SECOR

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Thousand Oaks, CA 91361
805-230-1266 TEL
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ATLANTIC RICHFIELD COMPANY QUARTERLY REPORT
Quarter 2, 2005 (July 15, 2005)

Station No.: 0069 Address: 9922 South Figueroa Street, Los Angeles, California
Atlantic Richfield Company Environmental Engineer/Phone No.: Jack Oman (714) 730-1898
Consulting Co./Contact Person/Phone No.: SECOR/Mr. Don Indermill/ (805) 230-1266 Ext 269
SECOR Project No.: 37BP.U0069.04
Primary Agency/Regulatory ID No.: LARWQCB / Mr. Jimmy Woo /File No. 905040061
Other Agencies to Receive Copies: None

WORK PERFORMED THIS QUARTER [Second - 2005]:

1. Conducted quarterly groundwater sampling and prepared Quarterly Report.
2. Enhanced Fluid Recovery (EFR) on Wells MW-6 and MW-7 Discontinued.
3. Restarted remediation system.
4. Conducted remediation system operation and maintenance.

WORK PROPOSED FOR NEXT QUARTER [Third - 2005]:

1. Conduct quarterly groundwater sampling and prepare Quarterly Report.
2. Continue EFRs in wells MW-5 and MW-6, if needed.
3. Conduct remediation system operation and maintenance.

Current Phase of Project:	Monitoring/Remediation	(Assmnt, Remed. etc)
Frequency of Sampling:	Quarterly	(Quarterly, etc.)
Frequency of Monitoring:	Quarterly	(Monthly, etc.)
Separate Phase Hydrocarbon Present On-Site	No	(Yes/No)
Cumulative SPH Recovered to Date:	2.21	(gallons)
SPH Recovered This Quarter:	0	(gallons)
Bulk Soil Removed to Date:	Unknown	(cubic yards)
Bulk Soil Removed This Quarter:	None	(cubic yards)
Water Wells or Surface Waters (4000-ft radius)	Well 2S/13W-31K02	
Radius & Their Respective Directions:	2,000' North (status unknown)	(Distance and Direction)
Current Remediation Techniques:	EFR, SVE	(SVE, SPH Removal etc.)
Permits for Discharge:	AQMD	(NPDES, POTW, etc.)
Approximate Depth to Groundwater:	Range: 19.20 to 20.40	(Measured Feet)
Groundwater Gradient:	Southeast	(Direction)
	0.005 feet/foot	(Magnitude)

REGISTERED GEOLOGIST
DONALD C. INDERMILL
No. 5102
Exp. 31 Mar 2006
STATE OF CALIFORNIA

Agency Directive Requirement: Continue Quarertly Monitoring

ATTACHED:

Figure 1 - Site Location Map Showing Wells Within A One-Mile Radius
Figure 2 - Site Map Showing Groundwater Monitoring Well Locations
Figure 3 - Site Map Showing Groundwater Contour and Hydrocarbon Concentration Map
Figure 4 - GRO Isoconcentration Map
Figure 5 - Benzene Isoconcentration Map
Figure 6 - MTBE Isoconcentration Map
Figure 7 - TBA Isoconcentration Map
Figure 8 - Cumulative Pounds of Gasoline Range Organics Removed
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Table 2 - Summary of SVE Operation Data
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Table 4a - Individual Air Sparge Well Monitoring Data
Table 4b - Individual Soil Vapor Extraction Well Field Monitoring Data
Table 5 - Summary of Process Vapor Sampling Results
Table 6 - Summary of Individual Well Vapor Analytical Results
Table 7 - Summary of Grourdwater Analytical and Elevation Results
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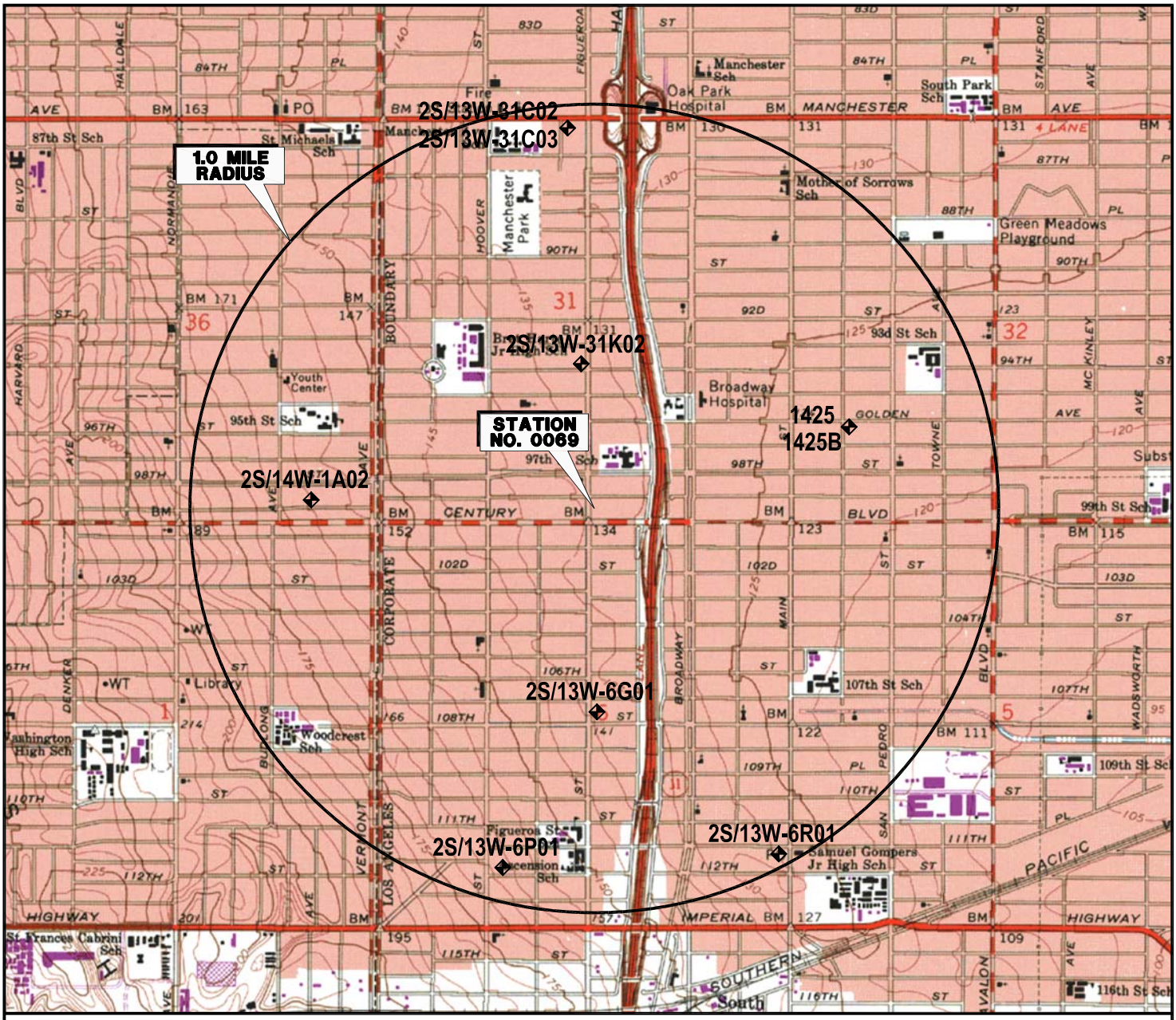
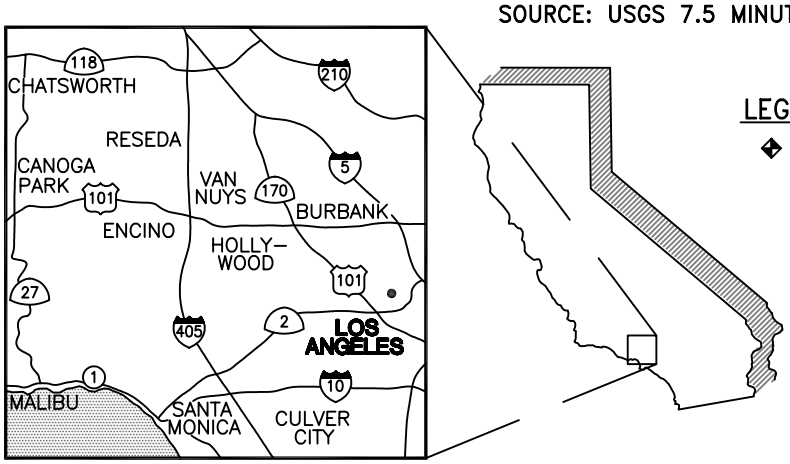
Appendix B - Groundwater Sampling and O&M Field Data Sheets
Appendix C - Waste Disposal Documents

Figures



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAPS, INGLEWOOD QUADRANGLE, 1964
PHOTO REVISED; 1981



LEGEND

◆ PRODUCTION WELL LOCATION (ACTIVE)

N

0 2000 4000

APPROXIMATE SCALE (FEET)

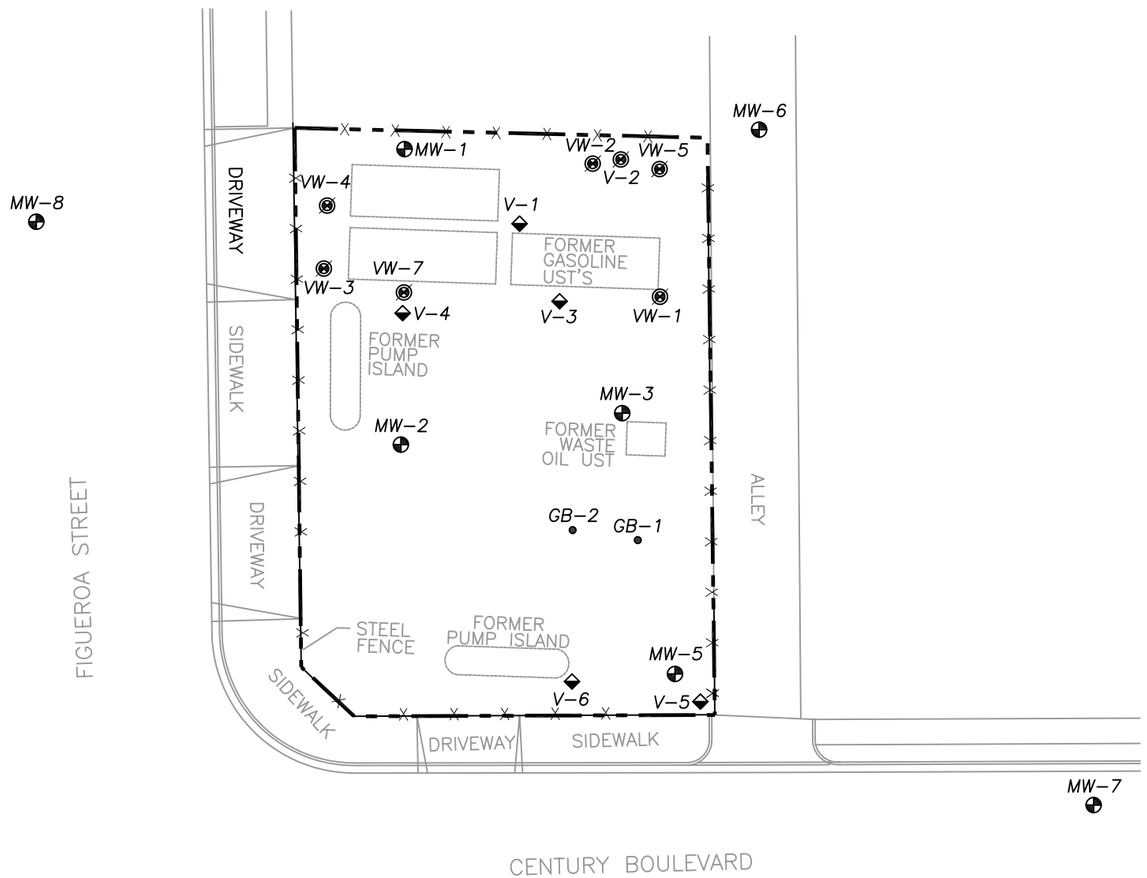
SECOR 290 Conejo Ridge Avenue, Suite 200 Thousand Oaks, CA 91361 (805) 230-1266/230-1277 (Fax)	PREPARED FOR: ATLANTIC RICHFIELD COMPANY STATION NO. 0069 9922 FIGUEROA STREET LOS ANGELES, CALIFORNIA		**SITE LOCATION MAP SHOWING WELLS WITHIN A ONE-MILE RADIUS**		FIGURE: **1**
	JOB NUMBER: 37BP.U0069.04/3143	DRAWN BY: RLE	CHECKED BY: L. Moreno	APPROVED BY: D. Indermill	DATE: 07/15/05

\ARCO\0069 Los Angeles\GIS\SLM-CLR\ 0069-SLMR

LEGEND

— — —	SITE PROPERTY LINE
MW–2	GROUNDWATER MONITORING WELL LOCATION
V–6	VADOSE MONITORING WELL LOCATION
VW–2	ABANDONED VENT WELL/ BORING LOCATION
GB–1	SOIL BORING LOCATION

N



NOTES:

1. SOURCE OF MAP: SECOR MAP DATED DECEMBER 2003 AND COUNTY ASSESSORS MAP DATED DECEMBER 17 1965.
2. GROUNDWATER MONITORING WELLS SURVEYED BY W.M. HOLDINGS JUNE 24, 2004.

0 30 60

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(805) 230-1266/230-1277 (Fax)

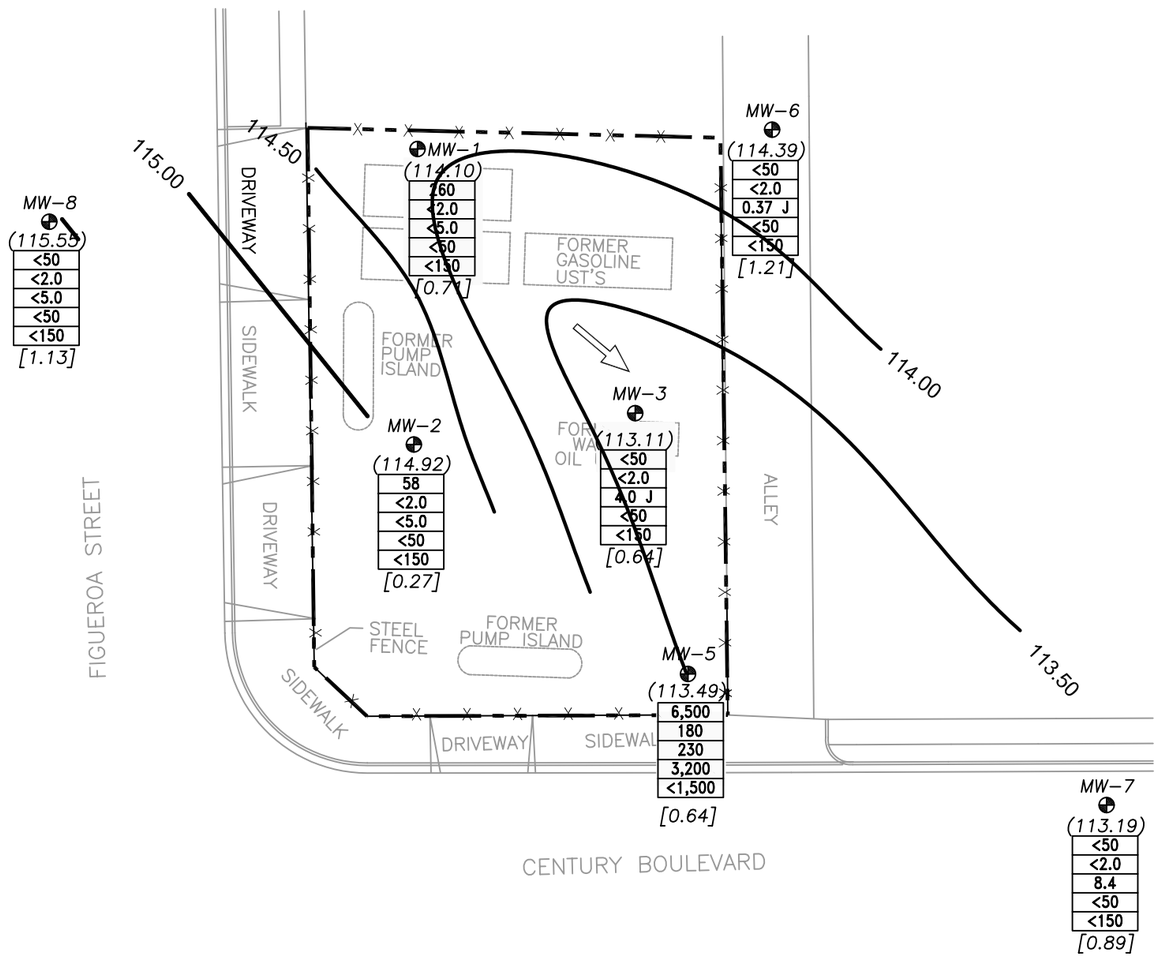
FOR:
ATLANTIC RICHFIELD COMPANY
STATION NO. 0069
9922 FIGUEROA STREET
LOS ANGELES, CALIFORNIA

SITE MAP SHOWING GROUNDWATER MONITORING WELL LOCATIONS

FIGURE: **2**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
37BP.U0069.04/3143	RLE	L. Moreno	D. Indermill	04/15/05

FILEPATH:M:\ARCO\QTRLY-GW.MAP\0069\0069-GW\dwg\Q2\Q2-05\0069-Q2GW05.dwg | rerdman | Jul 07, 2005 at 13:07 | Layout: SM_FIG2



LEGEND

— — —	SITE PROPERTY LINE
MW-2	GROUNDWATER MONITORING WELL LOCATION
(114.92)	GROUNDWATER ELEVATION (Feet above mean sea level)
GRO / BENZ / MTBE / TBA / ETHANOL	GASOLINE RANGE ORGANICS (C4–C12), BENZENE, MTBE, TERTIARY BUTANOL, AND ETHANOL CONCENTRATIONS IN MICROGRAMS PER LITER (µg/L)
[0.27]	DISSOLVED–OXYGEN CONCENTRATIONS IN GROUNDWATER
(J)	ESTIMATED VALUE; BELOW LABORATORY REPORTING LIMIT AND ABOVE THE METHOD DETECTION LIMIT (MDL)
	GROUNDWATER ELEVATION CONTOUR LINE (DASHED WHERE INFERRED)
	GROUNDWATER FLOW DIRECTION

N

NOTES:

1. SOURCE OF MAP: SECOR MAP DATED DECEMBER 2003 AND COUNTY ASSESSORS MAP DATED DECEMBER 17 1965.
2. GROUNDWATER MONITORING WELLS SURVEYED BY W.M. HOLDINGS JUNE 24, 2004.
3. GROUNDWATER MONITORING WELLS GAUGED AND SAMPLED ON JUNE 6, 2005.

0 30 60

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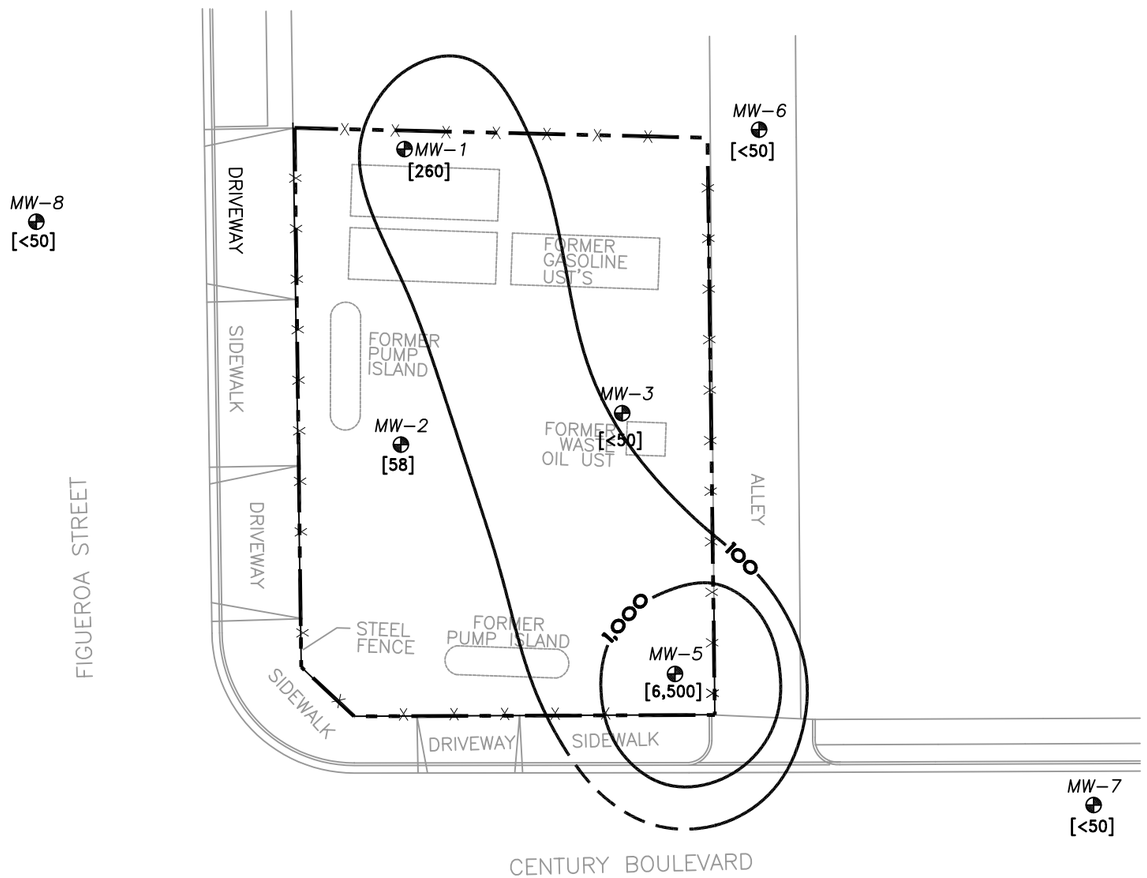
STATION NO. 0069
9922 FIGUEROA STREET
LOS ANGELES, CALIFORNIA

SITE MAP SHOWING GROUNDWATER CONTOUR AND HYDROCARBON CONCENTRATIONS

FIGURE: **3**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
37BP.U0069.04/3143	RLE	L. Moreno	D. Indermill	04/15/05



LEGEND

— — —	SITE PROPERTY LINE
MW-2 ⊕	GROUNDWATER MONITORING WELL LOCATION
[GRO]	GASOLINE RANGE ORGANICS (C4–C12), CONCENTRATIONS IN MICROGRAMS PER LITER (µg/L)
∼	GRO ISOCONCENTRATION CONTOUR LINE (DASHED WHERE INFERRED)
(J)	ESTIMATED VALUE; BELOW LABORATORY REPORTING LIMIT AND ABOVE THE METHOD DETECTION LIMIT (MDL)

N

NOTES:

1. SOURCE OF MAP: SECOR MAP DATED DECEMBER 2003 AND COUNTY ASSESSORS MAP DATED DECEMBER 17 1965.
2. GROUNDWATER MONITORING WELLS SURVEYED BY W.M. HOLDINGS JUNE 24, 2004.
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GRO ISOCONCENTRATION MAP

FIGURE: **4**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
37BP.U0069.04/3143	RLE	L. Moreno	D. Indermill	04/15/05

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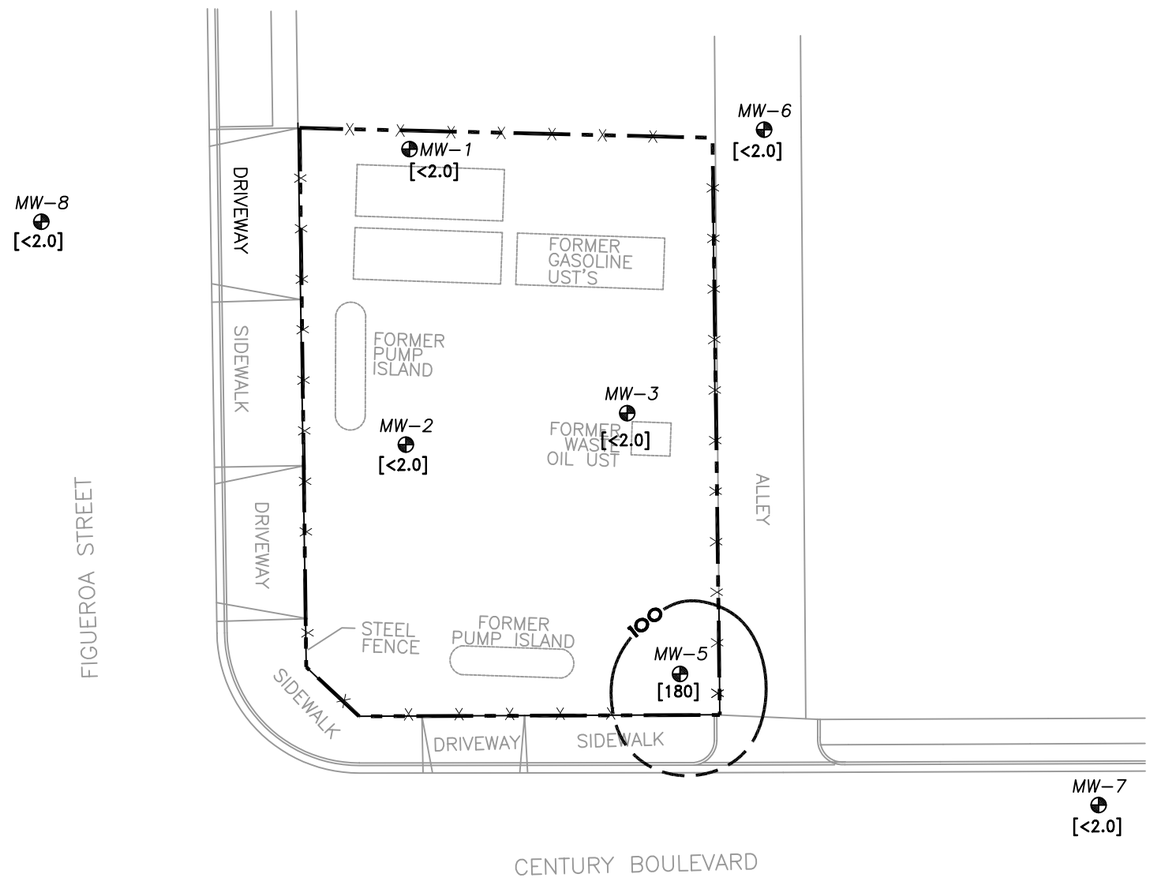

LEGEND

N

SITE PROPERTY LINE

MW-2 — GROUNDWATER MONITORING WELL LOCATION

[BENZ] — BENZENE CONCENTRATIONS IN MICROGRAMS PER LITER (μg/L)

TPHG ISOCONCENTRATION CONTOUR LINE (DASHED WHERE INFERRED)

(J) — ESTIMATED VALUE; BELOW LABORATORY REPORTING LIMIT AND ABOVE THE METHOD DETECTION LIMIT (MDL)

NOTES:

1. SOURCE OF MAP: SECOR MAP DATED DECEMBER 2003 AND COUNTY ASSESSORS MAP DATED DECEMBER 17 1965.
2. GROUNDWATER MONITORING WELLS SURVEYED BY W.M. HOLDINGS JUNE 24, 2004.
3. GROUNDWATER MONITORING WELLS GAUGED AND SAMPLED ON JUNE 6, 2005.

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LOS ANGELES, CALIFORNIA

BENZENE ISOCONCENTRATION MAP

FIGURE: **5**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
37BP.U0069.04/3143	RLE	L. Moreno	D. Indermill	04/15/05

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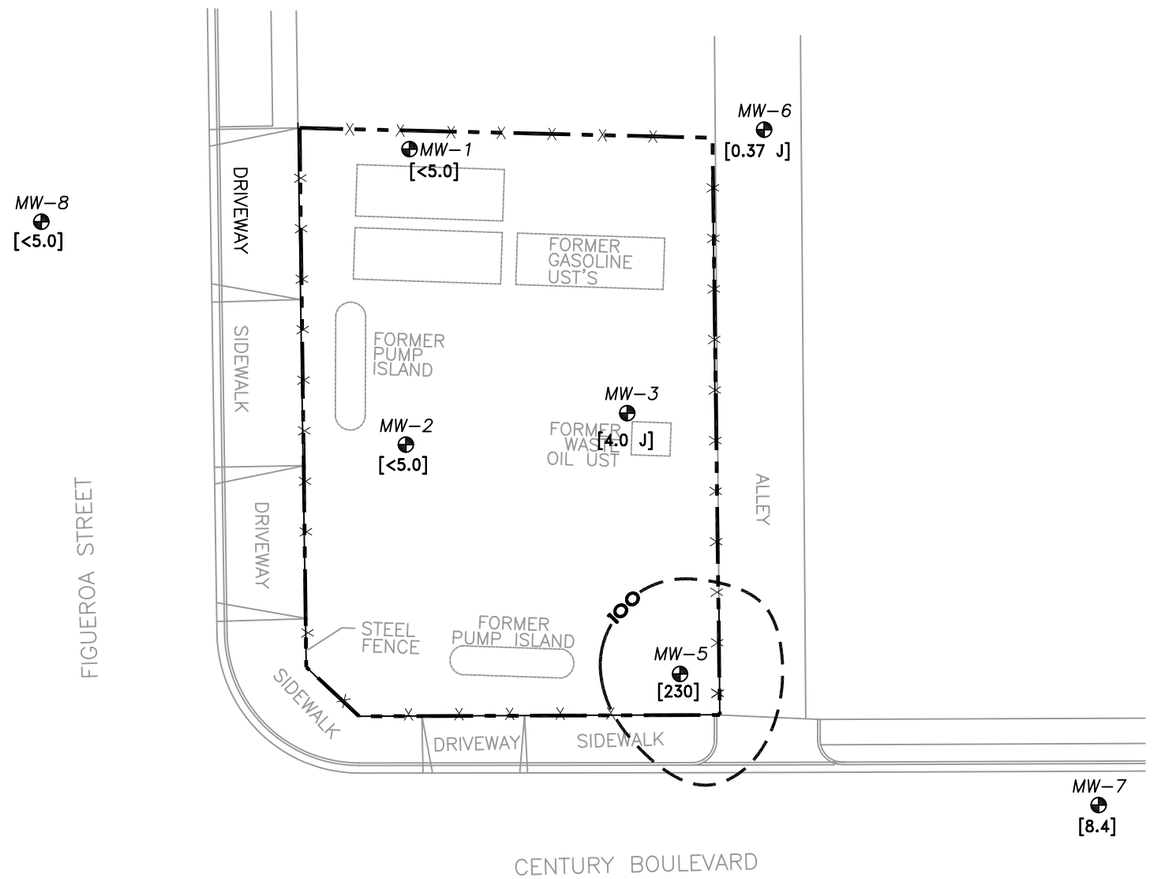

LEGEND

N

SITE PROPERTY LINE

MW-2 — GROUNDWATER MONITORING WELL LOCATION

[MTBE] — METHYL TERTIARY BUTYL ETHER CONCENTRATIONS IN MICROGRAMS PER LITER (μg/L)

METHYL TERTIARY BUTYL ETHER ISOCONCENTRATION CONTOUR LINE (DASHED WHERE INFERRED)

(J) — ESTIMATED VALUE; BELOW LABORATORY REPORTING LIMIT AND ABOVE THE METHOD DETECTION LIMIT (MDL)

NOTES:

1. SOURCE OF MAP: SECOR MAP DATED DECEMBER 2003 AND COUNTY ASSESSORS MAP DATED DECEMBER 17 1965.
2. GROUNDWATER MONITORING WELLS SURVEYED BY W.M. HOLDINGS JUNE 24, 2004.
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MTBE ISOCONCENTRATION MAP

FIGURE: **6**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
37BP.U0069.04/3143	RLE	L. Moreno	D. Indermill	04/15/05

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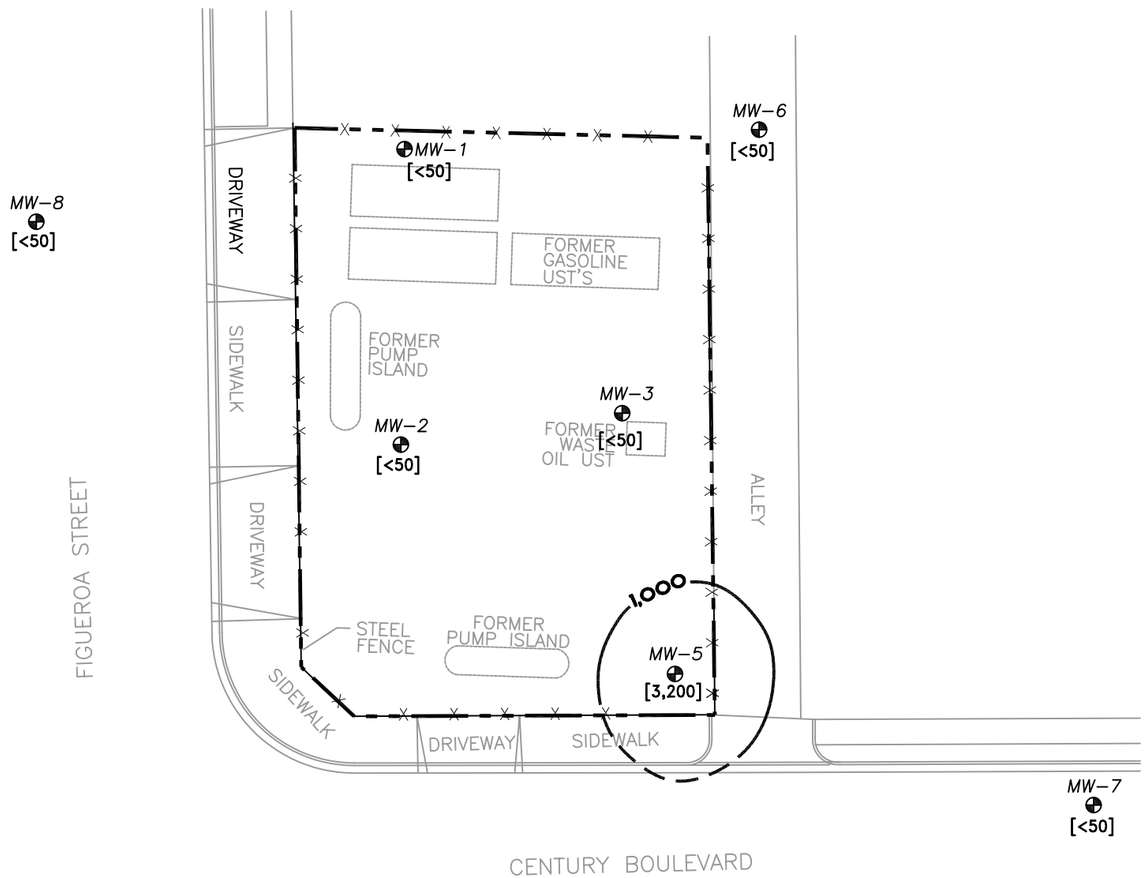

LEGEND

N

SITE PROPERTY LINE

MW-2 — GROUNDWATER MONITORING WELL LOCATION

[TBA] — TERTIARY BUTANOL CONCENTRATIONS IN MICROGRAMS PER LITER (μg/L)

TERTIARY BUTANOL ISOCONCENTRATION CONTOUR LINE (DASHED WHERE INFERRED)

(J) — ESTIMATED VALUE; BELOW LABORATORY REPORTING LIMIT AND ABOVE THE METHOD DETECTION LIMIT (MDL)

NOTES:

1. SOURCE OF MAP: SECOR MAP DATED DECEMBER 2003 AND COUNTY ASSESSORS MAP DATED DECEMBER 17 1965.
2. GROUNDWATER MONITORING WELLS SURVEYED BY W.M. HOLDINGS JUNE 24, 2004.
3. GROUNDWATER MONITORING WELLS GAUGED AND SAMPLED ON JUNE 6, 2005.

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APPROXIMATE SCALE (FEET)

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STATION NO. 0069
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LOS ANGELES, CALIFORNIA

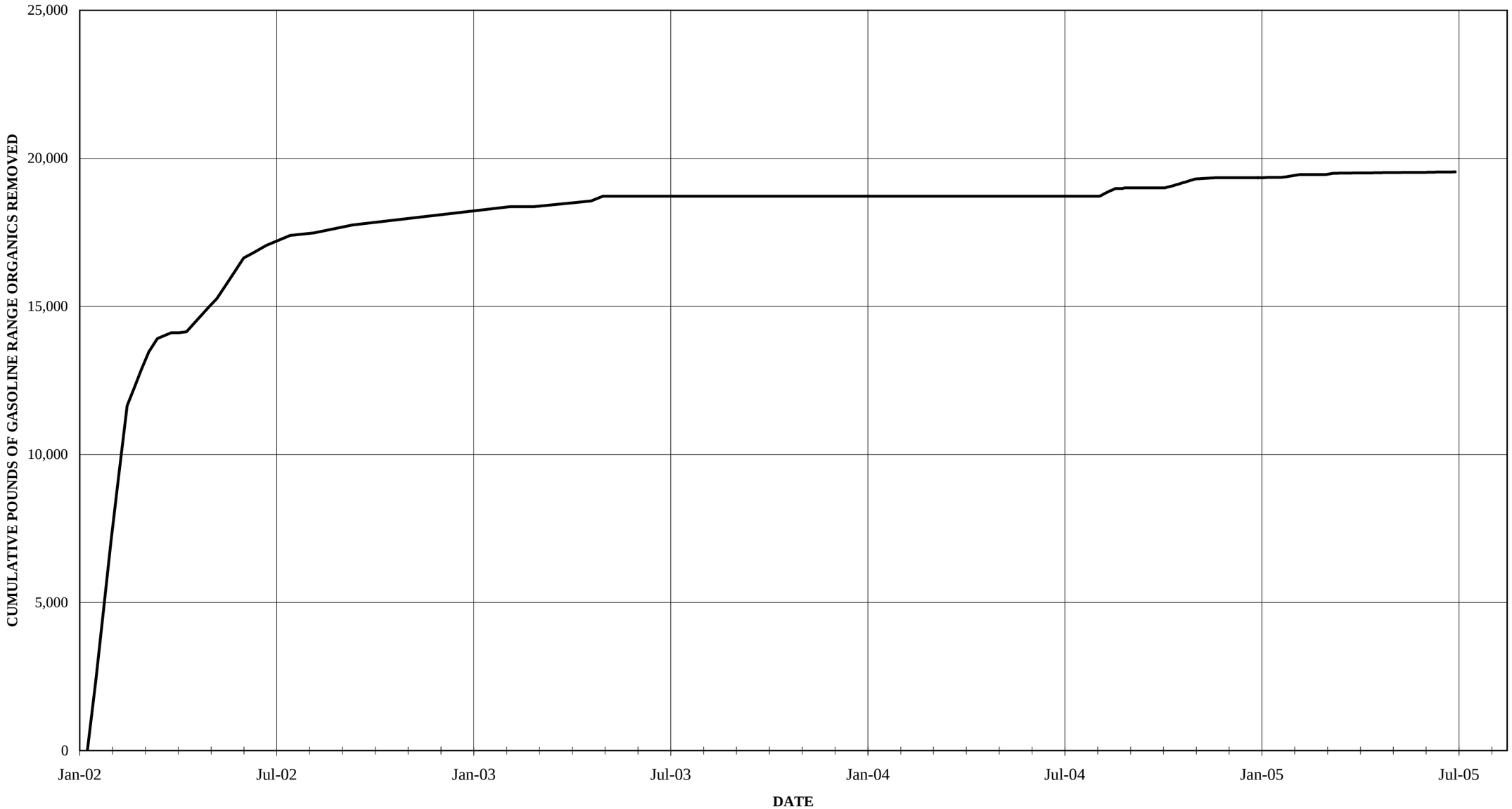
TBA ISOCONCENTRATION MAP

FIGURE: **7**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
37BP.U0069.04/3143	RLE	L. Moreno	D. Indermill	04/15/05

FILEPATH:M:\ARCO\QTRLY-GW.MAP\0069\0069-GW\dwg\Q2\Q2-05\0069-Q2GW05.dwg | rerdman | Jul 07, 2005 at 13:10 | Layout: TBA_FIG7

FIGURE 8
ATLANTIC RICHFIELD COMPANY SERVICE STATION NO. 0069
CUMULATIVE POUNDS OF GASOLINE RANGE ORGANICS REMOVED



Tables

TABLE 1
SVE OPERATION REPORT

ARCO STATION NO. 0069 9922 Figueroa Street, Los Angeles, CA VES SUMMARY OF THE OPERATING PERIOD Second Quarter, 2005	
Atlantic Richfield Company Engineer:	Ray Vose
Consultant:	SECOR International Incorporated
Lead Agency:	SCAQMD
Reporting Period:	April 1, 2005 through June 30, 2005
Equipment Inventory:	King, Buck/Hasstech, Model MMC-5A Skid Mounted
Operating Mode:	Catalytic Oxidation
SCAQMD Permit #:	F64757
Influent GRO Concentration at system start up:	System startup 1/9/02
Field observed concentration:	1,904 ppmv
Laboratory reported concentration:	760 ppmv
Influent Benzene Concentration at system start up:	System startup 2/19/04
Field observed concentration:	not measured
Laboratory reported concentration:	1.9 ppmv
Influent GRO Concentration at end of period:	
Field observed concentration:	597 ppmv (6/2/05)
Laboratory reported concentration:	15 ppmv (6/2/05)
Influent Benzene Concentration at end of period:	
Field observed concentration:	not measured
Laboratory reported concentration:	<0.004 ppmv (6/2/05)
Flow Rate at end of period:	158 scfm (6/29/05)
Gasoline Range Organics Removed This Period:	35 lb
Utility usage:	
Electricity:	6,321 kWh
Natural Gas:	7,748 Therms
Percent up time during this period:	60% (Vapor Extraction)
Number of auto shut downs during this period:	1 (Vapor Extraction)

Notes:
NA = Not Available
GRO = Gasoline Range Organics (C4 - C12)

TABLE 2
SUMMARY OF SVE OPERATION DATA

ARCO STATION NO. 0069 **9922 Figueroa Street, Los Angeles, CA** **VES OPERATING REPORT** **Second Quarter, 2005**			
CURRENT SOURCE (Without Dilution Air Added)			
Current Well Source:	VE-6, MW-5, V-1 low, V-1 high, V-1 mid, V-3 low, V-3 high		
GRO Concentration at end of period:	15	ppmv	(6/2/05)
GRO Concentration at end of last period:	9.7	ppmv	(3/10/05)
Initial GRO Concentration:	760	ppmv	(initial startup 2/19/04)
Benzene Concentration at end of period:	<0.004	ppmv	(6/2/05)
Benzene Concentration at end of last period:	<0.004	ppmv	(3/10/05)
Initial Benzene Concentration:	1.9	ppmv	(initial startup 2/19/04)
CURRENT PROCESS (With Dilution Air Added) - INFLUENT SUMMARY			
GRO Concentration at end of period:	NA		
GRO Concentration at end of last period:	NA		
Benzene Concentration at end of period:	NA		
Benzene Concentration at end of last period:	NA		
Initial Benzene Concentration:	NA		
CURRENT PROCESS - EFFLUENT SUMMARY			
GRO Concentration at end of period:	<1.0	ppmv	(6/2/05)
GRO Permit Requirement Concentration:	50	ppmv	(as Hexane)
Percent (%) TPH Conversion:	99.5	%	
Benzene Concentration at end of period:	<0.002	ppmv	(6/2/05)
Benzene Permit Requirement Concentration:	0.4	ppmv	
MTBE Concentration at end of period:	<0.002	ppmv	(6/2/05)
MTBE Permit Requirement Concentration:	3.9	ppmv	
Cumulative Hydrocarbons removed:	19,542	lb	
Avg. Stack Temperature (Process):	1454	deg. F	
(Catalytic/Outlet):	1450	deg. F	
Avg. Source Flow:	153	scfm	
Avg. Effluent Flow:	153	scfm	
Avg. Source Vacuum:	60	in. H_2O	

Notes:
Average values do not include down time.
NA = Not Applicable
NM = Not Measured
GRO = Gasoline Range Organics (C_4 - C_{12})

TABLE 3a

DAILY OPERATIONAL LOG
ATLANTIC RICHFIELD COMPANY SERVICE STATION #0069
SYSTEM START-UP DATE: 1/9/02

APRIL, 2005

DATE	DATA SOURCE	NOTES	LAB INFLUENT CONC. SOURCE (PPMV)	LAB EFFLUENT CONC. (PPMV)	FIELD INFLUENT CONC. SOURCE (PPMV)	FIELD EFFLUENT CONC. (PPMV)	GRO CONV. (%)	SOURCE FLOW (SCFM)	MANIFOLD VACUUM (IN H2O)	PROCESS TEMP. (DEG F)	CATALYTIC /OUTLET TEMP. (DEG F)	CUMULATIVE HYDROCARBONS REMOVED (LB)	HOURS ON-LINE
04/01/05	*				414	0.0	94.8	147	60	1,450	1,452	19,508	24.0
04/02/05	*				414	0.0	94.8	147	60	1,450	1,452	19,509	24.0
04/03/05	*				414	0.0	94.8	147	60	1,450	1,452	19,509	24.0
04/04/05	*				414	0.0	94.8	147	60	1,450	1,452	19,509	24.0
04/05/05	*				414	0.0	94.8	147	60	1,450	1,452	19,510	24.0
04/06/05	*				414	0.0	94.8	147	60	1,450	1,452	19,510	24.0
04/07/05	TECH	1	13	<1.0	429	0.0	96.2	158	62	1,452	1,454	19,511	22.1
04/08/05	*				429	0.0	96.2	158	62	1,452	1,454	19,511	0.6
04/09/05	system off											19,511	0.0
04/10/05	system off											19,511	0.0
04/11/05	system off											19,511	0.0
04/12/05	system off											19,511	0.0
04/13/05	system off											19,511	0.0
04/14/05	TECH	2			579	0.0	96.2	156	60	1,459	1,455	19,511	13.0
04/15/05	*				579	0.0	96.2	156	60	1,459	1,455	19,512	24.0
04/16/05	*				579	0.0	96.2	156	60	1,459	1,455	19,513	24.0
04/17/05	*				579	0.0	96.2	156	60	1,459	1,455	19,513	24.0
04/18/05	*				579	0.0	96.2	156	60	1,459	1,455	19,514	24.0
04/19/05	*				579	0.0	96.2	156	60	1,459	1,455	19,515	24.0
04/20/05	*				579	0.0	96.2	156	60	1,459	1,455	19,515	24.0
04/21/05	TECH				579	2.4	96.2	149	60	1,461	1,450	19,516	17.9
04/22/05	*				579	2.4	96.2	149	60	1,461	1,450	19,516	24.0
04/23/05	*				579	2.4	96.2	149	60	1,461	1,450	19,517	24.0
04/24/05	*				579	2.4	96.2	149	60	1,461	1,450	19,518	24.0
04/25/05	*				579	2.4	96.2	149	60	1,461	1,450	19,518	24.0
04/26/05	*				579	2.4	96.2	149	60	1,461	1,450	19,519	24.0
04/27/05	*				579	2.4	96.2	149	60	1,461	1,450	19,520	24.0
04/28/05	TECH	3			472	0.0	96.2	158	63	1,444	1,452	19,520	11.8
04/29/05	system off											19,520	0.0
04/30/05	system off											19,520	0.0

TOTAL POUNDS OF HYDROCARBONS REMOVED SINCE INITIAL START UP	19,520
TOTAL POUNDS OF HYDROCARBONS REMOVED DURNG APRIL, 2005	12
TOTAL HOURS ON-LINE DURING APRIL, 2005	497

Notes:
1 - Certified vapor sampling.
2 - System down due to low temperature fault. Restarted system.
3 - Shut down system for off cycle.

TECH - Technician performed O&M on this date
GRO - Gasoline Range Organics (C_4 - C_{12})
* - Data extrapolated
-- - Not Applicable

TABLE 3b

DAILY OPERATIONAL LOG
ATLANTIC RICHFIELD COMPANY SERVICE STATION #0069
SYSTEM START-UP DATE: 1/9/02

MAY, 2005

DATE	DATA SOURCE	NOTES	LAB INFLUENT CONC. SOURCE (PPMV)	LAB EFFLUENT CONC. (PPMV)	FIELD INFLUENT CONC. SOURCE (PPMV)	FIELD EFFLUENT CONC. (PPMV)	GRO CONV. (%)	SOURCE FLOW (SCFM)	MANIFOLD VACUUM (IN H2O)	PROCESS TEMP. (DEG F)	CATALYTIC /OUTLET TEMP. (DEG F)	CUMULATIVE HYDROCARBONS REMOVED (LB)	HOURS ON-LINE
05/01/05	system off											19,520	0.0
05/02/05	system off											19,520	0.0
05/03/05	system off											19,520	0.0
05/04/05	system off											19,520	0.0
05/05/05	TECH	1, 2	11	<1.0	511	0.0	95.5	155	60	1,455	1,453	19,520	12.0
05/06/05	*				511	0.0	95.5	155	60	1,455	1,453	19,521	24.0
05/07/05	*				511	0.0	95.5	155	60	1,455	1,453	19,521	24.0
05/08/05	*				511	0.0	95.5	155	60	1,455	1,453	19,522	24.0
05/09/05	*				511	0.0	95.5	155	60	1,455	1,453	19,522	24.0
05/10/05	*				511	0.0	95.5	155	60	1,455	1,453	19,523	24.0
05/11/05	*				511	0.0	95.5	155	60	1,455	1,453	19,524	24.0
05/12/05	TECH	3			530	0.0	95.5	152	62	1,452	1,451	19,524	11.0
05/13/05	system off											19,524	0.0
05/14/05	system off											19,524	0.0
05/15/05	system off											19,524	0.0
05/16/05	system off											19,524	0.0
05/17/05	system off											19,524	0.0
05/18/05	system off											19,524	0.0
05/19/05	TECH	2			674	0.0	95.5	156	60	1,458	1,455	19,524	13.0
05/20/05	*				674	0.0	95.5	156	60	1,458	1,455	19,525	24.0
05/21/05	*				674	0.0	95.5	156	60	1,458	1,455	19,525	24.0
05/22/05	*				674	0.0	95.5	156	60	1,458	1,455	19,526	24.0
05/23/05	*				674	0.0	95.5	156	60	1,458	1,455	19,526	24.0
05/24/05	*				674	0.0	95.5	156	60	1,458	1,455	19,527	24.0
05/25/05	*				674	0.0	95.5	156	60	1,458	1,455	19,527	24.0
05/26/05	TECH	3			529	0.0	95.5	152	60	1,452	1,450	19,528	11.8
05/27/05	system off											19,528	0.0
05/28/05	system off											19,528	0.0
05/29/05	system off											19,528	0.0
05/30/05	system off											19,528	0.0
05/31/05	system off											19,528	0.0

TOTAL POUNDS OF HYDROCARBONS REMOVED SINCE INITIAL START UP	19,528
TOTAL POUNDS OF HYDROCARBONS REMOVED DURNG MAY, 2005	8
TOTAL HOURS ON-LINE DURING MAY, 2005	336

Notes:
1 - Certified vapor sampling.
2 - Restarted system from off cycle.
3 - Shut down system for off cycle.

TECH - Technician performed O&M on this date
* - Data extrapolated
GRO - Gasoline Range Organics (C_4 - C_{12})
-- - Not Applicable

TABLE 3c

DAILY OPERATIONAL LOG
ATLANTIC RICHFIELD COMPANY SERVICE STATION #0069
SYSTEM START-UP DATE: 1/9/02

JUNE, 2005

DATE	DATA SOURCE	NOTES	LAB INFLUENT CONC. SOURCE (PPMV)	LAB EFFLUENT CONC. (PPMV)	FIELD INFLUENT CONC. SOURCE (PPMV)	FIELD EFFLUENT CONC. (PPMV)	GRO CONV. (%)	SOURCE FLOW (SCFM)	MANIFOLD VACUUM (IN H2O)	PROCESS TEMP. (DEG F)	CATALYTIC /OUTLET TEMP. (DEG F)	CUMULATIVE HYDROCARBONS REMOVED (LB)	HOURS ON-LINE
06/01/05	system off											19,528	0.0
06/02/05	TECH	1, 2, 4	15	<1.0	597	0.0	96.7	150	61	1,450	1,448	19,528	12.9
06/03/05	*				597	0.0	96.7	150	61	1,450	1,448	19,529	24.0
06/04/05	*				597	0.0	96.7	150	61	1,450	1,448	19,530	24.0
06/05/05	*				597	0.0	96.7	150	61	1,450	1,448	19,530	24.0
06/06/05	*				597	0.0	96.7	150	61	1,450	1,448	19,531	24.0
06/07/05	*				597	0.0	96.7	150	61	1,450	1,448	19,532	24.0
06/08/05	TECH				511	0.0	96.7	152	60	1,452	1,446	19,533	24.0
06/09/05	*				511	0.0	96.7	152	60	1,452	1,446	19,533	24.0
06/10/05	*				511	0.0	96.7	152	60	1,452	1,446	19,534	24.0
06/11/05	*				511	0.0	96.7	152	60	1,452	1,446	19,535	24.0
06/12/05	*				511	0.0	96.7	152	60	1,452	1,446	19,536	24.0
06/13/05	*				511	0.0	96.7	152	60	1,452	1,446	19,536	24.0
06/14/05	*				511	0.0	96.7	152	60	1,452	1,446	19,537	24.0
06/15/05	*				511	0.0	96.7	152	60	1,452	1,446	19,538	24.0
06/16/05	TECH	3			524	0.0	96.7	151	63	1,457	1,443	19,538	7.9
06/17/05	system off											19,538	0.0
06/18/05	system off											19,538	0.0
06/19/05	system off											19,538	0.0
06/20/05	system off											19,538	0.0
06/21/05	system off											19,538	0.0
06/22/05	system off											19,538	0.0
06/23/05	TECH	2			604	0.0	96.7	153	61	1,450	1,441	19,538	10.4
06/24/05	*				604	0.0	96.7	153	61	1,450	1,441	19,539	24.0
06/25/05	*				604	0.0	96.7	153	61	1,450	1,441	19,540	24.0
06/26/05	*				604	0.0	96.7	153	61	1,450	1,441	19,541	24.0
06/27/05	*				604	0.0	96.7	153	61	1,450	1,441	19,541	24.0
06/28/05	*				604	0.0	96.7	153	61	1,450	1,441	19,542	24.0
06/29/05	TECH	3			661	0.0	96.7	158	61	1,459	1,448	19,542	11.1
06/30/05	system off											19,542	0.0

TOTAL POUNDS OF HYDROCARBONS REMOVED SINCE INITIAL START UP	19,542
TOTAL POUNDS OF HYDROCARBONS REMOVED DURNG JUNE, 2005	15
TOTAL HOURS ON-LINE DURING JUNE, 2005	474

Notes:
1 - Certified vapor sampling.
2 - Restarted system from off cycle.
3 - Shut down system for off cycle.
4 - Lubricated blower and motor.

TECH - Technician performed O&M on this date
* - Data extrapolated
GRO - Gasoline Range Organics (C_4 - C_{12})
-- - Not Applicable

TABLE 4a
Individual Air Sparge Well Monitoring Data
Atlantic Richfield Company Service Station #69
9922 Figueroa Street, Los Angeles, CA
Initial Start-Up Date 2/19/04

Well Number	Monitoring Date	Injection Flow Rate (scfh)	Injection Pressure (psi)
AS-1	system off		
AS-2	system off		
AS-3	system off		
AS-4	system off		
AS-5	system off		

-- Not measured.

TABLE 4b
Individual Soil Vapor Extraction Well Field Monitoring Data
Atlantic Richfield Company Service Station #0069
9922 Figueroa Street, Los Angeles, CA
Initial Start-up Date 1/9/02

Well Number (Slotted Interval) (Start-up H.C. ppmv)	Monitoring Date	VOC Concentration (ppmv)	Vapor Well Flow Rate (scfm)	Vacuum at Flow Potential (in. w.c.)	Well Status (% open)
VE-6	04/07/05	811	--	60	100
	04/14/05	672	--	62	100
	04/21/05	610	--	60	100
(14 TO 24.5)	04/28/05	579	--	63	100
	05/05/05	592	--	60	100
(28)*	05/12/05	411	--	62	100
	05/19/05	496	--	60	100
	05/26/05	514	--	60	100
	06/02/05	562	--	61	100
	06/08/05	486	--	60	100
	06/16/05	418	--	63	100
	06/23/05	510	--	61	100
	06/29/05	329	--	61	100
MW-5	04/07/05	275	--	60	100
	04/14/05	311	--	62	100
	04/21/05	391	--	60	100
(5 TO 30)	04/28/05	324	--	63	100
	05/05/05	312	--	60	100
(64)*	05/12/05	292	--	62	100
	05/19/05	310	--	60	100
	05/26/05	326	--	60	100
	06/02/05	310	--	61	100
	06/08/05	324	--	60	100
	06/16/05	293	--	63	100
	06/23/05	227	--	61	100
	06/29/05	383	--	61	100
MW-3	04/07/05	--	--		0
	04/14/05	--	--		0
	04/21/05	--	--		0
(20 TO 40)	04/28/05	--	--		0
	05/05/05	--	--		0
(1,600)*	05/12/05	--	--		0
	05/19/05	--	--		0
	05/26/05	--	--		0
	06/02/05	--	--		0
	06/08/05	--	--		0
	06/16/05	--	--		0
	06/23/05	--	--		0
	06/29/05	--	--		0

TABLE 4b
Individual Soil Vapor Extraction Well Field Monitoring Data
Atlantic Richfield Company Service Station #0069
9922 Figueroa Street, Los Angeles, CA
Initial Start-up Date 1/9/02

Well Number (Slotted Interval) (Start-up H.C. ppmv)	Monitoring Date	VOC Concentration (ppmv)	Vapor Well Flow Rate (scfm)	Vacuum at Flow Potential (in. w.c.)	Well Status (% open)
MW-2	04/07/05	--	--		0
	04/14/05	--	--		0
	04/21/05	--	--		0
(6 TO 31)	04/28/05	--	--		0
	05/05/05	--	--		0
(530)*	05/12/05	--	--		0
	05/19/05	--	--		0
	05/26/05	--	--		0
	06/02/05	--	--		0
	06/08/05	--	--		0
	06/16/05	--	--		0
	06/23/05	--	--		0
	06/29/05	--	--		0
V-4 Low	04/07/05	--	--		0
	04/14/05	--	--		0
	04/21/05	--	--		0
(10 TO 17)	04/28/05	--	--		0
	05/05/05	--	--		0
(3,500)*	05/12/05	--	--		0
	05/19/05	--	--		0
	05/26/05	--	--		0
	06/02/05	--	--		0
	06/08/05	--	--		0
	06/16/05	--	--		0
	06/23/05	--	--		0
	06/29/05	--	--		0
V-4 High	04/07/05	--	--		0
	04/14/05	--	--		0
	04/21/05	--	--		0
(35.5 TO 53.5)	04/28/05	--	--		0
	05/05/05	--	--		0
(54)*	05/12/05	--	--		0
	05/19/05	--	--		0
	05/26/05	--	--		0
	06/02/05	--	--		0
	06/08/05	--	--		0
	06/16/05	--	--		0
	06/23/05	--	--		0
	06/29/05	--	--		0

TABLE 4b
Individual Soil Vapor Extraction Well Field Monitoring Data
Atlantic Richfield Company Service Station #0069
9922 Figueroa Street, Los Angeles, CA
Initial Start-up Date 1/9/02

Well Number (Slotted Interval) (Start-up H.C. ppmv)	Monitoring Date	VOC Concentration (ppmv)	Vapor Well Flow Rate (scfm)	Vacuum at Flow Potential (in. w.c.)	Well Status (% open)
	04/07/05	--	--		0
MW-1	04/14/05	--	--		0
	04/21/05	--	--		0
(5 TO 31)	04/28/05	--	--		0
	05/05/05	--	--		0
(4,200)*	05/12/05	--	--		0
	05/19/05	--	--		0
	05/26/05	--	--		0
	06/02/05	--	--		0
	06/08/05	--	--		0
	06/16/05	--	--		0
	06/23/05	--	--		0
	06/29/05	--	--		0
V-1 Low	04/07/05	--	--		0
	04/14/05	--	--		0
	04/21/05	--	--		0
(20 TO 40)	04/28/05	--	--		0
	05/05/05	--	--		0
(3,900)*	05/12/05	--	--		0
	05/19/05	--	--		0
	05/26/05	--	--		0
	06/02/05	--	--		0
	06/08/05	--	--		0
	06/16/05	--	--		0
	06/23/05	--	--		0
	06/29/05	174	--	61	100
V-1 High	04/07/05	189	--	60	100
	04/14/05	206	--	62	100
	04/21/05	153	--	60	100
(15 TO 30)	04/28/05	189	--	63	100
	05/05/05	324	--	60	100
(4,700)*	05/12/05	318	--	62	100
	05/19/05	352	--	60	100
	05/26/05	221	--	60	100
	06/02/05	186	--	61	100
	06/08/05	161	--	60	100
	06/16/05	209	--	63	100
	06/23/05	299	--	61	100
	06/29/05	209	--	61	100

TABLE 4b
Individual Soil Vapor Extraction Well Field Monitoring Data
Atlantic Richfield Company Service Station #0069
9922 Figueroa Street, Los Angeles, CA
Initial Start-up Date 1/9/02

Well Number (Slotted Interval) (Start-up H.C. ppmv)	Monitoring Date	VOC Concentration (ppmv)	Vapor Well Flow Rate (scfm)	Vacuum at Flow Potential (in. w.c.)	Well Status (% open)
V-1 Mid	04/07/05	295	--	60	100
	04/14/05	284	--	62	100
	04/21/05	213	--	60	100
(17 TO 26.5)	04/28/05	291	--	63	100
	05/05/05	196	--	60	100
(2,800)*	05/12/05	190	--	62	100
	05/19/05	202	--	60	100
	05/26/05	183	--	60	100
	06/02/05	159	--	61	100
	06/08/05	142	--	60	100
	06/16/05	147	--	63	100
	06/23/05	130	--	61	100
	06/29/05	127	--	61	100
V-3 Low	04/07/05	131	--	60	100
	04/14/05	118	--	62	100
	04/21/05	191	--	60	100
(17 TO 26.5)	04/28/05	120	--	63	100
	05/05/05	127	--	60	100
(2,800)*	05/12/05	136	--	62	100
	05/19/05	151	--	60	100
	05/26/05	139	--	60	100
	06/02/05	141	--	61	100
	06/08/05	159	--	60	100
	06/16/05	134	--	63	100
	06/23/05	148	--	61	100
	06/29/05	176	--	61	100
V-3 High	04/07/05	28	--	60	100
	04/14/05	31	--	62	100
	04/21/05	27	--	60	100
(32 TO 51.5)	04/28/05	58	--	63	100
	05/05/05	33	--	60	100
(80)*	05/12/05	37	--	62	100
	05/19/05	32	--	60	100
	05/26/05	39	--	60	100
	06/02/05	31	--	61	100
	06/08/05	38	--	60	100
	06/16/05	22	--	63	100
	06/23/05	27	--	61	100
	06/29/05	45	--	61	100

VOC = Volatile Range Organics
* = GRO from Laboratory analytical samples taken on start-up
-- = not measured

TABLE 5
Summary of Process Vapor Sampling Results
ARCO STATION NO. 0069
9922 Figueroa Street, Los Angeles, CA

Sample Date	Sample ID	GRO (ppmV)	Benzene (ppmV)	Ethylbenzene (ppmV)	Toluene (ppmV)	Total Xylenes (ppmV)	DIPE (ppmV)	ETBE (ppmV)	MTBE (ppmV)	TAME (ppmV)	TBA (ppmV)	CO_2 (%)	CO (%)	CH_4 (%)	N_2 (%)	O_2 (%)
8/5/2004	Influent	240	<1.2	<0.92	1.2	6.5	<2.4	<2.7	<2.8	<2.4	<33	2.5	<0.10	<0.10	79	18
	Effluent	5.1	<0.059	<0.92	<1.1	<1.8	<2.4	<2.7	<2.8	<2.4	<33	4.3	<0.10	<0.10	81	15
10/5/2004	Influent	180	<1.2	1.8	4	19	<2.4	<2.7	<2.8	<2.4	<33	--	--	--	--	--
	Effluent	<2.4	<0.059	<0.92	<1.1	<1.8	<2.4	<2.7	<2.8	<2.4	<33	--	--	--	--	--
11/2/2004	Influent	38	<1.2	<0.92	<1.1	3.6	<2.4	<2.7	<2.8	<2.4	<33	0.55	<0.10	<0.10	78	21
	Effluent	<2.4	<0.059	<0.92	<1.1	<1.8	<2.4	<2.7	<2.8	<2.4	<33	4.1	0.10	<0.10	80	16
1/6/2005	Influent	100	0.089	0.58	0.43	6.9	<0.02	<0.02	0.14	<0.02	<0.10	0.62	<0.001	0.0061	77	21
	Effluent	<1.0	<0.002	<0.002	<0.005	0.0036	<0.002	<0.002	<0.002	<0.002	<0.010	0.052	<0.001	0.00021	76	21
3/10/2005	Influent	9.7	<0.004	0.071	<0.01	1.4	<0.004	<0.004	<0.004	<0.004	<0.02	0.22	<0.001	0.00026	77	22
	Effluent	<1.0	<0.002	<0.002	<0.005	0.014	<0.002	<0.002	<0.002	<0.002	<0.01	0.061	<0.001	0.00028	77	22
4/7/2005	Influent	13	<0.004	0.076	<0.01	1.4	<0.004	<0.004	<0.004	<0.004	0.026	0.25	<0.001	0.00047	78	22
	Effluent	<1.0	<0.002	<0.002	<0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	0.049	<0.001	0.00020	78	22
5/5/2005	Influent	11	0.0054	0.051	<0.005	0.89	<0.002	<0.002	0.0051	<0.002	0.011	0.38	<0.001	0.00130	79	21
	Effluent	<1.0	<0.002	<0.002	0.0054	0.0062	<0.002	<0.002	<0.002	<0.002	<0.01	0.055	<0.001	0.00018	78	22
6/2/2005	Influent	15	<0.004	0.062	<0.01	1.1	<0.004	<0.004	<0.004	<0.004	<0.02	0.37	<0.001	0.00130	78	21
	Effluent	<1.0	<0.002	<0.002	<0.005	0.0092	<0.002	<0.002	<0.002	<0.002	<0.01	0.042	<0.001	<0.00020	78	22

Notes:

GRO = Gasoline Range Organics (C_4 - C_{12})
BTEX and Oxygenates analyzed using EPA Method 8260B
Effluent Benzene analyzed using EPA Method 410A Modified
Fixed gases analyzed using ASTM 1946-90
ppmV = Parts per million on a volume basis
-- = Not sampled/Not analyzed

DIPE = Di-Isopropyl ether
ETBE = Ethyl tert-butyl ether
MTBE = Methyl Tertiary Butyl Ether
TAME = Tertiary-amyl methylether
TBA = Tert-butyl alcohol

CO_2 = Carbon dioxide
CO = Carbon monoxide
CH_4 = Methane
N_2 = Nitrogen
O_2 = Oxygen
(%) = Percentage of air volume

TABLE 6
Summary of Individual Well Vapor Sample Analytical Results
ARCO STATION NO. 0069
9922 Figueroa Street, Los Angeles, CA

Sample Date	Sample ID	GRO (ppmV)	Benzene (ppmV)	Ethylbenzene (ppmV)	Toluene (ppmV)	Total Xylenes (ppmV)	DIPE (ppmV)	ETBE (ppmV)	MTBE (ppmV)	TAME (ppmV)	TBA (ppmV)	CO_2 (%)	CO (%)	CH_4 (%)	N_2 (%)	O_2 (%)
8/5/2004	V-1a Low	95	<1.2	<0.92	<1.1	2.6	<2.4	<2.7	<2.8	<2.4	<33	2.1	<0.10	<0.10	78	20
8/5/2004	V-1b Mid	1,600	6.1	10	2.8	82	<2.4	<2.7	<2.8	<2.4	<33	8.1	<0.10	0.11	82	9.8
8/5/2004	V-1c High	48	<1.2	<0.92	<1.1	4.6	<2.4	<2.7	<2.8	<2.4	<33	1.9	<0.10	<0.10	78	20
8/5/2004	V-3a Low	16	<1.2	<0.92	<1.1	<1.8	<2.4	<2.7	<2.8	<2.4	<33	4.2	<0.10	<0.10	81	15
8/5/2004	V-3b High	23	<1.2	<0.92	<1.1	<1.8	<2.4	<2.7	<2.8	<2.4	<33	3.0	<0.10	<0.10	80	17
8/5/2004	V-4a Low	7.6	<1.2	<0.92	<1.1	<1.8	<2.4	<2.7	<2.8	<2.4	<33	1.4	<0.10	<0.10	79	20
8/5/2004	V-4b High	62	<1.2	<0.92	<1.1	4.5	<2.4	<2.7	<2.8	<2.4	<33	1.4	<0.10	<0.10	82	16
8/5/2004	V-6	1,100	5.4	2.3	5.6	19	<2.4	<2.7	6.3	<2.4	<33	5.0	<0.10	0.11	82	13
8/5/2004	MW-1	13	<1.2	<0.92	<1.1	<1.8	<2.4	<2.7	<2.8	<2.4	<33	1.5	<0.10	<0.10	82	17
8/5/2004	MW-2	22	<1.2	<0.92	<1.1	<1.8	<2.4	<2.7	<2.8	<2.4	<33	0.81	<0.10	<0.10	84	16
8/5/2004	MW-3	18	<1.2	<0.92	<1.1	<1.8	<2.4	<2.7	<2.8	<2.4	<33	0.79	<0.10	<0.10	83	16
8/5/2004	MW-5	530	2.2	3.7	2.2	26	<2.4	<2.7	3.2	<2.4	<33	3.8	<0.10	<0.10	82	14

Notes:

GRO = Gasoline Range Organics (C_4 - C_{12})
BTEX and Oxygenates analyzed using EPA Method 8260B
Effluent Benzene analyzed using EPA Method 410A Modified
Fixed gases analyzed using ASTM 1946-90
ppmV = Parts per million on a volume basis
-- = Not sampled/Not analyzed

DIPE = Di-Isopropyl ether
ETBE = Ethyl tert-butyl ether
MTBE = Methyl Tertiary Butyl Ether
TAME = Tertiary-amyl methylether
TBA = Tert-butyl alcohol

CO_2 = Carbon dioxide
CO = Carbon monoxide
CH_4 = Methane
N_2 = Nitrogen
O_2 = Oxygen
(%) = Percentage of air volume

TABLE 7
Summary of Groundwater Analytical & Elevation Results
ARCO Station No. 0069
9922 South Figueroa Street, Los Angeles, California

Well No.	Date	Notes	TOC Elevation (ft-MSL)	Depth to Water (feet)	Measured SPH Thickness (feet)	Calc. GW Elev. (ft-MSL)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	Sample ID	Comments
MW-1	01/31/96		133.60	24.00	0.00	109.60	7,400	290	580	480	1,500	-	-	-	-	-	-	MW-1	
	04/15/96			24.50	0.00	109.10	5,200	190	370	370	1,000	3,400	-	-	-	-	-	MW-1	
	07/22/96			24.90	0.00	108.70	12,000	320	1,000	760	2,900	4,500	-	-	-	-	-	MW-1	
	10/17/96			24.87	0.00	108.73	6,600	110	390	400	1,500	3,600	-	-	-	-	-	MW-1	
	03/25/97			25.00	0.00	108.60	5,600	56	200	390	1,000	3,000	-	-	-	-	-	MW-1	
	06/20/97			22.70	0.00	110.90	2,600	28	5.5	400	62	9,300	-	-	-	-	-	MW-1	
	08/22/97			23.69	0.00	109.91	2,900	24	<3.9	260	19	9,100	-	-	-	-	-	MW-1	
	11/17/97			24.36	0.00	109.24	7,200	42	16	290	77	15,000	-	-	-	-	-	MW-1	
	03/18/98	NS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	06/18/98			17.64	0.00	115.96	360	5.0	2.7	5.2	4.0	7,300	-	-	-	-	-	MW-1	
	08/20/98			19.55	0.00	114.05	420	10	2.6	4.1	5.7	2,900	-	-	-	-	-	MW-1	
	11/18/98	NS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/24/99			21.98	0.00	111.62	950	13	2.8	1.7	2.4	12,000	-	-	-	-	-	MW-1	
	06/15/99			22.14	0.00	111.46	940	12	<3.0	3.4	<6.0	5,700	-	-	-	-	-	MW-1	
	09/01/99			22.78	0.00	110.82	630	9.9	1.4	0.95	2.0	4,100	-	-	-	-	-	MW-1	
	11/30/99			23.53	0.00	110.07	850	7.0	<0.30	0.39	3.8	5,400	-	-	-	-	-	MW-1	
	03/23/00			23.98	0.00	109.62	7,200	26 J	300	830	3,100	2,200	1,600	<100	<100	<100	-	MW-1	
	04/17/00			23.81	0.00	109.79	15,000	31 J	340	840	3,200	2,200	1,500 J	<25	<28	<34	-	MW-1	
	07/11/00			23.93	0.00	109.67	7,100	16 J	160	450	1,600	1,100	1,700	<10	<11	<14	-	MW-1	
	10/11/00			24.41	0.00	109.19	16,000	21 J	210	610	2,000	1,100	970 J	<10	<11	15 J	-	MW-1	
	01/04/01			25.05	0.00	108.55	12,000	16 J	170	560	2,000	600	1,100	<10	<11	<14	-	MW-1	
	04/19/01			23.23	0.00	110.37	8,100	22 J	110	320	1,100	590	900	<20	<20	<20	-	MW-1	
	07/09/01			23.10	0.00	110.50	7,900	19 J	120	480	1,500	470	1,500	<20	<20	<20	-	MW-1	
	10/02/01			24.94	0.00	108.66	6,100	<10	64	330	980	180	1,100	<20	<20	<20	-	MW-1	
	01/03/02			26.22	0.00	107.38	6,500	<10	81	430	1,200	250	890	<20	<20	<20	-	MW-1	
	04/02/02			26.02	0.00	107.58	3,500	<10	41 J	280	780	90	560	<20	<20	<20	-	MW-1	
	08/23/02			24.69	0.00	108.91	2,400	1.5 J	25	210	530	47	170	<5.0	<5.0	0.64 J	-	MW-1	
	12/19/02			25.63	0.00	107.97	10,000	3.0 J	47	440	1,100	59	160	<10	<10	0.72 J	-	MW-1	
	02/06/03			25.92	0.00	107.68	6,700	2.9 J	36	340	790	55	130	<10	<10	<10	<300	MW-1	
	05/20/03			24.11	0.00	109.49	3,900	<0.5	11	120	300	23	72	<1.0	<1.0	<1.0	<50	MW-1	
	07/18/03			23.54	0.00	110.06	2,600	<10	13	160	400	29	57 J	<25	<25	<25	<750	MW-1	
	11/21/03			23.47	0.00	110.13	1,100	<2.0	5.3	72	170	17	27 J	<5.0	<5.0	<5.0	<150	MW-1	
	02/20/04	INA		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Construction
	06/23/04	INA		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	09/08/04	NS		24.71	0.00	108.89	-	-	-	-	-	-	-	-	-	-	-	-	
	09/09/04			-	-	-	1,500	<8.0	18	140	390	5.7 J	21 J	<20	<20	<20	<600	MW-1	
	12/14/04			24.81	0.00	108.79	770	<2.0	4.9	25	110	5.0	5.5 J	<5.0	<5.0	<5.0	<150	MW-1	
	03/02/05			20.43	0.00	113.17	2,300	<2.0	4.6	62	150	1.9 J	<50	<5.0	<5.0	<5.0	<150	MW-1	
	06/06/05			19.50	0.00	114.10	260	<2.0	<2.0	1.3 J	2.4 J	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-1	

TABLE 7
Summary of Groundwater Analytical & Elevation Results
ARCO Station No. 0069
9922 South Figueroa Street, Los Angeles, California

Well No.	Date	Notes	TOC Elevation (ft-MSL)	Depth to Water (feet)	Measured SPH Thickness (feet)	Calc. GW Elev. (ft-MSL)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	Sample ID	Comments
MW-2	01/31/96		133.36	23.30	0.00	110.06	16,000	2,200	420	1,500	2,700	-	-	-	-	-	-	MW-2	
	04/15/96			24.30	0.00	109.06	20,000	1,800	280	1,600	2,200	<10	-	-	-	-	-	MW-2	
	07/22/96			24.60	0.00	108.76	16,000	1,000	170	1,100	1,400	<10	-	-	-	-	-	MW-2	
	10/17/96			24.25	0.00	109.11	16,000	1,100	150	1,300	1,600	<10	-	-	-	-	-	MW-2	
	03/25/97			22.22	0.00	111.14	11,000	480	58	660	990	<10	-	-	-	-	-	MW-2	
	06/20/97			21.39	0.00	111.97	1,500	86	<6.0	70	48	130	-	-	-	-	-	MW-2	
	08/22/97			22.16	0.00	111.20	1,200	40	7.5	28	35	82	-	-	-	-	-	MW-2	
	11/17/97			22.88	0.00	110.48	1,300	45	<0.5	15	30	42	-	-	-	-	-	MW-2	
	03/18/98	NS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	06/18/98			19.00	0.00	114.36	360	21	<0.30	4.8	0.83	130	-	-	-	-	-	MW-2	
	08/20/98			19.33	0.00	114.03	230	8.5	<0.30	2.4	<0.60	190	-	-	-	-	-	MW-2	
	11/18/98	NS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/24/99			22.85	0.00	110.51	120	0.85	<0.30	<0.30	0.64	120	-	-	-	-	-	MW-2	
	06/15/99			21.96	0.00	111.40	110	1.2	<0.30	0.56	<0.60	70	-	-	-	-	-	MW-2	
	09/01/99			22.47	0.00	110.89	110	0.42	<0.30	<0.30	<0.60	45	-	-	-	-	-	MW-2	
	11/30/99			23.02	0.00	110.34	150	1.7	<0.30	<0.30	<0.60	21	-	-	-	-	-	MW-2	
	03/23/00			23.47	0.00	109.89	3,400	29	0.18 J	82	67	15	<50	<5.0	<5.0	<5.0	-	MW-2	
	04/17/00			23.19	0.00	110.17	4,700	36	0.21 J	73	77	15	5.4	<0.50	<0.57	<0.68	-	MW-2	
	07/11/00			23.36	0.00	110.00	4,500	28	0.24 J	94	56	13	<5.0	<0.50	<0.57	<0.68	-	MW-2	
	10/11/00			23.65	0.00	109.71	2,800	25	0.16 J	57	41	8.1	<5.0	<0.50	<0.57	<0.68	-	MW-2	
	01/04/01			24.49	0.00	108.87	4,200	20	0.32 J	86	51	6.8 J	<10	<1.0	<1.1	<1.4	-	MW-2	
	04/19/01			22.93	0.00	110.43	2,600	19	<1.0	59	71	16	<10	<2.0	<2.0	<2.0	-	MW-2	
	07/09/01			22.68	0.00	110.68	2,100	12	<1.0	27	31	34	<10	<2.0	<2.0	<2.0	-	MW-2	
	10/02/01			24.30	0.00	109.06	1,600	7.6	<1.0	18	18	22	<10	<2.0	<2.0	<2.0	-	MW-2	
	01/03/02			25.81	0.00	107.55	2,000	9.0	<1.0	32	26	11	<10	<2.0	<2.0	<2.0	-	MW-2	
	04/02/02			25.40	0.00	107.96	1,200	5.1	<1.0	13	7.8	5.1	<10	<2.0	<2.0	<2.0	-	MW-2	
	08/23/02			24.46	0.00	108.90	330	1.4 J	<2.0	2.4	2.4 J	1.8 J	<50	<5.0	<5.0	<5.0	-	MW-2	
	12/19/02			24.63	0.00	108.73	230	0.89 J	<2.0	0.98 J	0.65 J	0.60 J	<50	<5.0	<5.0	<5.0	-	MW-2	
	02/06/03			24.94	0.00	108.42	370	1.9 J	<2.0	1.8 J	1.1 J	1.2 J	<50	<5.0	<5.0	<5.0	<150	MW-2	
	05/20/03			23.41	0.00	109.95	96	<0.5	<0.5	<0.5	<1.5	<1.0	<25	<1.0	<1.0	<1.0	<50	MW-2	
	07/18/03			23.01	0.00	110.35	40 J	<2.0	<2.0	<2.0	<4.0	0.51 J	<50	<5.0	<5.0	<5.0	<150	MW-2	
	11/21/03			23.60	0.00	109.76	99	<2.0	<2.0	<2.0	<4.0	0.38 J	<50	<5.0	<5.0	<5.0	<150	MW-2	
	02/20/04	INA		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Construction
	06/23/04		134.56	24.45	0.00	110.11	370	0.61 J	<2.0	1.7 J	1.5 J	0.58 J	<50	<5.0	<5.0	<5.0	<150	MW-2	
	06/23/04	DUP		-	-	-	610	0.62 J	<2.0	1.7 J	1.4 J	0.54 J	<50	<5.0	<5.0	<5.0	<150	Dup-0069-20040623	
	09/08/04	NS		24.49	0.00	110.07	-	-	-	-	-	-	-	-	-	-	-	-	
	09/09/04			-	-	-	320	1.8 J	<2.0	2.3	<4.0	0.51 J	<50	<5.0	<5.0	<5.0	<150	MW-2	
	12/14/04			24.66	0.00	109.90	570	0.86 J	<2.0	1.5 J	1.0 J	0.36 J	<50	<5.0	<5.0	<5.0	<150	MW-2	
	12/14/04	DUP		-	-	-	570	0.72 J	<2.0	1.1 J	0.69 J	0.43 J	<50	<5.0	<5.0	<5.0	<150	DUP-0069-20041214	

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Well No.	Date	Notes	TOC Elevation (ft-MSL)	Depth to Water (feet)	Measured SPH Thickness (feet)	Calc. GW Elev. (ft-MSL)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	Sample ID	Comments
MW-2	03/02/05		134.56	32.80	0.00	101.76	48 J	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-2	
	03/02/05	DUP		-	-	-	45 J	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	DUP-0069-20050302	
	06/06/05			19.64	0.00	114.92	58	<2.0	<2.0	0.28 J	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-2	

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Well No.	Date	Notes	TOC Elevation (ft-MSL)	Depth to Water (feet)	Measured SPH Thickness (feet)	Calc. GW Elev. (ft-MSL)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	Sample ID	Comments
MW-3	01/31/96		133.51	24.00	0.00	109.51	8,000	3,400	<30	280	<60	-	-	-	-	-	-	MW-3	
	04/15/96			24.40	0.00	109.11	5,200	2,700	<30	170	<60	2,800	-	-	-	-	-	MW-3	
	07/22/96			25.15	0.00	108.36	8,700	4,700	<30	480	91	3,000	-	-	-	-	-	MW-3	
	10/17/96			25.42	0.00	108.09	13,000	6,800	93	750	280	3,400	-	-	-	-	-	MW-3	
	03/25/97			23.20	0.00	110.31	9,800	3,700	52	530	300	1,200	-	-	-	-	-	MW-3	
	06/20/97			22.16	0.00	111.35	370	35	2.4	2.3	3.0	430	-	-	-	-	-	MW-3	
	08/22/97			23.88	0.00	109.63	360	4.7	0.74	1.1	1.9	370	-	-	-	-	-	MW-3	
	11/17/97			24.39	0.00	109.12	400	2.6	0.80	1.7	2.8	470	-	-	-	-	-	MW-3	
	03/18/98	NS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	06/18/98			18.80	0.00	114.71	440	3.2	<0.30	<0.30	1.2	1,400	-	-	-	-	-	MW-3	
	08/20/98			19.33	0.00	114.18	300	5.8	1.5	<0.30	1.4	6,200	-	-	-	-	-	MW-3	
	11/18/98	NS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/24/99			22.34	0.00	111.17	390	3.7	0.96	<0.30	1.1	11,000	-	-	-	-	-	MW-3	
	06/15/99			22.92	0.00	110.59	140	<0.30	0.32	<0.30	<0.60	1,700	-	-	-	-	-	MW-3	
	09/01/99			23.11	0.00	110.40	180	0.63	<0.30	0.35	0.86	<10	-	-	-	-	-	MW-3	
	11/30/99			23.78	0.00	109.73	270	<0.30	<0.30	<0.30	2.0	2,100	-	-	-	-	-	MW-3	
	03/23/00			24.16	0.00	109.35	380	35 J	<40	28 J	<80	1,100	730 J	<100	<100	<100	-	MW-3	
	04/17/00			24.04	0.00	109.47	3,300	330	<4.7	230	<41	2,200	1,500 J	<25	<28	<34	-	MW-3	
	07/11/00			24.06	0.00	109.45	5,000	680	38 J	260	63 J	2,900	2,100	<10	<11	22 J	-	MW-3	
	10/11/00			24.65	0.00	108.86	6,200	770	42 J	530	110 J	2,400	2,200	<10	<11	<14	-	MW-3	
	01/04/01			25.40	0.00	108.11	10,000	960	280 J	720	520 J	2,000	2,000	<10	<11	15 J	-	MW-3	
	04/19/01			23.61	0.00	109.90	2,900	190	<20	260	68 J	1,000	1,000	<40	<40	<40	-	MW-3	
	07/09/01			23.66	0.00	109.85	3,500	160	<10	260	39 J	1,100	1,800	<20	<20	<20	-	MW-3	
	10/02/01			25.34	0.00	108.17	4,000	160	97 J	250	180	910	1,800	<40	<40	<40	-	MW-3	
	01/03/02			26.81	0.00	106.70	6,900	320	610	480	1,100	730	1,000	<40	<40	<40	-	MW-3	
	04/02/02			26.53	0.00	106.98	4,600	300	260	460	600	640	700	<40	<40	<40	-	MW-3	
	08/23/02			25.70	0.00	107.81	2,100	130	72	180	150	170	180	<5.0	<5.0	1.8 J	-	MW-3	
	12/19/02			25.67	0.00	107.84	1,300	69	17	100	60	59	110	<5.0	<5.0	0.59 J	-	MW-3	
	02/06/03			25.92	0.00	107.59	820	72	13	78	46	54	72	<5.0	<5.0	0.66 J	<150	MW-3	
	05/20/03			24.33	0.00	109.18	85	4.3	1.4	6.2	4.3	12	28	<1.0	<1.0	<1.0	<50	MW-3	
	07/18/03			23.86	0.00	109.65	51	1.1 J	0.51 J	1.9 J	2.2 J	4.7 J	10 J	<5.0	<5.0	<5.0	<150	MW-3	
	11/21/03			24.13	0.00	109.38	120	1.6 J	0.57 J	3.1	2.7 J	4.5 J	9.4 J	<5.0	<5.0	<5.0	<150	MW-3	
	02/20/04	INA		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Construction
	06/23/04	INA		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	09/08/04	NS		25.47	0.00	108.04	-	-	-	-	-	-	-	-	-	-	-	-	
	09/09/04			-	-	-	85	0.59 J	<2.0	1.5 J	<4.0	4.0 J	6.3 J	<5.0	<5.0	<5.0	<150	MW-3	
	09/09/04	DUP		-	-	-	34 J	0.41 J	<2.0	0.89 J	<4.0	3.8 J	<50	<5.0	<5.0	<5.0	<150	DUP-0069-20040909	
	12/14/04			25.62	0.00	107.89	1,900	6.2	2.2	24	14	16	48 J	<5.0	<5.0	<5.0	<150	MW-3	
	03/02/05			21.38	0.00	112.13	26 J	<2.0	<2.0	<2.0	<4.0	3.0 J	<50	<5.0	<5.0	<5.0	<150	MW-3	
	06/06/05			20.40	0.00	113.11	<50	<2.0	<2.0	<2.0	<4.0	4.0 J	<50	<5.0	<5.0	<5.0	<150	MW-3	

TABLE 7
Summary of Groundwater Analytical & Elevation Results
ARCO Station No. 0069
9922 South Figueroa Street, Los Angeles, California

Well No.	Date	Notes	TOC Elevation (ft-MSL)	Depth to Water (feet)	Measured SPH Thickness (feet)	Calc. GW Elev. (ft-MSL)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	Sample ID	Comments
MW-5	01/31/96	SPH	133.54	24.10	0.00	109.44	-	-	-	-	-	-	-	-	-	-	-	-	Purge sheen
	04/15/96	SPH		24.39	0.00	109.15	-	-	-	-	-	-	-	-	-	-	-	-	Purge sheen
	07/22/96	SPH		45.25	0.30	88.52	-	-	-	-	-	-	-	-	-	-	-	-	
	10/17/96	NS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/25/97	SPH		24.18	0.53	109.76	-	-	-	-	-	-	-	-	-	-	-	-	
	06/20/97	SPH		24.13	0.40	109.71	-	-	-	-	-	-	-	-	-	-	-	-	
	08/22/97	SPH		24.62	0.22	109.09	-	-	-	-	-	-	-	-	-	-	-	-	
	11/17/97	SPH		25.07	0.09	108.54	-	-	-	-	-	-	-	-	-	-	-	-	
	03/18/98			20.25	0.00	113.29	39,000	4,000	7,400	920	6,700	2,000	-	-	-	-	-	MW-5	
	06/18/98			20.32	0.00	113.22	69,000	12,000	20,000	2,300	14,000	9,800	-	-	-	-	-	MW-5	
	08/20/98			19.66	0.00	113.88	71,000	13,000	20,000	2,000	13,000	11,000	-	-	-	-	-	MW-5	
	11/18/98	NS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	03/24/99			22.81	0.00	110.73	73,000	11,000	16,000	2,300	13,000	13,000	-	-	-	-	-	MW-5	
	06/15/99	SPH		23.09	sheen	110.45	70,000	9,300	12,000	2,000	12,000	6,400	-	-	-	-	-	MW-5	
	09/01/99	SPH		23.53	sheen	110.01	-	-	-	-	-	-	-	-	-	-	-	-	
	11/30/99	SPH		24.13	sheen	109.41	-	-	-	-	-	-	-	-	-	-	-	-	
	03/23/00	SPH		24.77	sheen	108.77	-	-	-	-	-	-	-	-	-	-	-	-	
	04/17/00	DRY		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/11/00	SPH		24.84	0.04	108.73	-	-	-	-	-	-	-	-	-	-	-	-	
	10/11/00	SPH		24.90	sheen	108.64	-	-	-	-	-	-	-	-	-	-	-	-	
	01/04/01	SPH		25.31	sheen	108.23	-	-	-	-	-	-	-	-	-	-	-	-	
	04/19/01	SPH		24.61	sheen	108.93	-	-	-	-	-	-	-	-	-	-	-	-	
	07/09/01	SPH		25.12	0.13	108.52	-	-	-	-	-	-	-	-	-	-	-	-	
	10/02/01	SPH		26.07	0.05	107.51	-	-	-	-	-	-	-	-	-	-	-	-	
	01/03/02	DRY		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04/02/02	DRY		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	08/23/02	DRY		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12/19/02	DRY		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	02/06/03	DRY		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	05/20/03	DRY		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07/18/03			24.39	0.00	109.15	37,000	1,200	1,900	2,000	15,000	5,800	9,900	<250	<250	61 J	<7,500	MW-5	
	11/21/03			24.80	0.00	108.74	29,000	1,100	620	1,500	11,000	5,500	7,500	<250	<250	58 J	<7,500	MW-5	
	02/20/04	INA		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Construction
	06/23/04	INA		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	09/08/04	NS		25.92	0.00	107.62	-	-	-	-	-	-	-	-	-	-	-	-	
	09/09/04			-	-	-	4,100	11 J	7.8 J	33	330	160	2,300	<50	<50	<50	<1,500	MW-5	
	12/14/04			25.93	0.00	107.61	1,100	<4.0	<4.0	5.2	34	19	1,400	<10	<10	<10	<300	MW-5	
	03/02/05	INA		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	06/06/05			20.05	0.00	113.49	6,500	180	61	300	1,500	230	3,200	<50	<50	4.9 J	<1,500	MW-5	
	06/06/05	DUP		-	-	-	5,900	160	57	270	1,400	220	3,200	<50	<50	4.8 J	<1,500	DUP-0069-20050606	

TABLE 7
Summary of Groundwater Analytical & Elevation Results
ARCO Station No. 0069
9922 South Figueroa Street, Los Angeles, California

Well No.	Date	Notes	TOC Elevation (ft-MSL)	Depth to Water (feet)	Measured SPH Thickness (feet)	Calc. GW Elev. (ft-MSL)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	Sample ID	Comments
MW-6	01/31/96		134.50	23.90	0.00	110.60	1,300	<3.0	<3.0	<3.0	<6.0	-	-	-	-	-	-	MW-6	
	04/15/96			24.26	0.00	110.24	87	3.7	0.38	<0.30	<0.60	<10	-	-	-	-	-	MW-6	
	07/22/96			26.48	0.00	108.02	170	0.43	<0.30	0.67	<0.60	2,500	-	-	-	-	-	MW-6	
	10/17/96			26.96	0.00	107.54	91	<0.30	<0.30	<0.30	<0.60	2,300	-	-	-	-	-	MW-6	
	03/25/97			25.27	0.00	109.23	120	<0.30	<0.30	<0.30	<0.60	1,700	-	-	-	-	-	MW-6	
	06/20/97			24.90	0.00	109.60	<50	<0.30	<0.30	<0.30	<0.60	850	-	-	-	-	-	MW-6	
	08/22/97			25.70	0.00	108.80	<50	0.61	0.32	<0.30	<0.60	900	-	-	-	-	-	MW-6	
	11/17/97			26.25	0.00	108.25	<50	0.60	<0.5	<0.5	<1.0	1,000	-	-	-	-	-	MW-6	
	03/18/98			20.30	0.00	114.20	<50	<0.30	<0.30	<0.30	<0.60	200	-	-	-	-	-	MW-6	
	06/18/98			19.84	0.00	114.66	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-6	
	08/20/98			20.81	0.00	113.69	<50	0.33	<0.30	<0.30	<0.60	73	-	-	-	-	-	MW-6	
	11/18/98			22.14	0.00	112.36	<50	0.51	<0.30	<0.30	<0.60	110	-	-	-	-	-	MW-6	
	03/24/99			23.35	0.00	111.15	<50	<0.30	<0.30	<0.30	<0.60	190	-	-	-	-	-	MW-6	
	06/15/99			23.73	0.00	110.77	<50	<0.30	<0.30	<0.30	<0.60	210	-	-	-	-	-	MW-6	
	09/01/99			24.30	0.00	110.20	<50	<0.30	<0.30	<0.30	<0.60	360	-	-	-	-	-	MW-6	
	11/30/99			25.38	0.00	109.12	<50	0.45	<0.30	<0.30	<0.60	350	-	-	-	-	-	MW-6	
	03/23/00			26.20	0.00	108.30	27 J	<20	<20	<20	<40	840	<500	<50	<50	<50	-	MW-6	
	04/17/00			25.99	0.00	108.51	500	<1.1	<0.93	<1.8	<8.2	950	<5.0	<5.0	<5.7	<6.8	-	MW-6	
	07/11/00			25.81	0.00	108.69	250	<1.1	<0.93	<1.8	<8.2	1,100	72 J	<5.0	<5.7	<6.8	-	MW-6	
	10/11/00			26.62	0.00	107.88	390	3.6 J	<1.9	<3.6	<16	1,400	<100	<10	<11	<14	-	MW-6	
	01/04/01			27.30	0.00	107.20	480	1.2 J	1.4 J	<1.8	<8.2	1,500	<50	<5.0	<5.7	8.3 J	-	MW-6	
	04/19/01			25.10	0.00	109.40	120	<4.0	<4.0	<4.0	<4.0	240	<40	<8.0	<8.0	<8.0	-	MW-6	
	07/09/01			25.33	0.00	109.17	180	<4.0	<4.0	<4.0	<4.0	400	<40	<8.0	<8.0	<8.0	-	MW-6	
	10/02/01			26.18	0.00	108.32	190	<4.0	<4.0	<4.0	<4.0	440	<40	<8.0	<8.0	<8.0	-	MW-6	
	01/03/02			27.36	0.00	107.14	210	<10	<10	<10	<10	770	<100	<20	<20	<20	-	MW-6	
	04/02/02			27.63	0.00	106.87	1,500	<40	<40	<40	<40	3,100	<400	<80	<80	<80	-	MW-6	
	08/23/02			27.20	0.00	107.30	610	<20	1.4 J	<20	<40	4,700	1,500	<50	<50	22 J	-	MW-6	
	12/19/02			26.77	0.00	107.73	620	<20	<20	<20	<40	3,500	1,800	<50	<50	13 J	-	MW-6	
	02/06/03			26.80	0.00	107.70	1,600	<20	<20	<20	5.2 J	3,200	470 J	<50	<50	20 J	<1,500	MW-6	
	05/20/03			25.02	0.00	109.48	410	<0.5	<0.5	<0.5	<1.5	900	178 J	<1.0	<1.0	<1.0	<50	MW-6	
	07/18/03			24.30	0.00	110.20	290	<2.0	<2.0	<2.0	<4.0	1,000	200	<5.0	<5.0	4.2 J	<150	MW-6	
	11/21/03			23.84	0.00	110.66	700	<40	<40	<40	<80	2,000	1,700	<100	<100	<100	<3,000	MW-6	
	02/20/04			24.84	0.00	109.66	420	<20	<20	<20	<40	1,200	1,300	<50	<50	6.4 J	<1,500	MW-6	
	06/23/04		134.34	25.03	0.00	109.31	580	<20	<20	<20	<40	870	990	<50	<50	4.7 J	<1,500	MW-6	
	09/08/04	NS		25.42	0.00	108.92	-	-	-	-	-	-	-	-	-	-	-	-	
	09/09/04			-	-	-	90	<5.0	<5.0	<5.0	<10	220	430	<12	<12	0.98 J	<380	MW-6	
	12/14/04			25.56	0.00	108.78	300	<20	<20	<20	<40	670	1,200	<50	<50	<50	<1,500	MW-6	
	03/02/05			20.59	0.00	113.75	<50	<2.0	<2.0	<2.0	<4.0	5.1	8.9 J	<5.0	<5.0	<5.0	<150	MW-6	
	06/06/05			19.95	0.00	114.39	<50	<2.0	<2.0	<2.0	<4.0	0.37 J	<50	<5.0	<5.0	<5.0	<150	MW-6	

TABLE 7
Summary of Groundwater Analytical & Elevation Results
ARCO Station No. 0069
9922 South Figueroa Street, Los Angeles, California

Well No.	Date	Notes	TOC Elevation (ft-MSL)	Depth to Water (feet)	Measured SPH Thickness (feet)	Calc. GW Elev. (ft-MSL)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	Sample ID	Comments
MW-7	07/22/96		132.43	24.60	0.00	107.83	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-7	
	10/17/96			24.90	0.00	107.53	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-7	
	03/25/97			24.10	0.00	108.33	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-7	
	06/20/97			23.10	0.00	109.33	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-7	
	08/22/97			23.93	0.00	108.50	68	<0.30	1.6	<0.30	1.8	<10	-	-	-	-	-	MW-7	
	11/17/97			24.49	0.00	107.94	63	<0.5	<0.5	<0.5	<1.0	<10	-	-	-	-	-	MW-7	
	03/18/98			19.20	0.00	113.23	150	1.7	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-7	
	06/18/98			18.30	0.00	114.13	120	1.1	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-7	
	08/20/98			19.72	0.00	112.71	110	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-7	
	11/18/98			20.25	0.00	112.18	120	1.0	0.45	<0.30	<0.60	<10	-	-	-	-	-	MW-7	
	03/24/99			22.15	0.00	110.28	61	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-7	
	06/15/99			22.46	0.00	109.97	58	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-7	
	09/01/99			22.89	0.00	109.54	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-7	
	11/30/99			23.49	0.00	108.94	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-7	
	03/23/00			23.56	0.00	108.87	19 J	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	-	MW-7	
	04/17/00			25.71	0.00	106.72	17 J	<0.11	<0.093	<0.18	<0.82	<0.28	<5.0	<0.50	<0.57	<0.68	-	MW-7	
	07/11/00			23.20	0.00	109.23	15 J	<0.11	<0.093	<0.18	<0.82	<0.28	<5.0	<0.50	<0.57	<0.68	-	MW-7	
	10/11/00			24.52	0.00	107.91	8.8 J	<0.11	0.20 J	<0.18	<0.82	<0.28	<5.0	<0.50	<0.57	<0.68	-	MW-7	
	01/04/01			25.24	0.00	107.19	9.5 J	<0.11	0.13 J	<0.18	<0.82	<0.28	<5.0	<0.50	<0.57	<0.68	-	MW-7	
	04/19/01			23.98	0.00	108.45	58 J	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	MW-7	
	07/09/01			24.90	0.00	107.53	<50	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	MW-7	
	10/02/01			25.92	0.00	106.51	82 J	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	MW-7	
	01/03/02			26.81	0.00	105.62	<50	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	MW-7	
	04/02/02			27.26	0.00	105.17	<50	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	MW-7	
	08/23/02			27.41	0.00	105.02	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	-	MW-7	
	12/19/02			27.50	0.00	104.93	11 J	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	-	MW-7	
	02/06/03			27.42	0.00	105.01	16 J	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-7	
	05/20/03			25.90	0.00	106.53	28 J	<0.5	<0.5	<0.5	<1.5	<1.0	<25	<1.0	<1.0	<1.0	<50	MW-7	
	07/18/03			25.22	0.00	107.21	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-7	
	11/21/03			25.46	0.00	106.97	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-7	
	02/20/04			26.25	0.00	106.18	27 J	<2.0	0.42 J	<2.0	<4.0	<5.0	7.8 J	<5.0	<5.0	<5.0	<150	MW-7	
	06/23/04		132.55	26.11	0.00	106.44	<50	<2.0	<2.0	0.29 J	1.4 J	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-7	
	09/08/04	NS		25.64	0.00	106.91	-	-	-	-	-	-	-	-	-	-	-	-	
	09/09/04			-	-	-	<50	<2.0	<2.0	<2.0	<4.0	3.9 J	<50	<5.0	<5.0	<5.0	<150	MW-7	
	12/14/04			26.26	0.00	106.29	<50	<2.0	<2.0	<2.0	<4.0	8.8	<50	<5.0	<5.0	<5.0	<150	MW-7	
	03/02/05			20.92	0.00	111.63	<50	<2.0	<2.0	<2.0	<4.0	21	<50	<5.0	<5.0	<5.0	<150	MW-7	
	06/06/05			19.36	0.00	113.19	<50	<2.0	<2.0	<2.0	<4.0	8.4	<50	<5.0	<5.0	<5.0	<150	MW-7	

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ARCO Station No. 0069
9922 South Figueroa Street, Los Angeles, California

Well No.	Date	Notes	TOC Elevation (ft-MSL)	Depth to Water (feet)	Measured SPH Thickness (feet)	Calc. GW Elev. (ft-MSL)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	Sample ID	Comments
MW-8	07/22/96		134.65	24.40	0.00	110.25	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-8	
	10/17/96			23.78	0.00	110.87	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-8	
	03/25/97			23.60	0.00	111.05	<50	0.54	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-8	
	06/20/97			22.86	0.00	111.79	67	1.4	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-8	
	08/22/97			23.77	0.00	110.88	<50	<0.30	1.2	0.30	2.1	<10	-	-	-	-	-	MW-8	
	11/17/97			24.39	0.00	110.26	<50	<0.5	<0.5	<0.5	<1.0	<10	-	-	-	-	-	MW-8	
	03/18/98			19.58	0.00	115.07	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-8	
	06/18/98			19.48	0.00	115.17	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-8	
	08/20/98			20.03	0.00	114.62	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-8	
	11/18/98			21.55	0.00	113.10	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-8	
	03/24/99			22.25	0.00	112.40	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-8	
	06/15/99			22.13	0.00	112.52	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-8	
	09/01/99			22.78	0.00	111.87	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-8	
	11/30/99			23.20	0.00	111.45	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	MW-8	
	03/23/00			23.68	0.00	110.97	<50	<2.0	<2.0	<2.0	<4.0	2.0 J	<50	<5.0	<5.0	<5.0	-	MW-8	
	04/17/00			23.25	0.00	111.40	10 J	<0.11	<0.093	<0.18	<0.82	2.2 J	<5.0	<0.50	<0.57	<0.68	-	MW-8	
	07/11/00			23.62	0.00	111.03	<7.0	<0.11	<0.093	<0.18	<0.82	1.9 J	<5.0	<0.50	<0.57	<0.68	-	MW-8	
	10/11/00			23.81	0.00	110.84	6.9 J	<0.11	<0.093	<0.18	<0.82	1.1 J	<5.0	<0.50	<0.57	<0.68	-	MW-8	
	01/04/01			24.81	0.00	109.84	8.8 J	0.11 J	0.23 J	<0.18	<0.82	1.2 J	<5.0	<0.50	<0.57	<0.68	-	MW-8	
	04/19/01			23.30	0.00	111.35	<50	<1.0	<1.0	<1.0	1.5	<2.0	<10	<2.0	<2.0	<2.0	-	MW-8	
	07/09/01			22.71	0.00	111.94	<50	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	MW-8	
	10/02/01			22.81	0.00	111.84	78 J	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	MW-8	
	01/30/02			24.83	0.00	109.82	<50	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	MW-8	
	04/02/02			23.51	0.00	111.14	<50	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	MW-8	
	08/23/02			22.95	0.00	111.70	12 J	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	-	MW-8	
	12/19/02			22.75	0.00	111.90	8.9 J	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	-	MW-8	
	02/06/03			23.74	0.00	110.91	12 J	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-8	
	05/20/03			21.84	0.00	112.81	27 J	<0.5	<0.5	<0.5	<1.5	<1.0	<25	<1.0	<1.0	<1.0	<50	MW-8	
	07/18/03			21.58	0.00	113.07	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-8	
	11/21/03			21.90	0.00	112.75	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-8	
	02/20/04			22.98	0.00	111.67	24 J	<2.0	0.54 J	<2.0	0.56 J	<5.0	8.2 J	<5.0	<5.0	<5.0	<150	MW-8	
	06/23/04		134.75	23.31	0.00	111.44	22 J	<2.0	<2.0	1.8 J	0.80 J	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-8	
	09/08/04	NS		23.34	0.00	111.41	-	-	-	-	-	-	-	-	-	-	-	-	
	09/09/04			-	-	-	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-8	
	12/14/04			23.42	0.00	111.33	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-8	
	03/02/05			19.23	0.00	115.52	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-8	
	06/06/05			19.20	0.00	115.55	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	MW-8	

TABLE 7
Summary of Groundwater Analytical & Elevation Results
ARCO Station No. 0069
9922 South Figueroa Street, Los Angeles, California

Well No.	Date	Notes	TOC Elevation (ft-MSL)	Depth to Water (feet)	Measured SPH Thickness (feet)	Calc. GW Elev. (ft-MSL)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	Sample ID	Comments
Trip Blank	03/18/98		-	-	-	-	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	TB	
	06/18/98			-	-	-	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	Trip Blank	
	08/20/98			-	-	-	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	Trip Blank	
	11/18/98			-	-	-	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	Trip Blank	
	03/24/99			-	-	-	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	Trip Blank	
	06/15/99			-	-	-	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	Trip Blank	
	09/01/99			-	-	-	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	Trip Blank	
	11/30/99			-	-	-	<50	<0.30	<0.30	<0.30	<0.60	<10	-	-	-	-	-	Trip Blank	
	03/23/00			-	-	-	11	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	-	Trip Blank	
	04/17/00			-	-	-	<9.3	<0.11	<0.093	<0.18	<0.82	<0.28	<5.0	<0.50	<0.57	<0.68	-	Trip Blank	
	07/11/00			-	-	-	<7.0	<0.11	<0.093	<0.18	<0.82	<0.28	7.0	<0.50	<0.57	<0.68	-	Trip Blank	
	10/11/00			-	-	-	12	<0.11	<0.093	<0.18	<0.82	<0.28	<5.0	<0.50	<0.57	<0.68	-	Trip Blank	
	01/04/01			-	-	-	40	<0.11	0.14	<0.18	<0.82	<0.28	<5.0	<0.50	<0.57	<0.68	-	Trip Blank	
	04/19/01			-	-	-	<50	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	Trip Blank	
	07/09/01			-	-	-	<50	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	Trip Blank	
	10/02/01			-	-	-	<50	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	Trip Blank	
	01/03/02			-	-	-	<50	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	Trip Blank	
	04/02/02			-	-	-	<50	<1.0	<1.0	<1.0	<1.0	<2.0	<10	<2.0	<2.0	<2.0	-	Trip Blank	
	08/23/02			-	-	-	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	-	Trip Blank	
	12/19/02			-	-	-	12 J	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	-	Trip Blank	
	02/06/03			-	-	-	11 J	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	Trip Blank	
	05/20/03			-	-	-	7.5 J	<0.5	<0.5	<0.5	<1.5	<5.0	<50	<1.0	<1.0	<1.0	<50	Trip Blank	
	07/18/03			-	-	-	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	Trip Blank	
	11/21/03			-	-	-	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	Trip Blank	

TABLE 7
Summary of Groundwater Analytical & Elevation Results
ARCO Station No. 0069
9922 South Figueroa Street, Los Angeles, California

Well No.	Date	Notes	TOC Elevation (ft-MSL)	Depth to Water (feet)	Measured SPH Thickness (feet)	Calc. GW Elev. (ft-MSL)	GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	Sample ID	Comments
Trip Blank	02/20/04		-	-	-	-	<50	<2.0	0.45 J	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	Trip Blank	
	06/23/04			-	-	-	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	TB-0069-20040623	
	09/09/04			-	-	-	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	TB-0069-20040909	
	12/14/04			-	-	-	32 J	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	TB-0069-20041214	
	03/02/05			-	-	-	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	TB-0069-20050302	
	06/06/05			-	-	-	<50	<2.0	<2.0	<2.0	<4.0	<5.0	<50	<5.0	<5.0	<5.0	<150	TB-0069-20050606	

Notes:

GRO = Gasoline range organics
B = Benzene
T = Toluene
E = Ethylbenzene
X = Total xylenes
MTBE = Methyl tert-butyl ether
TBA = Tert-butyl alcohol
DIPE = Di-isopropyl ether
ETBE = Ethyl tert-butyl ether
TAME = Tert-amyl methyl ether
SPH = Separate phase hydrocarbons
TOC = Top of casing (surveyed)
Calc. GW Elev. = Calculated groundwater elevation = TOC - Depth to Water + 0.75*(Measured SPH Thickness); assuming a specific gravity of 0.75 for SPH
ft-MSL = feet above mean sea level
µg/L = Micrograms per liter
< = Analyte was not detected above the specified method reporting limit
- = Not measured or analyzed
J = Estimated value (less than the method reporting limit and greater than or equal to the method detection limit)
Refer to the reports in which data was first presented for more information on historical data.

GRO analyzed by EPA Method 8015 Modified. The carbon chain range used for analysis since 2000 Quarter 1 is C4-C12.
BTEX and oxygenates analyzed by EPA Method 8260B since 2000 Quarter 1.
DRY = Well dry during gauging or purging; not sampled
DUP = Duplicate sample
INA = Well inaccessible; not sampled
NS = Well not sampled
Purge sheen = Sheen was observed during purging of the scheduled sampling; well not sampled
SPH = Well not sampled due to the presence of separate phase hydrocarbons (SPH)

TABLE 8
SUMMARY OF ENHANCED FLUID RECOVERY (EFR) DATA (Discontinued)
ATLANTIC RICHFIELD COMPANY STATION NO. 0069
9922 SOUTH FIGUEROA STREET
LOS ANGELES, CALIFORNIA

Date	Well ID	Volume of Groundwater Removed (gallons)	Volume of LPH Removed (gallons)	Depth to Groundwater (feet)	Depth to Product (feet)	Thickness of Product (feet)	COMMENTS
10/04/04	MW-1	30.00	0.00	24.86	--	--	
11/05/04		32.00	0.00	26.46	--	--	
12/10/04		50.00	0.00	24.24	--	--	
07/08/04	MW-2	80.00	0.00	24.31	--	--	
08/16/04		27.00	0.00	24.87	--	--	
09/15/04		51.00	0.00	24.52	--	--	
02/28/03	MW-5	0.00	0.00	--	--	--	Dry
03/20/03		10.00	0.00	23.80	--	--	
04/08/03		0.00	0.00	--	--	--	Dry
05/12/03		0.00	0.00	--	--	--	Dry
06/20/03		2.00	0.00	--	--	--	
07/11/03		1.00	0.00	24.46	--	--	
08/15/03		5.00	0.00	24.25	--	--	
09/12/03		0.00	0.00	23.75	--	--	
10/10/03		4.00	0.00	24.35	--	--	
11/19/03		46.00	0.00	30.51	--	--	
12/18/03		60.00	0.00	24.09	--	--	
01/07/04		12.00	0.00	24.42	--	--	
01/21/04		14.00	0.00	24.59	--	--	
02/04/04		--	--	--	--	--	
02/28/03	MW-6	8.00	0.00	27.47	--	--	
03/20/03		40.00	0.00	25.92	--	--	
04/08/03		19.00	0.00	25.72	--	--	
05/12/03		21.00	0.00	32.03	--	--	
06/20/03		24.00	0.00	32.00	--	--	
07/11/03		25.00	0.00	24.37	--	--	
08/15/03		50.00	0.00	24.11	--	--	
09/12/03		0.00	0.00	24.26	--	--	
10/10/03		40.00	0.00	23.63	--	--	
11/19/00		31.00	0.00	23.91	--	--	
12/18/03		65.00	0.00	25.27	--	--	
01/07/04		65.00	0.00	25.57	--	--	
01/21/04		75.00	0.00	25.78	--	--	
02/04/04		40.00	0.00	29.96	--	--	
05/06/04		26.00	0.00	24.72	--	--	
06/10/04		28.00	0.00	25.01	--	--	
10/04/04		24.00	0.00	24.28	--	--	
11/05/04		27.00	0.00	27.56	--	--	
12/10/04		75.00	0.00	25.54	--	--	
03/03/04	MW-7	26.25	0.00	25.00	--	--	
04/08/04		40.00	0.00	25.07	--	--	
05/06/04		25.00	0.00	26.84	--	--	
07/08/04		120.00	0.00	25.78	--	--	
08/16/04		70.00	0.00	25.73	--	--	
09/15/04		116.00	0.00	25.74	--	--	
Total gallons recovered:		**1504.25**	**0.00**				

Notes:
* 1 gallon = 128 ounces
* Liquid phase hydrocarbon (LPH) recovered via overpurging.
* Approximately 2.21 gallons of LPH has been recovered prior to February 28, 2003.

Appendix A
Laboratory Report and Chain of Custody

Del Mar Analytical

17461 Derian Ave., Suite 100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297
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9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

LABORATORY REPORT

Prepared For: SECOR International, Inc.-Thousand Oaks
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Attention: Don Indermill

Project: ARCO 0069, Los Angeles

Sampled: 06/06/05
Received: 06/07/05
Issued: 06/21/05 17:04

NELAP #01108CA California ELAP#1197 CSDLAC #10117

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of Del Mar Analytical and its client. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical. The Chain of Custody, 1 page, is included and is an integral part of this report.
This entire report was reviewed and approved for release.

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 3°C, on ice and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Del Mar Analytical Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: Results that fall between the MDL and RL are 'J' flagged.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

LABORATORY ID	CLIENT ID	MATRIX
IOF0591-01	MW-1	Water
IOF0591-02	MW-2	Water
IOF0591-03	MW-3	Water
IOF0591-04	MW-5	Water
IOF0591-05	MW-6	Water
IOF0591-06	MW-7	Water
IOF0591-07	MW-8	Water
IOF0591-08	DUP-0069-20050606	Water
IOF0591-09	TB-0069-20050606	Water

Reviewed By:

Del Mar Analytical, Irvine
Chris Roberts
Project Manager

Del Mar Analytical

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SECOR International, Inc.-Thousand Oaks
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Attention: Don Indermill

Project ID: ARCO 0069, Los Angeles

Report Number: IOF0591

Sampled: 06/06/05
Received: 06/07/05

VOLATILE FUEL HYDROCARBONS (EPA 5030/8015M)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOF0591-01 (MW-1 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
GRO (C4 - C12)	EPA 8015B	5F16044	24	50	**260**	1	06/16/05	06/16/05	
Surrogate: 4-BFB (FID) (65-140%)					*107 %*				
Sample ID: IOF0591-02 (MW-2 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
GRO (C4 - C12)	EPA 8015B	5F10043	24	50	**58**	1	06/10/05	06/10/05	
Surrogate: 4-BFB (FID) (65-140%)					*66 %*				
Sample ID: IOF0591-03 (MW-3 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
GRO (C4 - C12)	EPA 8015B	5F10043	24	50	ND	1	06/10/05	06/10/05	
Surrogate: 4-BFB (FID) (65-140%)					*74 %*				
Sample ID: IOF0591-04 (MW-5 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
GRO (C4 - C12)	EPA 8015B	5F10043	240	500	**6500**	10	06/10/05	06/10/05	
Surrogate: 4-BFB (FID) (65-140%)					*121 %*				
Sample ID: IOF0591-05 (MW-6 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
GRO (C4 - C12)	EPA 8015B	5F10043	24	50	ND	1	06/10/05	06/11/05	
Surrogate: 4-BFB (FID) (65-140%)					*70 %*				
Sample ID: IOF0591-06 (MW-7 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
GRO (C4 - C12)	EPA 8015B	5F09047	24	50	ND	1	06/09/05	06/09/05	
Surrogate: 4-BFB (FID) (65-140%)					*77 %*				
Sample ID: IOF0591-07 (MW-8 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
GRO (C4 - C12)	EPA 8015B	5F09047	24	50	ND	1	06/09/05	06/09/05	
Surrogate: 4-BFB (FID) (65-140%)					*71 %*				
Sample ID: IOF0591-08 (DUP-0069-20050606 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
GRO (C4 - C12)	EPA 8015B	5F10043	480	1000	**5900**	20	06/10/05	06/10/05	
Surrogate: 4-BFB (FID) (65-140%)					*98 %*				

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Chris Roberts
Project Manager

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SECOR International, Inc.-Thousand Oaks
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Attention: Don Indermill

Project ID: ARCO 0069, Los Angeles
Report Number: IOF0591

Sampled: 06/06/05
Received: 06/07/05

VOLATILE FUEL HYDROCARBONS (EPA 5030/8015M)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOF0591-09 (TB-0069-20050606 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
GRO (C4 - C12)	EPA 8015B	5F09047	24	50	ND	1	06/09/05	06/09/05	
Surrogate: 4-BFB (FID) (65-140%)					*68 %*				

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Project ID: ARCO 0069, Los Angeles

Report Number: IOF0591

Sampled: 06/06/05
Received: 06/07/05

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOF0591-01 (MW-1 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
Benzene	EPA 8260B	5F11006	0.28	2.0	ND	1	06/11/05	06/11/05	
Ethylbenzene	EPA 8260B	5F11006	0.25	2.0	**1.3**	1	06/11/05	06/11/05	J,DX
Toluene	EPA 8260B	5F11006	0.36	2.0	ND	1	06/11/05	06/11/05	
m,p-Xylenes	EPA 8260B	5F11006	0.52	2.0	**2.0**	1	06/11/05	06/11/05	
o-Xylene	EPA 8260B	5F11006	0.24	2.0	**0.37**	1	06/11/05	06/11/05	J,DX
Xylenes, Total	EPA 8260B	5F11006	0.52	4.0	**2.4**	1	06/11/05	06/11/05	J,DX
Di-isopropyl Ether (DIPE)	EPA 8260B	5F11006	0.25	5.0	ND	1	06/11/05	06/11/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F11006	0.28	5.0	ND	1	06/11/05	06/11/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F11006	0.33	5.0	ND	1	06/11/05	06/11/05	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F11006	0.32	5.0	ND	1	06/11/05	06/11/05	
tert-Butanol (TBA)	EPA 8260B	5F11006	3.1	50	ND	1	06/11/05	06/11/05	
Ethanol	EPA 8260B	5F11006	100	150	ND	1	06/11/05	06/11/05	IO
Surrogate: Dibromofluoromethane (80-120%)					*97 %*				
Surrogate: Toluene-d8 (80-120%)					*97 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)					*98 %*				
Sample ID: IOF0591-02 (MW-2 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
Benzene	EPA 8260B	5F11006	0.28	2.0	ND	1	06/11/05	06/11/05	
Ethylbenzene	EPA 8260B	5F11006	0.25	2.0	**0.28**	1	06/11/05	06/11/05	J,DX
Toluene	EPA 8260B	5F11006	0.36	2.0	ND	1	06/11/05	06/11/05	
m,p-Xylenes	EPA 8260B	5F11006	0.52	2.0	ND	1	06/11/05	06/11/05	
o-Xylene	EPA 8260B	5F11006	0.24	2.0	ND	1	06/11/05	06/11/05	
Xylenes, Total	EPA 8260B	5F11006	0.52	4.0	ND	1	06/11/05	06/11/05	
Di-isopropyl Ether (DIPE)	EPA 8260B	5F11006	0.25	5.0	ND	1	06/11/05	06/11/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F11006	0.28	5.0	ND	1	06/11/05	06/11/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F11006	0.33	5.0	ND	1	06/11/05	06/11/05	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F11006	0.32	5.0	ND	1	06/11/05	06/11/05	
tert-Butanol (TBA)	EPA 8260B	5F11006	3.1	50	ND	1	06/11/05	06/11/05	
Ethanol	EPA 8260B	5F11006	100	150	ND	1	06/11/05	06/11/05	IO
Surrogate: Dibromofluoromethane (80-120%)					*102 %*				
Surrogate: Toluene-d8 (80-120%)					*98 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)					*96 %*				

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Project ID: ARCO 0069, Los Angeles

Report Number: IOF0591

Sampled: 06/06/05
Received: 06/07/05

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOF0591-03 (MW-3 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
Benzene	EPA 8260B	5F11006	0.28	2.0	ND	1	06/11/05	06/11/05	
Ethylbenzene	EPA 8260B	5F11006	0.25	2.0	ND	1	06/11/05	06/11/05	
Toluene	EPA 8260B	5F11006	0.36	2.0	ND	1	06/11/05	06/11/05	
m,p-Xylenes	EPA 8260B	5F11006	0.52	2.0	ND	1	06/11/05	06/11/05	
o-Xylene	EPA 8260B	5F11006	0.24	2.0	ND	1	06/11/05	06/11/05	
Xylenes, Total	EPA 8260B	5F11006	0.52	4.0	ND	1	06/11/05	06/11/05	
Di-isopropyl Ether (DIPE)	EPA 8260B	5F11006	0.25	5.0	ND	1	06/11/05	06/11/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F11006	0.28	5.0	ND	1	06/11/05	06/11/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F11006	0.33	5.0	ND	1	06/11/05	06/11/05	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F11006	0.32	5.0	**4.0**	1	06/11/05	06/11/05	J,DX
tert-Butanol (TBA)	EPA 8260B	5F11006	3.1	50	ND	1	06/11/05	06/11/05	
Ethanol	EPA 8260B	5F11006	100	150	ND	1	06/11/05	06/11/05	IO
Surrogate: Dibromofluoromethane (80-120%)					*101 %*				
Surrogate: Toluene-d8 (80-120%)					*98 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)					*98 %*				
Sample ID: IOF0591-04 (MW-5 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
Benzene	EPA 8260B	5F13001	2.8	20	**180**	10	06/13/05	06/13/05	
Ethylbenzene	EPA 8260B	5F13001	2.5	20	**300**	10	06/13/05	06/13/05	
Toluene	EPA 8260B	5F13001	3.6	20	**61**	10	06/13/05	06/13/05	
m,p-Xylenes	EPA 8260B	5F13001	5.2	20	**1000**	10	06/13/05	06/13/05	
o-Xylene	EPA 8260B	5F13001	2.4	20	**530**	10	06/13/05	06/13/05	
Xylenes, Total	EPA 8260B	5F13001	5.2	40	**1500**	10	06/13/05	06/13/05	
Di-isopropyl Ether (DIPE)	EPA 8260B	5F13001	2.5	50	ND	10	06/13/05	06/13/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F13001	2.8	50	ND	10	06/13/05	06/13/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F13001	3.3	50	**4.9**	10	06/13/05	06/13/05	J,DX
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F13001	3.2	50	**230**	10	06/13/05	06/13/05	
tert-Butanol (TBA)	EPA 8260B	5F13001	31	500	**3200**	10	06/13/05	06/13/05	
Ethanol	EPA 8260B	5F13001	1000	1500	ND	10	06/13/05	06/13/05	
Surrogate: Dibromofluoromethane (80-120%)					*104 %*				
Surrogate: Toluene-d8 (80-120%)					*99 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)					*100 %*				

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SECOR International, Inc.-Thousand Oaks
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Attention: Don Indermill

Project ID: ARCO 0069, Los Angeles

Report Number: IOF0591

Sampled: 06/06/05
Received: 06/07/05

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOF0591-05 (MW-6 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
Benzene	EPA 8260B	5F11006	0.28	2.0	ND	1	06/11/05	06/11/05	
Ethylbenzene	EPA 8260B	5F11006	0.25	2.0	ND	1	06/11/05	06/11/05	
Toluene	EPA 8260B	5F11006	0.36	2.0	ND	1	06/11/05	06/11/05	
m,p-Xylenes	EPA 8260B	5F11006	0.52	2.0	ND	1	06/11/05	06/11/05	
o-Xylene	EPA 8260B	5F11006	0.24	2.0	ND	1	06/11/05	06/11/05	
Xylenes, Total	EPA 8260B	5F11006	0.52	4.0	ND	1	06/11/05	06/11/05	
Di-isopropyl Ether (DIPE)	EPA 8260B	5F11006	0.25	5.0	ND	1	06/11/05	06/11/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F11006	0.28	5.0	ND	1	06/11/05	06/11/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F11006	0.33	5.0	ND	1	06/11/05	06/11/05	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F11006	0.32	5.0	**0.37**	1	06/11/05	06/11/05	J,DX
tert-Butanol (TBA)	EPA 8260B	5F11006	3.1	50	ND	1	06/11/05	06/11/05	
Ethanol	EPA 8260B	5F11006	100	150	ND	1	06/11/05	06/11/05	IO
Surrogate: Dibromofluoromethane (80-120%)					*103 %*				
Surrogate: Toluene-d8 (80-120%)					*98 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)					*98 %*				
Sample ID: IOF0591-06 (MW-7 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
Benzene	EPA 8260B	5F11006	0.28	2.0	ND	1	06/11/05	06/11/05	
Ethylbenzene	EPA 8260B	5F11006	0.25	2.0	ND	1	06/11/05	06/11/05	
Toluene	EPA 8260B	5F11006	0.36	2.0	ND	1	06/11/05	06/11/05	
m,p-Xylenes	EPA 8260B	5F11006	0.52	2.0	ND	1	06/11/05	06/11/05	
o-Xylene	EPA 8260B	5F11006	0.24	2.0	ND	1	06/11/05	06/11/05	
Xylenes, Total	EPA 8260B	5F11006	0.52	4.0	ND	1	06/11/05	06/11/05	
Di-isopropyl Ether (DIPE)	EPA 8260B	5F11006	0.25	5.0	ND	1	06/11/05	06/11/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F11006	0.28	5.0	ND	1	06/11/05	06/11/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F11006	0.33	5.0	ND	1	06/11/05	06/11/05	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F11006	0.32	5.0	**8.4**	1	06/11/05	06/11/05	
tert-Butanol (TBA)	EPA 8260B	5F11006	3.1	50	ND	1	06/11/05	06/11/05	
Ethanol	EPA 8260B	5F11006	100	150	ND	1	06/11/05	06/11/05	IO
Surrogate: Dibromofluoromethane (80-120%)					*102 %*				
Surrogate: Toluene-d8 (80-120%)					*97 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)					*94 %*				

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Attention: Don Indermill

Project ID: ARCO 0069, Los Angeles

Report Number: IOF0591

Sampled: 06/06/05
Received: 06/07/05

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOF0591-07 (MW-8 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
Benzene	EPA 8260B	5F11006	0.28	2.0	ND	1	06/11/05	06/11/05	
Ethylbenzene	EPA 8260B	5F11006	0.25	2.0	ND	1	06/11/05	06/11/05	
Toluene	EPA 8260B	5F11006	0.36	2.0	ND	1	06/11/05	06/11/05	
m,p-Xylenes	EPA 8260B	5F11006	0.52	2.0	ND	1	06/11/05	06/11/05	
o-Xylene	EPA 8260B	5F11006	0.24	2.0	ND	1	06/11/05	06/11/05	
Xylenes, Total	EPA 8260B	5F11006	0.52	4.0	ND	1	06/11/05	06/11/05	
Di-isopropyl Ether (DIPE)	EPA 8260B	5F11006	0.25	5.0	ND	1	06/11/05	06/11/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F11006	0.28	5.0	ND	1	06/11/05	06/11/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F11006	0.33	5.0	ND	1	06/11/05	06/11/05	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F11006	0.32	5.0	ND	1	06/11/05	06/11/05	
tert-Butanol (TBA)	EPA 8260B	5F11006	3.1	50	ND	1	06/11/05	06/11/05	
Ethanol	EPA 8260B	5F11006	100	150	ND	1	06/11/05	06/11/05	IO
Surrogate: Dibromofluoromethane (80-120%)					*104 %*				
Surrogate: Toluene-d8 (80-120%)					*98 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)					*98 %*				
Sample ID: IOF0591-08 (DUP-0069-20050606 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
Benzene	EPA 8260B	5F13001	2.8	20	**160**	10	06/13/05	06/13/05	
Ethylbenzene	EPA 8260B	5F13001	2.5	20	**270**	10	06/13/05	06/13/05	
Toluene	EPA 8260B	5F13001	3.6	20	**57**	10	06/13/05	06/13/05	
m,p-Xylenes	EPA 8260B	5F13001	5.2	20	**940**	10	06/13/05	06/13/05	
o-Xylene	EPA 8260B	5F13001	2.4	20	**490**	10	06/13/05	06/13/05	
Xylenes, Total	EPA 8260B	5F13001	5.2	40	**1400**	10	06/13/05	06/13/05	
Di-isopropyl Ether (DIPE)	EPA 8260B	5F13001	2.5	50	ND	10	06/13/05	06/13/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F13001	2.8	50	ND	10	06/13/05	06/13/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F13001	3.3	50	**4.8**	10	06/13/05	06/13/05	J,DX
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F13001	3.2	50	**220**	10	06/13/05	06/13/05	
tert-Butanol (TBA)	EPA 8260B	5F13001	31	500	**3200**	10	06/13/05	06/13/05	
Ethanol	EPA 8260B	5F13001	1000	1500	ND	10	06/13/05	06/13/05	
Surrogate: Dibromofluoromethane (80-120%)					*100 %*				
Surrogate: Toluene-d8 (80-120%)					*97 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)					*98 %*				

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Thousand Oaks, CA 91361
Attention: Don Indermill

Project ID: ARCO 0069, Los Angeles

Report Number: IOF0591

Sampled: 06/06/05
Received: 06/07/05

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IOF0591-09 (TB-0069-20050606 - Water)					**Sampled: 06/06/05**				
Reporting Units: ug/l									
Benzene	EPA 8260B	5F11006	0.28	2.0	ND	1	06/11/05	06/11/05	
Ethylbenzene	EPA 8260B	5F11006	0.25	2.0	ND	1	06/11/05	06/11/05	
Toluene	EPA 8260B	5F11006	0.36	2.0	ND	1	06/11/05	06/11/05	
m,p-Xylenes	EPA 8260B	5F11006	0.52	2.0	ND	1	06/11/05	06/11/05	
o-Xylene	EPA 8260B	5F11006	0.24	2.0	ND	1	06/11/05	06/11/05	
Xylenes, Total	EPA 8260B	5F11006	0.52	4.0	ND	1	06/11/05	06/11/05	
Di-isopropyl Ether (DIPE)	EPA 8260B	5F11006	0.25	5.0	ND	1	06/11/05	06/11/05	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	5F11006	0.28	5.0	ND	1	06/11/05	06/11/05	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	5F11006	0.33	5.0	ND	1	06/11/05	06/11/05	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	5F11006	0.32	5.0	ND	1	06/11/05	06/11/05	
tert-Butanol (TBA)	EPA 8260B	5F11006	3.1	50	ND	1	06/11/05	06/11/05	
Ethanol	EPA 8260B	5F11006	100	150	ND	1	06/11/05	06/11/05	IO
Surrogate: Dibromofluoromethane (80-120%)					*96 %*				
Surrogate: Toluene-d8 (80-120%)					*98 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)					*96 %*				

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Chris Roberts
Project Manager

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Project ID: ARCO 0069, Los Angeles

Report Number: IOF0591

Sampled: 06/06/05
Received: 06/07/05

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (EPA 5030/8015M)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 5F09047 Extracted: 06/09/05											
Blank Analyzed: 06/09/2005 (5F09047-BLK1)											
GRO (C4 - C12)	ND	50	24	ug/l							
Surrogate: 4-BFB (FID)	*7.99*			*ug/l*	*10.0*		*80*	*65-140*			
LCS Analyzed: 06/09/2005 (5F09047-BS1)											
GRO (C4 - C12)	646	50	24	ug/l	800		81	65-140			
Surrogate: 4-BFB (FID)	*34.8*			*ug/l*	*30.0*		*116*	*65-140*			
Matrix Spike Analyzed: 06/09/2005 (5F09047-MS1)						**Source: IOF0591-06**					
GRO (C4 - C12)	224	50	24	ug/l	220	ND	102	60-145			
Surrogate: 4-BFB (FID)	*9.59*			*ug/l*	*10.0*		*96*	*65-140*			
Matrix Spike Dup Analyzed: 06/09/2005 (5F09047-MSD1)						**Source: IOF0591-06**					
GRO (C4 - C12)	219	50	24	ug/l	220	ND	100	60-145	2	20	
Surrogate: 4-BFB (FID)	*9.20*			*ug/l*	*10.0*		*92*	*65-140*			
Batch: 5F10043 Extracted: 06/10/05											
Blank Analyzed: 06/10/2005 (5F10043-BLK1)											
GRO (C4 - C12)	ND	50	24	ug/l							
Surrogate: 4-BFB (FID)	*7.02*			*ug/l*	*10.0*		*70*	*65-140*			
LCS Analyzed: 06/10/2005 (5F10043-BS1)											
GRO (C4 - C12)	781	50	24	ug/l	800		98	65-140			
Surrogate: 4-BFB (FID)	*26.5*			*ug/l*	*30.0*		*88*	*65-140*			
Matrix Spike Analyzed: 06/10/2005 (5F10043-MS1)						**Source: IOF0591-03**					
GRO (C4 - C12)	238	50	24	ug/l	220	ND	108	60-145			
Surrogate: 4-BFB (FID)	*10.5*			*ug/l*	*10.0*		*105*	*65-140*			

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METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (EPA 5030/8015M)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 5F10043 Extracted: 06/10/05											
Matrix Spike Dup Analyzed: 06/10/2005 (5F10043-MSD1)						**Source: IOF0591-03**					
GRO (C4 - C12)	230	50	24	ug/l	220	ND	105	60-145	3	20	
Surrogate: 4-BFB (FID)	*10.8*			*ug/l*	*10.0*		*108*	*65-140*			
Batch: 5F16044 Extracted: 06/16/05											
Blank Analyzed: 06/16/2005 (5F16044-BLK1)											
GRO (C4 - C12)	ND	50	24	ug/l							
Surrogate: 4-BFB (FID)	*9.32*			*ug/l*	*10.0*		*93*	*65-140*			
LCS Analyzed: 06/16/2005 (5F16044-BS1)											
GRO (C4 - C12)	873	50	24	ug/l	800		109	65-140			
Surrogate: 4-BFB (FID)	*30.8*			*ug/l*	*30.0*		*103*	*65-140*			
Matrix Spike Analyzed: 06/16/2005 (5F16044-MS1)						**Source: IOF1089-07**					
GRO (C4 - C12)	253	50	24	ug/l	220	ND	115	60-145			
Surrogate: 4-BFB (FID)	*11.4*			*ug/l*	*10.0*		*114*	*65-140*			
Matrix Spike Dup Analyzed: 06/16/2005 (5F16044-MSD1)						**Source: IOF1089-07**					
GRO (C4 - C12)	259	50	24	ug/l	220	ND	118	60-145	2	20	
Surrogate: 4-BFB (FID)	*11.1*			*ug/l*	*10.0*		*111*	*65-140*			

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METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 5F11006 Extracted: 06/11/05											
Blank Analyzed: 06/11/2005 (5F11006-BLK1)											
Benzene	ND	2.0	0.28	ug/l							
Ethylbenzene	ND	2.0	0.25	ug/l							
Toluene	ND	2.0	0.36	ug/l							
m,p-Xylenes	ND	2.0	0.52	ug/l							
o-Xylene	ND	2.0	0.24	ug/l							
Xylenes, Total	ND	4.0	0.52	ug/l							
Di-isopropyl Ether (DIPE)	ND	5.0	0.25	ug/l							
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	0.28	ug/l							
tert-Amyl Methyl Ether (TAME)	ND	5.0	0.33	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	5.0	0.32	ug/l							
tert-Butanol (TBA)	ND	50	3.1	ug/l							
Ethanol	ND	150	100	ug/l							
Surrogate: Dibromofluoromethane	*23.5*			*ug/l*	*25.0*		*94*	*80-120*			
Surrogate: Toluene-d8	*24.4*			*ug/l*	*25.0*		*98*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.5*			*ug/l*	*25.0*		*94*	*80-120*			
LCS Analyzed: 06/11/2005 (5F11006-BS1)											
Benzene	23.6	2.0	0.28	ug/l	25.0		94	65-120			
Ethylbenzene	23.9	2.0	0.25	ug/l	25.0		96	70-125			
Toluene	24.2	2.0	0.36	ug/l	25.0		97	70-125			
m,p-Xylenes	48.9	2.0	0.52	ug/l	50.0		98	70-125			
o-Xylene	24.0	2.0	0.24	ug/l	25.0		96	70-125			
Xylenes, Total	72.9	4.0	0.52	ug/l	75.0		97	70-125			
Di-isopropyl Ether (DIPE)	21.6	5.0	0.25	ug/l	25.0		86	60-135			
Ethyl tert-Butyl Ether (ETBE)	22.3	5.0	0.28	ug/l	25.0		89	60-135			
tert-Amyl Methyl Ether (TAME)	23.0	5.0	0.33	ug/l	25.0		92	60-135			
Methyl-tert-butyl Ether (MTBE)	23.2	5.0	0.32	ug/l	25.0		93	55-140			
tert-Butanol (TBA)	122	50	3.1	ug/l	125		98	65-135			
Ethanol	196	150	100	ug/l	250		78	35-160			
Surrogate: Dibromofluoromethane	*23.9*			*ug/l*	*25.0*		*96*	*80-120*			
Surrogate: Toluene-d8	*24.2*			*ug/l*	*25.0*		*97*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.1*			*ug/l*	*25.0*		*96*	*80-120*			

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METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 5F11006 Extracted: 06/11/05											
Matrix Spike Analyzed: 06/11/2005 (5F11006-MS1)						**Source: IOF0591-01**					
Benzene	26.4	2.0	0.28	ug/l	25.0	ND	106	60-125			
Ethylbenzene	27.6	2.0	0.25	ug/l	25.0	1.3	105	65-130			
Toluene	27.2	2.0	0.36	ug/l	25.0	ND	109	65-125			
m,p-Xylenes	55.9	2.0	0.52	ug/l	50.0	2.0	108	60-130			
o-Xylene	27.0	2.0	0.24	ug/l	25.0	0.37	107	60-125			
Xylenes, Total	82.9	4.0	0.52	ug/l	75.0	2.4	107	60-130			
Di-isopropyl Ether (DIPE)	25.1	5.0	0.25	ug/l	25.0	ND	100	60-140			
Ethyl tert-Butyl Ether (ETBE)	26.3	5.0	0.28	ug/l	25.0	ND	105	55-135			
tert-Amyl Methyl Ether (TAME)	26.1	5.0	0.33	ug/l	25.0	ND	104	55-140			
Methyl-tert-butyl Ether (MTBE)	27.6	5.0	0.32	ug/l	25.0	ND	110	50-150			
tert-Butanol (TBA)	140	50	3.1	ug/l	125	ND	112	60-145			
Ethanol	218	150	100	ug/l	250	ND	87	35-160			
Surrogate: Dibromofluoromethane	*24.4*			*ug/l*	*25.0*		*98*	*80-120*			
Surrogate: Toluene-d8	*25.1*			*ug/l*	*25.0*		*100*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.0*			*ug/l*	*25.0*		*100*	*80-120*			
Matrix Spike Dup Analyzed: 06/11/2005 (5F11006-MSD1)						**Source: IOF0591-01**					
Benzene	26.6	2.0	0.28	ug/l	25.0	ND	106	60-125	1	20	
Ethylbenzene	28.5	2.0	0.25	ug/l	25.0	1.3	109	65-130	3	20	
Toluene	27.2	2.0	0.36	ug/l	25.0	ND	109	65-125	0	20	
m,p-Xylenes	57.8	2.0	0.52	ug/l	50.0	2.0	112	60-130	3	25	
o-Xylene	27.9	2.0	0.24	ug/l	25.0	0.37	110	60-125	3	20	
Xylenes, Total	85.7	4.0	0.52	ug/l	75.0	2.4	111	60-130	3	20	
Di-isopropyl Ether (DIPE)	26.0	5.0	0.25	ug/l	25.0	ND	104	60-140	4	25	
Ethyl tert-Butyl Ether (ETBE)	27.0	5.0	0.28	ug/l	25.0	ND	108	55-135	3	25	
tert-Amyl Methyl Ether (TAME)	26.9	5.0	0.33	ug/l	25.0	ND	108	55-140	3	30	
Methyl-tert-butyl Ether (MTBE)	28.3	5.0	0.32	ug/l	25.0	ND	113	50-150	3	25	
tert-Butanol (TBA)	143	50	3.1	ug/l	125	ND	114	60-145	2	25	
Ethanol	227	150	100	ug/l	250	ND	91	35-160	4	30	
Surrogate: Dibromofluoromethane	*24.7*			*ug/l*	*25.0*		*99*	*80-120*			
Surrogate: Toluene-d8	*24.7*			*ug/l*	*25.0*		*99*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.9*			*ug/l*	*25.0*		*100*	*80-120*			

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METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 5F13001 Extracted: 06/13/05											
Blank Analyzed: 06/13/2005 (5F13001-BLK1)											
Benzene	ND	2.0	0.28	ug/l							
Ethylbenzene	ND	2.0	0.25	ug/l							
Toluene	ND	2.0	0.36	ug/l							
m,p-Xylenes	ND	2.0	0.52	ug/l							
o-Xylene	ND	2.0	0.24	ug/l							
Xylenes, Total	ND	4.0	0.52	ug/l							
Di-isopropyl Ether (DIPE)	ND	5.0	0.25	ug/l							
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	0.28	ug/l							
tert-Amyl Methyl Ether (TAME)	ND	5.0	0.33	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	5.0	0.32	ug/l							
tert-Butanol (TBA)	ND	50	3.1	ug/l							
Ethanol	ND	150	100	ug/l							
Surrogate: Dibromofluoromethane	*23.9*			*ug/l*	*25.0*		*96*	*80-120*			
Surrogate: Toluene-d8	*24.2*			*ug/l*	*25.0*		*97*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.1*			*ug/l*	*25.0*		*96*	*80-120*			
LCS Analyzed: 06/13/2005 (5F13001-BS1)											
Benzene	23.1	2.0	0.28	ug/l	25.0		92	65-120			
Ethylbenzene	23.8	2.0	0.25	ug/l	25.0		95	70-125			
Toluene	23.8	2.0	0.36	ug/l	25.0		95	70-125			
m,p-Xylenes	48.0	2.0	0.52	ug/l	50.0		96	70-125			
o-Xylene	23.7	2.0	0.24	ug/l	25.0		95	70-125			
Xylenes, Total	71.7	4.0	0.52	ug/l	75.0		96	70-125			
Di-isopropyl Ether (DIPE)	22.3	5.0	0.25	ug/l	25.0		89	60-135			
Ethyl tert-Butyl Ether (ETBE)	23.2	5.0	0.28	ug/l	25.0		93	60-135			
tert-Amyl Methyl Ether (TAME)	23.4	5.0	0.33	ug/l	25.0		94	60-135			
Methyl-tert-butyl Ether (MTBE)	23.8	5.0	0.32	ug/l	25.0		95	55-140			
tert-Butanol (TBA)	119	50	3.1	ug/l	125		95	65-135			
Ethanol	184	150	100	ug/l	250		74	35-160			
Surrogate: Dibromofluoromethane	*24.4*			*ug/l*	*25.0*		*98*	*80-120*			
Surrogate: Toluene-d8	*24.4*			*ug/l*	*25.0*		*98*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.6*			*ug/l*	*25.0*		*98*	*80-120*			

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METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 5F13001 Extracted: 06/13/05											
Matrix Spike Analyzed: 06/13/2005 (5F13001-MS1)						**Source: IOF0337-08**					
Benzene	22.5	2.0	0.28	ug/l	25.0	ND	90	60-125			
Ethylbenzene	23.2	2.0	0.25	ug/l	25.0	ND	93	65-130			
Toluene	23.4	2.0	0.36	ug/l	25.0	0.73	91	65-125			
m,p-Xylenes	48.6	2.0	0.52	ug/l	50.0	ND	97	60-130			
o-Xylene	23.6	2.0	0.24	ug/l	25.0	ND	94	60-125			
Xylenes, Total	72.2	4.0	0.52	ug/l	75.0	ND	96	60-130			
Di-isopropyl Ether (DIPE)	22.1	5.0	0.25	ug/l	25.0	ND	88	60-140			
Ethyl tert-Butyl Ether (ETBE)	23.2	5.0	0.28	ug/l	25.0	ND	93	55-135			
tert-Amyl Methyl Ether (TAME)	23.5	5.0	0.33	ug/l	25.0	ND	94	55-140			
Methyl-tert-butyl Ether (MTBE)	26.1	5.0	0.32	ug/l	25.0	2.6	94	50-150			
tert-Butanol (TBA)	115	50	3.1	ug/l	125	ND	92	60-145			
Ethanol	200	150	100	ug/l	250	ND	80	35-160			
Surrogate: Dibromofluoromethane	*24.9*			*ug/l*	*25.0*		*100*	*80-120*			
Surrogate: Toluene-d8	*24.3*			*ug/l*	*25.0*		*97*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.8*			*ug/l*	*25.0*		*103*	*80-120*			
Matrix Spike Dup Analyzed: 06/13/2005 (5F13001-MSD1)						**Source: IOF0337-08**					
Benzene	21.8	2.0	0.28	ug/l	25.0	ND	87	60-125	3	20	
Ethylbenzene	22.8	2.0	0.25	ug/l	25.0	ND	91	65-130	2	20	
Toluene	22.8	2.0	0.36	ug/l	25.0	0.73	88	65-125	3	20	
m,p-Xylenes	47.0	2.0	0.52	ug/l	50.0	ND	94	60-130	3	25	
o-Xylene	22.5	2.0	0.24	ug/l	25.0	ND	90	60-125	5	20	
Xylenes, Total	69.5	4.0	0.52	ug/l	75.0	ND	93	60-130	4	20	
Di-isopropyl Ether (DIPE)	21.0	5.0	0.25	ug/l	25.0	ND	84	60-140	5	25	
Ethyl tert-Butyl Ether (ETBE)	22.2	5.0	0.28	ug/l	25.0	ND	89	55-135	4	25	
tert-Amyl Methyl Ether (TAME)	22.4	5.0	0.33	ug/l	25.0	ND	90	55-140	5	30	
Methyl-tert-butyl Ether (MTBE)	25.2	5.0	0.32	ug/l	25.0	2.6	90	50-150	4	25	
tert-Butanol (TBA)	114	50	3.1	ug/l	125	ND	91	60-145	1	25	
Ethanol	182	150	100	ug/l	250	ND	73	35-160	9	30	
Surrogate: Dibromofluoromethane	*25.1*			*ug/l*	*25.0*		*100*	*80-120*			
Surrogate: Toluene-d8	*24.7*			*ug/l*	*25.0*		*99*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.2*			*ug/l*	*25.0*		*101*	*80-120*			

Del Mar Analytical, Irvine
Chris Roberts
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

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2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

SECOR International, Inc.-Thousand Oaks
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Attention: Don Indermill

Project ID: ARCO 0069, Los Angeles

Report Number: IOF0591

Sampled: 06/06/05
Received: 06/07/05

DATA QUALIFIERS AND DEFINITIONS

IO	Contract limits originate from BP-GCLN Technical Requirements
J,DX	EPA Flag - Estimated value,Value < lowest standard (MQL), but > than MDL
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD	Relative Percent Difference

ADDITIONAL COMMENTS

For 8260 analyses:

Due to the high water solubility of alcohols and ketones, the calibration criteria for these compounds is <30% RSD. The average % RSD of all compounds in the calibration is 15%, in accordance with EPA methods.

For GRO (C4-C12):

GRO (C4-C12) is quantitated against a gasoline standard. Quantitation begins immediately following the methanol peak.

8015 Analysis EDF Parlabel Cross Reference

Analyte	EDF Parlabel
GRO (C4 - C12)	GROC4C12

Del Mar Analytical, Irvine
Chris Roberts
Project Manager

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SECOR International, Inc.-Thousand Oaks
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Attention: Don Indermill

Project ID: ARCO 0069, Los Angeles

Report Number: IOF0591

Sampled: 06/06/05
Received: 06/07/05

Certification Summary

Del Mar Analytical, Irvine

Method	Matrix	Nelac	California
EPA 8015B	Water	X	X
EPA 8260B	Water	X	X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for Del Mar Analytical may be obtained by contacting the laboratory or visiting our website at www.dmalabs.com.

Del Mar Analytical, Irvine
Chris Roberts
Project Manager

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Page____ of _____

Chain of Custody Record

Project Name: Q2-2005 GROUNDWATER
BP BU/AR Region/Enfos Segment: RETAIL (Coastal +C.LA)
State or Lead Regulatory Agency:
Requested Due Date (06/20/05): Standard TAT

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

Lab Name:	Del Mar Analytical	BP/AR Facility No.:	69	Consultant/Contractor:	SECOR International, Inc
Address:	17461 Derian Ave Ste 100	BP/AR Facility Address:	9922 Figueroa St. S, L.A., CA	Address:	290 Conejo Ridge Ave Suite 200
	Irvine, CA 92614	Site Lat/Long:			Thousand Oaks, CA 91361
Lab PM:	Chris Roberts	California Global ID No.:	T0603700415	Consultant/Contractor Project No.:	37BP.00069.00
Tele/Fax:	949-261-1022	Enfos Project No.:	G0C9Y-0001	Consultant/Contractor PM:	LISA MORENO/ DON INDERMILL
BP/AR PM Contact:	Ravie Kolhatkar	Provision or RCOP (circle one)		Tele/Fax:	805-230-1266/805-230-1277
Address:	4 Centerpoint Dr.	Phase/WBS:	3- WATER	Report Type & QC Level:	Standard
	La Palma, CA	Sub Phase/Task:	Analytical	E-mail EDD To:	bauchard @secor.com
Tele/Fax:	(714) 670-3061	Cost Element:	Sub Contracted Cost	Invoice to:	Consultant or BP or Atlantic Richfield Co. (circle one)

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol		Requested Analysis: GRO C4-C12 (8015)	Requested Analysis: BTEX/OXY/ET (8260)									Sample Point Lat/Long and Comments
							10F0591																		
1	MW-1	1015	6/6/05		X			4				X			X	X									
2	MW-2	1030	6/6/05		X			4				X			X	X									
3	MW-3	1040	6/6/05		X			4				X			X	X									
4	MW-5	1000	6/6/05		X			4				X			X	X									
5	MW-6	0845	6/6/05		X			4				X			X	X									
6	MW-7	1145	6/6/05		X			4				X			X	X									
7	MW-8	1115	6/6/05		X			4				X			X	X									
8	DUP-0069-20050606	—	6/6/05		X			4				X			X	X									RS
9	TB-0069-20050606	—	6/6/05		X			4				X			X	X									
10	~~EB-0069-20050606~~				X							~~X~~			~~X~~	~~X~~									~~HOLD SAMPLE~~
11																									

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name:						
Sampler's Company: SECOR		6/7/05	0830	R. McTang DMAT	6/7/05	0830
Shipment Date:	L. McTang DMAT	6/7/05	1840			
Shipment Method:						
Shipment Tracking No:					6/7/05	1840

Special Instructions:

Custody Seals In Place Yes____ No X Temp Blank Yes____ No X Cooler Temperature on Receipt 3 °F/C Trip Blank Yes X No____

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BP COC Rev. 4 10/1/04

SEVERN TRENT STL

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921
www.stl-inc.com

April 19, 2005

STL LOT NUMBER: **E5D080261**
PO/CONTRACT: GEM-6-21909

DON INDERMILL
SECOR International Inc
290 Conejo Ridge Ave
Suite 200
Thousand Oaks, CA 91361

Dear DON INDERMILL,

This report contains the analytical results for the two samples received under chain of custody by STL Los Angeles on April 7, 2005. These samples are associated with your ARCO #69 project.

STL Los Angeles certifies that the test results provided in this report meet all the requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number for STL Los Angeles is 01118CA/E87652.

EPA Method TO14A describes the use of summa canisters for sampling and analysis. Use of Tedlar sample bags constitutes a modification to the method.

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This report contains _____ pages.

CASE NARRATIVE

Historical control limits for the LCS are used to define the estimate of uncertainty for a method.

All applicable quality control procedures met method-specified acceptance criteria.

If you have any questions, please feel free to call me at 714.258.8610.

Sincerely,

Sabina Sudoko
Project Manager
CC: Project File

ARCO SITE #69

E5D080261

Page 1 of 1

Chain of Custody Record

Project Name: 2005-Q1 O&M
BP BU/AR Region/Enfos Segment: Retail (Coastal + CLA)
State or Lead Regulatory Agency: LARWQCB
Requested Due Date (mm/dd/yy): 4-19-05

On-site Time: 1100	Temp: 80
Off-site Time: 130	Temp: 83
Sky Conditions: Clear	
Meteorological Events: None	
Wind Speed: None	Direction: None

b Name:	STL	BP/AR Facility No.:	69	Consultant/Contractor:	SECOR International Inc.
ldress:	1721 South Grand Ave	BP/AR Facility Address:	9922 S. Figueroa, Los Angeles	Address:	290 Conejo Ridge Ave, Suite 200
	Santa Ana, CA 92705	Site Lat/Long:			Thousand Oaks, CA 91361
b PM:	Sabina Sudoko	California Global ID No.:	T0603700415	Consultant/Contractor Project No.:	37BP.U0069.
le/Fax:	(714)258-8610	Enfos Project No.:	G0C9Y-0001	Consultant/Contractor PM:	Don Indermill
/AR PM Contact:	Jack Oman	Provision or RCOP (circle one)		Tele/Fax:	(805) 230-1266 x 269
ldress:	6 Centerpointe Dr.	Phase/WBS:	System O&M - Phase 3	Report Type & QC Level:	LARWQCB
	La Palma, CA	Sub Phase/Task:	Analytical	E-mail EDD To:	bauchard@secor.com
le/Fax:	714-730-1898	Cost Element:	Subcontracted Costs	Invoice to: Consultant or BP or Atlantic Richfield Co. (circle one)	

b Bottle Order No:

m o.	Sample Description	Time	Date	Matrix: Soil/Solid	Water/Liquid	Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	H_2SO_4	HNO_3	HCl	Methanol		Requested Analysis: BTEX 8021	BTEX/TPH	BTEX/Oxy/TPH	EPA 8260	EPA 8270	VFH C4-C12(TO-3)	BTEX/OXY(TO-14A)	Fixed Gases (D1946)			Sample Point Lat/Long and Comments
1	Sys Inf	1120	4-7			X		1												X	X	X			VP-INF
2	Sys Eff	1117	4-7			X		1												X	X	X			VP-EFF
3																									
4																									
5																									
6																									
7																									
8																									
9																									
0																									

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
mpler's Name: Tony Nicholson						
mpler's Company: Secor	secor	4/7	1315		4/7/05	1315
ipment Date:		4/7/05	1830		4/7/05	1830
ipment Method:						
ipment Tracking No:						

ecial Instructions:

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

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BP COC Rev. 4 10/1/04

3

E5D080261

SECOR International Inc

Client Sample ID: SYS INF

GC/MS Volatiles

Lot-Sample #...: E5D080261-001 **Work Order #...:** G71PW1AC **Matrix.....:** AE
Date Sampled...: 04/07/05 11:20 **Date Received..:** 04/07/05 18:30
Prep Date.....: 04/08/05 **Analysis Date..:** 04/08/05
Prep Batch #...: 5104270 **Analysis Time..:** 13:07
Dilution Factor: 2
Analyst ID.....: 101605 **Instrument ID..:** MSA
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
tert-Butyl alcohol	**0.026**	**0.020**	**ppm(v/v)**	**0.0020**
Tert-amyl methyl ether	ND	0.0040	ppm(v/v)	0.00040
Diisopropyl Ether (DIPE)	ND	0.0040	ppm(v/v)	0.00040
Ethyl-t-Butyl Ether (ETBE)	ND	0.0040	ppm(v/v)	0.00040
Benzene	ND	0.0040	ppm(v/v)	0.0016
Toluene	**0.0021 JDX**	**0.010**	**ppm(v/v)**	**0.0010**
Ethylbenzene	**0.076**	**0.0040**	**ppm(v/v)**	**0.0010**
m-Xylene & p-Xylene	**0.85**	**0.0040**	**ppm(v/v)**	**0.0020**
o-Xylene	**0.59**	**0.0040**	**ppm(v/v)**	**0.0012**
Xylenes (total)	**1.4**	**0.0040**	**ppm(v/v)**	**0.0020**
Methyl tert-butyl ether (MTBE)	ND	0.0040	ppm(v/v)	0.0010

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL). but > MDL.

SECOR International Inc

Client Sample ID: SYS INF

GC Volatiles

Lot-Sample #...: E5D080261-001 **Work Order #...:** G71PW1AD **Matrix.....:** AE
Date Sampled...: 04/07/05 11:20 **Date Received..:** 04/07/05 18:30
Prep Date.....: 04/08/05 **Analysis Date..:** 04/08/05
Prep Batch #...: 5098325 **Analysis Time..:** 16:05
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** GC3
Method.....: ASTM D1946

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Carbon dioxide	**0.25**	**0.010**	**%(v/v)**	**0.0020**
Oxygen	**22 FX**	**0.20**	**%(v/v)**	**0.030**
Nitrogen	**78**	**1.0**	**%(v/v)**	**0.70**
Methane	**0.00047**	**0.00020**	**%(v/v)**	**0.000060**
Carbon monoxide	ND	0.0010	%(v/v)	0.00030

NOTE(S):

FX This analyte is present in the associated method blank.

SECOR International Inc

Client Sample ID: SYS INF

GC Volatiles

Lot-Sample #...: E5D080261-001 **Work Order #...:** G71PW1AA **Matrix.....:** AE
Date Sampled...: 04/07/05 11:20 **Date Received..:** 04/07/05 18:30
Prep Date.....: 04/08/05 **Analysis Date..:** 04/08/05
Prep Batch #...: 5103586 **Analysis Time..:** 10:07
Dilution Factor: 1
Analyst ID.....: 358011 **Instrument ID..:** GC7
Method.....: EPA-19 TO-3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**13**	**1.0**	**ppm(v/v)**	**0.30**

SECOR International Inc

Client Sample ID: SYS EFF

GC/MS Volatiles

Lot-Sample #...: E5D080261-002 **Work Order #...:** G71QD1AC **Matrix.....:** AE
Date Sampled...: 04/07/05 11:17 **Date Received..:** 04/07/05 18:30
Prep Date.....: 04/08/05 **Analysis Date..:** 04/08/05
Prep Batch #...: 5104270 **Analysis Time..:** 13:35
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** MSA
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
tert-Butyl alcohol	ND	0.010	ppm(v/v)	0.0010
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Diisopropyl Ether (DIPE)	ND	0.0020	ppm(v/v)	0.00020
Ethyl-t-Butyl Ether (ETBE)	ND	0.0020	ppm(v/v)	0.00020
Benzene	**0.00093 JDX**	**0.0020**	**ppm(v/v)**	**0.00080**
Toluene	**0.0025 JDX**	**0.0050**	**ppm(v/v)**	**0.00050**
Ethylbenzene	ND	0.0020	ppm(v/v)	0.00050
m-Xylene & p-Xylene	**0.0015 JDX**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	ND	0.0020	ppm(v/v)	0.00060
Xylenes (total)	**0.0015 JDX**	**0.0020**	**ppm(v/v)**	**0.0010**
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	0.00050

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL). but > MDL.

SECOR International Inc

Client Sample ID: SYS EFF

GC Volatiles

Lot-Sample #...: E5D080261-002 **Work Order #...:** G71QD1AD **Matrix.....:** AE
Date Sampled...: 04/07/05 11:17 **Date Received..:** 04/07/05 18:30
Prep Date.....: 04/08/05 **Analysis Date..:** 04/08/05
Prep Batch #...: 5098325 **Analysis Time..:** 16:26
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** GC3
Method.....: ASTM D1946

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Carbon dioxide	**0.049**	**0.010**	**%(v/v)**	**0.0020**
Oxygen	**22 FX**	**0.20**	**%(v/v)**	**0.030**
Nitrogen	**78**	**1.0**	**%(v/v)**	**0.70**
Methane	**0.00020**	**0.00020**	**%(v/v)**	**0.000060**
Carbon monoxide	ND	0.0010	%(v/v)	0.00030

NOTE(S):

FX This analyte is present in the associated method blank.

SECOR International Inc

Client Sample ID: SYS EFF

GC Volatiles

Lot-Sample #...: E5D080261-002 **Work Order #...:** G71QD1AA **Matrix.....:** AE
Date Sampled...: 04/07/05 11:17 **Date Received..:** 04/07/05 18:30
Prep Date.....: 04/08/05 **Analysis Date..:** 04/08/05
Prep Batch #...: 5103586 **Analysis Time..:** 08:41
Dilution Factor: 1
Analyst ID.....: 358011 **Instrument ID..:** GC7
Method.....: EPA-19 TO-3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.40 JDX**	**1.0**	**ppm(v/v)**	**0.30**

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL). but > MDL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E5D080261 **Work Order #...:** G8C861AA **Matrix.....:** AIR
MB Lot-Sample #: M5D140000-270

Prep Date.....: 04/08/05 **Analysis Time..:** 05:18
Analysis Date..: 04/08/05 **Prep Batch #...:** 5104270 **Instrument ID..:** MSA
Dilution Factor: 1

Analyst ID.....: 101605

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
tert-Butyl alcohol	ND	0.010	ppm(v/v)	EPA-21 TO-14A
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Diisopropyl Ether (DIPE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethyl-t-Butyl Ether (ETBE	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E5D080261 **Work Order #...:** G71TW1AA **Matrix.....:** AIR
MB Lot-Sample #: M5D080000-325

Prep Date.....: 04/08/05 **Analysis Time..:** 11:18
Analysis Date..: 04/08/05 **Prep Batch #...:** 5098325 **Instrument ID..:** GC3
Dilution Factor: 1

Analyst ID.....: 101605

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Carbon dioxide	ND	0.010	%(v/v)	ASTM D1946
Oxygen	**0.19 JDX**	**0.20**	**%(v/v)**	**ASTM D1946**
Nitrogen	ND	1.0	%(v/v)	ASTM D1946
Methane	ND	0.00020	%(v/v)	ASTM D1946
Carbon monoxide	ND	0.0010	%(v/v)	ASTM D1946

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL). but > MDL.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E5D080261 **Work Order #...:** G8AW81AA **Matrix.....:** AIR
MB Lot-Sample #: M5D130000-586

Prep Date.....: 04/07/05 **Analysis Time..:** 20:03
Analysis Date..: 04/07/05 **Prep Batch #...:** 5103586 **Instrument ID..:** GC7
Dilution Factor: 1

Analyst ID.....: 358011

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
GRO (C4 - C12)	ND	1.0	ppm(v/v)	EPA-19 TO-3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E5D080261 **Work Order #...:** G8C861AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5D140000-270 G8C861AD-LCSD
Prep Date.....: 04/08/05 **Analysis Date..:** 04/08/05
Prep Batch #...: 5104270 **Analysis Time..:** 04:09
Dilution Factor: 1 **Instrument ID..:** MSA
Analyst ID.....: 101605

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
tert-Butyl alcohol	**0.250**	**0.216**	**ppm(v/v)**	**87**		**EPA-21 TO-14A**
	0.250	**0.221**	**ppm(v/v)**	**88**	**2.2**	**EPA-21 TO-14A**
Tert-amyl methyl ether	**0.0500**	**0.0350**	**ppm(v/v)**	**70**		**EPA-21 TO-14A**
	0.0500	**0.0365**	**ppm(v/v)**	**73**	**4.3**	**EPA-21 TO-14A**
Ethyl-t-Butyl Ether (ETBE)	**0.0500**	**0.0391**	**ppm(v/v)**	**78**		**EPA-21 TO-14A**
	0.0500	**0.0400**	**ppm(v/v)**	**80**	**2.3**	**EPA-21 TO-14A**
Diisopropyl Ether (DIPE)	**0.0500**	**0.0365**	**ppm(v/v)**	**73**		**EPA-21 TO-14A**
	0.0500	**0.0382**	**ppm(v/v)**	**76**	**4.5**	**EPA-21 TO-14A**
Benzene	**0.0500**	**0.0455**	**ppm(v/v)**	**91**		**EPA-21 TO-14A**
	0.0500	**0.0457**	**ppm(v/v)**	**91**	**0.46**	**EPA-21 TO-14A**
Toluene	**0.0500**	**0.0482**	**ppm(v/v)**	**96**		**EPA-21 TO-14A**
	0.0500	**0.0471**	**ppm(v/v)**	**94**	**2.3**	**EPA-21 TO-14A**
Ethylbenzene	**0.0500**	**0.0485**	**ppm(v/v)**	**97**		**EPA-21 TO-14A**
	0.0500	**0.0473**	**ppm(v/v)**	**95**	**2.4**	**EPA-21 TO-14A**
m-Xylene & p-Xylene	**0.100**	**0.105**	**ppm(v/v)**	**105**		**EPA-21 TO-14A**
	0.100	**0.0975**	**ppm(v/v)**	**97**	**7.2**	**EPA-21 TO-14A**
o-Xylene	**0.0500**	**0.0520**	**ppm(v/v)**	**104**		**EPA-21 TO-14A**
	0.0500	**0.0490**	**ppm(v/v)**	**98**	**6.0**	**EPA-21 TO-14A**
Xylenes (total)	**0.150**	**0.157**	**ppm(v/v)**	**104**		**EPA-21 TO-14A**
	0.150	**0.146**	**ppm(v/v)**	**98**	**6.8**	**EPA-21 TO-14A**
Methyl tert-butyl ether (MTBE)	**0.0500**	**0.0514**	**ppm(v/v)**	**103**		**EPA-21 TO-14A**
	0.0500	**0.0511**	**ppm(v/v)**	**102**	**0.64**	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E5D080261 **Work Order #...:** G71TW1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5D080000-325 G71TW1AD-LCSD
Prep Date.....: 04/08/05 **Analysis Date..:** 04/08/05
Prep Batch #...: 5098325 **Analysis Time..:** 10:13
Dilution Factor: 1 **Instrument ID..:** GC3
Analyst ID.....: 101605

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Carbon dioxide	**1.00**	**0.988**	**%(v/v)**	**99**		**ASTM D1946**
	1.00	**0.990**	**%(v/v)**	**99**	**0.18**	**ASTM D1946**
Methane	**0.0500**	**0.0500**	**%(v/v)**	**100**		**ASTM D1946**
	0.0500	**0.0497**	**%(v/v)**	**99**	**0.66**	**ASTM D1946**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E5D080261 **Work Order #...:** G8AW81AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5D130000-586 G8AW81AD-LCSD
Prep Date.....: 04/07/05 **Analysis Date..:** 04/07/05
Prep Batch #...: 5103586 **Analysis Time..:** 18:14
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
GRO (C4 - C12)	**10.3**	**8.65 LW**	**ppm(v/v)**	**84**		**EPA-19 TO-3**
	10.3	**8.29 LW**	**ppm(v/v)**	**80**	**4.2**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

SEVERN TRENT STL

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921
www.stl-inc.com

May 16, 2005

STL LOT NUMBER: **E5E060175**
PO/CONTRACT: GEM-6-21909

DON INDERMILL
SECOR International Inc
290 Conejo Ridge Ave
Suite 200
Thousand Oaks, CA 91361

Dear DON INDERMILL,

This report contains the analytical results for the two samples received under chain of custody by STL Los Angeles on May 5, 2005. These samples are associated with your ARCO #69 project.

STL Los Angeles certifies that the test results provided in this report meet all the requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number for STL Los Angeles is 01118CA/E87652.

This report shall not be reproduced except in full, without the written approval of the laboratory.

This report contains 000016 pages.

CASE NARRATIVE

Historical control limits for the LCS are used to define the estimate of uncertainty for a method.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page.

If you have any questions, please feel free to call me at 714.258.8610.

Sincerely,

Sabina Sudoko
Project Manager
CC: Project File

LOT NUMBER E5E060175

Nonconformance 05-12450

Affected Samples:
E5E060175 (1): SYS INF

Affected Methods:
TO14A

Details:
The Continuing calibration verification (CCV) was above the acceptance limit for t-Butyl Alcohol. Although the sample had a hit above the reporting limit the sample was not re-analyzed due to limited holding time.

The result was reported with an "IA" qualifier.

ARCO SITE# 69

ESE060175

Chain of Custody Record

Project Name: 2005-Q2 O&M
BP BU/AR Region/Enfos Segment: Retail (Coastal + CLA)
State or Lead Regulatory Agency: LARWQCB
Requested Due Date (mm/dd/yy): 5-19-05

On-site Time: 11:10	Temp: 72
Off-site Time: 100	Temp: 72
Sky Conditions: Cloudy	
Meteorological Events: Rain	
Wind Speed: none	Direction: none

Lab Name:	STL	BP/AR Facility No.:	69	Consultant/Contractor:	SECOR International Inc.
Address:	1721 South Grand Ave	BP/AR Facility Address:	9922 S. Figueroa, Los Angeles	Address:	290 Conejo Ridge Ave, Suite 200
	Santa Ana, CA 92705	Site Lat/Long:			Thousand Oaks, CA 91361
Lab PM:	Sabina Sudoko	California Global ID No.:	T0603700415	Consultant/Contractor Project No.:	37BP.U0069.
Tele/Fax:	(714)258-8610	Enfos Project No.:	G0C9Y-0001	Consultant/Contractor PM:	Don Indermill
BP/AR PM Contact:	Jack Oman	Provision or RCOP (circle one)		Tele/Fax:	(805) 230-1266 x 269
Address:	6 Centerpointe Dr.	Phase/WBS:	System O&M - Phase 3	Report Type & QC Level:	LARWQCB
	La Palma, CA	Sub Phase/Task:	Analytical	E-mail EDD To:	bauchard@secor.com
Tele/Fax:	714-730-1898	Cost Element:	Subcontracted Costs	Invoice to: Consultant or BP or Atlantic Richfield Co. (circle one)	

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol		Requested Analysis: BTEX 8021	BTEX/TPH	BTEX/Oxy/TPH	EPA 8260	EPA 8270	VFH C4-C12(TO-3)	BTEX/OXY(TO-14A)	Fixed Gases (D1946)			Sample Point Lat/Long and Comments
1	Sys Inf	1250	5-5			X		1												X	X	X			VP-INF
2	Sys Eff	1248	5-5			X		1												X	X	X			VP-EFF
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Tony Nickelson						
Sampler's Company: SECOR	SECOR			Urme Padilla	5/5/05	1455
Shipment Date:						
Shipment Method:	Urme Padilla 5/5/05	1830			5-5-05	1830
Shipment Tracking No:						

Special Instructions:

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

Distribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Pink Copy - Consultant/Contractor

BP COC Rev. 4 10/1/04

ESE060175

SECOR International Inc

Client Sample ID: SYS INF

GC/MS Volatiles

Lot-Sample #...: E5E060175-001 **Work Order #...:** G91G21AC **Matrix.....:** V
Date Sampled...: 05/05/05 12:50 **Date Received..:** 05/05/05 18:30
Prep Date.....: 05/06/05 **Analysis Date..:** 05/06/05
Prep Batch #...: 5132580 **Analysis Time..:** 19:41
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
tert-Butyl alcohol	**0.011 IA**	**0.010**	**ppm(v/v)**	**0.0010**
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Diisopropyl Ether (DIPE)	ND	0.0020	ppm(v/v)	0.00020
Ethyl-t-Butyl Ether (ETBE)	ND	0.0020	ppm(v/v)	0.00020
Benzene	**0.0054**	**0.0020**	**ppm(v/v)**	**0.00080**
Toluene	**0.0044 JDX**	**0.0050**	**ppm(v/v)**	**0.00050**
Ethylbenzene	**0.051**	**0.0020**	**ppm(v/v)**	**0.00050**
m-Xylene & p-Xylene	**0.54**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.35**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.89**	**0.0020**	**ppm(v/v)**	**0.0010**
Methyl tert-butyl ether (MTBE)	**0.0051**	**0.0020**	**ppm(v/v)**	**0.00050**

NOTE(S):

IA Results are valid even though CCV recovery outside of limits.

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL). but > MDL.

SECOR International Inc

Client Sample ID: SYS INF

GC Volatiles

Lot-Sample #...: E5E060175-001 **Work Order #...:** G91G21AD **Matrix.....:** V
Date Sampled...: 05/05/05 12:50 **Date Received..:** 05/05/05 18:30
Prep Date.....: 05/06/05 **Analysis Date..:** 05/06/05
Prep Batch #...: 5126503 **Analysis Time..:** 12:59
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** GC3
Method.....: ASTM D1946

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Carbon dioxide	**0.38**	**0.010**	**%(v/v)**	**0.0020**
Oxygen	**21 FX**	**0.20**	**%(v/v)**	**0.030**
Nitrogen	**79**	**1.0**	**%(v/v)**	**0.70**
Methane	**0.0013**	**0.00020**	**%(v/v)**	**0.000060**
Carbon monoxide	ND	0.0010	%(v/v)	0.00030

NOTE(S):

FX This analyte is present in the associated method blank.

SECOR International Inc

Client Sample ID: SYS INF

GC Volatiles

Lot-Sample #...: E5E060175-001 **Work Order #...:** G91G21AA **Matrix.....:** V
Date Sampled...: 05/05/05 12:50 **Date Received..:** 05/05/05 18:30
Prep Date.....: 05/06/05 **Analysis Date..:** 05/06/05
Prep Batch #...: 5127135 **Analysis Time..:** 14:40
Dilution Factor: 1
Analyst ID.....: 358011 **Instrument ID..:** GC7
Method.....: EPA-19 TO-3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**11**	**1.0**	**ppm(v/v)**	**0.30**

SECOR International Inc

Client Sample ID: SYS EFF

GC/MS Volatiles

Lot-Sample #...: E5E060175-002 **Work Order #...:** G91G31AC **Matrix.....:** V
Date Sampled...: 05/05/05 12:48 **Date Received..:** 05/05/05 18:30
Prep Date.....: 05/06/05 **Analysis Date..:** 05/06/05
Prep Batch #...: 5132580 **Analysis Time..:** 20:19
Dilution Factor: 1
Analyst ID.....: 117751 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
tert-Butyl alcohol	ND IB	0.010	ppm(v/v)	0.0010
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	0.00020
Diisopropyl Ether (DIPE)	ND	0.0020	ppm(v/v)	0.00020
Ethyl-t-Butyl Ether (ETBE)	ND	0.0020	ppm(v/v)	0.00020
Benzene	ND	0.0020	ppm(v/v)	0.00080
Toluene	**0.0054**	**0.0050**	**ppm(v/v)**	**0.00050**
Ethylbenzene	**0.00095 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
m-Xylene & p-Xylene	**0.0044**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.0018 JDX**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0062**	**0.0020**	**ppm(v/v)**	**0.0010**
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	0.00050

NOTE(S):

IB CCV recovery above limit; analyte not detected.

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL). but > MDL.

SECOR International Inc

Client Sample ID: SYS EFF

GC Volatiles

Lot-Sample #...: E5E060175-002 **Work Order #...:** G91G31AD **Matrix.....:** V
Date Sampled...: 05/05/05 12:48 **Date Received..:** 05/05/05 18:30
Prep Date.....: 05/06/05 **Analysis Date..:** 05/06/05
Prep Batch #...: 5126503 **Analysis Time..:** 13:21
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** GC3
Method.....: ASTM D1946

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Carbon dioxide	**0.055**	**0.010**	**%(v/v)**	**0.0020**
Oxygen	**22 FX**	**0.20**	**%(v/v)**	**0.030**
Nitrogen	**78**	**1.0**	**%(v/v)**	**0.70**
Methane	**0.00018 JDX**	**0.00020**	**%(v/v)**	**0.000060**
Carbon monoxide	ND	0.0010	%(v/v)	0.00030

NOTE(S):

FX This analyte is present in the associated method blank.

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL). but > MDL.

SECOR International Inc

Client Sample ID: SYS EFF

GC Volatiles

Lot-Sample #...: E5E060175-002 **Work Order #...:** G91G31AA **Matrix.....:** V
Date Sampled...: 05/05/05 12:48 **Date Received..:** 05/05/05 18:30
Prep Date.....: 05/06/05 **Analysis Date..:** 05/06/05
Prep Batch #...: 5127135 **Analysis Time..:** 13:39
Dilution Factor: 1
Analyst ID.....: 358011 **Instrument ID..:** GC7
Method.....: EPA-19 TO-3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.37 JDX**	**1.0**	**ppm(v/v)**	**0.30**

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL). but > MDL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E5E060175 **Work Order #...:** HAFAN1AA **Matrix.....:** AIR
MB Lot-Sample #: M5E120000-580

Prep Date.....: 05/06/05 **Analysis Time..:** 12:20
Analysis Date..: 05/06/05 **Prep Batch #...:** 5132580 **Instrument ID..:** MSB
Dilution Factor: 1

Analyst ID.....: 117751

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
tert-Butyl alcohol	ND IB	0.010	ppm(v/v)	EPA-21 TO-14A
Tert-amyl methyl ether	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Diisopropyl Ether (DIPE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethyl-t-Butyl Ether (ETBE	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

IB CCV recovery above limit; analyte not detected.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E5E060175 **Work Order #...:** G928L1AA **Matrix.....:** AIR
MB Lot-Sample #: M5E060000-503

Prep Date.....: 05/06/05 **Analysis Time..:** 11:34
Analysis Date..: 05/06/05 **Prep Batch #...:** 5126503 **Instrument ID..:** GC3
Dilution Factor: 1

Analyst ID.....: 101605

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Carbon dioxide	ND	0.010	%(v/v)	ASTM D1946
Oxygen	**0.17 JDX**	**0.20**	**%(v/v)**	**ASTM D1946**
Nitrogen	ND	1.0	%(v/v)	ASTM D1946
Methane	ND	0.00020	%(v/v)	ASTM D1946
Carbon monoxide	ND	0.0010	%(v/v)	ASTM D1946

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL). but > MDL.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E5E060175 **Work Order #...:** G94M61AA **Matrix.....:** AIR
MB Lot-Sample #: M5E070000-135

Prep Date.....: 05/06/05 **Analysis Time..:** 12:56
Analysis Date..: 05/06/05 **Prep Batch #...:** 5127135 **Instrument ID..:** GC7
Dilution Factor: 1

Analyst ID.....: 358011

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
GRO (C4 - C12)	ND	1.0	ppm(v/v)	EPA-19 TO-3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E5E060175 **Work Order #...:** HAFAN1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5E120000-580 HAFAN1AD-LCSD
Prep Date.....: 05/06/05 **Analysis Date..:** 05/06/05
Prep Batch #...: 5132580 **Analysis Time..:** 11:22
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 117751

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
tert-Butyl alcohol	**0.250**	**0.261**	**ppm(v/v)**	**104**		**EPA-21 TO-14A**
	0.250	**0.260**	**ppm(v/v)**	**104**	**0.34**	**EPA-21 TO-14A**
Tert-amyl methyl ether	**0.0500**	**0.0490**	**ppm(v/v)**	**98**		**EPA-21 TO-14A**
	0.0500	**0.0490**	**ppm(v/v)**	**98**	**0.060**	**EPA-21 TO-14A**
Ethyl-t-Butyl Ether (ETBE)	**0.0500**	**0.0434**	**ppm(v/v)**	**87**		**EPA-21 TO-14A**
	0.0500	**0.0434**	**ppm(v/v)**	**87**	**0.16**	**EPA-21 TO-14A**
Diisopropyl Ether (DIPE)	**0.0500**	**0.0486**	**ppm(v/v)**	**97**		**EPA-21 TO-14A**
	0.0500	**0.0484**	**ppm(v/v)**	**97**	**0.28**	**EPA-21 TO-14A**
Benzene	**0.0500**	**0.0537**	**ppm(v/v)**	**107**		**EPA-21 TO-14A**
	0.0500	**0.0536**	**ppm(v/v)**	**107**	**0.070**	**EPA-21 TO-14A**
Toluene	**0.0500**	**0.0531**	**ppm(v/v)**	**106**		**EPA-21 TO-14A**
	0.0500	**0.0530**	**ppm(v/v)**	**106**	**0.13**	**EPA-21 TO-14A**
Ethylbenzene	**0.0500**	**0.0536**	**ppm(v/v)**	**107**		**EPA-21 TO-14A**
	0.0500	**0.0543**	**ppm(v/v)**	**109**	**1.3**	**EPA-21 TO-14A**
m-Xylene & p-Xylene	**0.100**	**0.110**	**ppm(v/v)**	**110**		**EPA-21 TO-14A**
	0.100	**0.110**	**ppm(v/v)**	**110**	**0.090**	**EPA-21 TO-14A**
o-Xylene	**0.0500**	**0.0547**	**ppm(v/v)**	**109**		**EPA-21 TO-14A**
	0.0500	**0.0545**	**ppm(v/v)**	**109**	**0.33**	**EPA-21 TO-14A**
Xylenes (total)	**0.150**	**0.165**	**ppm(v/v)**	**110**		**EPA-21 TO-14A**
	0.150	**0.165**	**ppm(v/v)**	**110**	**0.12**	**EPA-21 TO-14A**
Methyl tert-butyl ether (MTBE)	**0.0500**	**0.0489**	**ppm(v/v)**	**98**		**EPA-21 TO-14A**
	0.0500	**0.0475**	**ppm(v/v)**	**95**	**2.8**	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E5E060175 **Work Order #...:** G928L1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5E060000-503 G928L1AD-LCSD
Prep Date.....: 05/06/05 **Analysis Date..:** 05/06/05
Prep Batch #...: 5126503 **Analysis Time..:** 10:27
Dilution Factor: 1 **Instrument ID..:** GC3
Analyst ID.....: 101605

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Carbon dioxide	**1.00**	**0.980**	**%(v/v)**	**98**		**ASTM D1946**
	1.00	**0.987**	**%(v/v)**	**99**	**0.76**	**ASTM D1946**
Methane	**0.0500**	**0.0520**	**%(v/v)**	**104**		**ASTM D1946**
	0.0500	**0.0514**	**%(v/v)**	**103**	**1.2**	**ASTM D1946**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E5E060175 **Work Order #...:** G94M61AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5E070000-135 G94M61AD-LCSD
Prep Date.....: 05/06/05 **Analysis Date..:** 05/06/05
Prep Batch #...: 5127135 **Analysis Time..:** 11:10
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
GRO (C4 - C12)	**10.3**	**10.4 LW**	**ppm(v/v)**	**101**		**EPA-19 TO-3**
	10.3	**10.3 LW**	**ppm(v/v)**	**100**	**0.68**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

SEVERN TRENT STL

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921
www.stl-inc.com

June 10, 2005

STL LOT NUMBER: **E5F020367**
PO/CONTRACT: GEM-6-21909

DON INDERMILL
SECOR International Inc
290 Conejo Ridge Ave
Suite 200
Thousand Oaks, CA 91361

Dear DON INDERMILL,

This report contains the analytical results for the two samples received under chain of custody by STL Los Angeles on June 2, 2005. These samples are associated with your ARCO #69 project.

STL Los Angeles certifies that the test results provided in this report meet all the requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number for STL Los Angeles is 01118CA/E87652.

This report shall not be reproduced except in full, without the written approval of the laboratory.

This report contains 000015 pages.

CASE NARRATIVE

Historical control limits for the LCS are used to define the estimate of uncertainty for a method.

All applicable quality control procedures met method-specified acceptance criteria.

If you have any questions, please feel free to call me at 714.258.8610.

Sincerely,

Sabina Sudoko
Project Manager
CC: Project File

ARCO SITE#0069

ESF020367 Page 1 of 1

Chain of Custody Record

Project Name: 2005-Q2 O&M
BP BU/AR Region/Enfos Segment: Retail (Coastal + CLA)
State or Lead Regulatory Agency: LARWQCB
Requested Due Date (mm/dd/yy): 1-16-05

On-site Time: 1100	Temp: 78		
Off-site Time: 1600	Temp: 79		
Sky Conditions: Cloudy			
Meteorological Events: None			
Wind Speed: None	Direction: –		

Lab Name:	STL	BP/AR Facility No.:	69	Consultant/Contractor:	SECOR International Inc.
Address:	1721 South Grand Ave	BP/AR Facility Address:	9922 S. Figueroa, Los Angeles	Address:	290 Conejo Ridge Ave, Suite 200
	Santa Ana, CA 92705	Site Lat/Long:			Thousand Oaks, CA 91361
Lab PM:	Sabina Sudoko	California Global ID No.:	T0603700415	Consultant/Contractor Project No.:	37BP.U0069.
Tele/Fax:	(714)258-8610	Enfos Project No.:	G0C9Y-0001	Consultant/Contractor PM:	Don Indermill
BP/AR PM Contact:	Jack Oman	Provision or RCOP (circle one)		Tele/Fax:	(805) 230-1266 x 269
Address:	6 Centerpointe Dr.	Phase/WBS:	System O&M - Phase 3	Report Type & QC Level:	LARWQCB
	La Palma, CA	Sub Phase/Task:	Analytical	E-mail EDD To:	bauchard@secor.com
Tele/Fax:	714-730-1898	Cost Element:	Subcontracted Costs	Invoice to: Consultant or BP or Atlantic Richfield Co. (circle one)	

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol		Requested Analysis: BTEX 8021	BTEX/TPH	BTEX/Oxy/TPH	EPA 8260	EPA 8270	VFH C4-C12(TO-3)	BTEX/OXY(TO-14A)	Fixed Gases (D1946)			Sample Point Lat/Long and Comments
1	Sys Inf	11:50	6-2			X		1												X	X	X			VP-INF
2	Sys Eff	11:52	6-2			X		1												X	X	X			VP-EFF
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Tony Mickelson						
Sampler's Company: SECOR	/ SECOR	6-2	100		6/2/05	1425
Shipment Date:	6/2/05	1505			6/2/05	1505
Shipment Method:						
Shipment Tracking No:						

Special Instructions:

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

Distribution: White Copy - Laboratory / Yellow Copy - BP/Atlantic Richfield Co. / Pink Copy - Consultant/Contractor

BP COC Rev. 4 10/1/04

3

E5F020367

SECOR International Inc

Client Sample ID: SYS INF

GC/MS Volatiles

Lot-Sample #...: E5F020367-001 **Work Order #...:** HCTH31AC **Matrix.....:** V
Date Sampled...: 06/02/05 11:56 **Date Received..:** 06/02/05 15:05
Prep Date.....: 06/03/05 **Analysis Date..:** 06/03/05
Prep Batch #...: 5157508 **Analysis Time..:** 02:39
Dilution Factor: 2
Analyst ID.....: 101605 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
tert-Butyl alcohol	**0.0053 JDX,IB**	**0.020**	**ppm(v/v)**	**0.0020**
Tert-amyl methyl ether	ND IB	0.0040	ppm(v/v)	0.00040
Diisopropyl Ether (DIPE)	ND	0.0040	ppm(v/v)	0.00040
Ethyl-t-Butyl Ether (ETBE)	ND	0.0040	ppm(v/v)	0.00040
Benzene	ND	0.0040	ppm(v/v)	0.0016
Toluene	**0.0031 JDX**	**0.010**	**ppm(v/v)**	**0.0010**
Ethylbenzene	**0.062**	**0.0040**	**ppm(v/v)**	**0.0010**
m-Xylene & p-Xylene	**0.65**	**0.0040**	**ppm(v/v)**	**0.0020**
o-Xylene	**0.40**	**0.0040**	**ppm(v/v)**	**0.0012**
Xylenes (total)	**1.1**	**0.0040**	**ppm(v/v)**	**0.0020**
Methyl tert-butyl ether (MTBE)	**0.0018 JDX**	**0.0040**	**ppm(v/v)**	**0.0010**

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL). but > MDL.

IB CCV recovery above limit; analyte not detected.

SECOR International Inc

Client Sample ID: SYS INF

GC Volatiles

Lot-Sample #...: E5F020367-001 **Work Order #...:** HCTH31AD **Matrix.....:** V
Date Sampled...: 06/02/05 11:56 **Date Received..:** 06/02/05 15:05
Prep Date.....: 06/02/05 **Analysis Date..:** 06/02/05
Prep Batch #...: 5158581 **Analysis Time..:** 19:23
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** GC3
Method.....: ASTM D1946

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Carbon dioxide	**0.37**	**0.010**	**%(v/v)**	**0.0020**
Oxygen	**21**	**0.20**	**%(v/v)**	**0.030**
Nitrogen	**78**	**1.0**	**%(v/v)**	**0.70**
Methane	**0.0013**	**0.00020**	**%(v/v)**	**0.000060**
Carbon monoxide	ND	0.0010	%(v/v)	0.00030

SECOR International Inc

Client Sample ID: SYS INF

GC Volatiles

Lot-Sample #...: E5F020367-001 **Work Order #...:** HCTH31AA **Matrix.....:** V
Date Sampled...: 06/02/05 11:56 **Date Received..:** 06/02/05 15:05
Prep Date.....: 06/02/05 **Analysis Date..:** 06/02/05
Prep Batch #...: 5154174 **Analysis Time..:** 19:27
Dilution Factor: 1
Analyst ID.....: 358011 **Instrument ID..:** GC7
Method.....: EPA-19 TO-3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**15**	**1.0**	**ppm(v/v)**	**0.30**

SECOR International Inc

Client Sample ID: SYS EFF

GC/MS Volatiles

Lot-Sample #...: E5F020367-002 **Work Order #...:** HCTH41AC **Matrix.....:** V
Date Sampled...: 06/02/05 11:52 **Date Received..:** 06/02/05 15:05
Prep Date.....: 06/03/05 **Analysis Date..:** 06/03/05
Prep Batch #...: 5157508 **Analysis Time..:** 03:15
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** MSB
Method.....: EPA-21 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
tert-Butyl alcohol	ND IB	0.010	ppm(v/v)	0.0010
Tert-amyl methyl ether	ND IB	0.0020	ppm(v/v)	0.00020
Diisopropyl Ether (DIPE)	ND	0.0020	ppm(v/v)	0.00020
Ethyl-t-Butyl Ether (ETBE)	ND	0.0020	ppm(v/v)	0.00020
Benzene	ND	0.0020	ppm(v/v)	0.00080
Toluene	**0.0030 JDX**	**0.0050**	**ppm(v/v)**	**0.00050**
Ethylbenzene	**0.00066 JDX**	**0.0020**	**ppm(v/v)**	**0.00050**
m-Xylene & p-Xylene	**0.0054**	**0.0020**	**ppm(v/v)**	**0.0010**
o-Xylene	**0.0038**	**0.0020**	**ppm(v/v)**	**0.00060**
Xylenes (total)	**0.0092**	**0.0020**	**ppm(v/v)**	**0.0010**
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	0.00050

NOTE(S):

IB CCV recovery above limit; analyte not detected.

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL). but > MDL.

SECOR International Inc

Client Sample ID: SYS EFF

GC Volatiles

Lot-Sample #...: E5F020367-002 **Work Order #...:** HCTH41AD **Matrix.....:** V
Date Sampled...: 06/02/05 11:52 **Date Received..:** 06/02/05 15:05
Prep Date.....: 06/02/05 **Analysis Date..:** 06/02/05
Prep Batch #...: 5158581 **Analysis Time..:** 19:46
Dilution Factor: 1
Analyst ID.....: 101605 **Instrument ID..:** GC3
Method.....: ASTM D1946

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Carbon dioxide	**0.042**	**0.010**	**%(v/v)**	**0.0020**
Oxygen	**22**	**0.20**	**%(v/v)**	**0.030**
Nitrogen	**78**	**1.0**	**%(v/v)**	**0.70**
Methane	**0.00017 JDX**	**0.00020**	**%(v/v)**	**0.000060**
Carbon monoxide	ND	0.0010	%(v/v)	0.00030

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL). but > MDL.

SECOR International Inc

Client Sample ID: SYS EFF

GC Volatiles

Lot-Sample #...: E5F020367-002 **Work Order #...:** HCTH41AA **Matrix.....:** V
Date Sampled...: 06/02/05 11:52 **Date Received..:** 06/02/05 15:05
Prep Date.....: 06/02/05 **Analysis Date..:** 06/02/05
Prep Batch #...: 5154174 **Analysis Time..:** 17:22
Dilution Factor: 1
Analyst ID.....: 358011 **Instrument ID..:** GC7
Method.....: EPA-19 TO-3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
GRO (C4 - C12)	**0.93 JDX**	**1.0**	**ppm(v/v)**	**0.30**

NOTE(S):

JDX J=EPA Flag - Esitmated value; DX = Value < lowest standard (MQL). but > MDL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E5F020367 **Work Order #...:** HC2F61AA **Matrix.....:** AIR
MB Lot-Sample #: M5F060000-508

Prep Date.....: 06/02/05 **Analysis Time..:** 18:40
Analysis Date..: 06/02/05 **Prep Batch #...:** 5157508 **Instrument ID..:** MSB
Dilution Factor: 1

Analyst ID.....: 101605

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
tert-Butyl alcohol	ND IB	0.010	ppm(v/v)	EPA-21 TO-14A
Tert-amyl methyl ether	ND IB	0.0020	ppm(v/v)	EPA-21 TO-14A
Diisopropyl Ether (DIPE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Ethyl-t-Butyl Ether (ETBE	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Benzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Toluene	ND	0.0050	ppm(v/v)	EPA-21 TO-14A
Ethylbenzene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
m-Xylene & p-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
o-Xylene	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Xylenes (total)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A
Methyl tert-butyl ether (MTBE)	ND	0.0020	ppm(v/v)	EPA-21 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

IB CCV recovery above limit; analyte not detected.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E5F020367 **Work Order #...:** HC4281AA **Matrix.....:** AIR
MB Lot-Sample #: M5F070000-581

Prep Date.....: 06/02/05 **Analysis Time..:** 18:22
Analysis Date..: 06/02/05 **Prep Batch #...:** 5158581 **Instrument ID..:** GC3
Dilution Factor: 1

Analyst ID.....: 101605

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Carbon dioxide	ND	0.010	%(v/v)	ASTM D1946
Oxygen	ND	0.20	%(v/v)	ASTM D1946
Nitrogen	ND	1.0	%(v/v)	ASTM D1946
Methane	ND	0.00020	%(v/v)	ASTM D1946
Carbon monoxide	ND	0.0010	%(v/v)	ASTM D1946

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E5F020367 **Work Order #...:** HCW9R1AA **Matrix.....:** AIR
MB Lot-Sample #: M5F030000-174

Prep Date.....: 06/02/05 **Analysis Time..:** 16:17
Analysis Date..: 06/02/05 **Prep Batch #...:** 5154174 **Instrument ID..:** GC7
Dilution Factor: 1

Analyst ID.....: 358011

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
GRO (C4 - C12)	ND	1.0	ppm(v/v)	EPA-19 TO-3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E5F020367 **Work Order #...:** HC2F61AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5F060000-508 HC2F61AD-LCSD
Prep Date.....: 06/02/05 **Analysis Date..:** 06/02/05
Prep Batch #...: 5157508 **Analysis Time..:** 17:37
Dilution Factor: 1 **Instrument ID..:** MSB
Analyst ID.....: 101605

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
tert-Butyl alcohol	**0.250**	**0.249**	**ppm(v/v)**	**100**		**EPA-21 TO-14A**
	0.250	**0.251**	**ppm(v/v)**	**100**	**0.63**	**EPA-21 TO-14A**
Tert-amyl methyl ether	**0.0500**	**0.0564**	**ppm(v/v)**	**113**		**EPA-21 TO-14A**
	0.0500	**0.0561**	**ppm(v/v)**	**112**	**0.49**	**EPA-21 TO-14A**
Ethyl-t-Butyl Ether (ETBE)	**0.0500**	**0.0430**	**ppm(v/v)**	**86**		**EPA-21 TO-14A**
	0.0500	**0.0430**	**ppm(v/v)**	**86**	**0.020**	**EPA-21 TO-14A**
Diisopropyl Ether (DIPE)	**0.0500**	**0.0534**	**ppm(v/v)**	**107**		**EPA-21 TO-14A**
	0.0500	**0.0509**	**ppm(v/v)**	**102**	**4.9**	**EPA-21 TO-14A**
Benzene	**0.0500**	**0.0522**	**ppm(v/v)**	**104**		**EPA-21 TO-14A**
	0.0500	**0.0483**	**ppm(v/v)**	**97**	**7.8**	**EPA-21 TO-14A**
Toluene	**0.0500**	**0.0551**	**ppm(v/v)**	**110**		**EPA-21 TO-14A**
	0.0500	**0.0499**	**ppm(v/v)**	**100**	**10**	**EPA-21 TO-14A**
Ethylbenzene	**0.0500**	**0.0556**	**ppm(v/v)**	**111**		**EPA-21 TO-14A**
	0.0500	**0.0521**	**ppm(v/v)**	**104**	**6.6**	**EPA-21 TO-14A**
m-Xylene & p-Xylene	**0.100**	**0.119**	**ppm(v/v)**	**119**		**EPA-21 TO-14A**
	0.100	**0.108**	**ppm(v/v)**	**108**	**9.5**	**EPA-21 TO-14A**
o-Xylene	**0.0500**	**0.0575**	**ppm(v/v)**	**115**		**EPA-21 TO-14A**
	0.0500	**0.0518**	**ppm(v/v)**	**104**	**10**	**EPA-21 TO-14A**
Xylenes (total)	**0.150**	**0.176**	**ppm(v/v)**	**117**		**EPA-21 TO-14A**
	0.150	**0.160**	**ppm(v/v)**	**106**	**9.9**	**EPA-21 TO-14A**
Methyl tert-butyl ether (MTBE)	**0.0500**	**0.0588**	**ppm(v/v)**	**118**		**EPA-21 TO-14A**
	0.0500	**0.0521**	**ppm(v/v)**	**104**	**12**	**EPA-21 TO-14A**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E5F020367 **Work Order #...:** HC4281AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5F070000-581 HC4281AD-LCSD
Prep Date.....: 06/02/05 **Analysis Date..:** 06/02/05
Prep Batch #...: 5158581 **Analysis Time..:** 17:35
Dilution Factor: 1 **Instrument ID..:** GC3
Analyst ID.....: 101605

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Carbon dioxide	**1.00**	**0.988**	**%(v/v)**	**99**		**ASTM D1946**
	1.00	**0.982**	**%(v/v)**	**98**	**0.55**	**ASTM D1946**
Methane	**0.0500**	**0.0496**	**%(v/v)**	**99**		**ASTM D1946**
	0.0500	**0.0499**	**%(v/v)**	**100**	**0.67**	**ASTM D1946**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E5F020367 **Work Order #...:** HCW9R1AC-LCS **Matrix.....:** AIR
LCS Lot-Sample#: M5F030000-174 HCW9R1AD-LCSD
Prep Date.....: 06/02/05 **Analysis Date..:** 06/02/05
Prep Batch #...: 5154174 **Analysis Time..:** 14:13
Dilution Factor: 1 **Instrument ID..:** GC7
Analyst ID.....: 358011

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
GRO (C4 - C12)	**10.3**	**10.1 LW**	**ppm(v/v)**	**98**		**EPA-19 TO-3**
	10.3	**10.1 LW**	**ppm(v/v)**	**98**	**0.10**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LW Quantited against gasoline.

Appendix B
Groundwater Sampling Data Sheets

Subjective and Well -Head Evaluation Form

Project No.: Q2-2005 Groundwater Location: Los Angeles Date: 6/6/2005

Station No.: 69 Field Technician: Shaun Day of Week: Monday

DTW ORDER	WELL ID	SURFICIAL SEAL	CONCRETE SEAL	LID SECURE	GASKET	LOCK	EXPANDING CAP	TOTAL DEPTH (feet)	TOTAL Depth at Sampling (feet)	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	DISSOLVED OXYGEN READING (mg/L)	COMMENTS
7	MW-1	✓	✓	✓	✓	N	✓	37.70	37.70	19.50	Ø	0.71	
8	MW-2	✓	✓	✓	✓	N	✓	32.80	34.00	19.64	Ø	0.27	
5	MW-3	✓	✓	✓	✓	N	✓	37.68	37.70	20.40	Ø	0.64	
6	MW-5	✓	✓	✓	✓	N	✓	27.00	~~20.05~~ 26.51	20.05	Ø	0.36	dup
4	MW-6	✓	✓	✓	✓	N	✓	33.20	33.20	19.95	Ø	1.21	
3	MW-7	✓	✓	✓	✓	N	✓	35.20	35.20	19.36	Ø	0.89	
1	MW-8	✓	✓	✓	✓	N	✓	34.63	34.55	19.20	Ø	1.13	

Note: Use G=Good and P=poor for well condition

GROUNDWATER SAMPLE FIELD DATA SHEET

ATLANTIC RICHFIELD COMPANY

PROJECT NO: Q2-2005 Groundwater	SAMPLE ID: MW-1
SAMPLER: Shaun	FACILITY NO: 69
DATE: 06/06/05	LOCATION: Los Angeles

CASING DIAMETER (inches) 2 3 (4) 6 8 12 OTHER:

DEPTH OF WELL (feet): 37.70	CALCULATED PURGE (gal): 36.40
DEPTH TO WATER (feet): 19.50	ACTUAL PURGE VOL (gal): 39
Standing Water in Casing (feet) 18.20 x 0.20= 3.64 + DTW 23.14 =80% Recharge Water Level	

2 (inches)	Standing Water in Casing (feet)	x 0.5=	3 Casing Volumes (gal.)
4 (inches)	Standing Water in Casing (feet)	x 2.0=	3 Casing Volumes (gal.)
6 (inches)	Standing Water in Casing (feet)	x 4.4=	3 Casing Volumes (gal.)
8 (inches)	Standing Water in Casing (feet)	x 7.8=	3 Casing Volumes (gal.)

Date Purged: 6/6/05 Start (2400 Hr.): 0906 End (2400 Hr.): 0930
Date Sampled: 6/6/05 Time (2400 Hr.): 1015 DTW @ Samp. Time: 19.50

FIELD QC SAMPLES COLLECTED AT THIS WELL (IE: FB-1, X-DUP-1): ~~DUP-MW-99~~

TIME (2400 Hr.)	VOLUME (gallons)	TEMP (degrees F)	E.C. (uS/cm) X1000	pH (units)	COLOR (visual)*	TURBIDITY (visual)**	TOTALIZE (gallons)
0911	12	73.1	1196	7.85	cloudy	Light	
0918	24	68.6	1152	7.98	"	"	
0930	37	66.5	1146	8.09	"	"	

* (Color) Clear, Cloudy, Yellow, Brown ** (Turbidity) Heavy, Moderate, Light, Trace

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
2" Bladder Pump	Bailer (Teflon)	2" Bladder Pump	Bailer (Stainless Steel)
Contrifugal Pump	Bailer (PVC)	Submersible Pump	~~Bailer (Teflon)~~
Submersible Pump	Bailer (Stainless Steel)	Dipper	Bailer (Disposable Teflon)
Redi-Flo2	Dedicated	Well Wizard	Dedicated

OTHER: VAC TRUCK	OTHER:

Well Condition (cap, ~~cement~~, padlock, screws, lid, etc.):
Floating Product Thickness (feet): Color: Padlock Number:

COMMENTS:

40 ml VOA, HCL: 4 1 liter amber, none: 16 ox poly, HNO3:
WATER LEVEL ONLY. NO SAMPLE COLLECTED: REVIEWED BY: Moreno DATE: ~~06/06/05~~ 6/13/05

Atlantic Richfield Company No. # 66

GROUNDWATER SAMPLE FIELD DATA SHEET

ATLANTIC RICHFIELD COMPANY

PROJECT NO: Q2-2005 Groundwater	SAMPLE ID: MW-2
SAMPLER: Shaun	FACILITY NO: 69
DATE: 06/06/05	LOCATION: Los Angeles

CASING DIAMETER (inches) 2 3 (4) 6 8 12 OTHER:

DEPTH OF WELL (feet): 34.00	CALCULATED PURGE (gal): 28.72
DEPTH TO WATER (feet): 19.64	ACTUAL PURGE VOL (gal): 29
Standing Water in Casing (feet) 14.36 x 0.20= 2.872 + DTW 22.51 =80% Recharge Water Level	

2 (inches)	Standing Water in Casing (feet)	x 0.5=	3 Casing Volumes (gal.)
4 (inches)	Standing Water in Casing (feet)	x 2.0=	3 Casing Volumes (gal.)
6 (inches)	Standing Water in Casing (feet)	x 4.4=	3 Casing Volumes (gal.)
8 (inches)	Standing Water in Casing (feet)	x 7.8=	3 Casing Volumes (gal.)

Date Purged: 6/6/05 Start (2400 Hr.): 0933 End (2400 Hr.): 1005

Date Sampled: 6/6/05 Time (2400 Hr.): 1020 DTW @ Samp. Time: 19.64

FIELD QC SAMPLES COLLECTED AT THIS WELL (IE: FB-1, X-DUP-1):

TIME (2400 Hr.)	VOLUME (gallons)	TEMP (degrees F)	E.C. (uS/cm) X1000	pH (units)	COLOR (visual)*	TURBIDITY (visual)**	TOTALIZE (gallons)
0941	10	71.5	889.1	7.67	Cloudy	Light	
0955	20	74.8	865.5	7.57	"	"	
1005	29	75.3	865.3	7.55	"	"	

* (Color) Clear, Cloudy, Yellow, Brown ** (Turbidity) Heavy, Moderate, Light, Trace

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
2" Bladder Pump	Bailer (Teflon)	2" Bladder Pump	Bailer (Stainless Steel)
Contrifugal Pump	Bailer (PVC)	Submersible Pump	~~Bailer (Teflon)~~
Submersible Pump	Bailer (Stainless Steel)	Dipper	~~Bailer (Disposable Teflon)~~
Redi-Flo2	Dedicated	Well Wizard	Dedicated

OTHER: VAC TRUCK	OTHER:

Well Condition (cap, cement, padlock, screws, lid, etc.):

Floating Product Thickness (feet): Color: Padlock Number:

COMMENTS:

40 ml VOA, HCL: 4 1 liter amber, none: 16 ox poly, HNO3:

WATER LEVEL ONLY. NO SAMPLE COLLECTED:

REVIEWED BY: Omoreno DATE: ~~06/06/05~~ 6/13/05

Atlantic Richfield Company No. # 66

GROUNDWATER SAMPLE FIELD DATA SHEET

ATLANTIC RICHFIELD COMPANY

PROJECT NO: Q2-2005 Groundwater	SAMPLE ID: MW-3
SAMPLER: Shaun	FACILITY NO: 69
DATE: 06/06/05	LOCATION: Los Angeles

CASING DIAMETER (inches) 2 3 (4) 6 8 12 OTHER:

DEPTH OF WELL (feet): 37.20	CALCULATED PURGE (gal): 34.60
DEPTH TO WATER (feet): 20.40	ACTUAL PURGE VOL (gal): 35
Standing Water in Casing (feet) 17.30 x 0.20= 3.46	+ DTW 23.86 =80% Recharge Water Level

2 (inches)	Standing Water in Casing (feet)	x 0.5=	3 Casing Volumes (gal.)
4 (inches)	Standing Water in Casing (feet)	x 2.0=	3 Casing Volumes (gal.)
6 (inches)	Standing Water in Casing (feet)	x 4.4=	3 Casing Volumes (gal.)
8 (inches)	Standing Water in Casing (feet)	x 7.8=	3 Casing Volumes (gal.)

Date Purged: 6/6/05 Start (2400 Hr.): 1011 End (2400 Hr.): 1027

Date Sampled: 6/6/05 Time (2400 Hr.): 1040 DTW @ Samp. Time: 23.00

FIELD QC SAMPLES COLLECTED AT THIS WELL (IE: FB-1, X-DUP-1):

TIME (2400 Hr.)	VOLUME (gallons)	TEMP (degrees F)	E.C. (uS/cm) X1000	pH (units)	COLOR (visual)*	TURBIDITY (visual)**	TOTALIZE (gallons)
1015	12	75.3	1236	7.83	cloudy	heavy	
1022	24	75.0	1246	7.91	"	"	
1027	35	76.6	1207	8.06	"	"	

* (Color) Clear, Cloudy, Yellow, Brown ** (Turbidity) Heavy, Moderate, Light, Trace

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
2" Bladder Pump	Bailer (Teflon)	2" Bladder Pump	Bailer (Stainless Steel)
Contrifugal Pump	Bailer (PVC)	Submersible Pump	~~Bailer (Teflon)~~
Submersible Pump	Bailer (Stainless Steel)	Dipper	Bailer (Disposable Teflon)
Redi-Flo2	Dedicated	Well Wizard	Dedicated

OTHER: VAC TRUCK	OTHER:

Well Condition (cap, cement, padlock, screws, lid, etc.):

Floating Product Thickness (feet): Color: Padlock Number:

COMMENTS:

40 ml VOA, HCL: 4 1 liter amber, none: 16 ox poly, HNO3:

WATER LEVEL ONLY. NO SAMPLE COLLECTED:

REVIEWED BY: Moreno DATE: ~~06/06/05~~ 6/13/05

Atlantic Richfield Company No. # 66

GROUNDWATER SAMPLE FIELD DATA SHEET

ATLANTIC RICHFIELD COMPANY

PROJECT NO: Q2-2005 Groundwater	SAMPLE ID: MW-5
SAMPLER: Shaun	FACILITY NO: 69
DATE: 06/06/05	LOCATION: Los Angeles

CASING DIAMETER (inches) 2 3 (4) 6 8 12 OTHER:

DEPTH OF WELL (feet): ~~27.00~~ 26.51	CALCULATED PURGE (gal): 12.52
DEPTH TO WATER (feet): 20.05	ACTUAL PURGE VOL (gal): 13
Standing Water in Casing (feet) 6.46 x 0.20= 1.292 + DTW 21.34 =80% Recharge Water Level	

2 (inches)	Standing Water in Casing (feet)	x 0.5=	3 Casing Volumes (gal.)
4 (inches)	Standing Water in Casing (feet)	x 2.0=	3 Casing Volumes (gal.)
6 (inches)	Standing Water in Casing (feet)	x 4.4=	3 Casing Volumes (gal.)
8 (inches)	Standing Water in Casing (feet)	x 7.8=	3 Casing Volumes (gal.)

Date Purged: 6/6/05 Start (2400 Hr.): 0844 End (2400 Hr.): 0901

Date Sampled: 6/6/05 Time (2400 Hr.): 1000 DTW @ Samp. Time: 20.05

FIELD QC SAMPLES COLLECTED AT THIS WELL (IE: FB-1, X-DUP-1): Dup-0069-20050606

TIME (2400 Hr.)	VOLUME (gallons)	TEMP (degrees F)	E.C. (uS/cm) X1000	pH (units)	COLOR (visual)*	TURBIDITY (visual)**	TOTALIZE (gallons)
0847	5	73.8	1195	8.04	Cloudy	Moderate	
0850	10	71.0	1167	8.02	"	"	
0901	13	70.0	1190	8.05	"	"	

* (Color) Clear, Cloudy, Yellow, Brown ** (Turbidity) Heavy, Moderate, Light, Trace

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
2" Bladder Pump	Bailer (Teflon)	2" Bladder Pump	Bailer (Stainless Steel)
Contrifugal Pump	Bailer (PVC)	Submersible Pump	~~Bailer (Teflon)~~
Submersible Pump	Bailer (Stainless Steel)	Dipper	~~Bailer (Disposable Teflon)~~
Redi-Flo2	Dedicated	Well Wizard	Dedicated
OTHER: VAC TRUCK		OTHER:	

Well Condition (cap, cement, padlock, screws, lid, etc.):

Floating Product Thickness (feet): Color: Padlock Number:

COMMENTS:

40 ml VOA, HCL: 8 1 liter amber, none: 16 ox poly, HNO3:

WATER LEVEL ONLY. NO SAMPLE COLLECTED: REVIEWED BY: Moreno DATE: ~~06/06/05~~ 6/13/05

Atlantic Richfield Company No. # 66

GROUNDWATER SAMPLE FIELD DATA SHEET

ATLANTIC RICHFIELD COMPANY	PROJECT NO: Q2-2005 Groundwater	SAMPLE ID: MW-6
	SAMPLER: Shaun	FACILITY NO: 69
	DATE: 06/06/05	LOCATION: Los Angeles

CASING DIAMETER (inches) 2 3 (4) 6 8 12 OTHER:

DEPTH OF WELL (feet): 33.20	CALCULATED PURGE (gal): 26.50
DEPTH TO WATER (feet): 19.55	ACTUAL PURGE VOL (gal): 27
Standing Water in Casing (feet) 13.25 x 0.20= 2.65 + DTW 22.60 =80% Recharge Water Level	

2 (inches)	Standing Water in Casing (feet)	x 0.5=	3 Casing Volumes (gal.)
4 (inches)	Standing Water in Casing (feet)	x 2.0=	3 Casing Volumes (gal.)
6 (inches)	Standing Water in Casing (feet)	x 4.4=	3 Casing Volumes (gal.)
8 (inches)	Standing Water in Casing (feet)	x 7.8=	3 Casing Volumes (gal.)

Date Purged: 6/6/05 Start (2400 Hr.): 0814 End (2400 Hr.): 0829

Date Sampled: 6/6/05 Time (2400 Hr.): 0845 DTW @ Samp. Time: 20.40

FIELD QC SAMPLES COLLECTED AT THIS WELL (IE: FB-1, X-DUP-1):

TIME (2400 Hr.)	VOLUME (gallons)	TEMP (degrees F)	E.C. (uS/cm) X1000	pH (units)	COLOR (visual)*	TURBIDITY (visual)**	TOTALIZE (gallons)
0818	9	72.1	2864	7.77	Cloudy/Yellow tint		
0823	18	70.4	2853	7.93	"	"	
0829	27	69.4	2861	7.94	"	"	

* (Color) Clear, Cloudy, Yellow, Brown ** (Turbidity) Heavy, Moderate, Light, Trace

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
2" Bladder Pump	Bailer (Teflon)	2" Bladder Pump	Bailer (Stainless Steel)
Contrifugal Pump	Bailer (PVC)	Submersible Pump	~~Bailer (Teflon)~~
Submersible Pump	Bailer (Stainless Steel)	Dipper	(Bailer (Disposable Teflon))
Redi-Flo2	Dedicated	Well Wizard	Dedicated

OTHER: (VAC TRUCK)	OTHER:

Well Condition (cap, cement, padlock, screws, lid, etc.):

Floating Product Thickness (feet): Color: Padlock Number:

COMMENTS:

40 ml VOA, HCL: 4 1 liter amber, none: 16 ox poly, HNO3:

WATER LEVEL ONLY. NO SAMPLE COLLECTED: REVIEWED BY: Lmoreno DATE: ~~06/06/05~~ 6/13/05

Atlantic Richfield Company No. # 66

GROUNDWATER SAMPLE FIELD DATA SHEET

ATLANTIC RICHFIELD COMPANY	PROJECT NO: Q2-2005 Groundwater	SAMPLE ID: MW-7
	SAMPLER: Shaun	FACILITY NO: 69
	DATE: 06/06/05	LOCATION: Los Angeles

CASING DIAMETER (inches) 2 3 (4) 6 8 12 OTHER:

DEPTH OF WELL (feet): 35.20	CALCULATED PURGE (gal): 31.68
DEPTH TO WATER (feet): 19.36	ACTUAL PURGE VOL (gal): 32
Standing Water in Casing (feet) 15.84 x 0.20= 3.168 + DTW 22.52 =80% Recharge Water Level	

2 (inches)	Standing Water in Casing (feet)	x 0.5=	3 Casing Volumes (gal.)
4 (inches)	Standing Water in Casing (feet)	x 2.0=	3 Casing Volumes (gal.)
6 (inches)	Standing Water in Casing (feet)	x 4.4=	3 Casing Volumes (gal.)
8 (inches)	Standing Water in Casing (feet)	x 7.8=	3 Casing Volumes (gal.)

Date Purged: 6/6/05 Start (2400 Hr.): 1119 End (2400 Hr.): 1131

Date Sampled: 6/6/05 Time (2400 Hr.): 1145 DTW @ Samp. Time: 20.40

FIELD QC SAMPLES COLLECTED AT THIS WELL (IE: FB-1, X-DUP-1):

TIME (2400 Hr.)	VOLUME (gallons)	TEMP (degrees F)	E.C. (uS/cm) X1000	pH (units)	COLOR (visual)*	TURBIDITY (visual)**	TOTALIZE (gallons)
1123	10	75.6	1553	7.63	Clear	Light	
1127	20	74.0	1503	7.83	"	"	
1131	32	73.8	1566	7.91	"	"	

* (Color) Clear, Cloudy, Yellow, Brown ** (Turbidity) Heavy, Moderate, Light, Trace

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
2" Bladder Pump	Bailer (Teflon)	2" Bladder Pump	Bailer (Stainless Steel)
Contrifugal Pump	Bailer (PVC)	Submersible Pump	Bailer (Teflon)
Submersible Pump	Bailer (Stainless Steel)	Dipper	Bailer (Disposable Teflon)
Redi-Flo2	Dedicated	Well Wizard	Dedicated

OTHER: VAC TRUCK	OTHER:

Well Condition (cap, cement, padlock, screws, lid, etc.):

Floating Product Thickness (feet): Color: Padlock Number:

COMMENTS:

40 ml VOA, HCL: 4 1 liter amber, none: 16 ox poly, HNO3:

WATER LEVEL ONLY. NO SAMPLE COLLECTED: REVIEWED BY: D Moreno DATE: ~~06/06/05~~ 6/13/05

Atlantic Richfield Company No. # 66

GROUNDWATER SAMPLE FIELD DATA SHEET

ATLANTIC RICHFIELD COMPANY	PROJECT NO: Q2-2005 Groundwater	SAMPLE ID: MW-8
	SAMPLER: Shaun	FACILITY NO: 69
	DATE: 06/06/05	LOCATION: Los Angeles

CASING DIAMETER (inches) 2 3 (4) 6 8 12 OTHER:

DEPTH OF WELL (feet): 34.55	CALCULATED PURGE (gal): 30.70
DEPTH TO WATER (feet): 19.20	ACTUAL PURGE VOL (gal): 31
Standing Water in Casing (feet) 15.35 x 0.20= 3.07	+ DTW ~~16.13~~ =80% Recharge Water Level

2 (inches)	Standing Water in Casing (feet)	x 0.5= 22.27	3 Casing Volumes (gal.)
4 (inches)	Standing Water in Casing (feet)	x 2.0=	3 Casing Volumes (gal.)
6 (inches)	Standing Water in Casing (feet)	x 4.4=	3 Casing Volumes (gal.)
8 (inches)	Standing Water in Casing (feet)	x 7.8=	3 Casing Volumes (gal.)

Date Purged: 6/6/05 Start (2400 Hr.): 1055 End (2400 Hr.): 1106
Date Sampled: 6/6/05 Time (2400 Hr.): 1115 DTW @ Samp. Time: 22.00

FIELD QC SAMPLES COLLECTED AT THIS WELL (IE: FB-1, X-DUP-1):

TIME (2400 Hr.)	VOLUME (gallons)	TEMP (degrees F)	E.C. (uS/cm) X1000	pH (units)	COLOR (visual)*	TURBIDITY (visual)**	TOTALIZE (gallons)
1100	10	74.0	1083	7.83	clear	Light	
1103	20	74.9	1139	7.89	"	"	
1106	31	74.5	1117	8.01	"	"	

* (Color) Clear, Cloudy, Yellow, Brown ** (Turbidity) Heavy, Moderate, Light, Trace

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
2" Bladder Pump	Bailer (Teflon)	2" Bladder Pump	Bailer (Stainless Steel)
Contrifugal Pump	Bailer (PVC)	Submersible Pump	~~Bailer (Teflon)~~
Submersible Pump	Bailer (Stainless Steel)	Dipper	(Bailer (Disposable Teflon)
Redi-Flo2	Dedicated	Well Wizard	~~Dedicated~~

OTHER: (VAC TRUCK)	OTHER:

Well Condition (cap, cement, padlock, screws, lid, etc.):
Floating Product Thickness (feet): Color: Padlock Number:

COMMENTS:

40 ml VOA, HCL: 4 1 liter amber, none: 16 ox poly, HNO3:

WATER LEVEL ONLY. NO SAMPLE COLLECTED: REVIEWED BY: DMoreno DATE: ~~06/06/05~~ 6/13/05

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069	Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.	Permit No.:	SCAQMD Permit No.125584 (Various Location)

TECHNICIAN	Initials: Tony Mickelson	Date:	3-31-05	Weekday:	Thurs	Time:	1110
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS:	16618.5	Alarms:	None		
UTILITIES	Gas Meter	3335	cfm / therm	Electrical Meter	62453		KWh

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1450	°F	Catalytic/Outlet: 1452	°F			
Dilution Valve	Auto: Closed	%open	Manual: 1/4 open	%open			
Blower	Amps: 19.2	A	Lubricate?	Yes/No	Change Oil?	Yes/No	Belts OK? Yes/No
Process Flow	N/A	scfm	Manifold Vacuum.: 60"	"H_2O			
Source Well Flow (Pitot Tube)	P: N/A in H_2O	DP: N/A in H_2O	Temp.: N/A °F	Source Flow: N/A	cfm		
Effluent Flow	P: N/A in H_2O	DP: N/A in H_2O	Temp.: N/A °F	Effluent Flow: N/A	scfm		
LEL Reading	Set N/A %	PV N/A %					
VES Process Concentrations	Influent w/dil: 414 ppm	Influent w/o dil: diluted ppm	Effluent 0 ppm				
Monitoring Device	Mini RAE 2000	Calibration (type/date) Hexane 100ppm 3-31-05					

VAPOR EXTRACTION WELLS

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	100	60"	826					
MW-5	100	60"	217					
MW-3	Closed	-	-					
MW-2	Closed	-	-					
V-4 Low	Closed	-	-					
V-4 High	Closed	-	-					
MW-1	Closed	-	-					
V-1 Low	Closed	-	-					
V-1 High	100	60"	179					
V-1 Mid	100	60"	323					
V-3 Low	100	60"	155					
V-3 High	100	60"	30.8					

COMPLIANCE

DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED

VES Flow Rate <300 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <20 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution	Yes/No	Influent w/o Dilutio	Yes/No	Effluent:	Yes/No
STATUS DEPARTURE:	ON/OFF			Drums: 2	empty	full

Notes: List all activities, observations, recommendations

System was up with no problems

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a *"(Monthly)"* note.

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069	Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.	Permit No.:	SCAQMD Permit No.125584 (Various Location)

TECHNICIAN	Initials: Tony Mickelson	Date: 4-7-05	Weekday: Thurs	Time: 11:16
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS: 16784.4	Alarms: None	
UTILITIES	Gas Meter 4393 cfm / therm	Electrical Meter 63723 KWh		

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1452 °F		Catalytic/Outlet: 1454 °F				
Dilution Valve	Auto: Closed %open		Manual: 1/4 open %open				
Blower	Amps: 19.4 A	Lubricate? Yes/No	Change Oil? Yes/No	Belts OK? Yes/No			
Process Flow	158 scfm		Manifold Vacuum: 62" "H_2O				
Source Well Flow (Pitot Tube)	P: N/A in H_2O	DP: N/A in H_2O	Temp.: N/A °F	Source Flow: N/A cfm			
Effluent Flow	P: N/A in H_2O	DP: N/A in H_2O	Temp.: N/A °F	Effluent Flow: N/A scfm			
LEL Reading	Set N/A %		PV N/A %				
VES Process Concentrations	Influent w/dil: 429 ppm	Influent w/o dil: divided ppm	Effluent 0 ppm				
Monitoring Device	Mini RAE 2000		Calibration (type/date) Hexane 100ppm 4-7-05				

VAPOR EXTRACTION WELLS

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	100	62"	811					
MW-5	100	62"	275					
MW-3	Closed	-	-					
MW-2	Closed	-	-					
V-4 Low	Closed	-	-					
V-4 High	Closed	-	-					
MW-1	Closed	-	-					
V-1 Low	Closed	-	-					
V-1 High	100	62"	189					
V-1 Mid	100	62"	295					
V-3 Low	100	62"	131					
V-3 High	100	62"	27.8					

COMPLIANCE	
DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED	
VES Flow Rate <300 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <20 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution Yes/No	Influent w/o Dilutio Yes/No	Effluent: Yes/No	
STATUS DEPARTURE:	ON/OFF		Drums: 2 empty	full

Notes: List all activities, observations, recommendations

system was on with no problems took samples

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a "*(Monthly)*" note.

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069	Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.	Permit No.:	SCAQMD Permit No.125584 (Various Location)

TECHNICIAN	Initials: Tony Mickelson	Date: 4-14-05	Weekday: Thurs	Time: 1100			
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS:	16797.8	Alarms:	low temp		
UTILITIES	Gas Meter ~~4378~~ 4428	cfm / therm	Electrical Meter	63773	KWh		

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1459 °F		Catalytic/Outlet: 1455 °F				
Dilution Valve	Auto: Closed %open		Manual: 1/4 open %open				
Blower	Amps: A	Lubricate?	Yes/No	Change Oil?	Yes/No	Belts OK?	Yes/No
Process Flow	scfm		Manifold Vacuum.: 60" "H_2O				
Source Well Flow (Pitot Tube)	P: in H_2O	DP: in H_2O	Temp.: °F	Source Flow: 156 cfm			
Effluent Flow	P: in H_2O	DP: in H_2O	Temp.: °F	Effluent Flow: scfm			
LEL Reading	Set %		PV %				
VES Process Concentrations	Influent w/dil: 579 ppm	Influent w/o dil: diluted ppm	Effluent 0 ppm				
Monitoring Device	Mini RAE 2000		Calibration (type/date) Hexane lamp/ 4-14				

VAPOR EXTRACTION WELLS

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	100 %	60	672					
MW-5	100 %	60	311					
MW-3	Closed	-	-					
MW-2	Closed	-	-					
V-4 Low	Closed	-	-					
V-4 High	Closed	-	-					
MW-1	Closed	-	-					
V-1 Low	Closed	-	-					
V-1 High	100 %	60	206					
V-1 Mid	100 %	60	284					
V-3 Low	100 %	60	118					
V-3 High	100 %	60	30.7					

COMPLIANCE

DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED

VES Flow Rate <300 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <20 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution Yes/No	Influent w/o Dilutio Yes/No	Effluent: Yes/No		
STATUS DEPARTURE:	ON/OFF		Drums: 2	empty	full

Notes: List all activities, observations, recommendations

System was off with low temp alarm. Reset alarm and started system

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a "*(Monthly)*" note.

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069	Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.	Permit No.:	SCAQMD Permit No.125584 (Various Location)
TECHNICIAN	Initials: AC	Date: 4/21/05	Weekday: Thur	Time:
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS: 16960.7	Alarms: None
UTILITIES	Gas Meter 5313 cfm / therm	Electrical Meter 64552 KWh

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1461 °F		Catalytic/Outlet: 1450 °F		
Dilution Valve	Auto: Closed %open		Manual: 1/4 open %open		
Blower	Amps: A	Lubricate? Yes/No	Change Oil? Yes/No	Belts OK? Yes/No	
Process Flow	scfm		Manifold Vacuum.: 60 "H_2O		
Source Well Flow (Pitot Tube)	P: in H_2O	DP: in H_2O	Temp.: °F	Source Flow: 149 cfm	
Effluent Flow	P: in H_2O	DP: in H_2O	Temp.: °F	Effluent Flow: scfm	
LEL Reading	Set %		PV %		
VES Process Concentrations	Influent w/dil: ppm	Influent w/o dil: Diluted ppm	Effluent 2.4 ppm		
Monitoring Device	Min Rae		Calibration (type/date) Hexane 4/21/05		

VAPOR EXTRACTION WELLS

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	100%	60	610					
MW-5	100%	60	391					
MW-3	closed	—	—					
MW-2	closed	—	—					
V-4 Low	closed	—	—					
V-4 High	closed	—	—					
MW-1	closed	—	—					
V-1 Low	closed	—	—					
V-1 High	100%	60	153					
V-1 Mid	100%	60	213					
V-3 Low	100%	60	191					
V-3 High	100%	60	27.4					

COMPLIANCE

DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED

VES Flow Rate <300 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <20 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution Yes/No	Influent w/o Dilutio Yes/No	Effluent: Yes/No		
STATUS DEPARTURE:	ON/OFF		Drums: 2 empty	full	

Notes: List all activities, observations, recommendations

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a "*(Monthly)*" note.

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069	Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.	Permit No.:	SCAQMD Permit No.125584 (Various Location)
TECHNICIAN	Initials: Tony Mickelson	Date: 4-28-05	Weekday: Thurs	Time: 1100
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS: 17128.0	Alarms: None
UTILITIES	Gas Meter 6386 cfm / therm	Electrical Meter 05327 KWh	

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1444 °F	Catalytic/Outlet: 1452 °F		
Dilution Valve	Auto: Closed %open	Manual: 1/4 open %open		
Blower	Amps: 18.4 A	Lubricate? Yes/No	Change Oil? Yes/No	Belts OK? Yes/No
Process Flow	158 scfm	Manifold Vacuum.: 63" "H_2O		
Source Well Flow (Pitot Tube)	P: - in H_2O	DP: - in H_2O	Temp.: - °F	Source Flow: 158 cfm
Effluent Flow	P: - in H_2O	DP: - in H_2O	Temp.: - °F	Effluent Flow: scfm
LEL Reading	Set - %	PV - %		
VES Process Concentrations	Influent w/dil: 472 ppm	Influent w/o dil: diluted ppm	Effluent 0 ppm	
Monitoring Device	Mini RAE 2000	Calibration (type/date) Hexane Toeppen 4-28-05		

VAPOR EXTRACTION WELLS

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	open	63"	579					
MW-5	open	63"	324					
MW-3	closed	-	-					
MW-2	Closed	-	-					
V-4 Low	Closed	-	-					
V-4 High	Closed	-	-					
MW-1	Closed	-	-					
V-1 Low	Closed	-	-					
V-1 High	Open	63"	189					
V-1 Mid	open	63"	291					
V-3 Low	open	63"	120					
V-3 High	open	63"	58.1					

COMPLIANCE

DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED

VES Flow Rate <300 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <20 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution	Yes/No	Influent w/o Dilutio	Yes/No	Effluent:	Yes/No
STATUS DEPARTURE:	ON/OFF			Drums:	2 empty	full

Notes: List all activities, observations, recommendations

performed O&M and shut system off to start cycle

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a "*(Monthly)*" note.

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069	Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.	Permit No.:	SCAQMD Permit No.125584 (Various Location)

TECHNICIAN	Initials: Tony Mickelson	Date: 5-5-05		Weekday: Thurs		Time: 1200	
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS:	17128.5	Alarms: Restart			
UTILITIES	Gas Meter	63887	cfm / therm	Electrical Meter	65328		KWh

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1455 °F			Catalytic/Outlet: 1453 °F			
Dilution Valve	Auto: Closed %open			Manual: 1/4 open %open			
Blower	Amps: 19.2 A			Lubricate? Yes/No	Change Oil? Yes/No	Belts OK?	Yes/No
Process Flow	scfm			Manifold Vacuum.: 60 "H_2O			
Source Well Flow (Pitot Tube)	P: N/A in H_2O	DP: N/A in H_2O	Temp.: N/A °F	Source Flow: 155 cfm			
Effluent Flow	P: N/A in H_2O	DP: N/A in H_2O	Temp.: N/A °F	Effluent Flow: N/A scfm			
LEL Reading	Set N/A %			PV %			
VES Process Concentrations	Influent w/dil: ~~N/A~~ TM 511 ppm			Influent w/o dil: diluted ppm	Effluent 0 ppm		
Monitoring Device	MiniRAE 2000			Calibration (type/date) Hexane 100ppm 5-5-05			

VAPOR EXTRACTION WELLS

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	100%	60	592					
MW-5	100%	60	312					
MW-3	Closed	-	-					
MW-2	Closed	-	-					
V-4 Low	Closed	-	-					
V-4 High	Closed	-	-					
MW-1	Closed	-	-					
V-1 Low	Closed	-	-					
V-1 High	100%	60	324					
V-1 Mid	100%	60	196					
V-3 Low	100%	60	127					
V-3 High	100%	60	32.9					

COMPLIANCE

DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED

VES Flow Rate <300 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <20 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution Yes/No	Influent w/o Dilutio Yes/No	Effluent: Yes/No		
STATUS DEPARTURE:	ON/OFF		Drums: 2	empty	full

Notes: List all activities, observations, recommendations

started system and took samples

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a "*(Monthly)*" note.

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069	Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.	Permit No.:	SCAQMD Permit No.F58259

TECHNICIAN	Initials: Tony Michelson	Date: 5-12-05		Weekday: Thurs		Time: 1115	
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS:	17295.5	Alarms:	none		
UTILITIES	Gas Meter	7266	cfm / therm	Electrical Meter	66092		KWh

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1452 °F		Catalytic/Outlet: 1451 °F				
Dilution Valve	Auto: closed %open		Manual: 1/4 open %open				
Blower	Amps: 19.2 A	Lubricate?	Yes/No	Change Oil?	Yes/No	Belts OK?	Yes/No
Process Flow	scfm		Manifold Vacuum.: 62" "H_2O				
Source Well Flow (Pitot Tube)	P: in H_2O	DP: in H_2O	Temp.: °F	Source Flow: 152 cfm			
Effluent Flow	P: in H_2O	DP: in H_2O	Temp.: °F	Effluent Flow: scfm			
LEL Reading	Set %		PV %				
VES Process Concentrations	Influent w/dil: 530 ppm	Influent w/o dil: diluted ppm	Effluent 0 ppm				
Monitoring Device	MiniRAE2000		Calibration (type/date) Hexane 100ppm 5-12				

VAPOR EXTRACTION WELLS

Pid reading express as Hexane

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	open	62	411					
MW-5	open	62	292					
MW-3	closed	n/a	–					
MW-2	closed	–	–					
V-4 Low	closed	–	–					
V-4 High	closed	–	–					
MW-1	closed	–	–					
V-1 Low	closed	–	–					
V-1 High	open	62	318					
V-1 Mid	open	62	190					
V-3 Low	open	62	136					
V-3 High	open	62	371					

COMPLIANCE

DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED

VES Flow Rate <250 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <67 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution	Yes/No	Influent w/o Dilutic	Yes/No	Effluent:	Yes/No

STATUS DEPARTURE:	ON/OFF	Drums: 2	empty	full

Notes: List all activities, observations, recommendations

Performed O&M and shut system off.

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a "*(Monthly)*" note.

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069			Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.			Permit No.:	SCAQMD Permit No.F58259
TECHNICIAN	Initials: Tony Hickolson	Date: 5-19-05		Weekday: Thurs	Time: 1058
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS:	17295.5	Alarms:	None
UTILITIES	Gas Meter 7266	cfm / therm		Electrical Meter	66092 KWh

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1458 °F		Catalytic/Outlet: 1455 °F			
Dilution Valve	Auto: Closed %open		Manual: open 1/4 %open			
Blower	Amps: 19.1 A	Lubricate?	Yes/No	Change Oil?	Yes/No	Belts OK? Yes/No
Process Flow	scfm		Manifold Vacuum.: 60 "H_2O			
Source Well Flow (Pitot Tube)	P: in H_2O	DP: in H_2O	Temp.: °F	Source Flow: 156 cfm		
Effluent Flow	P: in H_2O	DP: in H_2O	Temp.: °F	Effluent Flow: scfm		
LEL Reading	Set %		PV %			
VES Process Concentrations	Influent w/dil: 674 ppm	Influent w/o dil: diluted ppm	Effluent 0 ppm			
Monitoring Device	Mini RAE 2000		Calibration (type/date) Hexane 100ppm 5-19			

VAPOR EXTRACTION WELLS — Pid reading express as Hexane

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	open	60	496					
MW-5	open	60	310					
MW-3	Closed	-	-					
MW-2	Closed	-	-					
V-4 Low	Closed	-	-					
V-4 High	Closed	-	-					
MW-1	Closed	-	-					
V-1 Low	Closed	-	-					
V-1 High	open	60	352					
V-1 Mid	open	60	202					
V-3 Low	open	60	151					
V-3 High	open	60	32.4					

COMPLIANCE

DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED

VES Flow Rate <250 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <67 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution	Yes/No	Influent w/o Dilutic	Yes/No	Effluent:	Yes/No
STATUS DEPARTURE:	ON/OFF			Drums: 2	empty	full

Notes: List all activities, observations, recommendations

System was off started system to Complete cycle

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a "*(Monthly)*" note.

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069	Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.	Permit No.:	SCAQMD Permit No.F58259

TECHNICIAN	Initials: Tony Mickelson	Date:	5-26-05	Weekday:	Thurs	Time:	1201
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS:	17464.3	Alarms:	None		
UTILITIES	Gas Meter 7223 cfm / therm	Electrical Meter	66874 KWh				

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1452 °F	Catalytic/Outlet: 1450 °F					
Dilution Valve	Auto: close	%open	Manual: 1/4 open	%open			
Blower	Amps: 19.1 A	Lubricate? Yes/No	Change Oil? Yes/No	Belts OK? Yes/No			
Process Flow	scfm	Manifold Vacuum.: 60" "H_2O					
Source Well Flow (Pitot Tube)	P: in H_2O	DP: in H_2O	Temp.: °F	Source Flow: 152 cfm			
Effluent Flow	P: in H_2O	DP: in H_2O	Temp.: °F	Effluent Flow: scfm			
LEL Reading	Set %	PV %					
VES Process Concentrations	Influent w/dil: 529 ppm	Influent w/o dil: diluted ppm	Effluent 0 ppm				
Monitoring Device	Mini RAE 2000	Calibration (type/date) Hexane 100ppm 5-26-05					

VAPOR EXTRACTION WELLS

Pid reading express as Hexane

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	open	60	514					
MW-5	open	60	326					
MW-3	Close	-	-					
MW-2	Close	-	-					
V-4 Low	Close	-	-					
V-4 High	Close	-	-					
MW-1	Close	-	-					
V-1 Low	close	-	-					
V-1 High	open	60	221					
V-1 Mid	open	60	183					
V-3 Low	open	60	139					
V-3 High	open	60	39.1					

COMPLIANCE

DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED

VES Flow Rate <250 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <67 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution Yes/No	Influent w/o Dilutic Yes/No	Effluent: Yes/No				
STATUS DEPARTURE:	ON/OFF	Drums: 2 empty	full				

Notes: List all activities, observations, recommendations

System was on with No problems shut system off to Continue Cycle

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a "*(Monthly)*" note.

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069	Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.	Permit No.:	SCAQMD Permit No.F58259

TECHNICIAN	Initials: Gary Hickelson	Date:	6-2-05	Weekday:	Thurs	Time:	1105
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS:	17464.3	Alarms:	None		
UTILITIES	Gas Meter	7223	cfm / therm	Electrical Meter	66874	KWh	

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1450 °F			Catalytic/Outlet: 1448 °F			
Dilution Valve	Auto: Close		%open	Manual: 1/4 open			%open
Blower	Amps: 19.6 A			Lubricate? Yes/No	Change Oil? Yes/No	Belts OK? Yes/No	
Process Flow	scfm			Manifold Vacuum.: 61" "H_2O			
Source Well Flow (Pitot Tube)	P: in H_2O	DP: in H_2O	Temp.: °F	Source Flow: 150 cfm			
Effluent Flow	P: in H_2O	DP: in H_2O	Temp.: °F	Effluent Flow: scfm			
LEL Reading	Set %			PV %			
VES Process Concentrations	Influent w/dil: 5997 ppm		Influent w/o dil: diluted ppm		Effluent 0 ppm		
Monitoring Device	Mini RAE 2000			Calibration (type/date) Hexane 100ppm 6-2			

VAPOR EXTRACTION WELLS — Pid reading express as Hexane

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	Open	61"	562					
MW-5	Open	61"	316					
MW-3	Close	-	-					
MW-2	Close	-	-					
V-4 Low	Close	-	-					
V-4 High	Close	-	-					
MW-1	Close	-	-					
V-1 Low	Close	-	-					
V-1 High	Open	61"	186					
V-1 Mid	Open	61"	159					
V-3 Low	Open	61"	141					
V-3 High	Open	61"	30.9					

COMPLIANCE

DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED

VES Flow Rate <250 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <67 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution Yes/No	Influent w/o Dilution Yes/No	Effluent: Yes/No		
STATUS DEPARTURE:	ON/OFF		Drums: 2 empty	full	

Notes: List all activities, observations, recommendations

Started system and lubricated Blower and Motor addressed Issues on Audit form

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a "*(Monthly)*" note.

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069	Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.	Permit No.:	SCAQMD Permit No.F58259

TECHNICIAN	Initials: Tony Hickelson	Date:	6-8-05	Weekday:	Tues	Time:	214
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS:	17632.4	Alarms:	None		
UTILITIES	Gas Meter	8987	cfm / therm	Electrical Meter	67429		KWh

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1452 °F			Catalytic/Outlet: 1446 °F			
Dilution Valve	Auto: Closed %open			Manual: Open 1/4 %open			
Blower	Amps: 19.9 A	Lubricate?	Yes/No	Change Oil?	Yes/No	Belts OK?	Yes/No
Process Flow	scfm			Manifold Vacuum.:	60" "H_2O		
Source Well Flow (Pitot Tube)	P: in H_2O	DP: in H_2O	Temp.: °F	Source Flow:	152 cfm		
Effluent Flow	P: in H_2O	DP: in H_2O	Temp.: °F	Effluent Flow:	scfm		
LEL Reading	Set %			P.V %			
VES Process Concentrations	Influent w/dil: 511 ppm	Influent w/o dil:	diluted ppm	Effluent 0 ppm			
Monitoring Device	Mini RAE 2000			Calibration (type/date)	Hexane 100ppm 6-8-05		

VAPOR EXTRACTION WELLS

Pid reading express as Hexane

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	open	60	486					
MW-5	Open	60	324					
MW-3	Closed	-	-					
MW-2	Closed	-	-					
V-4 Low	Closed	-	-					
V-4 High	Closed	-	-					
MW-1	Closed	-	-					
V-1 Low	Closed	-	-					
V-1 High	Open	60	161					
V-1 Mid	open	60	142					
V-3 Low	Open	60	159					
V-3 High	Open	60	38.2					

COMPLIANCE

DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED

VES Flow Rate <250 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <67 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution	Yes/No	Influent w/o Dilutic	Yes/No	Effluent:	Yes/No	
STATUS DEPARTURE:	ON/OFF			Drums:	2	empty	full

Notes: List all activities, observations, recommendations

System was up with no problems

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a "*(Monthly)*" note.

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069	Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.	Permit No.:	SCAQMD Permit No.F58259

TECHNICIAN	Initials: Tony Mickelson	Date:	6-16-05	Weekday:	Thurs	Time:	1100
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS:	17796.0	Alarms:	None		
UTILITIES	Gas Meter	6192	cfm / therm	Electrical Meter	68221		KWh

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1457 °F		Catalytic/Outlet: 1443 °F				
Dilution Valve	Auto: closed %open		Manual: open 1/4 %open				
Blower	Amps: 19.2 A	Lubricate?	Yes/No	Change Oil?	Yes/No	Belts OK?	Yes/No
Process Flow	scfm		Manifold Vacuum.:	63"	"H_2O		
Source Well Flow (Pitot Tube)	P: in H_2O	DP: in H_2O	Temp.: °F	Source Flow:	151 cfm		
Effluent Flow	P: in H_2O	DP: in H_2O	Temp.: °F	Effluent Flow:	scfm		
LEL Reading	Set %		PV %				
VES Process Concentrations	Influent w/dil: 524 ppm		Influent w/o dil: diluted ppm		Effluent 0 ppm		
Monitoring Device	Mini RAE 2000		Calibration (type/date) Hexane 100ppm 6-15				

VAPOR EXTRACTION WELLS

Pid reading express as Hexane

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	open	63	418					
MW-5	open	63	293					
MW-3	closed	–	–					
MW-2	closed	–	–					
V-4 Low	closed	–	–					
V-4 High	closed	–	–					
MW-1	closed	–	–					
V-1 Low	closed	–	–					
V-1 High	open	63	209					
V-1 Mid	open	63	147					
V-3 Low	open	63	134					
V-3 High	open	63	21.6					

COMPLIANCE

DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED

VES Flow Rate <250 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <67 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution Yes/No	Influent w/o Dilutic Yes/No	Effluent: Yes/No		
STATUS DEPARTURE:	ON/OFF		Drums: 2 empty	full	

Notes: List all activities, observations, recommendations

System was up took Readings and shut system off to Complete cycle.

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a "*(Monthly)*" note.

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069	Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.	Permit No.:	SCAQMD Permit No.F58259

TECHNICIAN	Initials: Tom Mickelson	Date:	6-23-05	Weekday:	Thurs	Time:	138
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS:	17797.1	Alarms:	None		
UTILITIES	Gas Meter	0193	cfm / therm	Electrical Meter	68222	KWh	

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1450 °F		Catalytic/Outlet: 1441 °F				
Dilution Valve	Auto: Closed %open		Manual: Open 1/4 %open				
Blower	Amps: 19.1 A	Lubricate?	Yes/No	Change Oil?	Yes/No	Belts OK?	Yes/No
Process Flow	153 scfm		Manifold Vacuum.: 61" "H_2O				
Source Well Flow (Pitot Tube)	P: in H_2O	DP: in H_2O	Temp.: °F	Source Flow: 153 cfm			
Effluent Flow	P: in H_2O	DP: in H_2O	Temp.: °F	Effluent Flow: scfm			
LEL Reading	Set %		PV %				
VES Process Concentrations	Influent w/dil: 604 ppm	Influent w/o dil: diluted ppm	Effluent 0. ppm				
Monitoring Device	Mini RAE 2000	Calibration (type/date) Hexane 100ppm 6-23-05					

VAPOR EXTRACTION WELLS

Pid reading express as Hexane

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	open	61"	510					
MW-5	open	61"	227					
MW-3	closed	-	-					
MW-2	closed	-	-					
V-4 Low	closed	-	-					
V-4 High	closed	-	-					
MW-1	closed	-	-					
V-1 Low	closed	-	-					
V-1 High	open	61"	299					
V-1 Mid	open	61"	130					
V-3 Low	open	61"	148					
V-3 High	open	61"	26.7					

COMPLIANCE

DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED

VES Flow Rate <250 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <67 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution	Yes/No	Influent w/o Dilutic	Yes/No	Effluent:	Yes/No

STATUS DEPARTURE:	ON/OFF	Drums:	2	empty	full

Notes: List all activities, observations, recommendations

Turned system on to Continue cycle. took readings and left system on.

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a "*(Monthly)*" note.

SECOR International, Incorporated

Vapor Extraction/HVES Monitoring Log

SITE INFORMATION

CLIENT/SITE	Atlantic Richfield Company Station No. 0069	Unit:	Paragon Model # ET-250 Serial # 565
ADDRESS	9922 Figueroa St., Los Angeles, CA.	Permit No.:	SCAQMD Permit No.F58259

TECHNICIAN	Initials: Tom Mikelson	Date: 6-29-05	Weekday: Tued	Time: 130			
ARRIVAL STATUS:	ON/OFF	OPERATING HOURS:	179386	Alarms:	None		
UTILITIES	Gas Meter	1083	cfm / therm	Electrical Meter	68774	KWh	

PARAGON SYSTEM OXIDIZER

Temperature	Process: 1459 °F		Catalytic/Outlet: 1448 °F				
Dilution Valve	Auto: Closed %open		Manual: Open Yet %open				
Blower	Amps: 19.4 A	Lubricate?	Yes/No	Change Oil?	Yes/No	Belts OK?	Yes/No
Process Flow	scfm		Manifold Vacuum.: 61" "H_2O				
Source Well Flow (Pitot Tube)	P: in H_2O	DP: in H_2O	Temp.: °F	Source Flow:	158 cfm		
Effluent Flow	P: in H_2O	DP: in H_2O	Temp.: °F	Effluent Flow:	scfm		
LEL Reading	Set %		PV %				
VES Process Concentrations	Influent w/dil: 661 ppm		Influent w/o dil: diluted ppm		Effluent 0 ppm		
Monitoring Device	Mini RAE 2000		Calibration (type/date) Hexane ionpipes 6-24				

VAPOR EXTRACTION WELLS

Pid reading express as Hexane

Extraction Well Data

WELL NO.	Status O/C	Vacuum ("wc)	Conc. (ppmv)	Flow (scfm)				
VE-6	open	61	329					
MW-5	Open	61	383					
MW-3	Closed	–	–					
MW-2	Closed	–	–					
V-4 Low	Closed	–	–					
V-4 High	Closed	–	–					
MW-1	Closed	–	–					
V-1 Low	Open	61	174					
V-1 High	Open	61	209					
V-1 Mid	Open	61	127					
V-3 Low	Open	61	176					
V-3 High	Open	61	44.9					

COMPLIANCE

DO NOT OPERATE VES UNLESS CONDITIONS ARE SATISFIED

VES Flow Rate <250 SCFM?	Yes/No
Outlet Temperature >1400 °F	Yes/No
VES Outlet Concentration <67 PPMV?	Yes/No

MONTHLY CERTIFIED VAPOR SAMPLING

Tedlar Bag Samples	Influent w/ Dilution	Yes/No	Influent w/o Dilutio	Yes/No	Effluent:	Yes/No
STATUS DEPARTURE:	ON/OFF			Drums:	2 empty	full

Notes: List all activities, observations, recommendations

System was on shut system off to Complete Cycle

All O&M activities must be conducted every seven days or sooner unless otherwise indicated by a "*(Monthly)*" note.

SITE ACTIVITY REPORT

Name: Alvin Campos

Site Address:

Purpose of Visit:

- ___ Groundwater Monitoring
- X Remedial System O/M
- ___ UST Removal/Excavation
- ___ Air Monitoring
- ___ Product Bailing
- ___ Soil Sampling
- ___ Site Recon
- ___ Construction Oversight

Date: 6/14/05

Project #: ARCO#6129

Page ___ of ___

Project Preparation:

Time Arrived on Site:

Time Depart from Site:

Total Travel Time :

Total Project Time:

___ Number of Drums on Site

___ Trash Removed

Comments:

Arrive on-site go over scope of work. Set up Exclusion Zone. Replaced Bolts on 7 wells. Some wells missing 1 or 2 Bolts due to concreat in thred holes. All wells are fastend ~~s~~ up down tightly. Clean up. Do final walk around site. Tony & I depart site.

SECOR

i:\admin\forms\field forms\site activity rpt.xls

Appendix C
Waste Disposal Documents

260849-16

NO. 26270

NON-HAZARDOUS WASTE DATA FORM

C178 106

TO BE COMPLETED BY GENERATOR

NAME: BP West Coast Products LLC

GENERATING SITE: ARCO STATION # 0069

ADDRESS: P.O. Box 80249

9922 S. FIGUEROA AVENUE

CITY, STATE, ZIP: Rancho Santa Margarita, CA 92688

LOS ANGELES

PHONE NO.: (949) 753-5820

SITE CONTACT:

PROFILE NO.:

CONTAINERS: No. 1 GALLONS 214 Gallons WEIGHT:

TYPE: [X] TANK TRUCK [ ] DUMP TRUCK [ ] DRUMS [ ] CARTONS [ ] OTHER

WASTE DESCRIPTION: NON-HAZARDOUS WATER

GENERATING PROCESS: GROUNDWATER SAMPLING

COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. WATER		99-100%	4.		
2. TPH		< 1%	5.		
3.			6. BESI # 111554		

PROPERTIES: pH 7 [ ] SOLID [X] LIQUID [ ] SLUDGE [ ] SLURRY [ ] OTHER

HANDLING INSTRUCTIONS: WEAR APPROPRIATE PROTECTIVE CLOTHING

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

Larry Moothart as Agent of BP West Coast Products LLC — TYPED OR PRINTED FULL NAME & SIGNATURE

DATE: 06 / 06 / 05

TRANSPORTER

NAME: NIETO AND SONS TRUCKING, INC.

EPA I.D. NO.:

ADDRESS: 1281 BREA CANYON ROAD

SERVICE ORDER NO.:

CITY, STATE, ZIP: BREA, CALIFORNIA 92821

PICK UP DATE: 06 / 06 / 05

PHONE NO.: (714) 990-6855

Salvador Arcos — TYPED OR PRINTED FULL NAME & SIGNATURE

DATE: 06 / 06 / 05

TRUCK, UNIT, I.D. NO.: 222

TSD FACILITY

NAME: DeMenno Kerdoon

EPA I.D. NO.:

ADDRESS: 2000 N. Alameda Street

DISPOSAL METHOD: [ ] LANDFILL [X] RECYCLER

CITY, STATE, ZIP: Compton, CA 90222

Recycler

PHONE NO.: 310-537-7100

TYPED OR PRINTED FULL NAME & SIGNATURE

DATE: 6/7/05

FAC# 69

ID# 31664

GEN	OLD/NEW	L A	TONS
TRANS		S B	
C/Q		RT/CD	HWDF NONE

DISCREPANCY