Alameda County

MAY 03 2004



Environmental Health

720 Southpoint Blvd. Suite 207

Petaluma, CA 94954

Phone (707) 765-0466, Fax (707) 765-0366

TRANSMITTAL

TO:

Mr. Scott Seery

Alameda County Health Care Services

1131 Harbor Bay Parkway

Alameda, CA 94502

DATE:

PROJECT NO.

SUBJECT:

April 27, 2004

06-459-7176-04

76 Service Station 7176 Dublin, California

From:

Jeremy Smith

WE ARE SENDING YOU:

COPIES	DATED	DESCRIPTION
1	4/27/04	First Quarter Site Status Report
l		

THESE ARE TRANSMITTED as checked below:

For review and comment	Approved as submitted	\boxtimes	For your files
As Requested	Approved as noted		For your use
For Approval	Returned for corrections		As noted below

COMMENTS:

Attached is a copy of the First Quarter 2004 Site Status Report for the above referenced site.

Signed:

COPIES TO: Mr. Thomas Kosel, ConocoPhillips, (electronic copy)



Alameda County

MAY 0 1 2004

April 27, 2004

Environmental Health

Mr. Scott Seery Alameda County Health Care Services 1131 Harbor Bay Parkway Alameda, CA 94502

RE: Quarterly Summary Report-First Quarter 2004

Miller Brooks Environmental, Inc. Project No.: 06-459-7176-04

Dear Mr. Seery:

On behalf of ConocoPhillips Company (ConocoPhillips), Miller Brooks Environmental, Incorporated (Miller Brooks) is forwarding the quarterly summary report for the following location:

Service Station

Location

JED A. DOUGLAS

NO. 7516

76 Service Station No. 7176 COP NO. WNO,1635

7850 Amador Valley Boulevard Dublin, California

Sincerely.

Miller Brooks Environmental, Incorporated

Jed Douglas, R.G. No. 7516

Senior Geologist

cc:

Attachment: Site Plan

Mr. Thomas Kosel, ConocoPhillips



April 15, 2004

Mr. Scott Seery Alameda County Health Care Services 1131 Harbor Bay Parkway Alameda, CA 94502

SITE: 76 SERVICE STATION NO. 7176

7850 AMADOR VALLEY BOULEVARD

DUBLIN, CALIFORNIA COP NO. WNO.1635

RE:

FIRST QUARTER 2004 GROUNDWATER MONITORING AND SAMPLING REPORT EXTENSION REQUEST

Dear Mr. Seery:

Miller Brooks Environmental, Inc. (Miller Brooks), on behalf of ConocoPhillips Company (ConocoPhillips), respectfully submits this request for an extension of the due date for the quarterly monitoring and sampling report for the abovementioned site. A current estimate from TRC, the ConocoPhillips groundwater sampling contractor, on the completion of the First Quarter 2004 Monitoring and Sampling Report for the site is April 23, 2004. Once the report is completed by the groundwater sampling contractor, Miller Brooks will conduct a review of the results and prepare a Quarterly Status Report for the site. Miller Brooks anticipates that both reports will be submitted within one week of the receipt of TRC's report.

If you have any questions, please contact me at (707) 765-0466, or Thomas Kosel of ConocoPhillips at (918) 661-3896.

Sincerely,

MILLER BROOKS ENVIRONMENTAL, INC.

Everett Ferguson Fr, RG 7159, CHG 780

Senior Hydrogeologist

cc:

ConocoPhillips Company (electronic copy)

459-7176

🗸 💮 da County

MAY 03 2004

QUARTERLY SUMMARY REPORT First Quarter 2004

- Realth

76 Service Station No. 7176 7850 Amador Valley Boulevard Dublin, California

City/County ID #:

STID #4104

County:

Alameda

PREVIOUS ASSESSMENT

In November 1994, Unocal Corporation (Unocal) replaced the fuel underground storage tanks (USTs) and removed the used-oil UST and associated product piping. An oil/water separator was also decommissioned. No holes or signs of leakage were observed on the fuel USTs, however, eight holes up to 0.5 inches in diameter were observed in the used-oil UST. The soil sample analyzed from beneath the used-oil UST was reported as non detect for all analytes. The soil samples collected from beneath the fuel USTs indicate that petroleum hydrocarbons are present in the soil near the fuel UST cavity and product dispensers.

In October 1995, Unocal performed a soil and groundwater investigation that included drilling six soil borings (B1 through B6) and constructing three on-site groundwater monitoring wells (U1 through U3). Total petroleum hydrocarbons as diesel (TPHd), TPH as gasoline (TPHg), and benzene were present in the soil samples analyzed up to 25 milligrams per kilogram (mg/kg), 150 mg/kg, and 0.21 mg/kg, respectively.

During March 1998, Tosco Marketing Company (Tosco, now ConocoPhillips) performed an off-site soil and groundwater investigation that included installation of two off-site groundwater monitoring wells (MW4 and MW5). Petroleum hydrocarbons were not detected in the soil samples collected from these boreholes.

In June 2001, ERI submitted an Addendum to Request and Work Plan for Case Closure, including hydrographs and concentration versus time graphs for select wells, and required agency closure summary forms.

SENSITIVE RECEPTORS

In August 2000, ERI submitted a Request and Work Plan for Case Closure presenting the results of a groundwater receptor survey and risk-based corrective action Tier II analysis and requesting closure of the environmental case. No active groundwater production wells were positively identified within the survey radius during the agency or field groundwater receptor surveys.

MONITORING AND SAMPLING

Groundwater beneath the site is currently monitored and sampled on a semi-annual basis during the first and third quarter of each year. During the February 4, 2004 monitoring and sampling event, groundwater was present beneath the site at a depth ranging from 14.41 to 16.87 feet below

the top of casing (TOC). The groundwater flow direction was reported towards the southeast at a gradient of 0.003 ft/ft. TPHg, TPHd, and methyl tertiary butyl ether (MTBE) were present in the groundwater at concentrations up to 4,400, 1,300, and 9.6 micrograms per liter (μ g/L), respectively. Benzene was not detected at or above the laboratory detection limits in the groundwater samples analyzed during the February 4, 2004 sampling event.

REMEDIATION STATUS

Approximately 5,000 gallons of groundwater were removed from the fuel UST cavity during the 1994 UST replacement activities. A total of 15,511 gallons of groundwater have been removed historically from the site. Approximately 1,863 tons of hydrocarbon-impacted soil were excavated and removed from the site during the 1994 UST replacement activities.

CHARACTERIZATION STATUS

The soil impact beneath the site is limited to a small area surrounding UST cavity and dispenser islands. Groundwater beneath the site is delineated, however there are elevated concentrations of TPHg and TPHd in well MW-4. These concentrations have shown a decreasing trend since 2001.

RECENT CORRESPONDENCE

There was no correspondence during the first quarter 2004.

THIS QUARTER ACTIVITIES (First Quarter 2004)

1. The groundwater monitoring wells were monitored and sampled on February 4, 2004 by TRC Companies (TRC).

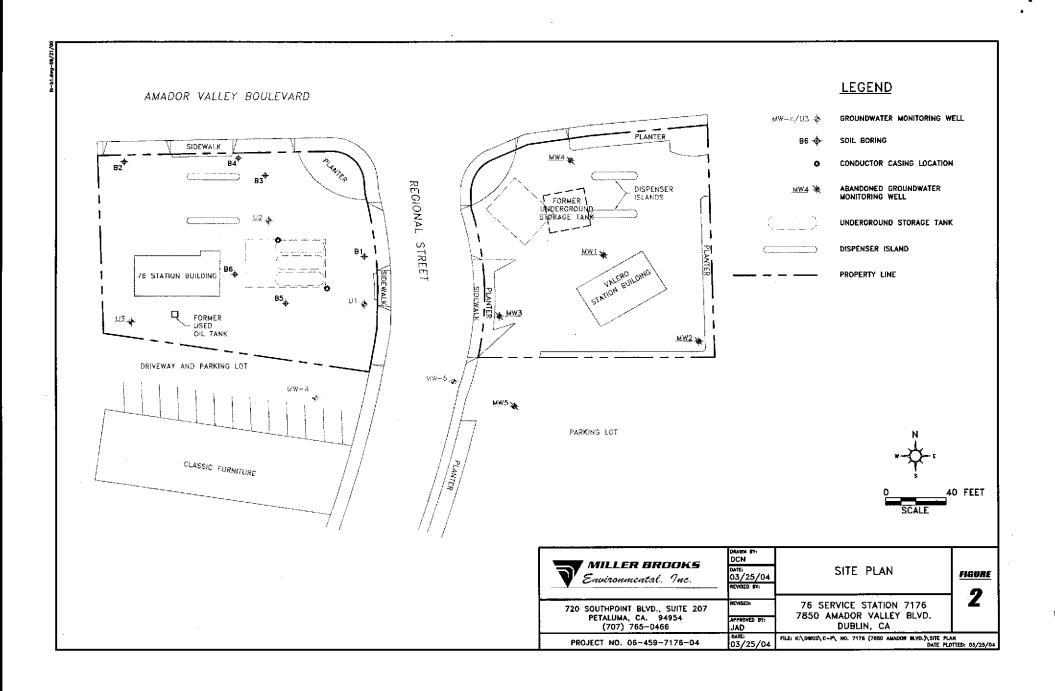
WASTE DISPOSAL SUMMARY

No waste was generated during this reporting period.

NEXT QUARTER ACTIVITIES (Second Quarter 2004)

1. Miller Brooks is currently anticipating a response from the Alameda County Health Care Services Agency to ConocoPhillips request for site closure, submitted in June 2001.

CONSULTANT: Miller Brooks Environmental, Incorporated





April 7, 2004

ConocoPhillips Company 76 Broadway Sacramento, CA 95818 A TORING COUNTY

District Committee and Continuing

ATTN:

MR. THOMAS H. KOSEL

SITE:

76 STATION 7176

7850 AMADOR VALLEY BLVD.

DUBLIN, CALIFORNIA

RE:

QUARTERLY MONITORING REPORT

JANUARY THROUGH MARCH 2004

Dear Mr. Kosel:

Please find enclosed our Quarterly Monitoring Report for 76 Station 7176, located at 7850 Amador Valley Blvd., Dublin, California. If you have any questions regarding this report, please call us at (949) 753-0101.

Sincerely,

TRC

Anju Farfan

QMS Operations Manager

CC:

Mr. Amir Gholami, Alameda County Health Care Services

Mr. Paul Blank, ERI, Inc.

Mr. Everett Ferguson, Miller Brooks Environmental

Enclosures 20-0400/7176R01.QMS



FIRST QUARTER 2004 FLUID LEVEL MONITORING AND GROUNDWATER SAMPLING REPORT

April 7, 2004

76 STATION 7176 7850 Amador Valley Blvd. Dublin, California

Prepared For:

Mr. Thomas H. Kosel CONOCOPHILLIPS COMPANY 76 Broadway Sacramento, California 95818

By:

Senior Project Geologist, Irvine Operations

GROUNDWATER MONITORING REPORT

LIST OF ATTACHMENTS									
Summary Sheet	Summary of Gauging and Sampling Activities								
Tables	Table Key								
	Table 1: Summary of Groundwater Levels and Chemical Analysis Results								
	Table 2: Historic Groundwater Levels and Chemical Analysis Results								
	Table 3: Summary of Additional Chemical Analysis Results								
Figures	Figure 1: Vicinity Map								
_	Figure 2: Groundwater Elevation Contour Map								
	Figure 3: Dissolved-Phase TPPH Concentration Map								
	Figure 4: Dissolved-Phase Benzene Concentration Map								
	Figure 5: Dissolved-Phase MTBE Concentration Map								
	Figure 6: Dissolved-Phase TPH-D Concentration Map								
Graphs	Benzene Concentrations vs. Time								
-	Hydrographs								
Field Activities	General Field Procedures								
	Groundwater Sampling Field Notes								
Laboratory	Official Laboratory Reports								
Reports	Quality Control Reports								
•	Chain of Custody Records								
Statements	Purge Water Transport and Disposal								
	Limitations								

Summary of Gauging and Sampling Activities January 2004 through March 2004 76 Station 7176

7850 Amador Valley Blvd. Dublin, CA

Site I	nformation:
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Additional Information:

Site: 76 Station 7850 Amador Valley Blvd. Dublin, CA Project Coordinator/Phone Number: Thomas Kosel/916-558-7666 Groundwater wells onsite: 0 Groundwater wells offsite: Field Activity: TRC Sampling consultant: 02/04/04 Date(s) sampled: Groundwater wells gauged: 5 Groundwater wells sampled: diaphragm pump Purging method: Onyx/Rodeo Unit 100 Treatment/disposal method during sampling event: No Free product pumpouts other than sampling event: N/A Treatment/Disposal method during free product pumpouts: Site Hydrogeology: Minimum depth to groundwater (feet bgs): 14.41 16.87 Maximum depth to groundwater (feet bgs): 340.96 Average groundwater elevation (feet relative to mean sea level): Average change in groundwater elevations since previous event (feet): -0.11Groundwater gradient and flow direction: 0.003 ft/ft, southeast Groundwater Condition (Benzene Maximum Contaminant Level [MCL] = 1.0 µg/l) 5 Wells with benzene concentrations below MCL: Wells with benzene concentrations at or above MCL: 0 Minimum benzene concentration (µg/l): ND ND Maximum benzene concentration (µg/l): Minimum MTBE concentration (µg/l): ND 9.6 Maximum MTBE concentration (µg/l): Minimum TPPH concentration (µg/l): Maximum TPPH concentration (µg/l): 4400 (U-2) Groundwater wells with free product: Minimum free product thickness (feet): 0 n Maximum free product thickness (feet):

This report presents the results of groundwater monitoring and sampling activities performed by TRC. Please contact the primary consultant for other specific information on this site.

TABLES

TABLE KEY

ABBREVIATIONS / SYMBOLS

LPH = liquid-phase hydrocarbons

μg/l = micrograms per liter mg/l = milligrams per liter

ND = not detected at or above laboratory detection limit

DTSC = Department of Toxic Substances Control

N/A = not applicable

Trace = less than 0.01 foot of LPH in well

USTs = underground storage tanks

-- = not analyzed, measured, or collected

TPH-G = total petroleum hydrocarbons with gasoline distinction
BTEX = benzene, toluene, ethylbenzene, and total xylenes

TPH-D = total petroleum hydrocarbons with disable distinction

TPH-D = total petroleum hydrocarbons with diesel distinction

TRPH = total recoverable petroleum hydrocarbons

MTBE = methyl tertiary butyl ether
TAME = tertiary amyl methyl ether
ETBE = ethyl tertiary butyl ether

DIPE = di-isopropyl ether
TBA = tertiary butyl alcohol
1,1-DCA = 1,1-Dichloroethane
1,2-DCA = 1,2-Dichloroethane
1,1-DCE = 1,1-Dichloroethene

1,2-DCE = cis- and trans-1,2-Dichloroethene

PCE = tetrachloroethene
TCA = trichloroethane
TCE = trichloroethene

PCB = polychlorinated biphenyls

TPPH = total purgeable petroleum hydrocarbons

NOTES

Elevations are in feet above mean sea level.

Groundwater elevation for wells with LPH is calculated as follows:

Surface elevation – depth to water + (0.75 x LPH thickness).

Concentration Graphs have been modified to plot non-detect results at the reporting limit stated in the official laboratory report. All non-detect results prior to the Second Quarter 2000 were plotted at $0.1 \,\mu g/l$ for graphical display.

J = estimated concentration, value is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL)

REFERENCE

TRC began groundwater monitoring and sampling activities in October 2003. Historical data for 76 Station 7176 was provided by Gettler-Ryan Inc., Dublin, California, in an excel table received in September 2003.

Table 1
SUMMARY OF GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS
February 4, 2004
76 Station 7176

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation		TPH-G	ТРРН 8260В	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	
MW-4		(Screen I	nterval in fe	et: 10.0-2	5.0)									
02/04/0	4 356.41	15.55	0.00	340.86	-0.08		270	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
MW-5		(Screen I	nterval in fe	et: 10.0-2	5.0)									
02/04/04	4 355.03	14.41	0.00	340.62	-0.01	**	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.6	
U-1		(Screen I	nterval in fe	et: 10.0-3	0.0)									
02/04/04	4 355.59	14.66	0.00	340.93	-0.15		4000	ND<0.50	ND<0.50	13	ND<1.0		9.6	
U-2		(Screen I	nterval in fe	et: 10.0-3	0.0)									
02/04/04	4 356.55	15.36	0.00	341.19	-0.18		4400	ND<5.0	ND<5.0	7.0	ND<10		ND<20	
U-3		(Screen I	nterval in fe	et: 10.0-3	0.0)									
02/04/04	4 358.09	16.87	0.00	341.22	-0.13		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	

Table 2
HISTORIC GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS
July 1995 Through February 2004

76 Station 7176

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	$(\mu g/l)$	(μg/l)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	
MW-4	G	Screen Inte	erval in fee	t: 10.0-25.0)									
04/23/9	•		0.00	344.30		2500		5.9	6.4	16	31	ND		
07/08/9	8 356.41	13.70	0.00	342.71	-1.59	1000		ND	ND	ND	ND	ND		
10/05/9	8 356.41	15.18	0.00	341.23	-1.48	890		ND	ND	ND	14	ND		
01/04/9	9 356.41	16.39	0.00	340.02	-1.21	230		0.56	1.3	1.4	1.8	10		
04/05/9	9 356.41	14.61	0.00	341.80	1.78	620		ND	1.8	2.1	ND	6	9.3	
07/01/9	9 356.41	15.43	0.00	340.98	-0.82	700		2.1	ND	1.9	2.4	ND	21	
09/30/9	9 356.41	16.27	0.00	340.14	-0.84	582		2.6	1.3	1.98	ND	2 3.1	22.5	
01/03/0	0 356.41	17.50	0.00	338.91	-1.23	800		4.2	4.6	3.3	11	31	17	
04/04/0	0 356.41	13.91	0.00	342.50	3.59	710		2	1.3	4.4	2	21	22	
07/14/0	0 356.41	15.58	0.00	340.83	~1.67	490		0.89	1.3	0.85	1.8	21	12	
10/27/0	0 356.41	16.96	0.00	339.45	-1.38	598		ND	1.56	4.65	ND	15.4	14	
01/08/0	356.41	16.64	0.00	339.77	0.32	522		4.09	1.69	2.53	1.26	17.2	14.3	
04/03/0	356.41	. 	0.00			575		ND	ND	ND	ND	14.0	11.6	
07/06/0	356.41	. 	0.00			720		4.7	1.5	2.5	0.74	10	7.1	
10/05/0	356.41		0.00			650		4.3	1.2	1.1	1.8	5.9	5.4	
01/03/0	2 356.41		0.00			340		2.9	1.4	1.7	ND<1.0	ND<10/	3.1	
04/01/0	2 356.41		0.00			340		ND<0.50	2.7	ND<0.50	0.66	ND<5.0	2.2	
07/01/0	2 356.41	15.53	0.00	340.88			280	ND<0.50	ND<0.50	ND<0.50	ND<1.0		0.58	
01/24/0	356.41	14.52	0.00	341.89	1.01		170	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
07/28/0	356.41	15.47	0.00	340.94	-0.95		380	ND<0.50	ND<0.50	ND<0.50	ND<1	ND<2	ND<2	
02/04/0	356.41	15.55	0.00	340.86	-0.08		270	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
MW-5	(3	Screen Inte	erval in feet	t: 1 0.0-2 5.0)									
04/23/9	8 355.03	11.15	0.00	343.88		120		0.53	0.9	1	3.8	13		
07/08/9	8 355.03	12.63	0.00	342.40	-1.48	ND		ND	ND	ND	ND	12		
10/05/9	8 355.03	14.00	0.00	341.03	-1.37	ND		ND	ND	ND	ND	12		

Page 1 of 5

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation		TPH-G	TPPH 8260B	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE 8021B	MTBE 8260B
<u> </u>	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)
	continued		0.00	220.02	1.31	ND		NID	ND	ND	ND	ND	
01/04/9			0.00	339.82	-1.21	ND		ND			ND ND	ND ND	ND
04/05/9				341.27	1.45	ND		ND	ND ND	ND ND	ND ND	ND ND	ND ND
07/01/9				340.55	-0.72	ND		ND ND		ND	ND ND	ND	ND ND
09/30/9				339.88	-0.67	50.8		ND ND	ND ND	ND	ND	ND	ND ND
01/03/0				338.69	-1.19	ND ND		ND	ND	ND ND	ND ND	ND ND	ND ND
04/04/0				342.13	3.44 -1.58	ND		ND	ND ND	ND ND	ND ND	ND	ND
07/14/0				340.55			**		ND ND	ND ND	ND ND	ND	ND ND
10/27/0			0.00	339.28	-1.27	ND		ND	ND ND	ND ND	ND ND	ND	ND ND
01/08/0			0.00	339.78	0.50	ND ND		ND ND	ND ND	ND ND	ND	ND	ND ND
04/03/0			0.00			ND ND		ND ND	ND ND	ND ND	ND	ND	ND ND
07/06/0 10/05/0			0.00					ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<2.0
			0.00			ND<50					ND<0.50	ND<5.0	1.6
01/03/0						ND<50		ND<0.50	ND<0.50	ND<0.50		ND<5.0	3.5
04/01/0			0.00	240.52		ND<50	 NID <50	ND<0.50	ND<0.50	ND<0.50 ND<0.50	ND<0.50 ND<1.0	ND<3.0 	2.3
07/01/0				340.52			ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0 ND<1.0		4.3
01/24/0			0.00	341.50	0.98		ND<50		ND<0.50		ND<1.0	 2.4	3.4
07/28/0				340.63	-0.87		ND<50	ND<0.50		ND0.50		3.4	2.6
02/04/0	04 355.03	14.41	0.00	340.62	-0.01		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.0
U-1	-		erval in feet		-	22000		1.400	MID	1400	3100		
10/12/9				340.24		33000		1400	ND	1400		**	
01/11/9				339.29	-0.95	8300		690	11	680	1500	700	
04/11/9				343.42	4.13	3200		110	ND	180	290	790	
07/10/9				341.78	-1.64	2600		81	4.4	210	230	510	
10/30/9				339.77	-2.01	2200		67	19	140	150	360	
01/27/9				343.42	3.65	4600		98	ND	360	290	150	
04/08/9				342.16	-1.26	2800	**	50	ND	220	140	ND 190	
07/17/9				340.32	-1.84	2300		30	4.5	140	94		
10/17/9				339.29	-1.03	1500		31	6.7	110	88	220	
01/19/9	98 355.62	2 14.34	0.00	341.28	1.99	3100		46	3.4	310	200	170	

Comments

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water	Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	
U-1 co														
04/23/9	8 355.59	11.16	0.00	344.43	3.15	3400		72	3.8	470	350	280		
07/08/9	8 355.59	12.67	0.00	342.92	-1.51	4500		51	ND	590	430	190		
10/05/9	8 355.59	14.57	0.00	341.02	-1.90	7500		53	ND	680	350	190	180	
01/04/9	9 355,59	15.35	0.00	340.24	-0.78	10000		ND	ND	1200	540		ND	
04/05/9	9 355.59	13.64	0.00	341.95	1.71	4900		34	ND	350	150	150	55	
07/01/9	9 355.59	14.39	0.00	341.20	-0.75	10000		45	ND	850	420	260	110	
09/30/9	9 355.59	15.32	0.00	340.27	-0.93	7150		ND	ND	415	84.4	ND	195	
01/03/0	0 355.59	16.51	0.00	339.08	-1.19	5400		28	8.4	180	33	160	120	
04/04/0	0 355.59	12.89	0.00	342.70	3.62	4800		30	ND	210	93	170	160	
07/14/0	0 355.59	14.56	0.00	341.03	-1.67	6200		41	16	170	32	170	120	
10/27/0	0 355.59	15.96	0.00	339.63	-1.40	3830		16.8	ND	68.6	7.99	55.2	38	
01/08/0	1 355.59	15.72	0.00	339.87	0.24	2410		14.7	4.3	30.5	5.04	34.5	9.33	
04/03/0	1 355.59		0.00			3,330		15.8	5.96	74.8	7.06	ND	13.3	
07/06/0	1 355.59		0.00			4,300		23	6.4	57	6.8	58	36	
10/05/0	1 355.59		0.00			3,800		19	ND<5.0	19	ND<5.0	64	36	
01/03/0	2 355.59		0.00			4,500		25	ND<10	24	ND<10	ND<100	23	
04/01/0	2 355.59		0.00			5,300	**	36	6.7	48	12	93	59	
07/01/0	2 355.59	14.61	0.00	340.98			3,900	ND<0.50	ND<0.50	ND<0.50	3.9		23	
01/24/0	3 355.59	13.82	0.00	341.77	0.79		3,400	ND<2.5	ND<2.5	37	ND<5.0		21	
07/28/0	3 355.59	14.51	0.00	341.08	-0.69		7100	ND<2.5	ND<2.5	12	ND<5	13	13	
02/04/0	4 355.59	14.66	0.00	340.93	-0.15		4000	ND<0.50	ND<0.50	13	ND<1.0		9.6	
U-2	(5	Screen Inte	rval in feet	: 10.0-30.0)									
07/08/9	5 356.59	12.68	0.00	343.91	- -	17000		430	ND	2200	590			
10/12/9	5 356.59	16.01	0.00	340.58	-3.33	24000		310	60	1900	190			
01/11/9	6 356.59	17.06	0.00	339.53	-1.05	10000		210	55	1400	240			
04/11/9	6 356.59	12.75	0.00	343.84	4.31	7700	**	130	27	1100	110	340		
07/10/9	6 356.59	14.42	0.00	342.17	-1.67	5600		59	15	610	42	250		
10/30/9	6 356.59	16.82	0.00	339.77	-2.40	7700		67	35	1000	54	260		
01/27/9	7 356.59	12.91	0.00	343.68	3.91	1600		14	ND	130	7	100		

Page 3 of 5

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(µg/l)	
U-2 co														
04/08/9				342.52	- 1.16	4300		35	ND	400	16	ND		
07/17/9			0.00	340.63	-1.89	6200		17	22	410	ND	130		
10/17/9			0.00	339.56	-1.07	7100		71	26	520	50	ND		
01/19/9	8 356.59	15.10	0.00	341.49	1.93	5300		46	11	350	16	110		
04/23/9	8 356.55	11.74	0.00	344.81	3.32	3200		23	11	210	38	160		
07/08/9	8 356.55	13.27	0.00	343.28	-1.53	1600		34	8.5	100	7.4	190		
10/05/9	8 356.55	14.90	0.00	341.65	-1.63	2900		37	8.4	110	7.3	78		
01/04/9	9 356.55	15.94	0.00	340.61	-1.04	2200		35	ND	17	ND	86		
04/05/9	9 356.55	14.19	0.00	342.36	1.75	4900		21	77	130	310	100	6.9	
07/01/9	9 356.55	14.98	0.00	341.57	-0.79	1500		7.6	ND	ND	ND	ND	35	
09/30/9	9 356.55	16.00	0.00	340.55	-1.02	256		1.85	ND	2.42	ND	26.3	29.8	
01/03/0	0 356.55	17.20	0.00	339.35	-1.20	3400		23	13	ND	44	46	14	
04/04/0	0 356.55	13.50	0.00	343.05	3.70	3600		34	17	56	ND	59	25	
07/14/0	0 356.55	15.23	0.00	341.32	-1.73	3100		16	13	15	10	100	19	
10/27/0	0 356.55	16.74	0.00	339.81	-1.51	4180		30.4	10.2	14.6	ND	55.5	15	
01/08/0	1 356.55	16.68	0.00	339.87	0.06	3300		33.5	7.32	3.49	ND	66.7	7.49	
04/03/0	1 356.55		0.00			4,290		32.4	9.91	20.1	ND	66.6	18.1	
07/06/0	1 356.55		0.00			4,700		35	11	12	5.3	62	19	r
10/05/0	1 356.55		0.00			3,600		31	9.6	8.7	6.9	62	13	
01/03/0	2 356.55		0.00			4,600		34	11	15	5.8	62	7.5	
04/01/0	2 356.55		0.00			3,500		38	9.3	10	6.5	87	18	
07/01/0	2 356.55	15.24	0.00	341.31			4,500	ND<0.50	ND<0.50	5.0	1.7		ND<0.50	
01/24/0	3 356.55	14.31	0.00	342.24	0.93		2,300	1.1	1.5	6.9	2.4		5.9	
07/28/0	3 356.55	15.18	0.00	341.37	-0.87		5600	ND<2.5	ND<2.5	3.4	ND<5	ND<10	ND<10	
02/04/0	4 356.55	15.36	0.00	341.19	-0.18		4400	ND<5.0	ND<5.0	7.0	ND<10		ND<20	
U-3	(5	Screen Inte	erval in feet	: 10.0-30.0)									
07/08/9			0.00	343.55		1100		0.57	2.1	1.7	2.4			
10/12/9	5 358.13	17.60	0.00	340.53	-3.02	560		ND	0.87	0.7	1.1			
01/11/9	6 358.13	18.65	0.00	339.48	-1.05	230		0.62	0.91	0.97	1.9			

Page 4 of 5

Date Sampled		Depth to Water	LPH Thickness		Change in Elevation	ТРН-G	TPPH 8260B	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	_
U-3 co			0.00									3.75		
04/11/9				344.93	5.45	68		ND	ND	ND	ND	ND		
07/10/9				342.15	-2.78	ND		ND	ND	ND	ND	ND		
10/30/9				339.89	-2.26	70		ND	ND	ND	ND	ND		
01/27/9			0.00	343.72	3.83	ND		ND	ND	ND	ND	ND		
04/08/9				342.40	-1.32	ND		ND	ND	ND	ND	ND		
07/17/9				340.59	-1.81	ND		ND	ND	ND	ND	ND		
10/17/9				339.49	-1.10	ND		ND	ND	ND	ND	ND		
01/19/9				341.46	1.97	ND		ND	ND	ND	ND	ND	**	
04/23/9				344.81	3.35	ND		ND	ND	ND	ND	ND		
07/08/9				343.19	-1.62	ND		ND	ND	ND	ND	ND		
10/05/9				341.59	-1.60	ND		ND	ND	ND	ND	ND		
01/04/9	9 358.09	17.70		340.39	-1.20	ND		ND	ND	ND	ND	ND		
04/05/9	9 358.09	15.67	0.00	342.42	2.03	ND		ND	ND	ND	ND	ND	ND	
07/01/9	9 358.09	16.79	0.00	341.30	-1.12	ND		ND	ND	ND	ND	ND	ND	
09/30/9	9 358.09	17.60	0.00	340.49	-0.81	ND		ND	ND	ND	ND	ND	ND	
01/03/0	0 358.09	18.86	0.00	339.23	-1.26	ND		ND	ND	ND	ND	ND	ND	
04/04/0	0 358.09	15.10	0.00	342.99	3.76	ND		ND	ND	ND	ND	ND	ND	
07/14/0	0 358.09	16.85	0.00	341.24	-1.75	ND		ND	ND	ND	ND	ND	ND	
10/27/0	0 358.09	18.35	0.00	339.74	-1.50	ND		ND	ND	ND	ND	ND	ND	
01/08/0	1 358.09	18.31	0.00	339.78	0.04	ND		ND	ND	ND	ND	ND	ND	
04/03/0	1 358.09		0.00			ND		ND	ND	ND	ND	ND	ND	
07/06/0	358.09		0.00			ND	•-	ND	ND	ND	ND	ND	ND	
10/05/0	358.09		0.00		**	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<2.0	
01/03/0	2 358.09		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<1.0	
04/01/0	2 358.09		0.00			ND<50		ND<0.50	1.1	ND<0.50	1.2	ND<5.0	ND<2.0	
07/01/0	2 358.09	16.77	0.00	341.32			ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	ND<2.018	
01/24/0	3 358.09	9 15.75	0.00	342.34	1.02		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	ND<2.019	
07/28/0	3 358.09	9 16.74	0.00	341.35	-0.99		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1	ND<2	ND<2	
02/04/0	4 358.09	16.87	0.00	341.22	-0.13	·	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	

Comments

Table 3
SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS
76 Station 7176

Date Sampled	TPH-D	EDC	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	1,2 DCE
	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)
MW-4									
07/08/98	1400			***	**				
01/04/99	71								
04/05/99	340		ND	ND	ND	ND	ND	ND	ND
07/01/99	260		ND	ND	ND	ND	ND	ND	ND
09/30/99	420		ND	ND	ND	ND	ND	ND	ND
01/03/00	250		ND	ND	ND	ND	ND	ND	ND
04/04/00	460		ND	ND	ND	ND	ND	ND	ND
07/14/00	220		ND	ND	ND	ND	ND	ND	ND
10/27/00	160	~-	ND	ND	ND	ND	ND	ND	ND
01/08/01			ND	ND	ND	ND	ND	ND	ND
04/03/01	180		ND	ND	ND	ND	ND	ND	ND
07/06/01	230		ND	ND	ND	ND	ND	ND	ND
10/05/01	180		ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<1,000	ND<2.0
01/03/02	390		ND<1.0	ND<1.0	ND<20	ND<1.0	ND<1.0	ND<500	ND<1.0
04/01/02	160		ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	ND<2.0
07/01/02	130		ND<0.50	ND<0.50	ND<5.0	ND<1.0	ND<0.50	ND<25	ND<0.50
01/24/03	52		ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	ND<2.0
07/28/03	110		ND<2	ND<2	ND<100	ND<2	ND<2	ND<500	ND<2
02/04/04	94	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	
MW-5									
07/08/98	170	**							
01/04/99	ND								
04/05/99	ND		ND	ND	ND	ND	ND	ND	ND
07/01/99	ND		ND	ND	ND	ND	ND	ND	ND
09/30/99	60.4		ND	ND	ND	ND	ND	ND	ND
01/03/00	ND		ND	ND	ND	ND	ND	ND	ND

Page 1 of 5

Date Sampled	TPH-D	-D EDC		TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	1,2 DCE
	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(μg/l)	(µg/l)
MW-5	ontinued								
04/04/00	69		ND	ND	ND	ND	ND	ND	ND
07/14/00	ND		ND	ND	ND	ND	ND	ND	ND
10/27/00	ND		ND	ND	ND	ND	ND	ND	ND
01/08/01			ND	ND	ND	ND	ND	ND	ND
04/03/01	ND		ND	ND	ND	ND	ND	ND	ND
07/06/01	ND		ND	ND	ND	ND	ND	ND	ND
10/05/01	ND<50		ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<1,000	ND<2.0
01/03/02	ND<51		ND<1.0	ND<1.0	ND<20	ND<1.0	ND<1.0	ND<500	ND<1.0
04/01/02	ND<50		ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	ND<2.0
07/01/02	ND<60		ND<0.50	ND<0.50	ND<5.0	ND<1.0	ND<0.50	ND<25	ND<0.50
01/24/03	ND<50		ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	ND<2.0
07/28/03	ND<50		ND<2	ND<2	ND<100	ND<2	ND<2	ND<500	ND<2
02/04/04	ND<50	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	
U-1									
10/12/95	4200				==	**			
01/11/96	8200								
04/11/96	5630								
07/10/96	2200								
10/30/96	560								
01/27/97	2300							**	*n
04/08/97	1300								••
07/17/97	460								
10/17/97	510					**	••		
01/19/98	1900								
07/08/98	2000						**		
01/04/99	2700								
04/05/99	920		ND	ND	ND	ND	ND	ND	ND
07/01/99	2700		ND	ND	ND	ND	ND	ND	ND
09/30/99	2360		ND	ND	ND	ND	ND	ND	ND

Date Sampled	TPH-D	EDC	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	1,2 DCE
	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(µg/l)	(μg/l)	(µg/l)
U-1 con	itinued								
01/03/00	2000		ND	ND	ND	ND	ND	ND	ND
04/04/00	990		ND	ND	ND	ND	ND	ND	ND
07/14/00	2800		ND	ND	ND	ND	ND	ND	ND
10/27/00	1400		ND	ND	ND	ND	ND	ND	ND
01/08/01	**		ND	ND	ND	ND	ND	ND	ND
04/03/01	1,500		ND	ND	ND	ND	ND	ND	ND
07/06/01	1,600		ND	ND	ND	ND	ND	ND	ND
10/05/01	2,500		ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<1,000	ND<2.0
01/03/02	2,200		ND<5.0	ND<5.0	ND<100	ND<5.0	ND<5.0	ND<2,500	ND<5.0
04/01/02	1,800		ND<10	ND<10	ND<500	ND<10	ND<10	ND<2,500	ND<10
07/01/02	2,100		ND<0.50	ND<0.50	ND<5.0	ND<1.0	ND<0.50	ND<25	ND<0.50
01/24/03	2,100	==	ND<10	ND<10	ND<500	ND<10	ND<10	ND<2,500	ND<10
07/28/03	2100		ND<10	ND<10	ND<500	ND<10	ND<10	ND<2500	ND<10
02/04/04	1300	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	
U-2									
07/08/95	4700								
10/12/95	3600								
01/11/96	8600		-						
04/11/96	1900								
07/10/96	2300								
10/30/96	1800								
01/27/97	660								
04/08/97	2000								
07/17/97	1300				••				
10/17/97	1400					•=	**	**	••
01/19/98	2100								
07/08/98	1100		••						
01/04/99	670								
04/05/99	660		ND	ND	ND	ND	ND	ND	ND

Date Sampled	трн-D	EDC	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	1,2 DCE
	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)
U-2 con	itinued								
07/01/99	210		ND	ND	ND	ND	ND	ND	ND
09/30/99	483		ND	ND	ND	ND	ND	ND	ND
01/03/00	2400		ND	ND	ND	ND	ND	NĎ	ND
04/04/00	1000		ND	ND	ND	ND	ND	ND	ND
07/14/00	1000		ND	ND	ND	ND	ND	ND	ND
10/27/00	2000		ND	ND	ND	ND	ND	ND	ND
01/08/01			ND	ND	ND	ND	ND	ND	ND
04/03/01	1,500		ND	ND	ND	ND	ND	ND	ND
07/06/01	1,400		ND	ND	ND	ND	ND	ND	ND
10/05/01	3,200		ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<1,000	ND<2.0
01/03/02	2,300		ND<5.0	ND<5.0	ND<100	ND<5.0	ND<5.0	ND<2,500	ND<5.0
04/01/02	1,400		ND<4.0	ND<4.0	ND<200	ND<4.0	ND<4.0	ND<1,000	ND<4.0
07/01/02	ND<50		ND<0.50	ND<0.50	ND<5.0	ND<1.0	ND<0.50	ND<25	ND<0.50
01/24/03	860		ND<4.0	ND<4.0	ND<200	ND<4.0	ND<4.0	ND<1,000	ND<4.0
07/28/03	1300	**	ND<10	ND<10	ND<500	ND<10	ND<10	ND<2500	ND<10
02/04/04	1300	ND<20	ND<20	ND<20	ND<1000	ND<20	ND<20	ND<5000	
U-3									
07/08/95	710			••					
10/12/95	470		**						
01/11/96	260		. -				••		
04/11/96	ND		**						
07/10/96	ND								
10/30/96	ND	**							
01/27/97	ND								
04/08/97	ND						F-		
07/17/97	ND								
10/17/97	63								
01/19/98	68							n-	
07/08/98	80	**					**		

Date Sampled	TPH-D	EDC	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	1,2 DCE
	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(μ g/l)
U-3 con	tinued								
01/04/99	ND								
04/05/99	ND	**	ND	ND	ND	ND	ND	ND	ND
07/01/99	ND		ND	ND	ND	ND	ND	ND	ND
09/30/99	ND		ND	ND	ND	ND	ND	ND	ND
01/03/00	ND	**	ND	ND	ND	ND	ND	ND	ND
04/04/00	ND		ND	ND	ND	ND	ND	ND	ND
07/14/00	ND		ND	ND	ND	ND	ND	ND	ND
10/27/00	ND		ND	ND	ND	ND	ND	ND	ND
01/08/01			ND	ND	ND	ND	ND	ND	ND
04/03/01	ND		ND	ND	ND	ND	ND	ND	ND
07/06/01	ND		ND	ND	ND	ND	ND	ND	ND
10/05/01	ND<50		ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<1,000	ND<2.0
01/03/02	ND<52		ND<1.0	ND<1.0	ND<20	ND<1.0	ND<1.0	ND<500	ND<1.0
04/01/02	ND<50		ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	ND<2.0
07/01/02	1,500		ND<0.50	ND<0.50	ND<5.0	ND<1.0	ND<0.50	ND<25	ND<0.50
01/24/03	ND<50		ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	ND<2.0
07/28/03	ND<50		ND<2	ND<2	ND<100	ND<2	ND<2	ND<500	ND<2
02/04/04	90	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	







SCALE 1:24,000

SOURCE:

United States Geological Survey 7.5 Minute Topographic Map: Dublin Quadrongle



QUADRANGLE LOCATION

VICINITY MAP

76 Station 7176 7850 Amador Valley Boulevard Dublin, California

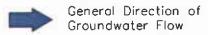
AMADOR VALLEY BOULEVARD N PANER DISPENSER **ISLANDS** U-2 ф. REGIONAL STREET 341.19 CC-2@ STATION BUILDING ©CC-1 U−1 340.93 U-3 + FORMER WASTE O 341.22 MW-5 ⊕ 340.62 MW-4 340.86

NOTES

Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. UST = underground storage tank.

LEGEND

- CC-2 ⊚ Conductor Casing
- 341.10 Groundwater Elevation Contour



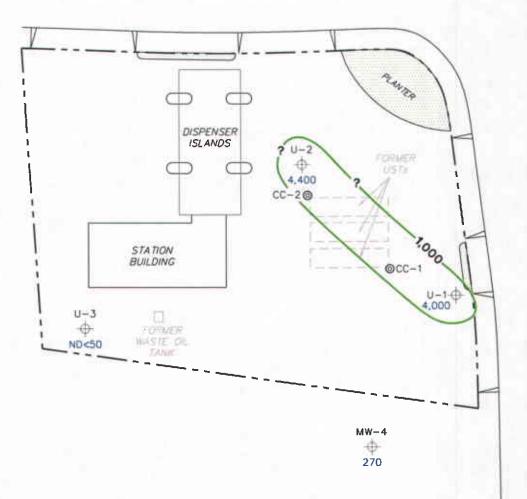
GROUNDWATER ELEVATION CONTOUR MAP February 4, 2004

76 Station 7176 7850 Amador Valley Boulevard Dublin, California





AMADOR VALLEY BOULEVARD



REGIONAL STREET

MW-5 +

NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. TPPH = total purgeable petroleum hydrocarbons. $\mu g/l = \text{micrograms}$ per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank. Results obtained using EPA Method 8260B.

LEGEND

MW-5 Φ Monitoring Well with Dissolved-Phase TPPH Concentration (μg/l)

CC-2 @ Conductor Casing

Dissolved—Phase TPPH
Contour (µg/l)

DISSOLVED-PHASE TPPH CONCENTRATION MAP February 4, 2004

76 Station 7176 7850 Amador Valley Boulevard Dublin, California





AMADOR VALLEY BOULEVARD RWER DISPENSER ISLANDS U-2FORMER 0 REGIONAL STREET ND<5.0 CC-2@ STATION BUILDING U-1-ND<0.50 U-3Φ FORMER WASTE DIL ND<0.50 TANK MW-5 + ND<0.50 MW-4 0 ND<0.50

NOTES:

 $\mu g/l=$ micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank. Results obtained using EPA Method 8260B.

LEGEND

ww-5 → Monitoring Well with
Dissolved—Phase Benzene
Concentration (µg/I)

CC-2 @ Conductor Casing

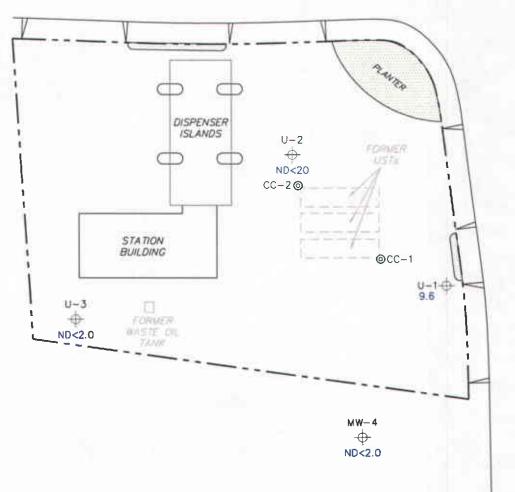
DISSOLVED-PHASE BENZENE CONCENTRATION MAP February 4, 2004

76 Station 7176 7850 Amador Valley Boulevard Dublin, California





AMADOR VALLEY BOULEVARD



REGIONAL STREET

MW-5 ⊕ 2.6

NOTES:

MTBE = methyl tertiory butyl ether. $\mu g/l$ = micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank. Results obtained using EPA Method 8260B.

LEGEND

CC-2 @ Conductor Casing

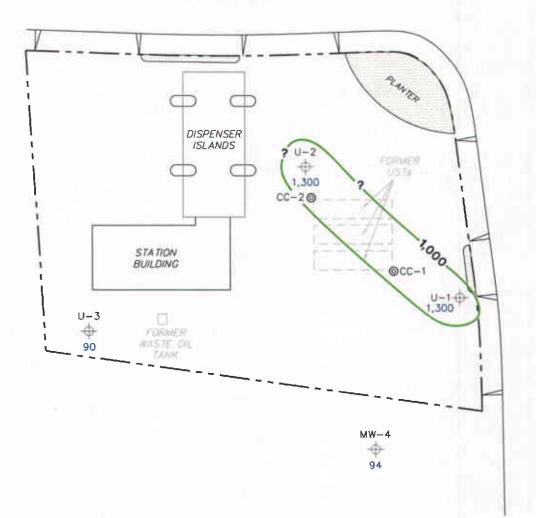
DISSOLVED-PHASE MTBE CONCENTRATION MAP February 4, 2004

76 Station 7176 7850 Amador Valley Boulevard Dublin, California





AMADOR VALLEY BOULEVARD



REGIONAL STREET

MW-5 +

NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. TPH-D = total petroleum hydrocarbons as diesel. $\mu g/I = micrograms$ per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank. Results obtained using EPA Method 8015M.

LEGEND

MW-5

Monitoring Well with
Dissolved-Phase TPH-D
Concentration (μg/I)

CC-2 ⊚ Conductor Casing

_1,000 Dissolved—Phase TPH—D Contour (µg/I) DISSOLVED-PHASE TPH-D CONCENTRATION MAP February 4, 2004

76 Station 7176 7850 Amador Valley Boulevard Dublin, California

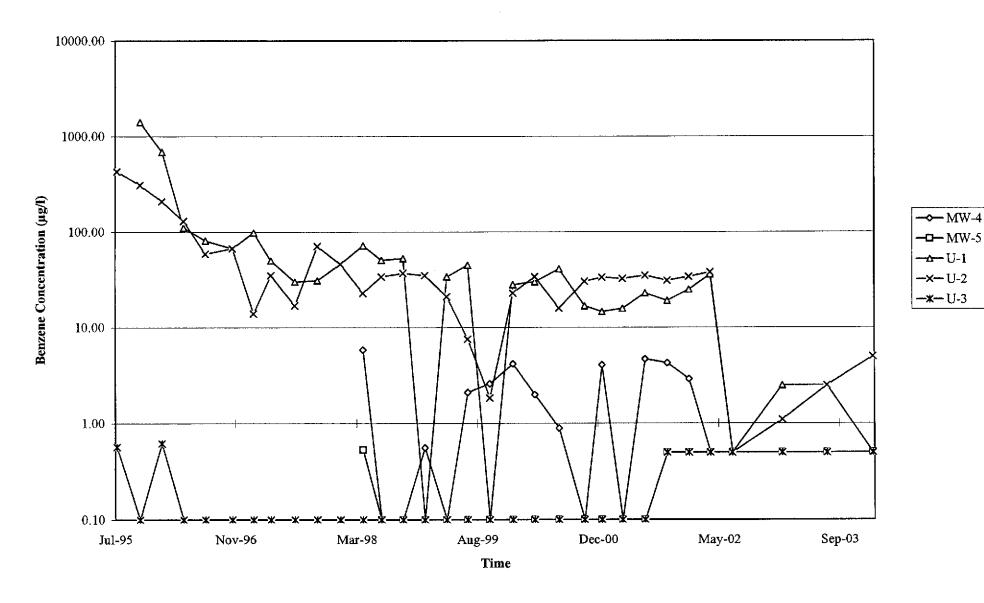
FIGURE 6

TRC

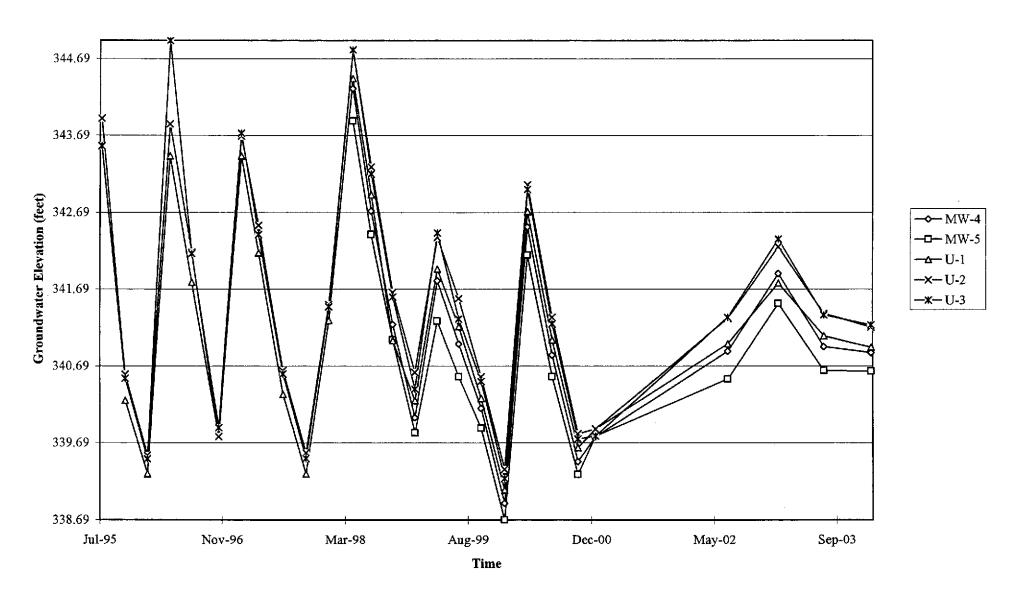


GRAPHS

Graph 1
Benzene Concentrations vs. Time
76 Station 7176



Graph 2 Hydrograph 76 Station 7176



GENERAL FIELD PROCEDURES

Groundwater Monitoring and Sampling Assignments

For each site, TRC technicians are provided with a Technical Service Request (TSR) that specifies activities required to complete the groundwater monitoring and sampling assignment for the site. TSRs are based on client directives, instructions from the primary environmental consultant for the site, regulatory requirements, and TRC's previous experience with the site.

Fluid Level Measurements

Initial site activities include determination of well locations based on a site map provided with the TSR. Well boxes are opened and caps are removed. Indications of well or well box damage, or of pressure buildup in the well are noted.

Fluid levels in each well are measured using a coated cloth tape equipped with an electronic interface probe, which distinguishes between liquid phase hydrocarbon (LPH) and water. The depth to LPH (if it is present), to water, and to the bottom of the well are measured from the top of the well casing (surveyors mark or notch if present) to the nearest 0.01 foot. Unless otherwise instructed, a well with less than 0.67 foot between the measured top of water and the measured bottom of the well casing is considered dry, and is not sampled. If the well contains 0.67 foot or more of water, an attempt is made to bail and/or sample as specified on the TSR.

Wells that are found to contain LPH are not purged or sampled. Instead, one casing volume of fluid is bailed from the well and the well is re-sealed. Bailed fluids are placed in a container separate from normal purge water, and properly disposed.

Purging and Groundwater Parameter Measurement

TSR instructions may specify that a well not be purged (no-purge sampling), be purged using low-flow methods, or be purged using conventional pump and/or bail methods. Conventional purging generally consists of pumping or bailing until a minimum of three casing volumes of water have been removed or until the well has been pumped dry. Pumping is generally accomplished using submersible electric or pneumatic diaphragm pumps.

During conventional purging, three groundwater parameters (temperature, pH, and conductivity) are measured after removal of each casing volume. Stabilization of these parameters, to within 10 percent, confirm that sufficient purging has been completed. In some cases, the TSR indicates that other parameters are also to be measured during purging. TRC commonly measures dissolved oxygen (DO), oxidation-reduction potential (ORP), and/or turbidity. Instruments used for groundwater parameter measurement are calibrated daily according to manufacturer's instructions.

Low-flow purging utilizes a bladder or peristaltic pump to remove water from the well at a low rate. Groundwater parameters specified by the TSR are measured continuously until they become stable in general accordance with EPA guidelines.

Purge water is generally collected in labeled drums for disposal. Drums may be left on site for disposal by others, or transported to a collection location for eventual transfer to a licensed treatment or recycling facility. In some cases, purge water may be collected directly from the site by a licensed vacuum truck company, or may be treated on site by an active remediation system, if so directed.

Groundwater Sample Collection

After wells are purged, or not purged, according to TSR instructions, samples are collected for laboratory analysis. For wells that have been purged using conventional pump or bail methods, sampling is conducted after the well has recovered to 80 percent of its original volume or after two hours if the well does not recover to at least 80 percent. If there is insufficient recharge of water in the well after two hours, the well is not sampled.

Samples are collected by lowering a new, disposable, ½-inch to 4-inch polyethylene bottom-fill bailer to just below the water level in the well. The bailer is retrieved and the water sample is carefully transferred to containers specified for the laboratory analytical methods indicated by the TSR. Particular care is given to containers for volatile organic analysis (VOAs) which require filling to zero headspace and fitting with Teflon-sealed caps.

After filling, all containers are labeled with project number (or site number), well designation, sample date, and the samplers initials, and placed in an insulated chest with ice. Samples remain chilled prior to and during transport to a state-certified laboratory for analysis. Sample container descriptions and requested analyses are entered onto a chain-of-custody form in order to provide instructions to the laboratory. The chain-of-custody form accompanies the samples during transportation to provide a continuous record of possession from the field to the laboratory. If a freight or overnight carrier transports the samples, the carrier is noted on the form.

For wells that have been purged using low-flow methods, sample containers are filled from the effluent stream of the bladder or peristaltic pump. In some cases, if so specified by the TSR, samples are taken from the sample ports of actively pumping remediation wells.

Sequence of Gauging, Purging, and Sampling

The sequence in which monitoring activities are conducted are specified on the TSR. In general, wells are gauged beginning with the least-affected well and ending with the well that has highest concentration based on previous analytic results. After all gauging for the site is completed, wells are purged and/or sampled from the least-affected well to the most-affected well.

Decontamination

In order to reduce the possibility of cross-contamination between wells, strict isolation and decontamination procedures are observed. Portable pumps are not used in wells with LPH. Technicians wear nitrile gloves during all gauging, purging and sampling activities. Gloves are changed between wells and more often if warranted. Any equipment that could come in contact with fluids are either dedicated to a particular well, decontaminated prior to each use, or discarded after a single use. Decontamination consists of washing in a solution of Liqui-nox and water and rinsing twice. The final rinse is in deionized water.

Exceptions

Additional tasks or non-standard procedures, if any, that may be requested or required for a particular site, and noted on the site TSR, are documented in field notes on the following pages.

FIELD MONITORING DATA SHEET

Technician:	AUEX	Job #/Task #:	41090001		Date:	2-4-04		
Site#	717Ce	Project Manager	KATHE	pegen	Page	1 of	1	

Well#	Grade	тос	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
P-3		~	28.28	16.87	-0	ð	1452	2"
MW-5		1	24.45	14-41	ð	-6	1425	2"
mw-4		V	25.10	15.55	Ø	Ť	1720	2"
U-2-		·/	24.33	15.36	đ	€	1751	2"
υ-1		3/	27.19	14.66	Đ	e	1826	2"
· · · · · · · · · · · · · · · · · · ·				-				
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FIELD DAT	A COMPL	ETE	<u> </u>		eoc	V	VELL BOX C	CONDITION SHEETS
NTT CERT	TIFICATE		MANIFE	ST	DRUM IN	IVENTORY	TRA	AFFIC CONTROL

GROUNDWATER SAMPLING FIELD NOTES

Casing Dian	oduct (feet): or Recovered (ga neter (Inches): me (gallons):	•	Oate:2_	4-04
Depth to Pro LPH & Wate Casing Dian 1 Well Volume Conducted Livity	oduct (feet): er Recovered (ga meter (Inches): me (gallons):	lons):	•	
LPH & Water Casing Dian 1 Well Volume Conducted Livity	r Recovered (ganeter (Inches): me (gallons): Temperature	lons):		
LPH & Water Casing Dian 1 Well Volume Conducted Livity	r Recovered (ganeter (Inches): me (gallons): Temperature	lons):	<u>*</u>	
Casing Dian 1 Well Volume Conducted Livity	neter (Inches): me (gallons): Temperature	211		
1 Well Volume Conducted livity	me (gallons):	2		
d livity				
4		. 1		
	(F(c))	pΗ	Turbidity	D.O.
527	18.9	6.38		
530	<i>P</i> .5	6.38		
522	20.1	6.37		
Total Gallons I	Purged		Time Sampl	
			[45]	<u>2</u>
Depth to Pr	oduct (feet):	*		
LPH & Wat	-		,	
-				
1 vveii voit	ime (gailons)	<u> </u>		
ed* tivity		рН	Turbidity	D.O.
		6,10		
585				
573	20.3	6.17		
:	:			:
Total Callana	Durand	T	Time Same	nled
Total Gallons	Purged .		Time Samp	
Total Gallons	1 -	1 3 m		
	Purge Meth Depth to Pr LPH & Wat Casing Dia 1 Well Volu (uS/cm) (uS/cm) 5 8 8	Purge Method: Discourse Depth to Product (feet): LPH & Water Recovered (gallons): 1 Well Volume (gallons): 1 Well Volume (gallons): 1 Well Volume (gallons): 588 19.8 585 19.9	Purge Method: DIA Depth to Product (feet): LPH & Water Recovered (gallons): Casing Diameter (Inches): 1 Well Volume (gallons): 2 VI Well Volume (gallons): PH S88 19.0 G10 585 19.9 G.09	Purge Method: DIA Depth to Product (feet): LPH & Water Recovered (gallons): 0 Casing Diameter (Inches): 2" 1 Well Volume (gallons): 2 Well Volume (gallons): pH Turbidity S88 19.0 G10 585 19.9 G.09

GROUNDWATER SAMPLING FIELD NOTES

			Technician:	ALEX				
Site: 717	16		Project No.:	4105000	ì		Date: 2-4	-04
/ell No.:t)~l			Purge Method	: DIA			
	r (feet): \	4.66				€		
	et): 27.		-	•	Recovered (gal	lons):	6	
	(feet):	11 -2	-		ter (Inches):	77 is		
	Depth (feet):	. marita	•	_	e (gallons):	2		
Time	Time	Depth	Volume	Conduc-	Temperature			1
Start	Stop	To Water	Purged	tivity	~ \	рН	Turbidity	D.O.
<i>l</i> 2		(feet)	(gallons)	(uS/cm)	(F, (F))	A 3-		
1800			2	494	16.8	6.79		<u> </u>
			4	456	19.2	6.60		
	1805		ie.	454	20.0	6.39		
	· · · · · · · · · · · · · · · · · · ·		· !					
Statio	c at Time Sam	pled	T ₀	otal Gallons Pu	rged		Time Samp	
	1 I			1	6		1820	P
·	1(0(0							
Comments:				Purge Method	d:			
Comments:	er (feet):			Purge Method Depth to Prod	d:duct (feet):			
Comments: Well No.: Depth to Wate	er (feet): eet):			Purge Method Depth to Prod LPH & Water	d: duct (feet): Recovered (ga			
Comments:	er (feet): eet): n (feet):			Purge Method Depth to Prod LPH & Water Casing Diame	d: duct (feet): Recovered (ga eter (Inches):	llons):		
Comments:	er (feet): eet):			Purge Method Depth to Prod LPH & Water Casing Diame	d: duct (feet): Recovered (ga	llons):		
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Vell No.: Depth to Wate otal Depth (fe Vater Column 80% Recharge Start	er (feet): eet): n (feet): e Depth (feet): Time	Depth:		Purge Method Depth to Prod LPH & Water Casing Diame 1 Well Volum Conduc- tivity	d:duct (feet): Recovered (ga eter (Inches): e (gallons):	llons):		
Vell No.: Depth to Wate otal Depth (fe Vater Column 80% Recharge Start	er (feet): eet): n (feet): e Depth (feet): Time	Depth:		Purge Method Depth to Prod LPH & Water Casing Diame 1 Well Volum Conduc- tivity	d:duct (feet): Recovered (ga eter (Inches): e (gallons):	llons):		
Vell No.: Depth to Wate otal Depth (fe Vater Column 30% Recharge Start	er (feet): eet): n (feet): e Depth (feet): Time	Depth:		Purge Method Depth to Prod LPH & Water Casing Diame 1 Well Volum Conduc- tivity	d:duct (feet): Recovered (ga eter (Inches): e (gallons):	llons):		
Vell No.: Depth to Wate otal Depth (fe Vater Column 0% Recharge Time Start	er (feet): eet): n (feet): e Depth (feet): Time	Depth:		Purge Method Depth to Prod LPH & Water Casing Diame 1 Well Volum Conduc- tivity	d:duct (feet): Recovered (ga eter (Inches): e (gallons):	llons):		
Vell No.: Depth to Wate otal Depth (fe Vater Column 0% Recharge Time Start	er (feet): eet): n (feet): e Depth (feet): Time	Depth:		Purge Method Depth to Prod LPH & Water Casing Diame 1 Well Volum Conduc- tivity	d:duct (feet): Recovered (ga eter (Inches): e (gallons):	llons):		
Well No.: Depth to Wate Total Depth (fe Water Column 30% Recharge Start	er (feet): eet): n (feet): e Depth (feet): Time	Depth To Water (feet)	Volume Purged (gallons)	Purge Method Depth to Prod LPH & Water Casing Diame 1 Well Volum Conduc- tivity	d:duct (feet): Recovered (ga eter (Inches): e (gallons): Temperature (F,C)	llons):		D.O.
Well No.: Depth to Wate Total Depth (fe Water Column 30% Recharge Start	er (feet):eet): eet): n (feet): e Depth (feet): Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Purge Method Depth to Prod LPH & Water Casing Diame 1 Well Volum Conduc- tivity (uS/cm)	d:duct (feet): Recovered (ga eter (Inches): e (gallons): Temperature (F,C)	llons):	Turbidity	D.O.
Vell No.: Depth to Wate otal Depth (fe Vater Column 30% Recharge Time Start	er (feet):eet): eet): n (feet): e Depth (feet): Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Purge Method Depth to Prod LPH & Water Casing Diame 1 Well Volum Conduc- tivity (uS/cm)	d:duct (feet): Recovered (ga eter (Inches): e (gallons): Temperature (F,C)	llons):	Turbidity	D.O.



TRC Alton Geoscience

February 19, 2004

21 Technology Drive Irvine, CA 92718

Attn.:

Anju Farfan

Project#: 41050001FA20

Project:

Conoco Phillips #7176

Site:

7850 Amador Valley Blvd., Dublin

Attached is our report for your samples received on 02/05/2004 17:43 This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

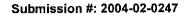
Please note that any unused portion of the samples will be discarded after 03/21/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: dsharma@stl-inc.com Sincerely,

Dimple Sharma Project Manager

laena_





TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
U-3	02/04/2004 16:52	Water	1
MW-5	02/04/2004 16:25	Water	2
MW-4	02/04/2004 17:20	Water	3
U-2	02/04/2004 17:51	Water	4
U-1	02/04/2004 18:26	Water	5



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Prep(s): 5030B

Sample ID: U-3

02/04/2004 16:52

Sampled: Matrix:

Water

Test(s):

8260FAB

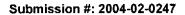
Lab ID: 2004-02-0247 - 1 Extracted:

2/13/2004 01:56

QC Batch#: 2004/02/12-2A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	02/13/2004 01:56	
Benzene	ND	0.50	ug/L	1.00	02/13/2004 01:56	
Toluene	ND	0.50	ug/L	1.00	02/13/2004 01:56	
Ethylbenzene	ND	0.50	ug/L	1.00	02/13/2004 01:56	
Total xylenes	ND	1.0	ug/L	1.00	02/13/2004 01:56	
tert-Butyl alcohol (TBA)	ND	100	ug/L	1.00	02/13/2004 01:56	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	1.00	02/13/2004 01:56	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	02/13/2004 01:56	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	02/13/2004 01:56	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	02/13/2004 01:56	
1,2-DCA	ND	2.0	ug/L	1.00	02/13/2004 01:56	
EDB	ND	2.0	ug/L	1.00	02/13/2004 01:56	
Ethanol	ND	500	ug/L	1.00	02/13/2004 01:56	
Surrogate(s)						
Toluene-d8	102.7	88-110	%	1.00	02/13/2004 01:56	
1,2-Dichloroethane-d4	104.0	76-114	%	1.00	02/13/2004 01:56	

- :





TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Prep(s):

5030B

Test(s):

8260FAB

Sample ID: MW-5

Lab ID:

2004-02-0247 - 2

Sampled: 02/04/2004 16:25

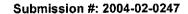
Extracted:

2/13/2004 20:58

Matrix:

Water

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	02/13/2004 20:58	
Benzene	ND	0.50	ug/L	1.00	02/13/2004 20:58	
Toluene	ND	0.50	ug/L	1.00	02/13/2004 20:58	
Ethylbenzene	ND	0.50	ug/L	1.00	02/13/2004 20:58	
Total xylenes	ND	1.0	ug/L	1.00	02/13/2004 20:58	
tert-Butyl alcohol (TBA)	ND	100	ug/L	1.00	02/13/2004 20:58	
Methyl tert-butyl ether (MTBE)	2.6	2.0	ug/L	1.00	02/13/2004 20:58	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	02/13/2004 20:58	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	02/13/2004 20:58	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	02/13/2004 20:58	
1,2-DCA	ND	2.0	ug/L	1.00	02/13/2004 20:58	
EDB	ND	2.0	ug/L	1.00	02/13/2004 20:58	
Ethanol	ND	500	ug/L	1.00	02/13/2004 20:58	
Surrogate(s)				·		
Toluene-d8	100.2	88-110	%	1.00	02/13/2004 20:58	
1,2-Dichloroethane-d4	93.7	76-114	%	1.00	02/13/2004 20:58	





TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Prep(s):

5030B

Test(s):

8260FAB

Sample ID: MW-4

Lab ID:

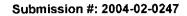
2004-02-0247 - 3

Sampled: 02/04/2004 17:20 Extracted:

2/13/2004 02:40

Matrix: Water

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	270	50	ug/L	1.00	02/13/2004 02:40	
Benzene	ND	0.50	ug/L	1.00	02/13/2004 02:40	
Toluene	ND	0.50	ug/L	1.00	02/13/2004 02:40	
Ethylbenzene	ND	0.50	ug/L	1.00	02/13/2004 02:40	
Total xylenes	ND	1.0	ug/L	1.00	02/13/2004 02:40	
tert-Butyl alcohol (TBA)	ND	100	ug/L	1.00	02/13/2004 02:40	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	1.00	02/13/2004 02:40	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	02/13/2004 02:40	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	02/13/2004 02:40	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	02/13/2004 02:40	
1,2-DCA	ND	2.0	ug/L	1.00	02/13/2004 02:40	
EDB	ND	2.0	ug/L	1.00	02/13/2004 02:40	
Ethanol	ND	500	ug/L	1.00	02/13/2004 02:40	
Surrogate(s)						
Toluene-d8	99.5	88-110	%	1.00	02/13/2004 02:40	
1,2-Dichloroethane-d4	108.0	76-114	%	1.00	02/13/2004 02:40	





TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Prep(s):

5030B

Test(s):

8260FAB

Sample ID: U-2

Lab ID:

2004-02-0247 - 4

Sampled: 02/04/2004 17:51

Extracted:

2/13/2004 03:02

Matrix:

Water

QC Batch#: 2004/02/12-2A.62

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	4400	500	ug/L	10.00	02/13/2004 03:02	
Benzene	ND	5.0	ug/L	10.00	02/13/2004 03:02	
Toluene	ND	5.0	ug/L	10.00	02/13/2004 03:02	
Ethylbenzene	7.0	5.0	ug/L	10.00	02/13/2004 03:02	
Total xylenes	ND	10	ug/L	10.00	02/13/2004 03:02	
tert-Butyl alcohol (TBA)	ND	1000	ug/L	10.00	02/13/2004 03:02	
Methyl tert-butyl ether (MTBE)	ND	20	ug/L	10.00	02/13/2004 03:02	
Di-isopropyl Ether (DIPE)	ND	20	ug/L	10.00	02/13/2004 03:02	
Ethyl tert-butyl ether (ETBE)	ND	20	ug/L	10.00	02/13/2004 03:02	
tert-Amyl methyl ether (TAME)	ND	20	ug/L	10.00	02/13/2004 03:02	
1,2-DCA	ND	20	ug/L	10.00	02/13/2004 03:02	
EDB	ND	20	ug/L	10.00	02/13/2004 03:02	
Ethanol	ND	5000	ug/L	10.00	02/13/2004 03:02	!
Surrogate(s)						
Toluene-d8	91.2	88-110	%	1.00	02/13/2004 03:02	
1,2-Dichloroethane-d4	105.6	76-114	%	1.00	02/13/2004 03:02	



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Prep(s): 5030B

Test(s):

8260FAB

Sample ID: U-1

Lab ID:

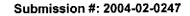
2004-02-0247 - 5

Sampled: 02/04/2004 18:26 Extracted:

2/13/2004 03:24

Matrix: Water

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	4000	50	ug/L	1.00	02/13/2004 03:24	
Benzene	ND	0.50	ug/L	1.00	02/13/2004 03:24	
Toluene	ND	0.50	ug/L	1.00	02/13/2004 03:24	
Ethylbenzene	13	0.50	ug/L	1.00	02/13/2004 03:24	
Total xylenes	ND	1.0	ug/L	1.00	02/13/2004 03:24	
tert-Butyl alcohol (TBA)	ND	100	ug/L	1.00	02/13/2004 03:24	
Methyl tert-butyl ether (MTBE)	9.6	2.0	ug/L	1.00	02/13/2004 03:24	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	02/13/2004 03:24	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	02/13/2004 03:24	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	02/13/2004 03:24	
1,2-DCA	ND	2.0	ug/L	1.00	02/13/2004 03:24	
EDB	ND	2.0	ug/L	1.00	02/13/2004 03:24	
Ethanol	ND	500	ug/L	1.00	02/13/2004 03:24	
Surrogate(s)						
Toluene-d8	92.0	88-110	%	1.00	02/13/2004 03:24	
1,2-Dichloroethane-d4	107.1	76-114	%	1.00	02/13/2004 03:24	





TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Batch QC Report

Prep(s): 5030B Method Blank

Water

Test(s): 8260FAB QC Batch # 2004/02/12-2A.62

MB: 2004/02/12-2A.62-009

Date Extracted: 02/12/2004 19:09

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	02/12/2004 19:09	
tert-Butyl alcohol (TBA)	ND	100	ug/L	02/12/2004 19:09	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	02/12/2004 19:09	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	02/12/2004 19:09	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	02/12/2004 19:09	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	02/12/2004 19:09	
1.2-DCA	ND	2.0	ug/L	02/12/2004 19:09	
EDB	ND	2.0	ug/L	02/12/2004 19:09	
Benzene	ND	0.5	ug/L	02/12/2004 19:09	
Toluene	ND	0.5	ug/L	02/12/2004 19:09	
Ethylbenzene	ND	0.5	ug/L	02/12/2004 19:09	
Total xylenes	ND	1.0	ug/L	02/12/2004 19:09	
Ethanol	ND	500	ug/L	02/12/2004 19:09	
Surrogates(s)		ĺ			
1,2-Dichloroethane-d4	99.2	76-114	%	02/12/2004 19:09	
Toluene-d8	99.2	88-110	%	02/12/2004 19:09	



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Batch QC Report

Prep(s): 5030B Method Blank

Water

Test(s): 8260FAB QC Batch # 2004/02/13-2B.64

MB: 2004/02/13-2B.64-047

Date Extracted: 02/13/2004 18:47

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	02/13/2004 18:47	
tert-Butyl alcohol (TBA)	ND	100	ug/L	02/13/2004 18:47	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	02/13/2004 18:47	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	02/13/2004 18:47	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	02/13/2004 18:47	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	02/13/2004 18:47	
1,2-DCA	ND	2.0	ug/L	02/13/2004 18:47	
EDB	ND	2.0	ug/L	02/13/2004 18:47	
Benzene	ND	0.5	ug/L	02/13/2004 18:47	
Toluene	ND	0.5	ug/L	02/13/2004 18:47	
Ethylbenzene	ND	0.5	ug/L	02/13/2004 18:47	
Total xylenes	ND	1.0	ug/L	02/13/2004 18:47	
Ethanol	ND	500	ug/L	02/13/2004 18:47	
Surrogates(s)					
1,2-Dichloroethane-d4	95.2	76-114	%	02/13/2004 18:47	
Toluene-d8	104.2	88-110	%	02/13/2004 18:47	



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Laboratory Control Spike

2004/02/12-2A.62-025

Water

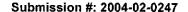
QC Batch # 2004/02/12-2A.62

LCS 2004/02/12 LCSD 2004/02/12

2004/02/12-2A.62-047

Extracted: 02/12/2004 Extracted: 02/12/2004 Analyzed: 02/12/2004 18:25 Analyzed: 02/12/2004 18:47

Compound	Conc.	ug/L	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lim	nits %	Fla	Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD	
Methyl tert-butyl ether (MTBE) Benzene	26.8	31.3 27.0	25 25	130.4 107.2	125.2 108.0	4.1 0.7	65-165 69-129	20 20			
Toluene Surrogates(s)	27.7	27.1	25	110.8	108.4	2.2	70-130	20			
1,2-Dichloroethane-d4 Toluene-d8	491 494	516 512	500 500	98.2 98.8	103.2 102.4		76-114 88-110				





TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Batch QC Report

Prep(s): 5030B Test(s): 8260FAB

Laboratory Control Spike

Water

QC Batch # 2004/02/13-2B.64

LCS

2004/02/13-2B.64-048

Extracted: 02/13/2004

Analyzed: 02/13/2004 18:02

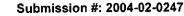
LCSD 2004/02/13-2B.64-024

Extracted: 02/13/2004

Analyzed: 02/13/2004 18:24

Compound	Conc. ug/L		Exp.Conc. Recovery % Rf		RPD	RPD Ctrl.Limits %		Flags		
•	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE) Benzene Toluene	24.9 27.1 28.0	23.0 25.9 26.7	25 25 25	99.6 108.4 112.0	92.0 103.6 106.8	7.9 4.5 4.8	65-165 69-129 70-130	20		
Surrogates(s) 1,2-Dichloroethane-d4 Toluene-d8	445 521	430 517	500 500	89.0 104.2	86.0 103.4		76-114 88-110			

• :





TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Legend and Notes

Analysis Flag

o

Reporting limits were raised due to high level of analyte present in the sample.



Diesel

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
U-3	02/04/2004 16:52	Water	1
MW-5	02/04/2004 16:25	Water	2
MW-4	02/04/2004 17:20	Water	3
U-2	02/04/2004 17:51	Water	4
U-1	02/04/2004 18:26	Water	5



Diesel

TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Prep(s):

3510/8015M

Test(s):

8015M

Sample ID: U-3

Lab ID:

2004-02-0247 - 1

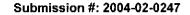
Sampled: 02/04/2004 16:52 Extracted:

2/11/2004 05:22

Matrix:

Water

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	90	50	ug/L	1.00	02/12/2004 19:32	edr
Surrogate(s) o-Terphenyl	78.3	60-130	%	1.00	02/12/2004 19:32	





Diesel

TRC Alton Geoscience Attn.; Anju Farfan

21 Technology Drive

Irvine, CA 92718 Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Prep(s):

3510/8015M

Test(s):

8015M

Sample ID: MW-5

Lab ID:

2004-02-0247 - 2

Sampled: 02/04/2004 16:25

Extracted:

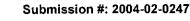
2/11/2004 05:22

Matrix:

Water

Extraored.

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	02/12/2004 20:03	
Surrogate(s) o-Terphenyl	63.9	60-130	%	1.00	02/12/2004 20:03	





Diesel

TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Prep(s):

3510/8015M

Test(s):

8015M

Sample ID: MW-4

Lab ID:

2004-02-0247 - 3

Sampled: 02/04/2004 17:20 Extracted:

2/11/2004 05:22

Matrix:

Water

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	94	50	ug/L	1.00	02/12/2004 12:51	edr
Surrogate(s) o-Terphenyl	67.2	60-130	%	1.00	02/12/2004 12:51	



Diesel

TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Prep(s): 3510/8015M

Sample ID: U-2

02/04/2004 17:51

Sampled: Matrix:

Water

Test(s): 8015M

Lab ID:

2004-02-0247 - 4 2/11/2004 05:22 Extracted:

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	1300	50	ug/L	1.00	02/12/2004 13:22	edr
Surrogate(s)						
o-Terphenyl	67.0	60-130	%	1.00	02/12/2004 13:22	



Diesel

TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Prep(s):

3510/8015M

Test(s):

8015M

Sample ID: U-1

Lab ID:

2004-02-0247 - 5

Sampled:

02/04/2004 18:26

Extracted:

2/11/2004 05:22

Matrix:

Water

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	1300	50	ug/L	1.00	02/12/2004 13:53	edr
Surrogate(s) o-Terphenyl	63.7	60-130	%	1.00	02/12/2004 13:53	



Diesel

TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Batch QC Report

Prep(s): 3510/8015M Method Blank

MB: 2004/02/11-02.10-001

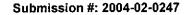
Water

Test(s): 8015M QC Batch # 2004/02/11-02.10

Date Extracted: 02/11/2004 05:22

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	02/11/2004 17:28	
Surrogates(s) o-Terphenyl	74.2	60-130	%	02/11/2004 17:28	

Page 7 of 9





Diesel

TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Batch QC Report

Water

Prep(s): 3510/8015M

Test(s): 8015M

Laboratory Control Spike

2004/02/11-02.10-002

Extracted: 02/11/2004

QC Batch # 2004/02/11-02.10

LCSD

2004/02/11-02.10-003

Extracted: 02/11/2004

Analyzed: 02/11/2004 13:53 Analyzed: 02/11/2004 14:24

Compound	Conc.	ug/L	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lim	nits %	Fla	igs
OSINPOUND	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Diesel	777	706	1000	77.7	70.6	9.6	60-130	25		
Surrogates(s) o-Terphenyl	15.7	13.9	20.0	78.7	69.5		60-130	0		



Diesel

TRC Alton Geoscience Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #7176

Received: 02/05/2004 17:43

Site: 7850 Amador Valley Blvd., Dublin

Legend and Notes

Result Flag

edr

Hydrocarbon reported is in the early Diesel range, and does not match our Diesel standard



STL San Francisco

Sample Receipt Checklist

Submission #:2004- 02 - 024 F	
Checklist completed by: (initials) DSH Date: 02 / 08 /04	
Courier name: \$\frac{1}{4}\text{STL San Francisco} \square \text{Client}	Mark
Custody seals intact on shipping container/samples	Yes No Present
Chain of custody present?	YesNo
Chain of custody signed when relinquished and received?	YesNo
Chain of custody agrees with sample labels?	Yes No
Samples in proper container/bottle?	Yes No
Sample containers intact?	Yes No
Sufficient sample volume for indicated test?	Yes No
All samples received within holding time?	Yes No
Container/Temp Blank temperature in compliance (4° C ± 2)?	Temp: 4-0 °C Yes No
	. Ice Present YesNo
Water - VOA vials have zero headspace?	No VOA vials submitted Yes/_ No
(if bubble is present, refer to approximate bubble size and itemize in comments Water - pH acceptable upon receipt? Yes □ No □ pH adjusted— Preservative used: □ HNO₃ □ HCl □ H₂SO₄ □ NaOH □	
For any item check-listed "No", provided detail of discrepancy in comme	
Comments:	
COMMITTEE.	
Project Management [Routing for instruction of indicate	ed discrepancy(ies)]
Project Manager: (initials) Date:/04	• • • • • • • • • • • • • • • • • • • •
Client contacted: ☐ Yes ☐ No	
Summary of discussion:	
O TO A LINE CONTRACTION OF THE PROPERTY OF THE	
Corrective Action (per PM/Client):	

ConocoPhillips Chain Of Custody Record ConocoPhillips Work Order Number ConocoPhillips Site Manager: 1220 Quarry Lane INVOICE REMITTANCE ADDRESS: CONOCOPHILLIPS Attn: Dee Hutchinson Pleasanton, CA 94566 ConocoPhillips Cost Object 3611 South Harbor, Suite 200 Santa Ana, CA. 92704 (925) 484-1919 (925) 484-1096 fax SAMPLING COMPANY: CONOCOPHILLIPS SITE NUMBER GLOBAL ID NO .: Valid Value ID: 7176 TRC SILE もららんか FOR THIS ADDRESS: SITE ADDRESS (Street and City): CONOCOPHILLIPS SITE MANAGER: DUBLIN 21 Technology Drive, Irvine CA 92618 7850 AMAGOR VALLEY BLUD. PROJECT CONTACT (Hardcopy or PDF Report to): EDF DELIVERABLE TO [RP or Designee]: Anju Farfan LAB USE ONLY TELEPHONE: Peter Thomson, TRC 949-341-7408 949-341-7440 949-753-0111 afarfan@trcsolutions.com pthomson@trcsolutions.com SAMPLER NAME(S) (Print): CONSULTANT PROJECT NUMBER REQUESTED ANALYSES MEX 41050001/FA20 TURNAROUND TIME (CALENDAR DAYS): 8260B - TPHg / BTEX / 8 Oxygenates 8260B - TPHg / BTEX / 8 oyxgenates + methanol (8015M) ☑ 14 DAYS ☐ 7 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS 8015M / 8021B - TPHg/BTEX/MtBE 8260 ſÛ OSTLC DTCLP 8260B - Full Scan VOCs (does include oxygenates) FIELD NOTES: 8660 8260 SOUZ 8260B - TPH9/BTEX/MtBE SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NEEDED ... 83 Container/Preservative 8270C - Semi-Volatiles or PID Readings WITH SILICA GEL or Laboratory Notes W 89 mTB CLEAN UP HITS . 23 □Total S * Field Point name only required if different from Sample ID BIEX Sample Identification/Field Point SAMPLING NO. OF CONT. Ò Name* DATE TIME 1652 (340) 0-3 2-4-04 11 mw-5 1425 mw-4 REFRIENERATE 1720 0-2 1751 18**L**C Received by: (Signature) Relinquished by: (Signature)

STATEMENTS

Purge Water Transport and Disposal

Non-hazardous groundwater produced during purging and sampling was accumulated at TRC's groundwater monitoring facility at Concord, California, for transportation by Onyx Transportation, Inc., to the ConocoPhillips Refinery at Rodeo, California. Disposal at the Rodeo facility was authorized by ConocoPhillips in accordance with "ESD Standard Operating Procedures – Water Quality and Compliance", as revised on February 7, 2003. Documentation of compliance with ConocoPhillips requirements is provided by an ESD Form R-149, which is on file at TRC's Concord Office. Purge water suspected of containing potentially hazardous material, such as liquid-phase hydrocarbons, was accumulated separately in a drum for transportation and disposal by Filter Recycling, Inc.

Limitations

The fluid level monitoring and groundwater sampling activities summarized in this report have been performed under the responsible charge of a California Registered Geologist or Registered Civil Engineer and have been conducted in accordance with current practice and the standard of care exercised by geologists and engineers performing similar tasks in this area. No warranty, express or implied, is made regarding the conclusions and professional opinions presented in this report. The conclusions are based solely upon an analysis of the observed conditions. If actual conditions differ from those described in this report, our office should be notified.