MONITORING
PURGING
DISPOSING
SAMPLING

MPDS SERVICES, INCORPORATED

September 18, 1997

Tosco Marketing Company
Environmental Compliance Department
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

Attention: Ms. Tina R. Berry

RE: Data Report
Unocal Service Station #7176
7850 Amador Valley Boulevard
Dublin, California

Dear Ms. Berry:

In reference to our report (MPDS-UN7176-08), enclosed find a revised report (MPDS-UN7176-08R) dated September 18, 1997, for the above referenced site. Please discard our previous report dated August 18, 1997. The ground water elevations in wells U-2 and U-3 have been corrected, and the ground water flow direction shown on Figure 1 has been revised accordingly.

Should you have any questions, please do not hesitate to contact me at (510) 602-5120.

Sincerely,

MPDS Services, Inc.

Haig (Gary) Tejirian
Senior Staff Geologist

HT:jfc

Enclosure

cc: Ms. Eva Chu, Alameda County Health Care Services
Mr. Keith Romstad, ERI

97 SEP 23 AM 10:56
ENVIRONMENTAL PROTECTION

2401 Stanwell Drive, Suite 400, Concord, CA 94520
TEL: (510) 602-5120 FAX: (510) 689-1918

MONITORING
PURGING
DISPOSING
SAMPLING
MPDS SERVICES, INCORPORATED

MPDS-UN7176-08R
September 18, 1997

Tosco Marketing Company
Environmental Compliance Department
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

Attention: Ms. Tina R. Berry

RE: Quarterly Data Report
Unocal Service Station #7176
7850 Amador Valley Boulevard
Dublin, California

Dear Ms. Berry:

This data report presents the results of the most recent quarter of monitoring and sampling of the monitoring wells at the referenced site by MPDS Services, Inc.

RECENT FIELD ACTIVITIES

The monitoring wells that were monitored and sampled during this quarter are indicated in Table 1. Oxygen Release Compound (ORC®) filter socks were present in monitoring wells U-1, U-2, and U-3. Prior to sampling, the wells were checked for depth to water and the presence of free product or sheen. The monitoring data and the ground water elevations are summarized in Table 1. The ground water flow direction during the most recent quarter is shown on the attached Figure 1.

Ground water samples were collected on July 17, 1997. Dissolved oxygen concentrations were measured and are presented in Table 3. The samples were collected using a clean Teflon bailer. The samples were decanted into clean VOA vials and/or one-liter amber bottles, as appropriate, which were then sealed with Teflon-lined screw caps, labeled, and stored in a cooler, on ice, until delivery to a state-certified laboratory.

ANALYTICAL RESULTS

The ground water samples were analyzed at Sequoia Analytical Laboratory and were accompanied by properly executed Chain of Custody documentation. The analytical results of the ground water samples collected to date are summarized in Table 2. The concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline, TPH as diesel, and benzene detected in the ground water samples collected this quarter are shown on the attached Figure 2. Copies of the laboratory analytical results and the Chain of Custody documentation are attached to this report.

2401 Stanwell Drive, Suite 400, Concord, CA 94520
TEL: (510) 602-5120 FAX: (510) 689-1918

LIMITATIONS

Environmental changes, either naturally-occurring or artificially-induced, may cause changes in ground water levels and flow paths, thereby changing the extent and concentration of any contaminants.

DISTRIBUTION

A copy of this report should be sent to Ms. Eva Chu of the Alameda County Health Care Services Agency.

If you have any questions regarding this report, please do not hesitate to call Mr. Nubar Srabian at (510) 602-5120.

Sincerely,

MPDS Services, Inc.

Haig (Gary) Tejirian
Senior Staff Geologist

Hagop Kevork, P.E.
Senior Staff Engineer

License No. C 55734
Exp. Date December 31, 2000

Attachments: Tables 1, 2 & 3
Location Map
Figures 1 & 2
Laboratory Analyses
Chain of Custody documentation

cc: Mr. Kieth Romstad, ERI

Table 1

Summary of Monitoring Data

Well #	Ground Water Elevation (feet)	Depth to Water (feet)♦	Total Well Depth (feet)♦	Product Thickness (feet)	Sheen	Water Purged (gallons)
			(Monitored and Sampled on July 17, 1997)			
U-1	340.32	15.30	27.95	0	--	0
U-2	340.63	15.96	26.51	0	--	0
U-3	340.59	17.54	28.58	0	--	0
			(Monitored and Sampled on April 8, 1997)			
U-1	342.16	13.46	27.98	0	--	0
U-2	342.52	14.07	26.54	0	--	0
U-3	342.40	15.73	28.88	0	--	0
			(Monitored and Sampled on January 27, 1997)			
U-1	343.42	12.20	28.00	0	--	0
U-2	343.68	12.91	26.56	0	--	0
U-3	343.72	14.41	28.90	0	--	0
			(Monitored and Sampled on October 30, 1996)			
U-1	339.77	15.85	27.98	0	--	0
U-2	339.77	16.82	26.55	0	--	0
U-3	339.89	18.24	28.89	0	--	0

Well #	Well Casing Elevation (feet)*
U-1	355.62
U-2	356.59
U-3	358.13

♦ The depth to water level and total well depth measurements were taken from the top of the well casings.

* The elevations of the top of the well casings are relative to Mean Sea Level (MSL), per the Benchmark AM-STW1977 located at the easterly return at the most easterly corner of intersection of Amador Valley Blvd. and Starward Street (Elevation = 344.17 feet MSL).

-- Sheen determination was not performed.

Table 2

Summary of Laboratory Analyses
Water

Date	Well #	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
7/17/97	U-1	460♦♦	2,300	30	4.5	140	94	190
	U-2	1,300♦♦	6,200	17	22	410	ND	130
	U-3	ND	ND	ND	ND	ND	ND	ND
4/8/97	U-1	1,300♦	2,800	50	ND	220	140	ND
	U-2	2,000♦	4,300	35	ND	400	16	ND
	U-3	ND	ND	ND	ND	ND	ND	ND
1/27/97	U-1	2,300♦	4,600	98	ND	360	290	150
	U-2	660♦	1,600	14	ND	130	7.0	100
	U-3	ND	ND	ND	ND	ND	ND	ND
10/30/96	U-1	560♦	2,200	67	19	140	150	360
	U-2	1,800♦	7,700	67	35	1,000	54	260
	U-3	ND	70	ND	ND	ND	ND	ND
7/10/96	U-1	2,200♦	2,600	81	4.4	210	230	510
	U-2	2,300♦	5,600	59	15	610	42	250
	U-3	ND	ND	ND	ND	ND	ND	ND
4/11/96	U-1✹	630♦	3,200	110	ND	180	290	790
	U-2✹	1,900♦	7,700	130	27	1,100	110	340
	U-3	ND	68★	ND	ND	ND	ND	ND
1/11/96‡	U-1	8,200♦	8,300	690	11	680	1,500	††
	U-2	8,600♦	10,000	210	55	1,400	240	††
	U-3	260♦♦	230	0.62	0.91	0.97	1.9	--
10/12/95	U-1	4,200♦	33,000	1,400	ND	1,400	3,100	†
	U-2	3,600♦	24,000	310	60	1,900	190	†
	U-3	470♦♦	560	ND	0.87	0.7	1.1	--
7/8/95	U-1	9,400*	39,000	1,500	19	1,600	5,200	--
	U-2	4,700*	17,000	430	ND	2,200	590	--
	U-3	710*	1,100**	0.57	2.1	1.7	2.4	--

Table 2

Summary of Laboratory Analyses
Water

✹ On April 11, 1996, all PNA compounds were non-detectable.

‡ On January 11, 1996, PNA compound naphthalene was detected in well U-1 at a concentration of 320 µg/L, and at a concentration of 310 µg/L in well U-2. All other PNA compounds were non-detectable in both wells.

† Sequoia Analytical Laboratory has potentially identified the presence of MTBE at reportable levels in the ground water sample collected from this well.

†† Sequoia Analytical Laboratory has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40 µg/L in the sample collected from this well.

* Unidentified Hydrocarbon C9-C26

** Gas and Unidentified Hydrocarbons >C12

★ Sequoia Analytical Laboratory reported that the hydrocarbons detected did not apepar to be gasoline.

♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.

♦♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be diesel.

PNA = Polynuclear aromatic hydrocarbons (EPA method 8100).

MTBE = methyl tert butyl ether.

ND = Non-detectable.

Results are in micrograms per liter (µg/L), unless otherwise indicated.

Note: The detection limit for results reported as ND by Sequoia Analytical Laboratory is equal to the stated detection limit times the dilution factor indicated on the laboratory analytical sheets.

Prior to August 1, 1995, the total purgeable petroleum hydrocarbon (TPH as gasoline) quantification range used by Sequoia Analytical Laboratory was C4 - C12. Since August 1, 1995, the quantification range used by Sequoia Analytical Laboratory is C6 - C12.

Laboratory analyses data prior to October 12, 1995, were provided by Enviros, Inc.

Table 3

Summary of Monitoring Data

Date	Well #	Dissolved Oxygen Concentrations	
		Before Purging	After Purging
7/17/97★	U-1	2.00	--
	U-2	2.08	--
	U-3	2.65	--
4/8/97★	U-1	2.09	--
	U-2	1.69	--
	U-3	3.73	--
1/27/97★	U-1	1.34	--
	U-2	1.29	--
	U-3	2.61	--
10/30/96★	U-1	1.41	--
	U-2	1.42	--
	U-3	2.18	--
7/10/96★	U-1	1.22	--
	U-2	1.01	--
	U-3	3.44	--
4/11/96	U-1	3.77	3.78
	U-2	3.32	3.41
	U-3	5.16	4.96
1/11/96	U-1	--	3.41
	U-2	--	3.99
	U-3	--	5.05
10/2/95	CC1*	2.83	--

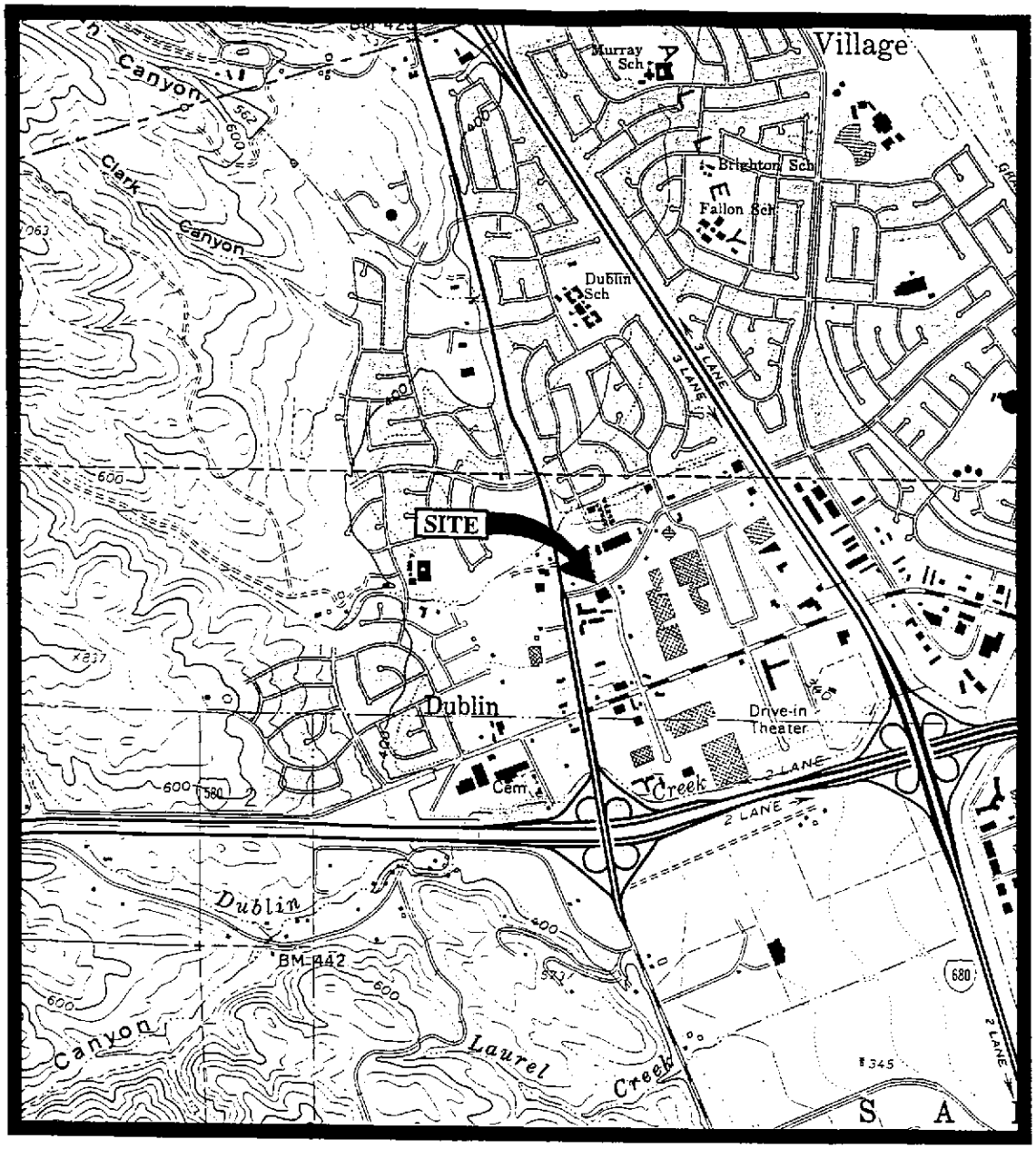
* For the location of sample point CC1, see Figure 1.

★ The wells were not purged on this date.

-- Measurement was not taken.

Results are in milligrams per liter (mg/L).

Note: Measurements were taken using a LaMotte DO4000 dissolved oxygen meter.

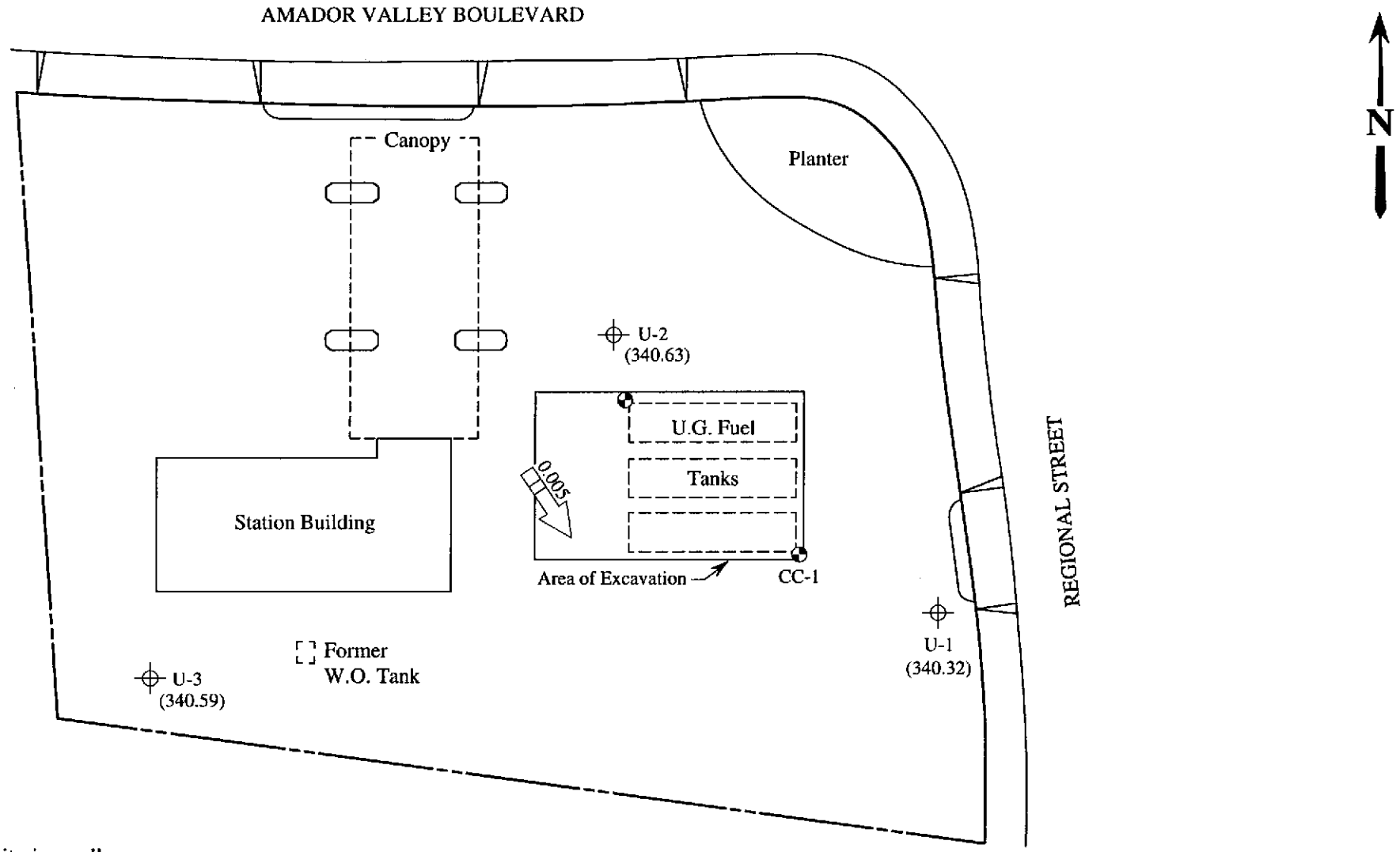


Base modified from 7.5 minute U.S.G.S. Dublin Quadrangle
(photorevised 1980)

0 2000 4000

Approx. scale feet

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #7176** **7850 AMADOR VALLEY BOULEVARD** **DUBLIN, CALIFORNIA**	**LOCATION MAP**

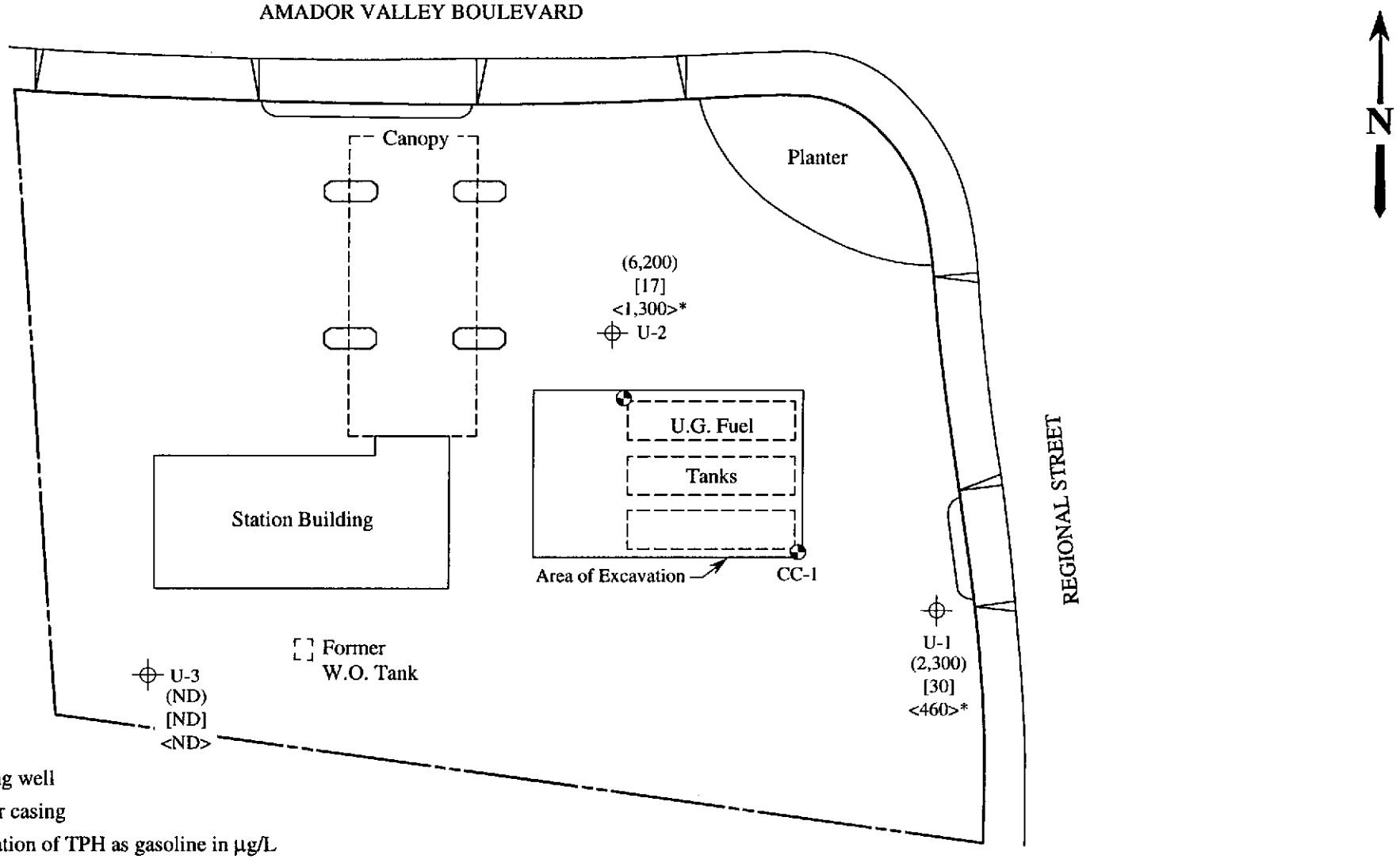


GROUND WATER FLOW DIRECTION MAP FOR THE JULY 17, 1997 MONITORING EVENT

UNOCAL SERVICE STATION #7176
7850 AMADOR VALLEY BOULEVARD
DUBLIN, CALIFORNIA

mpds SERVICES, INCORPORATED

FIGURE
1



PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON JULY 17, 1997

UNOCAL SERVICE STATION #7176
7850 AMADOR VALLEY BOULEVARD
DUBLIN, CALIFORNIA

mpds SERVICES, INCORPORATED

FIGURE
2

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

MPDS Services	Client Project ID:	Tosco #7176, 7850 Amador Vly, Dublin	Sampled:	Jul 17, 1997
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	Jul 17, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Jul 31, 1997
Attention: Jarrel Crider	First Sample #:	707-0921		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Purgeable Hydrocarbons µg/L	Benzene µg/L	Toluene µg/L	Ethyl Benzene µg/L	Total Xylenes µg/L
707-0921	U-1	2,300	30	4.5	140	94
707-0922	U-2	6,200	17	22	410	ND
707-0923	U-3	ND	ND	ND	ND	ND
Detection Limits:		**50**	**0.50**	**0.50**	**0.50**	**0.50**

Total Purgeable Petroleum Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as ND were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

7070921.MPD <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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MPDS Services	Client Project ID:	Tosco #7176, 7850 Amador Vly, Dublin	Sampled:	Jul 17, 1997
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	Jul 17, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Jul 31, 1997
Attention: Jarrel Crider	First Sample #:	707-0921		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Chromatogram Pattern	DL Mult. Factor	Date Analyzed	Instrument ID	Surrogate Recovery, % QC Limits: 70-130
707-0921	U-1	Gasoline	5.0	7/25/97	HP-2	89
707-0922	U-2	Gasoline	10	7/25/97	HP-2	137
707-0923	U-3	--	1.0	7/24/97	HP-9	90

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

MPDS Services	Client Project ID:	Tosco #7176, 7850 Amador Vly, Dublin	Sampled: Jul 17, 1997
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water	Received: Jul 17, 1997
Concord, CA 94520	Analysis for:	MTBE (Modified EPA 8020)	
Attention: Jarrel Crider	First Sample #:	707-0921	Analyzed: Jul 24-25, 1997
			Reported: Jul 31, 1997

LABORATORY ANALYSIS FOR: MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L
707-0921	U-1	13	190
707-0922	U-2	25	130
707-0923	U-3	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

MPDS Services	Client Project ID:	Tosco #7176, 7850 Amador Vly, Dublin	Sampled: Jul 17, 1997
2401 Stanwell Dr., Ste. 300	Sample Matrix:	Water	Received: Jul 17, 1997
Concord, CA 94520	Analysis Method:	EPA 3510/8015 Mod.	Reported: Jul 31, 1997
Attention: Jarrel Crider	First Sample #:	707-0921	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 707-0921 U-1 *	Sample I.D. 707-0922 U-2 *	Sample I.D. 707-0923 U-3
Extractable Hydrocarbons	50	460	1,300	N.D.
Chromatogram Pattern:		Unidentified Hydrocarbons <C15 >C24	Unidentified Hydrocarbons <C15 >C24	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Extracted:	7/24/97	7/24/97	7/24/97
Date Analyzed:	7/25/97	7/25/97	7/25/97
Instrument Identification:	HP-3B	HP-3B	HP-3B

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
* This sample does not appear to contain diesel. "Unidentified Hydrocarbons <C15" are probably gasoline; ">C24 refers to unidentified peaks in the total oil and grease range.

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Tosco #7176, 7850 Amador Vly, Dublin
Matrix: Liquid
QC Sample Group: 7070921-923

Reported: Jul 31, 1997

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD Batch#:	7070938	7070938	7070938	7070938
Date Prepared:	7/25/97	7/25/97	7/25/97	7/25/97
Date Analyzed:	7/25/97	7/25/97	7/25/97	7/25/97
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	85	105	95	102
Matrix Spike Duplicate % Recovery:	80	95	95	92
Relative % Difference:	6.1	10	0.0	10
LCS Batch#:	2LCS072597	2LCS072597	2LCS072597	2LCS072597
Date Prepared:	7/25/97	7/25/97	7/25/97	7/25/97
Date Analyzed:	7/25/97	7/25/97	7/25/97	7/25/97
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	85	100	95	97
% Recovery Control Limits:	60-140	60-140	60-140	60-140

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Tosco #7176, 7850 Amador Vly, Dublin
Matrix: Liquid
QC Sample Group: 7070921-923
Reported: Jul 31, 1997

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	K. Grubb
MS/MSD Batch#:	7070888	7070888	7070888	7070888	BLK072497
Date Prepared:	7/24/97	7/24/97	7/24/97	7/24/97	7/24/97
Date Analyzed:	7/24/97	7/24/97	7/24/97	7/24/97	7/29/97
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9	HP-3A
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
Matrix Spike % Recovery:	115	120	120	118	63
Matrix Spike Duplicate % Recovery:	115	120	120	118	63
Relative % Difference:	0.0	0.0	0.0	0.0	0.0
LCS Batch#:	9LCS072497	9LCS072497	9LCS072497	9LCS072497	LCS072497
Date Prepared:	7/24/97	7/24/97	7/24/97	7/24/97	7/24/97
Date Analyzed:	7/24/97	7/24/97	7/24/97	7/24/97	7/29/97
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9	HP-3A
LCS % Recovery:	110	115	115	118	40
% Recovery Control Limits:	60-140	60-140	60-140	60-140	60-140

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

M P D S Services, Inc.
2401 Stanwell Drive, Suite 400, Concord, CA 94520
Tel: (510) 602-5120 Fax: (510) 689-1918

CHAIN OF CUSTODY

9707269

SAMPLER: STEVE BALIAN
WITNESSING AGENCY:

TOSCO S/S # 7176 CITY: DUBLIN
ADDRESS: 7850 AMADOR VALLEY BLVD

TURN AROUND TIME: REGULAR

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	ANALYSES REQUESTED: TPH-G/BTEX	TPH-D	MTBE	8010	TOG				REMARKS
U-1	7-17-97	11:05	X	X		3	WELL	X	X	X	7070921					MTBE 5 PPB
U-2	"	10:35	X	X		3	"	X	X	X	7070922					
U-3	"	10:10	X	X		3	"	X	X	X	7070923					TPH-D FILTER WITH SILICA GEL

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
STEVE BALIAN (SIGNATURE)	12:10 7-17-97	(SIGNATURE)	12:10 7/17/97
(SIGNATURE)		(SIGNATURE)	
(SIGNATURE)		(SIGNATURE)	
(SIGNATURE)		(SIGNATURE)	

THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES:

1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? Y
2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? Y
3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? N
4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? Y

SIGNATURE: [signature] TITLE: 7/17/97 DATE: 7/17/97