MONITORING
PURGING
DISPOSING
SAMPLING

mpds SERVICES, INCORPORATED

ENVIRONMENTAL
95 JUL 19 PM 3:04

July 17, 1995

Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, CA 94502

Attention: Mr. Scott Seery

RE: Unocal Service Station #7376
4191 First Street
Pleasanton, California

Dear Mr. Seery:

Per the request of the Unocal Corporation Project Manager, Mr. Robert A. Boust, enclosed please find our report (MPDS-UN7376-02), dated June 22, 1995, for the above referenced site.

Should you have any questions regarding the reporting of data, please feel free to call our office at (510) 602-5120. Any other questions may be directed to the Project Manager at (510) 277-2334.

Sincerely,

MPDS Services, Inc.

Jarrel F. Crider

/jfc

Enclosure

cc: Mr. Robert A. Boust

2401 Stanwell Drive, Suite 300, Concord, CA 94520
TEL: (510) 602-5120 FAX: (510) 689-1918

MONITORING
PURGING
DISPOSING
SAMPLING

MPDS SERVICES, INCORPORATED

MPDS-UN7376-02
June 22, 1995

Unocal Corporation
2000 Crow Canyon Place, Suite 400
P.O. Box 5155
San Ramon, California 94583

Attention: Mr. Robert A. Boust

RE: Quarterly Data Report
Unocal Service Station #7376
4191 First Street
Pleasanton, California

Dear Mr. Boust:

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. 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 directions during the most recent quarter are shown on the attached Figures 1, 2, and 3.

Ground water samples were collected on June 1, 1995. Prior to sampling, the wells were each purged of between 6.5 and 11.5 gallons of water. During purging operations, the field parameters pH, temperature, and electrical conductivity were recorded and are presented in Table 2. Once the field parameters were observed to stabilize, and where possible, a minimum of approximately four casing volumes had been removed from each well, samples were then 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. MPDS Services, Inc. transported the purged ground water to the Unocal Refinery located in Rodeo, California, for treatment and discharge to San Pablo Bay under NPDES permit.

ANALYTICAL RESULTS

The ground water samples were analyzed at Sequoia Analytical Laboratory and were accompanied by properly executed Chain of Custody documenta-

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tion. The analytical results of the ground water samples collected to date are summarized in Table 3. 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 4. Copies of the laboratory analytical results and the Chain of Custody documentation are attached to this report.

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

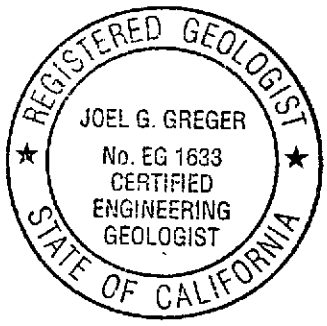
A copy of this report should be sent to Mr. Scott Seery of the Alameda County Health Care Services Agency.

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.

Sarkis Karkarian
Staff Engineer



Joel G. Greger, C.E.G.
Senior Engineering Geologist

License No. EG 1633
Exp. Date 8/31/96

/bp

Attachments: Tables 1, 2 & 3
Location Map
Figures 1 through 4
Laboratory Analyses
Chain of Custody documentation

cc: Mr. Robert H. Kezerian, Kaprealian Engineering, Inc.

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 June 1, 1995)						
MW1	289.46	77.53	86.44	0	No	6.5
MW2B	289.36	75.69	85.32	0	No	7
MW3	289.41	77.60	94.17	0	No	11.5
(Monitored on May 2, 1995)						
MW1	289.48	77.51	★	0	--	0
MW2B	289.38	75.67	★	0	--	0
MW3	289.42	77.59	★	0	--	0
(Monitored on April 6, 1995)						
MW1	287.27	79.72	86.39	0	--	0
MW2B	287.00	78.05	85.25	0	--	0
MW3	286.92	80.09	94.10	0	--	0
(Monitored and Sampled on March 1, 1995)						
MW1	286.90	80.09	86.39	0	No	1
MW2B	284.25	80.80	85.25	0	No	2
MW3	283.81	83.20	94.10	0	No	4
(Monitored and Sampled on December 7, 1994)						
MW1	N/A	81.04	86.46	0	No	4
MW2	WELL DAMAGED					
MW3	N/A	85.54	94.34	0	No	6

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

Well #	Well Casing Elevation (feet)*
MW1	366.99
MW2B	365.05
MW3	367.01

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

★ Total well depth not measured.

* The elevations of the top of the well casings were recently surveyed relative to City of Pleasanton Benchmark V1, a brass disk on the north curb of Ray Street, approximately 200 feet northwest of the centerline of First Street (elevation = 367.17 Mean Sea Level).

-- Sheen determination was not performed.

N/A = Not applicable.

Note: Monitoring data prior to March 1, 1995 were provided by Kaprealian Engineering, Inc.

TABLE 2

RECORD OF THE TEMPERATURE, CONDUCTIVITY, AND pH VALUES
IN THE MONITORING WELLS DURING PURGING AND PRIOR TO SAMPLING

(Measured on June 1, 1995)

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temperature (°F)	Conductivity ([μmhos/cm] x100)	pH
MW1	1.51	12:53	0	0	74.7	5.02	7.77
			1.5	0.99	73.3	4.74	7.51
			3	1.99	72.8	4.64	7.35
			4.5	2.98	72.6	4.61	7.28
		13:04	6.5	4.30	72.3	4.57	7.23
MW2B	1.64	14:34	0	0	73.5	5.21	7.87
			1.5	0.91	72.5	5.03	7.59
			3	1.83	72.2	4.95	7.38
			4.5	2.74	72.0	4.94	7.22
			6	3.66	72.2	4.95	7.15
		14:45	7	4.27			
MW3	2.82	13:43	0	0	74.8	5.32	7.85
			3	1.06	72.3	5.16	7.57
			6	2.13	71.9	5.14	7.39
			9	3.19	72.1	5.31	7.28
		13:55	11.5	4.08	72.4	5.31	7.20

TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
6/01/95	MW1	54♦♦	130	1.0	2.9	0.79	4.5
	MW2B	280	350	19	5.8	ND	7.7
	MW3	140♦♦	62	7.8	0.90	ND	1.6
3/01/95	MW1	120	ND	ND	1.1	ND	1.3
	MW2B	320	ND	ND	ND	ND	ND
	MW3	140♦	ND	ND	1.1	ND	1.1
12/07/95	MW1	--	ND	ND	ND	ND	ND
	MW2	--	WELL DAMAGED				
	MW3	--	ND	ND	ND	ND	ND

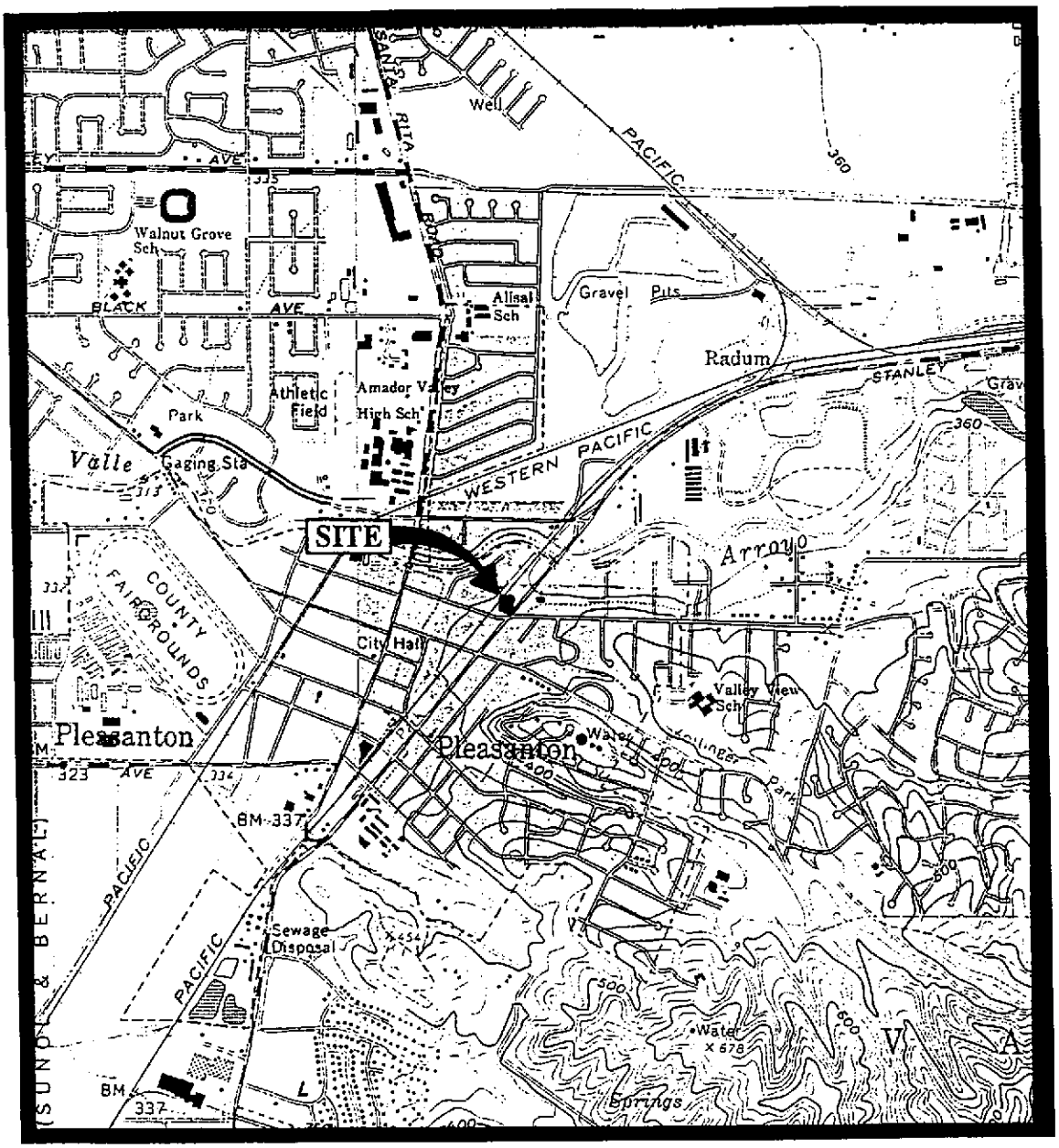
ND = Non-detectable.

♦ 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.

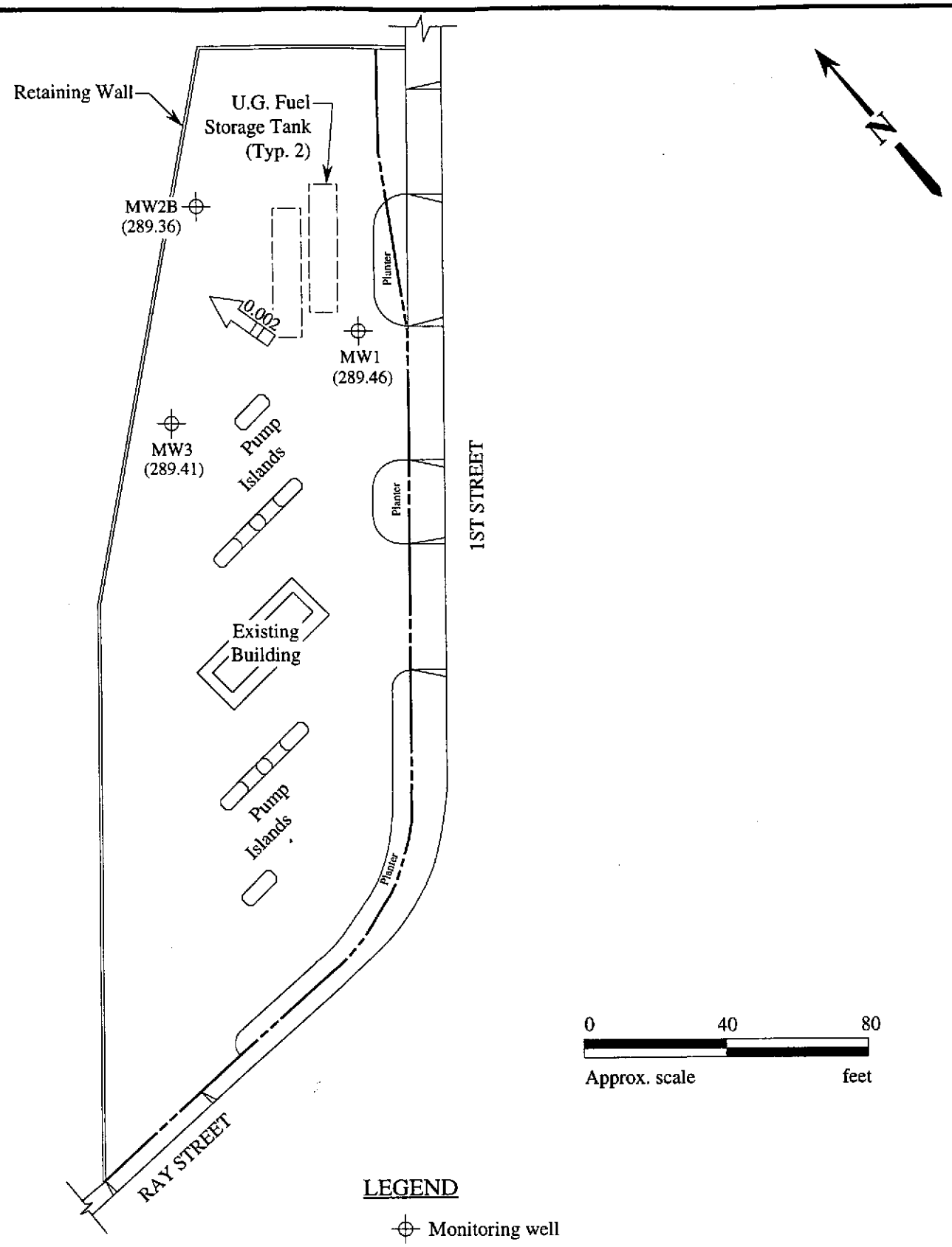
Results are in micrograms per liter (μg/L), unless otherwise indicated.

Note: Laboratory analyses data prior to March 1, 1995 were provided by Kaprealian Engineering, Inc.



Base modified from 7.5 minute U.S.G.S. Dublin and Livermore Quadrangles
(both photorevised 1980)

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #7376** **4191 1ST STREET** **PLEASANTON, CALIFORNIA**	**LOCATION MAP**

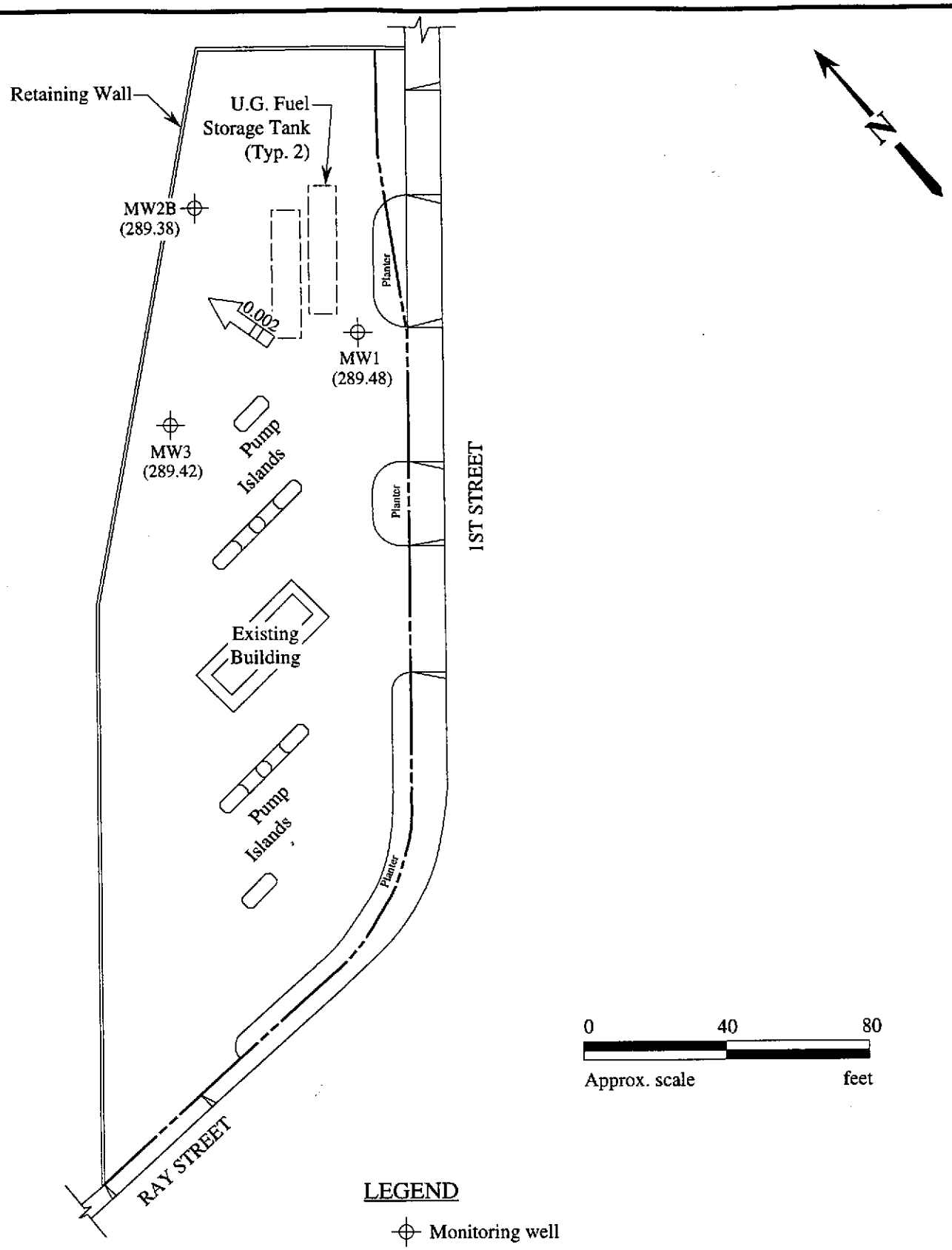


LEGEND

- Monitoring well
- ( ) Ground water elevation in feet above Mean Sea Level
- #.## Direction of ground water flow with approximate hydraulic gradient

GROUND WATER FLOW DIRECTION MAP FOR THE JUNE 1, 1995 MONITORING EVENT

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #7376** **4191 1ST STREET** **PLEASANTON, CALIFORNIA**	FIGURE **1**

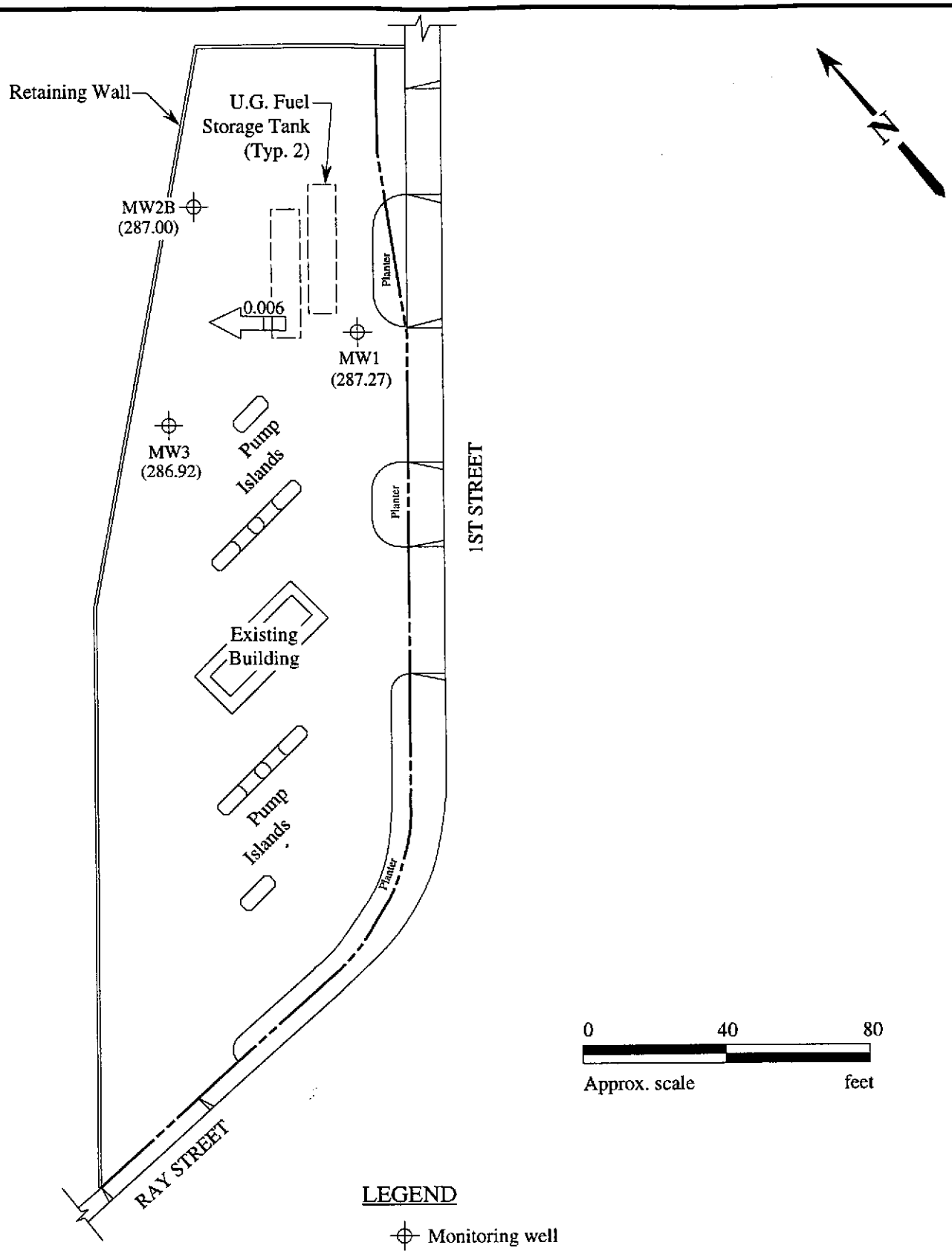


LEGEND

- Monitoring well
- ( ) Ground water elevation in feet above Mean Sea Level
- #.## Direction of ground water flow with approximate hydraulic gradient

GROUND WATER FLOW DIRECTION MAP FOR THE MAY 2, 1995 MONITORING EVENT

MPDS SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #7376** **4191 1ST STREET** **PLEASANTON, CALIFORNIA**	FIGURE **2**

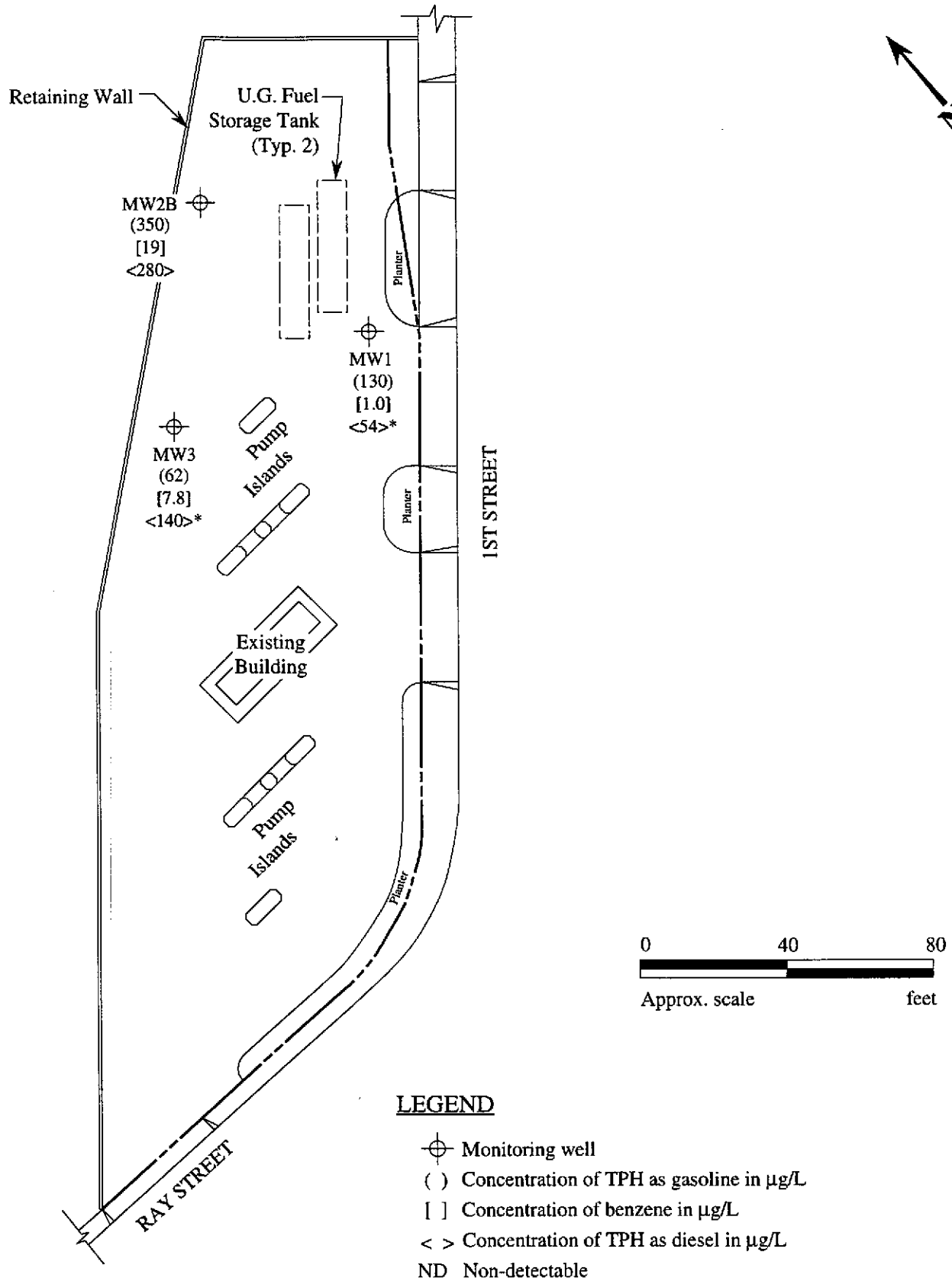


LEGEND

- Monitoring well
- ( ) Ground water elevation in feet above Mean Sea Level
- #.## Direction of ground water flow with approximate hydraulic gradient

GROUND WATER FLOW DIRECTION MAP FOR THE APRIL 6, 1995 MONITORING EVENT

MPDS SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #7376** **4191 1ST STREET** **PLEASANTON, CALIFORNIA**	FIGURE **3**



LEGEND

- ⊕ Monitoring well
- ( ) Concentration of TPH as gasoline in µg/L
- [ ] Concentration of benzene in µg/L
- < > Concentration of TPH as diesel in µg/L
- ND Non-detectable

* The lab reported that the hydrocarbons detected did not appear to be diesel.

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON JUNE 1, 1995

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #7376** **4191 1ST STREET** **PLEASANTON, CALIFORNIA**	FIGURE **4**

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:	Unocal #7376, 4191 1st St, Pleasanton	Sampled: Jun 1, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Jun 1, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported: Jun 19, 1995
Attention: Sarkis Karkarian	First Sample #:	506-0089	

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
506-0089	MW1	130	1.0	2.9	0.79	4.5
506-0090	MW2B	350	19	5.8	ND	7.7
506-0091	MW3	62	7.8	0.90	ND	1.6
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

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:	Unocal #7376, 4191 1st St, Pleasanton	Sampled: Jun 1, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Jun 1, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported: Jun 19, 1995
Attention: Sarkis Karkarian	First Sample #:	506-0089	

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
506-0089	MW1	Gasoline	1.0	6/2/95	HP-5	84
506-0090	MW2B	Gasoline	5.0	6/3/95	HP-2	100
506-0091	MW3	Gasoline	1.0	6/2/95	HP-5	84

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:	Unocal #7376, 4191 1st St, Pleasanton	Sampled: Jun 1, 1995
2401 Stanwell Dr., Ste. 300	Sample Matrix:	Water	Received: Jun 1, 1995
Concord, CA 94520	Analysis Method:	EPA 3510/8015	Reported: Jun 19, 1995
Attention: Sarkis Karkarian	First Sample #:	506-0089	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 506-0089 MW1*	Sample I.D. 506-0090 MW2B	Sample I.D. 506-0091 MW3*
Extractable Hydrocarbons	50	54	280	140
Chromatogram Pattern:		Unidentified Hydrocarbons <C15	Diesel	Unidentified Hydrocarbons <C15

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Extracted:	6/7/95	6/7/95	6/7/95
Date Analyzed:	6/7/95	6/7/95	6/7/95
Instrument Identification:	HP-3A	HP-3A	HP-3A

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.

Sequoia Analytical

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MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Sarkis Karkarian

Client Project ID: Unocal #7376, 4191 1st St, Pleasanton
Matrix: Liquid
QC Sample Group: 5060089-091

Reported: Jun 20, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	M. Creusere	M. Creusere	M. Creusere	M. Creusere
MS/MSD Batch#:	5052145	5052145	5052145	5052145
Date Prepared:	6/2/95	6/2/95	6/2/95	6/2/95
Date Analyzed:	6/2/95	6/2/95	6/2/95	6/2/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	95	95	100	100
Matrix Spike Duplicate % Recovery:	95	95	100	100
Relative % Difference:	0.0	0.0	0.0	0.0
LCS Batch#:	3LCS060295	3LCS060295	3LCS060295	3LCS060295
Date Prepared:	6/2/95	6/2/95	6/2/95	6/2/95
Date Analyzed:	6/2/95	6/2/95	6/2/95	6/2/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
LCS % Recovery:	94	95	96	98
% Recovery Control Limits:	71-133	72-128	72-130	71-120

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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MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Sarkis Karkarian

Client Project ID: Unocal #7376, 4191 1st St, Pleasanton
Matrix: Liquid
QC Sample Group: 5060089-091

Reported: Jun 20, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 Mod
Analyst:	M. Creusere	M. Creusere	M. Creusere	M. Creusere	J. Dinsay
MS/MSD Batch#:	5052137	5052137	5052137	5052137	BLK060795
Date Prepared:	6/3/95	6/3/95	6/3/95	6/3/95	6/7/95
Date Analyzed:	6/3/95	6/3/95	6/3/95	6/3/95	6/7/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3A
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
Matrix Spike % Recovery:	115	115	120	122	65
Matrix Spike Duplicate % Recovery:	115	115	115	117	60
Relative % Difference:	0.0	0.0	4.3	4.2	8.0
LCS Batch#:	1LCS060395	1LCS060395	1LCS060395	1LCS060395	BLK060795
Date Prepared:	6/3/95	6/3/95	6/3/95	6/3/95	6/7/95
Date Analyzed:	6/3/95	6/3/95	6/3/95	6/3/95	6/7/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3A
LCS % Recovery:	112	111	115	116	65
% Recovery Control Limits:	71-133	72-128	72-130	71-120	38-122

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.

mpds SERVICES, INCORPORATED
2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: (510) 602-5100, Fax: (510) 689-1918

CHAIN OF CUSTODY

SAMPLER: VARTKES TASHDJIAN

WITNESSING AGENCY:

UNOCAL S/S # 7376 CITY: Pleasanton

ADDRESS: 4191 1st St.

ANALYSES REQUESTED

TURN AROUND TIME: Regular

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010				REMARKS
MW1.	6/1/95	1:25 PM	X	X		2 VOA, 1 Amber	Well	X	X					5060089	AC
MW 2B	"	3:10 PM	X	X		"	"	X	X					5060090	|
MW 3	"	2:15 PM.	X	X		"	"	X	X					5060091	|

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
Vartkes Tashdjian (SIGNATURE)	4:45 PM 6/1/95	(SIGNATURE)	1645 6/1/95
(SIGNATURE)	0920 6-2-95	(SIGNATURE)	0431 6-2
(SIGNATURE)	6-2	(SIGNATURE)	415
(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? Yes
2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? Yes
3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? NO
4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? Yes

SIGNATURE: TITLE: DATE: 6/1/95

Note: All water containers to be sampled for TPHG/BTEX, 8010 & 8240 are preserved with HCL. All water containers to be sampled for Lead or Metals are preserved with HN03. All other containers are unpreserved.