Paid to:
City of San Leandro

MONITORING
PURGING
DISPOSING
SAMPLING

MPDS SERVICES, INCORPORATED

4438
SOS

September 10, 1997

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

RE: Unocal Service Station #7004
15599 Hesperian Boulevard
San Leandro, California

Per the request of the Tosco Marketing Company Project Manager, Ms. Tina R. Berry, enclosed please find our data report (MPDS-UN7004-12) dated August 4, 1997, 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) 277-2383.

Sincerely,

MPDS Services, Inc.

Jarrel F. Crider

/jfc

Enclosure

cc: Ms. Tina R. Berry

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

MONITORING
PURGING
DISPOSING
SAMPLING
MPDS SERVICES, INCORPORATED

MPDS-UN7004-12
August 4, 1997

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

Attention: Ms. Tina R. Berry

RE: Semi-Annual Data Report
Unocal Service Station #7004
15599 Hesperian Boulevard
San Leandro, California

Dear Ms. Berry:

This data report presents the results of the most recent 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 are indicated in Table 1. **Oxygen Release Compound (ORC®) filter socks were present in monitoring well MW5.** 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 semi-annual period is shown on the attached Figure 1.

Ground water samples were collected on July 2, 1997. Prior to sampling, the wells were each purged of 8 gallons of water. **In addition, dissolved oxygen concentrations were measured** and are presented in Table 3. Samples were then collected using a clean Teflon bailer. The samples were decanted into clean VOA vials, 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 Tosco 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 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 and benzene detected in the ground water samples collected this semi-annual period 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 the Alameda County Health Care Services, and to Mr. Michael Bakaldin of the City of San Leandro Fire Department.

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. C55734
Exp. Date : December 31, 2000

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

cc: Mr. Sarkis A. Soghomonian, 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 July 2, 1997)						
MW1	22.73	13.66	24.65	0	No	8
MW2	22.81	14.26	24.72	0	No	8
MW3	22.83	13.96	25.08	0	No	8
MW4	22.44	13.00	25.95	0	No	8
MW5	23.02	13.79	26.30	0	No	8
MW6	22.56	14.57	25.95	0	No	8
(Monitored and Sampled on January 3, 1997)						
MW1	23.50	12.89	24.70	0	No	6
MW2	23.93	13.14	24.75	0	No	6
MW3	23.70	13.09	25.10	0	No	6
MW4	23.06	12.38	25.92	0	No	6
MW5	23.96	12.85	26.28	0	No	6
MW6	24.01	13.12	25.96	0	No	6
(Monitored on July 12, 1996)						
MW5	22.31	14.50	26.25	0	No	8
(Monitored and Sampled on July 8, 1996)						
MW1	23.65	12.74	24.18	0	No	8
MW2	23.70	13.37	24.35	0	No	7.5
MW3	23.50	13.29	24.68	0	No	8.5
MW4	23.40	12.04	25.60	0	No	9.5
MW5	23.29	13.52	26.09	0	No	9
MW6	23.42	13.71	25.58	0	No	8.5
(Monitored and Sampled on January 8, 1996)						
MW1	22.21	14.18	24.22	0	No	7
MW2	22.26	14.81	24.40	0	No	7
MW3	22.09	14.70	24.70	0	No	7
MW4	22.01	13.43	25.65	0	No	8.5
MW5	21.96	14.85	26.15	0	No	8
MW6	22.08	15.05	25.64	0	No	7.5

Table 1
Summary of Monitoring Data

Well #	Well Casing Elevation (feet)**
MW1	36.39
MW2	37.07
MW3	36.79
MW4	35.44
MW5	36.81
MW6	37.13

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

* Monitored only.

** The elevations of the top of the well casings are relative to Mean Sea Level (MSL), based on the City of San Leandro Benchmark (elevation = 36.04 feet MSL).

-- Sheen determination was not performed.

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW1	7/2/97	ND	ND	ND	ND	ND	ND
	1/3/97	87*	ND	ND	ND	ND	ND
	7/8/96	ND	ND	ND	ND	ND	ND
	1/8/96	ND	ND	ND	ND	ND	--
	10/12/95	SAMPLED SEMI-ANNUALLY					
	7/14/95	ND	0.65	2.2	ND	2.3	--
	1/5/95	ND	ND	ND	ND	ND	--
	10/6/94	SAMPLED SEMI-ANNUALLY					
	7/8/94	ND	ND	ND	ND	ND	--
	4/6/94	SAMPLED SEMI-ANNUALLY					
	1/11/94	ND	ND	ND	ND	ND	--
	7/22/93	ND	ND	ND	ND	ND	77
	4/20/93	--	--	--	--	--	56
	1/21/93	ND	ND	ND	ND	ND	42
	10/28/92	SAMPLED SEMI-ANNUALLY					
	7/9/92	70*	ND	ND	ND	ND	130
	4/14/92	76*	ND	ND	ND	ND	--
	1/14/92	ND	ND	ND	ND	ND	--
	10/14/91	ND	ND	ND	ND	ND	--
	7/23/91	ND	ND	ND	ND	ND	--
	5/4/91	ND	ND	ND	ND	ND	--
MW2	7/2/97	91*	ND	ND	ND	ND	ND
	1/3/97	160*	ND	ND	ND	ND	ND
	7/8/96	100*	ND	ND	ND	ND	ND
	1/8/96	91*	ND	ND	ND	ND	--
	10/12/95	SAMPLED SEMI-ANNUALLY					
	7/14/95	86*	ND	ND	ND	ND	--
	1/5/95	310*	ND	ND	ND	ND	--
	10/6/94	SAMPLED SEMI-ANNUALLY					
	7/8/94	140*	ND	ND	ND	ND	--
	4/6/94	SAMPLED SEMI-ANNUALLY					
	1/11/94	120*	ND	ND	ND	ND	--
	7/22/93	62*	ND	ND	ND	ND	42
	4/20/93	--	--	--	--	--	80
	1/21/93	ND	ND	ND	ND	ND	17
	10/28/92	SAMPLED SEMI-ANNUALLY					
	7/9/92	ND	ND	ND	ND	ND	49
	4/14/92	45*	ND	ND	ND	ND	--
	1/14/92	ND	ND	ND	ND	ND	--
	10/14/91	ND	ND	ND	ND	ND	--
	7/23/91	ND	ND	ND	ND	ND	--
	5/4/91	ND	ND	ND	ND	ND	--

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW3	7/2/97	23,000	110	ND	3,600	1,600	1,200
	1/3/97	14,000	160	ND	2,100	120	620
	7/8/96	16,000	470	45	4,400	1,000	340
	1/8/96	14,000	760	ND	3,100	380	††
	10/12/95	17,000	1,000	ND	3,600	1,000	†
	7/14/95	21,000	1,600	ND	3,900	1,500	--
	4/5/95	18,000	2,100	ND	3,700	690	--
	1/5/95	20,000	2,100	ND	3,200	3,800	--
	10/6/94	20,000	2,100	26	3,000	900	--
	7/8/94	18,000	2,200	25	2,500	860	--
	4/6/94	24,000	3,100	ND	3,300	820	--
	1/11/94	19,000	3,300	31	3,300	890	--
	10/6/93	24,000	4,100	ND	3,600	2,000	ND
	7/22/93	16,000	4,500	17	3,600	1,900	440
	4/20/93	18,000	3,700	11	2,300	1,300	410
	1/21/93	12,000	2,800	11	1,600	590	--
	10/28/92	15,000	4,400	15	2,400	800	--
	7/9/92	13,000	3,200	12	1,900	1,100	--
	4/14/92	16,000	3,400	19	1,400	1,300	--
	1/14/92	13,000	6,600	19	2,600	1,800	--
	10/14/91	25,000	6,300	78	2,000	1,400	--
	7/23/91	17,000	5,500	26	1,800	2,800	--
	5/4/91	34,000	6,100	32	1,200	6,100	--
MW4	7/2/97	ND	ND	ND	ND	ND	25
	1/3/97	80*	ND	ND	ND	ND	ND
	7/8/96	ND	ND	ND	ND	ND	ND
	1/8/96	ND	ND	ND	ND	ND	††
	10/12/95	SAMPLED SEMI-ANNUALLY					
	7/14/95	ND	ND	ND	ND	ND	--
	1/5/95	ND	ND	ND	ND	ND	--
	10/6/94	SAMPLED SEMI-ANNUALLY					
	7/8/94	ND	ND	ND	ND	ND	--
	4/6/94	SAMPLED SEMI-ANNUALLY					
	1/11/94	ND	ND	ND	ND	ND	--
	7/22/93	ND	ND	ND	ND	ND	54
	4/20/93	--	--	--	--	--	65
	1/21/93	ND	ND	ND	ND	ND	--
	10/28/92	SAMPLED SEMI-ANNUALLY					
	7/9/92	ND	ND	ND	ND	ND	--
	4/14/92	ND	ND	ND	ND	ND	--
	1/14/92	ND	ND	ND	ND	ND	--
	10/14/91	ND	ND	ND	ND	ND	--
	7/23/91	ND	ND	ND	ND	ND	--

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW5	7/2/97	ND	ND	ND	ND	ND	72
	1/3/97	12,000	150	ND	2,100	120	660
	7/8/96	140	2.1	1.4	5.6	0.51	110
	1/8/96	ND	0.55	ND	ND	0.58	††
	10/12/95	310	ND	ND	31	1.2	†
	7/14/95	180	1.3	ND	7.9	ND	--
	4/5/95	ND	ND	ND	ND	ND	--
	1/5/95	85	ND	ND	ND	ND	--
	10/6/94	350	1.3	ND	ND	ND	--
	7/8/94	200	ND	ND	ND	ND	--
	4/6/94	260	1.4	ND	0.88	ND	--
	1/11/94	160	ND	0.79	0.54	ND	--
	10/6/93	150	1.1	ND	3.1	0.85	57
	7/22/93	59**	ND	ND	2.6	ND	42
	4/20/93	99*	ND	ND	ND	ND	120
	1/21/93	100*	ND	ND	ND	ND	160
	10/28/92	ND	ND	ND	ND	ND	45
	7/9/92	ND	ND	ND	ND	ND	71
	4/14/92	86*	ND	ND	ND	ND	--
	1/14/92	60*	ND	ND	ND	ND	--
	10/14/91	140	0.72	ND	1.3	0.89	--
	7/23/91	260	1.2	0.39	10	0.71	--
MW6	7/2/97	ND	ND	ND	ND	ND	ND
	1/3/97	97*	ND	ND	ND	ND	ND
	7/8/96	ND	ND	ND	ND	ND	ND
	1/8/96	ND	ND	ND	ND	ND	--
	10/12/95	SAMPLED SEMI-ANNUALLY					
	7/14/95	ND	ND	ND	ND	ND	--
	1/5/95	ND	ND	ND	ND	ND	--
	10/6/94	SAMPLED SEMI-ANNUALLY					
	7/8/94	ND	ND	ND	ND	ND	--
	4/6/94	SAMPLED SEMI-ANNUALLY					
	1/11/94	ND	ND	ND	ND	ND	--
	7/22/93	ND	ND	ND	ND	ND	ND
	4/20/93	--	--	--	--	--	ND
	1/21/93	ND	ND	ND	ND	ND	--
	10/28/92	SAMPLED SEMI-ANNUALLY					
	7/9/92	ND	ND	ND	ND	ND	--
	4/14/92	ND	ND	ND	ND	ND	--
	1/14/92	ND	ND	ND	ND	ND	--
	10/14/91	ND	ND	ND	ND	ND	--
	7/23/91	ND	ND	ND	ND	ND	--

Table 2

Summary of Laboratory Analyses
Water

ND = Non-detectable.

MTBE = Methyl tert butyl ether.

† 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.

* Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.

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

-- Indicates analysis was not performed.

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 quantificiation range used by Sequoia Analytical Laboratory is C6 - C12.

Laboratory analyses data prior to January 11, 1994, were provided by Kaprealian Engineering, Inc.

Table 3

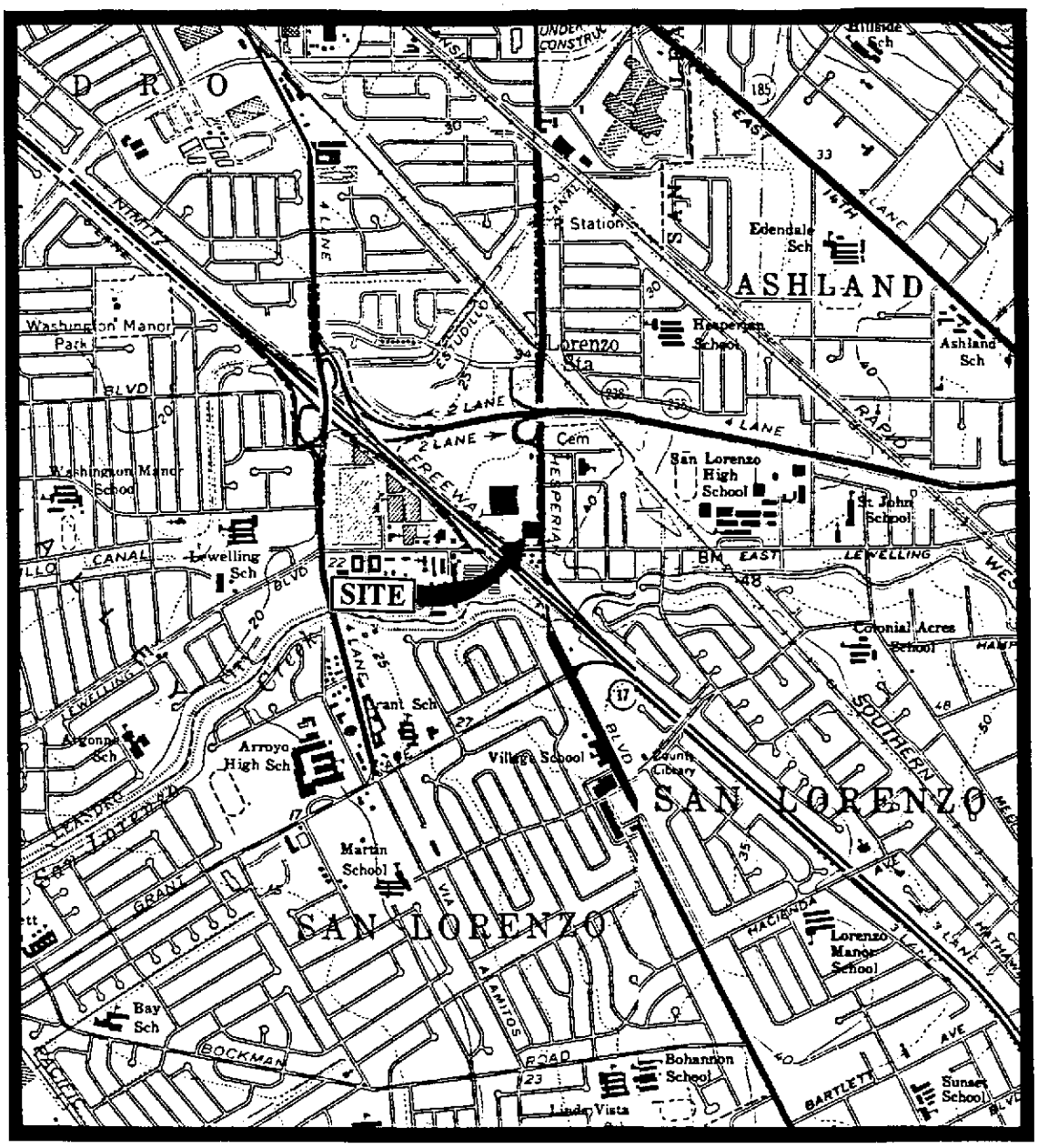
Summary of Monitoring Data

Well	Date	Dissolved Oxygen Concentrations Before Purging (mg/L)	After Purging (mg/L)
MW5	7/2/97	3.82	3.97
	1/3/97	4.35	4.27
	7/12/96	3.44	3.67

mg/L = Milligrams per liter.

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

flow Through?
lab or field?

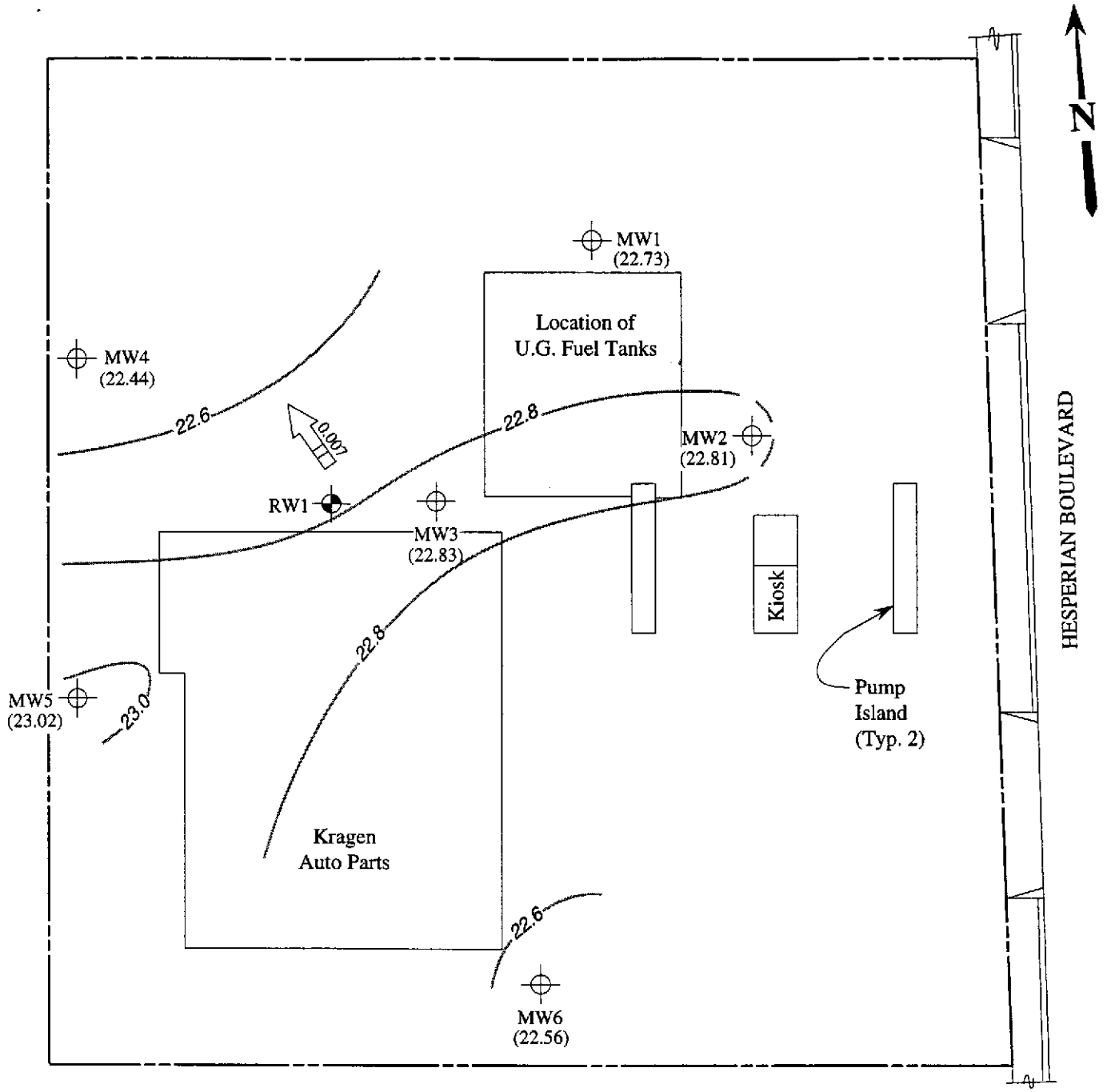


Base modified from 7.5 minute U.S.G.S. Hayward and San Leandro Quadrangles (both photorevised 1980)

0 2000 4000

Approx. scale feet

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #7004** **15599 HESPERIAN BOULEVARD** **SAN LEANDRO, CALIFORNIA**	**LOCATION MAP**



LEGEND

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

0 30 60

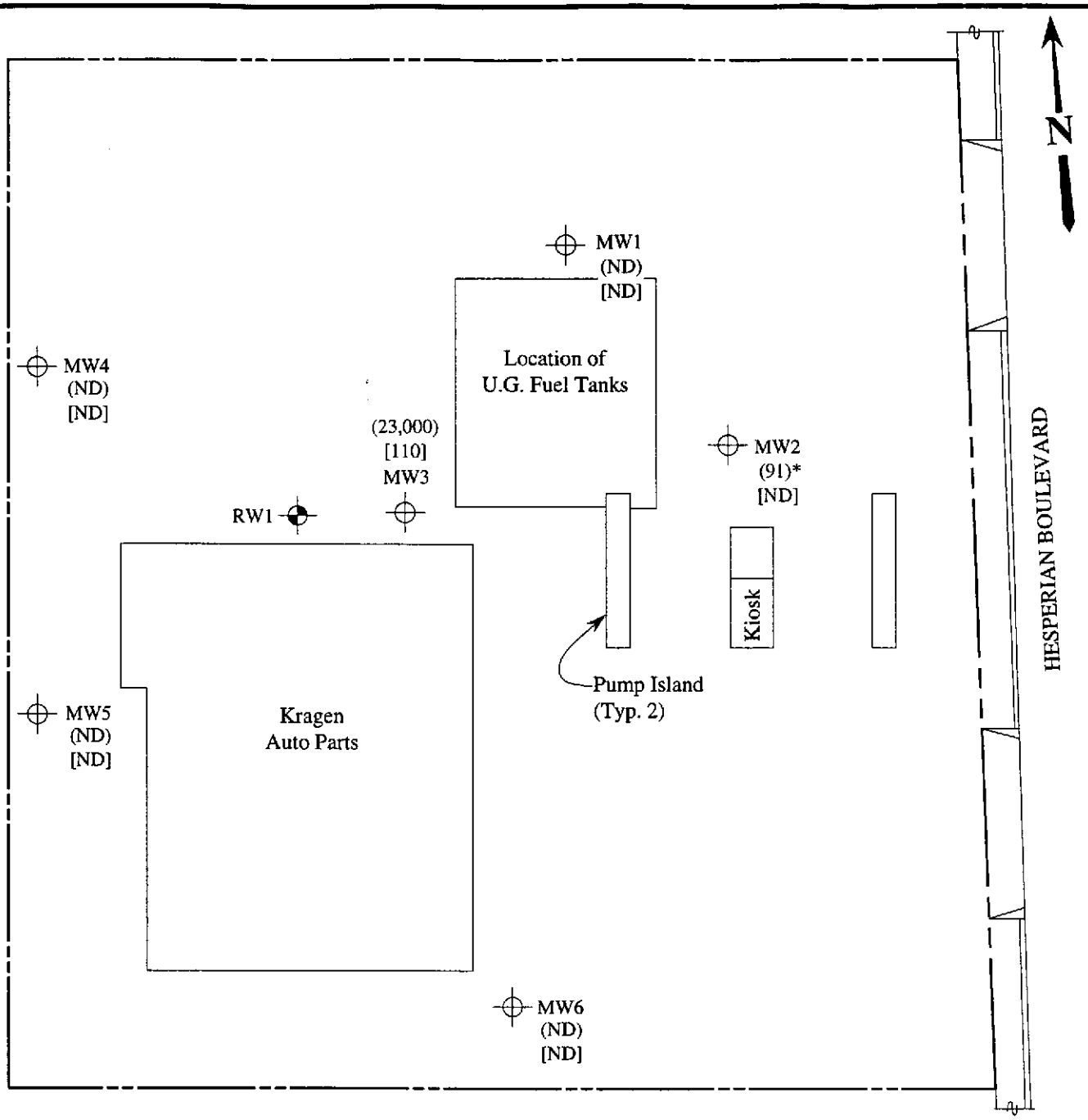
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE JULY 2, 1997 MONITORING EVENT

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #7004
15599 HESPERIAN BOULEVARD
SAN LEANDRO, CALIFORNIA

FIGURE
1



LEGEND

- Monitoring well
- Aquifer testing well
- ( ) Concentration of TPH as gasoline in µg/L
- [ ] Concentration of benzene in µg/L
- ND Non-detectable
- * The lab reported that the hydrocarbons detected did not appear to be gasoline.

0 30 60

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON JULY 2, 1997

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #7004
15599 HESPERIAN BOULEVARD
SAN LEANDRO, CALIFORNIA

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:	Unocal #7004, 15599 Hesparian San Leandro	Sampled: Jul 2, 1997
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Jul 3, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 21, 1997
Attention: Jarrel Crider	First Sample #:	707-0445	

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
707-0445	MW-1	ND	ND	ND	ND	ND
707-0446	MW-2	91 *	ND	ND	ND	ND
707-0447	MW-3	23,000	110	ND	3,600	1,600
707-0448	MW-4	ND	ND	ND	ND	ND
707-0449	MW-5	ND	ND	ND	ND	ND
707-0450	MW-6	ND	ND	ND	ND	ND

* Hydrocarbons detected did not appear to be gasoline.

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

7070445.MPD <1>

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 #7004, 15599 Hesparian San Leandro	Sampled: Jul 2, 1997
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Jul 3, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 21, 1997
Attention: Jarrel Crider	First Sample #:	707-0445	

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
707-0445	MW-1	-	1.0	7/15/97	HP-4	98
707-0446	MW-2	Discrete Peaks *	1.0	7/11/97	HP-2	83
707-0447	MW-3	Gasoline	100	7/11/97	HP-2	89
707-0448	MW-4	--	1.0	7/11/97	HP-2	82
707-0449	MW-5	--	1.0	7/11/97	HP-2	84
707-0450	MW-6	--	1.0	7/11/97	HP-2	78

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
* "Discrete Peaks" refers to unidentified peaks in the EPA 8010 range.

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 #7004, 15599 Hesparian San Leandro	Sampled: Jul 2, 1997
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water	Received: Jul 3, 1997
Concord, CA 94520	Analysis for:	MTBE (Modified EPA 8020)	
Attention: Jarrel Crider	First Sample #:	707-0445	Analyzed: Jul 11-15, 1997
			Reported: Jul 21, 1997

LABORATORY ANALYSIS FOR: MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L
707-0445	MW-1	5.0	N.D.
707-0446	MW-2	5.0	N.D.
707-0447	MW-3	250	1,200
707-0448	MW-4	5.0	25
707-0449	MW-5	5.0	72
707-0450	MW-6	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

7070445.MPD <3>

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

Client Project ID: Unocal #7004, 15599 Hesparian San Leandro
Matrix: Liquid
QC Sample Group: 707-0455
Reported: Jul 21, 1997

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD Batch#:	7070594	7070594	7070594	7070594
Date Prepared:	7/15/97	7/15/97	7/15/97	7/15/97
Date Analyzed:	7/15/97	7/15/97	7/15/97	7/15/97
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	80	80	80	82
Matrix Spike Duplicate % Recovery:	85	90	85	88
Relative % Difference:	6.1	12	6.1	7.8
LCS Batch#:	4LCS071597	4LCS071597	4LCS071597	4LCS071597
Date Prepared:	7/15/97	7/15/97	7/15/97	7/15/97
Date Analyzed:	7/15/97	7/15/97	7/15/97	7/15/97
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	85	85	85	87
% Recovery Control Limits:	70-130	70-130	70-130	70-130

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

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

Client Project ID: Unocal #7004, 15599 Hesparian San Leandro
Matrix: Liquid
QC Sample Group: 7070446-450
Reported: Jul 21, 1997

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	802002A	802002A	802002A	802002A
MS/MSD Batch#:	7070395	7070395	7070395	7070395
Date Prepared:	7/11/97	7/11/97	7/11/97	7/11/97
Date Analyzed:	7/11/97	7/11/97	7/11/97	7/11/97
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	100	90	93
Matrix Spike Duplicate % Recovery:	80	95	90	90
Relative % Difference:	6.1	5.1	0.0	3.6
LCS Batch#:	LCS071197	LCS071197	LCS071197	LCS071197
Date Prepared:	7/11/97	7/11/97	7/11/97	7/11/97
Date Analyzed:	7/11/97	7/11/97	7/11/97	7/11/97
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	85	100	95	93
% Recovery Control Limits:	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

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CHAIN OF CUSTODY

970711

SAMPLER	TOSCO S/S #	CITY	ANALYSES REQUESTED	TURN AROUND TIME:
JOE ASEMIAN	7004	San Leandro		Regular
WITNESSING AGENCY	ADDRESS: 15599 Hesperian			REMARKS

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPHG BTEX	MTBE						
MW-1	7-2-97	9:22 A.M	✓	✓		2 VOA	well	✓	✓		7070445				MTBE: 5 PPB.
MW-2	"	10:45 A.M	✓	✓		✓	"	✓	✓		7070446				
MW-3	"	12:22 P.M	✓	✓		✓	"	✓	✓		7070447				
MW-4	"	8:40 A.M	✓	✓		✓	"	✓	✓		7070448				
MW-5	"	11:30 A.M	✓	✓		✓	"	✓	✓		7070449				
MW-6	"	9:55 A.M	✓	✓		✓	"	✓	✓		7070450				

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
(SIGNATURE)	7-2-97 1:10 PM	(SIGNATURE)	7-2-97
(SIGNATURE)	7-3 14:00	(SIGNATURE)	7-3
(SIGNATURE)	7-3	(SIGNATURE)	7/3/97 15:40
(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? ~
3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? N
4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? Y

SIGNATURE: TITLE: Analyst DATE: 7-2-97

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 HNO3. All other containers are unpreserved.