MONITORING
PURGING
DISPOSING
SAMPLING
mpds SERVICES, INCORPORATED

RECEIVED
1:33 pm, Jun 08, 2009
Alameda County
Environmental Health

APPROVED
APR 01 1997
TINA R. BERRY

MPDS-UN5487-10
March 7, 1997

76 Products Company
2000 Crow Canyon Place, Suite 400
P.O. Box 5155
San Ramon, California 94583

FILE # 5487 SS ✓ BP ____
RPT ____ QM ✓ TRANSMITTAL ____
1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____

Attention: Ms. Tina R. Berry

RE: Annual Data Report
Unocal Service Station #5487
28250 Hesperian Boulevard
Hayward, 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. 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 this most recent annual monitoring and sampling event is shown on the attached Figure 1.

Ground water samples were collected on February 7, 1997. Prior to sampling, the wells were each purged of between 9.5 and 13 gallons of water. 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 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 during this annual monitoring and sampling event are shown on the attached Figure 2. 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

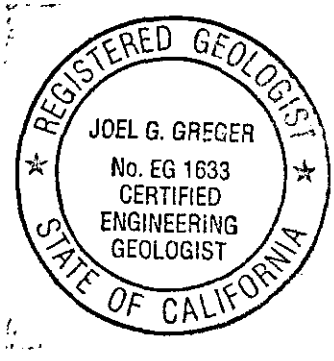
A copy of this report should be sent to the Alameda County Health Care Services Agency, and the City of Hayward Fire Department.

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

Sincerely,

MPDS Services, Inc.

Haig (Gary) Tejirian
Senior Staff Geologist



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

License No. EG 1633
Exp. Date 8/31/98

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

cc: Mr. Mark W. Boyd, 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 February 7, 1997)						
MW1*	7.10	4.63	27.22	0	--	0
MW2*	6.93	5.65	23.79	0	--	0
MW3*	6.95	5.04	24.42	0	--	0
MW4*	7.12	4.46	24.58	0	--	0
MW5	6.53	4.26	24.13	0	No	13.5
MW6	6.77	4.41	18.02	0	No	9.5
MW7	5.64	3.75	19.12	0	No	10.5
(Monitored and Sampled on February 2, 1996)						
MW1*	7.85	3.88	27.28	0	--	0
MW2*	6.67	5.91	23.79	0	--	0
MW3*	7.91	4.08	24.40	0	--	0
MW4*	7.87	3.71	24.59	0	--	0
MW5	7.29	3.50	24.13	0	No	14.5
MW6	7.54	3.64	18.02	0	No	10
(Monitored and Sampled on November 6, 1995)						
MW1*	4.93	6.80	27.33	0	--	0
MW2*	4.78	7.80	23.85	0	--	0
MW3*	4.79	7.20	24.46	0	--	0
MW4*	4.68	6.90	24.64	0	--	0
MW5	4.09	6.70	24.17	0	No	12
MW6	4.31	6.87	18.07	0	No	8
(Monitored and Sampled on August 3, 1995)						
MW1	5.52	6.21	27.31	0	No	14.5
MW2	5.39	7.19	23.85	0	No	11.5
MW3	5.40	6.59	24.04	0	No	12
MW4	5.25	6.33	24.61	0	No	12.5
MW5	4.76	6.03	24.15	0	No	12.5
MW6	4.92	6.26	18.05	0	No	8.5

Table 1
Summary of Monitoring Data

Well #	Well Casing Elevation (feet)**
MW1	11.73
MW2	12.58
MW3	11.99
MW4	11.58
MW5	10.79
MW6	11.18
MW7	9.39

♦ 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), per the City of Hayward Benchmark (elevation = 10.97 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	2/2/96	SAMPLED ANNUALLY					
	11/6/95	SAMPLED ANNUALLY					
	8/3/95	ND	ND	ND	ND	ND	--
	5/2/95	SAMPLED ANNUALLY					
	2/1/95	SAMPLED ANNUALLY					
	11/2/94	SAMPLED ANNUALLY					
	8/2/94	ND	ND	ND	ND	ND	--
	8/5/93	ND	ND	ND	ND	ND	--
	8/4/92	ND	ND	ND	ND	ND	--
	11/7/91	ND	ND	ND	ND	ND	--
	8/2/91	ND	ND	ND	ND	ND	--
	5/10/91	ND	ND	ND	ND	ND	--
	2/11/91*	ND	ND	ND	ND	ND	--
	11/15/90*	ND	ND	ND	ND	ND	--
	8/29/90*	ND	ND	ND	ND	0.74	--
	5/16/90*	ND	ND	ND	ND	ND	--
	2/16/90*	ND	ND	ND	ND	ND	--
	11/14/89*	ND	ND	ND	ND	ND	--
	8/16/89**	ND	ND	ND	ND	ND	--
	4/26/89*	ND	2.1	ND	ND	ND	--
MW2	2/2/96	SAMPLED ANNUALLY					
	11/6/95	SAMPLED ANNUALLY					
	8/3/95	ND	ND	ND	ND	ND	--
	5/2/95	SAMPLED ANNUALLY					
	2/1/95	SAMPLED ANNUALLY					
	11/2/94	SAMPLED ANNUALLY					
	8/2/94	ND	ND	ND	ND	ND	--
	8/5/93	ND	ND	ND	ND	ND	--
	8/4/92	ND	ND	ND	ND	ND	--
	11/7/91	ND	ND	ND	ND	ND	--
	8/2/91	ND	ND	ND	ND	ND	--
	5/10/91	ND	ND	ND	ND	ND	--
	2/11/91	ND	ND	ND	ND	ND	--
	11/15/90	ND	ND	ND	ND	ND	--
	8/29/90	ND	ND	ND	ND	ND	--
	5/16/90*	ND	ND	ND	ND	ND	--
	2/16/90	ND	ND	ND	ND	ND	--
	11/14/89*	ND	ND	ND	ND	ND	--
	8/16/89**	ND	ND	ND	ND	ND	--
	4/26/89*	ND	ND	ND	ND	ND	--

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW3	2/2/96	SAMPLED ANNUALLY					
	11/6/95	SAMPLED ANNUALLY					
	8/3/95	ND	ND	ND	ND	ND	--
	5/2/95	SAMPLED ANNUALLY					
	2/1/95	SAMPLED ANNUALLY					
	11/2/94	SAMPLED ANNUALLY					
	8/2/94	ND	ND	ND	ND	ND	--
	8/5/93	SAMPLED ANNUALLY					
	8/4/92	ND	ND	ND	ND	ND	--
	11/7/91	ND	ND	ND	ND	ND	--
	8/2/91	ND	ND	ND	ND	ND	--
	5/10/91	ND	ND	ND	ND	ND	--
	2/11/91	ND	ND	ND	ND	ND	--
	11/15/90	ND	ND	ND	ND	ND	--
	8/29/90	ND	ND	0.52	ND	ND	--
	5/16/90	ND	ND	ND	ND	ND	--
	2/16/90	ND	ND	ND	ND	ND	--
	11/14/89	ND	ND	ND	ND	ND	--
	8/16/89	ND	ND	ND	ND	ND	--
	4/26/89*	ND	ND	ND	ND	ND	--
MW4	2/2/96	SAMPLED ANNUALLY					
	11/6/95	SAMPLED ANNUALLY					
	8/3/95	ND	ND	ND	ND	ND	--
	5/2/95	SAMPLED ANNUALLY					
	2/1/95	SAMPLED ANNUALLY					
	11/2/94	SAMPLED ANNUALLY					
	8/2/94	ND	ND	ND	ND	ND	--
	8/5/93	ND	ND	ND	ND	ND	--
	8/4/92	ND	ND	ND	ND	ND	--
	11/7/91	ND	ND	ND	ND	ND	--
	8/2/91	ND	ND	ND	ND	ND	--
	5/10/91	ND	ND	ND	ND	ND	--
	2/11/91	ND	ND	ND	ND	ND	--
	11/15/90	ND	ND	ND	ND	ND	--
	8/29/90	ND	ND	ND	ND	ND	--
	5/16/90	ND	ND	ND	ND	ND	--
	2/16/90	ND	ND	ND	ND	ND	--
	11/14/89	ND	ND	ND	ND	ND	--
	8/16/89	ND	ND	ND	ND	ND	--
	4/26/89*	ND	0.33	ND	ND	ND	--

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW5	2/7/97	85	16	0.56	1.7	3.8	250
	2/2/96	64	20	ND	3.9	6.1	150
	11/6/95	160	80	ND	7.4	10	120
	8/3/95	ND	12	ND	0.70	ND	--
	5/2/95	ND	7.5	0.51	1.2	1.6	--
	2/1/95	170	11	ND	2.4	3.9	--
	11/2/94	450	73	1.6	6.2	11	--
	8/2/94	59	16	ND	2.4	3.1	--
	5/2/94	170†	38	0.73	8.5	8.4	--
	2/7/94	180	22	ND	6.4	5.9	--
	11/5/93	110	12	ND	2.3	2.3	--
	8/5/93	530	210	0.62	54	44	--
	5/3/93	260	35	ND	2.3	3.1	--
	2/2/93	77†	5.0	ND	1.2	1.3	--
	11/5/92	120	16	ND	3.5	3.0	--
	8/4/92	80	13	ND	4.5	6.9	--
	5/5/92	170	45	0.48	9.0	6.8	--
	2/5/92	120	20	ND	4.4	4.7	--
	11/7/91	700	43	1.7	29	24	--
	8/2/91	100	43	0.33	12	5.2	--
	5/10/91	ND	ND	ND	ND	ND	--
	2/11/91	58	23	ND	2.9	1.3	--
	11/15/90	ND	ND	ND	ND	0.47	--
	8/29/90	ND	0.70	ND	0.57	1.1	--
	5/16/90	1,100	310	2.8	70	110	--
	2/16/90	ND	ND	ND	ND	ND	--
	11/14/89	73	4.7	0.97	2.9	16	--
	8/31/89	910	120	7.1	50	53	--
	8/16/89	4,400	1,400	84	200	950	--
	4/26/89*	ND	ND	ND	ND	ND	--
MW6	2/7/97	66	5.8	1.2	2.1	6.6	450
	2/2/96	300	51	0.65	30	18	280
	11/6/95	210	17	0.66	14	37	130
	8/3/95	ND	0.76	ND	ND	ND	--
	5/2/95	ND	5.7	ND	0.81	1.1	--
	2/1/95	340	26	0.77	2.6	7.0	--
	11/2/94	840	30	2.5	26	57	--
	8/2/94	220	13	1.0	12	28	--
	5/2/94	440†	20	4.2	11	26	--
	2/7/94	1,100	130	14	13	130	--
	11/5/93	100	1.8	ND	0.79	2.2	--
	8/5/93	230	25	1.6	12	29	--
	5/3/93	520	47	2.6	33	48	--

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW6 (Cont)	2/2/93	400†	66	5.5	32	13	--
	11/5/92	300	16	2.3	14	14	--
	8/4/92	540	12	7.9	35	110	--
MW7	2/7/97	ND	ND	ND	ND	ND	ND
	7/30/96‡	ND	ND	ND	ND	ND	ND
MWD††	5/10/91	ND	ND	ND	ND	ND	--

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

†† MWD was a quality assurance duplicate water sample collected from well MW5.

* TPH as Diesel, Total Oil & Grease and all EPA method 8010 constituents were non-detectable.

** TOG for the samples collected from MW1 and MW2 were 23 milligrams per liter (mg/L) and 7.4 mg/L, respectively. TPH as Diesel and all EPA method 8010 constituents were non-detectable for both samples.

‡ Laboratory analysis data provided by Kaprealian Engineering, Inc.

MTBE = methyl tert butyl ether

ND = Non-detectable.

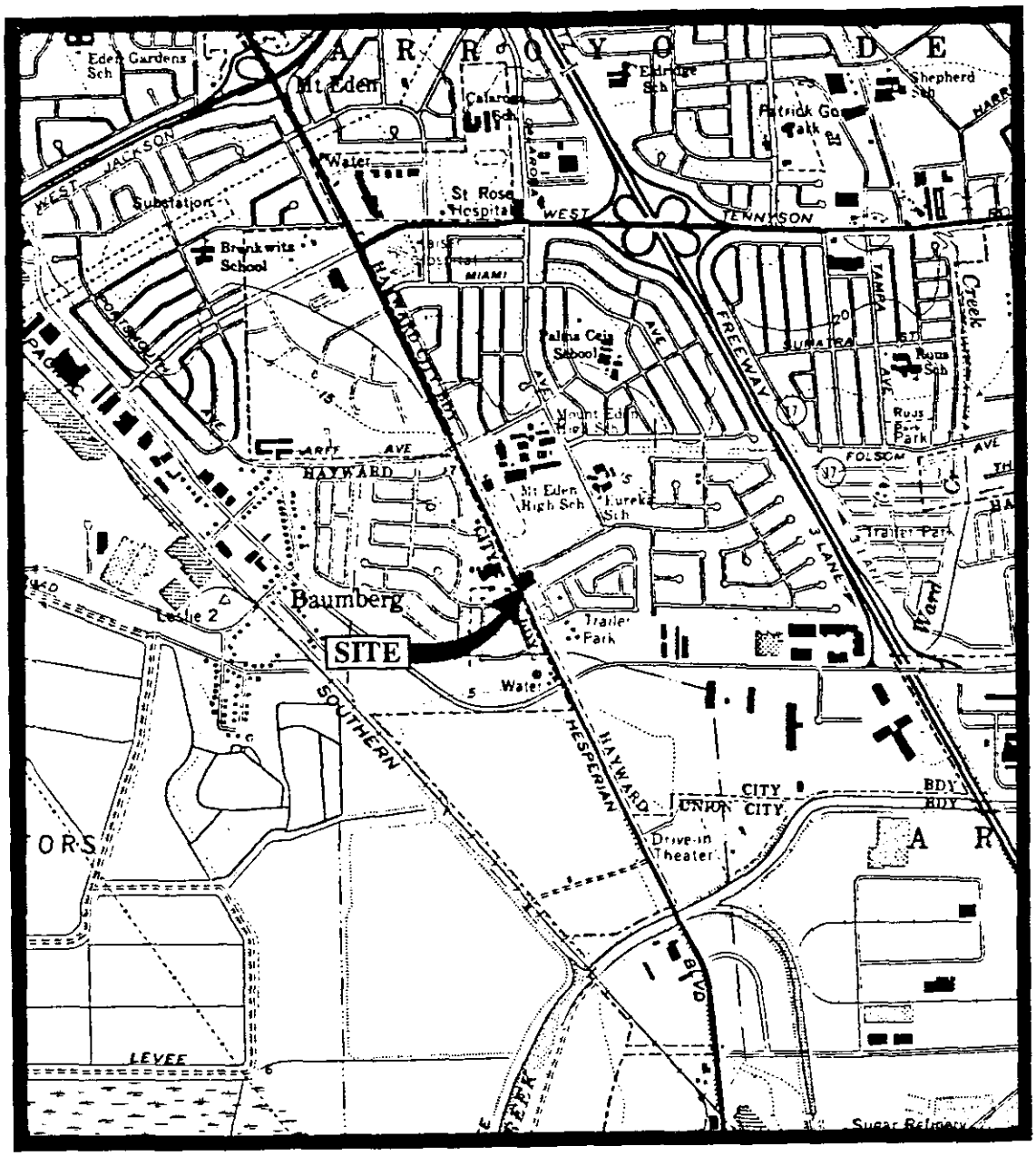
-- Indicates that analysis was not performed.

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 February 7, 1994, were provided by Kaprealian Engineering, Inc.

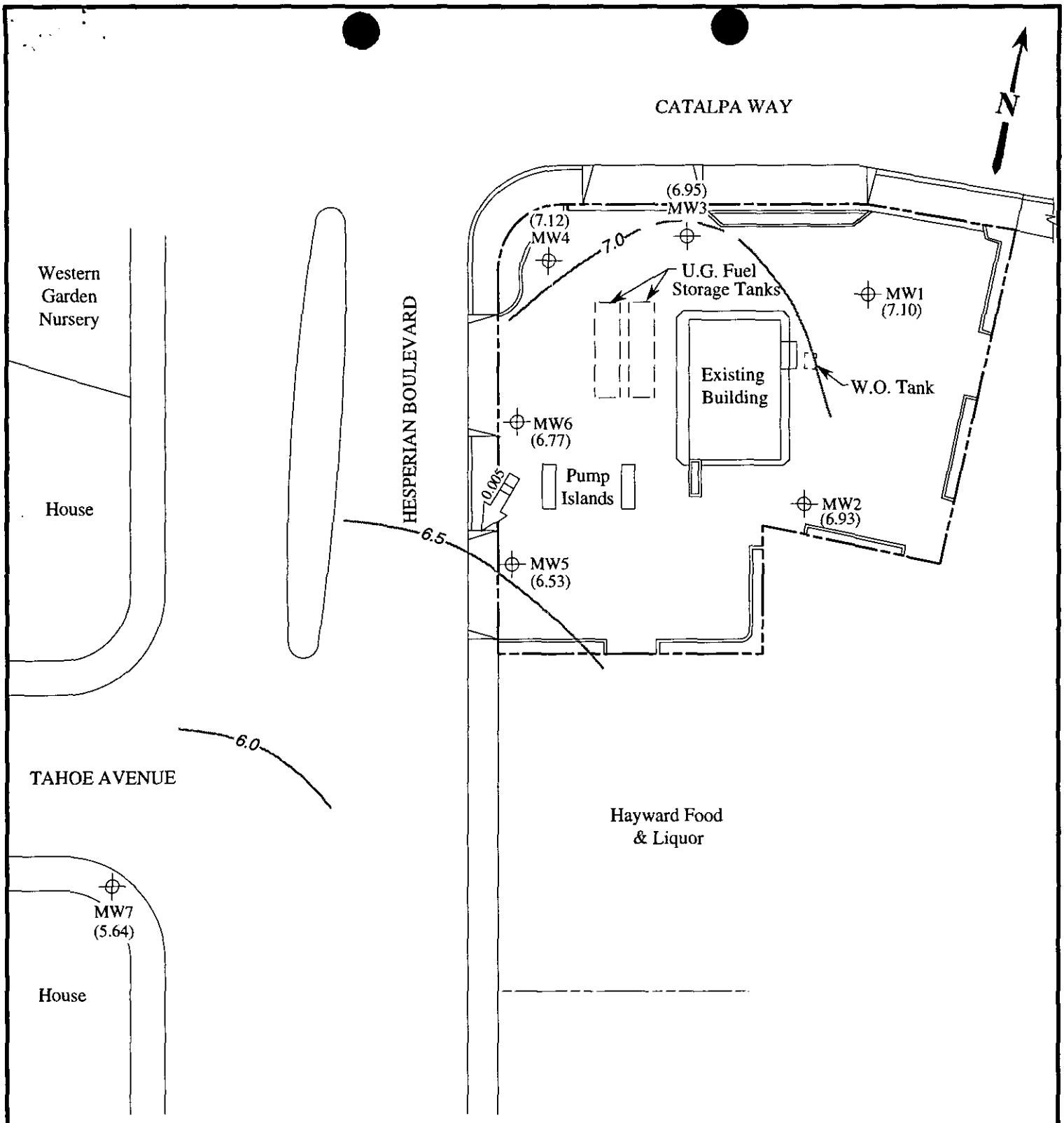


Base modified from 7.5 minute U.S.G.S.
Hayward & Newark Quadrangles
(both photorevised 1980)

0 2000 4000

Approx. scale feet

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #5487** **28250 HESPERIAN BOULEVARD** **HAYWARD, CALIFORNIA**	**LOCATION MAP**



LEGEND

- Monitoring 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 40 80

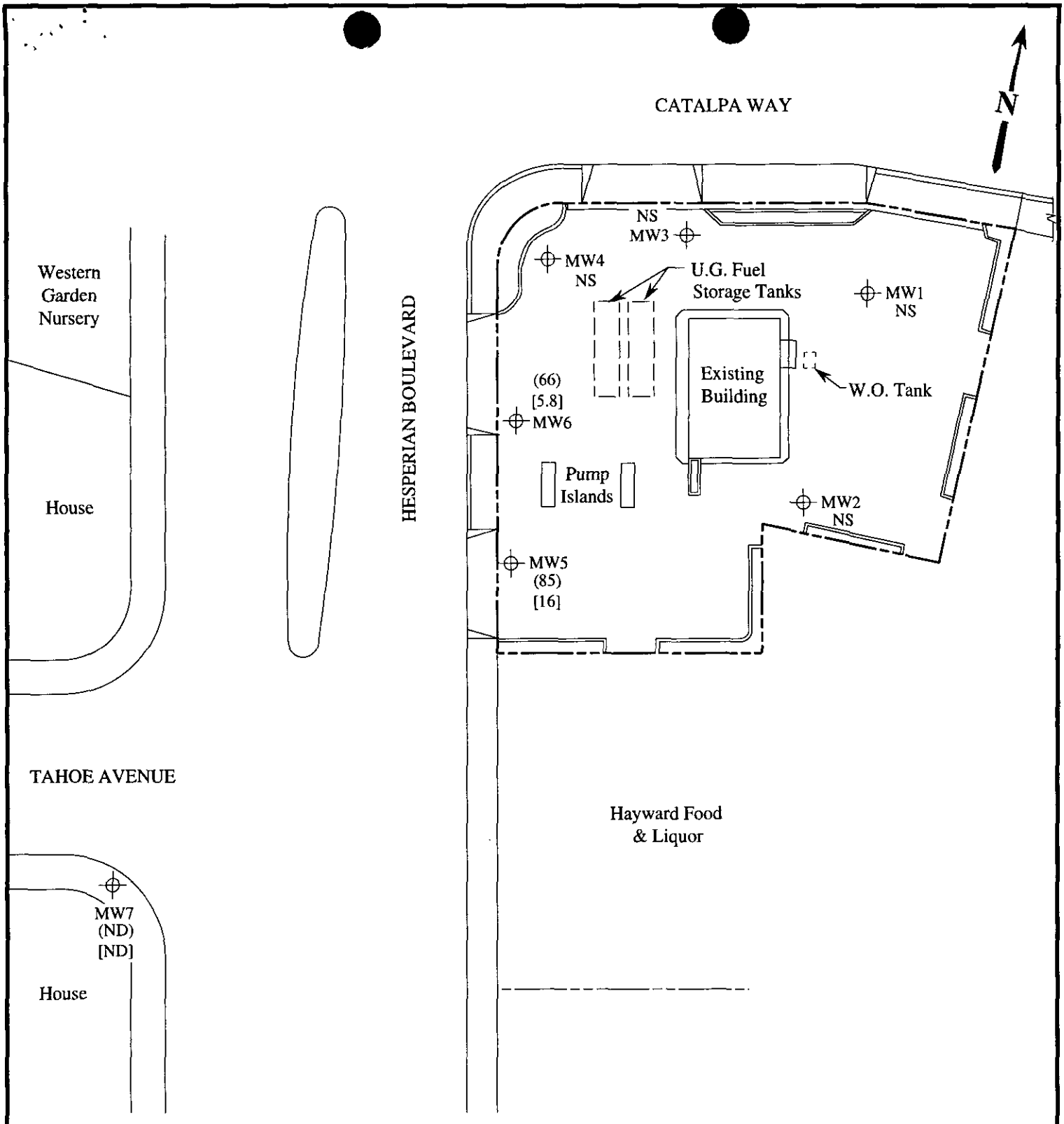
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE FEBRUARY 7, 1997 MONITORING EVENT

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #5487
28250 HESPERIAN BOULEVARD
HAYWARD, CALIFORNIA

FIGURE
1



LEGEND

- ⊕ Monitoring well
- ( ) Concentration of TPH as gasoline in µg/L
- [ ] Concentration of benzene in µg/L
- ND Non-detectable, NS Not sampled

0 40 80

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON FEBRUARY 7, 1997

MPDS SERVICES, INCORPORATED

UNOCAL SERVICE STATION #5487
28250 HESPERIAN BOULEVARD
HAYWARD, 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 #5487, 28250 Hesperian Blvd.	Sampled:	Feb 7, 1997
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water Hayward	Received:	Feb 7, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Feb 25, 1997
Attention: Jarrel Crider	First Sample #:	702-0771		

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	MTBE µg/L
702-0771	MW-5	85	16	0.56	1.7	3.8	250
702-0772	MW-6	66	5.8	1.2	2.1	6.6	450
702-0773	MW-7	ND	ND	ND	ND	ND	ND
Detection Limits:		**50**	**0.50**	**0.50**	**0.50**	**0.50**	**5.0**

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

7020771.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 #5487, 28250 Hesperian Blvd.	Sampled:	Feb 7, 1997
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Hayward Received:	Feb 7, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Feb 25, 1997
Attention: Jarrel Crider	First Sample #:	702-0771		

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
702-0771	MW-5	Gasoline	1.0	2/19/97	HP-4	100
702-0772	MW-6	Gasoline	1.0	2/19/97	HP-4	100
702-0773	MW-7	--	1.0	2/19/97	HP-4	96

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

Client Project ID: Unocal #5487, 28250 Hesperian Blvd. Hayward
Matrix: Liquid
QC Sample Group: 7020771-773
Reported: Feb 27, 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#:	7020773	7020773	7020773	7020773
Date Prepared:	2/19/97	2/19/97	2/19/97	2/19/97
Date Analyzed:	2/19/97	2/19/97	2/19/97	2/19/97
Instrument I.D.#:	HP4	HP4	HP4	HP4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	90	90	85	90
Matrix Spike Duplicate % Recovery:	90	90	85	90
Relative % Difference:	0.0	0.0	0.0	0.0
LCS Batch#:	4LCS021997	4LCS021997	4LCS021997	4LCS021997
Date Prepared:	2/19/97	2/19/97	2/19/97	2/19/97
Date Analyzed:	2/19/97	2/19/97	2/19/97	2/19/97
Instrument I.D.#:	HP4	HP4	HP4	HP4
LCS % Recovery:	90	90	90	90
% 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.

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

97 02438

SAMPLER: Karthes Tashjian

WITNESSING AGENCY:

UNOCAL S/S # 5487 CITY: Hayward

ADDRESS: 28250 Hesperian Blvd.

ANALYSES REQUESTED

TURN AROUND TIME: Regular

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPHG-BTEX	MTBE							REMARKS
MW 5	2/7/97	1:30 PM	X	X		2 VOAs	well	X	X		7020771		A-B			MTBE DETECTION LIMIT 5 ppb.
MW 6	"	2:05 PM	X	X		"	"	X	X		7020772					
MW 7	"	12:50 PM	X	X		"	"	X	X		7020773					

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
(SIGNATURE) Karthes Tashjian	2/7/97 2:45 pm	(SIGNATURE)
(SIGNATURE)	2/10/97 800	(SIGNATURE)
(SIGNATURE)	2-10 1640	(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: Seq. DATE: 2/7/97

Please review and return form BY FAX within 15 days of this report to:
MPDS Services, Inc., (510) 689-1918.

RECEIVED
MAR 13 1997

REPORT: MPDS-UN5487-10

DATE SENT: MARCH 12, 1997 **RETURN BY:** MARCH 27, 1997

UNOCAL SS #	ADDRESS	CITY
#5487	28250 HESPERIAN BLVD	HAYWARD

☐ No change to current monitoring/sampling frequency or analyses.

☐ Change in monitoring schedule. Specify change: _____

☐ Change in sampling schedule. Specify change: _____

☐ Change in analyses requested. Specify change: _____

☐ Comments: _____

☑ I authorize release of this report to the proper agencies and individuals.

☐ Please hold this report until further notice.

76 Products Co. Project Professional: Ms. Tina R. Berry

Signature: Tina Berry **Date:** 4/1/97

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