



GeoStrategies Inc.

QUARTERLY MONITORING REPORT

UNOCAL Service Station No. 5760
376 Lewelling Boulevard
San Lorenzo, California

780901-12

October 2, 1992



GeoStrategies Inc.

2140 WEST WINTON AVENUE
HAYWARD, CALIFORNIA 94545

(510) 352-4800

October 2, 1992

Unocal Corporation
P.O. Box 5155
San Ramon, California 94583

Attn: Ms. Penny L. Silzer

Re: QUARTERLY MONITORING REPORT
UNOCAL Service Station No. 5760
376 Lewelling Boulevard
San Lorenzo, California

Ms. Silzer:

This Quarterly Monitoring Report has been prepared by GeoStrategies Inc. (GSI) and presents the results of the 1992 third quarter sampling for the above referenced site (Plate 1).

There are currently eight monitoring wells at the site: Wells U-1 through U-8 (Plate 2). These wells were installed in 1988, 1990 and 1992 by Woodward-Clyde Consultants and GSI.

CURRENT QUARTER SAMPLING RESULTS

Depth to water-level measurements were obtained in each monitoring well on August 6, 1992. Static ground-water levels were measured from the surveyed top of the well box and recorded to the nearest ± 0.01 foot. Water-level elevations were referenced to Mean Sea Level (MSL) datum and are presented in Table 1. Water-level data were used to construct a quarterly potentiometric map (Plate 3). Shallow ground-water flow direction is to the southwest with an approximate hydraulic gradient of 0.004.

Each well was checked for the presence of floating product. Floating product was observed in Well U-1 at 0.01 feet in measured thickness. The field data sheets are included in Appendix A.

GeoStrategies Inc.

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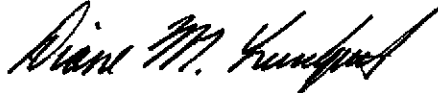
Ground-water samples were collected on August 6, 1992. Samples were analyzed for Total Petroleum Hydrocarbons calculated as Gasoline (TPH-Gasoline), according to EPA Method 8015 (Modified), and for Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) according to EPA Method 8020. The ground-water samples were analyzed by National Environmental Testing (NET) Pacific, Inc., a California State-certified laboratory located in Santa Rosa, California. A trip blank was also analyzed for TPH-Gasoline and for BTEX according to the same EPA methods. Detectable concentrations of BTEX were reported in the trip blank. This is attributed to laboratory error and is described in the laboratory analytical report. The laboratory analytical report and Chain-of-Custody form are included in Appendix B. These data are summarized and included with the historical chemical analytical data presented in Table 2. A chemical concentration map for benzene is presented on Plate 4. Groundwater sampling field methods and procedures are included in a previous GSI report dated May 19, 1992.

If you have any questions, please call.

GeoStrategies Inc. by,



Ellen C. Fostersmith
Geologist



Diane M. Lundquist, P.E.
Senior Engineer
C 46725



ECF/DML/rmt

GeoStrategies Inc.

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Plate 1. Vicinity Map
Plate 2. Site Plan
Plate 3. Potentiometric Map
Plate 4. Benzene Isoconcentration Map

Appendix A: Field Data Sheets
Appendix B: Laboratory Analytical Report and Chain-of-Custody Form

QC Review _____

TABLE 1

FIELD MONITORING DATA

WELL NO.	MONITORING DATE	CASING DIA. (IN)	TOTAL WELL DEPTH (FT)	WELL ELEV. (FT)	DEPTH TO WATER (FT)	PRODUCT THICKNESS (FT)	STATIC WATER ELEV. (FT)	PURGED WELL VOLUMES	pH	TEMPERATURE (F)	CONDUCTIVITY (μ MHOS/CM)
U-1	06-Aug-92	3	30.5	40.51	19.04	0.01	21.48	----	----	----	----
U-2	06-Aug-92	3	30.0	41.62	19.90	----	21.72	5	7.14	64.9	755
U-3	06-Aug-92	3	25.0	39.64	18.28	----	21.36	4	7.01	68.7	1120
U-4	06-Aug-92	3	28.0	40.53	19.10	----	21.43	5	7.07	68.5	1043
U-5	06-Aug-92	2	30.0	39.52	18.31	----	21.21	5	7.10	6.82	1104
U-6	06-Aug-92	2	30.0	37.80	16.71	----	21.09	5	6.99	67.5	950
U-7	06-Aug-92	2	35.0	37.37	16.34	----	21.03	5	7.33	64.7	857
U-8	06-Aug-92	2	30.0	38.81	17.53	----	21.28	5	7.36	65.2	866

- Notes: 1. Static water elevations referenced to Mean Sea Level (MSL).
 2. Physical parameter measurements represent stabilized values.
 3. Static water levels corrected for floating product (conversion factor = 0.80)
 4. Well U-1 contains an autobailer device for free product collection.

TABLE 2

HISTORICAL GROUND-WATER QUALITY DATABASE

SAMPLE DATE	SAMPLE POINT	TPH-G (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (PPB)	
09-Feb-88	U-1	93000.	3600.	11000.	----	20000.	
20-Mar-90	U-1	36000.	2100.	5500.	1900.	9300.	
05-Jun-90	U-1	46000.	2300.	5500.	2500.	11000.	
24-Aug-90	U-1	27000.	1200.	1800.	1400.	5500.	
10-Jan-92	U-1	PRODUCT SKIMMER INSTALLED IN WELL					
06-Aug-92	U-1	FLOATING PRODUCT 0.01 FT.					
23-Aug-90	U-2	<50.	<0.5	<0.5	<0.5	<0.5	
05-Dec-90	U-2	<50	<0.3	<0.3	<0.3	<0.3	
04-Mar-91	U-2	<50.	<0.5	0.9	<0.5	2.6	
03-Jun-91	U-2	<30	<0.30	<0.30	<0.30	<0.30	
19-Sep-91	U-2	<30	<0.30	<0.30	<0.30	<0.30	
04-Dec-91	U-2	<30	<0.30	<0.30	<0.30	<0.30	
05-Mar-92	U-2	<30	<0.30	0.36	<0.30	<0.30	
07-Apr-92	U-2	<50	<0.5	<0.5	<0.5	<0.5	
06-Aug-92	U-2	<50	<0.5	<0.5	<0.5	<0.5	
23-Aug-90	U-3	110000.	4400.	13000.	2800.	17000.	
05-Dec-90	U-3*	69000	1900	3500	1600	9800	
18-Jan-91	U-3	51000.	1700.	3100.	1500.	7500.	
04-Mar-91	U-3	84000.	1400.	10000.	2900.	17000.	
03-Jun-91	U-3	130000	5800	19000	4600	24000	
19-Sep-91	U-3	61000	3300	9700	2800	15000	
04-Dec-91	U-3	75000	2500	6100	1900	11000	
05-Mar-92	U-3	160000	5300	15000	5400	26000	
07-Apr-92	U-3	97000	6100	16000	5400	28000	
06-Aug-92	U-3	140,000	5,100	13,000	5,000	23,000	
23-Aug-90	U-4	<50.	<0.5	1.0	<0.5	1.8	
05-Dec-90	U-4*	<50	<0.3	<0.3	<0.3	<0.3	
18-Jan-91	U-4	<50.	<0.5	<0.5	<0.5	<0.5	

TABLE 2

HISTORICAL GROUND-WATER QUALITY DATABASE

SAMPLE DATE	SAMPLE POINT	TPH-G (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (PPB)
04-Mar-91	U-4	<50.	<0.5	<0.5	<0.5	<0.5
03-Jun-91	U-4	<30	<0.30	<0.30	<0.30	<0.30
19-Sep-91	U-4	<30	<0.30	<0.30	<0.30	<0.30
04-Dec-91	U-4	<30	<0.30	<0.30	<0.30	<0.30
05-Mar-92	U-4	<30	<0.30	<0.30	<0.30	<0.30
07-Apr-92	U-4	<50	<0.5	<0.5	<0.5	<0.5
06-Aug-92	U-4	<50	<0.5	<0.5	<0.5	<0.5
07-Apr-92	U-5	<50	<0.5	<0.5	<0.5	<0.5
06-Aug-92	U-5	<50	<0.5	<0.5	<0.5	<0.5
07-Apr-92	U-6	6600	90	<0.5	820	1200
06-Aug-92	U-6	9200	160	<0.5	360	150
07-Apr-92	U-7	<50	<0.5	<0.5	<0.5	<0.5
06-Aug-92	U-7	<50	<0.5	<0.5	<0.5	<0.5
07-Apr-92	U-8	<50	<0.5	<0.5	<0.5	<0.5
06-Aug-92	U-8	<50	<0.5	<0.5	<0.5	<0.5

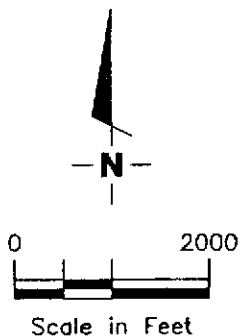
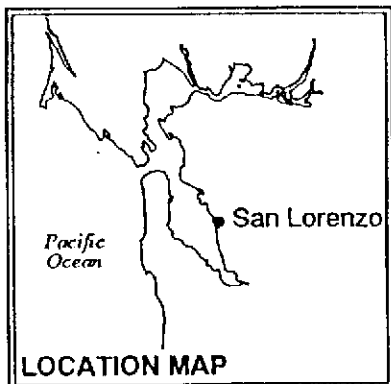
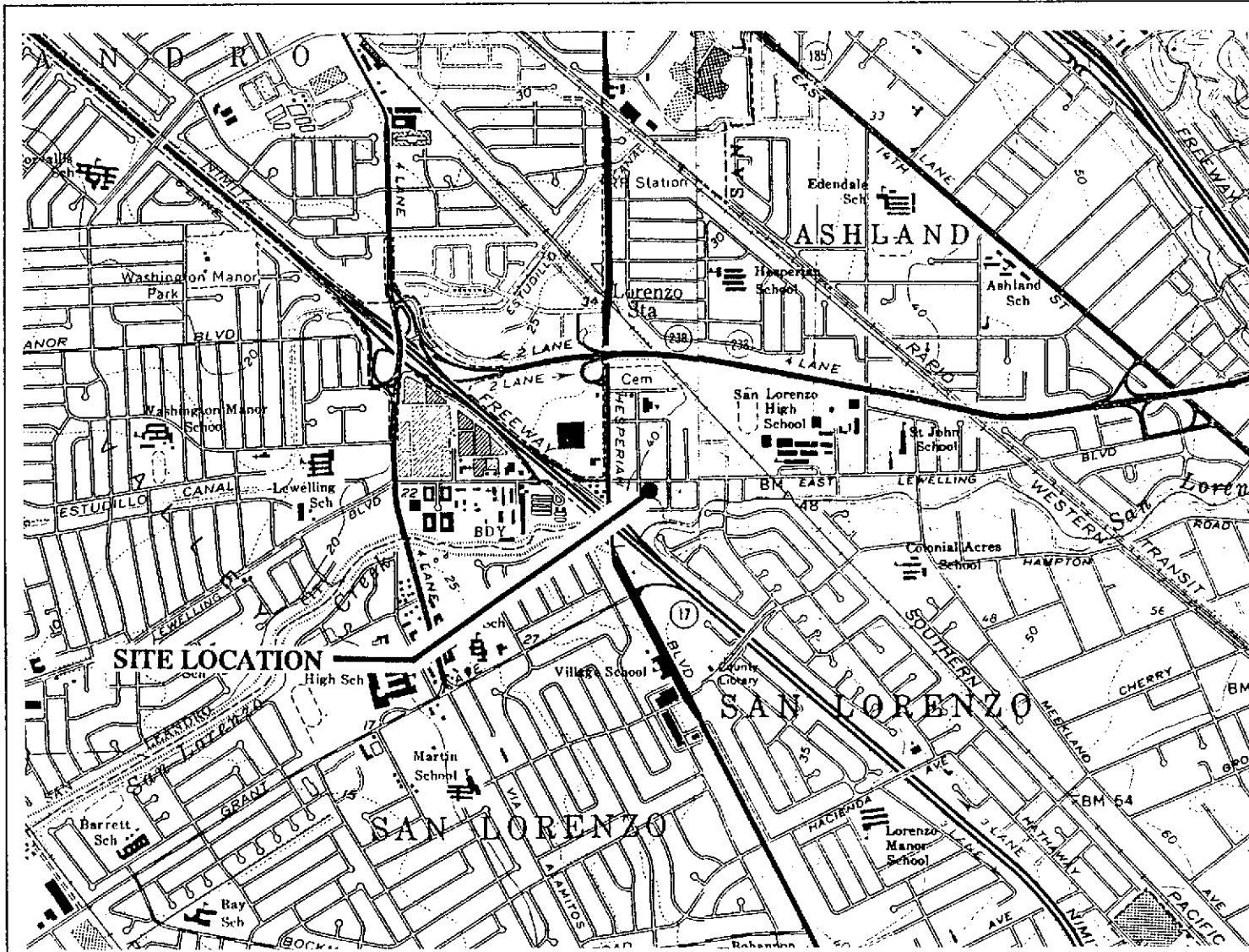
TPH-G = Total Petroleum Hydrocarbons calculated as Gasoline

PPB = Parts Per Billion

NOTE: 1. All data shown as <X are reported as ND (none detected).

2. *Analytical data for Wells U-3 and U-4 have been changed to reflect the correct values.

3. Ethylbenzene and Xylenes were combined prior to March 1990.



Base Map: USGS Topographic Map



GeoStrategies Inc.

VICINITY MAP
 UNOCAL Service Station #5760
 376 Lewelling Boulevard
 San Lorenzo, California

PLATE

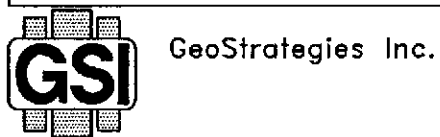
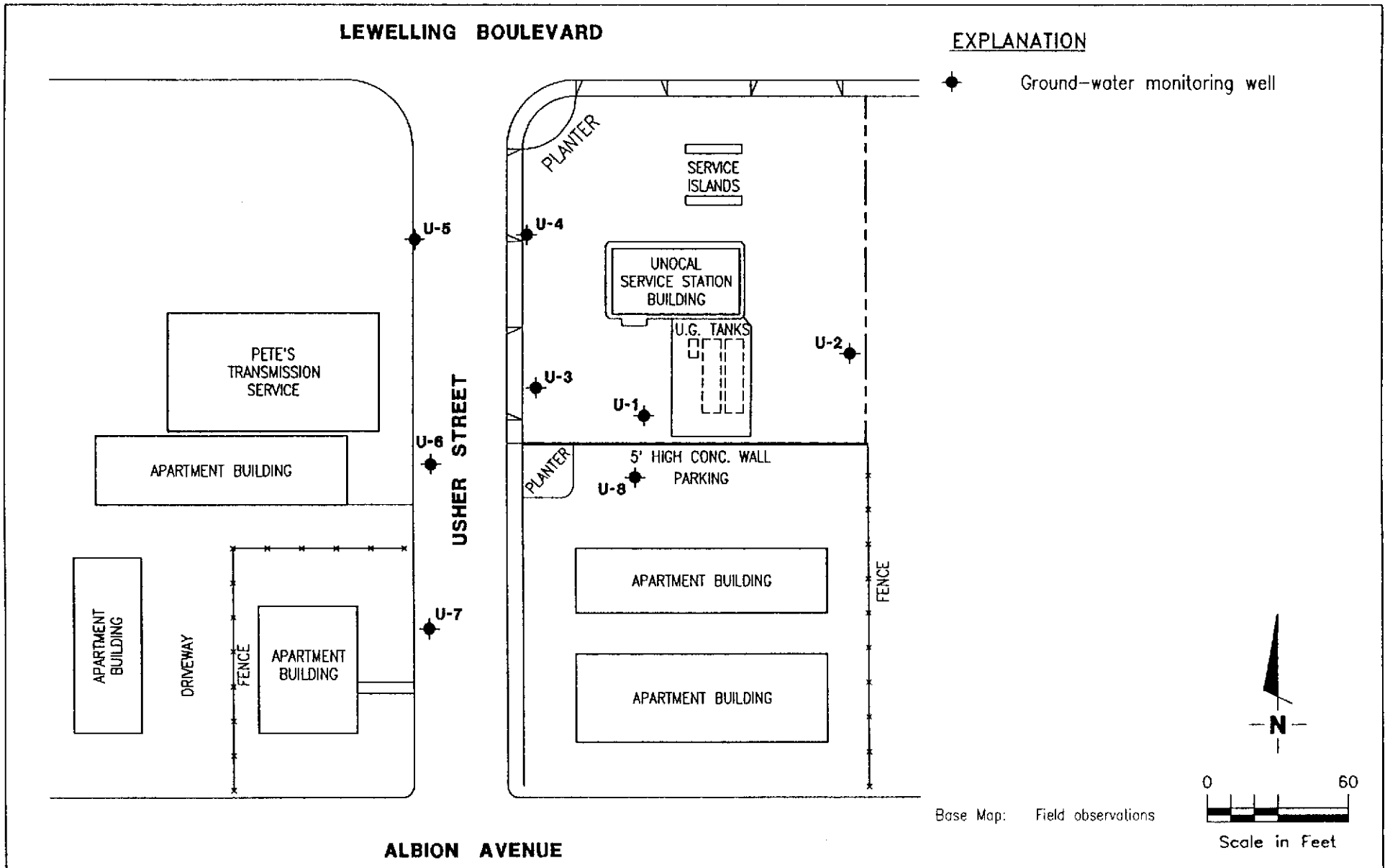
1

JOB NUMBER
7809

REVIEWED BY
MLA

DATE
2/91

REVISED DATE



JOB NUMBER
7809

REVIEWED BY
[Signature]

EXTENDED SITE PLAN
UNOCAL Service Station #5760
376 Lewelling Boulevard
San Lorenzo, California

DATE
5/92

REVISED DATE

PLATE

2


LEWELLING BOULEVARD

EXPLANATION

- ◆ Ground-water monitoring well
- - - 99.99 Ground-water elevation contour. Approximate Gradient = 0.004
- 99.99 Ground-water elevation in feet referenced to Mean Sea Level (MSL) measured on August 6, 1992

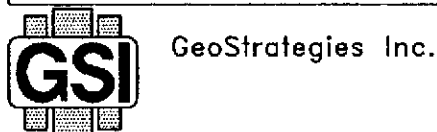
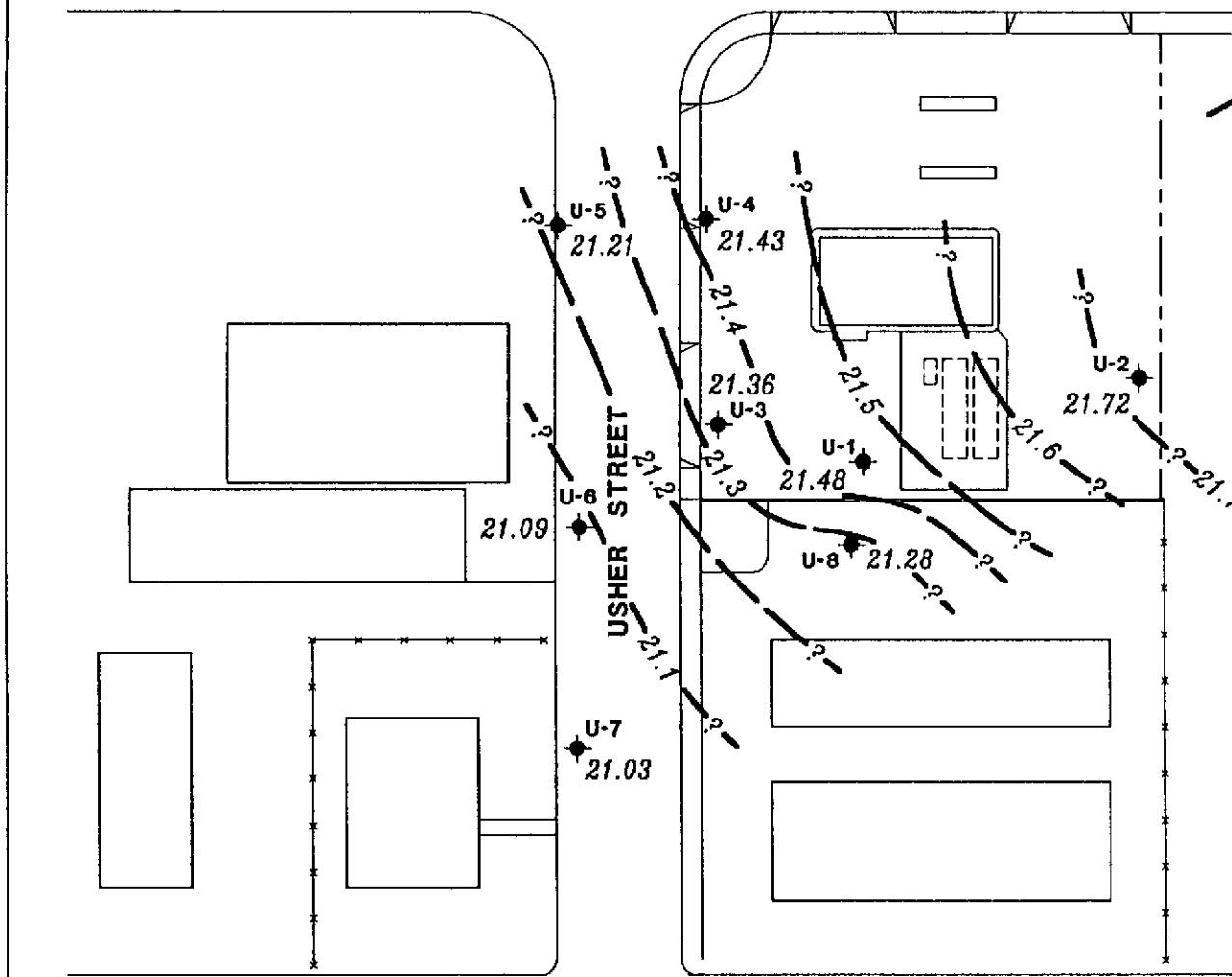
- NOTES:
1. Contours may be influenced by irrigation practices and/or site construction activities.
 2. Well U-1 contains a product skimmer.

Approximate Ground-water Flow Direction




Base Map: Field observations

ALBION AVENUE



POTENTIOMETRIC MAP
 UNOCAL Service Station #5760
 376 Lewelling Boulevard
 San Lorenzo, California

PLATE
3

JOB NUMBER
 780901-12

REVIEWED BY
 [Signature]

DATE
 10/92

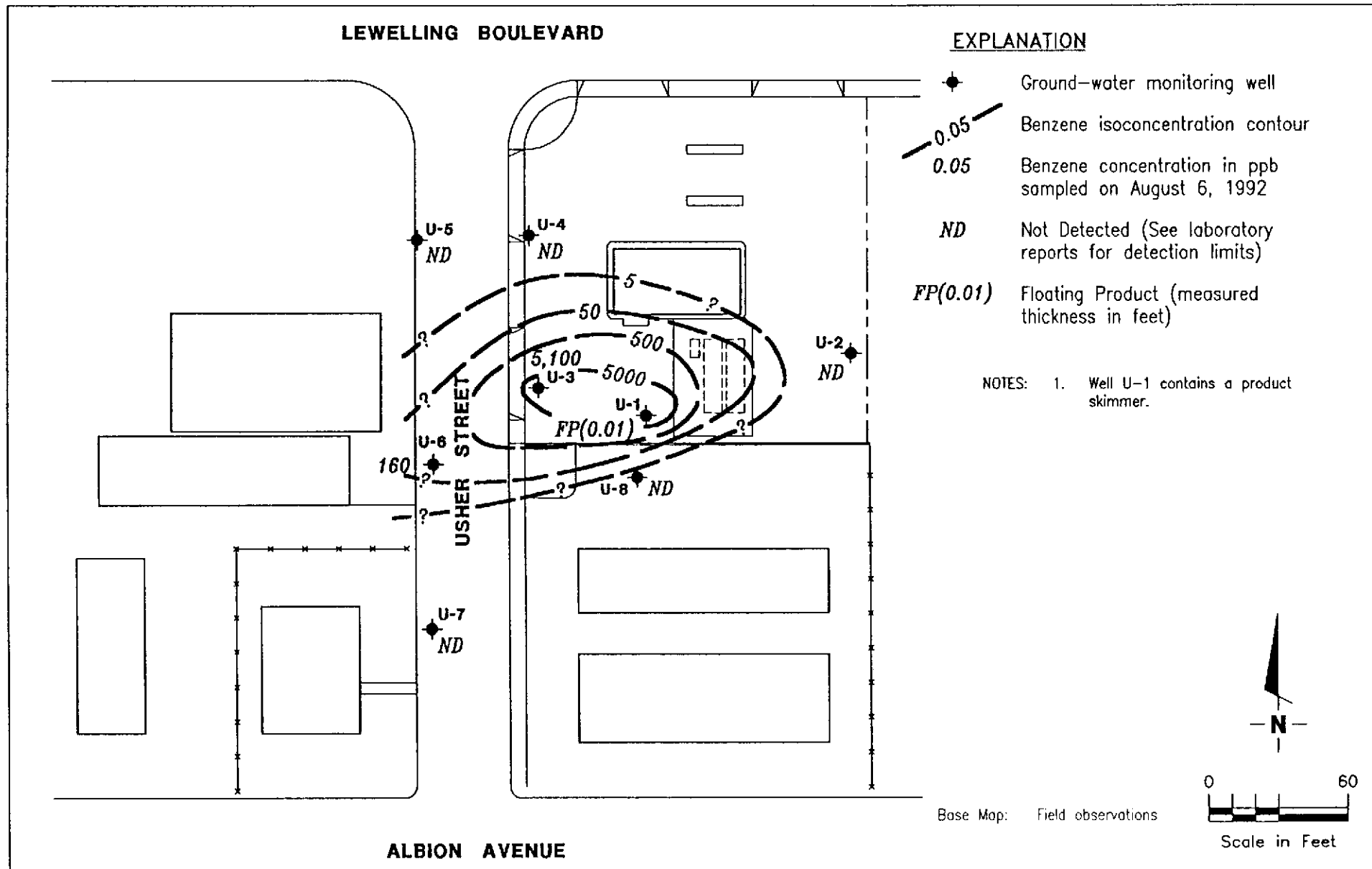
REVISED DATE

LEWELLING BOULEVARD

EXPLANATION

- ◆ Ground-water monitoring well
- 0.05- Benzene isoconcentration contour
- 0.05 Benzene concentration in ppb sampled on August 6, 1992
- ND Not Detected (See laboratory reports for detection limits)
- FP(0.01) Floating Product (measured thickness in feet)

NOTES: 1. Well U-1 contains a product skimmer.



Base Map: Field observations



GeoStrategies Inc.

BENZENE ISOCONCENTRATION MAP
 UNOCAL Service Station #5760
 376 Lewelling Boulevard
 San Lorenzo, California

PLATE

4

JOB NUMBER
780901-12

REVIEWED BY
em

DATE
10/92

REVISED DATE

GeoStrategies Inc.

APPENDIX A

FIELD DATA SHEETS

GETTLER-RYAN INC.

General and Environmental Contractors

WELL SAMPLING FIELD DATA SHEET

COMPANY Unocal JOB # 3809.01
 LOCATION 376 Lewelling DATE 8-6-92
 CITY San Lorenzo TIME _____

Well ID. U-2 Well Condition OK
 Well Diameter 2-3 in. Hydrocarbon Thickness _____ ft.
 Total Depth 30.0 ft.
 Depth to Liquid- 19.90 ft.
 (# of casing volumes) 5 x 10.10 x (VF) .17 - .38 = (Estimated Purge Volume) 19.2 gal.
 (3.8)
 Purging Equipment DD
 Sampling Equipment Bailer

Volume Factor (VF)	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38	8" = 2.80	
	4" = 0.66	10" = 4.10	

Starting Time 1107 Purging Flow Rate 2 gpm.
 (Estimated Purge Volume) 19.2 gal. / (Purging Flow Rate) 2 gpm. = (Anticipated Purging Time) 9.6 min.

Time	pH	Conductivity	Temperature	Volume
<u>1108</u>	<u>7.12</u>	<u>880</u>	<u>66.4</u>	<u>2 gal</u>
<u>1111</u>	<u>7.17</u>	<u>755</u>	<u>65.4</u>	<u>8</u>
<u>1116</u>	<u>7.18</u>	<u>762</u>	<u>65.7</u>	<u>18</u>
<u>1122</u>	<u>7.14</u>	<u>755</u>	<u>64.9</u>	<u>19</u>

Did well dewater? No If yes, time _____ Volume _____
 Sampling Time 1122 Weather Conditions Plc
 Analysis gas (BTXE) Bottles Used 6 3x40ml
 Chain of Custody Number _____

COMMENTS Duplicate
 FOREMAN _____ ASSISTANT _____

GETTLER-RYAN INC.

General and Environmental Contractors

WELL SAMPLING FIELD DATA SHEET

COMPANY Unocal JOB # 3809.01
 LOCATION 376 Lewelling DATE 8-6-92
 CITY San Lorenzo TIME _____

Well ID. U-5 Well Condition OK
 Well Diameter (2)-3 in. Hydrocarbon Thickness _____ ft.
 Total Depth 30.0 ft.
 Depth to Liquid- 18.31 ft.

Volume Factor (VF)	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38	8" = 2.80	
	4" = 0.66	10" = 4.10	

 (# of casing volumes) 5 x 11.69 x(VF) (1.7) - .38 = (Estimated Purge Volume) 9.9 gal.
 (2)
 Purging Equipment DD
 Sampling Equipment Bailer

Starting Time 959 Purging Flow Rate 2 gpm.
 (Estimated Purge Volume) 9.9 gal. / (Purging Flow Rate) 2 gpm. = (Anticipated Purging Time) 5 min.

Time	pH	Conductivity	Temperature	Volume
<u>1000</u>	<u>7.26</u>	<u>998</u>	<u>67.4</u>	<u>2 gal</u>
<u>1002</u>	<u>7.25</u>	<u>1048</u>	<u>67.7</u>	<u>6</u>
<u>1004</u>	<u>7.24</u>	<u>1072</u>	<u>68.5</u>	<u>10</u>
<u>1010</u>	<u>7.10</u>	<u>1104</u>	<u>68.2</u>	<u>11</u>

Did well dewater? NO If yes, time _____ Volume _____
 Sampling Time 1010 Weather Conditions PLC
 Analysis gas (BTXE) Bottles Used 3x40ml
 Chain of Custody Number _____

COMMENTS _____

FOREMAN [Signature] ASSISTANT _____

GETTLER-RYAN INC.

General and Environmental Contractors

WELL SAMPLING FIELD DATA SHEET

COMPANY Unocal JOB # 3809.01
 LOCATION 376 Levelling DATE 8-6-92
 CITY San Lorenzo TIME _____

Well ID. U-6 Well Condition OK
 Well Diameter (2)-3 in. Hydrocarbon Thickness _____ ft.
 Total Depth 30.0 ft.
 Depth to Liquid- 16.71 ft.
 (# of casing volumes) 5 x 13.29 x(VF) (17) - .38 = (Estimated Purge Volume) 11.3 gal. (2.3)
 Purging Equipment DD
 Sampling Equipment Bailer

Volume Factor (VF)	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38	8" = 2.60	
	4" = 0.66	10" = 4.10	

Starting Time 921 Purging Flow Rate 2 gpm.
 (Estimated Purge Volume) 11.3 gal. / (Purging Flow Rate) 2 gpm. = (Anticipated Purging Time) _____ min.

Time	pH	Conductivity	Temperature	Volume
922	7.20	1012	66.5	2 gal gal
924	7.15	970	67.7	6
926	7.05	959	67.8	10
933	6.99	950	67.5	11

Did well dewater? No If yes, time _____ Volume _____
 Sampling Time 933 Weather Conditions Plc
 Analysis gas (BTXE) Bottles Used 3x40ml
 Chain of Custody Number _____

COMMENTS _____
 FOREMAN [Signature] ASSISTANT _____

GETTLER-RYAN INC.

General and Environmental Contractors

WELL SAMPLING FIELD DATA SHEET

COMPANY Unocal JOB # 3809.01
 LOCATION 376 Lewelling DATE 8-6-92
 CITY San Lorenzo TIME _____

Well ID. U-7 Well Condition OK
 Well Diameter 2-3 in. Hydrocarbon Thickness _____ ft.
 Total Depth 35.0 ft.
 Depth to Liquid- 16.34 ft.
 (# of casing volumes) 5 x 18.66 x (VF) .17 = (Estimated Purge Volume) 15.9 gal. (3.2)
 Purging Equipment DD
 Sampling Equipment Bailer

Volume Factor (VF)	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38	8" = 2.60	
	4" = 0.66	10" = 4.10	

Starting Time 900 Purging Flow Rate 2 gpm.
 (Estimated Purge Volume) 15.9 gal. / (Purging Flow Rate) 2 gpm. = (Anticipated Purging Time) 8 min.

Time	pH	Conductivity	Temperature	Volume
<u>901</u>	<u>7.77</u>	<u>864</u>	<u>64.6</u>	<u>2 gal</u>
<u>904</u>	<u>7.71</u>	<u>866</u>	<u>64.7</u>	<u>8</u>
<u>907</u>	<u>7.47</u>	<u>858</u>	<u>64.6</u>	<u>14</u>
<u>912</u>	<u>7.33</u>	<u>857</u>	<u>64.7</u>	<u>15</u> ↓

Did well dewater? No If yes, time _____ Volume _____
 Sampling Time 912 Weather Conditions Plc
 Analysis gas (BTXE) Bottles Used 3x40ml
 Chain of Custody Number _____

COMMENTS _____
 FOREMAN _____ ASSISTANT _____

GETTLER-RYAN INC.

General and Environmental Contractors

WELL SAMPLING FIELD DATA SHEET

COMPANY Unocal JOB # 3809.01
 LOCATION 376 Lewelling DATE 8-6-92
 CITY San Lorenzo TIME _____

Well ID. U-8 Well Condition OK
 Well Diameter (2)-3 in. Hydrocarbon Thickness _____ ft.
 Total Depth 300 ft.
 Depth to Liquid- 17.53 ft.

Volume Factor (VF)	2" = 0.17	6" = 1.50	12" = 5.80
	3" = 0.38	8" = 2.80	
	4" = 0.66	10" = 4.10	

 (# of casing volumes) 5 x 12.47 x (VF) (.17) - .38 = (Estimated Purge Volume) 10.6 gal.
 (2.1)
 Purging Equipment DD
 Sampling Equipment Bailer

Starting Time 940 Purging Flow Rate 2 gpm.
 (Estimated Purge Volume) 10.6 gal. / (Purging Flow Rate) 2 gpm. = (Anticipated Purging Time) 5.3 min.

Time	pH	Conductivity	Temperature	Volume
<u>941</u>	<u>7.45</u>	<u>862</u>	<u>65.1</u>	<u>2 gal</u>
<u>943</u>	<u>7.44</u>	<u>861</u>	<u>65.3</u>	<u>6</u>
<u>945</u>	<u>7.38</u>	<u>864</u>	<u>65.2</u>	<u>10</u>
<u>952</u>	<u>7.36</u>	<u>866</u>	<u>65.2</u>	<u>11</u>

Did well dewater? NO If yes, time _____ Volume _____
 Sampling Time 952 Weather Conditions PLC
 Analysis gas (BTXE) Bottles Used 3x40ml
 Chain of Custody Number _____

COMMENTS _____
 FOREMAN [Signature] ASSISTANT _____

GeoStrategies Inc.

APPENDIX B
LABORATORY ANALYTICAL REPORT
AND
CHAIN-OF-CUSTODY FORM



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

FILED
AUG 26 1992
FBI - S.F.

John Werfal
Gettler-Ryan Inc.
2150 W. Winton Avenue
Hayward, CA 94545


GETTLER-RYAN INC.
Date: 08/26/1992
NET Client Acct No: CO67900
NET Pacific Job No: 92.4389
Received: 08/10/1992

Client Reference Information

Co: Unocal No. 5760 376 Lewelling No.3809

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:


Jules Skamarack
Laboratory Manager

JS:rct
Enclosure(s)



Client No: 67900
 Client Name: Gettler-Ryan Inc.
 NET Job No: 92.4389

Date: 08/26/1992

Page: 2

Ref: Co: Unocal No. 5760 376 Lewelling No.3809

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	U-2	U-3	Units
			08/06/1992 11:22 132609	08/06/1992 11:28 132610	
TPH (Gas/BTXE,Liquid)			--	--	
METHOD 5030 (GC,FID)					
DATE ANALYZED			08-14-92	08-15-92	
DILUTION FACTOR*			1	100	
as Gasoline	5030	50	ND	140,000	ug/L
METHOD 8020 (GC,Liquid)			--	--	
DATE ANALYZED			08-14-92	08-17-92	
DILUTION FACTOR*			1	500	
Benzene	8020	0.5	ND	5,100	ug/L
Ethylbenzene	8020	0.5	ND	5,000	ug/L
Toluene	8020	0.5	ND	13,000	ug/L
Xylenes (Total)	8020	0.5	ND	23,000	ug/L
SURROGATE RESULTS			--	--	
Bromofluorobenzene	5030		93	89	% Rec.



Client No: 67900
 Client Name: Gettler-Ryan Inc.
 NET Job No: 92.4389

Date: 08/26/1992
 Page: 3

Ref: Co: Unocal No. 5760 376 Lewelling No.3809

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results		Units
			U-4	U-5	
			08/06/1992 10:33 132611	08/06/1992 10:10 132612	
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)			--	--	
DATE ANALYZED			08-14-92	08-14-92	
DILUTION FACTOR*			1	1	
as Gasoline	5030	50	ND	ND	ug/L
METHOD 8020 (GC,Liquid)			--	--	
DATE ANALYZED			08-14-92	08-14-92	
DILUTION FACTOR*			1	1	
Benzene	8020	0.5	ND	ND	ug/L
Ethylbenzene	8020	0.5	ND	ND	ug/L
Toluene	8020	0.5	ND	ND	ug/L
Xylenes (Total)	8020	0.5	ND	ND	ug/L
SURROGATE RESULTS			--	--	
Bromofluorobenzene	5030		91	87	% Rec.



Client No: 67900
 Client Name: Gettler-Ryan Inc.
 NET Job No: 92.4389

Date: 08/26/1992

Page: 4

Ref: Co: Unocal No. 5760 376 Lewelling No.3809

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	U-6	U-7	Units
			08/06/1992 09:33 132613	08/06/1992 09:12 132614	
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)			--	--	
DATE ANALYZED			08-15-92	08-14-92	
DILUTION FACTOR*			10	1	
as Gasoline	5030	50	9,200	ND	ug/L
METHOD 8020 (GC,Liquid)			--	--	
DATE ANALYZED			08-15-92	08-14-92	
DILUTION FACTOR*			10	1	
Benzene	8020	0.5	160	ND	ug/L
Ethylbenzene	8020	0.5	360	ND	ug/L
Toluene	8020	0.5	ND	ND	ug/L
Xylenes (Total)	8020	0.5	150	ND	ug/L
SURROGATE RESULTS			--	--	
Bromofluorobenzene	5030		108	95	% Rec.



Client No: 67900
 Client Name: Gettler-Ryan Inc.
 NET Job No: 92.4389

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Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	U-8	UD-2	Units
			08/06/1992 09:52 132615	132616	
TPH (Gas/BTXE,Liquid)			--	--	
METHOD 5030 (GC,FID)					
DATE ANALYZED			08-14-92	08-14-92	
DILUTION FACTOR*			1	1	
as Gasoline	5030	50	ND	ND	ug/L
METHOD 8020 (GC,Liquid)			--	--	
DATE ANALYZED			08-14-92	08-14-92	
DILUTION FACTOR*			1	1	
Benzene	8020	0.5	ND	ND	ug/L
Ethylbenzene	8020	0.5	ND	ND	ug/L
Toluene	8020	0.5	ND	ND	ug/L
Xylenes (Total)	8020	0.5	ND	ND	ug/L
SURROGATE RESULTS			--	--	
Bromofluorobenzene	5030		92	87	% Rec.



Client No: 67900
 Client Name: Gettler-Ryan Inc.
 NET Job No: 92.4389

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Descriptor, Lab No. and Results

Trip Blank

Parameter	Method	Reporting Limit	132617 **	Units
TPH (Gas/BTXE,Liquid)			--	
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			08-14-92	
DILUTION FACTOR*			1	
as Gasoline	5030	50	ND	ug/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			08-14-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	ND	ug/L
Ethylbenzene	8020	0.5	ND	ug/L
Toluene	8020	0.5	1.7	ug/L
Xylenes (Total)	8020	0.5	3.4	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		95	% Rec.

** Note: The contamination in the Trip Blank appears to be due to contamination from an unknown hydrocarbon source.



Client No: 67900
Client Name: Gettler-Ryan Inc.
NET Job No: 92.4389

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QUALITY CONTROL DATA

<u>Parameter</u>	<u>Reporting Limits</u>	<u>Units</u>	<u>Cal Verif Stand % Recovery</u>	<u>Blank Data</u>	<u>Spike % Recovery</u>	<u>Duplicate Spike % Recovery</u>	<u>RPD</u>
Gasoline	50	ug/L	100	ND	107	102	4.8
Benzene	0.5	ug/L	81	ND	106	101	4.8
Toluene	0.5	ug/L	88	ND	102	99	3.0
Gasoline	50	ug/L	111	ND	105	101	3.9
Benzene	0.5	ug/L	82	ND	96	94	2.1
Toluene	0.5	ug/L	94	ND	96	97	<1

COMMENT: Blank Results were ND on other analytes tested.



NET Pacific, Inc

KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- * : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
- ICVS : Initial Calibration Verification Standard (External Standard).
- mean : Average; sum of measurements divided by number of measurements.
- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference, $100 \text{ [Value 1 - Value 2] / mean value}$.
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

Gettler - Ryan Inc.

ENVIRONMENTAL DIVISION

1918 Chain of Custody

COMPANY Unocal # 5760

JOB NO. 8025

JOB LOCATION 376 Lowelling

CITY San Lorenzo

PHONE NO. ⁽⁵¹⁰⁾ 783-7500

AUTHORIZED F. Cline

DATE 8-6-92 P.O. NO. 3809.01

SAMPLE ID	NO. OF CONTAINERS	SAMPLE MATRIX	DATE/TIME SAMPLED	ANALYSIS REQUIRED	SAMPLE CONDITION LAB ID
U-2	3	H ₂ O	8-6-92 / 1122	THC (GC) BTXE	
U-3	↓	↓	↓ / 1128	↓	
U-4	↓	↓	↓ / 1033	↓	
U-5	↓	↓	↓ / 1010	↓	
U-6	↓	↓	↓ / 933	↓	
U-7	↓	↓	↓ / 912	↓	
U-8	↓	↓	↓ / 952	↓	
UD2	↓	↓	↓ / -	↓	
TB	1	↓	—	↓	

CUSTODY SEALED 8/7/92
E1900 MWJ

RELINQUISHED BY: [Signature] 8/6/92 1320

RECEIVED BY: [Signature] 8/6/92 1320

RELINQUISHED BY: [Signature] 8-7-9-92 10:00

RECEIVED BY: [Signature] 8/7/92

RELINQUISHED BY: [Signature]

RECEIVED BY LAB: [Signature] 8/8/92 0900

DESIGNATED LABORATORY: NET (PAC)

DHS #:

REMARKS: NORMAL TAT

DATE COMPLETED 8-6-92

FOREMAN [Signature]