

ENVIRONMENTAL  
PROTECTION  
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5/9/96  
GK

**TRI-CITY PROPERTIES  
GARY KING  
PROJECT COORDINATOR  
5157 BROPHY DRIVE  
FREMONT, CALIFORNIA, 94536  
OFFICE (510) 793-9920 - PAGER (510) 810-5774**

May 2, 1996

Ms. Amy Leech, REHS  
Alameda County Department of Environmental Health  
1131 Harbor Bay Parkway, Second Floor  
Alameda, CA 94502

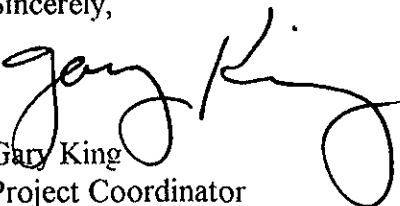
Subject: Request for Consideration of Site Closure for Property Located at 16525  
Worthley Drive, San Lorenzo Area of Alameda County

Dear Ms. Leech,

The most recent monitoring report for the subject site is attached. A review of the analytical results from MW-2, MW-8 and RW-1 indicate a significant reduction in contamination levels for all three wells since August of last year. These data suggest both stability and natural degradation of the groundwater contamination plume.

Extensive remediation of both soil and groundwater has already been carried out at the site. Given the recent trend to allow natural bioremediation to complete the remediation of these types of low risk sites, we are requesting that you consider closure of the subject site at this time. We would be happy to meet with you at your convenience after you have had a chance to review the new data to discuss this request in more detail.

Sincerely,

  
Gary King  
Project Coordinator

ENVIRONMENTAL  
PROTECTION  
96 MAY -3 PM12:44



**Epigene International**  
CONSULTING GEOLOGISTS

April 29, 1996

Mr. Anthony Varni  
P. O. Box 778  
Hayward, CA 94543

Subject: First Quarter 1996 Monitoring Report for Property Located at the Southwest  
End of Worthley Drive, San Lorenzo area of Alameda County

Dear Mr. Varni,

At the request of the Alameda County Dept. Of Environmental Health, quarterly monitoring of the site was initiated in the first quarter of 1996. To our knowledge, there were no site activities carried out in the fourth quarter of 1995 and a quarterly report was not prepared.

The site is located at the southwest end of Worthley Drive in San Lorenzo. The site location is shown on the attached location map (Figure 1). The southern edge of the site is bounded by an Alameda County flood control channel. The site plan is shown on Figure 2.

The scope of work for the quarterly monitoring was based on the most recent quarterly monitoring report for the site prepared by Lowney Associates dated September 12, 1995. The scope of work for the first quarter monitoring included the following: 1) gauging of seven onsite monitoring wells; 2) purging and sampling of monitoring wells MW-2 and MW-8; 3) purging and sampling of extraction well RW-1; 4) analysis of the water samples for TPH as gasoline and BTEX; 5) contouring of groundwater elevations and calculating direction and slope of the gradient using a three point problem solution; and 6) preparation of this letter report. The field work was carried out on April 17, 1996.

The depth to water measurements and calculated groundwater elevations are summarized below.

WELL NUMBER	TOP OF CASING ELEVATION	DEPTH TO WATER	GROUNDWATER ELEVATION
MW-1	8.86	6.44	2.42
MW-2	9.17	6.66	2.51
MW-4	NA	5.57	
MW-5	9.11	5.62	3.49
MW-6	9.19	6.00	3.19
MW-7	8.41	5.62	2.79
MW-8	8.52	5.99	2.47

The groundwater contours are shown on Figure 2. The direction of the gradient was calculated using wells MW-1, MW-5 and MW-7. The direction is S5E and the slope is 0.009 ft/ft. These data are also shown on Figure 2 and are consistent with the hydrogeologic setting of the site.

Monitoring wells MW-2 and MW-8 (see Figure 2) were purged of approximately 18 gallons of water using an electric (12 volt D.C.) purge pump. Samples were then collected by bailer and placed in 40 ml VOAS that were supplied by the laboratory and preserved with HCl. The electric pump present in RW-1 was used to purge the extraction well. The flow meter at the well head was not operating correctly so the system was run for approximately one hour with an estimated purging of at least 80 gallons. The water sample from RW-1 was collected from a sampling port located at the well head.

The water samples were maintained in a cooled ice chest and transported to a State-certified Laboratory for analysis under chain-of-custody control. The certified laboratory report and chain-of-custody documentation is included in Appendix A. The results of the analysis are summarized below.

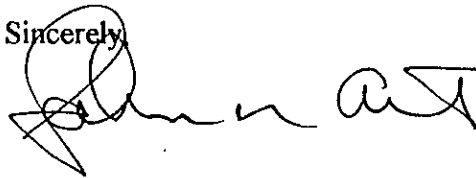
WELL NUMBER	TPH AS GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
MW-2	56	0.84	3.0	0.61	2.9
MW-8	<50	0.65	2.6	<0.5	2.7
RW-1	<50	4.2	<0.5	0.73	<0.5

The results from previous analysis of the three wells as taken from Lowney Associates (1995) are included in Appendix B to serve as a comparison.

The results of the analysis indicated that only a very minor level of contamination remains in the groundwater at the site. It is appropriate to discuss possible site closure with representatives of Alameda County prior to any additional site investigations. Destruction of wells that are no longer required for site monitoring should be considered.

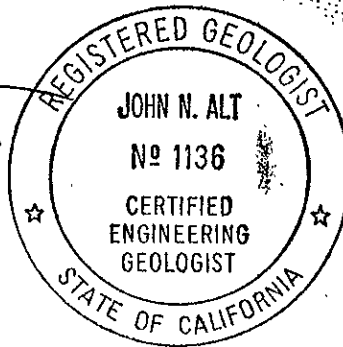
Should you have any questions, please contact the undersigned or Mr. Gary King who is serving as a coordinator for this phase of the investigations.

Sincerely,



John N. Alt, CEG No. 1136

Epigene International



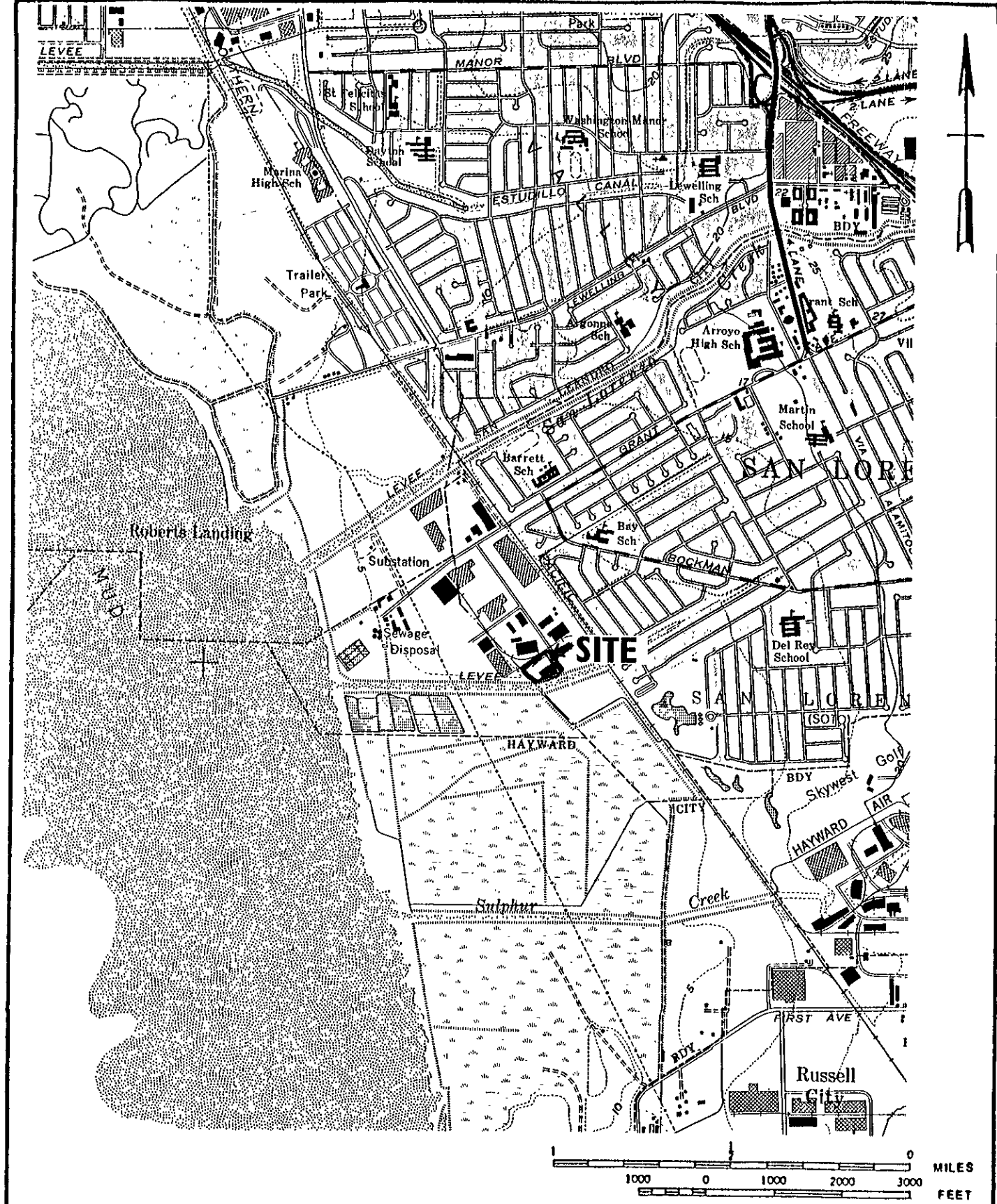
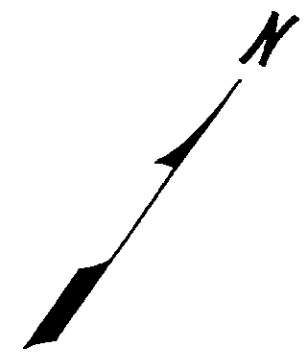
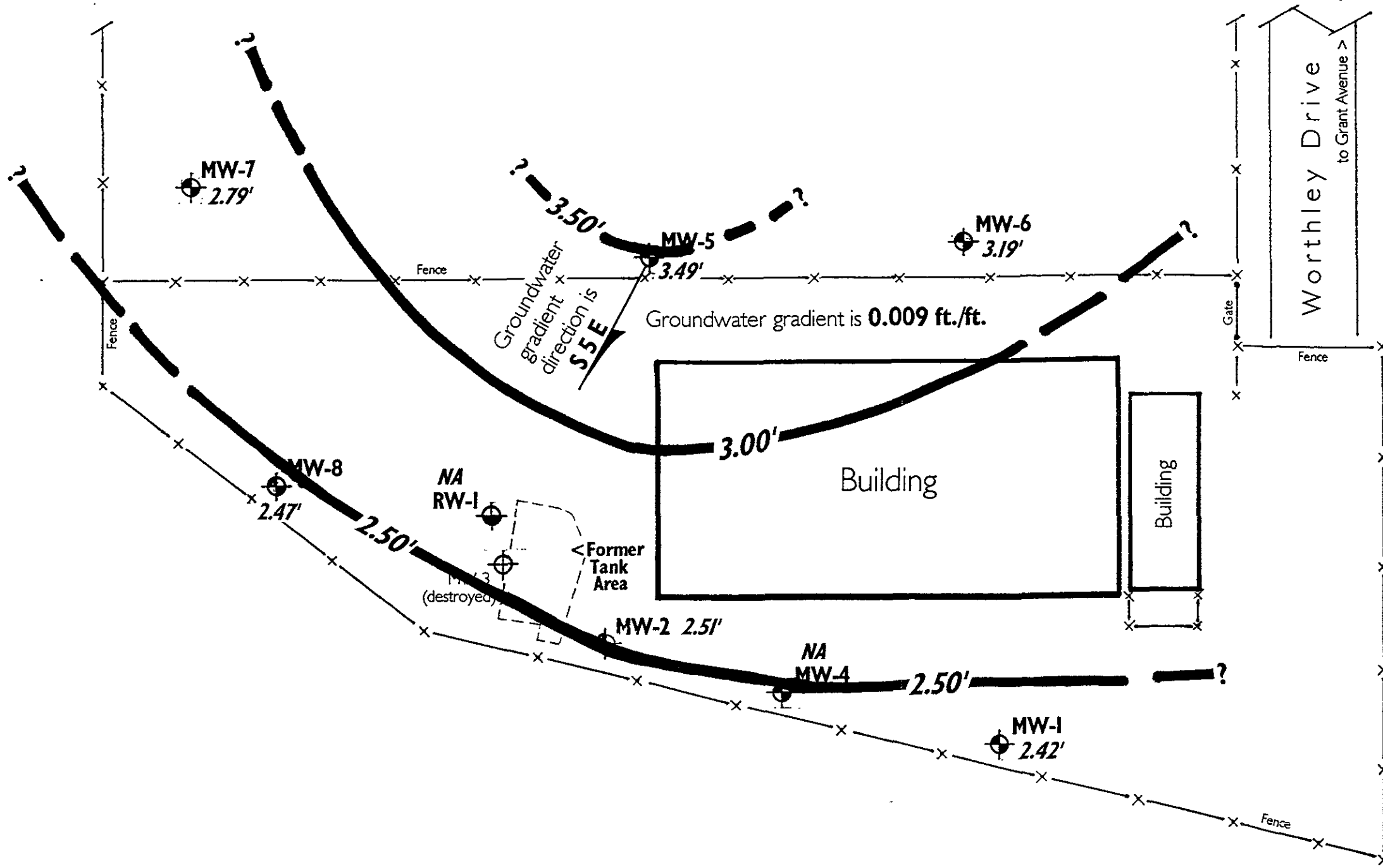




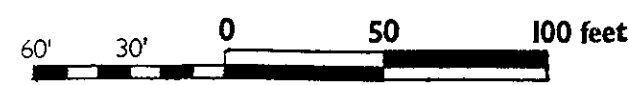
PLATE 1	No.
<b>SITE LOCATION MAP</b>	



*Legend*

-  MW- Monitoring well.
-  RW-I Remediation (extraction) well.
- X.XX'** Groundwater elevation (feet above mean sea level).

Groundwater gradient value and direction is calculated from groundwater elevations in MW's 1, 5, and 7.



Depths to groundwater measured on  
**April 17, 1996**

Plan derived from drawing by Resna, August 1993,  
 as used by Lovney Associates, Mountain View, California, August 1994

<b>EPIGENE INTERNATIONAL</b>	Project # 6525 WORTHLEY DRIVE, San Lorenzo, Alameda Co., Calif
	<b>GROUNDWATER GRADIENT AND CONTOURS</b>

**APPENDIX A**

**LABORATORY REPORT**

Epigene International 38750 Paseo Padre Pkwy, # A11 Fremont, CA 94536	Client Project ID: Worthley Dr., San Lorenzo	Date Sampled: 04/17/96
	Client Contact: John Alt	Date Received: 04/19/96
	Client P.O:	Date Extracted: 04/19/96
		Date Analyzed: 04/19/96

**Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline\*, with BTEX\***

EPA methods 5030, modified 8015, and 8020 or 602; California RWOCB (SF Bay Region) method GCFID (5030)

Lab ID	Client ID	Matrix	TPH(g) <sup>+</sup>	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
63370	RW-1	W	ND	4.2	ND	0.73	ND	98
63371	MW-2	W	56,a	0.84	3.0	0.61	2.9	96
63372	MW-8	W	ND	0.65	2.6	ND	2.7	95
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W	50 ug/L	0.5	0.5	0.5	0.5	0.5	
	S	1.0 mg/kg	0.005	0.005	0.005	0.005	0.005	

\* water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

# cluttered chromatogram; sample peak coelutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant (aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.



# CHAIN OF CUSTODY

Laboratory: McCampbell Analytical	
110 2nd Avenue South, D-7	
Pacheco, California 94553.	
telephone: (510) 798-1620	FAX: (510) 798-1622
Contact: Ed Hamilton	



6240AEX81

## Epigene International

CONSULTING GEOLOGISTS

38750 Paseo Padre Parkway, Suite A-11  
 Fremont, California, 94536  
 Business: (510) 791-1986 FAX: (510) 791-3306

Contact: John Alt	Sampler: JNA/GK
Project Name: Worthley Dr. San Lorenzo	
Project no.	Date:

### Analyses Requested

Sample I.D.	Date/Time Sampled	Matrix Desc.	Container		Comments	Analyses Requested							Lab. #		
			No. of	Type		TPH/Gasoline	BTEX	TPH/Diesel	601/8010	602/8020	Total Oil & Grease				
1. RW-1	4/17/96	H <sub>2</sub> O	2	VOAS	w/HCl	X	X								63370
2. MW-2	4/17/96	"	"	"	"	X	X								63371
3. MW-8	4/17/96	"	"	"	"	X	X								63372
4.															
5.															
6.															
7.															
8.															
9.															
10.															

Relinquished by: <i>[Signature]</i>	Date: 4/18/96	Time: 12:28 PM	Received by: G. Rucke ACRO 640	Date: 4/18/96	Time: 12:25
Relinquished by: G. Rucke 640	Date: 4-19-96	Time: 7:09 AM	Received by: <i>[Signature]</i>	Date: 4-19-96	Time: 7:50 AM
Relinquished by: <i>[Signature]</i> 601	Date: 4-19-96	Time: 9:42 AM	Received by: <i>[Signature]</i>	Date: 4-19-96	Time: 9:40 AM

Turnaround Time: Standard

Additional Comments: Project name shown on sample labels is shown as Worthley Ct. - correct name is Worthley Dr.

Page 1 of 1

APPENDIX B  
RESULTS OF PREVIOUS ANALYSIS  
LOWNEY ASSOCIATES (1995)

TABLE 2. Laboratory Analysis of Ground Water Samples  
(concentrations in ppb)

Well Number	Date	TPH <sub>g</sub>	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW-2	07/14/87	110	1.2	1.9	--	2
	11/24/87	3,600	82	47	--	13
	02/29/88	800	ND	ND	--	ND
	05/25/88	250	ND	ND	--	ND
	08/10/88	260	ND	ND	--	ND
	11/29/88	870	9.	ND	1	1
	02/07/89	710	16	ND	ND	ND
	05/12/89	260	2.8	0.76	1.3	3
	08/04/89	360	ND	ND	ND	0.48
	11/14/89	85	ND	3.5	0.36	2.5
	02/22/90	120	ND	ND	1.5	0.55
	05/17/90	240	ND	ND	ND	ND
	08/17/90	130	ND	2.9	1.2	0.68
	11/06/90	170	0.37	1.2	2	1.5
	02/01/91	57	ND	ND	ND	0.73
	05/01/91	220	1.5	0.42	0.43	0.54
	08/08/91	710	4.1	0.84	ND	0.71
	11/15/91	630	2.3	ND	3.1	0.86
	02/12/92	580	5.9	1.2	0.52	ND
	05/21/92	790	26	5.4	ND	ND
	11/13/92	230	ND	ND	ND	ND
	02/24/93	400	17	ND	ND	ND
	05/28/93	110	<0.50	<0.50	<0.50	<0.50
	08/20/93	1,000	<0.50	0.75	1.1	5.4
	11/30/93	590	<0.50	<0.50	3.8	2.3
	04/08/94	480	5.2	<0.50	<0.50	<0.50
	08/08/94	330	<0.50	<0.50	<0.50	<0.50
	08/23/95	160	<0.50	0.68	<0.50	0.98
MW-8	08/23/95	<50	<0.50	<0.50	<0.50	<0.50

continued

TABLE 2. Laboratory Analysis of Ground Water Samples  
 (concentrations in ppb)  
 (continued)

Well Number	Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes
RW-1	11/28/89	3,200	<50	<100	<100	<100
	01/09/90	1,300	150	15	100	170
	01/16/91	78	17.0	2.7	7.7	1.3
	04/20/91	<30	<0.30	<0.30	<0.30	<0.30
	05/01/91	160	40	0.79	14	6.1
	05/24/91	<30	<0.30	<0.30	<0.30	<0.30
	06/14/91	57	12	<0.30	4.3	0.84
	07/03/91	<30	<0.30	<0.30	<0.30	<0.30
	07/22/91	18	<0.30	2.7	0.4	<0.30
	08/08/91	89	41	0.31	4.6	0.73
	11/15/91	140	41	<0.30	1.3	0.44
	12/18/91	<50	12	<0.50	0.78	<0.50
	02/12/92	260	78	.073	6.6	8.2
	03/06/92	480	81	1.2	21	21
	04/02/92	300	52	1.2	13	15
	05/21/92	57	20	ND	1.7	0.85
	06/30/92	<50	7.7	<0.50	<0.50	<0.50
	07/17/92	79	7.4	<0.50	1.2	1.4
	09/01/92	<50	4.2	<0.50	<0.50	<0.50
	11/13/92	ND	ND	ND	ND	ND
	01/08/93	ND	8	ND	0.78	0.59
	01/29/93	64	22	ND	4.8	3.7
	03/18/93	2,400	330	3.3	51	17
	04/22/93	<50	13	<0.50	1.5	<0.50
	05/28/93	<50	0.76	<0.50	<0.50	<0.50
	08/20/93	57	16	<0.50	0.70	1.92
	09/15/93	<50	1.5	<0.50	<0.50	<0.50
	10/08/93	<50	<0.50	<0.50	0.50	<0.50
	10/26/93	<50	<0.50	<0.50	0.50	<0.50
	12/16/93	<50	0.73	2.6	1.1	<0.50
	04/08/94	130	15	1.4	1.9	1.9
	08/08/94	110	25	<0.50	0.86	3.2
	08/23/95	75	12	<0.50	1.8	3.5

— no data obtained  
 ND not detected