

**MARK BORSUK**  
**Attorney at Law**  
**1626 Vallejo Street**  
**San Francisco, CA 94123-5116**  
**(415) 922-4740**  
**FAX 922-1485**  
**Internet: mborsuk@ix.netcom.com**

June 19, 1999

Mr. Thomas Peacock  
Supervising HMS, LOP  
ACHCSA  
1131 Harbor Bay Parkway  
Alameda, CA 94501  
(510) 567-6700 / FAX 337-9335  
tpeacock@co.alameda.ca.us

SUBJECT: IQ'99 Monitoring Report  
1432 Harrison Street, Oakland, CA 94612  
SITE ID 498

Dear Mr. Peacock:

Attached is the IQ'99 groundwater monitoring data for the above site.  
If you have a question, please contact me.

Sincerely yours,



Mark Borsuk

**BLAINE**  
TECH SERVICES Inc.

1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
(408) 573-7771 FAX  
(408) 573-0555 PHONE



June 16, 1999

Mark Borsuk  
1626 Vallejo Street  
San Francisco, CA 94123-5116

Site:  
1432 Harrison Street  
Oakland, California

Date:  
March 29, 1999

## GROUNDWATER SAMPLING REPORT 990329-P-1

Blaine Tech Services, Inc. performs specialized environmental sampling and documentation as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. does not participate in the interpretation of analytical results, or become involved with the marketing or installation of remedial systems.

This report deals with the groundwater well sampling performed by our firm in response to your request. Data collected in the course of our work at the site are presented in the TABLE OF WELL MONITORING DATA. This information was collected during our inspection and sample collection. Measurements include the total depth of the well and the depth to water. Water surfaces were further inspected for the presence of immiscibles. A series of electrical conductivity, pH, turbidity, and temperature readings were obtained during sample collection.

## **STANDARD PRACTICES**

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### **Sampling Equipment**

Samples were collected using disposable bailers.

**Bailers:** A bailer, in its simplest form, is a hollow tube which has been fitted with a check valve at the lower end. The device can be lowered into a well by means of a cord. When the bailer enters the water, the check valve opens and liquid flows into the interior of the bailer. The bottom check valve prevents water from escaping when the bailer is drawn up and out of the well.

Two types of bailers are used in groundwater wells at sites where fuel hydrocarbons and/or solvents are of concern. The first type of bailer is made of a clear material such as acrylic plastic and is used to obtain a sample of the surface and the near-surface liquids, in order to detect the presence of visible or measurable fuel hydrocarbon floating on the surface. The second type of bailer is made of polyethylene, Teflon, or stainless steel, and is used as an evacuation and/or sampling device. Disposable bailers are made of polyethylene plastic, decontaminated by the manufacturer, individually packaged for one-time only use, and are inexpensive. Teflon and stainless steel bailers are relatively easy to clean and are considered reusable with proper decontamination.

Because bailers are manually operated, variations in operator technique may have a greater influence on performance than would be found when using more automated sampling equipment. Also, in cases where fuel hydrocarbons are involved the bailer may include near-surface contaminants that are not representative of water located deeper in the well.

### **Decontamination**

All apparatus is brought to the site in clean and serviceable condition. The equipment is decontaminated after each use and before leaving the site.

### **Sampling Methodology**

Samples were obtained by standardized sampling procedures that follow a non-purge sample collection protocol. The sampling methodology conforms to both State and Regional Water Quality Control Board standards for no purge sampling and specifically adheres to EPA requirements for apparatus, sample containers and sample handling as specified in publication SW 846 and T.E.G.D. which is published separately.

## **Sample Containers**

Sample containers are supplied by the laboratory performing the analyses.

## **Sample Handling Procedures**

Following collection, samples are promptly placed in an ice chest containing ice or an inert ice substitute such as Blue Ice or Super Ice. The samples are maintained in either an ice chest or a refrigerator until delivered into the custody of the laboratory.

## **Sample Designations**

All sample containers are identified with both a sampling event number and a discrete sample identification number. Please note that the sampling event number is the number that appears on our chain of custody. It is roughly equivalent to a job number, but applies only to work done on a particular day of the year rather than spanning several days, as jobs and projects often do.

## **Chain of Custody**

Samples are continuously maintained in an appropriate cooled container while in our custody and until delivered to the laboratory under our standard chain of custody. If the samples are taken charge of by a different party (such as another person from our office, a courier, etc.) prior to being delivered to the laboratory, appropriate release and acceptance records are made on the chain of custody (time, date and signature of person accepting custody of the samples).

## **Hazardous Materials Testing Laboratory**

The samples obtained at this site were analyzed at Sequoia Analytical in San Carlos, California. Sequoia is certified by the California Department of Health Services under the Environmental Laboratory Accreditation Program (ELAP), and is listed as ELAP #I-2360.

## **Personnel**

All Blaine Tech Services, Inc. personnel receive 29 CFR 1910.120(e)(2) training as soon after being hired as is practical. In addition, many of our personnel have additional certifications that include specialized training in level B supplied air apparatus and the supervision of employees working on hazardous materials sites. Employees are not sent to a site unless we are confident they can adhere to any site safety provisions in force at the site and unless we know that they can follow the written provisions of an SSP and the verbal directions of an SSO.

In general, employees sent to a site to perform groundwater well sampling will assume an OSHA level D (wet) environment exists unless otherwise informed. The use of gloves and double glove protocols protects both our employees and the integrity of the samples being collected. Additional protective gear and procedures for higher OSHA levels of protection are available.

### **Reportage**

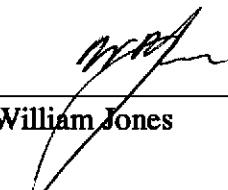
Submission to the Regional Water Quality Control Board and the local implementing agency should include copies of the sampling report, the chain of custody and the certified analytical report issued by the Hazardous Materials Testing Laboratory.

The following addresses have been listed here for your convenience:

Water Quality Control Board  
San Francisco Bay Region  
2101 Webster Street  
Suite 500  
Oakland, CA 94612  
ATTN: Chuck Headlee

Oakland Fire Prevention Bureau  
One City Hall Plaza  
Oakland, CA 94612  
ATTN: Stanley Y. Chi

Please call if we can be of any further assistance.



\_\_\_\_\_  
William Jones

WRJ/pb

attachments: cumulative table of well monitoring data  
certified professional report and gradient map  
certified analytical report  
chain of custody  
field data sheets

cc: John Riggi  
Cambria Environmental Technology, Inc.  
1144 65th St., Suite C  
Oakland, CA 94608

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	Motor Oil
<b>MW-1</b>											
12/21/94	34.95	15.42	19.53	--	180,000	41,000	64,000	3100	100,000	--	--
03/13/95	34.95	16.29	18.66	--	150,000	31,000	45,000	2500	17,000	--	--
06/27/95	34.95	16.75	18.20	--	71,000	17,000	18,000	1600	7700	--	--
07/07/95	34.95	16.60	18.35	Gauge Only	--	--	--	--	--	--	--
09/28/95	34.95	16.75	18.20	--	110,000	27,000	34,000	1700	14,000	--	--
12/20/95	34.95	14.99	19.96	--	120,000	33,000	43,000	2300	15,000	--	--
03/26/96	34.95	15.68	19.27	*	140,000	29,000	36,000	1900	13,000	ND	--
06/20/96	34.95	16.31	18.64	*	110,000	30,000	38,000	2200	13,000	ND	--
09/26/96	34.95	15.60	19.35	**	170,000	28,000	40,000	2200	15,000	ND	--
10/28/96	34.95	15.37	19.58	Gauge Only	--	--	--	--	--	--	--
12/12/96	34.95	15.27	19.68	*	110,000	36,000	47,000	2500	16,000	ND	--
03/31/97	34.95	16.15	18.80	*	160,000	24,000	39,000	1900	13,000	ND	--
06/27/97	34.95	15.69	19.26	*	130,000	25,000	36,000	2000	14,000	ND	--
09/09/97	34.95	15.25	19.70	*	99,000	22,000	27,000	1600	13,000	270	--
12/18/97	34.95	15.70	19.25	***	160,000	30,000	44,000	2200	15,000	ND	--
03/12/98	34.95	17.43	17.52	***	190,000	20,000	49,000	2500	18,000	ND	--
06/22/98	34.95	16.32	18.63	--	90,000	19,000	40,000	2100	16,000	--	--
09/18/98	34.95	16.35	18.60	--	190,000	29,000	48,000	2400	17,000	--	--
12/23/98	34.95	15.77	19.18	--	140,000+	24,000	44,000	2000	8200	--	--
03/29/99	34.95	16.43	18.52	--	181,000	22,200	40,100	1844	12,200	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	Motor Oil
<b>MW-2</b>											
12/21/94	35.18	15.27	19.91	--	200,000	140,000	200,000	3500	22,000	--	--
03/13/95	35.18	16.03	19.15	--	500,000	9200	23,000	7000	36,000	--	--
06/27/95	35.18	16.44	18.74	--	120,000	23,000	30,000	2700	13,000	--	--
07/07/95	35.18	16.38	18.80	Gauge Only	--	--	--	--	--	--	--
09/28/95	35.18	15.88	19.30	--	110,000	23,000	29,000	2500	11,000	--	--
12/20/95	35.18	14.94	20.24	--	83,000	980	1800	2200	10,000	--	--
03/26/96	35.18	15.49	19.69	*	150,000	23,000	32,000	2800	12,000	ND	--
06/20/96	35.18	20.98	14.20	*	94,000	15,000	23,000	2400	12,000	ND	--
09/26/96	35.18	15.38	19.80	**	150,000	20,000	29,000	2800	12,000	ND	--
10/28/96	35.18	15.00	20.18	Gauge Only	--	--	--	--	--	--	--
12/12/96	35.18	15.01	20.17	*	58,000	3100	11,000	1700	8100	220	--
03/31/97	35.18	15.51	19.67	*	38,000	6000	7900	690	3300	ND	--
06/27/97	35.18	15.50	19.68	*	62,000	13,000	16,000	1300	6000	ND	--
09/09/97	35.18	14.98	20.20	***	81,000	16,000	18,000	1800	8600	ND	--
12/18/97	35.18	15.38	19.80	***	110,000	18,000	26,000	2200	9500	ND	--
03/12/98	35.18	17.11	18.07	***	120,000	16,000	26,000	2200	9400	ND	--
06/22/98	35.18	16.89	18.29	--	38,000	9800	9500	1500	6000	--	--
09/18/98	35.18	16.09	19.09	--	68,000	12,000	16,000	1400	5900	--	--
12/23/98	35.18	15.51	19.67	--	180,000+	16,000	22,000	2200	8300	--	--
03/29/99	35.18	16.21	18.97	--	16,600	4800	1920	373	1840	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	MTBE	Motor Oil
<b>MW-3</b>											
12/21/94	33.97	15.15	18.82	--	ND	ND	ND	ND	ND	--	ND
03/13/95	33.97	16.11	17.86	--	ND	ND	ND	ND	ND	--	ND
07/07/95	33.97	15.72	18.25	Gauge Only	--	--	--	--	--	--	--
09/28/95	33.97	15.97	18.00	Gauge Only	--	--	--	--	--	--	--
12/20/95	33.97	15.23	18.74	Gauge Only	--	--	--	--	--	--	--
03/26/96	33.97	15.72	18.25	Gauge Only	--	--	--	--	--	--	--
06/20/96	33.97	15.62	18.35	Gauge Only	--	--	--	--	--	--	--
09/26/96	33.97	14.85	19.12	Gauge Only	--	--	--	--	--	--	--
10/28/96	33.97	14.86	19.11	Gauge Only	--	--	--	--	--	--	--
12/12/96	33.97	15.36	18.61	Gauge Only	--	--	--	--	--	--	--
03/31/97	33.97	15.62	18.35	Gauge Only	--	--	--	--	--	--	--
06/27/97	33.97	15.16	18.81	Gauge Only	--	--	--	--	--	--	--
09/09/97	33.97	14.79	19.18	Gauge Only	--	--	--	--	--	--	--
12/18/97	33.97	15.33	18.64	Gauge Only	--	--	--	--	--	--	--
03/12/98	33.97	16.41	17.56	Gauge Only	--	--	--	--	--	--	--
06/22/98	33.97	15.33	18.64	Gauge Only	--	--	--	--	--	--	--
09/18/98	33.97	15.64	18.33	Gauge Only	--	--	--	--	--	--	--
12/23/98	33.97	15.37	18.60	Gauge Only	--	--	--	--	--	--	--
03/29/99	33.97	16.12	17.85	Gauge Only	--	--	--	--	--	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	Motor Oil
<b>MW-4</b>											
10/28/96	30.77	11.45	19.32	--	NA	NA	NA	NA	NA	NA	--
12/12/96	30.77	11.35	19.42	*	11,000	4200	410	420	260	32	--
03/31/97	30.77	12.10	18.67	*	ND	ND	ND	ND	ND	ND	--
06/27/97	30.77	11.69	19.08	*	160	49	1.2	ND	5.9	ND	--
09/09/97	30.77	11.44	19.33	*	7400	5000	410	230	470	33	--
12/18/97	30.77	11.60	19.17	***	710	170	8.0	ND	39	ND	--
03/12/98	30.77	13.09	17.68	***	1300	410	21	ND	57	ND	--
06/22/98	30.77	13.14	17.63	--	ND	ND	ND	ND	ND	--	--
09/18/98	30.77	12.19	18.58	--	ND	42	1.6	ND	4.8	--	--
12/23/98	30.77	11.76	19.01	--	1900	1000	76.0	50	120	--	--
03/29/99	30.77	12.42	18.35	--	ND	ND	ND	ND	ND	--	--
<b>MW-5</b>											
10/28/96	31.61	11.73	19.88	--	NA	NA	NA	NA	NA	NA	--
12/12/96	31.61	11.52	20.09	*	230	5.6	0.9	ND	0.9	3.6	--
03/31/97	31.61	12.37	19.24	*	90	3.1	ND	ND	ND	ND	--
06/27/97	31.61	12.45	19.16	*	ND	ND	ND	ND	ND	ND	--
09/09/97	31.61	11.68	19.93	*	ND	ND	ND	ND	ND	ND	--
12/18/97	31.61	11.84	19.77	***	ND	ND	ND	ND	ND	ND	--
03/12/98	31.61	11.84	19.77	*	79	2.3	ND	0.8	ND	ND	--
06/22/98	31.61	13.53	18.08	--	ND	ND	ND	ND	ND	--	--
09/18/98	31.61	12.49	19.12	--	ND	ND	ND	ND	ND	--	--
12/23/98	31.61	12.01	19.60	--	ND	0.83	0.85	ND	ND	--	--
03/29/99	31.61	12.73	18.88	--	ND	ND	ND	ND	ND	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	Analytical results are in parts per billion (ppb)						
					TPH- Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylene	MTBE	Motor Oil
<b>MW-6</b>											
10/28/96	32.89	12.87	20.02	--	NA	NA	NA	NA	NA	NA	--
12/12/96	32.89	12.71	20.18	*	ND	ND	ND	ND	ND	ND	--
03/31/97	32.89	13.08	19.81	Gauge Only	--	--	--	--	--	--	--
06/27/97	32.89	13.13	19.76	Gauge Only	--	--	--	--	--	--	--
09/09/97	32.89	12.83	20.06	*	ND	ND	ND	ND	ND	ND	--
12/18/97	32.89	12.99	19.90	--	ND	ND	ND	ND	ND	--	--
03/12/98	32.89	14.89	18.00	*	ND	ND	ND	ND	ND	ND	--
06/22/98	32.89	14.46	18.43	--	ND	ND	ND	ND	ND	--	--
09/18/98	32.89	13.79	19.10	--	ND	ND	ND	ND	ND	--	--
12/23/98	32.89	13.28	19.61	--	ND	ND	ND	ND	ND	--	--
03/29/99	32.89	13.97	18.92	--	ND	ND	ND	ND	ND	--	--

\*=MTBE results by EPA method 8020.

\*\*=MTBE results by EPA method 8240.

\*\*\*=MTBE results by EPA method 8260.

+=Chromatogram pattern indicates gas.

### ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons

ND = Not detected at or above the minimum quantitation limit. See laboratory reports for minimum quantitation limits.

MTBE = Methyl-t-Butyl Ether

# C A M B R I A

June 14, 1999

Billy Jones  
Blaine Tech Services  
1680 Rogers Avenue  
San Jose, California 95112

Re: **First Quarter 1999 Monitoring Report**  
1432 Harrison Street  
Oakland, California  
Cambria Project #180-0214

Dear Mr. Jones:

As you requested, Cambria Environmental Technology, Inc. (Cambria) has summarized the results of the first quarter 1999 ground water sampling at the site referenced above. Presented below are sampling activities performed in the first quarter 1999, the hydrocarbon distribution in ground water, and the anticipated second quarter 1999 activities.

## FIRST QUARTER 1999 ACTIVITIES AND RESULTS

**Ground Water Sampling:** On March 29, 1999, Blaine Tech Services (Blaine) gauged all site wells and collected ground water samples from site wells MW-1, MW-2, MW-4, MW-5, and MW-6. Ground water elevations are shown on Figure 1. Analytical results are included as Attachment A.

**System Installation:** Cambria will install additional vapor extraction wells once the City of Oakland finalizes the encroachment permit.

## Hydrocarbon Distribution In Ground Water

As during previous sampling events, ground water analytical data suggest that hydrocarbon concentrations are highest in wells MW-1 and MW-2, which are located near the former underground storage tank area. Total petroleum hydrocarbons as gasoline (TPHg) concentrations increased in well MW-1 to 181,000 parts per billion (ppb) from 140,000 ppb during the fourth quarter 1998. However, this concentration is typical for historical first quarter analytical results. The TPHg concentration decreased in well MW-2 to 16,600 ppb this quarter from 180,000 ppb during the fourth quarter 1998. In addition, the sample collected from down gradient well MW-4

Oakland, CA  
Sonoma, CA  
Portland, OR  
Seattle, WA  
  
Cambria  
Environmental  
Technology, Inc.

1144 65th Street  
Suite B  
Oakland, CA 94608  
Tel (510) 420-0700  
Fax (510) 420-9170

Mr. Billy Jones  
June 14, 1999

was non-detect this quarter, compared to 1,900 ppb TPHg during the fourth quarter 1998 sampling event.

## ANTICIPATED SECOND QUARTER 1999 ACTIVITIES

**Ground Water Sampling:** Blaine will gauge all site wells and collect ground water samples from wells MW-1, MW-2, MW-4, MW-5, and MW-6. Cambria will prepare a ground water monitoring report summarizing the sampling data.



## CLOSING

We appreciate this opportunity to provide environmental consulting services to Blaine Tech Services. Please call if you have any questions or comments.

Sincerely,  
**Cambria Environmental Technology, Inc.**

  
Jacquelyn Jones  
Staff Geologist

  
David Elias, R.G.  
Senior Geologist

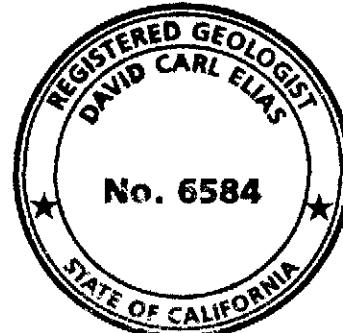
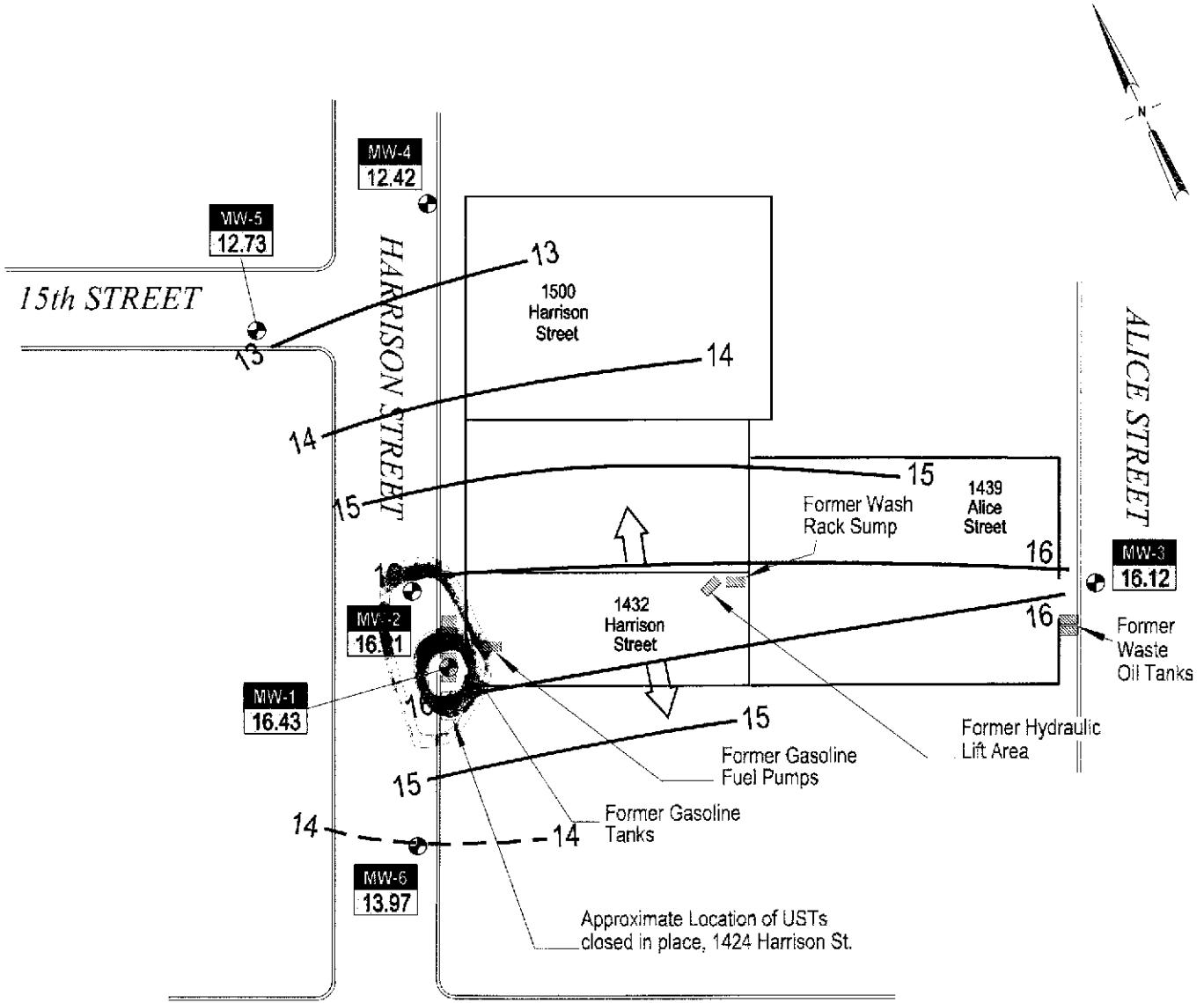
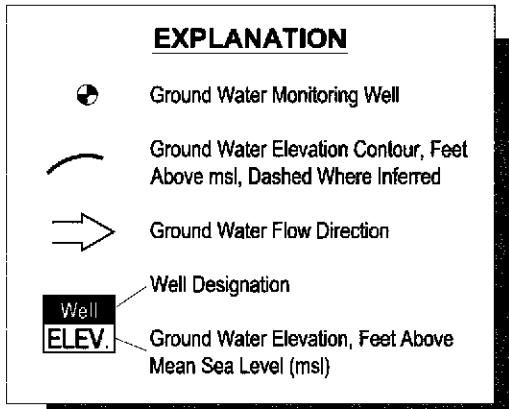


Figure: 1 - Ground Water Elevation Contours  
Attachment: A - Analytical Results for Ground Water Sampling

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14th STREET



NOTE: Wells MW-4, MW-5, and MW-6 installed in October, 1996.

FIGURE  
1  
Scale (ft)

**Borsuk**  
1432 Harrison Street  
Oakland, California

C  
A  
M  
B  
R  
I  
A

**Ground Water Elevation  
Contours**  
March 29, 1999

C A M B R I A



**Attachment A**

Analytical Results for Ground Water Sampling



**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite B  
1455 McDowell Blvd. North, Ste. D  
1551 Industrial Road

Redwood City, CA 94063 (650) 364-9600 FAX (650) 364-9233  
Walnut Creek, CA 94598 (925) 988-9600 FAX (925) 988-9673  
Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100  
Petaluma, CA 94954 (707) 792-1865 FAX (707) 792-0342  
San Carlos, CA 94070-4111 (650) 232-9600 FAX (650) 232-9612

April 14, 1999

WR Jones  
Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112

RE: Blaine Project(3)/L904016

Dear WR Jones:

Enclosed are the results of analyses for sample(s) received by the laboratory on March 30, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Gregory  
Project Manager D.M.



**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Widget Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North, Ste. D  
1551 Industrial Road

Redwood City, CA 94063	(650) 364-9600	FAX (650) 364-9233
Walnut Creek, CA 94598	(925) 988-9600	FAX (925) 988-9673
Sacramento, CA 95834	(916) 921-9600	FAX (916) 921-0100
Petaluma, CA 94954	(707) 792-1865	FAX (707) 792-0342
San Carlos, CA 94070-4111	(650) 232-9600	FAX (650) 232-9612

Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112

Project: Blains Project(3)  
Project Number: 1  
Project Manager: WR Jones

Sampled: 3/29/99  
Received: 3/30/99  
Reported: 4/14/99

### ANALYTICAL REPORT FOR L904016

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-1	L904016-01	Water	3/29/99
MW-2	L904016-02	Water	3/29/99
MW-4	L904016-03	Water	3/29/99
MW-5	L904016-04	Water	3/29/99
MW-6	L904016-05	Water	3/29/99



**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite B  
1455 McDowell Blvd. North, Ste. D  
1551 Industrial Road

Redwood City, CA 94063	(650) 364-9600	FAX (650) 364-9233
Walnut Creek, CA 94598	(925) 988-9600	FAX (925) 988-9673
Sacramento, CA 95834	(916) 921-9600	FAX (916) 921-0100
Petaluma, CA 94954	(707) 792-1865	FAX (707) 792-0342
San Carlos, CA 94070-4111	(650) 232-9600	FAX (650) 232-9612

Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112

Project: Blaine Project(3)  
Project Number: 1  
Project Manager: WR Jones

Sampled: 3/29/99  
Received: 3/30/99  
Reported: 4/14/99

Sample Description:  
Laboratory Sample Number:

MW-1  
L904016-01

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
<u>Sequoia Analytical - San Carlos</u>								
<b>Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT</b>								
Purgeable Hydrocarbons as Gasoline	9040048	4/9/99	4/9/99		50000	181000	ug/l	1
Benzene	"	"	"		500	22200	"	
Toluene	"	"	"		500	40100	"	
Ethylbenzene	"	"	"		500	1844	"	
Xylenes (total)	"	"	"		500	12200	"	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	"	"	60.0-140		88.9	%	



**Sequoia  
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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Blaine Project(3) Project Number: 1 Project Manager: WR Jones	Sampled: 3/29/99 Received: 3/30/99 Reported: 4/14/99
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**Sample Description:** MW-2  
**Laboratory Sample Number:** L904016-02

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
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<u>Sequoia Analytical - San Carlos</u>								
<u>Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT</u>								
Purgeable Hydrocarbons as Gasoline	9040048	4/9/99	4/9/99		2000	16600	ug/l	1
Benzene	"	"	"		20.0	1380	"	
Toluene	"	"	"		20.0	1920	"	
Ethylbenzene	"	"	"		20.0	373	"	
Xylenes (total)	"	"	"		20.0	1840	"	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	"	"	60.0-140		90.2	%	





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Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112

Project: Blaine Project(3)  
Project Number: 1  
Project Manager: WR Jones

Sampled: 3/29/99  
Received: 3/30/99  
Reported: 4/14/99

**Sample Description:** MW-4  
**Laboratory Sample Number:** L904016-03

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate	Reporting Limit	Result	Units	Notes*
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**Sequoia Analytical - San Carlos**

**Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT**

Purgeable Hydrocarbons as Gasoline	9040048	4/9/99	4/9/99		50.0	ND	ug/l
Benzene	"	"	"		0.500	ND	"
Toluene	"	"	"		0.500	ND	"
Ethylbenzene	"	"	"		0.500	ND	"
Xylenes (total)	"	"	"		0.500	ND	"
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	60.0-140	103	%	



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Blaine Tech Services  
1680 Rogers Avenue  
Sun Jose, CA 95112

Project: Blaine Project(3)  
Project Number: I  
Project Manager: WR Jones

Sampled: 3/29/99  
Received: 3/30/99  
Reported: 4/14/99

Sample Description: MW-5  
Laboratory Sample Number: L904016-04

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate	Reporting Limit	Result	Units	Notes*
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Sequoia Analytical - San Carlos

**Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT**

Purgeable Hydrocarbons as Gasoline	9040049	4/9/99	4/9/99		50.0	ND	ug/l
Benzene	"	"	"		0.500	ND	"
Toluene	"	"	"		0.500	ND	"
Ethylbenzene	"	"	"		0.500	ND	"
Xylenes (total)	"	"	"		0.500	ND	"
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	"	"	60.0-140		80.9	%



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Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112

Project: Blaine Project(3)  
Project Number: 1  
Project Manager: WR Jones

Sampled: 3/29/99  
Received: 3/30/99  
Reported: 4/14/99

Sample Description: MW-6  
Laboratory Sample Number: L904016-05

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
<u>Sequoia Analytical - San Carlos</u>								
<u>Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT</u>								
Purgeable Hydrocarbons as Gasoline	9040047	4/9/99	4/9/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	60.0-140		112	%	



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Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112

Project: Blaine Project(3)  
Project Number: 1  
Project Manager: WR Jones

Sampled: 3/29/99  
Received: 3/30/99  
Reported: 4/14/99

**Total Purgeable Hydrocarbons (C6-C12) and BTEX by Distilled/Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. Recov. Limits %	RPD %	RPD % Notes*
<u>Batch: 9040047</u>	<u>Date Prepared: 4/9/99</u>						<u>Extraction Method: EPA 5030B [MeOH]</u>		
<u>Blank</u>	<u>9040047-BLK1</u>								
Purgeable Hydrocarbons as Gasoline	4/9/99			ND	ug/l	50.0			
Benzene	"			ND	"	0.500			
Toluene	"			ND	"	0.500			
Ethylbenzene	"			ND	"	0.500			
Xylenes (total)	"			ND	"	0.500			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		9.06	"	60.0-140	90.6		
<u>LCS</u>	<u>9040047-BS1</u>								
Benzene	4/9/99	10.0		9.25	ug/l	70.0-130	92.5		
Toluene	"	10.0		9.22	"	70.0-130	92.2		
Ethylbenzene	"	10.0		9.62	"	70.0-130	96.2		
Xylenes (total)	"	30.0		28.3	"	70.0-130	94.3		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		10.7	"	60.0-140	107		
<u>Matrix Spike</u>	<u>9040047-MS1</u>		<u>L904016-05</u>						
Benzene	4/9/99	10.0	ND	9.28	ug/l	60.0-140	92.8		
Toluene	"	10.0	ND	9.29	"	60.0-140	92.9		
Ethylbenzene	"	10.0	ND	9.85	"	60.0-140	98.5		
Xylenes (total)	"	30.0	ND	28.2	"	60.0-140	94.0		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		11.5	"	60.0-140	115		
<u>Matrix Spike Dup</u>	<u>9040047-MSD1</u>		<u>L904016-05</u>						
Benzene	4/9/99	10.0	ND	8.30	ug/l	60.0-140	83.0	25.0	11.1
Toluene	"	10.0	ND	8.27	"	60.0-140	82.7	25.0	11.6
Ethylbenzene	"	10.0	ND	8.58	"	60.0-140	85.8	25.0	13.8
Xylenes (total)	"	30.0	ND	25.4	"	60.0-140	84.7	25.0	10.4
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		10.8	"	60.0-140	108		
<u>Batch: 9040048</u>	<u>Date Prepared: 4/9/99</u>						<u>Extraction Method: EPA 5030B [MeOH]</u>		
<u>Blank</u>	<u>9040048-BLK1</u>								
Purgeable Hydrocarbons as Gasoline	4/9/99			ND	ug/l	50.0			
Benzene	"			ND	"	0.500			
Toluene	"			ND	"	0.500			
Ethylbenzene	"			ND	"	0.500			
Xylenes (total)	"			ND	"	0.500			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		10.2	"	60.0-140	102		
<u>LCS</u>	<u>9040048-BS1</u>								
Benzene	4/9/99	10.0		8.82	ug/l	70.0-130	88.2		
Toluene	"	10.0		8.97	"	70.0-130	89.7		

Sequoia Analytical - San Carlos

\*Refer to end of report for text of notes and definitions.



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San Carlos, CA 94070-4111 (650) 232-9600 FAX (650) 232-9612

Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112

Project: Blaine Project(3)  
Project Number: 1  
Project Manager: WR Jones

Sampled: 3/29/99  
Received: 3/30/99  
Reported: 4/14/99

**Total Purgeable Hydrocarbons (TPH) and VOCs by GC/MS/IR/FT/Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Date Analyzed	Spike Level	Sample Result	OC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD % Notes*
<b>LCS (continued)</b>									
				<b>9040048-BS1</b>					
Ethylbenzene	4/9/99	10.0		9.05	ug/l	70.0-130	90.5		
Xylenes (total)	"	30.0		27.1	"	70.0-130	90.3		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		10.2	"	60.0-140	102		
<b>Matrix Spike</b>									
				<b>9040048-MS1</b>	<b>L904017-05</b>				
Benzene	4/9/99	10.0	ND	9.08	ug/l	60.0-140	90.8		
Toluene	"	10.0	ND	9.44	"	60.0-140	94.4		
Ethylbenzene	"	10.0	ND	9.42	"	60.0-140	94.2		
Xylenes (total)	"	30.0	ND	28.4	"	60.0-140	94.7		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		9.31	"	60.0-140	93.1		
<b>Matrix Spike DMR</b>									
				<b>9040048-MSD1</b>	<b>L904017-05</b>				
Benzene	4/9/99	10.0	ND	8.90	ug/l	60.0-140	89.0	25.0	2.00
Toluene	"	10.0	ND	9.14	"	60.0-140	91.4	25.0	3.23
Ethylbenzene	"	10.0	ND	9.15	"	60.0-140	91.5	25.0	2.91
Xylenes (total)	"	30.0	ND	27.4	"	60.0-140	91.3	25.0	3.66
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		8.63	"	60.0-140	86.3		
<b>Batch: 9040049</b>									
				<b>Date Prepared: 4/9/99</b>					
				<b>9040049-BLK1</b>					
Purgeable Hydrocarbons as Gasoline	4/9/99			ND	ug/l	50.0			
Benzene	"			ND	"	0.500			
Toluene	"			ND	"	0.500			
Ethylbenzene	"			ND	"	0.500			
Xylenes (total)	"			ND	"	0.500			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		8.59	"	60.0-140	85.9		
<b>LCS</b>									
				<b>9040049-BS1</b>					
Benzene	4/9/99	10.0		9.13	ug/l	70.0-130	91.3		
Toluene	"	10.0		9.31	"	70.0-130	93.1		
Ethylbenzene	"	10.0		9.71	"	70.0-130	97.1		
Xylenes (total)	"	30.0		28.6	"	70.0-130	95.3		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		9.06	"	60.0-140	90.6		
<b>Matrix Spike</b>									
				<b>9040049-MS1</b>	<b>L904016-04</b>				
Benzene	4/9/99	10.0	ND	9.85	ug/l	60.0-140	98.5		
Toluene	"	10.0	ND	10.0	"	60.0-140	100		
Ethylbenzene	"	10.0	ND	10.5	"	60.0-140	105		
Xylenes (total)	"	30.0	ND	29.1	"	60.0-140	97.0		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		9.40	"	60.0-140	94.0		



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Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112

Project: Blaine Project(3)  
Project Number: 1  
Project Manager: WR Jones

Sampled: 3/29/99  
Received: 3/30/99  
Reported: 4/14/99

**Total Purgeable Hydrocarbons (GC/FPD) and SMEX by DTE GC/ICP Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Matrix Spike Dup.</b> <b>9040049-MSD1</b> <b>L904016-04</b>										
Benzene	4/9/99	10.0	ND	10.1	ug/l	60.0-140	101	25.0	2.51	
Toluene	"	10.0	ND	10.3	"	60.0-140	103	25.0	2.96	
Ethylbenzene	"	10.0	ND	10.8	"	60.0-140	108	25.0	2.82	
Xylenes (total)	"	30.0	ND	29.9	"	60.0-140	99.7	25.0	2.75	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		9.37	"	60.0-140	93.7			



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Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112

Project: Blaine Project(3)  
Project Number: 1  
Project Manager: WR Jones

Sampled: 3/29/99  
Received: 3/30/99  
Reported: 4/14/99

#### Notes and Definitions

#	Note
1	Chromatogram pattern: Gasoline C6-C12
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Reoov.	Recovery
RPD	Relative Percent Difference







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April 14, 1999

WR Jones  
Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112

RE: Blaine Project(3)/L904016

Dear WR Jones:

Enclosed are the results of analyses for sample(s) received by the laboratory on March 30, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

  
Mike Gregory  
Project Manager D.M.





**Sequoia  
Analytical**

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Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112

Project: Blaine Project(3)  
Project Number: 1  
Project Manager: WR Jones

Sampled: 3/29/99  
Received: 3/30/99  
Reported: 4/14/99

### ANALYTICAL REPORT FOR L904016

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-1	L904016-01	Water	3/29/99
MW-2	L904016-02	Water	3/29/99
MW-4	L904016-03	Water	3/29/99
MW-5	L904016-04	Water	3/29/99
MW-6	L904016-05	Water	3/29/99





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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Blaine Project(3) Project Number: 1 Project Manager: WR Jones	Sampled: 3/29/99 Received: 3/30/99 Reported: 4/14/99
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**Sample Description:**

**Laboratory Sample Number:**

**MW-1**  
**L904016-01**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
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**Sequoia Analytical - San Carlos**

**Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT**

Purgeable Hydrocarbons as Gasoline	9040048	4/9/99	4/9/99		50000	<b>181000</b>	ug/l	1
Benzene	"	"	"		500	<b>22200</b>	"	
Toluene	"	"	"		500	<b>40100</b>	"	
Ethylbenzene	"	"	"		500	<b>1844</b>	"	
Xylenes (total)	"	"	"		500	<b>12200</b>	"	
Surrogate: <i>a,a,a-<i>Trifluorotoluene</i></i>	"	"	"	60.0-140		88.9	%	





**Sequoia  
Analytical**

680 Chesapeake Drive	Redwood City, CA 94063	(650) 364-9600	FAX (650) 364-9233
404 N. Wiget Lane	Walnut Creek, CA 94598	(925) 988-9600	FAX (925) 988-9673
819 Striker Avenue, Suite 8	Sacramento, CA 95834	(916) 921-9600	FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D	Petaluma, CA 94954	(707) 792-1865	FAX (707) 792-0342
1551 Industrial Road	San Carlos, CA 94070-4111	(650) 232-9600	FAX (650) 232-9612

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Blaine Project(3) Project Number: 1 Project Manager: WR Jones	Sampled: 3/29/99 Received: 3/30/99 Reported: 4/14/99
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**Sample Description:**

**MW-2**

**Laboratory Sample Number:**

**L904016-02**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
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**Sequoia Analytical - San Carlos**

**Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT**

Purgeable Hydrocarbons as Gasoline	9040048	4/9/99	4/9/99		2000	<b>16600</b>	ug/l	1
Benzene	"	"	"		20.0	<b>1380</b>	"	
Toluene	"	"	"		20.0	<b>1920</b>	"	
Ethylbenzene	"	"	"		20.0	<b>373</b>	"	
Xylenes (total)	"	"	"		20.0	<b>1840</b>	"	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	"	"	60.0-140		90.2	%	





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1551 Industrial Road	San Carlos, CA 94070-4111	(650) 232-9600	FAX (650) 232-9612

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Blaine Project(3) Project Number: 1 Project Manager: WR Jones	Sampled: 3/29/99 Received: 3/30/99 Reported: 4/14/99
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**Sample Description:**

**MW-4**

**Laboratory Sample Number:**

**L904016-03**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
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**Sequoia Analytical - San Carlos**

**Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT**

Purgeable Hydrocarbons as Gasoline	9040048	4/9/99	4/9/99	50.0	ND	ug/l
Benzene	"	"	"	0.500	ND	"
Toluene	"	"	"	0.500	ND	"
Ethylbenzene	"	"	"	0.500	ND	"
Xylenes (total)	"	"	"	0.500	ND	"
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	60.0-140	103	%

*Surrogate: a,a,a-Trifluorotoluene*





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1551 Industrial Road	San Carlos, CA 94070-4111	(650) 232-9600	FAX (650) 232-9612

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Blaine Project(3) Project Number: 1 Project Manager: WR Jones	Sampled: 3/29/99 Received: 3/30/99 Reported: 4/14/99
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**Sample Description:**

**MW-6**

**Laboratory Sample Number:**

**L904016-05**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate	Reporting Limit	Result	Units	Notes*
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**Sequoia Analytical - San Carlos**

**Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT**

Purgeable Hydrocarbons as Gasoline	9040047	4/9/99	4/9/99		50.0	ND	ug/l
Benzene	"	"	"		0.500	ND	"
Toluene	"	"	"		0.500	ND	"
Ethylbenzene	"	"	"		0.500	ND	"
Xylenes (total)	"	"	"		0.500	ND	"
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	60.0-140		112	%





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Analytical**

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1551 Industrial Road	San Carlos, CA 94070-4111	(650) 232-9600	FAX (650) 232-9612

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Blaine Project(3) Project Number: 1 Project Manager: WR Jones	Sampled: 3/29/99 Received: 3/30/99 Reported: 4/14/99
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**Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT/Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. Recov. Limits %	RPD Limit	RPD % Notes*
<b>Batch: 9040047</b>	<b>Date Prepared: 4/9/99</b>				<b>Extraction Method: EPA 5030B [MeOH]</b>				
<b>Blank</b>	<b>9040047-BLK1</b>								
Purgeable Hydrocarbons as Gasoline	4/9/99			ND	ug/l	50.0			
Benzene	"			ND	"	0.500			
Toluene	"			ND	"	0.500			
Ethylbenzene	"			ND	"	0.500			
Xylenes (total)	"			ND	"	0.500			
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		9.06	"	60.0-140	90.6		
<b>LCS</b>	<b>9040047-BS1</b>								
Benzene	4/9/99	10.0		9.25	ug/l	70.0-130	92.5		
Toluene	"	10.0		9.22	"	70.0-130	92.2		
Ethylbenzene	"	10.0		9.62	"	70.0-130	96.2		
Xylenes (total)	"	30.0		28.3	"	70.0-130	94.3		
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		10.7	"	60.0-140	107		
<b>Matrix Spike</b>	<b>9040047-MS1</b>	<b>L904016-05</b>							
Benzene	4/9/99	10.0	ND	9.28	ug/l	60.0-140	92.8		
Toluene	"	10.0	ND	9.29	"	60.0-140	92.9		
Ethylbenzene	"	10.0	ND	9.85	"	60.0-140	98.5		
Xylenes (total)	"	30.0	ND	28.2	"	60.0-140	94.0		
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		11.5	"	60.0-140	115		
<b>Matrix Spike Dup</b>	<b>9040047-MSD1</b>	<b>L904016-05</b>							
Benzene	4/9/99	10.0	ND	8.30	ug/l	60.0-140	83.0	25.0	11.1
Toluene	"	10.0	ND	8.27	"	60.0-140	82.7	25.0	11.6
Ethylbenzene	"	10.0	ND	8.58	"	60.0-140	85.8	25.0	13.8
Xylenes (total)	"	30.0	ND	25.4	"	60.0-140	84.7	25.0	10.4
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		10.8	"	60.0-140	108		
<b>Batch: 9040048</b>	<b>Date Prepared: 4/9/99</b>				<b>Extraction Method: EPA 5030B [MeOH]</b>				
<b>Blank</b>	<b>9040048-BLK1</b>								
Purgeable Hydrocarbons as Gasoline	4/9/99			ND	ug/l	50.0			
Benzene	"			ND	"	0.500			
Toluene	"			ND	"	0.500			
Ethylbenzene	"			ND	"	0.500			
Xylenes (total)	"			ND	"	0.500			
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		10.2	"	60.0-140	102		
<b>LCS</b>	<b>9040048-BS1</b>								
Benzene	4/9/99	10.0		8.82	ug/l	70.0-130	88.2		
Toluene	"	10.0		8.97	"	70.0-130	89.7		

Sequoia Analytical - San Carlos

\*Refer to end of report for text of notes and definitions.



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San Carlos, CA 94070-4111	(650) 232-9600	FAX (650) 232-9612

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Blaine Project(3) Project Number: 1 Project Manager: WR Jones	Sampled: 3/29/99 Received: 3/30/99 Reported: 4/14/99
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**Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT/Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Reporting Limit Units	Recov. Recov. Limits %	RPD Limit	RPD % Notes*
<b>LCS (continued)</b>								
	<b>9040048-BS1</b>							
Ethylbenzene	4/9/99	10.0		9.05	ug/l	70.0-130	90.5	
Xylenes (total)	"	30.0		27.1	"	70.0-130	90.3	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		10.2	"	60.0-140	102	
<b>Matrix Spike</b>								
	<b>9040048-MS1</b>	<b>L904017-05</b>						
Benzene	4/9/99	10.0	ND	9.08	ug/l	60.0-140	<b>90.8</b>	
Toluene	"	10.0	ND	9.44	"	60.0-140	<b>94.4</b>	
Ethylbenzene	"	10.0	ND	9.42	"	60.0-140	<b>94.2</b>	
Xylenes (total)	"	30.0	ND	28.4	"	60.0-140	<b>94.7</b>	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		9.31	"	60.0-140	93.1	
<b>Matrix Spike Dup</b>								
	<b>9040048-MSD1</b>	<b>L904017-05</b>						
Benzene	4/9/99	10.0	ND	8.90	ug/l	60.0-140	<b>89.0</b>	25.0 <b>2.00</b>
Toluene	"	10.0	ND	9.14	"	60.0-140	<b>91.4</b>	25.0 <b>3.23</b>
Ethylbenzene	"	10.0	ND	9.15	"	60.0-140	<b>91.5</b>	25.0 <b>2.91</b>
Xylenes (total)	"	30.0	ND	27.4	"	60.0-140	<b>91.3</b>	25.0 <b>3.66</b>
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		8.63	"	60.0-140	86.3	
<b>Batch: 9040049</b>								
	<b>Date Prepared: 4/9/99</b>							
	<b>9040049-BLK1</b>							
Purgeable Hydrocarbons as Gasoline	4/9/99			ND	ug/l	<b>50.0</b>		
Benzene	"			ND	"	<b>0.500</b>		
Toluene	"			ND	"	<b>0.500</b>		
Ethylbenzene	"			ND	"	<b>0.500</b>		
Xylenes (total)	"			ND	"	<b>0.500</b>		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		8.59	"	60.0-140	85.9	
<b>LCS</b>								
	<b>9040049-BS1</b>							
Benzene	4/9/99	10.0		9.13	ug/l	70.0-130	91.3	
Toluene	"	10.0		9.31	"	70.0-130	93.1	
Ethylbenzene	"	10.0		9.71	"	70.0-130	97.1	
Xylenes (total)	"	30.0		28.6	"	70.0-130	95.3	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		9.06	"	60.0-140	90.6	
<b>Matrix Spike</b>								
	<b>9040049-MS1</b>	<b>L904016-04</b>						
Benzene	4/9/99	10.0	ND	9.85	ug/l	60.0-140	<b>98.5</b>	
Toluene	"	10.0	ND	10.0	"	60.0-140	<b>100</b>	
Ethylbenzene	"	10.0	ND	10.5	"	60.0-140	<b>105</b>	
Xylenes (total)	"	30.0	ND	29.1	"	60.0-140	<b>97.0</b>	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	10.0		9.40	"	60.0-140	94.0	



**Sequoia  
Analytical**

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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Blaine Project(3) Project Number: 1 Project Manager: WR Jones	Sampled: 3/29/99 Received: 3/30/99 Reported: 4/14/99
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**Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT/Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. %	RPD Limit	RPD % Notes*
<b>Matrix Spike Dup</b>									
	<b>9040049-MSD1</b>		<b>L904016-04</b>						
Benzene	4/9/99	10.0	ND	10.1	ug/l	60.0-140	<b>101</b>	25.0	<b>2.51</b>
Toluene	"	10.0	ND	10.3	"	60.0-140	<b>103</b>	25.0	<b>2.96</b>
Ethylbenzene	"	10.0	ND	10.8	"	60.0-140	<b>108</b>	25.0	<b>2.82</b>
Xylenes (total)	"	30.0	ND	29.9	"	60.0-140	<b>99.7</b>	25.0	<b>2.75</b>
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	10.0		9.37	"	60.0-140	93.7		





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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Blaine Project(3) Project Number: 1 Project Manager: WR Jones	Sampled: 3/29/99 Received: 3/30/99 Reported: 4/14/99
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#### Notes and Definitions

#	Note
1	Chromatogram pattern: Gasoline C6-C12
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference



# BLAINE

TECH SERVICES INC.

**1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
FAX (408) 573-7771  
PHONE (408) 573-0555**

## LAB Section A

DHS #

**ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS  
SET BY CALIFORNIA DHS AND**

- EPA
- LIA
- OTHER

RWQCB REGION

**SPECIAL INSTRUCTIONS**

INVOICE & Report To  
BLAZE-TECH SERVICES  
ATTN: W.R. JONES

1904016

SAMPLING COMPLETED	DATE <u>3/29/99</u>	TIME <u>10:45</u>	SAMPLING PERFORMED BY	<u>Paul Sonne</u>	RESULTS NEEDED NO LATER THAN	<u>STANDARD</u>	
RELEASED BY	<u>Paul Sonne</u>	DATE <u>3/30/99</u>	TIME <u>DS 10:30</u>	RECEIVED BY	<u>John</u>	DATE <u>3/30/99</u>	TIME <u>11:30</u>
RELEASED BY	<u>Father</u>	DATE <u>3/30/99</u>	TIME	RECEIVED BY		DATE	TIME
RELEASED BY		DATE	TIME	RECEIVED BY		DATE	TIME
SHIPPED VIA		DATE SENT	TIME SENT	COOLER #			

## WELL GAUGING DATA

Project # 990329-P<sup>1</sup> Date 3-29-99 Client Mark Borsuk

Site 1432 Harrison St. Oakland

# WELL MONITORING DATA SHEET

Project #:	990329-P1		Client:	Mark Bousk				
Sampler:	PA-1		Start Date:	3-29-99				
Well I.D.:	MW-2		Well Diameter:	(2)	3	4	6	8
Total Well Depth:	25.61		Depth to Water:	18.97				
Before:	After:		Before:	After:				
Depth to Free Product:			Thickness of Free Product (feet):					
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH			

Purge Method:  Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible  
 Extraction Pump

Sampling Method:  Bailer  
 Disposable Bailer  
 Extraction Port

Other: \_\_\_\_\_

No.	(Gals.)	X	V	G	C	=	Gals.
1 Case Volume	Specified Volumes						Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
10:40	69.4	6.4	975	61	/	

Did well dewater? Yes  No Gallons actually evacuated: /

Sampling Time: 10:35 Sampling Date: 3-29-99

Sample I.D.: MW-2 Laboratory: Servo's

Analyzed for: TPH-G  BTEX MTBE TPH-D Other:

Equipment Blank I.D.: @ Time Duplicate I.D.:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: mg/L Post-purge: mg/L

ORP (if req'd): Pre-purge: mV Post-purge: mV

## WELL MONITORING DATA SHEET

Project #:	990329-P1		Client:	Mark Borsuk				
Sampler:	Paul		Start Date:	3-29-99				
Well I.D.:	MW-4		Well Diameter:	2	3	4	6	8
Total Well Depth:	24.72		Depth to Water:	18.35				
Before:	After:		Before:	After:				
Depth to Free Product:			Thickness of Free Product (feet):					
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH			

Purge Method: Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible  
 Extraction Pump

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port

Other: \_\_\_\_\_

No Gals.) X Purge = Gals.  
 1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
10:05	68.8	6.6	926	55	✓	

Did well dewater? Yes No Gallons actually evacuated: ✓

Sampling Time: 10:00 Sampling Date: 3-29-99

Sample I.D.: MW-4 Laboratory: Sogovic

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Equipment Blank I.D.: @ Time Duplicate I.D.:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

## WELL MONITORING DATA SHEET

Project #:	990329-P1		Client:	Mark Borsuk				
Sampler:	Paul		Start Date:	3-29-99				
Well I.D.:	MW-S		Well Diameter:	(2)	3	4	6	8
Total Well Depth:	28.65		Depth to Water:	18.88				
Before:	After:		Before:	After:				
Depth to Free Product:			Thickness of Free Product (feet):					
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH			

Purge Method: Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible  
 Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Other: \_\_\_\_\_

$$\frac{W_0 \text{ (Gals.)} \times \text{Purge}}{\text{Specified Volumes}} = \text{Calculated Volume Gals.}$$

1 Case Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
9:45	69.4	6.8	960	36	/	

Did well dewater? Yes  No Gallons actually evacuated: ✓

Sampling Time: 9:40 Sampling Date: 3-29-99

Sample I.D.: MW-S Laboratory: Sequoia

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Equipment Blank I.D.: @ Time Duplicate I.D.:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

## WELL MONITORING DATA SHEET

Project #:	990329-P1		Client:	Mark Borsuk	
Sampler:	PA-1		Start Date:	3-29-99	
Well I.D.:	MW-6		Well Diameter:	2	3 4 6 8
Total Well Depth:	28.27		Depth to Water:	18.92	
Before:	After:		Before:	After:	
Depth to Free Product:			Thickness of Free Product (feet):		
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH

Purge Method: Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible  
 Extraction Pump

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port

Other: \_\_\_\_\_

No Gals.) X Purge Gals.  
 1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
9:30	69.8	6.7	1386	21	/	

Did well dewater? Yes No Gallons actually evacuated: ✓

Sampling Time: 9:25 Sampling Date: 3-29-99

Sample I.D.: MW-6 Laboratory: Sequoia

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