TRC
Customer-Focused Solutions

January 15, 2001

California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, California 90013

ATTN: MR. JIMMIE WOO

SITE: JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CASE NUMBER: 97-020

RE: FOURTH QUARTER 2000
FLUID LEVEL MONITORING AND GROUNDWATER SAMPLING REPORT

Dear Mr. Woo:

Please find enclosed one copy of the Fourth Quarter 2000 Fluid Level Monitoring and Groundwater Sampling Report for the Jalk Fee Property located at 10607 Norwalk Boulevard, Santa Fe Springs, California.

If you have any questions regarding this report, please call me at (949) 341-7449.

Sincerely,

TRC

Jeff Hensel, RG, REA
Project Manager

Enclosure

23-0134/JalkQMSR03.Doc

c.c. Mr. F. E. Hand, ExxonMobil Corporation

21 Technology Drive • Irvine, California 92618
Telephone 949-753-0101 • Fax 949-753-0111

TRC
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FOURTH QUARTER 2000
FLUID LEVEL MONITORING AND
GROUNDWATER SAMPLING REPORT

January 15, 2001

JALK FEE PROPERTY
10607 Norwalk Boulevard
Santa Fe Springs, California

TRC Project No. 23-0134

Prepared For:

EXXONMOBIL CORPORATION
601 Jefferson, KT 1244
Houston, Texas 77002

By:

Jeff Hensel, RG, REA
Project Manager

REGISTERED GEOLOGIST
JEFFREY HENSEL
No. 5739
STATE OF CALIFORNIA

TRC ALTON GEOSCIENCE
21 Technology Drive
Irvine, California 92618

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A General Field Procedures and Monitoring Well Purging Data
B Official Laboratory Report and Chain of Custody Record and Manifests

1.0 INTRODUCTION

This report presents the findings of fluid level monitoring and groundwater sampling activities performed in the Fourth Quarter 2000 at the Jalk Fee Property located at 10607 Norwalk Boulevard, Santa Fe Springs, California (Figure 1).

2.0 FLUID LEVEL MONITORING AND GROUNDWATER SAMPLING ACTIVITIES

On November 28, 2000, fluid levels were measured in Monitoring Wells MMW-3, -4 and -5, located as shown on the groundwater elevation contour map (Figure 2). A summary of fluid level monitoring data for this and previous events is presented in Table 1. Plots of depth to water vs. time for this and the previous events, are presented in Graph 1. PCE trend plots are presented in Graphs 2, 3 and 4.

Monitoring wells were purged and sampled in accordance with standard regulatory protocol. General field procedures and monitoring well purging data are provided in Appendix A.

3.0 LABORATORY ANALYSIS AND GROUNDWATER DISPOSAL

Groundwater samples were submitted to a state-certified laboratory and analyzed for volatile organic compounds (VOCs) by EPA Method 8260B, total petroleum hydrocarbons as gasoline (TPH-G) by EPA Method 8015M, and ethanol and methanol by EPA Method 8015B. Dissolved-phase concentrations are shown in Figure 3. Laboratory results for this and previous groundwater sampling events are summarized in Table 1. Copies of the official laboratory report and chain of custody record are included in Appendix B.

Groundwater generated during purging and sampling activities was temporarily stored onsite pending transport to an appropriate disposal/recycling facility. Refer to Appendix C for a copy of the non-hazardous waste manifest.

4.0 FINDINGS

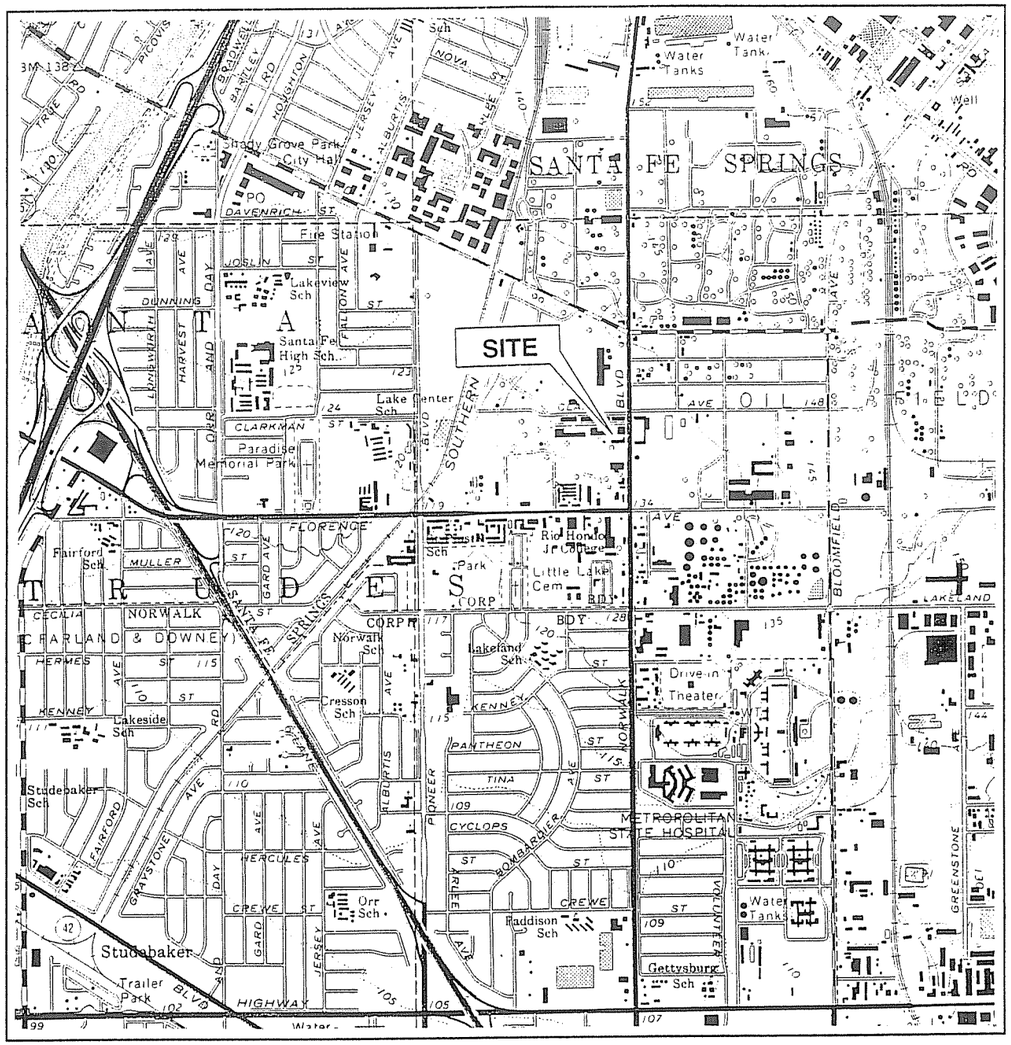
- The groundwater elevation ranges from 25.06 (MMW-4) to 27.68 (MMW-3) feet above mean sea level. The groundwater flow direction is generally directed to the southwest as shown on Figure 2.

- No concentrations of TPH-G, BTEX, MTBE, ethanol, or methanol were detected in groundwater samples collected in the Fourth Quarter 2000 (Table 1), with the exception of MTBE in MMW-3 at a concentration of 0.007 milligrams per liter (mg/l). MTBE has only recently been detected in MMW-3 (last two quarters) and will be closely monitored during future sampling events.

- The maximum concentrations of tetrachloroethene (PCE) and trichloroethane (TCE) were detected in Well MMW-5 (1.0 and 0.091 mg/l, respectively).

The fluid level monitoring and groundwater sampling activities summarized in this report have been conducted in accordance with current practice and the standard of care exercised by geologists and engineers performing similar tasks in this area. No warranty, express or implied, is made regarding the conclusions and professional opinions presented in this report. The conclusions are based solely upon an analysis of the observed conditions. If actual conditions differ from those described in this report, our office should be notified.

FIGURES

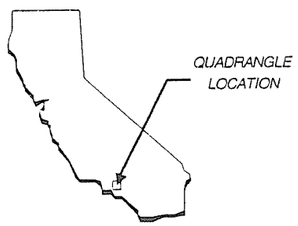


1 MILE 3/4 1/2 1/4 0 1 MILE

SCALE 1: 24,000

N

SOURCE:
United States Geological Survey
7.5 Minute Topographic Map:
Whittier Quadrangle



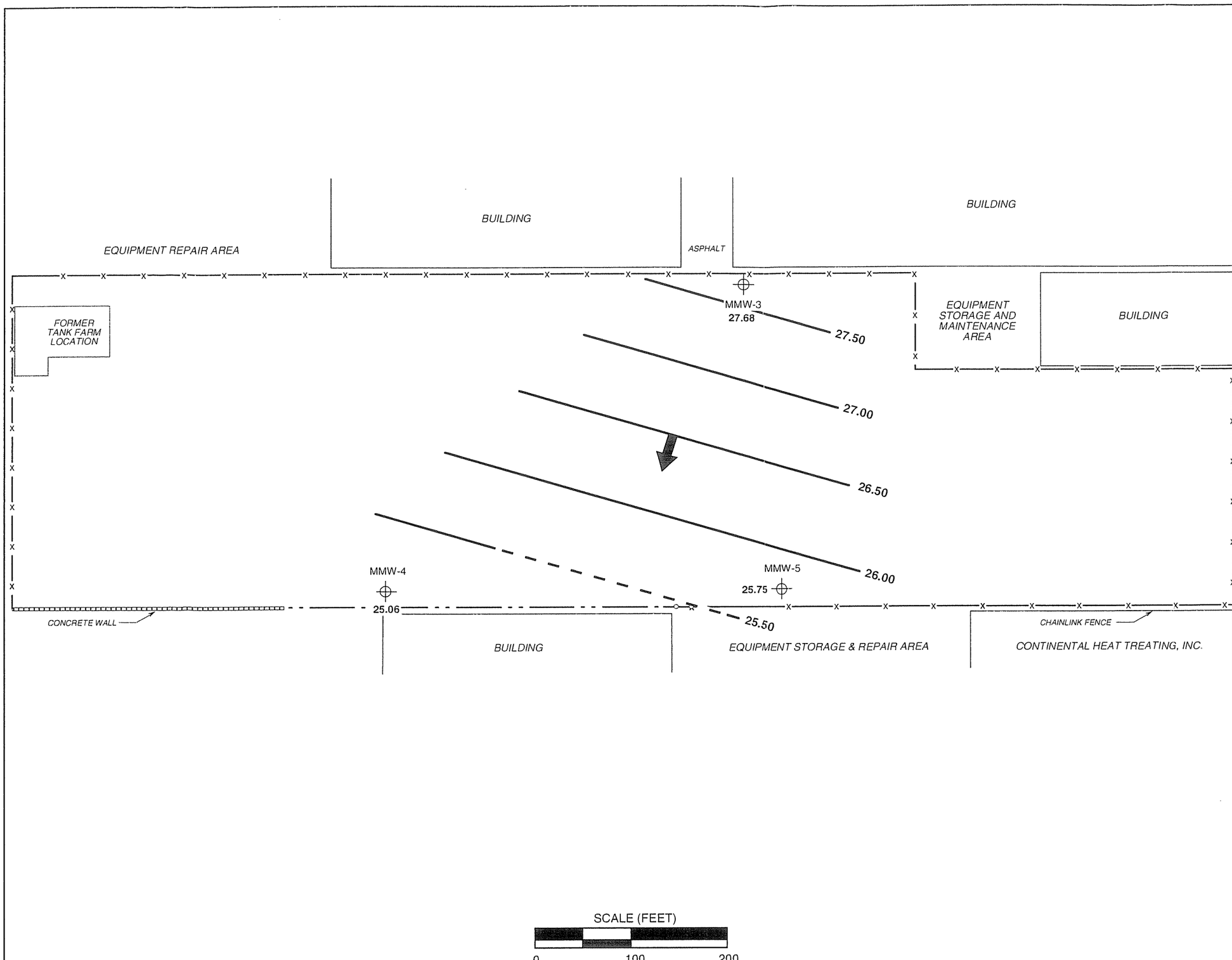
VICINITY MAP

Mobil Jalk Fee Property
10607 Norwalk Boulevard
Santa Fe Springs, California

ALTON GEOSCIENCE
Irvine, California

FIGURE 1

23-134 8/26/97



N

LEGEND

MMW-5 Monitoring Well with Groundwater Elevation (feet)

Chainlink Fence

Gate

27.00 Groundwater Elevation Contour

General Direction of Groundwater Flow

NOTE:

Contour lines are interpretive based on fluid levels measured in wells. Elevations are calculated using survey data to an arbitrary benchmark of 100 feet.

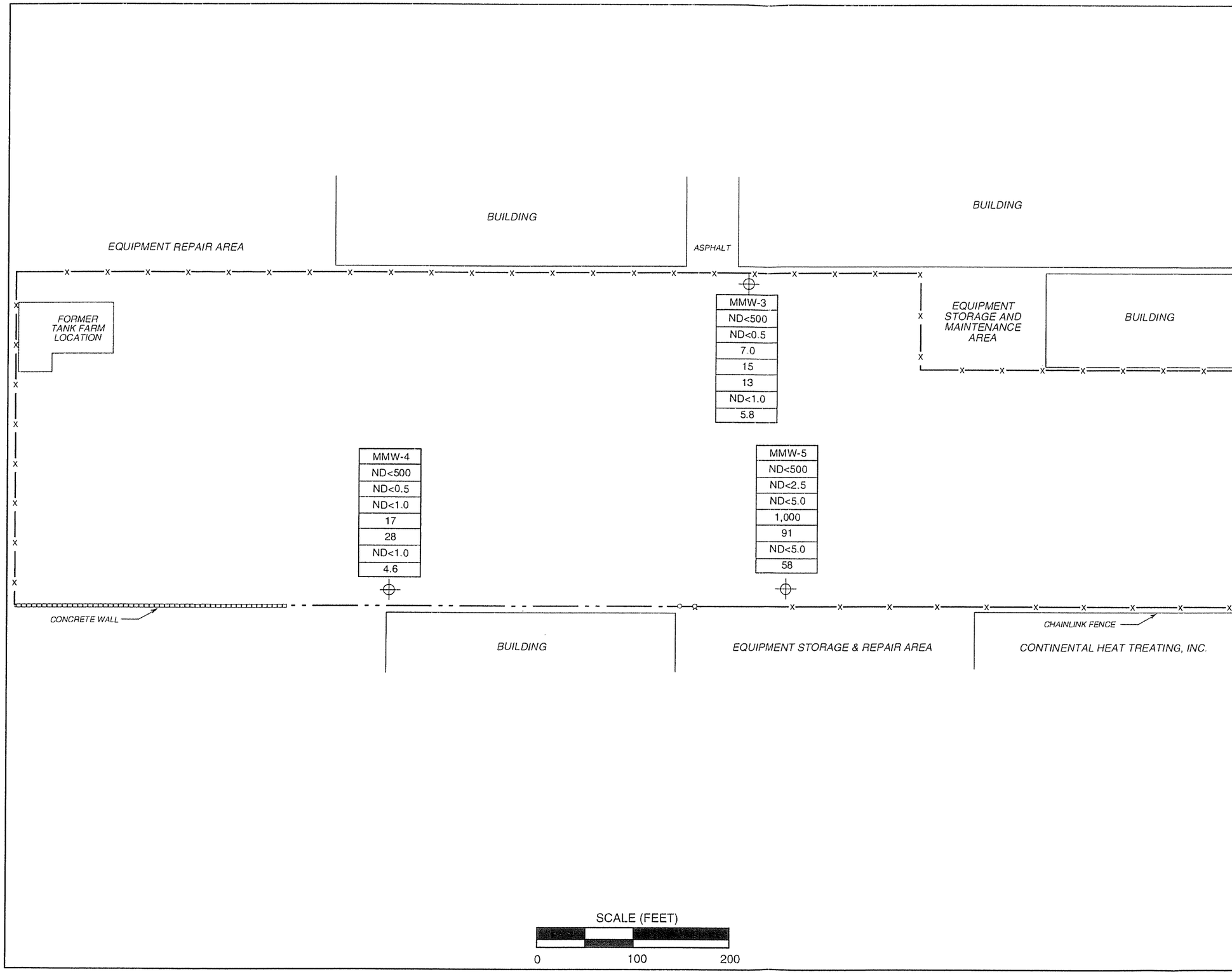
GROUNDWATER ELEVATION CONTOUR MAP
November 28, 2000

Mobil Jalk Fee Property
10607 Norwalk Boulevard
Santa Fe Springs, California

TRC Alton Geoscience

FIGURE 2

23-0134 QMS 1/15/01 jrw



LEGEND

WELL No.
TPH-G
B
MTBE
PCE
TCE
1,1-DCA
1,1-DCE

Monitoring Well with Dissolved-Phase Hydrocarbon Concentrations (µg/l)

NOTES:

TPH-G = total petroleum hydrocarbons as gasoline, B = benzene, MTBE = methyl tertiary butyl ether, PCE = tetrachloroethene, TCE = trichloroethene, 1,1-DCA = 1,1-Dichloroethane, 1,1-DCE = 1,1-Dichloroethene. µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. MTBE and other VOC results obtained using EPA Method 8260B.

DISSOLVED-PHASE HYDROCARBON CONCENTRATION MAP
November 28, 2000

Mobil Jalk Fee Property
10607 Norwalk Boulevard
Santa Fe Springs, California

TRC Alton Geoscience

FIGURE 3

23-0134 QMS 1/15/01 jrw

TABLES

Table I

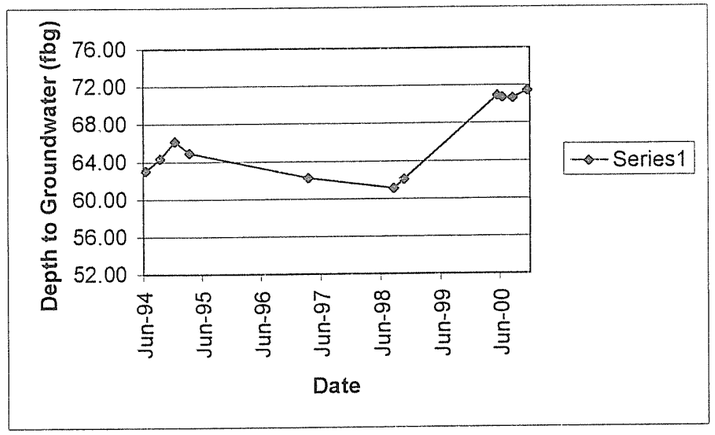
GROUNDWATER ELEVATION AND LABORATORY ANALYSIS RESULTS
March 1994 through December 2000
Jalk Fee Property

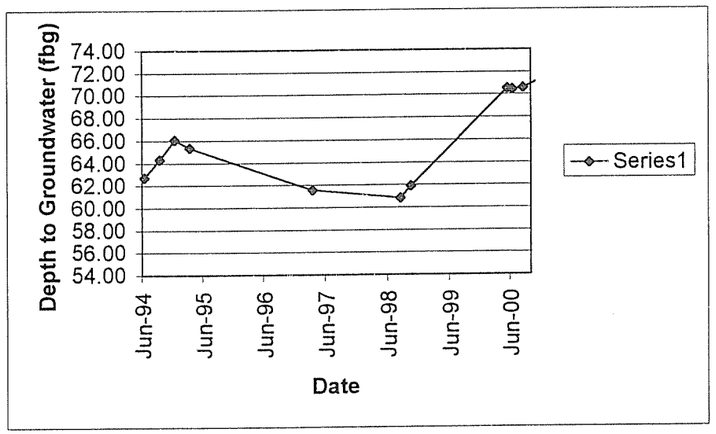
Well ID	Date	Top of Casing Elevation	Depth to Water (fbg)	Groundwater Elevation (fbg)	TPH-G (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	PCE (µg/l)	TCE (µg/l)	1-1, DCA (µg/l)	1,1-DCE (µg/l)	c-1,2-DCE (µg/l)
MMW-3	03/15/94	134.26	64.92	69.34	ND	4	13	26	101	--	5	25	2	10	--
	06/22/94	134.26	63.08	71.18	ND	ND	ND	ND	ND	--	4	24	2	8	--
	09/16/94	134.26	64.34	69.92	ND	ND	3	ND	6	--	ND	12	ND	3	--
	12/16/94	134.26	66.21	68.05	ND	ND	8	2	8	--	3	17	2	5	--
	03/08/95	134.26	64.95	69.31	ND	28	28	2	18	--	4	20	2	2	--
	03/26/97	99.17	62.25	36.92	ND	ND	ND	ND	ND	--	12	23	2	7	--
	08/03/98	99.17	61.12	38.05	ND	ND	ND	ND	ND	ND	8	21	2	6	--
	10/22/98	99.17	62.07	37.1	--	--	--	--	--	--	--	--	--	--	--
	05/02/00	99.17	70.94	28.23	ND	ND	ND	ND	ND	ND	5.0	16	1.8	9.2	--
	06/06/00	99.17	70.69	28.48	ND	ND	ND	ND	ND	ND	3.2	12	1.4	5.6	--
	08/31/00	99.17	70.67	28.5	ND<500	ND<0.50	ND<1.0	ND<1.0	ND<2.0	1.9	4.4	15	1.7	6.5	--
	11/28/00	99.17	71.49	27.68	ND<500	ND<0.50	ND<1.0	ND<1.0	ND<2.0	7.0	15.0	13	ND<1.0	5.8	ND<1.0
MMW-4	03/15/94	131.4	64.36	67.04	ND	ND	4	10	38	--	4	18	ND	2	--
	06/22/94	131.4	62.73	68.67	ND	ND	ND	ND	ND	--	2	16	ND	ND	--
	09/16/94	131.4	64.32	67.08	ND	ND	ND	ND	ND	--	ND	6	ND	ND	--
	12/16/94	131.4	66.10	65.3	ND	ND	7	3	9	--	1	6	ND	ND	--
	03/08/95	131.4	65.38	66.02	ND	2	2	ND	1	--	5	9	ND	ND	--
	03/26/97	96.34	61.57	34.77	ND	ND	ND	ND	ND	--	4.2	4	ND	ND	--
	08/03/98	96.34	60.86	35.48	ND	ND	ND	ND	ND	ND	2	4	ND	ND	--
	10/22/98	96.34	61.93	34.41	--	--	--	--	--	--	--	--	--	--	--
	05/02/00	96.34	70.57	25.77	ND	ND	ND	ND	ND	ND	4.4	12	1.7	1.8	--
	06/06/00	96.34	70.46	25.88	ND	ND	ND	ND	ND	ND	5.6	15	2.1	2.5	--
	08/31/00	96.34	70.58	25.76	ND<500	ND<0.50	ND<1.0	ND<1.0	ND<2.0	ND<1.0	6.7	17	1.9	2.0	--
	11/28/00	96.34	71.28	25.06	ND<500	ND<0.50	ND<1.0	ND<1.0	ND<2.0	ND<1.0	17	28	ND<1.0	4.6	3.4
MMW-5	03/15/94	133.38	66.26	67.12	ND	ND	ND	11	37	--	330	60	ND	5	--
	06/22/94	133.38	64.45	68.93	ND	ND	ND	ND	ND	--	930	100	ND	ND	--
	09/16/94	133.38	65.61	67.77	ND	ND	ND	ND	ND	--	830	82	ND	ND	--
	12/16/94	133.38	67.34	66.04	ND	ND	1	2	1	--	1,400	140	ND	5	--
	03/08/95	133.38	66.16	67.22	ND	ND	ND	ND	ND	--	2,200	180	ND	ND	--
	03/26/97	98.33	63.45	34.88	400	ND	ND	ND	ND	--	1,100	88	ND	ND	--
	10/22/98	98.33	63.34	34.99	ND	ND	0.40	ND	0.60	ND	--	--	--	--	--
	11/20/98	98.33	63.59	34.74	450	3	3.00	ND	1.00	ND	660	91	ND	9	--
	05/02/00	98.33	71.95	26.38	ND	ND	ND	ND	ND	ND	660	90	3.4	39	--
	06/06/00	98.33	71.79	26.54	ND	ND	ND	ND	ND	ND	100	24	ND	19	--
	09/15/00	98.33	71.86	26.47	136	ND<2.5	ND<5.0	ND<5.0	ND<10	ND<5.0	390	52	3.1	41	--
	11/28/00	98.33	72.58	25.75	ND<500	ND<2.5	ND<5.0	ND<5.0	ND<10	ND<5.0	1,000	91	ND<5.0	58	9.3

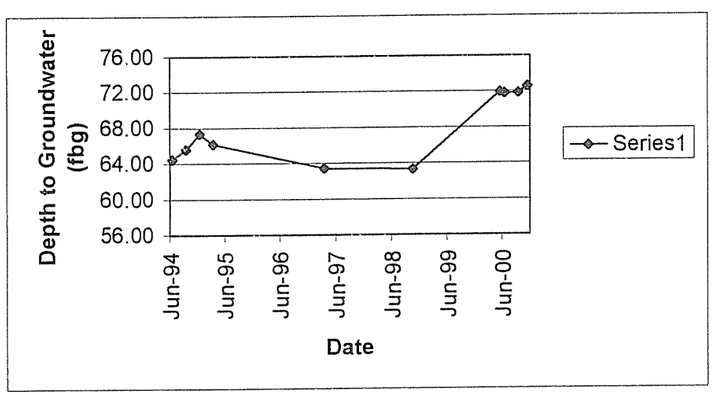
Notes:
PCE = tetrachloroethene
TPH-G = total petroleum hydrocarbons with gasoline distinction
MTBE = methyl tertiary butyl ether
TCE = trichloroethene
1,1-DCA = 1,1-dichloroethane
1,1-DCE = 1,1-dichloroethene
fbg = feet below grade
µg/l = micrograms per liter
-- = not analyzed, measured, or collected

GRAPHS

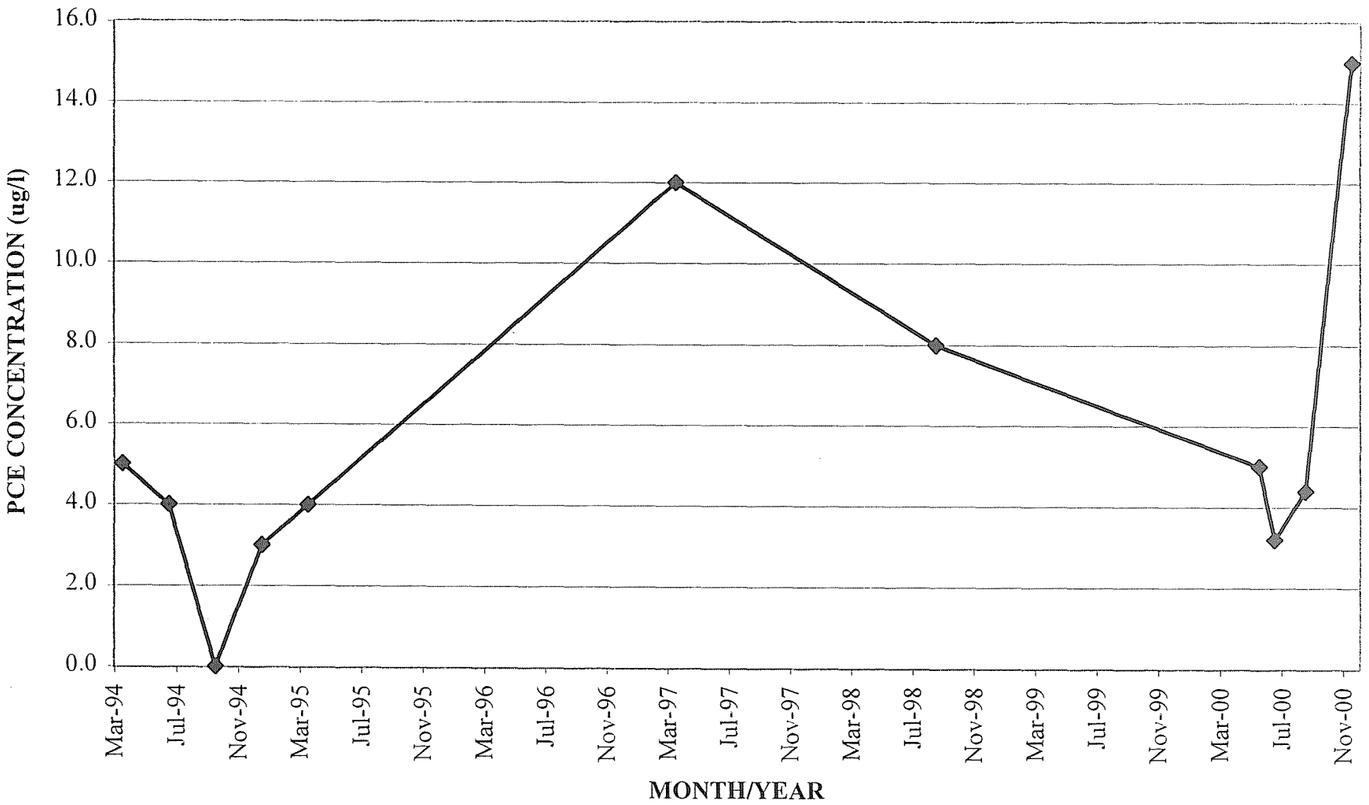
Graph 1
Depth to Groundwater vs. Time
Jalk Fee Property



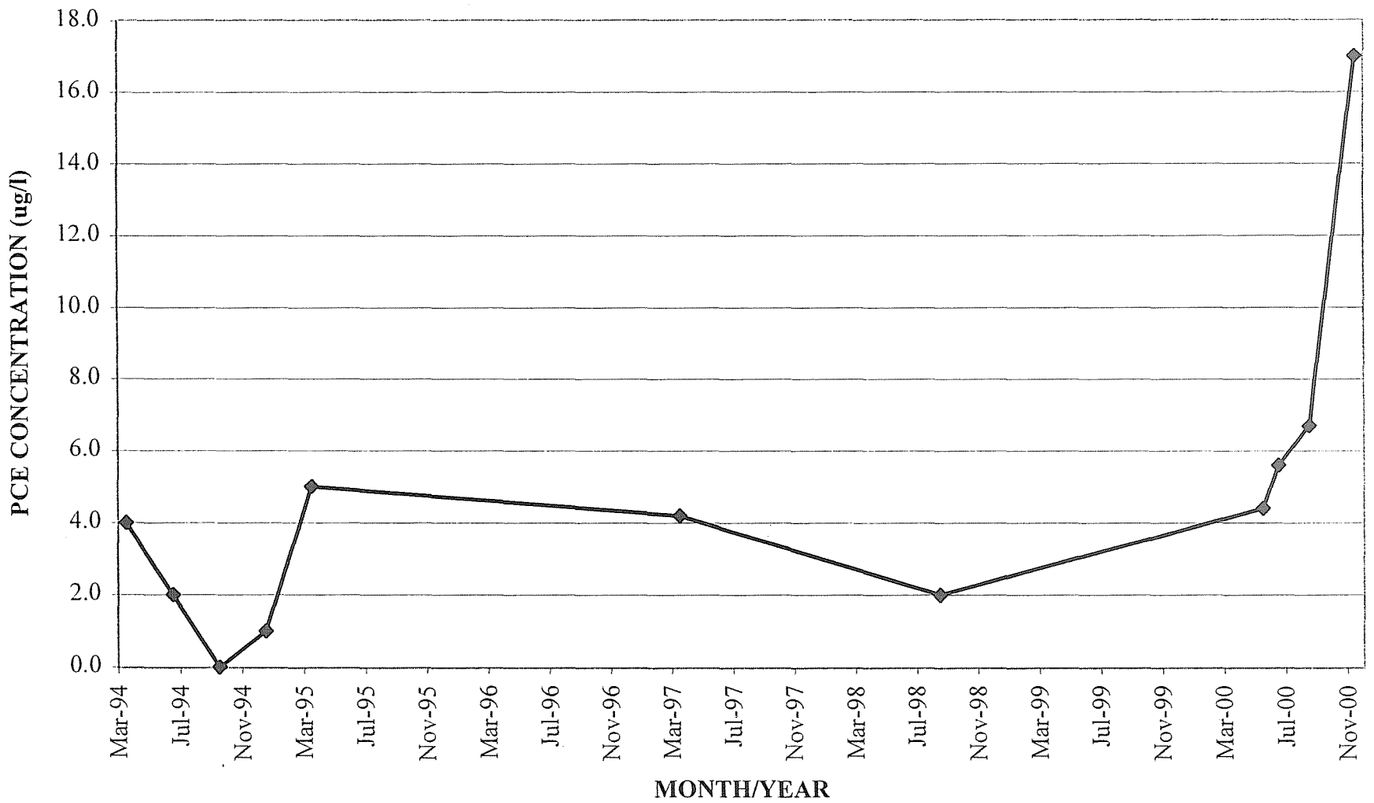




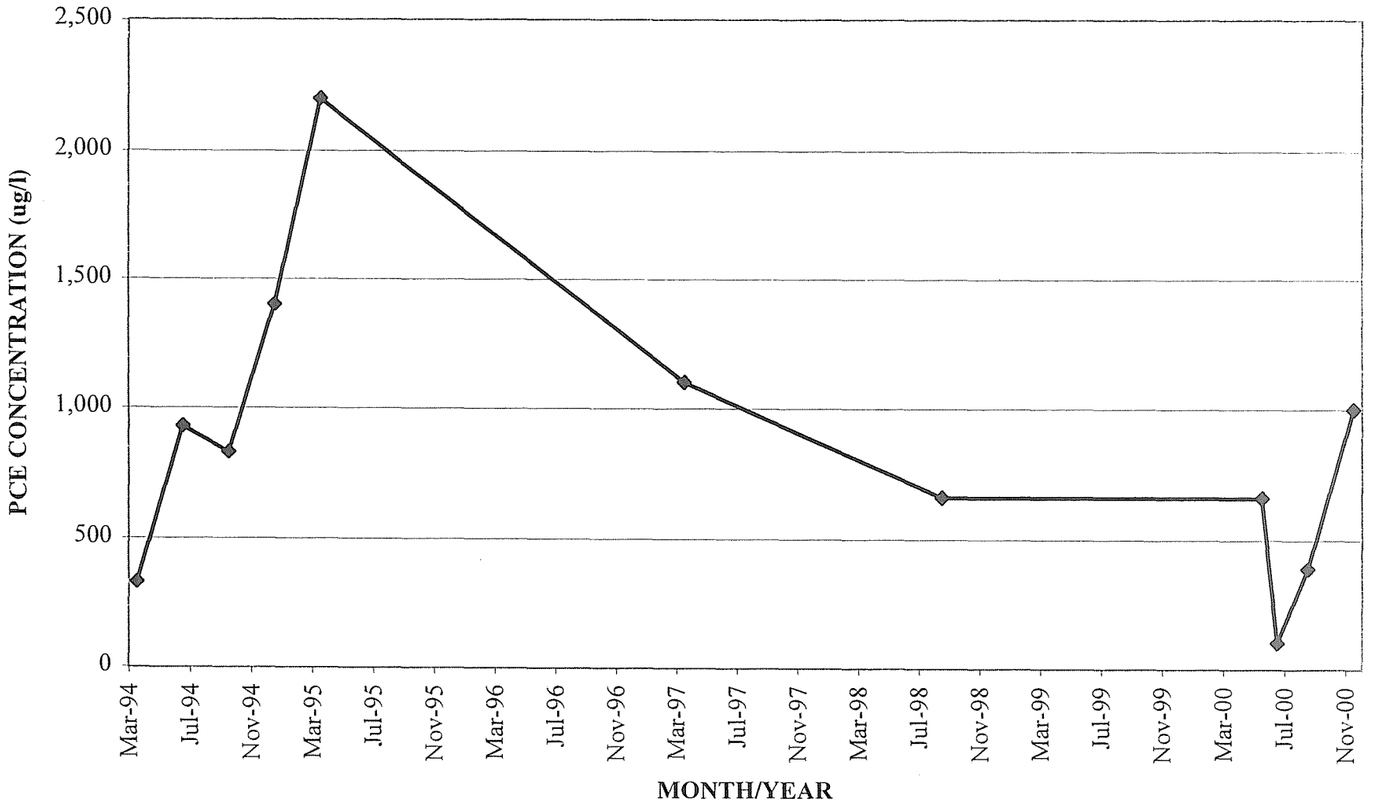
PCE vs. TIME - MMW-3



PCE vs. TIME - MMW-4



PCE vs. TIME - MMW-5



APPENDIX A

GENERAL FIELD PROCEDURES AND MONITORING WELL PURGING DATA

GENERAL FIELD PROCEDURES

General field procedures used during fluid level monitoring and groundwater sampling activities are described below.

FLUID LEVEL MONITORING

Fluid levels are monitored in the wells using an electronic interface probe with conductance sensors. The depth to liquid-phase hydrocarbons (LPH) and water is measured relative to the well box top or top of casing. Well box or casing elevations are surveyed to within 0.02 foot relative to a county or city bench mark.

GROUNDWATER SAMPLING

Groundwater monitoring wells are purged and sampled in accordance with standard regulatory protocol. Typically, monitoring wells that contain no LPH are purged of groundwater prior to sampling so that fluids collected are representative of fluids within the formation. Temperature, pH, and specific conductance are typically measured after each well casing volume has been removed. Purging is considered complete when the specified number of casing volumes of fluid have been removed and the three (3) parameters, pH, Conductivity, and Temperature have stabilized (See groundwater Sampling Field Notes for volume removed). Samples for laboratory analysis are collected without further purging if the well does not recharge within 2 hours to 80% of its volume before purging.

The purge water is either (1) pumped directly into a licensed vacuum truck; or (2) treated and disposed onsite using the TRC Alton Geoscience Mobile Groundwater Treatment Trailer; or (3) temporarily stored in labeled drums prior to transport to a treatment/recycling facility. If an automatic recovery system (ARS) is operating at the site, purged water may be pumped into the ARS for treatment.

With respect to wells that have been designated as "nonpurge", the wells will be sampled without purging. Monitoring wells that contain measurable LPH are typically purged. The purged water and LPH removed from wells will be either pumped directly into a licensed vacuum truck and removed from the site, or temporarily stored in labeled drums pending transport to an approved treatment/recycling facility.

GROUNDWATER SAMPLE COLLECTION

Groundwater samples are collected by lowering a 1.5-inch-diameter, bottom-fill, disposable polyethylene bailer to just below the static water level in the well. The samples are carefully transferred from the check-valve-equipped bailer to 1-liter and 40-milliliter glass containers. The sample containers are filled to zero headspace and fitted with Teflon-sealed caps. Each sample is labeled with the project number, well number, sample date, and sampler's initials, then transported to a state-certified laboratory for analysis. Samples remain in a cooler packed with ice until returned to TRC Alton's office where they are kept in a dedicated sample refrigerator pending shipment to an analytical laboratory.

Chain of custody protocol is followed for all groundwater samples selected for laboratory analysis. The chain of custody form(s) accompanies the samples from the sampling locality to the laboratory, providing a continuous record of possession prior to analysis. When a freight or overnight carrier ships samples, the carrier is noted on the chain of custody form.

DECONTAMINATION

Latex gloves are worn at all times during monitoring, sampling, and purging activities. Gloves are changed between each well. All monitoring, sampling, and purging equipment that could contact well fluids is either dedicated to a particular well or cleaned prior to each use in a Liqui-nox solution followed by two rinses: the first rinse in tap water and the final rinse in deionized water.

FIELD MONITORING DATA SHEET

ALTON GEOSCIENCE

Technician: Bill Ry Job #/Task #: 23-~~0150~~ 0134-70 Date: 11-29-00

Site # Valk-Fre Project Manager John Trompeter Page 1 of 1

Well #	D.O. ~~Grab~~	TOC	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
MW-5	1.85	X	106.00	72.58	~~Ø~~	~~Ø~~	1:49	
MW-4	1.69	↓	105.20	71.28	↓	↓	1:31	
MW-3	1.39	↓	93.30	71.49	↓	↓	1:40	

FIELD DATA COMPLETE ✓ QA/QC ✓ COC ✓ WELL BOX CONDITION SHEETS ✓

WTT CERTIFICATE MANIFEST DRUM INVENTORY ✓ TRAFFIC CONTROL ✓

FLDMONJL.S 3/29/99

GROUNDWATER SAMPLING FIELD NOTES

Site: Jalk Fee
Project No. 23-0134-22
Sampled By: Bill Rey
Date: 11-28-00

Well No. MW-5
Purge Method: Sub Space
Depth to Water (feet): 72.59
Depth to Product (feet): ∅
Total Depth (feet) 106.00
LPH & Water Recovered (gallons): ∅
Water Column (feet): 33.42
Casing Diameter (Inches): 4"
80% Recharge Depth (feet): 79.26
1 Well Volume (gallons): 22

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
12:19			22	1.76	77.1	6.25
			44	1.67	77.5	6.95
	12:36		66	1.55	77.9	6.91

Static at Time Sampled	Total Purged	Time Sampled
72.58	66	1:49

Comments:

Well No. MW-4
Purge Method: Sub Space
Depth to Water (feet): 71.28
Depth to Product (feet): ∅
Total Depth (feet) 105.20
LPH & Water Recovered (gallons): ∅
Water Column (feet): 33.92
Casing Diameter (Inches): 4"
80% Recharge Depth (feet): 78.06
1 Well Volume (gallons): 22

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
1:11			22	1.59	73.6	7.02
			44	1.56	74.9	6.97
	1:20		66	1.55	75.2	7.16

Static at Time Sampled	Total Purged	Time Sampled
71.27	66	1:31

Comments:

Well No. MW-3
Purge Method: Sub Space
Depth to Water (feet) 71.49
Depth to Product (feet): ∅
Total Depth (feet): 93.30
LPH & Water Recovered (gallons): ∅
Water Column (feet) 21.81
Casing Diameter (inches): 4"
80% Recharge Depth (feet): 75.05
1 Well Volume (gallons): 14

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
12:43			14	1.65	76.7	7.00
			28	1.73	75.4	6.96
	12:54		42	1.74	74.5	6.91

Static at Time Sampled	Total Purged	Time Sampled
71.43	42	1:40

Comments:

Well No. _____
Purge Method: _____
Depth to Water (feet) _____
Depth to Product (feet): _____
Total Depth (feet): _____
LPH & Water Recovered (gallons): ____
Water Column (feet) _____
Casing Diameter (inches): _____
80% Recharge Depth (feet): _____
1 Well Volume (gallons): _____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH

Static at Time Sampled	Total Purged	Time Sampled

Comments:

Well No. _____
Purge Method: _____
Depth to Water (feet) _____
Depth to Product (feet): _____
Total Depth (feet): _____
LPH & Water Recovered (gallons): ____
Water Column (feet) _____
Casing Diameter (inches): _____
80% Recharge Depth (feet): _____
1 Well Volume (gallons): _____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH

Static at Time Sampled	Total Purged	Time Sampled

Comments:

Well No. _____
Purge Method: _____
Depth to Water (feet) _____
Depth to Product (feet): _____
Total Depth (feet): _____
LPH & Water Recovered (gallons): ____
Water Column (feet) _____
Casing Diameter (inches): _____
80% Recharge Depth (feet): _____
1 Well Volume (gallons): _____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH

Static at Time Sampled	Total Purged	Time Sampled

Comments:

APPENDIX B

OFFICIAL LABORATORY REPORT AND CHAIN OF CUSTODY RECORD AND MANIFEST

Calscience
Environmental
Laboratories, Inc.

December 06, 2000

John Trompeter
TRC-Alton Geoscience
21 Technology Drive
Irvine, CA 92618

Subject: **Calscience Work Order Number: 00-11-1170**
Client Reference: Jalk Fee

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 11/29/00, and analyzed as requested on the attached chain-of-custody record.

The results in this analytical report are limited to the samples tested, and any reproduction of this report must be made in its entirety.

Note that the Sample Receipt Form and Chain-of-Custody Record are integral parts of this report.

If you have any questions regarding this report, require sampling supplies or field services, or information about our analytical services, please feel free to call me at (714) 895-5494.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Michael J. Crisostomo
Project Manager

William H. Christensen
Quality Assurance Manager

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience
21 Technology Drive
Irvine, CA 92618

Date Received: 11/29/00
Work Order No: 00-11-1170
Preparation: EPA 5030B
Method: EPA 8015M

Project: Jalk Fee

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-5	**00-11-1170-1**	**Aqueous**	**11/28/00**	**N/A**	**11/30/00**	**00113001sa**

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	79	57-128	

MW-4	**00-11-1170-2**	**Aqueous**	**11/28/00**	**N/A**	**12/01/00**	**00113001sa**

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	87	57-128	

MW-3	**00-11-1170-3**	**Aqueous**	**11/28/00**	**N/A**	**11/30/00**	**00112902sa**

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	95	57-128	

Method Blank	**098-03-006-799**	**Aqueous**	**N/A**	**N/A**	**11/30/00**	**00112902sa**

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	108	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience
21 Technology Drive
Irvine, CA 92618

Date Received: 11/29/00
Work Order No: 00-11-1170
Preparation: EPA 5030B
Method: EPA 8015M

Project: Jalk Fee

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	**098-03-006-802**	**Aqueous**	**N/A**	**N/A**	**11/30/00**	**00113001sa**

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	84	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience
21 Technology Drive
Irvine, CA 92618

Date Received:	11/29/00
Work Order No:	00-11-1170
Preparation:	N/A
Method:	EPA 8260B

Project: Jalk Fee

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-5	**00-11-1170-1**	**11/28/00**	**Aqueous**	**N/A**	**12/03/00**	**001202AW**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	50	5		ug/L	1,1-Dichloropropene	ND	5.0	5		ug/L
Benzene	ND	2.5	5		ug/L	c-1,3-Dichloropropene	ND	2.5	5		ug/L
Bromobenzene	ND	5.0	5		ug/L	t-1,3-Dichloropropene	ND	2.5	5		ug/L
Bromochloromethane	ND	5.0	5		ug/L	Ethylbenzene	ND	5.0	5		ug/L
Bromodichloromethane	ND	5.0	5		ug/L	2-Hexanone	ND	50	5		ug/L
Bromoform	ND	5.0	5		ug/L	Isopropylbenzene	ND	5.0	5		ug/L
Bromomethane	ND	5.0	5		ug/L	p-Isopropyltoluene	ND	5.0	5		ug/L
2-Butanone	ND	50	5		ug/L	Methylene Chloride	ND	50	5		ug/L
n-Butylbenzene	ND	5.0	5		ug/L	4-Methyl-2-Pentanone	ND	50	5		ug/L
sec-Butylbenzene	ND	5.0	5		ug/L	Naphthalene	ND	50	5		ug/L
tert-Butylbenzene	ND	5.0	5		ug/L	n-Propylbenzene	ND	5.0	5		ug/L
Carbon Disulfide	ND	50	5		ug/L	Styrene	ND	5.0	5		ug/L
Carbon Tetrachloride	ND	2.5	5		ug/L	1,1,1,2-Tetrachloroethane	ND	5.0	5		ug/L
Chlorobenzene	ND	5.0	5		ug/L	1,1,2,2-Tetrachloroethane	ND	5.0	5		ug/L
Chloroethane	ND	5.0	5		ug/L	Tetrachloroethene	1000	25	25	D	ug/L
Chloroform	ND	5.0	5		ug/L	Toluene	ND	5.0	5		ug/L
Chloromethane	ND	5.0	5		ug/L	1,2,3-Trichlorobenzene	ND	5.0	5		ug/L
2-Chlorotoluene	ND	5.0	5		ug/L	1,2,4-Trichlorobenzene	ND	5.0	5		ug/L
4-Chlorotoluene	ND	5.0	5		ug/L	1,1,1-Trichloroethane	ND	5.0	5		ug/L
Dibromochloromethane	ND	5.0	5		ug/L	1,1,2-Trichloroethane	ND	5.0	5		ug/L
1,2-Dibromo-3-Chloropropane	ND	25	5		ug/L	Trichloroethene	91	5	5		ug/L
1,2-Dibromoethane	ND	5.0	5		ug/L	Trichlorofluoromethane	ND	50	5		ug/L
Dibromomethane	ND	5.0	5		ug/L	1,2,3-Trichloropropane	ND	5.0	5		ug/L
1,2-Dichlorobenzene	ND	5.0	5		ug/L	1,2,4-Trimethylbenzene	ND	5.0	5		ug/L
1,3-Dichlorobenzene	ND	5.0	5		ug/L	1,3,5-Trimethylbenzene	ND	5.0	5		ug/L
1,4-Dichlorobenzene	ND	5.0	5		ug/L	Vinyl Acetate	ND	50	5		ug/L
Dichlorodifluoromethane	ND	5.0	5		ug/L	Vinyl Chloride	ND	2.5	5		ug/L
1,1-Dichloroethane	ND	5.0	5		ug/L	p/m-Xylene	ND	5.0	5		ug/L
1,2-Dichloroethane	ND	2.5	5		ug/L	o-Xylene	ND	5.0	5		ug/L
1,1-Dichloroethene	58	5	5		ug/L	Methyl-tert-Butyl Ether	ND	5.0	5		ug/L
c-1,2-Dichloroethene	9.3	5.0	5		ug/L	Tert-Butyl alcohol (TBA)	ND	250	5		ug/L
t-1,2-Dichloroethene	ND	5.0	5		ug/L	Diisopropyl ether (DIPE)	ND	10	5		ug/L
1,2-Dichloropropane	ND	5.0	5		ug/L	Ethyl t-butyl ether (ETBE)	ND	10	5		ug/L
1,3-Dichloropropane	ND	5.0	5		ug/L	Tert-Amyl methyl ether	ND	10	5		ug/L
2,2-Dichloropropane	ND	5.0	5		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	86-118		Toluene-d8	98	88-110	
1,4-Bromofluorobenzene	99	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience
21 Technology Drive
Irvine, CA 92618

Date Received: 11/29/00
Work Order No: 00-11-1170
Preparation: N/A
Method: EPA 8260B

Project: Jalk Fee

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-4	**00-11-1170-2**	**11/28/00**	**Aqueous**	**N/A**	**12/03/00**	**001202AW**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	17	1	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	28	1	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	4.6	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
c-1,2-Dichloroethene	3.4	1.0	1		ug/L	Tert-Butyl alcohol (TBA)	ND	50	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl t-butyl ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl methyl ether	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	86-118		Toluene-d8	97	88-110	
1,4-Bromofluorobenzene	97	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience
21 Technology Drive
Irvine, CA 92618

Date Received: 11/29/00
Work Order No: 00-11-1170
Preparation: N/A
Method: EPA 8260B

Project: Jalk Fee

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-3	**00-11-1170-3**	**11/28/00**	**Aqueous**	**N/A**	**12/03/00**	**001202AW**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene.	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	15	1	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	13	1	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	5.8	1.0	1		ug/L	Methyl-tert-Butyl Ether	7.0	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl alcohol (TBA)	ND	50	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl t-butyl ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl methyl ether	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	111	86-118		Toluene-d8	101	88-110	
1,4-Bromofluorobenzene	96	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience
21 Technology Drive
Irvine, CA 92618

Date Received: 11/29/00
Work Order No: 00-11-1170
Preparation: N/A
Method: EPA 8260B

Project: Jalk Fee

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	**099-10-006-1,192**	**N/A**	**Aqueous**	**N/A**	**12/02/00**	**001202AW**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl alcohol (TBA)	ND	50	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl t-butyl ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl methyl ether	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	86-118		Toluene-d8	98	88-110	
1,4-Bromofluorobenzene	100	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience		Date Sampled:	11/29/00
21 Technology Drive		Date Received:	11/29/00
Irvine, CA 92618		Date Extracted:	N/A
		Date Analyzed:	12/01/00
		Work Order No.:	00-11-1170
Attn: John Trompeter		Method:	EPA 8015B
RE: Jalk Fee		Page 1 of 1	

All concentrations are reported in mg/L (ppm).

Analyte	Concentration	Reporting Limit
Sample Number: MW-5		
Methanol	ND	0.10
Ethanol	ND	0.10
Sample Number: MW-4		
Methanol	ND	0.10
Ethanol	ND	0.10
Sample Number: MW-3		
Methanol	ND	0.10
Ethanol	ND	0.10
Sample Number: Method Blank		
Methanol	ND	0.10
Ethanol	ND	0.10

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience
21 Technology Drive
Irvine, CA 92618

Project: Jalk Fee

Date Received:	11/29/00
Work Order No:	00-11-1170
Preparation:	EPA 5030B
Method:	EPA 8015M

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-11-1034-5	**Aqueous**	**GC 18**	**N/A**	**11/30/00**	**00112903ms**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	114	114	68-122	0	0-14	

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience
21 Technology Drive
Irvine, CA 92618

Project: Jalk Fee

Date Received:	11/29/00
Work Order No:	00-11-1170
Preparation:	EPA 5030B
Method:	EPA 8015M

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-11-1180-8	**Aqueous**	**GC 24**	**N/A**	**11/30/00**	**00113001ms**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	96	95	68-122	1	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience
21 Technology Drive
Irvine, CA 92618

Project: Jalk Fee

Date Received: 11/29/00
Work Order No: 00-11-1170
Preparation: EPA 5030B
Method: EPA 8015M

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-006-799	Aqueous	GC 18	N/A	11/30/00	00112902sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	103	100	79-115	3	0-19	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience
21 Technology Drive
Irvine, CA 92618

Project: Jalk Fee

Date Received: 11/29/00
Work Order No: 00-11-1170
Preparation: EPA 5030B
Method: EPA 8015M

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-006-802	Aqueous	GC 24	N/A	11/30/00	00113001sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	104	104	79-115	0	0-19	

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience
21 Technology Drive
Irvine, CA 92618

Project: Jalk Fee

Date Received: 11/29/00
Work Order No: 00-11-1170
Preparation: N/A
Method: EPA 8260B

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-4	Aqueous	GC/MS R	N/A	12/03/00	0011117002

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	97	72-127	4	0-25	
Carbon Tetrachloride	110	110	70-130	0	0-25	
Chlorobenzene	101	99	72-131	2	0-25	
1,2-Dichlorobenzene	98	99	70-130	2	0-25	
1,1-Dichloroethene	107	104	69-127	2	0-25	
Toluene	99	98	75-124	2	0-25	
Trichloroethene	105	102	60-137	2	0-25	
Vinyl Chloride	96	105	70-130	9	0-25	
Methyl-tert-Butyl Ether	94	96	80-120	2	0-25	
Tert-Butyl alcohol (TBA)	80	86	60-140	7	0-25	
Diisopropyl ether (DIPE)	97	98	60-140	1	0-25	
Ethyl t-butyl ether (ETBE)	98	98	60-140	0	0-25	
Tert-Amyl methyl ether	96	97	60-140	1	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience
21 Technology Drive
Irvine, CA 92618

Project: Jalk Fee

Date Received: 11/29/00
Work Order No: 00-11-1170
Preparation: N/A
Method: EPA 8260B

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-1,192	Aqueous	GC/MS R	N/A	12/02/00	001202AW

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	92	100	72-127	8	0-25	
Carbon Tetrachloride	99	106	70-130	7	0-25	
Chlorobenzene	93	100	72-131	8	0-25	
1,2-Dichlorobenzene	91	100	70-130	10	0-25	
1,1-Dichloroethene	95	100	69-127	5	0-25	
Toluene	91	99	75-124	9	0-25	
Trichloroethene	94	102	60-137	8	0-25	
Vinyl Chloride	93	100	79-118	7	0-25	
Methyl-tert-Butyl Ether	92	97	80-120	5	0-25	
Tert-Butyl alcohol (TBA)	89	88	60-140	1	0-25	
Diisopropyl ether (DIPE)	94	101	60-140	7	0-25	
Ethyl t-butyl ether (ETBE)	94	99	60-140	5	0-25	
Tert-Amyl methyl ether	92	100	60-140	8	0-25	

Calscience Environmental Laboratories, Inc.

QUALITY ASSURANCE SUMMARY
Method EPA 8015B

TRC-Alton Geoscience — Work Order No.: 00-11-1170
Page 1 of 1 — Date Analyzed: 12/01/00

Matrix Spike/Matrix Spike Duplicate
Sample Spiked: MW-5

Analyte	MS%REC	MSD%REC	Control Limits	%RPD	Control Limits
Methanol	85	85	50 - 150	0	0 - 25
Ethanol	89	102	50 - 150	14	0 - 25

Laboratory Control Sample

Analyte	Conc. Added	Conc. Rec.	%REC	Control Limits
Methanol	5.00	4.38	88	50 - 150
Ethanol	5.00	4.37	87	50 - 150

Surrogate Recoveries (in %)

Sample Number	S1
MW-5	90
MW-4	92
MW-3	88
Method Blank	95

Surrogate Compound	%REC Acceptable Limits
S1 > Hexafluoro-2-propanol	70 - 130

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Calscience Environmental Laboratories, Inc.

GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 00-11-1170

Qualifier	Definition
D	The sample data was reported from a diluted analysis.
ND	Not detected at indicated reporting limit.

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SAMPLE RECEIPT FORM

Work Order Number:	**00-11-1170**	Date Received:	11/29/00
Delivery Container Type:	Cooler	Date Opened:	11/29/00
Client Project ID:	Jalk Fee	Opened By:	JP

Section A: Pass/Fail Criteria

		Comments
1. Chain of custody document(s) received with samples.	Yes	
2. Sample container label(s) consistent with custody papers.	Yes	
3. Sample container label(s) complete (ID, date, time, taken by).	Yes	
4. Sample container(s) intact and in good condition.	Yes	
5. If applicable, proper preservation noted on sample label(s).	Yes	
6. Sufficient sample volume received for analyses requested.	Yes	
7. Correct containers used for analyses requested.	Yes	
8. If applicable, VOA vials free of headspace.	Yes	

Section B: Additional Observations

1. Describe packing materials used in container.	NA
2. Was sample container('s) sealed with custody	No
3. Were all samples sealed in separate plastic bags?	No
4. Measured temperature inside delivery container when opened.	4.0 °C
5. If delivery container shipped by third-party carrier, did container come with shipping slip, airbill, etc.? If YES, attach copy of shipping slip/airbill to the back of this	No
6. Do tedlar bags show condensation? Describe below if yes.	No
7. Are 25.1 condensate traps immersed in dry ice?	NA
8. Are 25.1 sampling trains intact?	NA
9. Are 25.3 condensate vials still attached to the sampling train?	NA
10. Are 25.3 condensate vials on wet ice?	NA

Section C: Additional Comments

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 • FAX: (714) 894-7501

WBS 5 G
Bill to ALTON GEO.

CHAIN OF CUSTODY RECORD

Date 11-29-00
Page 1 of 1

LABORATORY CLIENT: TRC-Alton
ADDRESS: 21 Technology Dr
CITY: Irvine CA STATE ZIP
TEL: (949) 753-0101 FAX: (949) 753-0111 E-MAIL:

CLIENT PROJECT NAME / NUMBER: 0134 Jalk Fee / 23-~~0150~~ 70
PROJECT CONTACT: John Trompeter
SAMPLER(S): (SIGNATURE) [signature] / Bill Rey

P.O. NO.:
LAB USE ONLY: 11-1176
COOLER RECEIPT TEMP = 4.0 °C

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___ / ___ / ___.

SPECIAL INSTRUCTIONS 4 VOAs w HCl
2 VOAs w/o HCl

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) or ___	BTEX / MTBE ~~(8021B)~~ 8260B	HALOCARBONS (8021B)	VOCs (8260B)	VOCs (5035 / 8260B) EnCore	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EOB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	CH_4 / TGNMO (25.1)	FIXED GASES (25.1) or (D1946)	Oxy's	Full Scan 8260	Ethanol, methanol		
	MW-5		11-29-00	1:49	GW	6V	X		X													X	X	X		
	MW-4		11-29-00	1:31	GW	6V	X		X													X	X	X		
	MW-3		11-29-00	1:40	GW	6V	X		X													X	X	X		

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	[signature]	11/29/00	14:45
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature) [signature]	Received for Laboratory by: (Signature) [signature]	11/29/00	15:37

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Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Yellow and Pink copies respectively.

10/01/00 Revision

Q&Q Graphic (714) 898-9702

Receipt of Manifest
is Pending

(January 15, 2001)