desert petroleum inc.

John Rutherford
Director
Environmental Affairs

March 1, 1993

Mr. Larry Seto
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621

Re: Monitoring Report
Desert Petroleum STID 851
2844 Mountain Blvd., Oakland, CA

Dear Mr. Seto:

Enclosed is our consultant's report of a recent sampling of groundwater at the referenced site location.

As you are aware, Desert is in Chapter 11 Bankruptcy, and does not have complete discretion to spend its limited resources. For this reason we have not done sampling on a quarterly basis. However, we have and will continue to do as much as possible within the framework of the bankruptcy restrictions.

Very truly yours,

John D. Rutherford

JDR:jc

enclosure

cc: B. Mossman, RSI

REMEDIATION SERVICE, INT'L.

P.O. BOX 1601, OXNARD, CALIFORNIA 93032
(805) 644-5892 • FAX (805) 654-0720

MONITORING REPORT
for
DESERT PETROLEUM STATION NUMBER 796
2844 Mountain Boulevard
Oakland, CA

Prepared for:
DESERT PETROLEUM
2060 Knoll Drive
Ventura, CA 93003

Prepared by:
RSI - REMEDIATION SERVICE, INT'L
P.O. Box 1601
Oxnard, CA 93032

February 23, 1993

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1.0 INTRODUCTION

Desert Petroleum Station Number 796 is located at 2844 Mountain Boulevard in Oakland, California (Figure 1). Elevated concentrations of gasoline have been identified in both the soil and shallow groundwater at this site. This report presents the results of groundwater monitoring conducted in January, 1992 and January, 1993, as well as an update of remedial activities at the site.

1.1 Site Description

The site is located at the intersection of Mountain Boulevard and Werner Court in Oakland, California (Figure 2). It is currently occupied by a retail gasoline station operating under the ARCO trade name. Site improvements include three underground storage tanks, two pump islands and an office/garage building. The tanks contain various grades of unleaded gasoline and have individual storage capacities of 3,000, 4,000, and 10,000 gallons.

1.2 Background

Soil contamination was originally identified during replacement of the product lines in March, 1989. Analytical results of soil samples collected from beneath the lines near the pump islands showed total petroleum hydrocarbon as gasoline (TPH) concentrations to be less than 100 parts per million (ppm). However, a sample collected from the southern edge of the premium unleaded tank showed a TPH concentration of 8,400 ppm. In July, 1989, On-Site Technologies excavated and disposed of contaminated soil from the southern end of the premium unleaded tank (On-Site Technologies technical report dated 8/31/89).

Further assessment of the site was conducted by RSI in May, 1990 (RSI technical report dated July 25, 1990). As shown on Figure 2, four groundwater monitoring wells were installed and sampled. Soil samples collected above the water table showed TPH concentrations ranging from 1 to 240 ppm. TPH concentrations were detected in the groundwater samples collected from all the wells, with the highest concentration (23 ppm) found in monitoring well RS-2.

Active remediation of soil contamination began at the site in June, 1991, using an RSI S.A.V.E. System to vacuum extract gasoline hydrocarbons from the soil. Groundwater remediation began in October, 1991. Groundwater was pumped from wells RS-1 and RS-2 and treated with the S.A.V.E. equipment. Active remediation was suspended in February, 1992, due to the filing of bankruptcy by Desert Petroleum.

2.0 GROUNDWATER MONITORING

2.1 Groundwater Monitoring Procedures

The most recent groundwater monitoring episodes at this site were accomplished on January 8, 1992, and January 21, 1993. Monitoring was conducted by first measuring all wells for depth to water (Table 1). The wells were measured to an accuracy of 0.01 feet and the measuring point for each well was the top of the well cover. The wells were then purged and sampled. For the first sampling episode, purging was accomplished using a Grundfos electric pump. Purging was accomplished with PVC bailers for the second sampling episode. All equipment was decontaminated between wells using a standard 3-bucket wash method. The wells were purged until dry or four well volumes had been removed. The purged water was monitored for temperature, conductivity and pH. These measurements along with all other pertinent data were recorded on Water Sample Logs (Appendix A).

After the wells had recharged a minimum of 80 percent, they were sampled using disposable bailers. The samples were labeled and placed on blue ice for transportation to a state certified laboratory. All samples were analyzed for TPH using modified EPA method 8015 or the DHS method, and BTEX using EPA method 8020. The minimum detection level for TPH was 0.5 ppm for the first set of samples and 0.05 ppm for the second set of samples. The minimum detection level for BTE was 0.0003 ppm, and for xylenes the minimum detection level was 0.0009 ppm for the first set of samples and .0015 for the second set of samples. An additional sample was collected from well RS-2 and labeled as RS-5 to be used as a blind duplicate for QA/QC purposes during the sampling conducted in January, 1992. The laboratory reports are contained in Appendix B.

2.2 Ground Water Monitoring Results

As shown on Table 1, depth to groundwater ranged from 6.81 to 9.31 feet in January, 1992. In January, 1993, depth to groundwater ranged from 4.05 to 6.89 feet. The measurements in January, 1993, indicate that the water table was at its highest level since the wells were installed in May, 1990. The maximum calculated ground water gradient was 0.044 (4.4 feet per 100 feet) in January, 1992, and 0.049 in January, 1993. As shown on Figures 3 and 4, the general direction of groundwater flow is in a southwesterly direction. No floating product was found in any of the wells during either of the sampling episodes.

Analytical results for the samples collected during the two sampling episodes, and all previous monitoring episodes, are summarized in Table 2. The official laboratory results and Chain-of-Custody documents are included in Appendix B. As shown on Table 2, hydrocarbon concentrations in January, 1993, are somewhat

higher in wells RS-1 and RS-2 than in previous episodes. Hydrocarbon concentrations in wells RS-3 and RS-4 have remained relatively stable and in January, 1993, no detectable hydrocarbon concentrations were found in well RS-3.

3.0 REMEDIATION UPDATE

Vapor extraction and treatment began in June, 1991, with the installation of RSI's S.A.V.E. System. Groundwater extraction and treatment began October, 1991. Due to noise complaints from neighboring residents, the system was operated only sporadically. Remedial operations were suspended as of February 10, 1992, due to the filing of bankruptcy by Desert Petroleum. **The calculated amount of contaminant removed by both vapor and groundwater extraction is 170.5 gallons of gasoline.**

170.5 gal product removed

Currently, RSI is investigating alternate remedial methods for this site to comply with noise limitations and site use constraints. The resumption of remedial operations is dependant on the release of funds for this purpose from the bankruptcy court or on funding through Senate Bill 2004.

4.0 LIMITATIONS

The discussion, conclusion and any recommendations presented in this report are based on the professional performance of the personnel who conducted the investigations, the observations of the field personnel, the results of laboratory analyses performed by a state certified laboratory, any referenced documents and our understanding of the regulations of the State of California; also, if applicable, other local regulations.

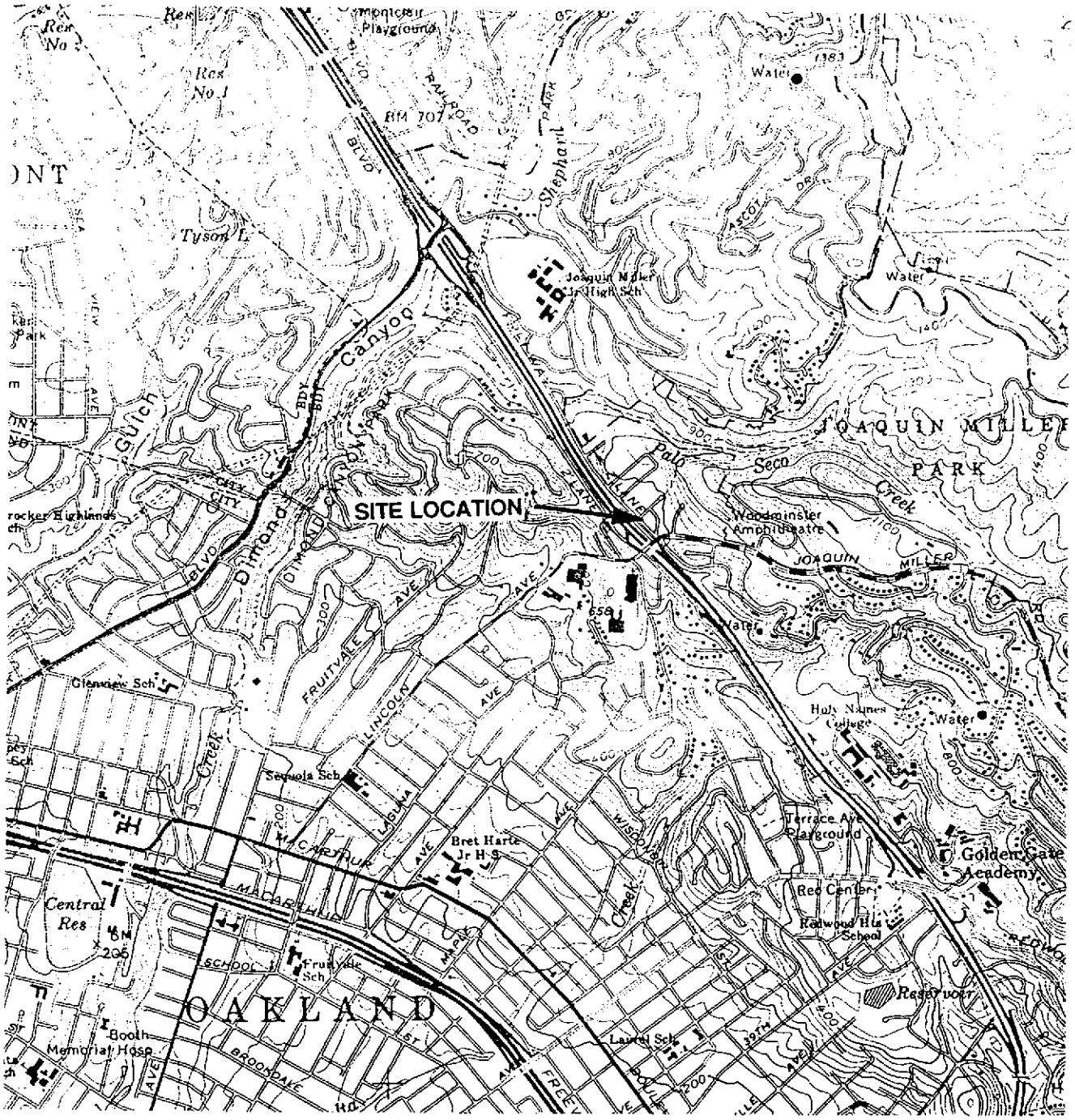
It is possible that variations in the soil and groundwater conditions exist beyond the points explored in this investigation.

The services performed by Remediation Service, Int'l have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the State of California. No other warranty, expressed or implied, is made.

Respectfully submitted,

Brian Mossman
Project Geologist

Steven M. Richardson, R. G. #4684
Senior Project Manager



SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

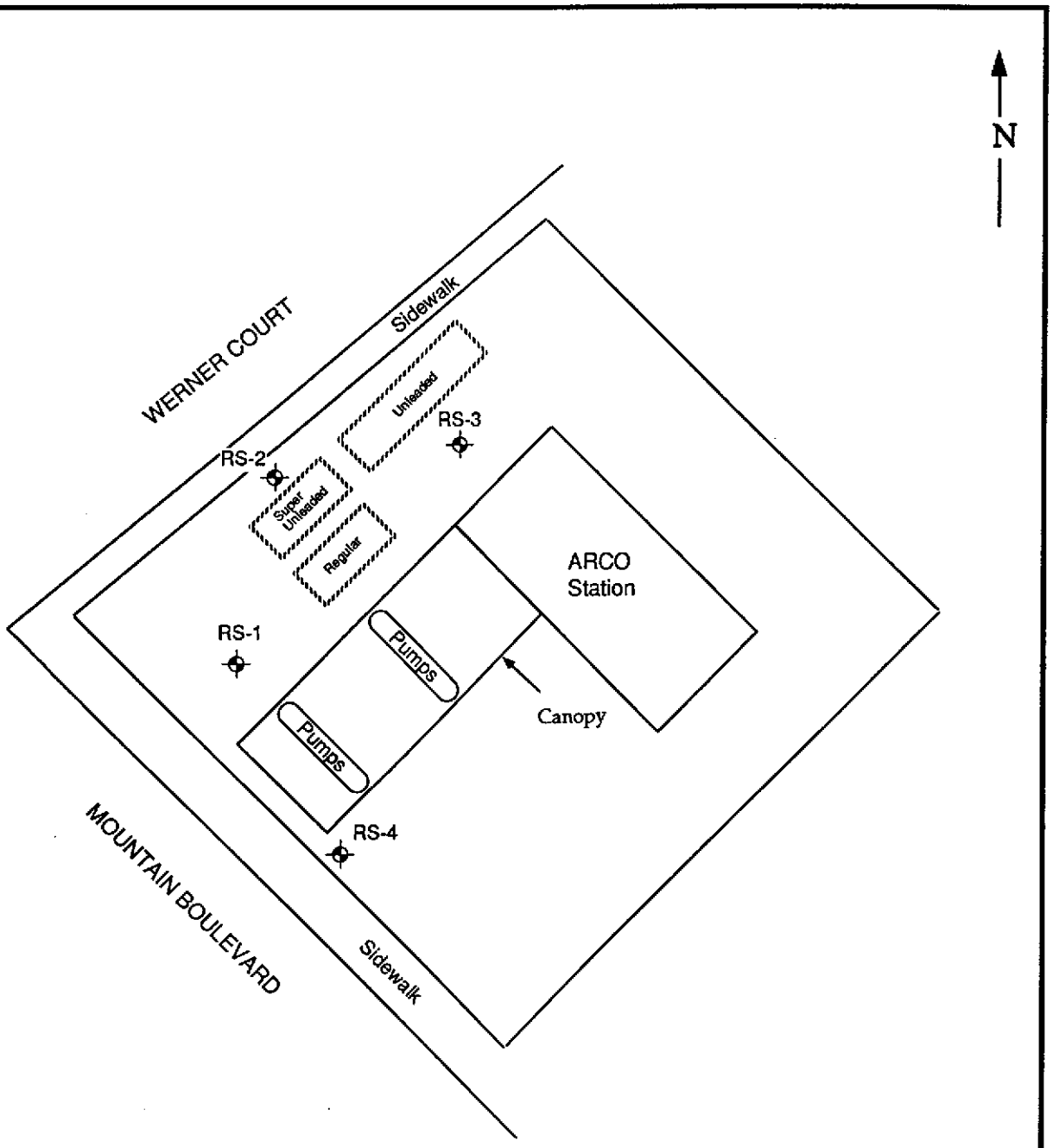
1 .5 0 1 KILOMETER

N

DESERT PETROLEUM

DESERT PETROLEUM STATION #796,
2844 MOUNTAIN BOULEVARD,
OAKLAND, CALIFORNIA
FIGURE 1 - LOCATION MAP

RSI REMEDIATION SERVICE, INT'L.



LEGEND

MONITORING WELL LOCATION

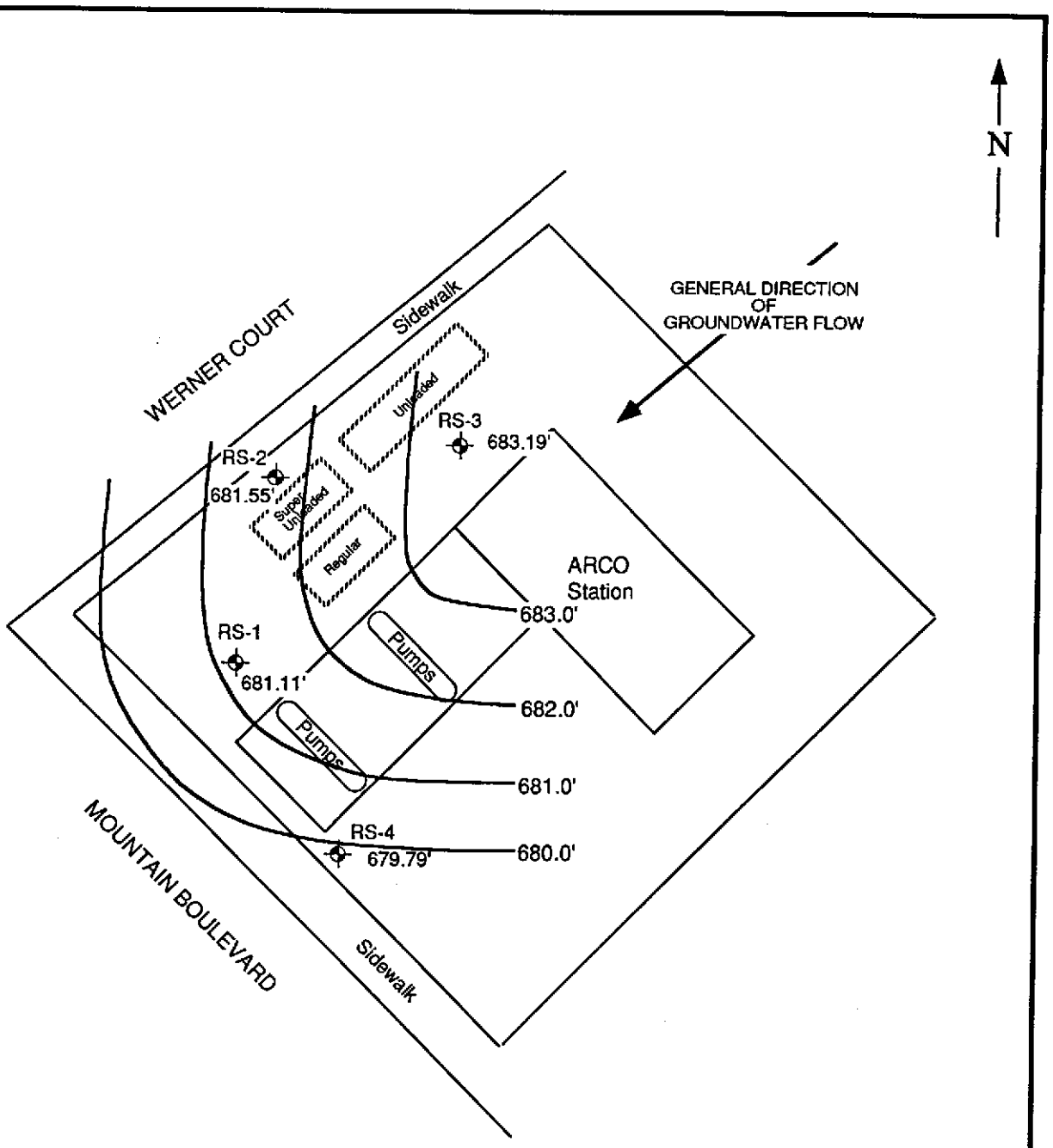
SCALE IN FEET

0 15 30

DESERT PETROLEUM

DESERT PETROLEUM STATION #796,
2844 MOUNTAIN BOULEVARD,
OAKLAND, CALIFORNIA
FIGURE 2 - PLOT PLAN

RSI REMEDIATION SERVICE, INT'L.



LEGEND

678.00 — GROUND WATER CONTOUR LINE

RS-4 679.79' — MONITORING WELL LOCATION WITH GROUND WATER ELEVATION

SCALE IN FEET

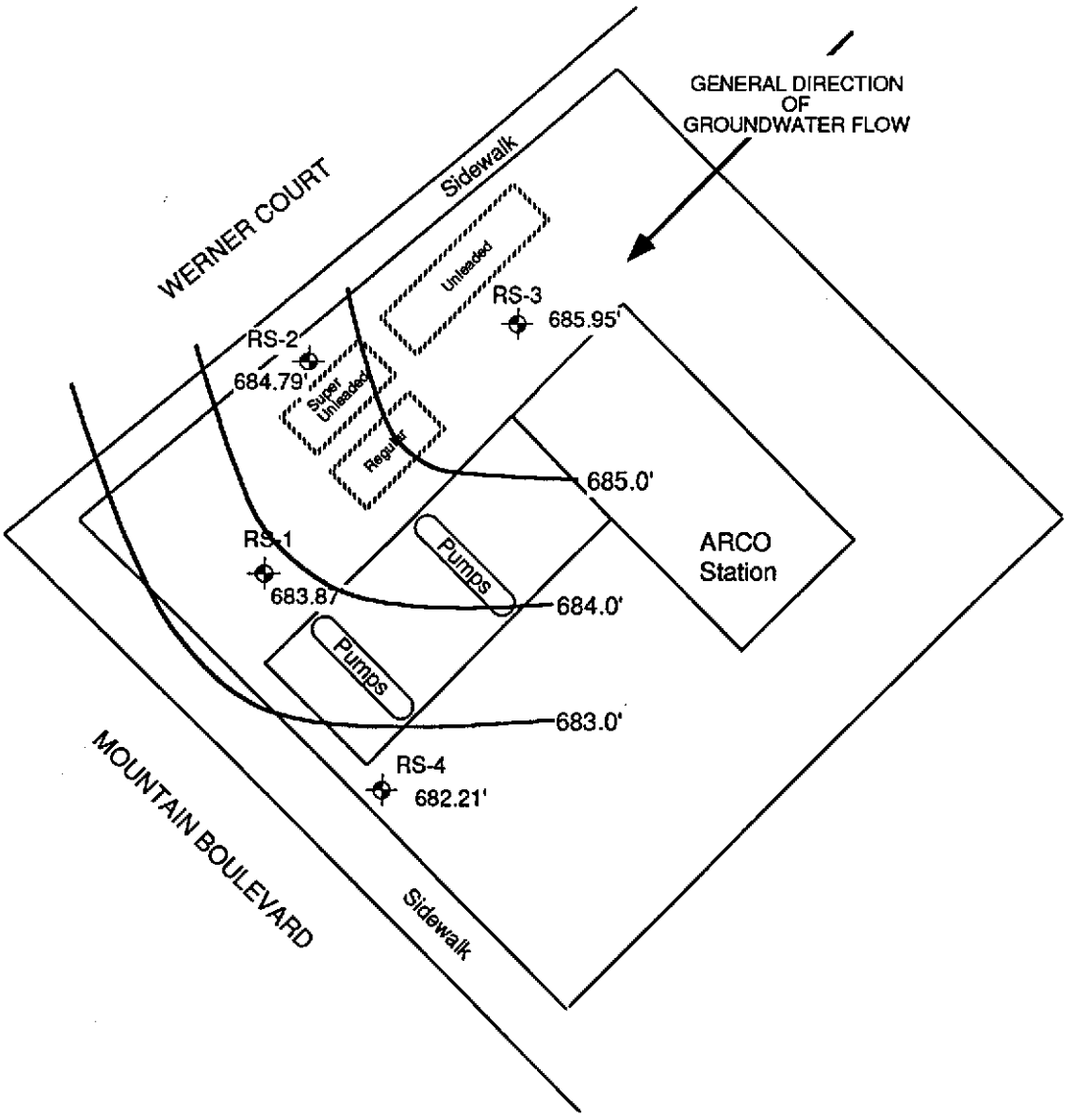
0 15 30

DESERT PETROLEUM

DESERT PETROLEUM STATION #796,
OAKLAND, CALIFORNIA

FIGURE 3 - GROUND WATER ELEVATION MAP
JANUARY 8, 1992

RSI REMEDIATION SERVICE, INT'L.



LEGEND

678.00 — GROUND WATER CONTOUR LINE

RS-4
679.79' — MONITORING WELL LOCATION WITH GROUND WATER ELEVATION

SCALE IN FEET
0 15 30

DESERT PETROLEUM

DESERT PETROLEUM STATION #796
OAKLAND, CALIFORNIA

FIGURE 4 - GROUND WATER ELEVATION MAP
JANUARY 21, 1993

RSI REMEDIATION SERVICE, INT'L.

TABLE 1

GROUNDWATER DATA
DESERT PETROLEUM STATION #796

Measurements are in feet.

Well	Date Measured	Depth to Water	Well Head Elevation*	Water Table Elevation	Change in Elevation
RS-1	5/90	7.20	689.25	682.05	
	5/91	8.35	689.25	680.90	-1.15
	10/91	10.22	689.17	678.95	-1.95
	1/92	8.06	689.17	681.11	2.16
	1/93	5.30	689.17	683.87	2.76
RS-2	5/90	7.06	689.00	681.94	
	5/91	7.14	689.00	681.86	-0.08
	10/91	8.84	688.89	680.05	-1.81
	1/92	7.34	688.89	681.55	1.50
	1/93	4.10	688.89	684.79	3.24
RS-3	5/90	6.00	690.00	684.00	
	5/91	6.76	690.00	683.24	-0.76
	10/91	8.98	690.00	681.02	-2.22
	1/92	6.81	690.00	683.19	2.17
	1/93	4.05	690.00	685.95	2.76
RS-4	5/90	8.34	689.06	680.72	
	5/91	9.50	689.06	679.56	-1.16
	10/91	10.82	689.10	678.28	-1.28
	1/92	9.31	689.10	679.79	1.51
	1/93	6.89	689.10	682.21	2.42

*Elevation of RS-3 approximated from U.S.G.S Topographical Map. All other wells surveyed in relation to RS-3.

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DESERT PETROLEUM STATION #796

Measurements are in parts per million.

WELL #	DATE SAMPLED	TPH	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
RS-1	5/90	2.7	0.37	0.42	0.04	0.32
	5/91	1.3	0.58	0.13	0.062	0.24
	10/91	1.1	0.14	0.1	0.045	0.21
	1/92	1.7	0.0099	0.031	0.0097	0.17
	1/93	3.7	0.65	0.0092	0.051	0.17
RS-2	5/90	23	7.2	4.8	0.3	3.3
	5/91	26	14	1.8	0.75	2.9
	10/91	13	4.3	0.91	0.3	2.3
	1/92	8.3	1.8	0.92	0.14	1.7
	1/93	41	7	0.21	1.2	4.2
RS-3	5/90	0.33	0.002	0.001	0.001	0.15
	5/91	<0.5	0.0004	<0.0003	0.0008	0.0082
	10/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
	1/92	<0.5	0.0022	0.0072	0.0006	0.0036
	1/93	<0.05	<.0005	<.0005	<.0005	<.0015
RS-4	5/90	0.44	0.009	0.011	0.009	0.049
	5/91	<0.5	0.008	0.004	0.003	0.005
	10/91	0.83	0.28	0.12	0.024	0.17
	1/92	0.62	0.034	0.0083	0.0021	0.021
	1/93	0.15	0.032	0.0017	0.0058	0.013

TPH = Total petroleum hydrocarbons (gasoline)

Remediation Management Services

1105 Hacienda Drive · Gilroy

FILE NO.: 555-93

DATE: 1-21-93

MONITORING WELL PURGING FOR SAMPLING RECORD

PROJECT LOCATION: DP-796 2844 Mountain Blvd Oakland

SAMPLER NAME (Print): J Mark Spencer

PRIOR TO PURGING	SAMPLE LOCATION	W-1	W-2	W-3	W-4
	TIME	16:05	14:55	14:30	14:10
	HNU READING (From top of casing)				
	TEMPERATURE (F)	59.1	61.7	61.6	67.2
	DEPTH TO WATER (From top of casing)	5.3'	4.1'	4.05'	6.89'
	VOLUME OF WATER IN WELL	14.58g	12.13g	12.08g	10.96g
	ELECTRICAL CONDUCTIVITY	.01	.16	.08	.07
	pH READING	7.97	7.92	7.68	7.40
	TOTAL SUSPENDED SOLIDS	Cloud	Cloud	Clear	Clear
	THICKNESS OF STANDING PRODUCT	Ø	Ø	Ø	Ø
DURING PURGING	SAMPLE LOCATION	W-1	W-2	W-3	W-4
	TIME	16:20	15:30	14:55	14:25
	HNU READING (From top of casing)				
	TEMPERATURE (F)	58.9	61.5	62.4	65.3
	DEPTH TO WATER (From top of casing)	5.41'	4.35'	4:20'	6.89'
	VOLUME OF WATER IN WELL				
	ELECTRICAL CONDUCTIVITY	.01	.06	.14	.06
	pH READING	8.04	7.93	8.02	7.39
	TOTAL SUSPENDED SOLIDS	Cloud	Cloud	Clear	Clear
	THICKNESS OF STANDING PRODUCT	Ø	Ø	Ø	Ø
END OF PURGING	SAMPLE LOCATION	W-1	W-2	W-3	W-4
	TIME	16:45	15:50	15:20	14:50
	HNU READING (From top of casing)				
	TEMPERATURE (F)	59.4	59.7	60.1	63.2
	DEPTH TO WATER (From top of casing)	7.50	9.45	9.60	8.70
	VOLUME OF WATER IN WELL				
	ELECTRICAL CONDUCTIVITY	01	01	06	04
	pH READING	8.12	7.89	7.93	7.37
	TOTAL SUSPENDED SOLIDS	Cloud	Cloud	Clear	Clear
	THICKNESS OF STANDING PRODUCT	Ø	Ø	Ø	Ø
SAMPLE	SAMPLE LOCATION	W-1	W-2	W-3	W-4
	TIME	17:10	17:25	16:37	16:50
	HNU READING (From top of casing)				
	TEMPERATURE (F)	58.6	56.2	58.0	57.6
	DEPTH TO WATER (From top of casing)	5.3'	4.1'	4.05'	6.89
	VOLUME OF WATER IN WELL	14.58G	12.13G	12.08G	10.96
	ELECTRICAL CONDUCTIVITY	.12	.09	.01	.01
	pH READING	10.20	10.18	8.60	8.96
	TOTAL SUSPENDED SOLIDS	Cloud	Cloud	Clear	Clear
	THICKNESS OF STANDING PRODUCT	Ø	Ø	Ø	Ø

NOTES: Total Well Depth 27.64' 22.68' 22.55' 23.68'

WATER SAMPLE LOG

CLIENT: Desert Petroleum DATE: 1/8/92

PROJECT: DP 796

LOCATION: 5844 Mountain Blvd., Oakland, CA

WELL NUMBER: RS-1

WEATHER CONDITIONS: Clear and cool

FIELD OBSERVATIONS:

TOTAL DEPTH OF WELL: 30 feet CASING DIAMETER: 4 inches

DEPTH TO FREE PRODUC: — ONE WELL VOLUME = 14.3 gallons

DEPTH TO WATER: 8.06 feet PURGING METHOD: Grunfos Pump

DEPTHS MEASURED FROM: Top of well cover.

INDICATOR PARAMETERS

Time	Discharge (gallons)	pH	Temp in F.	Specific Conductance (µmhos/cm)	Comments (Color, Odor, Turbidity)
1002	0	6.45	58.6	1.12	Clear, none, none
1007	13	6.23	62.9	1.16	Clear, none, none
1012	27	5.86	63.8	1.21	Clear, none, none
1017	38	5.85	64.3	1.13	Clear, none, none
1022	50	5.82	63.4	1.17	Clear, none, none

TOTAL DISCHARGE: Dry @ 50 gallons CASING VOLUMES REMOVED: 3+

TIME SAMPLE COLLECTED: 800 (1/9/92)

DEPTH TO WATER AT TIME OF SAMPLE 8.08 PERCENT RECHARGE: 100

METHOD OF SAMPLE COLLECTION: Disposable bailer.

APPEARANCE OF SAMPLE: Clear

AMOUNT AND SIZE OF SAMPLE CONTAINERS: 2 - 40ml VOA's

SAMPLE TRANSPORTED TO: BTC Environmental, Ventura

SAMPLED BY: BJM

RSI - REMEDIATION SERVICE, INT'L

WATER SAMPLE LOG

CLIENT: Desert Petroleum DATE: 1/8/92

PROJECT: DP 796

LOCATION: 5844 Mountain Blvd., Oakland, CA

WELL NUMBER: **RS-2**

WEATHER CONDITIONS: Clear and cool

FIELD OBSERVATIONS:

TOTAL DEPTH OF WELL: 25 feet CASING DIAMETER: 4 inches

DEPTH TO FREE PRODUC — ONE WELL VOLUME = 11.5 gallons

DEPTH TO WATER: 7.34 feet PURGING METHOD: Grunfos Pump

DEPTHS MEASURED FROM: Top of well cover.

INDICATOR PARAMETERS

Time	Discharge (gallons)	pH	Temp in F.	Specific Conductance (µmhos/cm)	Comments (Color, Odor, Turbidity)
1035	0	6.07	57.7	1.01	Clear, none, none
1039	10	5.87	60.8	1.03	Clear, none, none
1042	20	5.83	61.2	1.11	Clear, none, none
1047	30	6.26	62.8	0.91	Clear, none, none

TOTAL DISCHARGE: Dry @ 32 gallons CASING VOLUMES REMOVED: 2+

TIME SAMPLE COLLECTED: 810 (1/9/92)

DEPTH TO WATER AT TIME OF SAMPLE 7.35 PERCENT RECHARGE: 100

METHOD OF SAMPLE COLLECTION: Disposable bailer.

APPEARANCE OF SAMPLE: Clear

AMOUNT AND SIZE OF SAMPLE CONTAINERS: 4 - 40ml VOA's (Blind duplicate labeled as RS-5)

SAMPLE TRANSPORTED TO: BTC Environmental, Ventura

SAMPLED BY: BJM

RSI - REMEDIATION SERVICE, INT'L

WATER SAMPLE LOG

CLIENT: Desert Petroleum DATE: 1/8/92

PROJECT: DP 796

LOCATION: 5844 Mountain Blvd., Oakland, CA

WELL NUMBER: **RS-4**

WEATHER CONDITIONS: Clear and cool

FIELD OBSERVATIONS:

TOTAL DEPTH OF WELL: 26 feet CASING DIAMETER: 4 inches

DEPTH TO FREE PRODUC — ONE WELL VOLUME = 10.9 gallons

DEPTH TO WATER: 9.31 feet PURGING METHOD: Grunfos Pump

DEPTHS MEASURED FROM: Top of well cover.

INDICATOR PARAMETERS

Time	Discharge (gallons)	pH	Temp in F.	Specific Conductance (µmhos/cm)	Comments (Color, Odor, Turbidity)
932	0	9.73	56.3	1.05	Clear, sulfer smell, very low
935	10	8.16	61.1	1.06	Clear, sulfer smell, very low
939	20	6.66	62.8	1.13	Clear, sulfer smell, very low
950	30	6.89	62.5	1.12	Clear, none, very low

TOTAL DISCHARGE: Dry @ 35 gallons CASING VOLUMES REMOVED: 3+

TIME SAMPLE COLLECTED: 750 (1/9/92)

DEPTH TO WATER AT TIME OF SAMPLE 9.31 PERCENT RECHARGE: 100

METHOD OF SAMPLE COLLECTION: Disposable bailer.

APPEARANCE OF SAMPLE: Clear

AMOUNT AND SIZE OF SAMPLE CONTAINERS: 2 - 40ml VOA's

SAMPLE TRANSPORTED TO: BTC Environmental, Ventura

SAMPLED BY: BJM

RSI - REMEDIATION SERVICE, INT'L

APPENDIX B

LABORATORY REPORTS
AND
CHAIN OF CUSTODY

Trace Analysis Laboratory, Inc.
3423 Investment Boulevard, #8 • Hayward, California 94545
Telephone (510) 783-6960
Facsimile (510) 783-1512

TAL

LOG NUMBER: 2885
DATE SAMPLED: 01/21/93
DATE RECEIVED: 01/21/93
DATE ANALYZED: 01/26/93, 01/27/93, 01/28/93 and 01/29/93
DATE REPORTED: 02/04/93

CUSTOMER: Remediation Management Service

REQUESTER: Brian Mosman

PROJECT: No. DP-796

Sample Type: Water

Method and Constituent:	Units	W-1 Concentration	W-1 Reporting Limit	W-2 Concentration	W-2 Reporting Limit	W-3 Concentration	W-3 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	ug/l	3,700	50	41,000	65	ND	50
Modified EPA Method 8020 for:							
Benzene	ug/l	650	3.7	7,000	43	ND	0.50
Toluene	ug/l	9.2	3.9	210	9.5	ND	0.50
Ethylbenzene	ug/l	51	4.2	1,200	11	ND	0.50
Xylenes	ug/l	170	10	4,200	29	ND	1.5

Concentrations reported as ND were not detected at or above the reporting limit.

TAL Trace Analysis Laboratory, Inc.

LOG NUMBER: 2885
DATE SAMPLED: 01/21/93
DATE RECEIVED: 01/21/93
DATE ANALYZED: 01/26/93 and 01/28/93
DATE REPORTED: 02/04/93
PAGE: Two

Sample Type: Water

Method and Constituent:	Units	W-4 Concentration	W-4 Reporting Limit	Method Blank Concentration	Method Blank Reporting Limit
DHS Method:					
Total Petroleum Hydrocarbons as Gasoline	ug/l	150	50	ND	50
Modified EPA Method 8020 for:					
Benzene	ug/l	32	0.50	ND	0.50
Toluene	ug/l	1.7	0.50	ND	0.50
Ethylbenzene	ug/l	5.8	0.50	ND	0.50
Xylenes	ug/l	13	1.5	ND	1.5

QC Summary:

% Recovery:	79	98	94
% RPD:	0.0	4.6	0.53

Concentrations reported as ND were not detected at or above the reporting limit.

Louis W. DuPuis
Quality Assurance/Quality Control Manager

2885

SEND RESULTS AND INVOICE TO: Remediation Management Service
1105 Hacienda Drive
Gilroy Calif. 95020
Att: Mark Spencer

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Brian Mossman
Sampler Name (Print): J Mark Spencer
Project Address: 2974 Meridian Blvd Ono.
Project Number:
Project Name: DP-79E

I attest that the proper field sampling proceedures were used during the collection of these samples
Sampler Signature: [signature]

Boring Number and Sample ID Number	Depth	Transport Chest Temp	# Containers	Matrix: SOIL	WATER	AIR	SLUDGE	OTHER	Method Preserved: ICE	HNO_3	HCl	OTHER	Sampling: DATE	TIME	EPA 8140	EPA 632	EPA 7210	Heavy Metals Title 22	TPHG	B TEX
W-1			1		X				X				1/21/93	17:10				X	X	
W-3			1		X				X				1/21/93	17:25				X	X	
W-2			1		X				X				1/21/93	16:37				X	X	
W-4			1		X				X				1/21/93	16:50				X	X	

ANALYSIS REQUEST

CUSTODY RECORD

	Received by:	Received by:	Received by Laboratory: For TAL
Time			6:42 PM
Date	1/21/93		1/21/93

Transport Chest Temp.: Dan

Relinquished by Sampler: [signature]
Relinquished by:
Relinquished by:

SPECIAL HANDLING
- ☐ 24 HOURS
- ☐ EXPEDITED 48 HOURS
- ☐ SEVEN DAY
- ☐ FAX
- ☒ OTHER 10 (#) of BUISNESS DAYS
- ☐ QA/QC
- ☐ CLP Level
- ☐ Blue Level

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)

REMARKS: (1)-40ml WATER + ON ICE, HCl
10 day TAT GREEN
walked in
MD

Lab Use Only
Storage Location
Lot No.:
Work Order No.:

BTC Environmental, Incorporated
1536 Eastman Avenue, Suite B
Ventura, CA. 93003
(805) 644-1095

Prepared For: R.S.I.
P.O. Box 1601
Oxnard, CA 93032

January 15, 1992

ATTENTION: Brian Mossman

Laboratory No: 920071
Date Received: 10-JAN-92
Project Name: DP-796

Job No: 18000
Sampled by: Client
Sample ID: See Below

RESULTS

On January 10, 1991, six (6) samples were received for analysis by BTC Environmental, Inc. The samples were identified and assigned the lab numbers listed below. The results are on the following pages.

SAMPLE DESCRIPTION	BTCE LAB NUMBER
RS-1	92007101
RS-2	92007102
RS-3	92007103
RS-4	92007104
RS-5	92007105
Field Blank	92007106

Dan Farah

Dan A. Farah, Ph.D
Director - Analytical Operations

BTC Environmental, Incorporated
1536 Eastman Avenue, Suite B
Ventura, CA. 93003
(805) 644-1095

Client: R.S.I.
Lab No.: 920071
Sample ID: Method Blank

Date Analyzed: 10-JAN-92
Dilution Factor: 1

VOLATILE AROMATIC COMPOUNDS
BTXE by EPA 8020

COMPOUND	Concentration ug/L	PQL ug/L
Benzene	BQL	0.3
Toluene	BQL	0.3
Ethylbenzene	BQL	0.3
Xylenes	BQL	0.9

TOTAL PETROLEUM HYDROCARBONS
by Modified 8015

COMPOUND	Concentration mg/L	PQL mg/L
TPH as Gasoline	BQL	0.5

BQL: Below Practical Quantitation Limit
PQL: Practical Quantitation Limit

GC Analyst

BTC Environmental, Incorporated
1536 Eastman Avenue, Suite B
Ventura, CA. 93003
(805) 644-1095

Client: R.S.I.
Lab No.: 920071
Sample ID: Method Blank

Date Analyzed: 13-JAN-92
Dilution Factor: 1

VOLATILE AROMATIC COMPOUNDS
BTXE by EPA 8020

COMPOUND	Concentration ug/L	PQL ug/L
Benzene	BQL	0.3
Toluene	BQL	0.3
Ethylbenzene	BQL	0.3
Xylenes	BQL	0.9

TOTAL PETROLEUM HYDROCARBONS
by Modified 8015

COMPOUND	Concentration mg/L	PQL mg/L
TPH as Gasoline	BQL	0.5

BQL: Below Practical Quantitation Limit
PQL: Practical Quantitation Limit

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Client: R.S.I.
Lab No.: 920071
Sample ID: Method Blank

Date Analyzed: 14-JAN-92
Dilution Factor: 1

VOLATILE AROMATIC COMPOUNDS
BTXE by EPA 8020

COMPOUND	Concentration ug/L	PQL ug/L
Benzene	BQL	0.3
Toluene	BQL	0.3
Ethylbenzene	BQL	0.3
Xylenes	BQL	0.9

TOTAL PETROLEUM HYDROCARBONS
by Modified 8015

COMPOUND	Concentration mg/L	PQL mg/L
TPH as Gasoline	BQL	0.5

BQL: Below Practical Quantitation Limit
PQL: Practical Quantitation Limit

GC Analyst

BTC Environmental, Incorporated
1536 Eastman Avenue, Suite B
Ventura, CA. 93003
(805) 644-1095

Client: R.S.I.
Lab No.: 92007101
Sample ID: RS-1

Date Analyzed: 13-JAN-92
Dilution Factor: 1

VOLATILE AROMATIC COMPOUNDS
BTXE by EPA 8020

COMPOUND	Concentration ug/L	PQL ug/L
Benzene	9.9	0.3
Toluene	31	0.3
Ethylbenzene	9.7	0.3
Xylenes	170	0.9

TOTAL PETROLEUM HYDROCARBONS
by Modified 8015

COMPOUND	Concentration mg/L	PQL mg/L
TPH as Gasoline	1.7	0.5

BQL: Below Practical Quantitation Limit
PQL: Practical Quantitation Limit

Teresa J de Leon
GC Analyst

BTC Environmental, Incorporated
1536 Eastman Avenue, Suite B
Ventura, CA. 93003
(805) 644-1095

Client: R.S.I.
Lab No.: 92007102
Sample ID: RS-2

Date Analyzed: 14-JAN-92
Dilution Factor: 10

VOLATILE AROMATIC COMPOUNDS
BTXE by EPA 8020

COMPOUND	Concentration ug/L	PQL* ug/L
Benzene	1800	0.3
Toluene	920	0.3
Ethylbenzene	140	0.3
Xylenes	1700	0.9

TOTAL PETROLEUM HYDROCARBONS
by Modified 8015

COMPOUND	Concentration mg/L	PQL* mg/L
TPH as Gasoline	8.3	0.5

*: To obtain the actual PQL multiply by the dilution factor
BQL: Below Practical Quantitation Limit
PQL: Practical Quantitation Limit

GC Analyst

BTC Environmental, Incorporated
1536 Eastman Avenue, Suite B
Ventura, CA. 93003
(805) 644-1095

Client: R.S.I.
Lab No.: 92007103
Sample ID: RS-3

Date Analyzed: 13-JAN-92
Dilution Factor: 1

VOLATILE AROMATIC COMPOUNDS
BTXE by EPA 8020

COMPOUND	Concentration ug/L	PQL ug/L
Benzene	2.2	0.3
Toluene	7.2	0.3
Ethylbenzene	0.60	0.3
Xylenes	3.6	0.9

TOTAL PETROLEUM HYDROCARBONS
by Modified 8015

COMPOUND	Concentration mg/L	PQL mg/L
TPH as Gasoline	BQL	0.5

BQL: Below Practical Quantitation Limit
PQL: Practical Quantitation Limit

Teresa J. de Vera
GC Analyst

BTC Environmental, Incorporated
1536 Eastman Avenue, Suite B
Ventura, CA. 93003
(805) 644-1095

Client: R.S.I.
Lab No.: 92007104
Sample ID: RS-4

Date Analyzed: 10-JAN-92
Dilution Factor: 1

VOLATILE AROMATIC COMPOUNDS
BTXE by EPA 8020

COMPOUND	Concentration ug/L	PQL ug/L
Benzene	34	0.3
Toluene	8.3	0.3
Ethylbenzene	2.1	0.3
Xylenes	21	0.9

TOTAL PETROLEUM HYDROCARBONS
by Modified 8015

COMPOUND	Concentration mg/L	PQL mg/L
TPH as Gasoline	0.62	0.5

BQL: Below Practical Quantitation Limit
PQL: Practical Quantitation Limit

GC Analyst

BTC Environmental, Incorporated
1536 Eastman Avenue, Suite B
Ventura, CA. 93003
(805) 644-1095

Client: R.S.I.
Lab No.: 92007105
Sample ID: RS-5

Date Analyzed: 14-JAN-92
Dilution Factor: 10

VOLATILE AROMATIC COMPOUNDS
BTXE by EPA 8020

COMPOUND	Concentration ug/L	PQL* ug/L
Benzene	1800	0.3
Toluene	860	0.3
Ethylbenzene	140	0.3
Xylenes	1700	0.9

TOTAL PETROLEUM HYDROCARBONS
by Modified 8015

COMPOUND	Concentration mg/L	PQL* mg/L
TPH as Gasoline	5.6	0.5

*: To obtain the actual PQL multiply by the dilution factor
BQL: Below Practical Quantitation Limit
PQL: Practical Quantitation Limit

GC Analyst

BTC Environmental, Incorporated
1536 Eastman Avenue, Suite B
Ventura, CA. 93003
(805) 644-1095

Client: R.S.I.
Lab No.: 92007106
Sample ID: Field Blank

Date Analyzed: 13-JAN-92
Dilution Factor: 1

VOLATILE AROMATIC COMPOUNDS
BTXE by EPA 8020

COMPOUND	Concentration ug/L	PQL ug/L
Benzene	BQL	0.3
Toluene	BQL	0.3
Ethylbenzene	BQL	0.3
Xylenes	BQL	0.9

TOTAL PETROLEUM HYDROCARBONS
by Modified 8015

COMPOUND	Concentration mg/L	PQL mg/L
TPH as Gasoline	BQL	0.5

BQL: Below Practical Quantitation Limit
PQL: Practical Quantitation Limit

GC Analyst

BTC ENVIRONMENTAL INCORPORATED

1536 Eastman Avenue
Ventura, CA 93003
(805) 644-1095

920071

CHAIN OF CUSTODY RECORD

BILL TO Company: RSI
Address: 2060 KNOLL DR.
VENTURA, CA 93001
Phone #: ( ) 644-5892 Contact: BRIAN MOSSMAN

PROJ. NO.

PROJECT NAME: DP-796

SAMPLERS: (Signature) Brian Mossman

NO.	DATE	TIME	COMP	GRAB	SAMPLE I.D.	NO. OF CONTAINERS	ANALYSIS: TPH (GAS)	BTEX					REMARKS	CHECK IF RUSH
1	1/9/92	8:00		X	RS-1 WATER	2	X	X						
2		8:10			RS-2	2	X	X						
3		7:40			RS-3	2	X	X						
4		7:50			RS-4	2	X	X						
5		8:20			RS-5	2	X	X						
6		8:30			FIELD BLANK	2	X	X						
													5 Day Turn	

The undersigned hereby acknowledges having received a copy of the Fee Schedule/General Information and Conditions, the provisions of which are a part of this agreement.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Brian Mossman	1/10/92 8:20	Gena Ditmore			
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	NAME ADDRESS	
				PHONE NO.	

WHITE COPY_____ CANARY COPY_____ PINK COPY_____