

CALIFORNIA GEOPHYSICAL GROUP, INC.

2709 Poway Road, Suite 202, Poway, CA 92064

Tel: (619) 486-1323

91 MAY 21 AM 10:29

May 10, 1991

Department of Environmental Health
Alameda County
80 Swan Way Rm 200
Oakland, Ca 94621

Attn: Mr. Scott Seery

RE: Xtra Oil Co. Service Station, 3495 Castro Valley Blvd. Castro Valley Ca.

QUARTERLY REPORT

Feb. Mar. & Apr. 1991

This report describes the work and sampling done at the site for February 15, March 21, and April 15, 1991 at which time water samples were taken. The water table readings for March 21 were taken but the data was misplaced and we can not report the hydraulic gradient for this month. However, the gradient direction and slope in February and April are very similar and this would infer the March readings would also be similar. //

During this quarter the soil pile caused by the excavation of the pit on the southwest side of the property was disposed of, we have attached a copy of the invoice receipt for the fill dirt from the Avila Road Fill.

FINDINGS

We find the hydraulic gradient direction to remain, as expected, to the Southeast. The February readings were the highest TPH readings since the start of this project. The March and April readings show a slow reduction of contaminants. This probably is an indication the Unauthorized release in October 1990 has reached its peak as far as groundwater contamination is concerned, and in the future we expect the groundwater to register somewhat lower levels of contaminants.

TABLE I
WATER TABLE ELEVATIONS

Well No.	Date	Casing Elev.	Depth to Water	Water Table Elev. AMSL
MW-1	2/20/90	175.73'	8.71'	167.02'
	3/19/90		8.98'	166.75'
	7/20/90		9.08'	166.65'
	8/23/90		9.25'	166.48'
	9/27/90		9.67'	166.06'
	12/17/90		8.73'	167.00'
	1/14/91		9.30'	166.43'
	2/15/91		9.00'	166.73'
	4/15/91		8.50'	167.23'
MW-2	2/20/90	175.45'	8.61'	166.84'
	3/19/90		9.35'	166.10'
	7/20/90		9.58'	165.87'
	8/23/90		9.92'	165.53'
	9/27/90		10.29'	165.16'
	12/17/90		9.33'	166.12'
	1/14/91		9.75'	165.70'
	2/15/91		9.60'	165.85'
	4/15/91		9.08'	166.37'
MW-3	2/20/90	175.00'	7.28'	167.72'
	3/19/90		8.08'	166.92'
	7/20/90		9.00'	166.00'
	8/23/90		8.92'	166.08'
	9/27/90		9.35'	165.65'
	12/17/90		8.60'	166.40'
	1/14/91		9.00'	166.00'
	2/15/91		8.60'	166.43'
	4/15/91		8.17'	166.83'

HYDRAULIC GRADIENT INFORMATION

Date	Direction	Gradient (Ft/FT.)
2/20/90	N55E	0.0036
3/19/90	N72E	0.0100
7/20/90	S5W	0.0056
8/23/90	S70E	0.0065
9/27/90	S58E	0.0051
12/17/90	S16E	0.0049
1/14/91	S66E	0.0064
2/15/91	S71E	0.0058
4/15/91	S56E	0.0051

AMSL= Above Mean Sea Level

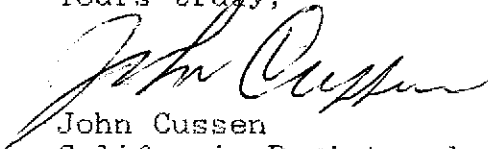
TABLE II
CHEMICAL ANALYSIS
REPORTED IN MG/L OR PPM

Well No.	Date	TPH	Benzene	Toluene	Xylenes	E. Benzene
MW-1	2/20/90	7.6	1.6	<0.015	1.3	<0.015
	3/19/90	40.0	3.7	1.1	3.3	<0.060
	7/20/90	44.0(D)	5.1	4.2	9.1	<0.0003
	8/23/90	40.0	5.1	4.9	6.0	0.35
	9/27/90	28.0	3.7	3.5	6.5	0.01
	1/14/91	33.0	3.9	2.9	5.3	0.21
	2/15/91	120.0	7.4	6.6	13.0	<3.0
	3/21/91	36.0	4.5	5.7	7.3	0.087
	4/15/91	56.0	6.5	8.5	9.9	0.41
MW-2	2/20/90	38.0	7.3	3.1	6.8	0.075
	3/19/90	50.0	7.7	8.7	5.6	0.075
	7/20/90	86.0(D)	9.1	14.0	13.0	0.94
	8/23/90	96.0	8.1	8.4	8.6	1.50
	9/27/90	59.0	8.4	12.0	9.0	0.88
	1/14/91	78.0	11.0	8.7	8.0	0.58
	2/15/91	200.0	12.0	12.0	14.0	1.70
	3/21/91	62.0	9.3	11.0	9.7	0.35
	4/15/91	82.0	5.3	7.4	9.4	1.00
MW-3	2/20/90	46.0	20.0	15.0	9.7	1.8
	3/19/90	210.0	38.0	28.0	12.0	1.8
	7/20/90	88.0(D)	25.1	21.2	14.1	0.61
	8/23/90	220.0	67.0	46.0	18.0	27.0
	9/27/90	25.0	7.2	6.4	3.4	0.42
	1/14/91	160.0	48.0	25.0	16.0	1.00
	2/15/91	230.0	44.0	40.0	31.0	<6.0
	3/21/91	87.0	30.0	14.0	5.4	0.69
	4/15/91	110.0	31.0	15.0	7.4	0.88

D= TPH High Boiling Hydrocarbons. No mark means TPH low to Medium Boiling Hydrocarbons.

Monthly monitoring will continue at this site, and THP-Highboiling fractions will be tested for also in accordance with your letter of April 19, 1991.

Yours truly,



John Cussen
California Registered
Environmental Assessor # 1979

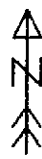


Richard Merriam
California Certified
Engineering Geologist #850

cc: State Water Resources Board; Dept. of Environmental Health, County of Alameda;

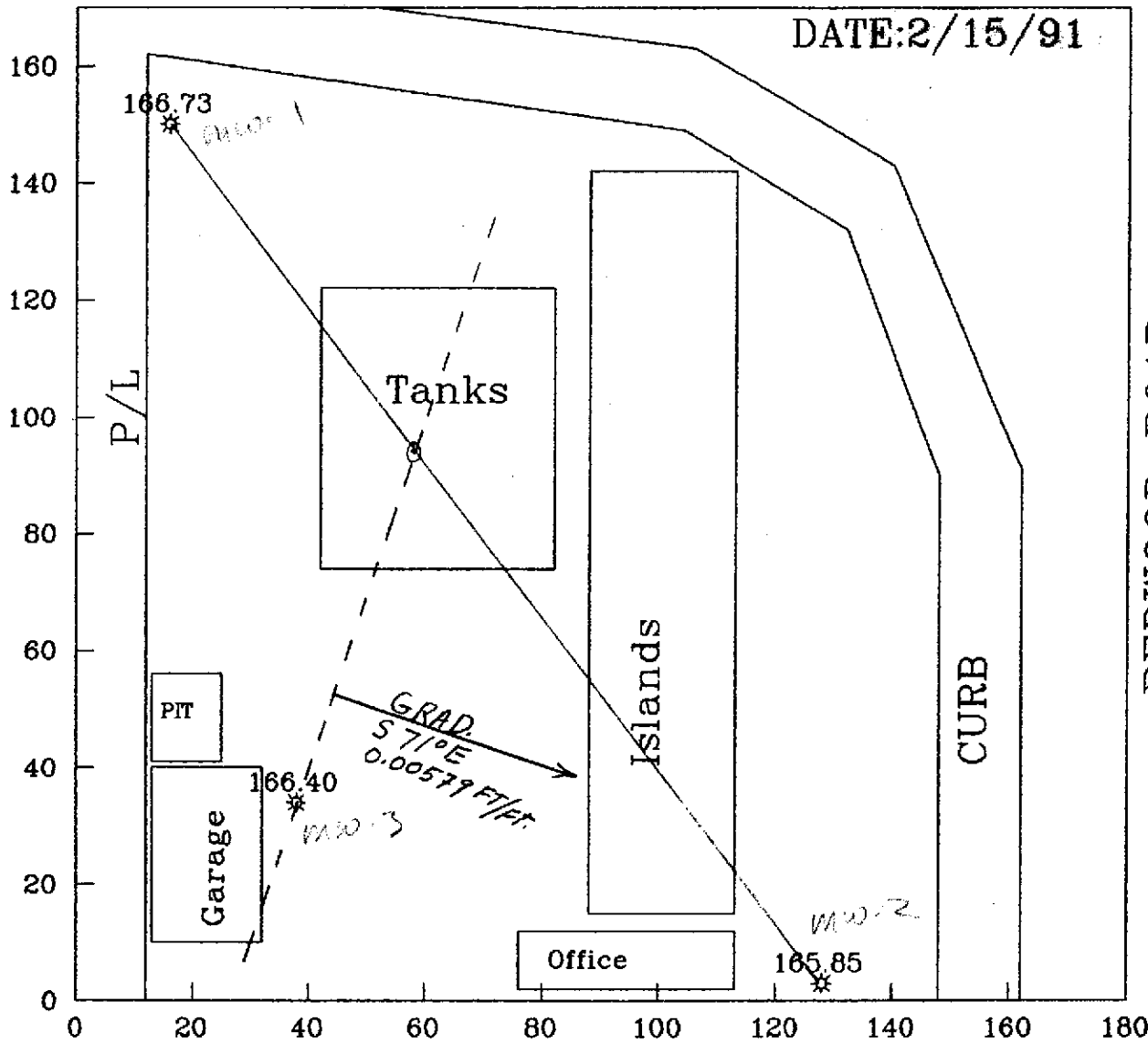
XTRA OIL CO.

HYDRAULIC GRADIENT

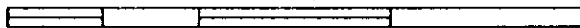


CASTRO VALLEY BLVD.

DATE: 2/15/91



SCALE 1 inch 30 Feet



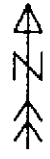
California Geophysical Group, Inc.
Engineering & Environmental Geophysics

SCALE

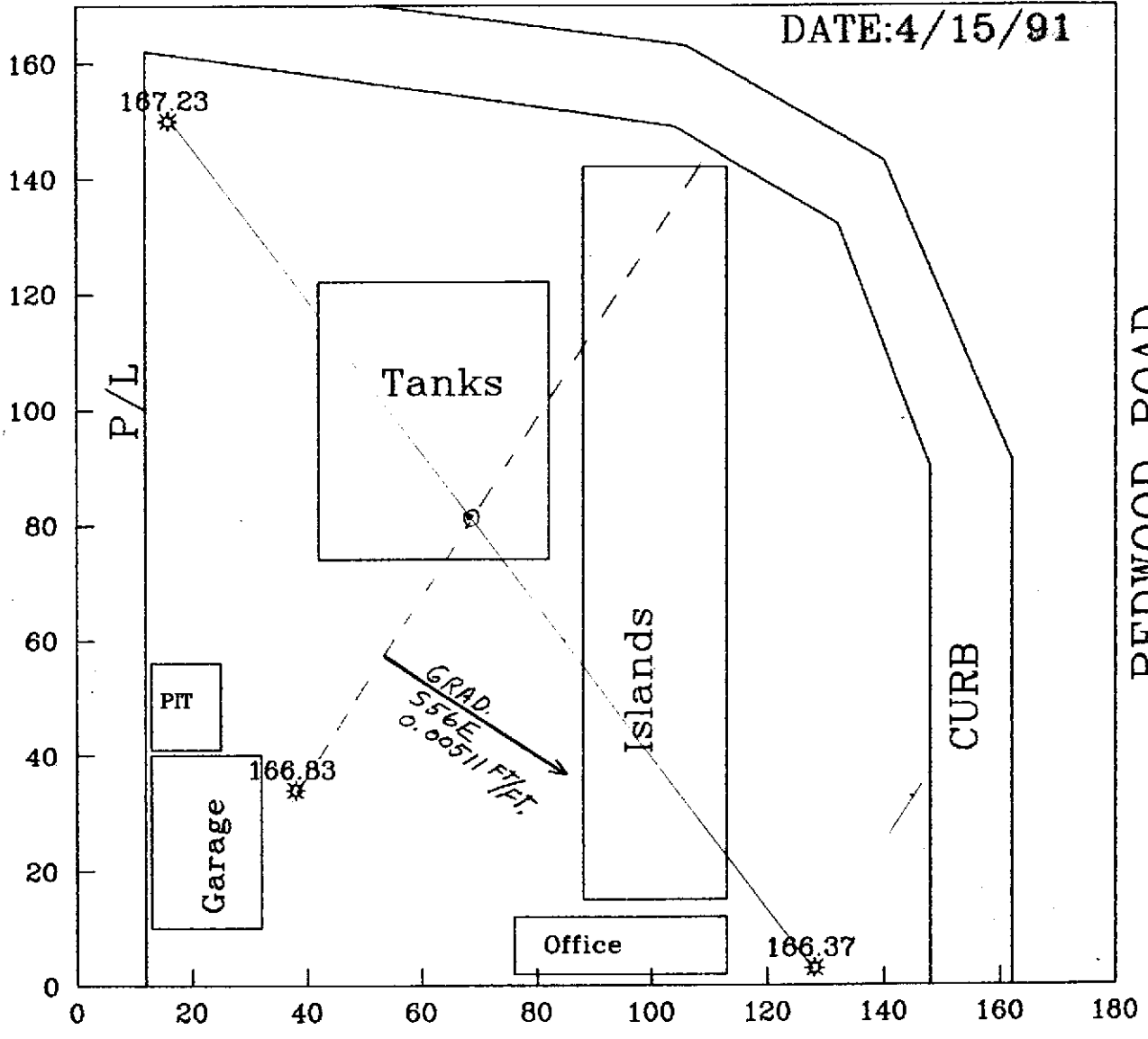
DATE

CHK'D

HYDRAULIC GRADIENT CASTRO VALLEY BLVD.



DATE: 4/15/91



SCALE 1 inch 30 Feet

California Geophysical Group, Inc.
Engineering & Environmental Geophysics

SCALE	DATE	
CHK'D		



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Xtra Oil Company	Client Project ID: Castro Valley	Sampled: Feb 15, 1991
2307 Pacific Avenue	Matrix Descript: Water	Received: Feb 15, 1991
Alameda, CA 94501	Analysis Method: EPA 5030/8015/8020	Analyzed: Feb 27, 1991
Attention: Ted Simas	First Sample #: 102-2167 A-B	Reported: Mar 4, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P.	Benzene	Toluene	Ethyl	Xylenes
		Hydrocarbons			Benzene	
		$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)
102-2167	Well #1	120,000	7,400	6,600	N.D.	13,000

Detection Limits:	300,000	2,000	3,000	3,000	3,000
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Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Maile A. McBirney
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Extra Oil Company
2307 Pacific Avenue
Alameda, CA 94501
Attention: Ted Simas

Client Project ID: Castro Valley
Matrix Descript: Water
Analysis Method: EPA 5030/8015/8020
First Sample #: 102-2168 A-B

Sampled: Feb 15, 1991
Received: Feb 15, 1991
Analyzed: Feb 27, 1991
Reported: Mar 4, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P.	Ethyl			
		Hydrocarbons	Benzene	Toluene	Benzene	Xylenes
		$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)
102-2168	Well #2	200,000	12,000	12,000	1,700	14,000

Detection Limits:	30	0.30	0.30	0.30	0.30
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Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Maile A. McBirney
Project Manager

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SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Xtra Oil Company
2307 Pacific Avenue
Alameda, CA 94501
Attention: Ted Simas

Client Project ID: Castro Valley
Matrix Descript: Water
Analysis Method: EPA 5030/8015/8020
First Sample #: 102-2169 A-B

Sampled: Feb 15, 1991
Received: Feb 15, 1991
Analyzed: Feb 27, 1991
Reported: Mar 4, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P.	Benzene	Toluene	Ethyl	Xylenes
		Hydrocarbons			Benzene	
		$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)
102-2169	Well #3	230,000	44,000	40,000	N.D.	31,000

Detection Limits:

600,000

6,000

6,000

6,000

6,000

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL


Maile A. McBirney
Project Manager

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SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9800 • FAX (415) 364-9233

Xtra Oil Company	Client Project ID: Castro Valley Blvd.	Sampled: Mar 21, 1991
2307 Pacific Avenue	Matrix Descript: Water	Received: Mar 21, 1991
Alameda, CA 94501	Analysis Method: EPA 5030/8015/8020	Analyzed: Mar 26, 1991
Attention: Ted Simas	First Sample #: 103-3248 A-B	Reported: Apr 3, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons	Benzene	Toluene	Ethyl Benzene	Xylenes
		$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)
103-3248	#1	36,000	4,500	5,700	87	7,300
103-3246	#2	62,000	9,300	11,000	350	9,700
103-3247	#3	87,000	30,000	14,000	690	5,400

Detection Limits:	30	0.30	0.30	0.30	0.30
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Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Maile A. McBirney
Project Manager

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SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Xtra Oil Company 2307 Pacific Avenue Alameda, CA 94501 Attention: Kertl Simas	Client Project ID: Castro Valley Blvd., Castro Valley Matrix Descript: Water Analysis Method: EPA 5030/8015/8020 First Sample #: 104-2444 A-D	Sampled: Apr 15, 1991 Received: Apr 15, 1991 Analyzed: Apr 16, 1991 Reported: Apr 30, 1991
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TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P.	Benzene		Ethyl	Xylenes
		Hydrocarbons	µg/L	Toluene	Benzene	
		µg/L (ppb)	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)
104-2444	Well # 1	56,000	6,500	8,500	410	9,900
104-2445	Well # 3	110,000	31,000	15,000	880	7,400
104-2446	Well # 2	82,000	5,300	7,400	1,000	9,400
104-2447	Field Blank	47	0.61	1.1	N.D.	2.1

Detection Limits:	30	0.30	0.30	0.30	0.30
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Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Maile McBirney Springer
Project Manager

1042444.XXX <1>

AVILA ROAD FILL

Mailing: C. de Bonneville
100 Avila Road
Concord, CA 94520
(415) 685-3045 - OFFICE
(415) 228 - 1181 - RES.

No CB- 20279

Received From Ted Simson PO No. _____
(Name of Company)

(PO Box or Street Address)

City _____ State _____ Zip _____

Time 3:30 Date 3.14.91 Truck License No. D-20

A/C \$ _____ X _____ = \$ _____
Rate per Yard Yards Total Amount Due

Conc. \$ _____ X _____ = \$ _____
Rate per Yard Yards Total Amount Due

Dirt \$ _____ X 5 = \$ 15.00
Rate per Yard Yards Total Amount Due

GRAND TOTAL \$ 15.00

Driver's Signature [Signature]

CONDITIONS

The Lessee expressly agrees to indemnify and save lessor harmless from and against all costs, losses and claims for death or injury to persons, including, employees of the Lessor, and loss, damage or injury to property including leased equipment caused or resulting, directly or indirectly, from the work covered by this order, or done by said equipment, it being expressly agreed that the leased equipment and the employees furnished therewith are under the exclusive jurisdiction, control and supervision of the Lessee.

AVILA ROAD FILL

Mailing: C. de Bonneville
100 Avila Road
Concord, CA 94520
(415) 685-3045 - OFFICE
(415) 228 - 1181 - RES.

No CB- 20272

Received From Ted Simson PO No. _____
(Name of Company)

(PO Box or Street Address)

City _____ State _____ Zip _____

Time 12:15 Date 3.14.91 Truck License No. D20

A/C \$ _____ X _____ = \$ _____
Rate per Yard Yards Total Amount Due

Conc. \$ _____ X _____ = \$ _____
Rate per Yard Yards Total Amount Due

Dirt \$ _____ X 5 = \$ 15.00
Rate per Yard Yards Total Amount Due

GRAND TOTAL \$ 15.00

Driver's Signature [Signature]

CONDITIONS

The Lessee expressly agrees to indemnify and save lessor harmless from and against all costs, losses and claims for death or injury to persons, including, employees of the Lessor, and loss, damage or injury to property including leased equipment caused or resulting, directly or indirectly, from the work covered by this order, or done by said equipment, it being expressly agreed that the leased equipment and the employees furnished therewith are under the exclusive jurisdiction, control and supervision of the Lessee.

Extra amber for
Well #1, 2, 3 if
needed 1/2

CHAIN OF CUSTODY REPORT

CLIENT: XTRA OIL REPORT TO: _____ TURNAROUND TIME: _____
 ADDRESS: _____ BILLING TO: _____ 24 HR. 48 HR. 72 HR. 8 HR.
 PHONE: _____ 5 DAY 10 DAY 15 DAY

PROJECT NAME/SITE: _____ POW/BILLING REFERENCE: _____

SAMPLER:					ANALYSIS REQUESTED										REMARKS	SAMPLE NUMBER
SAMPLE ID# / STATION	SAMPLE DESCRIPTION	NUMBER OF CONT.	TYPE CONT.	SAMPLING TIME/DATE												
Well #1					XXXX GAS/BTEX										1022167	
#2																
#3																
P1																
P2																

RELINQUISHED BY: [Signature] DATE: 2/15/91 TIME: 5:00 RECEIVED BY: _____ TRAVEL TIME: _____
 ON SITE TIME: _____
 RELINQUISHED BY: _____ DATE: _____ TIME: _____ RECEIVED BY: _____ OTHER: _____
 WERE SAMPLES: YES NO
 PRESERVED ?
 IN GOOD CONDITION?

