

JCH

**JOHN C. HOM & ASSOCIATES, INC.**

1618 Second Street  
San Rafael, CA 94901-2707  
(415) 258-9027

ALCOAT  
HIAZMAT  
9/14 AUG 26 PM 3:54

**REPORT  
ENVIRONMENTAL SERVICES  
19051 LAKE CHABOT ROAD  
CASTRO VALLEY, CALIFORNIA**

08/24/94

JCH&A Job Number 650.1

Job Prepared for

Henry Hertlein  
P. O. Box 824  
West Point, California 95255

by



*John C. Hom*

John C Hom  
Civil Engineer - 28877  
Geotechnical Engineer - 412  
Certificates Expire 3/31/95

John C Hom & Associates, Inc  
1618 Second Street  
San Rafael, California 94901  
415/258-9027

August 24, 1994

## INTRODUCTION

This report presents the results of the engineering services we performed for the property at 19051 Lake Chabot Road in Castro Valley, California. The scope of our services was to present the historical sampling and testing of monitoring wells. We previously presented a report dated September 19, 1990. That report summarizes our investigation, site history, and initial testing.

## SAMPLING AND TESTING

Since the September 19, 1990 report, the monitoring wells were sampled and tested seven times to determine their levels of benzene, ethylbenzene, toluene, xylene, and gasoline. Six of the samplings and testings were conducted by National Environmental Testing, Inc., (NET), with the latest by PACE Laboratory.

The well numbering system was different from the test boring numbers, and they are correlated as follows:

MW-1 (Monitoring Well)		JCH&A-B-2 (Test Boring)		
MW-2	"	"	JCH&A-B-1	" "
MW-3	"	"	JCH&A-B-3	" "
MW-4	"	"	JCH&A-B-4	" "

A summary of the testing is shown on Plate 1. The groundwater and groundwater calculations, and copies of the work by NET and PACE are attached in the appendix.

## CONCLUSIONS

Based upon the results of our work, the chemical testing indicates that groundwater chemicals at the former tank site (MW-2, MW-3, and MW-4) and downstream are below acceptable levels and guidelines set forth by the Regional Water Quality Control Board. The levels have, generally, been non-detectable for over three years. The benzene levels are above the action level, whereas the other levels are less than the action level. It is our opinion that detectable levels are limited to MW-1, nearest the tank site. The down gradient wells, MW-2, MW-3, and MW-4, have not shown any significant detectable levels. Therefore, the cleanup work has been successful, and no additional work is warranted.

## APPENDIX

### CONTENTS

Appendix A: NET Pacific Log No. 4623	7 Pages
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APPENDIX A

NET Pacific Log No. 4623

7 Pages



NATIONAL ENVIRONMENTAL TESTING, INC.

NET Pacific, Inc. 435 Tesconi Circle Santa Rosa, CA 95401 Tel: (707) 526-7200 Fax: (707) 526-9623

John Hom John C. Hom & Assoc., Inc. 1618 Second St San Rafael, CA 94901

Date: 11-13-90 NET Client Acct No: 589 NET Pacific Log No: 4623 Received: 10-26-90 1610

Client Reference Information

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Jules Skambrack Laboratory Manager

Enclosure(s)



Client Acct: 589  
 Client Name: John C. Hom & Assoc., Inc.  
 NET Log No: 4623

Date: 11-13-90  
 Page: 2

NET Pacific, Inc.

Ref:

Descriptor, Lab No. and Results

Parameter	Reporting Limit	MW-1	MW-2	MW-3	Units
		10-26-90 1155	10-26-90 1235	10-26-90 1315	
		66546	66547	66548	
PETROLEUM HYDROCARBONS		--	--	--	
VOLATILE (WATER)		--	--	--	
DILUTION FACTOR *		1	1	1	
DATE ANALYZED		11-08-90	11-08-90	11-08-90	
METHOD GC FID/5030		--	--	--	
as Gasoline	0.05	ND	ND	ND	mg/L
METHOD 602		--	--	--	
DILUTION FACTOR *		1	1	1	
DATE ANALYZED		11-08-90	11-08-90	11-08-90	
Benzene	0.5	ND	0.8	0.7	ug/L
Ethylbenzene	0.5	ND	ND	ND	ug/L
Toluene	0.5	ND	1.1	0.8	ug/L
Xylenes, total	0.5	ND	2.1	2.2	ug/L



NET Pacific, Inc.

## KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- \* : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
- ICVS : Initial Calibration Verification Standard (External Standard).
- mean : Average; sum of measurements divided by number of measurements.
- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference,  $100 \text{ [Value 1 - Value 2] / mean value}$ .
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

### Method References

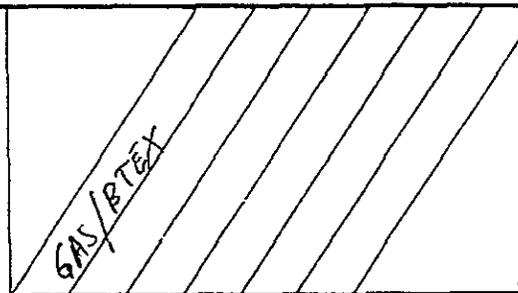
Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 16th Edition, APHA, 1985.

**CHAIN OF CUSTODY RECORD**

PROJ NO.		PROJECT NAME				NO. OF CONTAINERS	<div style="text-align: center;">  </div>						REMARKS	
		JOHN C. HOM & ASSOCIATES (415) 258-9027 1618 2nd St SAN RAFAEL, CA.												STAT
SAMPLERS - IS 2001 (90)		Eric J. Kueper												
STA NO	DATE	TIME	COMP	GRAB	STATION LOCATION									
MW 1	10/26/90	11:55	X	X	19051 19010 LAKE CHARLOT RD CASTRO VALLEY (See map)	3	X							
MW 2	10/26/90	12:35	X	X		3	X							
MW 3	10/26/90	13:15	X	X		3	X							
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)				
Eric J. Kueper		10/26/90 16:10												
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)				
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)		Date / Time		Remarks						
				Schwartz		10/26/90 1610								

4623

GAS/BTEX

STAT

ERIK  
 JOHN C. HOM & ASSOCIATES  
 1618 2<sup>ND</sup> ST.  
 SAN RAFAEL, CA.  
 19010 LAKE CHABOT RD, CASTRO VALLEY  
 19051

10/26/90  
 8:00-10:45 LOCATE WELLS (two covered with dirt & map is inaccurate)  
 10:45-13:30 SAMPLE  
 3 VOAS EACH WELL  
 GAS/BTEX

MW1: WELL DEPTH: 19.08' # 2" casing .1632  
 DEPTH TO WATER: 14.45' collection date & time: 10/26/90 11:55  
 WATER COLUMN: 4.63' purge equipment: bailer  
 ONE VOLUME: .76 gal sample equipment: bailer  
 TOTAL PURGE: 3.04

	PURGE 1	PURGE 2	PURGE 3	PURGE 4
TEMP °C:	18.9	18.7	18.6	18.6
pH:	7.5	6.7	6.8	6.8
µmhos:	1529	1530	1518	1470

MW2: WELL DEPTH: 17.50' 2" casing  
 DEPTH TO WATER: 7.96' collection date & time: 10/26/90 12:35  
 WATER COLUMN: 9.54' purge equip: bailer  
 ONE VOLUME: 1.56 sample equip: bailer  
 TOTAL PURGE: 6.24

	PURGE 1	PURGE 2	PURGE 3	PURGE 4
TEMP °C:	19.1	18.8	18.7	18.6
pH:	7.1	7.1	7.1	7.1
µmhos:	1544	1541	1539	1520

MW3: WELL DEPTH: 19.25' 2" casing  
 DEPTH TO WATER: 8.74' collection date & time: 10/26/90 13:15  
 WATER COLUMN: 10.51' purge equip: bailer  
 ONE VOLUME: 1.72 sample equip: bailer  
 TOTAL PURGE: 6.88

	PURGE 1	PURGE 2	PURGE 3	PURGE 4
TEMP °C:	19.3	18.8	18.8	18.7
pH:	7.3	7.3	7.3	7.3
µmhos:	1349	1349	1352	1352

10/26/90

MW 1 & MW 3 were buried under dirt  
and the map was inaccurate. I called John Home.  
and he said he would pay for a shovel and to  
try and locate and to rent a metal detector. I didn't  
have to rent a metal detector, but I did get a shovel  
and finally uncovered the lost wells.

Erik J. Kuehner

3624958

**PayLess**  
DRUG STORES

PAYLESS DRUGS  
4225 15 1200034  
102690 09:26

4019012118676093  
EXP. DT-01.91  
CREDIT CARD 5.57

PAYLESS DRUGS  
3848 CASTRO VLY  
CASTRO VALLEY CA

\*SHOVEL 5.19  
TAX 1 .38  
AMT DUE 5.57  
CHRG CRD 5.57  
CHANGE .00

10/26/90 09:26  
120034 15 THANKS

X *Erik J. Kuehner*  
Customer Signature

The issuer of the card identified on this item is authorized to pay the amount shown as TOTAL upon proper presentation. I promise to pay such TOTAL (together with any other charges due thereon) subject to and in accordance with the Agreement governing the use of such card.

Thank You for shopping

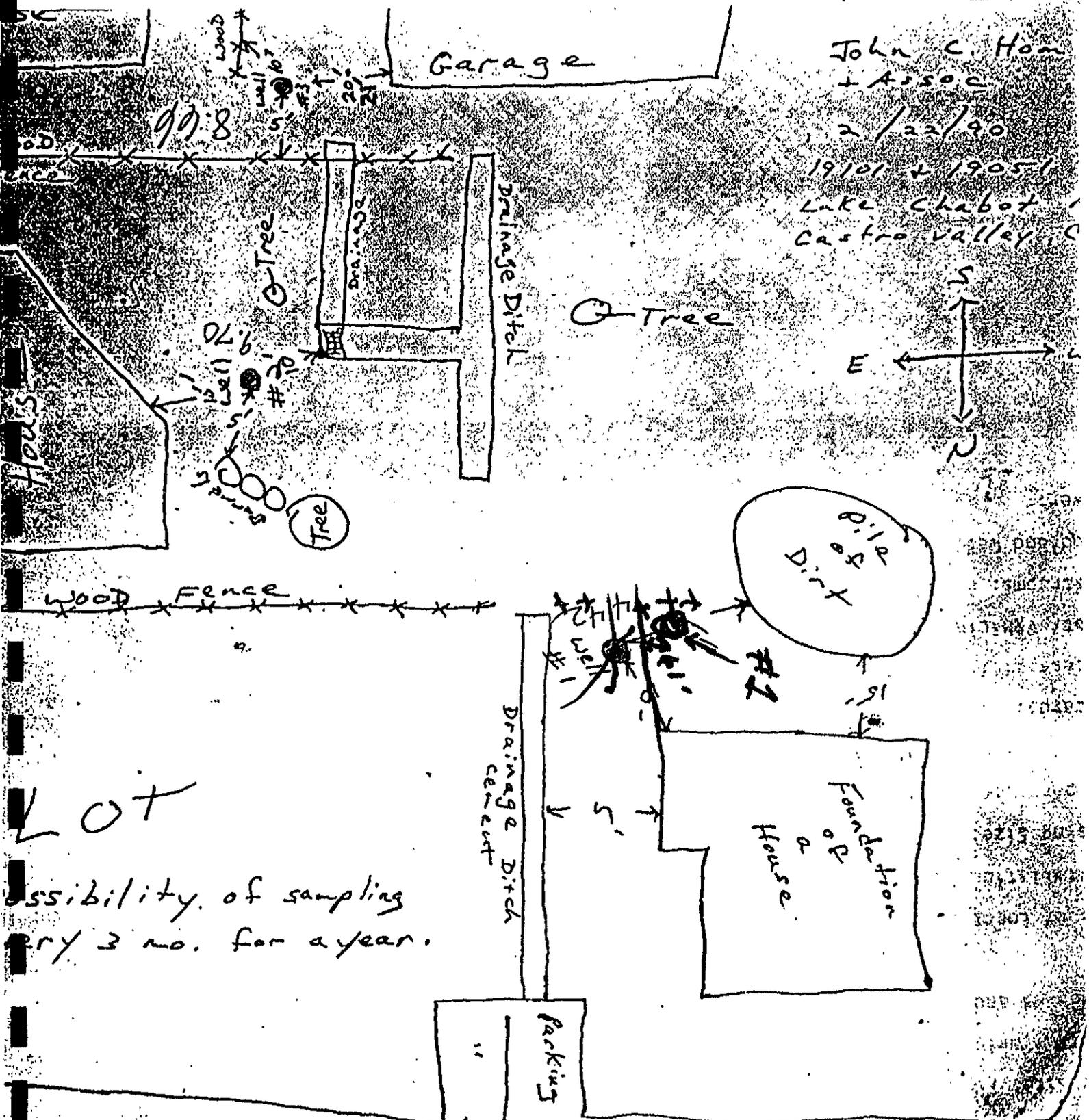
**PayLess**

OUR NAME IS THE PROMISE OF VALUE  
BUT WE KNOW PEOPLE MAKE THE DIFFERENCE  
CUSTOMER COPY

John C. Hom  
+ Assoc

2/22/90

19101 + 19051  
Lake Chabot  
Castro Valley, CA



LOT  
possibility of sampling  
every 3 mo. for a year.

HERTLEIN PL.

**APPENDIX B**

NET Pacific Log No. 5914

8 Pages



NATIONAL  
ENVIRONMENTAL  
TESTING, INC.

NET Pacific, Inc.  
435 Tesconi Circle  
Santa Rosa, CA 95401  
Tel: (707) 526-7200  
Fax: (707) 526-9623

Patrick J. Conway  
John C. Hom & Assoc., Inc.  
1618 Second St  
San Rafael, CA 94901

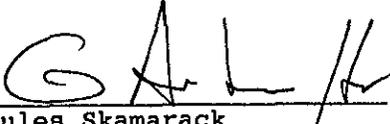
Date: 02-15-91  
NET Client Acct No: 589  
NET Pacific Log No: 5914  
Received: 02-01-91 1615

Client Reference Information

19101 & 19051 Lake Chabot Road, Castro Valley

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

  
\_\_\_\_\_  
Jules Skamarack  
Laboratory Manager

JS:rct  
Enclosure(s)



NET Pacific, Inc.

Client No: 589  
Client Name: John C. Hom & Assoc., Inc.  
NET Log No: 5914

Date: 02-15-91

Page: 2

Ref: 19101 & 19051 Lake Chabot Road, Castro Valley

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	MW-1	MW-2	Units
			02-01-91 1100	02-01-91 1315	
			73939	73940	
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-11-91	02-11-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	0.46	ND	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-11-91	02-11-91	
Benzene		0.5	12	ND	ug/L
Ethylbenzene		0.5	7.9	ND	ug/L
Toluene		0.5	ND	ND	ug/L
Xylenes, total		0.5	20	ND	ug/L

**NET**

NET Pacific, Inc.

Client No: 589  
 Client Name: John C. Hom & Assoc., Inc.  
 NET Log No: 5914

Date: 02-15-91

Page: 3

Ref: 19101 &amp; 19051 Lake Chabot Road, Castro Valley

## Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	MW-3	MW-4	Units
			02-01-91 1400	02-01-91 1215	
			73941	73942	
PETROLEUM HYDROCARBONS			---	---	
VOLATILE (WATER)			---	---	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-11-91	02-12-91	
METHOD GC FID/5030			---	---	
as Gasoline		0.05	ND	ND	mg/L
METHOD 602			---	---	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-11-91	02-12-91	
Benzene		0.5	ND	ND	ug/L
Ethylbenzene		0.5	ND	ND	ug/L
Toluene		0.5	ND	ND	ug/L
Xylenes, total		0.5	ND	ND	ug/L



NET Pacific, Inc.

KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- \* : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
- ICVS : Initial Calibration Verification Standard (External Standard).
- mean : Average; sum of measurements divided by number of measurements.
- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference,  $100 \frac{|\text{Value 1} - \text{Value 2}|}{\text{mean value}}$ .
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 16th Edition, APHA, 1985.

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME : 19101 & 19051 LAKE CHARLOT RD., Castro Valley CLIENT : JOHN C. MOM & ASSOC. 1618 2nd St, SAN RAFAEL				NO. OF CON- TAINERS											5914 REMARKS			
SAMPLERS: (Signature) <i>E. J. Kuefer</i>																	STAT			
STA NO	DATE	TIME	COMP.	GRAB	STATION LOCATION															
MW-1	2/1/91	11:00		X	} see map	3	X													
MW-2		13:15		X		3	X													
MW-3		14:00		X		3	X													
MW-4		12:15		X		3	X													
Relinquished by: (Signature) <i>E. J. Kuefer</i>						Date / Time 2/1/91 16:15		Received by: (Signature)						Relinquished by: (Signature)		Date / Time		Received by: (Signature)		
Relinquished by: (Signature)						Date / Time		Received by: (Signature)						Relinquished by: (Signature)		Date / Time		Received by: (Signature)		
Relinquished by: (Signature)						Date / Time		Received for Laboratory by: (Signature) <i>J. Schwartz</i>				Date / Time 2/1/91 16:15		Remarks						

3 Vials EACH WELL

2/1/91

ERIK  
JOHN C. HOM & ASSOCIATES  
1678 2nd St.

nw keys @

SAN RAFAEL, CA.  
Site 19010 LAKE CABOT RD., CASTRO VALLEY  
19051

3 VOAS each well x 4 = <sup>12</sup> VOAS TOTAL  
GAS/BTEX  
PURGE WATER PUT IN DRUM ON SITE

MW1 2" casing : .1632 gal/ft

TD: 19.08' well depth IV: .74 gal PE: bailer

WD: 14.53' depth to water PV: 2.96 gal SE: bailer

WC: 4.55' water column collection date & time: 2/1/91 11:00

	P1	P2	P3	P4
TEMP °C	16.9	17.2	17.3	17.4
CONDUCTIVITY Mhos	1569	1595	1593	1575
pH	6.7	6.8	6.8	6.8

MW2 2" casing

TD: 17.50' IV: 1.57 gal PE: ~~peristaltic~~ bailer

WD: 7.85' PV: 6.28 gal SE: bailer

WC: 9.65' collection date & time: 2/1/91 13:15

	P1	P2	P3	P4
TEMP °C	17.2	17.0	17.0	17.0
CONDUCTIVITY Mhos	1642	1628	1628	1626
pH	7.1	7.1	7.2	7.2

MW3 2" casing

TD: 19.25' IV: 1.74 gal PE: bailer

WD: 8.61' PV: 6.96 gal SE: bailer

WC: 10.64' collection date & time: 2/1/91 14:00

	P1	P2	P3	P4
TEMP °C	16.5	16.6	16.6	16.6
CONDUCTIVITY Mhos	1458	1461	1460	1461
pH	7.3	7.3	7.4	7.4

MW4 2" casing

TD: 20.10'

ND: 11.38'

WC: 8.72'

IV: 1.42 gal

PE: Peristaltic \*

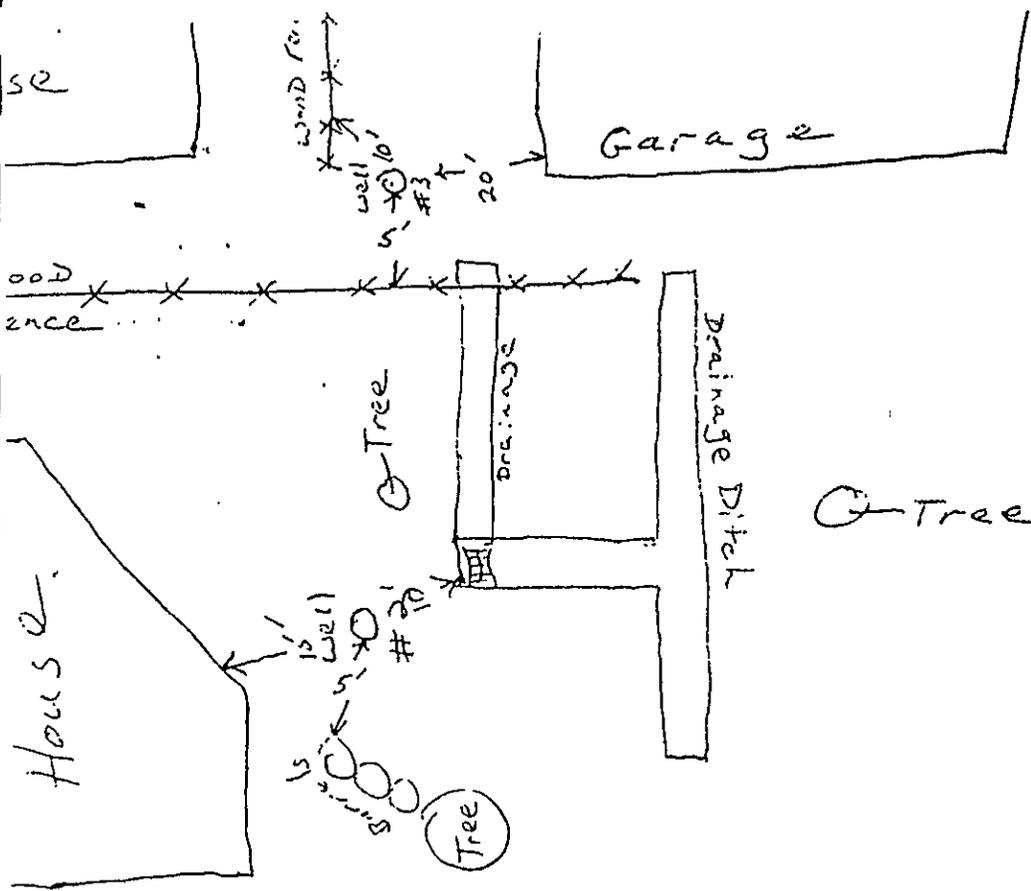
PV: 5.68 gal

SE: bailer

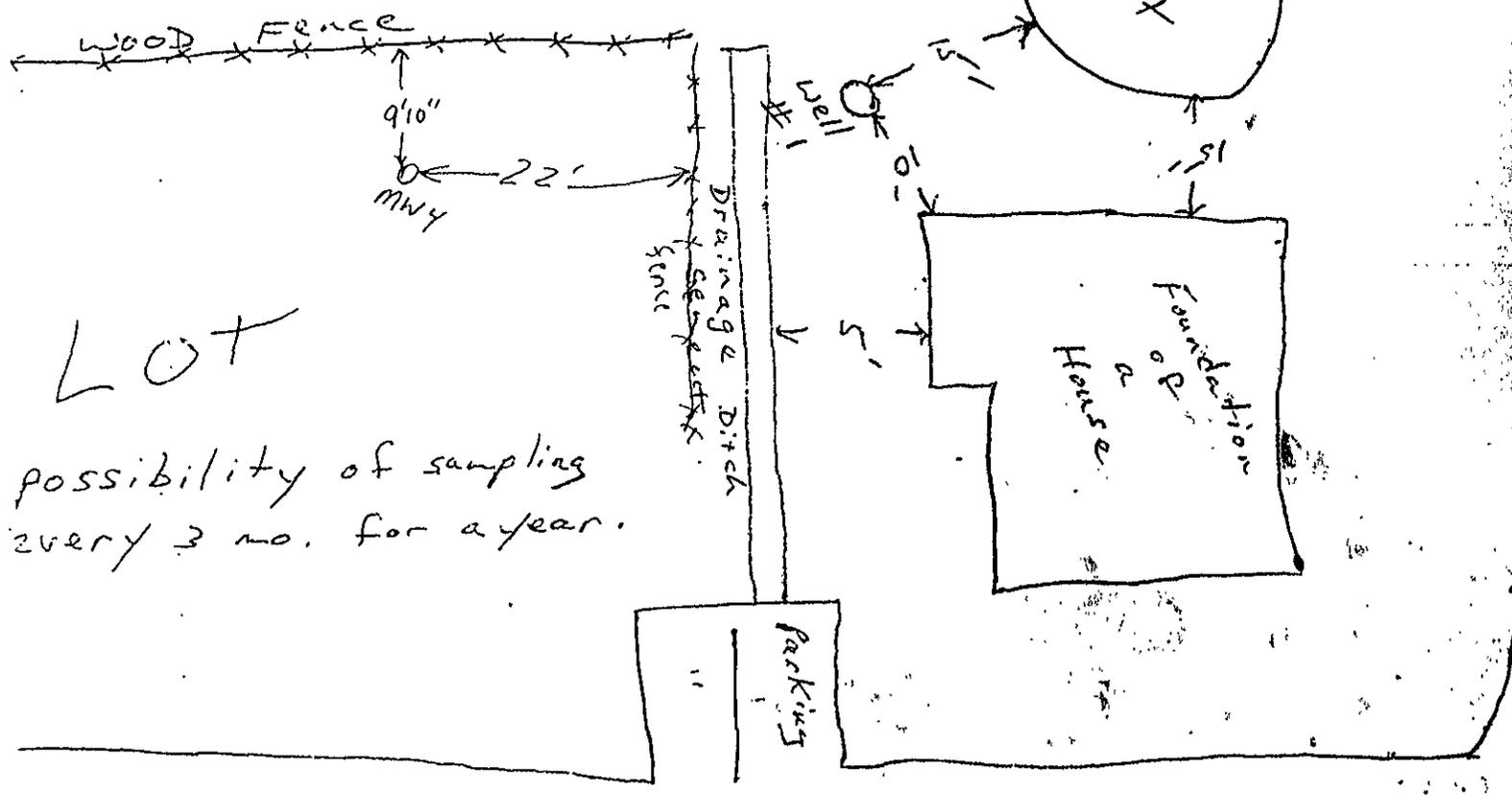
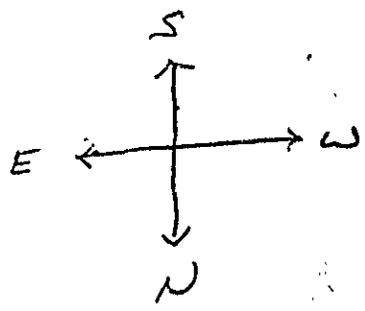
collection date & time: 2/1/91 12:15

	P1	P2	P3	P4
Temp °C:	17.0	17.3	17.4	17.7
sumhos:	1682	1707	1722	1803
pH:	7.0	7.0	7.0	7.1

\* note: MW-4 is curved and Teflon bailer would not slide down so peristaltic was needed for bailing.



John C. Horn  
 + Assoc  
 2/22/90  
 19101 + 19051  
 Lake Chabot Rd.  
 Castro Valley, CA.



LOT  
 possibility of sampling  
 every 3 mo. for a year.

HERTLEIN PL.

APPENDIX C

NET Pacific Log No. 7706

4 Pages



NATIONAL ENVIRONMENTAL TESTING, INC.

NET Pacific, Inc. 435 Tesconi Circle Santa Rosa, CA 95401 Tel: (707) 526-7200 Fax: (707) 526-9623

Patrick J. Conway John C. Hom & Assoc., Inc. 1618 Second St San Rafael, CA 94901

Date: 06-10-91 NET Client Acct No: 589 NET Pacific Log No: 7706 Received: 05-24-91 1719

Client Reference Information

19010 & 19051 Lake Chabot Rd. Castre Valley

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Jules Skamarack Laboratory Manager

JS:rcr Enclosure(s)



NET Pacific, Inc.

Client No: 589  
Client Name: John C. Hom & Assoc., Inc.  
NET Log No: 7706

Date: 06-10-91  
Page: 2

Ref: 19010 & 19051 Lake Chabot Rd. Castre Valley

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	MW-1	MW-2	Units
			05-24-91 1240	05-24-91 1350	
			86160	86161	
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			06-06-91	06-06-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	0.52	0.05	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			06-06-91	06-06-91	
Benzene		0.5	23	ND	ug/L
Ethylbenzene		0.5	ND	ND	ug/L
Toluene		0.5	ND	ND	ug/L
Xylenes, total		0.5	19	ND	ug/L



NET Pacific, Inc.

Client No: 589  
Client Name: John C. Hom & Assoc., Inc.  
NET Log No: 7706

Date: 06-10-91

Page: 3

Ref: 19010 & 19051 Lake Chabot Rd. Castre Valley

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	MW-3	MW-4	Units
			05-24-91 1440	05-24-91 1205	
			86162	86163	
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			06-06-91	06-06-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	ND	ND	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			06-06-91	06-06-91	
Benzene		0.5	ND	ND	ug/L
Ethylbenzene		0.5	ND	ND	ug/L
Toluene		0.5	ND	ND	ug/L
Xylenes, total		0.5	ND	ND	ug/L



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NET Pacific, Inc.

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- umhos/cm : Micromhos per centimeter.

### Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 16th Edition, APHA, 1985.

APPENDIX D

NET Pacific Log No. 9451

8 Pages



®

NATIONAL  
ENVIRONMENTAL  
TESTING, INC.

NET Pacific, Inc.  
435 Tesconi Circle  
Santa Rosa, CA 95401  
Tel: (707) 526-7200  
Fax: (707) 526-9623

John C. Hom  
John C. Hom & Assoc., Inc.  
1618 Second St  
San Rafael, CA 94901

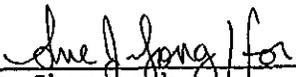
Date: 09-06-91  
NET Client Acct No: 589  
NET Pacific Log No: 9451  
Received: 08-23-91 1950

Client Reference Information

Lake Chabot Road

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

  
\_\_\_\_\_  
Jules Skamarack  
Laboratory Manager

JS:rct  
Enclosure(s)



NET Pacific, Inc

Client No: 589  
Client Name: John C. Hom & Assoc., Inc.  
NET Log No: 9451

Date: 09-06-91

Page: 2

Ref: Lake Chabot Road

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	MW-1	MW-2	Units
			08-23-91 1430	08-23-91 1630	
			95525	95526	
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			08-28-91	08-28-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	0.42	ND	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			08-28-91	08-28-91	
Benzene		0.5	32	ND	ug/L
Ethylbenzene		0.5	14	ND	ug/L
Toluene		0.5	3.6	ND	ug/L
Xylenes, total		0.5	29	ND	ug/L



NET Pacific, Inc

Client No: 589  
@Client Name: John C. Hom & Assoc., Inc.  
NET Log No: 9451

Date: 09-06-91

Page: 3

Ref: Lake Chabot Road

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	MW-3	MW-4	Units
			08-23-91 1715	08-23-91 1530	
			95527	95528	
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			08-28-91	08-29-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	ND	ND	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			08-28-91	08-29-91	
Benzene		0.5	ND	ND	ug/L
Ethylbenzene		0.5	ND	ND	ug/L
Toluene		0.5	ND	ND	ug/L
Xylenes, total		0.5	ND	ND	ug/L



NET Pacific, Inc

Client Acct: 589  
Client Name: John C. Hom & Assoc., Inc.  
NET Log No: 9451

Date: 09-06-91  
Page: 4

Ref: Lake Chabot Road

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verif Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Gasoline	0.05	mg/L	88	ND	93	85	9.0
Benzene	0.5	ug/L	97	ND	93	84	10
Toluene	0.5	ug/L	102	ND	95	91	4.3
Gasoline	0.05	mg/L	87	ND	79	80	1.3
Benzene	0.5	ug/L	94	ND	89	90	1.1
Toluene	0.5	ug/L	95	ND	89	85	4.6

COMMENT: Blank Results were ND on other analytes tested.



NET Pacific, Inc

KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- \* : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
- ICVS : Initial Calibration Verification Standard (External Standard).
- mean : Average; sum of measurements divided by number of measurements.
- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference,  $100 \text{ [Value 1 - Value 2]}/\text{mean value}$ .
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1983.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

**CHAIN OF CUSTODY RECORD**

9451

PROJ. NO.		PROJECT NAME					NO. OF CON- TAINERS	REMARKS								
SAMPLERS: (Signature)																
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION											
							GAS-BETX									
							Waters									
	8-23-91	1430		X	MW-1	3	X									
		1630		X	MW-2	3	X									
		1715		X	MW-3	3	X									
	↓	1530		X	MW-4	3	X									
Relinquished by: (Signature)		Date / Time		Received by: (Signature)			Relinquished by: (Signature)		Date / Time		Received by: (Signature)					
Mike Dowling		8-23-91 1950														
Relinquished by: (Signature)		Date / Time		Received by: (Signature)			Relinquished by: (Signature)		Date / Time		Received by: (Signature)					
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)			Date / Time		Remarks							
				Kemper			8/23/91 1950									

-M.A.

8-23-91

Client: - Johnston  
 1618 2nd St  
 San Rafael, CA  
 (415) 258-9027

Job Site: 19000 - 19051 Lake Chabot Rd.  
 Castro Valley, CA

Analytes: Gas-BTEX

MW-1 2" casing - 0.1632 gal/ft  
 TD: 19.08' IV: 0.82 gal  
 WD: 14.03'  
 WC: 5.05'

	P1	P2	P3	P4
OC	18.5	18.4	18.8	18.9
MS	1303	1331	1343	1343
pH	6.5	6.5	6.5	6.5

Sample collection: 8-23-91 1430

MW-2 2" casing  
 TD: 17.50' IV: 1.57 gal  
 WD: 7.86'  
 WC: 9.64'

	P1	P2	P3	P4
OC	20.5	20.5	20.4	20.0
MS	1642	1610	1608	1595
pH	7.2	7.2	7.1	7.2

Sample collection: 8-23-91 1630

John Han cont.

8-23-91

MW-3

TD 19.25' IV: 1.74 gal

WD 8.60'

WC 10.65'

	P1	P2	P3	P4
OC	20.3	20.1	19.4	20.1
MS	1387	1364	1355	1359
PH	7.4	7.3	7.3	7.2

Sample collection: 8-23-91 1715

MW-4 2" casing

TD 20.10' IV: 7.46 gal

WD 11.18'

WC 8.92'

	P1	P2	P3	P4
OC	20.6	20.0	19.1	19.9
MS	1560	1545	1549	1547
PH	7.2	7.1	7.2	7.2

Sample collection: 8-23-91 1530

BT	9	CF	17
2.25	2.15	2.5	2.5
2.21	2.11	2.11	2.11
FE	FE	FE	FE

APPENDIX E

NET Pacific Log No. 91.0823      9 Pages



NATIONAL ENVIRONMENTAL TESTING, INC.

NET Pacific, Inc. 435 Tesconi Circle Santa Rosa, CA 95401 Tel: (707) 526-7200 Fax: (707) 526-9623

John C. Hom John C. Hom & Assoc., Inc. 1618 Second St San Rafael, CA 94901

Date: 12/16/1991 NET Client Acct No: 58900 NET Pacific Log No: 91.0823 Received: 11/21/1991

Client Reference Information

John Hom-Lake Chabot Rd.

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

[Signature] Jules Skamarack Laboratory Manager

JS:rct Enclosure(s)



NET Pacific, Inc

Client No: 58900  
Client Name: John C. Hom & Assoc., Inc.  
NET Log No: 91.0823

Date: 12/16/1991

Page: 2

Ref: John Hom-Lake Chabot Rd.

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results		Units
			MW-1 105896	MW-4 105897	
TPH (Gas/BTXE,Liquid)					
METHOD 5030 (GC,FID)			--	--	
DATE ANALYZED			12-03-91	12-03-91	
DILUTION FACTOR*			1	1	
as Gasoline		0.05	0.29	ND	mg/L
METHOD 8020 (GC,Liquid)			--	--	
DATE ANALYZED			12-03-91	12-03-91	
DILUTION FACTOR*			1	1	
Benzene		0.5	16	ND	ug/L
Ethylbenzene		0.5	ND	ND	ug/L
Toluene		0.5	1.6	ND	ug/L
Xylenes (Total)		0.5	15	ND	ug/L



NET Pacific, Inc

Client No: 58900  
Client Name: John C. Hom & Assoc., Inc.  
NET Log No: 91.0823

Date: 12/16/1991

Page: 3

Ref: John Hom-Lake Chabot Rd.

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results		Units
			MW-2 105898	MW-3 105899	
TPH (Gas/BTXE, Liquid)					
METHOD 5030 (GC, FID)			--	--	
DATE ANALYZED			12-03-91	12-03-91	
DILUTION FACTOR*			1	1	
as Gasoline		0.05	ND	ND	mg/L
METHOD 8020 (GC, Liquid)			--	--	
DATE ANALYZED			12-03-91	12-03-91	
DILUTION FACTOR*			1	1	
Benzene		0.5	ND	ND	ug/L
Ethylbenzene		0.5	ND	ND	ug/L
Toluene		0.5	ND	ND	ug/L
Xylenes (Total)		0.5	ND	ND	ug/L



NET Pacific, Inc

Client No: 58900  
Client Name: John C. Hom & Assoc., Inc.  
NET Log No: 91.0823

Date: 12/16/1991

Page: 4

Ref: John Hom-Lake Chabot Rd.

QUALITY CONTROL DATA

<u>Parameter</u>	<u>Reporting Limits</u>	<u>Units</u>	<u>Cal Verf Stand % Recovery</u>	<u>Blank Data</u>	<u>Spike % Recovery</u>	<u>Duplicate Spike % Recovery</u>	<u>RPD</u>
Gasoline	0.05	mg/L	95	ND	93	93	<1
Benzene	0.5	ug/L	99	ND	96	101	5.3
Toluene	0.5	ug/L	109	ND	102	109	6.2

COMMENT: Blank Results were ND on other analytes tested.



NET Pacific, Inc

## KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- \* : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
- ICVS : Initial Calibration Verification Standard (External Standard).
- mean : Average; sum of measurements divided by number of measurements.
- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference,  $100 \text{ [Value 1 - Value 2] / mean value}$ .
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

### Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

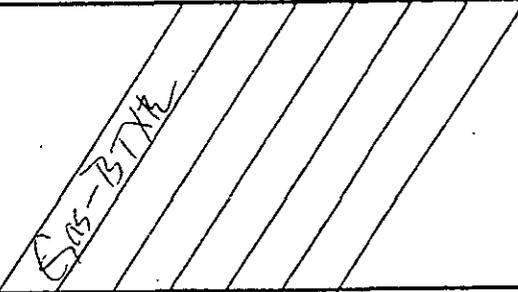
Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 16th Edition, APHA, 1985.

**CHAIN OF CUSTODY RECORD**

2291

PROJ. NO.		PROJECT NAME					NO. OF CONTAINERS	REMARKS				
SAMPLERS: (Signature)												
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION							
	Johnston-Lake Chabot Rd.						505-BTX 					
	11-21-91	1115		-	MW-1	3						X
		1320		-	MW-4	3						X
		1400		-	MW-2	3						X
		1440		-	MW-3	3	X					
Relinquished by: (Signature)		Date / Time		Received by: (Signature)			Relinquished by: (Signature)		Date / Time		Received by: (Signature)	
Michael Gonting		11-21-91 1652										
Relinquished by: (Signature)		Date / Time		Received by: (Signature)			Relinquished by: (Signature)		Date / Time		Received by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)			Date / Time		Remarks			
				K. Sample			11/21/91 1652					

NCA

11-21-91

Client: John Horn  
 1618 2nd St  
 San Rafael CA 94901

Contact: Same as above

Phone: 415/258-9027

Site: 19010-19051 Lake Chabot Rd.  
 Castro Valley, CA  
 (Map on file)

Analytes: Gas - BTXB

### Well Measurements:

Well #	TD	DTW	WC	CS	PV
MW-1	19.55'	14.29'	5.26'	2"	0.86 gal
MW-2	16.35'	7.85'	8.50'	2"	1.39 gal
MW-3	19.15'	8.57'	10.58'	2"	1.73 gal
MW-4	20.70'	11.29'	9.41'	2"	1.54 gal

### Purge Data:

MW-1 Purge Vol.: 0.86 gal ~~80%~~ Recharge @ 15.34'

	P1	P2	P3	P4
OC	17.2	17.7	17.5	17.6
MS	16.77	16.18	16.15	16.22
pH	7.0	7.0	7.0	7.0

Sample collected: 11-21-91 1115

Johnston cont.

MW-4 P.V. 1.54 gal 50% recharge @ 13.17'

	<u>P1</u>	<u>P2</u>	<u>P3</u>	<u>P4</u>
OC	18.0	18.3	18.0	18.1
US	1610	1623	1621	1622
pH	7.0	7.0	7.0	7.0

Sample collected: 11-21-91 1320

MW-2 PV 1.39 gal 50% recharge @ 9.55'

	<u>P1</u>	<u>P2</u>	<u>P3</u>	<u>P4</u>
OC	18.2	17.9	17.9	17.9
US	1848	1843	1829	1813
pH	7.0	7.0	7.0	7.0

Sample collected: 11-21-91 1400

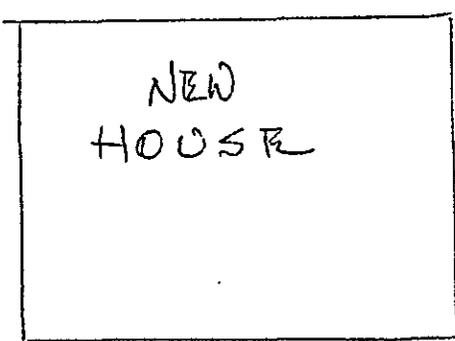
MW-3 PV: 1.73 gal 50% recharge @ 10.69'

	<u>P1</u>	<u>P2</u>	<u>P3</u>	<u>P4</u>
OC	17.1	17.2	17.2	17.1
US	1433	1432	1427	1429
pH	7.0	7.0	7.0	7.0

Sample collected 11-21-91 1440

John Hom Properties  
19101 - 19051 Lake Chabot Rd  
Castro Valley, CA

ROADWAY



EMPTY LOT

MW-4

PURGE WATER DRUMS

CONCRETE

MW-1

MW-2

RED HOUSE

CONCRETE DRAINAGE DITCHES

MW-3

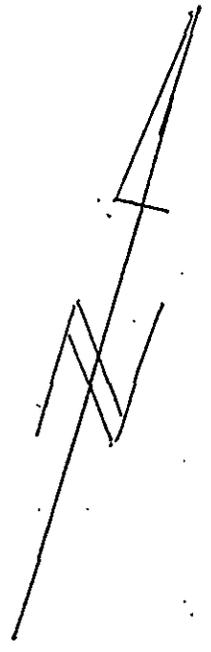
GARAGE

OLD HOUSE

GATE

ROADWAY

LAKE CHABOT RD



**APPENDIX F**

NET Pacific Log No. 92.1263      6 Pages



®

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Pacific, Inc. 435 Tesconi Circle Santa Rosa, CA 95401 Tel: (707) 526-7200 Fax: (707) 526-9623

John C. Hom John C. Hom & Assoc., Inc. 1618 Second St San Rafael, CA 94901

Date: 03/26/1992 NET Client Acct No: 58900 NET Pacific Log No: 92.1263 Received: 03/11/1992

Client Reference Information

Lake Chabot

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

[Signature] Jules Skamarack Laboratory Manager

JS:rcr Enclosure(s)



NET Pacific, Inc

Client No: 58900  
Client Name: John C. Hom & Assoc., Inc.  
NET Log No: 92.1263

Date: 03/26/1992  
Page: 2

Ref: Lake Chabot

Parameter	Method	Descriptor, Lab No. and Results		Units
		MW-3	MW-2	
		Reporting	Reporting	
		Limit	Limit	
		03/11/1992	03/11/1992	
		13:30	14:30	
		115995	115996	
TPH (Gas/BTXE,Liquid)		--	--	
METHOD 5030 (GC,FID)				
DATE ANALYZED		03-14-92	03-14-92	
DILUTION FACTOR*		1	1	
as Gasoline		0.05	ND	mg/L
METHOD 8020 (GC,Liquid)		--	--	
DATE ANALYZED		03-14-92	03-14-92	
DILUTION FACTOR*		1	1	
Benzene		0.5	ND	ug/L
Ethylbenzene		0.5	ND	ug/L
Toluene		0.5	ND	ug/L
Xylenes (Total)		0.5	ND	ug/L
SURROGATE RESULTS		--	--	
Bromofluorobenzene		107	93	% Rec.



NET Pacific, Inc

Client No: 58900  
Client Name: John C. Hom & Assoc., Inc.  
NET Log No: 92.1263

Date: 03/26/1992

Page: 3

Ref: Lake Chabot

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	MW-1	MW-4	Units
			03/11/1992 15:45 115997	03/11/1992 17:50 115998	
TPH (Gas/BTXE,Liquid)			--	--	
METHOD 5030 (GC,FID)					
DATE ANALYZED			03-14-92	03-14-92	
DILUTION FACTOR*			1	1	
as Gasoline		0.05	0.30	ND	mg/L
METHOD 8020 (GC,Liquid)			--	--	
DATE ANALYZED			03-14-92	03-14-92	
DILUTION FACTOR*			1	1	
Benzene		0.5	43	ND	ug/L
Ethylbenzene		0.5	9.2	ND	ug/L
Toluene		0.5	11	ND	ug/L
Xylenes (Total)		0.5	34	ND	ug/L
SURROGATE RESULTS			--	--	
Bromofluorobenzene			123	104	% Rec.



NET Pacific, Inc

Client No: 58900  
Client Name: John C. Hom & Assoc., Inc.  
NET Log No: 92.1263

Date: 03/26/1992

Page: 4

Ref: Lake Chabot

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Gasoline	0.05	mg/L	99	ND	100	93	7.0
Benzene	0.5	ug/L	105	ND	99	90	9.0
Toluene	0.5	ug/L	100	ND	100	95	6.0

COMMENT: Blank Results were ND on other analytes tested.



NET Pacific, Inc

## KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- \* : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
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- mean : Average; sum of measurements divided by number of measurements.
- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference,  $100 \text{ [Value 1 - Value 2] / mean value}$ .
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

### Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

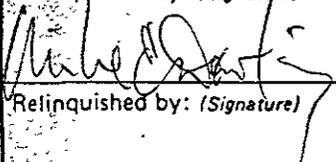
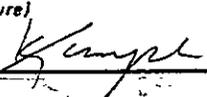
Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

CHAIN OF CUSTODY RECORD

4421

PROJ. NO.		PROJECT NAME					NO. OF CONTAINERS	REMARKS									
SAMPLERS (Signature)																	
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION												
	3-11-92	1330		-	MW-3	3	X	<div style="border: 1px solid black; padding: 5px; display: inline-block;">                     GAS-BTN                 </div>									
		1430		-	MW-2	3	X										
		1545		-	MW-1	3	X										
		1750		-	MW-4	3	X										
Relinquished by: (Signature)		Date / Time		Received by: (Signature)			Relinquished by: (Signature)		Date / Time		Received by: (Signature)						
		3-11-92 1950															
Relinquished by: (Signature)		Date / Time		Received by: (Signature)			Relinquished by: (Signature)		Date / Time		Received by: (Signature)						
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)			Date / Time		Remarks								
							3/11/92 1950										

APPENDIX G

PACE Project No. 440719.600      8 Pages

July 25, 1994

Mr. John Hobb  
John C. Hom and Associates  
1618 Second Street  
San Rafael, CA 94901

RE: PACE Project No. 440719.600  
Client Reference: Castro Valley

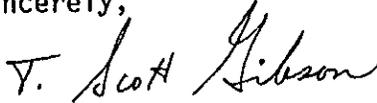
Dear Mr. Hobb:

Enclosed is the report of laboratory analyses for samples received July 19, 1994.

Footnotes are given at the end of the report.

If you have any questions concerning this report, please feel free to contact us.

Sincerely,



T. Scott Gibson  
Project Manager

Enclosures

**REPORT OF LABORATORY ANALYSIS**

Mr. John Hobb  
 Page 2

July 25, 1994  
 PACE Project Number: 440719600

Client Reference: Castro Valley

PACE Sample Number:  
 Date Collected:  
 Date Received:  
 Client Sample ID:  
 Parameter

70 0357454  
 07/19/94  
 07/19/94  
 MW-2

Units                      MDL                      DATE ANALYZED

ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS					
TOTAL FUEL HYDROCARBONS, (LIGHT):					
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	-	07/20/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):					
Benzene	ug/L	0.5	ND	-	07/20/94
Toluene	ug/L	0.5	ND	-	07/20/94
Ethylbenzene	ug/L	0.5	ND	-	07/20/94
Xylenes, Total	ug/L	0.5	ND	-	07/20/94

**REPORT OF LABORATORY ANALYSIS**

Mr. John Hobb  
 Page 3

July 25, 1994  
 PACE Project Number: 440719600

Client Reference: Castro Valley

PACE Sample Number:  
 Date Collected:  
 Date Received:  
 Client Sample ID:  
 Parameter

70 0357462  
 07/19/94  
 07/19/94  
 MW-3

Units      MDL      DATE ANALYZED

ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	07/20/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	07/20/94
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	07/20/94
Benzene	ug/L	0.5	ND	07/20/94
Toluene	ug/L	0.5	ND	07/20/94
Ethylbenzene	ug/L	0.5	ND	07/20/94
Xylenes, Total	ug/L	0.5	ND	07/20/94

These data have been reviewed and are approved for release.



for Darrell C. Cain  
 Regional Director

Mr. John Hobb  
Page 4

FOOTNOTES  
for pages 1 through 3

July 25, 1994  
PACE Project Number: 440719600

Client Reference: Castro Valley

MDL Method Detection Limit  
ND Not detected at or above the MDL.

**REPORT OF LABORATORY ANALYSIS**

Mr. John Hobb  
 Page 5

QUALITY CONTROL DATA

July 25, 1994  
 PACE Project Number: 440719600

Client Reference: Castro Valley

PURGEABLE FUELS AND AROMATICS

Batch: 70 32177  
 Samples: 70 0357446, 70 0357454, 70 0357462

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700357403	Spike	Spike Recv	Spike Dupl Recv	RPD
Benzene	ug/L	0.5	ND	100	93%	104%	11%
Toluene	ug/L	0.5	ND	100	93%	100%	7%
Ethylbenzene	ug/L	0.5	ND	100	92%	96%	4%
Xylenes, Total	ug/L	0.5	ND	300	93%	96%	3%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Benzene	ug/L	0.5	100	96%	99%	3%
Toluene	ug/L	0.5	100	95%	98%	3%
Ethylbenzene	ug/L	0.5	100	95%	96%	1%
Xylenes, Total	ug/L	0.5	300	96%	96%	0%

Mr. John Hobb  
Page 6

FOOTNOTES  
for page 5

July 25, 1994  
PACE Project Number: 440719600

Client Reference: Castro Valley

MDL Method Detection Limit  
ND Not detected at or above the MDL.  
RPD Relative Percent Difference



# REPORT OF LABORATORY ANALYSIS

John C. Hom and Associates  
1618 Second Street  
San Rafael, CA 94901

July 25, 1994  
PACE Project Number: 440719600

Attn: Mr. John Hobb

Client Reference: Castro Valley

PACE Sample Number:  
Date Collected:  
Date Received:  
Client Sample ID:  
Parameter

70 0357446  
07/19/94  
07/19/94  
MW-1

Units                      MDL                      DATE ANALYZED

## ORGANIC ANALYSIS

<u>ORGANIC ANALYSIS</u>			
PURGEABLE FUELS AND AROMATICS			
TOTAL FUEL HYDROCARBONS, (LIGHT):			
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	300
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			
Benzene	ug/L	0.5	24
Toluene	ug/L	0.5	3.0
Ethylbenzene	ug/L	0.5	9.1
Xylenes, Total	ug/L	0.5	34

440719.600

**CHAIN-OF-CUSTODY RECORD**  
Analytical Request

Client John Hum + Associates

Report To: John Hubbs

Pace Client No. \_\_\_\_\_

Address \_\_\_\_\_

Bill To: \_\_\_\_\_

Pace Project Manager TSG

Phone \_\_\_\_\_

P.O. # / Billing Reference \_\_\_\_\_

Pace Project No. \_\_\_\_\_

Project Name / No. Castro Valley

\*Requested Due Date: Std.

Sampled By (PRINT):  
T. Scott Gibson

Sampler Signature T. Scott Gibson Date Sampled 7-19-94

NO. OF CONTAINERS	PRESERVATIVES				ANALYSES REQUEST
	UNPRESERVED	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	VOA	
				HCL	TPH-GAS BTEX

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	UNPRESERVED	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	VOA	ANALYSES REQUEST	REMARKS
1	MW-1		H <sub>2</sub> O	35744.6	1						
2	MW-2			35745.4	3						
3	MW-3			35746.2	3						
4											
5											
6											
7											
8											

COOLER NOS.	BAILERS	SHIPMENT METHOD	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
		OUT / DATE   RETURNED / DATE	1- T. Scott Gibson - PACE	PACE	7/19/94	1500

Additional Comments

15/1

APPENDIX H

PACE Project No. 440718.502      7 Pages

July 21, 1994

Mr. John Hobb  
John C. Hom and Associates  
1618 Second Street  
San Rafael, CA 94901

RE: PACE Project No. 440718.502  
Client Reference: Castro Valley

Dear Mr. Hobb:

Enclosed is the report of laboratory analyses for samples received July 18, 1994.

Footnotes are given at the end of the report.

If you have any questions concerning this report, please feel free to contact us.

Sincerely,



T. Scott Gibson  
Project Manager

Enclosures



# REPORT OF LABORATORY ANALYSIS

John C. Hom and Associates  
1618 Second Street  
San Rafael, CA 94901

July 21, 1994  
PACE Project Number: 440718502

Attn: Mr. John Hobb

Client Reference: Castro Valley

PACE Sample Number: 70 0357136  
Date Collected: 07/18/94  
Date Received: 07/18/94  
Client Sample ID: MW-4

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
------------------	--------------	------------	----------------------

### ORGANIC ANALYSIS

<u>PURGEABLE FUELS AND AROMATICS</u>			
TOTAL FUEL HYDROCARBONS, (LIGHT):			07/19/94
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND 07/19/94
<u>PURGEABLE AROMATICS (BTXE BY EPA 8020M):</u>			
Benzene	ug/L	0.5	ND 07/19/94
Toluene	ug/L	0.5	ND 07/19/94
Ethylbenzene	ug/L	0.5	ND 07/19/94
Xylenes, Total	ug/L	0.5	ND 07/19/94

These data have been reviewed and are approved for release.

Darrell C. Cain  
Regional Director

Mr. John Hobb  
Page 2

FOOTNOTES  
for page 1

July 21, 1994  
PACE Project Number: 440718502

Client Reference: Castro Valley

MDL Method Detection Limit  
ND Not detected at or above the MDL.



# REPORT OF LABORATORY ANALYSIS

Mr. John Hobb  
Page 3

## QUALITY CONTROL DATA

July 21, 1994  
PACE Project Number: 440718502

Client Reference: Castro Valley

PURGEABLE FUELS AND AROMATICS  
Batch: 70 32153  
Samples: 70 0357136

### METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

### SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	700356067	Spike	Spike Recv	Spike Dupl Recv	RPD
Benzene	ug/L	0.5	ND	100	90%	89%	1%
Toluene	ug/L	0.5	ND	100	94%	93%	1%
Ethylbenzene	ug/L	0.5	ND	100	95%	93%	2%
Xylenes, Total	ug/L	0.5	ND	300	96%	96%	0%

### LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Benzene	ug/L	0.5	100	101%	98%	3%
Toluene	ug/L	0.5	100	105%	103%	2%
Ethylbenzene	ug/L	0.5	100	108%	106%	2%
Xylenes, Total	ug/L	0.5	300	110%	108%	2%



# REPORT OF LABORATORY ANALYSIS

Mr. John Hobb  
Page 4

FOOTNOTES  
for page 3

July 21, 1994  
PACE Project Number: 440718502

Client Reference: Castro Valley

MDL Method Detection Limit  
ND Not detected at or above the MDL.  
RPD Relative Percent Difference

**CHAIN-OF-CUSTODY RECORD**  
Analytical Request

Client John C Horn & Associates  
Address 1618 Second St  
San Rafael CA 94901  
Phone 415 258 9027

Report To: John Hobb  
Bill To: - Same -  
P.O. # / Billing Reference \_\_\_\_\_  
Project Name / No. Castro Valley

Pace Client No. \_\_\_\_\_  
Pace Project Manager TJG  
Pace Project No. \_\_\_\_\_  
\*Requested Due Date: Std.

Sampled By (PRINT): T. SCOTT GIBSON  
Sampler Signature T. Scott Gibson Date Sampled 7-18-94

NO. OF CONTAINERS	PRESERVATIVES					ANALYSES REQUEST	REMARKS
	UNPRESERVED	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	VOA	HCL		
					X X	TPH-300 PTEX	

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES	ANALYSES REQUEST	REMARKS
1	MW-4		H <sub>2</sub> O	5713.6	3	X X	--	
2								
3								
4								
5								
6								
7								
8								

COOLER NOS.	BAILERS	SHIPMENT METHOD		ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
OUT / DATE	RETURNED / DATE							
				1	T. Scott Gibson PACE	T. Scott Gibson PACE	7/18/94	12:00

Additional Comments

1014

FIGURE II  
 FIELD LOG DATA SHEET  
 PACE Laboratories, Inc.  
 WELL SAMPLING

**COPY**

Client: John C. Horn & Assoc. Project: Castro Valley Project #: \_\_\_\_\_  
 Sample Site: Lake Chabot Rd MW-4

Well Identification and Description: (Locked \_\_\_\_\_ Not Locked ) Key#: \_\_\_\_\_

ID Inches \_\_\_\_\_ PVC: 2" Steel: \_\_\_\_\_ Stainless Steel: \_\_\_\_\_ Other: \_\_\_\_\_ Labeled:

Total Well Depth (from top of casing) \_\_\_\_\_ meters 20.19 feet Elevation: \_\_\_\_\_ feet

Static Water Level (from top of casing) Before Prepumping: \_\_\_\_\_ meters 11.19 feet

Static Water Level (from top of casing) At Time of Sampling: \_\_\_\_\_ meters \_\_\_\_\_ feet

Static Water Elevation: \_\_\_\_\_ feet Water Column: 9.0 feet One Casing Volume 1.5 gal  
3X = 5g

Date Prepumped: 7-18-94 Time Prepumped: 10:55 - 11:16 AM Volume Prepumped: \_\_\_\_\_ gal

Prepumping Method Used: HAND BAIL Pump Rate: \_\_\_\_\_ gpm

Date Sampled: 7-18-94 Time Sampled: 11:26 AM Sampling Equipment Used: 55 BAIL

Sample Temperature: \_\_\_\_\_ °C Sample pH: \_\_\_\_\_ Sample Specific Conductance: \_\_\_\_\_ umho/cm2

Field Measurements Temperature Corrected: Yes \_\_\_\_\_ No \_\_\_\_\_ Metals Filtered in Field: Yes \_\_\_\_\_ No \_\_\_\_\_

Weather Conditions: clear warm

Observations: mod recharge; mod turbid (brn.); No odors

Sample Description: SL turbid

Name and Affiliation of Sampler(s): VJA - PACE

Name and Affiliation of Inspector(s) Present: N/A

**STABILIZATION TEST**

Time	pH	Specific Conductance (umhos/cm2)	Temp. (°C)	Cumulative Volume Removed (gallons)
	7.0	1650	17.5	2
	7.0	1650	17.5	3 1/2
	7.0	1650	17.5	5

APPENDIX I

JCH&A, INC. Measurements      7 Pages

**JCH**  
**JOHN C. HOM & ASSOCIATES**

Geotechnical Consultants  
 1618 Second Street  
 San Rafael, CA 94901

JOB 19051 Lake Chabot Road (650.1)

SHEET NO. 1 OF 4

CALCULATED BY DHR DATE 8/22/94

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

SCALE \_\_\_\_\_

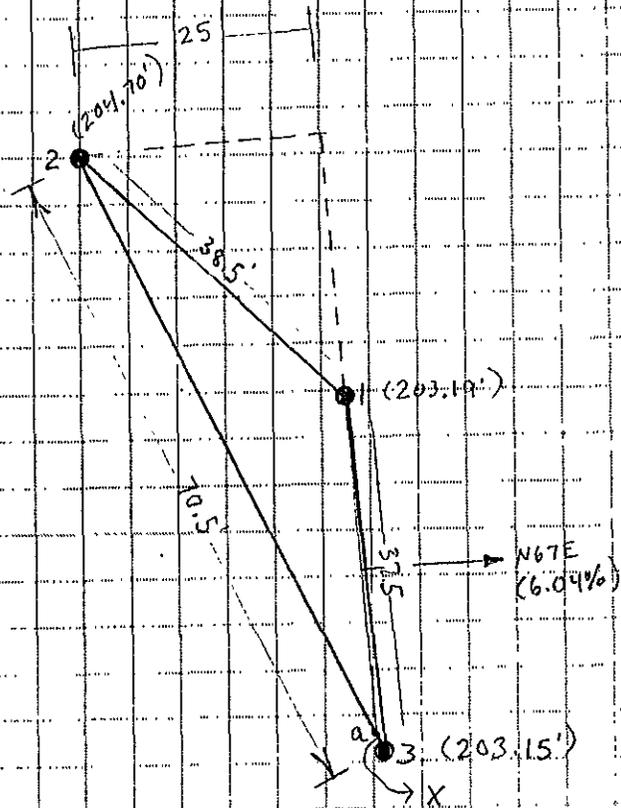
Monitoring well # (NET) As labeled by JCH & Assoc.	Tap of Casing Elevation	Depth to Water	Elevation of the Top of Water Column
MW-1 (NET) # 2 (JCH)	218.93'	14.23'	204.70'
MW-2 (NET) # 1 (JCH)	211.11'	7.92'	203.19'
MW-3 (NET) # 3 (JCH)	211.77'	8.62'	203.15'
MW-4 (NET) # 4 (JCH)	219.49'	11.19'	208.30'

Measurements recorded 7/18-19/94

JCH  
**JOHN C. HOM & ASSOCIATES**

Geotechnical Consultants  
 1618 Second Street  
 San Rafael, CA 94901

JOB 19051 Lake Chabot Road (650.1)  
 SHEET NO. 2 OF 4  
 CALCULATED BY DHR DATE 8/22/94  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 SCALE 1" = 20'



line from well #1 to point a is the line of strike of the planar surface of the water table.

distance x = distance from well #3 to point a.

point a is at the same elevation as well #1, but lies along the line from well #2 to well #3.

Wells # 1, #2, #3

finding point a:

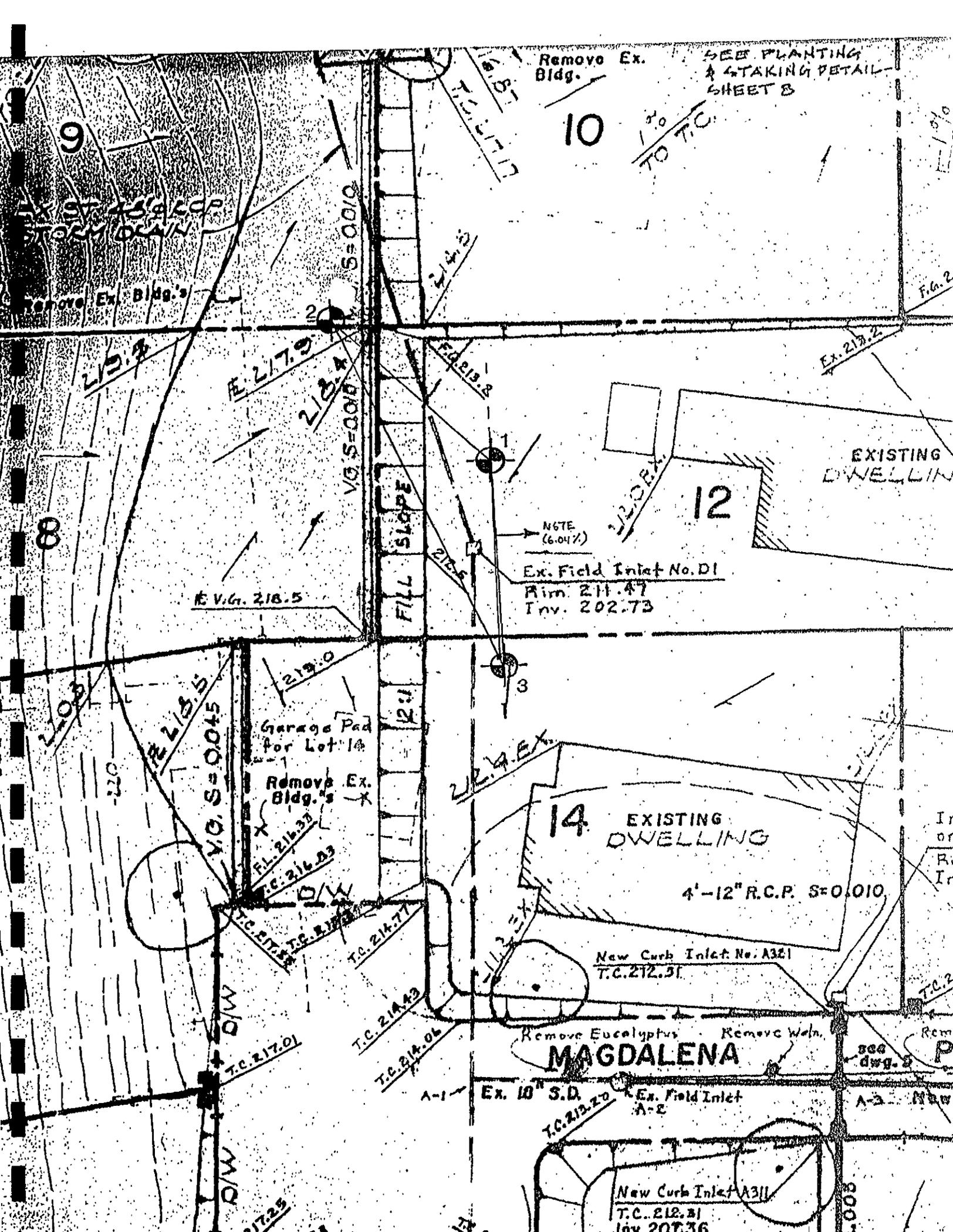
$$\frac{203.19 - 203.15}{204.70 - 203.15} = \frac{x}{70.5'} \quad x = 1.82'$$

Gradient Calculation:

$$\frac{204.70 - 203.19}{25.0'} = \frac{1.51}{25.0} = 6.04\%$$

N 67° E = direction of gradient.

Measurements taken 7/19/94



Remove Ex. Bldg.

SEE PLANTING & STAKING DETAIL SHEET B

10

1/2% TO T.C.

9

EX. ST. 43" R.C.P. STORM DRAIN

Remove Ex. Bldg.'s

Ex. 212.2

Ex. 212.2

EXISTING DWELLING

12

NOTE (6.04%)

Ex. Field Inlet No. D1  
Rim. 211.47  
Inv. 202.73

E.V.G. 218.5

FILL SLOPE

12:1

Garage Pad for Lot 14

Remove Ex. Bldg.'s

14

EXISTING DWELLING

4'-12" R.C.P. S=0.010

New Curb Inlet No. A321  
T.C. 212.51

Remove Eucalyptus Remove Weib.  
**MAGDALENA**

Ex. 10" S.D.

Ex. Field Inlet A-2

see dwg. 2

T.C. 217.01

T.C. 214.49  
T.C. 214.04

T.C. 212.20

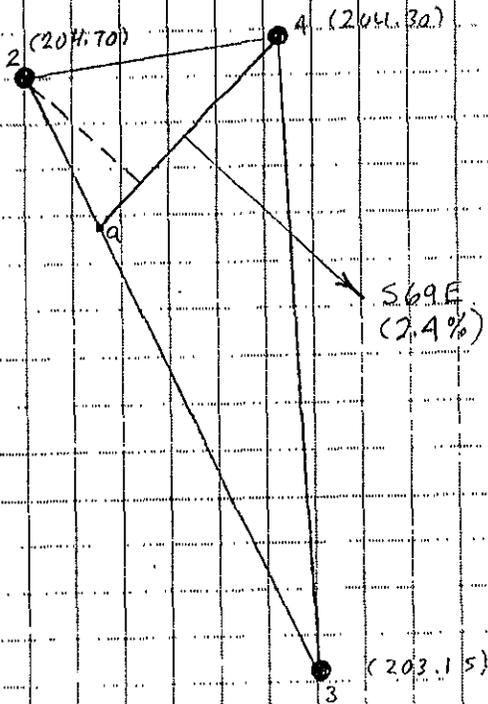
New Curb Inlet A311  
T.C. 212.31  
Inv. 207.36

000

JCH  
**JOHN C. HOM & ASSOCIATES**

Geotechnical Consultants  
 1618 Second Street  
 San Rafael, CA 94901

JOB 19051 Lake Chabot Road (650.1)  
 SHEET NO. 3 OF 9  
 CALCULATED BY DHR DATE 8/22/94  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 SCALE 1" = 20'



Line from well # 4 to a  
 is the line of strike of  
 the planar surface of the  
 water table.

distance x = distance from  
 well # 3 to point a.

point a is at the same  
 elevation as well # 4,  
 but along the line from  
 well # 2 to well # 3.

Wells # 2, # 3, # 4

Finding point a: 
$$\frac{204.30 - 203.15}{204.70 - 203.15} = \frac{1.15}{1.55} = \frac{x}{70.5} \quad x = 52.31'$$

Gradient Calculation: 
$$\frac{204.70 - 204.30}{17.0'} = 2.4\%$$

S69E = direction of gradient

Measurements taken 7/18-19/94

EXIST. 48" R.C.P. STORM DRAIN

Remove Ex. Bldg.'s

V.G. S=0.010

8

E.V.G. 216.5

FILL SLOPE

Ex. Field Inlet No. D1  
Rim 211.47  
Inv. 202.73

12

EXIST. T.WELL

Garage Pad for Lot 14

Remove Ex. Bldg.'s

V.G. S=0.045

FL. 214.20  
T.C. 214.03

14 EXISTING DWELLING

4'-12" R.C.P. S=0.010

New Curb Inlet No. A3E1  
T.C. 212.31

MAGDALENA

Remove Eucalyptus Remove Wehn.

Ex. 18" S.D.

Ex. Field Inlet A-2

New Curb Inlet A311  
T.C. 212.31  
Inv. 207.36

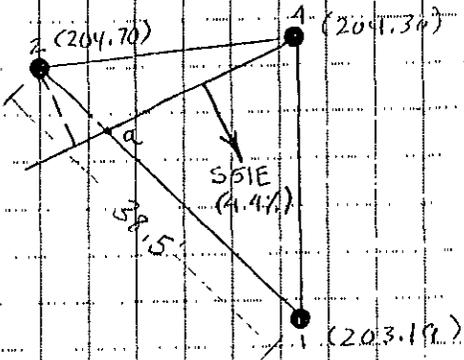
Remove Ex. Garage & Shed

Remove 16" Pine

S=0.008

Geotechnical Consultants  
 1618 Second Street  
 San Rafael, CA 94901

JOB: 19051 Lake Chabot Road (650.1)  
 SHEET NO. 4 OF 4  
 CALCULATED BY: DHR DATE: 8/22/94  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 SCALE: 1" = 20'



line from well #4 to point a is the strike of the planar surface of the water table.

distance x = the distance from well #1 to point a.

Point a is the same elevation as well #4 but along the line from well #1 to well #2.

Wells # 1, #2, #4

Finding point a: 
$$\frac{204.30 - 203.19}{204.70 - 203.19} = \frac{1.11}{1.51} = \frac{x}{38.5} \quad x = 28.30$$

Calculation of gradient: 
$$\frac{204.70 - 204.30}{9.0} = 4.4\%$$

SSE = direction of gradient

Measurements taken 7/18-19/94

EXIST. 48" R.C.P.  
STORM DRAIN

Remove Ex. Bldg.'s

8

S=0.010

E. 217.9

218.4

V.G. S=0.000

551E (4.4%)

E.V.G. 218.5

FILL SLOPE

Ex. Field Inlet No. D1  
Rim 211.47  
Inv. 202.73

EXIST DWELL

12

Garage Pad  
for Lot 14

Remove Ex.  
Bldg.'s

FL. 216.93

T.C. 216.93

V.G. S=0.045

E. 218.5

219.0

12:1

14. EXISTING  
DWELLING

4'-12" R.C.P. S=0.010

New Curb Inlet No. A321  
T.C. 212.51

Remove Eucalyptus Remove Water

MAGDALENA

Ex. 18" S.D.

Ex. Field Inlet  
A-2

T.C. 213.20

New Curb Inlet A311  
T.C. 212.31  
Inv. 207.36

Remove Ex.  
Garage & Shed

S=0.000

Remove  
16" Pine

FL. 216.5

T.C. 216.83

T.C. 217.25

T.C. 217.01

T.C. 214.43

T.C. 214.06

T.C. 214.77

T.C. 217.25

T.C. 217.25

D/W

D/W

D/W

-220

210.3

213.8

212.4 EX.

211.2 EX.

T.C. 213.23

Ex. 219.2

214.3

E. 213.8

4

1

A-1

A-2

A-3

see  
dwg. 8

**PLATES**

Plate 1      Location Plan  
                 Test Boring and Monitoring Well

**DISTRIBUTION**

Three Copies Submitted

copy: Alameda County Environmental Health Dept  
Division of Hazardous Material  
Attention: Scott Seery  
80 Swan Way, Room 200  
Oakland, California 94621