

JCH

JOHN C. HOM & ASSOCIATES, INC.

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

91 NOV 12 PM 2:33

November 8, 1991
Job Number 650.1

Scott Seery
County of Alameda
80 Swan Way, Room 200
Oakland, California 94621

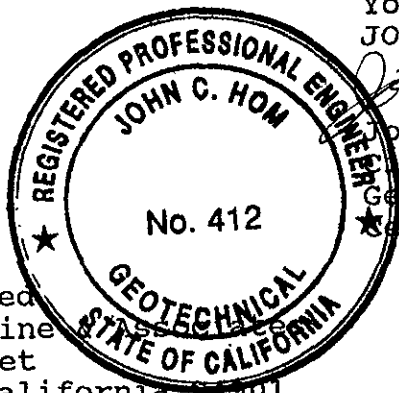
Dear Mr Seery:

Quarterly Report
Ground Water Study
Chemical Testing
19051 Lake Chabot Road
Castro Valley, California

This letter present our quarterly report of the ground water study and chemical testing for the property at 19051 Lake Chabot Road in Castro Valley, California. The attached calculations by us and chemical testing data by NET Pacific indicate very little change since our last report. In summary, the chemical levels appear to have stabilized. We request that you review this study and consider the possibility of discontinuing the readings.

We trust this provides the information you require at this time. If you have any questions, please call.

Yours very truly,
JOHN C HOM & ASSOCIATES, INC



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

JCH\jbc
3 copies submitted
c: Fredric C Divine
1930 4th Street
San Rafael, California 94901
c: Henry Hertlein
19051 Lake Chabot Road
Castro Valley, California 94546
c: San Francisco Bay Regional
Water Quality Board
Attention: Lester Feldman
2101 Webster Street, Room 500
Oakland, California 94612

JCH

JOHN C. HOM & ASSOCIATES

Geotechnical Consultants
1618 Second Street
San Rafael, CA 94901

JOB 19051 Lake Chabot Road (650.1)

SHEET NO. _____ OF _____

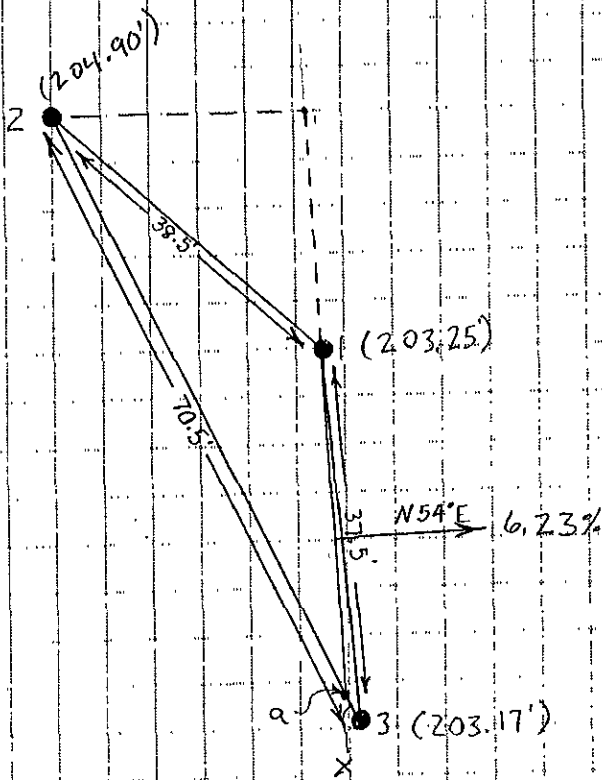
CALCULATED BY DHR DATE 11/8/91

CHECKED BY _____ DATE _____

SCALE _____

Monitoring Well # (NET) (As labeled by JCH&A)	Top of Casing Elevation	Depth to Water	Elevation of the top of water Column
MW-1 (NET) #2 (JCH&A)	218.93'	14.03'	204.90'
MW-2 (NET) #1 (JCH&A)	211.11'	7.80'	203.25'
MW-3 (NET) #3 (JCH&A)	211.77'	8.60'	203.17'
MW-4 (NET) #4 (JCH&A)	215.49'	11.18'	204.31'

Measurements Recorded 8-23-91



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 along the line from well #2 to well #3.

Wells #1, #2, #3

Finding point a:

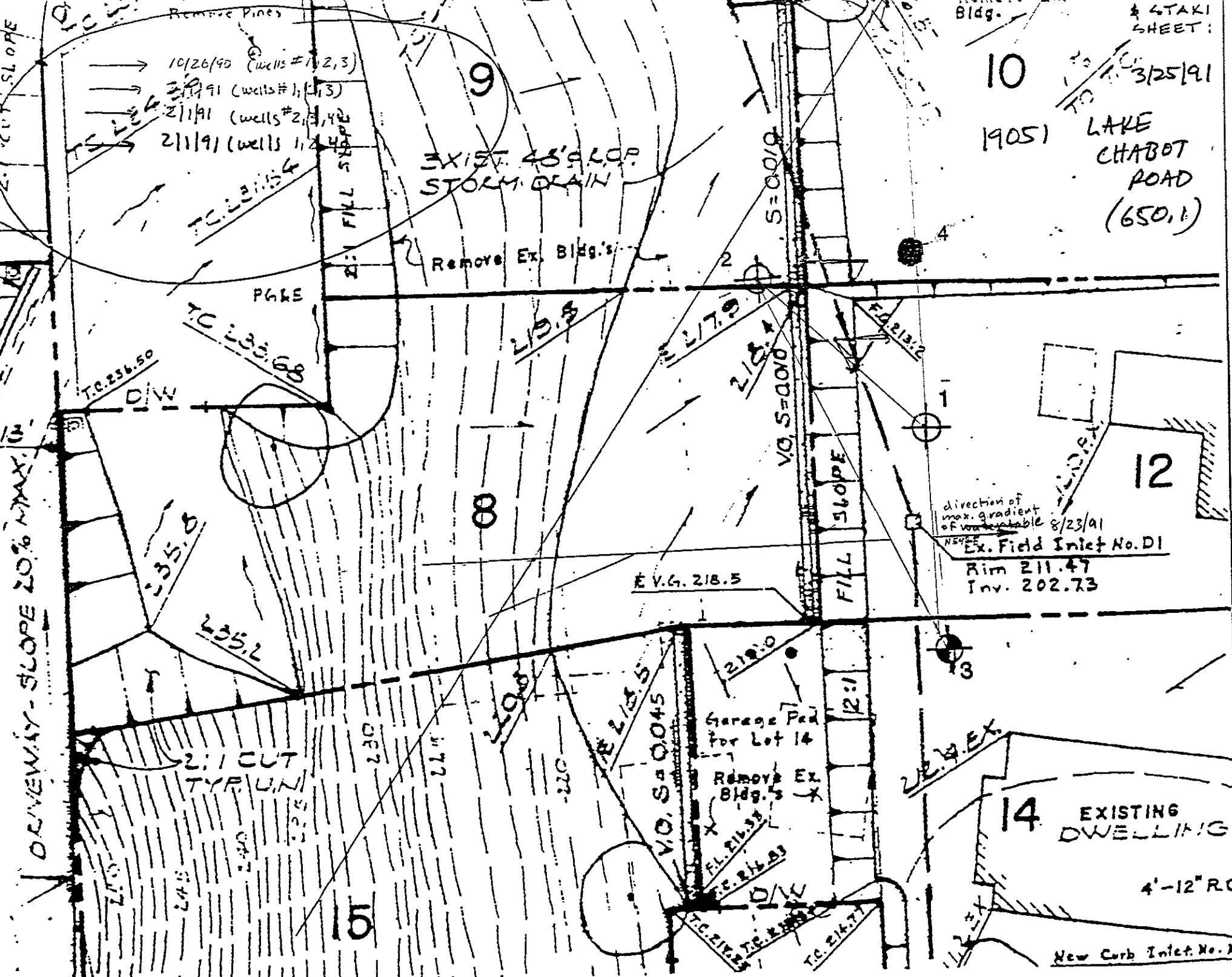
$$\frac{203.25 - 203.17}{204.90 - 203.17} = \frac{.08}{1.73} = \frac{x}{70.5'} \quad x = 3.26$$

Gradient Calculation: $\frac{204.90' - 203.25'}{26.5'} = \frac{1.65'}{26.5'} = 6.23\%$

N54°E = direction of gradient of water table.

Measurements taken 8/23/91

10
19051 LAKE CHABOT ROAD (650.1)



Remove Pines
10/26/90 (wells #1, 2, 3)
3/1/91 (wells #1, 2, 3)
2/1/91 (wells #2, 3, 4)
2/1/91 (wells #1, 2, 4)
2:1 FILL SLOPE
TC 231.5
PAGE
TC 235.8
TC 236.50
D/W

EXIST. 48\"/>STORM DRAIN

Remove Ex. Bldg.'s

direction of max. gradient of water available 8/23/91
NEW
Ex. Field Inlet No. D1
Rim 211.47
Inv. 202.73

Garage Pad for Lot 14
Remove Ex. Bldg.'s
E.L. 213.3
E.L. 214.83
D/W
TC 214.71

14 EXISTING DWELLING
4'-12" RC
New Curb Inlet No. A3

DRIVEWAY - SLOPE 20% MAX. (4)

2:1 CUT TYP. UNL

FILL SLOPE

2:1

S=0.00

V.O. S=0.00

E.V.G. 218.5

V.O. S=0.045

15

8

9

12

1

3

2

4

2:1

2:1

2:1

2:1

2:1

2:1 EX

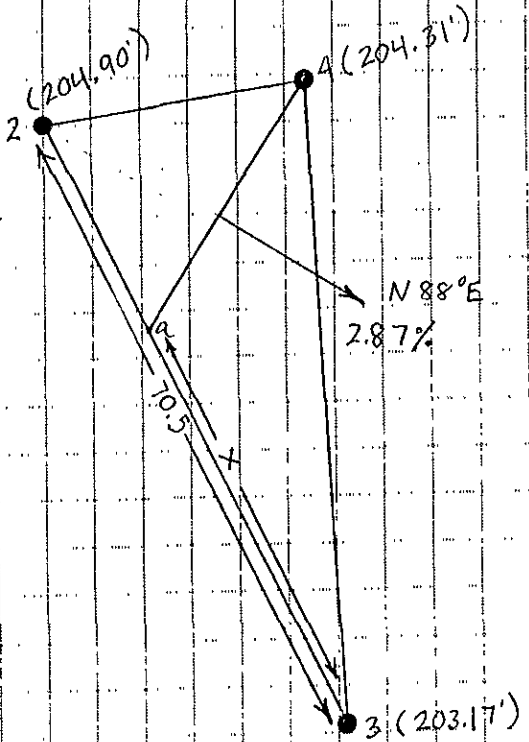
2:1 CUT SLOPE

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
CALCULATED BY DHR DATE 11/8/91
CHECKED BY DATE
SCALE 1" = 20'



Line from well #4 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 #4, but along the line from well #2 to well #3.

Wells #2, #3, #4

Finding point a:

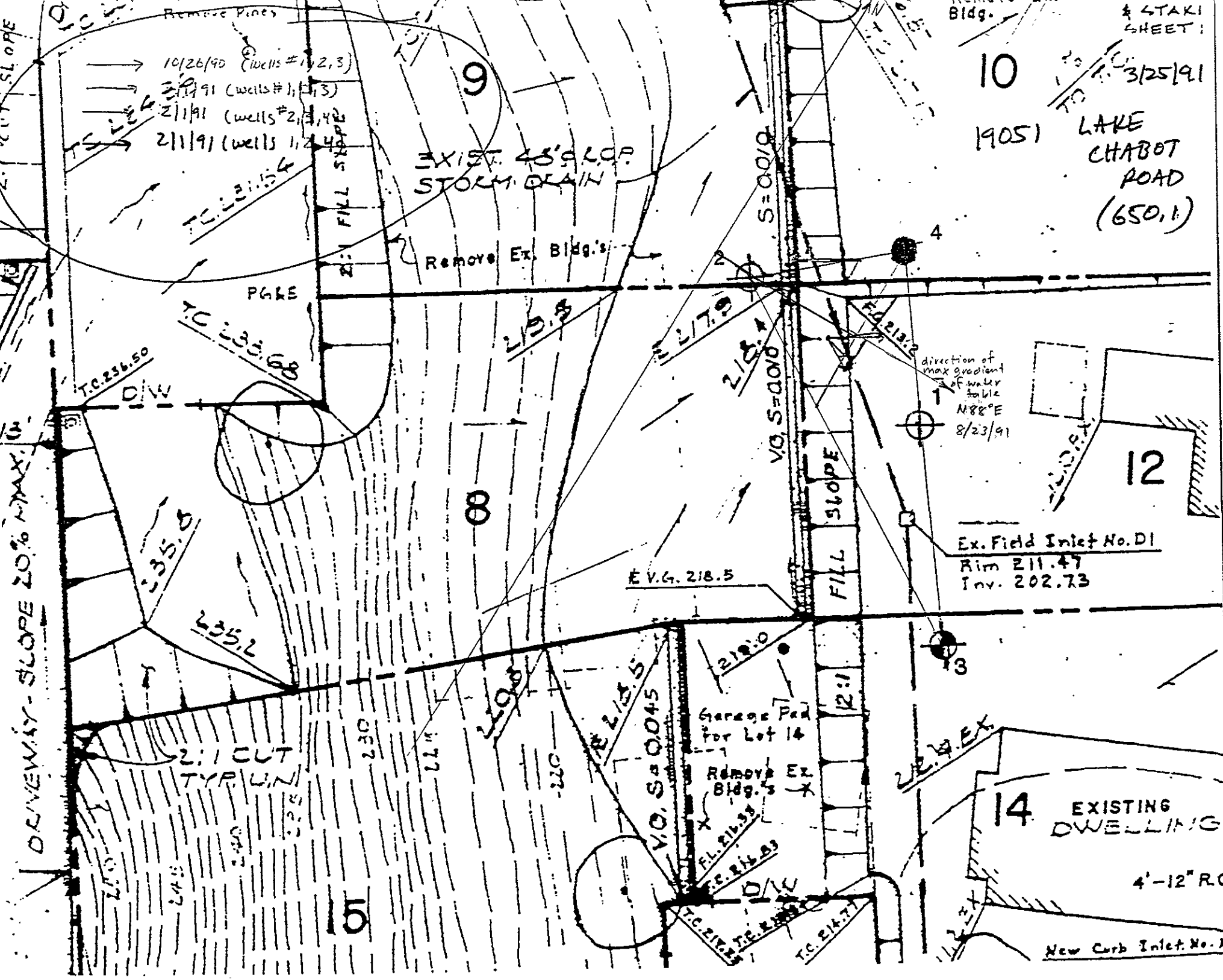
$$\frac{204.31 - 203.17}{204.90 - 203.17} = \frac{1.14}{1.73} = \frac{x}{70.5'} \quad x = 46.5'$$

Gradient calculation: $\frac{204.90 - 204.31}{20.5'} = \frac{.59}{20.5'} = 2.87\%$

N 88° E = direction of gradient of water table

Measurements taken 8/28/91

10
19051 LAKE CHABOT ROAD (650.1)



- 10/26/90 (wells #1, 2, 3)
- 2/1/91 (wells #1, 2, 3)
- 2/1/91 (wells #2, 3, 4)
- 2/1/91 (wells #1, 2, 4)

EXIST. 48" LCP STORM DRAIN

Remove Ex. Bldg.'s

direction of max gradient of water table N88°E 8/23/91

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

14 EXISTING DWELLING

4'-12" R.C.

New Curb Inlet No. A

DRIVEWAY - SLOPE 20% MAX.

2:1 CUT SLOPE

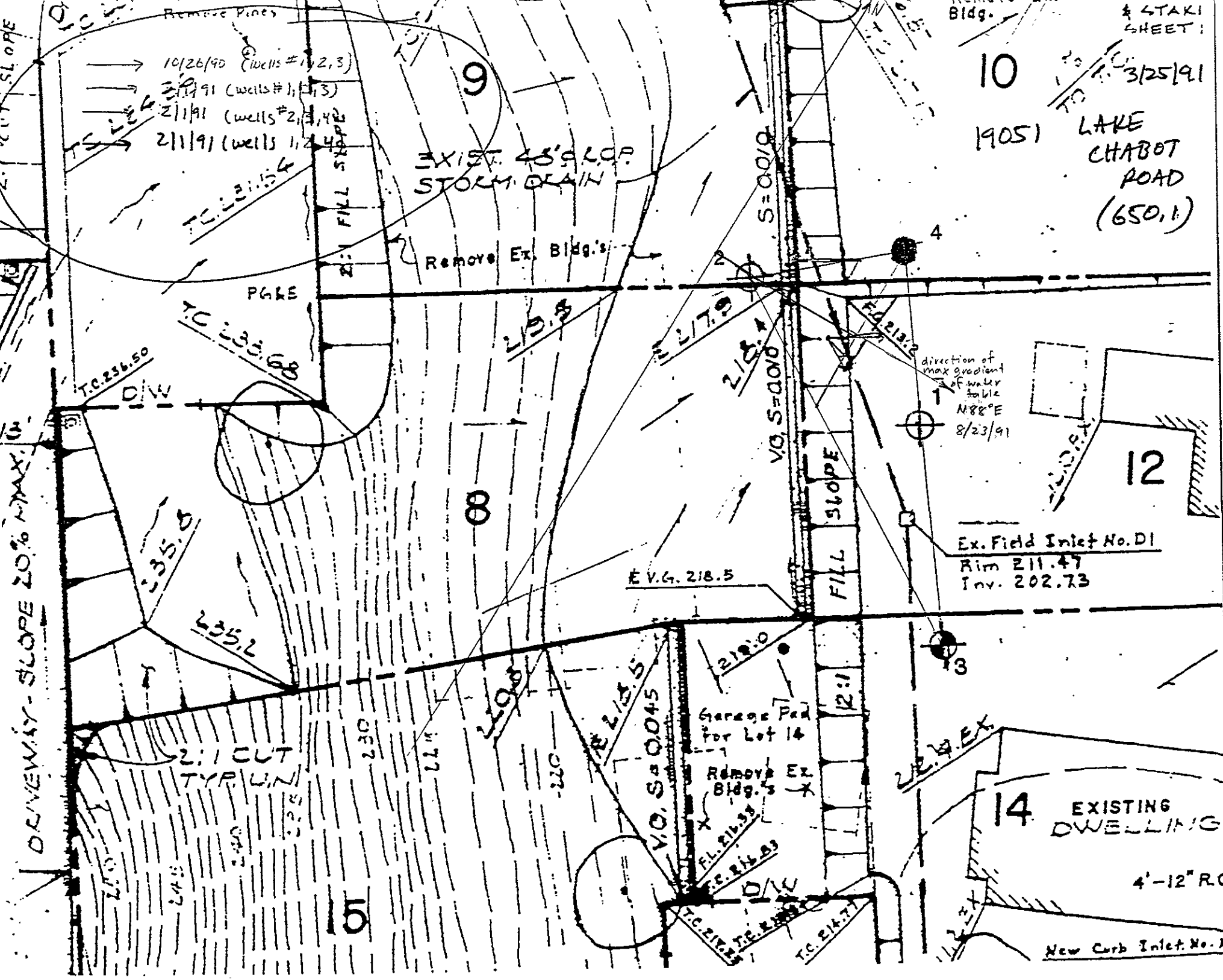
2:1 FILL SLOPE

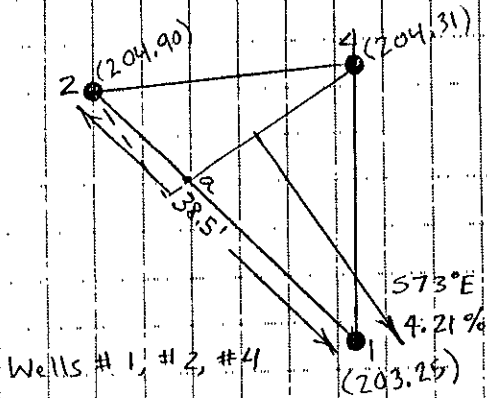
FILL SLOPE

2:1 CUT TYP. UN

Garage Pad for Lot 14

Remove Ex. Bldg.'s





Line from Well #4 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 #4, but along the line from #2 to #1.

Finding point a:

$$\frac{204.31 - 203.25}{204.90 - 203.25} = \frac{1.06}{1.65} = \frac{X}{38.5} \quad X = 24.73'$$

Calculation of Gradient: $\frac{204.90 - 204.31}{14.0} = \frac{.59}{14.0} = 4.21\%$

S 7.3°E = direction of gradient of water table.

Measurements taken 8/23/91.

CHARLOT
ROAD
(650.1)

EXIST. 48'x40'
STORM DRAIN

Remove Ex. Bldg.'s

Direction of Max
gradient
of water
table:
S 73° E
8/23/91

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

EXISTING
DWELLING

4'-12" R.C.

New Curb Inlet No. A

DRIVEWAY - SLOPE 20% MAX.

T.C. 236.50

P6&E
T.C. 233.68

235.5

235.2

2:1 CUT
TYP. LINI

15

88

L/S.S

E.V.G. 218.5

V.O. S=0.045

Garage Pad
for Lot 14

Remove
Bldg.'s

E.L. 216.32

E.L. 216.53

T.C. 216.25

T.C. 216.71

V.O. S=0.010

FILL SLOPE

2:1

2:1 EX

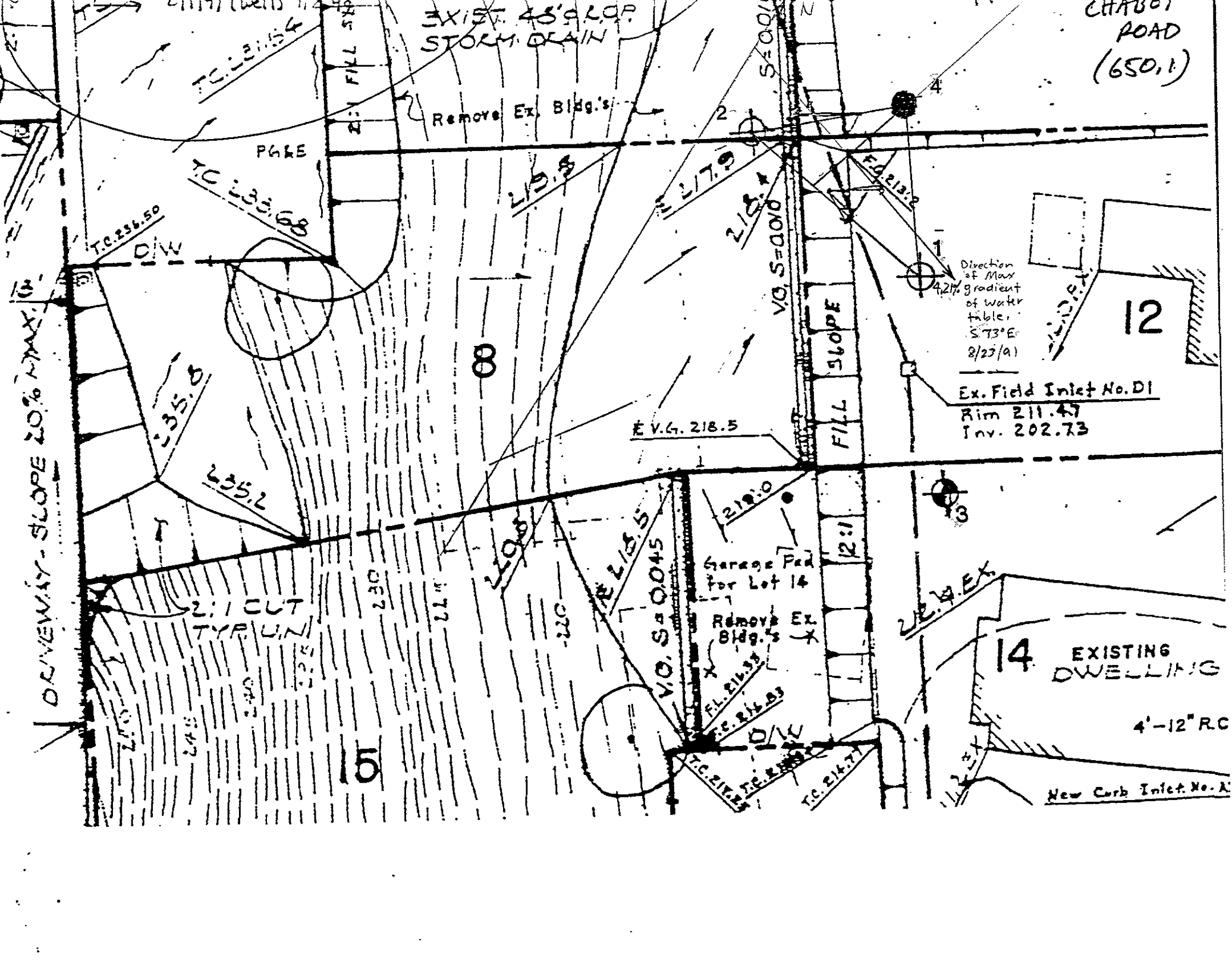
14

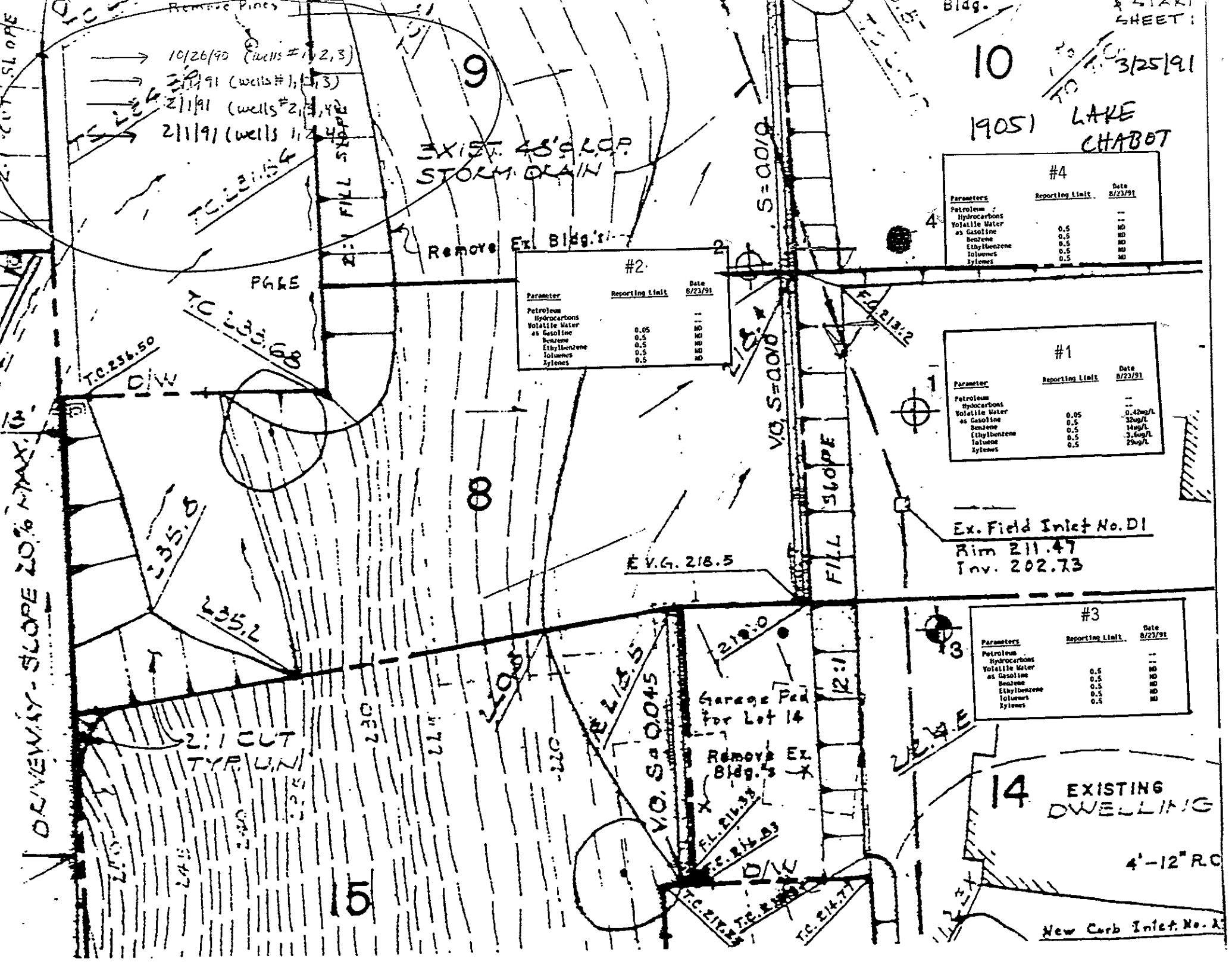
1

3

4

12





10
 19051 LAKE CHABOT
 3/25/91

10/26/90 (wells #1, 2, 3)
 2/1/91 (wells #1, 2, 3)
 2/1/91 (wells #2, 3, 4)
 2/1/91 (wells #1, 2, 4)

EXIST. 48" SLOPE STORM DRAIN

#4

Parameters	Reporting Limit	Date 8/23/91
Petroleum Hydrocarbons		--
Volatile Water as Gasoline	0.5	ND
Benzene	0.5	ND
Ethylbenzene	0.5	ND
Toluene	0.5	ND
Xylenes	0.5	ND

#2

Parameter	Reporting Limit	Date 8/23/91
Petroleum Hydrocarbons		--
Volatile Water as Gasoline	0.05	ND
Benzene	0.5	ND
Ethylbenzene	0.5	ND
Toluene	0.5	ND
Xylenes	0.5	ND

#1

Parameter	Reporting Limit	Date 8/23/91
Petroleum Hydrocarbons		--
Volatile Water as Gasoline	0.05	0.42mg/L
Benzene	0.5	32ug/L
Ethylbenzene	0.5	14ug/L
Toluene	0.5	3.6ug/L
Xylenes	0.5	29ug/L

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

#3

Parameters	Reporting Limit	Date 8/23/91
Petroleum Hydrocarbons		--
Volatile Water as Gasoline	0.5	ND
Benzene	0.5	ND
Ethylbenzene	0.5	ND
Toluene	0.5	ND
Xylenes	0.5	ND

14 EXISTING DWELLING

New Corb Inlet No. 2

DRIVEWAY - SLOPE 20% MAX.

2:1 FILL SLOPE

V.O. S=0.019

V.O. S=0.010

FILL SLOPE

E.V.G. 218.5

Garage Pad for Lot 14

Remove Ex. Bldg. 5

4'-12" RC

PG&E

D/W

2:1 CUT TYP. UNF.

10

00

3

9

14

TC 236.50

TC 233.68

235.0

235.2

230

227

229.0

227

V.O. S=0.045

218.0

12:1

222.4 E

FL 218.35

FL 216.85

TC 214.71

TC 214.71



®

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

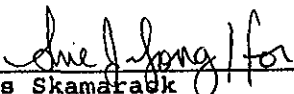
Date: 09-06-91
NET Client Acct No: 589
NET Pacific Log No: 9451
Received: 08-23-91 1950

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



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

Date: 09-06-91
Page: 4

NET Pacific, Inc

Ref: Lake Chabot Road

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf 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, $100 \text{ [Value 1 - Value 2] / mean value}$.
- 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, 17th Edition, APHA, 1989.

-M.A. Michael Deane

8-23-91

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

Job Site: 19010 - 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
μS	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
μS	1642	1610	1608	1595
pH	7.2	7.2	7.1	7.2

Sample collection: 8-23-91 1630

56

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
PS	1382	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
PS	1560	1545	1549	1542
PH	7.2	7.1	7.2	7.2

Sample collection: 8-23-91 1530

	P1	P2	P3	P4
OC	20.5	20.0	19.5	19.5
PS	1571	1541	1541	1541
PH	7.5	7.5	7.5	7.5