

PORT OF OAKLAND

August 21, 1996

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

**Subject: Groundwater Monitoring at Former Seabreeze Yacht Center, Inc. Site
280 6th Avenue, Oakland**

Dear Mr. Chan:

Enclosed please find the results of the first quarterly monitoring of five wells at the former Seabreeze Yacht Center. The next round of sampling is scheduled for October 1996.

If you have any questions, please contact me at 272-1467.

Sincerely,

Diane Heinze, P.E.
Associate Environmental Scientist

enclosure

cc: Sum Arigala, RWQCB 2101 Webster Street, Suite 500, Oakland, CA 94612

cc: w/out enclosure:
Neil Werner
Mark O'Brien
Michele Heffes

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ENVIRONMENTAL
PROTECTION

BASELINE

ENVIRONMENTAL CONSULTING

19 August 1996
S9171-CO

COPY

Ms. Diane Heinze
Port of Oakland
Environmental Department
530 Water Street
Oakland, California 94608

Subject: Quarterly Groundwater Monitoring Report, June-July 1996, Former Seabreeze Yacht Center, Inc. Site, 280 6th Avenue, Oakland, California

Dear Ms. Heinze:

This report documents the groundwater sampling activities performed on 1 July 1996 at the former Seabreeze Yacht Center, Inc. Site (Site), located in Oakland (Figure 1). The groundwater monitoring was conducted in accordance with the 7 June 1996 Port of Oakland (Port) letter to the Alameda County Health Care Services Agency, Department of Environmental Health (County). The groundwater monitoring network includes wells PW-2, MW-SB2, MW-SB3, MW-SB4, and MW-SB5 (Figure 2).

FIELD ACTIVITIES, JUNE-JULY 1996

On 28 June 1996, the presence of free product was checked and water levels were measured in the monitoring network wells using a dual-interface probe. Water levels were measured and recorded to the nearest one-hundredth of a foot. The dual-interface probe was decontaminated after each use by washing in a trisodium phosphate (TSP) solution and rinsing with deionized water. A slight sheen was identified in monitoring well MW-SB4; all other wells did not have any observable sheen or free product. An odor (petroleum?) was noticed in all wells except monitoring wells MW-SB2 which had a sulfur odor.

On June 28, each monitoring well was purged of approximately two to three well volumes using a double diaphragm pump with new, disposable PVC tubing after water level measurements. Electrical conductivity, pH, and temperature of the purge water were monitored during purging. The recharge rate in all wells was too slow to allow the removal of a full three well volumes in each well. The wells did not recover to 80 percent of original water levels on 28 June. Therefore, well sampling occurred on 1 July 1996; at that time the groundwater levels had recovered to at least 80 percent of the original water levels, except for MW-SB2.

Sample bottles were labeled and stored in a cooler containing blue ice. The groundwater samples were submitted under chain-of-custody protocol to Curtis & Tompkins, Ltd. of Berkeley for analysis on the day of sampling. The groundwater samples were analyzed for total lead, total

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ENVIRONMENTAL PROTECTION

Ms. Diane Heinze
19 August 1996
Page 2

copper, and total extractable hydrocarbons (TEH) as diesel and Bunker C. The samples collected for metals analyses were placed in plastic containers; the samples were not filtered. Prior to the TEH analysis, the samples were subjected to a silica gel cleanup (EPA Method 3630). The groundwater sampling forms, which document sampling activities, are included in Attachment A and the chain-of-custody form is included in Attachment B.

One drum containing purge and decontamination water was generated from the June-July 1996 sampling activities. The drum was labeled and stored on-site.

ANALYTICAL RESULTS

The metals and TEH analytical results are summarized in Table 1 and the laboratory reports are presented in Attachment B.

GROUNDWATER FLOW DIRECTION

Recently collected and historic groundwater elevation data are summarized in Table 2. The groundwater elevation data were used to calculate groundwater flow direction and gradient magnitude using the three point method for the June-July 1996 monitoring event. The groundwater flow direction was calculated as east-southeast at S76E, with a gradient magnitude of 0.005.

The next quarterly groundwater monitoring event will be performed in October 1996. The data collected during this sampling event will be used to develop additional analytical needs for source identification and determination of chemicals of concern. If you have any questions, or need further information, please contact us at your convenience.

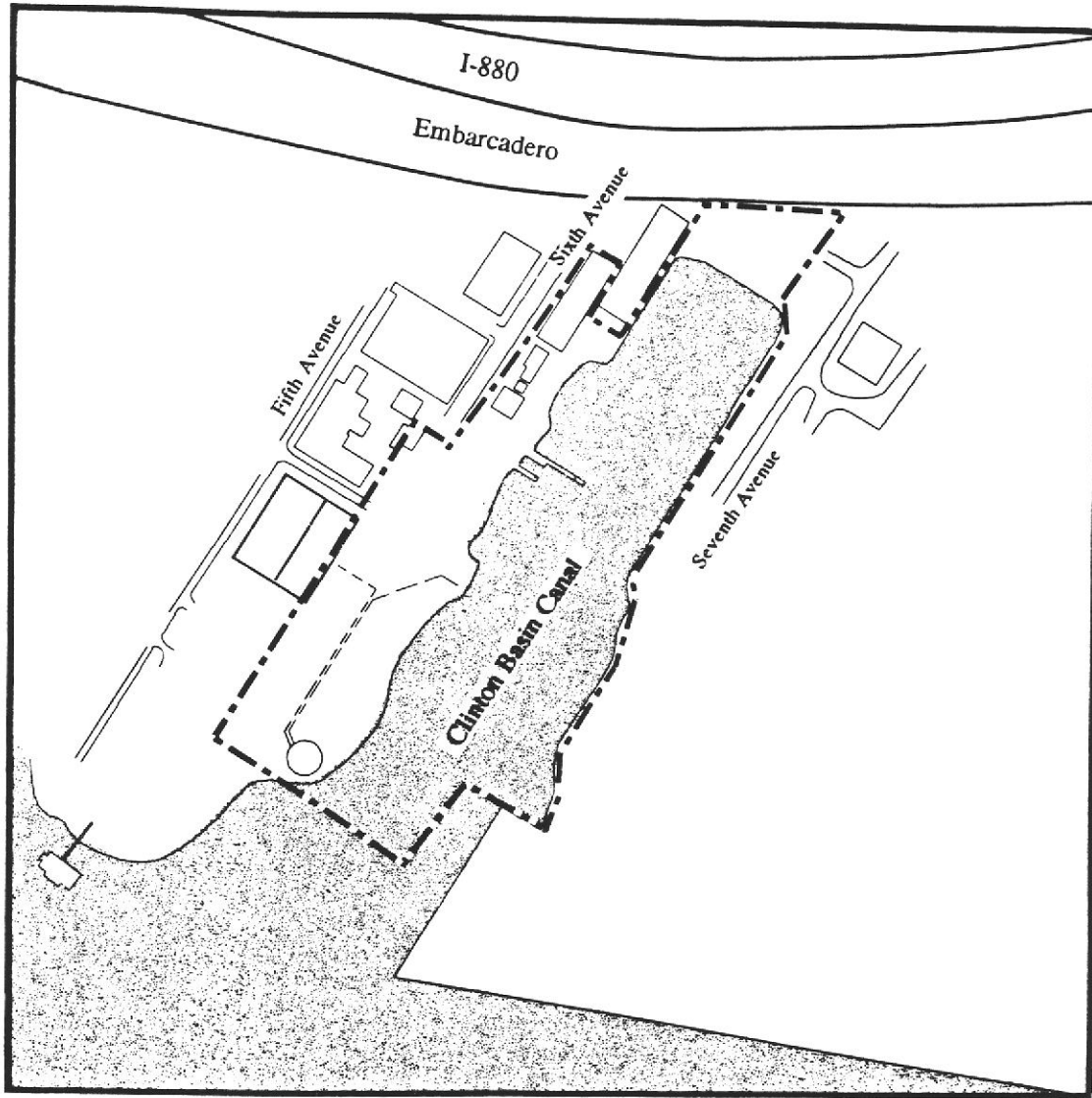
Sincerely,



Yane Nordhav
Principal
Reg. Geologist No. 4009

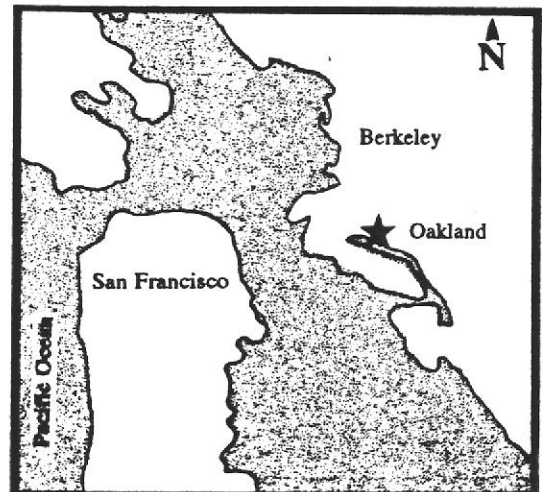


Rhodora Del Rosario
Civil Engineer



Legend

--- Project Site Boundary

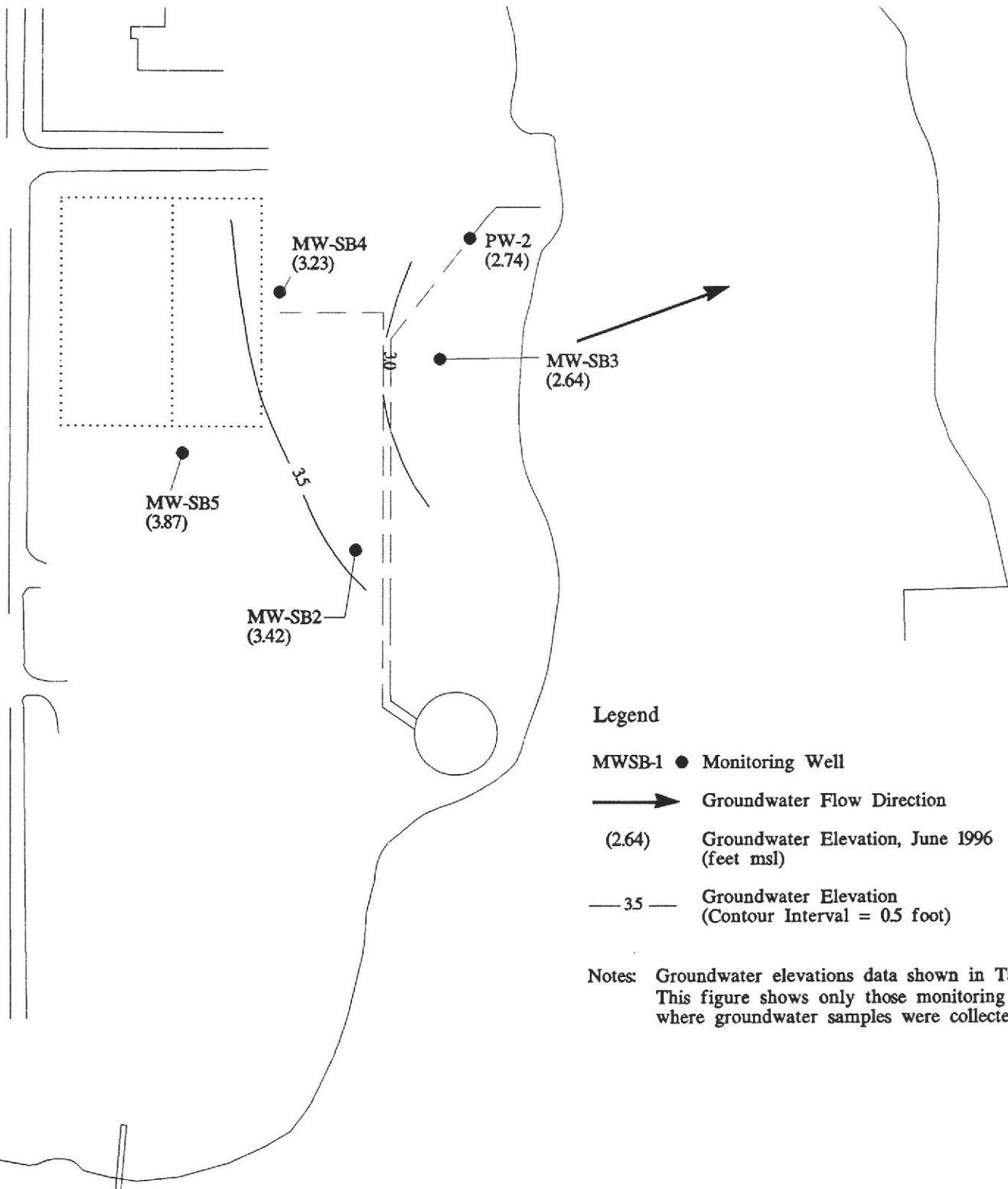


Clinton Basin
Oakland, California

BASELINE

MONITORING WELL LOCATIONS AND JUNE 1996 GROUNDWATER CONTOURS

Figure 2

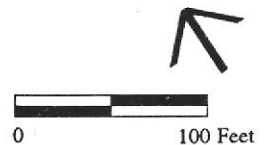


Legend

- MWSB-1 ● Monitoring Well
- Groundwater Flow Direction
- (2.64) Groundwater Elevation, June 1996 (feet msl)
- 3.5 — Groundwater Elevation (Contour Interval = 0.5 foot)

Notes: Groundwater elevations data shown in Table 2. This figure shows only those monitoring wells where groundwater samples were collected.

**Seabreeze Yacht Center
Sixth Avenue
Oakland, California**



BASELINE

TABLE 1
ANALYTICAL RESULTS
Seabreeze Yacht Center, Oakland, California
(mg/L)

Sample ID	Sample Date	Metals ¹		Total Extractable Hydrocarbons ²		
		Lead	Copper	Diesel	Bunker C	Motor Oil
PW-2	2/2/95	0.0043	--	--	--	--
	3/6/95	--	--	1.7 ³	4.4 ³	1.1 ³
	7/1/96	<0.003	<0.01	<0.049 ⁴	<0.3 ⁴	--
MW-SB2	4/9/91	<0.06 ⁷	<0.02 ⁸	--	--	--
	4/19/91	<0.07	0.0481	--	--	--
	1/10/94	<0.10 ⁷	<0.02 ⁸	--	--	--
	12/26/94	<0.0043 ⁸	0.014 ⁸	--	--	--
	3/6/95	--	--	16.0 ³ / 18.0 ^{3,5}	28.0 ³ / 33.0 ^{3,5}	4.9 ³ / <25.0 ^{3,5}
	7/1/96	<0.003/ <0.003	0.055/ 0.065	<0.050 ⁴ / 0.170 ^{4,6}	<0.3 ⁴ / <0.3 ⁴	--
MW-SB3	3/6/95	--	--	4.5 ³	5.8 ³	1.5 ³
	7/1/96	0.0036	<0.01	<0.049 ⁴	<0.3 ⁴	--
MW-SB4	3/3/95	--	--	4.5 ³	3.0 ³	0.66 ³
	7/1/96	0.014	0.013	<0.049 ⁴	<0.3 ⁴	--
MW-SB5	3/6/95	--	--	15.0 ³ / 15.0 ^{3,5}	34.0 ³ / 31.0 ^{3,5}	8.1 ³ / 6.9 ^{3,5}
	7/1/96	0.0031	0.012	<0.049 ⁴	<0.3 ⁴	--

Notes: <x.x = analyte not identified above laboratory reporting limit of x.x.

x.x/x.x = duplicate sample.

-- = no analysis performed.

Refer to Figure 2 for well locations.

Laboratory reports for the July 1996 sampling event are included in Attachment B.

¹ Analytical Method EPA 6010A, unless otherwise noted.

² Analytical Method California DOHS, LUFT Manual (EPA 8015M).

³ Sample chromatogram does not resemble hydrocarbon standard.

⁴ Samples were subjected to silica gel cleanup (EPA 3630) prior to analysis.

⁵ Duplicate sample centrifuged prior to TEH analyses.

⁶ Sample exhibited fuel pattern which did not resemble standard.

⁷ EPA Method 7420.

⁸ EPA Method 7210.

TABLE 2

**GROUNDWATER ELEVATION DATA
Seabreeze Yacht Center, Oakland, California**

Well	Date	Time	Surface Elevation (msl)	TOC Elevation (msl)	Depth to Groundwater (feet)	Groundwater Elevation (msl)
PW-2 ¹	2/15/95 ²	--	5.56	6.57	4.60	1.97
	3/3/95	9:10			3.90	2.67
	6/28/96	7:37			3.83	2.74
MW-SB2 ³	4/19/91	11:09	6.2	7.18	5.38	1.8
	7/9/91	11:04			3.7	3.48
	1/10/94	12:31			3.08	4.1
	1/26/94	13:40			1.63	5.5
	11/14/94	7:30			4.8	2.38
		11:05			4.76	2.42
		14:14			4.73	2.45
	11/28/94	9:00			2.85	4.33
	3/3/95	8:50			2.84	4.34
6/28/96	7:40	3.76	3.42			
MW-SB3 ³	11/14/94	7:25	6.0	8.10	8.23	-0.13
		11:00			8.14	-0.04
		14:12			8.07	0.03
	11/28/94	8:53			6.32	1.78
	12/06/94	8:37			6.15	1.95
	3/3/95	8:40			6.78	1.32
	6/28/96	7:35			5.46	2.64
	MW-SB4 ⁴	11/28/94			9:02	6.6
3/3/95		8:35	0.90	5.49		
6/28/96		8:28	3.16	3.23		
MW-SB5 ⁴	11/28/94	8:40	6.9	6.30	6.32	-0.02
	3/3/95	9:00			2.54	3.76
	6/28/96	8:45			2.43	3.87

Notes: 11/14/94: High tide 9:21; Low tide 15:50.
 11/28/94: High tide 7:46.
 2/15/95: High tide 5:14 and 18:03; Low tide 23:34.
 3/3/95: High tide 13:14; Low tide 7:03.
 6/28/96: High tide 11:41; Low tide 4:35.
 -- = Unknown.
 msl = Feet above mean sea level
 TOC = Top of casing
 Refer to Figure 2 for well locations.

¹ Well survey conducted by Bates & Bailey 2/8/95.

² Groundwater elevation measured by SOMA; all other elevations measured by BASELINE.

³ Well survey conducted by Bates & Bailey 11/18/94.

⁴ Well survey conducted by Bates & Bailey 11/28/94.

ATTACHMENT A

GROUNDWATER SAMPLING FORMS

GROUNDWATER SAMPLING

Project no.: S9171-C0 Well no.: PW-2 Date: 6/28/96
 Project name: Seabreeze Yacht Center Depth of well from TOC (feet): 15
 Location: 260 6th Avenue Well diameter (inch): 4
Oakland, CA Screened interval from TOC (feet): 6.5-15.0
 Recorded by: WKS/RPD/TT TOC elevation (feet): 6.57
 Weather: Sunny Water level from TOC (feet): 3.83 Time: 7:37
 Precip in past _____ Product level from TOC (feet): None Time: 7:37
 5 days (inch): None Water level measurement: Dual interface probe

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING:

$$[(15 \text{ ft}) - (3.83 \text{ ft})] \times (0.166 \text{ ft})^2 \times 3.14 \times 7.48 =$$

Well depth	Water level	Well radius	
			<u>7.2</u> gallons in one well volume
			<u>36.1</u> gallons in 5 well volumes
			<u>12</u> total gallons removed

CALIBRATION:

	Time	Temp (°C)	pH	EC (µmho/cm)
Calibration Standard:			7.00	10,000
Before Purging:	7:30	20.5	7.00	8,000
After Purging:	11:20	21.7	7.05	8,000

FIELD MEASUREMENTS:

Time	Temp (°C)	pH	EC (µmho/cm)	Cumulative Gallons Removed	Appearance
8:06	20.3	6.84	20,000	1	Clear with black particulate matter
8:30	19.8	6.83	25,000	2.5	Clear with black particulate matter
8:45	20.0	6.84	23,500	5	Clear with black particulate matter
INCREASED PUMP RATE					
9:00	19.5	6.80	23,500	7.5	Clear with black particulate matter
9:06	19.1	6.81	23,500	12	Clear with black particulate matter
WELL PUMPED DRY					

Note: Recharge rate too slow to allow 80% recharge before sampling on 6/28/96. Sample collected on 7/1/96.

Water level after purging prior to sampling (feet): 6.55 Time: 7/1/96 10:38
 Appearance of sample: Clear to very slightly turbid with petroleum odor Time: 7/1/96 10:38
 Duplicate/blank number: None Time: --
 Purge method: Double diaphragm pump
 Sampling equipment: Disposable PVC bailer VOC attachment: None
 Sample containers: One-liter amber glass, one-liter plastic
 Sample analyses: TEPH, copper, lead Laboratory: Curtis & Tompkins, Ltd.
 Decontamination method: TSP and water, DI water rinse Rinsate disposal: MW-SB2 to 5 & PW-2

S9171JUN.XLS (7/23/96)

GROUNDWATER SAMPLING

Project no.: S9171-C0 Well no.: MW-SB2 Date: 6/28/96
 Project name: Seabreeze Yacht Center Depth of well from TOC (feet): 11.0
 Location: 260 6th Avenue Well diameter (inch): 2
Oakland, CA Screened interval from TOC (feet): 3-11
 Recorded by: WKS/RPD/TT TOC elevation (feet): 7.18
 Weather: Sunny Water level from TOC (feet): 3.76 Time: 7:40
 Precip in past Product level from TOC (feet): None Time: 7:40
 5 days (inch): None Water level measurement: Dual interface probe

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING:

$$[(11.0 \text{ ft}) - (3.76 \text{ ft})] \times (0.083 \text{ ft})^2 \times 3.14 \times 7.48 =$$

Well depth	Water level	Well radius	<u>1.2</u> gallons in one well volume
			<u>5.9</u> gallons in 5 well volumes
			<u>2.5</u> total gallons removed

CALIBRATION:

	<u>Time</u>	<u>Temp</u> (° C)	<u>pH</u>	<u>EC</u> (µmho/cm)
Calibration Standard:			7.00	10,000
Before Purging:	7:30	20.5	7.00	8,000
After Purging:	11:20	21.7	7.05	8,000

FIELD MEASUREMENTS:

<u>Time</u>	<u>Temp</u> (° C)	<u>pH</u>	<u>EC</u> (µmho/cm)	<u>Cumulative</u> <u>Gallons</u> <u>Removed</u>	<u>Appearance</u>
9:21	19.8	6.86	13,000	0.5	Clear, sulfur odor
9:25	19.7	6.98	13,000	2	Clear, sulfur odor
9:27	19.5	7.02	12,000	2.5	Clear, sulfur odor

WELL PUMPED DRY

Note: Recharge rate too slow to allow 80% recharge before sampling on 6/28/96. Sample collected on 7/1/96.

Water level after purging prior to sampling (feet): 7.33 Time: 7/1/96 10:51
 Appearance of sample: Clear, sulfur odor Time: 7/1/96 10:51
 Duplicate/blank number: MW-SB2-duplicate Time: 7/1/96 10:51
 Purge method: Double diaphragm pump
 Sampling equipment: Disposable PVC bailer VOC attachment: None
 Sample containers: One-liter amber glass, one-liter plastic
 Sample analyses: TEPH, copper, lead Laboratory: Curtis & Tompkins, Ltd.
 Decontamination method: TSP and water, DI water rinse Rinsate disposal: MW-SB2 to 5 & PW-2

S9171JUN.XLS (7/23/96)

GROUNDWATER SAMPLING

Project no.: S9171-C0 Well no.: MW-SB3 Date: 6/28/96
 Project name: Seabreeze Yacht Center Depth of well from TOC (feet): 11.06
 Location: 280 6th Street Well diameter (inch): 2
Oakland, CA Screened interval from TOC (feet): 4.86-11.06
 Recorded by: WKS/RPD/TT TOC elevation (feet): 8.10
 Weather: Sunny Water level from TOC (feet): 5.46 Time: 7:35
 Precip in past Product level from TOC (feet): None Time: 7:35
 5 days (inch): None Water level measurement: Dual interface probe

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING:

$$[(11.06 \text{ ft}) - (5.46 \text{ ft})] \times (0.083 \text{ ft})^2 \times 3.14 \times 7.48 =$$

	<u>0.9</u> gallons in one well volume
Well depth Water level Well radius	<u>4.5</u> gallons in 5 well volumes
	<u>3.5</u> total gallons removed

CALIBRATION:

	<u>Time</u>	<u>Temp</u> (° C)	<u>pH</u>	<u>EC</u> (µmho/cm)
Calibration Standard:			7.00	10,000
Before Purging:	7:30	20.5	7.00	8,000
After Purging:	11:20	21.7	7.05	8,000

FIELD MEASUREMENTS:

<u>Time</u>	<u>Temp</u> (° C)	<u>pH</u>	<u>EC</u> (µmho/cm)	<u>Cumulative</u> <u>Gallons</u> <u>Removed</u>	<u>Appearance</u>
7:49	20.3	6.73	18,000	1.5	Clear with slight amber color
7:59	20.4	6.74	18,000	3.5	Clear with slight amber color

WELL PUMPED DRY

Note: Recharge rate too slow to allow 80% recharge before sampling on 6/28/96. Sample collected on 7/1/96.

Water level after purging prior to sampling (feet): 6.77 Time: 7/1/96 10:45
 Appearance of sample: Clear to very slightly turbid with black sheen and petroleum odor Time: 7/1/96 10:45
 Duplicate/blank number: None Time: --
 Purge method: Double diaphragm pump
 Sampling equipment: Disposable PVC bailer VOC attachment: None
 Sample containers: One-liter amber glass, one-liter plastic
 Sample analyses: TEPH, copper, lead Laboratory: Curtis & Tompkins, Ltd.
 Decontamination method: TSP and water, DI water rinse Rinsate disposal: MW-SB2 to 5 & PW-2

S9171JUN.XLS (7/23/96)

GROUNDWATER SAMPLING

Project no.: S9171-C0 Well no.: MW-SB4 Date: 6/28/96
 Project name: Seabreeze Yacht Center Depth of well from TOC (feet): 14.75
 Location: 260 6th Avenue Well diameter (inch): 2
Oakland, CA Screened interval from TOC (feet): 2.55-14.75
 Recorded by: WKS/RPD/TT TOC elevation (feet): 6.39
 Weather: Sunny Water level from TOC (feet): 3.16 Time: 8:28
 Precip in past Product level from TOC (feet): Slight sheen Time: 8:28
 5 days (inch): None Water level measurement: Dual interface probe

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING:

$$[(14.75 \text{ ft}) - (3.16 \text{ ft})] \times (0.083 \text{ ft})^2 \times 3.14 \times 7.48 =$$

1.9 gallons in one well volume
9.4 gallons in 5 well volumes
7 total gallons removed

Well depth Water level Well radius

CALIBRATION:

	Time	Temp (° C)	pH	EC (µmho/cm)
Calibration Standard:			7.00	10,000
Before Purging:	7:30	20.5	7.00	8,000
After Purging:	11:20	21.7	7.05	8,000

FIELD MEASUREMENTS:

Time	Temp (° C)	pH	EC (µmho/cm)	Cumulative Gallons Removed	Appearance
9:38	20.1	6.96	2,700	1	Clear to very slightly turbid
9:46	18.1	6.94	16,000	5	Slightly turbid
DECREASED FLOW RATE					
10:29	18.6	6.98	16,000	7	Slightly turbid
WELL PUMPED DRY					

Note: Recharge rate too slow to allow 80% recharge before sampling on 6/28/96. Sample collected on 7/1/96.

Water level after purging prior to sampling (feet): 3.19 Time: 7/1/96 10:28
 Appearance of sample: Clear to very slightly turbid, petroleum odor Time: 7/1/96 10:28
 Duplicate/blank number: None Time: --
 Purge method: Double diaphragm pump
 Sampling equipment: Disposable PVC bailer VOC attachment: None
 Sample containers: One-liter amber glass, one-liter plastic
 Sample analyses: TEPH, copper, lead Laboratory: Curtis & Tompkins, Ltd.
 Decontamination method: TSP and water, DI water rinse Rinsate disposal: MW-SB2 to 5 & PW-2

S9171JUN.XLS (7/23/96)

GROUNDWATER SAMPLING

Project no.: S9171-C0 Well no.: MW-SB5 Date: 6/28/96
 Project name: Seabreeze Yacht Center Depth of well from TOC (feet): 14.75
 Location: 260 6th Avenue Well diameter (inch): 2
Oakland, CA Screened interval from TOC (feet): 2.55-14.75
 Recorded by: WKS/RPD/TT TOC elevation (feet): 6.30
 Weather: Sunny Water level from TOC (feet): 2.43 Time: 8:45
 Precip in past Product level from TOC (feet): None Time: 8:45
 5 days (inch): None Water level measurement: Dual interface probe

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING:

$$[(14.75 \text{ ft}) - (2.43 \text{ ft})] \times (0.083 \text{ ft})^2 \times 3.14 \times 7.48 =$$

2.0 gallons in one well volume
10.0 gallons in 5 well volumes
6 total gallons removed

Well depth Water level Well radius

CALIBRATION:

	Time	Temp (° C)	pH	EC (µmho/cm)
Calibration Standard:			7.00	10,000
Before Purging:	7:30	20.5	7.00	8,000
After Purging:	11:20	21.7	7.05	8,000

FIELD MEASUREMENTS:

Time	Temp (° C)	pH	EC (µmho/cm)	Cumulative Gallons Removed	Appearance
10:45	19.4	6.67	22,000	1	Light amber color
10:51	20.1	6.63	19,000	2	Light amber color
11:04	20.4	6.76	20,000	3.5	Light amber color
11:11	19.6	6.83	21,000	5	Light amber color
11:15	19.0	6.87	19,000	6	Light amber color

Note: Recharge rate too slow to allow 80% recharge before sampling on 6/28/96. Sample collected on 7/1/96.

Water level after purging prior to sampling (feet): 2.34 Time: 7/1/96 11:18
 Appearance of sample: Light amber color, petroleum odor Time: 7/1/96 11:18
 Duplicate/blank number: None Time: --
 Purge method: Double diaphragm pump
 Sampling equipment: Disposable PVC bailer VOC attachment: None
 Sample containers: One-liter amber glass, one-liter plastic
 Sample analyses: TEPH, copper, lead Laboratory: Curtis & Tompkins, Ltd.
 Decontamination method: TSP and water, DI water rinse Rinsate disposal: MW-SB2 to 5 & PW-2

S9171JUN.XLS (7/23/96)

ATTACHMENT B
LABORATORY REPORTS



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Baseline Environmental
5900 Hollis Street
Suite D
Emeryville, CA 94608

Date: 19-JUL-96
Lab Job Number: 126175
Project ID: S9171-CO
Location: Seabreeze

Reviewed by: Danara Moore

Reviewed by: [Signature]

This package may be reproduced only in its entirety.

CLIENT: Baseline Environmental
 PROJECT ID: S9171-CO
 LOCATION: Seabreeze
 MATRIX: Water

DATE REPORTED: 07/23/96

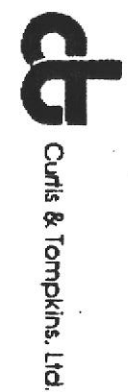
Metals Analytical Report

Copper

JUL 23 '96 10:35 TO-BASELINE FROM-CURTIS & TOMPKINS

Sample ID	Lab ID	Sample Date	Receive Date	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
PW-2	126175-001	07/01/96	07/01/96	ND	10	1	28505	EPA 6010A	07/05/96
MW-SB2	126175-002	07/01/96	07/01/96	55	10	1	28505	EPA 6010A	07/05/96
MW-SB3	126175-003	07/01/96	07/01/96	ND	10	1	28505	EPA 6010A	07/05/96
MW-SB4	126175-004	07/01/96	07/01/96	13	10	1	28505	EPA 6010A	07/05/96
MW-SB5	126175-005	07/01/96	07/01/96	12	10	1	28505	EPA 6010A	07/05/96
MW-SB2A	126175-006	07/01/96	07/01/96	65	10	1	28505	EPA 6010A	07/05/96

ND = Not detected at or above reporting limit



CLIENT: Baseline Environmental
 PROJECT ID: S9171-CO
 LOCATION: Seabreeze
 MATRIX: Water

DATE REPORTED: 07/23/96

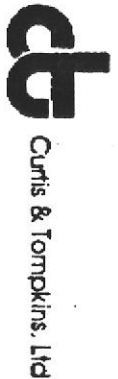
JUL 23 '96 10:36 TO-BASELINE FROM-CURTIS & TOMPKINS

Metals Analytical Report

Lead

Sample ID	Lab ID	Sample Date	Receive Date	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
PW-2	126175-001	07/01/96	07/01/96	ND	3.0	1	28505	EPA 6010A	07/05/96
MW-SB2	126175-002	07/01/96	07/01/96	ND	3.0	1	28505	EPA 6010A	07/05/96
MW-SB3	126175-003	07/01/96	07/01/96	3.6	3.0	1	28505	EPA 6010A	07/05/96
MW-SB4	126175-004	07/01/96	07/01/96	14	3.0	1	28505	EPA 6010A	07/05/96
MW-SB5	126175-005	07/01/96	07/01/96	3.1	3.0	1	28505	EPA 6010A	07/05/96
MW-SB2A	126175-006	07/01/96	07/01/96	ND	3.0	1	28505	EPA 6010A	07/05/96

ND = Not detected at or above reporting limit





TEH-Tot Ext Hydrocarbons

Client: Baseline Environmental
Project#: S9171-CO
Location: Seabreeze

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: EPA 3520
Cleanup Method: 3630(126175)

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
126175-005	MW-SB5	28535	07/01/96	07/03/96	07/18/96	
126175-006	MW-SB2A	28535	07/01/96	07/03/96	07/20/96	

Matrix: Water

Analyte	Units	126175-005	126175-006
Diln Fac:		1	1
Diesel C12-C22	ug/L	<49	170 Y
Bunker C	ug/L	<300	<300
surrogate			
Hexacosane	%REC	114	100

Y: Sample exhibits fuel pattern which does not resemble standard

126175-6

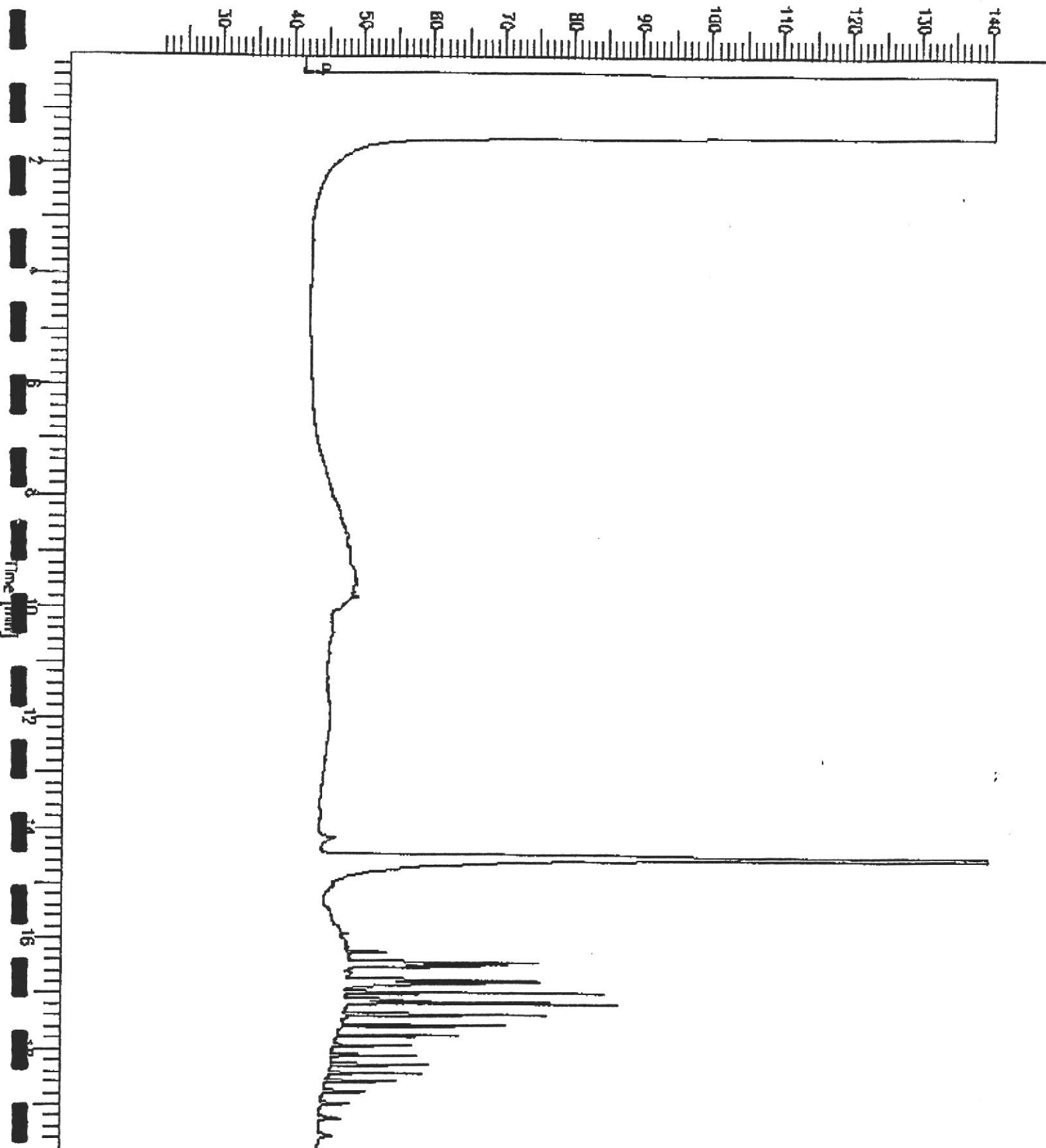
GC15 Channel A 1EN

Sample Name : W,126175-006
FileName : C:\GC15\1998038.RAW
Method : BTEHJ.MTH
Start Time : 0.01 min
Scale Factor: 0.0

End Time : 19.80 min
Plot Offset: 22 mV

Sample #: 28535
Date : 7/18/96 09:59 AM
Time of Injection: 7/18/96 01:48 AM
Low Point : 21.61 mV
Plot Scale: 119.0 mV
High Point : 140.62 mV
Page 1 of 1

Response [mV]



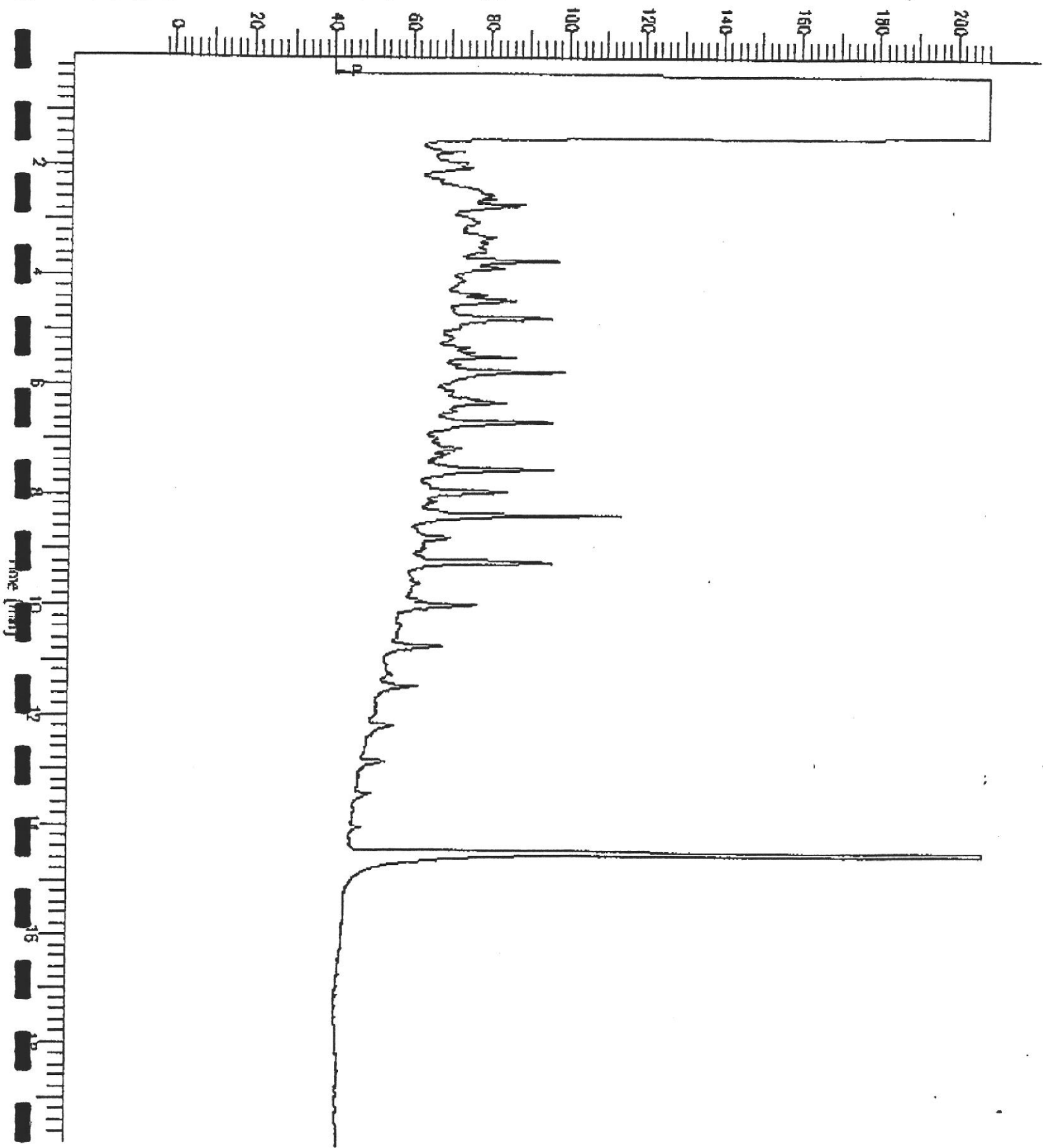
Sample Name : CCV,96WS2565,DSL
FileName : C:\GC15\199B032.RAW
Method : BTEHJ.MTH
Start Time : 0.01 min
Scale Factor: 0.0

End Time : 19.80 min
Plot Offset: -3 mV

Sample #: 500MG/L
Date : 7/18/96 08:27 AM
Time of Injection: 7/17/96 11:03 PM
Low Point : -2.89 mV
Plot Scale: 210.9 mV
High Point : 208.04 mV

Page 1 of 1

DIESEL STANDARD Response [mV]



DUNKER C JIMMINKU

Sample Name : CCV,96MS2344,C

File Name : C:\GC15\CHB\201B061.RAW

Method : BTEHJ.MTH

Start Time : 0.01 min

Scale Factor: 0.0

End Time : 31.91 min

Plot Offset: 10 mV

Sample #: 1250MG/L

Date : 7/22/96 06:22 PM

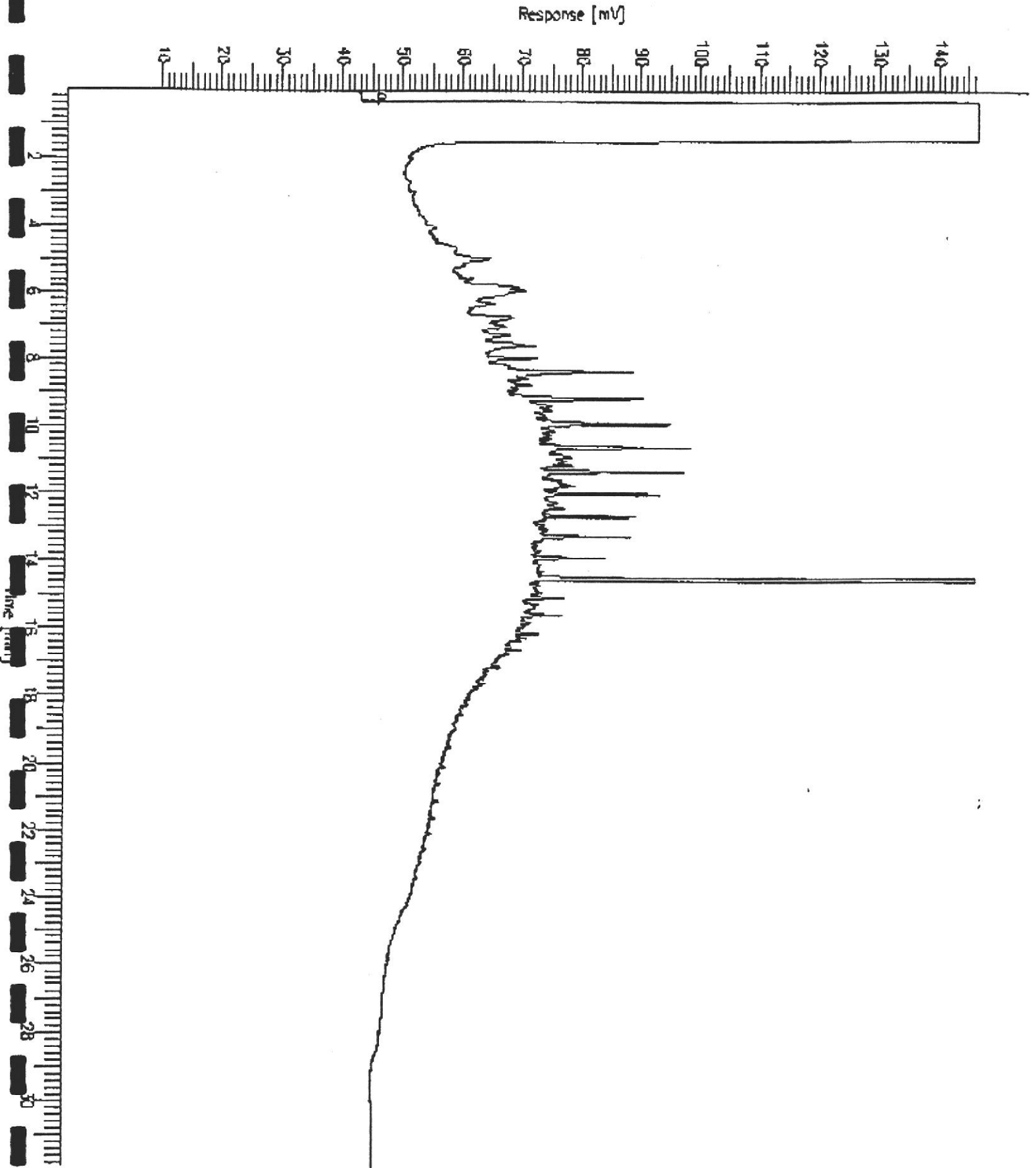
Time of Injection: 7/21/96 06:40 AM

Low Point : 9.53 mV

Plot Scale: 137.1 mV

Page 1 of 1

High Point : 146.67 mV

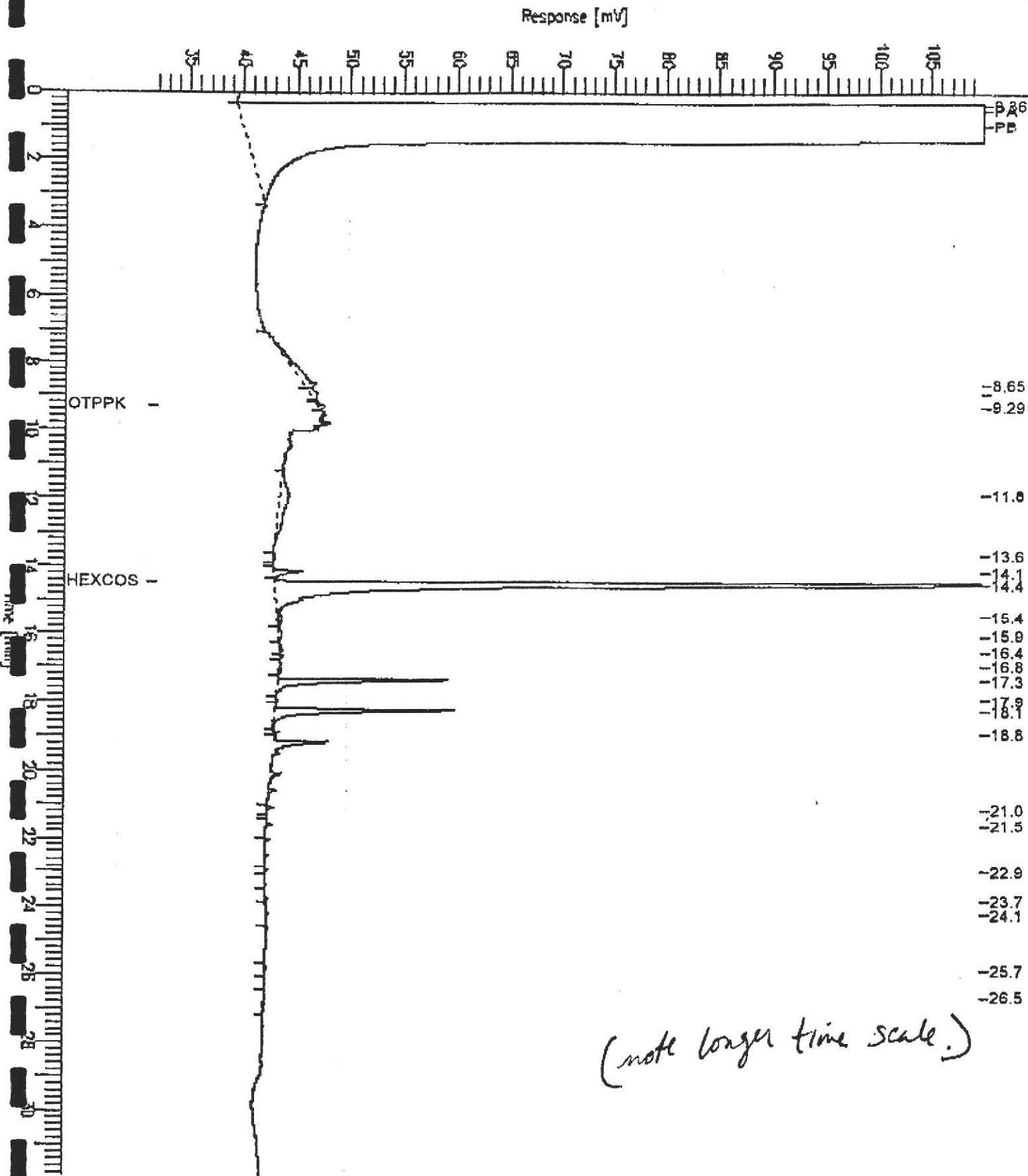


120115-6 rerun

Sample Name : W,126175-006
File Name : C:\GC15\CHB\201B048.raw
Method : DUAL
Start Time : 0.00 min
Scale Factor: 0.0

End Time : 31.90 min
Plot Offset: 32 mV

Sample #: 28535
Date : 7/20/96 09:48 PM
Time of Injection: 7/20/96 09:12 PM
Low Point : 32.00 mV
High Point : 110.00 mV
Plot Scale: 78.0 mV



(note longer time scale.)

BASELINE
 30 Hollis Street, Suite D
 Berkeley, CA 94608
 (415) 420-8686

126175

CHAIN OF CUSTODY RECORD

Turn-around Time
 Lab
 BASELINE Contact Person
 Standard FAT
 CFT
 Khadava Del Rosario

T-324 P. 11/11 F-207

FROM-CURTIS & TOMPKINS

JUL 23 '96 10:39 TO-BASELINE

Project No. 99171-00 99171-00		Project Name and Location Seabreeze 2806th Ave				Analysis											Remarks/ Composite	Detection Limits	
Samplers: (Signature) <i>Jendilupa</i>						TEH	TPH with BTX&E	Oil & Grease	Motor Oil	PNAs	Title 22 Metals	Total Lead	Silicagel (EPA3430)	Pb & Cu					
Sample ID No. Station	Date	Time	Media	Depth	No. of Contain- ers														
2W-2	7/1/96	10:46	Water	-	2	X						X	X						
BB2 MW-SB2	7/1/96	10:55	Water	-	2	X						X	X						
BB3 MW-SB3	7/1/96	10:56	Water	-	2	X						X	X						
BB4 MW-SB4	7/1/96	10:36	Water	-	2	X						X	X						
MW-SB5	7/1/96	11:20	Water	-	2	X						X	X						
MW-SB2A	7/1/96	10:55	Water	-	2	X						X	X						

Relinquished by: (Signature) <i>Jendilupa</i>	Date / Time 7/1/96 / 13:50	Received by: (Signature) <i>[Signature]</i>	Date / Time 7/1/96 13:50	Conditions of Samples Upon Arrival at Laboratory
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Remarks: * Subject samples to silica gel clean up prior to TEH analysis
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	