H2OGEOL
A GROUNDWATER CONSULTANCY

Ms. Juliet Shin
Senior Hazardous Materials Specialist
Alameda County Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502-6577

February 12, 1996

RE: Second consecutive quarter (1st Quarter, 1996) groundwater monitoring: 1081-1085 Eastshore Highway (formerly 1077 Eastshore Frontage Road), Albany, California.

Dear Ms. Shin;

This letter report provides the results of the second consecutive quarter (First Quarter, 1996) sampling of the monitoring wells at 1081-1085 Eastshore Highway (formerly 1077 Eastshore Frontage Road), Albany, California (Figure 1).

Depth to water in each monitoring well was measured to +/- 0.01 feet using a Solinst Model 101 water level meter on January 11, 1996. The depth to water was converted to potentiometric surface elevation by subtracting the measured depths to water from the casing top elevation. This information is presented below.

WELL AND GROUNDWATER ELEVATIONS
JANUARY 11, 1996

Well Number	Top of Casing Elevation (feet, msl)	Time of Depth measurement	Depth to Water (feet)	Groundwater Surface Elevation (feet, msl)
MW-4	8.58	12:46	8.58	2.14
MW-K	8.43	12:36	8.43	2.91
MW-L	7.64	12:45	7.64	2.59
MW-N	8.96	12:41	8.96	3.29

The groundwater flow direction (more precisely direction of groundwater gradient, since the horizontal hydraulic conductivity anisotropy is unknown) for the triangle with a well at each apex is S 19.1° E at a gradient of 0.0104. Figure 2 is a potentiometric surface map showing well locations and groundwater surface contours as measured on January 11, 1996. Historic water level information follows.

MW-4	10/17/95	09:49	6.57	2.01
	01/11/96	12:46	8.58	2.14
MW-K	10/17/95	10:01	5.74	2.69
	01/11/96	12:36	8.43	2.91
MW-L	10/17/95	09:53	5.78	1.86
	01/11/96	12:45	7.64	2.59
MW-N	10/17/95	09:56	6.02	2.94
	01/11/96	12:41	8.96	3.29

GROUNDWATER FLOW DIRECTION AND GRADIENT

10/17/95 S 16.4° W at a gradient of 0.0053
01/11/96 S 19.1° E at a gradient of 0.0104

AVERAGE S 1.4° E at a gradient of 0.0078

Following water level measurements the groundwater surface at each monitoring well was checked for free product, observation of sheen, and odor. No free product, sheen, or odor was noted.

The monitoring wells were purged by pumping with an "ES-60" submersible pump marketed for monitoring well purging by Enviro-Tech Services Co. of Martinez, California. Field measured water quality parameters were measured using a Cambridge Scientific Industries Hydac™ Conductivity Temperature pH Tester. Well purging activities and the field measured water quality parameters are documented in Attachment A. For each well, purging continued until specific conductance stabilized to +/- 5% on consecutive readings.

The purge pump was slowly removed from each well while running to allow a sweeping of the wellbore, preventing significant surging of the wellbore and drainage of the discharge tubing into the well.

Groundwater samples for TPH-D were collected directly from the end of the pump discharge tubing into a one liter amber glass bottle. Groundwater samples for TPH-G plus BTEX were collected using a precleaned Teflon™ bailer suspended from a new nylon twine line. Water samples were transferred, in duplicate, from the bailer to 40-mL glass vials with Teflon™ septum lids using a precleaned Teflon™ pepcock type bottom emptying device.

Groundwater sample bottles were labeled and placed in an ice chest with 2 Liter plastic bottles containing ice. Chain-of-Custody forms were filled out and were delivered with the ice chest to Chromalab, Inc. of Pleasanton, California, a state certified laboratory.

Groundwater samples from both monitoring wells MW-4 and MW-L were found not to contain detectable concentrations of petroleum hydrocarbons. Monitoring well MW-4 was found to contain 460 micrograms per liter (µg/L) of hydrocarbons in the Diesel range. As detailed in the December 22, 1995 letter these are attributed to hydrocarbons derrived from decayed vegetation encountered in the monitoring well borehole. The laboratory report and Chain-of-Custody documentation is contained in Attachment B. The historic groundwater sample analytical results are summarized below.

All concentrations are expressed in micrograms per liter (µg/L).

Well	TPH-D	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW-4						
10/17/95	440*	<50	<0.5	<0.5	<0.5	<0.5
*	*Superior Analytical reports all compounds from C10-C25 as Diesel.					
01/11/96	<50	<50	<0.5	<0.5	<0.5	<0.5
	Chromalab reported 460 µg/L unknown hydrocarbons in the diesel range.					
MW-L						
10/17/95	180*	<50	1.3	<0.5	0.6	0.5
*	*Superior Analytical reports all compounds from C10-C25 as Diesel.					
01/11/96	<50	<50	<0.5	<0.5	<0.5	<0.5
California*Primary MCL's						
	na	na	1	na	680	1,750
US E.P.A.*Primary MCL's						
	na	na	5	1,000	700	10,000

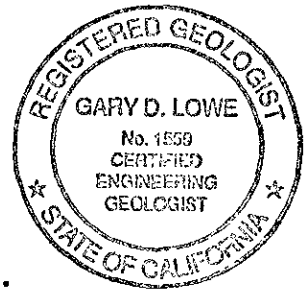
na - not available

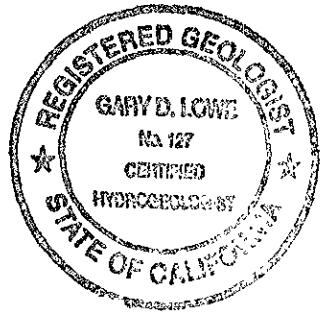
Marshack, Jon B., D. Env. 1991, A Compilation of Water Quality Goals, Central Valley Regional Water Quality Control Board.

The third consecutive quarter (Second Quarter, 1996) sampling event at 1081-1085 Eastshore Highway (formerly 1077 Eastshore Frontage Road), Albany, California is scheduled for the week of April 08, 1996.

Please do not hesitate to call me at (510) 373-9211 should you have any questions.

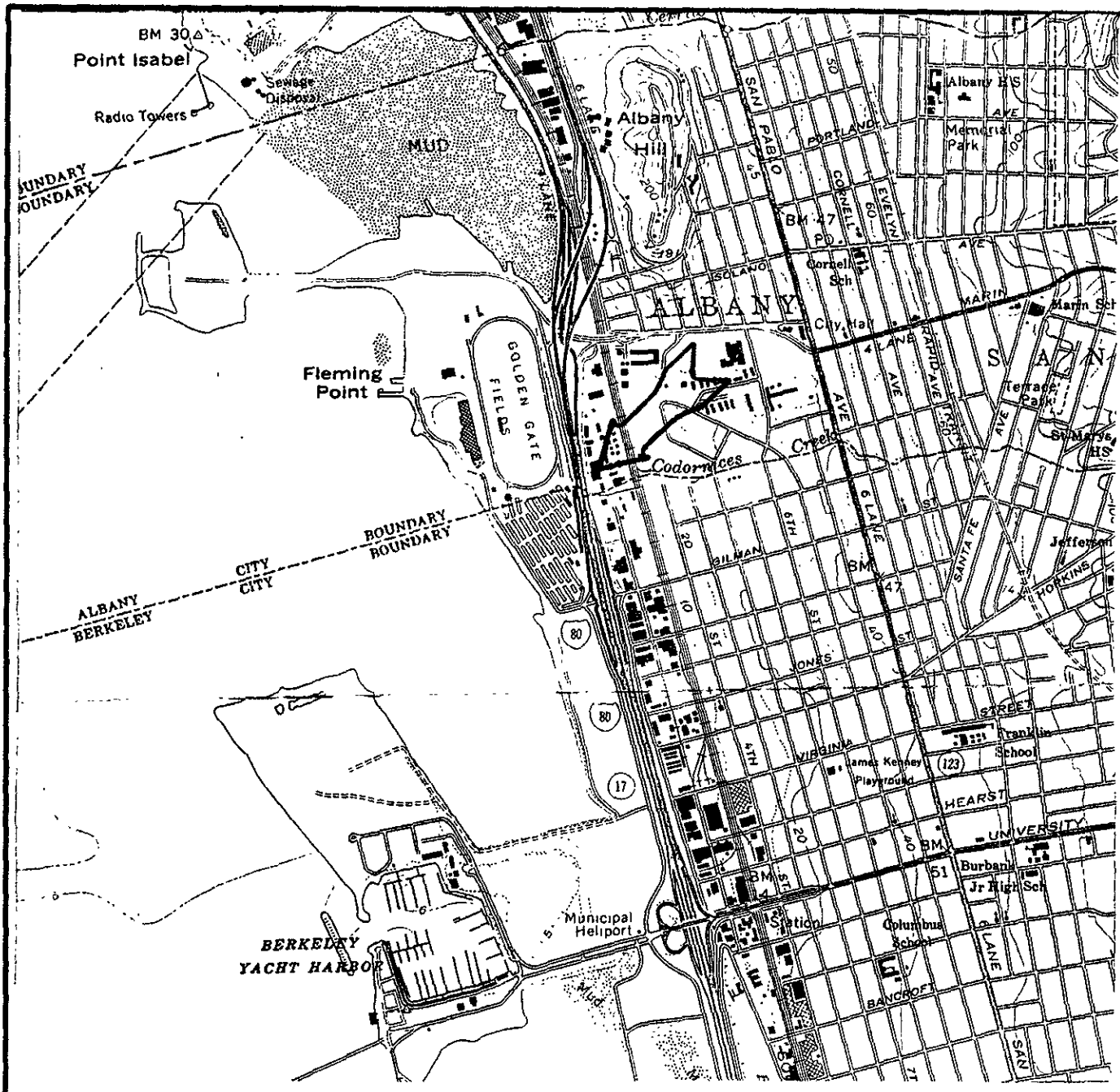
Sincerely,





Gary D. Lowe, R.G., C.E.G., C.H.
Principal, Hydrogeologist
Sole Proprietor

xc: Mr. John Piggott, Wilanco, Inc., P.O. Box 8117, Berkeley, CA, 94563



Base from U.S. Geological Survey Richmond and Oakland West 7.5 Minute Series Topographic Maps

NORTH

1000 0 1000 2000 3000 4000 6000 FEET

CALIF

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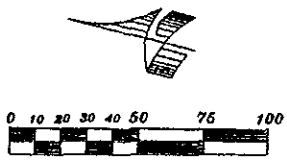
SITE LOCATION MAP

1081-1085 EASTSHORE HIGHWAY
ALBANY, CALIFORNIA

FIGURE 1



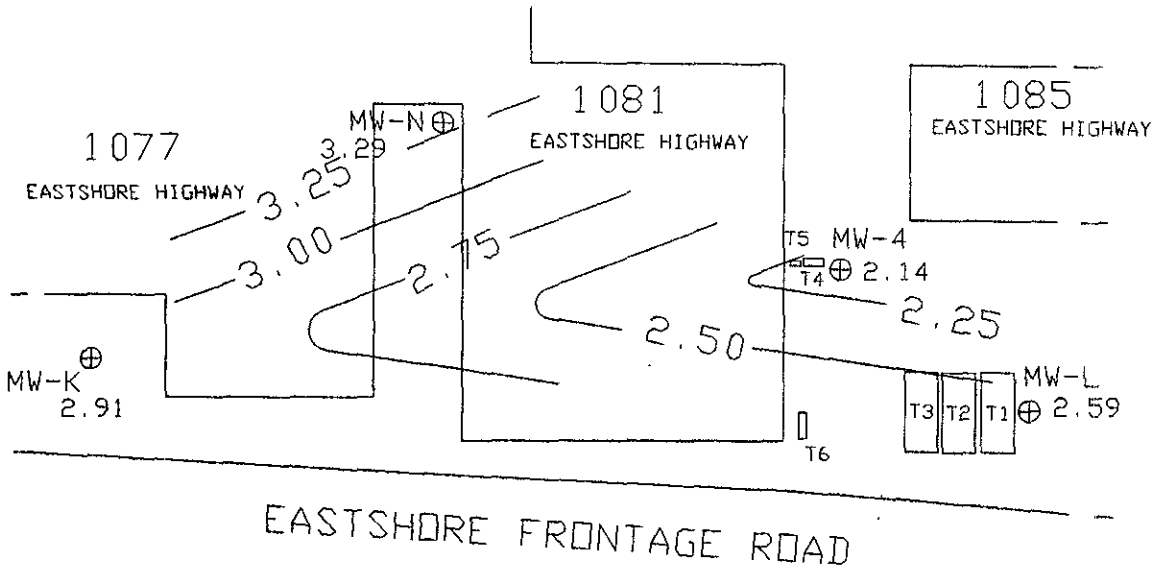
MW-N Monitoring Well name/Number

⊕ Monitoring Well Location

2.91 Groundwater Surface Elevation at monitoring well

T1, T2, & T3 Diesel
T4, T5, & T6 Gasoline
Information from ENSR, June 17, 1993, Wilanco Tank Removal Report

3.00 Potentiometric Surface Contour and Contour Elevation



GRADIENT = 0.0104 Feet/Foot

DIRECTION OF GRADIENT = S 19.1° E
(Approximate groundwater flow direction, uncorrected for hydraulic conductivity anisotropy).

Tank locations and dimensions are approximate after ENSR, 1993, Figure 1.

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POTENTIOMETRIC SURFACE MAP
JANUARY 11, 1996
1077-1085 EASTSHORE HIGHWAY
ALBANY, CALIFORNIA

FIGURE
2

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ATTACHMENT A

FIELD DATA SHEET
LOG OF WELL SAMPLING ACTIVITIES

LOG OF WELL SAMPLING ACTIVITIES

Well Identification: MW-4/ Project Name: 1081-1085 Eastshore Highway, Albany, CA Date: 10/17/95

Sampled by: G. Lowe & R. Vorst Weather Conditions: Clear, breezy, 65°F

Well Location: _____ Well Casing Diameter: 2-inch Depth of Well Casing: 14.21

Measuring Point: Top of PVC Casing Initial Depth to Water: 6.44 Final Depth to Water: Not measured

Casing Volume (1 vol./ 3 vol): 1.24 / 3.72 Well Borehole Volume: _____

Purging Method: Centrifugal Pump/Peristaltic Pump; Grundfos Submersible Pump; Centrifugal Pump/ES-60 Submersible; ES-60 Submersible Pump; X

Sampling Method: Peristaltic Pump; Grundfos Submersible Pump; ES-60 Submersible Pump; Teflon Bailer

Purging Rate: See below Total Discharge: 4.7 Casing Volumes Purged: 3.8

Comments: _____

Waste Water Disposal: To property site drum.

Starting Time: 12:49

Time Pump on: 12:51

Date	Time	Gal. Purged	pH	T deg. F	Diluted S.C.		Dil. Factor		S.C. (µS/cm)	Color
01/11/96	12:53	2.1 [illegible]				x		=		Color, turbid
"	12:55	2.6 [illegible]	6.81	68.5	16,680	x	2	=		"
"	12:57	3.0 [illegible]	6.88	66.6	16,760	x	2	=		"
"	12:59	3.4 [illegible]	6.87	66.4	16,630	x	2	=		"
"	13:02	3.8 [illegible]	6.88	66.4		x	2	=	13,640	"
"	13:04	4.0	6.87	66.3		x		=	14,020	"
"	13:08	4.3	6.92	66.2		x		=	13,870	"
"	13:10	4.7	6.86	66.0		x		=	13,790	"
	:					x		=		
	:					x		=		
	:					x		=		

Sample Identification: 1081-85/MW-4 Sample Time: 13:13

TURBIDITY ANALYSIS

Finishing Time: 13:20 Time Analyzed: _____ NTU Value: _____

LOG OF WELL SAMPLING ACTIVITIES

Well Identification: MW- L Project Name: 1081-1085 Eastshore Highway, Albany, CA Date: 10/17/95

Sampled by: G. Lowe & R. Vorst *Weather Conditions:* clear, breezy, 65°F

Well Location: _____ Well Casing Diameter: 2-inch Depth of Well Casing: 14.2

Measuring Point: Top of PVC Casing Initial Depth to Water: 5.45 Final Depth to Water: Not measured

Casing Volume (1 vol./ 3 vol): 1.4 / 4.2 Well Borehole Volume: _____

Purging Method:
- Centrifugal Pump/Peristaltic Pump
- Grundfos Submersible Pump
- Centrifugal Pump/ES-60 Submersible
- ES-60 Submersible Pump X

Sampling Method:
- Peristaltic Pump
- *Grundfos Submersible Pump*
- ES-60 Submersible Pump
- Teflon Bailer

Purging Rate: See below Total Discharge: 5.6 Casing Volumes Purged: 4

Comments: _____

Waste Water Disposal: To property site drum.

Starting Time: 13:20

Time Pump on: 13:22

Date	Time	Gal. Purged	pH	T deg. F	Diluted S.C.		Dil. Factor		S.C. (µS/cm)	Color
01/11/96	13:26	3.6	6.86	67.0	15870	x	2	=	15870	Lt. yellow
"	13:29	4.6	6.91	66.6	16840	x	2	=		" "
"	13:31	4.9	6.92	66.8	16750	x	2	=		" "
"	13:33	5.3	6.88	66.7	16,740	x	2	=		" "
"	13:35	5.6	6.90	67.0	16,770	x	2	=		" "
	:					x		=		
	:					x		=		
	:					x		=		
	:					x		=		
	:					x		=		
	:					x		=		

Sample Identification: 1081-85/MW- L Sample Time: 13:48

TURBIDITY ANALYSIS

Finishing Time. _____ Time Analyzed: _____ NTU Value: _____

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ATTACHMENT B

LABORATORY ANALYTICAL REPORT
SAMPLE CHAIN OF CUSTODY

CHROMALAB, INC.

Environmental Services (SDB)

January 20, 1996 — *Submission #:* 9601534

H2O GEOL — Revised from previously sent report

Atten: Gary Lowe

Project: WILANCO, INC. — *Project#:* 1081-1085 Eastshore Highway
Received: January 11, 1996

re: 1 sample for Gasoline and BTEX compounds analysis.

Method: EPA 5030/8015M/8020

Matrix: WATER
Sampled: January 11, 1996 *Run#:* 532 *Analyzed:* January 17, 1996

Spl#	CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)	DIL'N FACTOR
77966	1081-85/MW-4	N.D.	N.D.	N.D.	N.D.	N.D.	1
	Reporting Limits	50	0.50	0.50	0.50	0.50	
	Blank Result	N.D.	N.D.	N.D.	N.D.	N.D.	
	Blank Spike Result (%)	100	106	103	109	102	

June Zhao
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510 373-9222 GC

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

January 19, 1996 — *Submission #:* 9601534

H2O GEOL — Revised from previously sent report

Atten: Gary Lowe

Project: WILANCO, INC. — *Project#:* 1081-1085 Eastshore Highway

Received: January 11, 1996

re: 1 sample for Gasoline and BTEX compounds analysis.

Method: EPA 5030/8015M/8020

Matrix: WATER

Sampled: January 11, 1996 *Run#:* 528 *Analyzed:* January 17, 1996

Spl#	CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)	DIL'N FACTOR
77967	1081-85/MW-L	N.D.	N.D.	N.D.	N.D.	N.D.	1
Reporting Limits		50	0.50	0.50	0.50	0.50	
Blank Result		N.D.	N.D.	N.D.	N.D.	N.D.	
Blank Spike Result (%)		109	101	99.2	104	99.8	

Billy Thach
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510 373 9222 GC

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

V115 0:QC0118 BILLY 21:32

CHROMALAB, INC.

Environmental Services (SDB)

February 12, 1996 *Submission #:* 9601534

Revised report from Feb.9,1996

H2O GEOL

Atten: Gary Lowe

Project: RATTO-LARKIN PROPERTY *Project#:* 1628 WEBSTER ST, ALAMEDA
Received: January 11, 1996

re: 2 samples for TPH - Diesel analysis.

Method: EPA 3550/8015M

Matrix: WATER *Extracted:* January 16, 1996
Sampled: January 11, 1996 *Run#:* 521 *Analyzed:* January 17, 1996

Spl#	CLIENT SPL ID	DIESEL (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
77966	1081-85/MW-4	N.D.	50	ND	99.8	1
	Note: Hydrocarbons in the Diesel range do not match our hydrocarbon standard profiles. Quantified using our Diesel standard, amount is 460 ug/L.					
77967	1081-85/MW-L	N.D.	50	ND	99.8	1

Kayvan Kimyai
Chemist

Alex Tam
Semivolatiles Supervisor

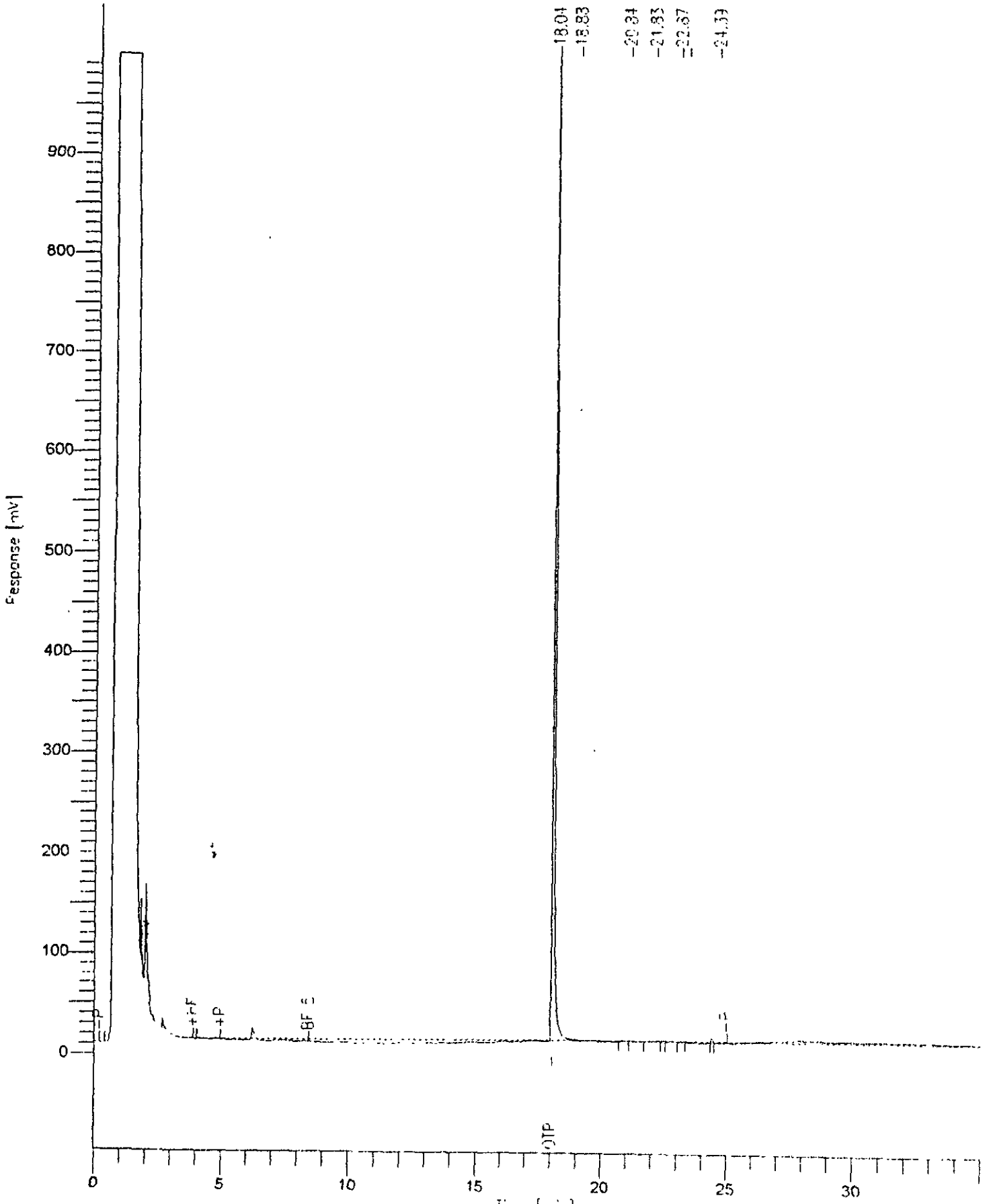
510-373 9222 GC

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

diesel analysis

Sample Name : 1534/MWL
FileName : D:\6000DIES\3117005.raw
Method : SDIESELB
Start Time : 0.00 min End Time : 35.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

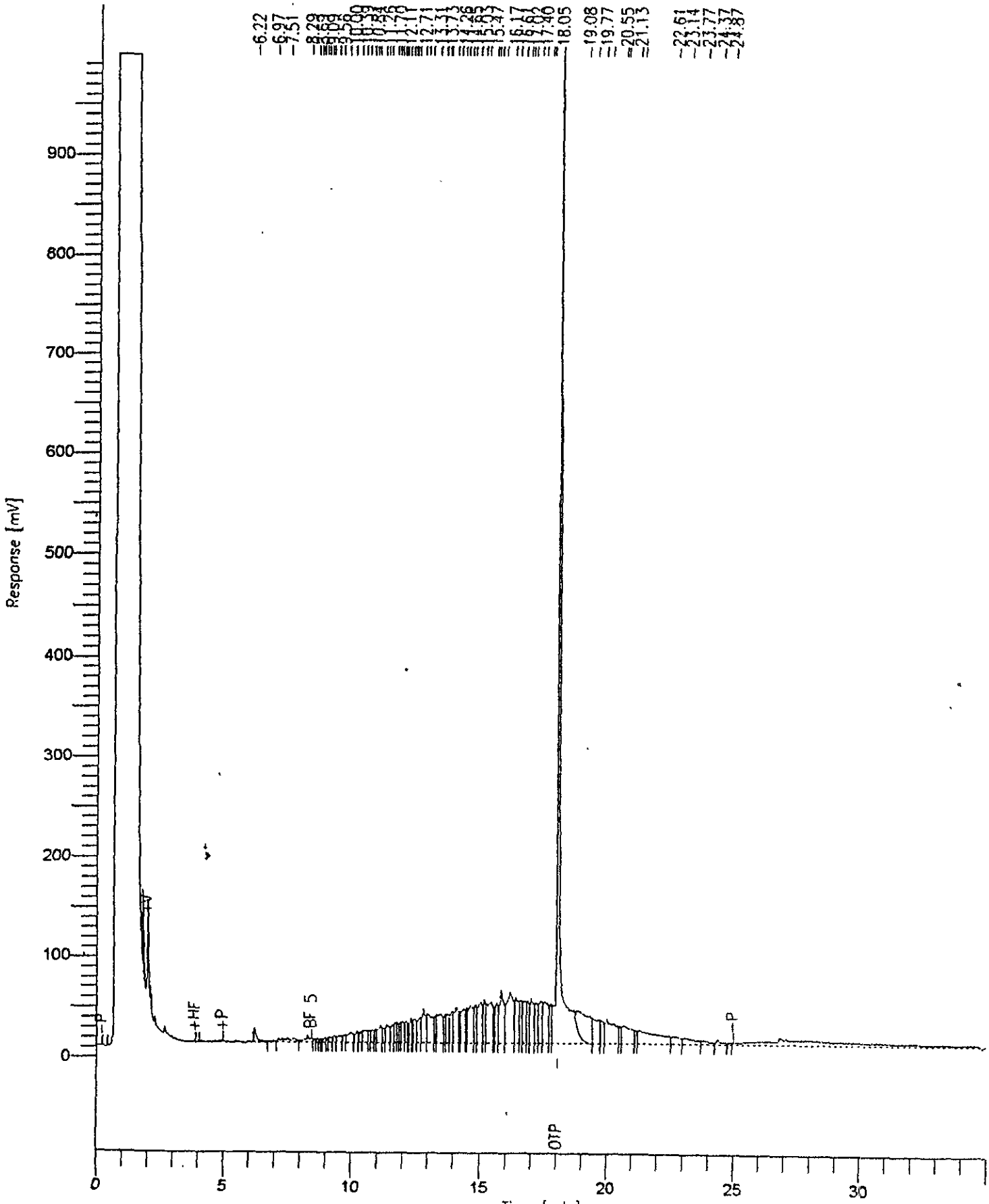
Sample #: 77967 Page 1 of 1
Date : 1/17/96 08:41 PM
Time of Injection: 1/17/96 08:06 PM
Low Point : 0.00 mV High Point : 1000.00 mV
Plot Scale: 1000.0 mV



diesel analysis

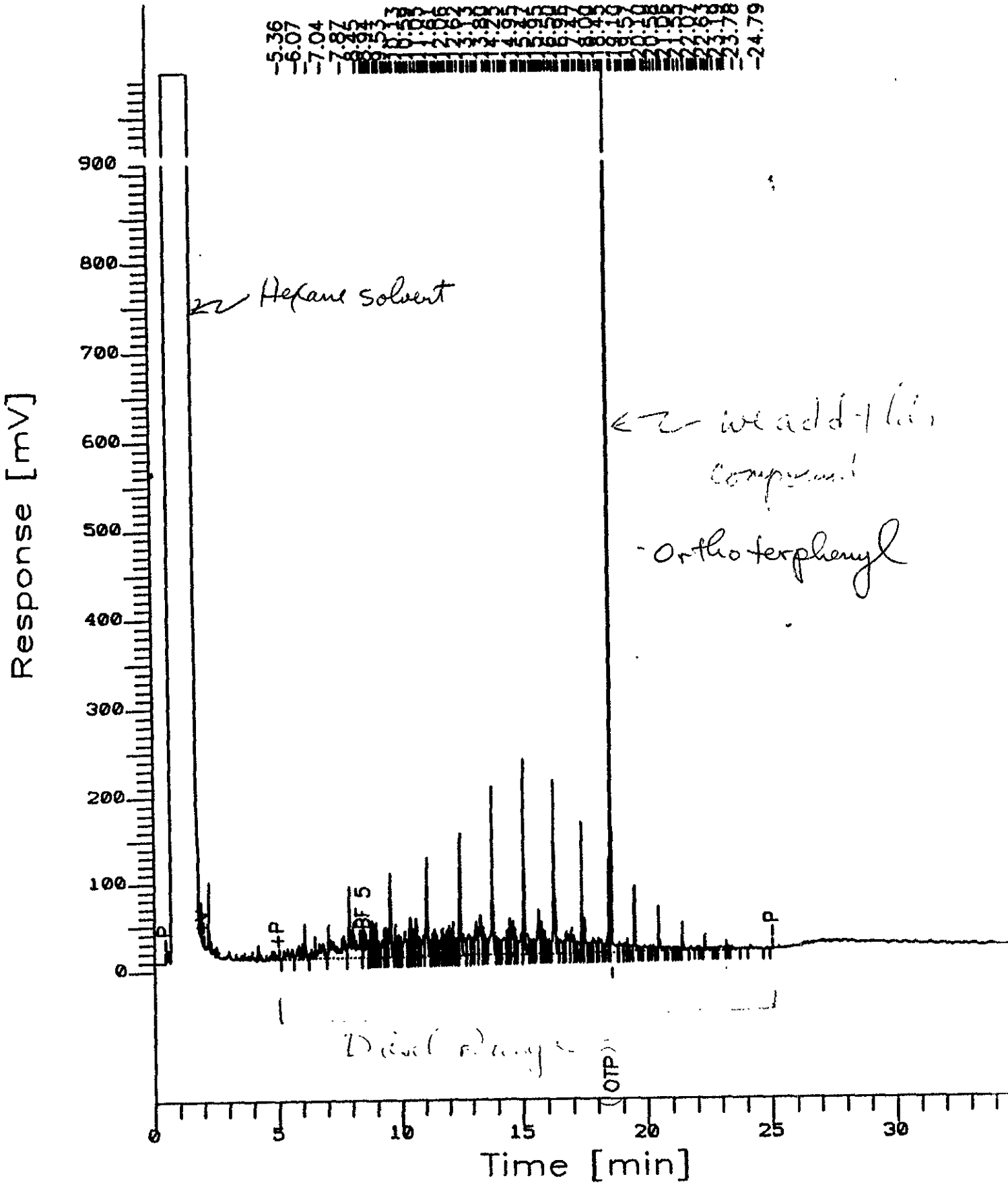
Sample Name : 1534/MW4
FileName : D:\6000DIES\S117004.raw
Method : SDIESELB
Start Time : 0.00 min End Time : 35.00 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: 77966
Date : 1/17/96 07:59 PM
Time of Injection: 1/17/96 07:24 PM
Low Point : 0.00 mV High Point : 1000.00 mV
Plot Scale: 1000.0 mV



Sample Name : CCV100DIESEL
FileName : d:\6500dies\T525001.raw
Method : tdieselb.ins
Start Time : 0.00 min End Time : 35.00 min
Scale Factor: 0 Plot Offset: 0 mV

Sample #: GC393 Page 1 of 1
Date : 5/25/95 01:31 PM
Time of Injection: 5/25/95 12:55 PM
Low Point : 0.00 mV High Point : 1000.00 mV
Plot Scale: 1000 mV



534/77966 - 77967

~~25915~~ 25920

CHAIN OF CUSTODY

H_2OGEOL A GROUNDWATER CONSULTANCY

P.O. BOX 2165
LIVERMORE, CALIFORNIA 94551-2165

DATE: 01/11/96 PAGE 1 of 1

Sample Source:
Wilanco, Inc.
1081-1085 Eastshore Highway
Albany, CA

SUBM #: 9601534 REP.
CLIENT: H2OGEOL
DUE: 01/25/96
REF #:25920

SAMPLER(S): Gary D. Lowe & Richard C. Vorst

SAMPLER'S SIGNATURE: [signature]

ANA

SAMPLE RECIEPT:
TOTAL No. of CONTAINERS
CHAIN OF CUSTODY SEALS
REC'D GOOD CONDITION/COLD
CONFORMS TO RECORD
LAB NO.

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	TPH-gasoline (5030/8015M) plus BTEX (EPA 602/8020)	TPH-diesel (EPA 3550/8015M)						NUMBER OF CONTAINE
1081-B5/MW-4	01/11/96	13:13	water		X	X						3
1081-B5/MW-L	01/11/96	13:48	water		X	X						3
	PROVIDE CHROMATOGRAMS FOR EPA 3550/8015M											

Please note special pricing
per Gary Cook
10-DAY TAT

RELINQUISHED BY:
SIGNATURE [signature]
PRINTED NAME Gary D. Lowe
COMPANY H_2OGEOL
TIME 16:30
DATE 01/11/96

RELINQUISHED BY: Laboratory Currier
SIGNATURE Mimi Pak
PRINTED NAME Mimi Pak
COMPANY Chromalab
TIME 1630
DATE 1/11/96

RECEIVED BY: Laboratory Currier
SIGNATURE
PRINTED NAME
COMPANY
TIME
DATE

RECEIVED BY LABORATORY:
SIGNATURE
PRINTED NAME
COMPANY CHROMALAB, INC.
TIME
DATE 01/11/96