



KAPREALIAN ENGINEERING
INCORPORATED

93 SEP -7 AM 11:56

September 3, 1993

Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

Attention: Mr. Scott Seery

RE: Unocal Service Station #7004
15599 Hesperian Boulevard
San Leandro, California

Dear Mr. Seery:

Per the request of Mr. Adadu Yemane of Unocal Corporation, enclosed please find our report dated August 17, 1993, for the above referenced site.

If you should have any questions, please feel free to call our office at (510) 602-5100.

Sincerely,

Kaprealian Engineering, Inc.

A handwritten signature in cursive script, appearing to read 'Judy A. Dewey', written over a horizontal line.

Judy A. Dewey

jad\82

Enclosure

cc: Adadu Yemane, Unocal Corporation



KAPREALIAN ENGINEERING
INCORPORATED

KEI-P90-1003.QR7
August 17, 1993

Unocal Corporation
2000 Crow Canyon Place, Suite 400
P.O. Box 5155
San Ramon, California 94583

Attention: Mr. Adadu Yemane

RE: Quarterly Report
Unocal Service Station #7004
15599 Hesperian Boulevard
San Leandro, California

Dear Mr. Yemane:

This report presents the results of the most recent quarter of monitoring and sampling of the monitoring wells at the referenced site by Kaprealian Engineering, Inc. (KEI). The wells are currently monitored monthly and wells MW3 and MW5 are sampled on a quarterly basis. Monitoring wells MW1, MW2, MW4, and MW6 are sampled on a semi-annual basis. This report covers the work performed by KEI from May through July of 1993.

BACKGROUND

The subject site contains a Unocal service station facility. Three underground gasoline storage tanks and the product piping were removed from the site in October of 1990 during tank replacement activities. The fuel tank pit and the product pipe trenches were subsequently overexcavated in order to remove contaminated soil. Six monitoring wells and one aquifer testing well have been installed at the site. An aquifer pumping test has also been conducted.

A site description, detailed background information including a summary of all of the soil and ground water subsurface investigation/remediation work conducted to date, site hydrogeologic conditions, and tables that summarize all of the soil and ground water sample analytical results are presented in KEI's report (KEI-P90-1003.R6) dated May 29, 1992.

RECENT FIELD ACTIVITIES

The six existing monitoring wells (MW1 through MW6) were monitored three times and were sampled once during the quarter. During monitoring, the wells were checked for depth to water and the presence of free product. Prior to sampling, the wells were also checked for the presence of a sheen. No free product or sheen was

noted in any of the wells during the quarter. The monitoring data collected this quarter are summarized in Table 1.

Ground water samples were collected from all of the existing monitoring wells on July 22, 1993. Prior to sampling, the wells were each purged of between 7 and 9 gallons of water by the use of a surface pump. Samples were collected by the use of a clean Teflon bailer. The samples were decanted into clean VOA vials that were then sealed with Teflon-lined screw caps, labeled, and stored in a cooler, on ice, until delivery to a state-certified laboratory.

HYDROLOGY

The measured depth to ground water at the site on July 22, 1993, ranged between 13.52 and 15.20 feet below grade. The water levels in all of the wells have shown net increases ranging from 0.05 to 0.55 foot since April 23, 1993. Based on the water level data gathered during the quarter, the ground water flow direction appeared to be to the west-southwest, as shown on the attached Potentiometric Surface Maps, Figures 1, 2, and 3. The flow direction reported this quarter is relatively similar to the predominant flow directions reported since May 1991. The average hydraulic gradient at the site on July 22, 1993, was approximately 0.0028.

ANALYTICAL RESULTS

The ground water samples collected this quarter were analyzed at Sequoia Analytical Laboratory and were accompanied by properly executed Chain of Custody documentation. The ground water samples collected from all of the wells were analyzed for total petroleum hydrocarbons (TPH) as gasoline by EPA method 5030/modified 8015, benzene, toluene, ethylbenzene, and xylenes (BTEX), by EPA method 8020, and methyl tert butyl ether (MTBE) by EPA method 8020/modified.

The analytical results of all of the ground water samples collected from the monitoring wells to date are summarized in Table 2. The concentrations of TPH as gasoline and benzene detected in the ground water samples collected this quarter are shown on the attached Figure 4. Copies of the laboratory analytical results and the Chain of Custody documentation are attached to this report.

DISCUSSION AND RECOMMENDATIONS

Based on the analytical results for the ground water samples collected and evaluated to date, and no evidence of free product or

sheen in any of the wells, KEI recommends the continuation of the current ground water monitoring and sampling program. The current program consists of monthly monitoring of all of the monitoring wells; quarterly sampling of wells MW3 and MW5; and semi-annual sampling of wells MW1, MW2, MW4, and MW6. The ground water samples collected from all of the wells are analyzed for TPH as gasoline and BTEX.

At the request of Mr. Scott Seery of the Alameda County Health Care Services (ACHCS) Agency, the ground water monitoring and sampling program has been modified to include the sampling of all of the wells for the presence of MTBE for two quarterly sampling events. In addition, per the ACHCS, the chromatograms for the TPH as gasoline, BTEX, and MTBE analyses are included with the analytical results in this quarterly report. After one additional quarter of these analyses, the ground water monitoring and sampling program will be re-evaluated and modified as warranted.

DISTRIBUTION

A copy of this report should be sent to the ACHCS, Mr. Michael Bakaldin of the City of San Leandro Fire Department, and to the Regional Water Quality Control Board, San Francisco Bay Region.

LIMITATIONS

Environmental changes, either naturally-occurring or artificially-induced, may cause changes in ground water levels and flow paths, thereby changing the extent and concentration of any contaminants.

Our studies assume that the field and laboratory data are reasonably representative of the site as a whole, and assume that subsurface conditions are reasonably conducive to interpolation and extrapolation.

The results of this study are based on the data obtained from the field and laboratory analyses obtained from a state-certified laboratory. We have analyzed these data using what we believe to be currently applicable engineering techniques and principles in the Northern California region. We make no warranty, either expressed or implied, regarding the above, including laboratory analyses, except that our services have been performed in accordance with generally accepted professional principles and practices existing for such work.

KEI-P90-1003.QR7
August 17, 1993
Page 4

If you have any questions regarding this report, please do not hesitate to call at (510) 602-5100.

Sincerely,

Kaprealian Engineering, Inc.



Thomas J. Berkins
Senior Environmental Engineer



Joel G. Greger, C.E.G.
Senior Engineering Geologist

License No. EG 1633
Exp. Date 6/30/94



Aram B. Kaloustian
Project Engineer

/bp

Attachments: Tables 1 & 2
Location Map
Potentiometric Surface Maps - Figures 1, 2 & 3
Concentrations of Petroleum Hydrocarbons - Figure 4
Laboratory Analyses
Chain of Custody documentation
Chromatograms

KEI-P90-1003.QR7
August 17, 1993

TABLE 1

SUMMARY OF MONITORING DATA

<u>Well #</u>	<u>Ground Water Elevation (feet)</u>	<u>Depth to Water (feet)</u>	<u>Product Thickness (feet)</u>	<u>Sheen</u>	<u>Water Purged (gallons)</u>
(Monitored and Sampled on July 12, 1993)					
MW1	22.55	14.34	0	No	7.5
MW2	22.60	14.75	0	No	7.5
MW3	22.39	14.83	0	No	7
MW4	22.29	13.52	0	No	9
MW5	22.19	14.82	0	No	8
MW6	22.35	15.20	0	No	8
(Monitored on June 22, 1993)					
MW1	23.03	13.86	0	--	0
MW2	23.09	14.26	0	--	0
MW3	22.88	14.34	0	--	0
MW4	22.78	13.03	0	--	0
MW5	22.67	14.34	0	--	0
MW6	22.81	14.74	0	--	0
(Monitored on May 22, 1993)					
MW1	23.73	13.16	0	--	0
MW2	23.78	13.57	0	--	0
MW3	23.55	13.67	0	--	0
MW4	23.45	12.36	0	--	0
MW5	23.33	13.68	0	--	0
MW6	23.47	14.08	0	--	0

KEI-P90-1003.QR7
August 17, 1993

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

<u>Well #</u>	<u>Well Cover Elevation*</u> <u>(feet)</u>
MW1	36.89
MW2	37.35
MW3	37.22
MW4	35.81
MW5	37.01
MW6	37.55

-- Sheen determination was not performed.

* The elevations of the tops of the well covers has been surveyed relative to Mean Sea Level (MSL), per a city of San Leandro Benchmark located at the southwest corner of Hesperian Boulevard and Sycamore (elevation = 36.04 MSL).

KEI-P90-1003.QR7
 August 17, 1993

TABLE 2

SUMMARY OF LABORATORY ANALYSES
 WATER

<u>Date</u>	<u>Sample Number</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>	<u>MTBE</u>
7/22/93	MW1	ND	ND	ND	ND	ND	77
	MW2	62*	ND	ND	ND	ND	42
	MW3	16,000	4,500	17	3,600	1,900	440
	MW4	ND	ND	ND	ND	ND	54
	MW5	59**	ND	ND	2.6	ND	42
	MW6	ND	ND	ND	ND	ND	ND
4/20/93 &	MW1	--	--	--	--	--	56
	MW2	--	--	--	--	--	80
4/23/93	MW3	18,000	3,700	11	2,300	1,300	410
	MW4	--	--	--	--	--	65
	MW5	99*	ND	ND	ND	ND	120
	MW6	--	--	--	--	--	ND
1/21/93	MW1	ND	ND	ND	ND	ND	42
	MW2	ND	ND	ND	ND	ND	17
	MW3	12,000	2,800	11	1,600	590	--
	MW4	ND	ND	ND	ND	ND	--
	MW5	100*	ND	ND	ND	ND	160
	MW6	ND	ND	ND	ND	ND	--
10/28/92	MW1	SAMPLED SEMI-ANNUALLY					
	MW2	SAMPLED SEMI-ANNUALLY					
	MW3	15,000	4,400	15	2,400	800	--
	MW4	SAMPLED SEMI-ANNUALLY					
	MW5	ND	ND	ND	ND	ND	45
	MW6	SAMPLED SEMI-ANNUALLY					
7/09/92	MW1	70*	ND	ND	ND	ND	130
	MW2	ND	ND	ND	ND	ND	49
	MW3	13,000	3,200	12	1,900	1,100	--
	MW4	ND	ND	ND	ND	ND	--
	MW5	ND	ND	ND	ND	ND	71
	MW6	ND	ND	ND	ND	ND	--
4/14/92	MW1	76*	ND	ND	ND	ND	--
	MW2	45*	ND	ND	ND	ND	--
	MW3	16,000	3,400	19	1,400	1,300	--
	MW4	ND	ND	ND	ND	ND	--
	MW5	86*	ND	ND	ND	ND	--
	MW6	ND	ND	ND	ND	ND	--

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August 17, 1993

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

<u>Date</u>	<u>Sample Number</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>	<u>MTBE</u>
1/14/92	MW1	ND	ND	ND	ND	ND	--
	MW2	ND	ND	ND	ND	ND	--
	MW3	13,000	6,600	19	2,600	1,800	--
	MW4	ND	ND	ND	ND	ND	--
	MW5	60*	ND	ND	ND	ND	--
	MW6	ND	ND	ND	ND	ND	--
10/14/91	MW1	ND	ND	ND	ND	ND	--
	MW2	ND	ND	ND	ND	ND	--
	MW3	25,000	6,300	78	2,000	1,400	--
	MW4	ND	ND	ND	ND	ND	--
	MW5	140	0.72	ND	1.3	0.89	--
	MW6	ND	ND	ND	ND	ND	--
7/23/91	MW1	ND	ND	ND	ND	ND	--
	MW2	ND	ND	ND	ND	ND	--
	MW3	17,000	5,500	26	1,800	2,800	--
	MW4	ND	ND	ND	ND	ND	--
	MW5	260	1.2	0.39	10	0.71	--
	MW6	ND	ND	ND	ND	ND	--
5/04/91	MW1	ND	ND	ND	ND	ND	--
	MW2	ND	ND	ND	ND	ND	--
	MW3	34,000	6,100	32	1,200	6,100	--

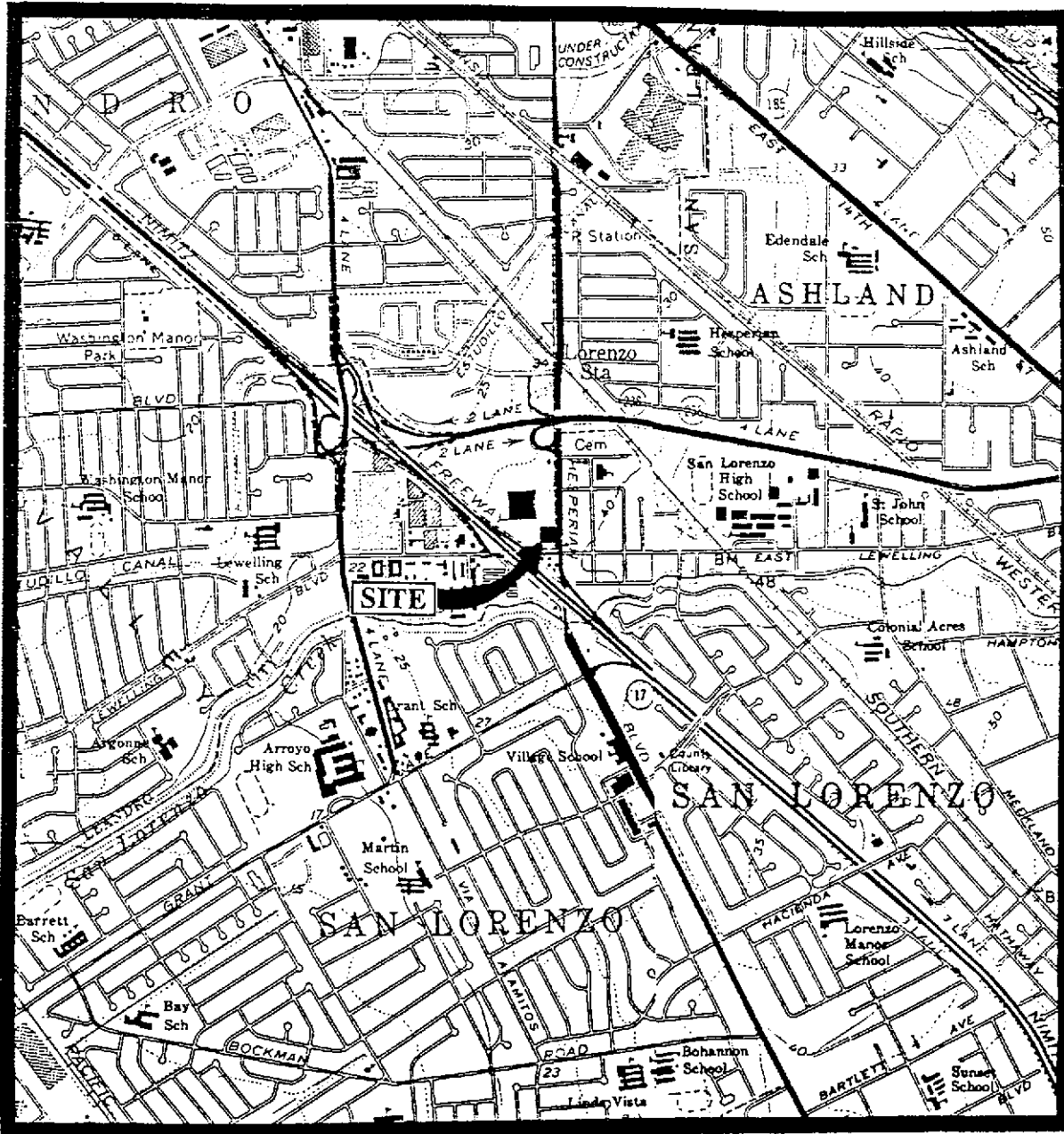
* Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.

** Sequoia Analytical Laboratory reported that the hydrocarbons detected appear to be a gasoline and non-gasoline mixture.

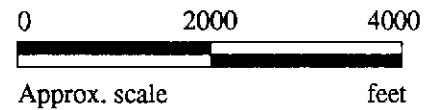
ND = Non-detectable.

-- Indicates analysis was not performed.

Results in parts per billion (ppb), unless otherwise indicated.



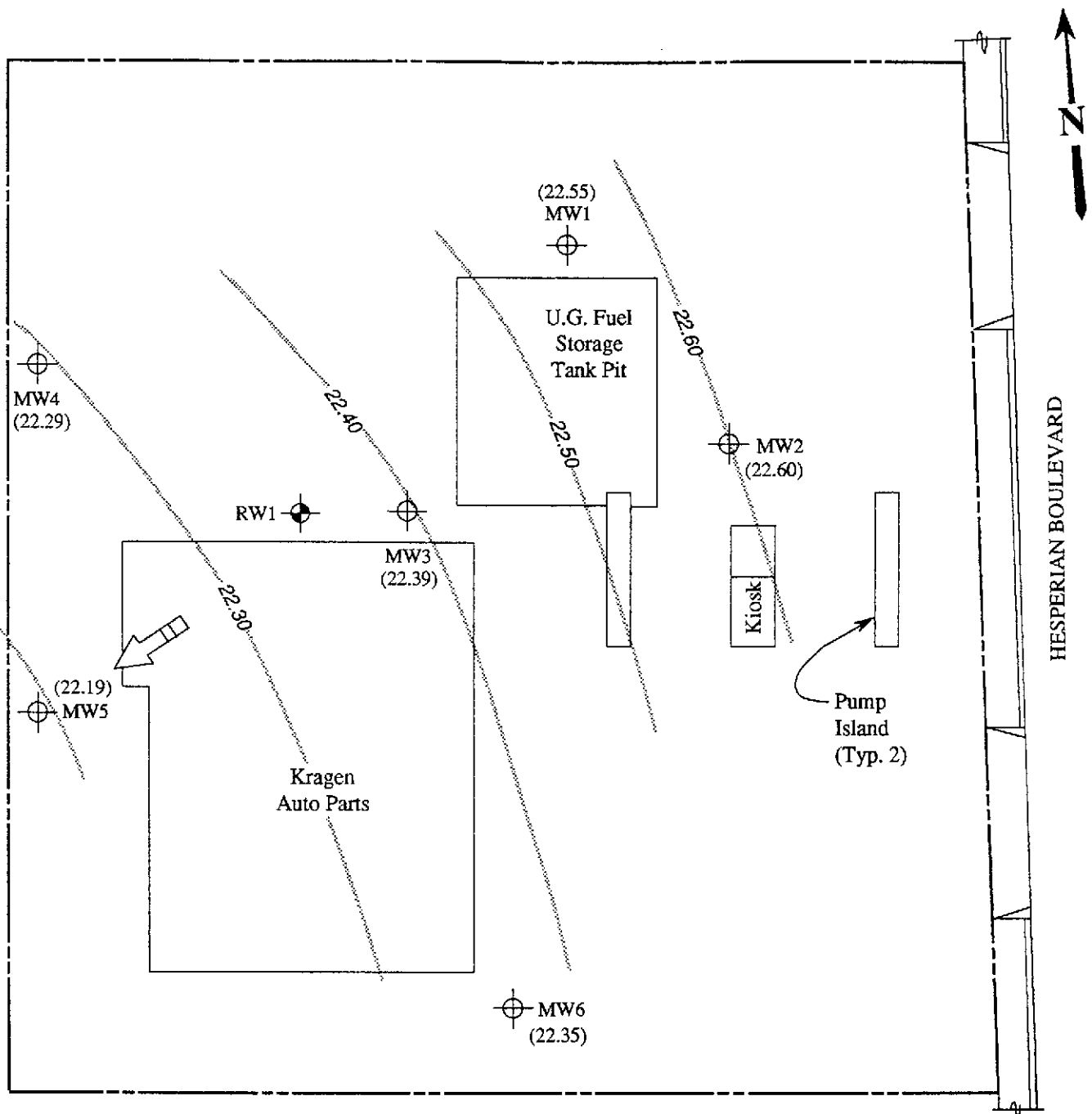
Base modified from 7.5 minute U.S.G.S. Hayward and San Leandro Quadrangles
(both photorevised 1980)



KEI
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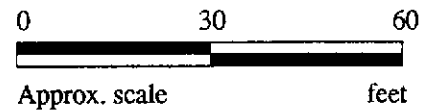
UNOCAL SERVICE STATION #7004
15599 HESPERIAN BOULEVARD
SAN LEANDRO, CA

LOCATION
MAP



LEGEND

- ⊕ Monitoring well
- ⊙ Aquifer testing well
- () Ground water elevation in feet above Mean Sea Level
- ➡ Direction of ground water flow
- Contours of ground water elevation

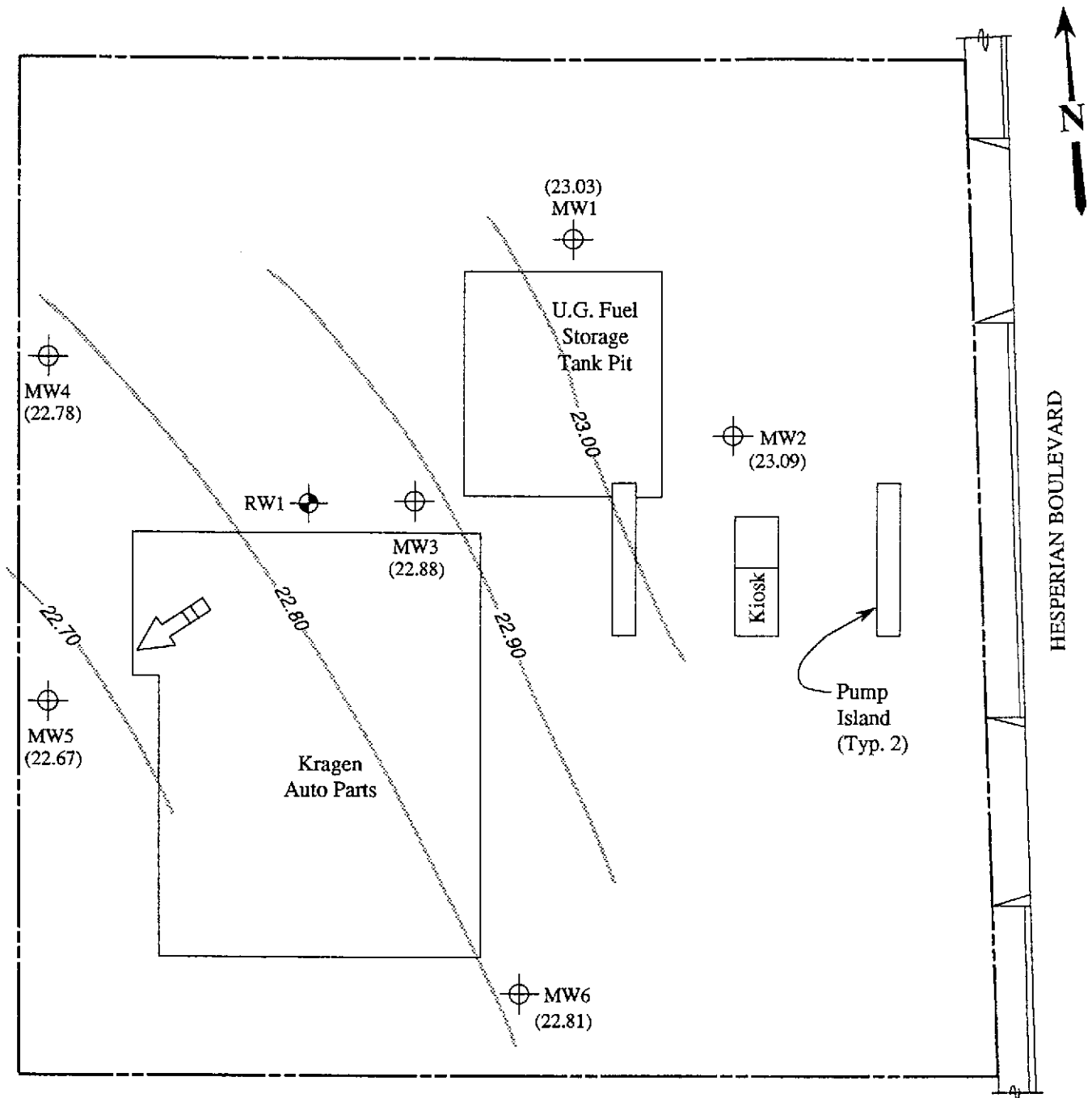


POTENTIOMETRIC SURFACE MAP FOR THE JULY 12, 1993 MONITORING EVENT



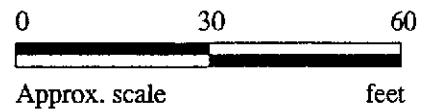
**UNOCAL SERVICE STATION #7004
15599 HESPERIAN BOULEVARD
SAN LEANDRO, CA**

**FIGURE
1**



LEGEND

- ⊕ Monitoring well
- ⊙ Aquifer testing well
- () Ground water elevation in feet above Mean Sea Level
- ➡ Direction of ground water flow
- Contours of ground water elevation

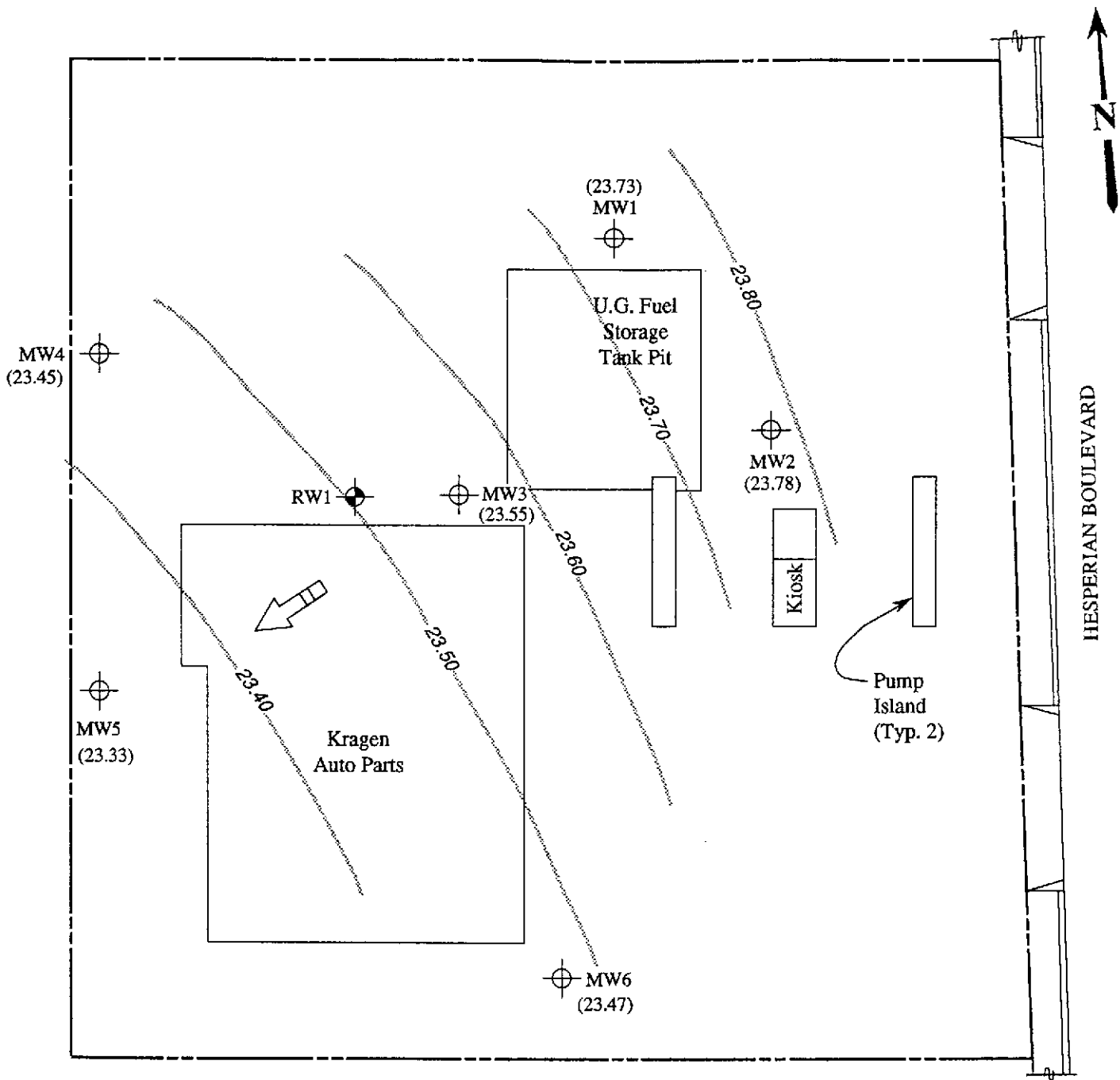


POTENTIOMETRIC SURFACE MAP FOR THE JUNE 22, 1993 MONITORING EVENT

**KAPREALIAN ENGINEERING
INCORPORATED**

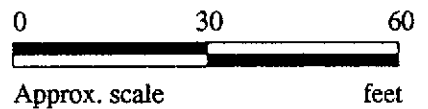
**UNOCAL SERVICE STATION #7004
15599 HESPERIAN BOULEVARD
SAN LEANDRO, CA**

**FIGURE
2**



LEGEND

- ⊕ Monitoring well
- ⊙ Aquifer testing well
- () Ground water elevation in feet above Mean Sea Level
- ➡ Direction of ground water flow
- ⋯ Contours of ground water elevation

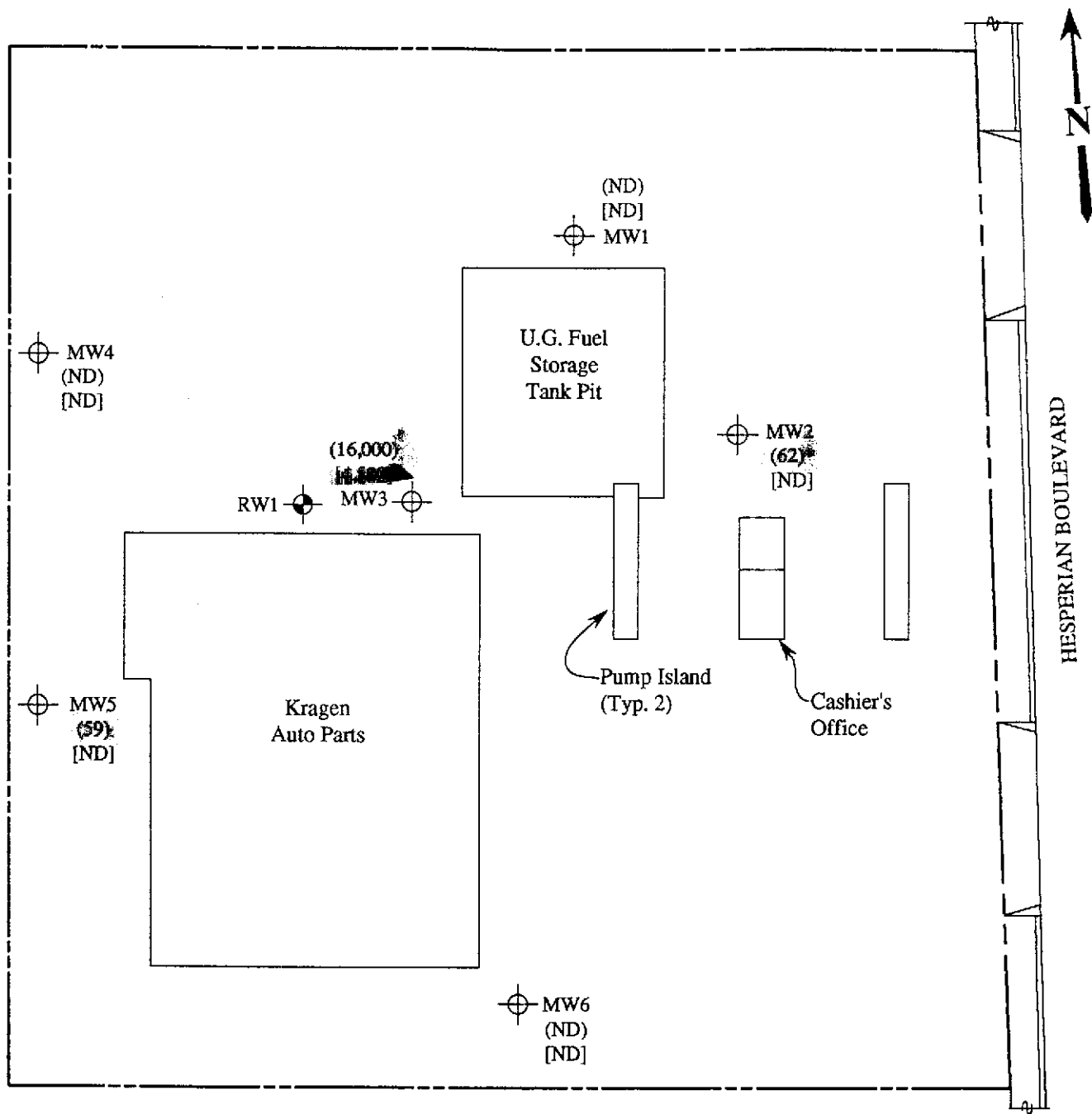


POTENTIOMETRIC SURFACE MAP FOR THE MAY 22, 1993 MONITORING EVENT

**KAPREALIAN ENGINEERING
INCORPORATED**

**UNOCAL SERVICE STATION #7004
15599 HESPERIAN BOULEVARD
SAN LEANDRO, CA**

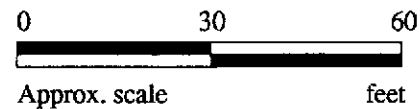
**FIGURE
3**



LEGEND

- ⊕ Monitoring well
- Aquifer testing well
- () Concentration of TPH as gasoline in ppb
- [] Concentration of [redacted] in ppb
- ND = Non-detectable

* The lab reported that the hydrocarbons detected do not appear to be gasoline.



PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON JULY 22, 1993



**UNOCAL SERVICE STATION #7004
15599 HESPERIAN BOULEVARD
SAN LEANDRO, CA**

**FIGURE
4**



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Kaprealian Engineering, Inc.
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Avo Avedessian

Client Project ID: Unocal, 15599 Hesperian Blvd., San Leandro
Sample Matrix: Water
Analysis Method: EPA 5030/8015/8020
First Sample #: 307-1075

Sampled: Jul 22, 1993
Received: Jul 22, 1993
Reported: Aug 4, 1993

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 307-1075 MW-1	Sample I.D. 307-1076 MW-2*	Sample I.D. 307-1077 MW-3	Sample I.D. 307-1078 MW-4	Sample I.D. 307-1079 MW-5^	Sample I.D. 307-1080 MW-6
Purgeable Hydrocarbons	50	N.D.	62	16,000	N.D.	59	N.D.
Benzene	0.5	N.D.	N.D.	4,500	N.D.	N.D.	N.D.
Toluene	0.5	N.D.	N.D.	17	N.D.	N.D.	N.D.
Ethyl Benzene	0.5	N.D.	N.D.	3,600	N.D.	2.6	N.D.
Total Xylenes	0.5	N.D.	N.D.	1,900	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	Discrete Peaks	Gasoline	--	Gasoline & Discrete Peak	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	20	1.0	1.0	1.0
Date Analyzed:	7/30/93	7/30/93	7/30/93	7/30/93	7/30/93	7/29/93
Instrument Identification:	HP-2	HP-2	HP-2	HP-2	HP-2	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	96	99	90	101	101	94

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL


Alan B. Kemp
Project Manager

Please Note:
*Discrete Peaks refers to MTBE peak and unidentified peaks in EPA 8010 Range.
^Discrete Peak refers to MTBE Peak.



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Kaprealian Engineering, Inc. 2401 Stanwell Dr., Ste. 400 Concord, CA 94520 Attention: Avo Avedessian	Client Project ID: Unocal, 15599 Hesperian Blvd., San Leandro Sample Matrix: Water Analysis Method: EPA 5030/8015/8020 First Sample #: Blank	Sampled: Jul 22, 1993 Received: Jul 22, 1993 Reported: Aug 4, 1993
---	---	--

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. Matrix Blank
---------	-------------------------	--------------------------------

Purgeable Hydrocarbons	50	
------------------------	----	--

Benzene	0.5	
---------	-----	--

Toluene	0.5	
---------	-----	--

Ethyl Benzene	0.5	
---------------	-----	--

Total Xylenes	0.5	
---------------	-----	--

Chromatogram Pattern:

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	7/29/93
Instrument Identification:	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	102

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL


Alan B. Kemp
Project Manager



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Kaprealian Engineering, Inc.
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Avo Avedessian

Client Project ID: Unocal, 15599 Hesperian Blvd., San Leandro
Sample Descript: Water
Analysis for: MTBE (EPA 8020 Modified)
First Sample #: 307-1075

Sampled: Jul 22, 1993
Received: Jul 22, 1993
Analyzed: Jul 30, 1993
Reported: Aug 4, 1993

LABORATORY ANALYSIS FOR: MTBE (EPA 8020 Modified)

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L
307-1075	MW-1	0.60	77
307-1076	MW-2	0.60	42
307-1077	MW-3	12	440
307-1078	MW-4	0.60	54
307-1079	MW-5	0.60	42
307-1080	MW-6	0.60	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Alan B. Kemp
Project Manager



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Kaprealian Engineering, Inc.
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Avo Avedessian

Client Project ID: Unocal, 15599 Hesperian Blvd., San Leandro
Matrix: Water

QC Sample Group: 3071075-80

Reported: Aug 4, 1993

QUALITY CONTROL DATA REPORT


ANALYTE	Benzene	Toluene	Ethyl- Benzene	Xylenes
	Method:	EPA 8020	EPA 8020	EPA 8020
Analyst:	J.F.	J.F.	J.F.	J.F.
Conc. Spiked:	20	20	20	60
Units:	µg/L	µg/L	µg/L	µg/L
LCS Batch#:	3LCS072993	3LCS072993	3LCS072993	3LCS072993
Date Prepared:	7/29/93	7/29/93	7/29/93	7/29/93
Date Analyzed:	7/29/93	7/29/93	7/29/93	7/29/93
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
LCS % Recovery:	114	107	100	100
Control Limits:	70-130	70-130	70-130	70-130

MS/MSD Batch #:	3071110	3071110	3071110	3071110
Date Prepared:	7/29/93	7/29/93	7/29/93	7/29/93
Date Analyzed:	7/29/93	7/29/93	7/29/93	7/29/93
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Matrix Spike % Recovery:	110	105	100	98
Matrix Spike Duplicate % Recovery:	110	105	100	100
Relative % Difference:	0.0	0.0	0.0	2.0

SEQUOIA ANALYTICAL

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.


Alan B. Kemp
Project Manager

CHAIN OF CUSTODY

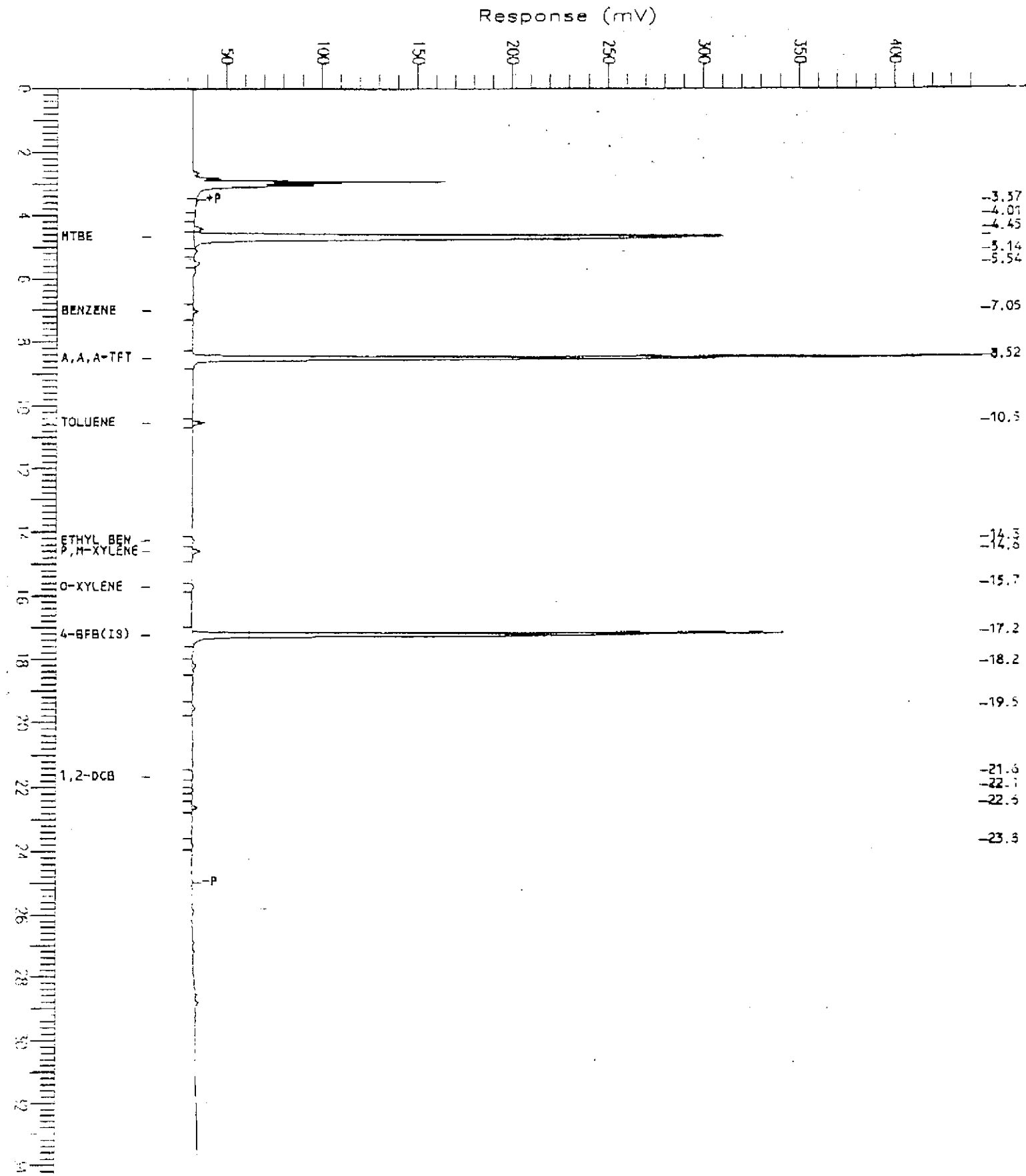
SAMPLER RAY (NET)		SITE NAME & ADDRESS UNOCAL SAN LEONARDO 15599 HESPERIAN BLVD							ANALYSES REQUESTED					TURN AROUND TIME: REGULAR			
WITNESSING AGENCY									TPAS	PTBE							
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION									REMARKS
MW1	7-22			X	X		4	VOA'S	X	X							3071075 A-D
MW2	4			X	X		4	"	X	X							1076
MW3	4			X	X		4	"	X	X							1077
MW4	4			X	X		4	"	X	X							1078
MW5	4			X	X		4	"	X	X							1079
MW6	4			X	X		4	"	X	X							1080
Relinquished by: (Signature) Ray (NET)		Date/Time 7-22-93		Received by: (Signature) A. Napora		The following MUST BE completed by the laboratory accepting samples for analysis: 1. Have all samples received for analysis been stored in ice? <u>Yes</u> 2. Will samples remain refrigerated until analyzed? <u>Yes</u> 3. Did any samples received for analysis have head space? <u>NO</u> 4. Were samples in appropriate containers and properly packaged? Signature: <u>[Signature]</u> Title: <u>[Signature]</u> Date: <u>7/23/93</u>											
Relinquished by: (Signature) Steve Dee		Date/Time 7/23/93 12:30		Received by: (Signature) [Signature]													
Relinquished by: (Signature) [Signature]		Date/Time 7-23-93 1:54pm		Received by: (Signature) Melissa Chusue													
Relinquished by: (Signature)		Date/Time		Received by: (Signature)													

FID Chromatogram

Sample Name : KEI
File Name : E:\B1DATA\F1JY605.raw
Method : BTEX1.ina
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 34.50 min
Plot Offset: 11 mV

Sample #: 3071075 PAHs-t
Date : 8/27/93 10:54 AM
Time of Injection: 7/31/93 02:31 AM
Low Point : 10.63 mV
Plot Scale: 435.7 mV



FID Chromatogram

Sample Name : KEI

FileName : E:\B1DATA\P1JY605.raw

Method : BTEX1.1na

Start Time : 0.00 min

Scale Factor : 0.0

End Time : 34.50 min

Plot Offset : 20 mV

Sample # : 3071075 YMAJ-1

Page 1 of 1

Date : 8/27/93 11:08 AM

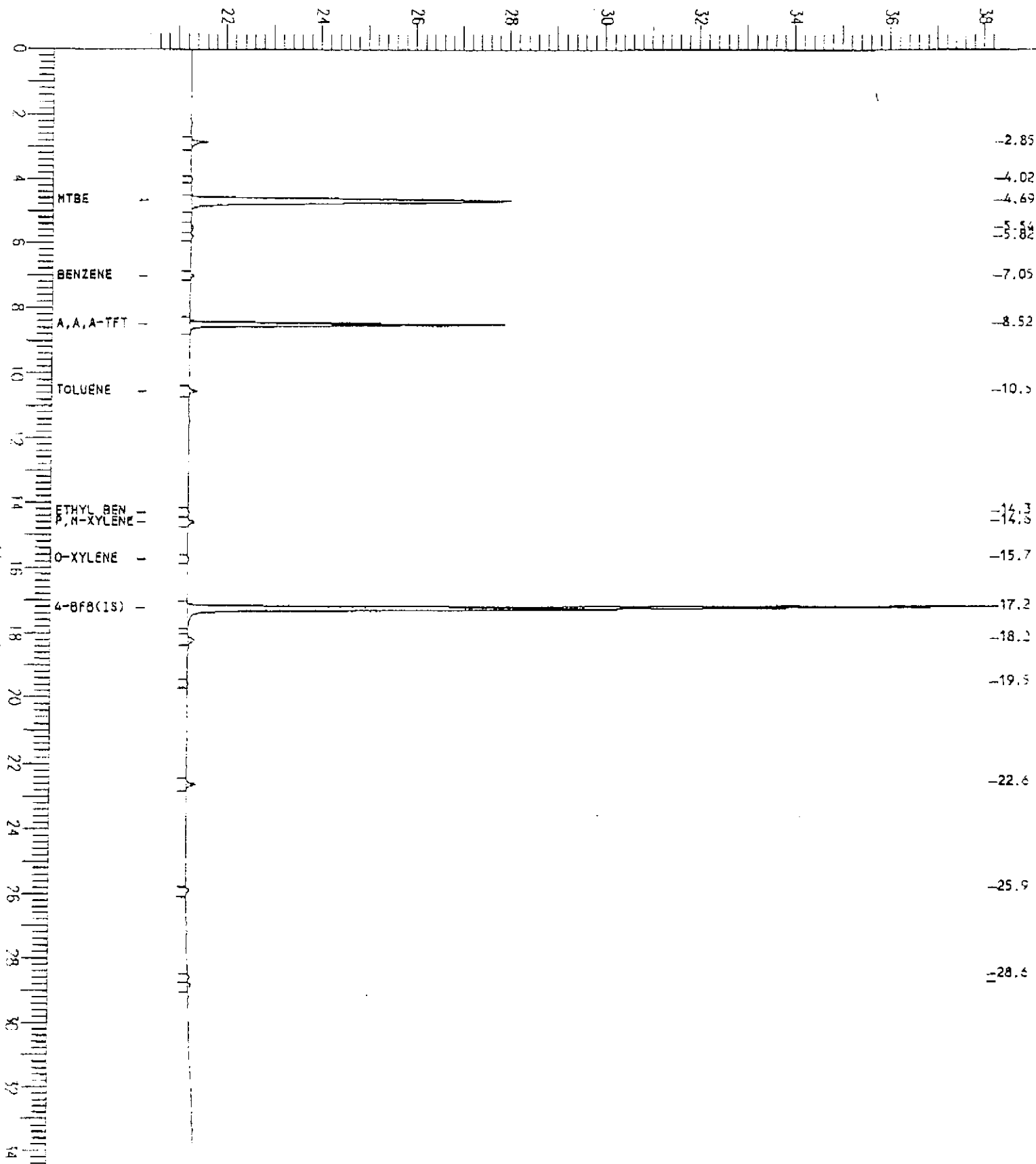
Time of Injection: 7/31/93 02:31 AM

Low Point : 20.36 mV

High Point : 38.22 mV

Plot Scale: 17.9 mV

Response (mV)

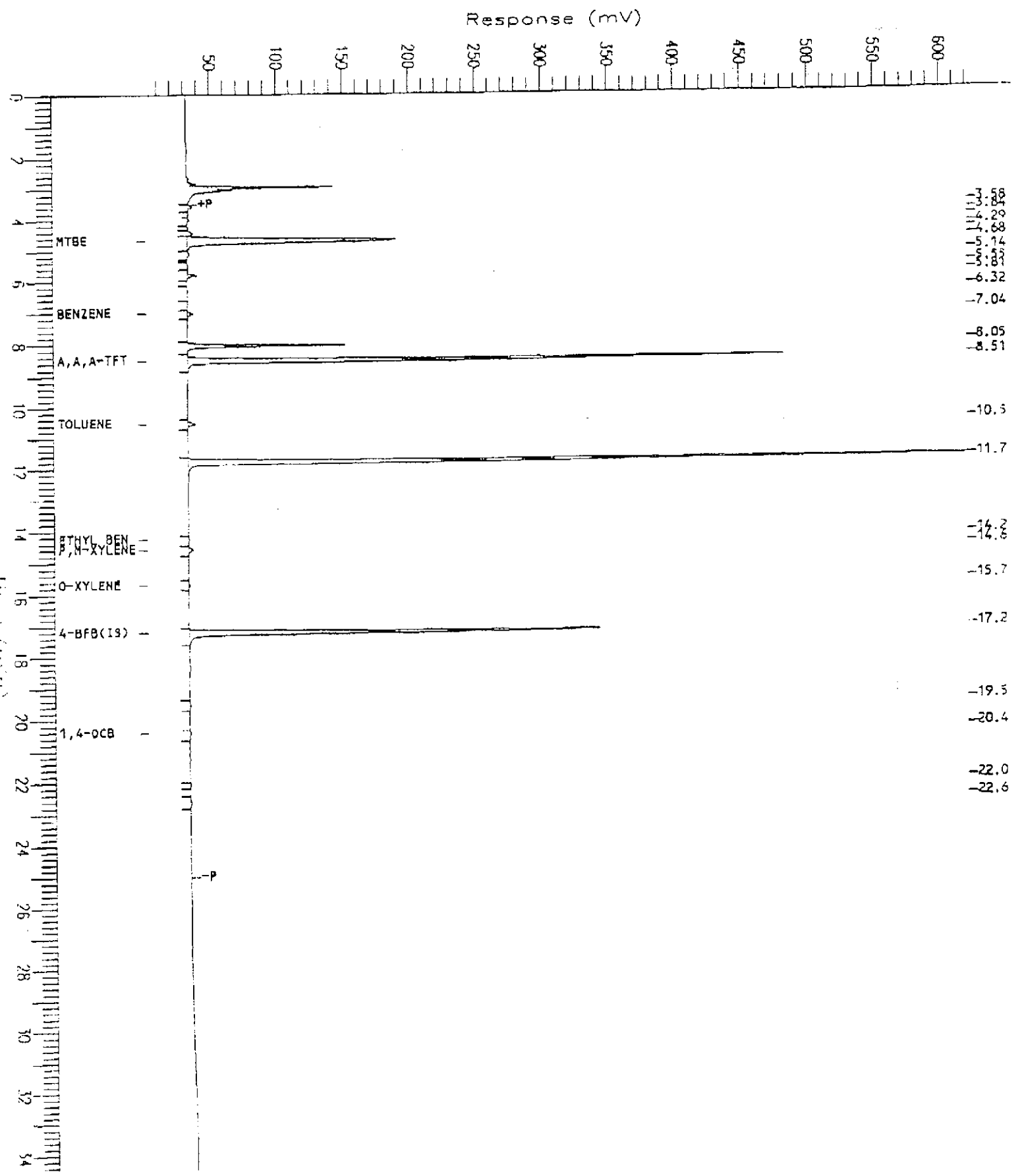


FID Chromatogram

Sample Name : KE1
File Name : E:\B1DATA\F1JY600.raw
Method : BTEX1.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 34.50 min
Plot Offset : 1 mV

Sample # : 3071076 ~~MMJ-2~~
Date : 8/27/93 11:01 AM
Time of Injection : 7/30/93 11:09 PM
Low Point : 1.41 mV
Plot Scale : 619.6 mV



PID Chromatogram

File Name : KEI

Sample # 3071076-2

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File Name : E:\B1DATA\P1JY600.raw

Date : 8/27/93 11:06 AM

Method : BTEX1.ins

Time of Injection: 7/30/93 11:09 PM

Start Time : 0.00 min

End Time : 34.50 min

Low Point : 18.92 mV

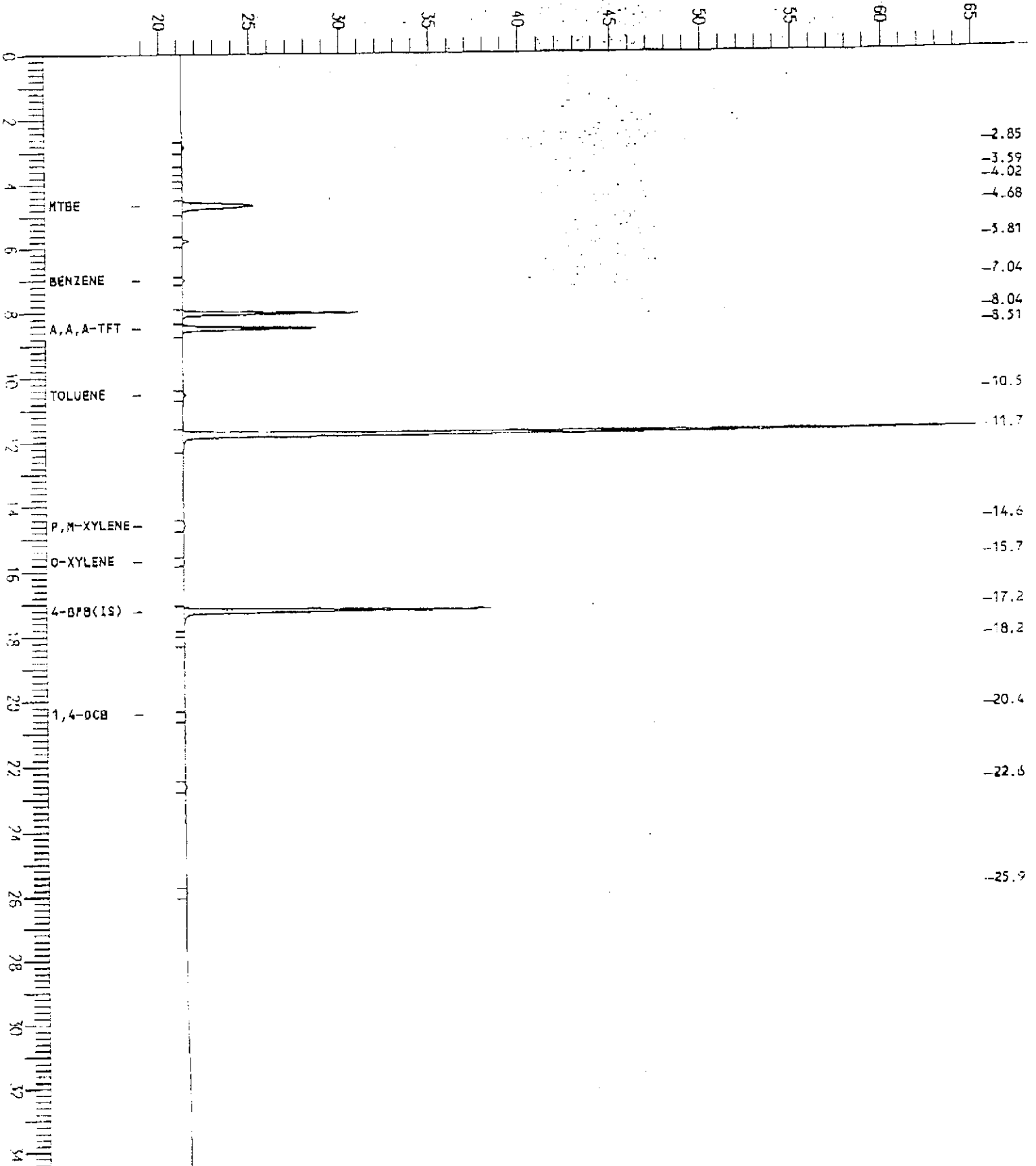
High Point : 65.61 mV

Gain Factor : 0.0

Plot Offset: 19 mV

Plot Scale: 46.7 mV

Response (mV)



FID Chromatogram

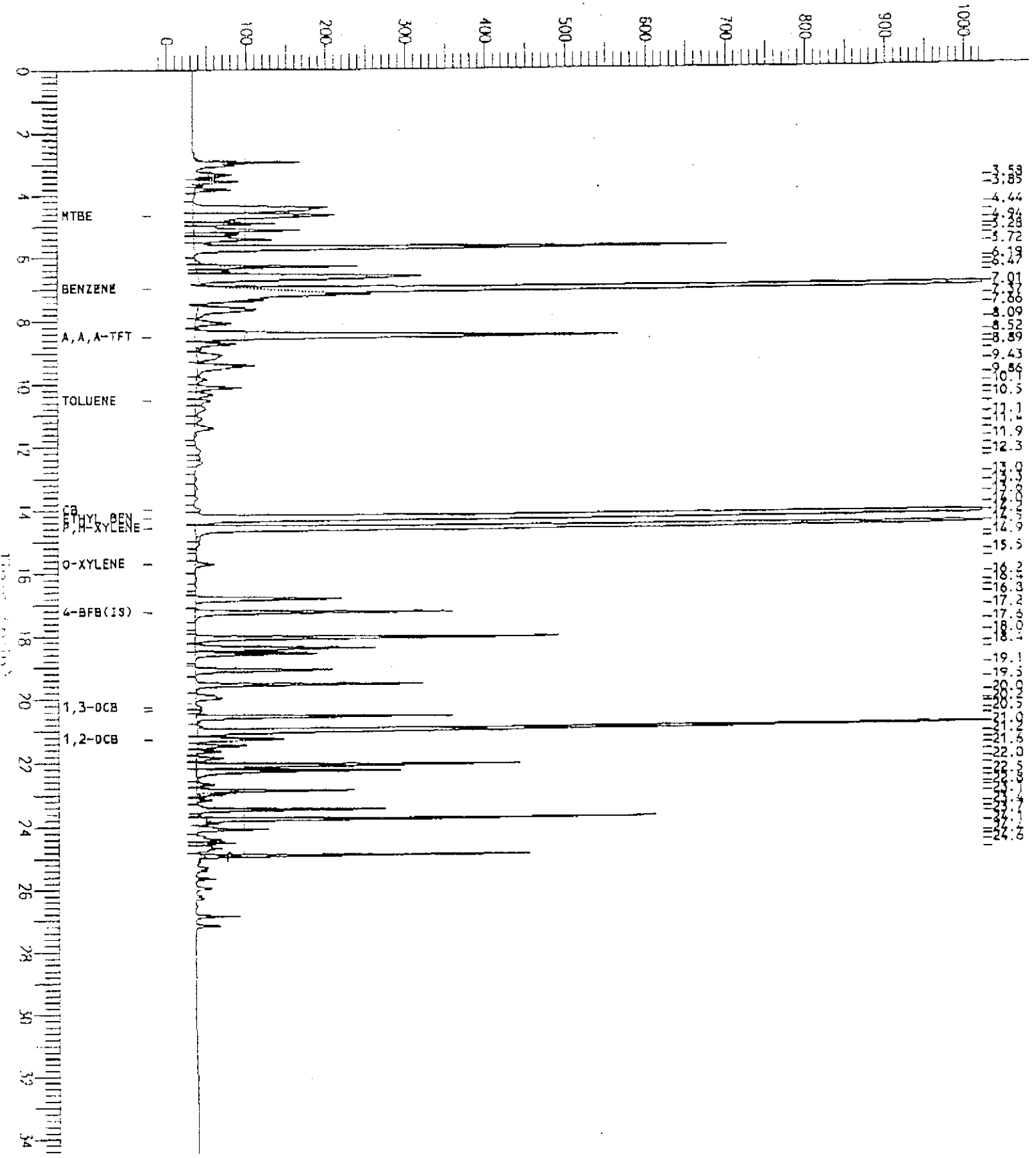
Sample Name : KEI
File Name : E:\B1DATA\F1JY606.raw
Method : BTEX1.lna
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 34.50 min
Plot Offset: -20 mV

Sample #: 3071877 MWL-3
Date : 8/27/93 10:57 AM
Time of Injection: 7/31/93 03:11 AM
Low Point : -19.74 mV
Plot Scale: 1043.7 mV

High Point : 1024.00 mV

Response (mV)



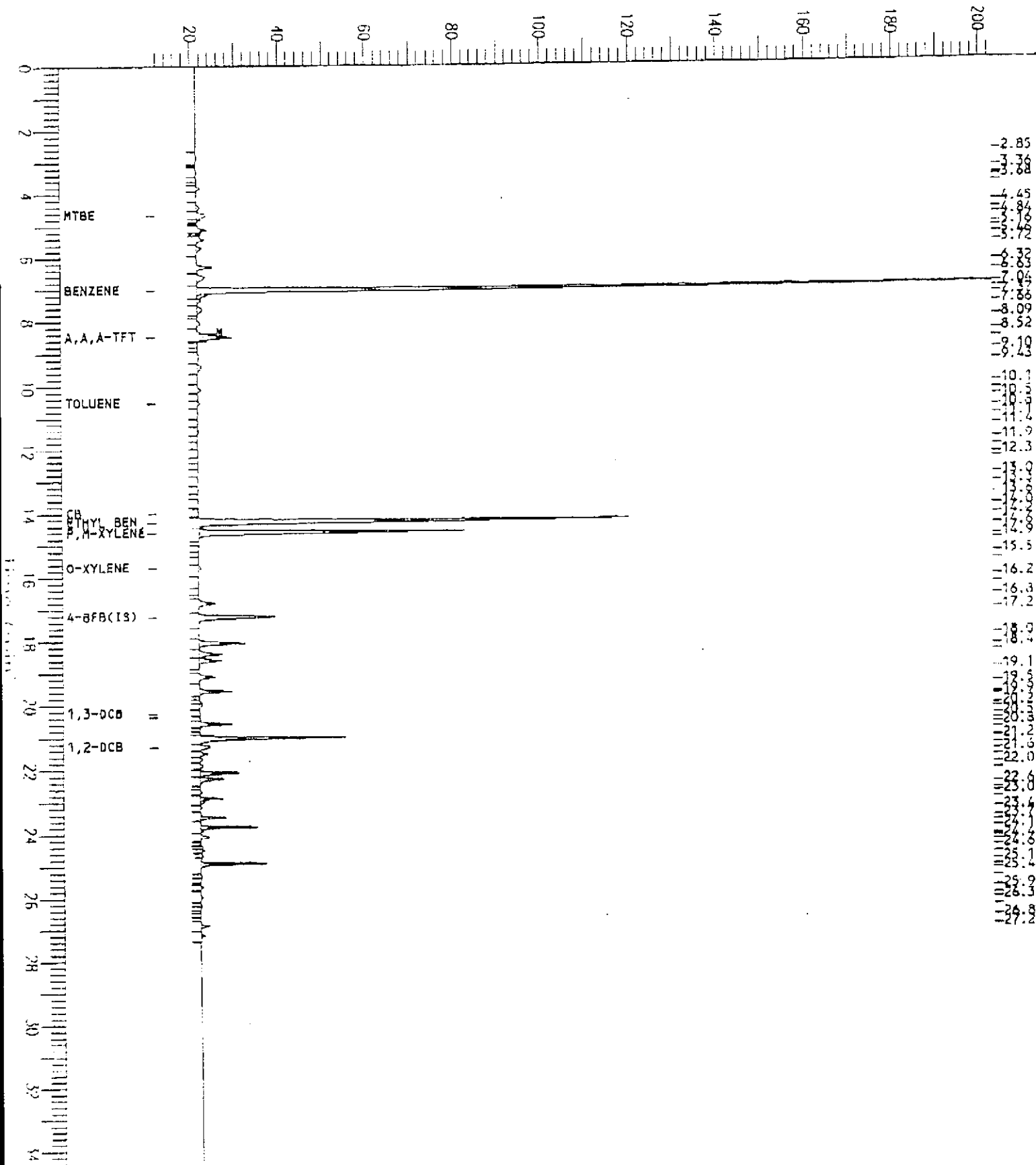
PID Chromatogram

Sample Name : KEI
FileName : E:\B1DATA\P1JY606.raw
Method : BTEX1.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 34.50 min
Plot Offset: 12 mV

Sample # : 3071077 YMW-3
Date : 8/27/93 11:09 AM
Time of Injection: 7/31/93 03:11 AM
Low Point : 11.69 mV
Plot Scale: 191.2 mV

Response (mV)



FID Chromatogram

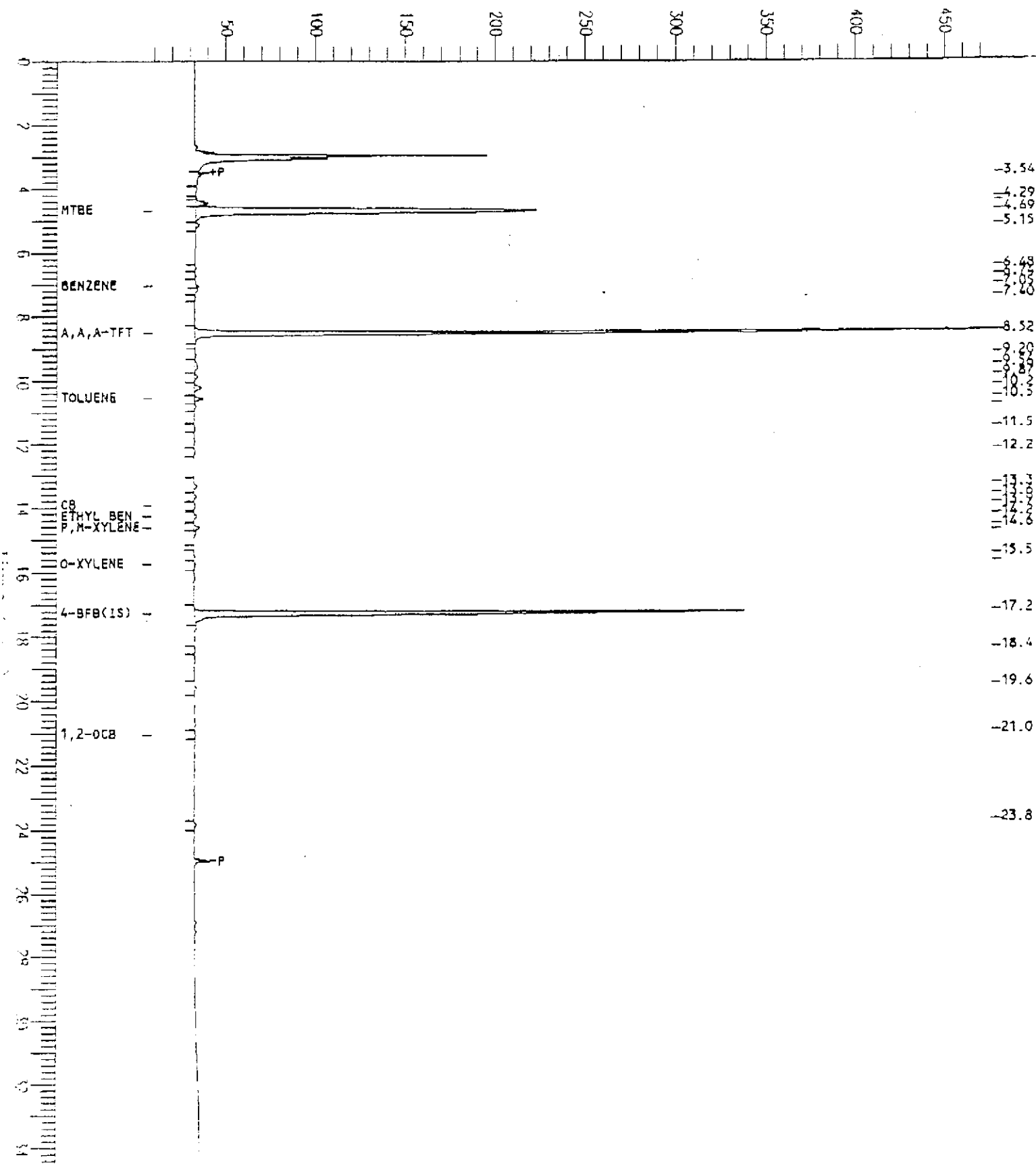
Sample Name : KEI
FileName : E:\B10DATA\F1JY607.raw
Method : BTEX1.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 34.50 min
Plot Offset: 9 mV

Sample #: 3071078 Y100-4
Date : 8/27/93 11:00 AM
Time of Injection: 7/31/93 03:51 AM
Low Point : 9.02 mV
Plot Scale: 468.7 mV

High Point : 477.75 mV

Response (mV)

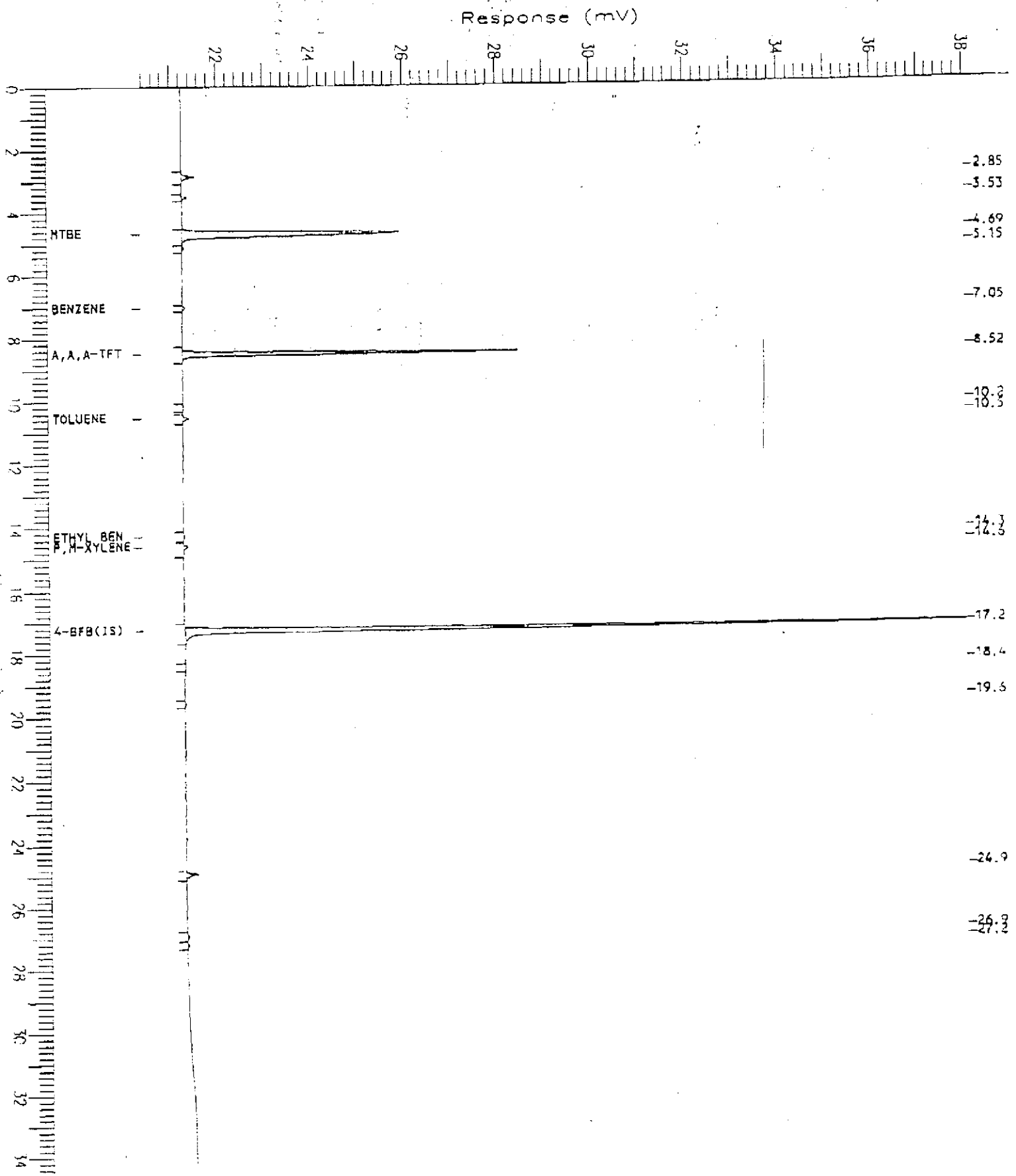


PID Chromatogram

mole Name : KE1
 fileName : E:\B1DATA\P1JY607.raw
 method : BT2X1.ins
 start Time : 0.00 min
 scale Factor : 0.0

End Time : 34.50 min
 Plot Offset : 20 mV

Sample #: 3071078 *ms-9*
 Date : 8/27/93 11:11 AM
 Time of Injection: 7/31/93 03:51 AM
 Low Point : 20.36 mV
 High Point : 38.05 mV
 Plot Scale : 17.7 mV

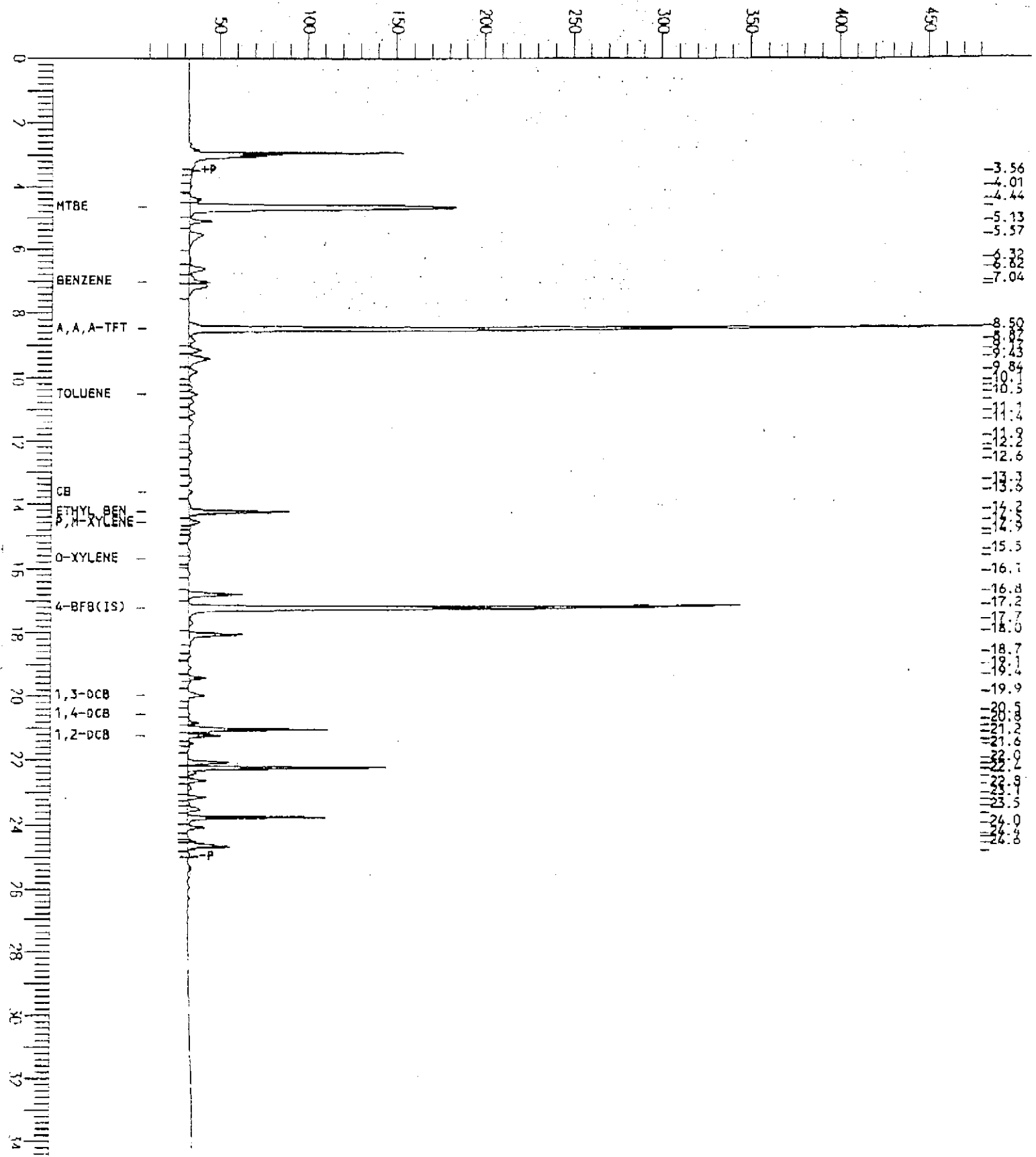


FID Chromatogram

Sample Name : KEI
FileName : E:\B1DATA\F1JY601.raw
Method : BTEX1.ins
Start Time : 0.00 min
Scale Factor : 0.0

Sample #: 302107-200-5
Date : 8/27/93 11:02 AM
Time of Injection: 7/30/93 11:49 PM
End Time : 34.50 min
Low Point : 8.76 mV
High Point : 481.56 mV
Plot Offset: 9 mV
Plot Scale: 472.8 mV

Response (mV)

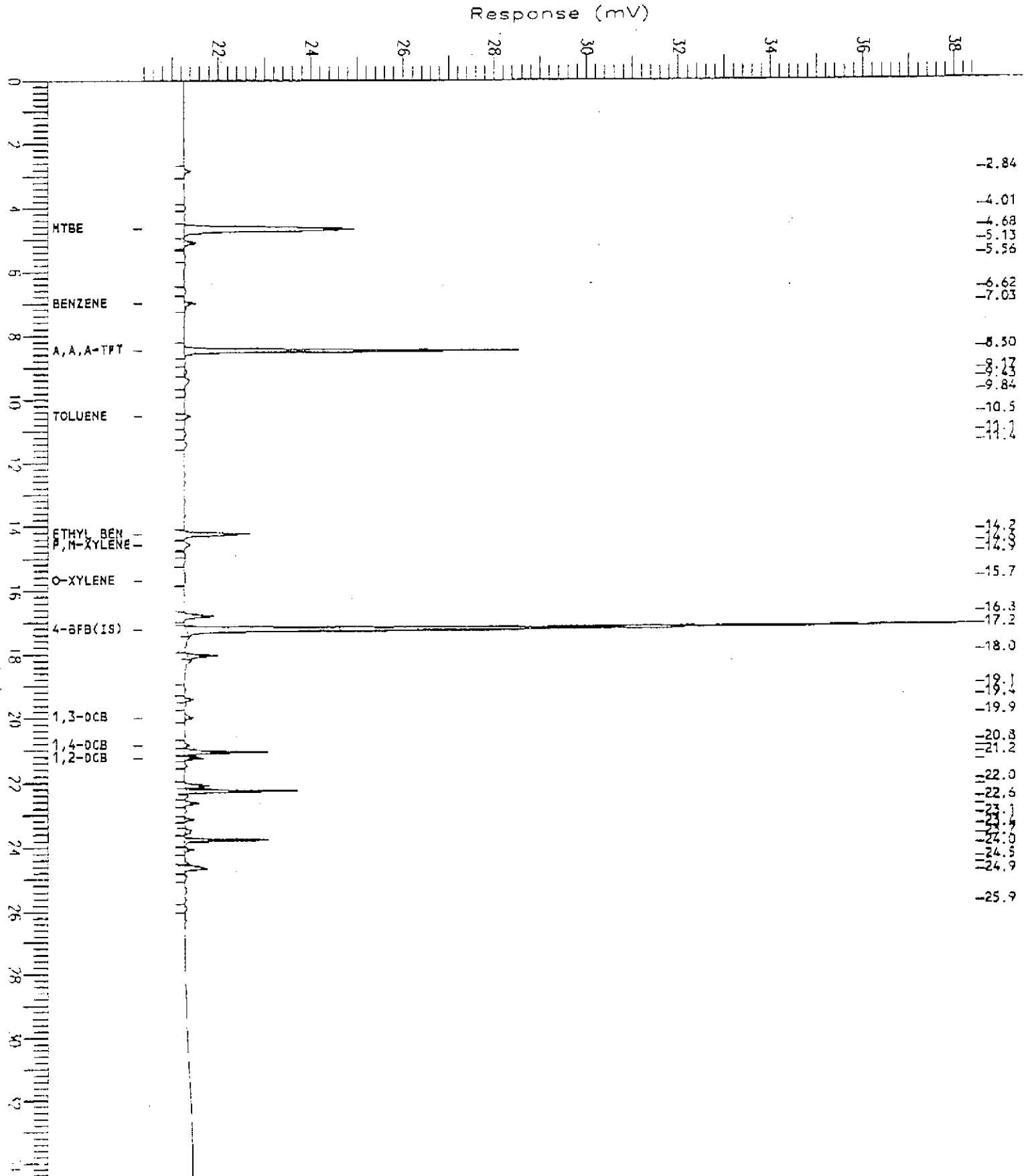


PID Chromatogram

Sample Name : KEI
FileName : E:\B1DATA\P1JY601.raw
Method : BTEX1.ina
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 34.50 min
Plot Offset: 20 mV

Sample # 3071079 YMU-S Page 1 of 1
Date : 8/27/93 11:13 AM
Time of Injection: 7/30/93 11:49 PM
Low Point : 20.35 mV High Point : 38.49 mV
Plot Scale: 18.1 mV

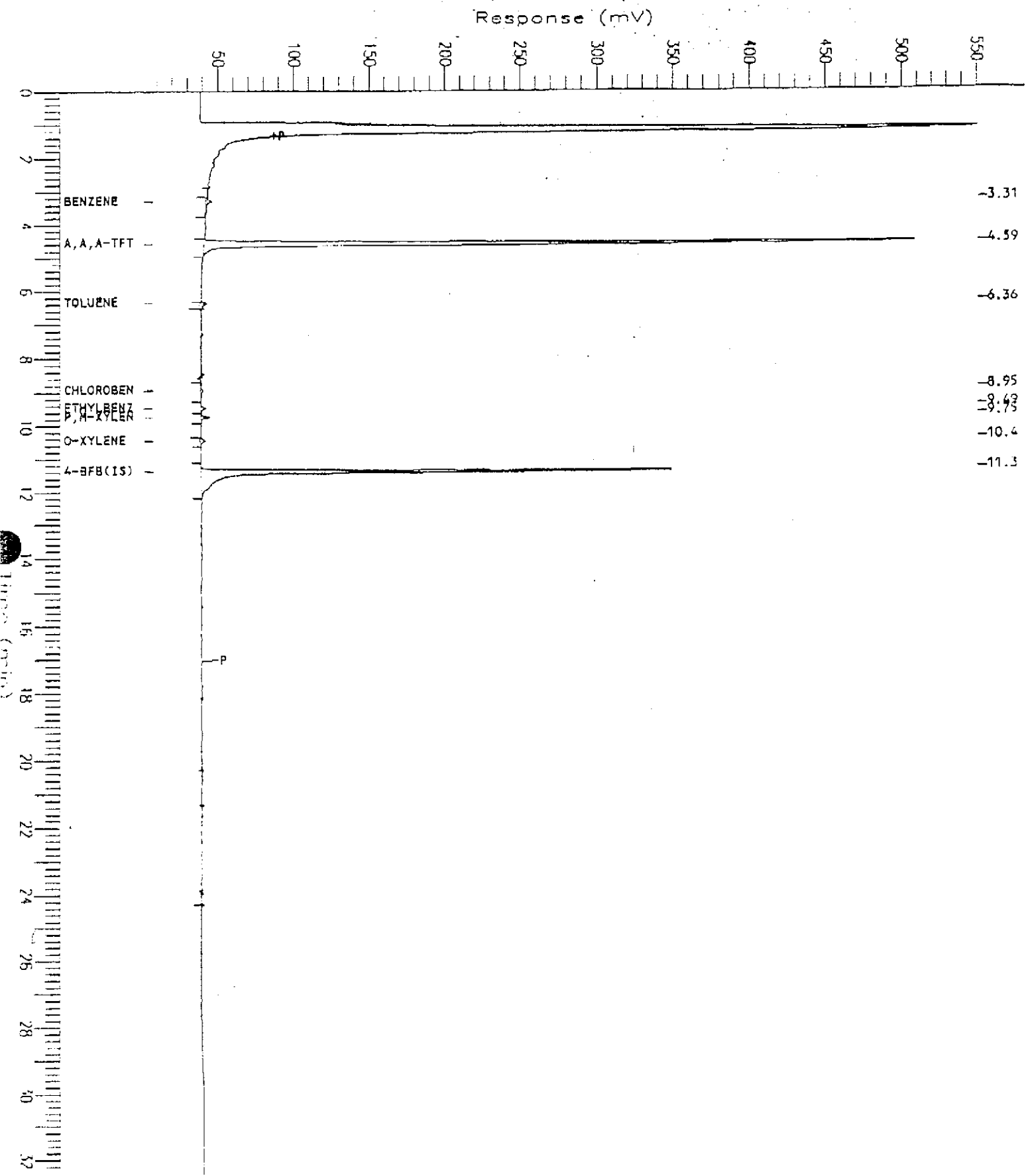


FID Chromatogram

Sample Name : KEI
FileName : E:\B3DATA\F3JY563.raw
Method : BTEX3.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 32.50 min
Plot Offset: 7 mV

Sample #: 307108
Date : 8/27/93 11:26 AM
Time of Injection: 7/29/93 11:15 PM
Low Point : 6.87 mV
Plot Scale: 544.0 mV
High Point : 550.90 mV



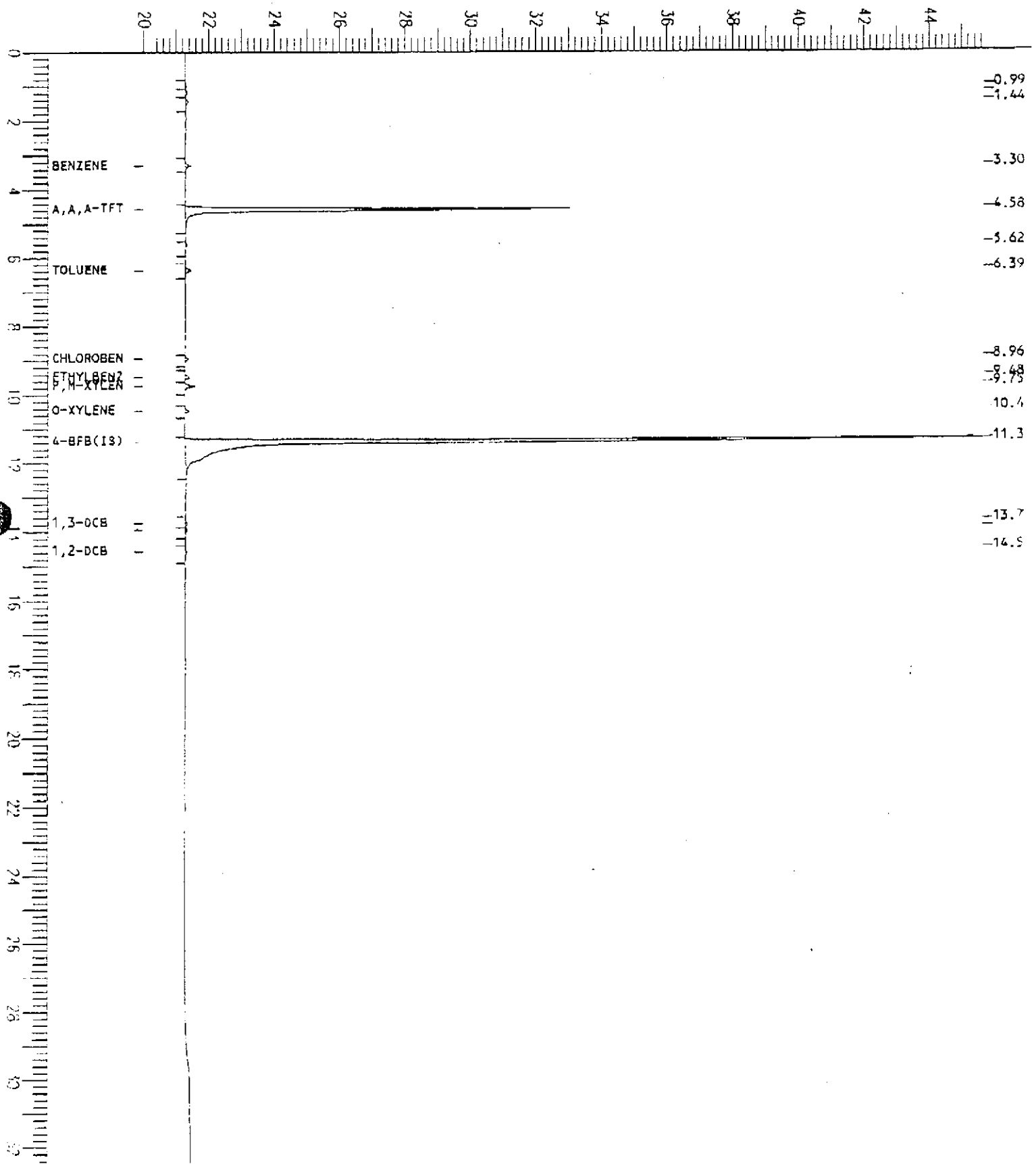
PID Chromatogram

Sample Name : KEI
FileName : E:\B3DATA\B3JY563.raw
Method : BTEX3.ins
Start Time : 0.00 min
Scale Factor : 0.0

End Time : 32.50 min
Plot Offset: 20 mV

Sample #: 3071080 MW-6
Date : 8/27/93 11:33 AM
Time of Injection: 7/29/93 11:15 PM
Low Point : 19.98 mV
Plot Scale: 25.7 mV

Response (mV)



FID Chromatogram

Sample Name : GBLK072993

Sample #: 8015AT07c

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FileName : E:\B3DATA\F3JY552.raw

Date : 8/27/93 11:29 AM

Method : BTEX3

Time of Injection: 7/29/93 03:50 PM

Start Time : 0.00 min

End Time : 32.50 min

Low Point : -10.13 mV

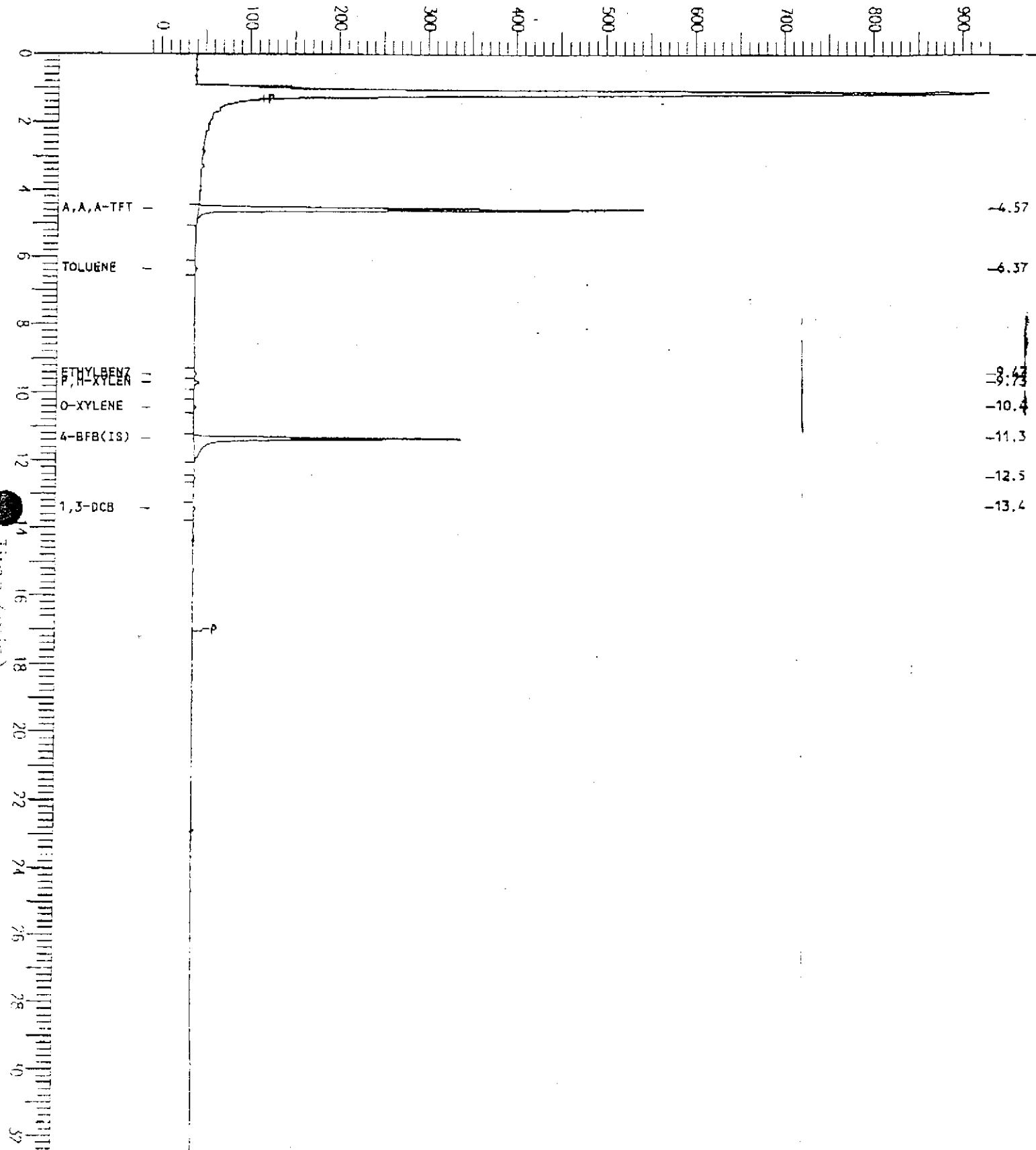
High Point : 930.21 mV

Scale Factor: 0.0

Plot Offset: -10 mV

Plot Scale: 940.3 mV

Response (mV)



PID Chromatogram

Sample Name : GBLK072993

Sample #: 8015AT07C

Page 1 of 1

File Name : E:\B3DATA\P3JY552.raw

Date : 8/27/93 11:31 AM

Method : BTEX3

Time of Injection: 7/29/93 03:50 PM

Start Time : 0.00 min

End Time : 32.50 min

Low Point : 20.15 mV

High Point : 45.11 mV

Scale Factor: 0.0

Plot Offset: 20 mV

Plot Scale: 25.0 mV

Response (mV)

