



KAPREALIAN ENGINEERING
INCORPORATED

April 15, 1993

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

Attention: Mr. Scott Seery

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

Dear Mr. Seery:

Unocal has received your correspondence dated March 29, 1993, requesting additional information regarding the referenced site and a change in the current monitoring and sampling program. Subsequently, Unocal has directed Kaprealian Engineering, Inc. to provide you with the requested information and to amend the current ground water monitoring and sampling schedule as you requested.

Enclosed please find the chromatograms for the TPH analyses conducted on wells MW1, MW2, and MW5 on April 14, 1992, and the chromatograms for the MTBE analyses performed on water samples collected from wells MW1, MW2, and MW5 on July 19, 1992. In addition, the monitoring and sampling schedule has been modified to include analyses of MTBE for all monitoring wells during the next two quarterly sampling events, beginning in April of 1993.

Hopefully, this information will assist you in evaluation of the monitoring and sampling program for this site. Should you have any questions or require any additional information, please do not hesitate to contact me at (510) 602-5106.

Sincerely,

Kaprealian Engineering, Inc.

Aram B. Kaloustian
Project Engineer

ABK:jad\SS04115

Encs.

cc: Mr. Robert A. Boust, Unocal Corporation

Chromatogram

Sample Name : KEI

Sample #: 2040635 MW1

Page 1 of 1

FileName : E:\B1DATA\PIAP429.raw

Date : 4/21/92 1:50 AM

Method : BTEX1.ins

Time of Injection: 4/21/92 1:09 AM

Start Time : 0.00 min

End Time : 34.50 min

Low Point : 20.76 mV

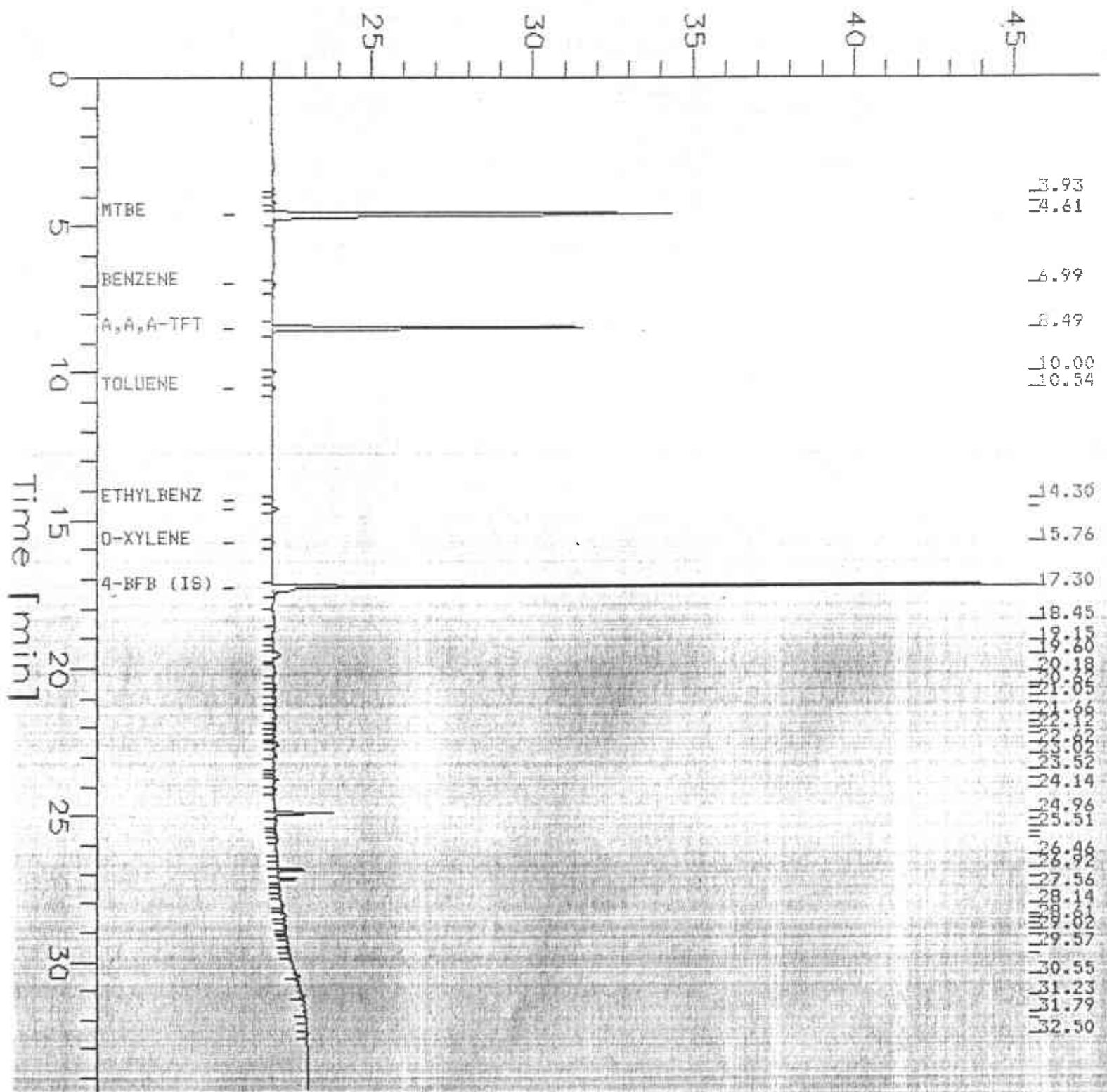
High Point : 45.48 mV

Scale Factor : 1

Plot Offset: 21 mV

Plot Scale: 25 mV

Response [mV]



Chromatogram

Sample Name : KE1

Sample #: 2040636 MW2

Page 1 of 1

FileName : E:\B1DATA\PIAP430.raw

Date : 4/21/92 2:26 AM

Method : BTEX1.ins

Time of Injection: 4/21/92 1:50 AM

Start Time : 0.00 min

End Time : 34.50 min

Low Point : 20.76 mV

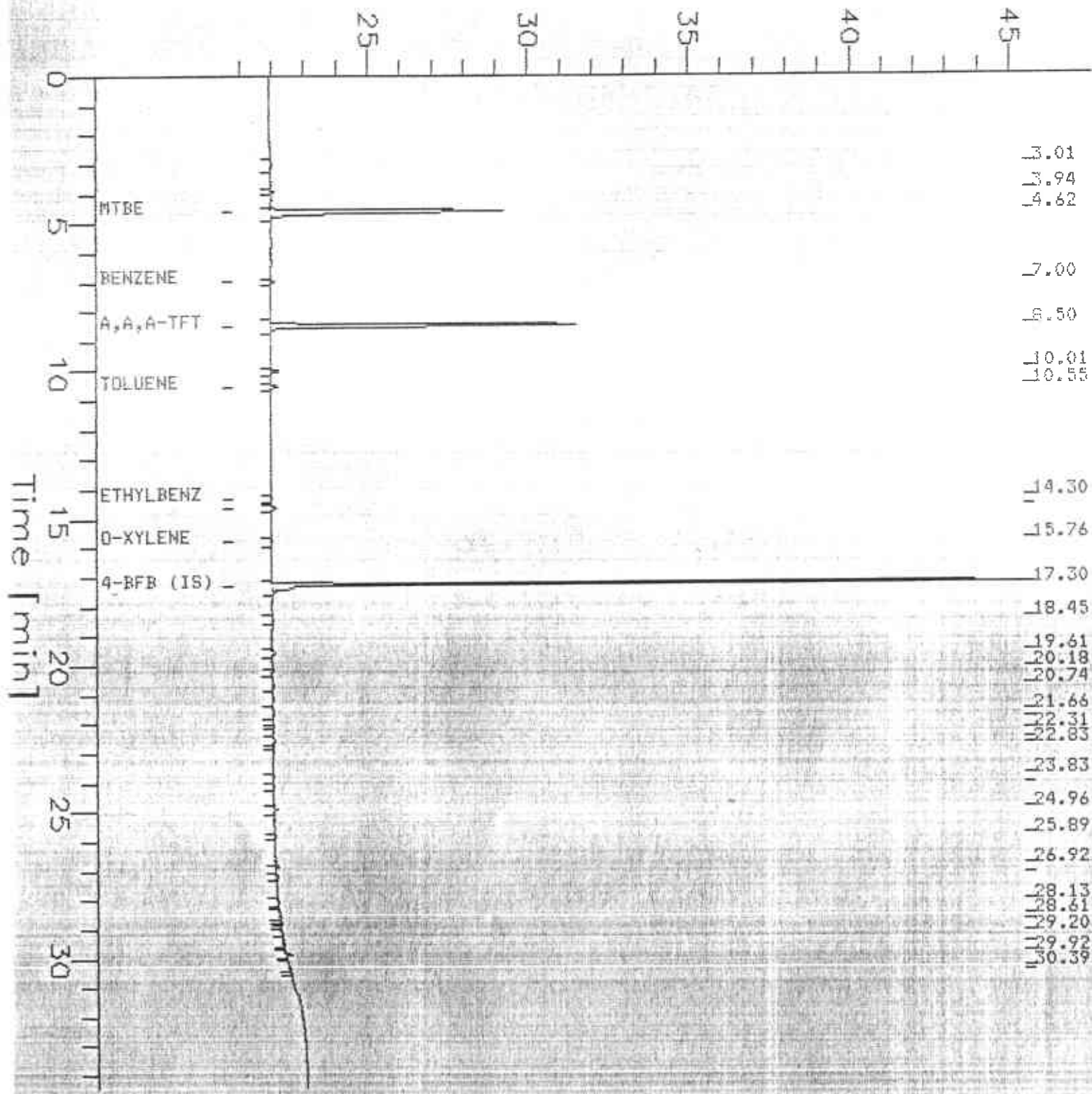
High Point : 45.46 mV

Scale Factor: 1

Plot Offset: 21 mV

Plot Scale: 25 mV

Response [mV]



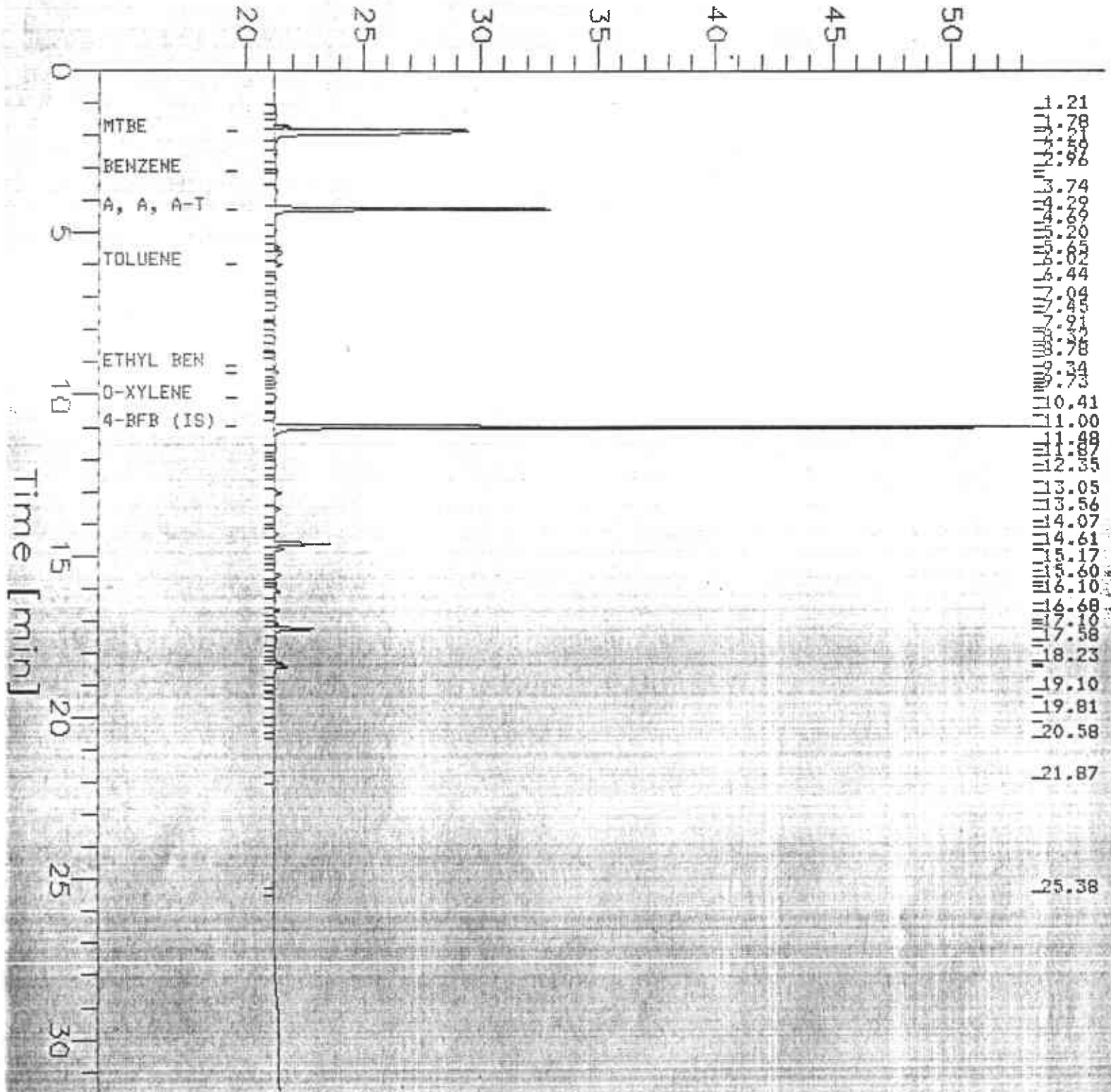
Chromatogram

Sample Name : KEI
 FileName : E:\B2DATA\P2AP440.raw
 Method : BTEX2.ins
 Start Time : 0.00 min
 Scale Factor: 1

End Time : 31.67 min
 Plot Offset: 20 mV

Sample #: 2040639 MW5
 Date : 4/21/92 2:49 PM
 Time of Injection: 4/21/92 2:16 PM
 Low Point : 19.61 mV
 High Point : 53.56 mV
 Plot Scale: 34 mV

Response [mV]



Chromatogram

Sample Name : 5000 NG GAS STD

Sample #: 8015KN03

Page 1 of 1

File Name : E:\BIDATA\FIAP409.Fam

Date : 4/20/92 10:47 AM

Method : BTEX1.ins

Time of Injection: 4/20/92 10:11 AM

Start Time : 0.00 min

End Time : 34.50 min

Low Point : -11.93 mV

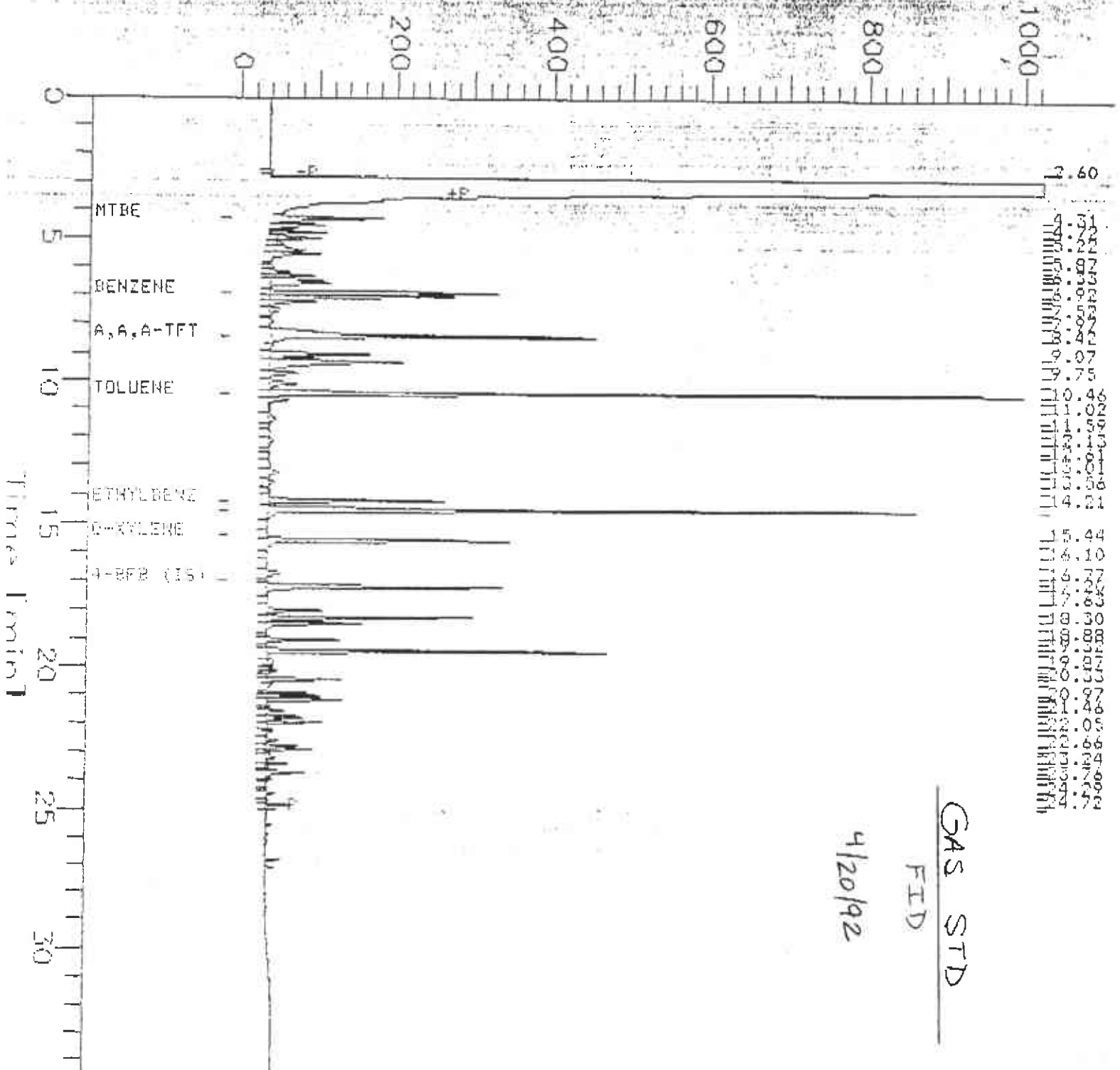
High Point : 1024.00 mV

Scale Factor : 1

Plot Offset: -12 mV

Plot Scale: 1036 mV

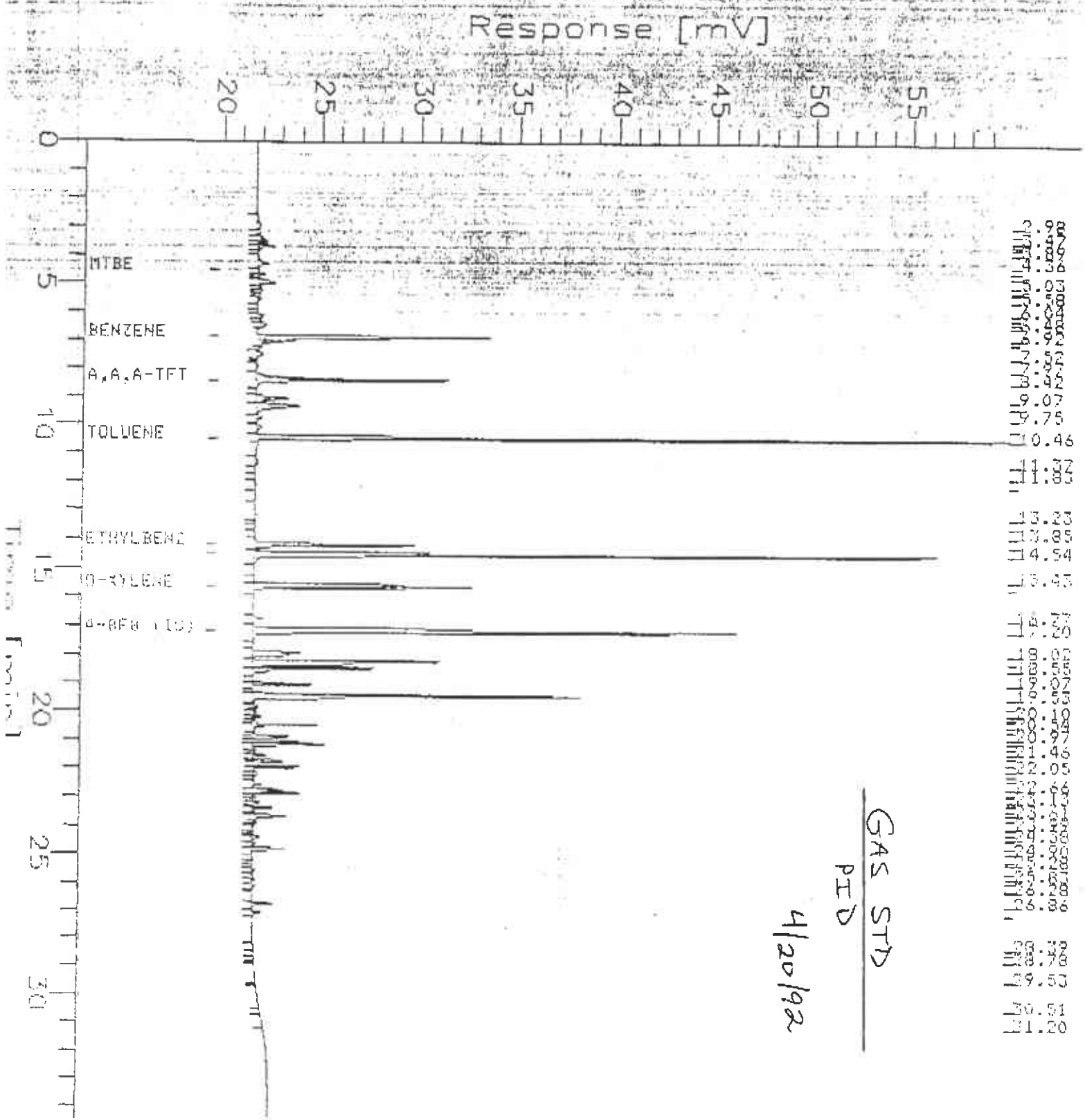
Response [mV]



GAS STD
FID
4/20/92

Chromatogram

Name: 3000 NG BAS STD
 Sample #: 8015KN03L
 Page 1 of 1
 File Name: E:\B1DATA\PIAP409.raw
 Date: 4/20/92 10:49 AM
 Method: BTEX1.ins
 Time of Injection: 4/20/92 10:11 AM
 Start Time: 0.00 min
 End Time: 34.30 min
 Low Point: 19.76 mV
 High Point: 39.99 mV
 Calc Factor: 1
 Plot Offset: 20 mV
 Plot Scale: 40 mV



Retention Time (min)	Peak Label	Approximate Response (mV)
4.5	MTBE	20
7.5	BENZENE	35
9.5	A,A,A-TFT	30
10.5	TOLUENE	45
14.5	ETHYLENE	40
15.5	p-XYLENE	45
18.5	p-BFB (10)	40

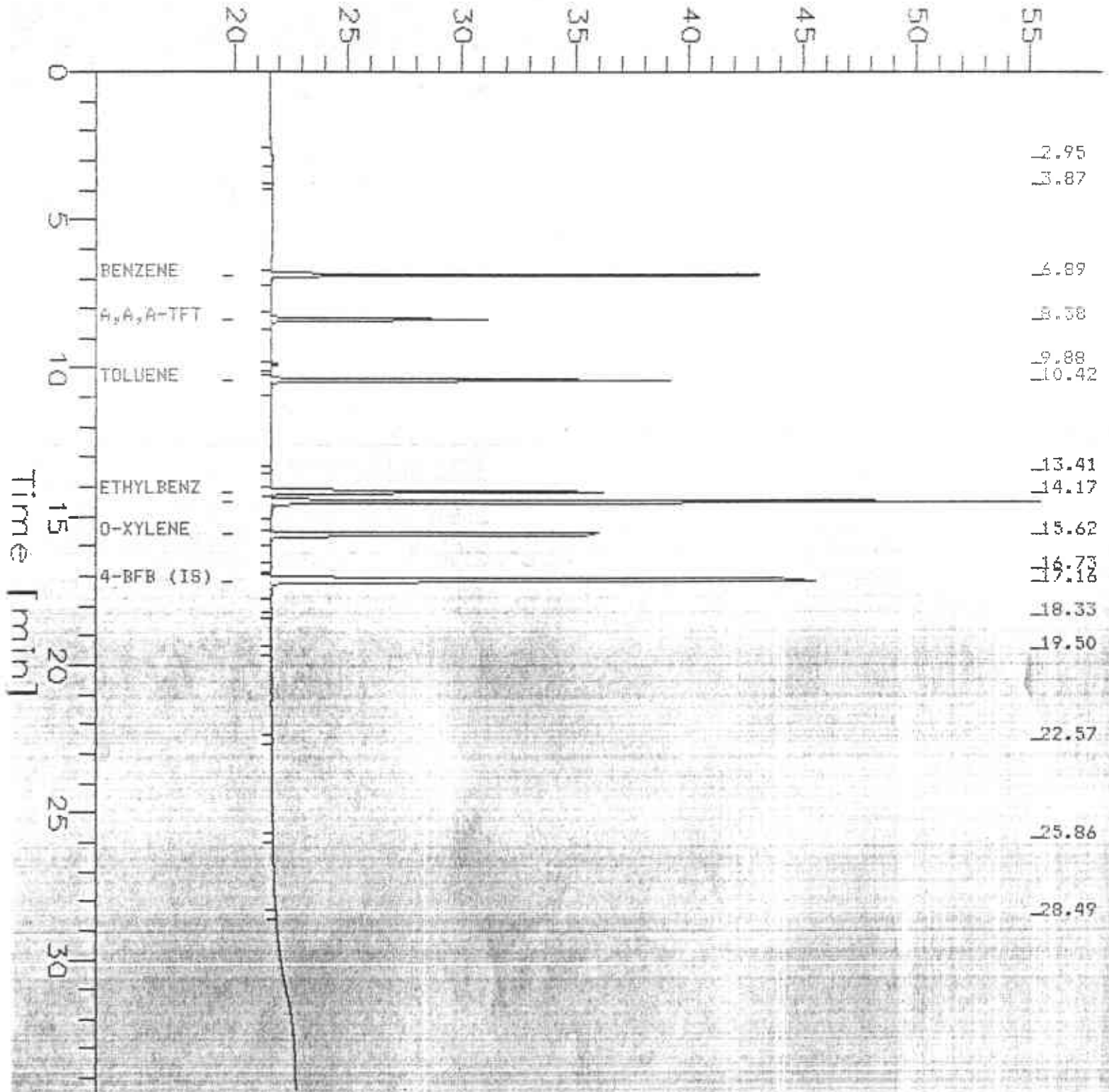
Chromatogram

Sample Name: 200 MG BTEX STD
File Name: E:\B1DATA\1AP408.raw
Method: BTEX1.ins
Start Time: 0.00 min
Scale Factor: 1

End Time: 34.50 min
Plot Offset: 20 mV

Sample #: 8015JF02E
Date: 4/20/92 10:08 AM
Time of Injection: 4/20/92 9:31 AM
Low Point: 19.91 mV
High Point: 55.07 mV
Plot Scale: 35 mV

Response [mV]





KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER <i>RAY KEI</i>		SITE NAME & ADDRESS <i>UNOCAL SAN LEANARO 15599 HESPERIAN BLVD</i>						ANALYSES REQUESTED				TURN AROUND TIME: <i>REGULAR</i>			
WITNESSING AGENCY								<i>TPHG</i>				<i>BTXE</i>			
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION				REMARKS			
<i>MW1</i>	<i>4-14</i>			<i>x</i>	<i>x</i>		<i>2</i>	<i>W02A</i>		<i>x</i>	<i>x</i>	<i>2040635 AB</i>			
<i>MW2</i>	<i>"</i>			<i>x</i>	<i>x</i>		<i>"</i>			<i>x</i>	<i>x</i>	<i>636 AB</i>			
<i>MW3</i>	<i>"</i>			<i>x</i>	<i>x</i>		<i>"</i>			<i>x</i>	<i>x</i>	<i>637 AB</i>			
<i>MW4</i>	<i>"</i>			<i>x</i>	<i>x</i>		<i>"</i>			<i>x</i>	<i>x</i>	<i>638 AB</i>			
<i>MW5</i>	<i>"</i>			<i>x</i>	<i>x</i>		<i>"</i>			<i>x</i>	<i>x</i>	<i>639 AB</i>			
<i>MW6</i>	<i>"</i>			<i>x</i>	<i>x</i>		<i>"</i>			<i>x</i>	<i>x</i>	<i>640 AB</i>			
Relinquished by: (Signature) <i>Ray Kei</i>			Date/Time <i>4.14.92</i>		Received by: (Signature) <i>Jim Cottrell</i>			Date/Time <i>4/14/92 4:25</i>		<p>The following MUST BE completed by the laboratory accepting samples for analysis:</p> <ol style="list-style-type: none"> Have all samples received for analysis been stored in ice? <input checked="" type="checkbox"/> Will samples remain refrigerated until analyzed? <input checked="" type="checkbox"/> Did any samples received for analysis have head space? <input checked="" type="checkbox"/> Were samples in appropriate containers and properly packaged? <input checked="" type="checkbox"/> 					
Relinquished by: (Signature) <i>mm</i>			Date/Time <i>4/15/92</i>		Received by: (Signature) <i>Ken Spaulding</i>			Date/Time <i>4/15/92 5:55 PM</i>							
Relinquished by: (Signature) <i>Ken Spaulding</i>			Date/Time <i>4/15/92 5:55 PM</i>		Received by: (Signature)			Date/Time							
Relinquished by: (Signature)			Date/Time		Received by: (Signature)			Date/Time							
										<i>J.C.</i>		<i>Analyst</i>			
										Signature		Title			
												<i>4/14/92</i>			
												Date			

Chromatogram

Sample Name : 200 NG BTEX

Sample #: 8015JF07C

Page 1 of 1

FileName : E:\B1DATA\PIJY212.raw

Date : 7/15/92 10:25 AM

Method : BTEX1.ins

Time of Injection: 7/15/92 9:49 AM

Start Time : 0.00 min

End Time : 34.50 min

Low Point : 9.64 mV

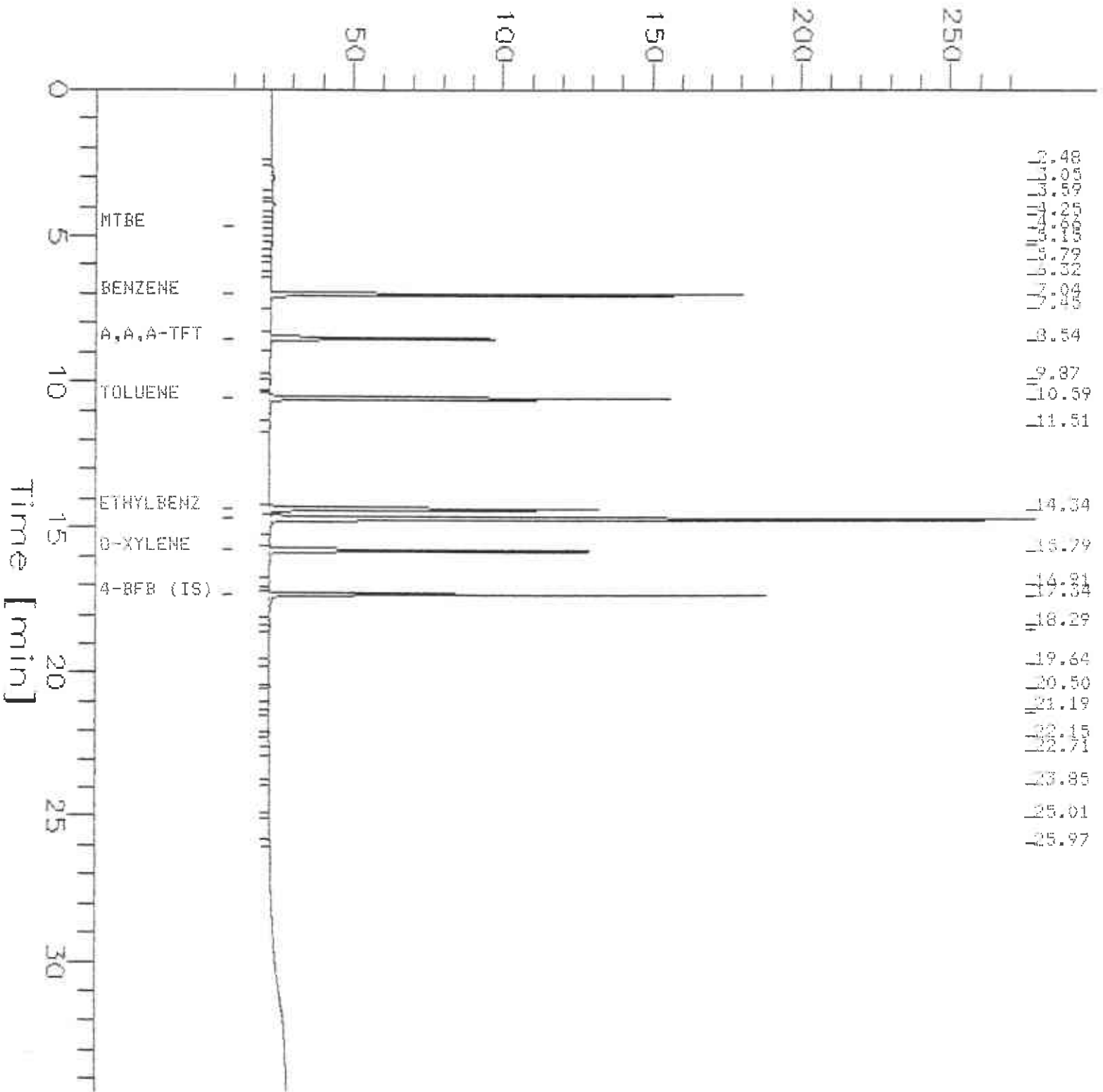
High Point : 275.77 mV

Scale Factor: 1

Plot Offset: 10 mV

Plot Scale: 266 mV

Response [mV]



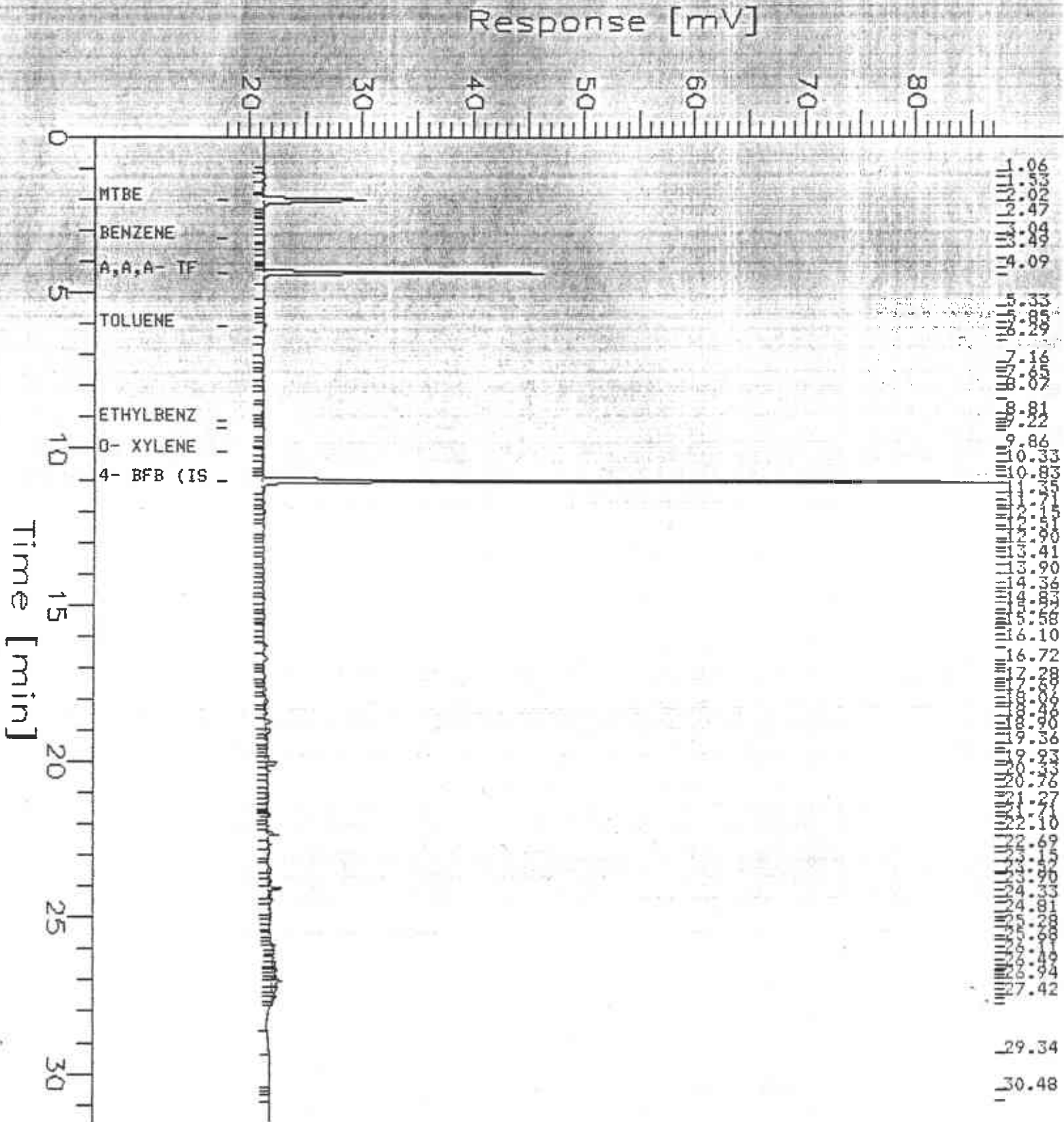
Chromatogram

Sample Name : 200NG MTBE
 FileName : E:\B2DATA\23Y302.raw
 Method : BTEX2.ins
 Start Time : 0.00 min
 Scale Factor : 1

End Time : 31.67 min
 Plot Offset: 18 mV

Sample #: 8015JF01H
 Date : 7/17/92 6:29 PM
 Time of Injection: 7/17/92 5:19 PM
 Low Point : 17.90 mV
 Plot Scale: 69 mV

Page 1 of 1

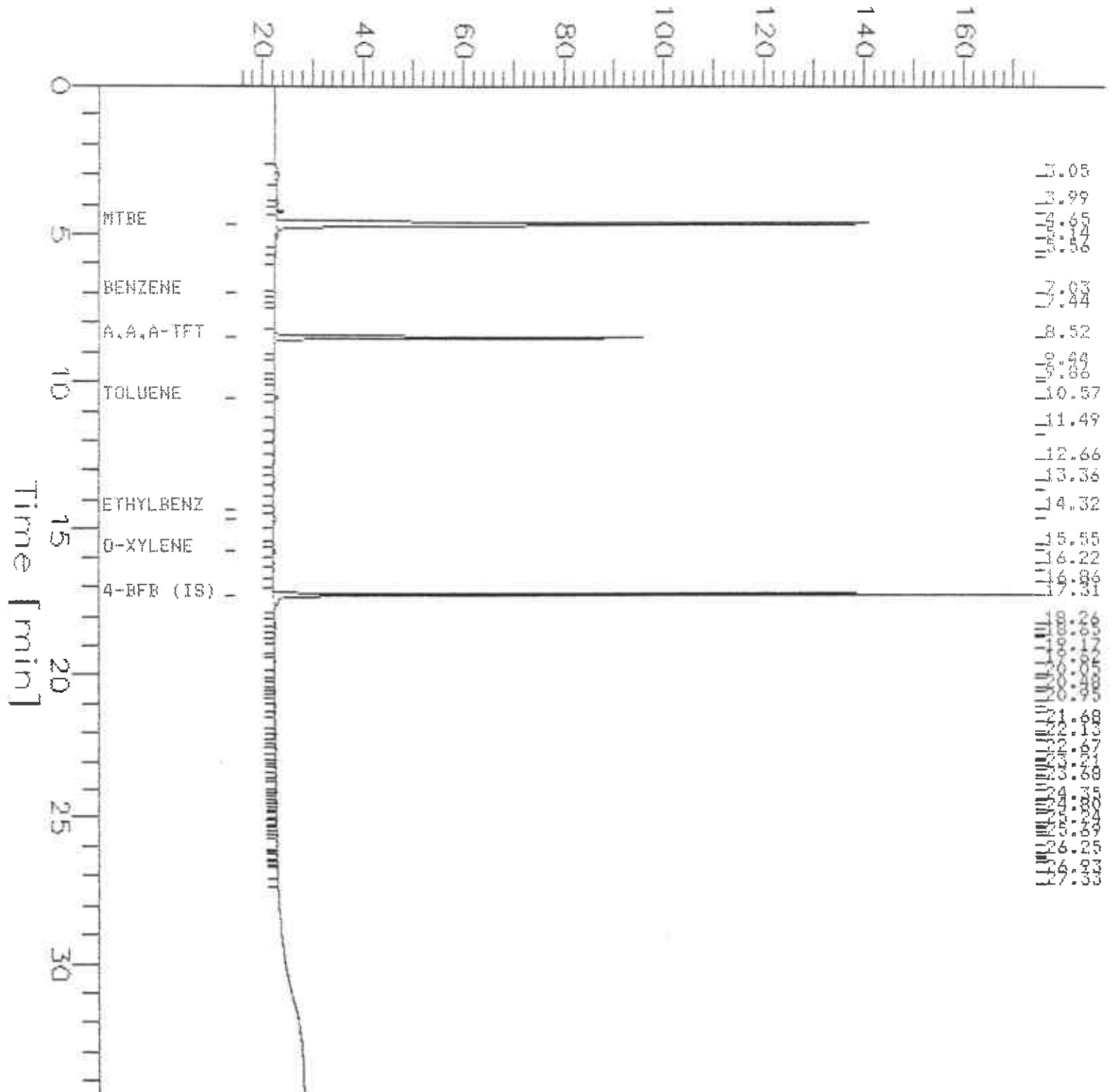


Chromatogram

Sample Name : KEI
 FileName : E:\B1DATA\PIV217.raw
 Method : BTEX1.ins
 Start Time : 0.00 min
 Scale Factor : 1

Sample #: 207032B MW-1
 Date : 7/15/92 2:06 PM
 Time of Injection: 7/15/92 1:30 PM
 Low Point : 14.71 mV
 High Point : 174.46 mV
 Plot Scale: 160 mV

Response [mV]



Chromatogram

Sample Name : KEI

Sample #: 2070329 MW-2

Page 1 of 1

fileName : E:\81DATA\F1JY218.raw

Date : 7/15/92 2:45 PM

Method : BTEX1.int

Time of Injection: 7/15/92 2:10 PM

Start Time : 0.00 min

End Time : 34.00 min

Low Point : -16.41 mV

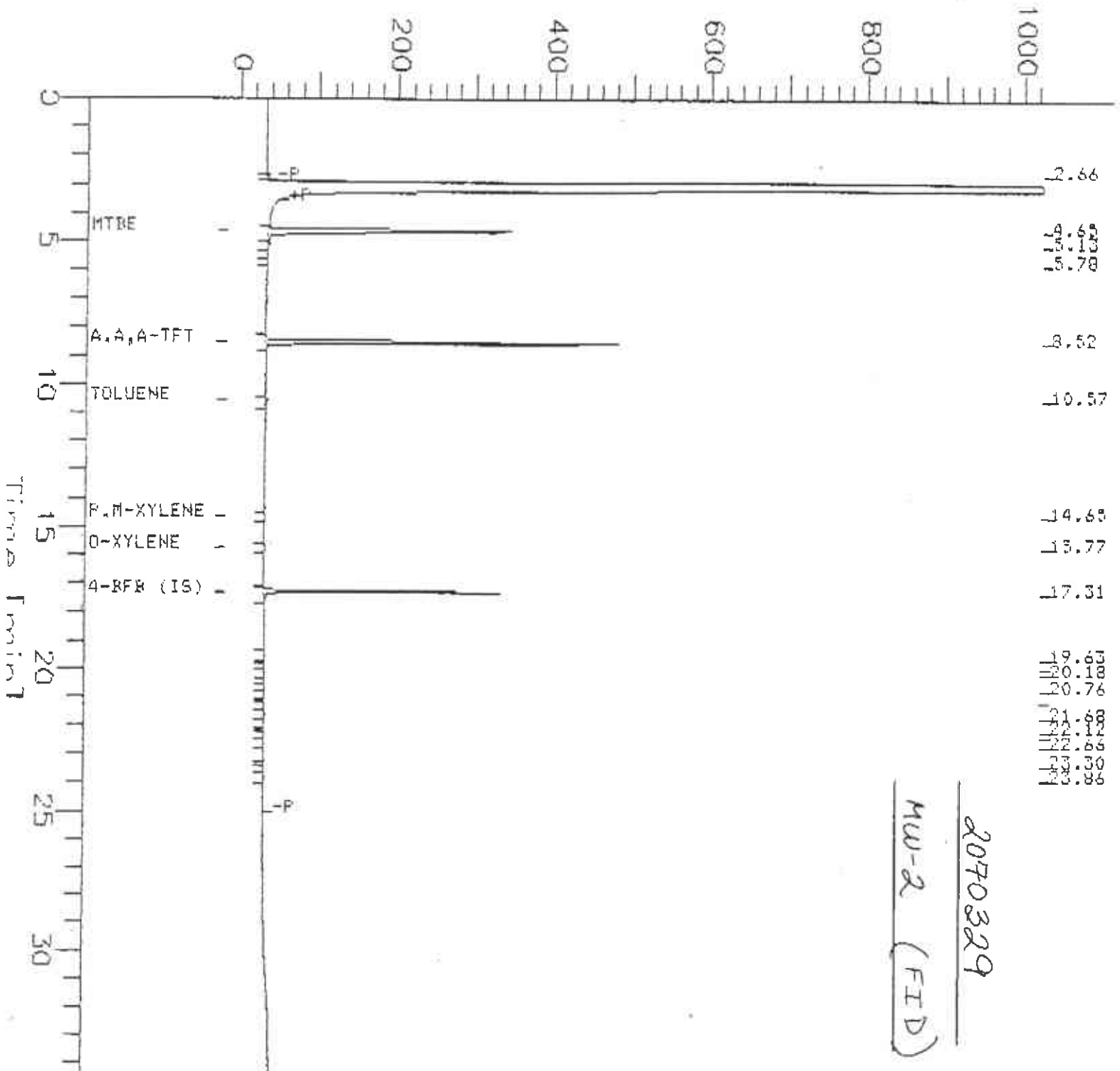
High Point : 1024.00 mV

Scale Factor : 1

Plot Offset: -16 mV

Plot Scale: 1040 mV

Response [mV]



2070329
 MW-2 (FID)

Chromatogram

Name : KEI

Sample #: 2070332 *MUS*

Page 1 of 1

FileName : E:\BIDATA\F1JY223.raw

Date : 7/15/92 6:07 PM

Method : BTEX1.ins

Time of Injection: 7/15/92 5:32 PM

Start Time : 0.00 min

End Time : 34.50 min

Low Point : -16.62 mV

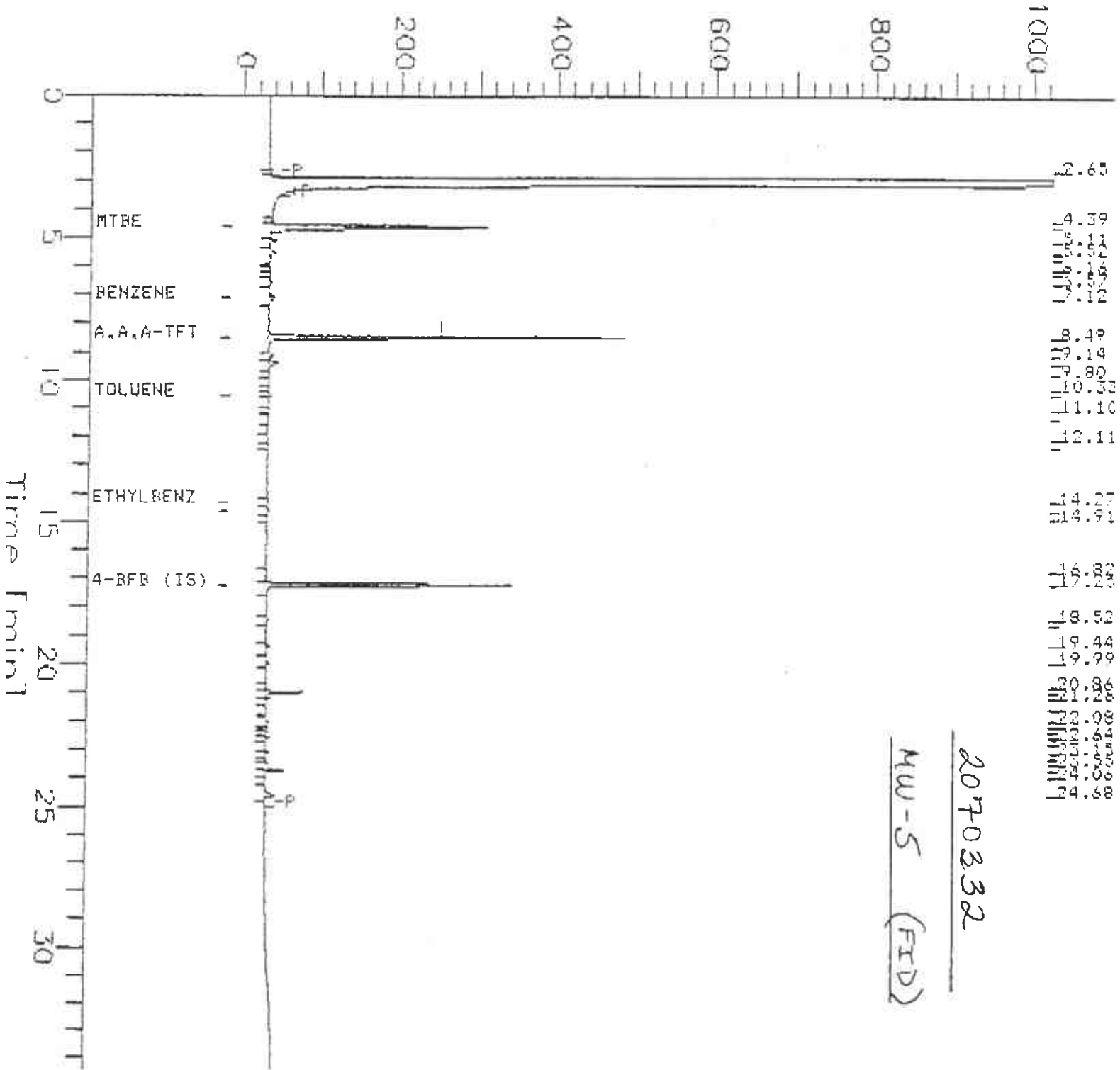
High Point : 1024.00 mV

Scale Factor: 1

Plot Offset: -17 mV

Plot Scale: 1041 mV

Response [mV]





KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER		SITE NAME & ADDRESS		ANALYSES REQUESTED				TURN AROUND TIME:			
Vartkes		Unocal / San Leandro 15599 Hesperian Blvd.		TPHG: BTX MTBE				Regular			
WITNESSING AGENCY								REMARKS			
SAMPLE ID-NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	CONT.	SAMPLING LOCATION	TPHG: BTX	MTBE	
MW-1	7/9/92	9:40 A.M.		✓	✓		4	Monitoring Well	✓	✓	2070328AD ↓ 329AD 330AB 331AB 332AD 333AB
MW-2	"	"		✓	✓		4	"	✓	✓	
MW-3	"	"		✓	✓		2	"	✓		
MW-4	"	"		✓	✓		2	"	✓		
MW-5	"	"		✓	✓		4	"	✓	✓	
MW-6	"	12:45 P.M.		✓	✓		2	"	✓		
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		The following MUST BE completed by the laboratory accepting samples for analysis:					
W. Tardiff		7/9/92		W. Tardiff 7/9/92 9:55AM		1. Have all samples received for analysis been stored in ice? <u>Y</u>					
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		2. Will samples remain refrigerated until analyzed? <u>Y</u>					
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		3. Did any samples received for analysis have head space? <u>NO</u>					
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		4. Were samples in appropriate containers and properly packaged? <u>Y</u>					
						Signature		Title		Date	
						S		F.S.		7/9/92	