

Woodward-Clyde Consultants



Engineering & sciences applied to the earth & its environment

90 MAR 19 10 11:19

11 March 1993

Jeff Shapiro
Alameda County Health Agency
80 Swan Way, Room 200
Oakland, California 94621

Regarding: Continental Baking Company UST Removal
6841 Village Parkway
Dublin, California

Dear Mr. Shapiro:

Enclosed are the laboratory-generated analytical reports for the above-referenced site. These reports are provided to you as requested. During your review of the data, please keep in mind that we are still in the process of reviewing the data quality and are not providing any data interpretation in this submittal. We will submit a report with our interpretations and other UST closure documentation after site restoration (excavations backfilled, stockpiled soil disposed, etc.) has been completed.

For your convenience, we have enclosed sketches of the site plan showing locations of the UST closure samples. Should you have any questions or require additional information, please do not hesitate to call me at (510) 874 3081.

Sincerely,



Anita Yan

Enclosure

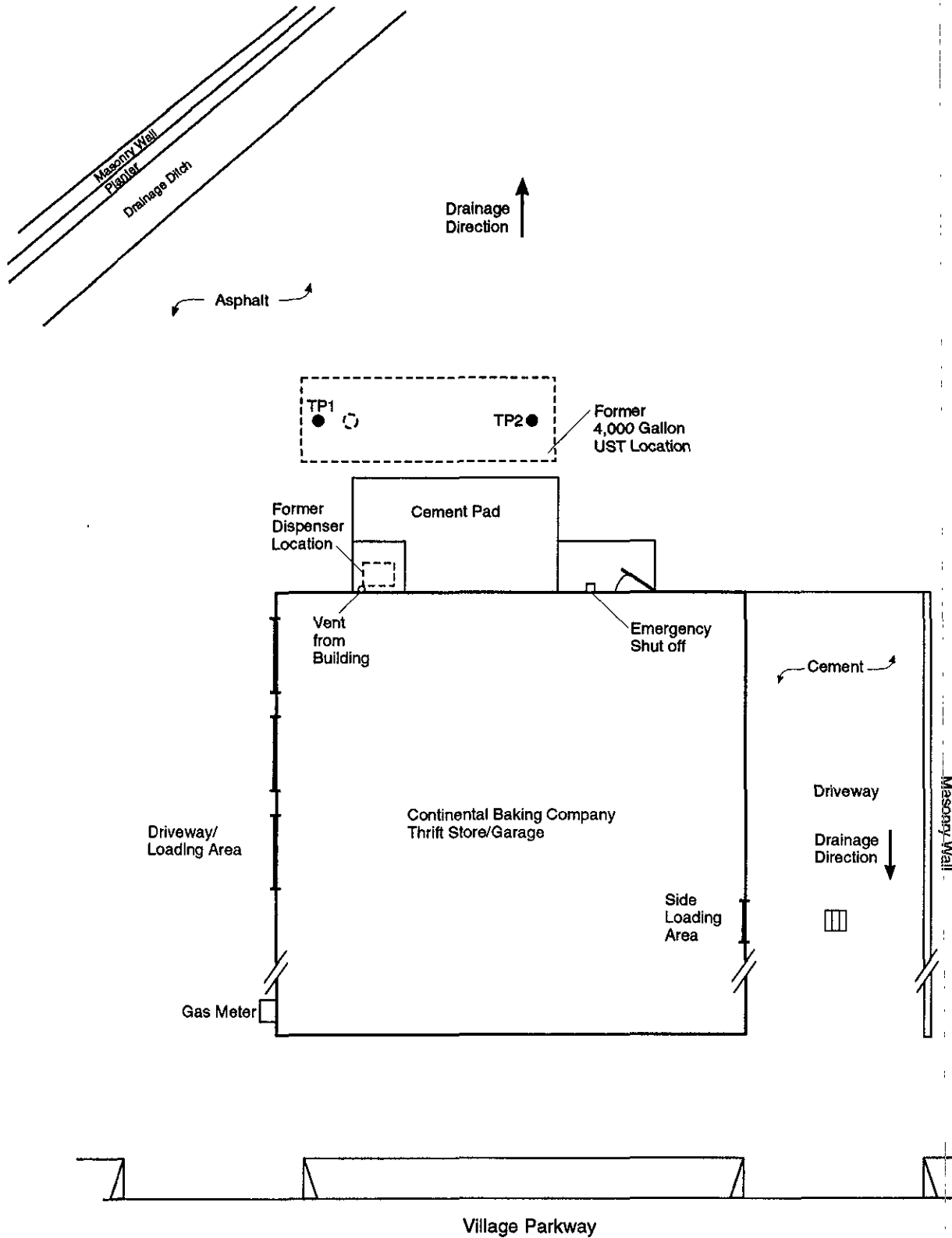
cc: (with enclosure)

Fred Dannecker

cc: (without enclosure)

Charles Gjersvik
RWQCB, San Francisco Bay Region





LEGEND

- Tank Closure Soil Sample Locations
- ▤ Storm Drain



(not to scale)

Project No. 92CB037	Continental Baking Company 6841 Village Parkway Dublin, California	SITE PLAN AND LOCATIONS OF UST CLOSURE SOIL SAMPLES	Figure 3
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NAT → /ETC

Mid-Pacific Environmental Laboratory, Inc.
625B Clyde Avenue
Mountain View, CA 94043
(415) 964 0844
FAX (415) 961 7113

Woodward Clyde Consultants
500 12th Street Suite 100
Oakland, CA 94607-4014

January 12, 1993
MPELI Order#: 92-12-130
Date Received: 12/18/92

Attn: Anita Yan

Subject: Analysis of 2 Soil Samples, 1 Composite

Work ID: 92CB037/0000

P.O. #: none given

Pages in report: 16

Analysis of soil samples for higher boiling petroleum hydrocarbons (diesel, kerosene, & oil) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Preparation and analysis of soil samples for organic metals by Flame Atomic Absorption were performed by following California Dept of Health Services SOP #938 Rev. 1, March 1989.

Analysis of soil samples for lower boiling petroleum hydrocarbons (benzene, toluene, ethylbenzene, xylenes, and gasoline) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., 1986).

Samples were analyzed for requested general chemical parameters following Methods for Chemical Analysis of Water and Wastes (EPA 1983) or Test Methods for Evaluating Solid Wastes (SW-846, 3rd Ed., 1986). The test method used is listed along with the particular analysis.

NOTES

Method TPH-GAS: For the analysis of the composite sample, a chromatographic pattern was observed that did not match the patterns of our in-house standards for this method. This component was semi-quantitated by comparison to the gasoline standard and is reported as "unknown".

QC Batch# 0123A: The MS/MSD recoveries were unobtainable due to the high level of analyte present in the sample selected. The result of the LCS is reported.

All analyses have been conducted in batches of 20 samples or less. Each QC batch consists of a method blank, a Matrix Spike, a Matrix Spike Duplicate and a

Laboratory Control Sample. The QC information is in a separate QC Report at the end of the regular report. To find the associated QC data, identify the batch number for the analysis of interest and look for that number in the QC Report for that test. Occasionally a sample will be associated with a sub-batch, which will end in a letter other than "A". The main batch will include the original blank, MS, MSD, and LCS. The sub-batch will contain the additional blank associated with the sample and LCS.

All analytes reported above detection limits on gas chromatography analyses have been confirmed by a second dissimilar column.

Samples were diluted when one or both of the following situations existed:

- 1) one or more analytes was present at a level above the linear calibration range of the instrument; or
- 2) compounds were present at levels that could damage the instrument.

The following flags and abbreviations are used in this report:

ND - Not detected above the detection limit stated.
**- See other dilution.
Freon 113 - 1,1,2-Trichloro-1,2,2-trifluoroethane. Not an 8010 compound.
MS(D) - Matrix spike (Duplicate)
LCS(D) - Laboratory Control Sample (Duplicate)
RPD - Relative percent difference
N/A - Not applicable

If you should have any technical questions, please contact the undersigned at (415) 964-0844.

Approved by:


Client Services

These results were obtained by following standard laboratory procedures; the liability of Mid-Pacific Environmental Laboratory, Inc. shall not exceed the amount paid for this report. In no event shall Mid-Pacific be liable for special or consequential damages.

Woodward Clyde Consultants
Analytical Results - TPH as Diesel by GC /soil

Client ID: TP1
MPELI ID: 9212130-01B
Matrix: SOIL
QC Batch: 0123A

Collected: 12/17/92
Received: 12/18/92
Extracted: 12/21/92
Analyzed: 12/31/92
Dilution factor: 10.0

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	2200	10.0
Kerosene	ND	10.0
Motor Oil	ND	100

What EPA method?
8/15

Woodward Clyde Consultants
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: TP1
MPELI ID: 9212130-01A
Matrix: SOIL
QC Batch: S089A

Collected: 12/17/92
Received: 12/18/92
Analyzed: 12/30/92
Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	20
Toluene	ND	20
Ethylbenzene	38	20
Total Xylenes	60	20
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	59	42-137

Woodward Clyde Consultants
Analytical Results - TPH as Diesel by GC /soilClient ID: TP2
MPELI ID: 9212130-02B
Matrix: SOIL
QC Batch: 0123ACollected: 12/17/92
Received: 12/18/92
Extracted: 12/21/92
Analyzed: 12/31/92
Dilution factor: 10.0

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	1600	10.0
Kerosene	ND	10.0
Motor Oil	ND	100

Woodward Clyde Consultants
Analytical Results - TPH as Gas, BTEX by GC/soilClient ID: TP2
MPELI ID: 9212130-02A
Matrix: SOIL
QC Batch: S089ACollected: 12/17/92
Received: 12/18/92
Analyzed: 12/30/92
Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	20
Toluene	ND	20
Ethylbenzene	88	20
Total Xylenes	58	20

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	58	42-137

Woodward Clyde Consultants
Analytical Results - TPH as Diesel by GC /soilClient ID: Comp SP1-A,B,C,D
MPELI ID: 9212130-07B
Matrix: SOIL
QC Batch: 0123ACollected: 12/17/92
Received: 12/18/92
Extracted: 12/21/92
Analyzed: 12/31/92
Dilution factor: 50.0

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	6800	50
Kerosene	ND	50
Motor Oil	ND	500

Woodward Clyde Consultants
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: Comp SP1-A, B, C, D
MPELI ID: 9212130-07A
Matrix:
QC Batch: S088A

Collected: 12/17/92
Received: 12/18/92
Analyzed: 12/22/92
Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Gasoline	ND	20000
Unknown	220000	20000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	116	42-137

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Client ID: TP1
MPELI ID: 9212130 - 01C
Matrix: SOIL

Date collected: 12/17/92
Date received: 12/18/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
Org. Lead by flame AA	DOHS	ND	0.50 mg/kg	12/27	01/07	0032A

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Client ID: TP2
MPELI ID: 9212130 - 02C
Matrix: SOIL

Date collected: 12/17/92
Date received: 12/18/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
Org. Lead by flame AA	DOHS	ND	0.50 mg/kg	12/27	01/07	0032A

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Client ID: Comp SP1-A,B,C,D
MPELI ID: 9212130 - 07C
Matrix: SOIL

Date collected: 12/17/92
Date received: 12/18/92

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
Flashpoint:nonliquid	EPA 1010	>70	0 Degr.C	01/05	01/05	0017A
pH in soil	EPA 9045	8.4	N/A pH	12/30	12/30	0115A

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Tot. Pet. Hydrocarbon/soil

QC Batch#: 0123A
Units: mg/kg
Prep Date: 12/21/93

Analysis Dates
Blank: 12/29/93
MS:
MSD:
LCS: 12/29/93

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery		QC		
	<u>Result</u>	<u>Limit</u>		<u>MS</u>	<u>MSD</u>	<u>LCS</u>	<u>LIMITS</u>	<u>RPD</u>
Diesel	ND	1				97		
Kerosene	ND	1						
Motor Oil	ND	10						

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Gas BTEX in soil

QC Batch#: S088A
 Units: ug/kg
 Prep Date: 12/22/92

Analysis Dates
 Blank: 12/22/92
 MS: 12/22/92
 MSD: 12/22/92
 LCS: 12/22/92

Analytes	Blank		Spike level	%Recovery			QC	
	Result	Limit		MS	MSD	LCS	LIMITS	RPD
Benzene	ND	5	125	46	50	89		8.3
Toluene	ND	5	125	48	54	90		12
Ethylbenzene	ND	5	125	73	82	89		12
Total Xylenes	ND	5	125	62	76	93		20
Gasoline	ND	1000						
Bromofluorobenzene (surr)	109%		1250	92	114	102	42-137	

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Gas BTEX in soil

QC Batch#: S089A
 Units: ug/kg
 Prep Date: 12/30/92

Analysis Dates
 Blank: 12/30/92
 MS: 12/30/92
 MSD: 12/30/92
 LCS: 12/30/92

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery			QC	<u>RPD</u>
	<u>Result</u>	<u>Limit</u>		<u>MS</u>	<u>MSD</u>	<u>LCS</u>	<u>LIMITS</u>	
Benzene	ND	5	125	55	54	76		1.8
Toluene	ND	5	125	58	56	78		3.5
Ethylbenzene	ND	5	125	61	60	82		1.7
Total Xylenes	ND	5	125	62	61	82		1.6
Gasoline	ND	1000						
Bromofluorobenzene (surr)	103%		1250	72	70	96	42-137	

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Instrument Type: Flame Atomic Absorption
QC Batch #: 0032A Units: mg/kg Matrix: SOIL Prep date: 12/27/92

<u>Test Description</u>	<u>Method</u>	<u>Blank</u> <u>Result</u>	<u>Blank</u> <u>Limit</u>	<u>Spike</u> <u>Amt</u>	<u>%Recovery</u> <u>MS</u> <u>MSD</u> <u>LCS</u> <u>RPD</u>	<u>Date</u> <u>Run</u>
Org. Lead by flame AA	DOHS	ND	0.50	10	42 41 98 2.4	01/07

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Batch #: 0017A Units: Degr.C

Test Description	Method	First Analysis	Duplicate Analysis	Date Run
Flashpoint:nonliquid	EPA 1010	>70	>70	01/05

75-12-104

9012-133

Woodward-Clyde Consultants

500 12th Street, Suite 100, Oakland, CA 94607-4014
(510) 893-3600

Chain of Custody Record

PROJECT NO. 9202037/0000			Sample Matrix (Soil, Water, Air)	ANALYSES						Number of Containers	REMARKS (Sample preservation, handling procedures, etc.)
DATE	TIME	SAMPLE NUMBER		EPA Method 8015*	EPA Method 8020 PAH DHS LIPT EPA Method 1631	EPA Method	RC1	TPH-gas meqis	TPH-diesel meqis		
1	17DEC92	1503		X	X						<p>all cool m</p> <p>MEQIS for TPH TPH diesel analyze TPH only only if TPH is detected</p> <p>Please call Anita Yan (510) 874 3081 with questions. Also send bills and reports to the attention of Anita Yan.</p>
2	17DEC92	1519		X	X						
3	17DEC92	1615					X	X	X		
4	17DEC92	1617					X	X	X		
5	17DEC92	1619					X	X	X		
6	17DEC92	1621					X	X	X		

TOTAL NUMBER OF CONTAINERS 6

No. of ~~samples~~ samples for analysis = 3

RELINQUISHED BY: (Signature) *[Signature]*

DATE/TIME 18 DEC 92

RECEIVED BY: (Signature) *[Signature]*

RELINQUISHED BY: (Signature) *[Signature]*

DATE/TIME

RECEIVED BY: (Signature)

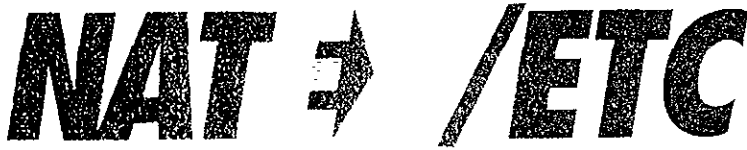
METHOD OF SHIPMENT: COURIER

SHIPPED BY: (Signature) 18 DEC 92 *[Signature]*

COURIER (Signature) SR:dgely 766 *[Signature]*

RECEIVED FOR LAB BY (Signature) *[Signature]*

DATE/TIME 17 DEC 92 1645



Mid-Pacific Environmental Laboratory, Inc.
625B Clyde Avenue
Mountain View, CA 94043
415 964 8844
FAX 415 961-7113

February 24, 1993

Ms. Anita Yan
Woodward Clyde Consultants
500 12th Street, Suite 100
Oakland, CA 94607-4014

Dear Ms. Yan:

Enclosed is a revised report for MPELI Order# 92-12-133, your work ID 92CB037/0000, originally issued on January 08, 1993.

The analysis date for the reactive sulfide in QC batch nos. QRZ2A and QRZ2B have been corrected from 12/21 to 12/27.

If you should have any further questions, please do not hesitate to contact me at (415) 964-0844.


Donald Magarian
Project Manager

NAT → /ETC

Mid-Pacific Environmental Laboratory, Inc.
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Mountain View, CA 94043
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FAX 415) 961-7113

REVISED

Woodward Clyde Consultants
500 12th Street Suite 100
Oakland, CA 94607-4014

February 24, 1993
MPELI Order#: 92-12-133
Date Received: 12/18/92

Attn: Anita Yan

Subject: Analysis of 1 composite of 4 soils

Work ID: 92CB037/0000

P.O. #: none given

Pages in report: 4

Samples were analyzed for requested general chemical parameters following Methods for Chemical Analysis of Water and Wastes (EPA 1983) or Test Methods for Evaluating Solid Wastes (SW-846, 3rd Ed., 1986). The test method used is listed along with the particular analysis.

NOTES

All analyses have been conducted in batches of 20 samples or less. Each QC batch consists of a method blank, a Matrix Spike, a Matrix Spike Duplicate and a Laboratory Control Sample. The QC information is in a separate QC Report at the end of the regular report. To find the associated QC data, identify the batch number for the analysis of interest and look for that number in the QC Report for that test. Occasionally a sample will be associated with a sub-batch, which will end in a letter other than "A". The main batch will include the original blank, MS, MSD, and LCS. The sub-batch will contain the additional blank associated with the sample and LCS.

All analytes reported above detection limits on gas chromatography analyses have been confirmed by a second dissimilar column.

Samples were diluted when one or both of the following situations existed:

- 1) one or more analytes was present at a level above the linear calibration range of the instrument; or
- 2) compounds were present at levels that could damage the instrument.

The following flags and abbreviations are used in this report:

- ND - Not detected above the detection limit stated.
- ** - See other dilution.
- Freon 113 - 1,1,2-Trichloro-1,2,2-trifluoroethane. Not an 8010 compound.
- MS(D) - Matrix spike (Duplicate)
- LCS(D) - Laboratory Control Sample (Duplicate)
- RPD - Relative percent difference

N/A - Not applicable

REVISED

If you should have any technical questions, please contact the undersigned at (415) 964-0844.

Approved by: *Donald Magau*
Client Services

These results were obtained by following standard laboratory procedures; the liability of Mid-Pacific Environmental Laboratory, Inc. shall not exceed the amount paid for this report. In no event shall Mid-Pacific be liable for special or consequential damages.

Woodward Clyde Consultants

REVISED

Client ID: Comp SP1-A,B,C,D

Date collected: 12/17/92

MPELI ID: 9212133 - 05A

Date received: 12/18/92

Matrix: SOIL

Test description	Method	Result	Report Limit Units	Prep Date	Run Date	QC Batch
Reactive cyanide	EPA 7.3.3.2	ND	10 mg/L	12/27	12/27	QRZ2B
Reactive sulfide	EPA 7.3.4.2	ND	10 mg/L	12/27	12/27	QRZ2B

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REVISED

Batch #: QRZ2A Units: mg/L

Test Description	Method	Blank		Spike Level	%Recovery			Date Run
		Result	Lmt		MS	MSD	LCS	
Reactive cyanide	EPA 7.3.3.2	ND	10	48.4	64		66	12/27

Batch #: QRZ2B Units: mg/L

Test Description	Method	Blank		Spike Level	%Recovery			Date Run
		Result	Lmt		MS	MSD	LCS	
Reactive cyanide	EPA 7.3.3.2	ND	10	48.4			66	12/27

Batch #: QRZ2A Units: mg/L

Test Description	Method	Blank		Spike Level	%Recovery			Date Run
		Result	Lmt		MS	MSD	LCS	
Reactive sulfide	EPA 7.3.4.2	ND	10	988	61		87	12/27

Batch #: QRZ2B Units: mg/L

Test Description	Method	Blank		Original Result	Duplicate Result	RPD	Date Run
		Result	Limit				
Reactive sulfide	EPA 7.3.4.2	ND	10	710	693	2.4	12/27

NAT /ETC

Mid-Pacific Environmental Laboratory, Inc.
625B Clyde Avenue
Mountain View, CA 94043
(415) 964-0844
FAX (415) 961-7113

March 03, 1993

Ms. Anita Quesada
Woodward Clyde Consultants
500 12th Street, Suite 100
Oakland, CA 94607-4014

RE: MPEL Order NO. 92-12-130

Dear Ms. Quesada:

In regard to your inquiries concerning the identification of "unknown hydrocarbons" reported in the TPH-Gasoline analysis, the following statement applies:

Sample SP1 A,B,C,D Composite (MPEL ID 9212130-07): The unknown hydrocarbon pattern that appears in the TPH-Gasoline analysis elutes very late in the scan, at the end of the gasoline elution profile. This is consistent with the detection of diesel in the TPH-Diesel analysis of this sample, but cannot be confirmed since diesel standards are not analyzed in the TPH-Gasoline scan.

Copies of sample and standard chromatograms are enclosed.

If you should have any further questions, please do not hesitate to contact me at (415) 964-0844.



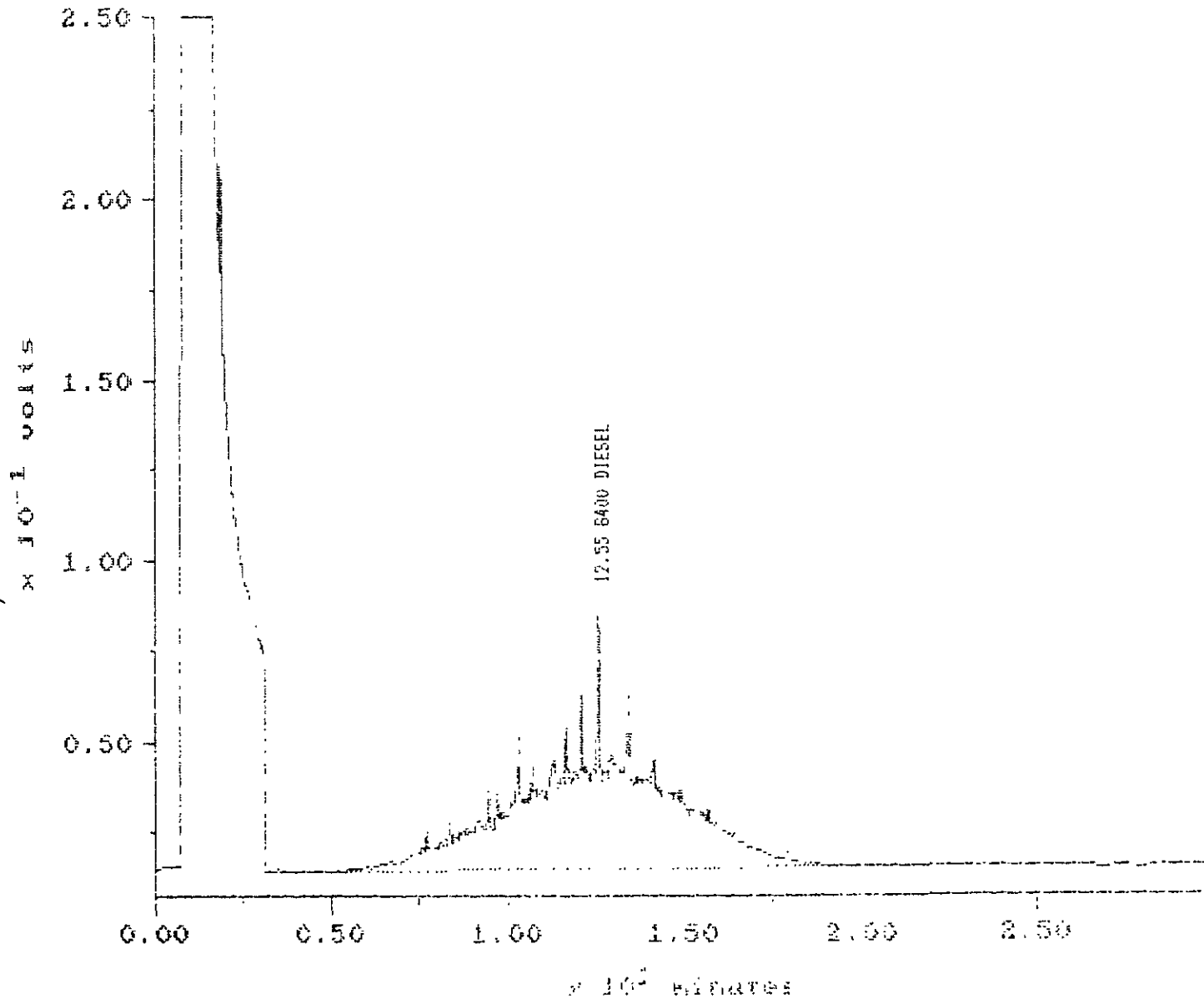
Donald Magarian
Project Manager

SPI A,B,C,D Composite (TPH-D)

Filename: 1230E34
Operator: KY

Sample: 21213007B_01234 Channel: FID-E
Acquired: 31-DEC-92 5:12 Method: C:\MAX\DATAE\DEC92\80151230
Inj Vol: 1.00 *to*

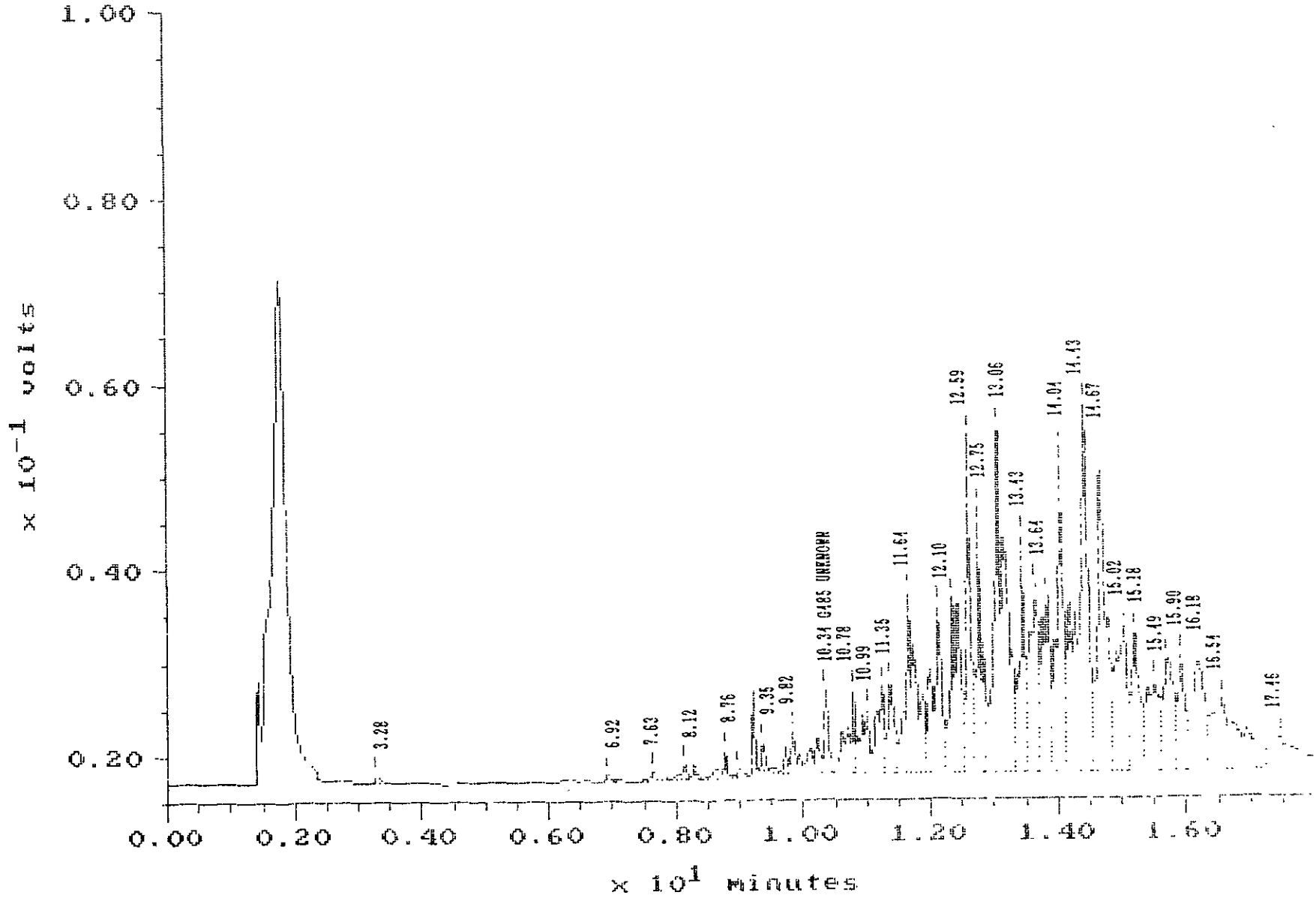
Comments: GC-E FUELS



Filename: 1222D19
Operator: CS

Sample: 21213007A_S088A Channel: FID-D
Acquired: 22-DEC-92 18:00 Method: C:\MAN\3700D\DEC92\GBTX1222
Dilution: 1 : 20.000
Consents: 3700D DB5 30 METER 0.52 MM PRIMARY GBTX INSTRUMENT

SPIA, B, C, D Composite (TPH-G)



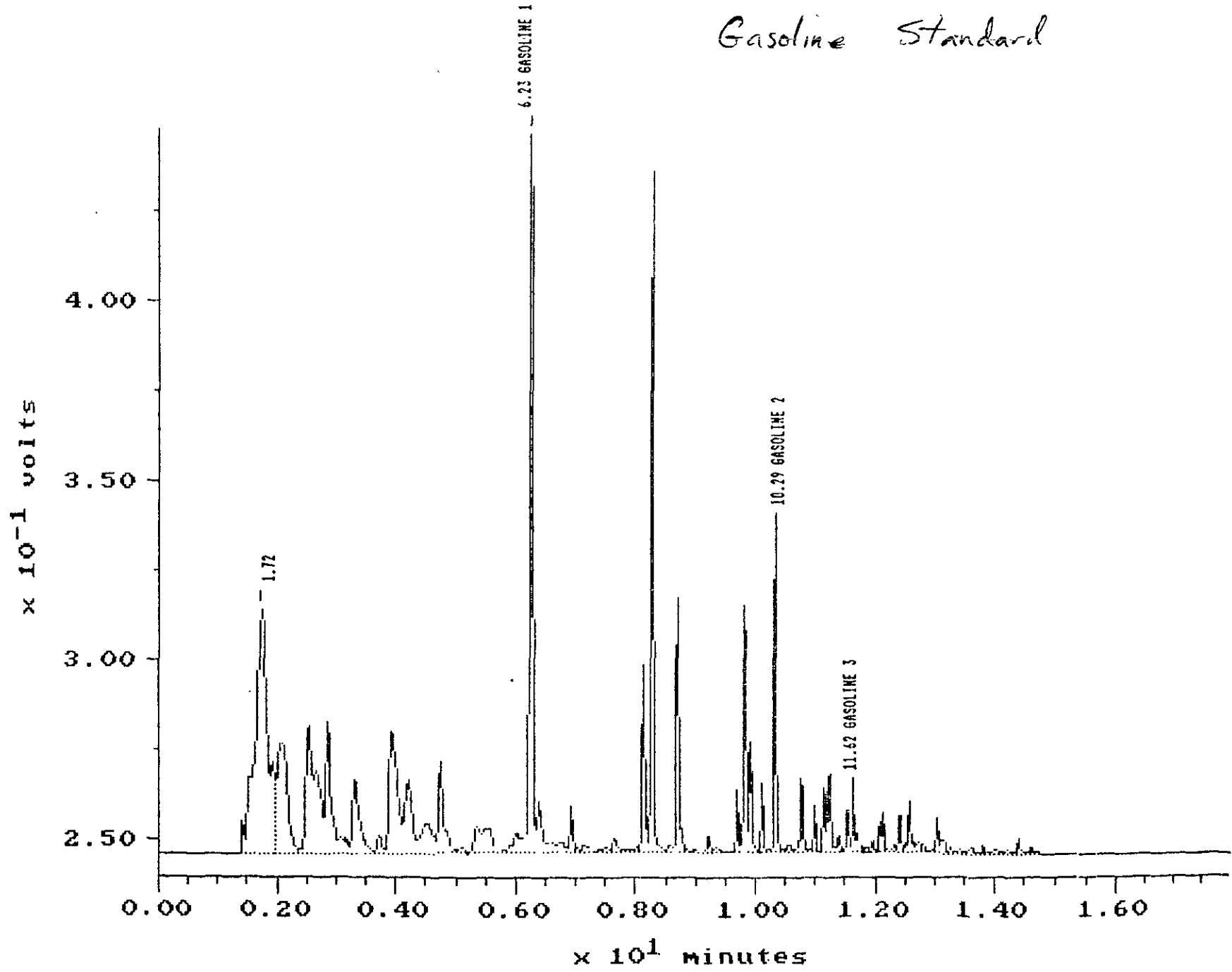
Operator: CS

Acquired: 16-FEB-93 10:45 Method: C:\MAX\37000\FEB93\GBTX0216

Inj Vol: 1.00

Comments: 37000 DBS 30 METER 0.52 MM PRIMARY GBTEX INSTRUMENT

Gasoline Standard

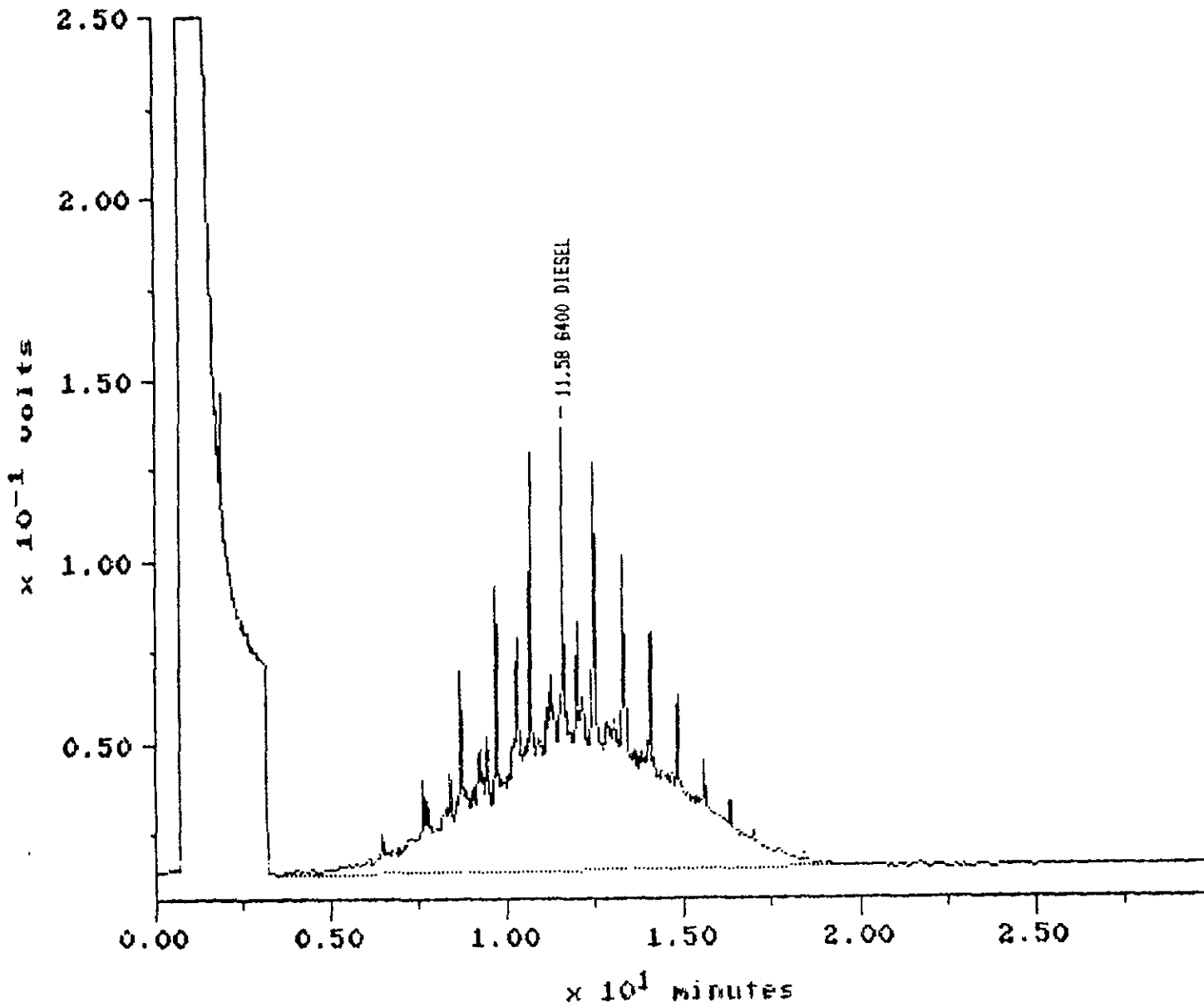


Diesel Standard

Filename: 0216E02
Operator: KV

Channel: FID-E
Method: C:\MAX\DATA\FEB93\80150216

Sample: DIESEL-0216D
Acquired: 16-FEB-93 9:31
Inj Vol: 1.00
Comments: 80-E FUELS

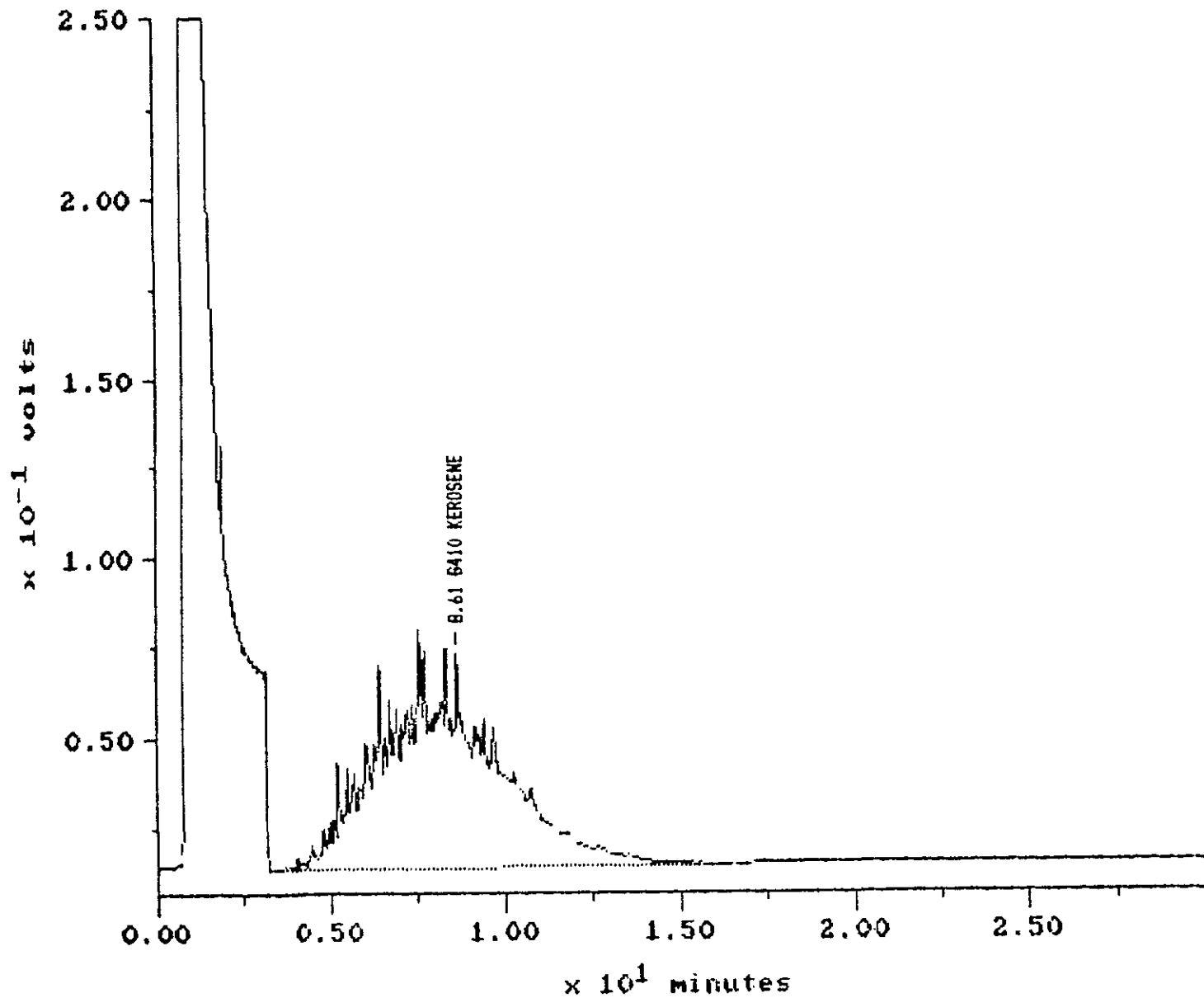


Kerosene Standard

Sample: IKERO-02160
Acquired: 16-FEB-93 10:09
Inj Vol: 1.00
Comments: GC-E FUELS

Channel: FID-E
Method: C:\MAX\DATA\FEB93\80150216

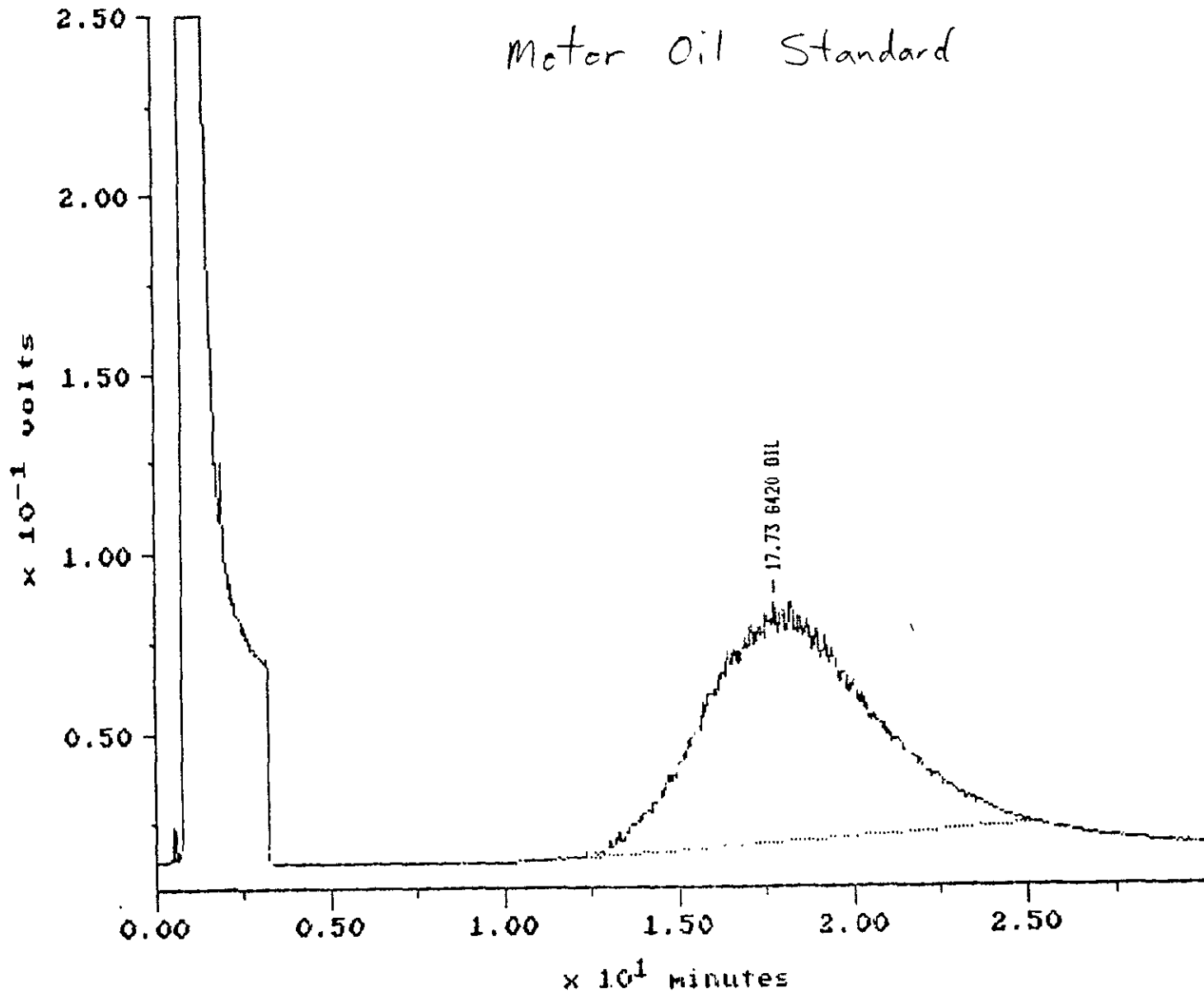
Filename: 0216E03
Operator: KV



Sample: IM011-0216D
Acquired: 16-FEB-93 19:56
Inj Vol: 1.00
Comments: BC-E FUELS

Channel: FID-E
Method: C:\MAX\DATA\FEB93\80150216

Filename: 0216E16
Operator: KV



Sample: IJP 5-0216D Channel: FID-E
Acquired: 16-FEB-93 11:26 Method: C:\MAX\DATA\FEB93\80150216
Inj Vol: 1.00
Comments: GC-E FUELS

Filename: 0216E05
Operator: KV

Jet Fuel Standard

