

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

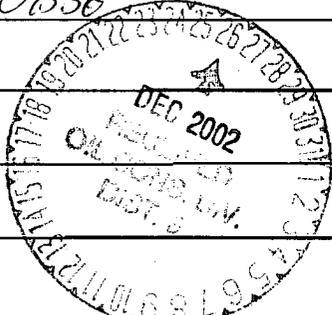
*Risk
Plume
not defined*

Submit 1 copy to appropriate District Office and 1 copy to the Santa Fe Office
(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

30-039-07556

Operator: Meridian by EPFS Telephone _____



Address: _____

Facility Or: San Juan 29-7 #58, Meter 71703

Well Name _____

Location: Unit or Qtr/Qtr Sec M Sec 26 T 29 R 7 County Rio Arriba

Pit Type: Separator _____ Dehydrator X Other _____

Land Type: BLM _____, State _____, Fee X Other _____

Pit Location: Pit dimensions: length 17', width 34', depth 3'

(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 112'

Direction from reference: 46 Degrees X East North _____
of _____ West South _____

Depth To Ground Water	Less than 50 feet	(20 points)
(Vertical distance from	50 feet to 99 feet	(10 points)
contaminants to seasonal	Greater than 100 feet	(0 points) <u>10</u>
high water elevation of		
ground water.)		

Wellhead Protection Area:	Yes (20 points)
(Less than 200 feet from a private	No (0 points) <u>0</u>
domestic water source, or; less than	
1000 feet from all other water sources.)	

Distance To Surface Water:	Less than 200 feet	(20 points)
(Horizontal distance to perennial	200 feet to 1000 feet	(10 points)
lakes, ponds, rivers, streams, creeks,	Greater than 1000 feet	(0 points) <u>0</u>
irrigation canals and ditches.)		

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 03/31/95 Date completed: 03/31/95

Remediation Method: Excavation _____ Approx. cubic yards _____
(Check all appropriate sections.) Landfarmed _____ Insitu Bioremediation _____
Other Backfill pit without excavation

Remediation Location: Onsite N/A Offsite N/A
(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Excavated test hole to 12'. Took PID sample, closed pit.

Ground Water Encountered: No Yes _____ Depth _____

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)
Sample location Four walls and center of pit composite
Sample depth 12'

Sample Date 03/31/95 Sample time 13:10

Sample Results
Benzene(ppm) Not reported.
Total BTEX(ppm) Not reported.
Field headspace(ppm) 274
TPH 12300

Ground Water Sample: Yes _____ No (If yes, attach sample results)

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Date 1/8/03
Signature Scott T. Pope

Printed Name Scott T. Pope
and Title Senior Env. Scientist



PIT CLOSURE REQUEST

**San Juan 29-7 #58
Meter/Line ID 71703**

SITE DETAILS

Legals - Twn: 29N	Rng: 7W	Sec: 26	Unit: M
NMOCD Hazard Ranking: 10		Land Type: FEE	
Operator: Meridian Oil Inc		Pit Closure Date: 3/31/95	

RATIONALE FOR RISK-BASED CLOSURE

The pit noted above was assessed and ranked according to the criteria in the New Mexico Oil Conservation Division's (NMOCD) Unlined Surface Impoundment Closure Guidelines.

A test pit was excavated to 12 feet (ft) below ground surface (bgs) and a soil sample was collected for field headspace and laboratory analysis for TPH. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 274 ppm; laboratory analysis showed a TPH concentration of 12,300 mg/kg. The TPH measurement exceeded recommended remediation levels for the Hazard Ranking Score of 10.

No soil was disposed of offsite. The pit was backfilled with site soil, topped with clean soil from the surrounding berms, and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed with refusal at 24 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 24-25 ft bgs. Headspace analysis indicated an organic vapor content of 1,047 ppm, laboratory analysis indicated a benzene concentration of <1.0 mg/kg, a total BTEX concentration of 178 mg/kg, and a TPH concentration of 2,370 mg/kg. The benzene is below recommended remediation levels for the Hazard Ranking Score.

No Phase III activities were conducted.

El Paso Field Services requests closure of the above mentioned pit location for the following reasons:

- The primary source, discharge to the pit, has been removed for over seven years.
- The test pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- The clean soil from the berms placed on top of the excavation would limit the potential for direct contact with hazardous constituents by livestock or the public; i.e., current direct contact exposure pathways are unlikely to be completed.
- Bedrock was encountered at 24 feet bgs making further vertical migration unlikely.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.
- Groundwater was not encountered in the soil boring at 24 ft bgs; local geologic features indicate the depth to groundwater is greater than 50 ft bgs.
- The benzene concentration at the bottom of the Phase II boring is below recommended remediation levels for the Hazard Ranking Score.

REVISED
FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 71703 Location: San Juan 29-7 #58
 Operator #: _____ Operator Name: _____ P/L District: _____
 Coordinates: Letter: M Section 26 Township: 29 Range: 7
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 12/19/97 Area: _____ Run: _____

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps) **Land Type:**

Inside	<input type="checkbox"/> (1)	BLM	<input type="checkbox"/> (1)
Outside	<input checked="" type="checkbox"/> (2)	State	<input type="checkbox"/> (2)
		Fee	<input checked="" type="checkbox"/> (3)
		Indian	_____

Depth to Groundwater

Less Than 50 Feet (20 points) (1)
 50 Ft to 99 Ft (10 points) (2)
 Greater Than 100 Ft (0 points) (3)

Wellhead Protection Area

Is it less than 1000 ft from wells, springs or other sources of fresh water extraction?, or; Is it less than 200 ft from a private domestic water source?
 (1) YES (20 points) (2) NO (0 points)

Horizontal Distance to Surface Water Body

Less Than 200 Ft (20 points) (1)
 200 Ft to 1000 Ft (10 points) (2)
 Greater Than 1000 Ft (0 points) (3)

Name of Surface Water Body _____

(Surface Water Body: Perennial Rivers, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)

Distance to Nearest Ephemeral Stream (1) < 100' (Navajo Pits Only)
 (2) > 100'

TOTAL HAZARD RANKING SCORE: 10 POINTS

REMARKS

Remarks : Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. No well site is listed on Topo map in Unit M. Unit M is Outside GWVZ. Used conservative location to measure distances. Depth to GW measured to center of San Rafael Canyon



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 405	946771
MTR CODE SITE NAME:	71703	N/A
SAMPLE DATE TIME (Hrs):	3-31-95	1310
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	4-4-95	4-4-95
DATE OF BTEX EXT. ANAL.:	N/A	N/A
TYPE DESCRIPTION:	VG	Dark brown Sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	12300 ^{KD 405 4/4/95}	MG/KG			0.60	28
HEADSPACE PID	274	PPM				
PERCENT SOLIDS	86.4	%				

- TPH is by EPA Method 418.1 -

Narrative:

DF = Dilution Factor Used

Approved By: 

Date: 4/6/95

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 71703 Location: SAN JUAN 29-7 #58
Coordinates: Letter: M Section 26 Township: 29 Range: 7
Or Latitude _____ Longitude _____
Date Started : 3/31/95 Run: 10 91

FIELD OBSERVATIONS

Sample Number(s): KD 405
Sample Depth: 12' Feet
Final PID Reading 274 ppm PID Reading Depth 12' Feet
Groundwater Encountered Yes No
Approximate Depth _____ Feet

CLOSURE

Remediation Method :
Excavation Approx. Cubic Yards 0
Onsite Bioremediation
Backfill Pit Without Excavation
Soil Disposition:
Envirotech Tierra
Other Facility Name: _____
Pit Closure Date: 3/31/95 Pit Closed By: BEI

REMARKS

Remarks : Excavated Test Hole to 12', TOOK PID SAMPLE, closed pit

Signature of Specialist: Henry Dean

ORD OF SUBSURFACE EXPLORATION

SERVICES CORP.

Address: Mexico 87401
 Phone: (505) 326-2388

Borehole # BH-1
 Well # NA
 Page 1 of 1

Project Number 19643 Phase 1001.77
 Project Name EPFS PITS >10
 Project Location SAN JUAN 29-7 #58 71703

Location LTR: M S: 26 T: 29 R: 7
 Depth NA
 By K. PADILLA
 Logged By H. BRADBURY
 Started 11/17/98
 Completed 11/17/98

Drilling Method 4 1/4 ID HSA
 Air Monitoring Method PID

Depth (feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM			Drilling Conditions & Blow Counts
							BZ	BH	S/HS	
0										BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
12				EXCAVATION SAMPLE COLLECTED AT 12'						
15	1	15-17	24	LT GR silty SAND, FINE SAND, LOOSE, dry	SM		0	96	$\frac{807}{727}$	1407 HRS
20	2	20-21	6	DK GR SANDS TONE, FINE SAND, low CEMENTATION, dry			0	330	$\frac{682}{503}$	1413 HRS DRILLING
25	3	24-25	6	DK GR SANDSTONE, FINE SAND, low CEMENTATION, dry					$\frac{975}{1047}$	1425 HRS
25				TOB 25'						

HAB 74 (24-25) SENT TO LAB FOR TPH. BTEX GW NOT ENCOUNTERED BH ROUTED TO SURFACE AUGER RETRAVAL AT 24'

Geologist Signature

Holly Bradbury

**FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT**

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	HAB74	980823
MTR CODE SITE NAME:	71703	San Juan 29-7 #58
SAMPLE DATE TIME (Hrs):	11/17/98	1425
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	11/23/98	11/27/98
DATE OF BTEX EXT. ANAL.:	11/19/98	11/20/98
TYPE DESCRIPTION:	VG	SOIL

Field Remarks: 24-25'

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<1.0	MG/KG	2			
TOLUENE	43.7	MG/KG	2			
ETHYL BENZENE	8.09	MG/KG	2			
TOTAL XYLENES	126	MG/KG	2			
TOTAL BTEX	251	MG/KG	2			
TPH (MOD.8015)	2,370	MG/KG				
HEADSPACE PID	1047	PPM				
PERCENT SOLIDS	90.8	%				

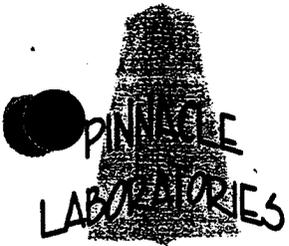
-- TPH is by EPA Method 8015 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 98.0 % for this sample All QA/QC was acceptable.
 rative:

DF = Dilution Factor Used

Approved By: John Larch

Date: 12/21/98



2709-D Pan American Freeway NE
 Albuquerque, New Mexico 87107
 Phone (505) 344-3777
 Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
 CLIENT : EL PASO FIELD SERVICES
 PROJECT # : (none)
 PROJECT NAME : PHASE II DRILLING

PINNACLE I.D.: 811074

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE	DATE	DATE	DIL. FACTOR
			SAMPLED	EXTRACTED	ANALYZED	
01	980817	NON-AQ	11/16/98	11/23/98	11/26/98	1
02	980818	NON-AQ	11/16/98	11/23/98	11/26/98	1
03	980819	NON-AQ	11/16/98	11/23/98	11/26/98	1
PARAMETER	DET. LIMIT	UNITS	01	02	03	
FUEL HYDROCARBONS, C6-C10	10	MG/KG	45	< 10	12	
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	400	< 5.0	52	
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	150	< 5.0	14	
CALCULATED SUM:			595		78	
SURROGATE:						
O-TERPHENYL (%)			118	86	84	
SURROGATE LIMITS	(66 - 151)					

CHEMIST NOTES:
 N/A

2709-D Pan American Freeway NE
 Albuquerque, New Mexico 87107
 Phone (505) 344-3777
 Fax (505) 344-4413



GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
 CLIENT : EL PASO FIELD SERVICES
 PROJECT # : (none)
 PROJECT NAME : PHASE II DRILLING

PINNACLE I.D.: 811074

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
04	980820	NON-AQ	11/16/98	11/23/98	11/26/98	1
05	980821	NON-AQ	11/16/98	11/23/98	11/26/98	1
06	980822	NON-AQ	11/17/98	11/23/98	11/27/98	1
PARAMETER	DET. LIMIT	UNITS	04	05	06	
FUEL HYDROCARBONS, C6-C10	10	MG/KG	240	15	< 10	
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	130	< 5.0	< 5.0	
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	40	< 5.0	< 5.0	
CALCULATED SUM:			410	15.0		
SURROGATE:						
O-TERPHENYL (%)			87	90	84	
SURROGATE LIMITS			(66 - 151)			

CHEMIST NOTES:
 N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)
CLIENT : EL PASO FIELD SERVICES
PROJECT # : (none)
PROJECT NAME : PHASE II DRILLING

PINNACLE I.D.: 811074

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	980823	NON-AQ	11/17/98	11/23/98	11/27/98	5
PARAMETER	DET. LIMIT	UNITS	07			
FUEL HYDROCARBONS, C6-C10	10	MG/KG	2200			
FUEL HYDROCARBONS, C10-C22	5.0	MG/KG	170			
FUEL HYDROCARBONS, C22-C36	5.0	MG/KG	< 25			
CALCULATED SUM:			2370			
SURROGATE: O-TERPHENYL (%)			83			
SURROGATE LIMITS			(66 - 151)			

CHEMIST NOTES:
N/A



2709-D Pan American Freeway NE
 Albuquerque, New Mexico 87107
 Phone (505) 344-3777
 Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
 MSMSD

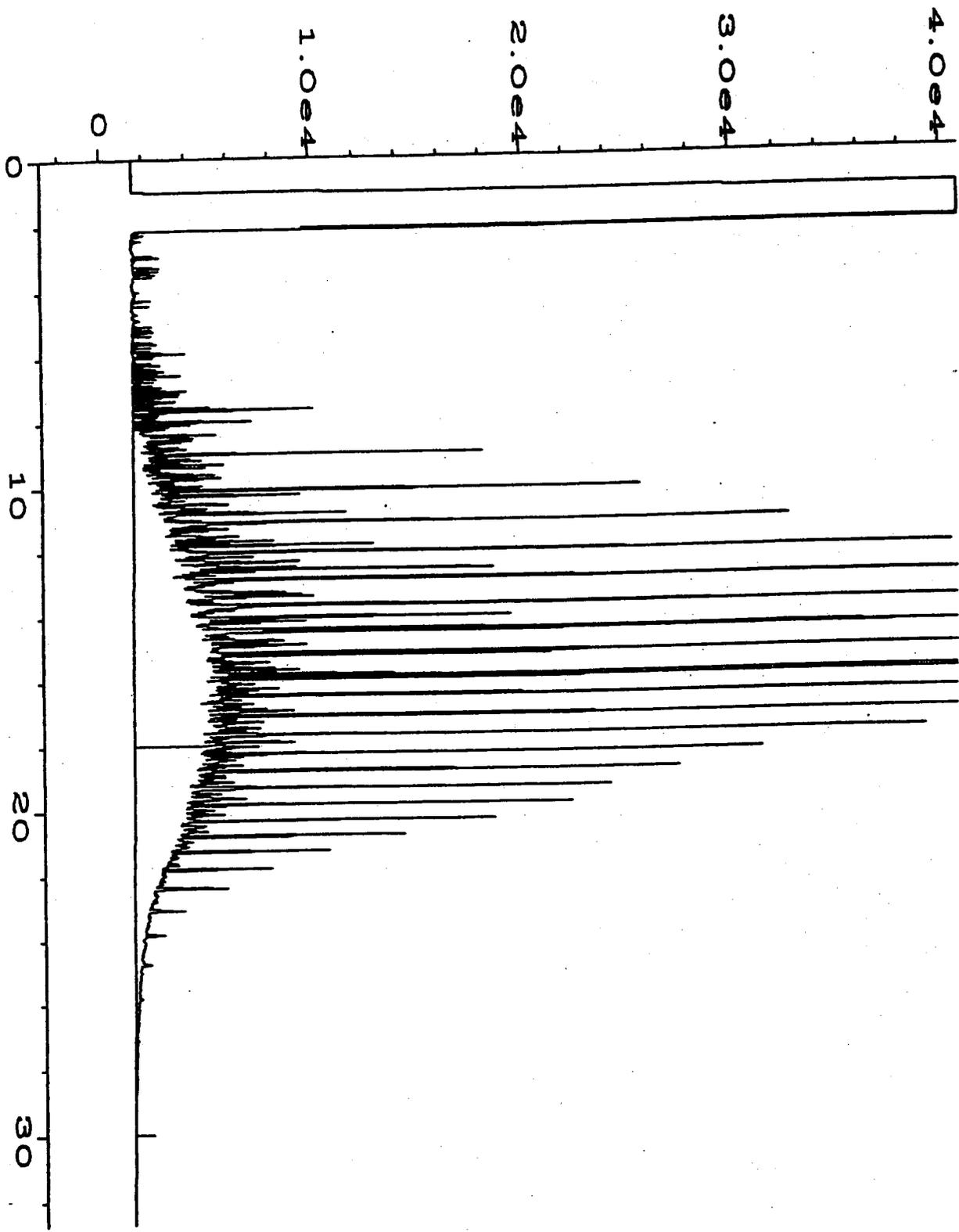
TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 811074
MSMSD #	: 811074-06	DATE EXTRACTED	: 11/23/98
CLIENT	: EL PASO FIELD SERVICES	DATE ANALYZED	: 11/27/98
PROJECT #	: (none)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: PHASE II DRILLING	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<5.0	100	109	109	117	117	7	(56 - 148)	20

EMIST NOTES:

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

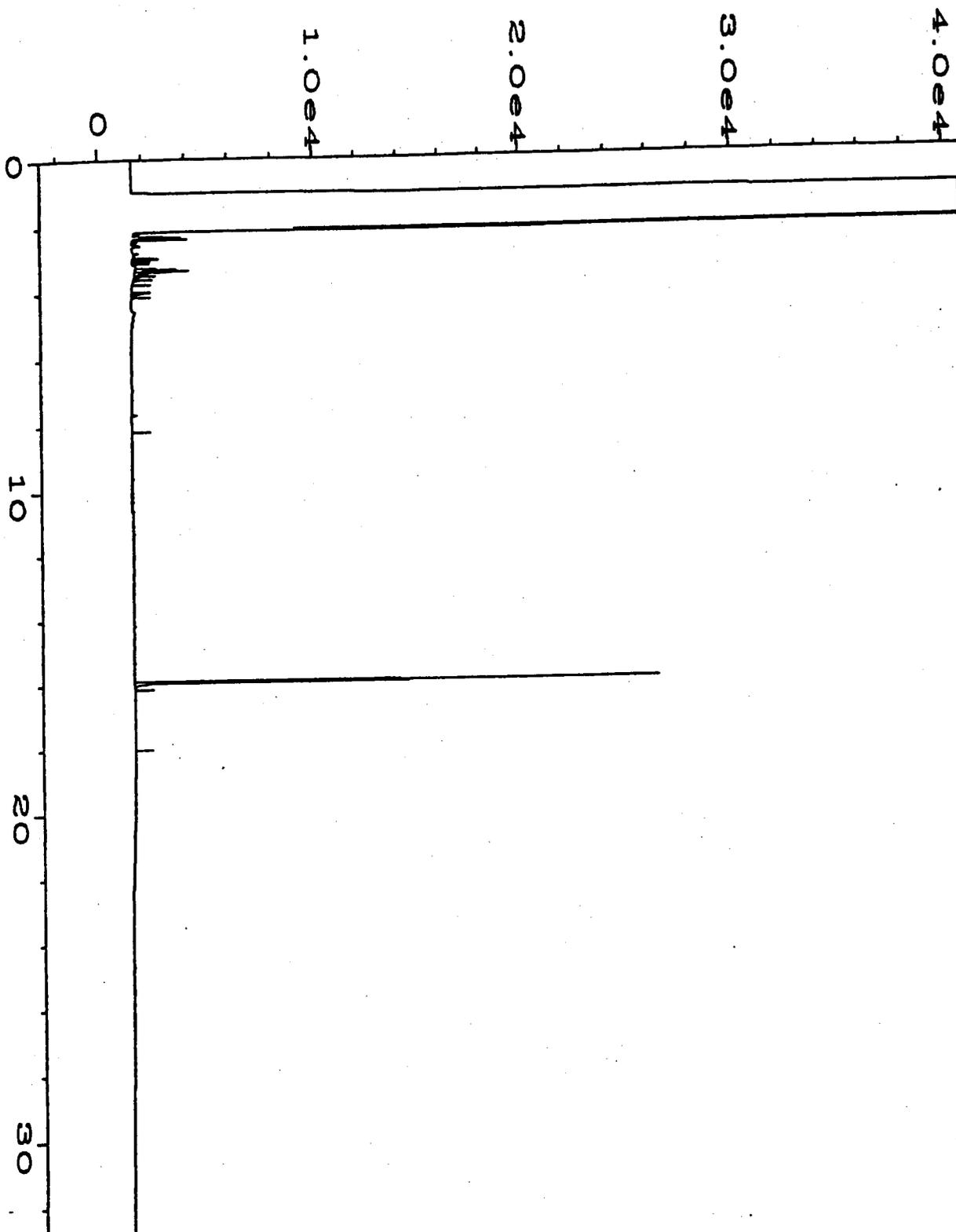
$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



user modified

Data File Name	: C:\HPCHEM\2\DATA\24NOV98\057F0101.D	Page Number	: 1
Operator	: Pinnacle - mb & cff	Vial Number	: 57
Instrument	: FID-FID1	Injection Number	: 1
Sample Name	: 811074-01	Sequence Line	: 1
Retention Time Bar Code:	26 98	Instrument Method:	RT061698.MTH
Acquired on	: 28 Oct 97 04:15 AM	Analysis Method	: RT061698.MTH
Report Created on:	28 Oct 97 01:41 PM		

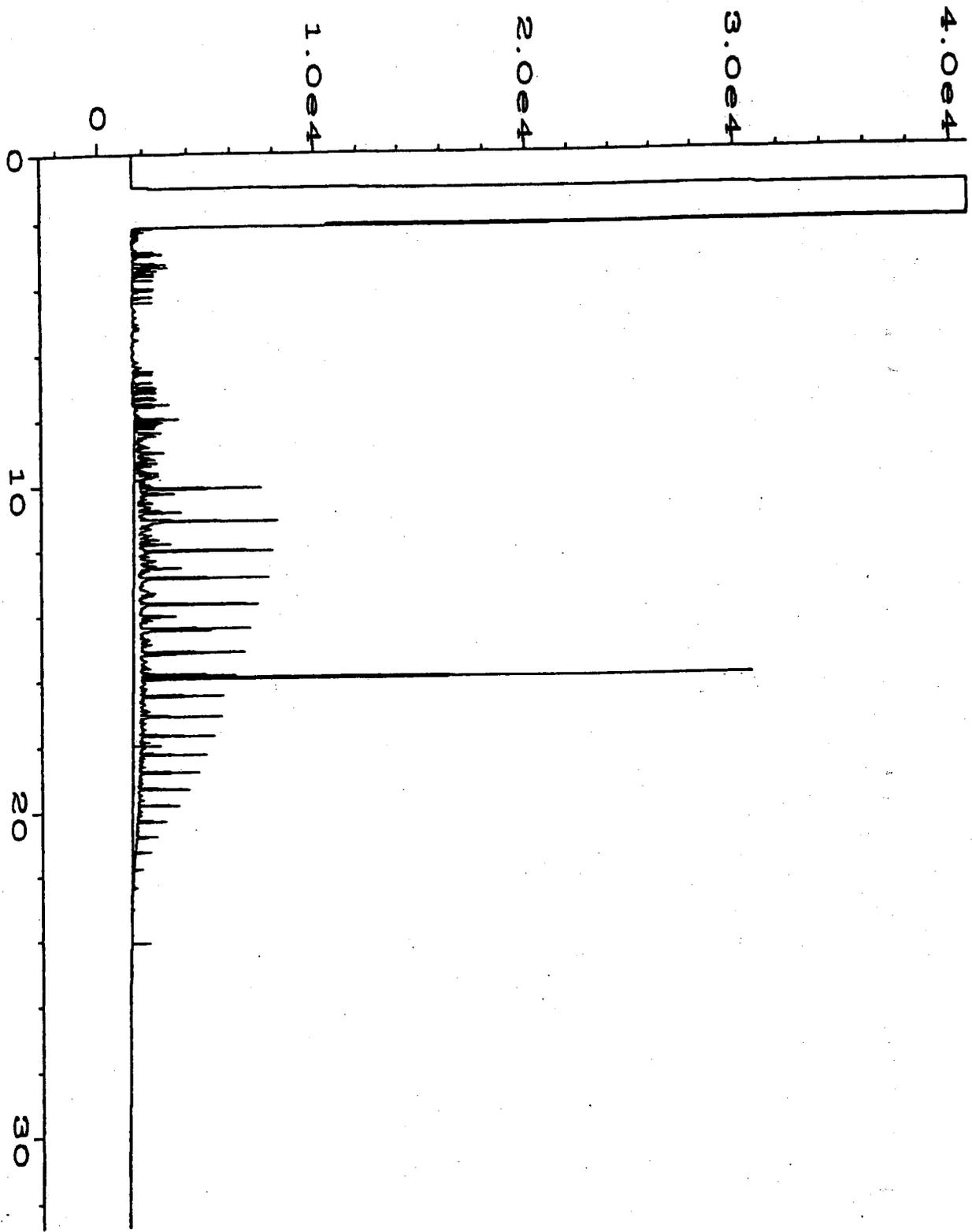
[Handwritten signature]



user modified

Data File Name	: C:\HPCHEM\2\DATA\24NOV98\058F0101.D	Page Number	: 1
Operator	: Pinnacle - mb & cff	Vial Number	: 58
Instrument	: FID-FID1	Injection Number	: 1
Sample Name	: 811074-02	Sequence Line	: 1
Run Time Bar Code:		Instrument Method:	RT061698.MTH
Acquired on	: ²⁶ 25 Oct 98 04:57 AM	Analysis Method	: RT061698.MTH
Report Created on:	²⁷ 28 Oct 98 01:41 PM		

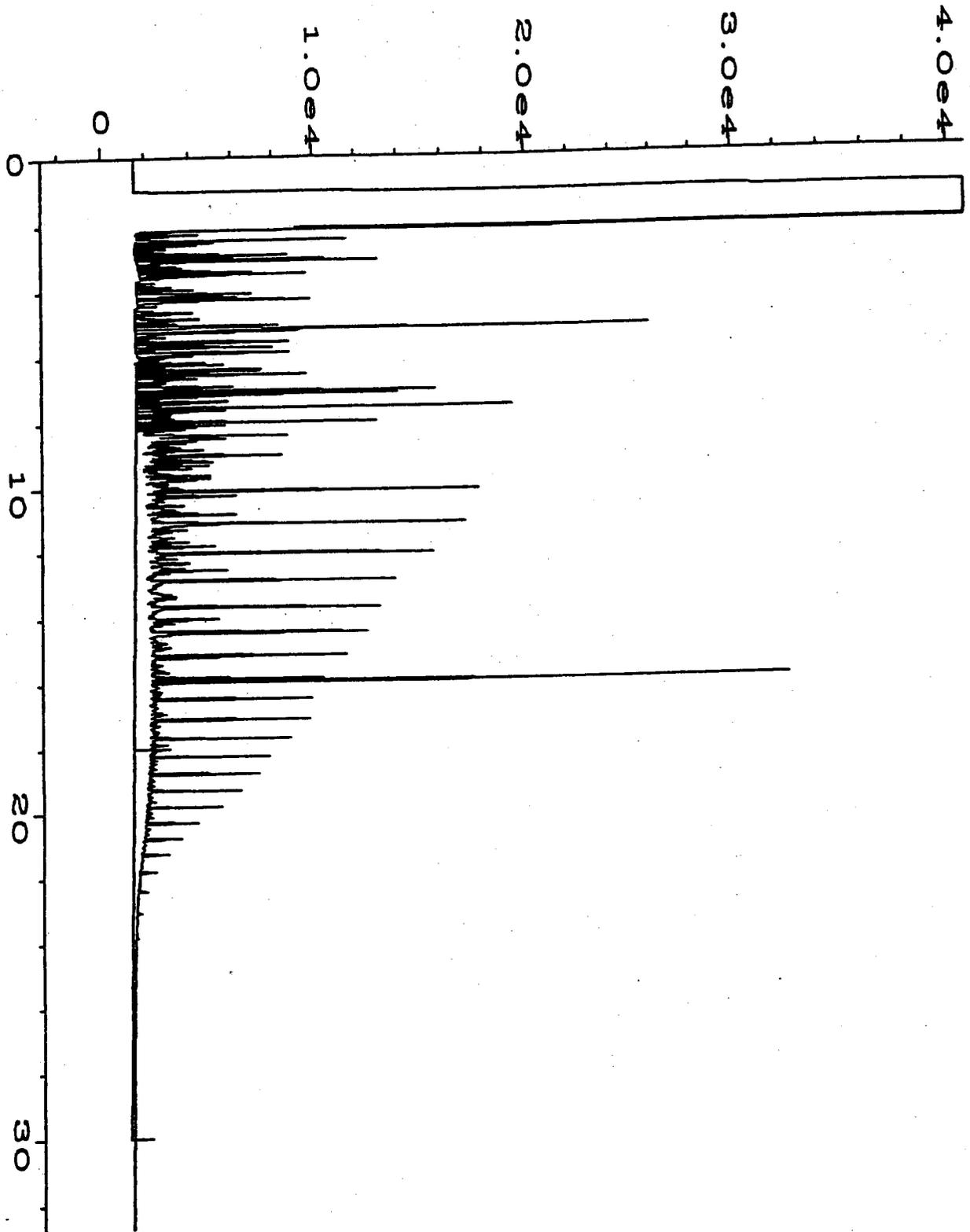
mb



user modified

Data File Name	: C:\HPCHEM\2\DATA\24NOV98\059F0101.D	Page Number	: 1
Operator	: Pinnacle - mb & cff	Vial Number	: 59
Instrument	: FID-FID1	Injection Number	: 1
Sample Name	: 811074-03	Sequence Line	: 1
Time Bar Code:	26 98	Instrument Method:	RT061698.MTH
Acquired on	: 25 Oct 97 05:39 AM	Analysis Method	: RT061698.MTH
Report Created on:	28 Oct 97 01:43 PM		
	27 98		

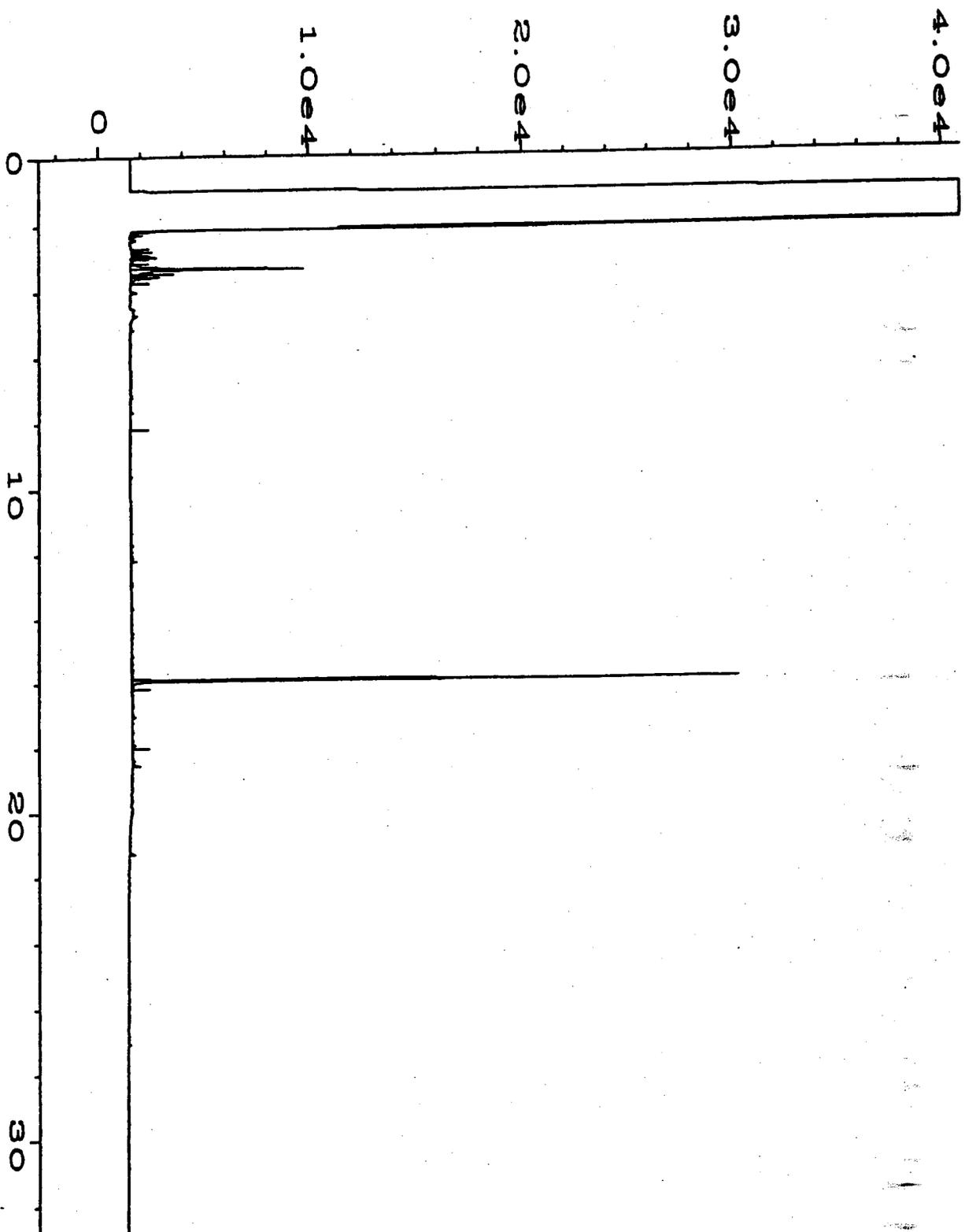
[Handwritten signature]



user modified

Data File Name	: C:\HPCHEM\2\DATA\24NOV98\060F0101.D	Page Number	: 1
Operator	: Pinnacle - mb & cff	Vial Number	: 60
Instrument	: FID-FID1	Injection Number	: 1
Sample Name	: 811074-04	Sequence Line	: 1
Time Bar Code:	26 98	Instrument Method:	RT061698.MTH
Acquired on	: 25 Oct 98 06:21 AM	Analysis Method	: RT061698.MTH
Report Created on:	26 Oct 98 01:44 PM		

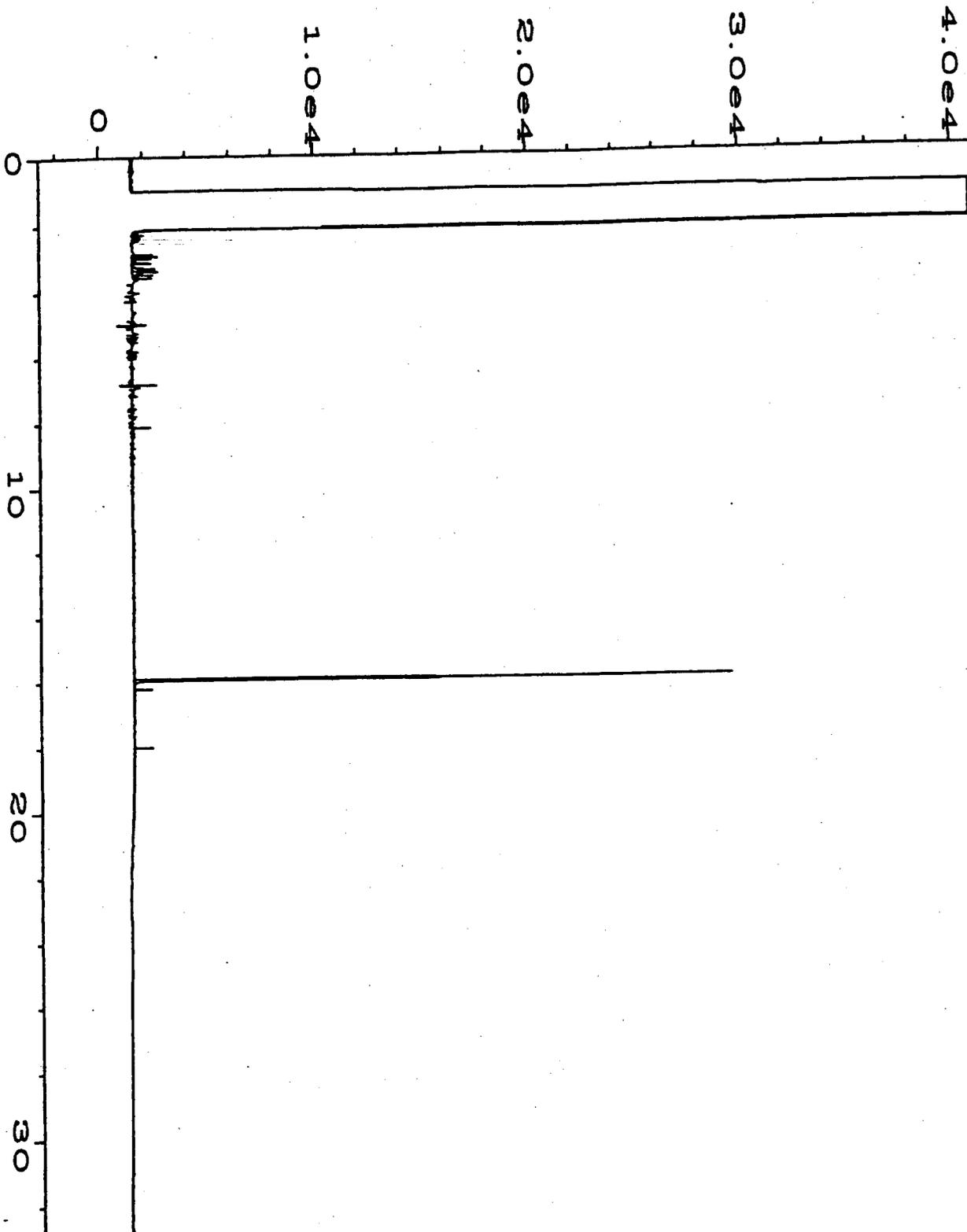
mb/cff



user modified

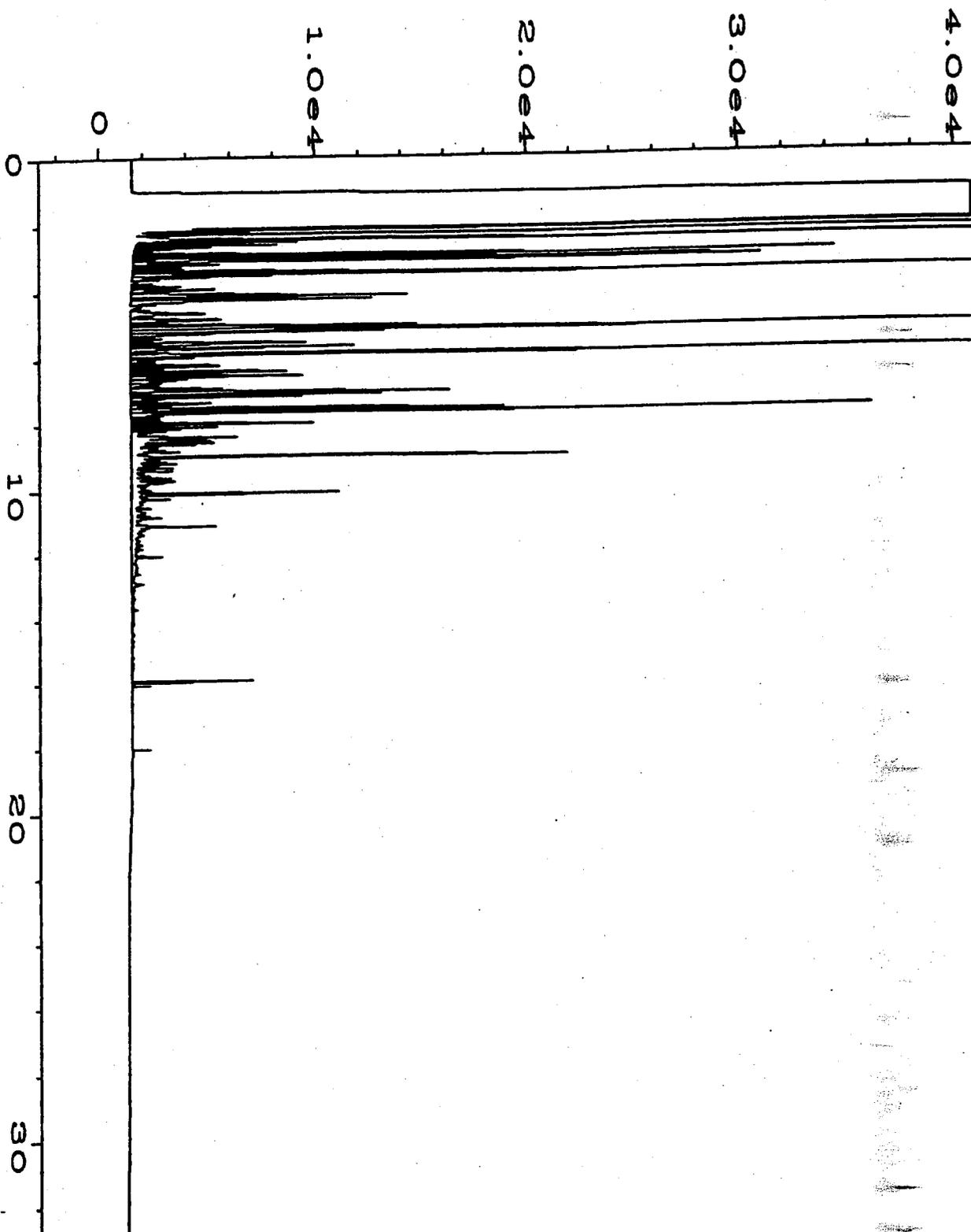
Data File Name	: C:\HPCHEM\2\DATA\24NOV98\061F0101.D	Page Number	: 1
Operator	: Pinnacle - mb & cff	Vial Number	: 61
Instrument	: FID-FID1	Injection Number	: 1
Sample Name	: 811074-05	Sequence Line	: 1
Run Time Bar Code:	26 98	Instrument Method:	RT061698.MTH
Acquired on	: 25 Oct 97 07:03 AM	Analysis Method	: RT061698.MTH
Report Created on:	26 Oct 97 01:45 PM		

[Signature]



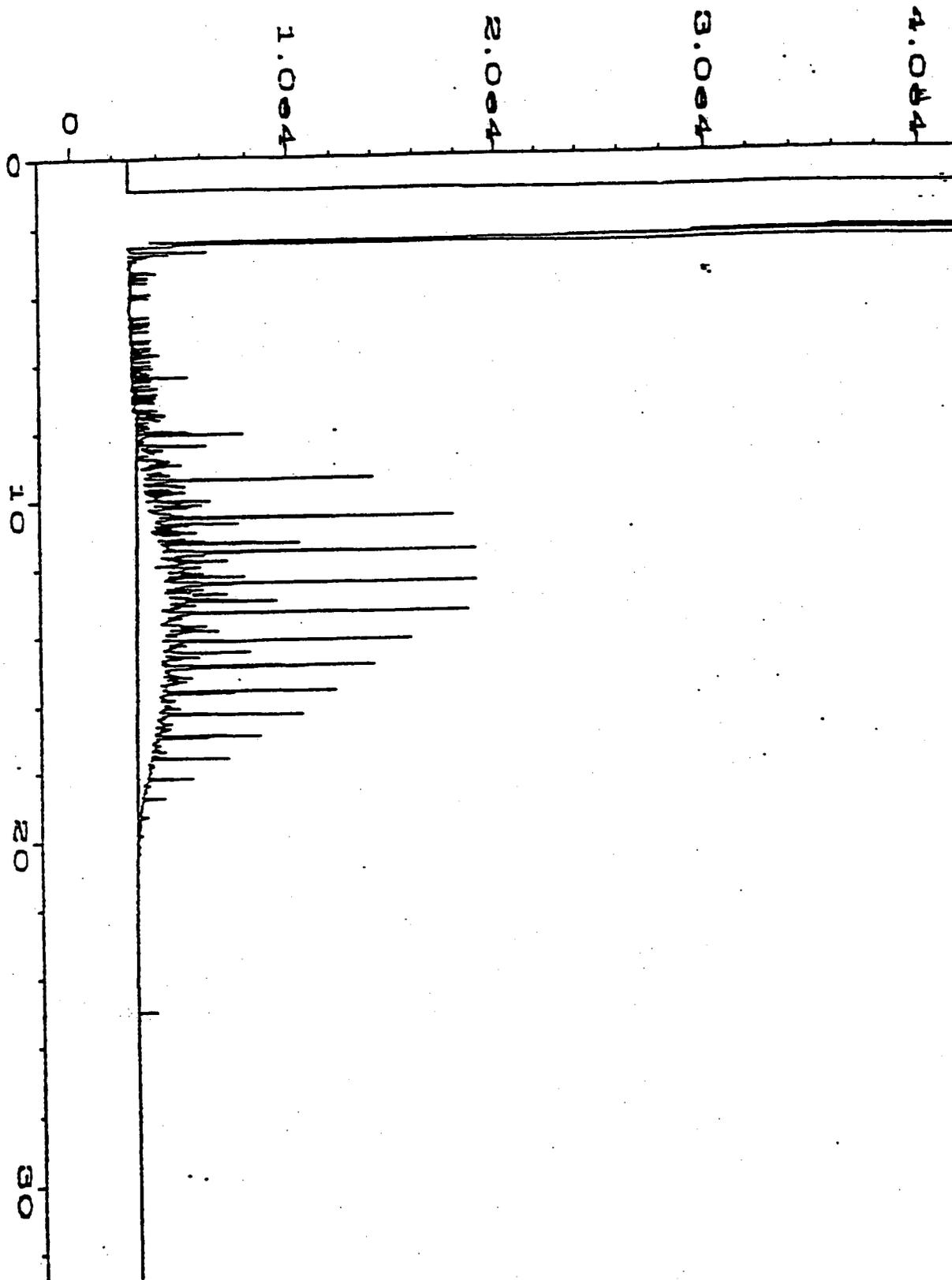
user modified

Data File Name	: C:\HPCHEM\2\DATA\27NOV98\008F0101.D	Page Number	: 1
Operator	: Pinnacle - mb & cff	Vial Number	: 8
Instrument	: FID-FID1	Injection Number	: 1
Sample Name	: 811074-06	Sequence Line	: 1
Time Bar Code:		Instrument Method:	RT061698.MTH
Acquired on	: 26 Oct 97 04:22 PM	Analysis Method	: RT061698.MTH
Report Created on:	30 Nov 98 12:24 PM		

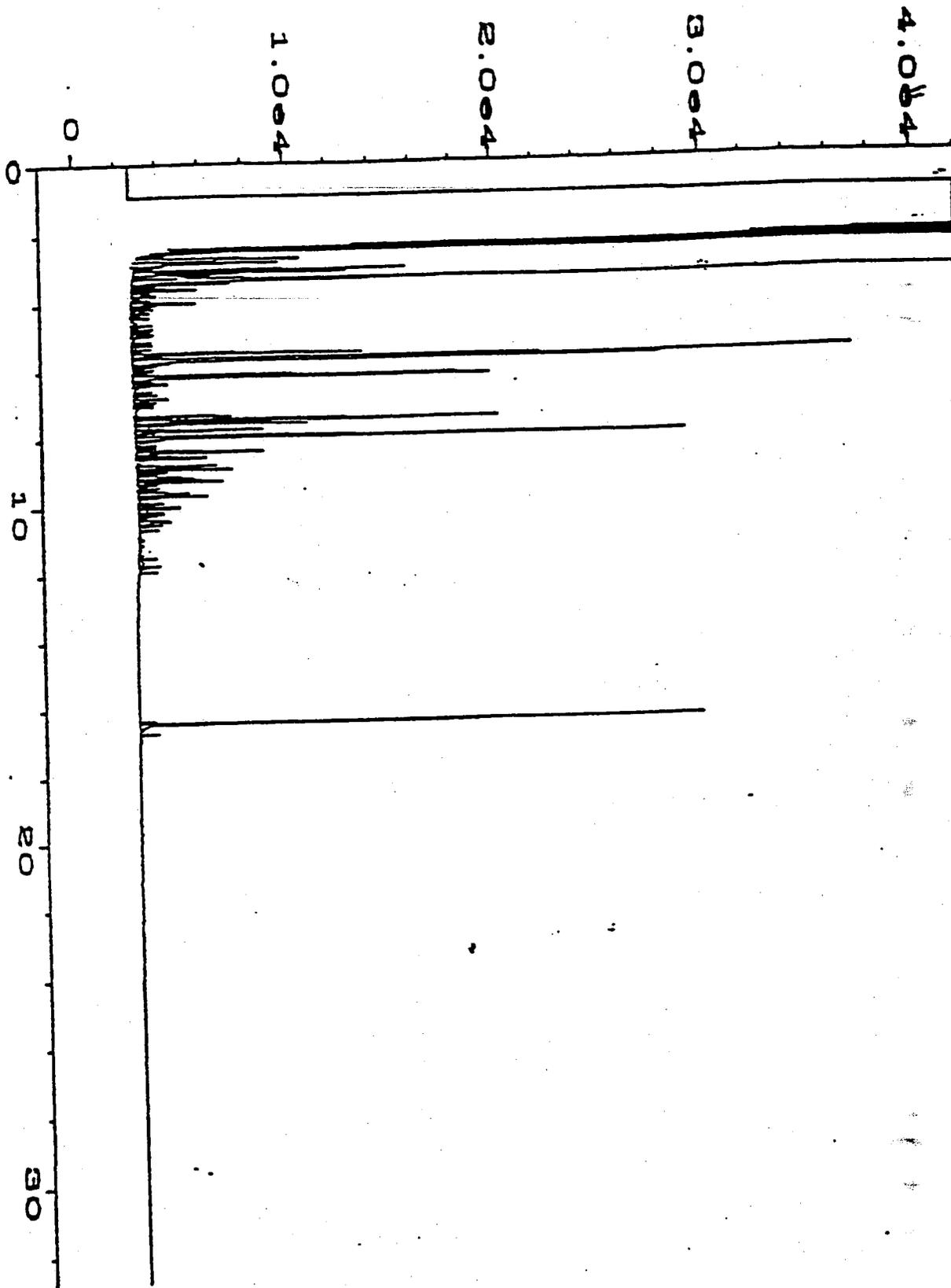


user modified

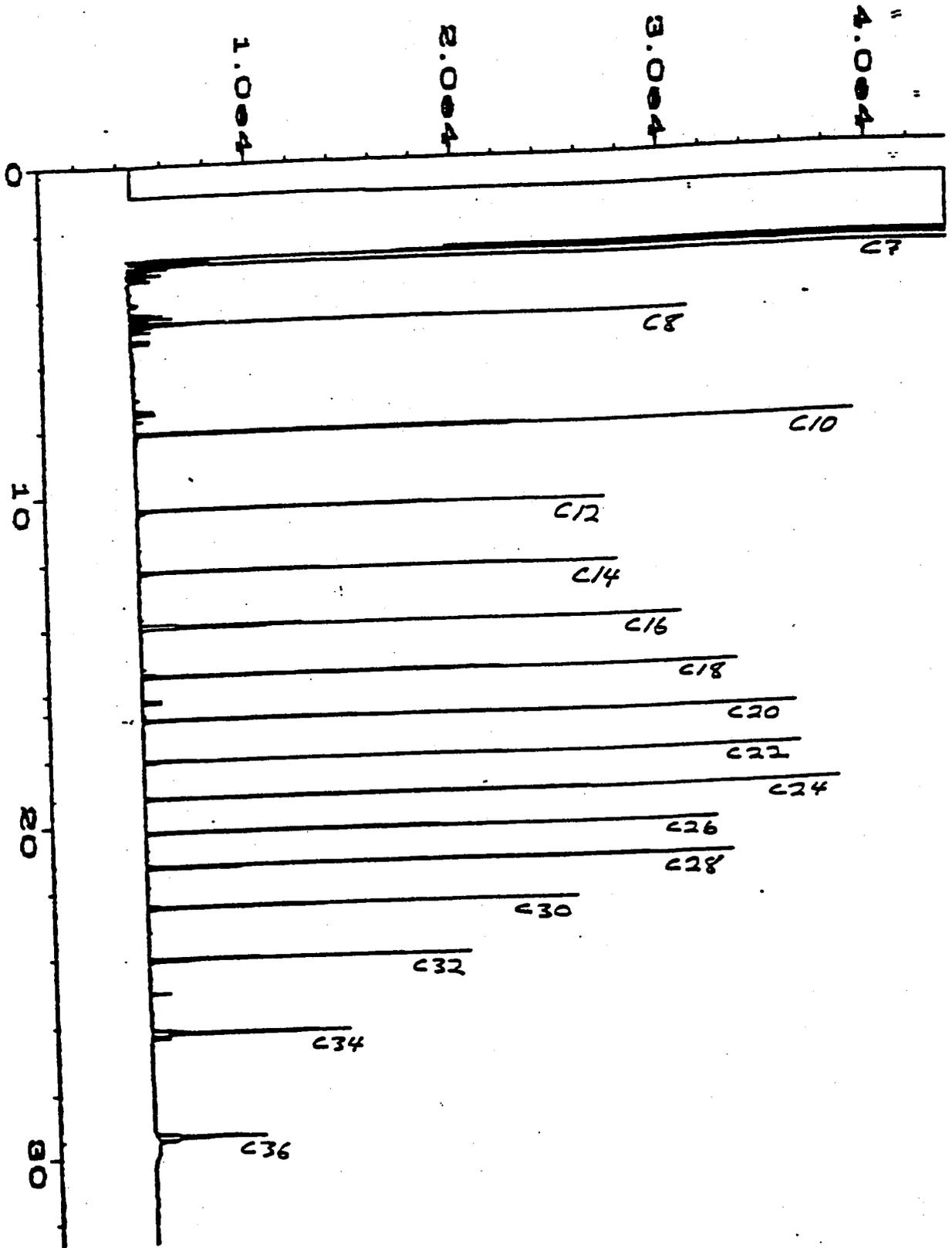
Data File Name	: C:\HPCHEM\2\DATA\27NOV98\011F0101.D	Page Number	: 1
Operator	: Pinnacle - mb & cff	Vial Number	: 11
Instrument	: FID-FID1	Injection Number	: 1
Sample Name	: 811074-07*5	Sequence Line	: 1
Run Time Bar Code:		Instrument Method:	RT061698.MTH
Acquired on	: 26 Oct 97 06:31 PM	Analysis Method	: RT061698.MTH
Report Created on:	30 Nov 98 11:35 AM		



Data File Name	: C:\HPCHEM\1\DATA\16SEPT97\011F0101.D	Page Number	: 1
Operator	: AEN NM GC #1 FID DI	Vial Number	: 11
Instrument	: INSTRUMEN	Injection Number	: 1
Sample Name	: DSL GC3-103-15	Sequence Line	: 1
Run Time Bar Code:		Instrument Method:	SDF0820.MTH
Acquired on	: 16 Sep 97 08:50 PM	Analysis Method	: SDF0820.MTH
Report Created on:	17 Sep 97 11:19 AM		



Data File Name	: C:\HPCHEM\1\DATA\16SEPT97\019F0201.D	Page Number	: 1
Operator	: AEN NM GC #1 FID DI	Vial Number	: 19
Instrument	: INSTRUMEN	Injection Number	: 1
Sample Name	: GAS GC3-103-16	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	: SGF0820.MTH
Acquired on	: 17 Sep 97 02:37 AM	Analysis Method	: SGF0820.MTH
Report Created on:	17 Sep 97 10:45 AM		



Data File Name : C:\HPCHEM\1\DATA\11APR96\004F0101.D
 Operator : DJ
 Instrument : GC#1 5890
 Sample Name : RET TIME STAND
 Run Time Bar Code : 11 Apr 96 10:17 AM
 Page Number : 1
 Vial Number : 4
 Injection Number : 1
 Sequence Line : 1
 Instrument Method : SDF011.MTH
 Method : SDF011.MTH

BTEX SOIL SAMPLE WORKSHEET

File	:	980823	Date Printed	:	11/23/98	
Soil Mass (g)	:	5.02	Multiplier (L/g)	:	0.00100	
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):		400	
Shot Volume (uL)	:	25	CAL FACTOR (Report):		0.39841	
			DILUTION FACTOR:	2		Det. Limit
Benzene (ug/L)	:	2.44	Benzene (mg/Kg):	0.972		0.996
Toluene (ug/L)	:	110	Toluene (mg/Kg):	43.685		0.996
Ethylbenzene (ug/L)	:	20.3	Ethylbenzene (mg/Kg):	8.087		0.996
p & m-xylene (ug/L)	:	257	p & m-xylene (mg/Kg):	102.470		1.992
o-xylene (ug/L)	:	58.3	o-xylene (mg/Kg):	23.218		0.996
			Total xylenes (mg/Kg):	125.687		2.988
			Total BTEX (mg/Kg):	251.375		