FAX COVER SHEET

FAX NUMBER
918-251-2599

DATE: 8-23-91

TO: NAME: Barry Evens
CLIENT: EPA Region VII
SUBJECT: Case 6566 G Sample No -028
FAX # 913-551-5218

FROM: NAME: Jayant Shringarpure
LABORATORY: SWOK

COMMENTS:
- ___ For your comments
- ___ Please call me about this
- ___ Information only
- ✓ As you requested
- ___ As we discussed
- ___ Review and forward

NUMBER OF PAGES: 16 (Including this cover page)

SPECIAL INSTRUCTIONS:

If you have any problems with this transmission

please call _____ at (918)251-2658.

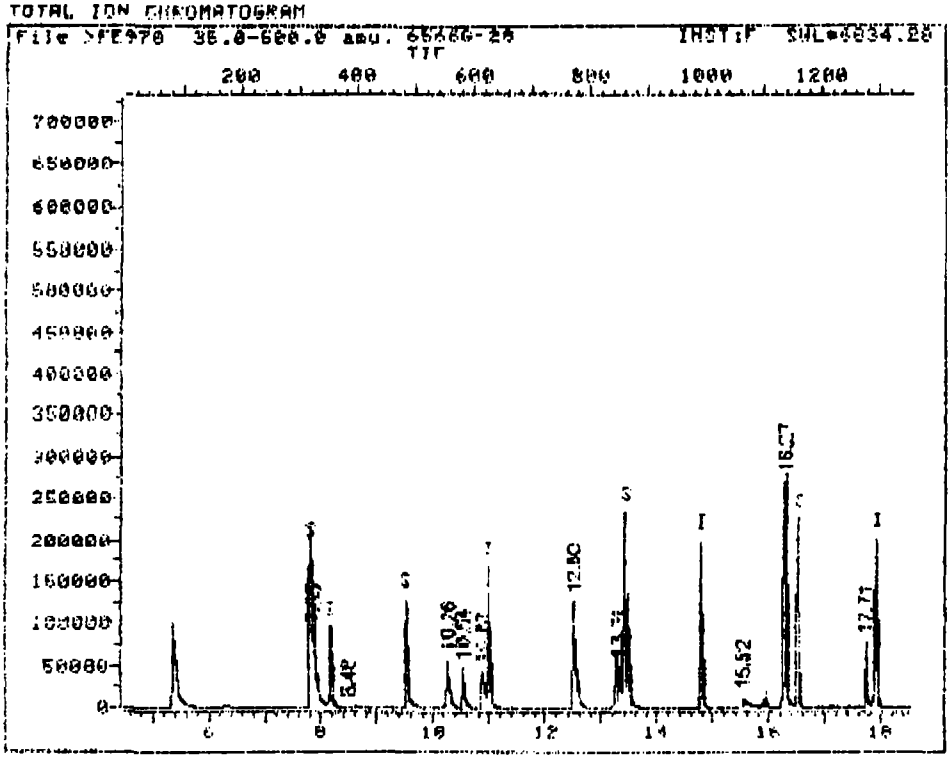
55

30216189
Superfund

OU-00

Extra Data
outside 12 hr. time

TOTAL ION CHROMATOGRAM



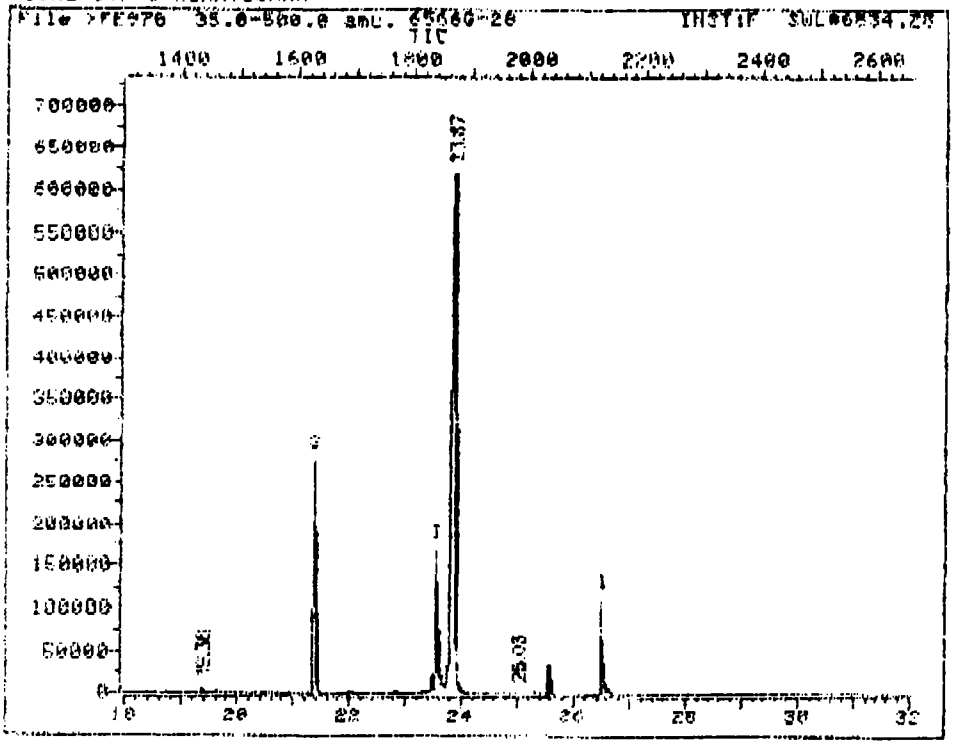
Data File: >FE970::D7 Quant Output File: ^FE970::L1
Name: 6566G-28
Misc: INST:F SWL#6834.28 1000ML/1ML/1UL BTL#12

Id File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625)
Last Calibration: 910805 15:07

Operator ID: LINDA
Quant Time: 910805 23:45
Injected at: 910805 23:10

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >FE970::D7 Quant Output File: ^FE970::L1
Name: 6566G-28
Misc: INST:F SWL#6834.28 1000ML/1ML/1UL BTL#12

Id File: ID_BN2::EX
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Operator ID: LINDA
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TIC page 2 of 2

QUANT REPORT

Operator ID: LINDA Quant Rev: 6 Quant Time: 910805 23:45
Output File: ^FE970::L1 Injected at: 910805 23:10
Data File: >FE970::D7 Dilution Factor: 1.00000
Name: 6566G-28
Misc: INST:F SWL#6834.28 1000ML/1ML/1UL BTL#12

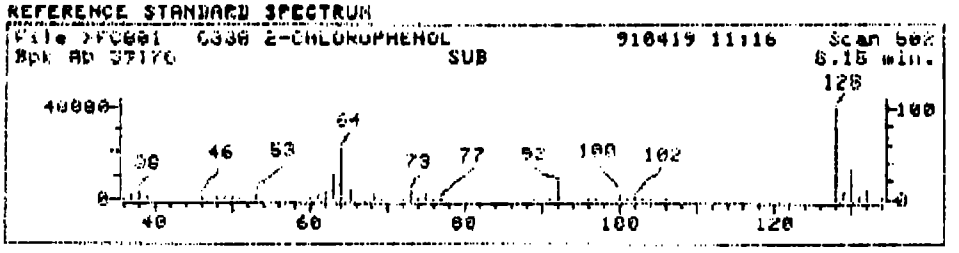
ID File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625)
Last Calibration: 910805 15:07

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C130 1,4-DICHLOROBENZENE-D4	8.15	152.0	31903	40.00	NG/UL	97
5)	C330 2-CHLOROPHENOL	7.85	128.0	22277	24.25	NG/UL	87
11)	~~C360 BIS(2-CHLOROISOPROPYL)ETH~~	~~8.48~~	~~45.0~~	~~619~~	~~.19~~	~~NG/UL~~	100
16)	C340 PHENOL-D6	7.77	99.0	121741	96.26	NG/UL	92
17)	*C140 NAPHTHALENE-D8	10.98	136.0	130912	40.00	NG/UL	90
20)	C420 2-NITROPHENOL	10.26	139.0	27124	41.02	NG/UL	75
21)	C425 2,4-DIMETHYLPHENOL	10.54	107.0	23700	18.56	NG/UL	89
24)	C440 2,4-DICHLOROPHENOL	10.87	162.0	30258	32.59	NG/UL	88
29)	C465 4-CHLORO-3-METHYLPHENOL	12.50	107.0	84383	61.87	NG/UL	87
31)	CS20 NITROBENZENE-D5	9.50	82.0	104351	77.50	NG/UL	89
32)	*C150 ACENAPHTHENE-D10	14.78	164.0	78445	40.00	NG/UL	96
34)	C515 2,4,6-TRICHLOROPHENOL	13.31	196.0	14976	19.70	NG/UL	96
44)	C560 4-NITROPHENOL	15.52	109.0	9142	23.76	NG/UL	89
51)	CS25 2-FLUOROBIPHENYL	13.41	172.0	142704	64.91	NG/UL	95
52)	CS50 2,4,6-TRIBROMOPHENOL	16.51	329.8	58457	149.08	NG/UL	97
53)	*C160 PHENANTHRENE-D10	17.90	188.0	143908	40.00	NG/UL	86
54)	C610 4,6-DINITRO-2-METHYLPHENO	16.27	198.0	105928	182.66	NG/UL	100
58)	C635 PENTACHLOROPHENOL	17.71	266.0	21973	71.98	NG/UL	97
61)	~~C650 DI-N-BUTYLPHTHALATE~~	~~19.38~~	~~149.0~~	~~4609~~	~~.81~~	~~NG/UL~~	85
63)	*C170 CHRYSENE-D12	23.54	240.0	123739	40.00	NG/UL	95
69)	C745 BIS(2-ETHYLHEXYL)PHTHALAT	23.82	149.0	730822	194.63	NG/UL	97
70)	CS30 TERPHENYL-D14	21.37	244.0	182923	77.76	NG/UL	96
71)	*C175 PERYLENE-D12	26.49	264.0	105587	40.00	NG/UL	98
72)	~~C760 DI-N-OCTYLPHTHALATE~~	~~25.03~~	~~149.0~~	~~590~~	~~.09~~	~~NG/UL~~	100

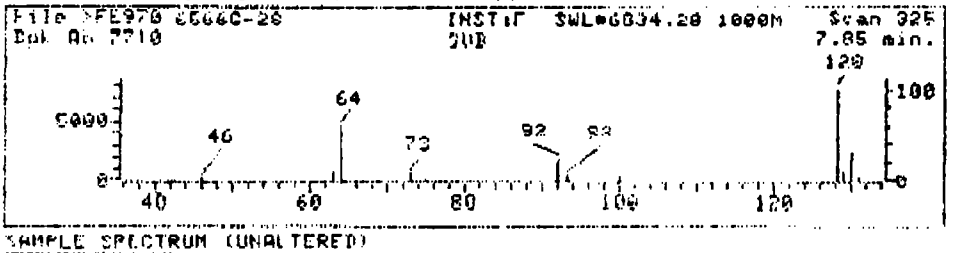
* Compound is ISTD

FP = FALSE POSITIVE

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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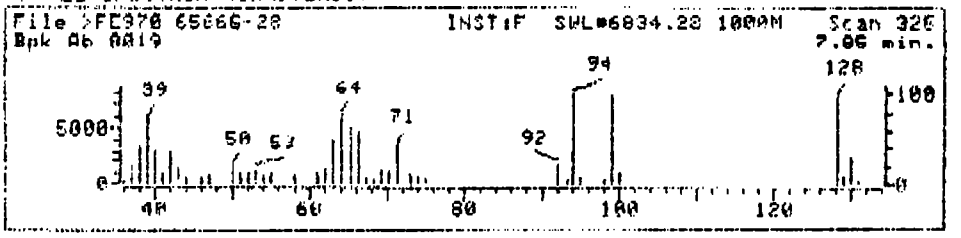
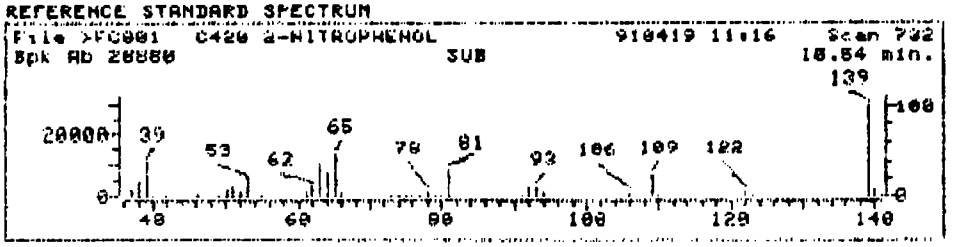


Data File: >FF970::07 Quant Output File: ^FE970::L1
Name: 6566C-28
Misc: INST:F SWL#6834.28 1000ML/1ML/1UL BTL#12
Quant Time: 910805 23:45 Quant ID File: ID_BN2::EX
Injected at: 910805 23:10 Last Calibration: 910805 15:07

Compound No: 5
Compound Name: C330 2-CHLOROPHENOL
Scan Number: 325
Retention Time: 7.85 min.
Quant Ion: 128.0
Area: 22277
Concentration: 24.25 NG/UL
Q-value: 87

REFERENCE STANDARD SPECTRUM



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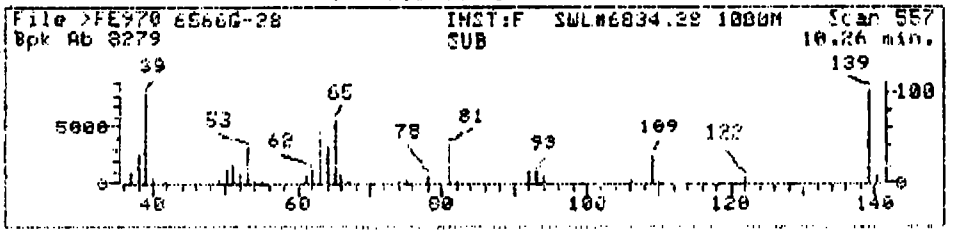

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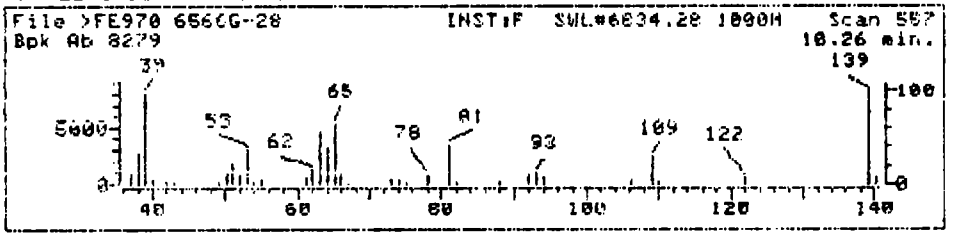

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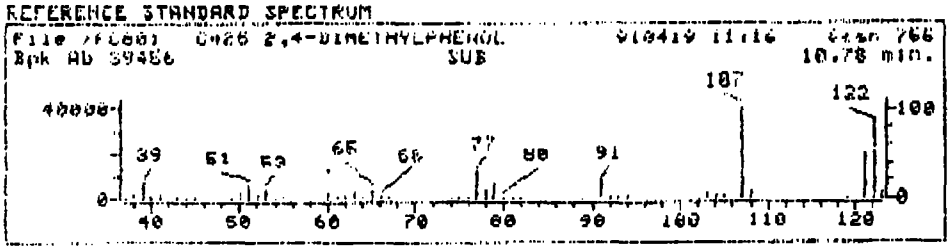
Name: 6566G-28
Misc: INST:F SWL#6834.28 1000ML/1ML/1UL BTL#12
Quant Time: 910805 23:45 Quant ID File: ID_BN2::EX
Injected at: 910805 23:10 Last Calibration: 910805 19:07

Compound No: 20
Compound Name: C420 2-NITROPHENOL
Scan Number: 557
Retention Time: 10.26 min.
Quant Ion: 139.0
Area: 27124
Concentration: 41.02 NG/UL
q-value: 75

REFERENCE STANDARD SPECTRUM



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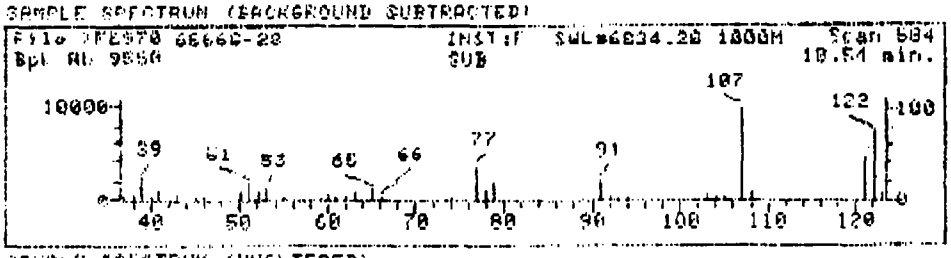

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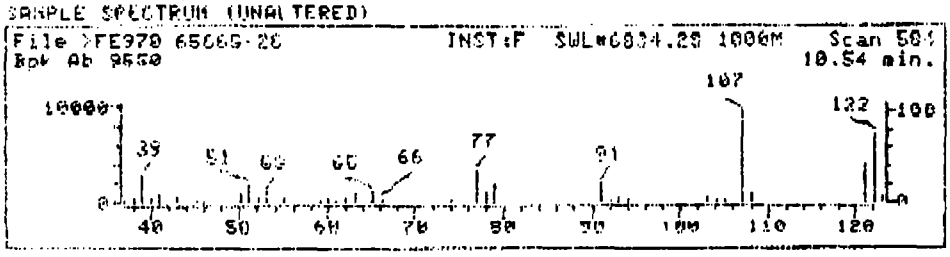
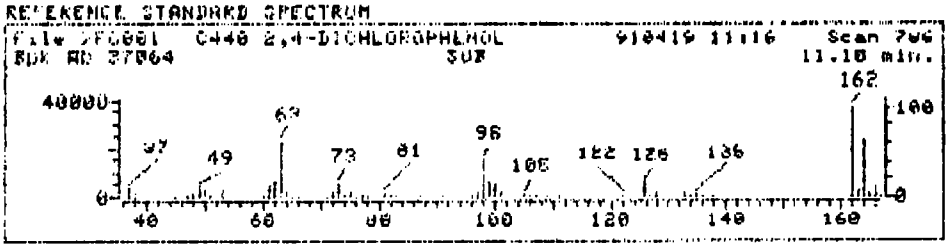


Data File: >FE970::D7 Quant Output File: ^FE970::L1
Name: 6566G-28
Misc: INST:F SWL#6834.28 1000ML/1ML/1UL BTL#12
Quant Time: 910805 23:45 Quant ID File: ID_BN2::EX
Injected at: 910805 23:10 Last Calibration: 910805 15:07

Compound No: 23
Compound Name: C426 2,4-DIMETHYLPHENOL
Scan Number: 584
Retention Time: 10.54 min.
Quant Ion: 107.0
Area: 23700
Concentration: 18.56 NG/UL
q-value: 89

REFERENCE STANDARD SPECTRUM



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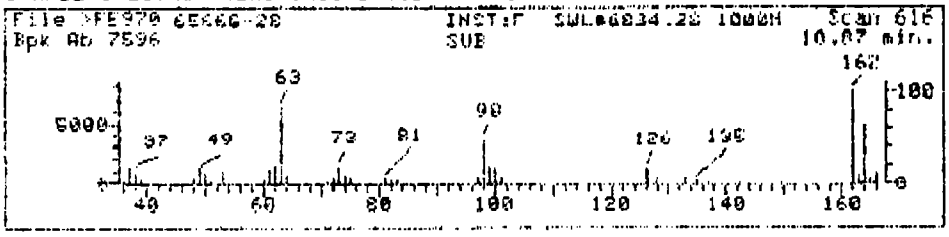

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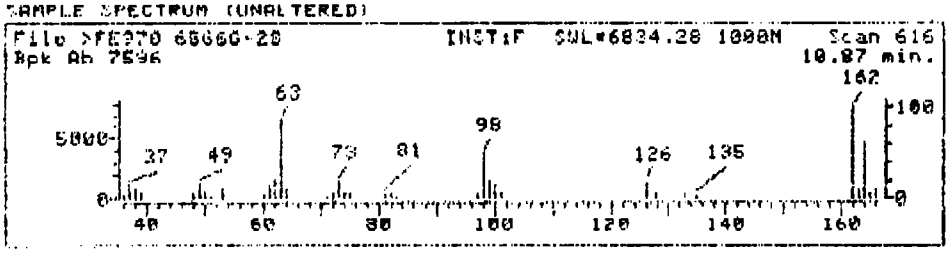
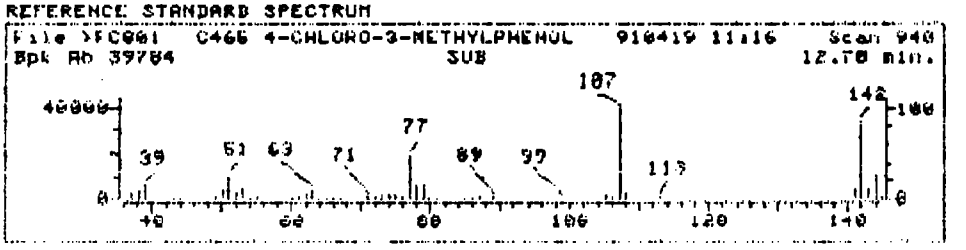


Data File: >FE970::D7 Quant Output File: ^FE970::L1
Name: 65666-28
Misc: INST:F SWL#6834.28 1000ML/1ML/1UL BTL#12
Quant Time: 910805 23:45 Quant ID File: ID_BN2::EX
Injected at: 910805 23:10 Last Calibration: 910805 15:07

Compound No: 24
Compound Name: C440 2,4-DICHLOROPHENOL
Scan Number: 616
Retention Time: 10.87 min.
Quant Ion: 162.0
Area: 30258
Concentration: 32.59 NG/UL
q-value: 88

REFERENCE STANDARD SPECTRUM



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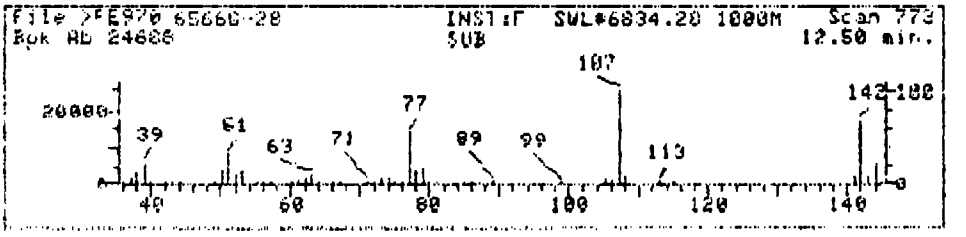

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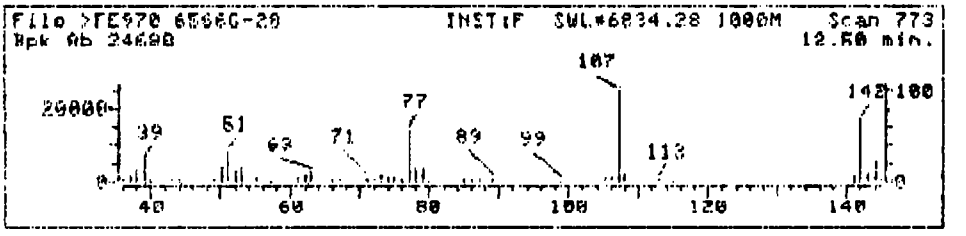
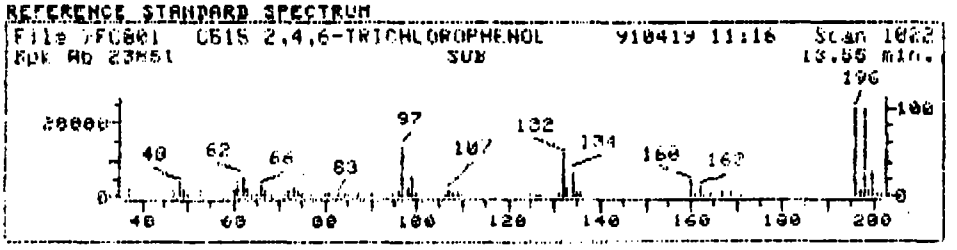


Data File: >FE970::D7 Quant Output File: ^FE970::L1
Name: 6566G-28
Misc: INST:F SWL#6834.28 1000ML/1ML/1UL BTL#12
Quant Time: 910805 23:45 Quant ID File: ID_BN2::EX
Injected at: 910805 23:10 Last Calibration: 910805 15:07

Compound No: 29
Compound Name: C465 4-CHLORO-3-METHYLPHENOL
Scan Number: 773
Retention Time: 12.50 min.
Quant Ion: 107.0
Area: 84383
Concentration: 61.87 NG/UL
q-value: 87

REFERENCE STANDARD SPECTRUM



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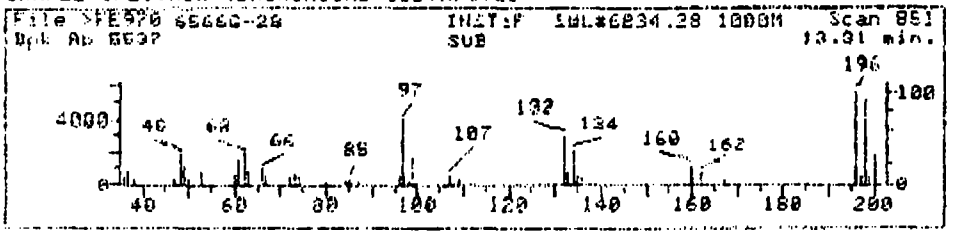

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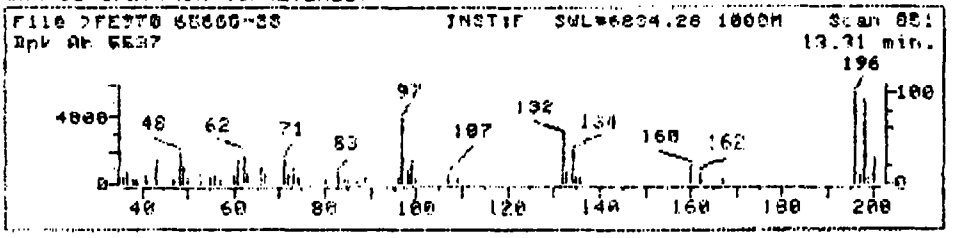
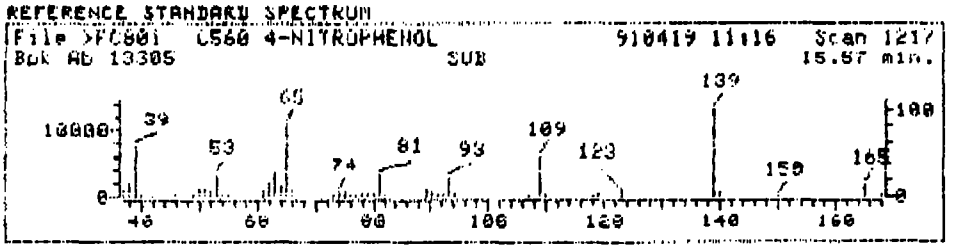


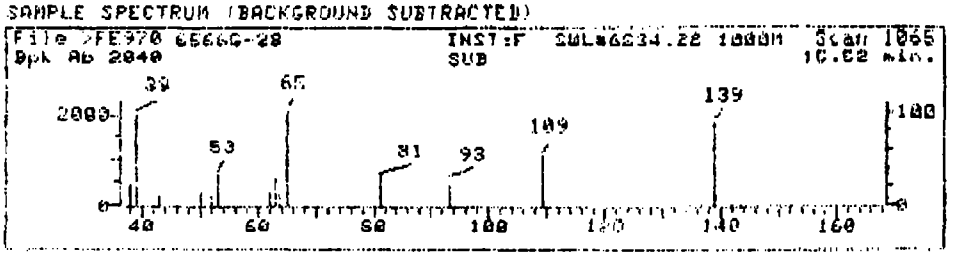
Data File: >FE970::D7 Quant Output File: ^FE970::L1
Name: 6566G-28
Misc: INST:F SWL#6834.28 1000ML/1ML/1UL BTL#12
Quant Time: 910805 23:45 Quant ID File: ID_BN2::EX
Injected at: 910805 23:10 Last Calibration: 910805 15:07

Compound No: 34
Compound Name: C515 2,4,6-TRICHLOROPHENOL
Scan Number: 851
Retention Time: 13.31 min.
Quant Ion: 196.0
Area: 14976
Concentration: 19.70 NG/UL
q-value: 96

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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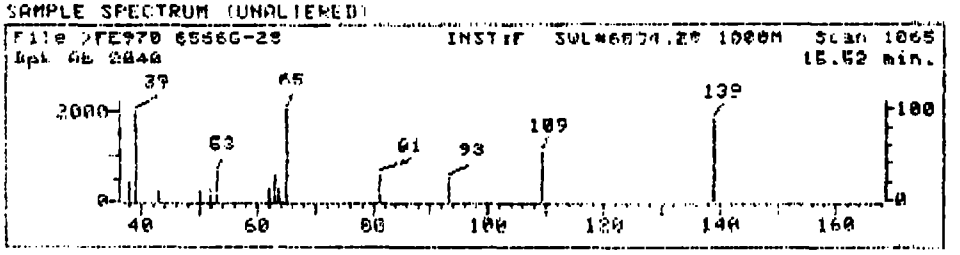
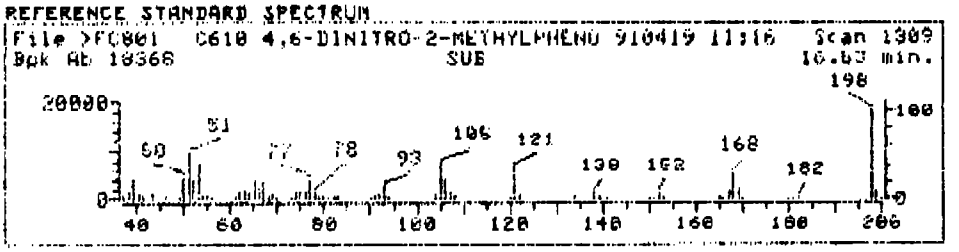


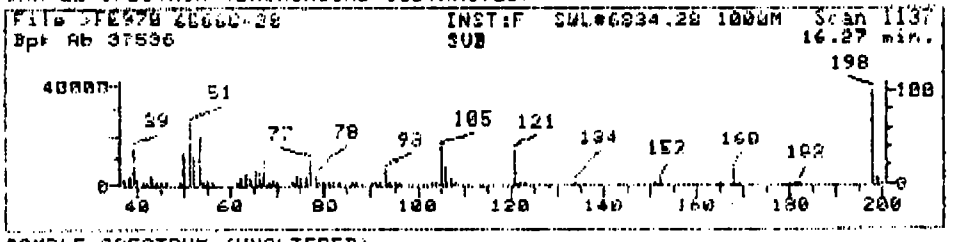
Data File: >FE970::D7 Quant Output File: >FE970::L1
Name: 6566G-28
Misc: INST:F SWL#6834.28 1000ML/1ML/1UL BTL#12
Quant Time: 910805 23:45 Quant ID File: ID_BN2::EX
Injected at: 910805 23:10 Last Calibration: 910805 15:07

Compound No: 44
Compound Name: C560 4-NITROPHENOL
Scan Number: 1065
Retention Time: 15.52 min.
Quant Ion: 109.0
Area: 5142
Concentration: 23.76 NG/UL
q-value: 89

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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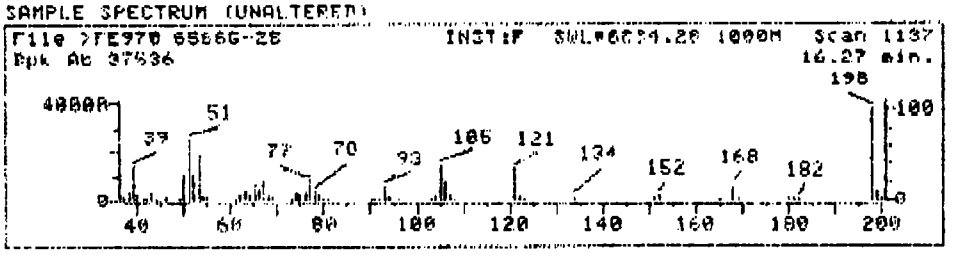
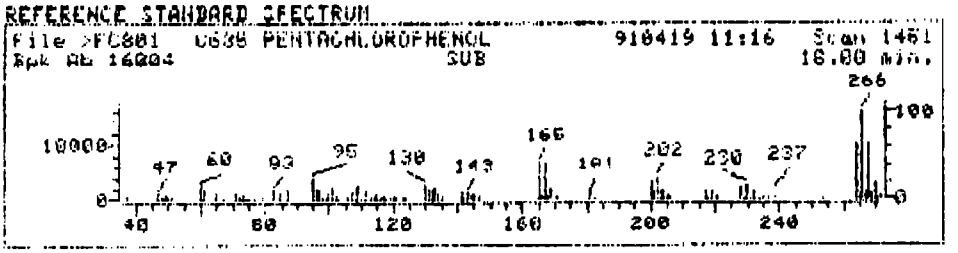


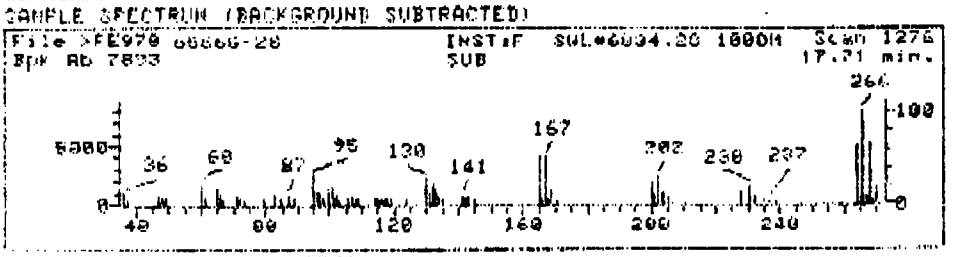
Data File: >FE970::D7 Quant Output File: ^FE970::L1
Name: 6566G-28
Misc: INST:F SWL#6934.28 1000ML/1ML/1UL BTL#12
Quant Time: 910805 23:45 Quant ID File: ID_BN2::EX
Injected at: 910805 23:10 Last Calibration: 910805 15:07

Compound No: 54
Compound Name: C610 4,6-DINITRO-2-METHYLPHENO
Scan Number: 1137
Retention Time: 16.27 min.
Quant Ion: 198.0
Area: 105928
Concentration: 183.66 NG/UL
q-value: 100

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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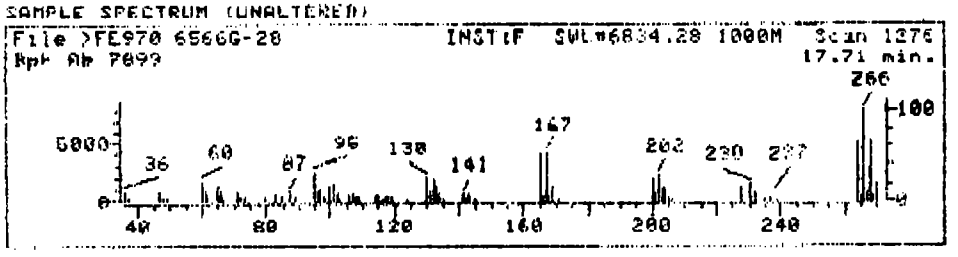
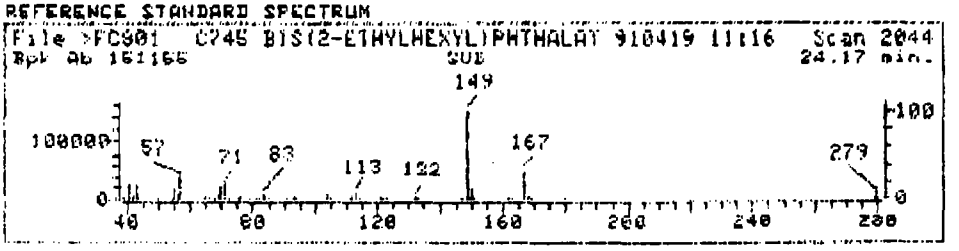


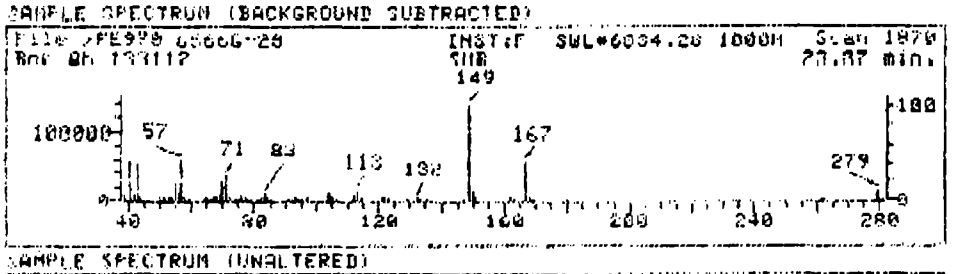
Data File: >FE970::D7 Quant Output File: ^FE970::L1
Name: 6566G-28
Misc: INST:F SWL#6834.28 1000ML/1ML/1UL BTL#12
Quant Time: 910805 23:45 Quant ID File: ID_BN2::EX
Injected at: 910805 23:10 Last Calibration: 910805 15:07

Compound No: 58
Compound Name: C635 PENTACHLOROPHENOL
Scan Number: 1276
Retention Time: 17.71 min.
Quant Ion: 266.0
Area: 21973
Concentration: 71.98 NG/UL
q-value: 97

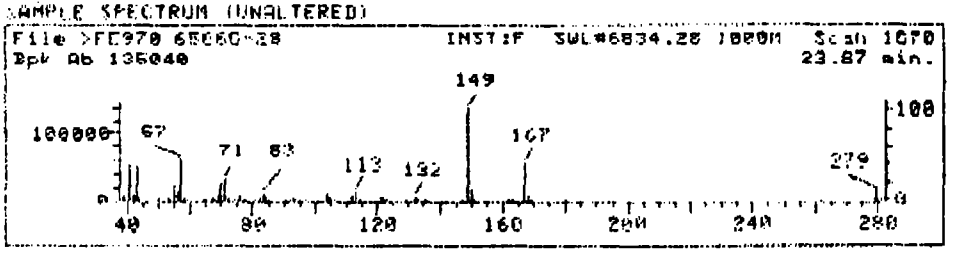
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

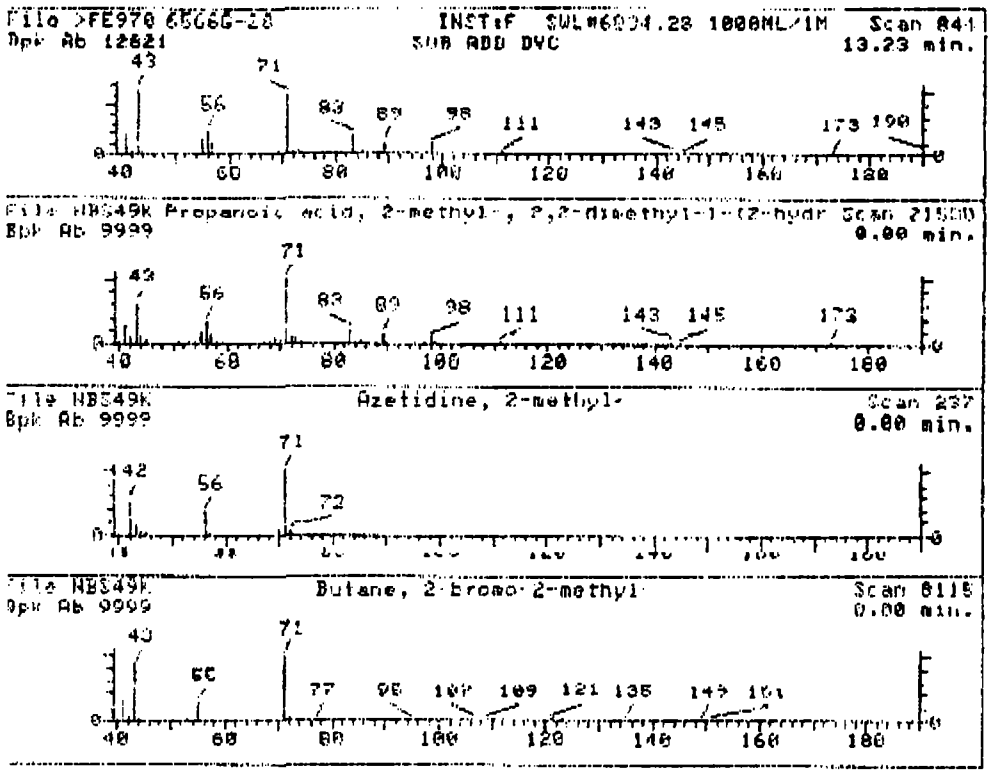


SAMPLE SPECTRUM (UNALTERED)



Data File: >FE970::D7 Quant Output File: ^FE970::L1
Name: 6566G-28
Misc: INST:F SWL#6834.28 1000ML/1ML/1UL BTL#12
Quant Time: 910805 23:45 Quant ID File: ID_BN2::EX
Injected at: 910805 23:10 Last Calibration: 910805 15:07

Compound No: 69
Compound Name: C745 BIS(2-ETHYLHEXYL)PHTHALAT
Scan Number: 1870
Retention Time: 23.87 min.
Quant Ion: 149.0
Area: 730822
Concentration: 194.63 NG/UL
q-value: 97



UNKNOWN

ample: 6566G-28 Operator: LINDA MS 8/05/91 23:10

. Unknown #,2
Area = 141657.0 Tentative Concentration is 15.00

1. Propanoic acid, 2-methyl-, 2,2-dimethyl-1-(2-hydroxy-1-methylethyl)propyl ester	216	C12H24O3
2. Azetidine, 2-methyl-	71	C4H9N
3. Butane, 2-bromo-2-methyl-	150	C5H11Br
4. Oxirane, butyl-	100	C6H12O
5. Butyric acid, ester with m-hydroxybenzonitrile	189	C11H11NO2
6. Butyric acid, ester with p-hydroxybenzonitrile	189	C11H11NO2
7. Pentane, 3-bromo-	150	C5H11Br

Sample file: >FE970 Spectrum #: 844
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	RODT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	76	74367332	4428	NBS49K	27	37	2	0	94	7	45	21
2.	28*	19812498	4253	NBS49K	26	36	2	0	94	37	10	14
3.	25	507368	4343	NBS49K	35	43	2	0	93	47	7	12
4.	25	1436346	4272	NBS49K	39	48	2	0	94	46	7	12
5.	25*	29062093	4404	NBS49K	30	45	2	0	94	47	7	14
6.	25*	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MS data file header from : >FF970

Sample: 6566G-28 Operator: LINDA MS 8/05/91 23:10
Misc : INST:F SWL#6834.28 1000ML/1ML/10L BTL#12
Sys. #: 2 MS model: 70 SW/HW rev.: 1A ALS # : 0
Method file: #STDF Tuning file: F2TUNE No. of extra records: 2
Source temp.: 0 Analyzer temp.: 300 Transfer line temp. : 0

Chromatographic temperatures : 45. 300. 0. 0. 0.
Chromatographic times, min. : 4.0 9.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 12.0 0.0 0.0 0.0 0.0

>FF970 6566G-28 INST:F SWL#6834.28 1000ML/1ML/10L
35.0: 500.0 CIP ADC TIC
Uslope: .20 Area Reject: 23116. Max Peaks: 8 Bunching: 1
Dnslope: 0.00 Results File IFF970 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	~~5.34~~	~~81~~	~~85~~	~~190~~	~~101358~~	~~483293~~	~~483293~~	~~188.88~~ 55	~~57.069~~
2	13.23	839	844	847	68935	141657	141657	29.31	16.727
3	~~15.61~~	~~1072~~	~~1073~~	~~1087~~	~~6338~~	~~34307~~	~~34307~~	~~7.10~~	~~4.051~~
4	~~15.94~~	1102	1105	1110	15532	27774	26684	5.52	3.151
5	16.31	~~1140~~	1141	1147	16196	41253	41253	8.54	4.871
6	23.48	1829	~~1833~~	~~1834~~	15869	32615	23416	4.85	2.765
7	23.91	~~1873~~	1874	1891	~~16813~~	54786	41492	8.59	4.900
8	~~26.57~~	2031	2034	2038	33703	~~59772~~	54756	11.33	6.466

Sum of corrected areas: 846858.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	40.0	231164.	8.15	4.50 - 9.57
2	40.0	343026.	10.98	9.57 - 12.88
3	40.0	385186.	14.78	12.88 - 16.34
4	40.0	416083.	17.90	16.34 - 20.72
5	40.0	391580.	23.54	20.72 - 25.02
6	40.0	329135.	26.49	25.02 - 32.04

Dilution Factor (DF) = 1.00 Fractional Solids (FS) = 1.00
Amount Method (AM) = 1000.00 Amount Used (AU) = 1000.00

Correction Factor = 1.00 = (AM / AU) / (DF * FS)

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std}}{\text{Area Int Std}} * \text{Area Unk} * \text{Correction Factor}$$

1:33 AM TUE., 6 AUG., 1991