SITE INSPECTION REPORT
ORBIS PRODUCTS CORPORATION
55 VIRGINIA STREET
NEWARK, ESSEX COUNTY, NEW JERSEY

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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253173

REFERENCE 15 (continued)

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: Envirotactics Inc.
Project: ORBIS - 444
Lab Case No.: E01-1922

Lab ID:	1922-013			1922-014			1922-015		
Client ID:	S-29			TB			S-30		
Matrix:	Soil			Soil			Soil		
Sampled Date:	3/28/2001			3/27/2001			3/28/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Metals (ppm)									
Antimony	ND		2.61	~			ND		2.72
Arsenic	3.98		0.261	~			2.65		0.272
Beryllium	1.03		0.261	~			0.734		0.272
Cadmium	0.611		0.261	~			0.524		0.272
Chromium	58.0		0.783	~			41.6		0.816
Copper	105		0.522	~			20.3		0.544
Lead	61.7		2.61	~			16.6		2.72
Mercury	0.500		0.0164	~			0.0476		0.017
Nickel	33.0		0.783	~			25.1		0.816
Selenium	ND		2.61	~			ND		2.72
Silver	ND		0.649	~			ND		0.673
Thallium	0.189		0.104	~			0.142		0.109
Zinc	145		1.30	~			295		1.36
General Analytical									
Cyanide, Total (ppm)	ND		1.31	~			ND		1.36
Phenol (ppm)	ND		3.28	~			39.4		3.40
Total Petroleum Hydrocarbons (ppm)	30.3		26.3	~			600		27.2

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-001
Client ID: S-17
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9462.D

GC/MS Column: DB-624
Sample wt/vol: 0.038g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.1

Compound	Concentration	Q	MDL
Chloromethane	ND		775
Vinyl Chloride	ND		775
Bromomethane	ND		775
Chloroethane	ND		775
Trichlorofluoromethane	ND		775
Acrolein	ND		1550
1,1-Dichloroethene	ND		775
Methylene Chloride	ND		775
Acrylonitrile	ND		1550
trans-1,2-Dichloroethene	ND		775
1,1-Dichloroethane	ND		775
Chloroform	ND		775
1,1,1-Trichloroethane	ND		775
Carbon Tetrachloride	ND		775
1,2-Dichloroethane(EDC)	ND		775
Benzene	14200		775
Trichloroethene	ND		775
1,2-Dichloropropane	ND		775
Bromodichloromethane	ND		775
2-Chloroethylvinyl Ether	ND		775
cis-1,3-Dichloropropene	ND		775
Toluene	ND		775
trans-1,3-Dichloropropene	ND		775
1,1,2-Trichloroethane	ND		775
Tetrachloroethene	ND		775
Dibromochloromethane	ND		775
Chlorobenzene	ND		775
Ethylbenzene	ND		775
Total Xylenes	ND		775
Bromoform	ND		775
1,1,2,2-Tetrachloroethane	ND		775
1,3-Dichlorobenzene	ND		775
1,4-Dichlorobenzene	ND		775
1,2-Dichlorobenzene	ND		775

Total Target Compounds: 14200

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-001
Client ID: S-17
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9462.D

GC/MS Column: DB-624
Sample wt/vol: 0.038g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.1

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

1058

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-002
Client ID: S-18
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9463.D

GC/MS Column: DB-624
Sample wt/vol: 0.034g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 26.7

Compound	Concentration	Q	MDL
Chloromethane	ND		1000
Vinyl Chloride	ND		1000
Bromomethane	ND		1000
Chloroethane	ND		1000
Trichlorofluoromethane	ND		1000
Acrolein	ND		2010
1,1-Dichloroethene	ND		1000
Methylene Chloride	ND		1000
Acrylonitrile	ND		2010
trans-1,2-Dichloroethene	ND		1000
1,1-Dichloroethane	ND		1000
Chloroform	ND		1000
1,1,1-Trichloroethane	ND		1000
Carbon Tetrachloride	ND		1000
1,2-Dichloroethane(EDC)	ND		1000
Benzene	ND		1000
Trichloroethene	ND		1000
1,2-Dichloropropane	ND		1000
Bromodichloromethane	ND		1000
2-Chloroethylvinyl Ether	ND		1000
cis-1,3-Dichloropropene	ND		1000
Toluene	205	J	1000
trans-1,3-Dichloropropene	ND		1000
1,1,2-Trichloroethane	ND		1000
Tetrachloroethene	ND		1000
Dibromochloromethane	ND		1000
Chlorobenzene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
Bromoform	ND		1000
1,1,2,2-Tetrachloroethane	ND		1000
1,3-Dichlorobenzene	ND		1000
1,4-Dichlorobenzene	ND		1000
1,2-Dichlorobenzene	ND		1000
Total Target Compounds:	205	J	

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-002
Client ID: S-18
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Date File: F9463.D

GC/MS Column: DB-624
Sample wt/vol: 0.034g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 26.7

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	1280	18.94

Total TICs = 1280

1060

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-003
Client ID: S-19
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9473.D

GC/MS Column: DB-624
Sample wt/vol: 0.004g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 10
% Moisture: 22.7

Compound	Concentration	Q	MDL
Chloromethane	ND		8090
Vinyl Chloride	ND		8090
Bromomethane	ND		8090
Chloroethane	ND		8090
Trichlorofluoromethane	ND		8090
Acrolein	ND		16200
1,1-Dichloroethene	ND		8090
Methylene Chloride	ND		8090
Acrylonitrile	ND		16200
trans-1,2-Dichloroethene	ND		8090
1,1-Dichloroethane	ND		8090
Chloroform	ND		8090
1,1,1-Trichloroethane	ND		8090
Carbon Tetrachloride	ND		8090
1,2-Dichloroethane(EDC)	ND		8090
Benzene	5090	J	8090
Trichloroethene	ND		8090
1,2-Dichloropropane	ND		8090
Bromodichloromethane	ND		8090
2-Chloroethylvinyl Ether	ND		8090
cis-1,3-Dichloropropene	ND		8090
Toluene	1270000	E	8090
trans-1,3-Dichloropropene	ND		8090
1,1,2-Trichloroethane	ND		8090
Tetrachloroethene	ND		8090
Dibromochloromethane	ND		8090
Chlorobenzene	21200		8090
Ethylbenzene	4120	J	8090
Total Xylenes	11800		8090
Bromoform	ND		8090
1,1,2,2-Tetrachloroethane	ND		8090
1,3-Dichlorobenzene	ND		8090
1,4-Dichlorobenzene	ND		8090
1,2-Dichlorobenzene	5060	J	8090
Total Target Compounds:	1317270	JE	

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INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-003
Client ID: S-19
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Date File: F9473.D

GC/MS Column: DB-624
Sample wt/vol: 0.004g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 10
% Moisture: 22.7

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown aromatic	124000	16.58
	Unknown aromatic	103000	18.52
	Unknown aromatic	6510000	18.87

Total TICs = 6737000

1062

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-003DIL
Client ID: S-19
Date Received: 03/28/2001
Date Analyzed: 03/31/2001
Data file: F9505.D

GC/MS Column: DB-624
Sample wt/vol: 0.0004g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 100
% Moisture: 22.7

Compound	Concentration	Q	MDL
Chloromethane	ND		80900
Vinyl Chloride	ND		80900
Bromomethane	ND		80900
Chloroethane	ND		80900
Trichlorofluoromethane	ND		80900
Acrolein	ND		162000
1,1-Dichloroethene	ND		80900
Methylene Chloride	ND		80900
Acrylonitrile	ND		162000
trans-1,2-Dichloroethene	ND		80900
1,1-Dichloroethane	ND		80900
Chloroform	ND		80900
1,1,1-Trichloroethane	ND		80900
Carbon Tetrachloride	ND		80900
1,2-Dichloroethane(EDC)	ND		80900
Benzene	ND		80900
Trichloroethene	ND		80900
1,2-Dichloropropane	ND		80900
Bromodichloromethane	ND		80900
2-Chloroethylvinyl Ether	ND		80900
cis-1,3-Dichloropropene	ND		80900
Toluene	1400000		80900
trans-1,3-Dichloropropene	ND		80900
1,1,2-Trichloroethane	ND		80900
Tetrachloroethene	ND		80900
Dibromochloromethane	ND		80900
Chlorobenzene	23500	J	80900
Ethylbenzene	ND		80900
Total Xylenes	ND		80900
Bromoform	ND		80900
1,1,2,2-Tetrachloroethane	ND		80900
1,3-Dichlorobenzene	ND		80900
1,4-Dichlorobenzene	ND		80900
1,2-Dichlorobenzene	ND		80900
Total Target Compounds:	1423500	J	

1063

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-004
Client ID: S-20
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9464.D

GC/MS Column: DB-624
Sample wt/vol: 0.04g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.7

Compound	Concentration	Q	MDL
Chloromethane	ND		741
Vinyl Chloride	ND		741
Bromomethane	ND		741
Chloroethane	ND		741
Trichlorofluoromethane	ND		741
Acrolein	ND		1480
1,1-Dichloroethene	ND		741
Methylene Chloride	ND		741
Acrylonitrile	ND		1480
trans-1,2-Dichloroethene	ND		741
1,1-Dichloroethane	ND		741
Chloroform	ND		741
1,1,1-Trichloroethane	ND		741
Carbon Tetrachloride	ND		741
1,2-Dichloroethane(EDC)	ND		741
Benzene	4220		741
Trichloroethene	ND		741
1,2-Dichloropropane	ND		741
Bromodichloromethane	ND		741
2-Chloroethylvinyl Ether	ND		741
cis-1,3-Dichloropropene	ND		741
Toluene	16800		741
trans-1,3-Dichloropropene	ND		741
1,1,2-Trichloroethane	ND		741
Tetrachloroethene	295	J	741
Dibromochloromethane	ND		741
Chlorobenzene	236	J	741
Ethylbenzene	ND		741
Total Xylenes	637	J	741
Bromoform	ND		741
1,1,2,2-Tetrachloroethane	ND		741
1,3-Dichlorobenzene	ND		741
1,4-Dichlorobenzene	ND		741
1,2-Dichlorobenzene	ND		741
Total Target Compounds:	22188	J	

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-004
Client ID: S-20
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Date File: F9464.D

GC/MS Column: DB-624
Sample wt/vol; 0.04g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.7

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown hydrocarbon	979	18.65
	Unknown aromatic	4370	18.84
	Unknown hydrocarbon	1320	21.07
	Substituted benzene	3530	21.46
	Unknown aromatic	1780	22.34
	Unknown aromatic	1420	22.93
	Unknown aromatic	2920	23.47
	Unknown aromatic	4140	23.96
	Unknown aliphatic	3940	24.45
	Unknown	919	24.78
	Unknown aromatic	6110	25.14
	Unknown aromatic	1040	26.18
	Unknown aromatic	1070	26.58

Total TICs = 33538

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-005
Client ID: S-21
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9465.D

GC/MS Column: DB-624
Sample wt/vol: 0.042g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 14.6

Compound	Concentration	Q	MDL
Chloromethane	ND		697
Vinyl Chloride	ND		697
Bromomethane	ND		697
Chloroethane	ND		697
Trichlorofluoromethane	ND		697
Acrolein	ND		1390
1,1-Dichloroethene	ND		697
Methylene Chloride	ND		697
Acrylonitrile	ND		1390
trans-1,2-Dichloroethene	ND		697
1,1-Dichloroethane	ND		697
Chloroform	ND		697
1,1,1-Trichloroethane	ND		697
Carbon Tetrachloride	ND		697
1,2-Dichloroethane(EDC)	ND		697
Benzene	709		697
Trichloroethene	ND		697
1,2-Dichloropropane	ND		697
Bromodichloromethane	ND		697
2-Chloroethylvinyl Ether	ND		697
cis-1,3-Dichloropropene	ND		697
Toluene	4760		697
trans-1,3-Dichloropropene	ND		697
1,1,2-Trichloroethane	ND		697
Tetrachloroethene	ND		697
Dibromochloromethane	ND		697
Chlorobenzene	ND		697
Ethylbenzene	ND		697
Total Xylenes	ND		697
Bromoform	ND		697
1,1,2,2-Tetrachloroethane	ND		697
1,3-Dichlorobenzene	ND		697
1,4-Dichlorobenzene	ND		697
1,2-Dichlorobenzene	266	J	697
Total Target Compounds:	5735	J	

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-005
Client ID: S-21
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Date File: F9465.D

GC/MS Column: DB-624
Sample wt/vol: 0.042g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 14.6

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown hydrocarbon	5630	17.52
	Unknown cyclic hydrocarbon	1760	17.66
	Unknown aromatic	3070	17.77
	Unknown cyclic hydrocarbon	5300	17.90
	Unknown cyclic hydrocarbon	1620	18.31
	Unknown aromatic	976	18.63
	Unknown aromatic	1520	18.78
	Substituted benzene	2020	21.46
	Unknown	6330	22.44
	Unknown aromatic	6150	23.47
	Unknown aromatic	5590	23.59
	Unknown aromatic	3320	23.97
	Unknown aromatic	2330	24.46
	Unknown aromatic	1200	25.12
	Unknown hydrocarbon	1100	26.56

Total TICs = 47916

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-006
Client ID: S-22
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9470.D

GC/MS Column: DB-624
Sample wt/vol: 0.019g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 2
% Moisture: 16.5

Compound	Concentration	Q	MDL
Chloromethane	ND		1580
Vinyl Chloride	ND		1580
Bromomethane	ND		1580
Chloroethane	ND		1580
Trichlorofluoromethane	ND		1580
Acrolein	ND		3150
1,1-Dichloroethene	ND		1580
Methylene Chloride	ND		1580
Acrylonitrile	ND		3150
trans-1,2-Dichloroethene	ND		1580
1,1-Dichloroethane	ND		1580
Chloroform	ND		1580
1,1,1-Trichloroethane	ND		1580
Carbon Tetrachloride	ND		1580
1,2-Dichloroethane(EDC)	ND		1580
Benzene	ND		1580
Trichloroethene	1090	J	1580
1,2-Dichloropropane	ND		1580
Bromodichloromethane	ND		1580
2-Chloroethylvinyl Ether	ND		1580
cis-1,3-Dichloropropene	ND		1580
Toluene	1910		1580
trans-1,3-Dichloropropene	ND		1580
1,1,2-Trichloroethane	ND		1580
Tetrachloroethene	1440	J	1580
Dibromochloromethane	ND		1580
Chlorobenzene	1830		1580
Ethylbenzene	1340	J	1580
Total Xylenes	2690		1580
Bromoform	ND		1580
1,1,2,2-Tetrachloroethane	ND		1580
1,3-Dichlorobenzene	449	J	1580
1,4-Dichlorobenzene	2010		1580
1,2-Dichlorobenzene	13500		1580
Total Target Compounds:	26259	J	

1068

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-006
Client ID: S-22
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Date File: F9470.D

GC/MS Column: DB-624
Sample wt/vol: 0.019g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 2
% Moisture: 16.5

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown aromatic	3810	16.30
	Substituted benzene	54500	16.61
	Unknown aromatic	19600	17.07
	Substituted benzene	31500	17.51
	Substituted benzene	35500	17.72
	Unknown aromatic	2840	18.38
	Unknown aromatic	270000	18.63
	Unknown aromatic	16600	18.84
	Unknown aliphatic	87300	19.54
	Substituted benzene	9740	21.45
	Unknown alkane	4600	21.89
	Unknown aromatic	9580	22.45
	Unknown aromatic	6050	23.46
	Unknown aromatic	5110	23.60
	Substituted benzene	3180	24.44

Total TICs = 559910

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-007
Client ID: S-23
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9503.D

GC/MS Column: DB-624
Sample wt/vol: 0.04g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.8

Compound	Concentration	Q	MDL
Chloromethane	ND		760
Vinyl Chloride	ND		760
Bromomethane	ND		760
Chloroethane	ND		760
Trichlorofluoromethane	ND		760
Acrolein	ND		1520
1,1-Dichloroethene	ND		760
Methylene Chloride	ND		760
Acrylonitrile	ND		1520
trans-1,2-Dichloroethene	ND		760
1,1-Dichloroethane	ND		760
Chloroform	ND		760
1,1,1-Trichloroethane	ND		760
Carbon Tetrachloride	ND		760
1,2-Dichloroethane(EDC)	1140		760
Benzene	571	J	760
Trichloroethene	3120		760
1,2-Dichloropropane	ND		760
Bromodichloromethane	ND		760
2-Chloroethylvinyl Ether	ND		760
cis-1,3-Dichloropropene	ND		760
Toluene	2540		760
trans-1,3-Dichloropropene	ND		760
1,1,2-Trichloroethane	ND		760
Tetrachloroethene	ND		760
Dibromochloromethane	ND		760
Chlorobenzene	ND		760
Ethylbenzene	ND		760
Total Xylenes	ND		760
Bromoform	ND		760
1,1,2,2-Tetrachloroethane	ND		760
1,3-Dichlorobenzene	ND		760
1,4-Dichlorobenzene	ND		760
1,2-Dichlorobenzene	ND		760
Total Target Compounds:	7371	J	

000030

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INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-007
Client ID: S-23
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9503.D

GC/MS Column: DB-624
Sample wt/vol: 0.04g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.8

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-008
Client ID: S-24
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9502.D

GC/MS Column: DB-624
Sample wt/vol: 0.035g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 21.8

Compound	Concentration	Q	MDL
Chloromethane	ND		913
Vinyl Chloride	ND		913
Bromomethane	ND		913
Chloroethane	ND		913
Trichlorofluoromethane	ND		913
Acrolein	ND		1830
1,1-Dichloroethene	ND		913
Methylene Chloride	ND		913
Acrylonitrile	ND		1830
trans-1,2-Dichloroethene	ND		913
1,1-Dichloroethane	ND		913
Chloroform	ND		913
1,1,1-Trichloroethane	ND		913
Carbon Tetrachloride	ND		913
1,2-Dichloroethane(EDC)	ND		913
Benzene	ND		913
Trichloroethene	ND		913
1,2-Dichloropropane	ND		913
Bromodichloromethane	ND		913
2-Chloroethylvinyl Ether	ND		913
cis-1,3-Dichloropropene	ND		913
Toluene	399	J	913
trans-1,3-Dichloropropene	ND		913
1,1,2-Trichloroethane	ND		913
Tetrachloroethene	ND		913
Dibromochloromethane	ND		913
Chlorobenzene	ND		913
Ethylbenzene	ND		913
Total Xylenes	ND		913
Bromoform	ND		913
1,1,2,2-Tetrachloroethane	ND		913
1,3-Dichlorobenzene	ND		913
1,4-Dichlorobenzene	ND		913
1,2-Dichlorobenzene	ND		913
Total Target Compounds:	399	J	

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INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-008
Client ID: S-24
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9502.D

GC/MS Column: DB-624
Sample wt/vol: 0.035g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 21.8

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-009
Client ID: S-25
Date Received: 03/28/2001
Date Analyzed: 04/09/2001
Data file: J8837.D

GC/MS Column: DB-624
Sample wt/vol: 0.004g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 10
% Moisture: 18.3

Compound	Concentration	Q	MDL
Chloromethane	ND		7650
Vinyl Chloride	ND		7650
Bromomethane	ND		7650
Chloroethane	ND		7650
Trichlorofluoromethane	ND		7650
Acrolein	ND		15300
1,1-Dichloroethene	ND		7650
Methylene Chloride	ND		7650
Acrylonitrile	ND		15300
trans-1,2-Dichloroethene	ND		7650
1,1-Dichloroethane	ND		7650
Chloroform	ND		7650
1,1,1-Trichloroethane	ND		7650
Carbon Tetrachloride	ND		7650
1,2-Dichloroethane(EDC)	ND		7650
Benzene	ND		7650
Trichloroethene	ND		7650
1,2-Dichloropropane	ND		7650
Bromodichloromethane	ND		7650
2-Chloroethylvinyl Ether	ND		7650
cis-1,3-Dichloropropene	ND		7650
Toluene	2170	J	7650
trans-1,3-Dichloropropene	ND		7650
1,1,2-Trichloroethane	ND		7650
Tetrachloroethene	ND		7650
Dibromochloromethane	ND		7650
Chlorobenzene	ND		7650
Ethylbenzene	29900		7650
Total Xylenes	207000		7650
Bromoform	ND		7650
1,1,2,2-Tetrachloroethane	ND		7650
1,3-Dichlorobenzene	ND		7650
1,4-Dichlorobenzene	ND		7650
1,2-Dichlorobenzene	ND		7650
Total Target Compounds:	239070	J	

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INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-009
Client ID: S-25
Date Received: 03/28/2001
Date Analyzed: 04/09/2001
Date File: J8837.D

GC/MS Column: DB-624
Sample wt/vol: 0.004g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 10
% Moisture: 18.3

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	49700	12.29
	Substituted benzene	315000	12.40
	Substituted benzene	122000	12.51
	Substituted benzene	77400	12.75
	Substituted benzene	382000	12.96
	Substituted benzene	80800	13.49
	Substituted benzene	108000	13.74
	Substituted benzene	90900	13.84
	Substituted benzene	30400	14.18
	Substituted benzene	63300	14.30
	Substituted benzene	17100	14.45
	Substituted benzene	24900	14.77
	Substituted benzene	34600	14.83
	Substituted benzene	19100	15.13
	Substituted benzene	34900	15.31

Total TICs = 1450100

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-011
Client ID: S-27
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9468.D

GC/MS Column: DB-624
Sample wt/vol: 0.035g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17

Compound	Concentration	Q	MDL
Chloromethane	ND		861
Vinyl Chloride	ND		861
Bromomethane	ND		861
Chloroethane	ND		861
Trichlorofluoromethane	ND		861
Acrolein	ND		1720
1,1-Dichloroethene	ND		861
Methylene Chloride	ND		861
Acrylonitrile	ND		1720
trans-1,2-Dichloroethene	ND		861
1,1-Dichloroethane	ND		861
Chloroform	ND		861
1,1,1-Trichloroethane	ND		861
Carbon Tetrachloride	ND		861
1,2-Dichloroethane(EDC)	ND		861
Benzene	ND		861
Trichloroethene	ND		861
1,2-Dichloropropane	ND		861
Bromodichloromethane	ND		861
2-Chloroethylvinyl Ether	ND		861
cis-1,3-Dichloropropene	ND		861
Toluene	301	J	861
trans-1,3-Dichloropropene	ND		861
1,1,2-Trichloroethane	ND		861
Tetrachloroethene	ND		861
Dibromochloromethane	ND		861
Chlorobenzene	ND		861
Ethylbenzene	ND		861
Total Xylenes	ND		861
Bromoform	ND		861
1,1,2,2-Tetrachloroethane	ND		861
1,3-Dichlorobenzene	ND		861
1,4-Dichlorobenzene	ND		861
1,2-Dichlorobenzene	412	J	861
Total Target Compounds:	713	J	

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-011
Client ID: S-27
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Date File: F9468.D

GC/MS Column: DB-624
Sample wt/vol: 0.035g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown alkane	1150	19.17
	Unknown alkane	1140	21.35
	Unknown aliphatic	2500	22.45
	Substituted benzene	861	22.83
	Unknown aromatic	1030	23.26
	Unknown aromatic	10600	23.47
	Unknown aromatic	1120	24.42
	Unknown aromatic	5920	25.13

Total TICs = 24321

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-012
Client ID: S-28
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9472.D

GC/MS Column: DB-624
Sample wt/vol: 0.022g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 2
% Moisture: 22.7

Compound	Concentration	Q	MDL
Chloromethane	ND		1470
Vinyl Chloride	ND		1470
Bromomethane	ND		1470
Chloroethane	ND		1470
Trichlorofluoromethane	ND		1470
Acrolein	ND		2940
1,1-Dichloroethene	ND		1470
Methylene Chloride	ND		1470
Acrylonitrile	ND		2940
trans-1,2-Dichloroethene	ND		1470
1,1-Dichloroethane	ND		1470
Chloroform	ND		1470
1,1,1-Trichloroethane	ND		1470
Carbon Tetrachloride	ND		1470
1,2-Dichloroethane(EDC)	ND		1470
Benzene	ND		1470
Trichloroethene	ND		1470
1,2-Dichloropropane	ND		1470
Bromodichloromethane	ND		1470
2-Chloroethylvinyl Ether	ND		1470
cis-1,3-Dichloropropene	ND		1470
Toluene	1080	J	1470
trans-1,3-Dichloropropene	ND		1470
1,1,2-Trichloroethane	ND		1470
Tetrachloroethene	ND		1470
Dibromochloromethane	ND		1470
Chlorobenzene	ND		1470
Ethylbenzene	861	J	1470
Total Xylenes	732	J	1470
Bromoform	ND		1470
1,1,2,2-Tetrachloroethane	ND		1470
1,3-Dichlorobenzene	ND		1470
1,4-Dichlorobenzene	ND		1470
1,2-Dichlorobenzene	600	J	1470
Total Target Compounds:	3273	J	

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INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-012
Client ID: S-28
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Date File: F9472.D

GC/MS Column: DB-624
Sample wt/vol: 0.022g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 2
% Moisture: 22.7

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown aromatic	6820	15.64
	Unknown hydrocarbon	4880	17.04
	Unknown cyclic hydrocarbon	314000	17.51
	Unknown cyclic hydrocarbon	5060	17.89
	Unknown hydrocarbon	5470	18.69
	Unknown alkane	8560	19.17
	Unknown alkane	4470	19.85
	Unknown aliphatic	6350	23.32
	Unknown aromatic	6470	23.47
	Unknown aromatic	5380	23.96
	Unknown aromatic	11800	24.42

Total TICs = 379260

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-013
Client ID: S-29
Date Received: 03/28/2001
Date Analyzed: 03/31/2001
Data file: F9504.D

GC/MS Column: DB-624
Sample wt/vol: 0.043g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 23.8

Compound	Concentration	Q	MDL
Chloromethane	ND		763
Vinyl Chloride	ND		763
Bromomethane	ND		763
Chloroethane	ND		763
Trichlorofluoromethane	ND		763
Acrolein	ND		1530
1,1-Dichloroethene	ND		763
Methylene Chloride	ND		763
Acrylonitrile	ND		1530
trans-1,2-Dichloroethene	ND		763
1,1-Dichloroethane	ND		763
Chloroform	ND		763
1,1,1-Trichloroethane	ND		763
Carbon Tetrachloride	ND		763
1,2-Dichloroethane(EDC)	ND		763
Benzene	17200		763
Trichloroethene	ND		763
1,2-Dichloropropane	ND		763
Bromodichloromethane	ND		763
2-Chloroethylvinyl Ether	ND		763
cis-1,3-Dichloropropene	ND		763
Toluene	630	J	763
trans-1,3-Dichloropropene	ND		763
1,1,2-Trichloroethane	ND		763
Tetrachloroethene	ND		763
Dibromochloromethane	ND		763
Chlorobenzene	ND		763
Ethylbenzene	ND		763
Total Xylenes	ND		763
Bromoform	ND		763
1,1,2,2-Tetrachloroethane	ND		763
1,3-Dichlorobenzene	ND		763
1,4-Dichlorobenzene	ND		763
1,2-Dichlorobenzene	ND		763
Total Target Compounds:	17830	J	

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-013
Client ID: S-29
Date Received: 03/28/2001
Date Analyzed: 03/31/2001
Data file: F9504.D

GC/MS Column: DB-624
Sample wt/vol: 0.043g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 23.8

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

/081/

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-014
Client ID: TB
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9461.D

GC/MS Column: DB-624
Sample wt/vol: 0.04g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0

Compound	Concentration	Q	MDL
Chloromethane	ND		625
Vinyl Chloride	ND		625
Bromomethane	ND		625
Chloroethane	ND		625
Trichlorofluoromethane	ND		625
Acrolein	ND		1250
1,1-Dichloroethene	ND		625
Methylene Chloride	ND		625
Acrylonitrile	ND		1250
trans-1,2-Dichloroethene	ND		625
1,1-Dichloroethane	ND		625
Chloroform	ND		625
1,1,1-Trichloroethane	ND		625
Carbon Tetrachloride	ND		625
1,2-Dichloroethane(EDC)	ND		625
Benzene	ND		625
Trichloroethene	ND		625
1,2-Dichloropropane	ND		625
Bromodichloromethane	ND		625
2-Chloroethylvinyl Ether	ND		625
cis-1,3-Dichloropropene	ND		625
Toluene	ND		625
trans-1,3-Dichloropropene	ND		625
1,1,2-Trichloroethane	ND		625
Tetrachloroethene	ND		625
Dibromochloromethane	ND		625
Chlorobenzene	ND		625
Ethylbenzene	ND		625
Total Xylenes	ND		625
Bromoform	ND		625
1,1,2,2-Tetrachloroethane	ND		625
1,3-Dichlorobenzene	ND		625
1,4-Dichlorobenzene	ND		625
1,2-Dichlorobenzene	ND		625

Total Target Compounds: 0

000042

1082

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-014
Client ID: TB
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Date File: F9461.D

GC/MS Column: DB-624
Sample wt/vol: 0.04g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-015
Client ID: S-30
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Data file: F9475.D

GC/MS Column: DB-624
Sample wt/vol: 0.0009g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 26.4

Compound	Concentration	Q	MDL
Chloromethane	ND		37700
Vinyl Chloride	ND		37700
Bromomethane	ND		37700
Chloroethane	ND		37700
Trichlorofluoromethane	ND		37700
Acrolein	ND		75500
1,1-Dichloroethene	ND		37700
Methylene Chloride	ND		37700
Acrylonitrile	ND		75500
trans-1,2-Dichloroethene	ND		37700
1,1-Dichloroethane	ND		37700
Chloroform	ND		37700
1,1,1-Trichloroethane	ND		37700
Carbon Tetrachloride	ND		37700
1,2-Dichloroethane(EDC)	ND		37700
Benzene	13100	J	37700
Trichloroethene	ND		37700
1,2-Dichloropropane	ND		37700
Bromodichloromethane	ND		37700
2-Chloroethylvinyl Ether	ND		37700
cis-1,3-Dichloropropene	ND		37700
Toluene	1450000		37700
trans-1,3-Dichloropropene	ND		37700
1,1,2-Trichloroethane	ND		37700
Tetrachloroethene	ND		37700
Dibromochloromethane	ND		37700
Chlorobenzene	ND		37700
Ethylbenzene	ND		37700
Total Xylenes	ND		37700
Bromoform	ND		37700
1,1,2,2-Tetrachloroethane	ND		37700
1,3-Dichlorobenzene	ND		37700
1,4-Dichlorobenzene	ND		37700
1,2-Dichlorobenzene	ND		37700
Total Target Compounds:	1463100	J	

1084

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-015
Client ID: S-30
Date Received: 03/28/2001
Date Analyzed: 03/30/2001
Date File: F9475.D

GC/MS Column: DB-624
Sample wt/vol: 0.0009g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 26.4

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown cyclic hydrocarbon	932000	17.51
	Unknown cyclic hydrocarbon	67900	17.90
	Substituted benzene	5920000	18.93
	Unknown aromatic	117000	20.99

Total TICs = 7036900

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-001
Client ID: S-17
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1668.D

GC/MS Column: DB-5
Sample wt/vol: 10.68g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.1

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		110
Phenol	ND		110
Aniline	ND		110
bis(2-Chloroethyl)ether	ND		110
2-Chlorophenol	ND		110
1,3-Dichlorobenzene	ND		110
1,4-Dichlorobenzene	ND		110
Benzyl alcohol	ND		110
1,2-Dichlorobenzene	ND		110
2-Methylphenol	ND		110
bis(2-chloroisopropyl)ether	ND		110
4-Methylphenol	ND		110
N-Nitroso-di-n-propylamine	ND		110
Hexachloroethane	ND		110
Nitrobenzene	ND		110
Isophorone	ND		110
2-Nitrophenol	ND		110
2,4-Dimethylphenol	ND		110
bis(2-Chloroethoxy)methane	ND		110
Benzoic acid	ND		110
2,4-Dichlorophenol	ND		110
1,2,4-Trichlorobenzene	ND		110
Naphthalene	ND		110
4-Chloroaniline	ND		110
Hexachlorobutadiene	ND		110
4-Chloro-3-methylphenol	ND		110
2-Methylnaphthalene	ND		110
Hexachlorocyclopentadiene	ND		110
2,4,6-Trichlorophenol	ND		110
2,4,5-Trichlorophenol	ND		110
2-Chloronaphthalene	ND		110
2-Nitroaniline	ND		110
Dimethylphthalate	ND		110
2,6-Dinitrotoluene	ND		110
Acenaphthylene	ND		110

000046

1086

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-001
Client ID: S-17
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1668.D

GC/MS Column: DB-5
Sample wt/vol: 10.68g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.1

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		110
Acenaphthene	ND		110
2,4-Dinitrophenol	ND		110
4-Nitrophenol	ND		110
2,4-Dinitrotoluene	ND		110
Dibenzofuran	ND		110
Diethylphthalate	ND		110
Fluorene	ND		110
4-Chlorophenyl-phenylether	ND		110
4-Nitroaniline	ND		110
4,6-Dinitro-2-methylphenol	ND		110
N-Nitrosodiphenylamine	ND		110
1,2-Diphenylhydrazine/Azobenzene	ND		110
4-Bromophenyl-phenylether	ND		110
Hexachlorobenzene	ND		110
Pentachlorophenol	ND		110
Phenanthrene	ND		110
Anthracene	ND		110
Carbazole	ND		110
Di-n-butylphthalate	ND		110
Fluoranthene	ND		110
Benzidine	ND		110
Pyrene	ND		110
3,3'-Dimethylbenzidine	ND		110
Butylbenzylphthalate	ND		110
3,3'-Dichlorobenzidine	ND		110
Benzo[a]anthracene	ND		110
Chrysene	ND		110
bis(2-Ethylhexyl)phthalate	ND		110
Di-n-octylphthalate	ND		110
Benzo[b]fluoranthene	ND		110
Benzo[k]fluoranthene	ND		110
Benzo[a]pyrene	ND		110
Indeno[1,2,3-cd]pyrene	ND		110
Dibenz[a,h]anthracene	ND		110
Benzo[g,h,i]perylene	ND		110

Total Target Compounds: 0

000047

1087

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-001
Client ID: S-17
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Date File: B1668.D

GC/MS Column: DB-5
Sample wt/vol: 10.68g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.1

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown	783	2.63
010544-50-0	Cyclic octaatomic sulfur	9080	3.84

Total TICs = 9863

1088

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-002
Client ID: S-18
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1669.D

GC/MS Column: DB-5
Sample wt/vol: 5.09g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 26.7

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		268
Phenol	ND		268
Aniline	ND		268
bis(2-Chloroethyl)ether	ND		268
2-Chlorophenol	ND		268
1,3-Dichlorobenzene	ND		268
1,4-Dichlorobenzene	ND		268
Benzyl alcohol	ND		268
1,2-Dichlorobenzene	ND		268
2-Methylphenol	ND		268
bis(2-chloroisopropyl)ether	ND		268
4-Methylphenol	ND		268
N-Nitroso-di-n-propylamine	ND		268
Hexachloroethane	ND		268
Nitrobenzene	ND		268
Isophorone	ND		268
2-Nitrophenol	ND		268
2,4-Dimethylphenol	ND		268
bis(2-Chloroethoxy)methane	ND		268
Benzoic acid	ND		268
2,4-Dichlorophenol	ND		268
1,2,4-Trichlorobenzene	ND		268
Naphthalene	234	J	268
4-Chloroaniline	ND		268
Hexachlorobutadiene	ND		268
4-Chloro-3-methylphenol	ND		268
2-Methylnaphthalene	ND		268
Hexachlorocyclopentadiene	ND		268
2,4,6-Trichlorophenol	ND		268
2,4,5-Trichlorophenol	ND		268
2-Chloronaphthalene	ND		268
2-Nitroaniline	ND		268
Dimethylphthalate	ND		268
2,6-Dinitrotoluene	ND		268
Acenaphthylene	208	J	268

1089

000049

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-002
Client ID: S-18
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1669.D

GC/MS Column: DB-5
Sample wt/vol: 5.09g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 26.7

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		268
Acenaphthene	758		268
2,4-Dinitrophenol	ND		268
4-Nitrophenol	ND		268
2,4-Dinitrotoluene	ND		268
Dibenzofuran	417		268
Diethylphthalate	ND		268
Fluorene	822		268
4-Chlorophenyl-phenylether	ND		268
4-Nitroaniline	ND		268
4,6-Dinitro-2-methylphenol	ND		268
N-Nitrosodiphenylamine	ND		268
1,2-Diphenylhydrazine/Azobenzene	ND		268
4-Bromophenyl-phenylether	ND		268
Hexachlorobenzene	ND		268
Pentachlorophenol	ND		268
Phenanthrene	8180		268
Anthracene	1780		268
Carbazole	778		268
Di-n-butylphthalate	8460		268
Fluoranthene	10500		268
Benzidine	ND		268
Pyrene	10500		268
3,3'-Dimethylbenzidine	ND		268
Butylbenzylphthalate	ND		268
3,3'-Dichlorobenzidine	ND		268
Benzo[a]anthracene	5100		268
Chrysene	4620		268
bis(2-Ethylhexyl)phthalate	5320		268
Di-n-octylphthalate	ND		268
Benzo[b]fluoranthene	3690		268
Benzo[k]fluoranthene	3110		268
Benzo[a]pyrene	4530		268
Indeno[1,2,3-cd]pyrene	2920		268
Dibenz[a,h]anthracene	979		268
Benzo[g,h,i]perylene	3210		268

Total Target Compounds: 76116 J

000050

1090

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-002
Client ID: S-18
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Date File: B1669.D

GC/MS Column: DB-5
Sample wt/vol: 5.09g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 26.7

CAS #	Compound	Estimated Concentration	Retention Time
005989-27-5	D-Limonene	4400	1.58
	Unknown aromatic	1130	3.80
	Unknown aromatic	1530	4.10
	Unknown	1290	4.15
	Unknown aromatic	1070	5.13

Total TICs = 9420

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-003
Client ID: S-19
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1670.D

GC/MS Column: DB-5
Sample wt/vol: 5.08g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 22.7

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		255
Phenol	ND		255
Aniline	20100		255
bis(2-Chloroethyl)ether	ND		255
2-Chlorophenol	ND		255
1,3-Dichlorobenzene	ND		255
1,4-Dichlorobenzene	ND		255
Benzyl alcohol	ND		255
1,2-Dichlorobenzene	ND		255
2-Methylphenol	ND		255
bis(2-chloroisopropyl)ether	ND		255
4-Methylphenol	ND		255
N-Nitroso-di-n-propylamine	ND		255
Hexachloroethane	ND		255
Nitrobenzene	ND		255
Isophorone	ND		255
2-Nitrophenol	ND		255
2,4-Dimethylphenol	ND		255
bis(2-Chloroethoxy)methane	ND		255
Benzoic acid	ND		255
2,4-Dichlorophenol	ND		255
1,2,4-Trichlorobenzene	ND		255
Naphthalene	2220		255
4-Chloroaniline	ND		255
Hexachlorobutadiene	ND		255
4-Chloro-3-methylphenol	ND		255
2-Methylnaphthalene	372		255
Hexachlorocyclopentadiene	ND		255
2,4,6-Trichlorophenol	ND		255
2,4,5-Trichlorophenol	ND		255
2-Chloronaphthalene	ND		255
2-Nitroaniline	ND		255
Dimethylphthalate	ND		255
2,6-Dinitrotoluene	ND		255
Acenaphthylene	ND		255

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-003
Client ID: S-19
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1670.D

GC/MS Column: DB-5
Sample wt/vol: 5.08g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 22.7

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		255
Acenaphthene	ND		255
2,4-Dinitrophenol	ND		255
4-Nitrophenol	ND		255
2,4-Dinitrotoluene	ND		255
Dibenzofuran	ND		255
Diethylphthalate	ND		255
Fluorene	ND		255
4-Chlorophenyl-phenylether	ND		255
4-Nitroaniline	ND		255
4,6-Dinitro-2-methylphenol	ND		255
N-Nitrosodiphenylamine	ND		255
1,2-Diphenylhydrazine/Azobenzene	ND		255
4-Bromophenyl-phenylether	ND		255
Hexachlorobenzene	ND		255
Pentachlorophenol	ND		255
Phenanthrene	1310		255
Anthracene	1410		255
Carbazole	727		255
Di-n-butylphthalate	ND		255
Fluoranthene	ND		255
Benzidine	ND		255
Pyrene	ND		255
3,3'-Dimethylbenzidine	ND		255
Butylbenzylphthalate	ND		255
3,3'-Dichlorobenzidine	ND		255
Benzo[a]anthracene	ND		255
Chrysene	ND		255
bis(2-Ethylhexyl)phthalate	913		255
Di-n-octylphthalate	ND		255
Benzo[b]fluoranthene	ND		255
Benzo[k]fluoranthene	ND		255
Benzo[a]pyrene	ND		255
Indeno[1,2,3-cd]pyrene	ND		255
Dibenz[a,h]anthracene	ND		255
Benzo[g,h,i]perylene	ND		255

Total Target Compounds: 27052

1093

000053

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-003
Client ID: S-19
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Date File: B1670.D

GC/MS Column: DB-5
Sample wt/vol: 5.08g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 22.7

CAS #	Compound	Estimated Concentration	Retention Time
000138-86-3	Limonene	10200	1.64
000140-29-4	Benzyl nitrile	20200	1.90
	Unknown	22200	1.93
	Unknown alkane	238000	2.11
	Unknown alkane	13600	2.20
	Unknown alkane	15400	2.27
	Substituted naphthalene	19500	2.84
	Unknown alkane	7950	2.89
	Substituted naphthalene	9960	3.15
	Unknown aromatic	6110	3.29
	Unknown alkane	6040	3.52
	Unknown aromatic	7050	3.58
	Substituted naphthalene	9910	3.61
	Unknown aromatic	18200	3.64
	Unknown	6470	3.68
	Unknown	6420	3.71
	Unknown	8610	3.79
	Unknown aromatic	14200	3.81
	Unknown aromatic	25600	3.90
	Unknown aromatic	34900	3.97
	Unknown aromatic	21300	4.09
	Unknown	34100	4.12
	Unknown aromatic	25800	4.15
	Unknown aromatic	36800	4.22
	Unknown aromatic	22700	4.26
	Total TICs =	641220	

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-004
Client ID: S-20
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1671.D

GC/MS Column: DB-5
Sample wt/vol: 5.20g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.7

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		228
Phenol	ND		228
Aniline	ND		228
bis(2-Chloroethyl)ether	ND		228
2-Chlorophenol	ND		228
1,3-Dichlorobenzene	ND		228
1,4-Dichlorobenzene	ND		228
Benzyl alcohol	ND		228
1,2-Dichlorobenzene	ND		228
2-Methylphenol	ND		228
bis(2-chloroisopropyl)ether	ND		228
4-Methylphenol	ND		228
N-Nitroso-di-n-propylamine	ND		228
Hexachloroethane	ND		228
Nitrobenzene	ND		228
Isophorone	ND		228
2-Nitrophenol	ND		228
2,4-Dimethylphenol	ND		228
bis(2-Chloroethoxy)methane	ND		228
Benzoic acid	ND		228
2,4-Dichlorophenol	ND		228
1,2,4-Trichlorobenzene	242		228
Naphthalene	ND		228
4-Chloroaniline	ND		228
Hexachlorobutadiene	ND		228
4-Chloro-3-methylphenol	ND		228
2-Methylnaphthalene	ND		228
Hexachlorocyclopentadiene	ND		228
2,4,6-Trichlorophenol	ND		228
2,4,5-Trichlorophenol	ND		228
2-Chloronaphthalene	ND		228
2-Nitroaniline	ND		228
Dimethylphthalate	ND		228
2,6-Dinitrotoluene	ND		228
Acenaphthylene	ND		228

1095

000055

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-004
Client ID: S-20
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1671.D

GC/MS Column: DB-5
Sample wt/vol: 5.20g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.7

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		228
Acenaphthene	ND		228
2,4-Dinitrophenol	ND		228
4-Nitrophenol	ND		228
2,4-Dinitrotoluene	ND		228
Dibenzofuran	ND		228
Diethylphthalate	ND		228
Fluorene	ND		228
4-Chlorophenyl-phenylether	ND		228
4-Nitroaniline	ND		228
4,6-Dinitro-2-methylphenol	ND		228
N-Nitrosodiphenylamine	ND		228
1,2-Diphenylhydrazine/Azobenzene	ND		228
4-Bromophenyl-phenylether	ND		228
Hexachlorobenzene	ND		228
Pentachlorophenol	ND		228
Phenanthrene	618		228
Anthracene	ND		228
Carbazole	633		228
Di-n-butylphthalate	ND		228
Fluoranthene	ND		228
Benzidine	ND		228
Pyrene	ND		228
3,3'-Dimethylbenzidine	ND		228
Butylbenzylphthalate	ND		228
3,3'-Dichlorobenzidine	ND		228
Benzo[a]anthracene	ND		228
Chrysene	ND		228
bis(2-Ethylhexyl)phthalate	3000		228
Di-n-octylphthalate	ND		228
Benzo[b]fluoranthene	ND		228
Benzo[k]fluoranthene	ND		228
Benzo[a]pyrene	ND		228
Indeno[1,2,3-cd]pyrene	ND		228
Dibenz[a,h]anthracene	ND		228
Benzo[g,h,i]perylene	ND		228

Total Target Compounds: 4493

1096

000056

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-004
Client ID: S-20
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Date File: B1671.D

GC/MS Column: DB-5
Sample wt/vol: 5.20g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.7

CAS #	Compound	Estimated Concentration	Retention Time
005989-27-5	D-Limonene	6590	1.58
	Unknown alkane	4790	2.19
	Unknown alkane	8240	2.27
	Unknown alkane	18700	2.28
	Unknown alkane	5250	2.36
	Unknown aromatic	3330	2.55
	Unknown aromatic	4200	2.65
	Unknown aromatic	6140	3.40
	Unknown	7250	3.57
	Unknown aromatic	19400	3.62
	Unknown aromatic	6020	3.67
	Unknown aromatic	63700	3.98
	Unknown aromatic	8280	4.17
	Unknown aromatic	26700	4.21
	Unknown aromatic	4770	4.24
	Unknown aromatic	3900	4.32
	Unknown aromatic	10100	4.38
	Unknown	5180	4.41
	Unknown	20700	4.71
	Unknown aromatic	4310	4.73
	Unknown aromatic	7570	4.80
	Unknown aromatic	5730	4.82
	Unknown aromatic	13500	5.47
	Unknown	3310	5.49
	Unknown aromatic	54800	5.65
	Total TICs =	322460	

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-005
Client ID: S-21
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1672.D

GC/MS Column: DB-5
Sample wt/vol: 1.38g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 14.6

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		849
Phenol	ND		849
Aniline	ND		849
bis(2-Chloroethyl)ether	ND		849
2-Chlorophenol	ND		849
1,3-Dichlorobenzene	ND		849
1,4-Dichlorobenzene	ND		849
Benzyl alcohol	ND		849
1,2-Dichlorobenzene	ND		849
2-Methylphenol	ND		849
bis(2-chloroisopropyl)ether	ND		849
4-Methylphenol	ND		849
N-Nitroso-di-n-propylamine	ND		849
Hexachloroethane	ND		849
Nitrobenzene	ND		849
Isophorone	ND		849
2-Nitrophenol	ND		849
2,4-Dimethylphenol	ND		849
bis(2-Chloroethoxy)methane	ND		849
Benzoic acid	ND		849
2,4-Dichlorophenol	ND		849
1,2,4-Trichlorobenzene	ND		849
Naphthalene	ND		849
4-Chloroaniline	ND		849
Hexachlorobutadiene	ND		849
4-Chloro-3-methylphenol	ND		849
2-Methylnaphthalene	ND		849
Hexachlorocyclopentadiene	ND		849
2,4,6-Trichlorophenol	ND		849
2,4,5-Trichlorophenol	ND		849
2-Chloronaphthalene	ND		849
2-Nitroaniline	ND		849
Dimethylphthalate	ND		849
2,6-Dinitrotoluene	ND		849
Acenaphthylene	ND		849

1098

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-005
Client ID: S-21
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1672.D

GC/MS Column: DB-5
Sample wt/vol: 1.38g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 14.6

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		849
Acenaphthene	ND		849
2,4-Dinitrophenol	ND		849
4-Nitrophenol	ND		849
2,4-Dinitrotoluene	ND		849
Dibenzofuran	ND		849
Diethylphthalate	ND		849
Fluorene	ND		849
4-Chlorophenyl-phenylether	ND		849
4-Nitroaniline	ND		849
4,6-Dinitro-2-methylphenol	ND		849
N-Nitrosodiphenylamine	ND		849
1,2-Diphenylhydrazine/Azobenzene	ND		849
4-Bromophenyl-phenylether	ND		849
Hexachlorobenzene	ND		849
Pentachlorophenol	ND		849
Phenanthrene	ND		849
Anthracene	ND		849
Carbazole	ND		849
Di-n-butylphthalate	ND		849
Fluoranthene	ND		849
Benzidine	ND		849
Pyrene	ND		849
3,3'-Dimethylbenzidine	ND		849
Butylbenzylphthalate	ND		849
3,3'-Dichlorobenzidine	ND		849
Benzo[a]anthracene	ND		849
Chrysene	ND		849
bis(2-Ethylhexyl)phthalate	ND		849
Di-n-octylphthalate	ND		849
Benzo[b]fluoranthene	ND		849
Benzo[k]fluoranthene	ND		849
Benzo[a]pyrene	ND		849
Indeno[1,2,3-cd]pyrene	ND		849
Dibenz[a,h]anthracene	ND		849
Benzo[g,h,i]perylene	ND		849

Total Target Compounds: 0

1099

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-005
Client ID: S-21
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Date File: B1672.D

GC/MS Column: DB-5
Sample wt/vol: 1.38g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 14.6

CAS #	Compound	Estimated Concentration	Retention Time
005989-27-5	D-Limonene	7210	1.58
	Unknown aromatic	3480	3.40
	Unknown aromatic	4330	3.42
	Unknown aromatic	4500	3.48
	Substituted phenol	7040	3.79
010544-50-0	Cyclic octaatomic sulfur	108000	3.85
	Unknown aromatic	22000	3.96

Total TICs = 156560

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-006
Client ID: S-22
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Data file: B1699.D

GC/MS Column: DB-5
Sample wt/vol: 5.34g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 2
% Moisture: 16.5

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		449
Phenol	ND		449
Aniline	ND		449
bis(2-Chloroethyl)ether	ND		449
2-Chlorophenol	ND		449
1,3-Dichlorobenzene	ND		449
1,4-Dichlorobenzene	323	J	449
Benzyl alcohol	ND		449
1,2-Dichlorobenzene	2080		449
2-Methylphenol	ND		449
bis(2-chloroisopropyl)ether	ND		449
4-Methylphenol	ND		449
N-Nitroso-di-n-propylamine	ND		449
Hexachloroethane	ND		449
Nitrobenzene	ND		449
Isophorone	ND		449
2-Nitrophenol	ND		449
2,4-Dimethylphenol	ND		449
bis(2-Chloroethoxy)methane	ND		449
Benzoic acid	ND		449
2,4-Dichlorophenol	ND		449
1,2,4-Trichlorobenzene	534		449
Naphthalene	ND		449
4-Chloroaniline	ND		449
Hexachlorobutadiene	ND		449
4-Chloro-3-methylphenol	ND		449
2-Methylnaphthalene	ND		449
Hexachlorocyclopentadiene	ND		449
2,4,6-Trichlorophenol	ND		449
2,4,5-Trichlorophenol	ND		449
2-Chloronaphthalene	ND		449
2-Nitroaniline	ND		449
Dimethylphthalate	ND		449
2,6-Dinitrotoluene	ND		449
Acenaphthylene	ND		449

1101

000061

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-006
Client ID: S-22
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Data file: B1699.D

GC/MS Column: DB-5
Sample wt/vol: 5.34g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 2
% Moisture: 16.5

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		449
Acenaphthene	ND		449
2,4-Dinitrophenol	ND		449
4-Nitrophenol	ND		449
2,4-Dinitrotoluene	ND		449
Dibenzofuran	ND		449
Diethylphthalate	ND		449
Fluorene	ND		449
4-Chlorophenyl-phenylether	ND		449
4-Nitroaniline	ND		449
4,6-Dinitro-2-methylphenol	ND		449
N-Nitrosodiphenylamine	ND		449
1,2-Diphenylhydrazine/Azobenzene	ND		449
4-Bromophenyl-phenylether	ND		449
Hexachlorobenzene	ND		449
Pentachlorophenol	ND		449
Phenanthrene	554		449
Anthracene	ND		449
Carbazole	601		449
Di-n-butylphthalate	ND		449
Fluoranthene	317	J	449
Benzidine	ND		449
Pyrene	ND		449
3,3'-Dimethylbenzidine	ND		449
Butylbenzylphthalate	ND		449
3,3'-Dichlorobenzidine	ND		449
Benzo[a]anthracene	ND		449
Chrysene	304	J	449
bis(2-Ethylhexyl)phthalate	ND		449
Di-n-octylphthalate	ND		449
Benzo[b]fluoranthene	ND		449
Benzo[k]fluoranthene	ND		449
Benzo[a]pyrene	ND		449
Indeno[1,2,3-cd]pyrene	ND		449
Dibenz[a,h]anthracene	ND		449
Benzo[g,h,i]perylene	ND		449
Total Target Compounds:	4713	J	

000062

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-006
Client ID: S-22
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Date File: B1699.D

GC/MS Column: DB-5
Sample wt/vol: 5.34g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 2
% Moisture: 16.5

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	3090	1.85
	Unknown aromatic	3360	2.16
	Unknown	5160	2.54
	Unknown	3360	2.61
	Unknown	2420	2.66
	Substituted naphthalene	6410	2.83
	Unknown	3090	2.96
	Unknown	3050	3.28
	Unknown aromatic	9240	3.40
	Unknown	7310	3.51
	Unknown	12000	3.53
	Unknown aromatic	4800	3.55
	Unknown	7940	3.61
	Unknown	3010	3.64
	Unknown alkane	2870	3.68
	Unknown	2200	3.72
	Unknown	2290	3.75
	Unknown	17100	3.94
	Unknown alkane	3630	4.64
	Unknown aromatic	8030	5.48
	Unknown	88800	5.63

Total TICs = 199160

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-007
Client ID: S-23
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1674.D

GC/MS Column: DB-5
Sample wt/vol: 5.01g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.8

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		243
Phenol	ND		243
Aniline	ND		243
bis(2-Chloroethyl)ether	ND		243
2-Chlorophenol	ND		243
1,3-Dichlorobenzene	ND		243
1,4-Dichlorobenzene	ND		243
Benzyl alcohol	ND		243
1,2-Dichlorobenzene	ND		243
2-Methylphenol	ND		243
bis(2-chloroisopropyl)ether	ND		243
4-Methylphenol	ND		243
N-Nitroso-di-n-propylamine	ND		243
Hexachloroethane	ND		243
Nitrobenzene	ND		243
Isophorone	ND		243
2-Nitrophenol	ND		243
2,4-Dimethylphenol	ND		243
bis(2-Chloroethoxy)methane	ND		243
Benzoic acid	ND		243
2,4-Dichlorophenol	ND		243
1,2,4-Trichlorobenzene	ND		243
Naphthalene	ND		243
4-Chloroaniline	ND		243
Hexachlorobutadiene	ND		243
4-Chloro-3-methylphenol	ND		243
2-Methylnaphthalene	ND		243
Hexachlorocyclopentadiene	ND		243
2,4,6-Trichlorophenol	ND		243
2,4,5-Trichlorophenol	ND		243
2-Chloronaphthalene	ND		243
2-Nitroaniline	ND		243
Dimethylphthalate	ND		243
2,6-Dinitrotoluene	ND		243
Acenaphthylene	283		243

000064

1104

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-007
Client ID: S-23
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1674.D

GC/MS Column: DB-5
Sample wt/vol: 5.01g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.8

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		243
Acenaphthene	ND		243
2,4-Dinitrophenol	ND		243
4-Nitrophenol	ND		243
2,4-Dinitrotoluene	ND		243
Dibenzofuran	ND		243
Diethylphthalate	ND		243
Fluorene	ND		243
4-Chlorophenyl-phenylether	ND		243
4-Nitroaniline	ND		243
4,6-Dinitro-2-methylphenol	ND		243
N-Nitrosodiphenylamine	ND		243
1,2-Diphenylhydrazine/Azobenzene	ND		243
4-Bromophenyl-phenylether	ND		243
Hexachlorobenzene	ND		243
Pentachlorophenol	ND		243
Phenanthrene	670		243
Anthracene	186	J	243
Carbazole	ND		243
Di-n-butylphthalate	ND		243
Fluoranthene	1050		243
Benzidine	ND		243
Pyrene	1390		243
3,3'-Dimethylbenzidine	ND		243
Butylbenzylphthalate	ND		243
3,3'-Dichlorobenzidine	ND		243
Benzo[a]anthracene	781		243
Chrysene	1020		243
bis(2-Ethylhexyl)phthalate	372		243
Di-n-octylphthalate	ND		243
Benzo[b]fluoranthene	1060		243
Benzo[k]fluoranthene	824		243
Benzo[a]pyrene	1150		243
Indeno[1,2,3-cd]pyrene	959		243
Dibenz[a,h]anthracene	346		243
Benzo[g,h,i]perylene	1200		243

Total Target Compounds: 11291 J

1105

000065

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-007
Client ID: S-23
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Date File: B1674.D

GC/MS Column: DB-5
Sample wt/vol: 5.01g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.8

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown alkane	2310	1.95
	Substituted benzene	1170	2.40
000101-84-8	Diphenyl ether	2110	2.56
	Unknown	1240	2.83
	Unknown	1530	2.88
	Substituted benzene	1970	3.22
	Unknown alkane	2530	3.42
	Substituted benzene	2790	3.48
	Unknown	2450	3.49
	Substituted biphenyl	4710	3.63
000817-80-1	Carbonochloridic acid, 2-chloro-1-	1260	3.64
	Unknown aromatic	1650	3.68
	Unknown aromatic	7500	3.72
	Substituted biphenyl	1920	4.10
	Substituted biphenyl	6120	4.15
000072-54-8	1,1-Dichloro-2,2-bis(p-chloropheny	3130	4.17
	Substituted benzene	8810	4.20
	Substituted biphenyl	2400	4.23
	Substituted biphenyl	2890	4.24
	Substituted benzene	2190	4.28
	Substituted biphenyl	4370	4.32
	Unknown	1580	4.40
	Substituted biphenyl	1190	4.42
	Unknown	2570	4.88
	Unknown aromatic	1940	5.63
	Total TICs =	72330	

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-008
Client ID: S-24
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1675.D

GC/MS Column: DB-5
Sample wt/vol: 2.88g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 21.8

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		444
Phenol	ND		444
Aniline	ND		444
bis(2-Chloroethyl)ether	ND		444
2-Chlorophenol	ND		444
1,3-Dichlorobenzene	ND		444
1,4-Dichlorobenzene	ND		444
Benzyl alcohol	ND		444
1,2-Dichlorobenzene	ND		444
2-Methylphenol	ND		444
bis(2-chloroisopropyl)ether	ND		444
4-Methylphenol	ND		444
N-Nitroso-di-n-propylamine	ND		444
Hexachloroethane	ND		444
Nitrobenzene	ND		444
Isophorone	ND		444
2-Nitrophenol	ND		444
2,4-Dimethylphenol	ND		444
bis(2-Chloroethoxy)methane	ND		444
Benzoic acid	ND		444
2,4-Dichlorophenol	ND		444
1,2,4-Trichlorobenzene	ND		444
Naphthalene	ND		444
4-Chloroaniline	ND		444
Hexachlorobutadiene	ND		444
4-Chloro-3-methylphenol	ND		444
2-Methylnaphthalene	ND		444
Hexachlorocyclopentadiene	ND		444
2,4,6-Trichlorophenol	ND		444
2,4,5-Trichlorophenol	ND		444
2-Chloronaphthalene	ND		444
2-Nitroaniline	ND		444
Dimethylphthalate	ND		444
2,6-Dinitrotoluene	ND		444
Acenaphthylene	ND		444

1107

000067

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-008
Client ID: S-24
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1675.D

GC/MS Column: DB-5
Sample wt/vol: 2.88g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 21.8

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		444
Acenaphthene	ND		444
2,4-Dinitrophenol	ND		444
4-Nitrophenol	ND		444
2,4-Dinitrotoluene	ND		444
Dibenzofuran	ND		444
Diethylphthalate	ND		444
Fluorene	ND		444
4-Chlorophenyl-phenylether	ND		444
4-Nitroaniline	ND		444
4,6-Dinitro-2-methylphenol	ND		444
N-Nitrosodiphenylamine	ND		444
1,2-Diphenylhydrazine/Azobenzene	ND		444
4-Bromophenyl-phenylether	ND		444
Hexachlorobenzene	ND		444
Pentachlorophenol	ND		444
Phenanthrene	ND		444
Anthracene	ND		444
Carbazole	514		444
Di-n-butylphthalate	ND		444
Fluoranthene	ND		444
Benzidine	ND		444
Pyrene	ND		444
3,3'-Dimethylbenzidine	ND		444
Butylbenzylphthalate	ND		444
3,3'-Dichlorobenzidine	ND		444
Benzo[a]anthracene	ND		444
Chrysene	ND		444
bis(2-Ethylhexyl)phthalate	4210		444
Di-n-octylphthalate	ND		444
Benzo[b]fluoranthene	ND		444
Benzo[k]fluoranthene	ND		444
Benzo[a]pyrene	ND		444
Indeno[1,2,3-cd]pyrene	ND		444
Dibenz[a,h]anthracene	ND		444
Benzo[g,h,i]perylene	ND		444

Total Target Compounds: 4724

1108

000068

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS --
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-008
Client ID: S-24
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Date File: B1675.D

GC/MS Column: DB-5
Sample wt/vol: 2.88g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 21.8

CAS #	Compound	Estimated Concentration	Retention Time
000100-09-4	Benzoic acid, 4-methoxy-	1860	2.59
	Unknown	2660	3.56
	Unknown aromatic	2530	3.68
	Unknown aromatic	4440	3.71
	Unknown aromatic	2400	4.65
	Substituted biphenyl	3200	4.67
	Unknown aromatic	13900	4.83
	Unknown aromatic	7240	5.23
	Unknown aromatic	18000	5.46
	Substituted biphenyl	48500	5.64
	Unknown	5200	6.18
	Unknown	2400	6.34
	Unknown	1820	6.52

Total TICs = 114150

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-009
Client ID: S-25
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1676.D

GC/MS Column: DB-5
Sample wt/vol: 5.81g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.3

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		211
Phenol	ND		211
Aniline	ND		211
bis(2-Chloroethyl)ether	ND		211
2-Chlorophenol	ND		211
1,3-Dichlorobenzene	ND		211
1,4-Dichlorobenzene	ND		211
Benzyl alcohol	ND		211
1,2-Dichlorobenzene	ND		211
2-Methylphenol	ND		211
bis(2-chloroisopropyl)ether	ND		211
4-Methylphenol	ND		211
N-Nitroso-di-n-propylamine	ND		211
Hexachloroethane	ND		211
Nitrobenzene	ND		211
Isophorone	ND		211
2-Nitrophenol	ND		211
2,4-Dimethylphenol	ND		211
bis(2-Chloroethoxy)methane	ND		211
Benzoic acid	ND		211
2,4-Dichlorophenol	ND		211
1,2,4-Trichlorobenzene	ND		211
Naphthalene	3470		211
4-Chloroaniline	ND		211
Hexachlorobutadiene	ND		211
4-Chloro-3-methylphenol	ND		211
2-Methylnaphthalene	2110		211
Hexachlorocyclopentadiene	ND		211
2,4,6-Trichlorophenol	ND		211
2,4,5-Trichlorophenol	ND		211
2-Chloronaphthalene	ND		211
2-Nitroaniline	ND		211
Dimethylphthalate	ND		211
2,6-Dinitrotoluene	ND		211
Acenaphthylene	ND		211

1110

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-009
Client ID: S-25
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1676.D

GC/MS Column: DB-5
Sample wt/vol: 5.81g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.3

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		211
Acenaphthene	ND		211
2,4-Dinitrophenol	ND		211
4-Nitrophenol	ND		211
2,4-Dinitrotoluene	ND		211
Dibenzofuran	ND		211
Diethylphthalate	ND		211
Fluorene	ND		211
4-Chlorophenyl-phenylether	ND		211
4-Nitroaniline	ND		211
4,6-Dinitro-2-methylphenol	ND		211
N-Nitrosodiphenylamine	ND		211
1,2-Diphenylhydrazine/Azobenzene	ND		211
4-Bromophenyl-phenylether	ND		211
Hexachlorobenzene	ND		211
Pentachlorophenol	ND		211
Phenanthrene	260		211
Anthracene	ND		211
Carbazole	ND		211
Di-n-butylphthalate	ND		211
Fluoranthene	487		211
Benzidine	ND		211
Pyrene	466		211
3,3'-Dimethylbenzidine	ND		211
Butylbenzylphthalate	ND		211
3,3'-Dichlorobenzidine	ND		211
Benzo[a]anthracene	336		211
Chrysene	277		211
bis(2-Ethylhexyl)phthalate	ND		211
Di-n-octylphthalate	ND		211
Benzo[b]fluoranthene	325		211
Benzo[k]fluoranthene	153	J	211
Benzo[a]pyrene	299		211
Indeno[1,2,3-cd]pyrene	226		211
Dibenz[a,h]anthracene	ND		211
Benzo[g,h,i]perylene	241		211

Total Target Compounds: 8650 J

000071

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-009
Client ID: S-25
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Date File: B1676.D

GC/MS Column: DB-5
Sample wt/vol: 5.81g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.3

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	1160	1.08
	Unknown alkane	1450	1.12
	Substituted benzene	2360	1.33
	Substituted benzene	15400	1.46
	Unknown alkane	2110	1.60
	Substituted benzene	5810	1.65
	Substituted benzene	7020	1.67
	Substituted benzene	1370	1.84
	Substituted benzene	1770	1.86
	Unknown alkane	1500	1.91
	Substituted benzene	2440	1.95

Total TICs = 42390

1112

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-011
Client ID: S-27
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1677.D

GC/MS Column: DB-5
Sample wt/vol: 5.14g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.0

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		234
Phenol	ND		234
Aniline	ND		234
bis(2-Chloroethyl)ether	ND		234
2-Chlorophenol	ND		234
1,3-Dichlorobenzene	ND		234
1,4-Dichlorobenzene	ND		234
Benzyl alcohol	ND		234
1,2-Dichlorobenzene	ND		234
2-Methylphenol	ND		234
bis(2-chloroisopropyl)ether	ND		234
4-Methylphenol	ND		234
N-Nitroso-di-n-propylamine	ND		234
Hexachloroethane	ND		234
Nitrobenzene	ND		234
Isophorone	ND		234
2-Nitrophenol	ND		234
2,4-Dimethylphenol	ND		234
bis(2-Chloroethoxy)methane	ND		234
Benzoic acid	ND		234
2,4-Dichlorophenol	ND		234
1,2,4-Trichlorobenzene	ND		234
Naphthalene	ND		234
4-Chloroaniline	ND		234
Hexachlorobutadiene	ND		234
4-Chloro-3-methylphenol	ND		234
2-Methylnaphthalene	ND		234
Hexachlorocyclopentadiene	ND		234
2,4,6-Trichlorophenol	ND		234
2,4,5-Trichlorophenol	ND		234
2-Chloronaphthalene	ND		234
2-Nitroaniline	ND		234
Dimethylphthalate	ND		234
2,6-Dinitrotoluene	ND		234
Acenaphthylene	ND		234

1113

000073

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-011
Client ID: S-27
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1677.D

GC/MS Column: DB-5
Sample wt/vol: 5.14g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.0

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		234
Acenaphthene	ND		234
2,4-Dinitrophenol	ND		234
4-Nitrophenol	ND		234
2,4-Dinitrotoluene	ND		234
Dibenzofuran	ND		234
Diethylphthalate	ND		234
Fluorene	ND		234
4-Chlorophenyl-phenylether	ND		234
4-Nitroaniline	ND		234
4,6-Dinitro-2-methylphenol	ND		234
N-Nitrosodiphenylamine	ND		234
1,2-Diphenylhydrazine/Azobenzene	ND		234
4-Bromophenyl-phenylether	ND		234
Hexachlorobenzene	ND		234
Pentachlorophenol	ND		234
Phenanthrene	ND		234
Anthracene	ND		234
Carbazole	ND		234
Di-n-butylphthalate	ND		234
Fluoranthene	ND		234
Benzidine	ND		234
Pyrene	ND		234
3,3'-Dimethylbenzidine	ND		234
Butylbenzylphthalate	ND		234
3,3'-Dichlorobenzidine	ND		234
Benzo[a]anthracene	ND		234
Chrysene	ND		234
bis(2-Ethylhexyl)phthalate	300		234
Di-n-octylphthalate	ND		234
Benzo[b]fluoranthene	ND		234
Benzo[k]fluoranthene	ND		234
Benzo[a]pyrene	ND		234
Indeno[1,2,3-cd]pyrene	ND		234
Dibenz[a,h]anthracene	ND		234
Benzo[g,h,i]perylene	ND		234

Total Target Compounds: 300

000074

1114

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-011
Client ID: S-27
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1677.D

GC/MS Column: DB-5
Sample wt/vol: 5.14g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.0

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-012
Client ID: S-28
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1678.D

GC/MS Column: DB-5
Sample wt/vol: 0.97g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 22.7

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		1330
Phenol	ND		1330
Aniline	ND		1330
bis(2-Chloroethyl)ether	ND		1330
2-Chlorophenol	ND		1330
1,3-Dichlorobenzene	ND		1330
1,4-Dichlorobenzene	ND		1330
Benzyl alcohol	ND		1330
1,2-Dichlorobenzene	ND		1330
2-Methylphenol	ND		1330
bis(2-chloroisopropyl)ether	ND		1330
4-Methylphenol	ND		1330
N-Nitroso-di-n-propylamine	ND		1330
Hexachloroethane	ND		1330
Nitrobenzene	ND		1330
Isophorone	ND		1330
2-Nitrophenol	ND		1330
2,4-Dimethylphenol	ND		1330
bis(2-Chloroethoxy)methane	ND		1330
Benzoic acid	ND		1330
2,4-Dichlorophenol	ND		1330
1,2,4-Trichlorobenzene	ND		1330
Naphthalene	ND		1330
4-Chloroaniline	ND		1330
Hexachlorobutadiene	ND		1330
4-Chloro-3-methylphenol	ND		1330
2-Methylnaphthalene	ND		1330
Hexachlorocyclopentadiene	ND		1330
2,4,6-Trichlorophenol	ND		1330
2,4,5-Trichlorophenol	ND		1330
2-Chloronaphthalene	ND		1330
2-Nitroaniline	ND		1330
Dimethylphthalate	ND		1330
2,6-Dinitrotoluene	ND		1330
Acenaphthylene	6360		1330

1116

000076

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-012
Client ID: S-28
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1678.D

GC/MS Column: DB-5
Sample wt/vol: 0.97g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 22.7

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		1330
Acenaphthene	ND		1330
2,4-Dinitrophenol	ND		1330
4-Nitrophenol	ND		1330
2,4-Dinitrotoluene	ND		1330
Dibenzofuran	ND		1330
Diethylphthalate	ND		1330
Fluorene	1580		1330
4-Chlorophenyl-phenylether	ND		1330
4-Nitroaniline	ND		1330
4,6-Dinitro-2-methylphenol	ND		1330
N-Nitrosodiphenylamine	ND		1330
1,2-Diphenylhydrazine/Azobenzene	ND		1330
4-Bromophenyl-phenylether	ND		1330
Hexachlorobenzene	ND		1330
Pentachlorophenol	ND		1330
Phenanthrene	8750		1330
Anthracene	3330		1330
Carbazole	3070		1330
Di-n-butylphthalate	ND		1330
Fluoranthene	1190	J	1330
Benzidine	ND		1330
Pyrene	1450		1330
3,3'-Dimethylbenzidine	ND		1330
Butylbenzylphthalate	ND		1330
3,3'-Dichlorobenzidine	ND		1330
Benzo[a]anthracene	1790		1330
Chrysene	ND		1330
bis(2-Ethylhexyl)phthalate	28100		1330
Di-n-octylphthalate	ND		1330
Benzo[b]fluoranthene	ND		1330
Benzo[k]fluoranthene	ND		1330
Benzo[a]pyrene	ND		1330
Indeno[1,2,3-cd]pyrene	ND		1330
Dibenz[a,h]anthracene	ND		1330
Benzo[g,h,i]perylene	ND		1330
Total Target Compounds:	55620	J	

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-012
Client ID: S-28
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Date File: B1678.D

GC/MS Column: DB-5
Sample wt/vol: 0.97g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 22.7

CAS #	Compound	Estimated Concentration	Retention Time
005989-27-5	D-Limonene	5470	1.58
	Unknown	7200	2.33
000103-29-7	Bibenzyl	28500	2.83
	Substituted benzene	16500	2.85
	Substituted biphenyl	11600	2.86
	Substituted benzene	6800	3.80
	Unknown alkane	8400	4.12
	Unknown aromatic	11700	4.16
	Unknown	12800	4.18
	Unknown aromatic	61900	4.22
	Unknown	10000	4.26
	Unknown	6270	4.40
	Unknown aromatic	12500	4.43
	Unknown	7070	4.81
	Unknown aromatic	108000	4.84
	Unknown	9340	5.47
	Unknown aromatic	38800	5.64

Total TICs = 362850

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-013
Client ID: S-29
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1679.D

GC/MS Column: DB-5
Sample wt/vol: 5.51g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 23.8

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		238
Phenol	ND		238
Aniline	ND		238
bis(2-Chloroethyl)ether	ND		238
2-Chlorophenol	ND		238
1,3-Dichlorobenzene	ND		238
1,4-Dichlorobenzene	ND		238
Benzyl alcohol	ND		238
1,2-Dichlorobenzene	ND		238
2-Methylphenol	ND		238
bis(2-chloroisopropyl)ether	ND		238
4-Methylphenol	ND		238
N-Nitroso-di-n-propylamine	ND		238
Hexachloroethane	ND		238
Nitrobenzene	ND		238
Isophorone	ND		238
2-Nitrophenol	ND		238
2,4-Dimethylphenol	ND		238
bis(2-Chloroethoxy)methane	ND		238
Benzoic acid	ND		238
2,4-Dichlorophenol	ND		238
1,2,4-Trichlorobenzene	ND		238
Naphthalene	ND		238
4-Chloroaniline	ND		238
Hexachlorobutadiene	ND		238
4-Chloro-3-methylphenol	ND		238
2-Methylnaphthalene	ND		238
Hexachlorocyclopentadiene	ND		238
2,4,6-Trichlorophenol	ND		238
2,4,5-Trichlorophenol	ND		238
2-Chloronaphthalene	ND		238
2-Nitroaniline	ND		238
Dimethylphthalate	ND		238
2,6-Dinitrotoluene	ND		238
Acenaphthylene	ND		238

1119

000079

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-013
Client ID: S-29
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1679.D

GC/MS Column: DB-5
Sample wt/vol: 5.51g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 23.8

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		238
Acenaphthene	ND		238
2,4-Dinitrophenol	ND		238
4-Nitrophenol	ND		238
2,4-Dinitrotoluene	ND		238
Dibenzofuran	ND		238
Diethylphthalate	ND		238
Fluorene	ND		238
4-Chlorophenyl-phenylether	ND		238
4-Nitroaniline	ND		238
4,6-Dinitro-2-methylphenol	ND		238
N-Nitrosodiphenylamine	ND		238
1,2-Diphenylhydrazine/Azobenzene	ND		238
4-Bromophenyl-phenylether	ND		238
Hexachlorobenzene	ND		238
Pentachlorophenol	ND		238
Phenanthrene	ND		238
Anthracene	ND		238
Carbazole	ND		238
Di-n-butylphthalate	ND		238
Fluoranthene	ND		238
Benzidine	ND		238
Pyrene	ND		238
3,3'-Dimethylbenzidine	ND		238
Butylbenzylphthalate	ND		238
3,3'-Dichlorobenzidine	ND		238
Benzo[a]anthracene	ND		238
Chrysene	ND		238
bis(2-Ethylhexyl)phthalate	ND		238
Di-n-octylphthalate	ND		238
Benzo[b]fluoranthene	ND		238
Benzo[k]fluoranthene	ND		238
Benzo[a]pyrene	ND		238
Indeno[1,2,3-cd]pyrene	ND		238
Dibenz[a,h]anthracene	ND		238
Benzo[g,h,i]perylene	ND		238

Total Target Compounds: 0

1120

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-013
Client ID: S-29
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Date File: B1679.D

GC/MS Column: DB-5
Sample wt/vol: 5.51g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 23.8

CAS #	Compound	Estimated Concentration	Retention Time
000103-29-7	Bibenzyl	1710	2.83
	Substituted benzene	1140	3.22
	Substituted phenol	1050	3.26
	Substituted phenol	1240	3.53
	Unknown aromatic	7070	3.71
010544-50-0	Cyclic octaatomic sulfur	8910	3.84
	Unknown aromatic	1620	4.43

Total TICs = 22740

1121

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-015
Client ID: S-30
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1680.D

GC/MS Column: DB-5
Sample wt/vol: 5.06g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 26.4

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		269
Phenol	ND		269
Aniline	ND		269
bis(2-Chloroethyl)ether	ND		269
2-Chlorophenol	ND		269
1,3-Dichlorobenzene	ND		269
1,4-Dichlorobenzene	ND		269
Benzyl alcohol	ND		269
1,2-Dichlorobenzene	ND		269
2-Methylphenol	ND		269
bis(2-chloroisopropyl)ether	ND		269
4-Methylphenol	ND		269
N-Nitroso-di-n-propylamine	ND		269
Hexachloroethane	ND		269
Nitrobenzene	ND		269
Isophorone	ND		269
2-Nitrophenol	ND		269
2,4-Dimethylphenol	ND		269
bis(2-Chloroethoxy)methane	ND		269
Benzoic acid	ND		269
2,4-Dichlorophenol	ND		269
1,2,4-Trichlorobenzene	ND		269
Naphthalene	ND		269
4-Chloroaniline	ND		269
Hexachlorobutadiene	ND		269
4-Chloro-3-methylphenol	ND		269
2-Methylnaphthalene	ND		269
Hexachlorocyclopentadiene	ND		269
2,4,6-Trichlorophenol	ND		269
2,4,5-Trichlorophenol	ND		269
2-Chloronaphthalene	ND		269
2-Nitroaniline	ND		269
Dimethylphthalate	ND		269
2,6-Dinitrotoluene	ND		269
Acenaphthylene	ND		269

1122

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-015
Client ID: S-30
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1680.D

GC/MS Column: DB-5
Sample wt/vol: 5.06g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 26.4

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		269
Acenaphthene	ND		269
2,4-Dinitrophenol	ND		269
4-Nitrophenol	ND		269
2,4-Dinitrotoluene	ND		269
Dibenzofuran	ND		269
Diethylphthalate	ND		269
Fluorene	ND		269
4-Chlorophenyl-phenylether	ND		269
4-Nitroaniline	ND		269
4,6-Dinitro-2-methylphenol	ND		269
N-Nitrosodiphenylamine	ND		269
1,2-Diphenylhydrazine/Azobenzene	ND		269
4-Bromophenyl-phenylether	ND		269
Hexachlorobenzene	ND		269
Pentachlorophenol	ND		269
Phenanthrene	322		269
Anthracene	ND		269
Carbazole	ND		269
Di-n-butylphthalate	170	J	269
Fluoranthene	254	J	269
Benzidine	ND		269
Pyrene	ND		269
3,3'-Dimethylbenzidine	ND		269
Butylbenzylphthalate	ND		269
3,3'-Dichlorobenzidine	ND		269
Benzo[a]anthracene	ND		269
Chrysene	ND		269
bis(2-Ethylhexyl)phthalate	ND		269
Di-n-octylphthalate	ND		269
Benzo[b]fluoranthene	ND		269
Benzo[k]fluoranthene	ND		269
Benzo[a]pyrene	ND		269
Indeno[1,2,3-cd]pyrene	ND		269
Dibenz[a,h]anthracene	ND		269
Benzo[g,h,i]perylene	ND		269
Total Target Compounds:	746	J	

1123

000083

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-015
Client ID: S-30
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Date File: B1680.D

GC/MS Column: DB-5
Sample wt/vol: 5.06g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 26.4

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	5830	0.53
	Substituted benzene	155000	1.58
	Unknown alkane	6040	1.59
	Unknown	8590	1.92
	Substituted phenol	10900	2.20
	Unknown aromatic	8460	2.29
	Substituted phenol	7520	2.31
	Unknown aromatic	9080	2.57
	Unknown alkane	7730	2.62
	Unknown aromatic	12000	2.68
	Substituted naphthalene	49500	2.84
	Unknown	5290	2.87
	Substituted naphthalene	7120	2.89
	Substituted benzene	8430	2.92
	Unknown	6100	2.97
	Unknown	6120	2.98
	Unknown	8140	3.00
	Substituted naphthalene	4860	3.14
	Unknown aromatic	9560	3.41
	Unknown	8380	3.45
	Unknown aromatic	8240	3.46
	Unknown aromatic	12700	3.53
	Unknown aromatic	6950	3.69
010544-50-0	Cyclic octaatomic sulfur	7330	3.83
	Unknown aromatic	5080	4.43
	Total TICs =	384950	

1124

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-001
Client ID: S-17
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: R3802.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.2g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 100
% Moisture: 15.1

Compound	Concentration	Q	MDL
Aroclor-1016	ND		78
Aroclor-1221	ND		78
Aroclor-1232	ND		78
Aroclor-1242	ND		78
Aroclor-1248	ND		78
Aroclor-1254	ND		78
Aroclor-1260	ND		78

1125

000085

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-002
Client ID: S-18
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 03/30/2001
Data file: R3756.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.4g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 100
% Moisture: 26.7

Compound	Concentration	Q	MDL
Aroclor-1016	ND		89.8
Aroclor-1221	ND		89.8
Aroclor-1232	ND		89.8
Aroclor-1242	ND		89.8
Aroclor-1248	ND		89.8
Aroclor-1254	ND		89.8
Aroclor-1260	2720		89.8

1126

000086

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-003
Client ID: S-19
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 03/30/2001
Data file: R3757.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 100
% Moisture: 22.7

Compound	Concentration	Q	MDL
Aroclor-1016	ND		86
Aroclor-1221	ND		86
Aroclor-1232	ND		86
Aroclor-1242	ND		86
Aroclor-1248	ND		86
Aroclor-1254	ND		86
Aroclor-1260	ND		86

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-004
Client ID: S-20
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 03/30/2001
Data file: R3758.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.2g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 100
% Moisture: 15.7

Compound	Concentration	Q	MDL
Aroclor-1016	ND		78.6
Aroclor-1221	ND		78.6
Aroclor-1232	ND		78.6
Aroclor-1242	ND		78.6
Aroclor-1248	ND		78.6
Aroclor-1254	1440		78.6
Aroclor-1260	ND		78.6

000088

1128

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-005
Client ID: S-21
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: R3803.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.9g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 100
% Moisture: 14.6

Compound	Concentration	Q	MDL
Aroclor-1016	ND		75.8
Aroclor-1221	ND		75.8
Aroclor-1232	ND		75.8
Aroclor-1242	ND		75.8
Aroclor-1248	ND		75.8
Aroclor-1254	245		75.8
Aroclor-1260	ND		75.8

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-006
Client ID: S-22
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: R3804.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.9g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 100
% Moisture: 16.5

Compound	Concentration	Q	MDL
Aroclor-1016	ND		77.5
Aroclor-1221	ND		77.5
Aroclor-1232	ND		77.5
Aroclor-1242	ND		77.5
Aroclor-1248	ND		77.5
Aroclor-1254	983		77.5
Aroclor-1260	ND		77.5

1130

000090

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-007
Client ID: S-23
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 03/30/2001
Data file: R3761.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.8g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 100
% Moisture: 17.8

Compound	Concentration	Q	MDL
Aroclor-1016	ND		79
Aroclor-1221	ND		79
Aroclor-1232	ND		79
Aroclor-1242	ND		79
Aroclor-1248	ND		79
Aroclor-1254	23600		79
Aroclor-1260	ND		79

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-008
Client ID: S-24
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 03/30/2001
Data file: R3762.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 100
% Moisture: 21.8

Compound	Concentration	Q	MDL
Aroclor-1016	ND		85.3
Aroclor-1221	ND		85.3
Aroclor-1232	ND		85.3
Aroclor-1242	ND		85.3
Aroclor-1248	ND		85.3
Aroclor-1254	1200		85.3
Aroclor-1260	ND		85.3

1132

000092

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-009
Client ID: S-25
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 03/30/2001
Data file: R3763.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.4g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 100
% Moisture: 18.3

Compound	Concentration	Q	MDL
Aroclor-1016	ND		80.5
Aroclor-1221	ND		80.5
Aroclor-1232	ND		80.5
Aroclor-1242	ND		80.5
Aroclor-1248	ND		80.5
Aroclor-1254	ND		80.5
Aroclor-1260	ND		80.5

1133

000093

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-011
Client ID: S-27
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 03/30/2001
Data file: R3764.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.8g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 100
% Moisture: 17.0

Compound	Concentration	Q	MDL
Aroclor-1016	ND		78.2
Aroclor-1221	ND		78.2
Aroclor-1232	ND		78.2
Aroclor-1242	ND		78.2
Aroclor-1248	ND		78.2
Aroclor-1254	161		78.2
Aroclor-1260	ND		78.2

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INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-012
Client ID: S-28
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: R3805.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.2g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 100
% Moisture: 22.7

Compound	Concentration	Q	MDL
Aroclor-1016	ND		85.7
Aroclor-1221	ND		85.7
Aroclor-1232	ND		85.7
Aroclor-1242	ND		85.7
Aroclor-1248	ND		85.7
Aroclor-1254	1860		85.7
Aroclor-1260	ND		85.7

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-013
Client ID: S-29
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: R3806.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.7g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 100
% Moisture: 23.8

Compound	Concentration	Q	MDL
Aroclor-1016	ND		85.5
Aroclor-1221	ND		85.5
Aroclor-1232	ND		85.5
Aroclor-1242	ND		85.5
Aroclor-1248	ND		85.5
Aroclor-1254	ND		85.5
Aroclor-1260	ND		85.5

000096

1136

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-015
Client ID: S-30
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: R3807.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.5g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 100
% Moisture: 26.4

Compound	Concentration	Q	MDL
Aroclor-1016	ND		89.1
Aroclor-1221	ND		89.1
Aroclor-1232	ND		89.1
Aroclor-1242	ND		89.1
Aroclor-1248	ND		89.1
Aroclor-1254	ND		89.1
Aroclor-1260	ND		89.1

1137

000097

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-001
Client ID: S-17
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: W5609.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.2g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 15.1

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.75
beta-BHC	ND		9.75
gamma-BHC	ND		9.75
delta-BHC	ND		9.75
Heptachlor	ND		9.75
Aldrin	ND		9.75
Heptachlor epoxide	ND		9.75
Endosulfan I	ND		9.75
4,4'-DDE	ND		9.75
Dieldrin	ND		9.75
Endrin	ND		9.75
Endosulfan II	ND		9.75
4,4'-DDD	ND		9.75
Endrin aldehyde	ND		9.75
Endosulfan sulfate	ND		9.75
4,4'-DDT	ND		9.75
Chlordane	ND		48.8
Toxaphene	ND		48.8

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INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-002
Client ID: S-18
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: W5610.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.4g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 26.7

Compound	Concentration	Q	MDL
alpha-BHC	ND		11.2
beta-BHC	ND		11.2
gamma-BHC	ND		11.2
delta-BHC	ND		11.2
Heptachlor	ND		11.2
Aldrin	ND		11.2
Heptachlor epoxide	ND		11.2
Endosulfan I	ND		11.2
4,4'-DDE	ND		11.2
Dieldrin	ND		11.2
Endrin	ND		11.2
Endosulfan II	ND		11.2
4,4'-DDD	ND		11.2
Endrin aldehyde	ND		11.2
Endosulfan sulfate	ND		11.2
4,4'-DDT	ND		11.2
Chlordane	ND		56.1
Toxaphene	ND		56.1

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-003
Client ID: S-19
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: W5611.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 22.7

Compound	Concentration	Q	MDL
alpha-BHC	ND		10.7
beta-BHC	ND		10.7
gamma-BHC	ND		10.7
delta-BHC	ND		10.7
Heptachlor	ND		10.7
Aldrin	ND		10.7
Heptachlor epoxide	ND		10.7
Endosulfan I	ND		10.7
4,4'-DDE	ND		10.7
Dieldrin	ND		10.7
Endrin	ND		10.7
Endosulfan II	ND		10.7
4,4'-DDD	ND		10.7
Endrin aldehyde	ND		10.7
Endosulfan sulfate	ND		10.7
4,4'-DDT	ND		10.7
Chlordane	ND		53.7
Toxaphene	ND		53.7

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INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-004
Client ID: S-20
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: W5612.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.2g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 15.7

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.82
beta-BHC	ND		9.82
gamma-BHC	ND		9.82
delta-BHC	ND		9.82
Heptachlor	ND		9.82
Aldrin	ND		9.82
Heptachlor epoxide	ND		9.82
Endosulfan I	ND		9.82
4,4'-DDE	89		9.82
Dieldrin	ND		9.82
Endrin	ND		9.82
Endosulfan II	ND		9.82
4,4'-DDD	61.1		9.82
Endrin aldehyde	ND		9.82
Endosulfan sulfate	ND		9.82
4,4'-DDT	ND		9.82
Chlordane	ND		49.1
Toxaphene	ND		49.1

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INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-005
Client ID: S-21
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: W5613.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.9g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 14.6

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.47
beta-BHC	ND		9.47
gamma-BHC	ND		9.47
delta-BHC	ND		9.47
Heptachlor	ND		9.47
Aldrin	ND		9.47
Heptachlor epoxide	ND		9.47
Endosulfan I	ND		9.47
4,4'-DDE	36.9		9.47
Dieldrin	ND		9.47
Endrin	ND		9.47
Endosulfan II	ND		9.47
4,4'-DDD	58.4		9.47
Endrin aldehyde	ND		9.47
Endosulfan sulfate	ND		9.47
4,4'-DDT	ND		9.47
Chlordane	ND		47.4
Toxaphene	ND		47.4

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INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-006
Client ID: S-22
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Data file: W5624.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.9g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 16.5

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.69
beta-BHC	ND		9.69
gamma-BHC	ND		9.69
delta-BHC	ND		9.69
Heptachlor	ND		9.69
Aldrin	ND		9.69
Heptachlor epoxide	ND		9.69
Endosulfan I	ND		9.69
4,4'-DDE	35.4		9.69
Dieldrin	ND		9.69
Endrin	ND		9.69
Endosulfan II	ND		9.69
4,4'-DDD	62.8		9.69
Endrin aldehyde	ND		9.69
Endosulfan sulfate	ND		9.69
4,4'-DDT	ND		9.69
Chlordane	ND		48.4
Toxaphene	ND		48.4

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-007
Client ID: S-23
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Data file: W5625.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.8g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 17.8

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.88
beta-BHC	ND		9.88
gamma-BHC	ND		9.88
delta-BHC	ND		9.88
Heptachlor	ND		9.88
Aldrin	ND		9.88
Heptachlor epoxide	ND		9.88
Endosulfan I	ND		9.88
4,4'-DDE	1150		9.88
Dieldrin	ND		9.88
Endrin	ND		9.88
Endosulfan II	ND		9.88
4,4'-DDD	3810	E	9.88
Endrin aldehyde	ND		9.88
Endosulfan sulfate	ND		9.88
4,4'-DDT	ND		9.88
Chlordane	ND		49.4
Toxaphene	ND		49.4

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INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-007DIL
Client ID: S-23
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Data file: W5639.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.8g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 100
% Moisture: 17.8

Compound	Concentration	Q	MDL
alpha-BHC	ND		19.7
beta-BHC	ND		19.7
gamma-BHC	ND		19.7
delta-BHC	ND		19.7
Heptachlor	ND		19.7
Aldrin	ND		19.7
Heptachlor epoxide	ND		19.7
Endosulfan I	ND		19.7
4,4'-DDE	1270		19.7
Dieldrin	ND		19.7
Endrin	ND		19.7
Endosulfan II	ND		19.7
4,4'-DDD	4450		19.7
Endrin aldehyde	ND		19.7
Endosulfan sulfate	ND		19.7
4,4'-DDT	ND		19.7
Chlordane	ND		98.7
Toxaphene	ND		98.7

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INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-008
Client ID: S-24
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Data file: W5626.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 21.8

Compound	Concentration	Q	MDL
alpha-BHC	ND		10.7
beta-BHC	ND		10.7
gamma-BHC	ND		10.7
delta-BHC	ND		10.7
Heptachlor	ND		10.7
Aldrin	ND		10.7
Heptachlor epoxide	ND		10.7
Endosulfan I	ND		10.7
4,4'-DDE	322		10.7
Dieldrin	ND		10.7
Endrin	ND		10.7
Endosulfan II	ND		10.7
4,4'-DDD	180		10.7
Endrin aldehyde	ND		10.7
Endosulfan sulfate	ND		10.7
4,4'-DDT	55.4		10.7
Chlordane	ND		53.3
Toxaphene	ND		53.3

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INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-009
Client ID: S-25
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Data file: W5627.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.4g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 18.3

Compound	Concentration	Q	MDL
alpha-BHC	ND		10.1
beta-BHC	ND		10.1
gamma-BHC	ND		10.1
delta-BHC	ND		10.1
Heptachlor	ND		10.1
Aldrin	ND		10.1
Heptachlor epoxide	ND		10.1
Endosulfan I	ND		10.1
4,4'-DDE	ND		10.1
Dieldrin	ND		10.1
Endrin	ND		10.1
Endosulfan II	ND		10.1
4,4'-DDD	ND		10.1
Endrin aldehyde	ND		10.1
Endosulfan sulfate	ND		10.1
4,4'-DDT	ND		10.1
Chlordane	ND		50.3
Toxaphene	ND		50.3

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-011
Client ID: S-27
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Data file: W5628.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.8g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 17.0

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.78
beta-BHC	ND		9.78
gamma-BHC	ND		9.78
delta-BHC	ND		9.78
Heptachlor	ND		9.78
Aldrin	ND		9.78
Heptachlor epoxide	ND		9.78
Endosulfan I	ND		9.78
4,4'-DDE	ND		9.78
Dieldrin	ND		9.78
Endrin	ND		9.78
Endosulfan II	ND		9.78
4,4'-DDD	ND		9.78
Endrin aldehyde	ND		9.78
Endosulfan sulfate	ND		9.78
4,4'-DDT	ND		9.78
Chlordane	ND		48.9
Toxaphene	ND		48.9

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INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-012
Client ID: S-28
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Data file: W5629.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.2g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 22.7

Compound	Concentration	Q	MDL
alpha-BHC	ND		10.7
beta-BHC	ND		10.7
gamma-BHC	ND		10.7
delta-BHC	ND		10.7
Heptachlor	ND		10.7
Aldrin	ND		10.7
Heptachlor epoxide	ND		10.7
Endosulfan I	ND		10.7
4,4'-DDE	79		10.7
Dieldrin	ND		10.7
Endrin	ND		10.7
Endosulfan II	ND		10.7
4,4'-DDD	ND		10.7
Endrin aldehyde	ND		10.7
Endosulfan sulfate	ND		10.7
4,4'-DDT	ND		10.7
Chlordane	ND		53.5
Toxaphene	ND		53.5

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INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-013
Client ID: S-29
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Data file: W5630.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.7g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 23.8

Compound	Concentration	Q	MDL
alpha-BHC	ND		10.7
beta-BHC	ND		10.7
gamma-BHC	ND		10.7
delta-BHC	ND		10.7
Heptachlor	ND		10.7
Aldrin	ND		10.7
Heptachlor epoxide	ND		10.7
Endosulfan I	ND		10.7
4,4'-DDE	ND		10.7
Dieldrin	ND		10.7
Endrin	ND		10.7
Endosulfan II	ND		10.7
4,4'-DDD	ND		10.7
Endrin aldehyde	ND		10.7
Endosulfan sulfate	ND		10.7
4,4'-DDT	ND		10.7
Chlordane	ND		53.4
Toxaphene	ND		53.4

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INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-015
Client ID: S-30
Date Received: 03/28/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Data file: W5631.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.5g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 26.4

Compound	Concentration	Q	MDL
alpha-BHC	ND		11.1
beta-BHC	ND		11.1
gamma-BHC	ND		11.1
delta-BHC	ND		11.1
Heptachlor	ND		11.1
Aldrin	ND		11.1
Heptachlor epoxide	ND		11.1
Endosulfan I	ND		11.1
4,4'-DDE	ND		11.1
Dieldrin	ND		11.1
Endrin	ND		11.1
Endosulfan II	ND		11.1
4,4'-DDD	ND		11.1
Endrin aldehyde	ND		11.1
Endosulfan sulfate	ND		11.1
4,4'-DDT	ND		11.1
Chlordane	ND		55.7
Toxaphene	ND		55.7

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-001
Client ID: S-17
Date Received: 3/28/01
Date Analyzed: 4/3/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 15.1

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.36
Arsenic	1.40		1	0.236
Beryllium	ND		1	0.236
Cadmium	0.573		1	0.236
Chromium	13.4		1	0.708
Copper	63.3		1	0.472
Lead	87.1		1	2.36
Mercury	0.125		1	0.0147
Nickel	3.95		1	0.708
Selenium	ND		1	2.36
Silver	ND		1	0.590
Thallium	ND		1	0.0944
Zinc	129		1	1.18

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-002
Client ID: S-18
Date Received: 3/28/01
Date Analyzed: 4/3/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 26.7

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.71
Arsenic	11.6		1	0.271
Beryllium	0.594		1	0.271
Cadmium	1.67		1	0.271
Chromium	26.7		1	0.813
Copper	224		1	0.542
Lead	330		1	2.71
Mercury	0.315		1	0.0169
Nickel	31.7		1	0.813
Selenium	ND		1	2.71
Silver	ND		1	0.677
Thallium	0.148		1	0.108
Zinc	391		1	1.35

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-003
Client ID: S-19
Date Received: 3/28/01
Date Analyzed: 4/3/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 22.7

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.58
Arsenic	2.48		1	0.258
Beryllium	0.609		1	0.258
Cadmium	1.06		1	0.258
Chromium	23.0		1	0.774
Copper	29.6		1	0.516
Lead	205		1	2.58
Mercury	0.0834		1	0.0161
Nickel	14.1		1	0.774
Selenium	ND		1	2.58
Silver	ND		1	0.648
Thallium	0.214		1	0.103
Zinc	225		1	1.29

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-004
Client ID: S-20
Date Received: 3/28/01
Date Analyzed: 4/3/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 15.7

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.35
Arsenic	1.96		1	0.235
Beryllium	0.355		1	0.235
Cadmium	4.39		1	0.235
Chromium	23.5		1	0.706
Copper	45.2		1	0.470
Lead	93.6		1	2.35
Mercury	0.481		1	0.0148
Nickel	771		1	0.706
Selenium	ND		1	2.35
Silver	ND		1	0.589
Thallium	0.0953		1	0.0941
Zinc	1680		1	1.18

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-005
Client ID: S-21
Date Received: 3/28/01
Date Analyzed: 4/3/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 14.6

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.33
Arsenic	0.972		1	0.233
Beryllium	0.511		1	0.233
Cadmium	ND		1	0.233
Chromium	27.8		1	0.699
Copper	23.9		1	0.466
Lead	17.0		1	2.33
Mercury	0.0354		1	0.0146
Nickel	73.3		1	0.699
Selenium	ND		1	2.33
Silver	ND		1	0.579
Thallium	0.108		1	0.0932
Zinc	80.3		1	1.17

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-006
Client ID: S-22
Date Received: 3/28/01
Date Analyzed: 4/3/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 16.5

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.40
Arsenic	2.02		1	0.240
Beryllium	ND		1	0.240
Cadmium	ND		1	0.240
Chromium	19.8		1	0.720
Copper	7.56		1	0.480
Lead	83.9		1	2.40
Mercury	0.0408		1	0.0149
Nickel	78.7		1	0.720
Selenium	ND		1	2.40
Silver	ND		1	0.600
Thallium	ND		1	0.096
Zinc	111		1	1.20

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-008
Client ID: S-24
Date Received: 3/28/01
Date Analyzed: 4/3/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 21.8

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.55
Arsenic	15.0		1	0.255
Beryllium	0.289		1	0.255
Cadmium	10.4		1	0.255
Chromium	251		1	0.765
Copper	435		1	0.510
Lead	464		1	2.55
Mercury	34.7		100	1.58
Nickel	385		1	0.765
Selenium	2.95		1	2.55
Silver	2.06		1	0.634
Thallium	ND		1	0.102
Zinc	2090		1	1.27

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-009
Client ID: S-25
Date Received: 3/28/01
Date Analyzed: 4/3/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 18.3

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.44
Arsenic	2.01		1	0.244
Beryllium	0.477		1	0.244
Cadmium	0.322		1	0.244
Chromium	23.7		1	0.732
Copper	32.9		1	0.488
Lead	39.6		1	2.44
Mercury	0.309		1	0.0152
Nickel	15.4		1	0.732
Selenium	ND		1	2.44
Silver	ND		1	0.613
Thallium	ND		1	0.0976
Zinc	142		1	1.22

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-011
Client ID: S-27
Date Received: 3/28/01
Date Analyzed: 4/3/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 17

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.38
Arsenic	1.21		1	0.238
Beryllium	0.406		1	0.238
Cadmium	0.676		1	0.238
Chromium	42.1		1	0.714
Copper	60.8		1	0.476
Lead	81.5		1	2.38
Mercury	0.139		1	0.015
Nickel	28.5		1	0.714
Selenium	ND		1	2.38
Silver	ND		1	0.597
Thallium	0.105		1	0.0952
Zinc	152		1	1.19

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-012
Client ID: S-28
Date Received: 3/28/01
Date Analyzed: 4/3/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 22.7

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.56
Arsenic	5.31		1	0.256
Beryllium	0.658		1	0.256
Cadmium	3.14		1	0.256
Chromium	71.0		1	0.768
Copper	181		1	0.512
Lead	284		1	2.56
Mercury	0.905		5	0.0798
Nickel	275		1	0.768
Selenium	ND		1	2.56
Silver	ND		1	0.645
Thallium	0.182		1	0.102
Zinc	558		1	1.28

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-013
Client ID: S-29
Date Received: 3/28/01
Date Analyzed: 4/3/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 23.8

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.61
Arsenic	3.98		1	0.261
Beryllium	1.03		1	0.261
Cadmium	0.611		1	0.261
Chromium	58.0		1	0.783
Copper	105		1	0.522
Lead	61.7		1	2.61
Mercury	0.500		1	0.0164
Nickel	33.0		1	0.783
Selenium	ND		1	2.61
Silver	ND		1	0.649
Thallium	0.189		1	0.104
Zinc	145		1	1.30

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 1922-015
Client ID: S-30
Date Received: 3/28/01
Date Analyzed: 4/3/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 26.4

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.72
Arsenic	2.65		1	0.272
Beryllium	0.734		1	0.272
Cadmium	0.524		1	0.272
Chromium	41.6		1	0.816
Copper	20.3		1	0.544
Lead	16.6		1	2.72
Mercury	0.0476		1	0.017
Nickel	25.1		1	0.816
Selenium	ND		1	2.72
Silver	ND		1	0.673
Thallium	0.142		1	0.109
Zinc	295		1	1.36

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CYANIDE, TOTAL

Client/Project: ENVTACT/ORBIS

Date Received: 3/28/01

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	% Moist	Date Analyzed
1922-001	S-17	ND		1	Soil-mg/Kg	1.18	15.1	4/4/01
1922-002	S-18	ND		1	Soil-mg/Kg	1.36	26.7	4/4/01
1922-003	S-19	3.31		1	Soil-mg/Kg	1.29	22.7	4/4/01
1922-004	S-20	5.94		1	Soil-mg/Kg	1.19	15.7	4/4/01
1922-005	S-21	ND		1	Soil-mg/Kg	1.17	14.6	4/4/01
1922-006	S-22	ND		1	Soil-mg/Kg	1.20	16.5	4/4/01
1922-007	S-23	126		10	Soil-mg/Kg	1.22	17.8	4/4/01
1922-008	S-24	2.45		1	Soil-mg/Kg	1.28	21.8	4/4/01
1922-009	S-25	ND		1	Soil-mg/Kg	1.22	18.3	4/4/01
1922-011	S-27	ND		1	Soil-mg/Kg	1.20	17.0	4/4/01
1922-012	S-28	2		1	Soil-mg/Kg	1.29	22.7	4/4/01
1922-013	S-29	ND		1	Soil-mg/Kg	1.31	23.8	4/4/01
1922-015	S-30	ND		1	Soil-mg/Kg	1.36	26.4	4/4/01

INTEGRATED ANALYTICAL LABORATORIES, LLC.

PHENOL

Client/Project: ENVTACT/ORBIS

Date Received: 3/28/01

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	% Moist	Date Analyzed
1922-001	S-17	ND		1	Soil-mg/Kg	2.94	15.1	4/2/01
1922-002	S-18	ND		1	Soil-mg/Kg	3.41	26.7	4/2/01
1922-003	S-19	19.4		1	Soil-mg/Kg	3.23	22.7	4/2/01
1922-004	S-20	3.14		1	Soil-mg/Kg	2.97	15.7	4/2/01
1922-005	S-21	ND		1	Soil-mg/Kg	2.93	14.6	4/2/01
1922-006	S-22	3.26		1	Soil-mg/Kg	2.99	16.5	4/2/01
1922-007	S-23	ND		1	Soil-mg/Kg	3.04	17.8	4/2/01
1922-008	S-24	ND		1	Soil-mg/Kg	3.20	21.8	4/2/01
1922-009	S-25	9.84		1	Soil-mg/Kg	3.06	18.3	4/2/01
1922-011	S-27	ND		1	Soil-mg/Kg	3.01	17.0	4/2/01
1922-012	S-28	ND		1	Soil-mg/Kg	3.23	22.7	4/2/01
1922-013	S-29	ND		1	Soil-mg/Kg	3.28	23.8	4/2/01
1922-015	S-30	39.4		2	Soil-mg/Kg	3.40	26.4	4/2/01

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TOTAL PETROLEUM HYDROCARBONS

Client/Project: ENVTACT/ORBIS

Date Received: 3/28/01

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	% Moist	Date Analyzed
1922-001	S-17	239		1	Soil-mg/Kg	25.0	15.1	3/30/01
1922-002	S-18	170		1	Soil-mg/Kg	27.3	26.7	3/30/01
1922-003	S-19	30500		40	Soil-mg/Kg	1035	22.7	3/30/01
1922-004	S-20	137		1	Soil-mg/Kg	25.0	15.7	3/30/01
1922-005	S-21	1150		2	Soil-mg/Kg	46.8	14.6	3/30/01
1922-006	S-22	9390		20	Soil-mg/Kg	479	16.5	3/30/01
1922-007	S-23	307		1	Soil-mg/Kg	25.0	17.8	3/30/01
1922-008	S-24	1150		2	Soil-mg/Kg	51.2	21.8	3/30/01
1922-009	S-25	195		1	Soil-mg/Kg	25.0	18.3	3/30/01
1922-011	S-27	129		1	Soil-mg/Kg	25.0	17.0	3/30/01
1922-012	S-28	10200		10	Soil-mg/Kg	259	22.7	3/30/01
1922-013	S-29	30.3		1	Soil-mg/Kg	26.3	23.8	3/30/01
1922-015	S-30	600		1	Soil-mg/Kg	27.2	26.4	3/30/01

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METHODOLOGY SUMMARY

Analytical Parameter	Aqueous Samples Method #	Soil/Other Samples Method #
Volatiles + 15	NA	EPA 8260B
Volatiles + 10	NA	EPA 8260B
Semivolatiles - BNA + 25	NA	EPA 8270C
PCB's	NA	EPA 8082
Pesticides	NA	EPA 8081A
P.P. Metals	NA	EPA 6020
Metals (Mercury)	NA	EPA 7471A
Metals (Silver)	NA	EPA 7760A
Cyanide, Total	NA	EPA 9012 A
Phenols	NA	EPA 9066
Total Petroleum Hydrocarbons	NA	EPA 418.1 M

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8713.D

BFB Injection Date: 04/06/2001

Inst ID: MSD_J

BFB Injection Time: 15:45

m/z	Ion Abudance Criteria	%Relative Abundance		
50	15 - 40.0% of mass 95	18.3		
75	30.0 - 60.0% of mass 95	46.5		
95	Base peak, 100% relative abundance	100.0		
96	5.0 - 9.0% of mass 95	7.0		
173	Less than 2.0% of mass 174	0.3	(0.4	)1
174	Great than 50.0% of mass 95	74.1		
175	5.0 - 9.0% of mass 174	5.5	(7.4	)1
176	95.0 - 101.0% of mass 174	71.0	(95.8	)1
177	5.0 - 9.0% of mass 176	4.6	(6.5	)2
	1-Value is % mass 174	2-Value is % mass 176		

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
20PPB	STD-20PPB	J8714.D	04/06/2001	16:14
50PPB	STD-50PPB	J8715.D	04/06/2001	16:43
100PPB	STD-100PPB	J8716.D	04/06/2001	17:12
150PPB	STD-150PPB	J8717.D	04/06/2001	17:41
200PPB	STD-200PPB	J8718.D	04/06/2001	18:10
N/A	METHOD-BLK	J8721.D	04/06/2001	19:36
S-12A	1840-003	J8722.D	04/06/2001	20:05
AC-27__10.5-11'	2044-001	J8723.D	04/06/2001	20:34
TRIP	2044-002	J8724.D	04/06/2001	21:03
S-34	2006-004	J8726.D	04/06/2001	22:01
S-38	2006-008	J8727.D	04/06/2001	22:29
AOC_#4	2045-001	J8728.D	04/06/2001	22:59
AOC_#4-B	2045-002	J8729.D	04/06/2001	23:27
WC-328	1996-001DIL	J8730.D	04/06/2001	23:56
TRIP_BLANK	2095-006	J8731.D	04/07/2001	0:26
PR-4	2095-004	J8732.D	04/07/2001	0:54
MS	2044-001MS	J8733.D	04/07/2001	1:23
MSD	2044-001MSD	J8734.D	04/07/2001	1:52
MS	2045-002MS	J8736.D	04/07/2001	2:49
MSD	2045-002MSD	J8737.D	04/07/2001	3:18

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8815.D

BFB Injection Date: 04/09/2001

Inst ID: MSD_J

BFB Injection Time: 12:13

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.3			
75	30.0 - 60.0% of mass 95	48.3			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.2	(	0.3	)1
174	Great than 50.0% of mass 95	73.5			
175	5.0 - 9.0% of mass 174	5.5	(	7.5	)1
176	95.0 - 101.0% of mass 174	71.1	(	96.8	)1
177	5.0 - 9.0% of mass 176	4.6	(	6.4	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
100PPB	STD-100PPB	J8816.D	04/09/2001	12:42
N/A	METHOD-BLK	J8818.D	04/09/2001	13:47
FEN-SL/INITIAL	2056-002	J8819.D	04/09/2001	14:16
FEN-SL/CONTRO	2056-003	J8820.D	04/09/2001	14:45
FEN-SL/T-A	2056-004	J8821.D	04/09/2001	15:14
PER-SL/CONTROL	2140-001	J8822.D	04/09/2001	15:43
PER-SL/T-A	2140-002	J8823.D	04/09/2001	16:12
MT._HOPE_WC	2147-001	J8824.D	04/09/2001	16:42
SB-5	2112-006	J8827.D	04/09/2001	18:10
TRIP_BLANK	2123-009	J8828.D	04/09/2001	18:39
BORING_1/8.5	2123-001	J8829.D	04/09/2001	19:08
BORING_2/7	2123-002	J8830.D	04/09/2001	19:37
BORING_3/7	2123-003	J8831.D	04/09/2001	20:05
BORING_4A/7	2123-004	J8832.D	04/09/2001	20:34
BORING_5/7	2123-005	J8833.D	04/09/2001	21:03
BORING_8/7	2123-006	J8834.D	04/09/2001	21:32
BORING_7/10.5	2123-007	J8835.D	04/09/2001	22:01
BORING_7/8.0	2123-008	J8836.D	04/09/2001	22:31
S-25	1922-009	J8837.D	04/09/2001	22:59
MS	2112-006MS	J8838.D	04/09/2001	23:28

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8815.D

BFB Injection Date : 04/09/200

Inst ID: MSD J

BFB Injection Time: 12:13

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.3			
75	30.0 - 60.0% of mass 95	48.3			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.2	(	0.3	)1
174	Great than 50.0% of mass 95	73.5			
175	5.0 - 9.0% of mass 174	5.5	(	7.5	)1
176	95.0 - 101.0% of mass 174	71.1	(	96.8	)1
177	5.0 - 9.0% of mass 176	4.6	(	6.4	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
MSD	2112-006MSD	J8839.D	04/09/2001	23:57

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F9097.D

Inst ID: MSD_F

BFB Injection Date: 03/16/2001

BFB Injection Time: 11:25

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	21.4			
75	30.0 - 60.0% of mass 95	45.4			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.8			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	54.5			
175	5.0 - 9.0% of mass 174	4.6	(	8.5	)1
176	95.0 - 101.0% of mass 174	53.1	(	97.4	)1
177	5.0 - 9.0% of mass 176	4.4	(	8.2	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
100	100_PPB_STD	F9098.D	03/16/2001	11:58
200	200_PPB_STD	F9099.D	03/16/2001	12:31
150	150_PPB_STD	F9100.D	03/16/2001	13:04
50	50_PPB_STD	F9101.D	03/16/2001	13:37
20	20_PPB_STD	F9102.D	03/16/2001	14:09
N/A	METHOD_BLK	F9104.D	03/16/2001	15:15
N/A	METHOD_BLK	F9105.D	03/16/2001	15:47
FB	1623-006	F9106.D	03/16/2001	16:20
NWUST-FB-1	1625-021	F9107.D	03/16/2001	16:53
NWUST-TB-1	1625-022	F9108.D	03/16/2001	17:26
NWUST-TB-2	1625-026	F9109.D	03/16/2001	17:58
MS	1625-026MS	F9110.D	03/16/2001	18:32
MSD	1625-026MSD	F9111.D	03/16/2001	19:04
TB	1623-005	F9112.D	03/16/2001	19:37
SED9A	1623-001	F9113.D	03/16/2001	20:11
MS	1623-002MS	F9114.D	03/16/2001	20:44
MSD	1623-002MSD	F9115.D	03/16/2001	21:17
SED9B	1623-002	F9116.D	03/16/2001	21:49
SED9C	1623-003	F9117.D	03/16/2001	22:22
SED9D	1623-004	F9118.D	03/16/2001	22:55

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F9456.D BFB Injection Date: 03/30/2001

Inst ID: MSD_F BFB Injection Time: 23:03

m/z	Ion Abudance Criteria	%Relative Abundance	
50	15 - 40.0% of mass 95	20.3	
75	30.0 - 60.0% of mass 95	45.5	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	7.0	
173	Less than 2.0% of mass 174	0.0	(0.0)1
174	Great than 50.0% of mass 95	56.6	
175	5.0 - 9.0% of mass 174	4.7	(8.3)1
176	95.0 - 101.0% of mass 174	57.0	(100.7)1
177	5.0 - 9.0% of mass 176	3.7	(6.5)2
	1-Value is % mass 174	2-Value is % mass 176	

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
100	100_PPB_STD	F9458.D	03/30/2001	0:08
N/A	METHOD_BLK	F9460.D	03/30/2001	1:14
TB	1922-014	F9461.D	03/30/2001	1:46
S-17	1922-001	F9462.D	03/30/2001	2:19
S-18	1922-002	F9463.D	03/30/2001	2:52
S-20	1922-004	F9464.D	03/30/2001	3:25
S-21	1922-005	F9465.D	03/30/2001	3:57
S-27	1922-011	F9468.D	03/30/2001	5:37
S-22	1922-006	F9470.D	03/30/2001	6:44
MS	1922-008MS	F9471.D	03/30/2001	7:17
S-28	1922-012	F9472.D	03/30/2001	7:50
S-19	1922-003	F9473.D	03/30/2001	8:23
S-30	1922-015	F9475.D	03/30/2001	9:29
MS	1922-008MSD	F9476.D	03/30/2001	10:01

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F9487.D

BFB Injection Date: 03/30/2001

Inst ID: MSD_F

BFB Injection Time: 15:22

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	21.2			
75	30.0 - 60.0% of mass 95	47.7			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.6			
173	Less than 2.0% of mass 174	0.2	(	0.4	)1
174	Great than 50.0% of mass 95	59.7			
175	5.0 - 9.0% of mass 174	4.5	(	7.6	)1
176	95.0 - 101.0% of mass 174	57.6	(	96.5	)1
177	5.0 - 9.0% of mass 176	3.8	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
100	100_PPB_STD	F9489.D	03/30/2001	16:06
N/A	METHOD_BLK	F9491.D	03/30/2001	17:12
VACUUM_0-0.5'	1889-015	F9493.D	03/30/2001	18:17
MS	1889-015MS	F9494.D	03/30/2001	18:51
MSD	1889-015MSD	F9495.D	03/30/2001	19:23
W-OWS	1836-004DIL	F9496.D	03/30/2001	19:55
FDS-2_4.5-5'	1920-003	F9498.D	03/30/2001	21:02
12-4_2.5-3'	1920-001DIL	F9499.D	03/30/2001	21:34
12-2_7.5-8'	1920-002DIL	F9500.D	03/30/2001	22:07
S-24	1922-008	F9502.D	03/30/2001	23:13
S-23	1922-007	F9503.D	03/30/2001	23:47
S-29	1922-013	F9504.D	03/31/2001	0:20
S-19	1922-003DIL	F9505.D	03/31/2001	0:53
WC-1	1864-001	F9508.D	03/31/2001	2:31

VOLATILE METHOD BLANK SUMMARY

Lab File ID: J8818.D

Instrument ID: MSD_J

Date Analyzed: 04/09/2001

Time Analyzed: 13:47

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
FEN-SL/INITIAL	2056-002	04/09/2001	14:16
FEN-SL/CONTROL	2056-003	04/09/2001	14:45
FEN-SL/T-A	2056-004	04/09/2001	15:14
PER-SL/CONTROL	2140-001	04/09/2001	15:43
PER-SL/T-A	2140-002	04/09/2001	16:12
MT._HOPE_WC	2147-001	04/09/2001	16:42
SB-5	2112-006	04/09/2001	18:10
TRIP_BLANK	2123-009	04/09/2001	18:39
BORING_1/8.5	2123-001	04/09/2001	19:08
BORING_2/7	2123-002	04/09/2001	19:37
BORING_3/7	2123-003	04/09/2001	20:05
BORING_4A/7	2123-004	04/09/2001	20:34
BORING_5/7	2123-005	04/09/2001	21:03
BORING_8/7	2123-006	04/09/2001	21:32
BORING_7/10.5	2123-007	04/09/2001	22:01
BORING_7/8.0	2123-008	04/09/2001	22:31
S-25	1922-009	04/09/2001	22:59
MS	2112-006MS	04/09/2001	23:28
MSD	2112-006MSD	04/09/2001	23:57

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/09/2001
Data file: J8818.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

Compound	Concentration	Q	MDL
Chloromethane	ND		250
Vinyl Chloride	ND		250
Bromomethane	ND		250
Chloroethane	ND		250
Trichlorofluoromethane	ND		250
Acrolein	ND		500
1,1-Dichloroethene	ND		250
Methylene Chloride	ND		250
Acrylonitrile	ND		500
trans-1,2-Dichloroethene	ND		250
1,1-Dichloroethane	ND		250
Chloroform	ND		250
1,1,1-Trichloroethane	ND		250
Carbon Tetrachloride	ND		250
1,2-Dichloroethane(EDC)	ND		250
Benzene	ND		250
Trichloroethene	ND		250
1,2-Dichloropropane	ND		250
Bromodichloromethane	ND		250
2-Chloroethylvinyl Ether	ND		250
cis-1,3-Dichloropropene	ND		250
Toluene	ND		250
trans-1,3-Dichloropropene	ND		250
1,1,2-Trichloroethane	ND		250
Tetrachloroethene	ND		250
Dibromochloromethane	ND		250
Chlorobenzene	ND		250
Ethylbenzene	ND		250
Total Xylenes	ND		250
Bromoform	ND		250
1,1,2,2-Tetrachloroethane	ND		250
1,3-Dichlorobenzene	ND		250
1,4-Dichlorobenzene	ND		250
1,2-Dichlorobenzene	ND		250

Total Target Compounds: 0

000136

1175

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/09/2001
Date File: J8818.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

000137

1176

VOLATILE METHOD BLANK SUMMARY

Lab File ID: F9460.D Instrument ID: MSD_F

Date Analyzed: 03/30/2001 Time Analyzed: 01:14

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
TB	1922-014	03/30/2001	1:46
S-17	1922-001	03/30/2001	2:19
S-18	1922-002	03/30/2001	2:52
S-20	1922-004	03/30/2001	3:25
S-21	1922-005	03/30/2001	3:57
S-27	1922-011	03/30/2001	5:37
S-22	1922-006	03/30/2001	6:44
MS	1922-008MS	03/30/2001	7:17
S-28	1922-012	03/30/2001	7:50
S-19	1922-003	03/30/2001	8:23
S-30	1922-015	03/30/2001	9:29
MS	1922-008MSD	03/30/2001	10:01

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: N/A

Lab ID: METHOD_BLK
Client ID: N/A
Date Received: N/A
Date Analyzed: 03/30/2001
Data file: F9460.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

Compound	Concentration	Q	MDL
Chloromethane	ND		250
Vinyl Chloride	ND		250
Bromomethane	ND		250
Chloroethane	ND		250
Trichlorofluoromethane	ND		250
Acrolein	ND		500
1,1-Dichloroethene	ND		250
Methylene Chloride	ND		250
Acrylonitrile	ND		500
trans-1,2-Dichloroethene	ND		250
1,1-Dichloroethane	ND		250
Chloroform	ND		250
1,1,1-Trichloroethane	ND		250
Carbon Tetrachloride	ND		250
1,2-Dichloroethane(EDC)	ND		250
Benzene	ND		250
Trichloroethene	ND		250
1,2-Dichloropropane	ND		250
Bromodichloromethane	ND		250
2-Chloroethylvinyl Ether	ND		250
cis-1,3-Dichloropropene	ND		250
Toluene	ND		250
trans-1,3-Dichloropropene	ND		250
1,1,2-Trichloroethane	ND		250
Tetrachloroethene	ND		250
Dibromochloromethane	ND		250
Chlorobenzene	ND		250
Ethylbenzene	ND		250
Total Xylenes	ND		250
Bromoform	ND		250
1,1,2,2-Tetrachloroethane	ND		250
1,3-Dichlorobenzene	ND		250
1,4-Dichlorobenzene	ND		250
1,2-Dichlorobenzene	ND		250

Total Target Compounds: 0

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INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: N/A

Lab ID: METHOD_BLK
Client ID: N/A
Date Received: N/A
Date Analyzed: 03/30/2001
Data file: F9460.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

VOLATILE METHOD BLANK SUMMARY

Lab File ID: F9491.D

Instrument ID: MSD_F

Date Analyzed: 03/30/2001

Time Analyzed: 17:12

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
VACUUM_0-0.5'	1889-015	03/30/2001	18:17
MS	1889-015MS	03/30/2001	18:51
MSD	1889-015MSD	03/30/2001	19:23
W-OWS	1836-004DIL	03/30/2001	19:55
FDS-2_4.5-5'	1920-003	03/30/2001	21:02
12-4_2.5-3'	1920-001DIL	03/30/2001	21:34
12-2_7.5-8'	1920-002DIL	03/30/2001	22:07
S-24	1922-008	03/30/2001	23:13
S-23	1922-007	03/30/2001	23:47
S-29	1922-013	03/31/2001	0:20
S-19	1922-003DIL	03/31/2001	0:53
WC-1	1864-001	03/31/2001	2:31

FORM 4 000142

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INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: N/A

Lab ID: METHOD_BLK
Client ID: N/A
Date Received: N/A
Date Analyzed: 03/30/2001
Data file: F9491.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

Compound	Concentration	Q	MDL
Chloromethane	ND		250
Vinyl Chloride	ND		250
Bromomethane	ND		250
Chloroethane	ND		250
Trichlorofluoromethane	ND		250
Acrolein	ND		500
1,1-Dichloroethene	ND		250
Methylene Chloride	ND		250
Acrylonitrile	ND		500
trans-1,2-Dichloroethene	ND		250
1,1-Dichloroethane	ND		250
Chloroform	ND		250
1,1,1-Trichloroethane	ND		250
Carbon Tetrachloride	ND		250
1,2-Dichloroethane(EDC)	ND		250
Benzene	ND		250
Trichloroethene	ND		250
1,2-Dichloropropane	ND		250
Bromodichloromethane	ND		250
2-Chloroethylvinyl Ether	ND		250
cis-1,3-Dichloropropene	ND		250
Toluene	ND		250
trans-1,3-Dichloropropene	ND		250
1,1,2-Trichloroethane	ND		250
Tetrachloroethene	ND		250
Dibromochloromethane	ND		250
Chlorobenzene	ND		250
Ethylbenzene	ND		250
Total Xylenes	ND		250
Bromoform	ND		250
1,1,2,2-Tetrachloroethane	ND		250
1,3-Dichlorobenzene	ND		250
1,4-Dichlorobenzene	ND		250
1,2-Dichlorobenzene	ND		250

Total Target Compounds: 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: N/A

Lab ID: METHOD_BLK
Client ID: N/A
Date Received: N/A
Date Analyzed: 03/30/2001
Data file: F9491.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

Response Factor Report MSD_J

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration

Calibration Files
20 =J8714.D 100 =J8716.D 50 =J8715.D
150 =J8717.D 200 =J8718.D

		Compound	20	100	50	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	ISTD						
2)	T	Dichlorodifluoromet	0.231	0.345	0.351	0.327	0.336	0.318	15.65
3)	P	Chloromethane	0.341	0.456	0.446	0.459	0.474	0.435	12.35
4)	C	Vinyl Chloride	0.254	0.362	0.361	0.361	0.380	0.344	14.71
5)	T	Bromomethane	0.145	0.114	0.144	0.090	0.080	0.115	25.88
6)	T	Chloroethane	0.165	0.169	0.197	0.133	0.117	0.156	20.14
7)	T	Trichlorofluorometh	0.290	0.435	0.438	0.407	0.409	0.396	15.31
8)	T	Acrolein	0.046	0.042	0.045	0.042	0.042	0.043	4.72
9)	MC	1,1-Dichloroethene	0.184	0.257	0.258	0.250	0.256	0.241	13.28
10)	T	Acetone	0.140	0.150	0.162	0.149	0.146	0.149	5.32
11)	T	Carbon Disulfide	0.643	0.941	0.924	0.933	0.966	0.882	15.22
12)	T	Vinyl Acetate	1.244	1.484	1.612	1.443	1.356	1.428	9.68
13)	T	Methylene Chloride	0.262	0.326	0.333	0.326	0.326	0.314	9.42
14)	T	Acrylonitrile	0.144	0.131	0.141	0.132	0.136	0.137	4.22
15)	T	t-Butyl Alcohol(TBA	0.037	0.039	0.044	0.040	0.040	0.040	6.10
16)	T	trans-1,2-Dichloroe	0.222	0.284	0.292	0.278	0.281	0.272	10.28
17)	T	Methyl-t-Butyl Ethe	0.966	1.221	1.271	1.243	1.228	1.186	10.49
18)	P	1,1-Dichloroethane	0.459	0.590	0.598	0.586	0.592	0.565	10.55
19)	T	Diisopropyl Ether(D	0.980	1.225	1.258	1.227	1.212	1.180	9.62
20)	T	cis-1,2-Dichloroeth	0.349	0.443	0.452	0.432	0.428	0.421	9.79
21)	T	2,2-Dichloropropane	0.396	0.540	0.546	0.521	0.527	0.506	12.33
22)	T	2-Butanone(MEK)	0.195	0.242	0.263	0.248	0.244	0.239	10.75
23)	T	Bromochloromethane	0.165	0.212	0.217	0.213	0.210	0.203	10.61
25)	C	Chloroform	0.563	0.730	0.735	0.727	0.725	0.696	10.69
26)	T	1,1,1-Trichloroetha	0.399	0.585	0.577	0.576	0.594	0.546	15.17
27)	T	Carbon Tetrachlorid	0.295	0.456	0.446	0.450	0.465	0.423	16.92
28)	T	1,1-Dichloropropene	0.344	0.493	0.495	0.478	0.487	0.460	14.19
29)	T	1,2-Dichloroethane(	0.488	0.608	0.628	0.609	0.597	0.586	9.56
30)	S	1,2-Dichloroethane-	0.617	0.612	0.622	0.620	0.620	0.618	0.64
31)	I	1,4-Difluorobenzene	ISTD						
32)	M	Benzene	0.912	1.148	1.184	1.114	1.094	1.090	9.67
33)	M	Trichloroethene	0.201	0.277	0.277	0.272	0.275	0.260	12.72
34)	C	1,2-Dichloropropane	0.236	0.299	0.303	0.295	0.289	0.284	9.66
35)	T	Dibromomethane	0.130	0.168	0.171	0.168	0.164	0.160	10.85
37)	T	Bromodichloromethan	0.258	0.371	0.363	0.375	0.372	0.348	14.51
38)	T	2-Chloroethylvinyl	0.131	0.205	0.207	0.210	0.207	0.192	17.88
39)	T	cis-1,3-Dichloropro	0.332	0.475	0.472	0.477	0.468	0.445	14.18
40)	T	4-Methyl-2-pentanon	0.211	0.310	0.326	0.320	0.318	0.297	16.22
41)	S	Toluene-d8	1.015	1.014	1.011	1.009	1.017	1.013	0.32
42)	MC	Toluene	0.547	0.706	0.718	0.688	0.677	0.667	10.31
43)	T	trans-1,3-Dichlorop	0.307	0.448	0.442	0.449	0.443	0.418	14.78
44)	T	1,1,2-Trichloroetha	0.166	0.211	0.218	0.212	0.206	0.203	10.29
45)	T	Tetrachloroethene	0.178	0.237	0.244	0.227	0.224	0.222	11.55
46)	T	1,3-Dichloropropane	0.352	0.449	0.469	0.443	0.428	0.428	10.55
47)	T	2-Hexanone	0.148	0.225	0.235	0.233	0.231	0.215	17.36
48)	T	Dibromochloromethan	0.165	0.260	0.251	0.265	0.264	0.241	17.69
49)	T	1,2-Dibromoethane(E	0.190	0.260	0.267	0.264	0.258	0.248	13.10

000144

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			ISTD						
50)	I	Chlorobenzene-d5							9.27
51)	MP	Chlorobenzene	0.743	0.927	0.952	0.904	0.883	0.882	12.11
52)	T	1,1,1,2-Tetrachloro	0.238	0.322	0.322	0.321	0.313	0.303	11.16
53)	C	Ethylbenzene	1.192	1.578	1.595	1.531	1.510	1.481	9.71
54)	T	m,p-Xylene	0.479	0.590	0.623	0.565	0.542	0.560	10.37
55)	T	o-Xylene	0.472	0.601	0.625	0.576	0.554	0.566	10.68
	T	Styrene	0.828	1.065	1.102	1.030	0.978	1.000	21.39
57)	P	Bromoform	0.109	0.187	0.176	0.198	0.198	0.174	13.65
58)	T	Isopropylbenzene	1.003	1.422	1.421	1.394	1.386	1.325	0.30
59)	S	Bromofluorobenzene	0.641	0.643	0.639	0.638	0.641	0.640	10.96
60)	P	1,1,2,2-Tetrachloro	0.290	0.369	0.392	0.371	0.358	0.356	9.47
61)	T	Bromobenzene	0.302	0.378	0.389	0.367	0.356	0.359	10.43
62)	T	1,2,3-Trichloroprop	0.290	0.361	0.388	0.365	0.355	0.352	12.83
63)	T	n-Propylbenzene	1.199	1.666	1.663	1.621	1.617	1.553	10.13
64)	T	2-Chlorotoluene	0.857	1.100	1.114	1.078	1.061	1.042	11.01
65)	T	1,3,5-Trimethylbenz	0.915	1.200	1.226	1.166	1.151	1.132	9.18
66)	T	4-Chlorotoluene	1.028	1.280	1.316	1.243	1.221	1.218	14.23
67)	T	tert-Butylbenzene	0.642	0.930	0.921	0.903	0.907	0.861	10.32
68)	T	1,2,4-Trimethylbenz	0.996	1.282	1.306	1.258	1.235	1.215	14.76
69)	T	sec-Butylbenzene	0.872	1.274	1.274	1.243	1.257	1.184	8.96
70)	T	1,3-Dichlorobenzene	0.549	0.674	0.701	0.657	0.641	0.645	12.83
71)	T	4-Isopropyltoluene	0.761	1.052	1.062	1.029	1.023	0.985	8.53
72)	T	1,4-Dichlorobenzene	0.578	0.705	0.726	0.692	0.671	0.674	14.70
73)	T	n-Butylbenzene	0.340	0.497	0.495	0.487	0.486	0.461	8.68
74)	T	1,2-Dichlorobenzene	0.543	0.657	0.689	0.645	0.621	0.631	18.31
75)	T	1,2-Dibromo-3-chlor	0.035	0.052	0.055	0.057	0.057	0.051	12.18
76)	T	1,2,4-Trichlorobenz	0.201	0.256	0.281	0.270	0.265	0.255	11.93
77)	T	Hexachlorobutadiene	0.076	0.101	0.102	0.102	0.104	0.097	14.14
78)	T	Naphthalene	0.473	0.614	0.704	0.655	0.650	0.619	15.77
79)	T	1,2,3-Trichlorobenz	0.113	0.153	0.168	0.171	0.169	0.155	15.08
80)	T	1,1,2-Trichloro-1,2	0.147	0.216	0.222	0.202	0.204	0.198	12.75
	T	Methyl acetate	0.203	0.263	0.279	0.278	0.281	0.261	16.99
	T	Cyclohexane	0.325	0.505	0.519	0.478	0.489	0.463	17.50
83)	T	Methyl cyclohexane	0.189	0.301	0.303	0.284	0.290	0.273	

(#) = Out of Range

JME0406.M Sun Apr 08 10:18:10 2001 MSD_J

000145

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Instrument ID: MSD_J
Method ID: JME0406.M
Date: 04/08/2001

Average %RSD = 12.46

Refer to SW846 Method 8000B Section 7.5.1.

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8816.D
Acq On : 9 Apr 2001 12:42
[redacted]mple : 100PPB,STD-100PPB,W,5ml,100
[redacted]sc :
IS Integration Params: LSCINT.P

Vial: 2
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 09 14:14:46 2001
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 35% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	95	0.00
2	T	Dichlorodifluoromethane	0.318	0.409	-28.6	113	0.00
3	P	Chloromethane	0.435	0.463	-6.4	96	0.00
4	C	Vinyl Chloride	0.344	0.389	-13.1	102	0.00
5	T	Bromomethane	0.115	0.127	-10.4	105	0.00
6	T	Chloroethane	0.156	0.170	-9.0	96	0.00
7	T	Trichlorofluoromethane	0.396	0.381	3.8	83	0.00
8	T	Acrolein	0.043	0.042	2.3	96	0.00
9	MC	1,1-Dichloroethene	0.241	0.259	-7.5	96	0.00
10	T	Acetone	0.149	0.118	20.8	75	0.00
11	T	Carbon Disulfide	0.882	0.968	-9.8	98	0.00
12	T	Vinyl Acetate	1.428	1.751	-22.6	112	0.00
[redacted]	T	Methylene Chloride	0.314	0.325	-3.5	95	0.00
[redacted]	T	Acrylonitrile	0.137	0.141	-2.9	102	0.00
[redacted]	T	t-Butyl Alcohol(TBA)	0.040	0.040	0.0	97	0.00
16	T	trans-1,2-Dichloroethene	0.272	0.293	-7.7	98	0.00
17	T	Methyl-t-Butyl Ether(MTBE)	1.186	1.214	-2.4	94	0.00
18	P	1,1-Dichloroethane	0.565	0.595	-5.3	96	0.00
19	T	Diisopropyl Ether(DIPE)	1.180	1.248	-5.8	97	0.00
20	T	cis-1,2-Dichloroethene	0.421	0.449	-6.7	96	0.00
21	T	2,2-Dichloropropane	0.506	0.584	-15.4	103	0.00
22	T	2-Butanone(MEK)	0.239	0.235	1.7	92	0.00
23	T	Bromochloromethane	0.203	0.212	-4.4	95	0.00
25	C	Chloroform	0.696	0.749	-7.6	98	0.00
26	T	1,1,1-Trichloroethane	0.546	0.618	-13.2	100	0.00
27	T	Carbon Tetrachloride	0.423	0.488	-15.4	102	0.00
28	T	1,1-Dichloropropene	0.460	0.518	-12.6	100	0.00
29	T	1,2-Dichloroethane(EDC)	0.586	0.627	-7.0	98	0.00
30	S	1,2-Dichloroethane-d4	0.618	0.655	-6.0	102	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	96	0.00
32	M	Benzene	1.090	1.156	-6.1	97	0.00
33	M	Trichloroethene	0.260	0.274	-5.4	95	0.00
34	C	1,2-Dichloropropane	0.284	0.298	-4.9	96	0.00
35	T	Dibromomethane	0.160	0.169	-5.6	96	0.00
37	T	Bromodichloromethane	0.348	0.368	-5.7	95	0.00
38	T	2-Chloroethylvinyl Ether	0.192	0.207	-7.8	97	0.00
39	T	cis-1,3-Dichloropropene	0.445	0.471	-5.8	95	0.00
[redacted]	T	4-Methyl-2-pentanone(MIBK)	0.297	0.321	-8.1	99	0.00
[redacted]	S	Toluene-d8	1.013	1.024	-1.1	97	0.00
[redacted]	MC	Toluene	0.667	0.713	-6.9	97	0.00
43	T	trans-1,3-Dichloropropene	0.418	0.449	-7.4	96	0.00
44	T	1,1,2-Trichloroethane	0.203	0.213	-4.9	97	0.00
45	T	Tetrachloroethene	0.222	0.243	-9.5	98	0.00
46	T	1,3-Dichloropropane	0.428	0.453	-5.8	97	0.00

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7 T	2-Hexanone	0.215	0.214	0.5	91	0.00
8 T	Dibromochloromethane	0.241	0.259	-7.5	96	0.00
9 T	1,2-Dibromoethane(EDB)	0.248	0.260	-4.8	96	0.00
0 I	Chlorobenzene-d5	1.000	1.000	0.0	95	0.00
1 MP	Chlorobenzene	0.882	0.935	-6.0	96	0.00
T	1,1,1,2-Tetrachloroethane	0.303	0.325	-7.3	96	0.00
3 C	Ethylbenzene	1.481	1.634	-10.3	98	0.00
4 T	m,p-Xylene	0.560	0.618	-10.4	99	0.00
5 T	o-Xylene	0.566	0.616	-8.8	97	0.00
6 T	Styrene	1.000	1.088	-8.8	97	0.00
7 P	Bromoform	0.174	0.191	-9.8	97	0.00
8 T	Isopropylbenzene	1.325	1.489	-12.4	99	0.00
9 S	Bromofluorobenzene	0.640	0.643	-0.5	95	0.00
0 P	1,1,2,2-Tetrachloroethane	0.356	0.399	-12.1	103	0.00
1 T	Bromobenzene	0.359	0.384	-7.0	96	0.00
2 T	1,2,3-Trichloropropane	0.352	0.380	-8.0	100	0.00
3 T	n-Propylbenzene	1.553	1.746	-12.4	99	0.00
4 T	2-Chlorotoluene	1.042	1.140	-9.4	98	0.00
5 T	1,3,5-Trimethylbenzene	1.132	1.253	-10.7	99	0.00
6 T	4-Chlorotoluene	1.218	1.342	-10.2	99	0.00
7 T	tert-Butylbenzene	0.861	0.969	-12.5	99	0.00
8 T	1,2,4-Trimethylbenzene	1.215	1.345	-10.7	99	0.00
9 T	sec-Butylbenzene	1.184	1.355	-14.4	101	0.00
0 T	1,3-Dichlorobenzene	0.645	0.699	-8.4	98	0.00
1 T	4-Isopropyltoluene	0.985	1.118	-13.5	101	0.00
2 T	1,4-Dichlorobenzene	0.674	0.727	-7.9	98	0.00
3 T	n-Butylbenzene	0.461	0.536	-16.3	102	0.00
4 T	1,2-Dichlorobenzene	0.631	0.682	-8.1	98	0.00
5 T	1,2-Dibromo-3-chloropropane	0.051	0.054	-5.9	100	0.00
6 T	1,2,4-Trichlorobenzene	0.255	0.250	2.0	92	0.00
T	Hexachlorobutadiene	0.097	0.107	-10.3	101	0.00
T	Naphthalene	0.619	0.582	6.0	90	0.00
9 T	1,2,3-Trichlorobenzene	0.155	0.134	13.5	83	0.00
0 T	1,1,2-Trichloro-1,2,2-trifl	0.198	0.234	-18.2	103	0.00
1 T	Methyl acetate	0.261	0.265	-1.5	96	0.00
2 T	Cyclohexane	0.463	0.564	-21.8	106	0.00
3 T	Methyl cyclohexane	0.273	0.341	-24.9	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

J8816.D JME0406.M Mon Apr 09 14:14:49 2001 MSD_J

Response Factor Report 5970 - In

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
[illegible]t Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration

Calibration Files
20 =F9102.D 50 =F9101.D 100 =F9098.D
150 =F9100.D 200 =F9099.D

		Compound	20	50	100	150	200	Avg	%RSD
			ISTD						
1)	I	Pentafluorobenzene							
2)	T	Dichlorodifluorometha	0.462	0.500	0.433	0.507	0.434	0.467	7.51
3)	P	Chloromethane	0.390	0.351	0.289	0.347	0.296	0.335	12.53
4)	C	Vinyl Chloride	0.327	0.317	0.263	0.328	0.278	0.302	9.97
5)	T	Bromomethane	0.324	0.277	0.221	0.255	0.212	0.258	17.55
6)	T	Chloroethane	0.222	0.198	0.161	0.185	0.152	0.184	15.49
7)	T	Trichlorofluoromethan	0.353	0.416	0.371	0.438	0.380	0.392	8.86
8)	T	Acrolein	0.044	0.036	0.033	0.039	0.038	0.038	10.68
9)	MC	1,1-Dichloroethene	0.324	0.288	0.227	0.268	0.232	0.268	15.12
10)	T	Acetone	0.171	0.122	0.087	0.113	0.093	0.117	28.30
11)	T	Carbon Disulfide	0.898	0.891	0.755	0.847	0.751	0.828	8.65
12)	T	Vinyl Acetate	1.801	1.504	1.358	1.376	1.395	1.487	12.41
13)	T	Methylene Chloride	0.452	0.365	0.297	0.343	0.309	0.353	17.37
14)	T	Acrylonitrile	0.092	0.090	0.080	0.094	0.091	0.090	6.12
15)	T	t-Butyl Alcohol(TBA)	0.065	0.054	0.041	0.044	0.040	0.049	22.02
16)	T	trans-1,2-Dichloroeth	0.438	0.372	0.296	0.328	0.308	0.348	16.60
[illegible]	T	Methyl-t-Butyl Ether(	1.748	1.329	1.149	1.232	1.156	1.323	18.77
[illegible]	P	1,1-Dichloroethane	0.913	0.823	0.703	0.738	0.716	0.778	11.36
[illegible]	T	Diisopropyl Ether(DIP	2.631	2.219	1.885	1.911	1.897	2.109	15.36
20)	T	cis-1,2-Dichloroethen	0.509	0.417	0.364	0.366	0.359	0.403	15.79
21)	T	2,2-Dichloropropane	0.609	0.614	0.586	0.562	0.576	0.589	3.71
22)	T	2-Butanone(MEK)	0.260	0.197	0.164	0.162	0.173	0.191	21.40
23)	T	Bromochloromethane	0.293	0.247	0.222	0.230	0.224	0.243	12.12
25)	C	Chloroform	0.941	0.792	0.751	0.718	0.734	0.787	11.45
26)	T	1,1,1-Trichloroethane	0.631	0.634	0.591	0.567	0.579	0.600	5.09
27)	T	Carbon Tetrachloride	0.463	0.496	0.457	0.451	0.457	0.465	3.89
28)	T	1,1-Dichloropropene	0.518	0.532	0.497	0.472	0.495	0.503	4.62
29)	T	1,2-Dichloroethane(ED	0.768	0.647	0.620	0.591	0.605	0.646	11.04
30)	S	1,2-Dichloroethane-d4	0.462	0.471	0.502	0.517	0.546	0.500	6.81
			ISTD						
31)	I	1,4-Difluorobenzene							
32)	M	Benzene	1.294	1.172	1.045	1.011	1.034	1.111	10.80
33)	M	Trichloroethene	0.516	0.492	0.451	0.463	0.447	0.474	6.20
34)	C	1,2-Dichloropropane	0.618	0.522	0.468	0.464	0.459	0.506	13.37
35)	T	Dibromomethane	0.468	0.407	0.381	0.364	0.362	0.396	11.13
37)	T	Bromodichloromethane	0.944	0.781	0.738	0.744	0.716	0.785	11.72
38)	T	2-Chloroethylvinyl Et	0.226	0.219	0.213	0.232	0.227	0.223	3.33
39)	T	cis-1,3-Dichloroprope	0.902	0.738	0.679	0.694	0.687	0.740	12.64
40)	T	4-Methyl-2-pentanone(	0.648	0.599	0.511	0.522	0.518	0.559	10.89
41)	S	Toluene-d8	0.912	0.923	0.927	0.919	0.914	0.919	0.68
42)	MC	Toluene	0.787	0.707	0.668	0.650	0.633	0.689	8.86
43)	T	trans-1,3-Dichloropro	0.773	0.670	0.602	0.625	0.612	0.657	10.69
44)	T	1,1,2-Trichloroethane	0.457	0.388	0.346	0.345	0.332	0.374	13.65
[illegible]	T	Tetrachloroethene	0.447	0.442	0.412	0.410	0.385	0.419	6.02
[illegible]	T	1,3-Dichloropropane	0.846	0.703	0.633	0.629	0.616	0.685	13.98
47)	T	2-Hexanone	0.381	0.368	0.325	0.343	0.342	0.352	6.33
48)	T	Dibromochloromethane	0.706	0.612	0.569	0.564	0.550	0.600	10.57
49)	T	1,2-Dibromoethane(EDB	0.637	0.543	0.493	0.481	0.492	0.529	12.29

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50)	I	Chlorobenzene-d5	----------ISTD----------						
51)	MP	Chlorobenzene	1.569	1.366	1.244	1.203	1.214	1.319	11.66
52)	T	1,1,1,2-Tetrachloroet	0.766	0.658	0.610	0.585	0.585	0.641	11.90
53)	C	Ethylbenzene	2.350	2.198	1.966	1.883	1.873	2.054	10.28
54)	T	m,p-Xylene	0.840	0.798	0.696	0.661	0.676	0.734	10.91
55)	T	o-Xylene	0.878	0.729	0.686	0.650	0.653	0.719	13.08
)	T	Styrene	1.529	1.375	1.248	1.186	1.214	1.310	10.85
57)	P	Bromoform	0.836	0.766	0.706	0.689	0.702	0.740	8.32
58)	T	Isopropylbenzene	2.157	1.990	1.832	1.821	1.784	1.917	8.13
59)	S	Bromofluorobenzene	1.063	1.059	1.076	1.111	1.097	1.081	2.06
60)	P	1,1,2,2-Tetrachloroet	1.193	0.990	0.887	0.858	0.873	0.960	14.58
61)	T	Bromobenzene	0.805	0.703	0.667	0.629	0.623	0.685	10.81
62)	T	1,2,3-Trichloropropan	1.098	0.896	0.783	0.769	0.778	0.865	16.22
63)	T	n-Propylbenzene	2.452	2.381	2.150	2.153	2.112	2.250	6.91
64)	T	2-Chlorotoluene	2.120	1.891	1.755	1.761	1.714	1.848	8.97
65)	T	1,3,5-Trimethylbenzen	1.990	1.768	1.581	1.609	1.547	1.699	10.79
66)	T	4-Chlorotoluene	2.403	2.154	1.964	1.979	1.926	2.085	9.49
67)	T	tert-Butylbenzene	1.658	1.537	1.374	1.393	1.336	1.460	9.22
68)	T	1,2,4-Trimethylbenzen	1.967	1.687	1.522	1.562	1.518	1.651	11.46
69)	T	sec-Butylbenzene	1.967	1.864	1.668	1.758	1.665	1.784	7.31
70)	T	1,3-Dichlorobenzene	1.126	0.944	0.883	0.943	0.898	0.959	10.15
71)	T	4-Isopropyltoluene	1.646	1.525	1.353	1.336	1.302	1.432	10.27
72)	T	1,4-Dichlorobenzene	1.335	1.141	1.008	1.052	1.017	1.111	12.26
73)	T	n-Butylbenzene	1.471	1.427	1.263	1.340	1.273	1.355	6.82
74)	T	1,2-Dichlorobenzene	1.163	1.001	0.877	0.915	0.874	0.966	12.59
75)	T	1,2-Dibromo-3-chlorop	0.276	0.263	0.225	0.240	0.234	0.247	8.60
76)	T	1,2,4-Trichlorobenzen	0.748	0.638	0.530	0.584	0.554	0.611	14.21
77)	T	Hexachlorobutadiene	0.479	0.451	0.374	0.401	0.379	0.417	11.08
78)	T	Naphthalene	1.228	1.105	0.884	0.977	0.946	1.028	13.41
79)	T	1,2,3-Trichlorobenzen	0.607	0.570	0.431	0.486	0.447	0.508	15.17
80)	T	1,1,2-Trichloro-1,2,2	0.907	0.975	0.828	0.898	0.811	0.884	7.50
[illegible])	T	Methyl Acetate	0.960	0.813	0.615	0.697	0.683	0.754	18.00
[illegible]	T	Cyclohexane	0.483	0.550	0.515	0.475	0.483	0.501	6.30
83)	T	Methylcyclohexane	0.609	0.717	0.661	0.638	0.634	0.652	6.23

(#) = Out of Range

FME0316.M Fri Mar 16 14:55:22 2001 MSD_F

Instrument ID: MSD_F
Method ID: FME0316.M
Date: 03/16/2001

Average %RSD = 11.33

Refer to SW846 Method 8000B Section 7.5.1.

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9458.D
Acq On : 30 Mar 2001 00:08
Sample : 100,100_PPB_STD,W,5.0mL,100
Misc : N/A,N/A,N/A
.S Integration Params: rteint.p

Vial: 26
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	151	0.07
2	T	Dichlorodifluoromethane	0.467	0.326	30.2	114	0.03
3	P	Chloromethane	0.335	0.289	13.7	151	0.03
4	C	Vinyl Chloride	0.302	0.290	4.0	167	0.03
5	T	Bromomethane	0.258	0.251	2.7	172	0.07
6	T	Chloroethane	0.184	0.183	0.5	173	0.06
7	T	Trichlorofluoromethane	0.392	0.378	3.6	154	0.06
8	T	Acrolein	0.038	0.043	-13.2	193	0.04
9	MC	1,1-Dichloroethene	0.268	0.258	3.7	172	0.04
10	T	Acetone	0.117	0.119	-1.7	207	0.04
11	T	Carbon Disulfide	0.828	0.776	6.3	155	0.04
12	T	Vinyl Acetate	1.487	1.328	10.7	148	0.06
13	T	Methylene Chloride	0.353	0.356	-0.8	181	0.06
[illegible]	T	Acrylonitrile	0.090	0.093	-3.3	176	0.07
[illegible]	T	t-Butyl Alcohol(TBA)	0.049	0.050	-2.0	187	0.06
16	T	trans-1,2-Dichloroethene	0.348	0.353	-1.4	180	0.07
17	T	Methyl-t-Butyl Ether(MTBE)	1.323	1.312	0.8	172	0.07
18	P	1,1-Dichloroethane	0.778	0.820	-5.4	176	0.07
19	T	Diisopropyl Ether(DIPE)	2.109	2.119	-0.5	170	0.07
20	T	cis-1,2-Dichloroethene	0.403	0.410	-1.7	170	0.07
21	T	2,2-Dichloropropane	0.589	0.519	11.9	134	0.06
22	T	2-Butanone(MEK)	0.191	0.192	-0.5	177	0.06
23	T	Bromochloromethane	0.243	0.263	-8.2	179	0.06
25	C	Chloroform	0.787	0.846	-7.5	170	0.06
26	T	1,1,1-Trichloroethane	0.600	0.649	-8.2	166	0.06
27	T	Carbon Tetrachloride	0.465	0.502	-8.0	166	0.07
28	T	1,1-Dichloropropene	0.503	0.515	-2.4	157	0.09
29	T	1,2-Dichloroethane(EDC)	0.646	0.700	-8.4	171	0.07
30	S	1,2-Dichloroethane-d4	0.500	0.502	-0.4	151	0.07
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	149	0.06
32	M	Benzene	1.111	1.129	-1.6	161	0.06
33	M	Trichloroethene	0.474	0.526	-11.0	174	0.07
34	C	1,2-Dichloropropane	0.506	0.517	-2.2	165	0.07
35	T	Dibromomethane	0.396	0.402	-1.5	157	0.07
37	T	Bromodichloromethane	0.785	0.795	-1.3	161	0.07
38	T	2-Chloroethylvinyl Ether	0.223	0.242	-8.5	169	0.05
39	T	cis-1,3-Dichloropropene	0.740	0.714	3.5	157	0.05
[illegible]	T	4-Methyl-2-pentanone(MIBK)	0.559	0.553	1.1	161	0.07
[illegible]	S	Toluene-d8	0.919	0.936	-1.8	151	0.07
42	MC	Toluene	0.689	0.718	-4.2	160	0.07
43	T	trans-1,3-Dichloropropene	0.657	0.612	6.8	151	0.05
44	T	1,1,2-Trichloroethane	0.374	0.377	-0.8	162	0.07
45	T	Tetrachloroethene	0.419	0.442	-5.5	160	0.07
46	T	1,3-Dichloropropane	0.685	0.691	-0.9	163	0.07

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47 T	2-Hexanone	0.352	0.351	0.3	161	0.04
48 T	Dibromochloromethane	0.600	0.625	-4.2	164	0.05
49 T	1,2-Dibromoethane(EDB)	0.529	0.534	-0.9	162	0.07
[redacted] I	Chlorobenzene-d5	1.000	1.000	0.0	162	0.05
[redacted] IP	Chlorobenzene	1.319	1.253	5.0	163	0.04
T	1,1,1,2-Tetrachloroethane	0.641	0.609	5.0	161	0.07
53 C	Ethylbenzene	2.054	1.973	3.9	162	0.05
54 T	m,p-Xylene	0.734	0.692	5.7	161	0.05
55 T	o-Xylene	0.719	0.680	5.4	160	0.05
56 T	Styrene	1.310	1.228	6.3	159	0.05
57 P	Bromoform	0.740	0.693	6.4	159	0.05
58 T	Isopropylbenzene	1.917	1.883	1.8	166	0.07
59 S	Bromofluorobenzene	1.081	1.098	-1.6	165	0.05
60 P	1,1,2,2-Tetrachloroethane	0.960	0.817	14.9	149	0.05
61 T	Bromobenzene	0.685	0.666	2.8	162	0.05
62 T	1,2,3-Trichloropropane	0.865	0.783	9.5	162	0.05
63 T	n-Propylbenzene	2.250	2.165	3.8	163	0.05
64 T	2-Chlorotoluene	1.848	1.773	4.1	163	0.05
65 T	1,3,5-Trimethylbenzene	1.699	1.639	3.5	168	0.05
66 T	4-Chlorotoluene	2.085	2.019	3.2	166	0.05
67 T	tert-Butylbenzene	1.460	1.371	6.1	161	0.05
68 T	1,2,4-Trimethylbenzene	1.651	1.591	3.6	169	0.05
69 T	sec-Butylbenzene	1.784	1.687	5.4	163	0.05
70 T	1,3-Dichlorobenzene	0.959	0.917	4.4	168	0.05
71 T	4-Isopropyltoluene	1.432	1.312	8.4	157	0.05
72 T	1,4-Dichlorobenzene	1.111	1.063	4.3	170	0.05
73 T	n-Butylbenzene	1.355	1.196	11.7	153	0.07
74 T	1,2-Dichlorobenzene	0.966	0.926	4.1	171	0.05
75 T	1,2-Dibromo-3-chloropropane	0.247	0.186	24.7	134	0.07
76 T	1,2,4-Trichlorobenzene	0.611	0.470	23.1	143	0.07
[redacted] T	Hexachlorobutadiene	0.417	0.334	19.9	144	0.07
[redacted] T	Naphthalene	1.028	0.815	20.7	149	0.07
79 T	1,2,3-Trichlorobenzene	0.508	0.374	26.4	140	0.06
80 T	1,1,2-Trichloro-1,2,2-trifl	0.884	0.730	17.4	143	0.06
81 T	Methyl Acetate	0.754	0.693	8.1	182	0.06
82 T	Cyclohexane	0.501	0.435	13.2	136	0.06
83 T	Methylcyclohexane	0.652	0.559	14.3	137	0.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0

F3394.D FME0316.M Fri Mar 30 08:33:02 2001 MSD_F

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\03-30-01\F9489.D
Acq On : 30 Mar 2001 16:06
Sample : 100,100_PPB_STD,W,5.0mL,100
Misc : N/A,N/A,N/A
Integration Params: rteint.p

Vial: 2
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	149	0.09
2	T	Dichlorodifluoromethane	0.467	0.597	-27.8	205	0.04
3	P	Chloromethane	0.335	0.394	-17.6	203	0.04
4	C	Vinyl Chloride	0.302	0.361	-19.5	204	0.03
5	T	Bromomethane	0.258	0.303	-17.4	204	0.10
6	T	Chloroethane	0.184	0.218	-18.5	202	0.07
7	T	Trichlorofluoromethane	0.392	0.532	-35.7	213	0.06
8	T	Acrolein	0.038	0.044	-15.8	199	0.07
9	MC	1,1-Dichloroethene	0.268	0.299	-11.6	197	0.06
10	T	Acetone	0.117	0.101	13.7	173	0.06
11	T	Carbon Disulfide	0.828	0.882	-6.5	174	0.06
12	T	Vinyl Acetate	1.487	1.569	-5.5	172	0.09
13	T	Methylene Chloride	0.353	0.374	-5.9	187	0.07
14	T	Acrylonitrile	0.090	0.085	5.6	159	0.07
15	T	t-Butyl Alcohol(TBA)	0.049	0.040	18.4	148	0.07
16	T	trans-1,2-Dichloroethene	0.348	0.349	-0.3	176	0.09
17	T	Methyl-t-Butyl Ether(MTBE)	1.323	1.313	0.8	170	0.09
18	P	1,1-Dichloroethane	0.778	0.819	-5.3	174	0.09
19	T	Diisopropyl Ether(DIPE)	2.109	2.095	0.7	166	0.09
20	T	cis-1,2-Dichloroethene	0.403	0.394	2.2	161	0.10
21	T	2,2-Dichloropropane	0.589	0.668	-13.4	170	0.09
22	T	2-Butanone(MEK)	0.191	0.154	19.4	139	0.07
23	T	Bromochloromethane	0.243	0.247	-1.6	166	0.07
25	C	Chloroform	0.787	0.798	-1.4	158	0.07
26	T	1,1,1-Trichloroethane	0.600	0.643	-7.2	162	0.07
27	T	Carbon Tetrachloride	0.465	0.501	-7.7	163	0.07
28	T	1,1-Dichloropropene	0.503	0.506	-0.6	152	0.10
29	T	1,2-Dichloroethane(EDC)	0.646	0.647	-0.2	155	0.09
30	S	1,2-Dichloroethane-d4	0.500	0.484	3.2	144	0.09
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	148	0.07
32	M	Benzene	1.111	1.077	3.1	152	0.07
33	M	Trichloroethene	0.474	0.469	1.1	154	0.09
34	C	1,2-Dichloropropane	0.506	0.496	2.0	157	0.07
35	T	Dibromomethane	0.396	0.375	5.3	145	0.08
37	T	Bromodichloromethane	0.785	0.771	1.8	154	0.08
38	T	2-Chloroethylvinyl Ether	0.223	0.220	1.3	153	0.07
39	T	cis-1,3-Dichloropropene	0.740	0.710	4.1	155	0.08
40	T	4-Methyl-2-pentanone(MIBK)	0.559	0.497	11.1	144	0.08
41	S	Toluene-d8	0.919	0.944	-2.7	150	0.08
42	MC	Toluene	0.689	0.701	-1.7	155	0.07
43	T	trans-1,3-Dichloropropene	0.657	0.644	2.0	158	0.07
44	T	1,1,2-Trichloroethane	0.374	0.350	6.4	150	0.08
45	T	Tetrachloroethene	0.419	0.427	-1.9	153	0.08
46	T	1,3-Dichloropropane	0.685	0.652	4.8	152	0.08

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1193

47	T	2-Hexanone	0.352	0.305	13.4	139	0.07
48	T	Dibromochloromethane	0.600	0.561	6.5	146	0.07
49	T	1,2-Dibromoethane(EDB)	0.529	0.484	8.5	145	0.08
[illegible]	I	Chlorobenzene-d5	1.000	1.000	0.0	162	0.08
[illegible]	MP	Chlorobenzene	1.319	1.202	8.9	156	0.07
	T	1,1,1,2-Tetrachloroethane	0.641	0.584	8.9	155	0.08
53	C	Ethylbenzene	2.054	1.879	8.5	155	0.08
54	T	m,p-Xylene	0.734	0.654	10.9	152	0.08
55	T	o-Xylene	0.719	0.629	12.5	148	0.08
56	T	Styrene	1.310	1.152	12.1	149	0.07
57	P	Bromoform	0.740	0.615	16.9	141	0.07
58	T	Isopropylbenzene	1.917	1.738	9.3	153	0.08
59	S	Bromofluorobenzene	1.081	1.083	-0.2	163	0.07
60	P	1,1,2,2-Tetrachloroethane	0.960	0.753	21.6	137	0.07
61	T	Bromobenzene	0.685	0.619	9.6	150	0.07
62	T	1,2,3-Trichloropropane	0.865	0.674	22.1	139	0.08
63	T	n-Propylbenzene	2.250	1.904	15.4	143	0.07
64	T	2-Chlorotoluene	1.848	1.571	15.0	145	0.07
65	T	1,3,5-Trimethylbenzene	1.699	1.388	18.3	142	0.08
66	T	4-Chlorotoluene	2.085	1.801	13.6	148	0.08
67	T	tert-Butylbenzene	1.460	1.197	18.0	141	0.07
68	T	1,2,4-Trimethylbenzene	1.651	1.377	16.6	146	0.07
69	T	sec-Butylbenzene	1.784	1.441	19.2	140	0.07
70	T	1,3-Dichlorobenzene	0.959	0.803	16.3	147	0.07
71	T	4-Isopropyltoluene	1.432	1.150	19.7	137	0.07
72	T	1,4-Dichlorobenzene	1.111	0.968	12.9	155	0.07
73	T	n-Butylbenzene	1.355	1.034	23.7	133	0.08
74	T	1,2-Dichlorobenzene	0.966	0.795	17.7	147	0.08
75	T	1,2-Dibromo-3-chloropropane	0.247	0.141	42.9	101	0.08
[illegible]	T	1,2,4-Trichlorobenzene	0.611	0.352	42.4	107	0.06
[illegible]	T	Hexachlorobutadiene	0.417	0.310	25.7	134	0.08
[illegible]	T	Naphthalene	1.028	0.601	41.5	110	0.08
79	T	1,2,3-Trichlorobenzene	0.508	0.284	44.1	106	0.08
80	T	1,1,2-Trichloro-1,2,2-trifl	0.884	0.992	-12.2	194	0.07
81	T	Methyl Acetate	0.754	0.588	22.0	155	0.07
82	T	Cyclohexane	0.501	0.475	5.2	149	0.07
83	T	Methylcyclohexane	0.652	0.602	7.7	148	0.09

(#) = Out of Range SPCC's out = 0 CCC's out = 0

F3394.D FME0316.M Mon Apr 02 07:40:42 2001 MSD_F

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/09/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD-BLK	SOIL	J8818.D	107	96	96
2056-002	SOIL	J8819.D	105	96	95
2056-003	SOIL	J8820.D	106	97	95
2056-004	SOIL	J8821.D	106	96	97
2140-001	SOIL	J8822.D	106	97	95
2140-002	SOIL	J8823.D	108	97	95
2147-001	SOIL	J8824.D	107	97	95
2112-006	MEOH	J8827.D	94	97	69
2123-009	MEOH	J8828.D	101	88	79
2123-001	MEOH	J8829.D	105	82	79
2123-002	MEOH	J8830.D	95	76	72
2123-003	MEOH	J8831.D	99	79	74
2123-004	MEOH	J8832.D	94	75	71
2123-005	MEOH	J8833.D	99	78	74
2123-006	MEOH	J8834.D	100	77	74
2123-007	MEOH	J8835.D	100	77	73
2123-008	MEOH	J8836.D	99	78	76
1922-009	MEOH	J8837.D	70	50	50
2112-006MS	MEOH	J8838.D	99	79	77
2112-006MSD	MEOH	J8839.D	100	80	78

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	53-138	43-133
SMC2 = Toluene-d8	50 ppb	46-111	39-137
SMC3 = Bromofluorobenzene	50 ppb	38-147	23-145

Column to be used to flag recovery values

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 03/30/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD_BLK	SOIL	F9460.D	93	104	93
1922-014	MEOH	F9461.D	127	125	100
1922-001	MEOH	F9462.D	118	121	94
1922-002	MEOH	F9463.D	114	113	84
1922-004	MEOH	F9464.D	111	107	89
1922-005	MEOH	F9465.D	115	107	92
1922-011	MEOH	F9468.D	113	97	96
1922-006	MEOH	F9470.D	116	118	94
1922-008MS	MEOH	F9471.D	125	113	107
1922-012	MEOH	F9472.D	88	69	74
1922-003	MEOH	F9473.D	89	100	93
1922-015	MEOH	F9475.D	96	92	109
1922-008MSD	MEOH	F9476.D	127	111	108

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	27-175	60-112
SMC2 = Toluene-d8	50 ppb	24-164	50-148
SMC3 = Bromofluorobenzene	50 ppb	24-150	69-113

Column to be used to flag recovery values

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 03/30/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD_BLK	SOIL	F9491.D	85	97	89
1889-015	SOIL	F9493.D	92	100	90
1889-015MS	MEOH	F9494.D	91	105	89
1889-015MSD	MEOH	F9495.D	91	102	89
1836-004DIL	MEOH	F9496.D	105	113	85
1920-003	MEOH	F9498.D	113	117	95
1920-001DIL	MEOH	F9499.D	110	116	91
1920-002DIL	MEOH	F9500.D	94	109	68
1922-008	MEOH	F9502.D	107	92	94
1922-007	MEOH	F9503.D	117	121	91
1922-013	MEOH	F9504.D	103	98	91
1922-003DIL	MEOH	F9505.D	64	100	102
1864-001	SOIL	F9508.D	85	104	89

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	27-175	60-112
SMC2 = Toluene-d8	50 ppb	24-164	50-148
SMC3 = Bromofluorobenzene	50 ppb	24-150	69-113

Column to be used to flag recovery values

000158

FORM 2

1197

MEOH VOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2112-006

Batch No.: JM0070

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0.0	42.3	85	56 - 120
Benzene	50.0	0.0	53.2	106	64 - 126
Trichloroethene	50.0	0.0	48.3	97	66 - 120
Toluene	50.0	0.0	51.9	104	65 - 122
Chlorobenzene	50.0	0.0	53.1	106	68 - 120

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD #	% REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	0.0	45.6		91	7	11	56 - 120
Benzene	0.0	55.0		110	4	10	64 - 126
Trichloroethene	0.0	49.8		100	3	9	66 - 120
Toluene	0.0	53.5		107	3	9	65 - 122
Chlorobenzene	0.0	55.3		111	5	9	68 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __5__ outside limits

Spike Recovery: __0___ out of __10__ outside limits

000159

1198

MEOH VOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 1922-008

Batch No.: FM0044

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0.0	42.7	85	31 - 137
Benzene	50.0	0.0	49.3	99	63 - 130
Trichloroethene	50.0	0.0	47.1	94	71 - 115
Toluene	50.0	0.0	52.7	105	74 - 126
Chlorobenzene	50.0	0.0	41.2	82	74 - 126

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	0.0	47.4	95	11	18	31 - 137
Benzene	0.0	48.9	98	1	11	63 - 130
Trichloroethene	0.0	44.1	88	7	7	71 - 115
Toluene	0.0	48.5	97	8	9	74 - 126
Chlorobenzene	0.0	41.3	83	1	8	74 - 126

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __5__ outside limits

Spike Recovery: __0___ out of __10__ outside limits

MEOH VOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 1889-015

Batch No.: FM0045

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0.0	49.1	98	31 - 137
Benzene	50.0	0.0	51.2	102	63 - 130
Trichloroethene	50.0	0.0	50.2	100	71 - 115
Toluene	50.0	0.0	56.3	113	74 - 126
Chlorobenzene	50.0	0.0	43.6	87	74 - 126

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD #	% REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	0.0	51.2		102	4	18	31 - 137
Benzene	0.0	51.8		104	2	11	63 - 130
Trichloroethene	0.0	49.1		98	2	7	71 - 115
Toluene	0.0	54.9		110	3	9	74 - 126
Chlorobenzene	0.0	43.9		88	1	8	74 - 126

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __5__ outside limits

Spike Recovery: __0___ out of __10__ outside limits

000161

1200

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J8716.D

Date Analyzed: 04/06/2001

Instrument ID: MSD_J

Time Analyzed: 17:12

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	513567		6.39		751960		7.22		613907		10.58	
	UPPER LIMIT	1027134		6.89		1503920		7.72		1227814		11.08	
	LOWER LIMIT	256783.5		5.89		375980		6.72		306953.5		10.08	
	LAB SAMPLE ID												
01	STD-20PPB	522866		6.39		756759		7.22		610060		10.58	
02	STD-50PPB	517192		6.39		752725		7.22		614693		10.58	
03	STD-150PPB	509011		6.39		755394		7.22		616821		10.58	
04	STD-200PPB	506927		6.39		760721		7.22		622861		10.58	
05	METHOD-BLK	510479		6.39		737984		7.22		588556		10.58	
06	1840-003	486585		6.39		702070		7.22		557167		10.58	
07	2044-001	491455		6.39		707328		7.22		565245		10.58	
08	2044-002	513345		6.39		736573		7.21		586212		10.58	
09	2006-004	459418		6.39		660979		7.22		528456		10.58	
10	2006-008	518393		6.39		739418		7.22		595865		10.58	
11	2045-001	488269		6.39		702508		7.22		576556		10.58	
12	2045-002	520688		6.39		741407		7.22		600845		10.58	
13	1996-001DIL	459882		6.39		662045		7.22		535600		10.58	
14	2095-006	482463		6.39		696892		7.22		555834		10.58	
15	2095-004	526939		6.39		754597		7.22		627206		10.58	
16	2044-001MS	468887		6.39		677246		7.21		543419		10.58	
17	2044-001MSD	487953		6.39		704532		7.21		562524		10.58	
18	2045-002MS	493677		6.38		710013		7.21		571735		10.58	
19	2045-002MSD	478138		6.39		686566		7.21		553458		10.58	
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J8816.D

Date Analyzed: 04/09/2001

Instrument ID: MSD_J

Time Analyzed: 12:42

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	487878		6.39		721955		7.22		582428		10.58	
	UPPER LIMIT	975756		6.89		1443910		7.72		1164856		11.08	
	LOWER LIMIT	243939		5.89		360977.5		6.72		291214		10.08	
	LAB SAMPLE ID												
01	METHOD-BLK	482262		6.39		704897		7.22		547347		10.58	
02	2056-002	478943		6.39		694445		7.22		544314		10.58	
03	2056-003	470596		6.39		677511		7.22		537578		10.58	
04	2056-004	474129		6.39		688074		7.22		538066		10.58	
05	2140-001	471552		6.39		678773		7.21		529007		10.58	
06	2140-002	458715		6.39		670416		7.22		528281		10.58	
07	2147-001	459699		6.38		664666		7.21		513919		10.58	
08	2112-006	433846		6.38		629127		7.21		506261		10.58	
09	2123-009	463623		6.38		671297		7.21		535751		10.58	
10	2123-001	395070		6.38		581053		7.21		464338		10.58	
11	2123-002	460571		6.39		671501		7.21		533076		10.58	
12	2123-003	425253		6.39		622718		7.22		500873		10.58	
13	2123-004	447614		6.38		655476		7.21		517883		10.58	
14	2123-005	429671		6.39		630923		7.21		502700		10.58	
15	2123-006	423655		6.38		624075		7.21		496600		10.58	
16	2123-007	424741		6.38		622655		7.21		497317		10.58	
17	2123-008	421227		6.39		617232		7.22		494467		10.58	
18	1922-009	442031		6.39		638000		7.22		538434		10.58	
19	2112-006MS	430476		6.38		631406		7.21		507618		10.58	
20	2112-006MSD	429728		6.38		632140		7.21		506862		10.58	
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

1202

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F9098.D

Date Analyzed: 03/16/2001

Instrument ID: MSD_F

Time Analyzed: 11:58

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	2151032	8.74	2157050	9.91	1393382	14.78
	UPPER LIMIT	4302064	9.24	4314100	10.41	2786764	15.28
	LOWER LIMIT	1075516	8.24	1078525	9.41	696691	14.28
	LAB SAMPLE ID						
01	200_PPB_STD	2108795	8.74	2140742	9.92	1379714	14.77
02	150_PPB_STD	2154203	8.79	2121332	9.95	1428885	14.81
03	50_PPB_STD	2224331	8.78	2176614	9.96	1405295	14.82
04	20_PPB_STD	2181659	8.78	2127289	9.96	1389941	14.81
05	METHOD_BLK	2173658	8.78	2080601	9.95	1391689	14.83
06	METHOD_BLK	2129248	8.79	2119006	9.95	1363535	14.80
07	1623-006	2042805	8.78	2075967	9.95	1445640	14.80
08	1625-021	1989365	8.78	1995662	9.95	1470807	14.80
09	1625-022	2093862	8.78	2106910	9.95	1472311	14.82
10	1625-026	2103476	8.78	2043055	9.94	1491588	14.80
11	1625-026MS	2131635	8.78	2250252	9.94	1460698	14.80
12	1625-026MSD	2369607	8.78	2225577	9.95	1512169	14.80
13	1623-005	2161833	8.76	2116518	9.94	1467748	14.80
14	1623-001	2299696	8.76	2238303	9.94	1510897	14.80
15	1623-002MS	2317943	8.78	2236930	9.94	1567539	14.81
16	1623-002MSD	2222111	8.78	2214964	9.94	1566593	14.81
17	1623-002	2264776	8.78	2201657	9.95	1508377	14.80
18	1623-003	2186066	8.76	2284282	9.94	1537741	14.80
19	1623-004	2158467	8.76	2099705	9.94	1530510	14.82
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F9458.D

Date Analyzed: 03/30/2001

Instrument ID: MSD_F

Time Analyzed: 0:08

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	3249978	8.80	3219120	9.96	2252452	14.82
	UPPER LIMIT	6499956	9.30	6438240	10.46	4504904	15.32
	LOWER LIMIT	1624989	8.30	1609560	9.46	1126226	14.32
	LAB SAMPLE ID						
01	METHOD_BLK	3029415	8.80	3106587	9.95	2254495	14.84
02	1922-014	3203036	8.79	3259118	9.95	2316003	14.81
03	1922-001	3043377	8.77	3178234	9.95	2397492	14.83
04	1922-002	3131339	8.79	3257073	9.96	2469383	14.82
05	1922-004	3475217	8.77	3413487	9.95	2455712	14.81
06	1922-005	3383672	8.77	3374425	9.96	2413444	14.83
07	1922-011	3366922	8.77	3335022	9.96	2410241	14.82
08	1922-006	3330474	8.79	3366122	9.95	2422533	14.81
09	1922-008MS	3122670	8.79	3122943	9.95	2460151	14.81
10	1922-012	3228877	8.77	3321878	9.95	2347587	14.81
11	1922-003	2945516	8.79	2983609	9.98	2345362	14.83
12	1922-015	3292080	8.79	3127613	9.98	2264234	14.83
13	1922-008MSD	3206008	8.79	3093355	9.97	2316447	14.83
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

1204

VOLATILE METHANOL PRESERVATION CONTAINER SUMMARY

Sample ID	Client ID	Bottle ID	Date Prepared	Inital Wgt.(g)	Final Wgt.(g)	Sample Wgt.(g)	MeOH Lot #	Surrogate Lot #
1922-001	S-17	103313	3/22/01	107.5	117.1	9.6	CA591	LS169
1922-002	S-18	103308	3/21/01	106.5	114.9	8.4	CA591	LS169
1922-003	S-19	103307	3/21/01	106.2	116.2	10.0	CA591	LS169
1922-004	S-20	103316	3/22/01	107.0	117.1	10.1	CA591	LS169
1922-005	S-21	103309	3/21/01	105.8	116.3	10.5	CA591	LS169
1922-006	S-22	103315	3/22/01	107.3	117.0	9.7	CA591	LS169
1922-007	S-23	103298	3/21/01	106.3	116.3	10.0	CA591	LS169
1922-008	S-24	103462	3/21/01	106.2	114.9	8.7	CA591	LS169
1922-009	S-25	103470	3/21/01	106.4	115.3	8.9	CA591	LS169
1922-010	S-26	103457	3/21/01	105.4	114.4	9.0	CA591	LS169
1922-011	S-27	103460	3/21/01	105.9	114.5	8.7	CA591	LS169
1922-012	S-28	103459	3/21/01	105.9	117.0	11.0	CA591	LS169
1922-013	S-29	103467	3/21/01	105.9	116.6	10.7	CA591	LS169
1922-014	TB	103374	3/26/01	106.5	116.5	10.0	CA706	LS169
1922-015	S-30	103461	3/26/01	105.7	116.8	11.1	CA591	LS169

Limits : Sample Weight = 8 to 12 grams, * = Outside limits

Comments : _____

_____

_____

Sample weight is reported on a wet weight basis

000167

1205

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-29-01\F9462.D
Acq On : 30 Mar 2001 2:19
Sample : S-17,1922-001,M,0.038g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
IS Integration Params: rteint.p
Quant Time: Mar 30 9:56 2001

Vial: 30
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	8.77	168	3043377	50.00	UG	0.05
31) 1,4-Difluorobenzene	9.95	114	3178234	50.00	UG	0.04
50) Chlorobenzene-d5	14.83	117	2397492	50.00	UG	0.06
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	9.26	65	1792493	58.94	UG	0.06
Spiked Amount 50.000	Range 27 - 176		Recovery = 117.88%			
41) Toluene-d8	12.36	98	3544434	60.66	UG	0.07
Spiked Amount 50.000	Range 20 - 158		Recovery = 121.32%			
59) Bromofluorobenzene	16.91	95	2431617	46.90	UG	0.06
Spiked Amount 50.000	Range 28 - 148		Recovery = 93.80%			
Target Compounds						Qvalue
32) Benzene	9.33	78	6456072	91.39	UG	100

(#) = qualifier out of range (m) = manual integration

C00168

1206

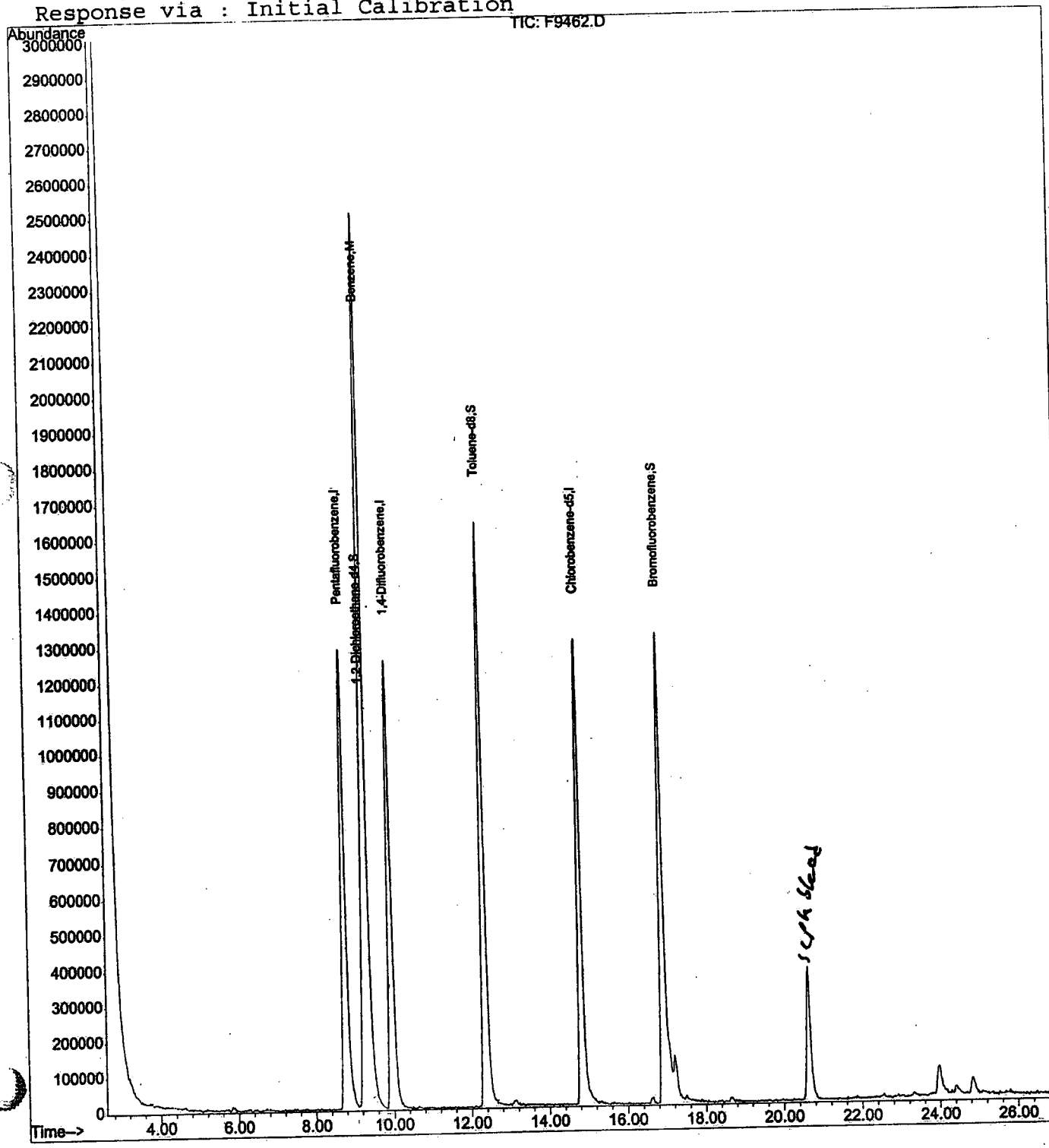
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9462.D
Acq On : 30 Mar 2001 2:19
Sample : S-17,1922-001,M,0.038g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: rteint.p
Quant Time: Mar 30 9:56 2001

Vial: 30
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



000169

1207

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9462.D
Acq On : 30 Mar 2001 2:19
Sample : S-17,1922-001,M,0.038g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 30
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

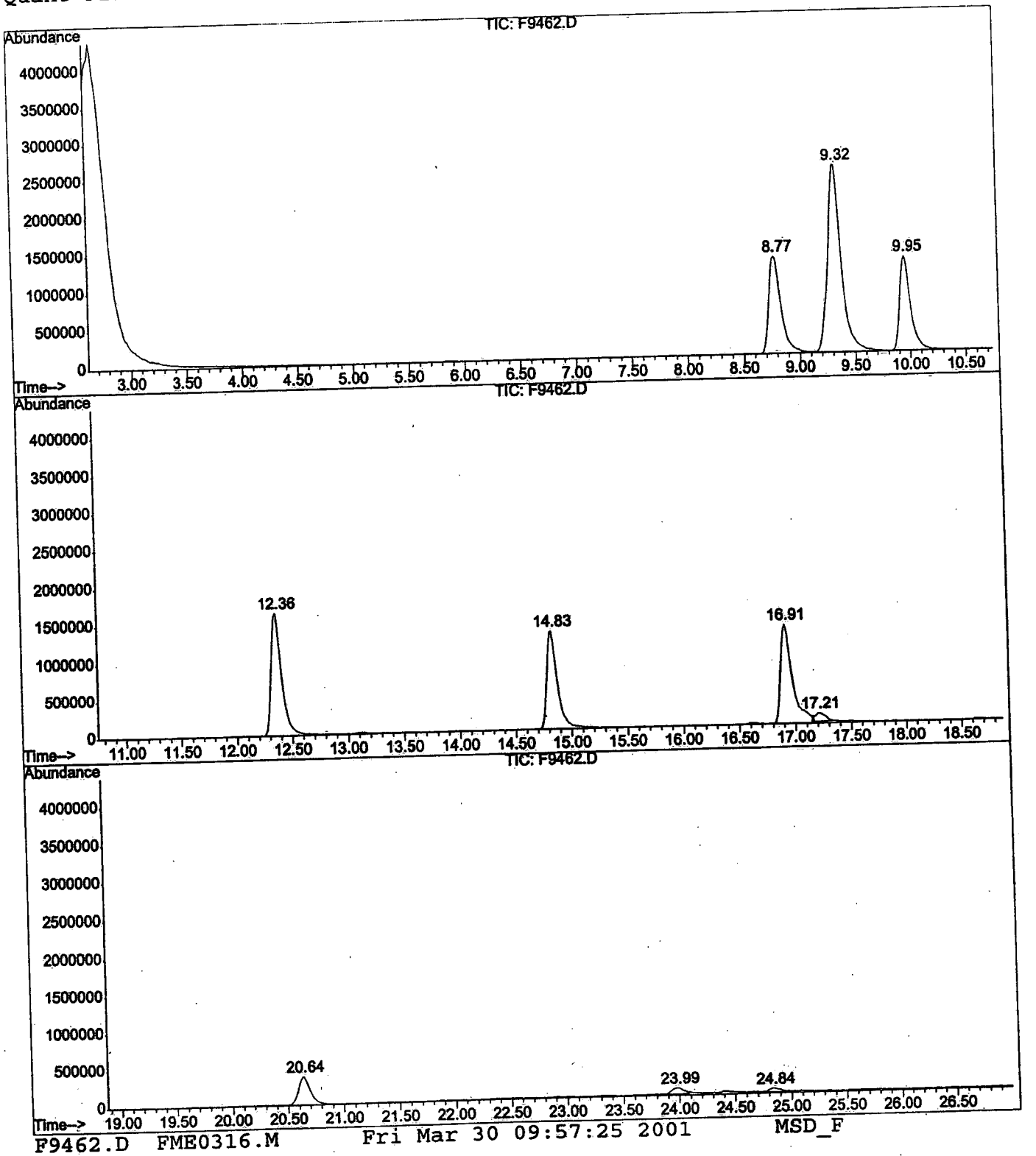
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	8.774	412	421	442	rBV2	1286701	9665481	45.99%	13.299%
2	9.318	446	458	493	rVB2	2506711	21017284	100.00%	28.919%
3	9.950	493	501	518	rBV2	1254413	8537403	40.62%	11.747%
4	12.358	656	665	684	rBV	1634306	10715295	50.98%	14.744%
5	14.826	825	833	855	rBV	1304736	8656073	41.19%	11.911%
6	16.911	968	975	991	rBV2	1318945	9675149	46.03%	13.313%
7	17.205	992	995	1004	rVB6	117022	699760	3.33%	0.963%
8	20.641	1215	1229	1245	rBV	379371	2782892	13.24%	3.829%
9	23.989	1449	1457	1463	rBV3	82479	598345	2.85%	0.823%
10	24.841	1508	1515	1523	rBV4	48032	328253	1.56%	0.452%

Sum of corrected areas: 72675935

F9462.D FME0316.M Fri Mar 30 09:57:24 2001 MSD_F

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\03-29-01\F9462.D
Operator : GREGG
Acquired : 30 Mar 2001 2:19 using AcqMethod VOAF
Instrument : 5970 - In
Sample Name: S-17,1922-001,M,0.038g
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01
Vial Number: 30
Quant File :FME0316.RES (RTE Integrator)



F9462.D FME0316.M Fri Mar 30 09:57:25 2001 MSD_F

000171

1209

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-29-01\F9463.D
Acq On : 30 Mar 2001 2:52
Sample : S-18,1922-002,M,0.034g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
RTE Integration Params: rteint.p
Quant Time: Mar 30 9:58 2001

Vial: 31
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	8.79	168	3131339	50.00	UG	0.06
31) 1,4-Difluorobenzene	9.96	114	3257073	50.00	UG	0.06
50) Chlorobenzene-d5	14.82	117	2469383	50.00	UG	0.06
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	9.26	65	1777879	56.82	UG	0.06
Spiked Amount 50.000	Range 27 - 176		Recovery = 113.64%			
41) Toluene-d8	12.36	98	3380104	56.45	UG	0.07
Spiked Amount 50.000	Range 20 - 158		Recovery = 112.90%			
59) Bromofluorobenzene	16.91	95	2232873	41.81	UG	0.06
Spiked Amount 50.000	Range 28 - 148		Recovery = 83.62%			
Target Compounds						Qvalue
42) Toluene	12.48	92	45817	1.02	UG	# 23

(#) = qualifier out of range (m) = manual integration

000172

1210

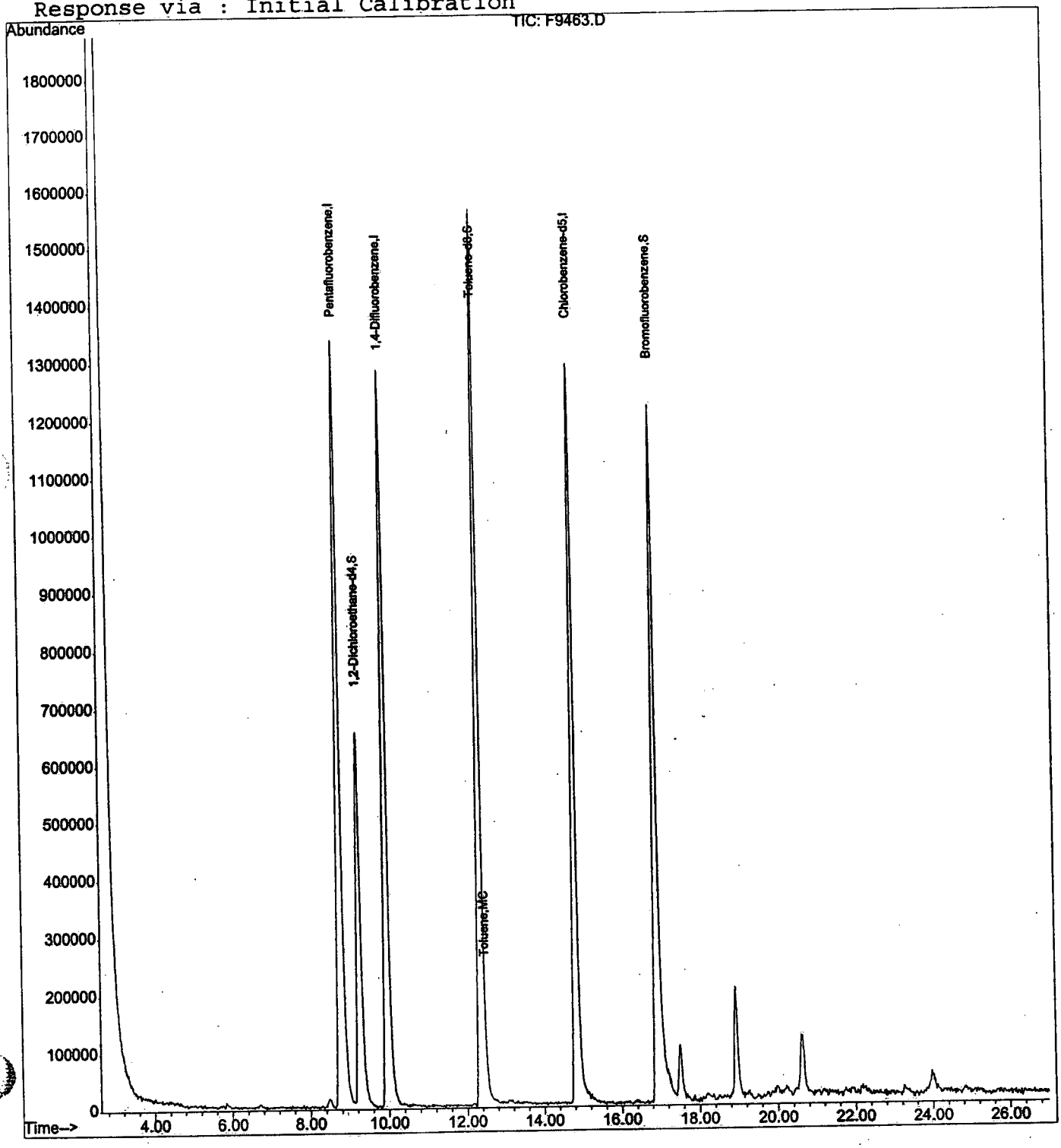
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9463.D
Acq On : 30 Mar 2001 2:52
Sample : S-18,1922-002,M,0.034g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: rteint.p
Quant Time: Mar 30 9:58 2001

Vial: 31
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9463.D
Acq On : 30 Mar 2001 2:52
Sample : S-18,1922-002,M,0.034g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 31
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	8.774	411	421	442	rBV2	1337498	9938227	94.12%	18.278%
2	9.259	446	454	472	rVV2	647739	4684543	44.36%	8.615%
3	9.949	490	501	525	rBV	1285523	8907206	84.36%	16.381%
4	12.358	656	665	687	rBV	1563975	10559110	100.00%	19.419%
5	14.810	822	832	854	rBV	1288703	8729549	82.67%	16.055%
6	16.910	967	975	993	rBV	1215999	8947936	84.74%	16.456%
7	17.513	1009	1016	1025	rVB3	94759	592292	5.61%	1.089%
8	18.937	1106	1113	1124	rVB	190102	1110220	10.51%	2.042%
9	20.612	1220	1227	1239	rVB	102059	753594	7.14%	1.386%
10	23.975	1449	1456	1458	rBV3	34423	151285	1.43%	0.278%

Sum of corrected areas: 54373962

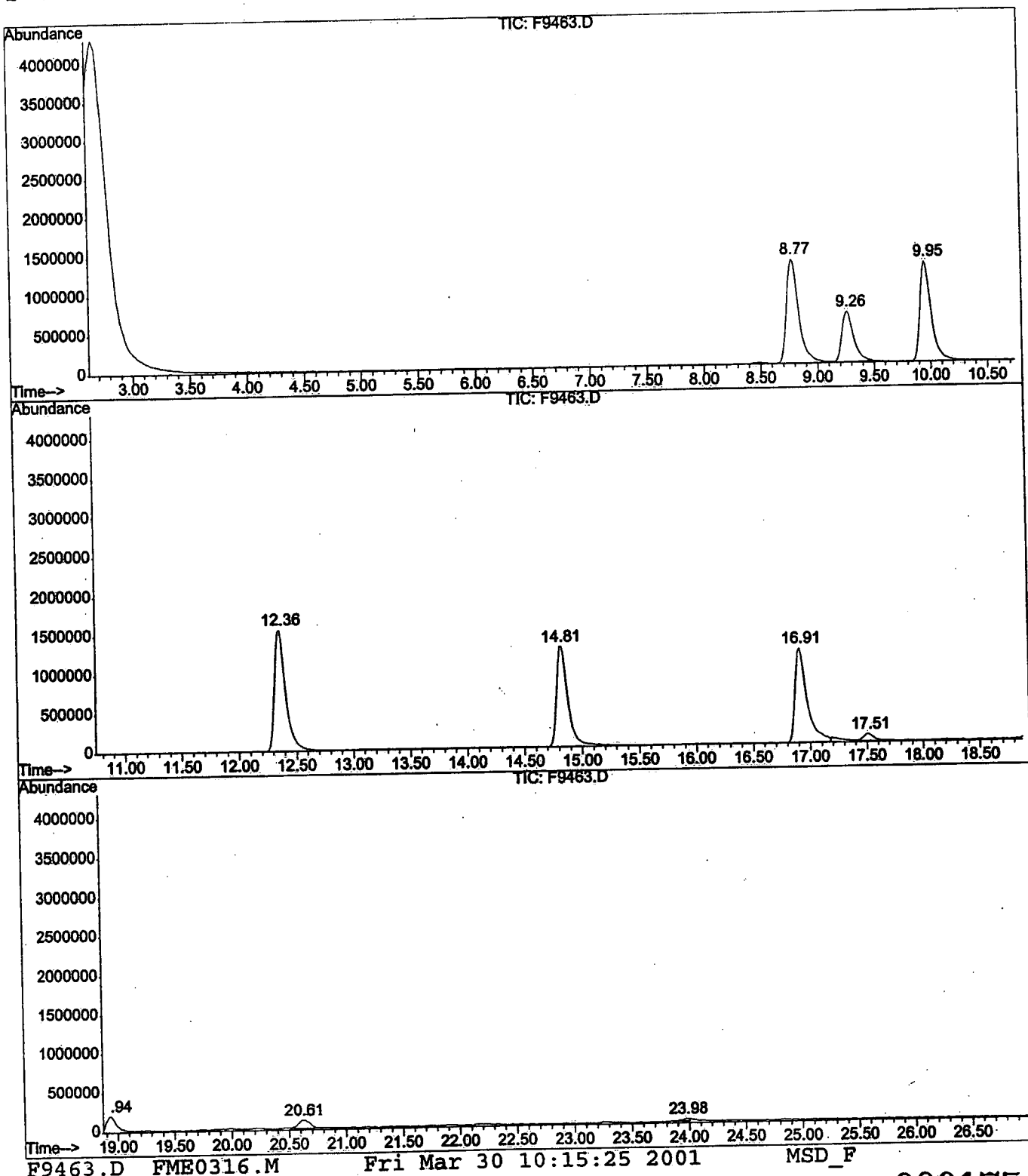
F9463.D FME0316.M Fri Mar 30 10:15:24 2001 MSD_F

000174

1212

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\03-29-01\F9463.D
Operator : GREGG
Acquired : 30 Mar 2001 2:52 using AcqMethod VOAF
Instrument : 5970 - In
Sample Name: S-18,1922-002,M,0.034g
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01
Vial Number: 31
Quant File :FME0316.RES (RTE Integrator)



F9463.D FME0316.M Fri Mar 30 10:15:25 2001 MSD_F

000175

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9463.D
Acq On : 30 Mar 2001 2:52
Sample : S-18,1922-002,M,0.034g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 31
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

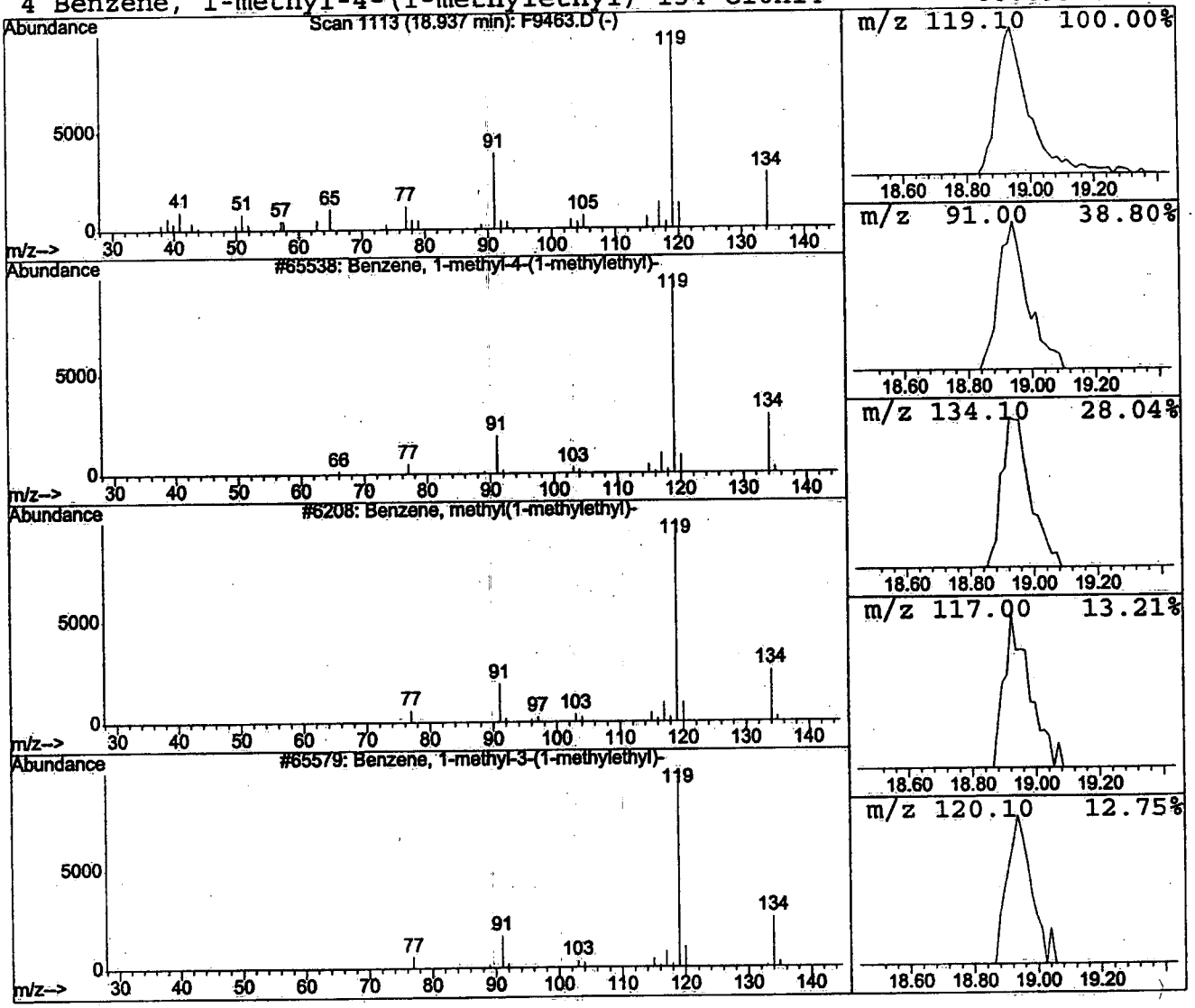
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.94	6.36 UG	1110220	Chlorobenzene-d5	14.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methylethyl)	134	C10H14	000099-87-6	91
2	Benzene, methyl(1-methylethyl)-	134	C10H14	025155-15-1	91
3	Benzene, 1-methyl-3-(1-methylethyl)	134	C10H14	000535-77-3	91
4	Benzene, 1-methyl-4-(1-methylethyl)	134	C10H14	000099-87-6	91



000176

1214

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-29-01\F9473.D
Acq On : 30 Mar 2001 8:23
Sample : S-19,1922-003,M,0.004g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,10
IS Integration Params: rteint.p
Quant Time: Mar 30 11:04 2001

Vial: 41
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	8.79	168	2945516	50.00	UG		0.06
31) 1,4-Difluorobenzene	9.98	114	2983609	50.00	UG		0.07
50) Chlorobenzene-d5	14.83	117	2345362	50.00	UG		0.06
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	9.27	65	131250	4.46	UG		0.07
Spiked Amount 50.000	Range 27 - 176		Recovery =	8.92%#			
41) Toluene-d8	12.37	98	273072	4.98	UG		0.08
Spiked Amount 50.000	Range 20 - 158		Recovery =	9.96%#			
59) Bromofluorobenzene	16.91	95	235180	4.64	UG		0.06
Spiked Amount 50.000	Range 28 - 148		Recovery =	9.28%#			
Target Compounds							Qvalue
32) Benzene	9.36	78	208773	3.15	UG		100
42) Toluene	12.48	92	32245527	784.18	UG		94
51) Chlorobenzene	14.87	112	812693	13.13	UG	#	100
53) Ethylbenzene	15.06	91	245445	2.55	UG		99
54) m,p-Xylene	15.27	106	213180	6.19	UG		92
55) o-Xylene	15.97	106	36550	1.08	UG	#	1
74) 1,2-Dichlorobenzene	19.74	146	141836	3.13	UG	#	98

(#) = qualifier out of range (m) = manual integration

000177

1215

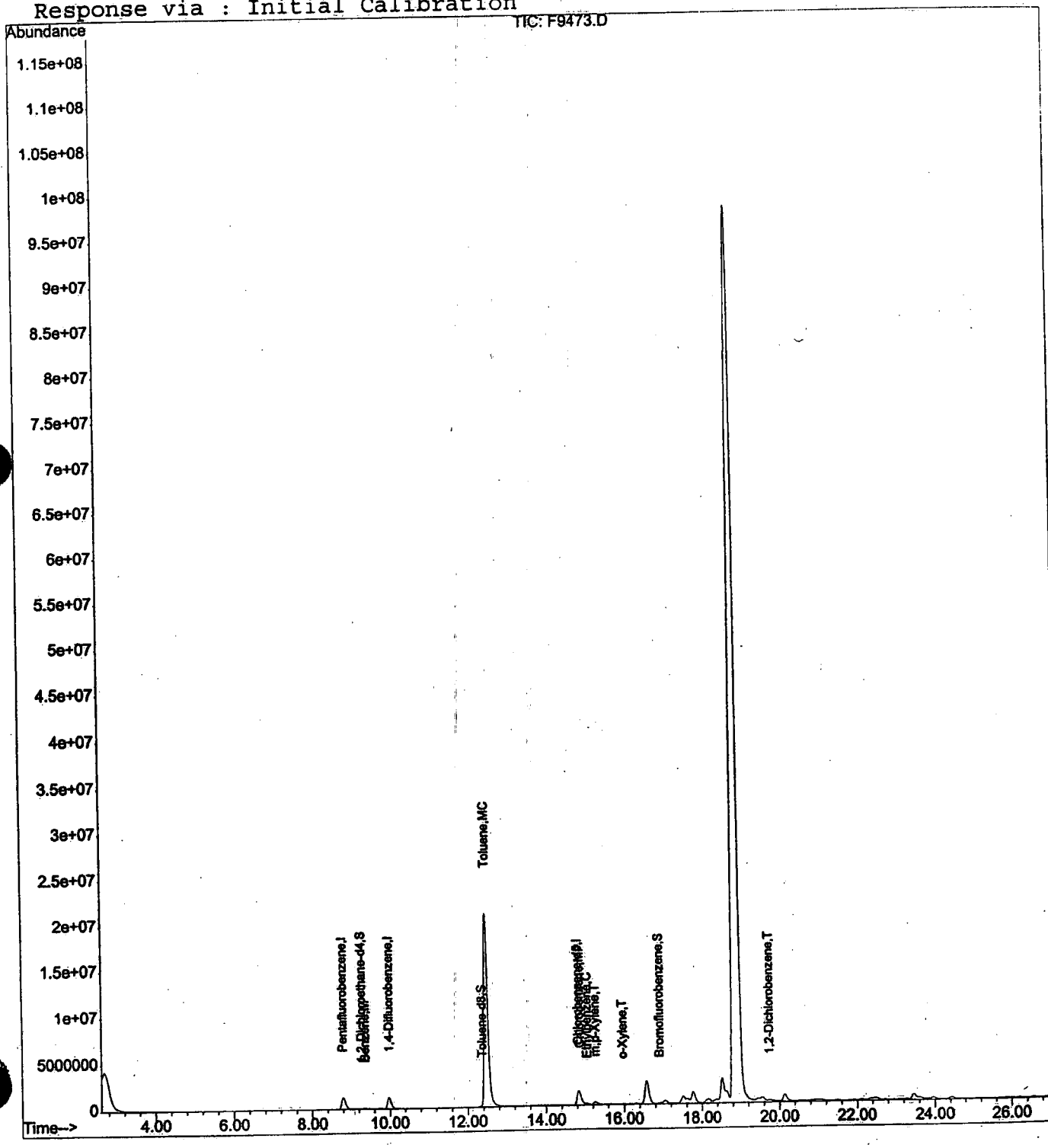
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9473.D
Acq On : 30 Mar 2001 8:23
Sample : S-19,1922-003,M,0.004g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,10
MS Integration Params: rteint.p
Quant Time: Mar 30 11:04 2001

Vial: 41
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



000178

1216

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9473.D
Acq On : 30 Mar 2001 8:23
Sample : S-19,1922-003,M,0.004g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,10
Integration Params: LSCINT.P

Vial: 41
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

Peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	12.476	657	673	699	rBV	21057793	144413236	15.45%	12.859%
2	14.827	825	833	845	rBV3	1543293	11612809	1.24%	1.034%
3	16.576	941	952	967	rBV4	2535048	17741353	1.90%	1.580%
4	18.519	1077	1084	1090	rBV	2441326	14752217	1.58%	1.314%
5	18.873	1097	1108	1136	rVB5	97905183	934558104	100.00%	83.214%

Sum of corrected areas: 1123077719

F9473.D FME0316.M Fri Mar 30 11:04:55 2001 MSD_F

000179

1217

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9473.D
Acq On : 30 Mar 2001 8:23
Sample : S-19,1922-003,M,0.004g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,10
MS Integration Params: LSCINT.P

Vial: 41
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

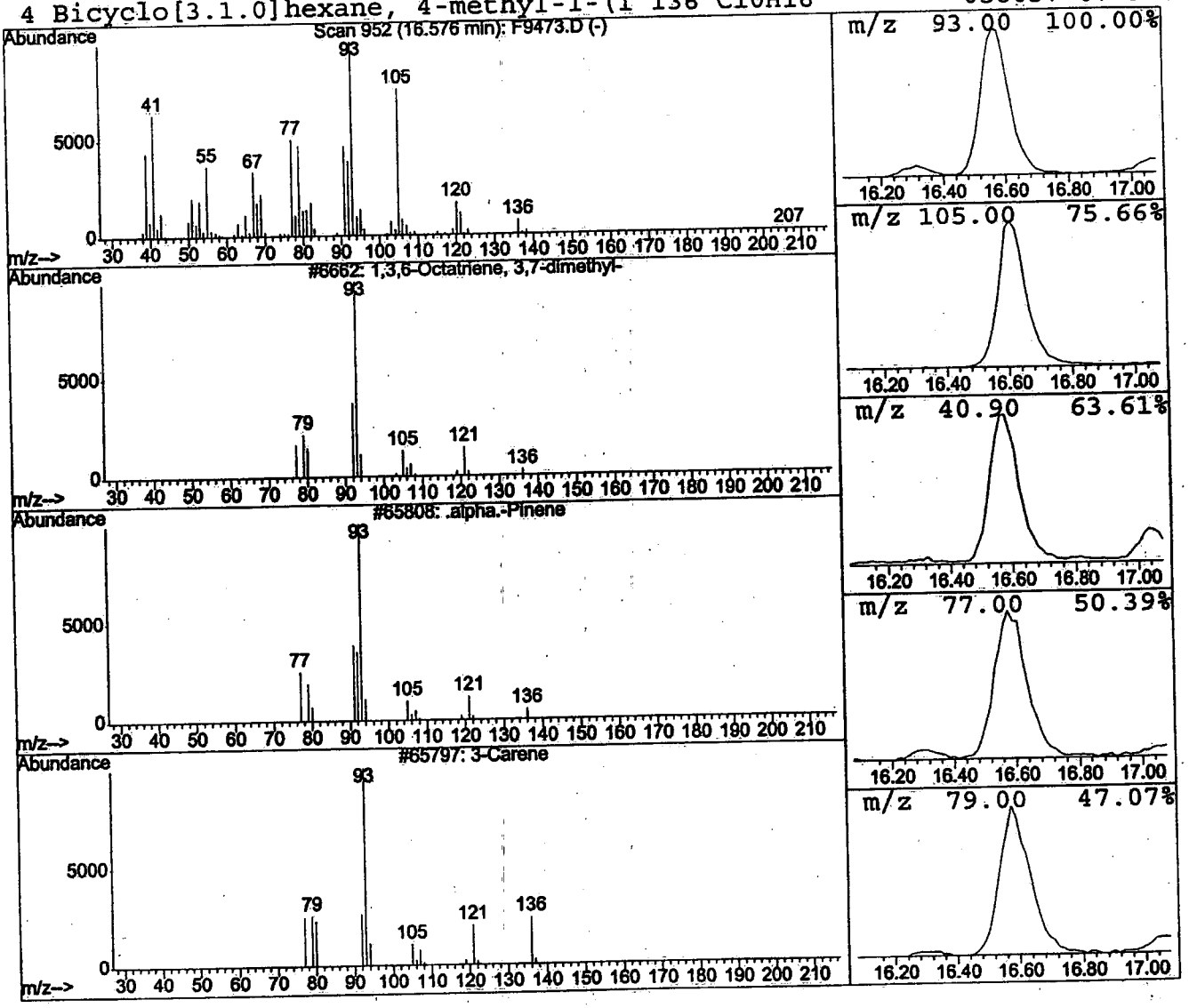
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Unknown aromatic — Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.58	76.39 UG	17741400	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3,6-Octatriene, 3,7-dimethyl-	136	C10H16	013877-91-3	74
2	.alpha.-Pinene	136	C10H16	000080-56-8	70
3	3-Carene	136	C10H16	013466-78-9	64
4	Bicyclo[3.1.0]hexane, 4-methyl-1-(1	136	C10H16	058037-87-9	62



000181

1218

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9473.D
Acq On : 30 Mar 2001 8:23
Sample : S-19,1922-003,M,0.004g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,10
MS Integration Params: LSCINT.P

Vial: 41
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

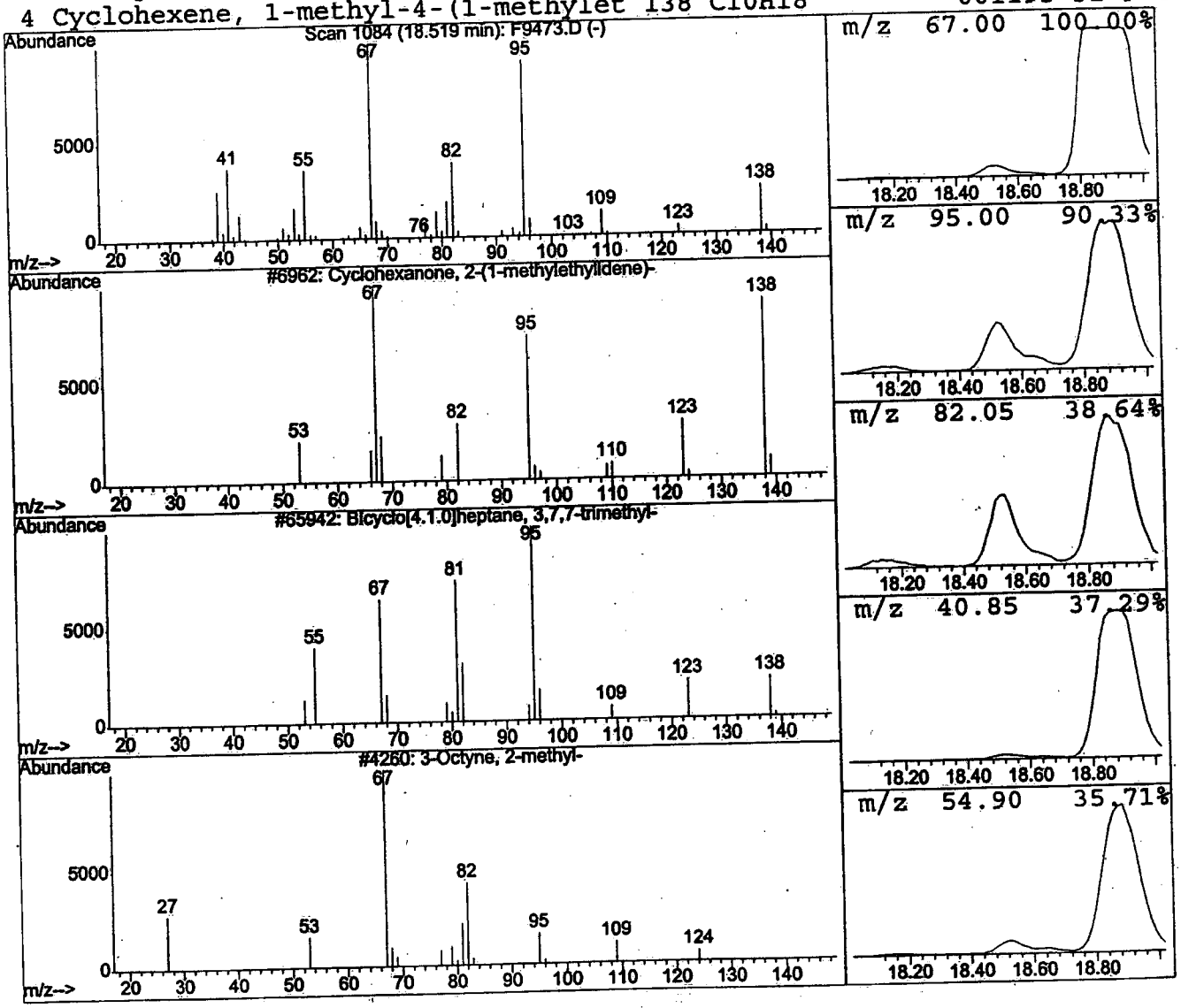
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Unknown aromatic — Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.52	63.52 UG	14752200	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanone, 2-(1-methylethyliden	138	C9H14O	013747-73-4	90
2	Bicyclo[4.1.0]heptane, 3,7,7-trimet	138	C10H18	000554-59-6	59
3	3-Octyne, 2-methyl-	124	C9H16	055402-15-8	47
4	Cyclohexene, 1-methyl-4-(1-methylet	138	C10H18	001195-31-9	47



1219

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9473.D
Acq On : 30 Mar 2001 8:23
Sample : S-19,1922-003,M,0.004g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,10
MS Integration Params: LSCINT.P

Vial: 41
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

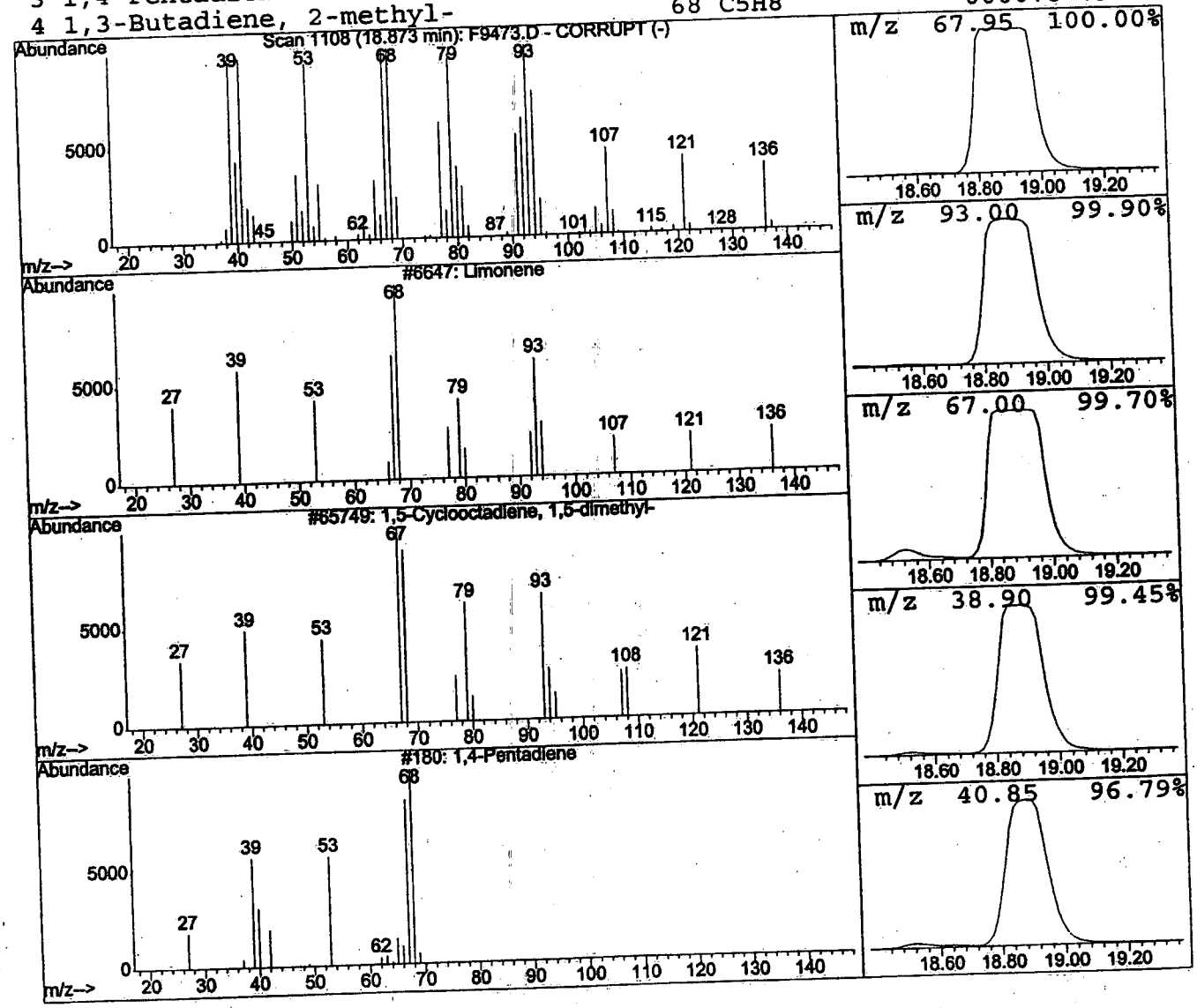
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Unknown aromatic — Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.87	4023.82 UG	934558000	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Limonene	136	C10H16	000138-86-3	87
2	1,5-Cyclooctadiene, 1,5-dimethyl-	136	C10H16	003760-14-3	68
3	1,4-Pentadiene	68	C5H8	000591-93-5	62
4	1,3-Butadiene, 2-methyl-	68	C5H8	000078-79-5	62



1220

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-30-01\F9505.D
Acq On : 31 Mar 2001 00:53
Sample : S-19,1922-003DIL,M,0.0004g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,100
IS Integration Params: rteint.p
Quant Time: Apr 2 11:51 2001

Vial: 17
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	8.79	168	3111667	50.00	UG	0.06
31) 1,4-Difluorobenzene	9.96	114	3093187	50.00	UG	0.06
50) Chlorobenzene-d5	14.84	117	2237852	50.00	UG	0.08
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	9.26	65	10026	0.32	UG	0.06
Spiked Amount 50.000	Range 27 - 176		Recovery = 0.64%#			
41) Toluene-d8	12.37	98	28536	0.50	UG	0.08
Spiked Amount 50.000	Range 20 - 158		Recovery = 1.00%#			
59) Bromofluorobenzene	16.93	95	24700m	0.51	UG	0.07
Spiked Amount 50.000	Range 28 - 148		Recovery = 1.02%#			
Target Compounds						Qvalue
42) Toluene	12.48	92	3679082	86.30	UG	97
51) Chlorobenzene	14.88	112	85731	1.45	UG #	100

(#) = qualifier out of range (m) = manual integration

122/

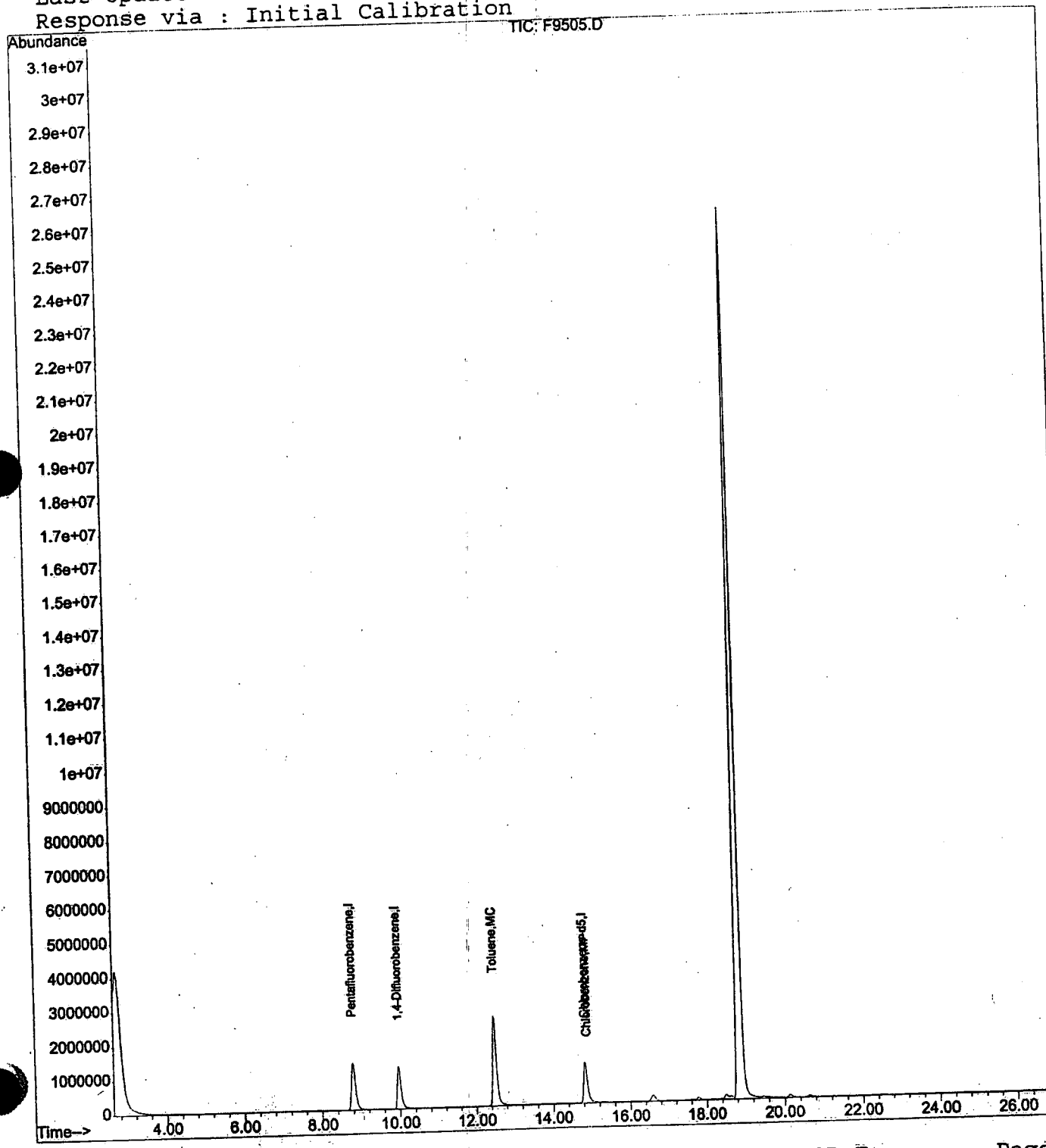
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-30-01\F9505.D
Acq On : 31 Mar 2001 00:53
Sample : S-19,1922-003DIL,M,0.0004g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,100
MS Integration Params: rteint.p
Quant Time: Apr 2 11:51 2001

Vial: 17
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



1222

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
IS Integration Params: rteint.p
Quant Time: Mar 30 10:17 2001

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	8.77	168	3475217	50.00	UG		0.05
31) 1,4-Difluorobenzene	9.95	114	3413487	50.00	UG		0.04
50) Chlorobenzene-d5	14.81	117	2455712	50.00	UG		0.05
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	9.26	65	1933743	55.68	UG		0.06
Spiked Amount 50.000	Range 27 - 176		Recovery = 111.36%				
41) Toluene-d8	12.36	98	3343925	53.28	UG		0.07
Spiked Amount 50.000	Range 20 - 158		Recovery = 106.56%				
59) Bromofluorobenzene	16.91	95	2365459	44.54	UG		0.06
Spiked Amount 50.000	Range 28 - 148		Recovery = 89.08%				
Target Compounds							Qvalue
32) Benzene	9.33	78	2158178	28.45	UG		100
42) Toluene	12.46	92	5344614	113.61	UG		97
45) Tetrachloroethene	13.39	166	56882	1.99	UG	#	79
51) Chlorobenzene	14.86	112	102996	1.59	UG	#	100
54) m,p-Xylene	15.27	106	115942	3.22	UG		95
55) o-Xylene	15.99	106	38277	1.08	UG	#	1

(#) = qualifier out of range (m) = manual integration

000186

1223

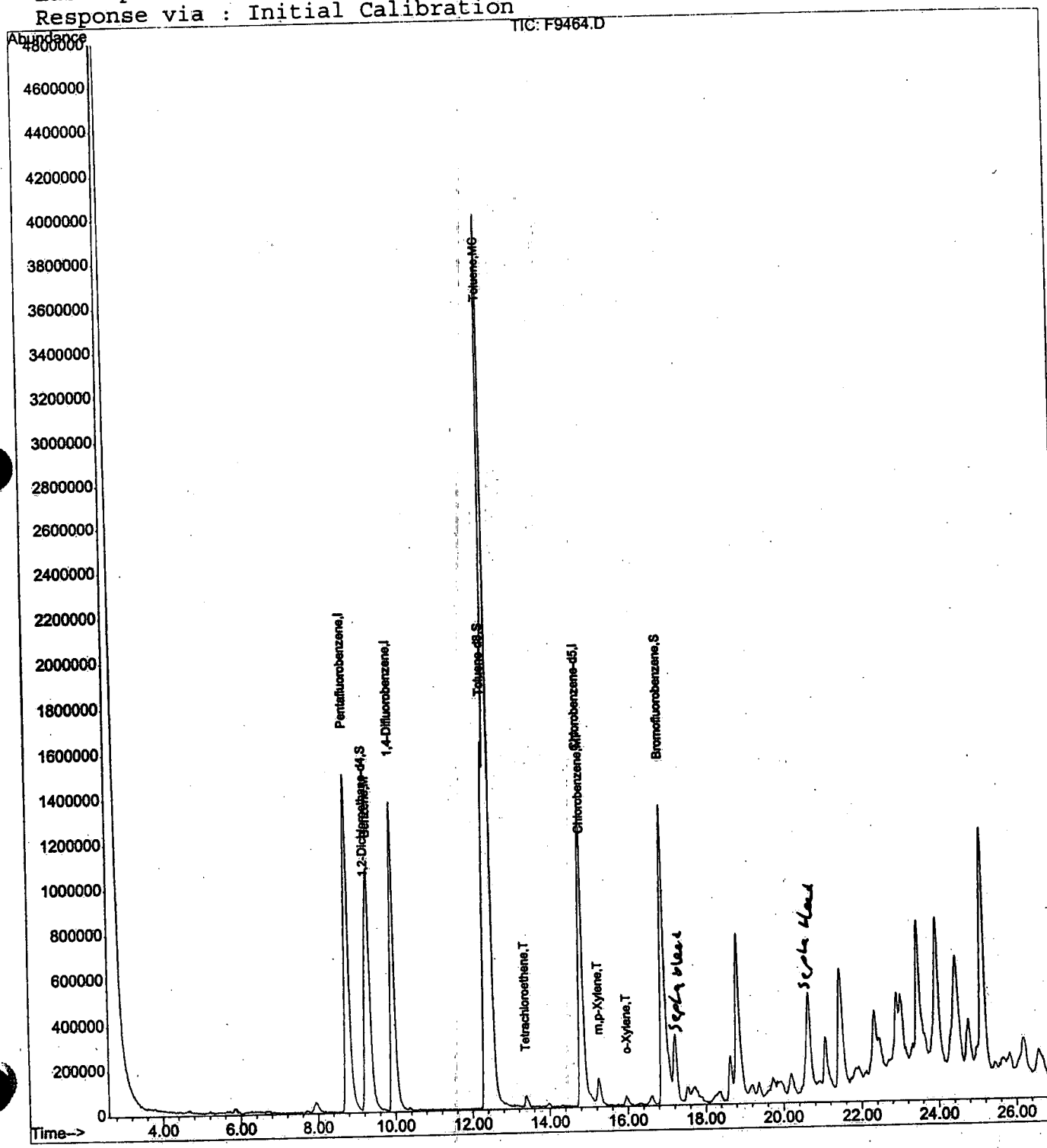
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: rteint.p
Quant Time: Mar 30 10:17 2001

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



000187

1224

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
IS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.937	356	364	379	rVB	44459	349829	1.33%	0.256%
2	8.774	411	421	445	rBV	1498260	10945736	41.51%	8.001%
3	9.318	445	458	481	rVB4	1072286	10360095	39.29%	7.573%
4	9.950	493	501	520	rBV2	1369667	9348989	35.46%	6.834%
5	12.359	654	665	667	rBV2	1626340	8323990	31.57%	6.085%
6	12.462	667	672	696	rVB	3986422	26367765	100.00%	19.275%
7	13.387	730	735	743	rBV6	50254	299400	1.14%	0.219%
8	14.812	825	832	854	rBV	1375942	9373304	35.55%	6.852%
9	15.253	856	862	870	rVB2	113436	679124	2.58%	0.496%
10	16.913	967	975	990	rBV2	1332757	9856311	37.38%	7.205%
11	17.222	990	996	1009	rVB4	302916	2075243	7.87%	1.517%
12	17.516	1012	1016	1023	rBV5	63091	387730	1.47%	0.283%
13	18.647	1086	1093	1098	rBV4	201597	1228295	4.66%	0.898%
14	18.838	1098	1106	1122	rVV5	739012	5522040	20.94%	4.037%
15	19.221	1124	1132	1137	rVV5	58549	458086	1.74%	0.335%
16	19.382	1139	1143	1150	rVB3	67689	322769	1.22%	0.236%
17	19.735	1156	1167	1173	rBV8	75533	560240	2.12%	0.410%
18	20.205	1191	1199	1210	rVB6	93268	707377	2.68%	0.517%
19	20.646	1214	1229	1242	rBV3	445262	3958754	15.01%	2.894%
20	21.073	1252	1258	1274	rVB	231537	1677775	6.36%	1.226%
21	21.456	1275	1284	1297	rBV4	529352	4463869	16.93%	3.263%
22	22.339	1334	1344	1350	rBV4	285191	2244699	8.51%	1.641%
23	22.928	1375	1384	1387	rBV6	295122	1806907	6.85%	1.321%
24	23.473	1415	1421	1431	rBV4	554026	3695276	14.01%	2.701%
25	23.959	1443	1454	1468	rVB7	637503	5238173	19.87%	3.829%
26	24.446	1474	1487	1502	rVB5	466987	4981964	18.89%	3.642%
27	24.785	1504	1510	1519	rVV4	187492	1160710	4.40%	0.848%
28	25.138	1527	1534	1548	rVB2	1066996	7724819	29.30%	5.647%
29	26.184	1601	1605	1620	rVB2	159784	1319366	5.00%	0.964%
30	26.581	1624	1632	1648	rVB2	119739	1358586	5.15%	0.993%

000182

1225

Sum of corrected areas: 136797221

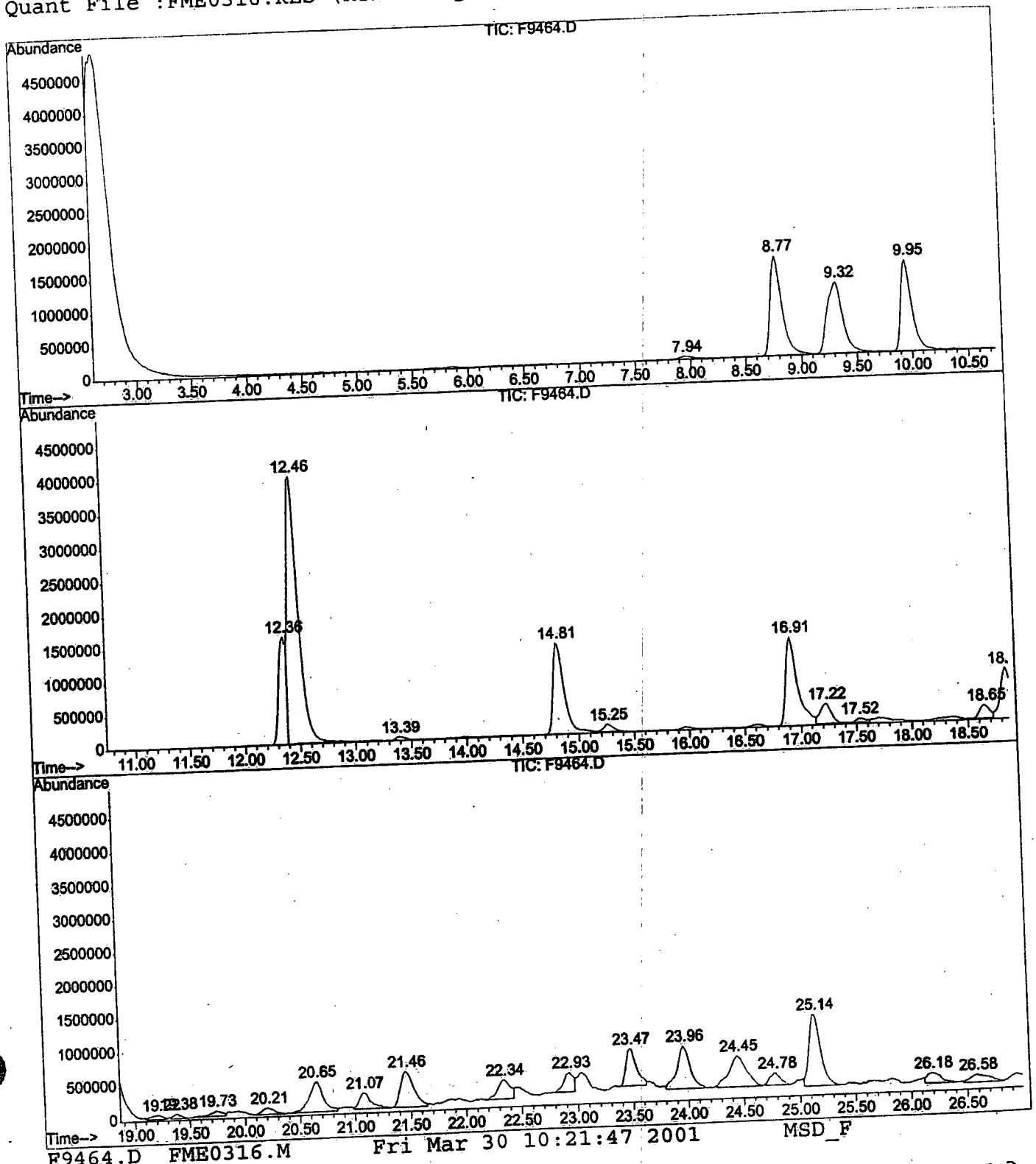
F9464.D FME0316.M Fri Mar 30 10:21:46 2001 MSD_F

000189

1226

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Operator : GREGG
Acquired : 30 Mar 2001 3:25 using AcqMethod VOAF
Instrument : 5970 - In
Sample Name: S-20,1922-004,M,0.04g
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01
Vial Number: 32
Quant File :FME0316.RES (RTE Integrator)



F9464.D FME0316.M Fri Mar 30 10:21:47 2001 MSD_F

000190

1227

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

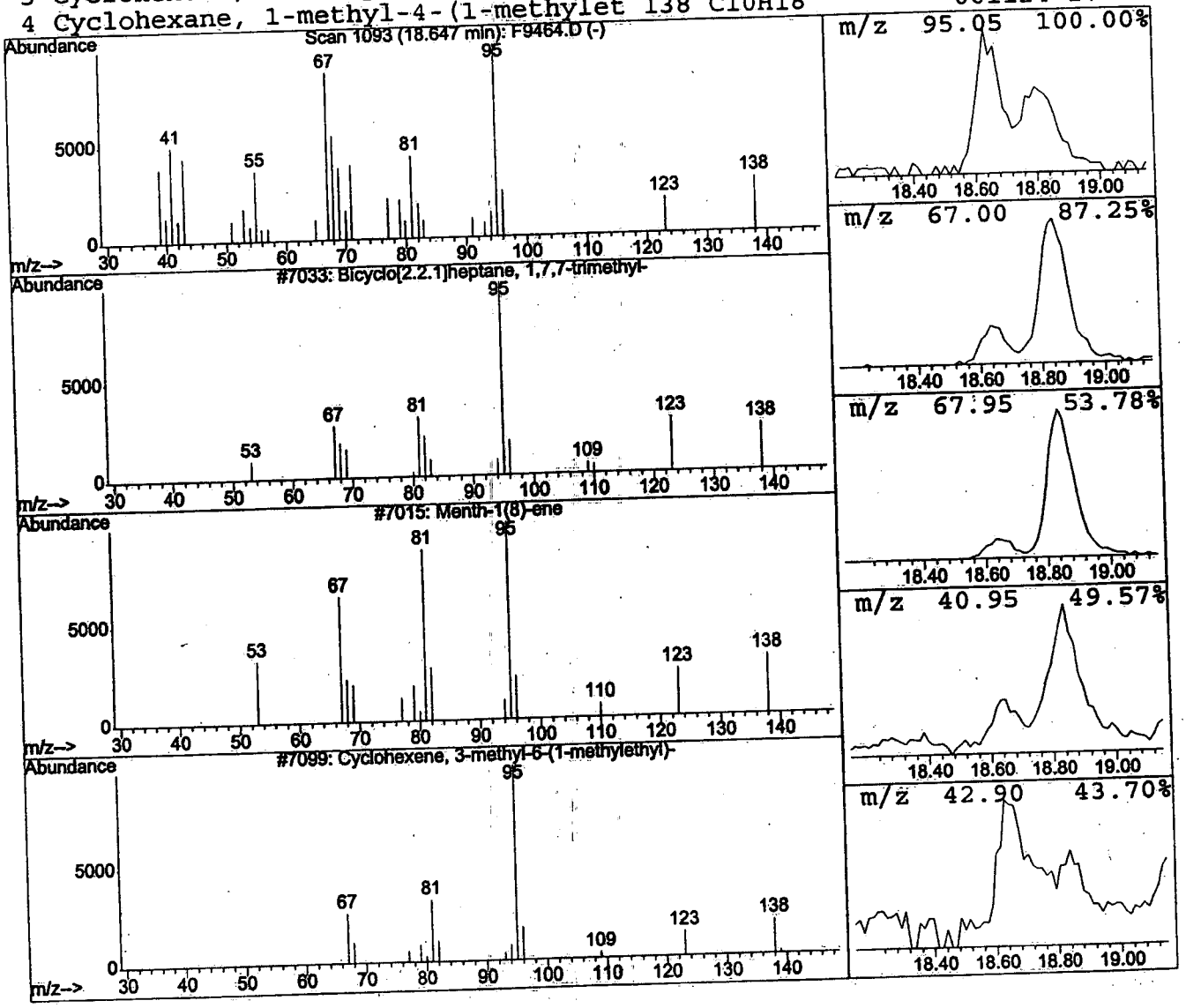
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Unknown hydrocarbon Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.65	6.55 UG	1228300	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[2.2.1]heptane, 1,7,7-trimet	138	C10H18	000464-15-3	74
2	Menth-1(8)-ene	138	C10H18	000000-00-0	64
3	Cyclohexene, 3-methyl-6-(1-methylet	138	C10H18	005256-65-5	64
4	Cyclohexane, 1-methyl-4-(1-methylet	138	C10H18	001124-27-2	64



000461

1228

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

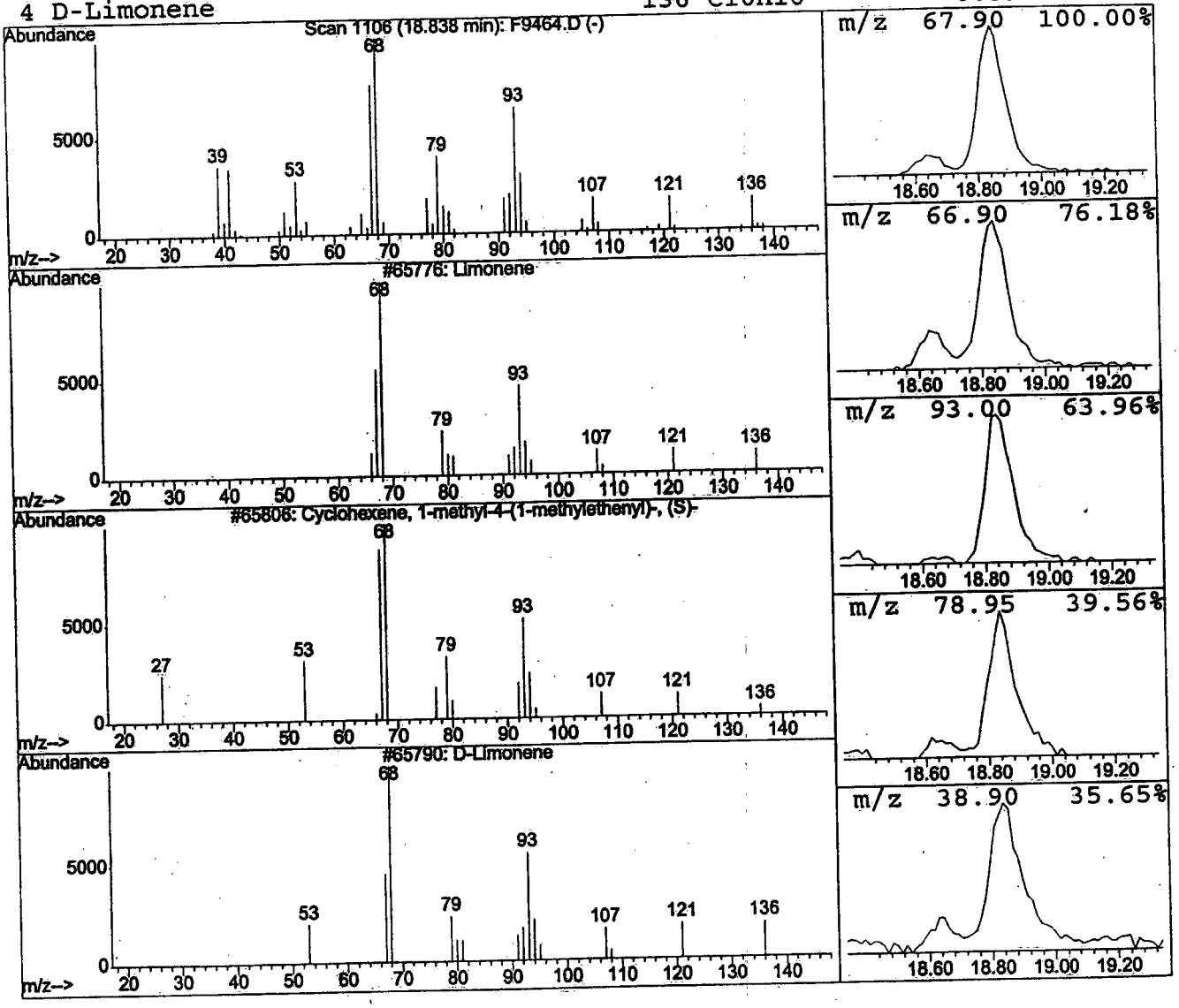
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Unknown aromatic — Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.84	29.46 UG	5522040	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Limonene	136	C10H16	000138-86-3	93
2	Cyclohexene, 1-methyl-4-(1-methylet	136	C10H16	005989-54-8	90
3	D-Limonene	136	C10H16	005989-27-5	81
4	D-Limonene	136	C10H16	005989-27-5	81



1229

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

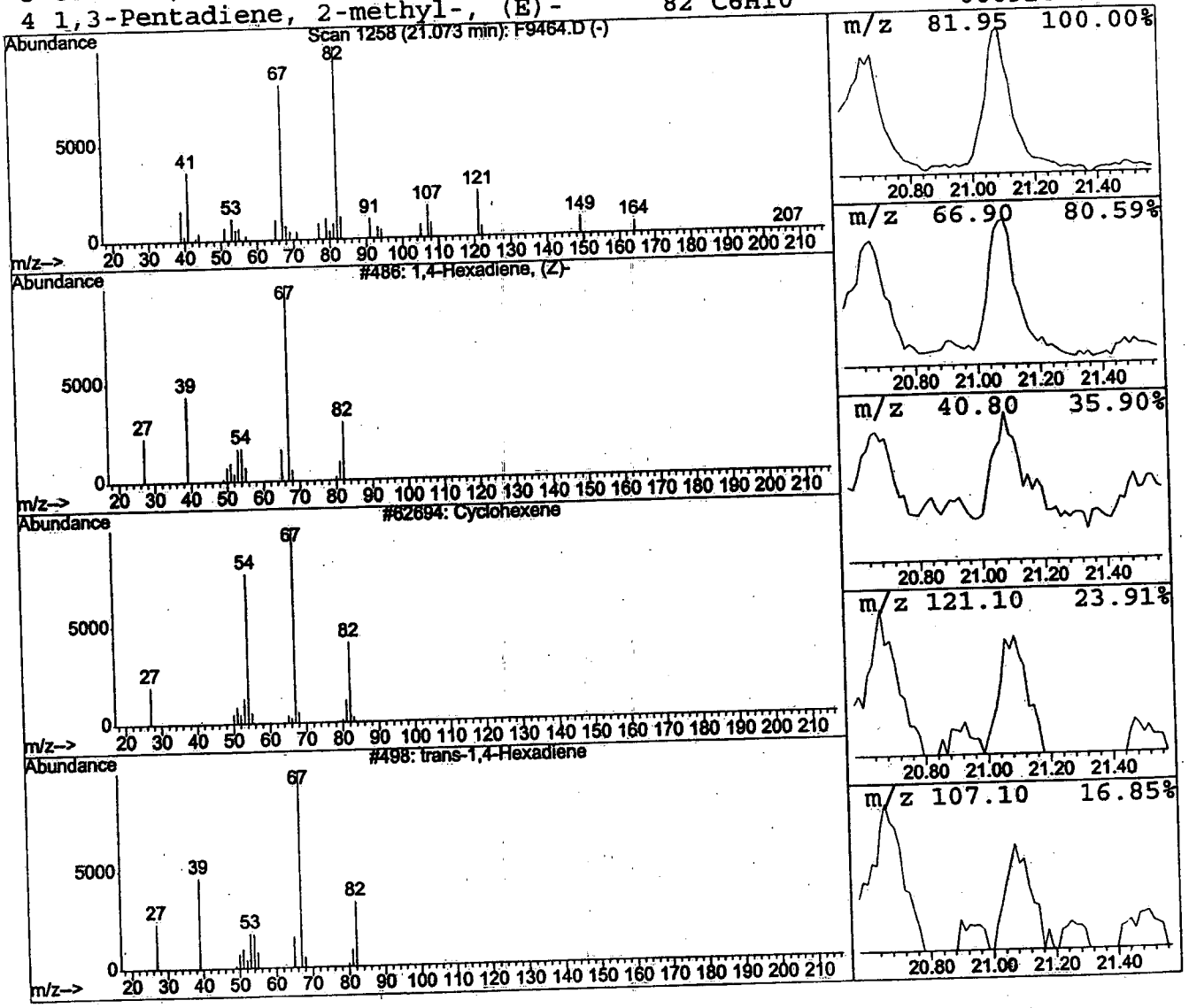
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Unknown hydrocarbon Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.07	8.95 UG	1677780	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Hexadiene, (Z)-	82	C6H10	007318-67-4	64
2	Cyclohexene	82	C6H10	000110-83-8	64
3	trans-1,4-Hexadiene	82	C6H10	007319-00-8	64
4	1,3-Pentadiene, 2-methyl-, (E)-	82	C6H10	000926-54-5	64



1230

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

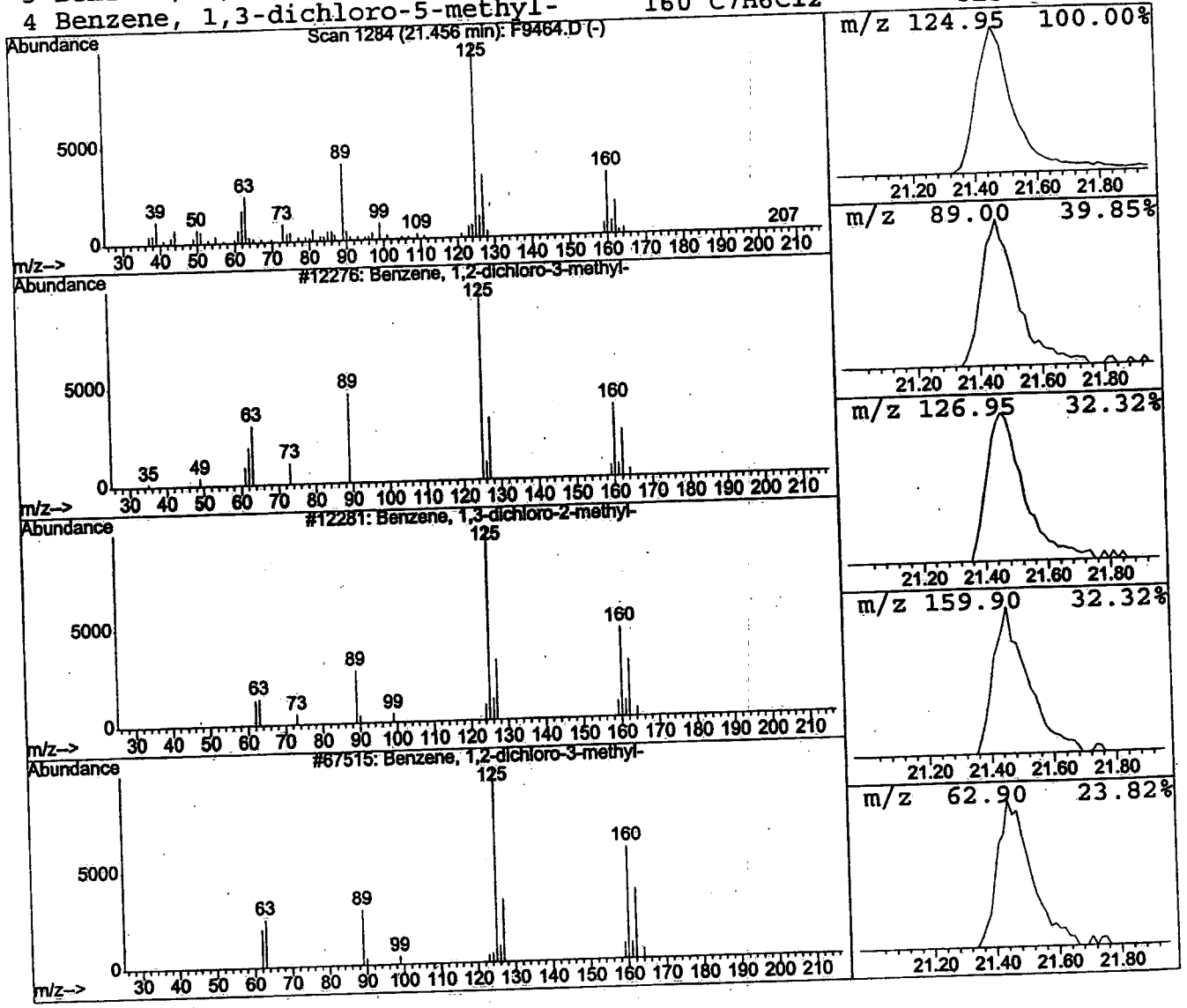
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Substituted benzene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.46	23.81 UG	4463870	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2-dichloro-3-methyl-	160	C7H6Cl2	032768-54-0	98
2	Benzene, 1,3-dichloro-2-methyl-	160	C7H6Cl2	000118-69-4	97
3	Benzene, 1,2-dichloro-3-methyl-	160	C7H6Cl2	032768-54-0	96
4	Benzene, 1,3-dichloro-5-methyl-	160	C7H6Cl2	025186-47-4	95



000194

1231

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

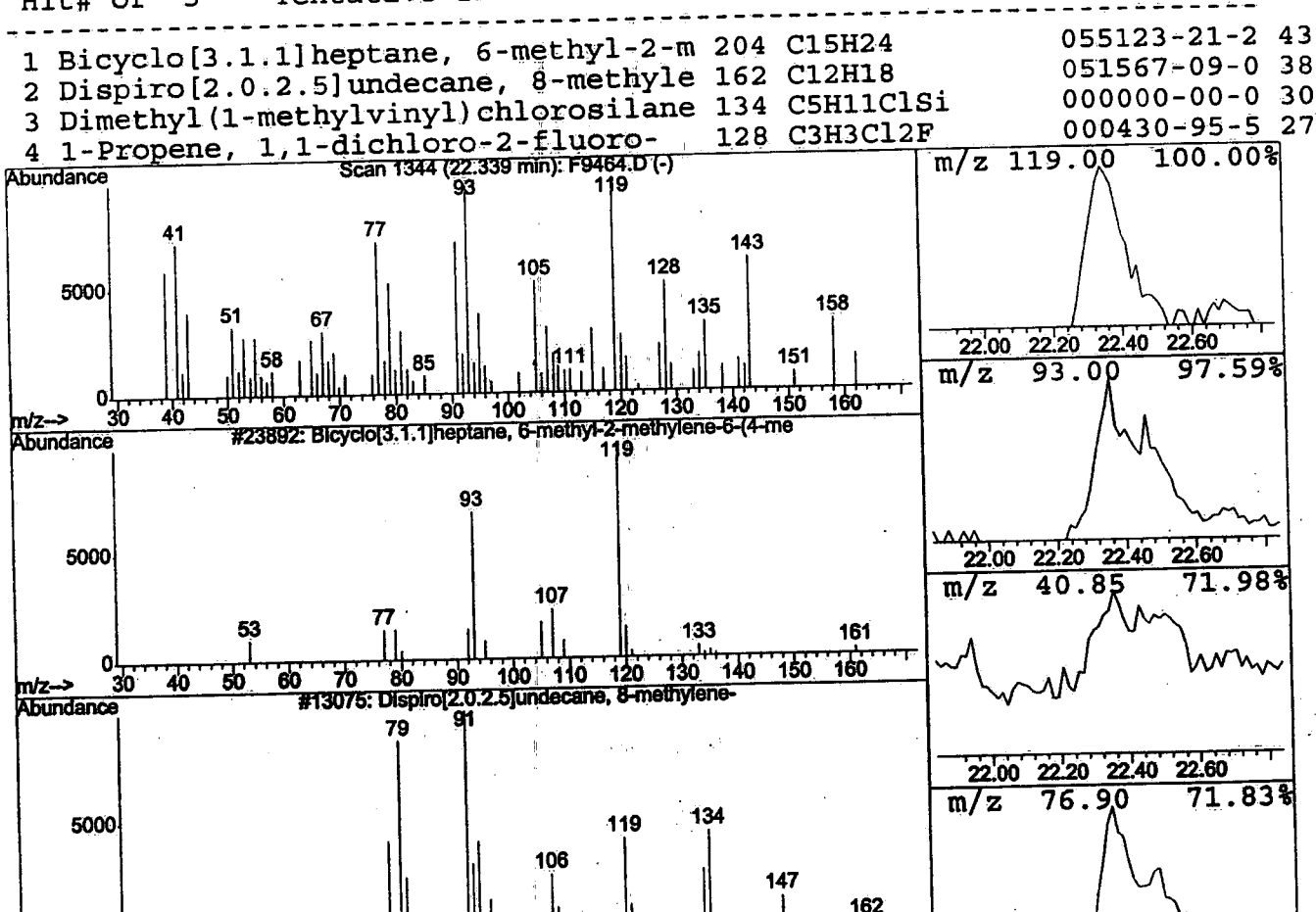
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 5 Unknown aromatic — Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.34	11.97 UG	2244700	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[3.1.1]heptane, 6-methyl-2-m	204	C15H24	055123-21-2	43
2	Dispiro[2.0.2.5]undecane, 8-methyle	162	C12H18	051567-09-0	38
3	Dimethyl(1-methylvinyl)chlorosilane	134	C5H11ClSi	000000-00-0	30
4	1-Propene, 1,1-dichloro-2-fluoro-	128	C3H3Cl2F	000430-95-5	27



000195

1232

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

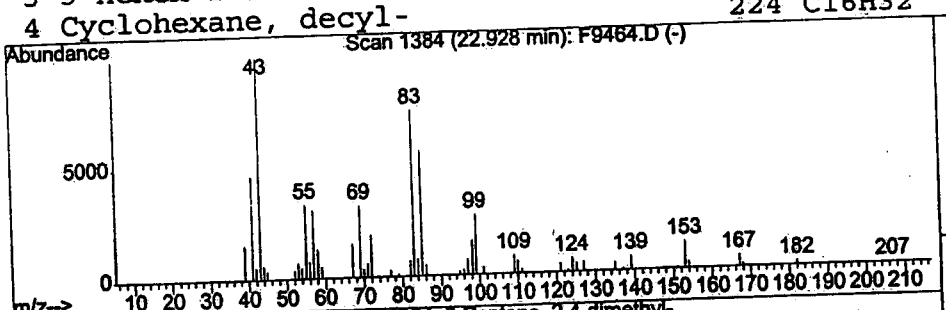
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

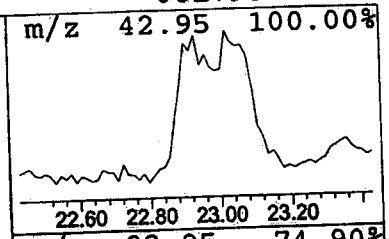
****

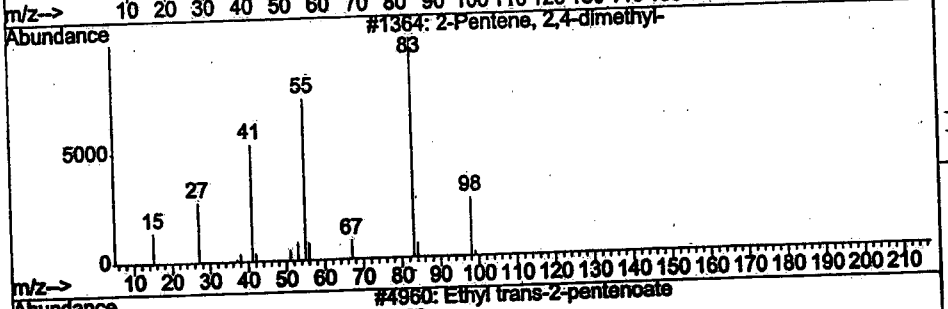
Peak Number 6 Unknown aromatic — Concentration Rank 10

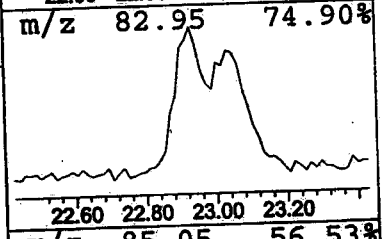
R.T.	EstConc	Area	Relative to ISTD	R.T.
22.93	9.64 UG	1806910	Chlorobenzene-d5	14.81

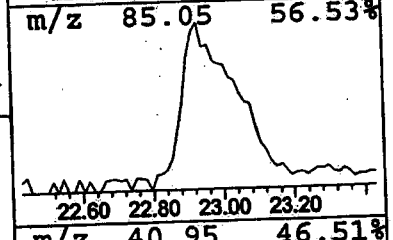
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentene, 2,4-dimethyl-	98	C7H14	000625-65-0	38
2	Ethyl trans-2-pentenoate	128	C7H12O2	024410-84-2	38
3	3-Hexen-2-one	98	C6H10O	000763-93-9	35
4	Cyclohexane, decyl-	224	C16H32	001795-16-0	35

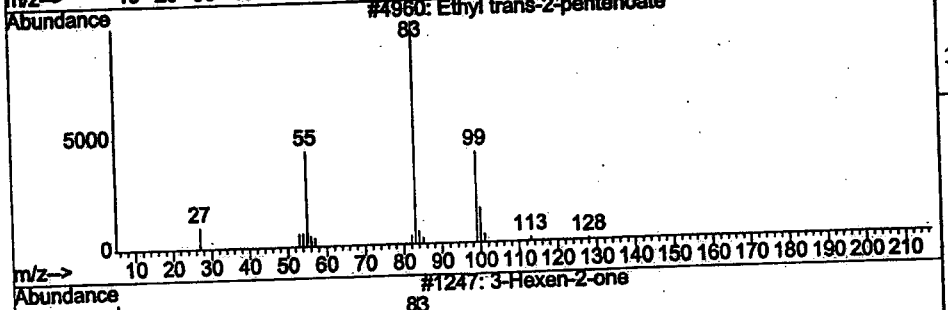


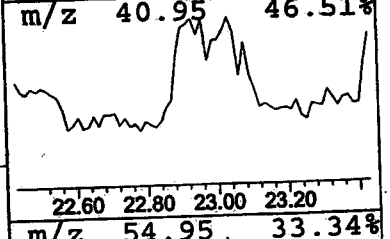


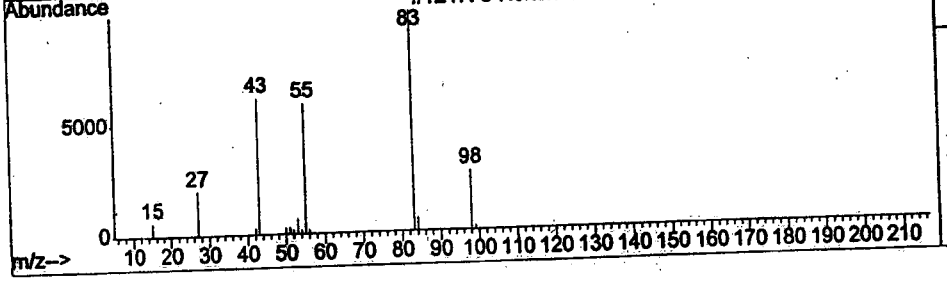


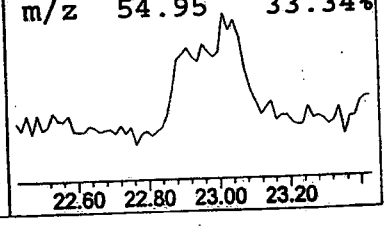












000198

1233

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

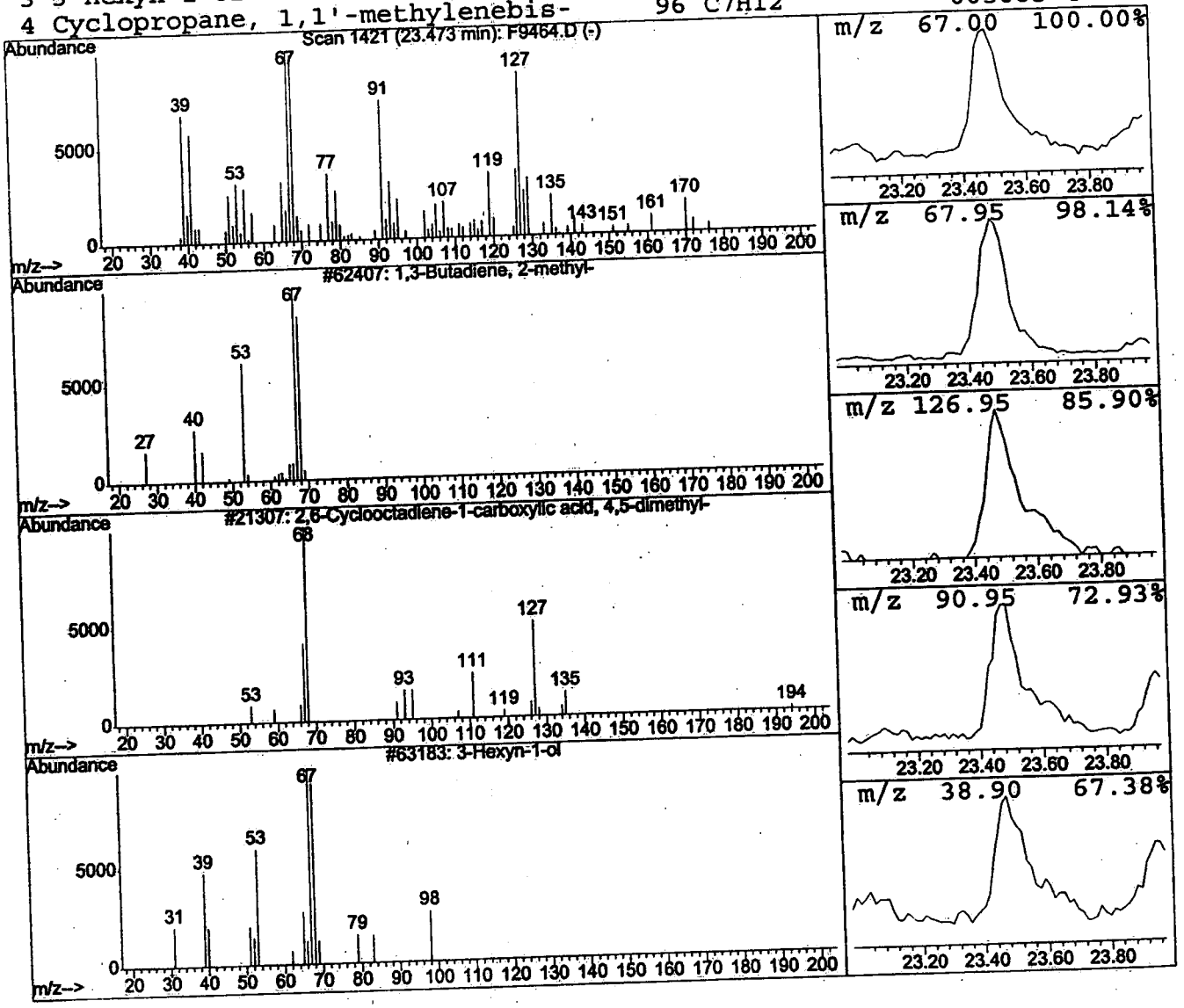
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 7 Unknown aromatic — Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.47	19.71 UG	3695280	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3-Butadiene, 2-methyl-	68	C5H8	000078-79-5	27
2	2,6-Cyclooctadiene-1-carboxylic aci	194	C12H18O2	062338-04-9	25
3	3-Hexyn-1-ol	98	C6H10O	001002-28-4	16
4	Cyclopropane, 1,1'-methylenebis-	96	C7H12	005685-47-2	16



000197

1234

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

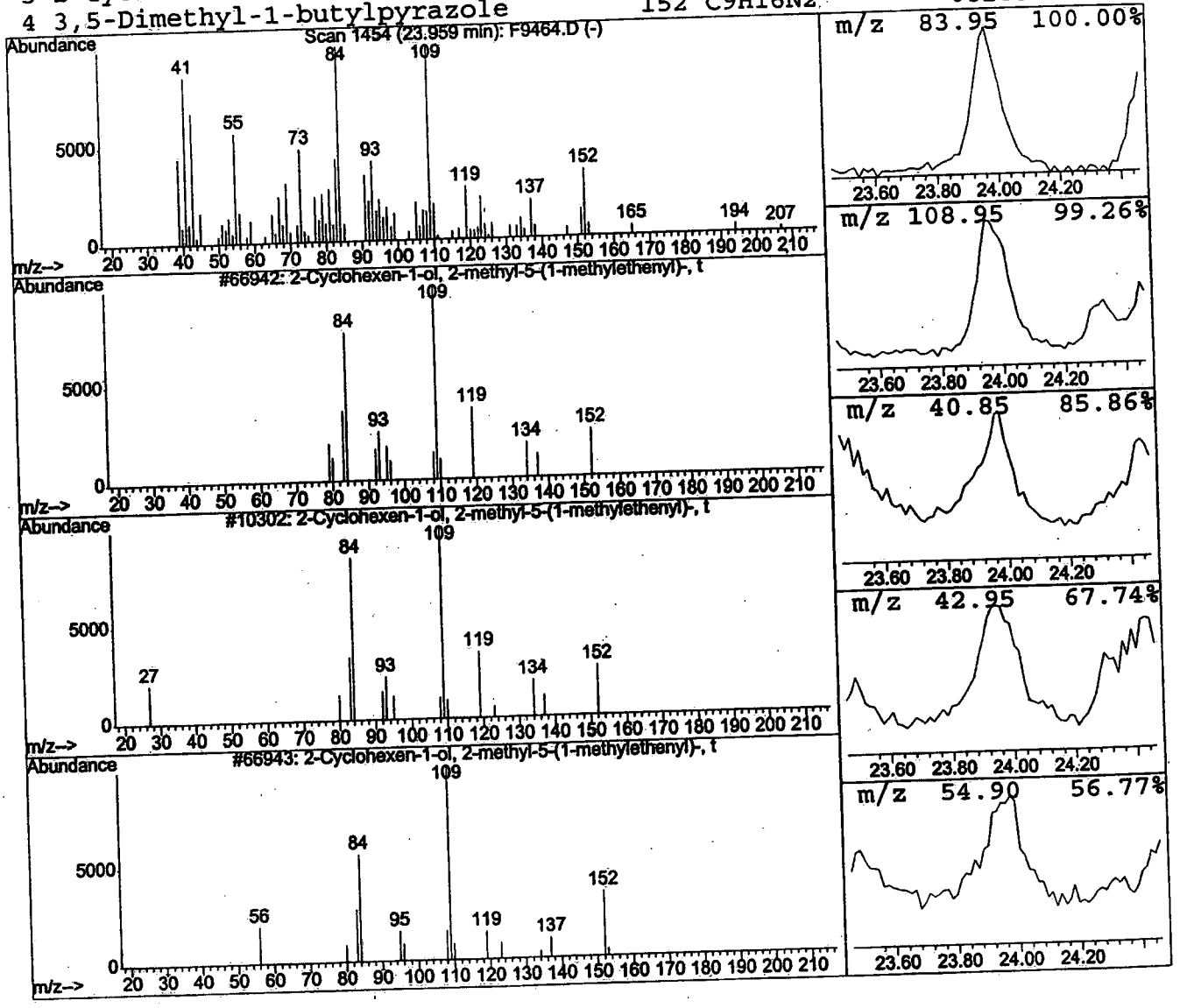
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 8 Unknown aromatic — Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.96	27.94 UG	5238170	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclohexen-1-ol, 2-methyl-5-(1-me	152	C10H16O	001197-07-5	83
2	2-Cyclohexen-1-ol, 2-methyl-5-(1-me	152	C10H16O	001197-07-5	49
3	2-Cyclohexen-1-ol, 2-methyl-5-(1-me	152	C10H16O	001197-07-5	43
4	3,5-Dimethyl-1-butylpyrazole	152	C9H16N2	002655-37-0	30



1235

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

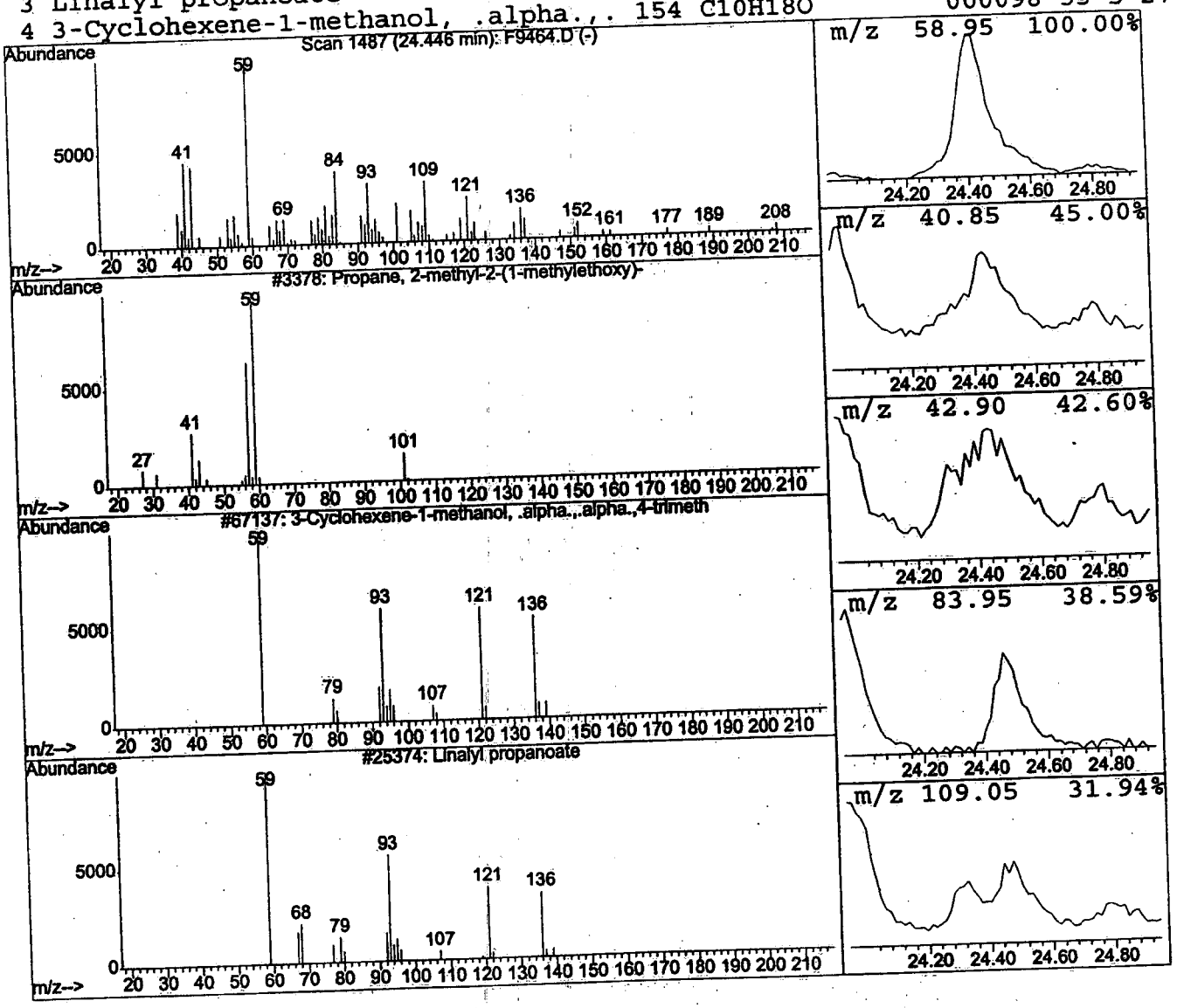
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 9 Unknown aliphatic — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.45	26.58 UG	4981960	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propane, 2-methyl-2-(1-methylethoxy	116	C7H16O	017348-59-3	35
2	3-Cyclohexene-1-methanol, .alpha.,.	154	C10H18O	010482-56-1	35
3	Linalyl propanoate	210	C13H22O2	000000-00-0	35
4	3-Cyclohexene-1-methanol, .alpha.,.	154	C10H18O	000098-55-5	27



1236

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

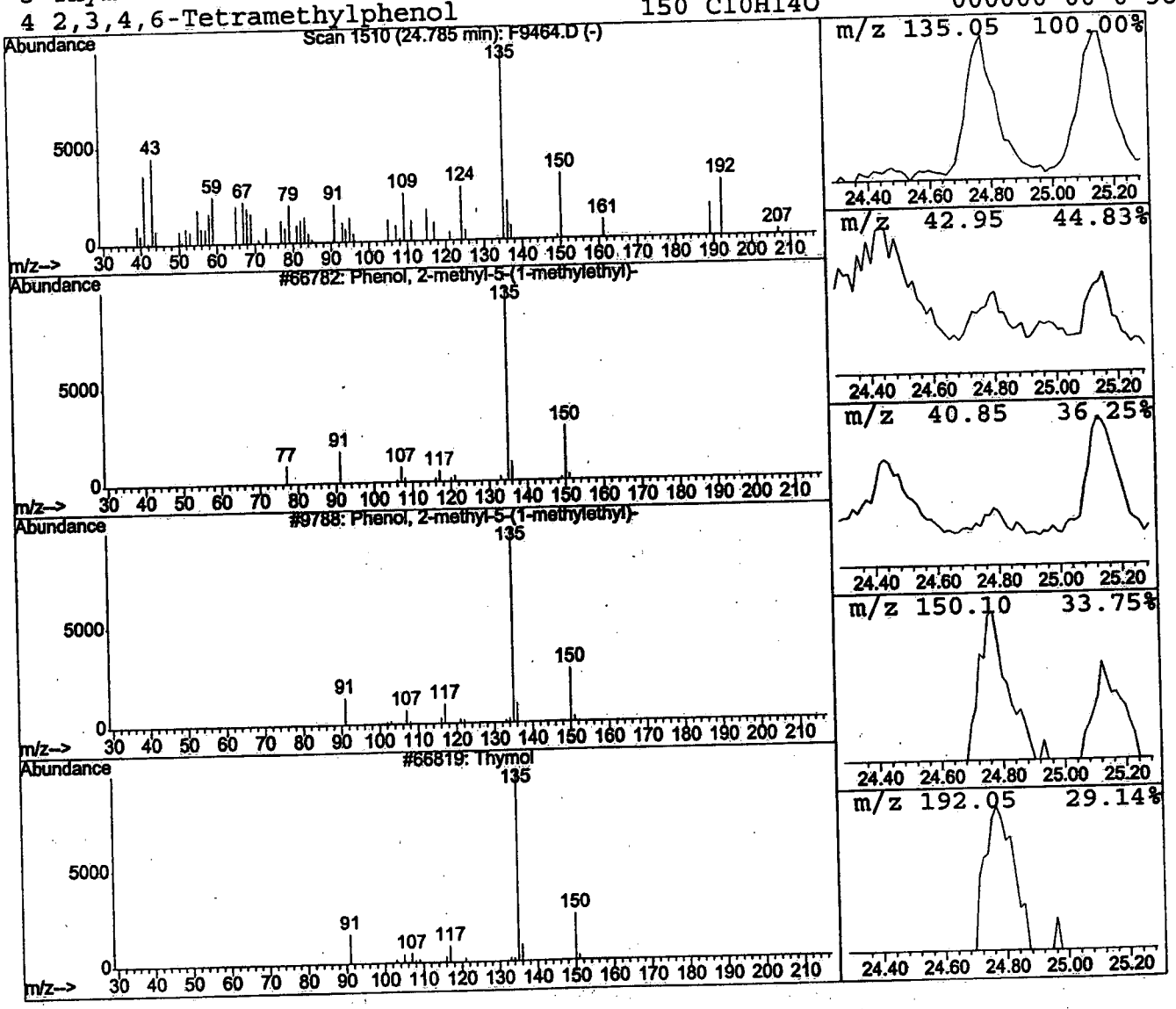
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 10 Unknown — Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.78	6.19 UG	1160710	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 2-methyl-5-(1-methylethyl)-	150	C10H14O	000499-75-2	43
2	Phenol, 2-methyl-5-(1-methylethyl)-	150	C10H14O	000499-75-2	43
3	Thymol	150	C10H14O	000089-83-8	43
4	2,3,4,6-Tetramethylphenol	150	C10H14O	000000-00-0	38



000200

1237

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

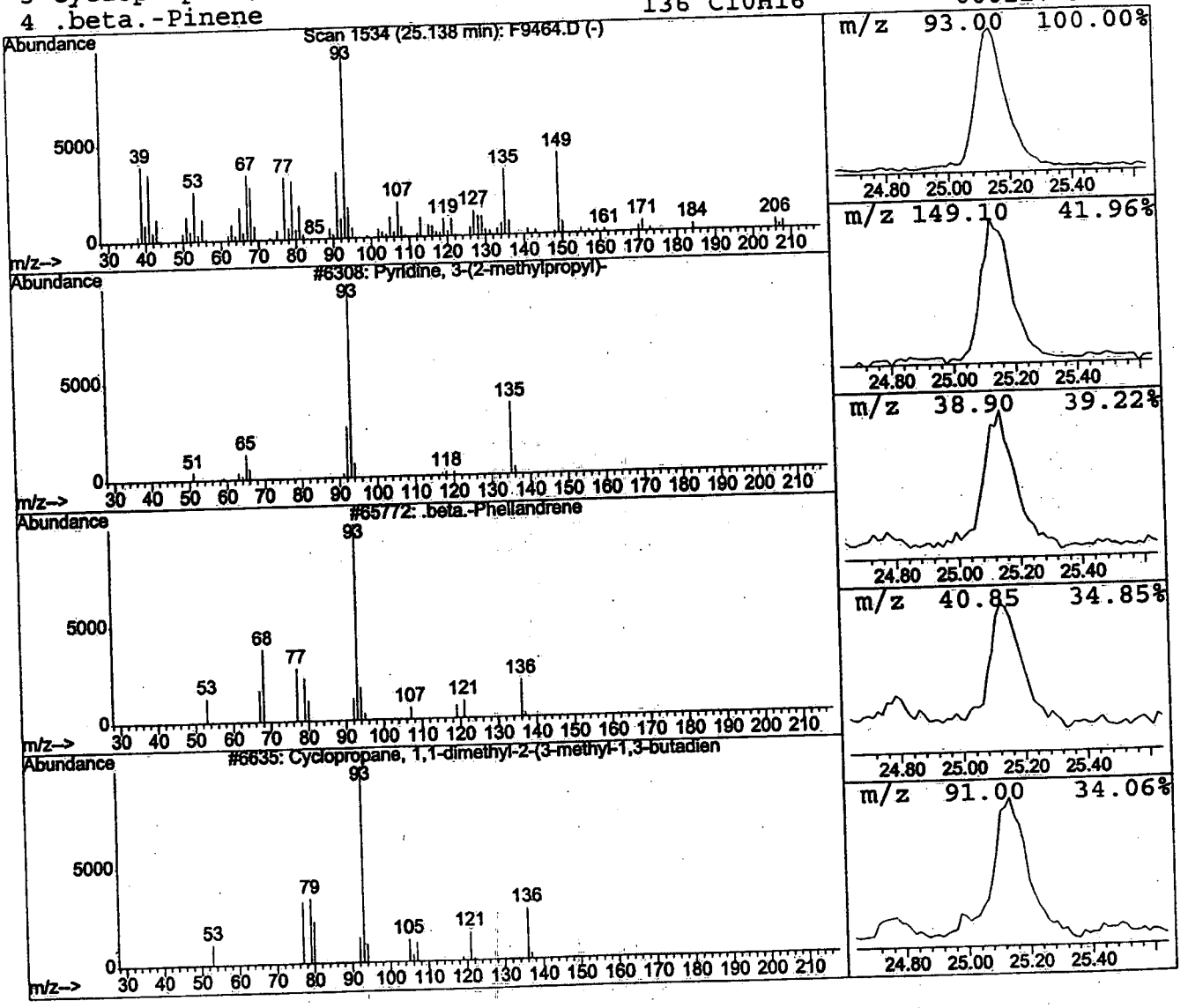
****

Peak Number 11 Unknown aromatic

Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.14	41.21 UG	7724820	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyridine, 3-(2-methylpropyl)-	135	C9H13N	014159-61-6	38
2	.beta.-Phellandrene	136	C10H16	000555-10-2	38
3	Cyclopropane, 1,1-dimethyl-2-(3-met	136	C10H16	068998-21-0	38
4	.beta.-Pinene	136	C10H16	000127-91-3	38



000201

1238

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

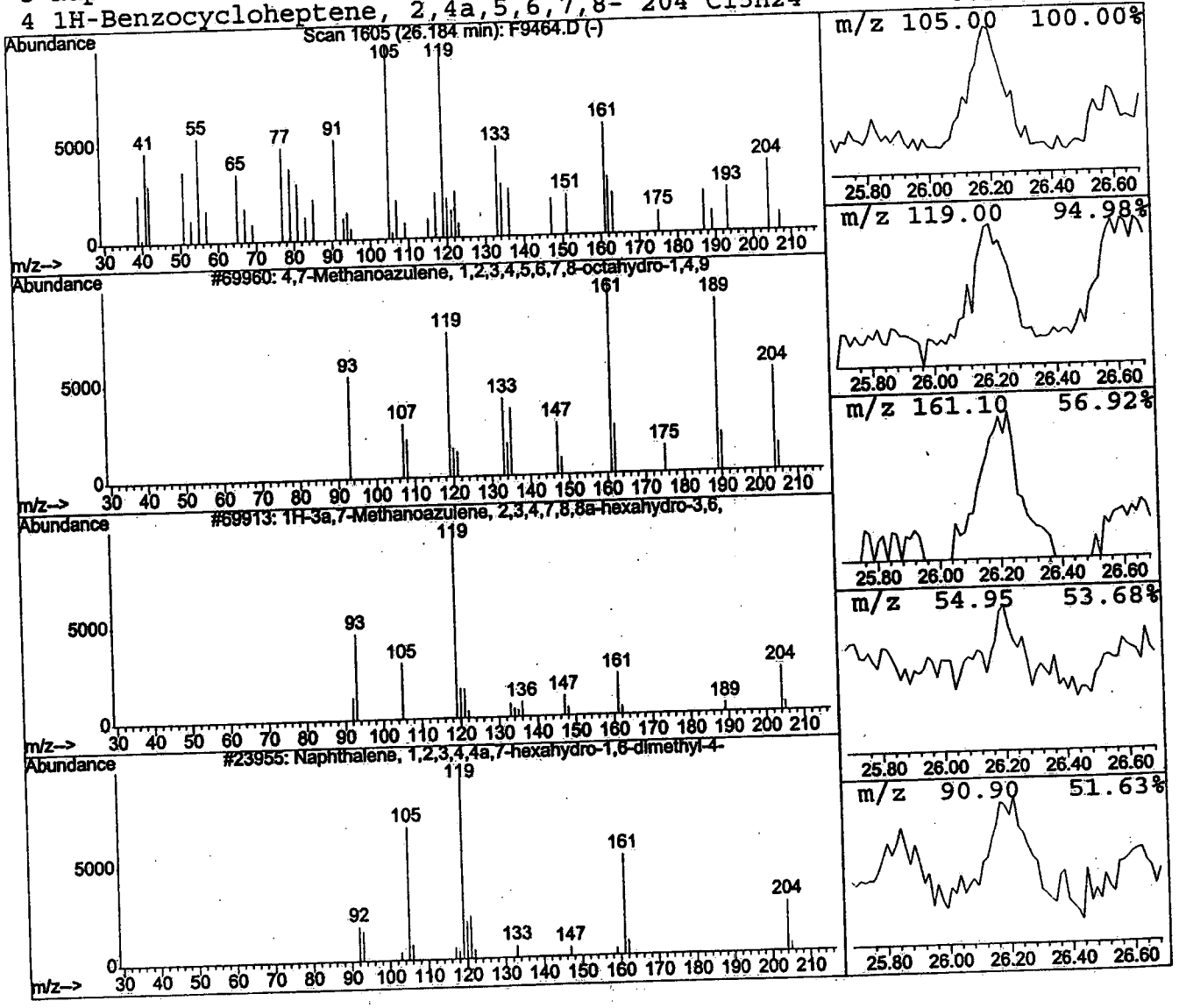
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 12 Unknown aromatic — Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.18	7.04 UG	1319370	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4,7-Methanoazulene, 1,2,3,4,5,6,7,8	204	C15H24	000514-51-2	43
2	1H-3a,7-Methanoazulene, 2,3,4,7,8,8	204	C15H24	000469-61-4	38
3	Naphthalene, 1,2,3,4,4a,7-hexahydro	204	C15H24	016728-99-7	32
4	1H-Benzocycloheptene, 2,4a,5,6,7,8-	204	C15H24	001461-03-6	32



000202

1239

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9464.D
Acq On : 30 Mar 2001 3:25
Sample : S-20,1922-004,M,0.04g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 32
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

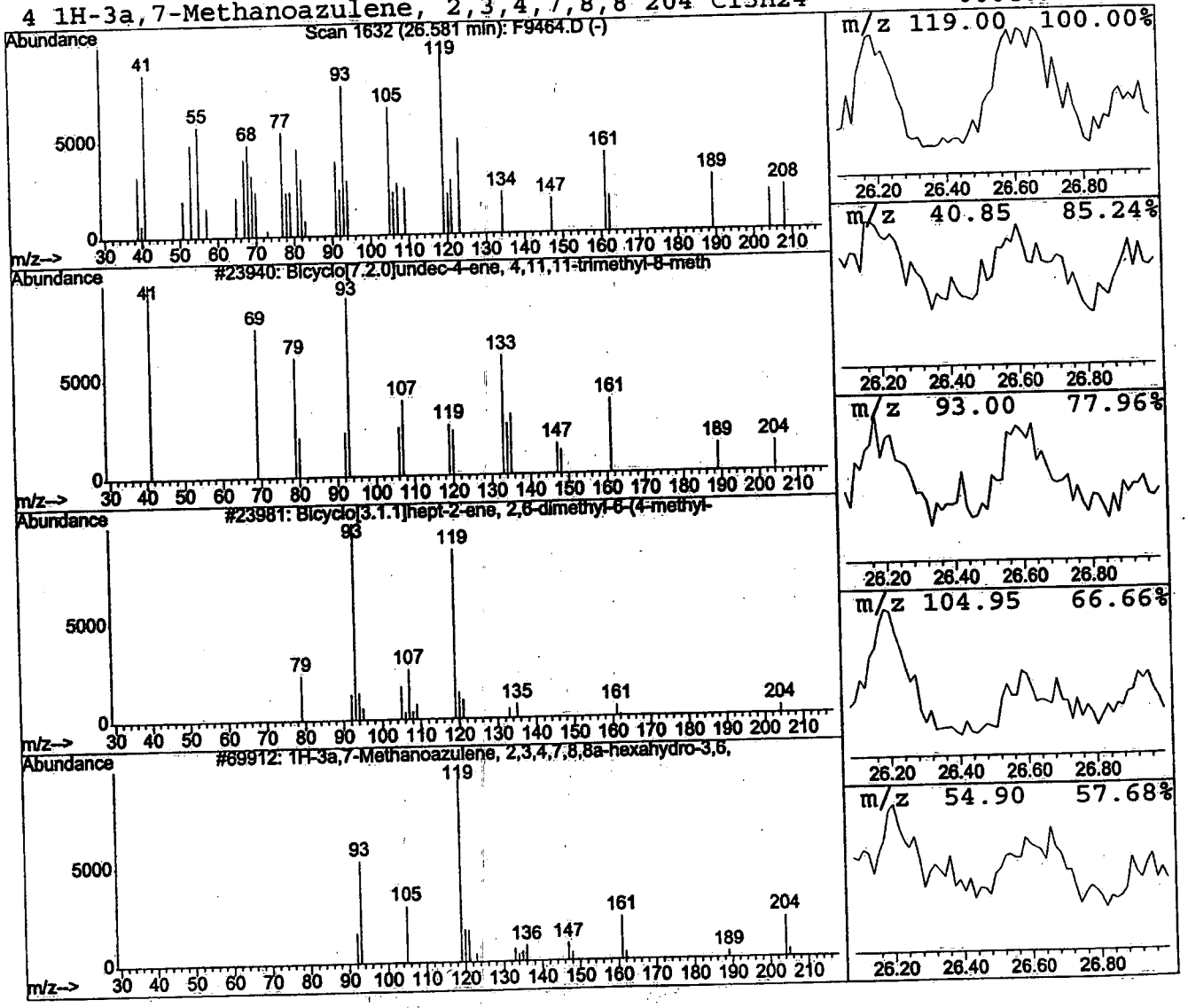
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 13 Unknown aromatic — Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.58	7.25 UG	1358590	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[7.2.0]undec-4-ene, 4,11,11-	204	C15H24	000118-65-0	38
2	Bicyclo[3.1.1]hept-2-ene, 2,6-dimet	204	C15H24	017699-05-7	30
3	1H-3a,7-Methanoazulene, 2,3,4,7,8,8	204	C15H24	000469-61-4	27
4	1H-3a,7-Methanoazulene, 2,3,4,7,8,8	204	C15H24	000469-61-4	27



000203

1240

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: rteint.p
Quant Time: Mar 30 10:23 2001

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	8.77	168	3383672	50.00	UG		0.05
31) 1,4-Difluorobenzene	9.96	114	3374425	50.00	UG		0.06
50) Chlorobenzene-d5	14.83	117	2413444	50.00	UG		0.06
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	9.27	65	1949456	57.66	UG		0.07
Spiked Amount 50.000	Range 27 - 176		Recovery = 115.32%				
41) Toluene-d8	12.36	98	3327465	53.63	UG		0.07
Spiked Amount 50.000	Range 20 - 158		Recovery = 107.26%				
59) Bromofluorobenzene	16.91	95	2395770	45.90	UG		0.06
Spiked Amount 50.000	Range 28 - 148		Recovery = 91.80%				
Target Compounds							Qvalue
32) Benzene	9.32	78	381549	5.09	UG	#	89
42) Toluene	12.46	92	1587783	34.14	UG		99
74) 1,2-Dichlorobenzene	19.75	146	88834	1.91	UG	#	67

(#) = qualifier out of range (m) = manual integration

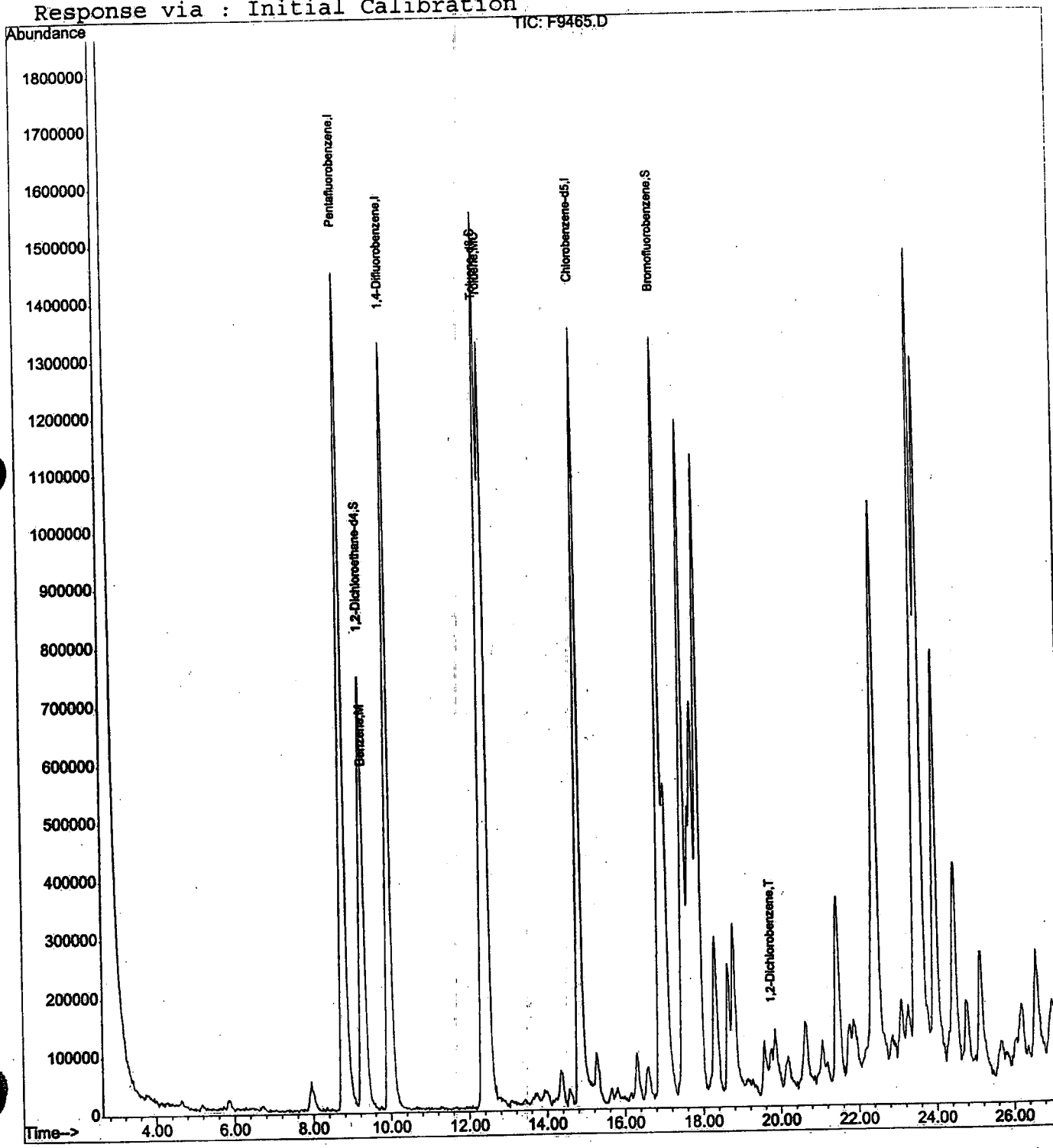
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: rteint.p
Quant Time: Mar 30 10:23 2001

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



000205

1242

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

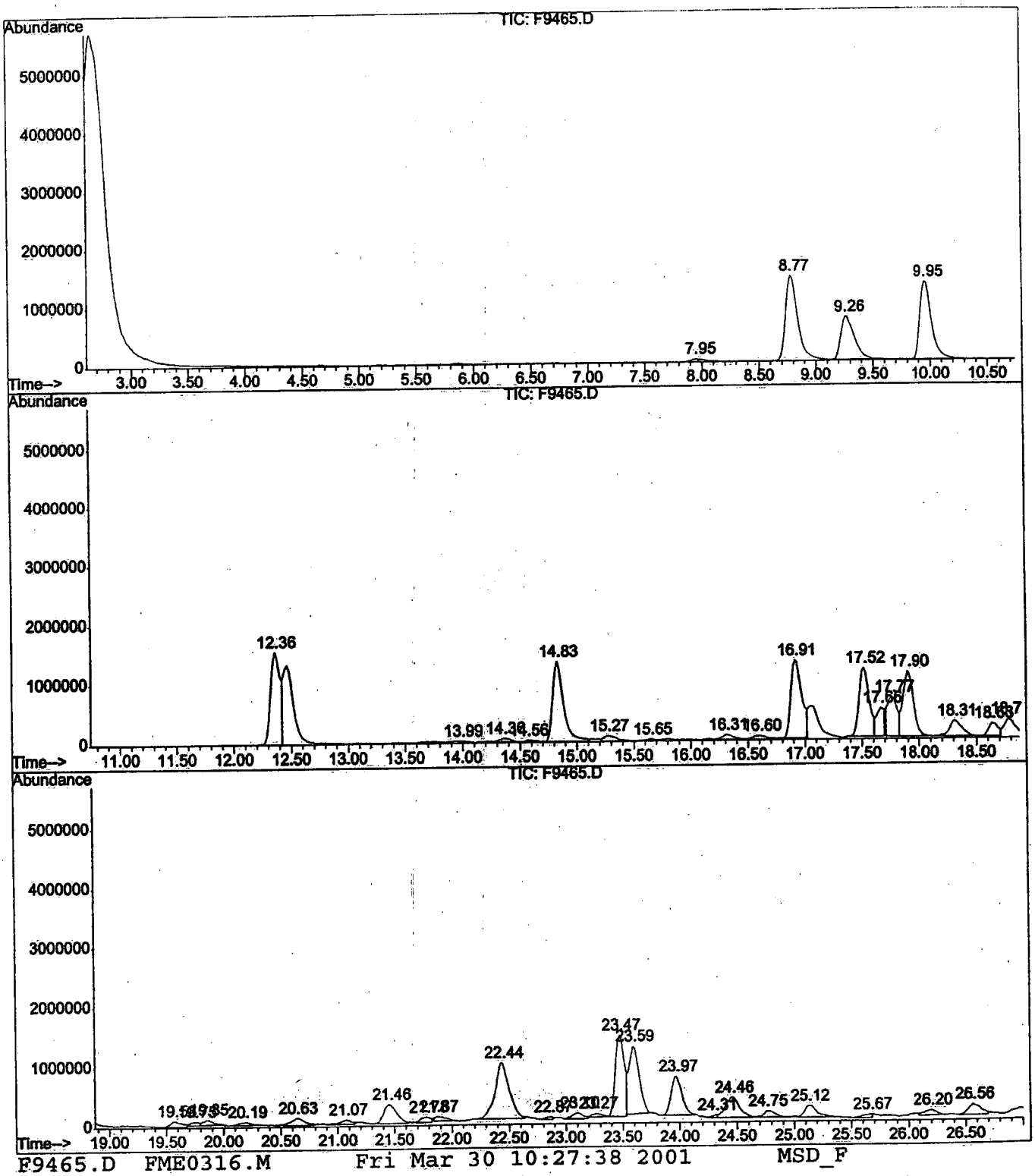
Peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.952	357	365	366	rBV2	52214	201728	1.87%	0.163%
2	8.775	412	421	446	rBV	1447973	10797069	100.00%	8.724%
3	9.260	446	454	474	rVV2	737441	5982444	55.41%	4.834%
4	9.950	492	501	520	rBV	1324325	9119498	84.46%	7.368%
5	12.359	653	665	669	rBV	1552395	9087974	84.17%	7.343%
6	13.989	775	776	784	rVB5	26315	108437	1.00%	0.088%
7	14.357	794	801	809	rVB7	57895	394589	3.65%	0.319%
[illegible]	14.562	812	815	823	rBV6	31177	193411	1.79%	0.156%
[illegible]	14.827	826	833	852	rBV	1340151	8852788	81.99%	7.153%
10	15.268	859	863	878	rVB8	88740	637048	5.90%	0.515%
11	15.650	883	889	893	rBV5	26615	135984	1.26%	0.110%
12	16.311	926	934	945	rVB4	82257	540206	5.00%	0.436%
13	16.605	945	954	960	rBV6	58582	421779	3.91%	0.341%
14	16.913	967	975	982	rBV	1310570	8823943	81.73%	7.130%
15	17.517	1007	1016	1022	rBV2	1148822	7149601	66.22%	5.777%
16	17.664	1022	1026	1028	rVV2	483253	2232804	20.68%	1.804%
17	17.767	1029	1033	1037	rVV3	663504	3894199	36.07%	3.146%
18	17.899	1037	1042	1054	rVB	1091934	6719883	62.24%	5.430%
19	18.311	1059	1070	1084	rVB8	265179	2060774	19.09%	1.665%
20	18.635	1086	1092	1097	rBV5	217203	1232381	11.41%	0.996%
21	18.782	1097	1102	1120	rVB6	278436	1937360	17.94%	1.565%
22	19.575	1148	1156	1163	rBV3	93695	659492	6.11%	0.533%
23	19.752	1163	1168	1171	rVV5	59706	335069	3.10%	0.271%
24	19.855	1171	1175	1183	rVB5	81128	466112	4.32%	0.377%
25	20.193	1189	1198	1207	rBV9	50262	379363	3.51%	0.307%
26	20.634	1215	1228	1239	rBV3	117058	1085382	10.05%	0.877%
27	21.075	1246	1258	1263	rBV5	77105	548378	5.08%	0.443%
28	21.457	1274	1284	1295	rBV3	318304	2566768	23.77%	2.074%
29	21.781	1299	1306	1309	rBV4	85032	542894	5.03%	0.439%
[illegible]	21.869	1310	1312	1321	rVB8	70323	461111	4.27%	0.373%
31	22.443	1337	1351	1364	rBV6	938923	8032818	74.40%	6.490%

000206

1243

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Operator : GREGG
Acquired : 30 Mar 2001 3:57 using AcqMethod VOAF
Instrument : 5970 - In
Sample Name: S-21,1922-005,M,0.042g
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01
Vial Number: 33
Quant File :FME0316.RES (RTE Integrator)



F9465.D FME0316.M Fri Mar 30 10:27:38 2001 MSD_F

000208

1244

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

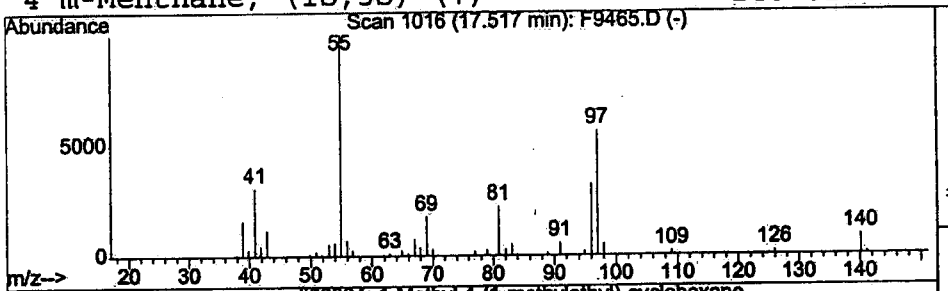
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

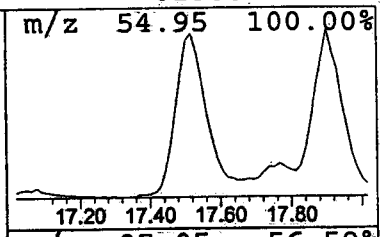
****

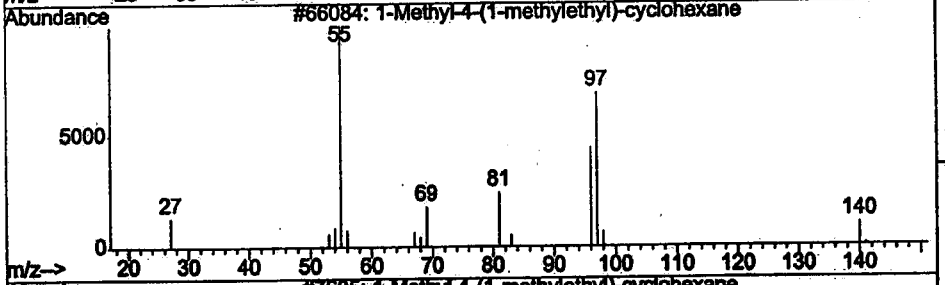
Peak Number 1 Unknown hydrocarbon Concentration Rank 3

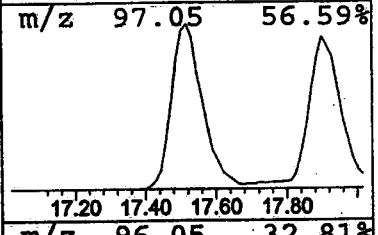
R.T.	EstConc	Area	Relative to ISTD	R.T.
17.52	40.38 UG	7149600	Chlorobenzene-d5	14.83

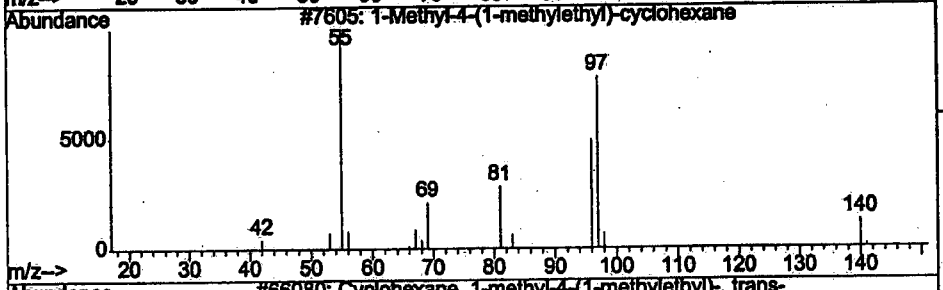
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Methyl-4-(1-methylethyl)-cyclohex	140	C10H20	000099-82-1	94
2	1-Methyl-4-(1-methylethyl)-cyclohex	140	C10H20	000099-82-1	94
3	Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	001678-82-6	93
4	m-Menthane, (1S,3S)-(+)-	140	C10H20	013837-67-7	91

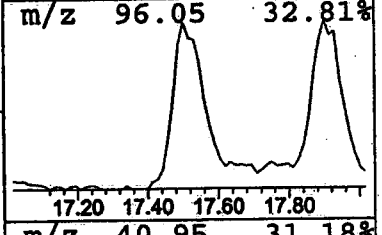


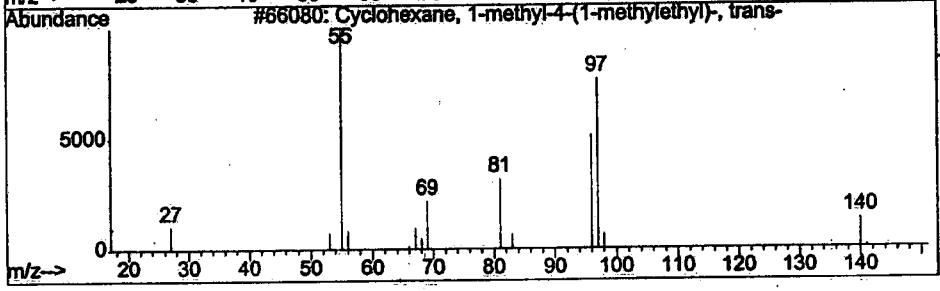


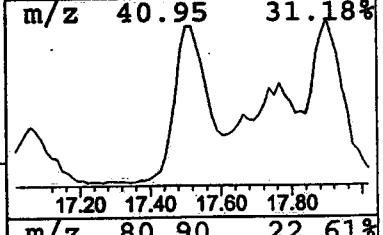


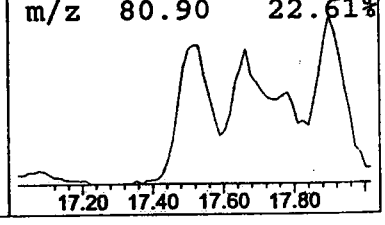












000269

1245

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

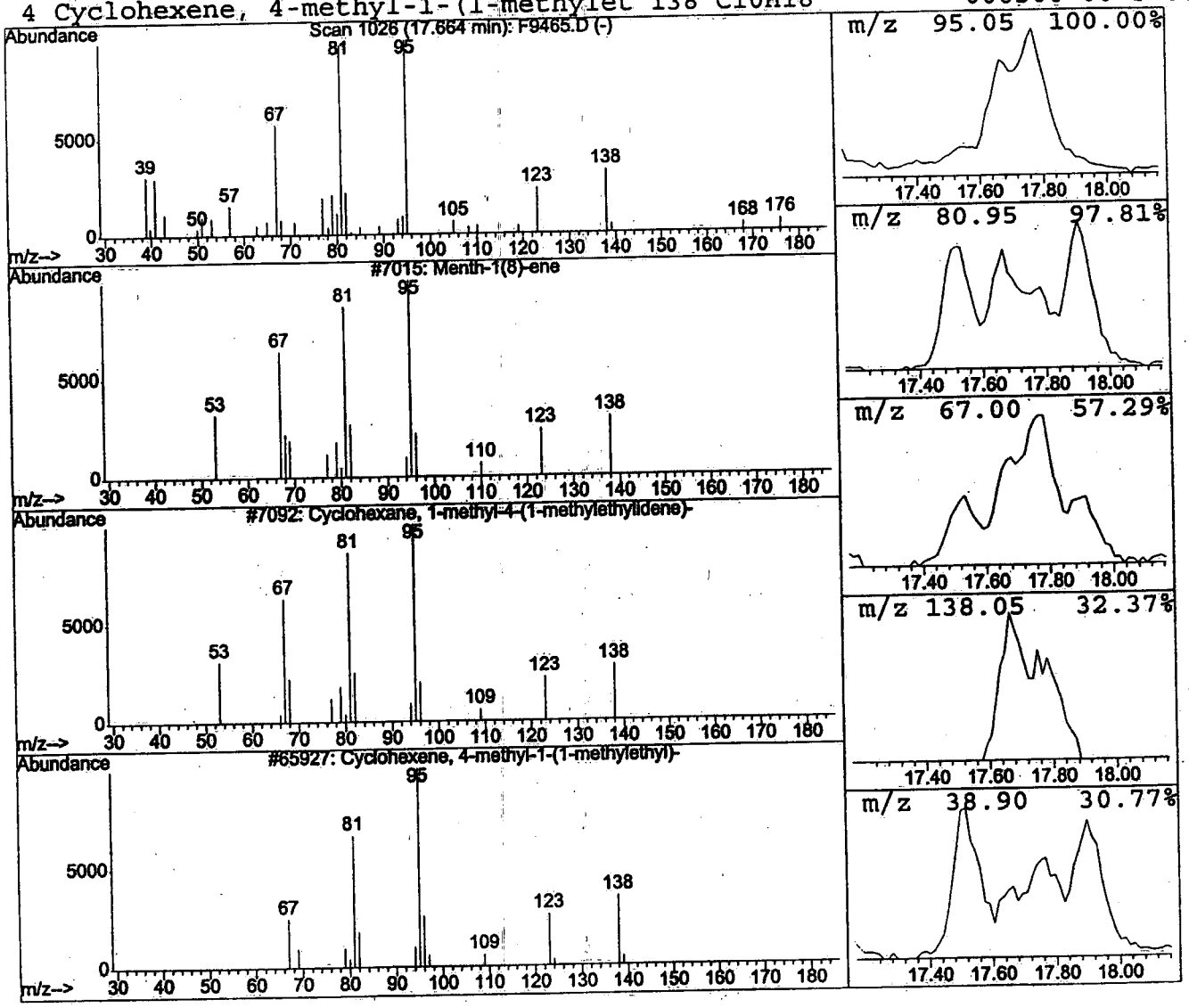
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Unknown cyclic hydrocarbon Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.66	12.61 UG	2232800	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Menth-1(8)-ene	138	C10H18	000000-00-0	91
2	Cyclohexane, 1-methyl-4-(1-methylet	138	C10H18	001124-27-2	91
3	Cyclohexene, 4-methyl-1-(1-methylet	138	C10H18	000500-00-5	90
4	Cyclohexene, 4-methyl-1-(1-methylet	138	C10H18	000500-00-5	86



000210

1246

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

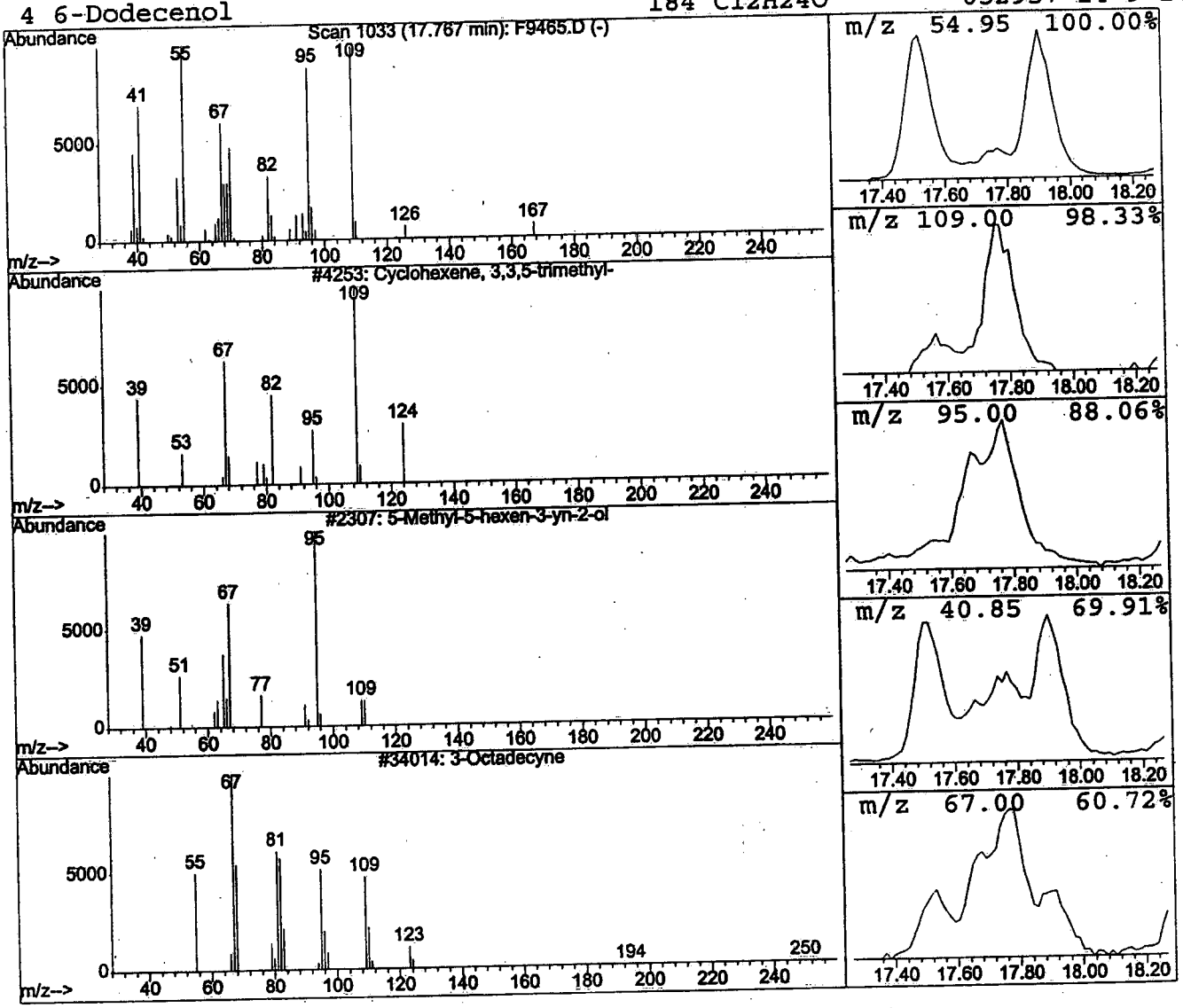
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Unknown aromatic — Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.77	21.99 UG	3894200	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 3,3,5-trimethyl-	124	C9H16	000503-45-7	43
2	5-Methyl-5-hexen-3-yn-2-ol	110	C7H10O	068017-33-4	38
3	3-Octadecyne	250	C18H34	061886-64-4	35
4	6-Dodecenol	184	C12H24O	052957-14-9	27



000211

1247

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

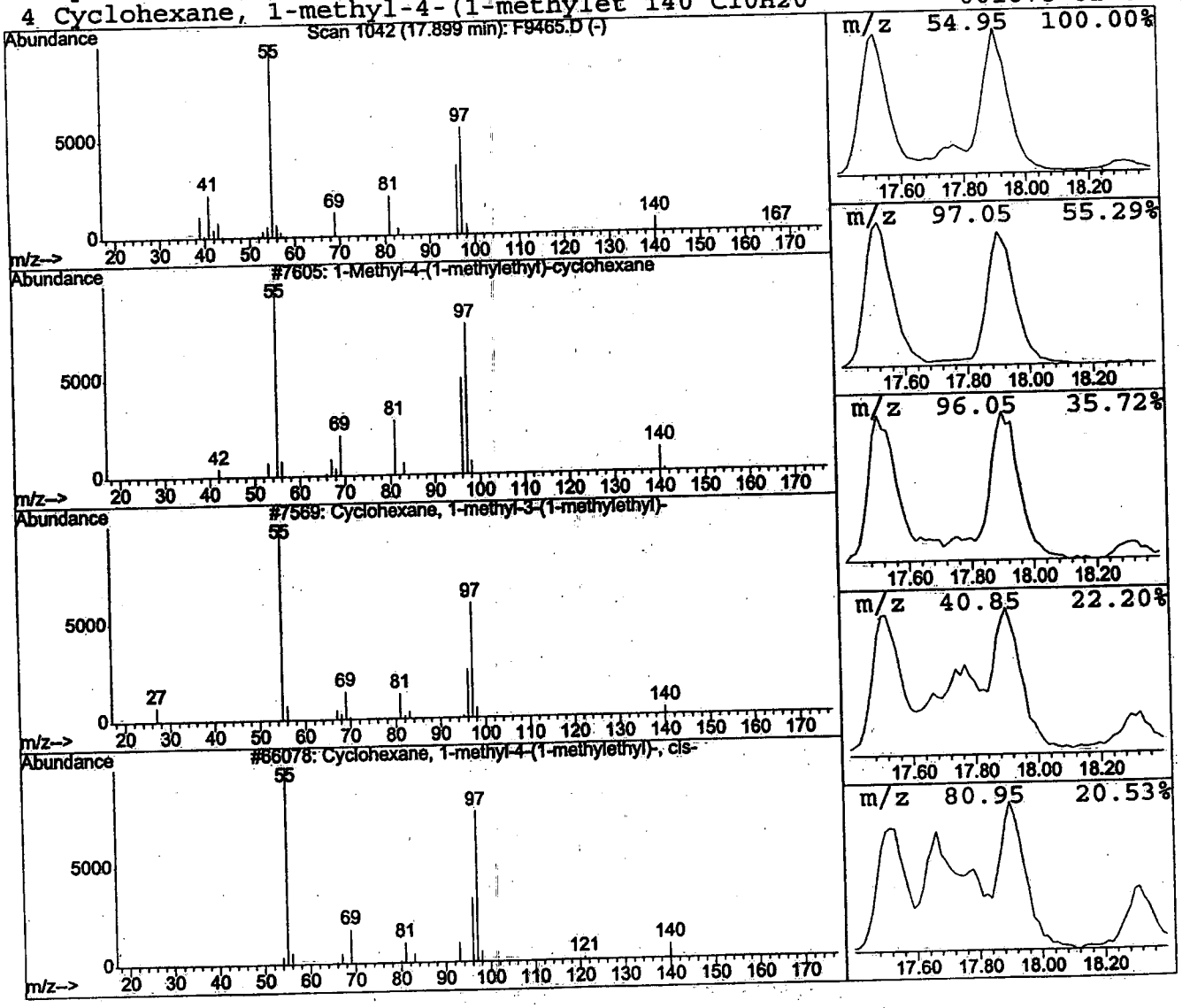
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Unknown cyclic hydrocarbon Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.90	37.95 UG	6719880	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Methyl-4-(1-methylethyl)-cyclohex	140	C10H20	000099-82-1	91
2	Cyclohexane, 1-methyl-3-(1-methylet	140	C10H20	016580-24-8	90
3	Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	006069-98-3	90
4	Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	001678-82-6	86



000212

1248

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

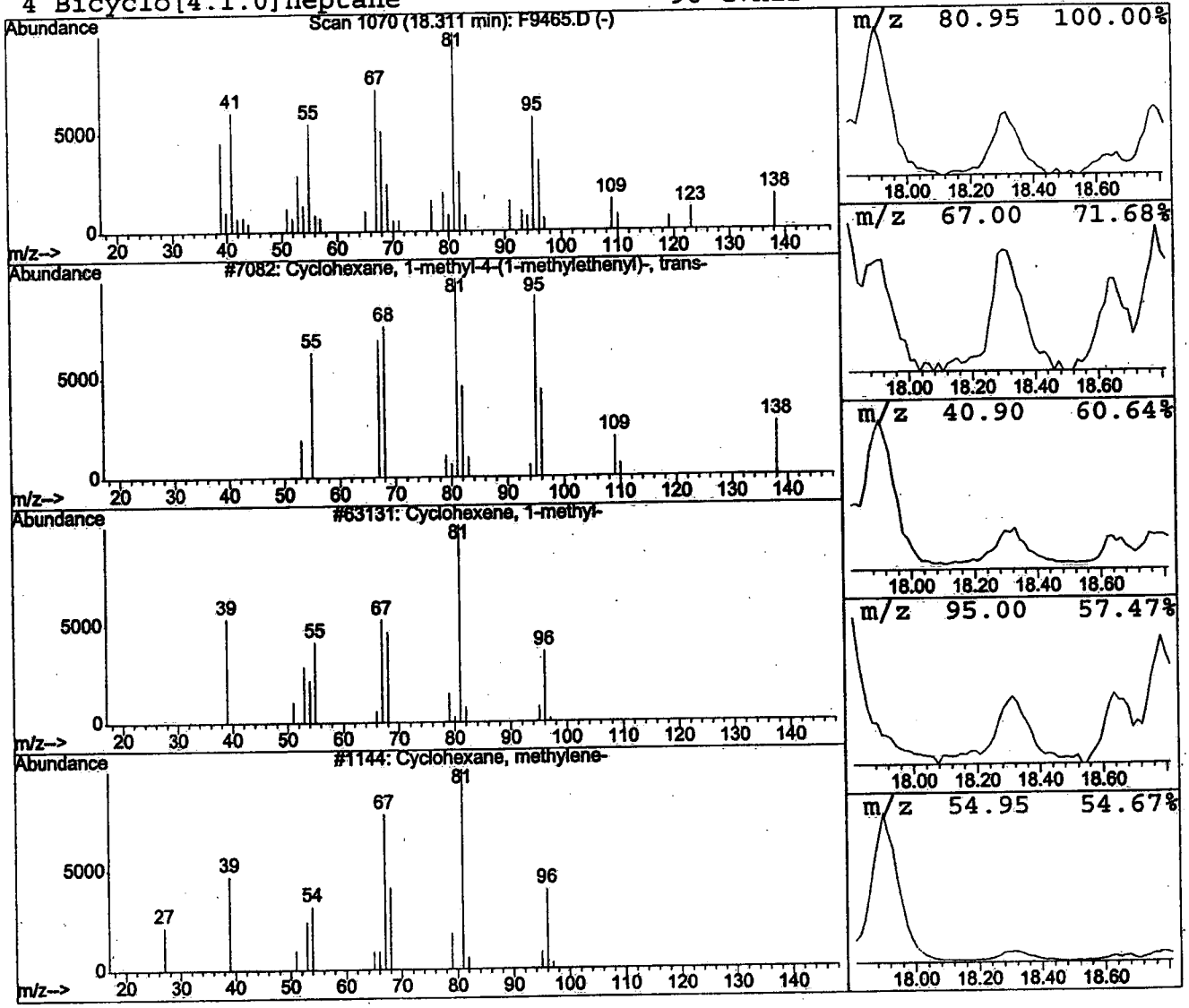
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 5 Unknown cyclic hydrocarbon Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.31	11.64 UG	2060770	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-4-(1-methylet	138	C10H18	001124-25-0	92
2	Cyclohexene, 1-methyl-	96	C7H12	000591-49-1	70
3	Cyclohexane, methylene-	96	C7H12	001192-37-6	70
4	Bicyclo[4.1.0]heptane	96	C7H12	000286-08-8	58



000213

1249

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

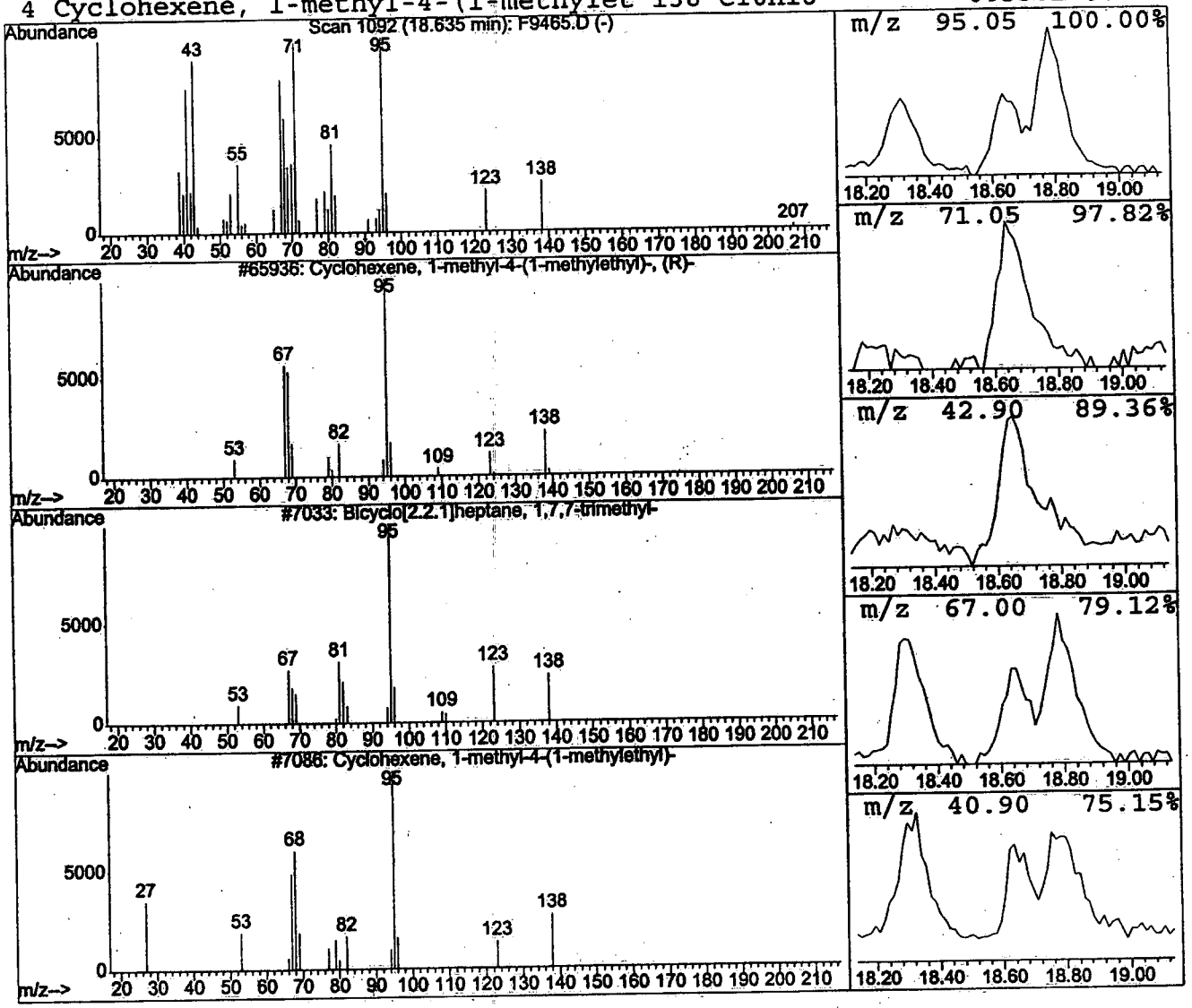
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 6 Unknown aromatic — Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.63	6.96 UG	1232380	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 1-methyl-4-(1-methylet	138	C10H18	001195-31-9	64
2	Bicyclo[2.2.1]heptane, 1,7,7-trimet	138	C10H18	000464-15-3	62
3	Cyclohexene, 1-methyl-4-(1-methylet	138	C10H18	005502-88-5	52
4	Cyclohexene, 1-methyl-4-(1-methylet	138	C10H18	005502-88-5	52



000214

1250

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

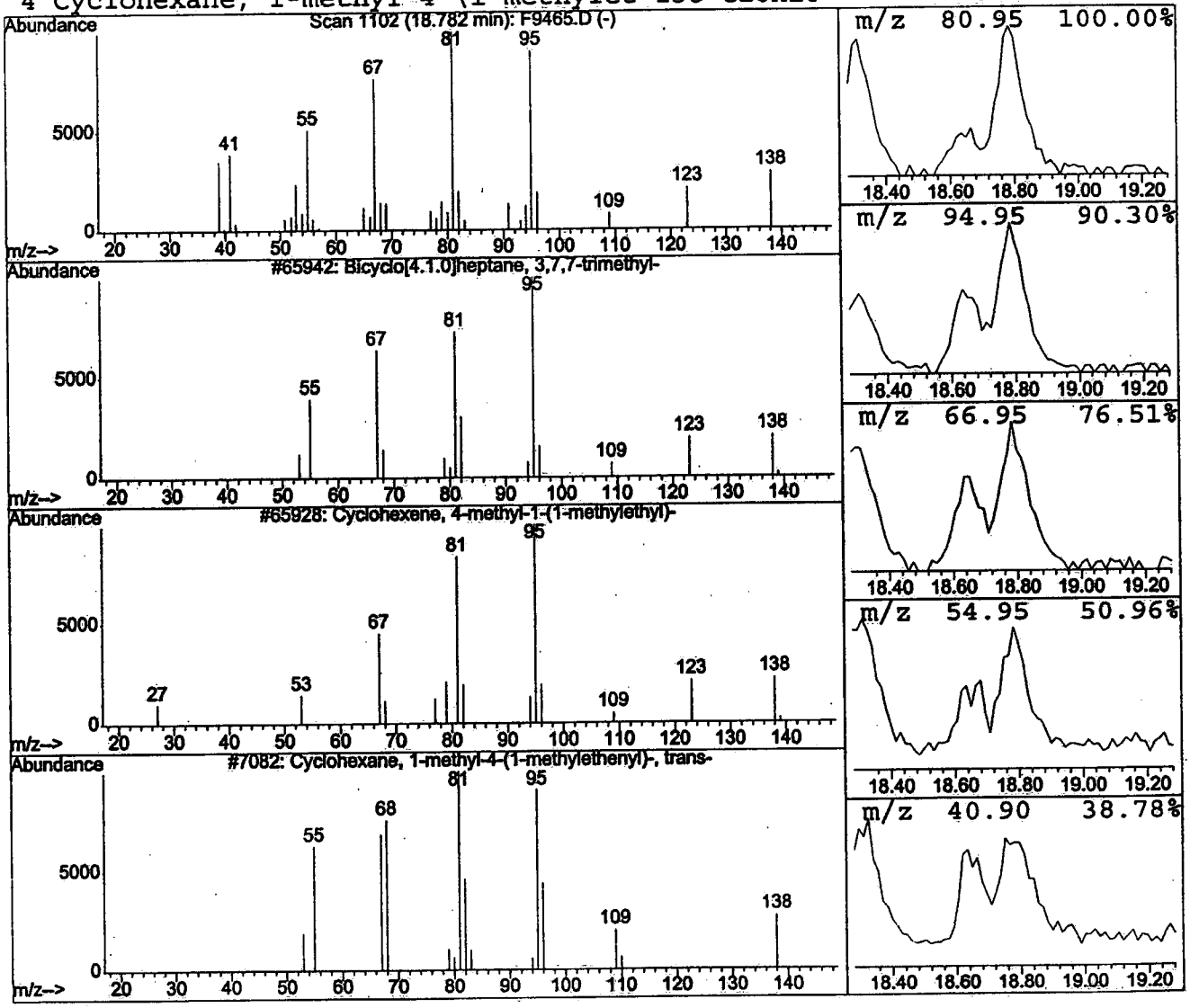
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 7 Unknown aromatic Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.78	10.94 UG	1937360	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[4.1.0]heptane, 3,7,7-trimet	138	C10H18	000554-59-6	91
2	Cyclohexene, 4-methyl-1-(1-methylet	138	C10H18	000500-00-5	87
3	Cyclohexane, 1-methyl-4-(1-methylet	138	C10H18	001124-25-0	87
4	Cyclohexane, 1-methyl-4-(1-methylet	138	C10H18	001124-27-2	72



1251

000215

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

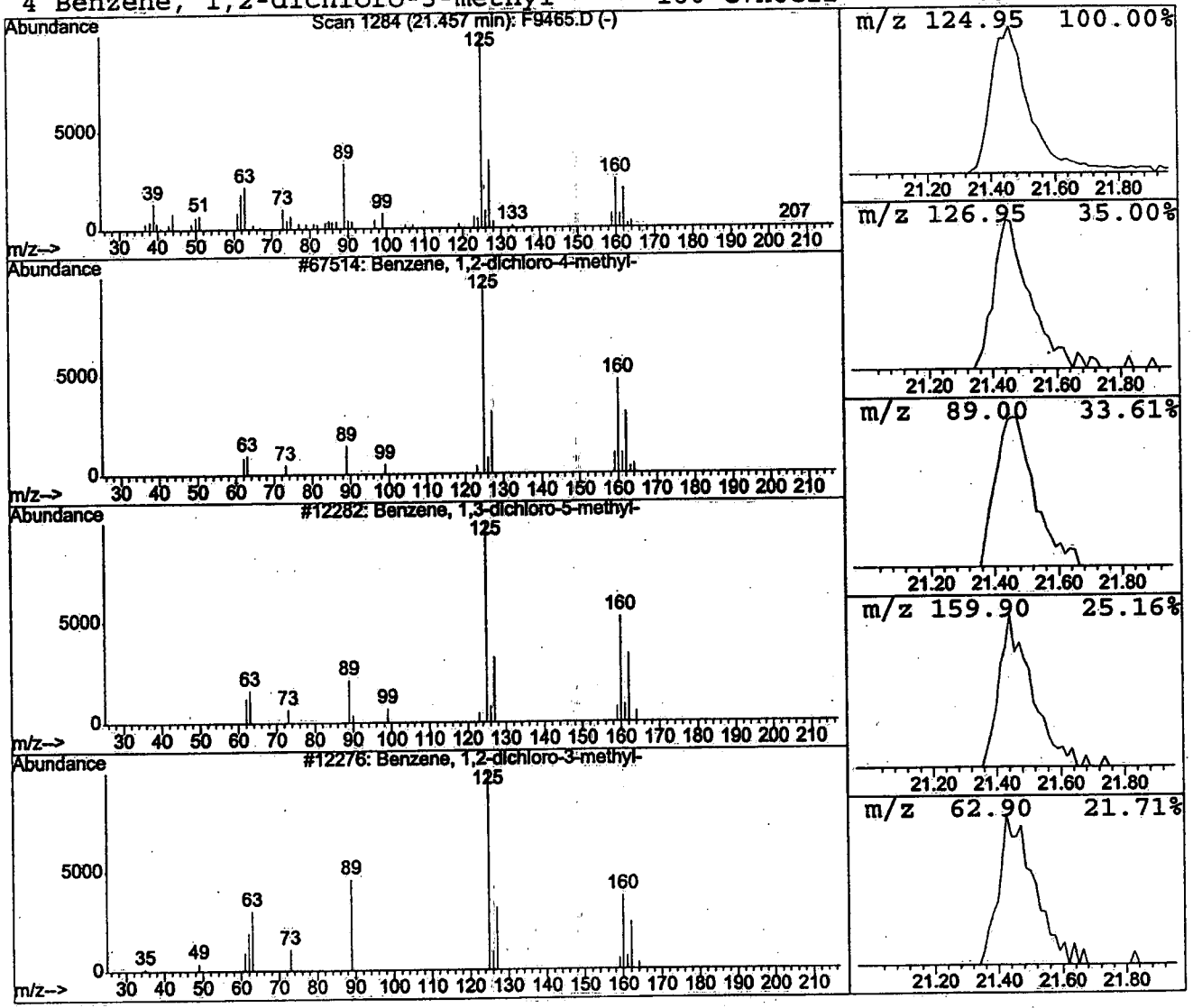
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 8 Substituted benzene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.46	14.50 UG	2566770	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2-dichloro-4-methyl-	160	C7H6Cl2	000095-75-0	97
2	Benzene, 1,3-dichloro-5-methyl-	160	C7H6Cl2	025186-47-4	97
3	Benzene, 1,2-dichloro-3-methyl-	160	C7H6Cl2	032768-54-0	96
4	Benzene, 1,2-dichloro-3-methyl-	160	C7H6Cl2	032768-54-0	96



000216

1252

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

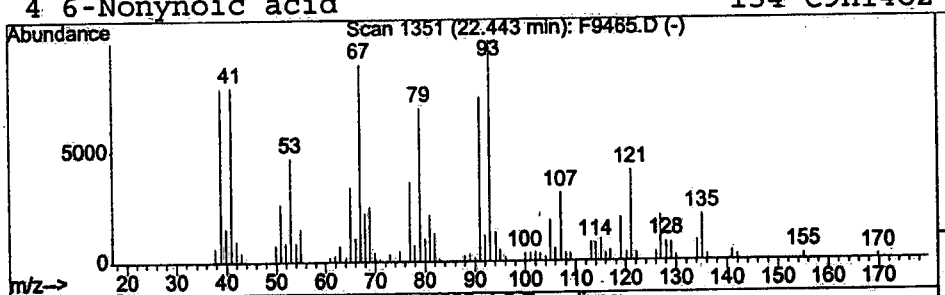
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

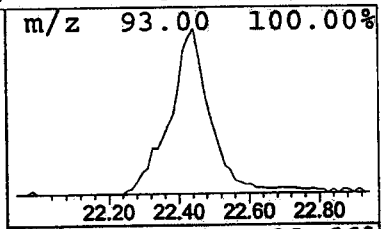
****

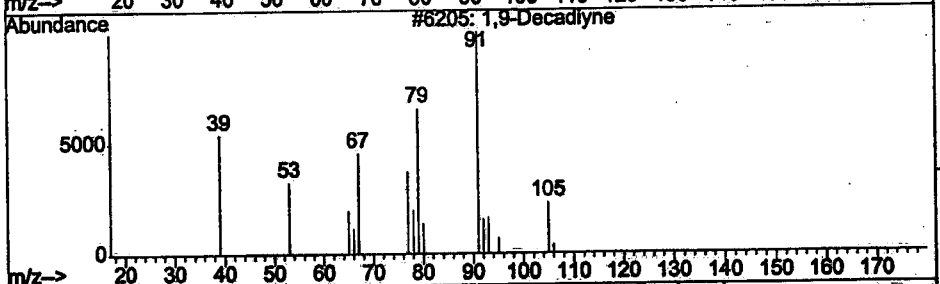
Peak Number 9 Unknown Concentration Rank 1

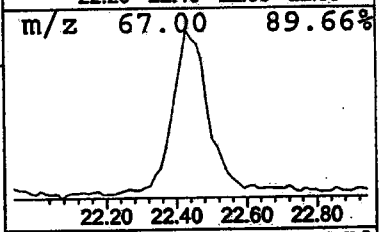
R.T.	EstConc	Area	Relative to ISTD	R.T.
22.44	45.37 UG	8032820	Chlorobenzene-d5	14.83

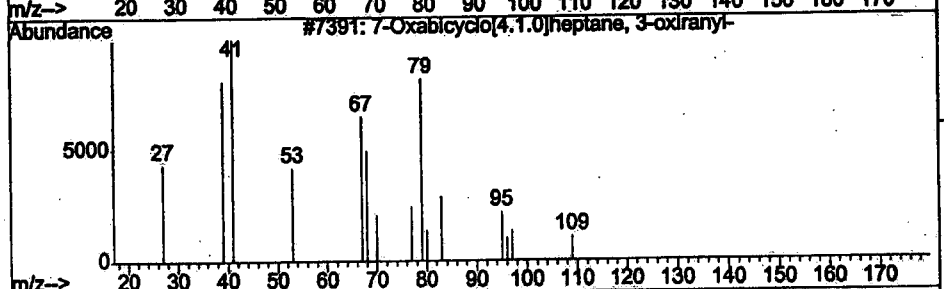
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,9-Decadiyne	134	C10H14	001720-38-3	53
2	7-Oxabicyclo[4.1.0]heptane, 3-oxira	140	C8H12O2	000106-87-6	45
3	Dicyclopropylmethane	96	C7H12	000000-00-0	42
4	6-Nonynoic acid	154	C9H14O2	056630-31-0	42

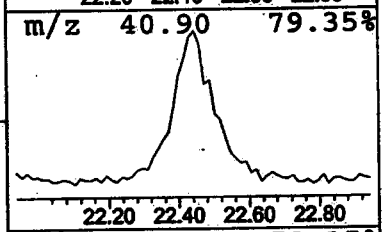


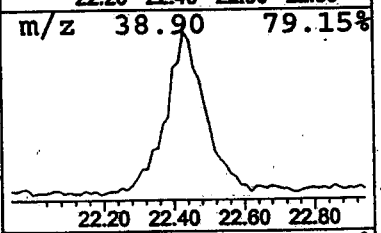


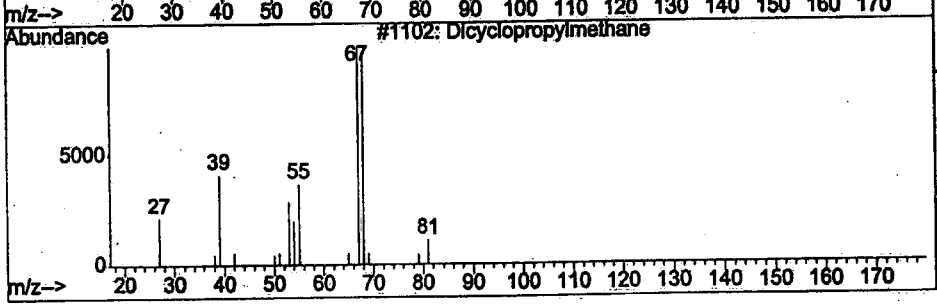


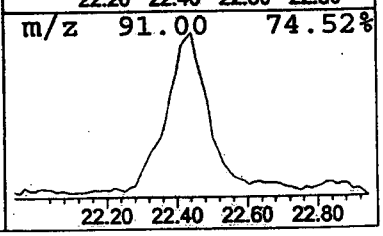












1253

000217

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D Vial: 33
Acq On : 30 Mar 2001 3:57 Operator: GREGG
Sample : S-21,1922-005,M,0.042g Inst : 5970 - In
Misc : ENVTACT/ORBIS,03/27/01,03/28/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

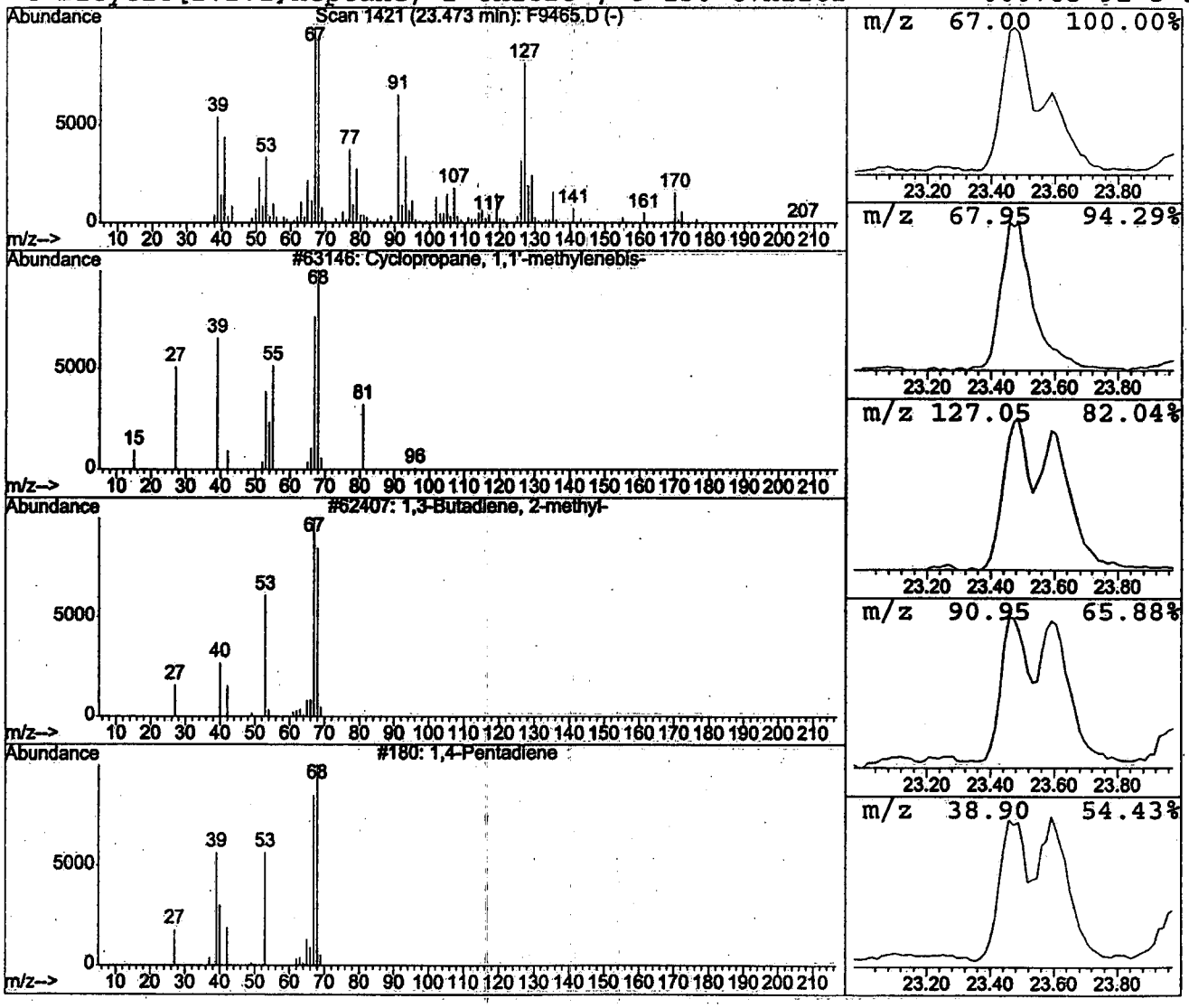
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 10 Unknown aromatic Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.47	44.12 UG	7811200	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopropane, 1,1'-methylenebis-	96	C7H12	005685-47-2	35
2	1,3-Butadiene, 2-methyl-	68	C5H8	000078-79-5	35
3	1,4-Pentadiene	68	C5H8	000591-93-5	35
4	Bicyclo[2.2.1]heptane, 2-chloro-, e	130	C7H11Cl	000765-91-3	35



1254

000218

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

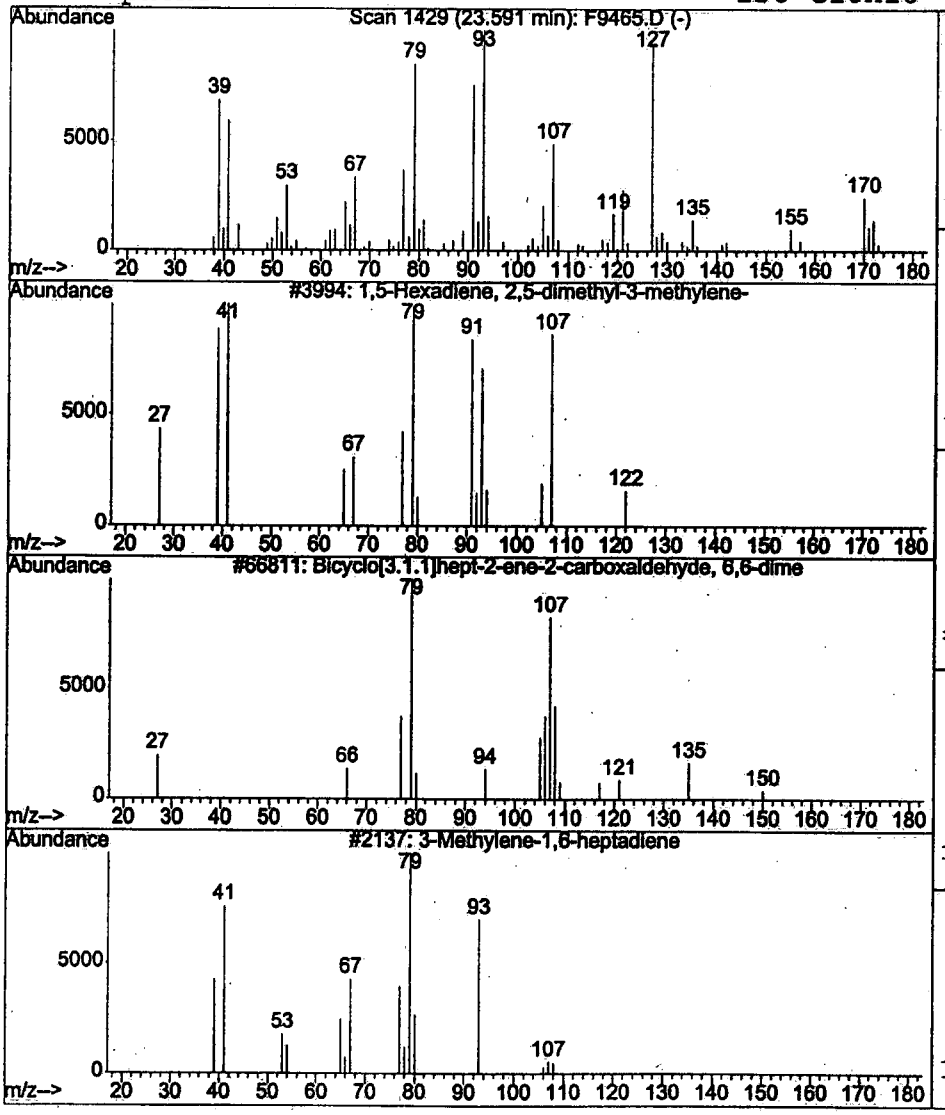
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

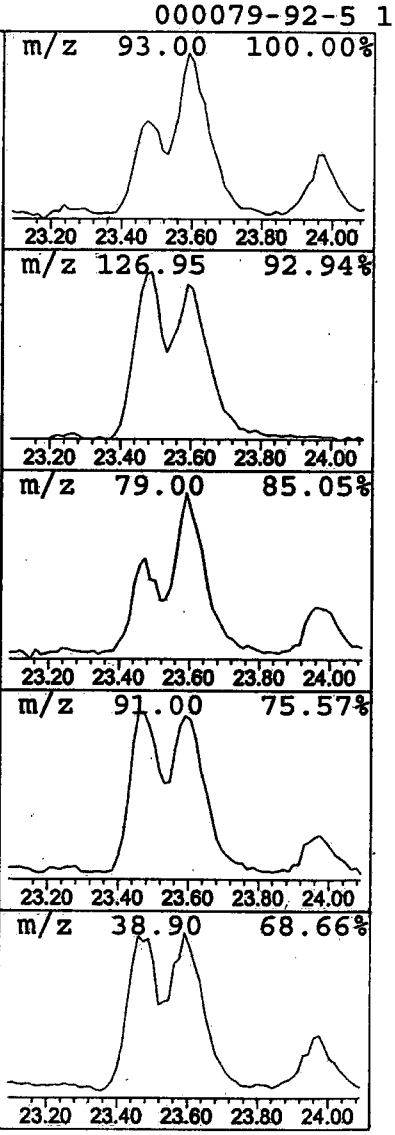
****

Peak Number 11 Unknown aromatic Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.59	40.06 UG	7092420	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,5-Hexadiene, 2,5-dimethyl-3-methy	122	C9H14	059131-13-4	42
2	Bicyclo[3.1.1]hept-2-ene-2-carboxal	150	C10H14O	000564-94-3	22
3	3-Methylene-1,6-heptadiene	108	C8H12	016626-48-5	18
4	Camphene	136	C10H16	000079-92-5	14





1255

000219

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

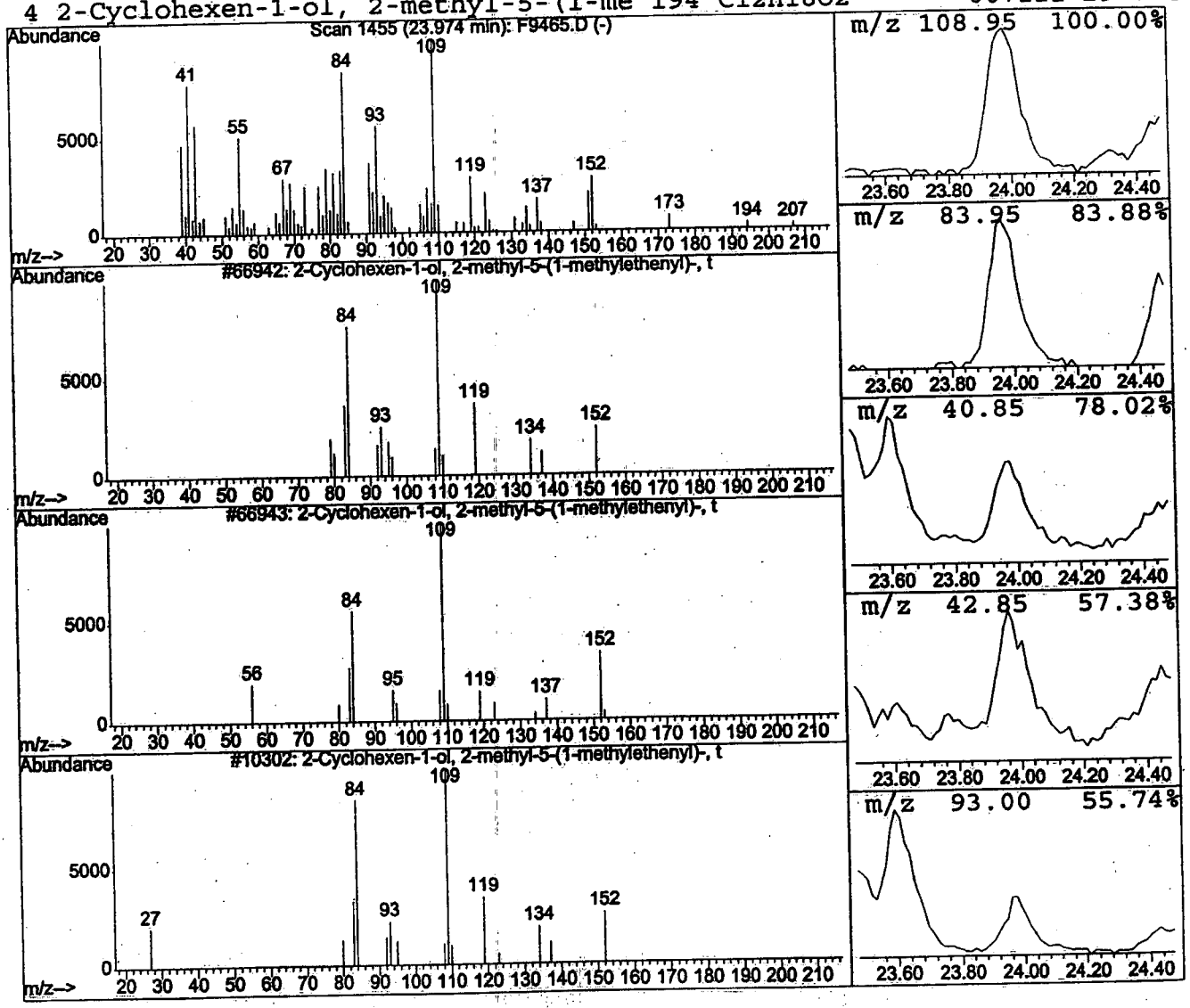
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 12 Unknown aromatic Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.97	23.78 UG	4210710	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclohexen-1-ol, 2-methyl-5-(1-me	152	C10H16O	001197-07-5	62
2	2-Cyclohexen-1-ol, 2-methyl-5-(1-me	152	C10H16O	001197-07-5	60
3	2-Cyclohexen-1-ol, 2-methyl-5-(1-me	152	C10H16O	001197-07-5	50
4	2-Cyclohexen-1-ol, 2-methyl-5-(1-me	194	C12H18O2	007111-29-7	47



000220

1256

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

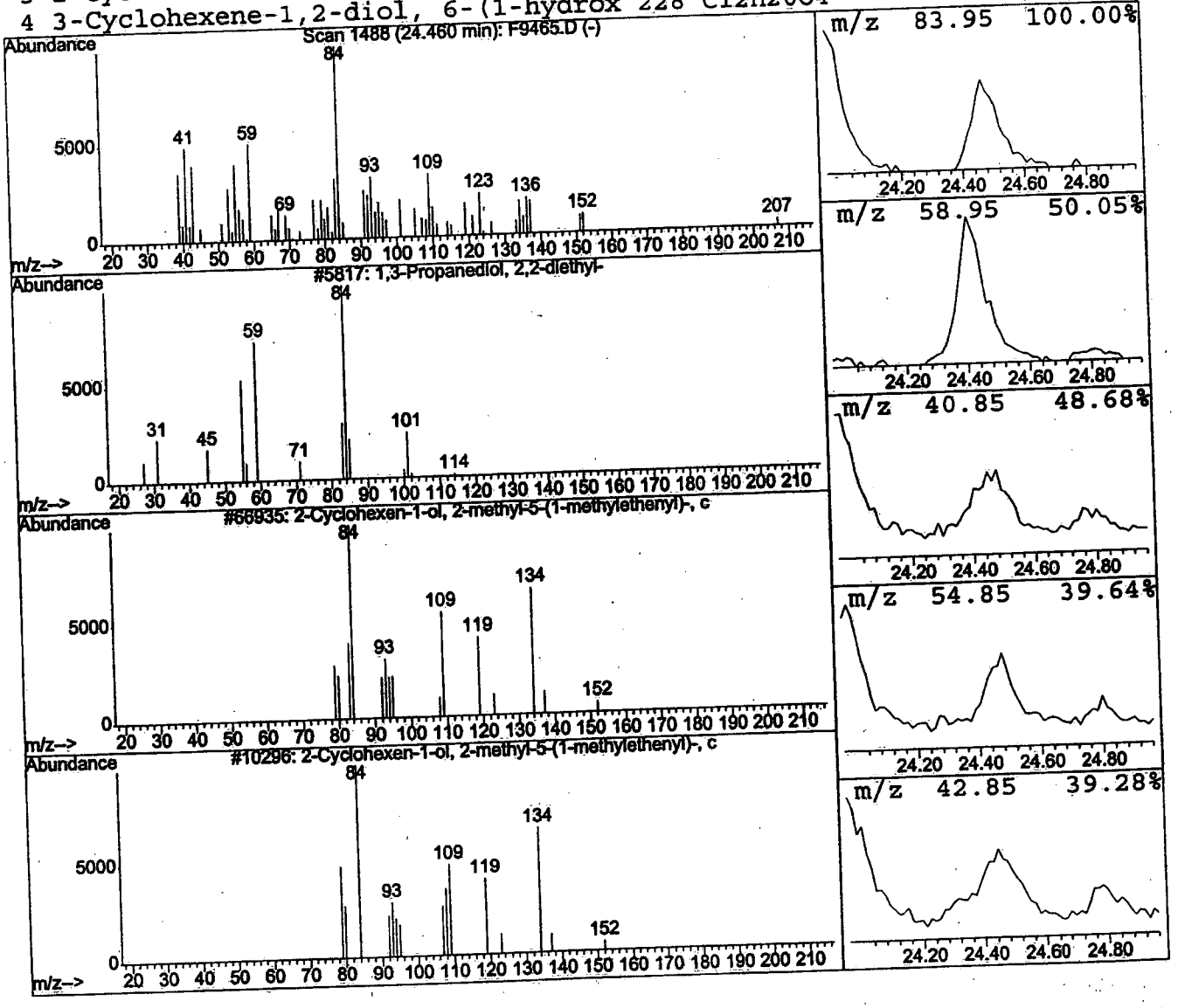
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 13 Unknown aromatic — Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.46	16.72 UG	2960360	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3-Propanediol, 2,2-diethyl-	132	C7H16O2	000115-76-4	43
2	2-Cyclohexen-1-ol, 2-methyl-5-(1-me	152	C10H16O	001197-06-4	38
3	2-Cyclohexen-1-ol, 2-methyl-5-(1-me	152	C10H16O	001197-06-4	25
4	3-Cyclohexene-1,2-diol, 6-(1-hydrox	228	C12H20O4	106929-43-5	25



000221

1257

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

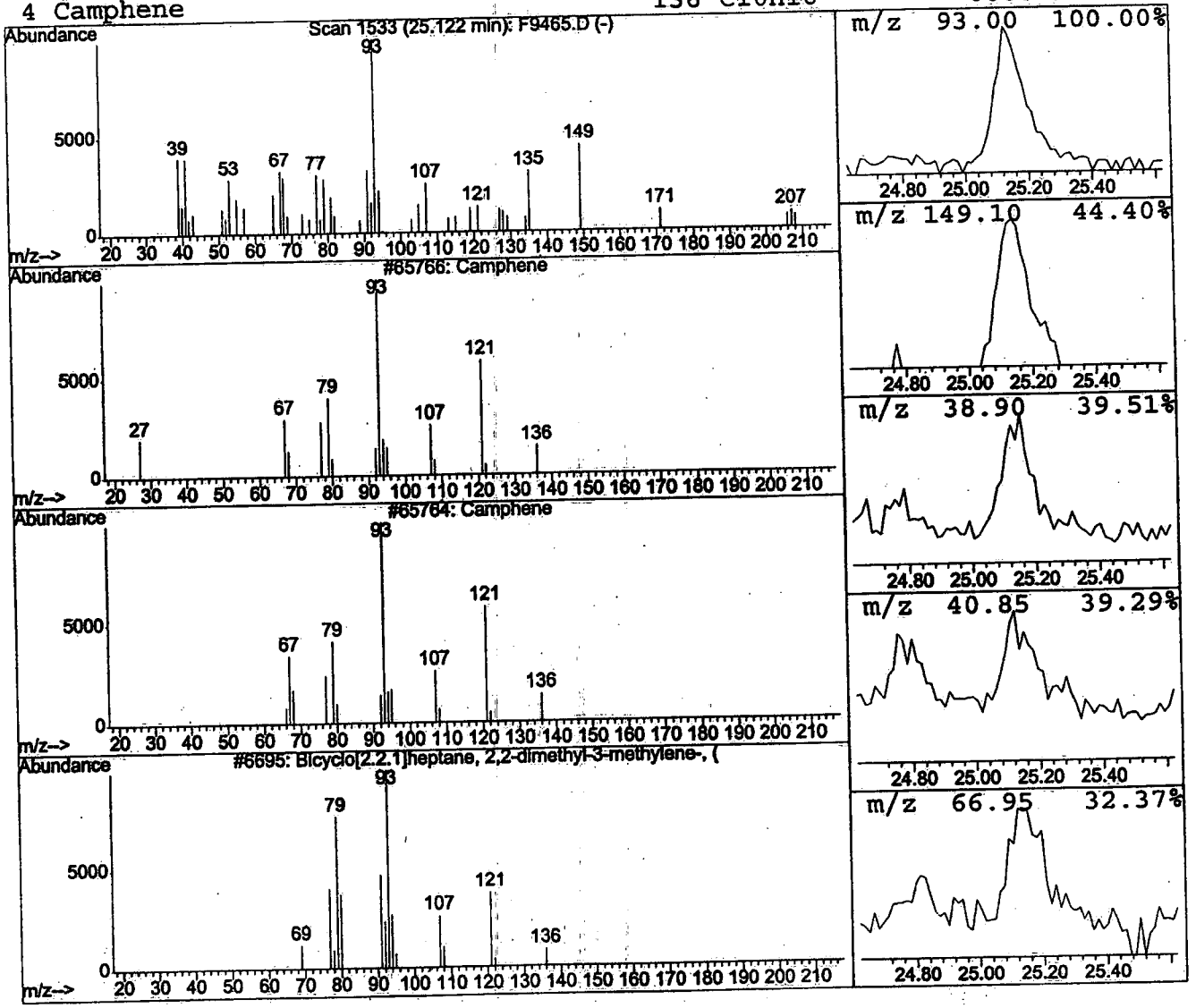
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 14 Unknown aromatic — Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.12	8.65 UG	1530840	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Camphene	136	C10H16	000079-92-5	37
2	Camphene	136	C10H16	000079-92-5	37
3	Bicyclo[2.2.1]heptane, 2,2-dimethyl	136	C10H16	005794-03-6	37
4	Camphene	136	C10H16	000079-92-5	37



1258

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9465.D
Acq On : 30 Mar 2001 3:57
Sample : S-21,1922-005,M,0.042g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

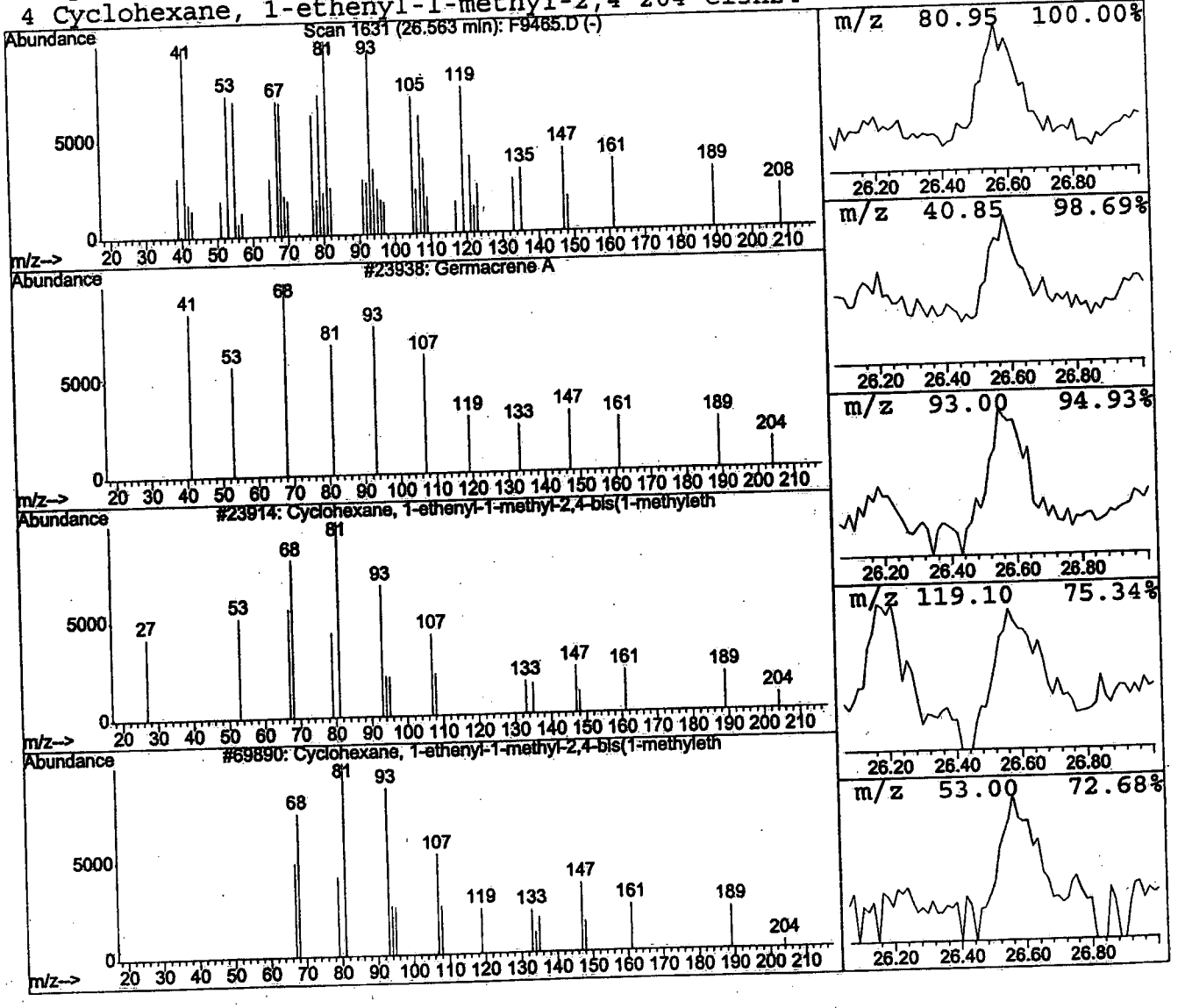
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 15 Unknown hydrocarbon Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.56	7.90 UG	1398100	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Germacrene A	204	C15H24	028387-44-2	64
2	Cyclohexane, 1-ethenyl-1-methyl-2,4	204	C15H24	000515-13-9	52
3	Cyclohexane, 1-ethenyl-1-methyl-2,4	204	C15H24	000515-13-9	46
4	Cyclohexane, 1-ethenyl-1-methyl-2,4	204	C15H24	000515-13-9	43



1259

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: rteint.p
Quant Time: Mar 30 10:47 2001

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	8.79	168	3330474	50.00	UG	0.06
31) 1,4-Difluorobenzene	9.95	114	3366122	50.00	UG	0.04
50) Chlorobenzene-d5	14.81	117	2422533	50.00	UG	0.05
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	9.26	65	962100	28.91	UG	0.06
Spiked Amount 50.000	Range 27 - 176		Recovery = 57.82%			
41) Toluene-d8	12.37	98	1824978	29.49	UG	0.08
Spiked Amount 50.000	Range 20 - 158		Recovery = 58.98%			
59) Bromofluorobenzene	16.90	95	1231331	23.50	UG	0.05
Spiked Amount 50.000	Range 28 - 148		Recovery = 47.00%			
Target Compounds						Qvalue
33) Trichloroethene	10.39	95	110679	3.47	UG	# 36
42) Toluene	12.46	92	280424	6.04	UG	95
45) Tetrachloroethene	13.42	166	129011	4.57	UG	# 100
51) Chlorobenzene	14.87	112	370585	5.80	UG	# 100
53) Ethylbenzene	15.05	91	422728	4.25	UG	100
54) m,p-Xylene	15.26	106	211461	5.94	UG	93
55) o-Xylene	15.96	106	90599	2.60	UG	93
70) 1,3-Dichlorobenzene	18.92	146	66105	1.42	UG	# 95
72) 1,4-Dichlorobenzene	19.06	146	342332	6.36	UG	98
74) 1,2-Dichlorobenzene	19.74	146	2003771	42.81	UG	# 67

(#) = qualifier out of range (m) = manual integration

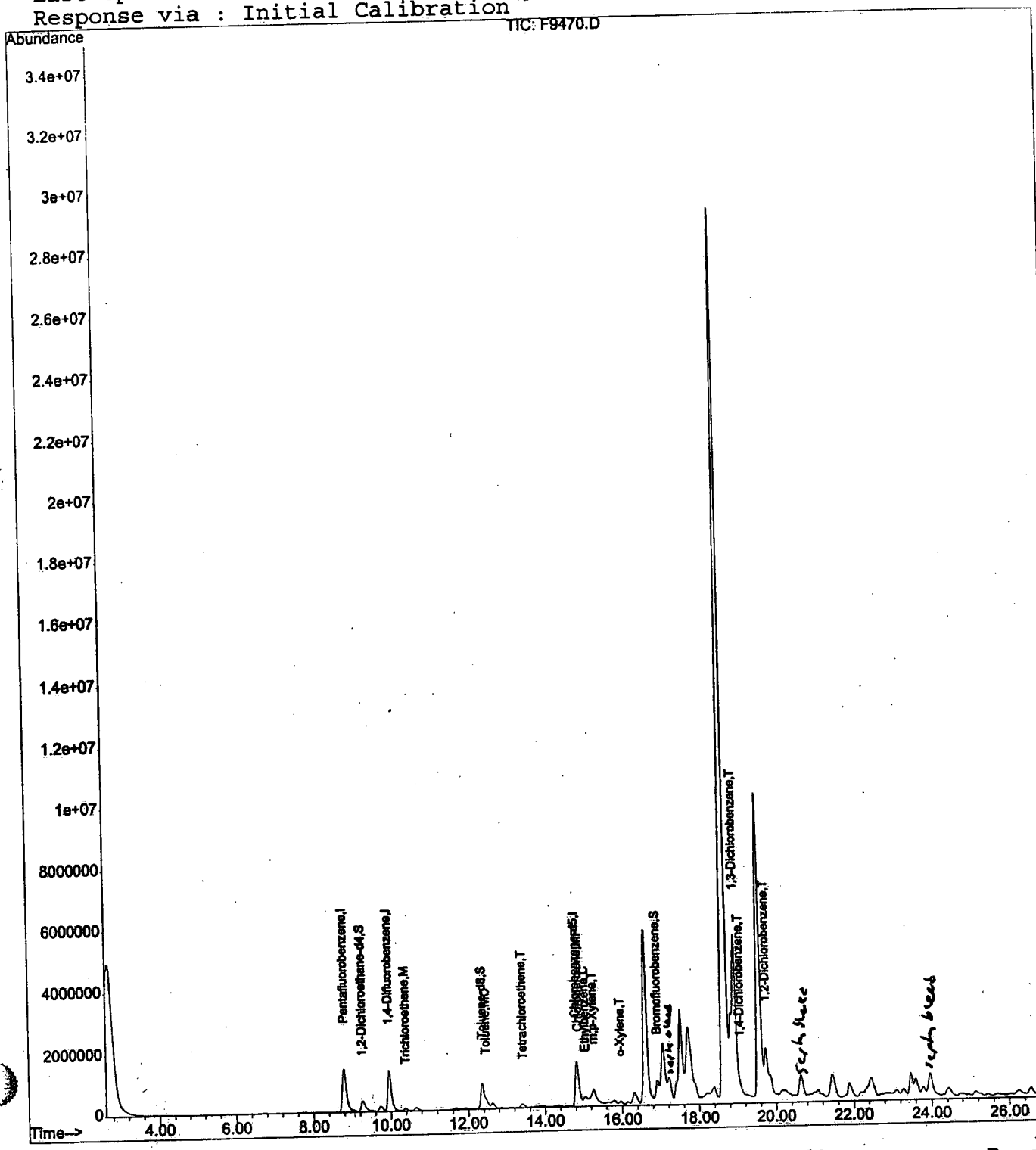
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: rteint.p
Quant Time: Mar 30 10:47 2001

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



000225

1261

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

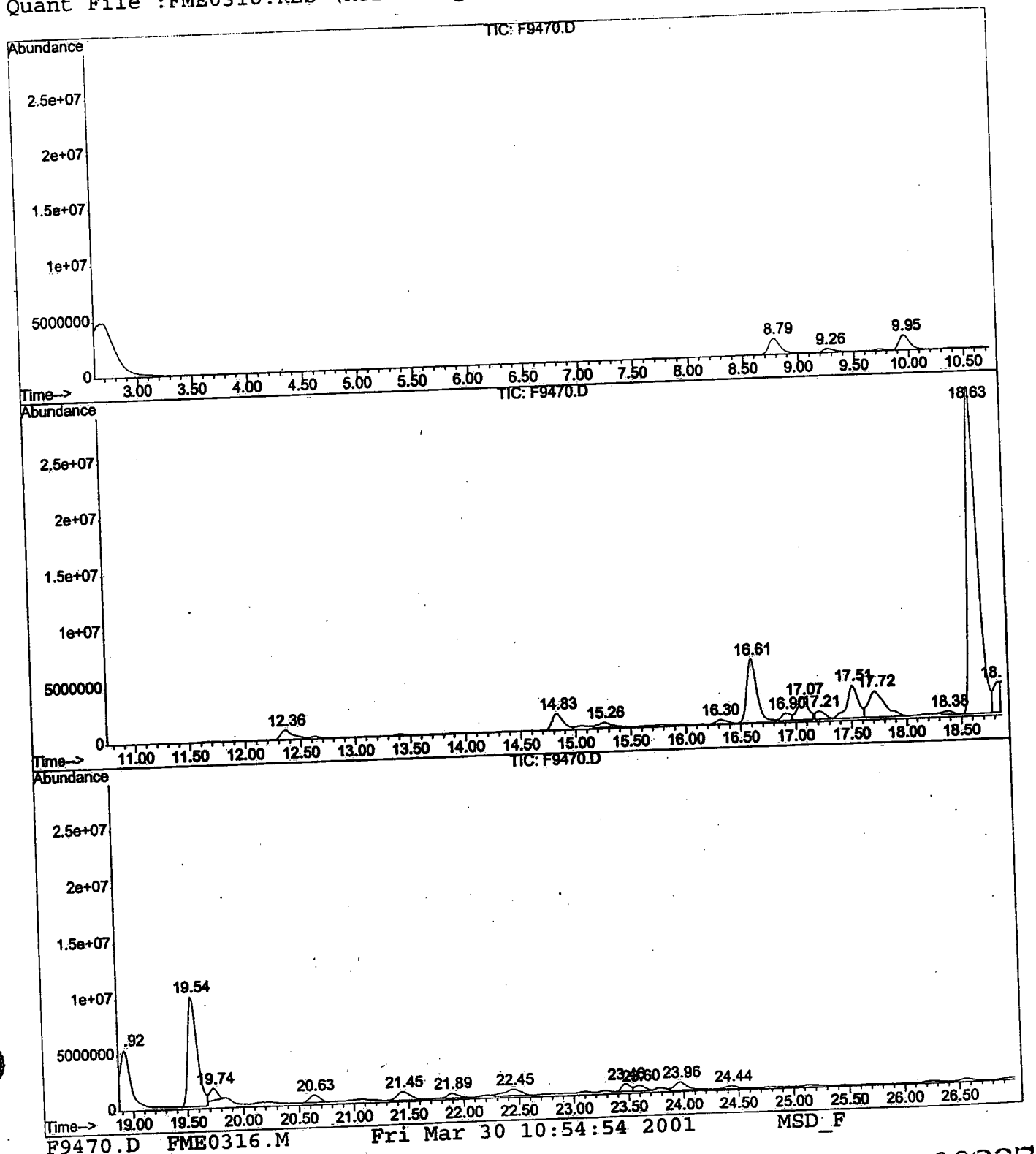
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	8.789	409	422	434	rBV	1440089	10515792	5.86%	2.231%
2	9.260	447	454	468	rBV2	354415	2630856	1.47%	0.558%
3	9.950	494	501	523	rVB	1353511	9173864	5.11%	1.947%
4	12.359	653	665	679	rBV3	841816	6991259	3.90%	1.483%
5	14.828	825	833	843	rBV2	1462493	10466618	5.83%	2.221%
6	15.256	855	862	875	rVB4	456346	3799702	2.12%	0.806%
7	16.300	927	933	944	rVB4	354341	2532605	1.41%	0.537%
8	16.610	944	954	968	rBV	5644199	36197740	20.17%	7.681%
9	16.904	968	974	978	rVV2	677725	3962292	2.21%	0.841%
10	17.066	978	985	991	rVV2	1871048	13002765	7.25%	2.759%
11	17.214	992	995	1003	rVV4	726683	4114747	2.29%	0.873%
12	17.509	1003	1015	1022	rVV	2920109	20896202	11.64%	4.434%
13	17.716	1022	1029	1050	rVB9	2318624	23570303	13.13%	5.001%
14	18.379	1070	1074	1082	rVB6	323232	1891034	1.05%	0.401%
15	18.629	1083	1091	1101	rBV	28979315	179453798	100.00%	38.079%
16	18.836	1101	1105	1106	rVV2	2711728	11059493	6.16%	2.347%
17	18.925	1107	1111	1131	rVB	5209398	32058232	17.86%	6.803%
18	19.544	1145	1153	1162	rBV	9902398	57977637	32.31%	12.302%
19	19.736	1162	1166	1172	rVB	968345	5198471	2.90%	1.103%
20	20.635	1219	1227	1236	rVB	665842	4514477	2.52%	0.958%
21	21.445	1273	1282	1297	rVB3	753936	6466633	3.60%	1.372%
22	21.887	1306	1312	1325	rVB3	458547	3052941	1.70%	0.648%
23	22.447	1338	1350	1361	rVB3	593105	6373556	3.55%	1.352%
24	23.463	1414	1419	1424	rVV4	699591	4016688	2.24%	0.852%
25	23.596	1424	1428	1436	rVV7	521319	3401105	1.90%	0.722%
26	23.965	1446	1453	1473	rVB3	741392	5835636	3.25%	1.238%
27	24.436	1478	1485	1498	rVB6	261753	2113511	1.18%	0.448%

Sum of corrected areas: 471267957

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Operator : GREGG
Acquired : 30 Mar 2001 6:44 using AcqMethod VOAF
Instrument : 5970 - In
Sample Name: S-22,1922-006,M,0.019g
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,2
Vial Number: 38
Quant File :FME0316.RES (RTE Integrator)



000227

1763

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

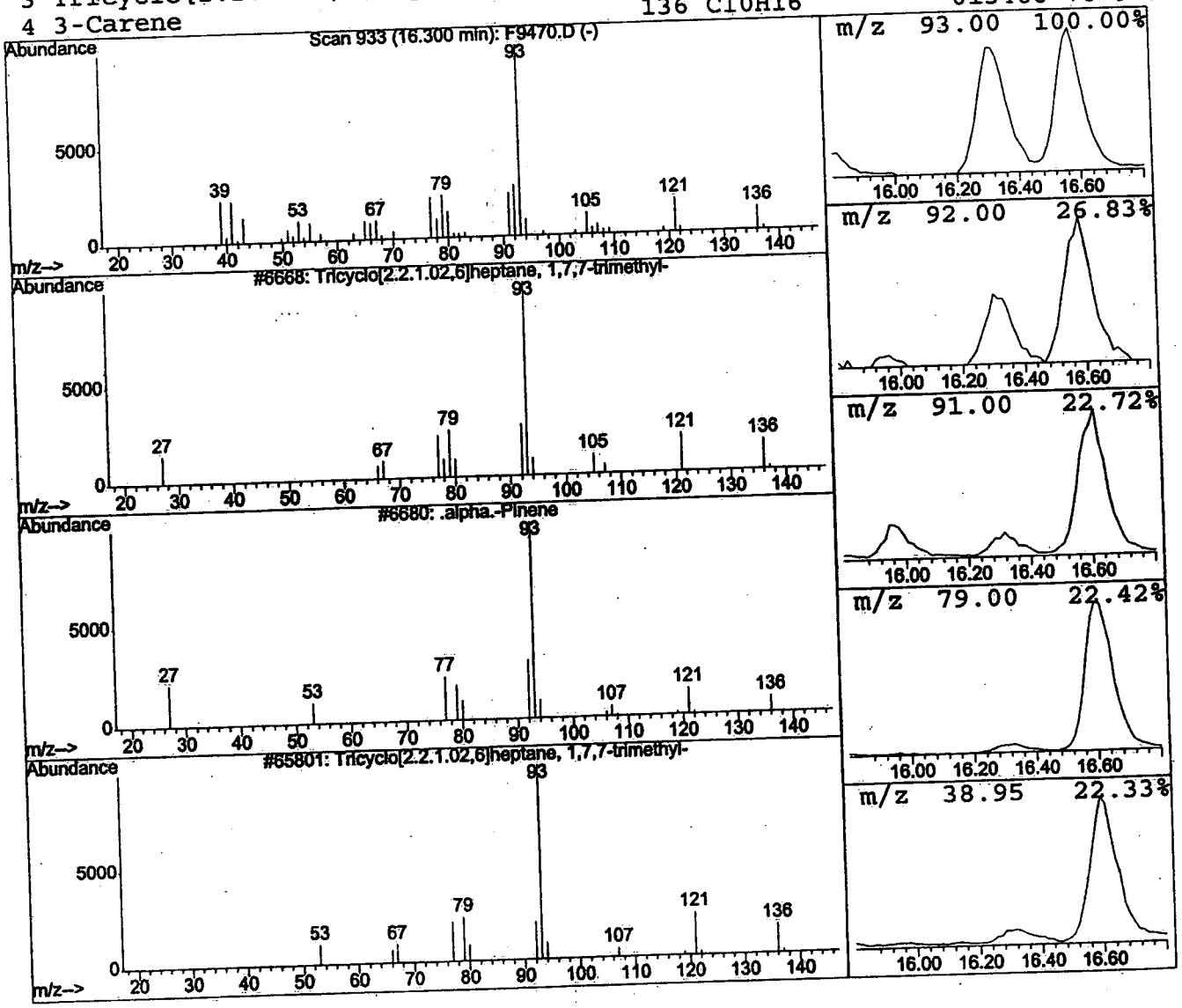
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Unknown aromatic — Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.30	12.10 UG	2532610	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tricyclo[2.2.1.02,6]heptane, 1,7,7-	136	C10H16	000508-32-7	96
2	.alpha.-Pinene	136	C10H16	000080-56-8	95
3	Tricyclo[2.2.1.02,6]heptane, 1,7,7-	136	C10H16	000508-32-7	95
4	3-Carene	136	C10H16	013466-78-9	93



1264

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

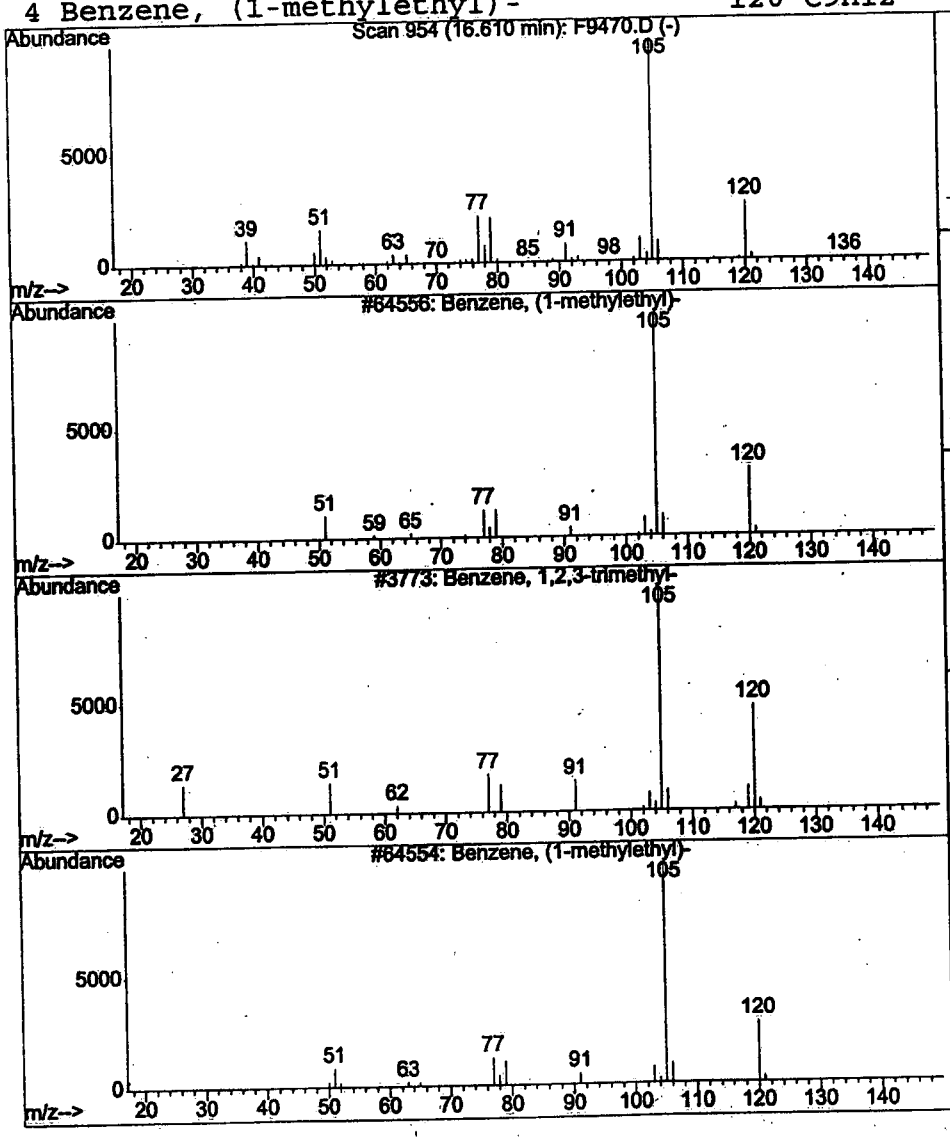
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

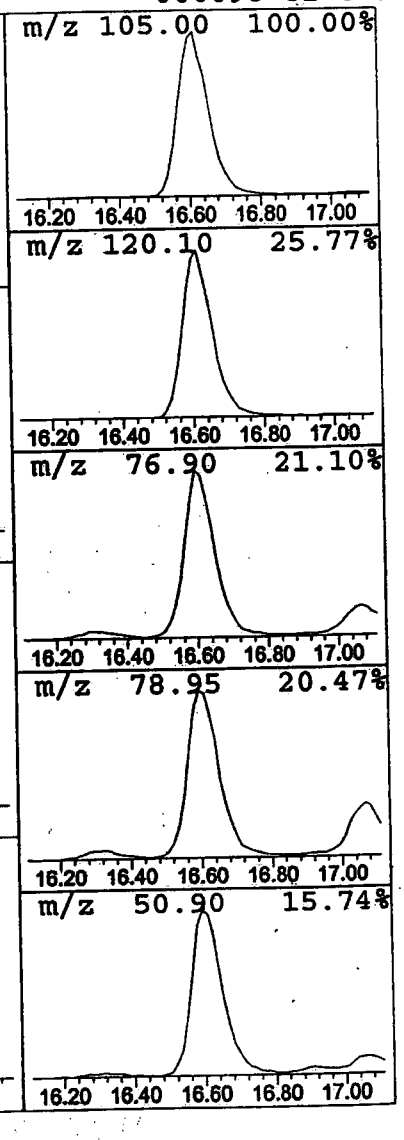
****

Peak Number 2 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.61	172.92 UG	36197700	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (1-methylethyl)-	120	C9H12	000098-82-8	91
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	91
3	Benzene, (1-methylethyl)-	120	C9H12	000098-82-8	90
4	Benzene, (1-methylethyl)-	120	C9H12	000098-82-8	90





000229

1265

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

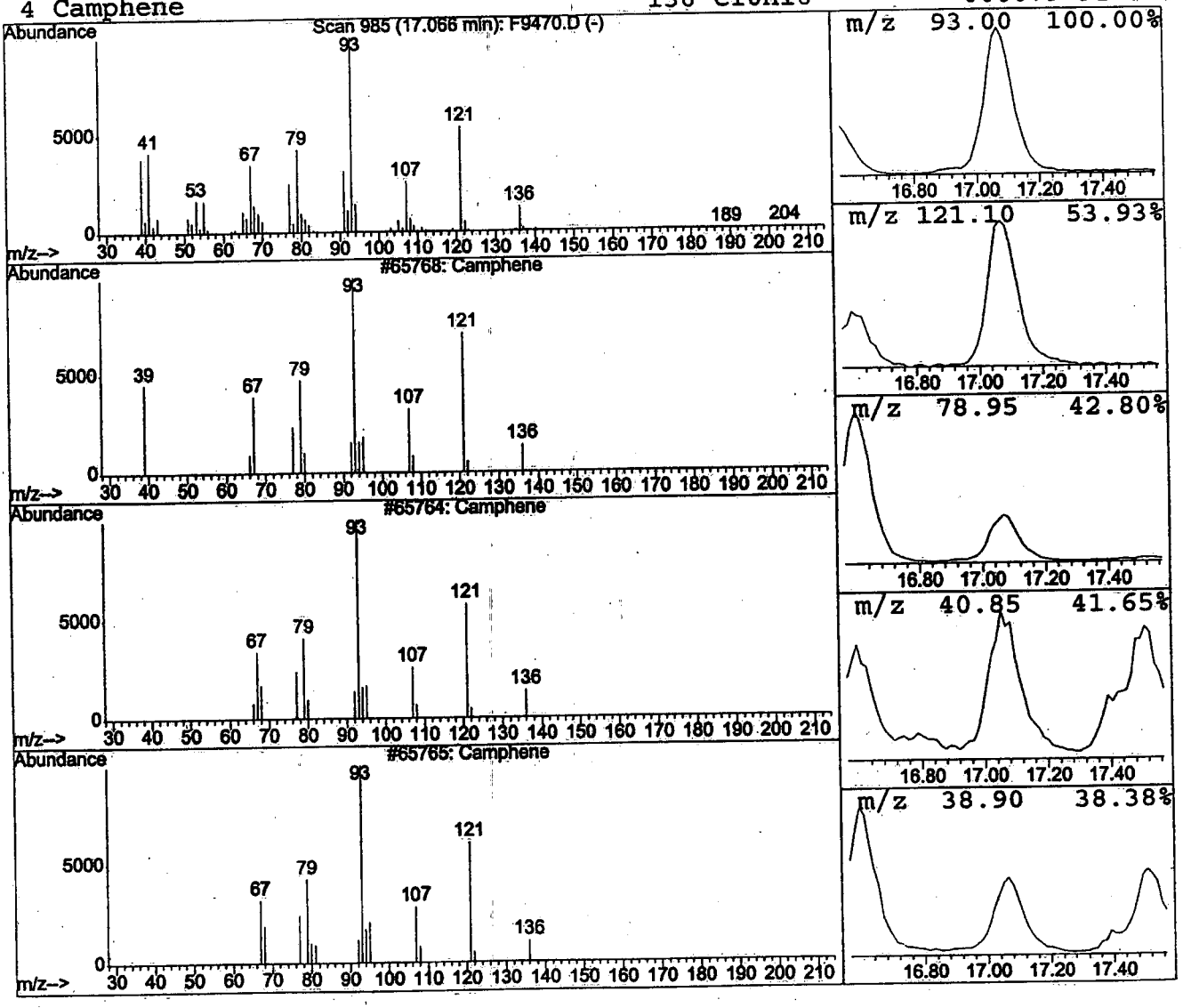
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Unknown aromatic Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.07	62.12 UG	13002800	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Camphene	136	C10H16	000079-92-5	98
2	Camphene	136	C10H16	000079-92-5	97
3	Camphene	136	C10H16	000079-92-5	97
4	Camphene	136	C10H16	000079-92-5	97



1266

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

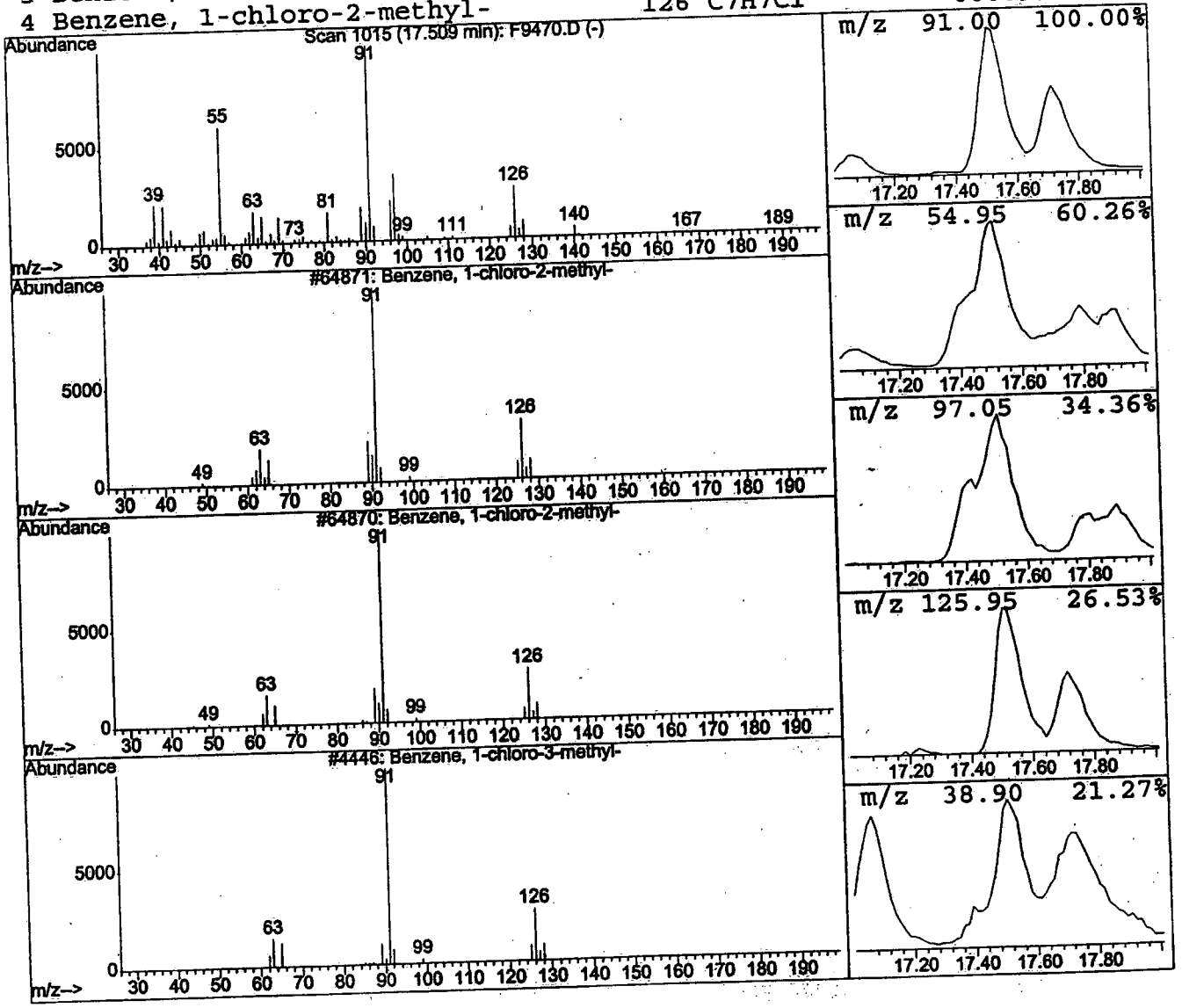
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Substituted benzene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.51	99.82 UG	20896200	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	95
2	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	95
3	Benzene, 1-chloro-3-methyl-	126	C7H7Cl	000108-41-8	55
4	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	55



000231

1267

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

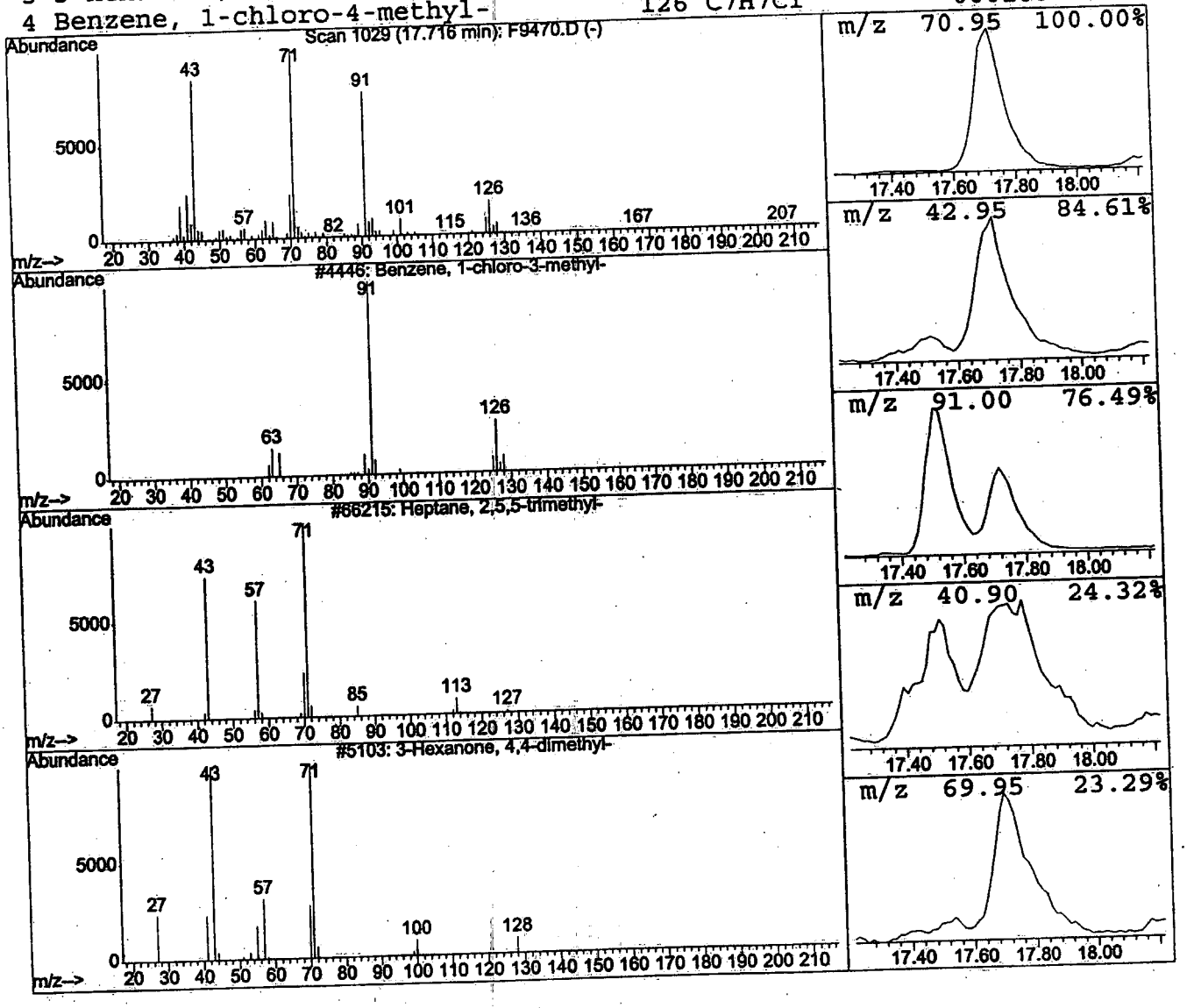
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 5 Substituted benzene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.72	112.60 UG	23570300	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-3-methyl-	126	C7H7Cl	000108-41-8	64
2	Heptane, 2,5,5-trimethyl-	142	C10H22	001189-99-7	47
3	3-Hexanone, 4,4-dimethyl-	128	C8H16O	019550-14-2	47
4	Benzene, 1-chloro-4-methyl-	126	C7H7Cl	000106-43-4	43



000232

1268

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

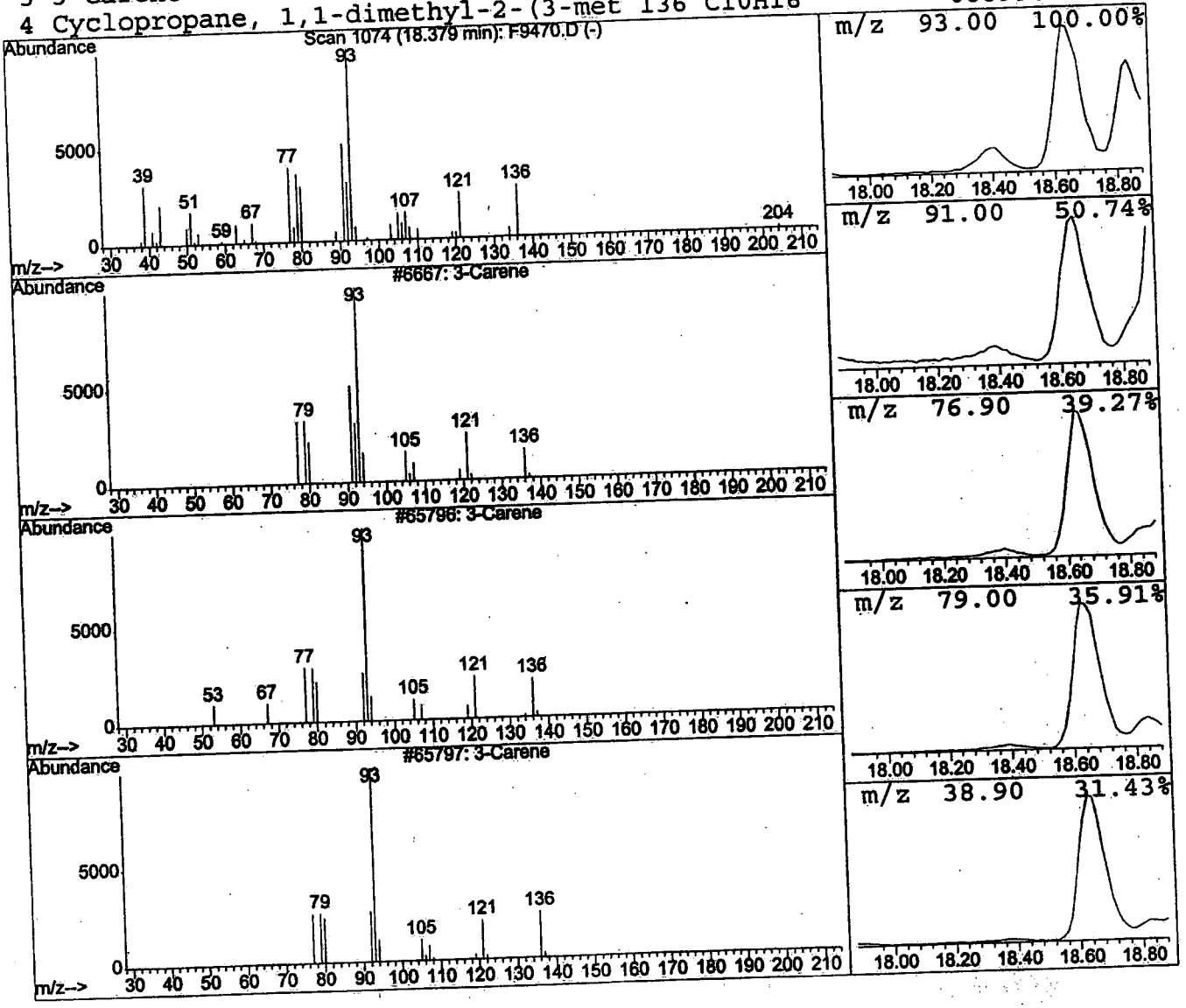
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 6 Unknown aromatic — Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.38	9.03 UG	1891030	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Carene	136	C10H16	013466-78-9	91
2	3-Carene	136	C10H16	013466-78-9	91
3	3-Carene	136	C10H16	013466-78-9	87
4	Cyclopropane, 1,1-dimethyl-2-(3-met	136	C10H16	068998-21-0	87



1269

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

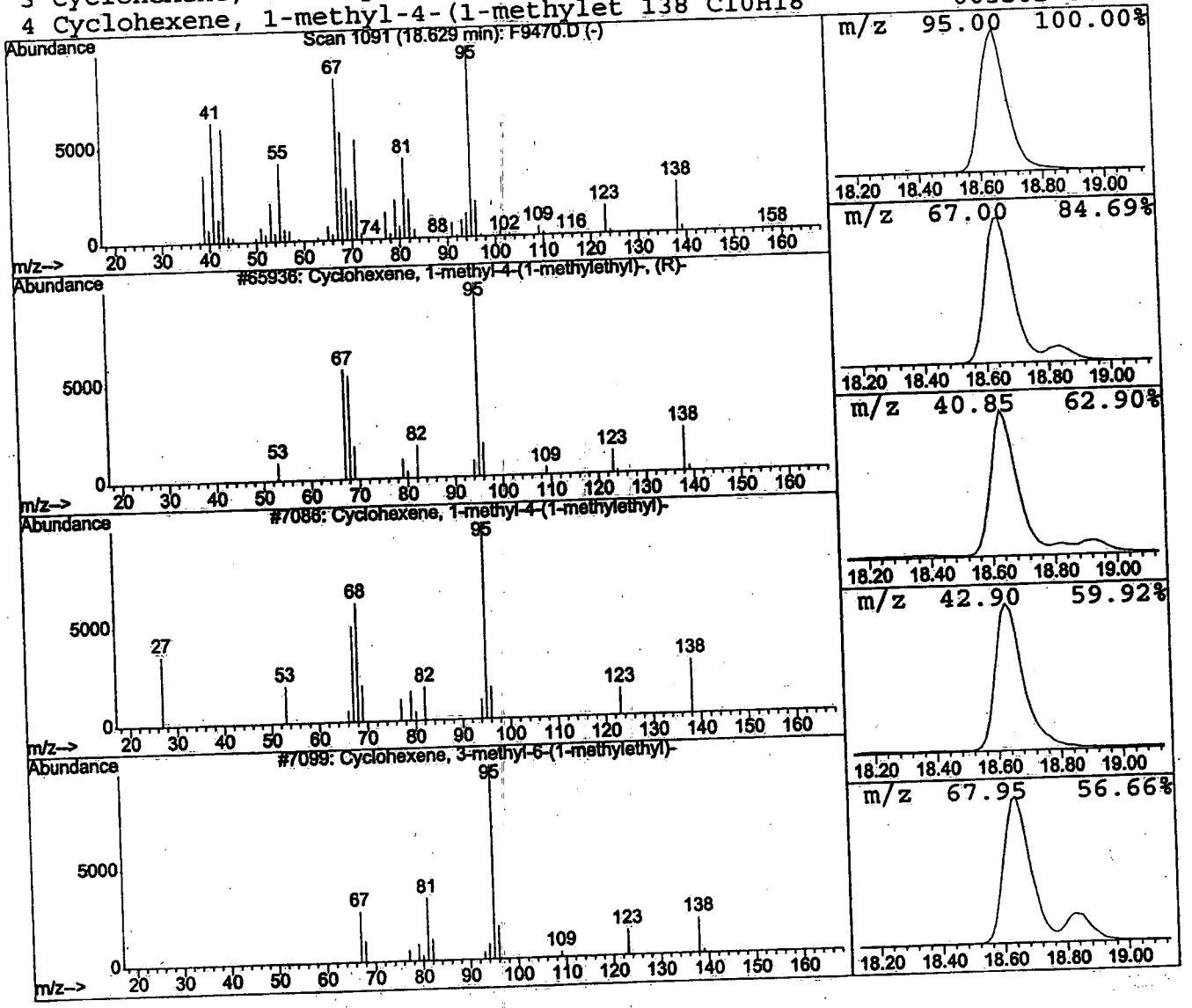
****

Peak Number 7 Unknown aromatic

Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.63	857.27 UG	179454000	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 1-methyl-4-(1-methylet	138	C10H18	001195-31-9	94
2	Cyclohexene, 1-methyl-4-(1-methylet	138	C10H18	005502-88-5	89
3	Cyclohexene, 3-methyl-6-(1-methylet	138	C10H18	005256-65-5	81
4	Cyclohexene, 1-methyl-4-(1-methylet	138	C10H18	005502-88-5	64



1270

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

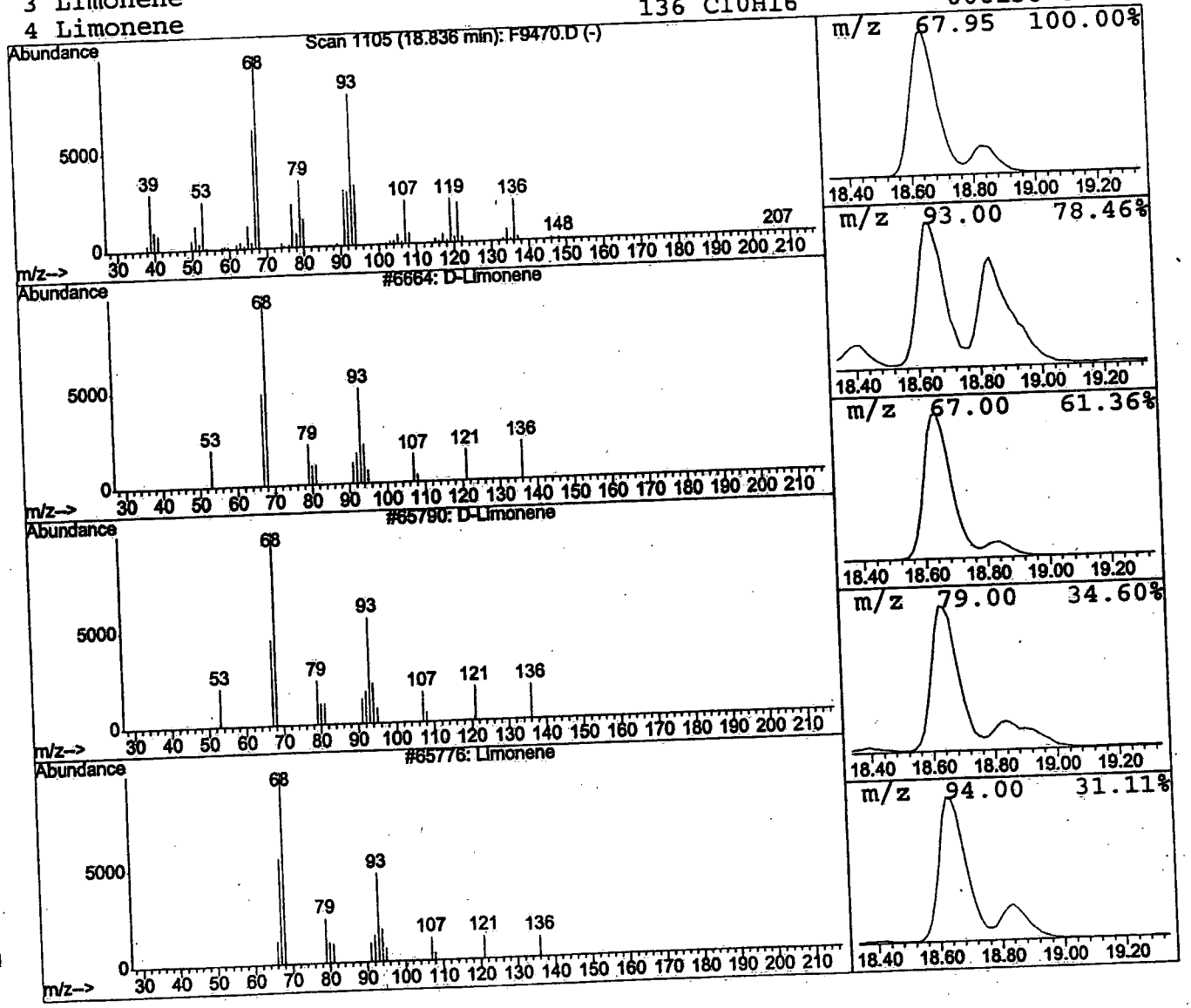
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 8 Unknown aromatic Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.84	52.83 UG	11059500	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Limonene	136	C10H16	005989-27-5	94
2	D-Limonene	136	C10H16	005989-27-5	93
3	Limonene	136	C10H16	000138-86-3	93
4	Limonene	136	C10H16	000138-86-3	93



1271

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

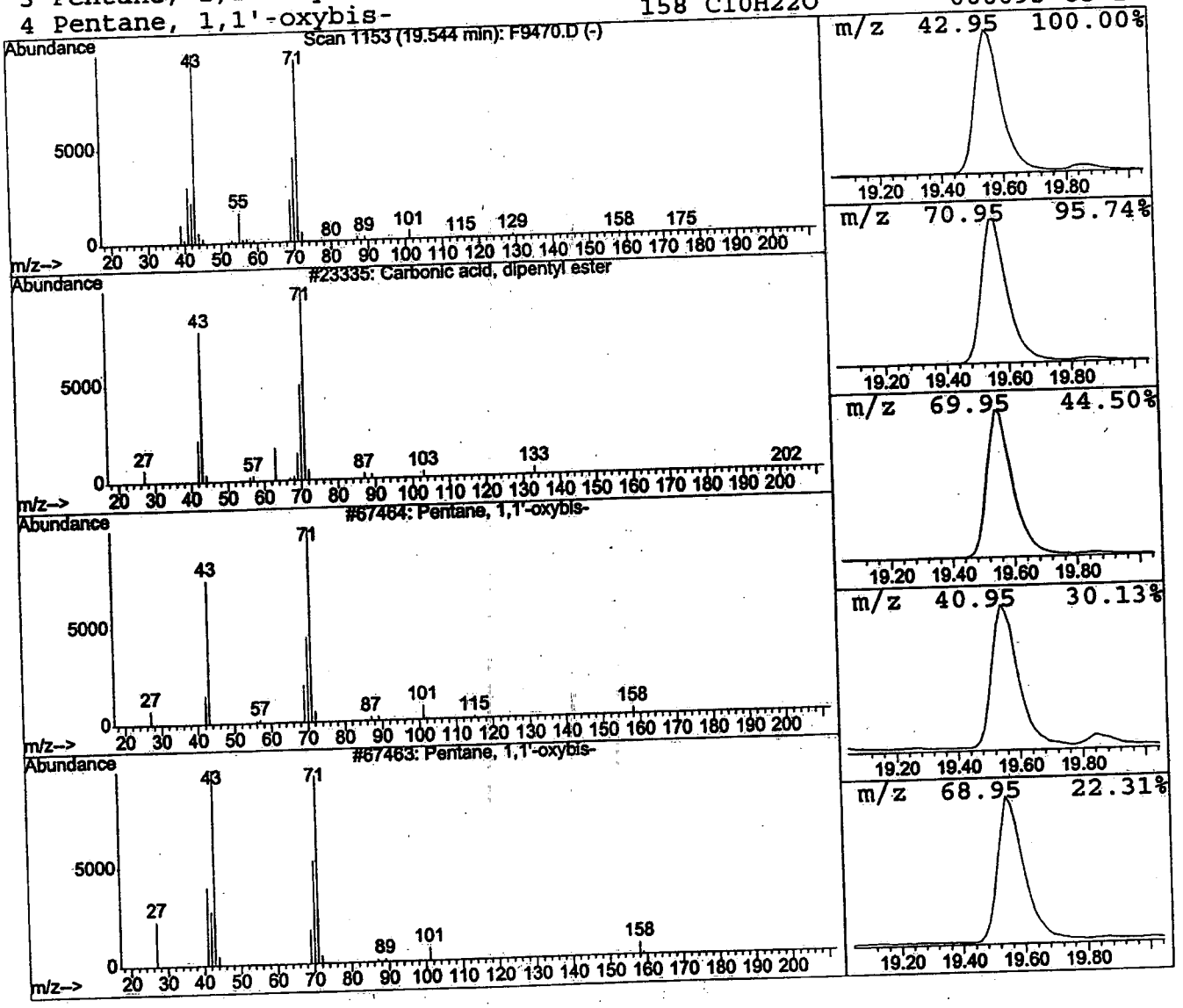
****

Peak Number 9 Unknown aliphatic

Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.54	276.96 UG	57977600	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbonic acid, dipentyl ester	202	C11H22O3	002050-94-4	83
2	Pentane, 1,1'-oxybis-	158	C10H22O	000693-65-2	83
3	Pentane, 1,1'-oxybis-	158	C10H22O	000693-65-2	83
4	Pentane, 1,1'-oxybis-	158	C10H22O	000693-65-2	78



000236

1272

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

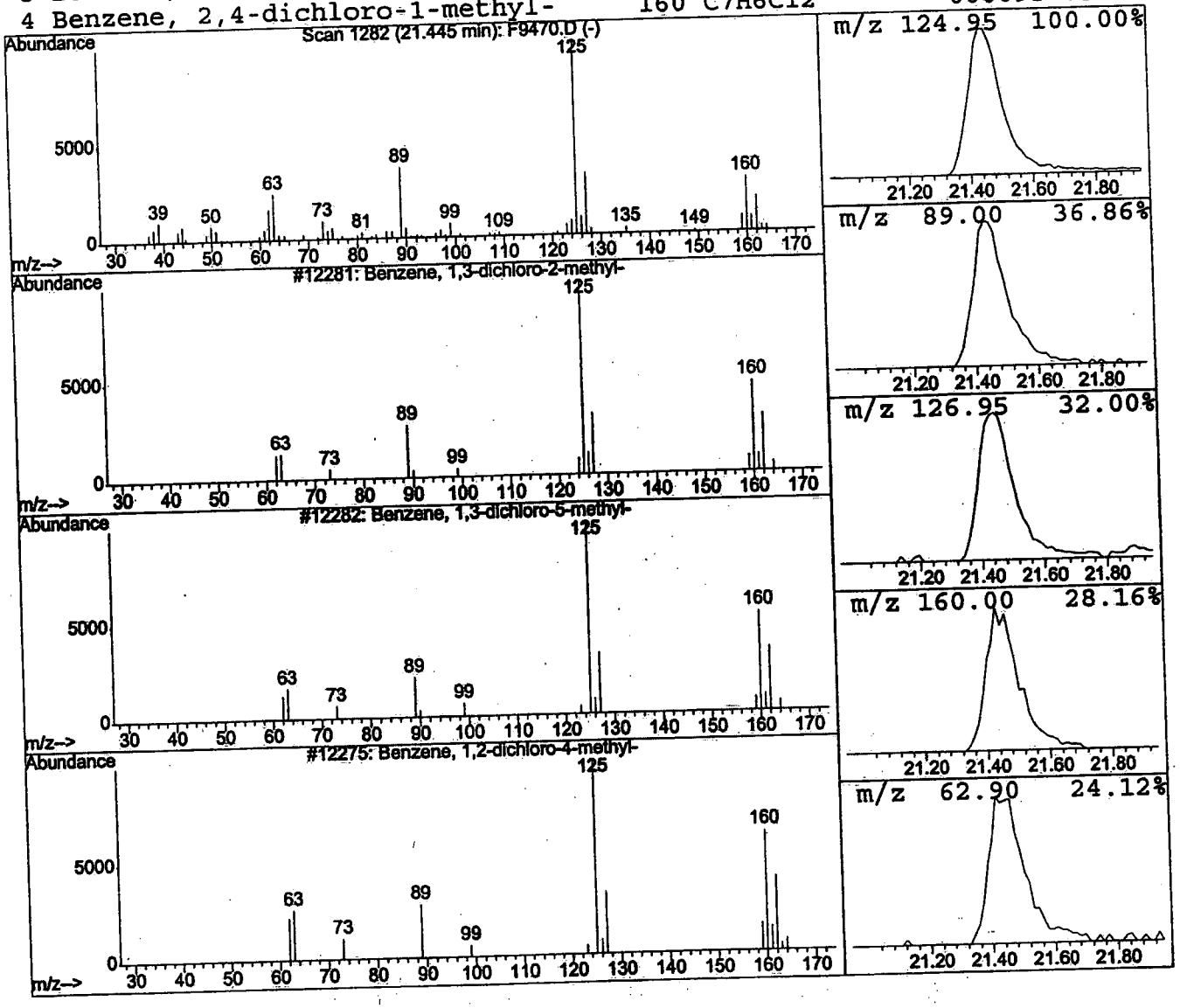
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 10 Substituted benzene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.45	30.89 UG	6466630	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3-dichloro-2-methyl-	160	C7H6Cl2	000118-69-4	97
2	Benzene, 1,3-dichloro-5-methyl-	160	C7H6Cl2	025186-47-4	96
3	Benzene, 1,2-dichloro-4-methyl-	160	C7H6Cl2	000095-75-0	96
4	Benzene, 2,4-dichloro-1-methyl-	160	C7H6Cl2	000095-73-8	96



000237

1273

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

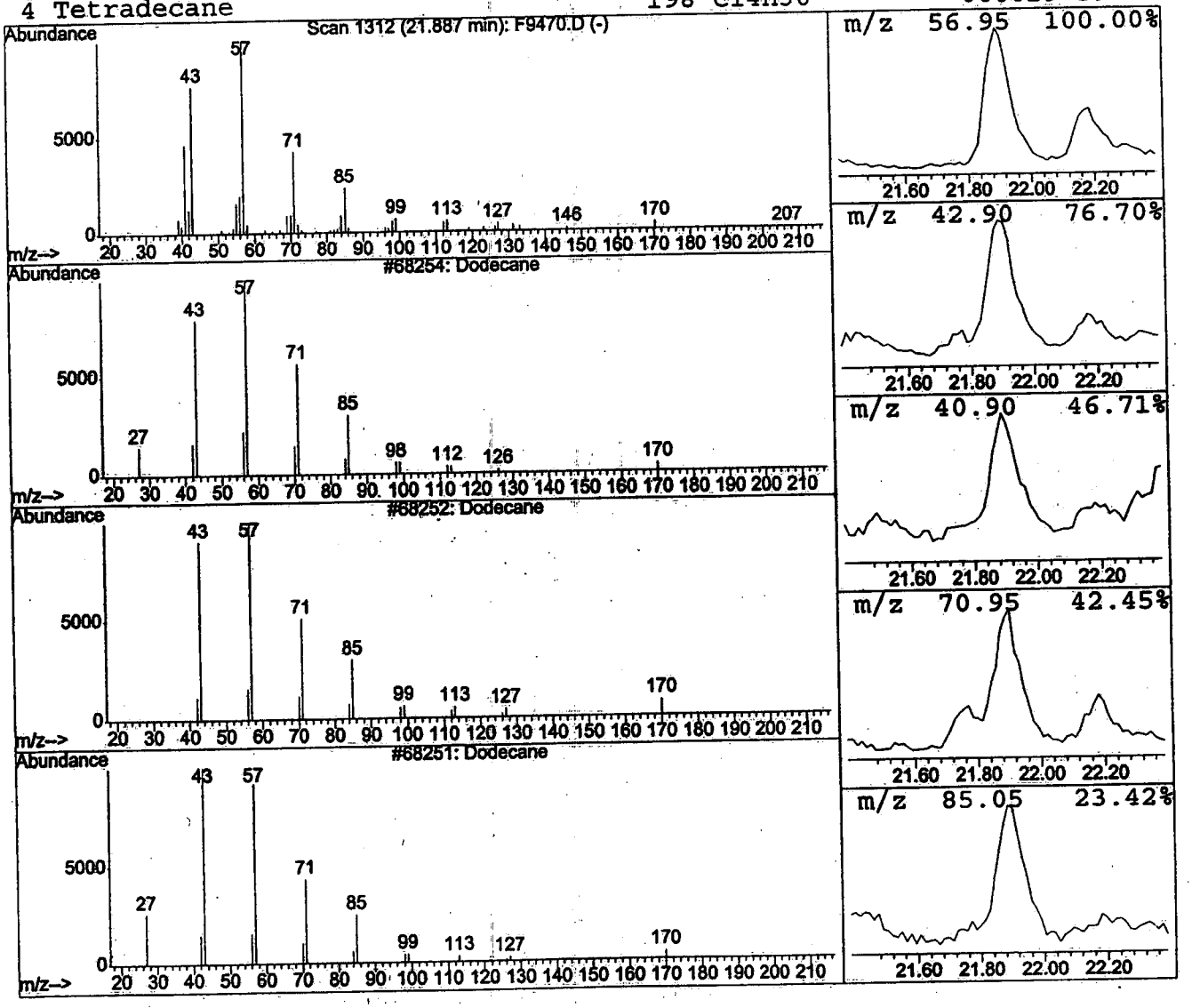
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 11 Unknown alkane — Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.89	14.58 UG	3052940	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane	170	C12H26	000112-40-3	93
2	Dodecane	170	C12H26	000112-40-3	91
3	Dodecane	170	C12H26	000112-40-3	81
4	Tetradecane	198	C14H30	000629-59-4	80



1274

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

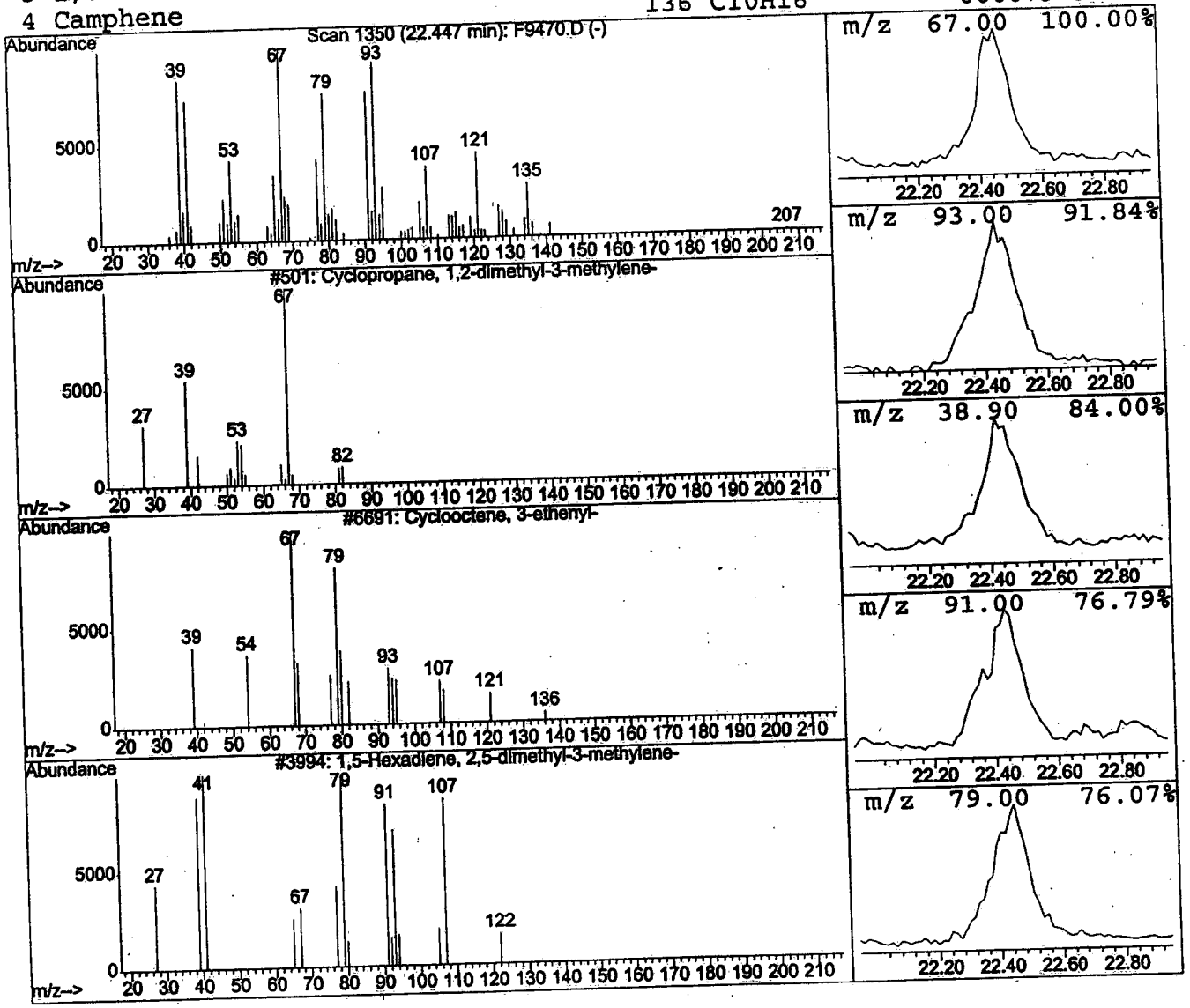
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 12 Unknown aromatic — Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.45	30.45 UG	6373560	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopropane, 1,2-dimethyl-3-methyl	82	C6H10	062338-02-7	50
2	Cyclooctene, 3-ethenyl-	136	C10H16	002213-60-7	50
3	1,5-Hexadiene, 2,5-dimethyl-3-methy	122	C9H14	059131-13-4	47
4	Camphene	136	C10H16	000079-92-5	47



1275

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006;M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

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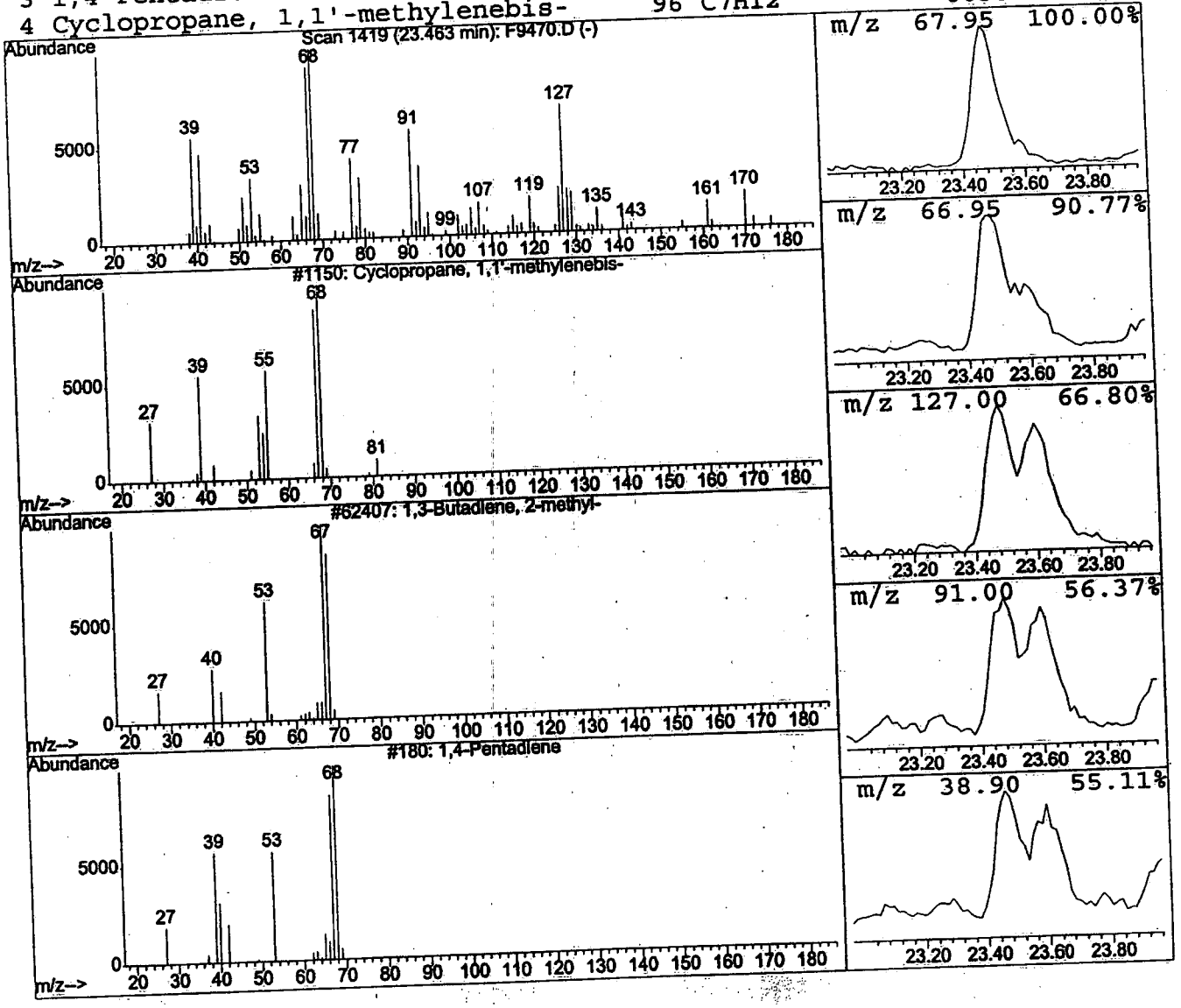
Peak Number 13 Unknown aromatic — Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.46	19.19 UG	4016690	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopropane, 1,1'-methylenebis-	96	C7H12	005685-47-2	35
2	1,3-Butadiene, 2-methyl-	68	C5H8	000078-79-5	35
3	1,4-Pentadiene	68	C5H8	000591-93-5	25
4	Cyclopropane, 1,1'-methylenebis-	96	C7H12	005685-47-2	25



000240

1276

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

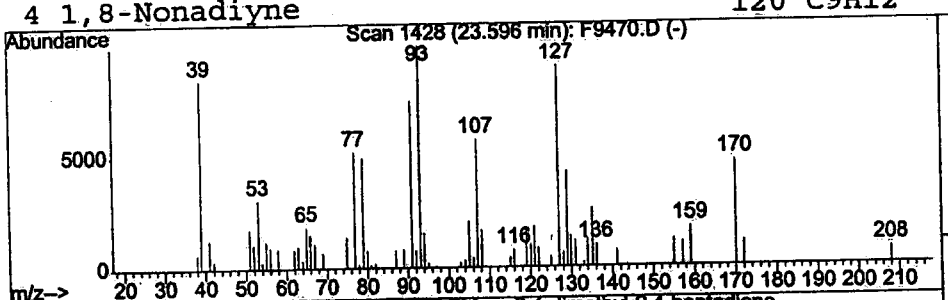
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

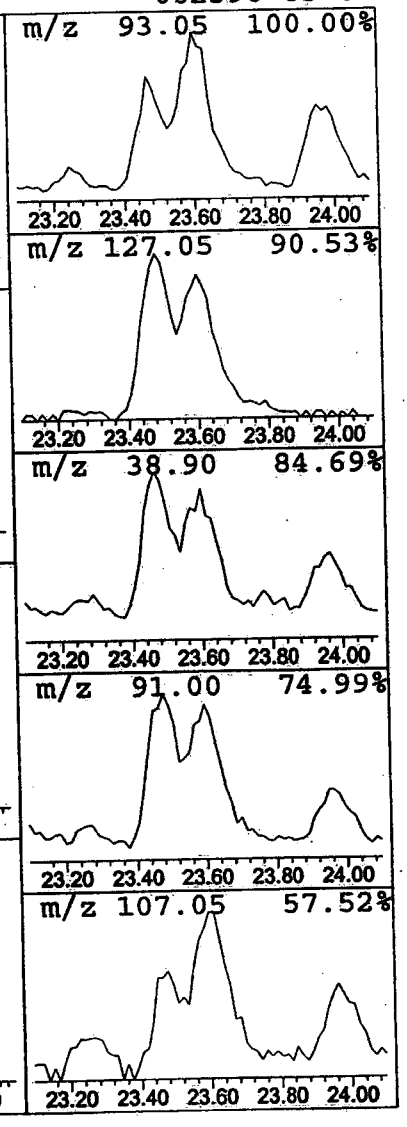
****

Peak Number 14 Unknown aromatic — Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.60	16.25 UG	3401110	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(2E,4E)-5-Chloro-3,4-dimethyl-2,4-h	158	C9H15Cl	000000-00-0	50
2	Acetoacetic acid, 3-thio-, benzyl e	208	C11H12O2S	020632-90-0	49
3	2,4,6-Trimethyl-1,3,6-heptatriene	136	C10H16	000000-00-0	33
4	1,8-Nonadiyne	120	C9H12	002396-65-8	23





000241

1277

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9470.D
Acq On : 30 Mar 2001 6:44
Sample : S-22,1922-006,M,0.019g
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 38
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

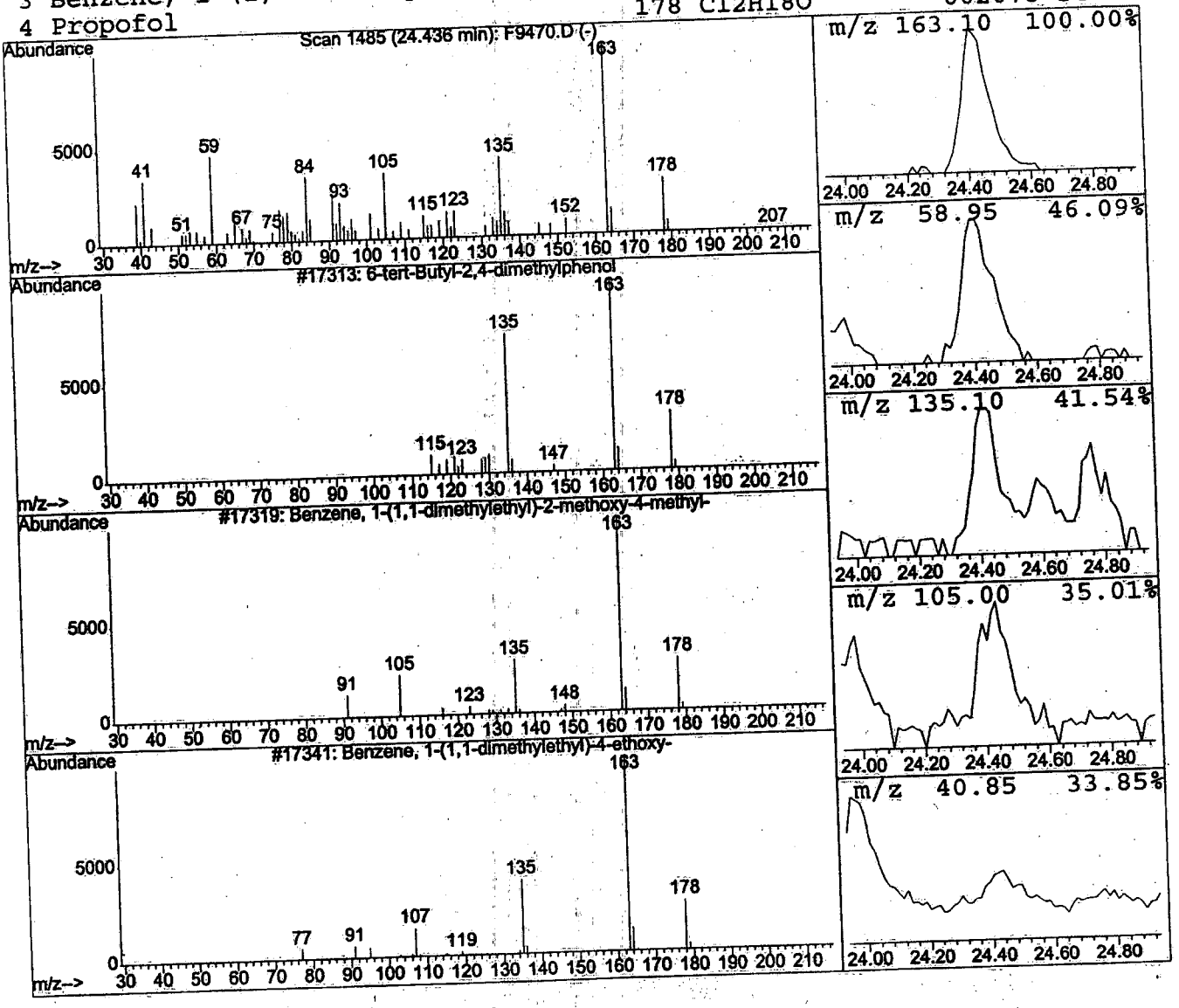
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 15 Substituted benzene Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.44	10.10 UG	2113510	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	6-tert-Butyl-2,4-dimethylphenol	178	C12H18O	001879-09-0	55
2	Benzene, 1-(1,1-dimethylethyl)-2-me	178	C12H18O	000088-40-4	49
3	Benzene, 1-(1,1-dimethylethyl)-4-et	178	C12H18O	017269-94-2	47
4	Propofol	178	C12H18O	002078-54-8	43



000242

1278

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-30-01\F9503.D
Acq On : 30 Mar 2001 23:47
Sample : S-23,1922-007,M,0.04g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
S Integration Params: rteint.p
Quant Time: Apr 2 11:07 2001

Vial: 16
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	8.77	168	3156583	50.00	UG	0.05
31) 1,4-Difluorobenzene	9.95	114	3289844	50.00	UG	0.04
50) Chlorobenzene-d5	14.83	117	2383587	50.00	UG	0.06
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	9.26	65	1844308	58.47	UG	0.06
Spiked Amount 50.000	Range 27 - 176		Recovery = 116.94%			
41) Toluene-d8	12.36	98	3651993	60.38	UG	0.07
Spiked Amount 50.000	Range 20 - 158		Recovery = 120.76%			
59) Bromofluorobenzene	16.91	95	2354915	45.69	UG	0.06
Spiked Amount 50.000	Range 28 - 148		Recovery = 91.38%			
Target Compounds						Qvalue
29) 1,2-Dichloroethane(EDC)	9.38	62	305450	7.49	UG	# 85
32) Benzene	9.33	78	274500	3.75	UG	100
33) Trichloroethene	10.38	95	639913	20.52	UG	93
42) Toluene	12.46	92	756179	16.68	UG	98

(#) = qualifier out of range (m) = manual integration

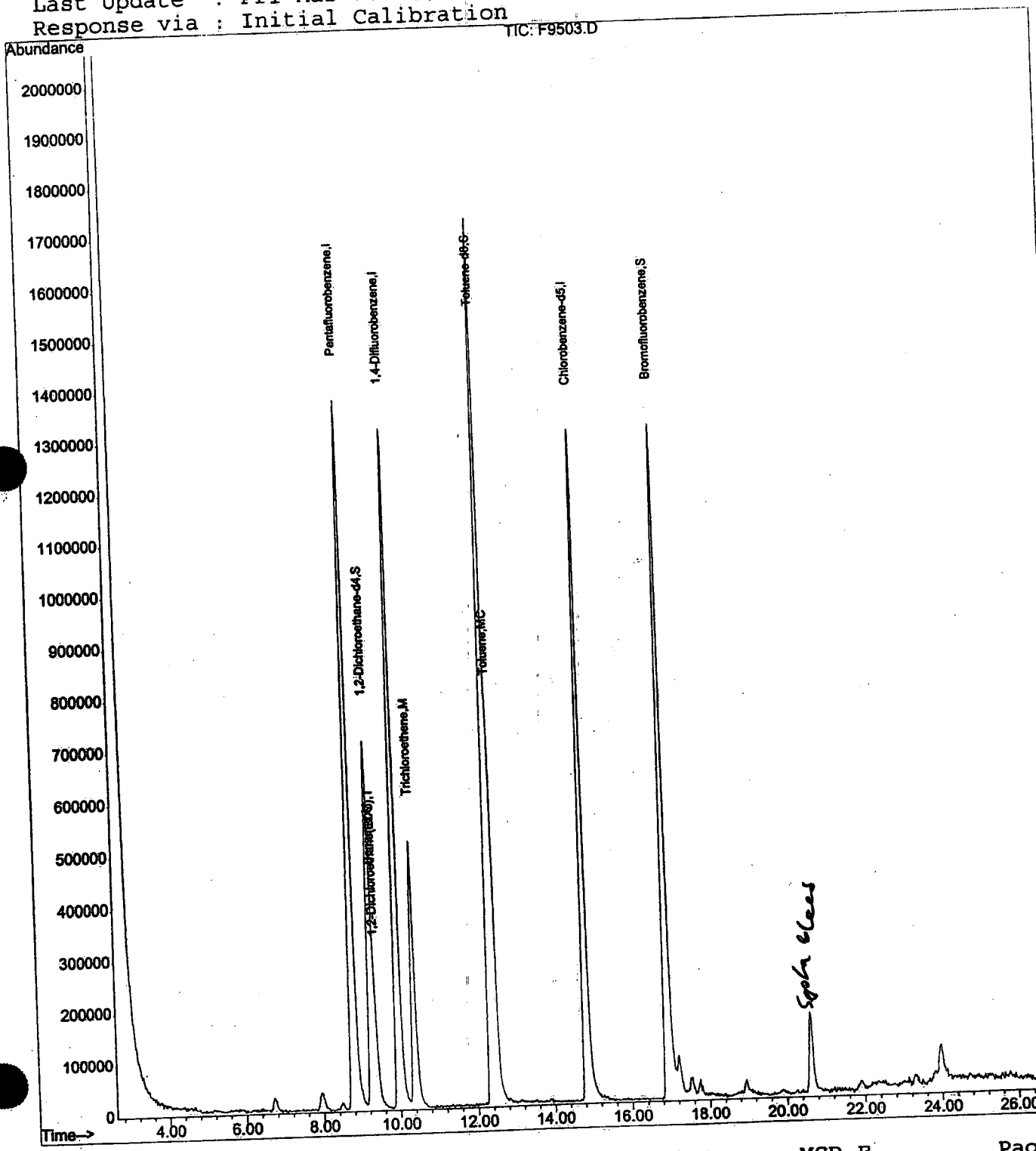
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-30-01\F9503.D
Acq On : 30 Mar 2001 23:47
Sample : S-23,1922-007,M,0.04g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
MS Integration Params: rteint.p
Quant Time: Apr 2 11:07 2001

Vial: 16
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

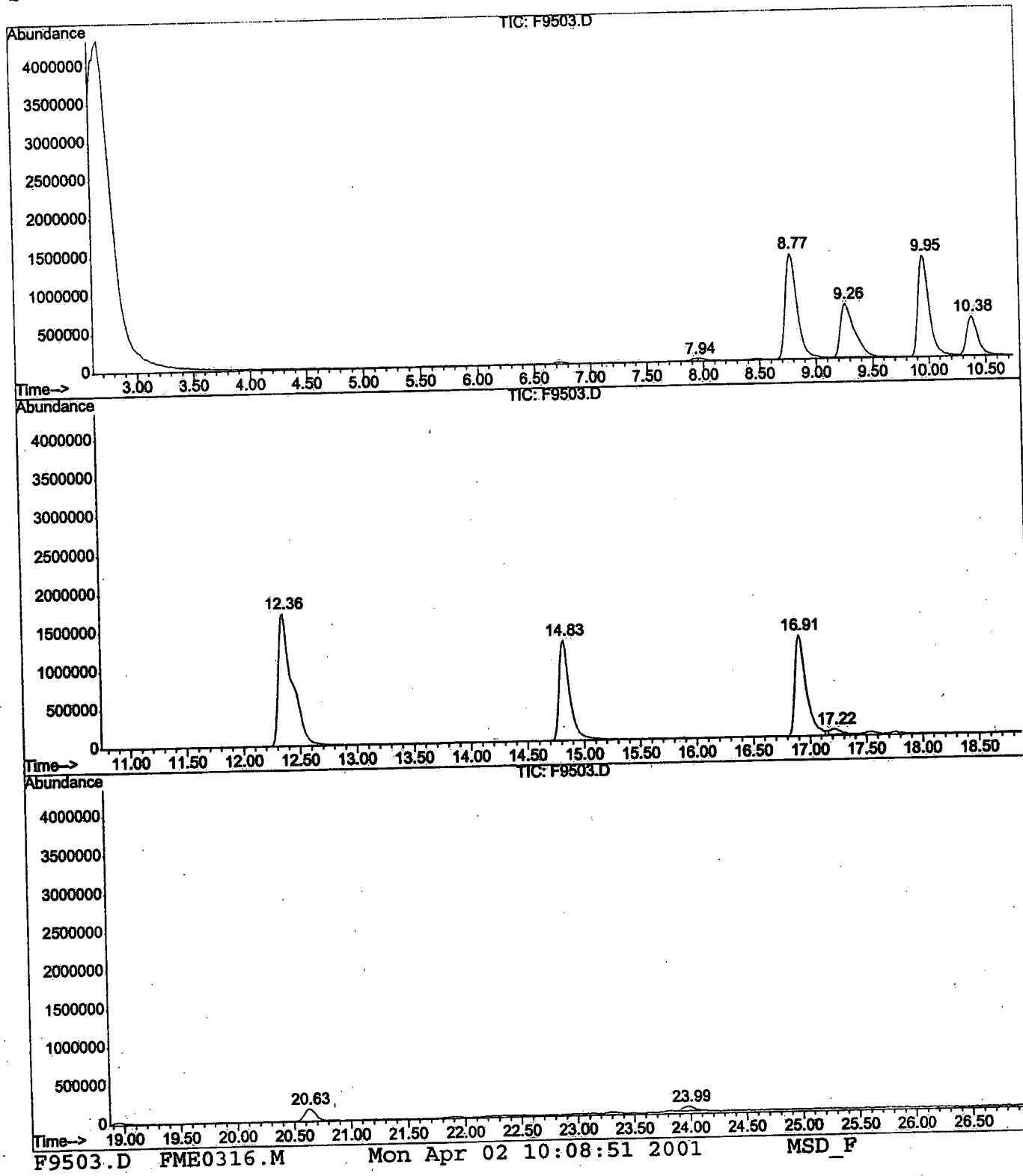
Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



1280

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\03-30-01\F9503.D
Operator : GREGG
Acquired : 30 Mar 2001 23:47 using AcqMethod VOAF
Instrument : 5970 - In
Sample Name: S-23,1922-007,M,0.04g
Misc Info : ENVTACT/ORBIS,03/28/01,03/28/01
Vial Number: 16
Quant File :FME0316.RES (RTE Integrator)



F9503.D FME0316.M Mon Apr 02 10:08:51 2001 MSD_F

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-30-01\F9502.D
Acq On : 30 Mar 2001 23:13
Sample : S-24,1922-008,M,0.035g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
Integration Params: rteint.p
Quant Time: Apr 2 11:01 2001

Vial: 15
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	8.79	168	3290515	50.00	UG	0.06
31) 1,4-Difluorobenzene	9.96	114	3328522	50.00	UG	0.06
50) Chlorobenzene-d5	14.83	117	2319215	50.00	UG	0.06
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	9.26	65	1758667	53.49	UG	0.06
Spiked Amount 50.000	Range 27 - 176		Recovery = 106.98%			
41) Toluene-d8	12.37	98	2816166	46.02	UG	0.08
Spiked Amount 50.000	Range 20 - 158		Recovery = 92.04%			
59) Bromofluorobenzene	16.91	95	2367154	47.20	UG	0.06
Spiked Amount 50.000	Range 28 - 148		Recovery = 94.40%			
Target Compounds						Qvalue
42) Toluene	12.46	92	100106	2.18	UG	96

(#) = qualifier out of range (m) = manual integration

1282

000246

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\03-30-01\F9502.D
Acq On : 30 Mar 2001 23:13
Sample : S-24,1922-008,M,0.035g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
'S Integration Params: LSCINT.P

Vial: 15
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

Peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.952	357	365	372	rBV4	31677	242702	2.31%	0.464%
2	8.789	413	422	442	rBV	1444107	10484700	100.00%	20.039%
3	9.260	446	454	477	rVB	687160	4640631	44.26%	8.870%
4	9.950	493	501	527	rBV	1302360	8857855	84.48%	16.930%
5	12.358	658	665	687	rBV	1289494	8884939	84.74%	16.982%
6	14.826	826	833	858	rBV2	1255837	8263086	78.81%	15.793%
7	16.911	968	975	990	rBV2	1320083	9302990	88.73%	17.781%
8	17.220	991	996	1006	rVB5	103196	717399	6.84%	1.371%
	20.626	1220	1228	1238	rBV	139821	926072	8.83%	1.770%

Sum of corrected areas: 52320374

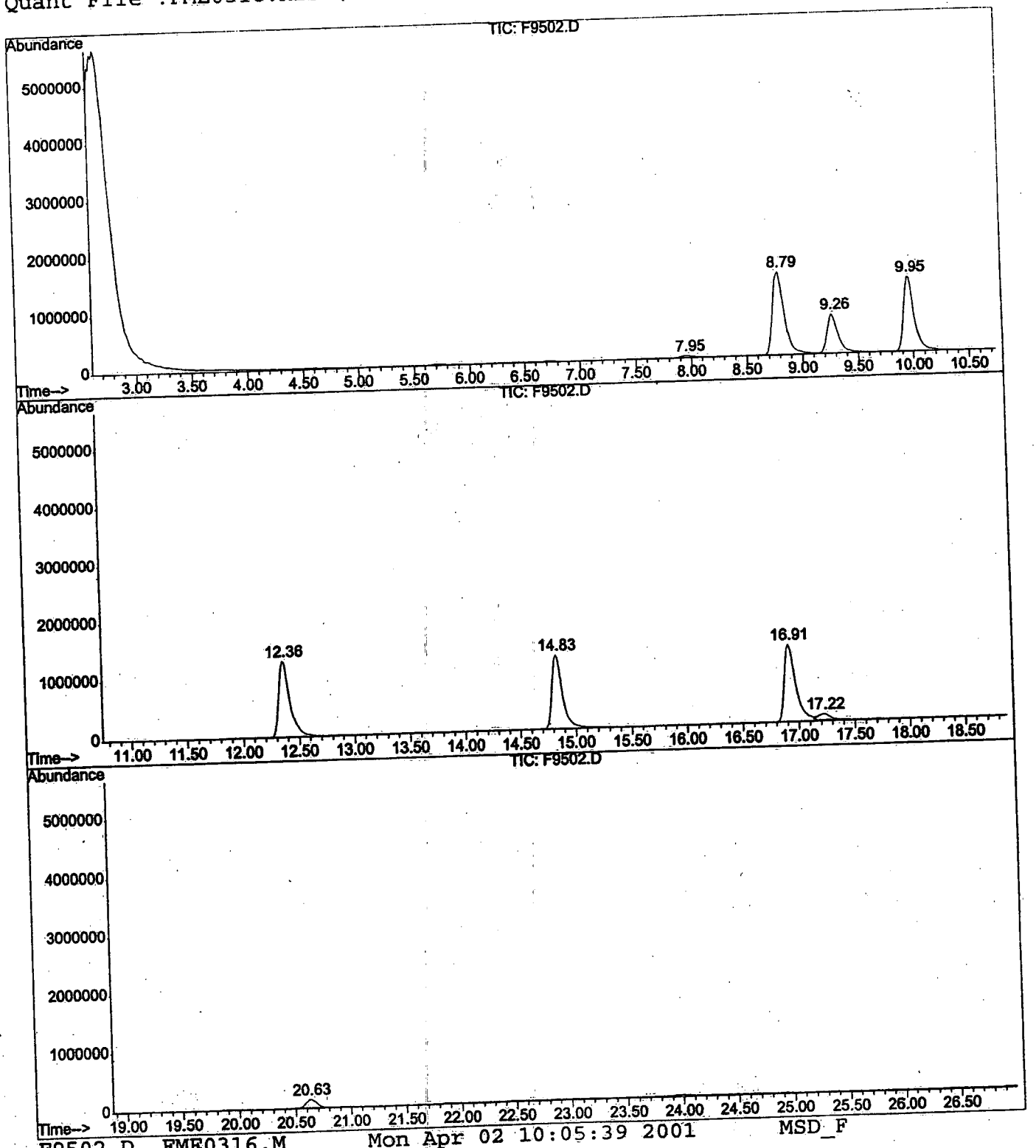
F9502.D FME0316.M Mon Apr 02 10:05:38 2001 MSD_F

000248

1283

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\03-30-01\F9502.D
Operator : GREGG
Acquired : 30 Mar 2001 23:13 using AcqMethod VOAF
Instrument : 5970 - In
Sample Name: S-24,1922-008,M,0.035g
Misc Info : ENVTACT/ORBIS,03/28/01,03/28/01
Vial Number: 15
Quant File :FME0316.RES (RTE Integrator)



F9502.D FME0316.M Mon Apr 02 10:05:39 2001 MSD_F

000249

1284

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D
Acq On : 9 Apr 2001 22:59
Sample : S-25,1922-009,M,0.004g,18.3
Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
3 Integration Params: LSCINT.P
Quant Time: Apr 09 23:18:53 2001

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	442031	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.22	114	638000m	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	538434	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.73	65	18843	3.45	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 6.90%#			
41) Toluene-d8	8.89	98	30903m	2.39	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 4.78%#			
59) Bromofluorobenzene	11.98	95	18496	2.68	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 5.36%#			
Target Compounds						Qvalue
42) Toluene	8.98	92	12079	1.42	UG	# 100
53) Ethylbenzene	10.74	91	311661	19.54	UG	# 84
54) m,p-Xylene	10.87	106	613604	101.81	UG	# 49
55) o-Xylene	11.34	106	204444	33.57	UG	# 47

(#) = qualifier out of range (m) = manual integration

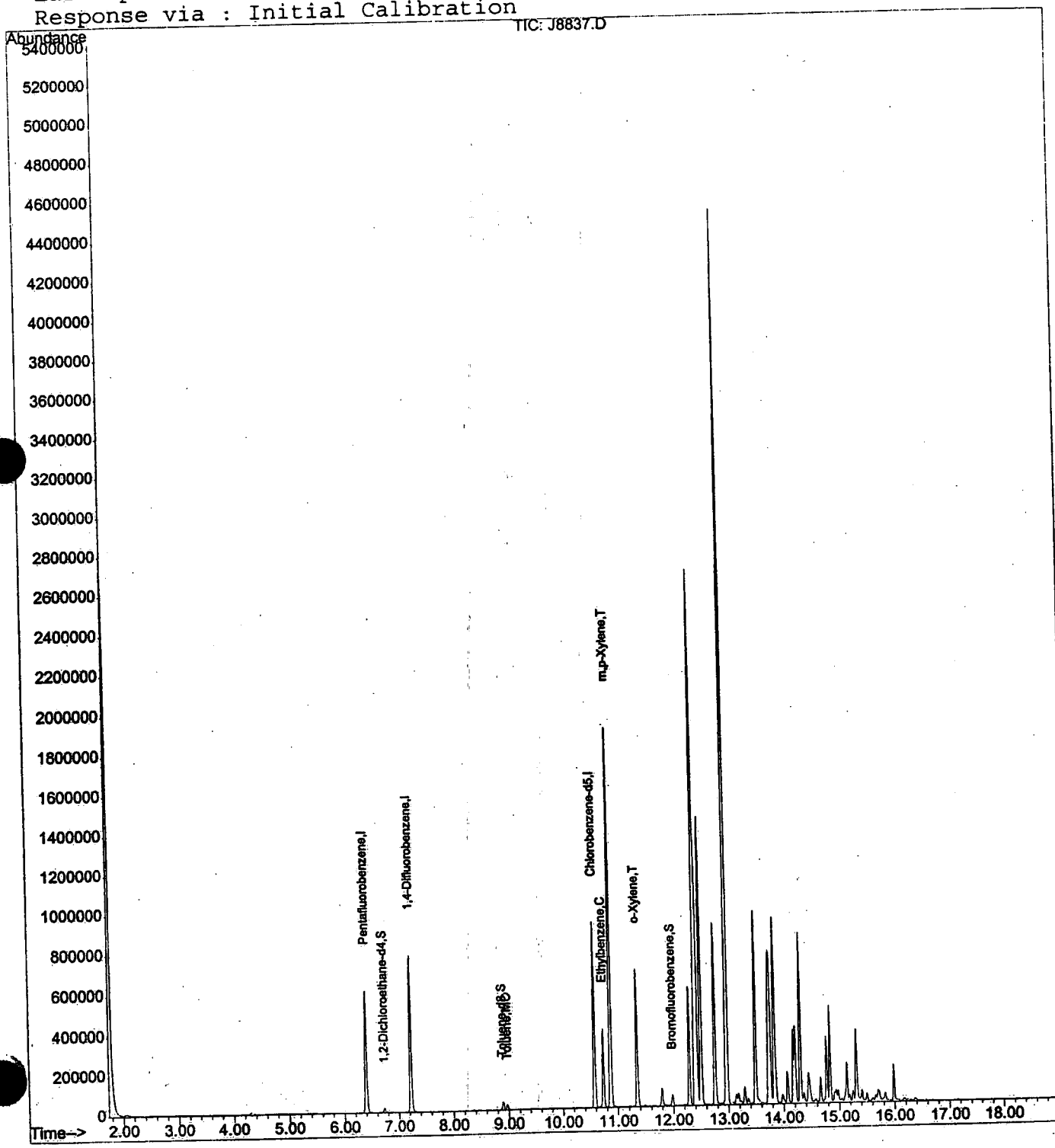
Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D
Acq On : 9 Apr 2001 22:59
Sample : S-25,1922-009,M,0.004g,18.3
Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
MS Integration Params: LSCINT.P
Quant Time: Apr 10 9:19 2001

Vial: 23
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue Apr 10 09:02:08 2001
Response via : Initial Calibration



000251

1286

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D
Acq On : 9 Apr 2001 22:59
Sample : S-25,1922-009,M,0.004g,18.3
Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

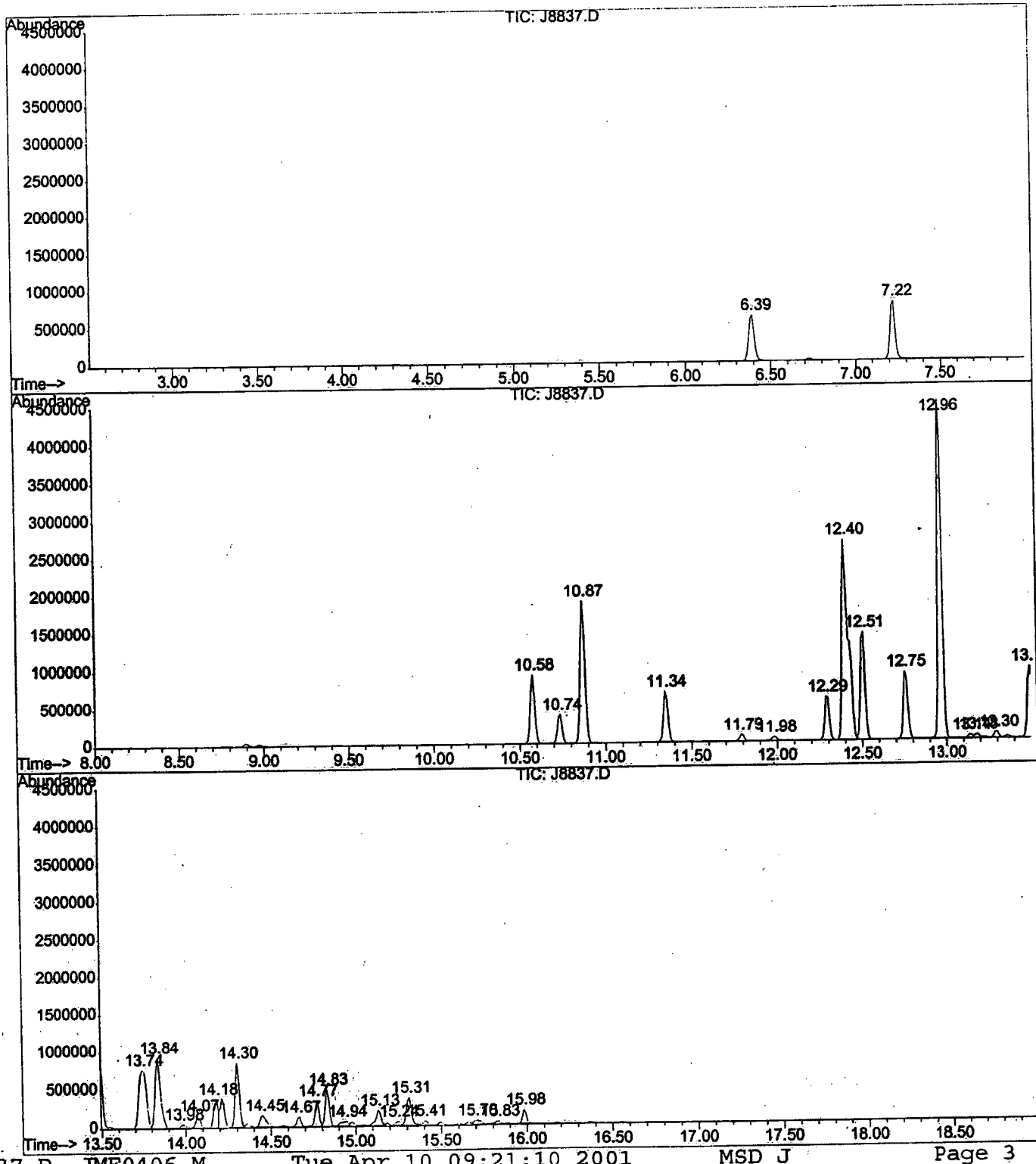
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.393	453	461	479	rBV	610183	1351332	15.99%	3.036%
2	7.223	536	543	554	rBV	780048	1578047	18.68%	3.545%
3	10.575	868	874	881	rBV	928020	1693676	20.05%	3.805%
4	10.737	881	890	895	rVV	396400	750893	8.89%	1.687%
5	10.869	896	903	919	rVB	1903623	3585132	42.43%	8.054%
6	11.345	945	950	958	rVB	686300	1230020	14.56%	2.763%
7	11.790	987	994	998	rBV	92959	177263	2.10%	0.398%
8	11.983	1005	1013	1017	rVB	58096	116599	1.38%	0.262%
9	12.286	1026	1043	1049	rBV	594254	1102616	13.05%	2.477%
10	12.398	1049	1054	1061	rVV	2680020	6972462	82.53%	15.663%
11	12.509	1061	1065	1074	rVB	1443266	2708038	32.05%	6.083%
12	12.752	1084	1089	1098	rBV	908177	1714382	20.29%	3.851%
13	12.965	1103	1110	1116	rVB	4511097	8448847	100.00%	18.979%
14	13.137	1123	1127	1129	rBV	49030	92728	1.10%	0.208%
15	13.177	1129	1131	1139	rVV2	54600	118279	1.40%	0.266%
16	13.299	1139	1143	1146	rVV	83348	161050	1.91%	0.362%
17	13.491	1153	1162	1173	rBV	961186	1788203	21.17%	4.017%
18	13.745	1179	1187	1192	rBV3	762657	2396270	28.36%	5.383%
19	13.836	1192	1196	1206	rVB	927485	2010369	23.79%	4.516%
20	13.977	1206	1210	1215	rBV2	43399	106299	1.26%	0.239%
21	14.069	1215	1219	1225	rVB	158268	289394	3.43%	0.650%
22	14.180	1225	1230	1231	rBV	369013	675237	7.99%	1.517%
23	14.302	1238	1242	1246	rBV	844192	1401230	16.58%	3.148%
24	14.453	1252	1257	1264	rVB3	147803	380758	4.51%	0.855%
25	14.666	1273	1278	1282	rBV	126175	215312	2.55%	0.484%
26	14.767	1282	1288	1291	rBV	329503	552013	6.53%	1.240%
27	14.828	1291	1294	1299	rVB	478784	766390	9.07%	1.722%
28	14.939	1299	1305	1307	rBV2	58732	183715	2.17%	0.413%
29	15.132	1317	1324	1328	rBV	197057	423500	5.01%	0.951%
30	15.243	1332	1335	1338	rVV2	52272	105224	1.25%	0.236%
31	15.314	1338	1342	1348	rVV2	364011	771475	9.13%	1.733%

32	15.405	1348	1351	1357	rVV	58153	120771	1.43%	0.271%
33	15.699	1378	1380	1387	rVV2	52029	149886	1.77%	0.337%
34	15.831	1387	1393	1396	rVB2	38598	86857	1.03%	0.195%
35	15.982	1404	1408	1416	rBV	184330	291948	3.46%	0.656%

Sum of corrected areas: 44516215

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D
Operator : XINGFANG WANG
Acquired : 9 Apr 2001 22:59 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: S-25,1922-009,M,0.004g,18.3
Misc Info : ENVTACT/ORBIS,3/28/01,3/28/01,10
Vial Number: 23
Quant File :JME0406.RES (RTE Integrator)



000254

1289

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D
Acq On : 9 Apr 2001 22:59
Sample : S-25,1922-009,M,0.004g,18.3
Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
MS Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

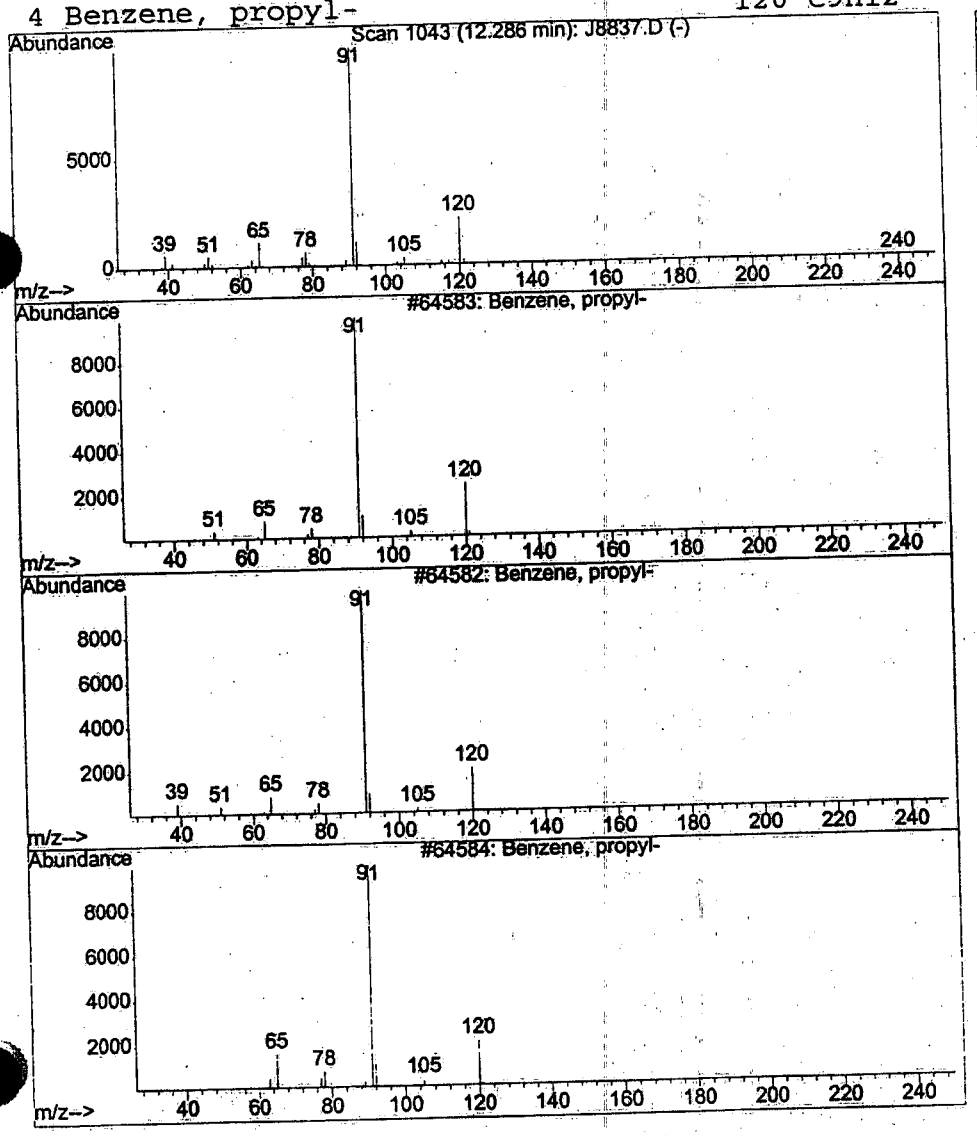
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

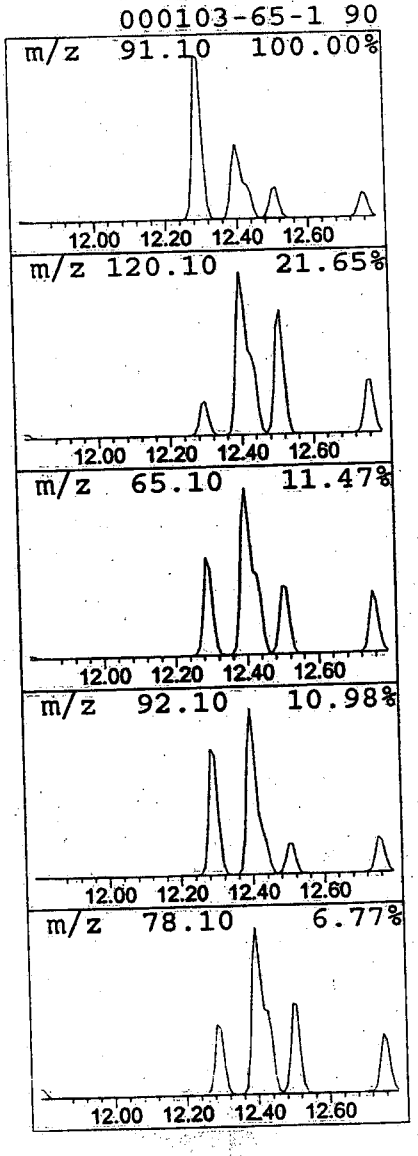
****

Peak Number 1 Substituted benzene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.29	32.55 UG	1102620	Chlorobenzene-d5	10.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, propyl-	120	C9H12	000103-65-1	90
2	Benzene, propyl-	120	C9H12	000103-65-1	90
3	Benzene, propyl-	120	C9H12	000103-65-1	90
4	Benzene, propyl-	120	C9H12	000103-65-1	90





000255

1290

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D
Acq On : 9 Apr 2001 22:59
Sample : S-25,1922-009,M,0.004g,18.3
Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

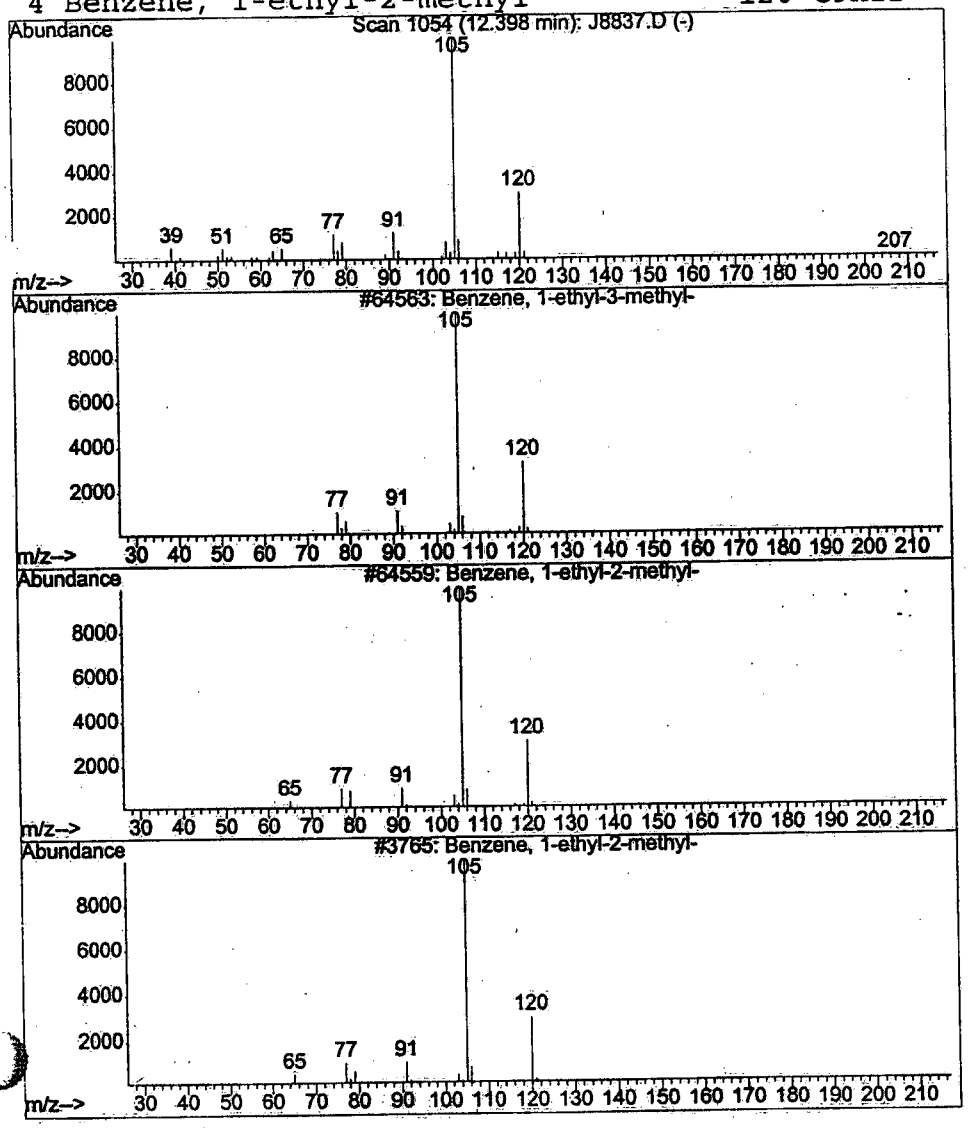
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

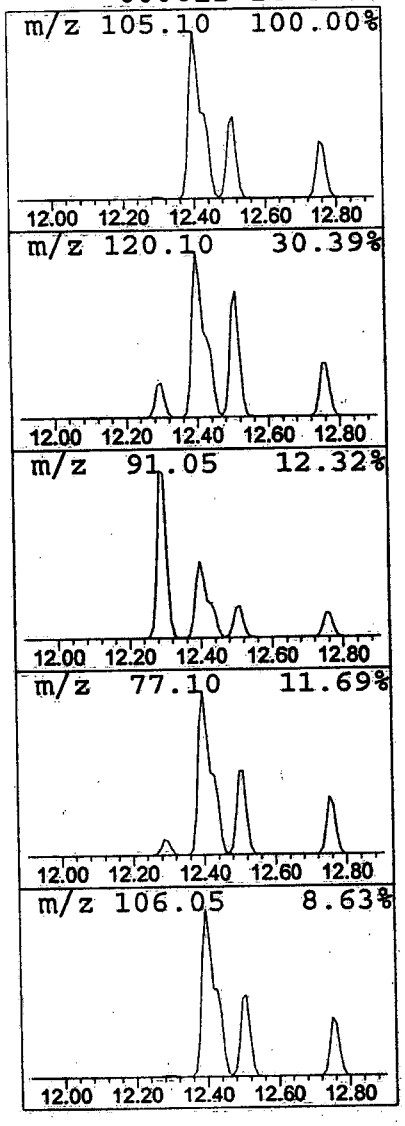
****

Peak Number 2 Substituted benzene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.40	205.84 UG	6972460	Chlorobenzene-d5	10.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95





1291

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D
Acq On : 9 Apr 2001 22:59
Sample : S-25,1922-009,M,0.004g,18.3
Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
MS Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

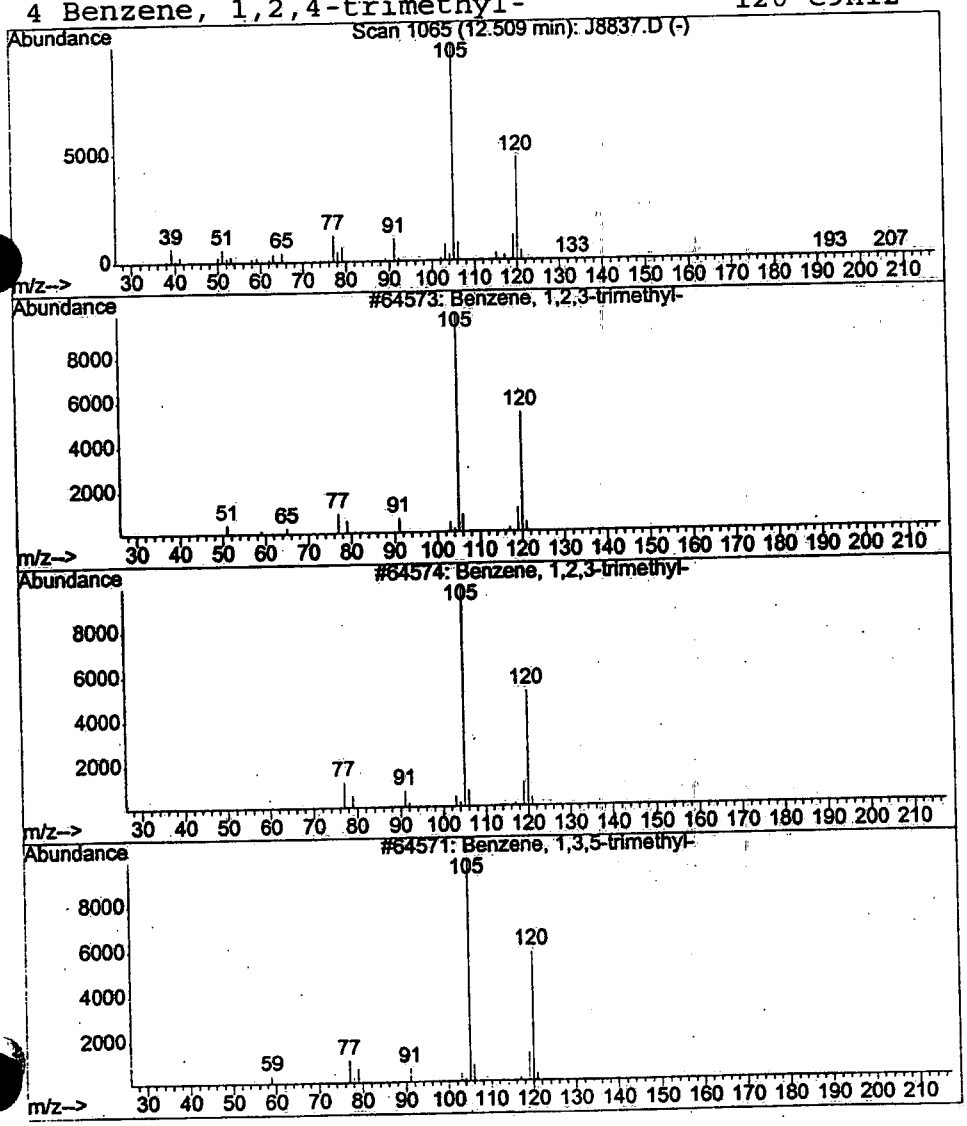
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

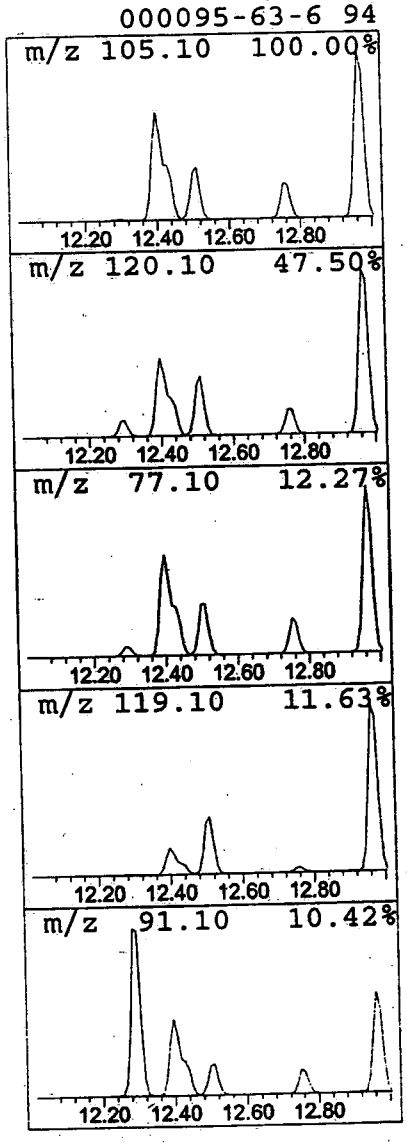
****

Peak Number 3 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.51	79.95 UG	2708040	Chlorobenzene-d5	10.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94
4	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	94





000257
1292

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D
Acq On : 9 Apr 2001 22:59
Sample : S-25,1922-009,M,0.004g,18.3
Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

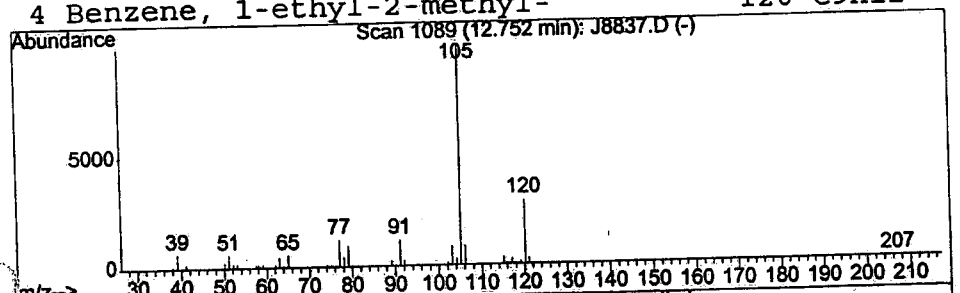
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

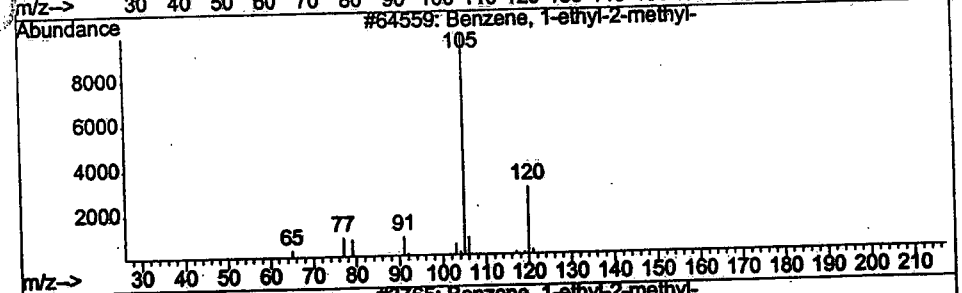
****

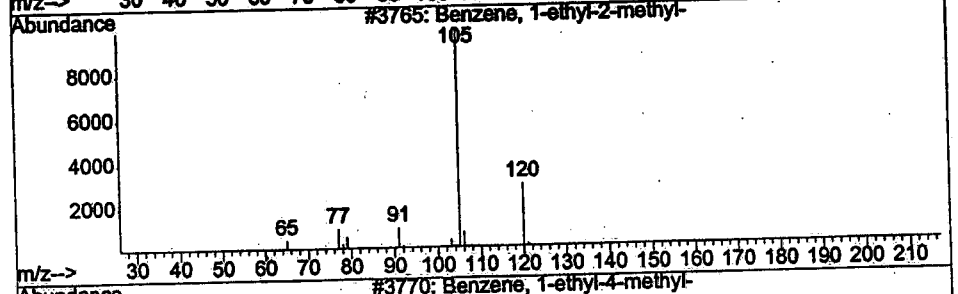
Peak Number 4 Substituted benzene Concentration Rank 7

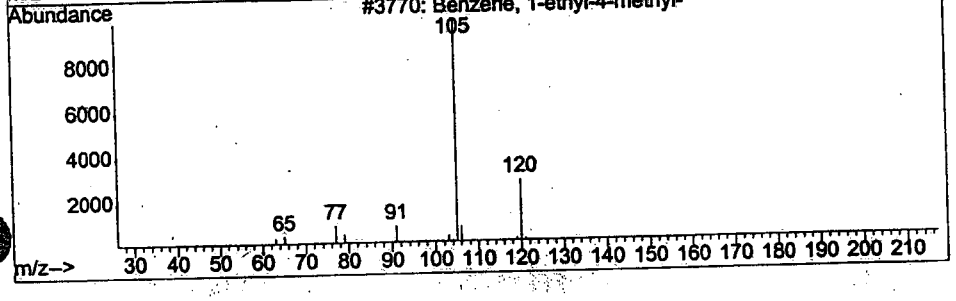
R.T.	EstConc	Area	Relative to ISTD	R.T.
12.75	50.61 UG	1714380	Chlorobenzene-d5	10.57

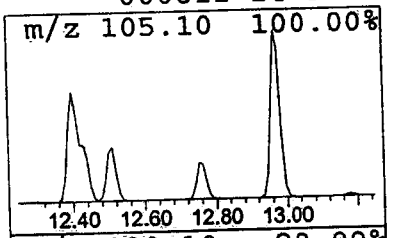
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
3	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	94
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94

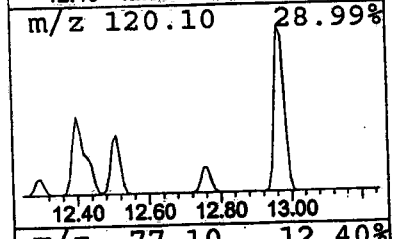


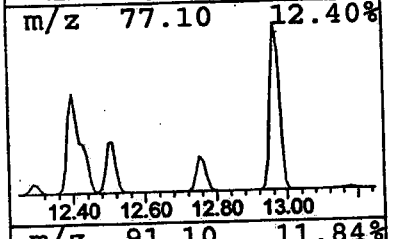


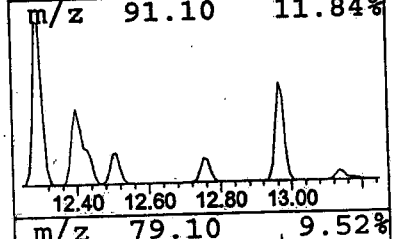


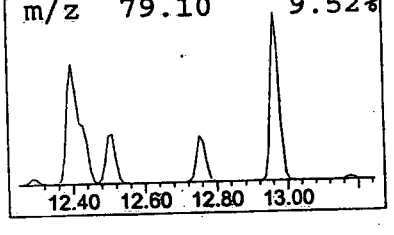












000258

1293

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D
Acq On : 9 Apr 2001 22:59
Sample : S-25,1922-009,M,0.004g,18.3
Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
LS Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

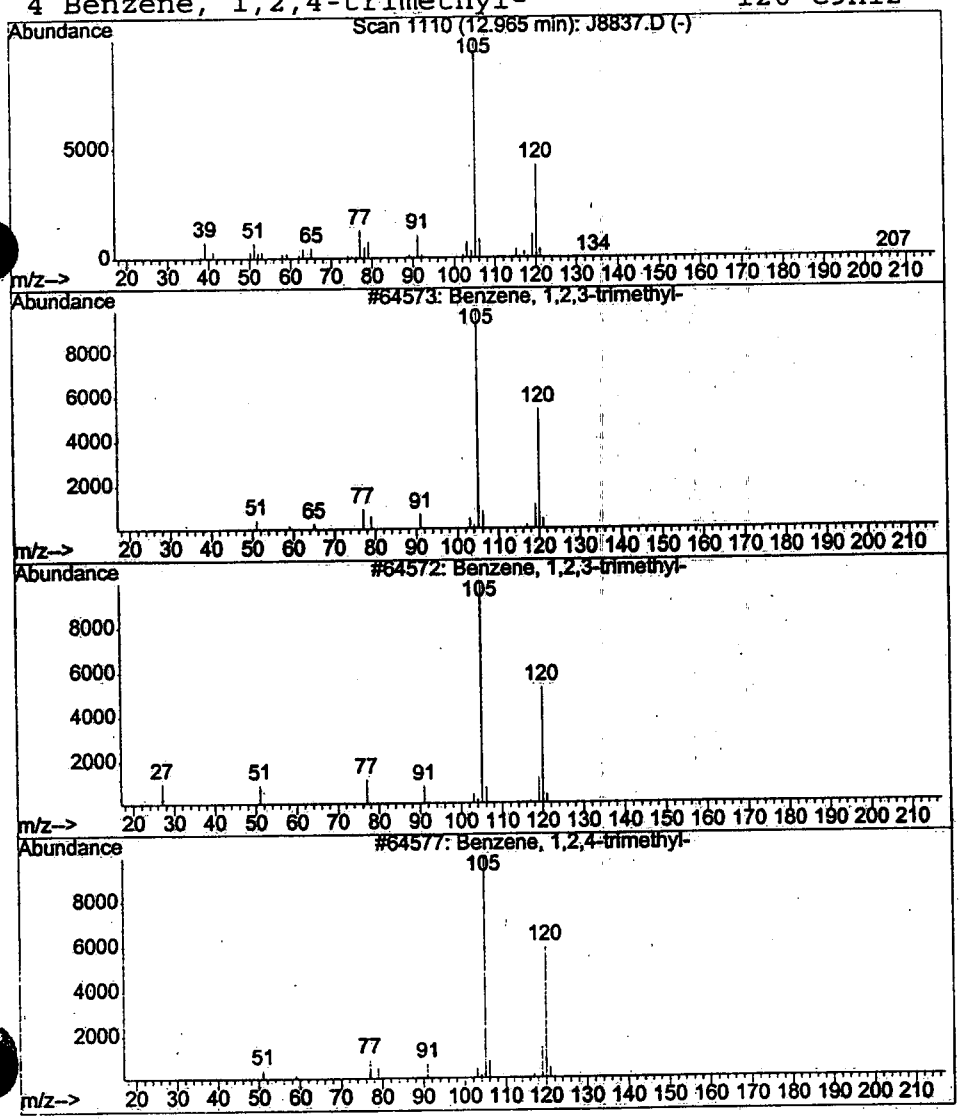
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

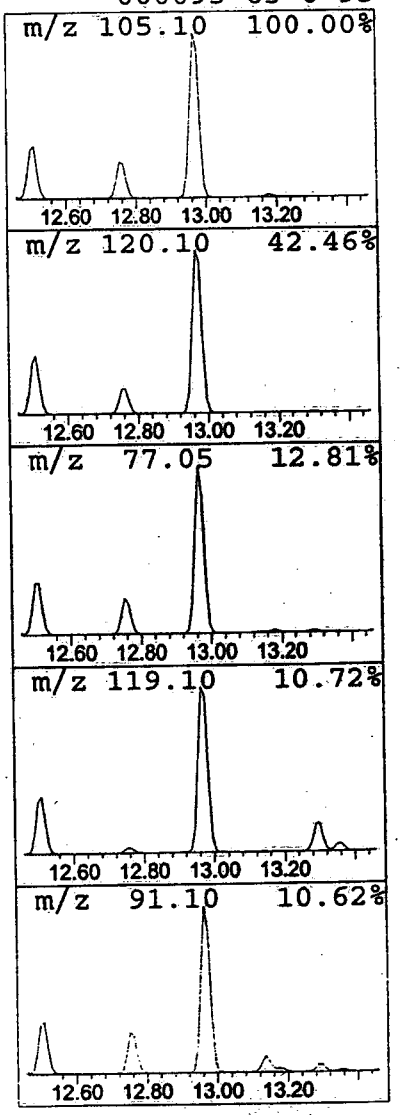
****

Peak Number 5 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.96	249.42 UG	8448850	Chlorobenzene-d5	10.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
3	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	95
4	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	95





1294

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D
Acq On : 9 Apr 2001 22:59
Sample : S-25,1922-009,M,0.004g,18.3
Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

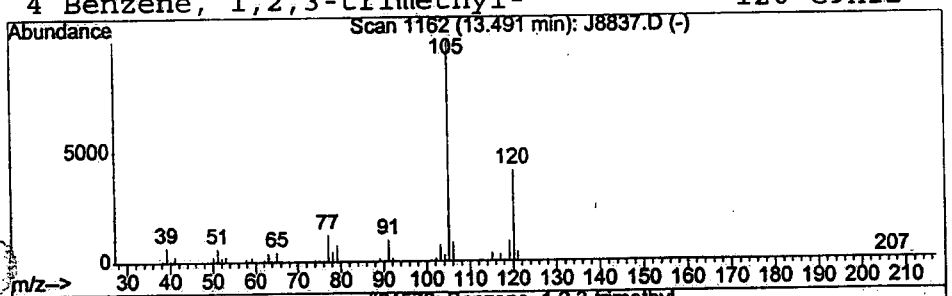
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

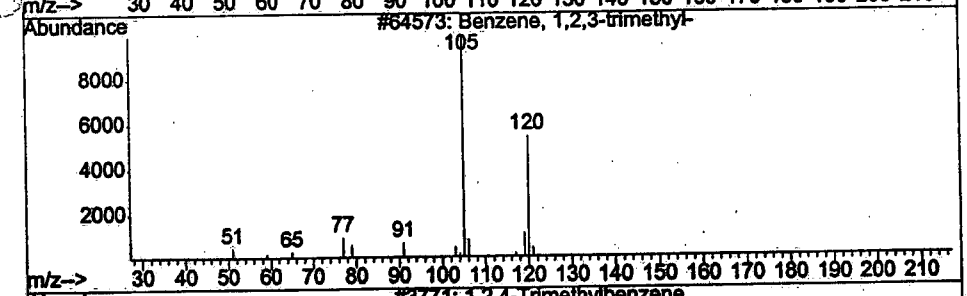
****

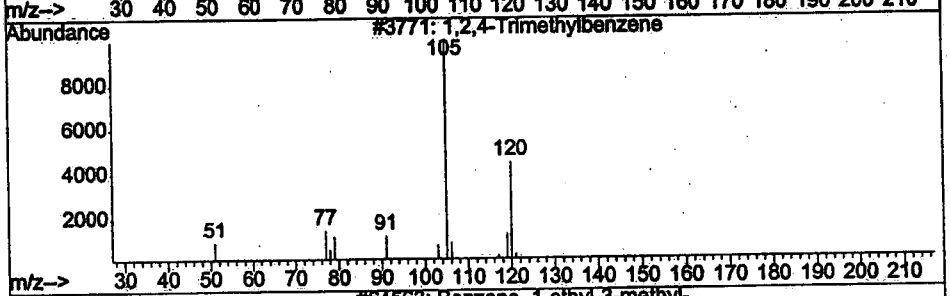
Peak Number 6 Substituted benzene Concentration Rank 6

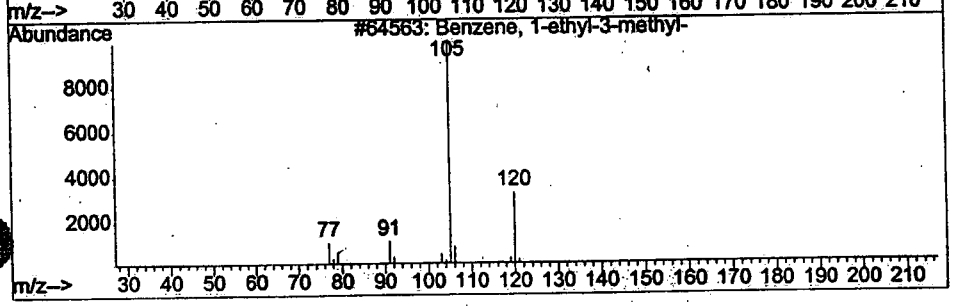
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.49	52.79 UG	1788200	Chlorobenzene-d5	10.57

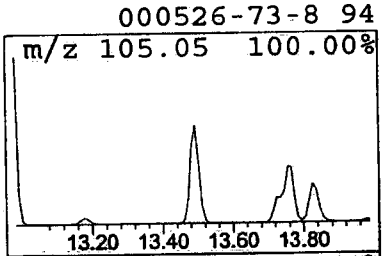
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
2	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	94
3	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94
4	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94

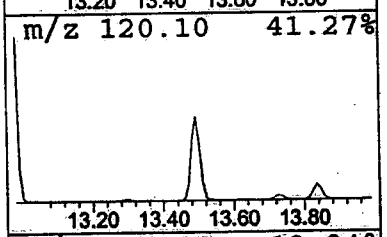


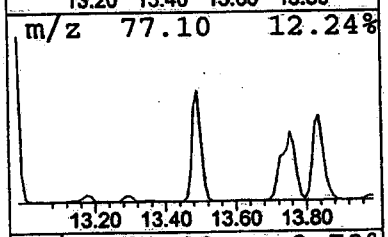


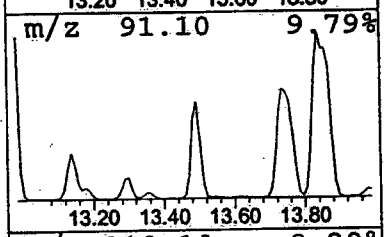


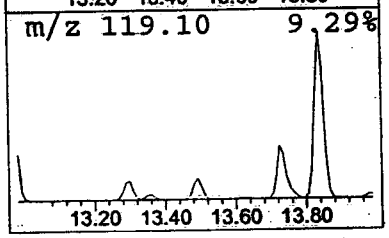












000260

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D
Acq On : 9 Apr 2001 22:59
Sample : S-25,1922-009,M,0.004g,18.3
Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
MS Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG/WANG
Inst : MSD_J
Multiplr: 1.00

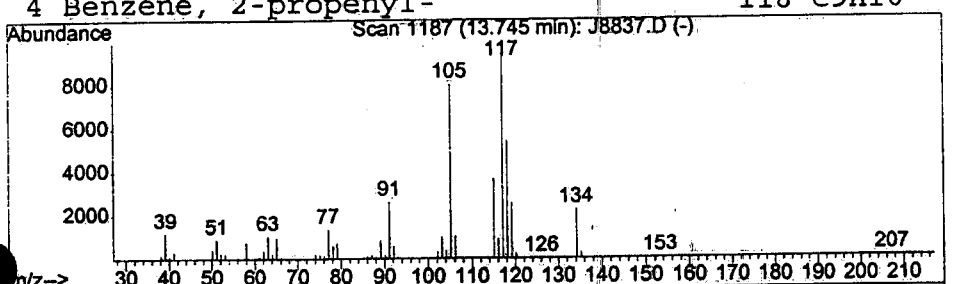
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

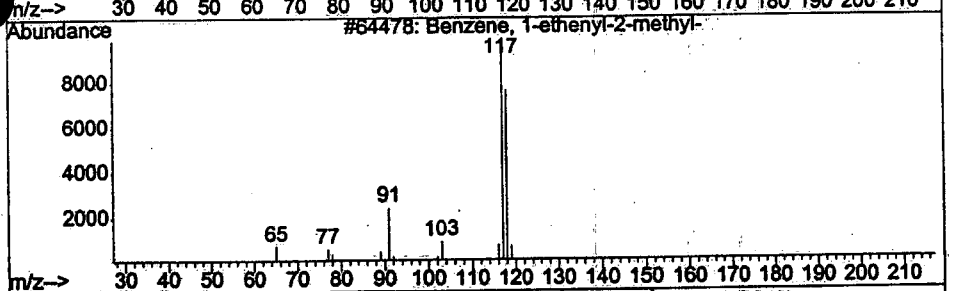
****

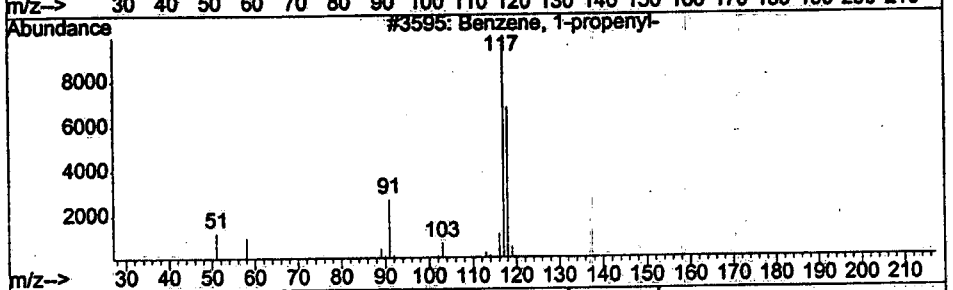
Peak Number 7 Substituted benzene Concentration Rank 4

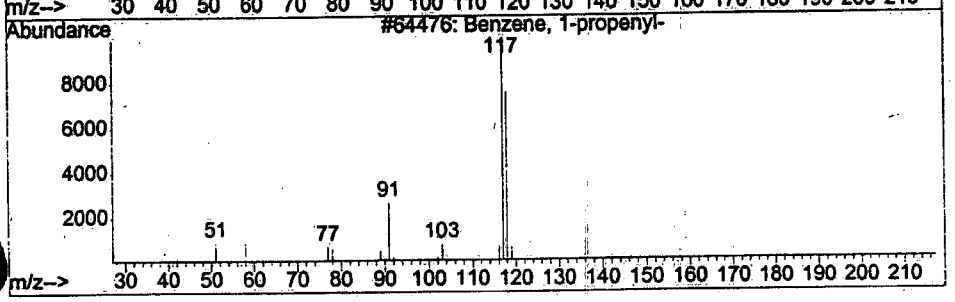
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.74	70.74 UG	2396270	Chlorobenzene-d5	10.57

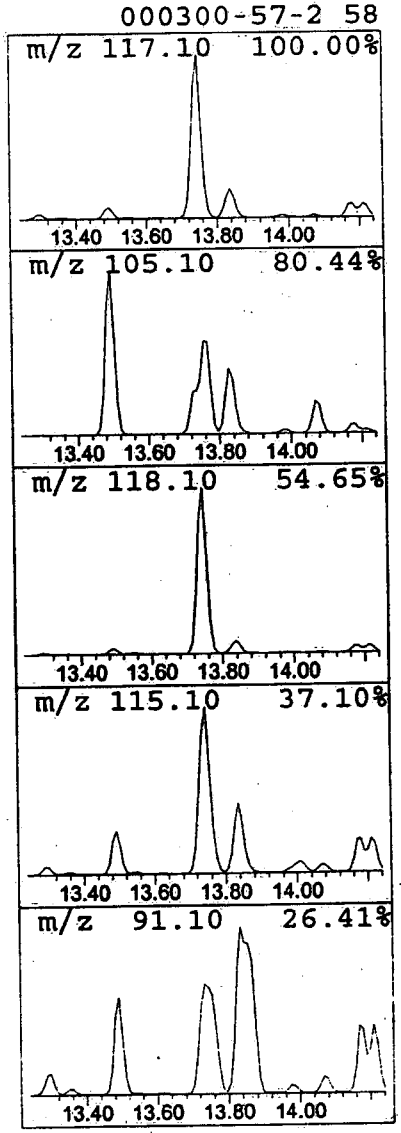
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	60
2	Benzene, 1-propenyl-	118	C9H10	000637-50-3	60
3	Benzene, 1-propenyl-	118	C9H10	000637-50-3	60
4	Benzene, 2-propenyl-	118	C9H10	000300-57-2	58











000261
1796

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D
Acq On : 9 Apr 2001 22:59
Sample : S-25,1922-009,M,0.004g,18.3
Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
3 Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

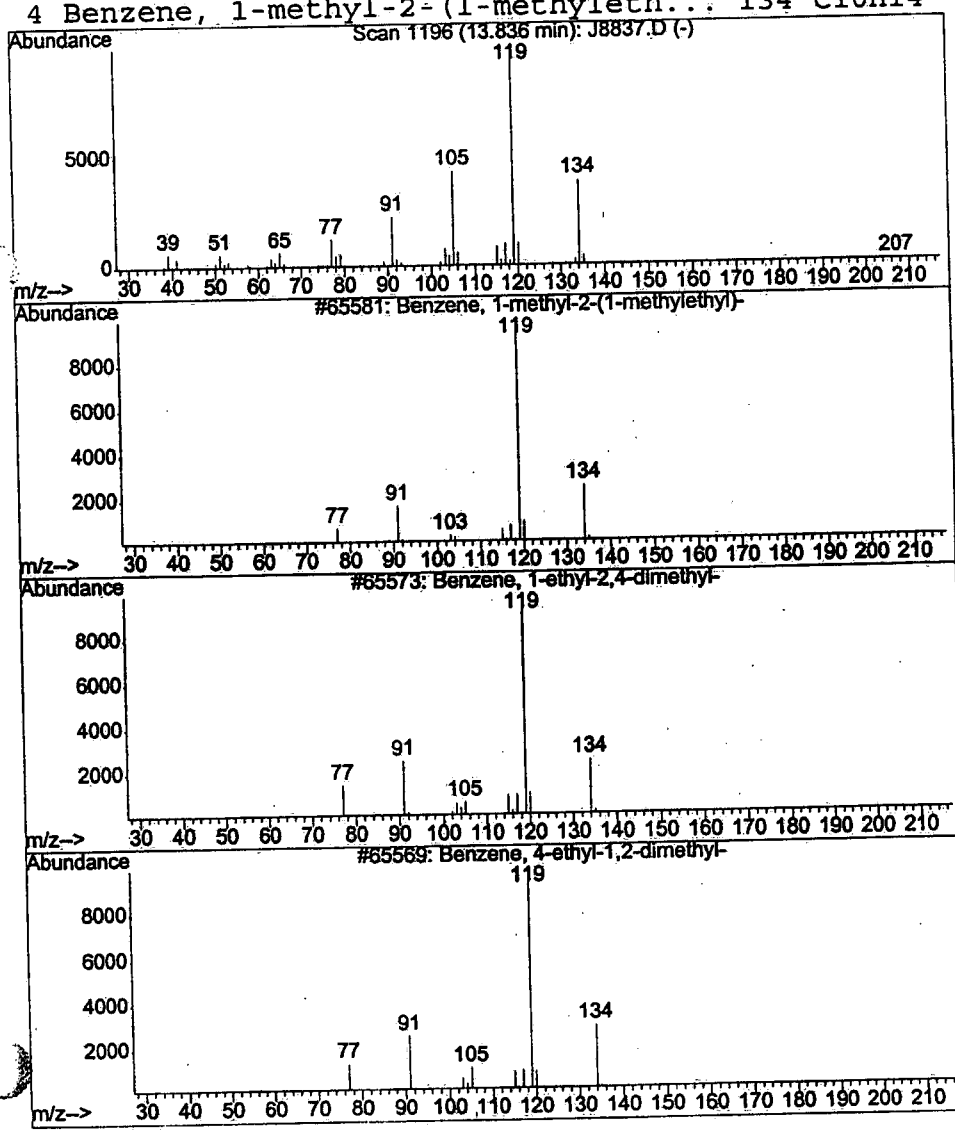
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

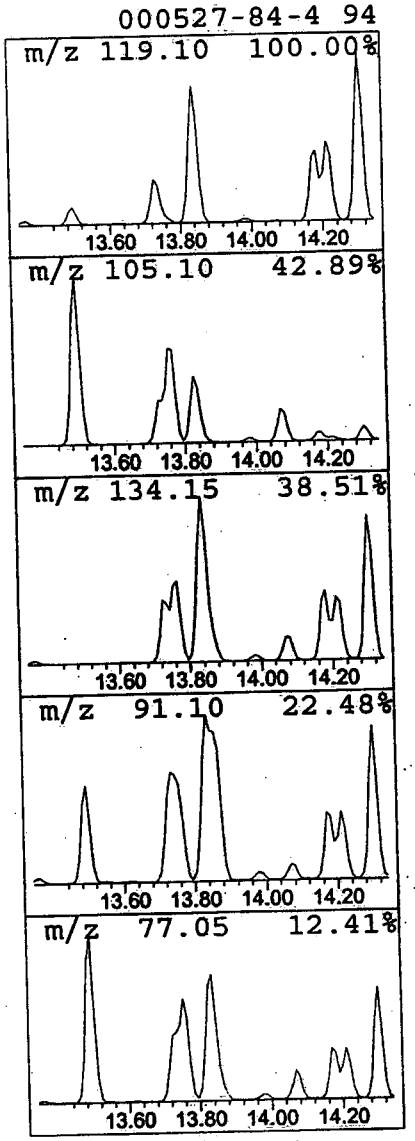
****

Peak Number 8 Substituted benzene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.84	59.35 UG	2010370	Chlorobenzene-d5	10.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
2	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	94
3	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
4	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	94





1297

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D Vial: 23
Acq On : 9 Apr 2001 22:59 Operator: XINGFANG WANG
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Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10 Multiplr: 1.00
IS Integration Params: Lscint.p

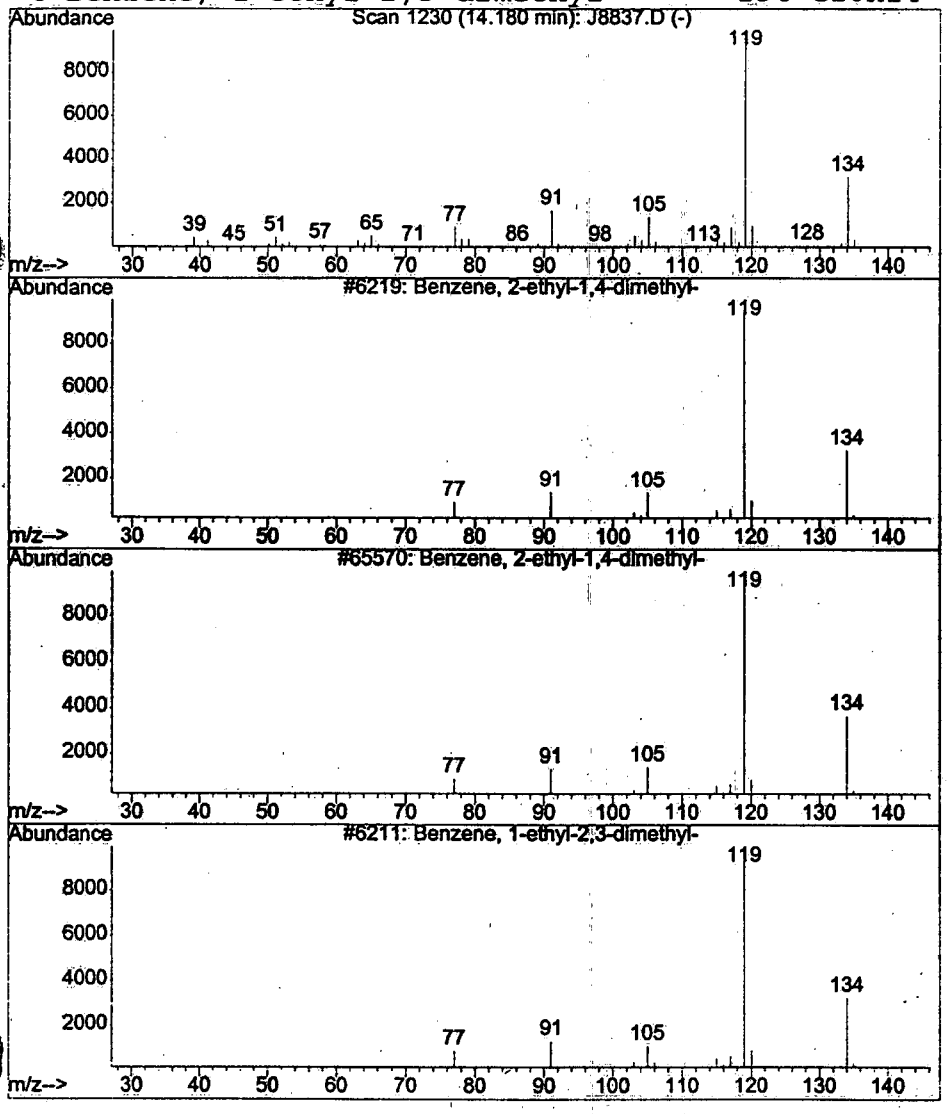
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

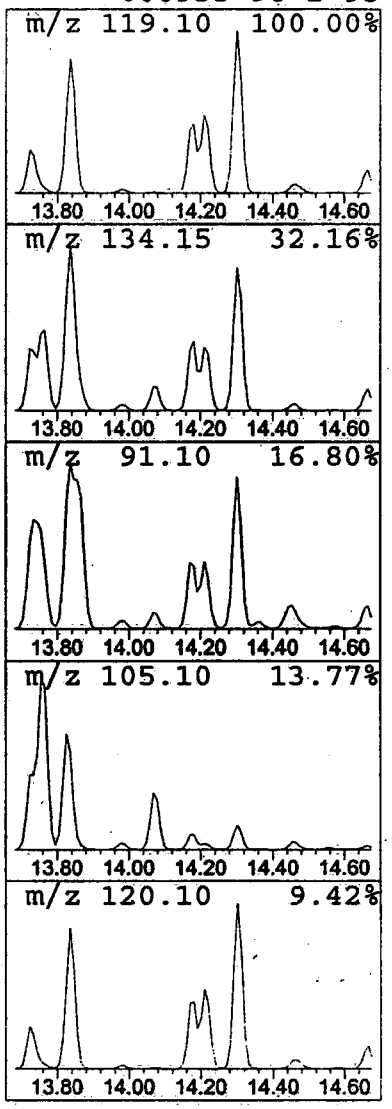
****

Peak Number 9 Substituted benzene Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.18	19.93 UG	675237	Chlorobenzene-d5	10.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	97
2	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	95
3	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	95
4	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	95





1298

Library Search Compound Report

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Acq On : 9 Apr 2001 22:59
Sample : S-25,1922-009,M,0.004g,18.3
Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

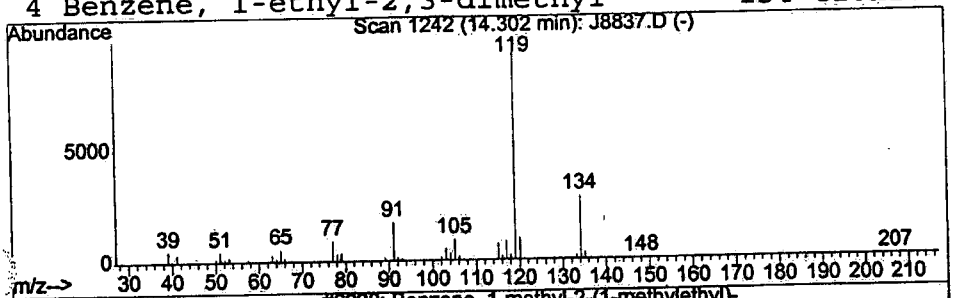
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

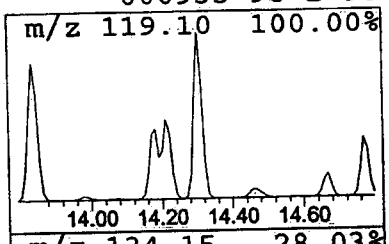
****

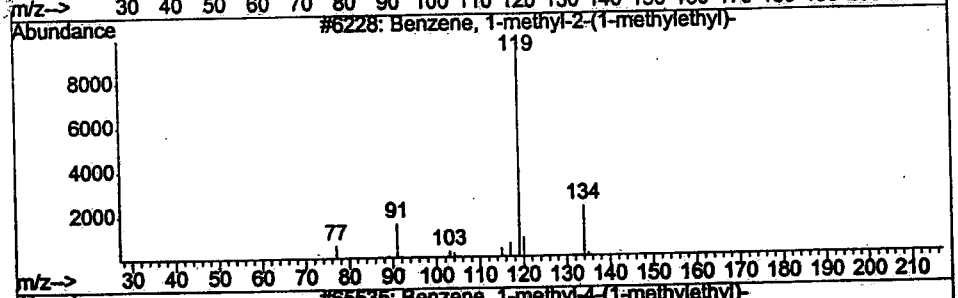
Peak Number 10 Substituted benzene Concentration Rank 8

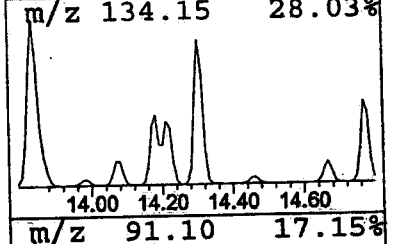
R.T.	EstConc	Area	Relative to ISTD	R.T.
14.30	41.37 UG	1401230	Chlorobenzene-d5	10.57

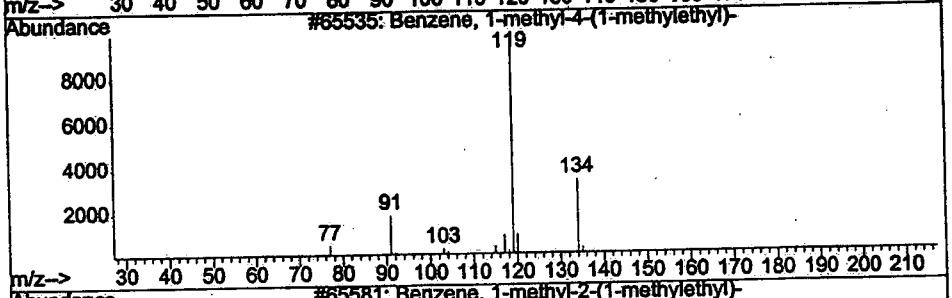
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
2	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
3	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
4	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	95

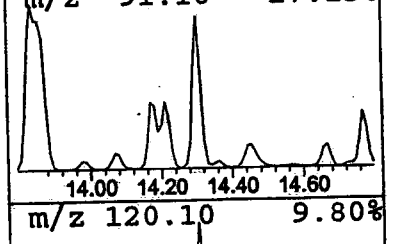


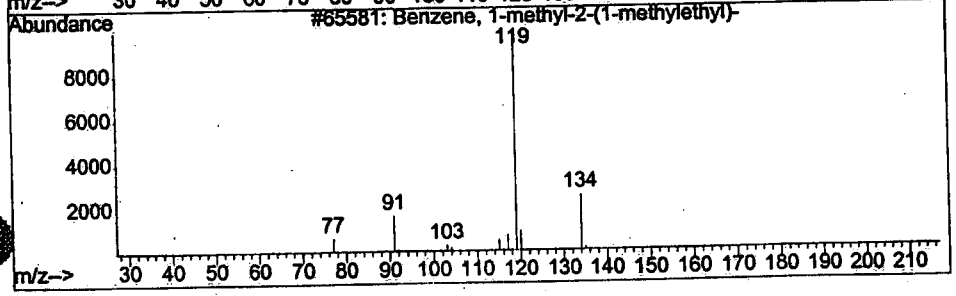


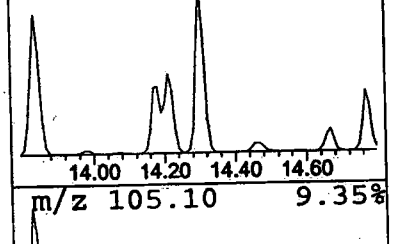


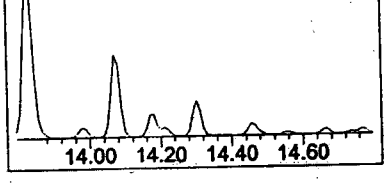












000264

1299

Library Search Compound Report

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Sample : S-25,1922-009,M,0.004g,18.3
Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
LS Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

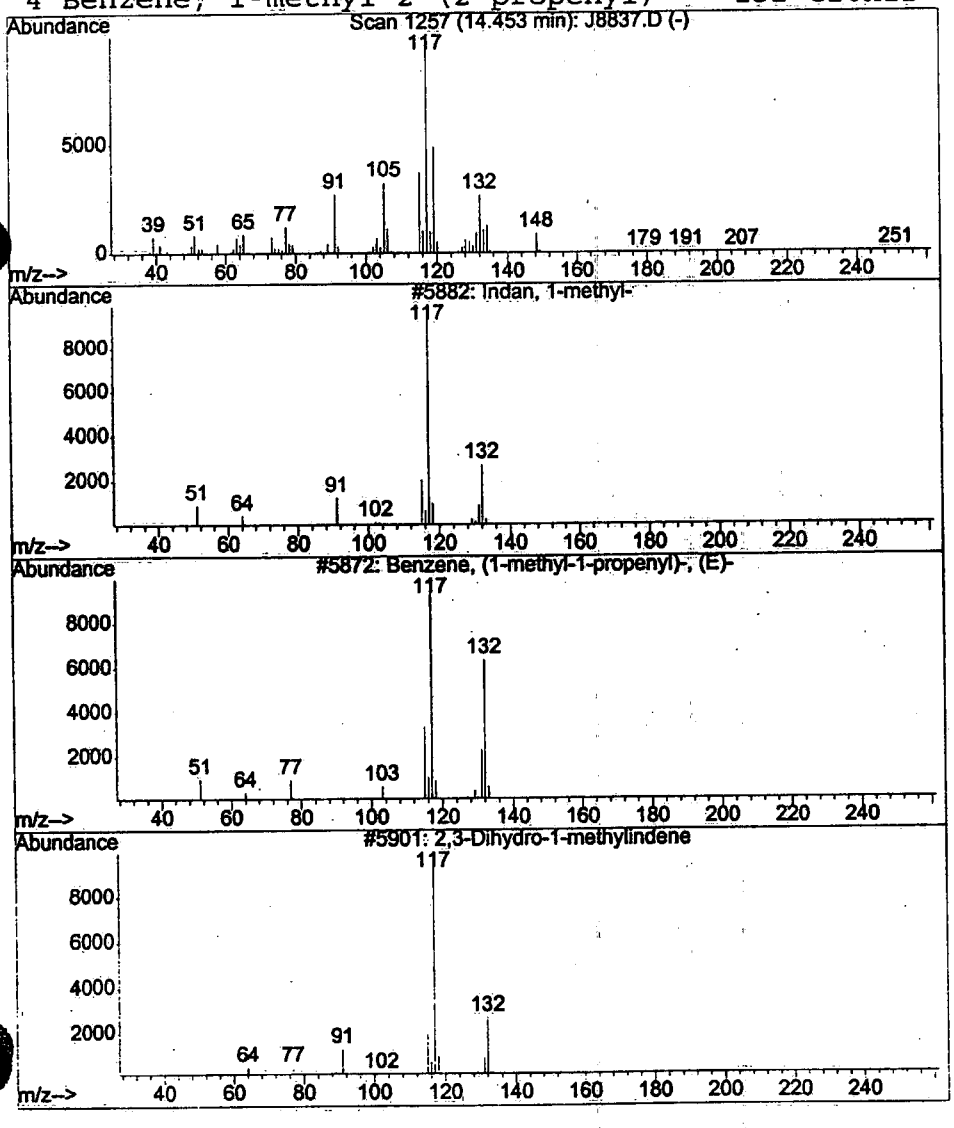
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

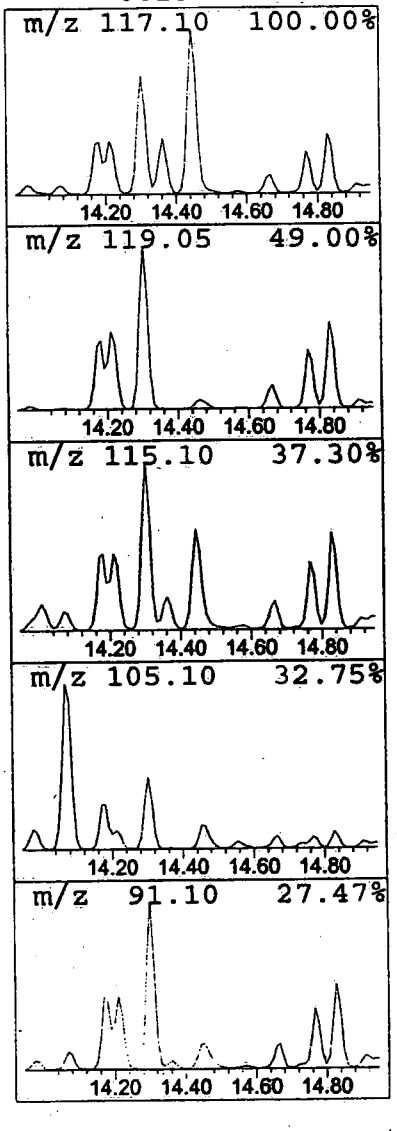
****

Peak Number 11 Substituted benzene Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.45	11.24 UG	380758	Chlorobenzene-d5	10.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indan, 1-methyl-	132	C10H12	000767-58-8	70
2	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	70
3	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	64
4	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	58





000265

1300

Library Search Compound Report

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isc : ENVTACT/ORBIS,3/28/01,3/28/01,10
3 Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

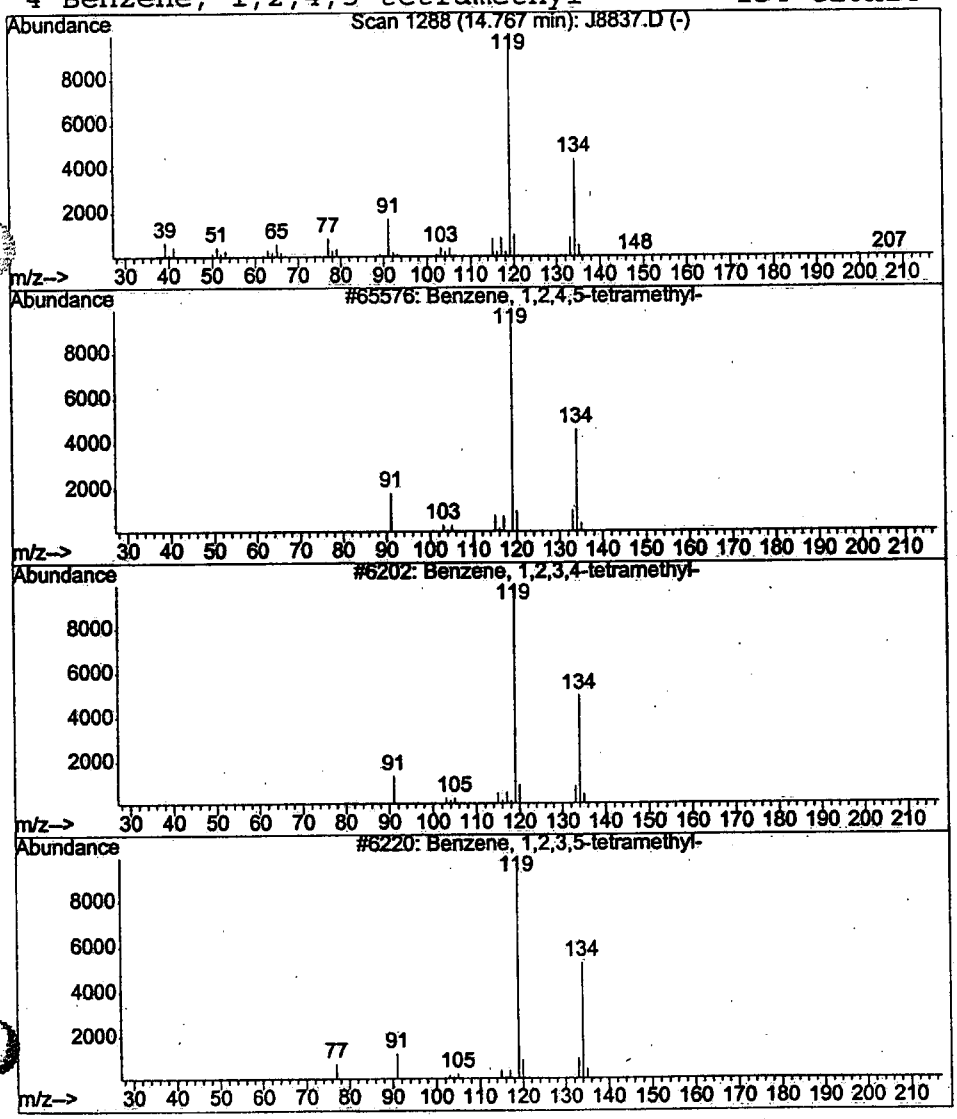
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

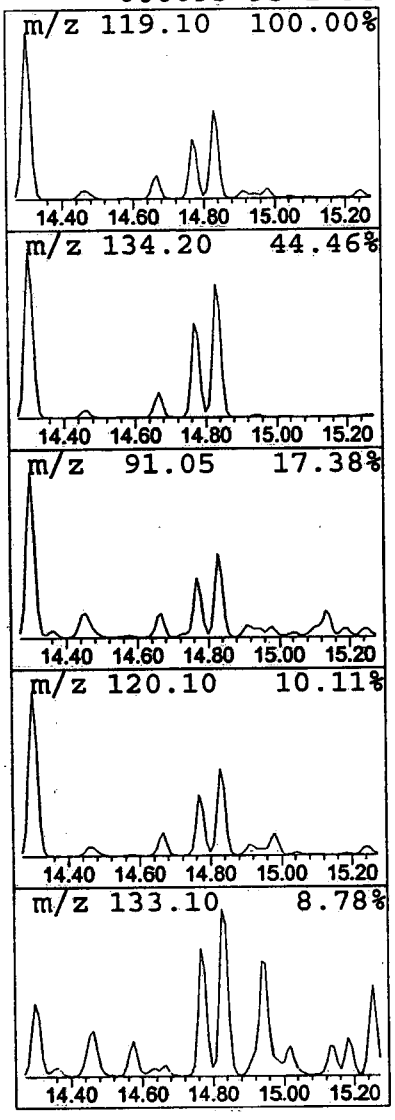
****

Peak Number 12 Substituted benzene Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.77	16.30 UG	552013	Chlorobenzene-d5	10.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
2	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
4	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95





Library Search Compound Report

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Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
S Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

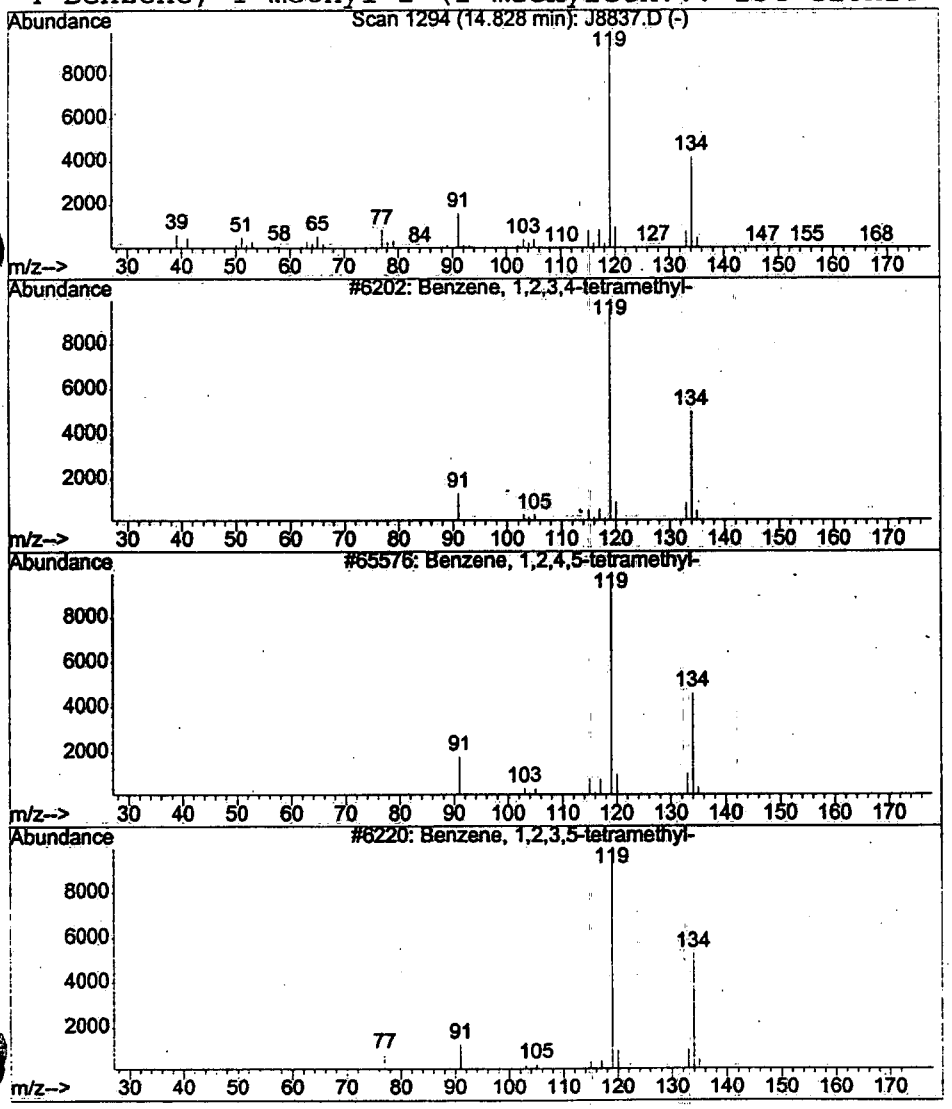
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

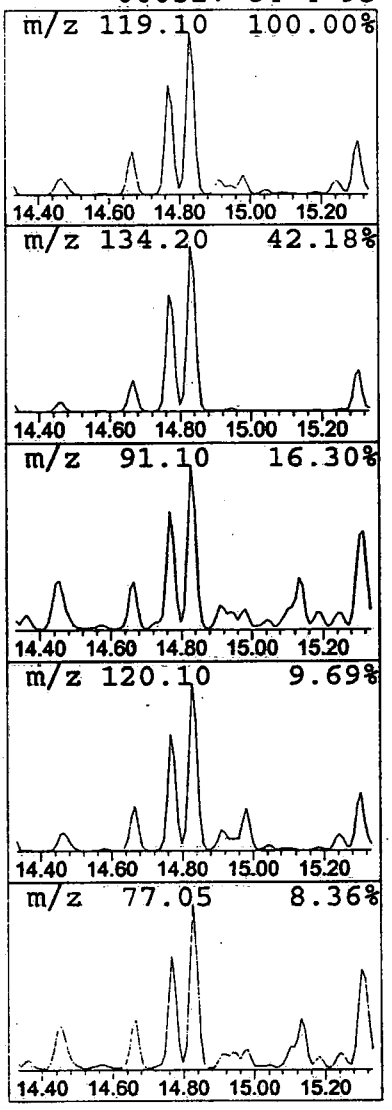
****

Peak Number 13 Substituted benzene Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.83	22.63 UG	766390	Chlorobenzene-d5	10.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	97
2	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
4	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95





000267

1302

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8837.D
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Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
; Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

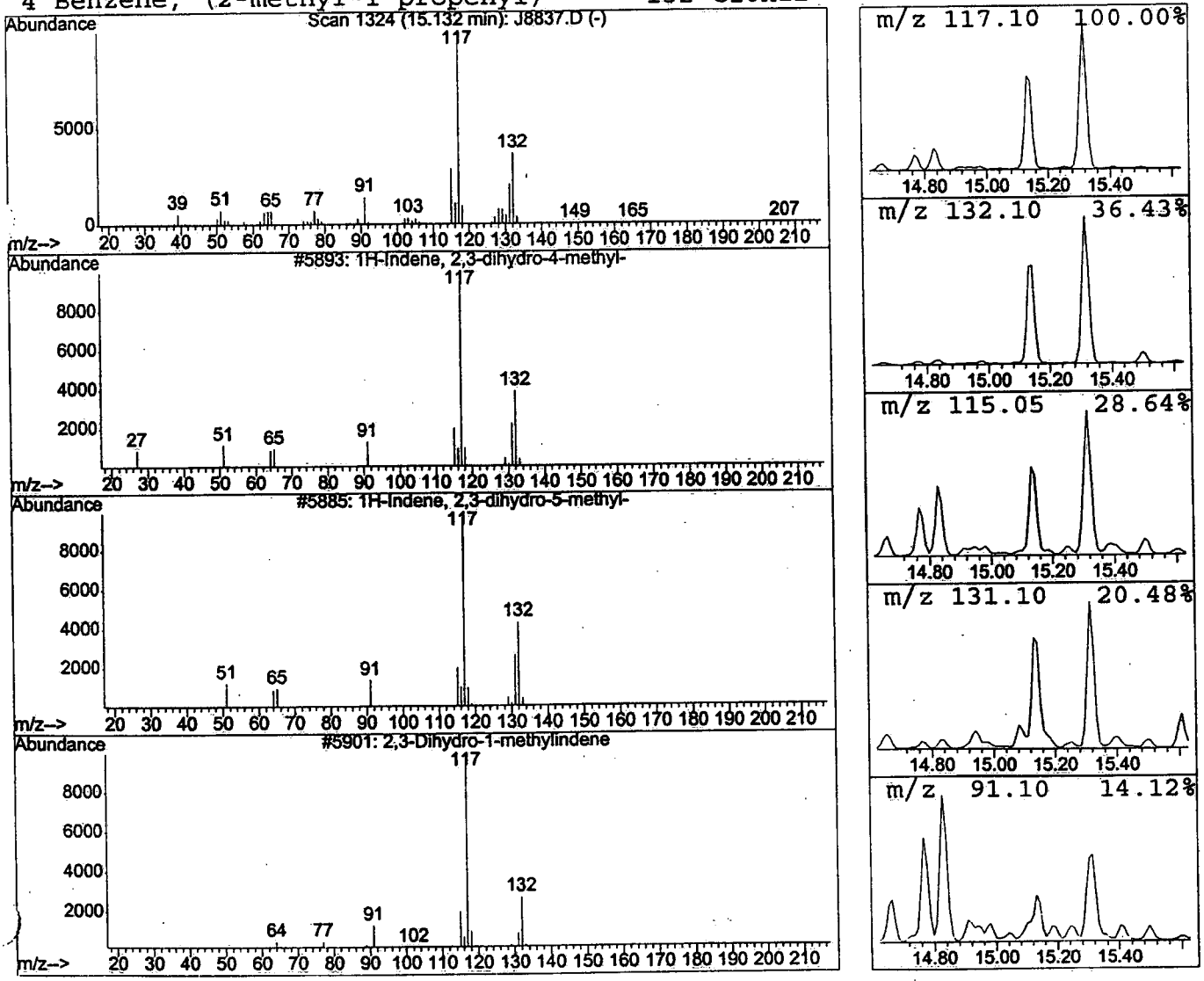
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 14 Substituted benzene Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.13	12.50 UG	423500	Chlorobenzene-d5	10.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	90
2	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	90
3	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	87
4	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	72



1303

Library Search Compound Report

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Misc : ENVTACT/ORBIS,3/28/01,3/28/01,10
MS Integration Params: Lscint.p

Vial: 23
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

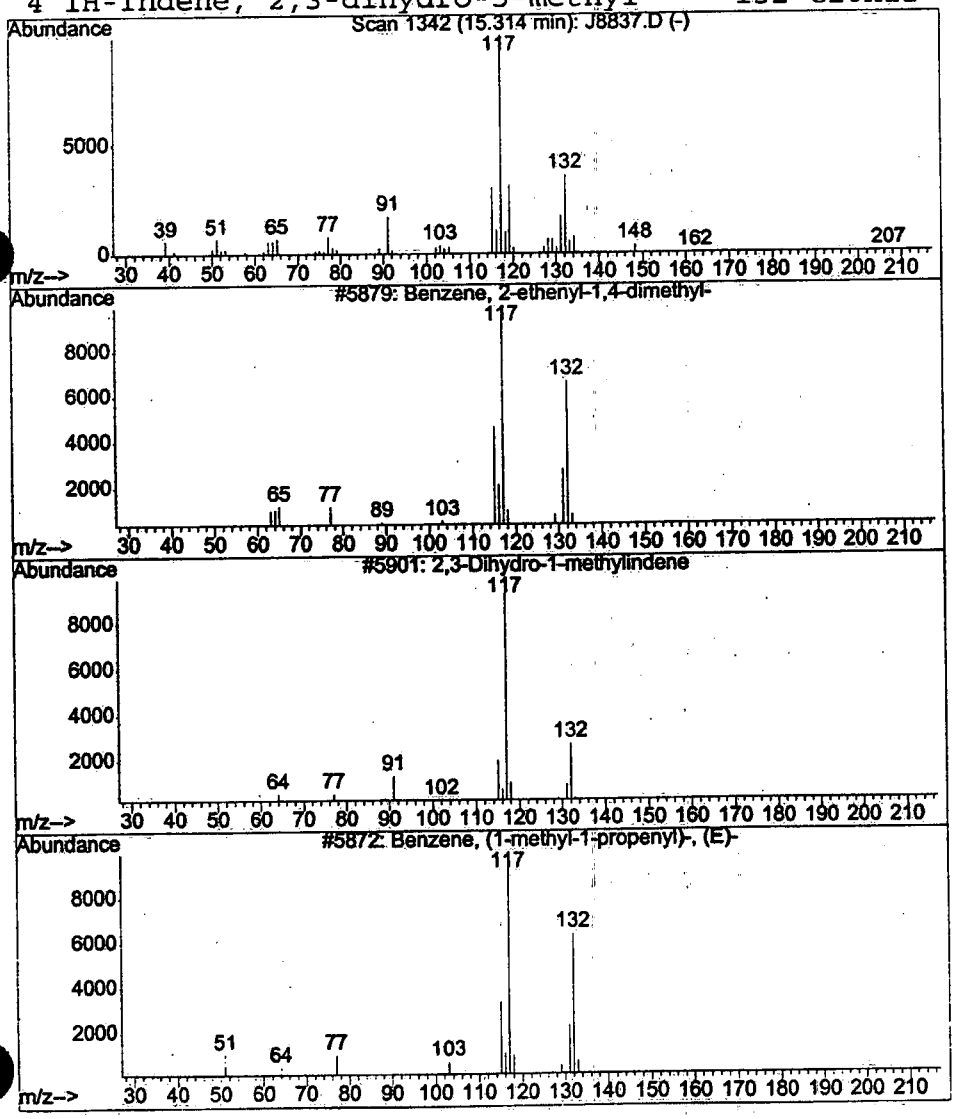
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

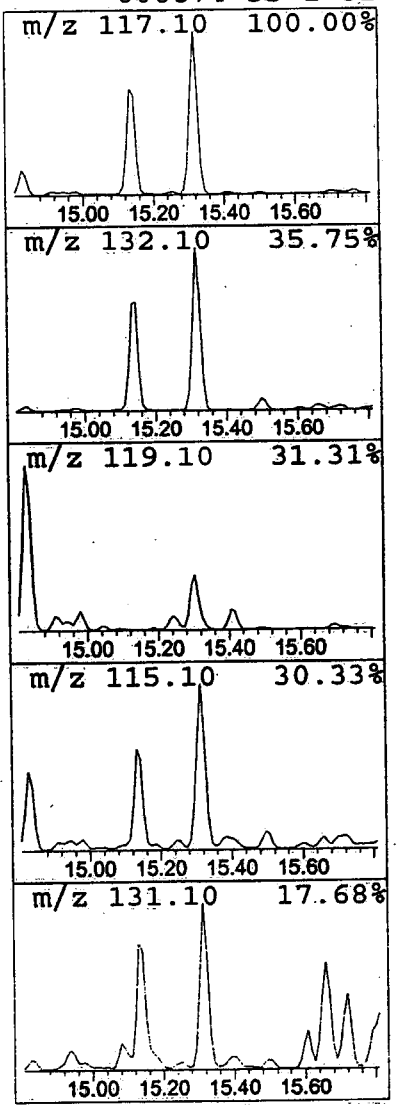
****

Peak Number 15 Substituted benzene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.31	22.78 UG	771475	Chlorobenzene-d5	10.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	95
2	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	93
3	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	81
4	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	81





000269

1304

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-29-01\F9468.D
Acq On : 30 Mar 2001 5:37
Sample : S-27,1922-011,M,0.035g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
.S Integration Params: rteint.p
Quant Time: Mar 30 10:37 2001

Vial: 36
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	8.77	168	3366922	50.00	UG		0.05
31) 1,4-Difluorobenzene	9.96	114	3335022	50.00	UG		0.06
50) Chlorobenzene-d5	14.82	117	2410241	50.00	UG		0.06
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	9.26	65	1901974	56.53	UG		0.06
Spiked Amount 50.000	Range 27 - 176		Recovery = 113.06%				
41) Toluene-d8	12.36	98	2988020	48.73	UG		0.07
Spiked Amount 50.000	Range 20 - 158		Recovery = 97.46%				
59) Bromofluorobenzene	16.91	95	2505862	48.08	UG		0.06
Spiked Amount 50.000	Range 28 - 148		Recovery = 96.16%				
Target Compounds							Qvalue
42) Toluene	12.46	92	80380	1.75	UG		93
74) 1,2-Dichlorobenzene	19.75	146	111333	2.39	UG	#	67

(#) = qualifier out of range (m) = manual integration

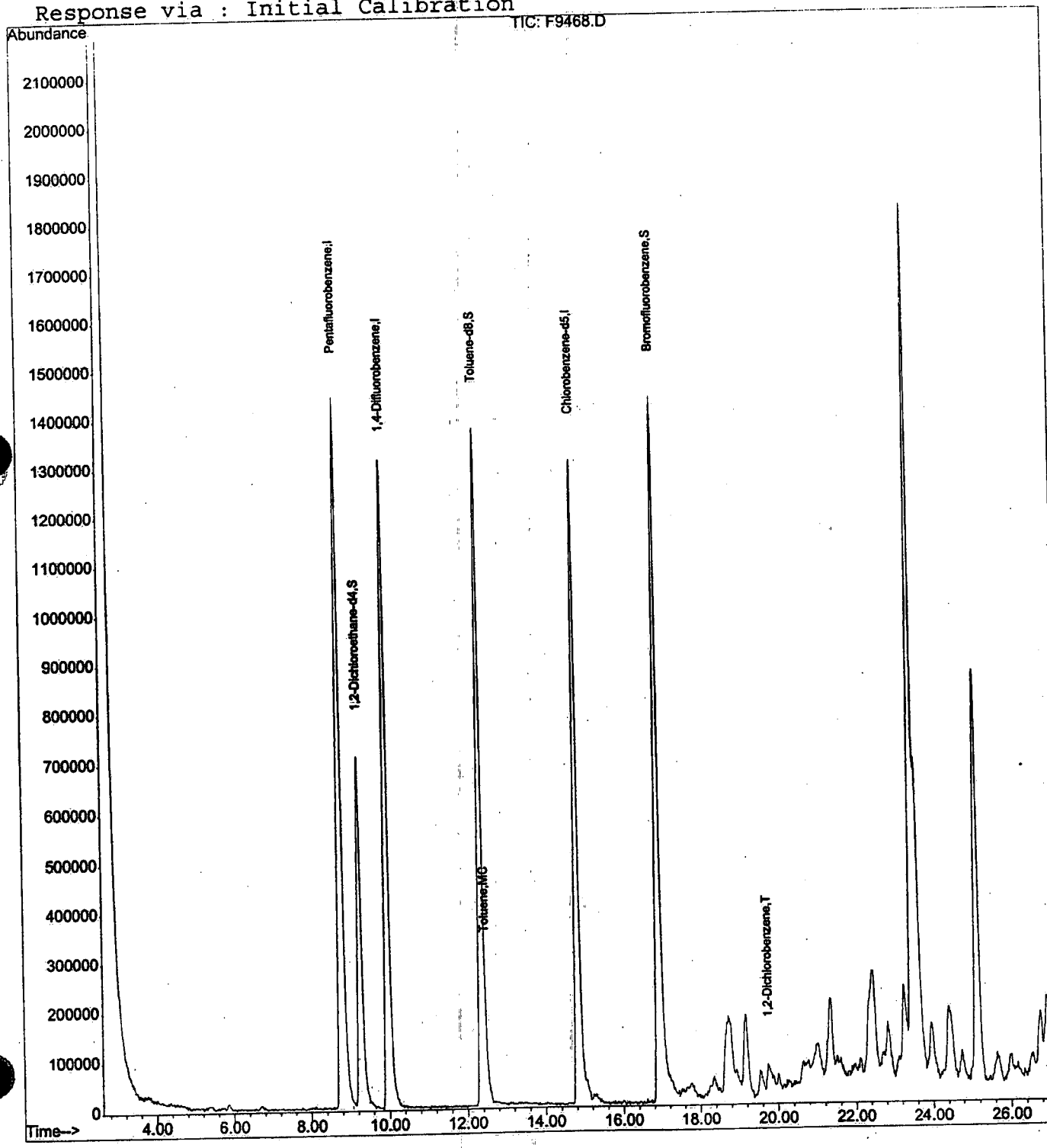
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9468.D
Acq On : 30 Mar 2001 5:37
Sample : S-27,1922-011,M,0.035g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
MS Integration Params: rteint.p
Quant Time: Mar 30 10:37 2001

Vial: 36
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



1306

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9468.D
Acq On : 30 Mar 2001 5:37
Sample : S-27,1922-011,M,0.035g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
S Integration Params: LSCINT.P

Vial: 36
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

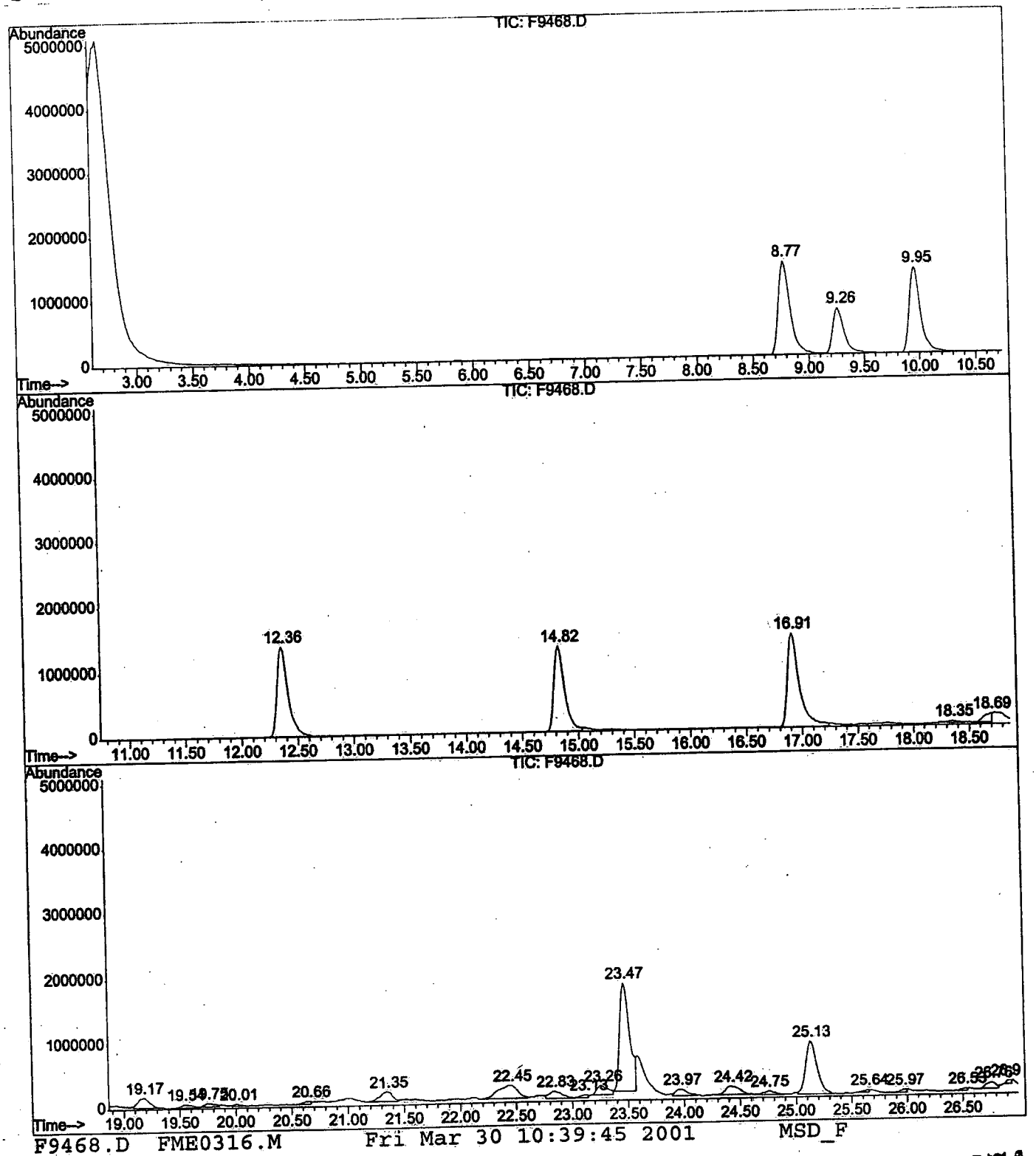
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	8.774	413	421	446	rBV	1436266	10510173	98.35%	12.768%
2	9.259	446	454	471	rVV	708205	4970201	46.51%	6.038%
3	9.950	493	501	519	rBV	1313710	9175895	85.87%	11.147%
4	12.358	656	665	684	rBV2	1372557	9367393	87.66%	11.380%
5	14.825	825	833	847	rBV2	1302455	8616623	80.63%	10.468%
6	16.910	966	975	997	rBV	1430968	10686336	100.00%	12.982%
7	18.350	1070	1073	1080	rVB4	33109	152300	1.43%	0.185%
8	18.688	1085	1096	1097	rBV6	142439	741308	6.94%	0.901%
9	19.173	1123	1129	1140	rVB3	156478	1146746	10.73%	1.393%
10	19.541	1148	1154	1163	rBV8	51496	360242	3.37%	0.438%
11	19.746	1163	1168	1175	rBV7	53520	351826	3.29%	0.427%
12	20.011	1183	1186	1192	rVB5	33013	137327	1.29%	0.167%
13	20.657	1223	1230	1231	rBV2	41884	185043	1.73%	0.225%
14	21.348	1266	1277	1284	rBV5	149157	1144092	10.71%	1.390%
15	22.451	1335	1352	1362	rBV5	205686	2501038	23.40%	3.038%
16	22.834	1373	1378	1390	rVB6	113965	865346	8.10%	1.051%
17	23.128	1390	1398	1399	rBV7	45098	228963	2.14%	0.278%
18	23.260	1401	1407	1414	rBV8	146310	1033526	9.67%	1.256%
19	23.466	1414	1421	1428	rBV3	1684281	10577187	98.98%	12.849%
20	23.967	1450	1455	1465	rVB6	104625	728511	6.82%	0.885%
21	24.423	1478	1486	1496	rVB3	132016	1116222	10.45%	1.356%
22	24.747	1503	1508	1518	rVB7	60658	407806	3.82%	0.495%
23	25.129	1526	1534	1548	rVB3	828750	5928537	55.48%	7.202%
24	25.644	1562	1569	1570	rBV5	44822	160965	1.51%	0.196%
25	25.967	1584	1591	1593	rBV6	51869	237669	2.22%	0.289%
26	26.526	1624	1629	1630	rBV4	39384	149802	1.40%	0.182%
27	26.761	1638	1645	1649	rBV5	101399	632895	5.92%	0.769%
28	26.908	1652	1655	1657	rBV4	62463	202385	1.89%	0.246%

Sum of corrected areas: 82316357

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\03-29-01\F9468.D
Operator : GREGG
Acquired : 30 Mar 2001 5:37 using AcqMethod VOAF
Instrument : 5970 - In
Sample Name: S-27,1922-011,M,0.035g
Misc Info : ENVTACT/ORBIS,03/28/01,03/28/01
Vial Number: 36
Quant File :FME0316.RES (RTE Integrator)



F9468.D FME0316.M Fri Mar 30 10:39:45 2001 MSD_F

000274

1309

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9468.D
Acq On : 30 Mar 2001 5:37
Sample : S-27,1922-011,M,0.035g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 36
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

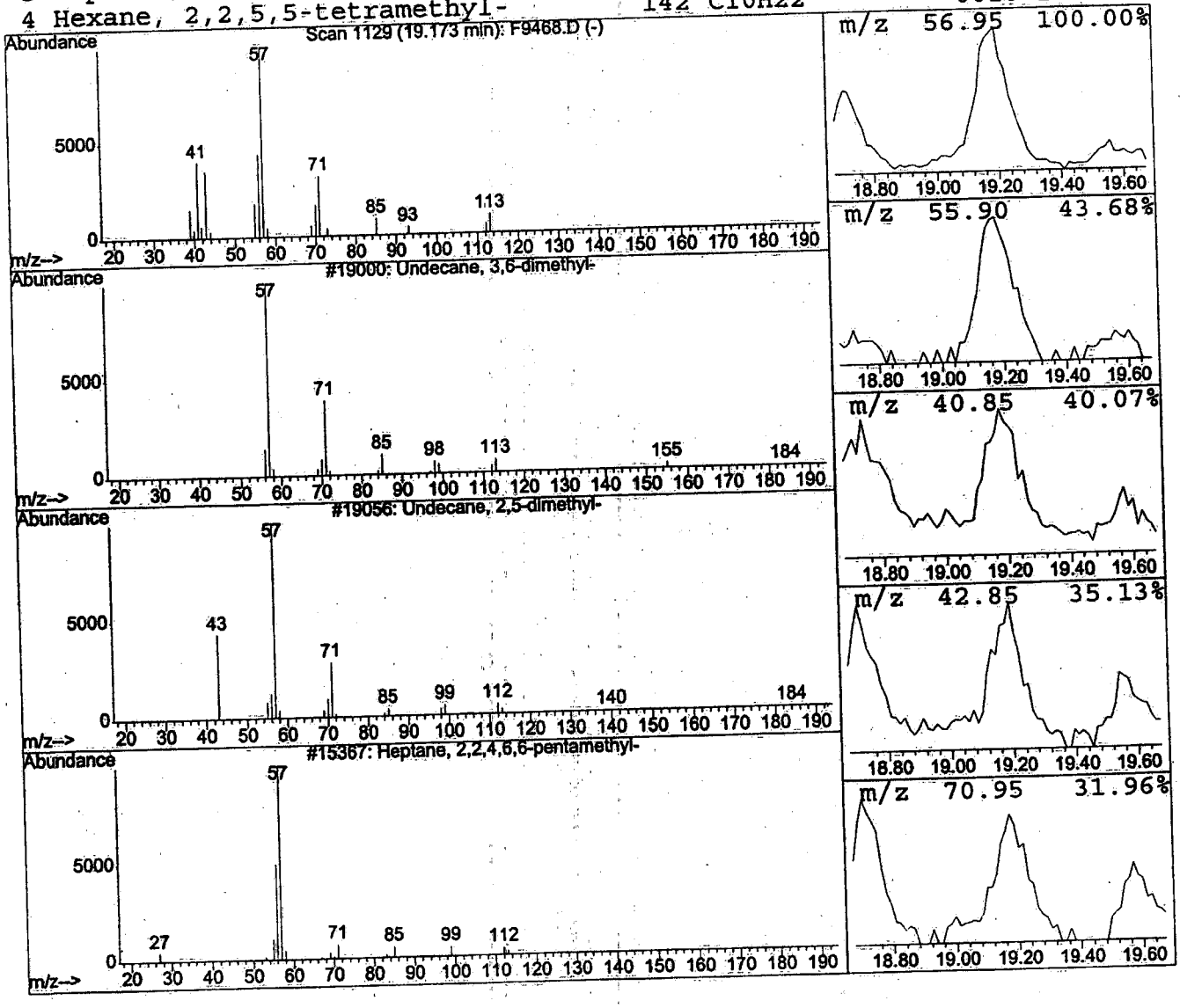
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Unknown alkane — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.17	6.65 UG	1146750	Chlorobenzene-d5	14.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 3,6-dimethyl-	184	C13H28	017301-28-9	47
2	Undecane, 2,5-dimethyl-	184	C13H28	017301-22-3	47
3	Heptane, 2,2,4,6,6-pentamethyl-	170	C12H26	013475-82-6	42
4	Hexane, 2,2,5,5-tetramethyl-	142	C10H22	001071-81-4	40



000275

1310

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9468.D
Acq On : 30 Mar 2001 5:37
Sample : S-27,1922-011,M,0.035g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 36
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

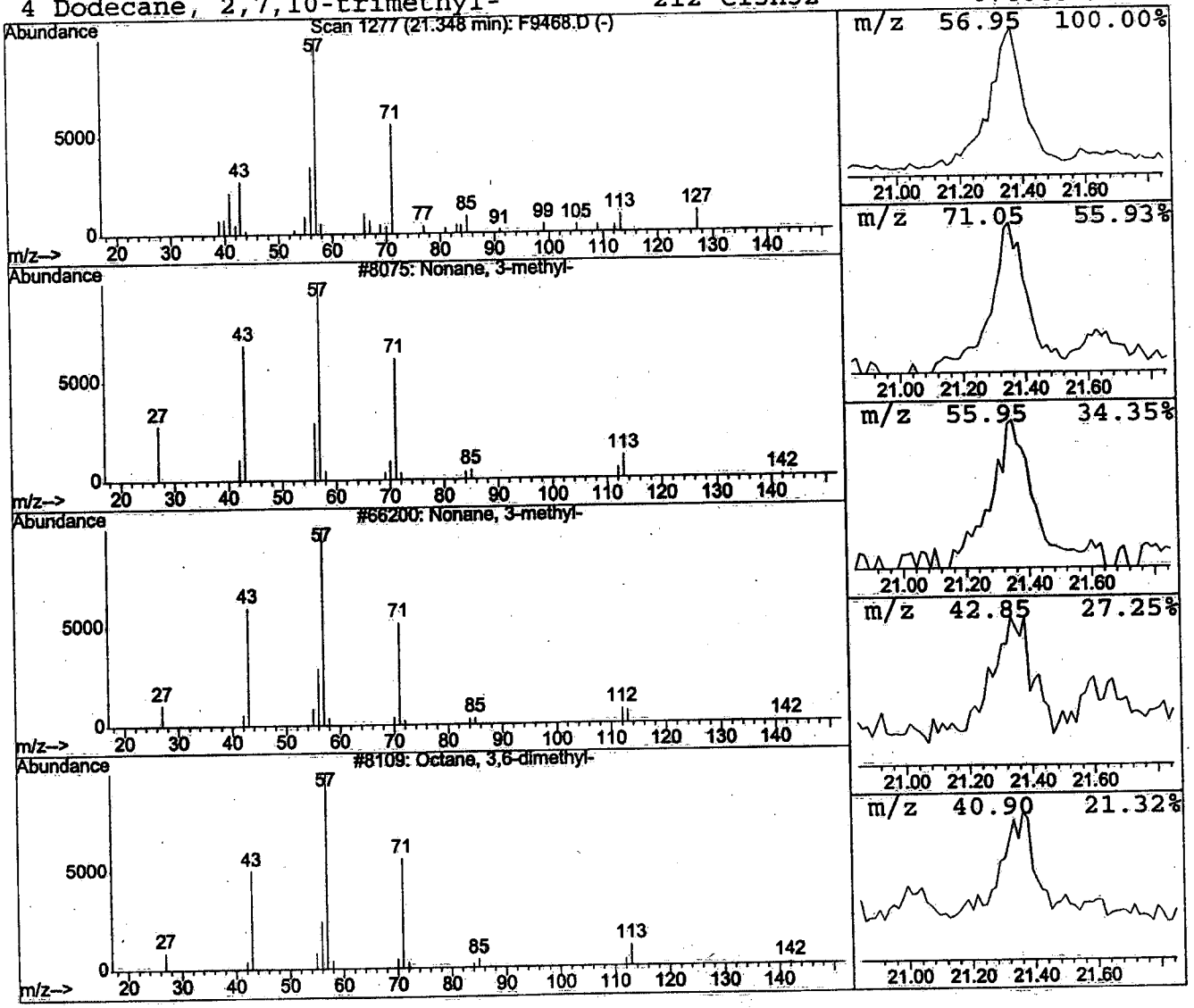
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Unknown alkane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.35	6.64 UG	1144090	Chlorobenzene-d5	14.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane, 3-methyl-	142	C10H22	005911-04-6	59
2	Nonane, 3-methyl-	142	C10H22	005911-04-6	53
3	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	45
4	Dodecane, 2,7,10-trimethyl-	212	C15H32	074645-98-0	42



1311

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9468.D
Acq On : 30 Mar 2001 5:37
Sample : S-27,1922-011,M,0.035g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 36
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

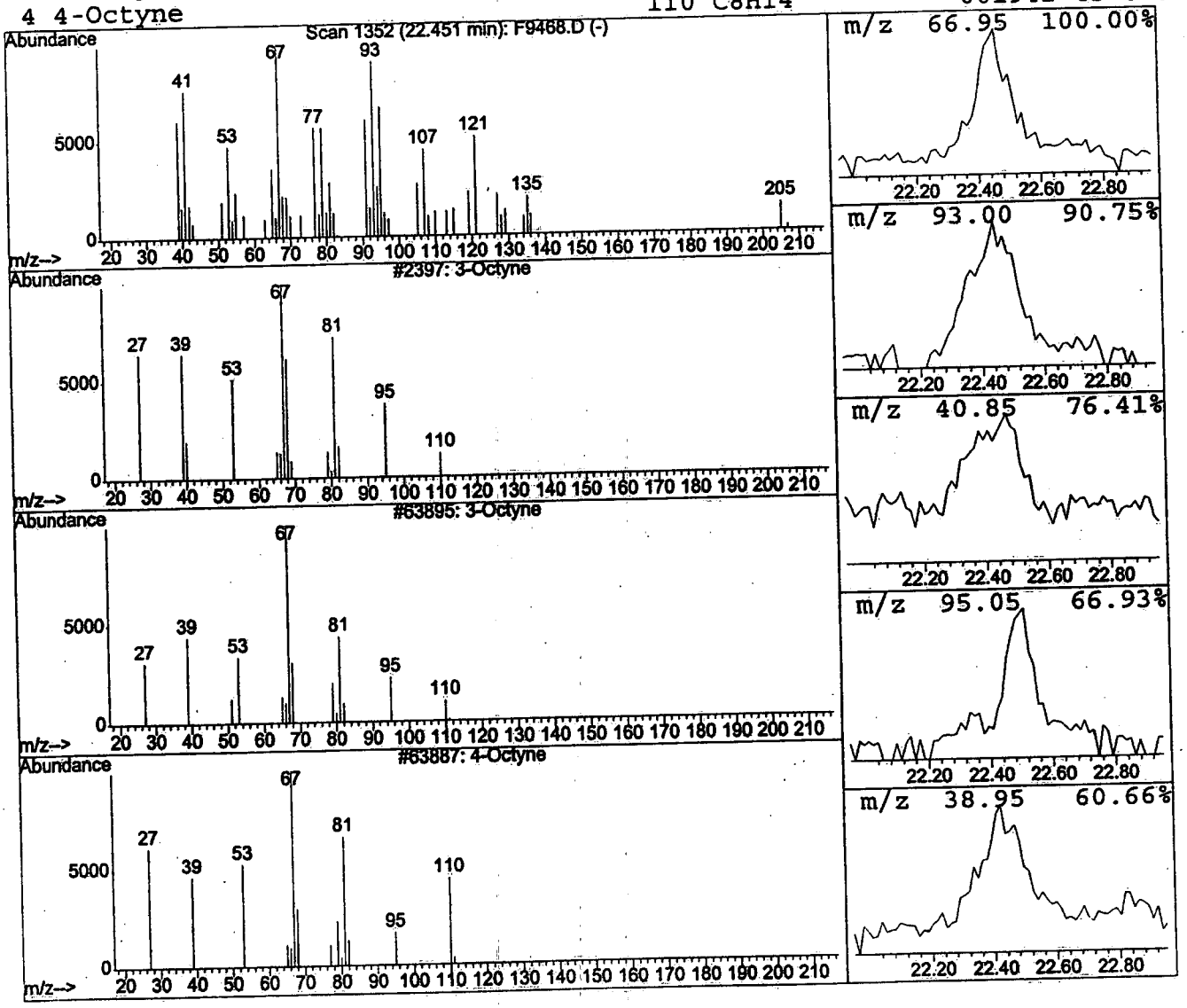
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Unknown aliphatic Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.45	14.51 UG	2501040	Chlorobenzene-d5	14.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Octyne	110	C8H14	015232-76-5	43
2	3-Octyne	110	C8H14	015232-76-5	43
3	4-Octyne	110	C8H14	001942-45-6	38
4	4-Octyne	110	C8H14	001942-45-6	38



000277

1312

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9468.D
Acq On : 30 Mar 2001 5:37
Sample : S-27,1922-011,M,0.035g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 36
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

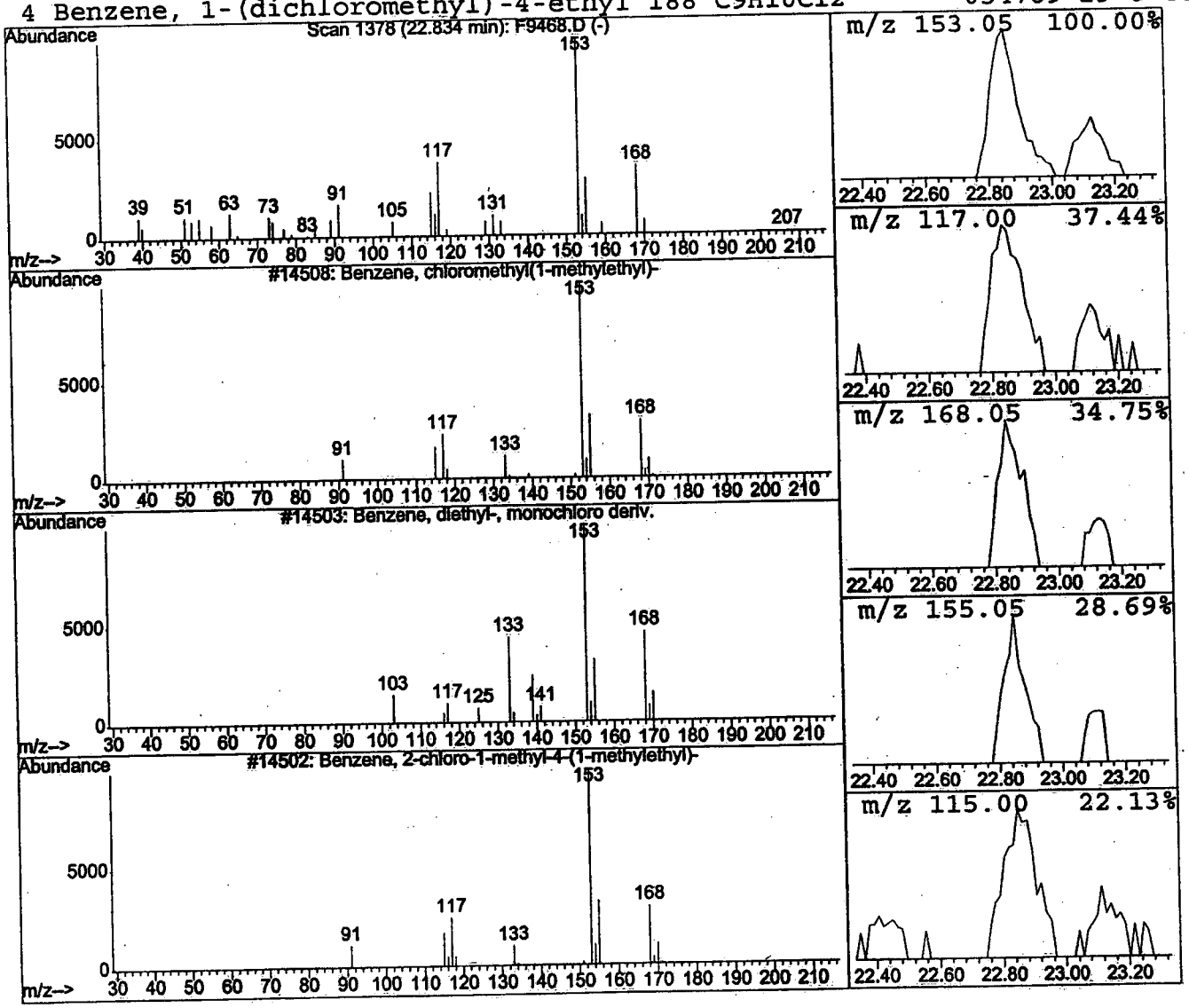
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Substituted benzene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.83	5.02 UG	865346	Chlorobenzene-d5	14.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, chloromethyl(1-methylethyl	168	C10H13Cl	072403-13-5	50
2	Benzene, diethyl-, monochloro deriv	168	C10H13Cl	054868-29-0	50
3	Benzene, 2-chloro-1-methyl-4-(1-met	168	C10H13Cl	004395-79-3	45
4	Benzene, 1-(dichloromethyl)-4-ethyl	188	C9H10Cl2	054789-29-6	45



1313

Data File : C:\HPCHEM\1\DATA\03-29-01\F9468.D
Acq On : 30 Mar 2001 5:37
Sample : S-27,1922-011,M,0.035g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 36
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

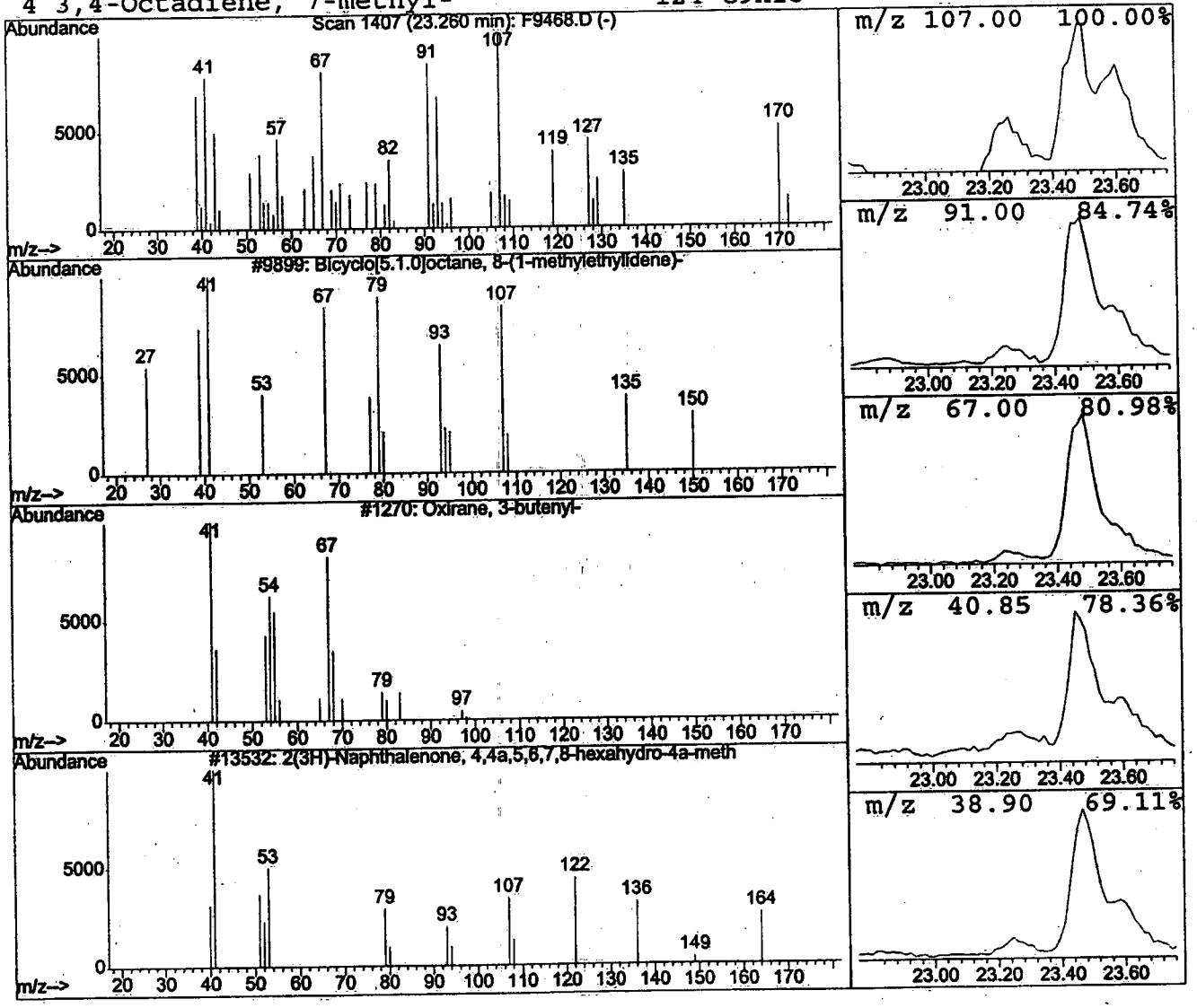
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 5 Unknown aromatic Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.26	6.00 UG	1033530	Chlorobenzene-d5	14.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[5.1.0]octane, 8-(1-methylet	150	C11H18	054166-47-1	36
2	Oxirane, 3-butenyl-	98	C6H10O	010353-53-4	25
3	2(3H)-Naphthalenone, 4,4a,5,6,7,8-h	164	C11H16O	004087-39-2	22
4	3,4-Octadiene, 7-methyl-	124	C9H16	037050-05-8	17



1314

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9468.D
Acq On : 30 Mar 2001 5:37
Sample : S-27,1922-011,M,0.035g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 36
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

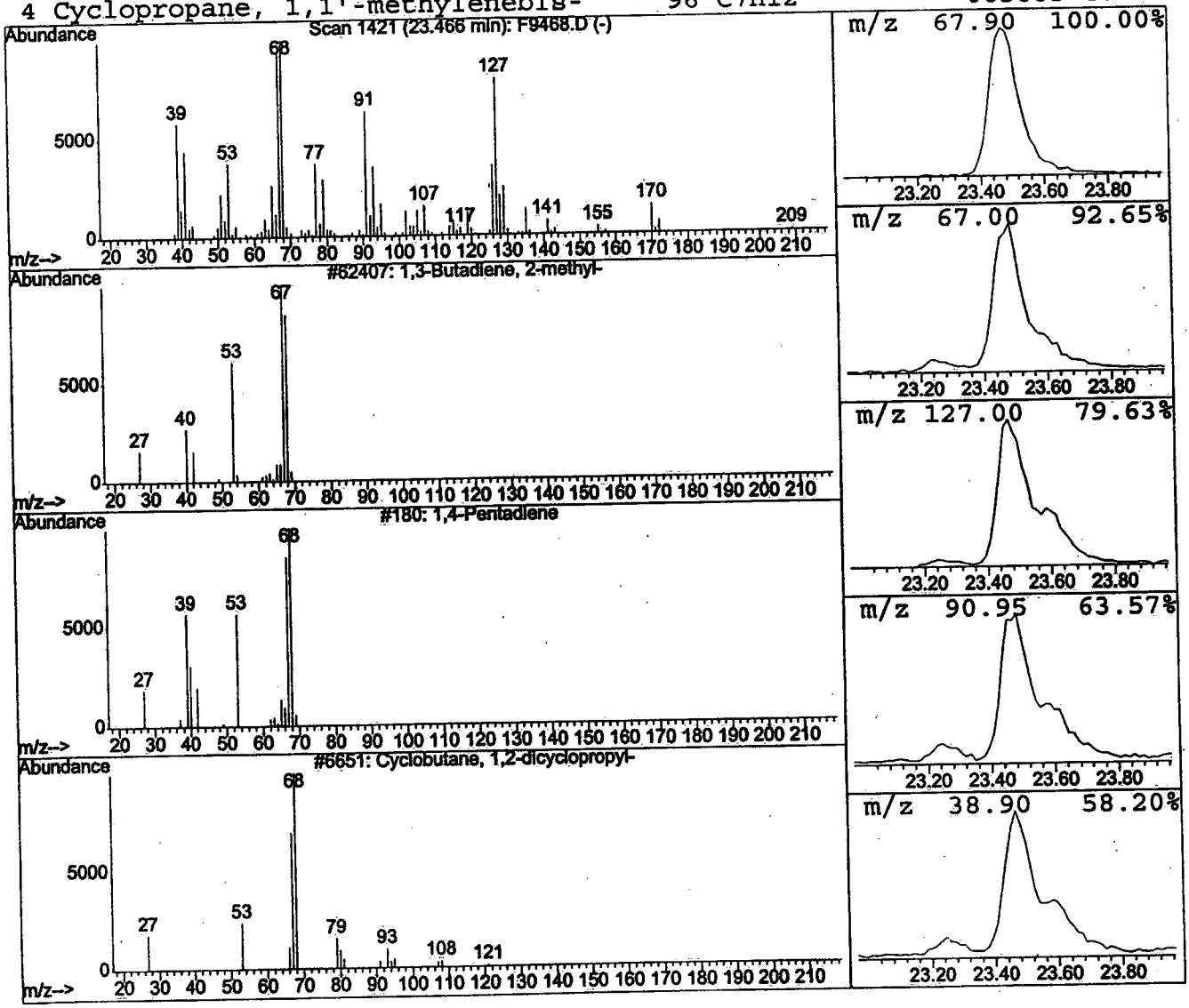
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 6 Unknown aromatic — Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.47	61.38 UG	10577200	Chlorobenzene-d5	14.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3-Butadiene, 2-methyl-	68	C5H8	000078-79-5	35
2	1,4-Pentadiene	68	C5H8	000591-93-5	35
3	Cyclobutane, 1,2-dicyclopropyl-	136	C10H16	061141-62-6	35
4	Cyclopropane, 1,1'-methylenebis-	96	C7H12	005685-47-2	25



000280

1315

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9468.D
Acq On : 30 Mar 2001 5:37
Sample : S-27,1922-011,M,0.035g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 36
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

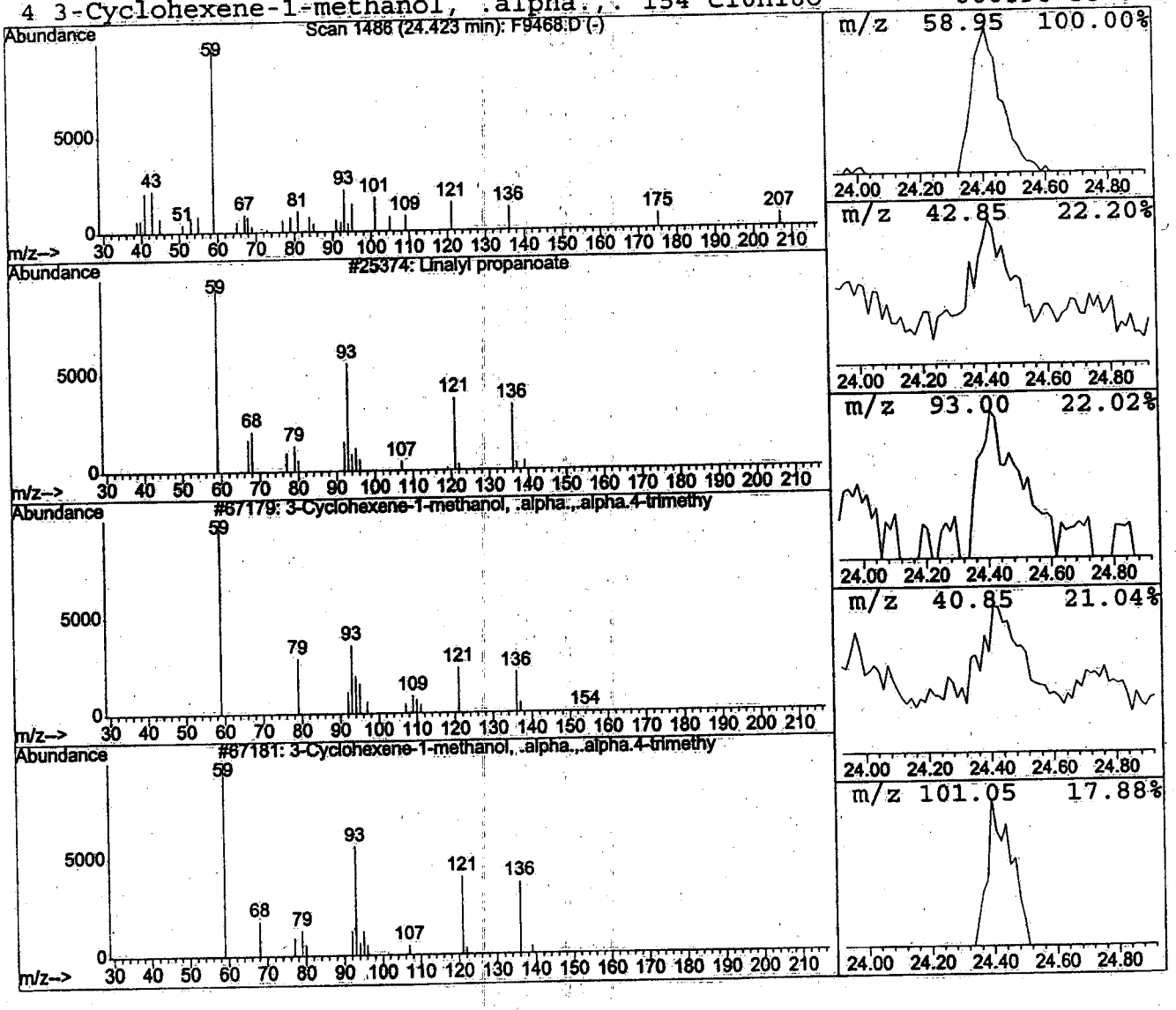
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 7 Unknown aromatic — Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.42	6.48 UG	1116220	Chlorobenzene-d5	14.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Linalyl propanoate	210	C13H22O2	000000-00-0	50
2	3-Cyclohexene-1-methanol, .alpha.,.	154	C10H18O	000098-55-5	28
3	3-Cyclohexene-1-methanol, .alpha.,.	154	C10H18O	000098-55-5	27
4	3-Cyclohexene-1-methanol, .alpha.,.	154	C10H18O	000098-55-5	17



1316

000281

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9468.D
Acq On : 30 Mar 2001 5:37
Sample : S-27,1922-011,M,0.035g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
MS Integration Params: LSCINT.P

Vial: 36
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

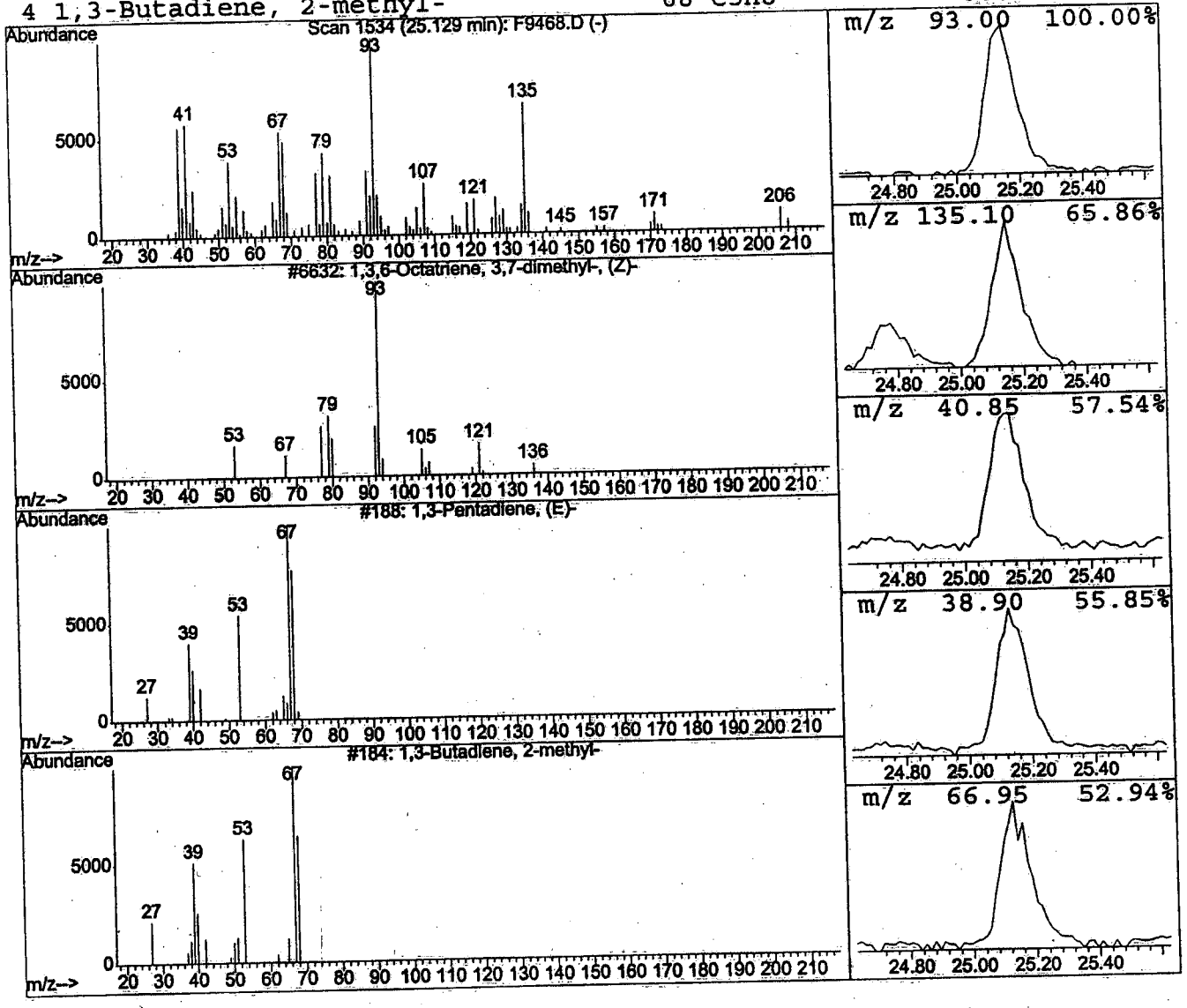
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 8 Unknown aromatic — Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.13	34.40 UG	5928540	Chlorobenzene-d5	14.82

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3,6-Octatriene, 3,7-dimethyl-, (Z	136	C10H16	003338-55-4	64
2	1,3-Pentadiene, (E)-	68	C5H8	002004-70-8	43
3	1,3-Butadiene, 2-methyl-	68	C5H8	000078-79-5	43
4	1,3-Butadiene, 2-methyl-	68	C5H8	000078-79-5	43



1317

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
Integration Params: rteint.p
Quant Time: Mar 30 10:57 2001

Vial: 40
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	8.77	168	3228877	50.00	UG		0.05
31) 1,4-Difluorobenzene	9.95	114	3321878	50.00	UG		0.04
50) Chlorobenzene-d5	14.81	117	2347587	50.00	UG		0.05
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	9.26	65	711412	22.05	UG		0.06
Spiked Amount 50.000	Range 27 - 176		Recovery = 44.10%				
41) Toluene-d8	12.36	98	1047135	17.15	UG		0.07
Spiked Amount 50.000	Range 20 - 158		Recovery = 34.30%				
59) Bromofluorobenzene	16.92	95	935367	18.43	UG		0.06
Spiked Amount 50.000	Range 28 - 148		Recovery = 36.86%				
Target Compounds							Qvalue
42) Toluene	12.46	92	168771	3.69	UG		94
53) Ethylbenzene	15.05	91	282372	2.93	UG		100
54) m,p-Xylene	15.26	106	61140	1.77	UG		92
74) 1,2-Dichlorobenzene	19.75	146	92577	2.04	UG	#	67

(#) = qualifier out of range (m) = manual integration

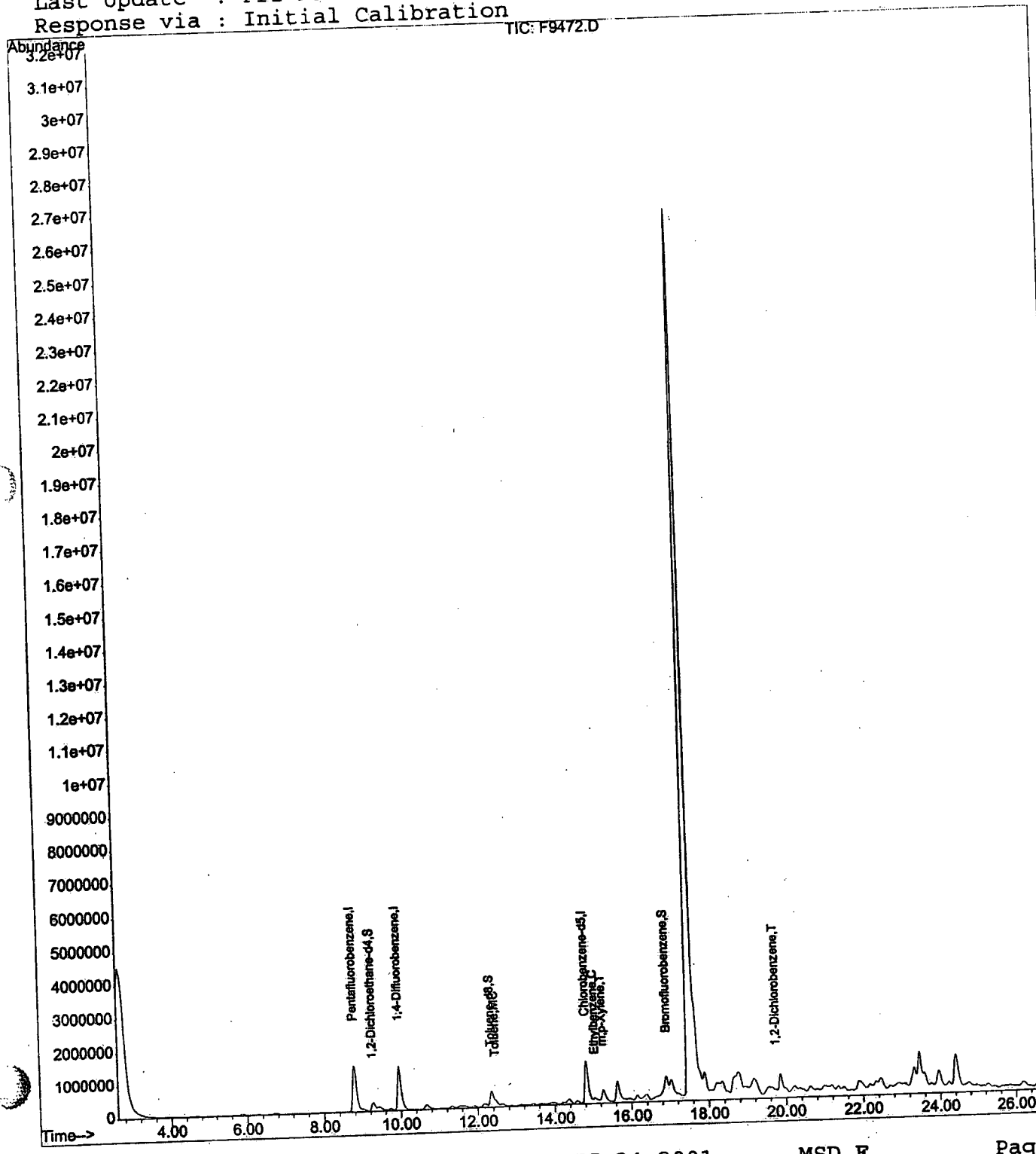
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
MS Integration Params: rteint.p
Quant Time: Mar 30 10:57 2001

Vial: 40
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



000284

1319

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 40
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

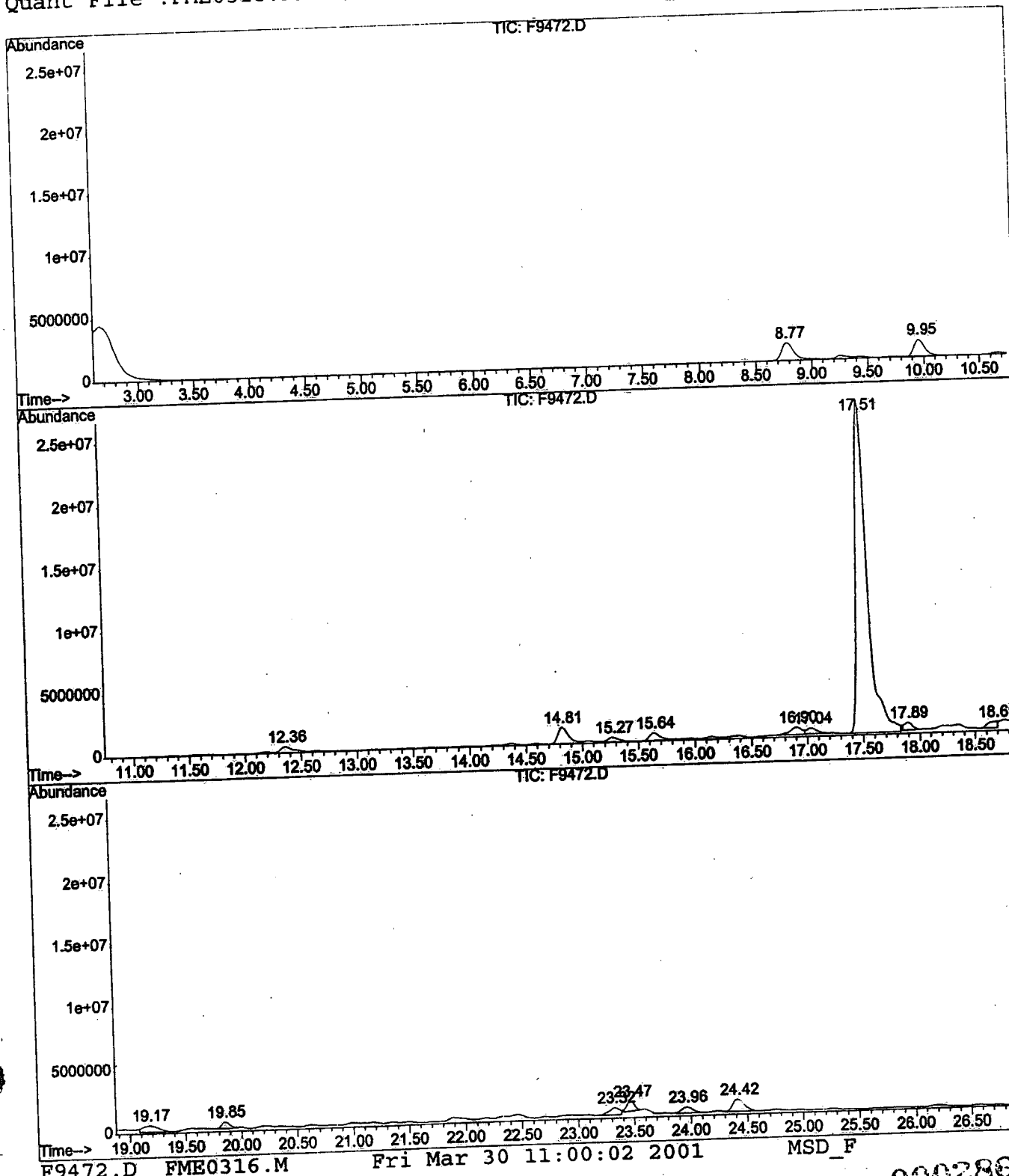
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	8.775	413	421	447	rBV	1413644	11002660	5.98%	4.204%
2	9.951	493	501	521	rBV	1353614	8916800	4.85%	3.407%
3	12.360	658	665	679	rVV3	480433	3937064	2.14%	1.504%
4	14.814	825	832	844	rBV	1300527	8612934	4.68%	3.291%
5	15.270	857	863	874	rVB3	364182	2449786	1.33%	0.936%
6	15.638	881	888	898	rBV2	618021	3988026	2.17%	1.524%
7	16.903	963	974	979	rVV6	609151	4668927	2.54%	1.784%
8	17.035	979	983	994	rVB5	437669	2865496	1.56%	1.095%
9	17.507	1006	1015	1037	rBV	26573414	183845297	100.00%	70.253%
10	17.890	1038	1041	1048	rVB2	588271	2954406	1.61%	1.129%
11	18.685	1085	1095	1096	rBV4	504359	3207227	1.74%	1.226%
12	19.171	1122	1128	1143	rVB4	507067	5017702	2.73%	1.917%
13	19.848	1169	1174	1182	rBV	494884	2619968	1.43%	1.001%
14	23.324	1401	1410	1414	rBV4	541189	3716582	2.02%	1.420%
15	23.472	1415	1420	1426	rVB3	724457	3783114	2.06%	1.446%
16	23.958	1447	1453	1465	rVB6	472515	3160803	1.72%	1.208%
17	24.415	1476	1484	1497	rVB2	954922	6943139	3.78%	2.653%

Sum of corrected areas: 261689931

F9472.D FME0316.M Fri Mar 30 11:01:11 2001 MSD_F

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Operator : GREGG
Acquired : 30 Mar 2001 7:50 using AcqMethod VOAF
Instrument : 5970 - In
Sample Name: S-28,1922-012,M,0.022g
Misc Info : ENVTACT/ORBIS,03/28/01,03/28/01,2
Vial Number: 40
Quant File :FME0316.RES (RTE Integrator)



F9472.D FME0316.M Fri Mar 30 11:00:02 2001 MSD_F

000286

1321

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 40
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

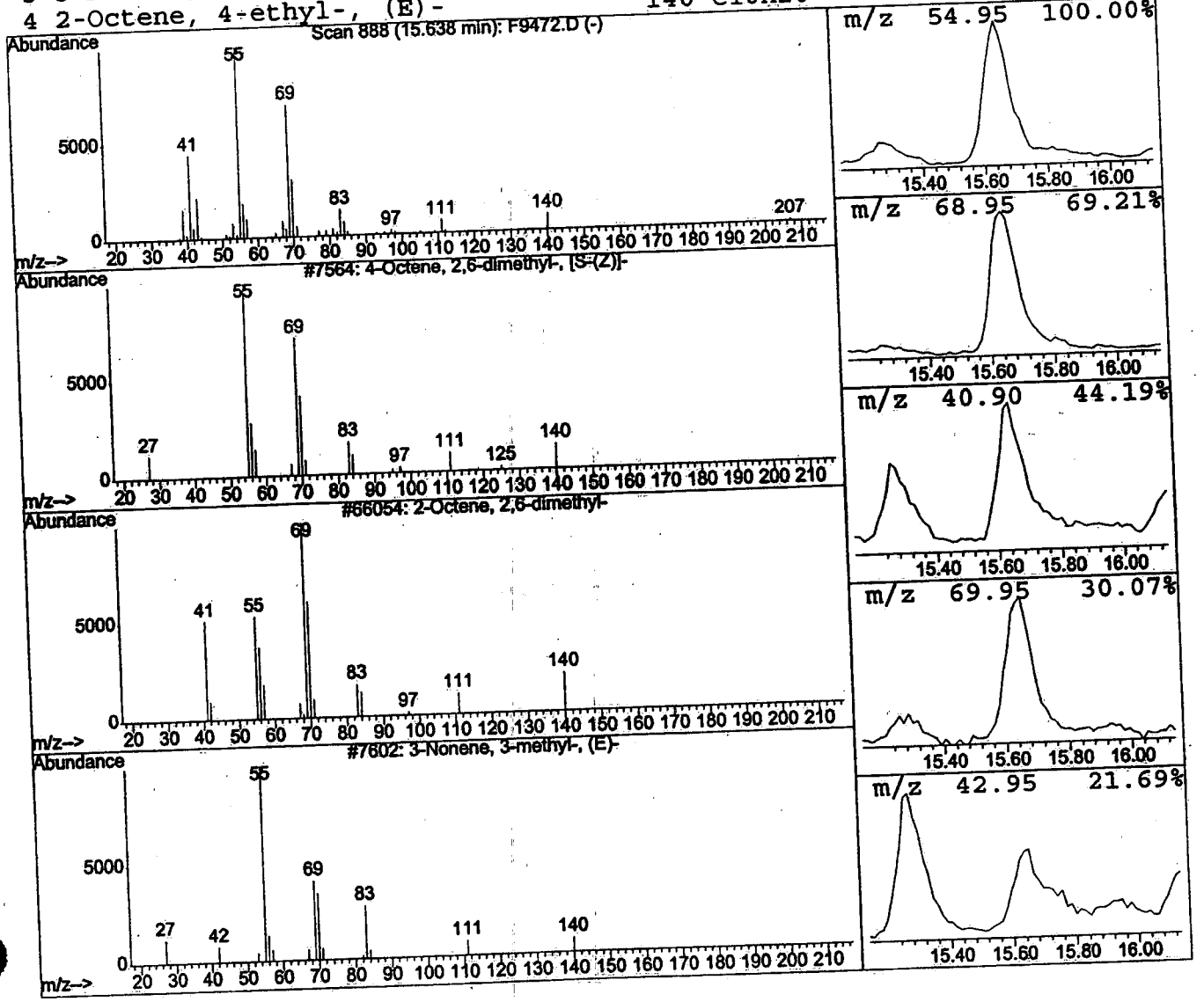
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Unknown aromatic — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.64	23.15 UG	3988030	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Octene, 2,6-dimethyl-, [S-(Z)]-	140	C10H20	062960-77-4	87
2	2-Octene, 2,6-dimethyl-	140	C10H20	004057-42-5	72
3	3-Nonene, 3-methyl-, (E)-	140	C10H20	069405-42-1	72
4	2-Octene, 4-ethyl-, (E)-	140	C10H20	074630-09-4	58



1322

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 40
Operator: GREGG
Inst : 5970 --In
Multiplr: 1.00

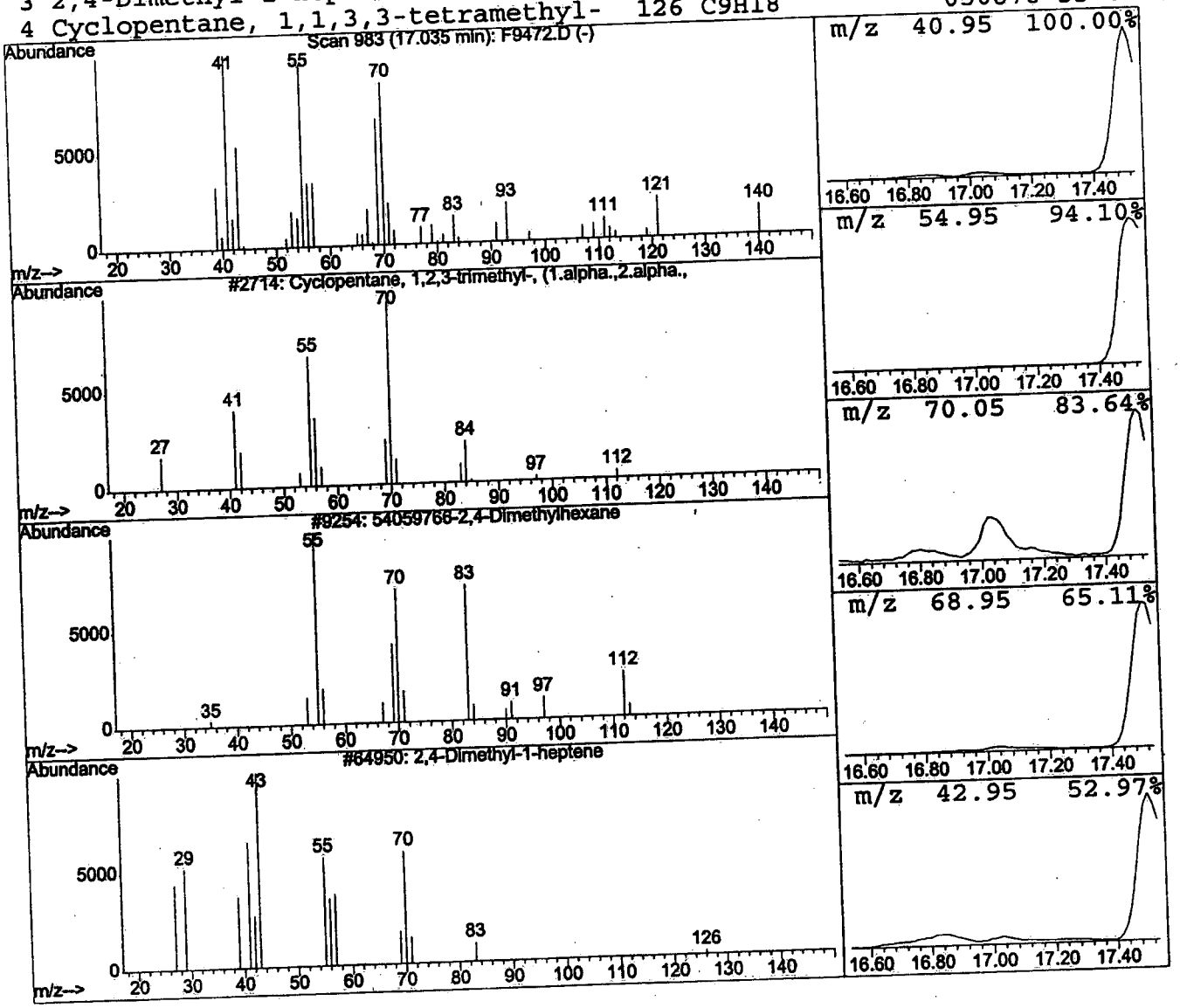
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Unknown hydrocarbon Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.04	16.63 UG	2865500	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, 1,2,3-trimethyl-, (1.	112	C8H16	002613-69-6	50
2	54059766-2,4-Dimethylhexane	148	C8H17Cl	000000-00-0	47
3	2,4-Dimethyl-1-heptene	126	C9H18	019549-87-2	47
4	Cyclopentane, 1,1,3,3-tetramethyl-	126	C9H18	050876-33-0	45



000288

1323

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 40
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

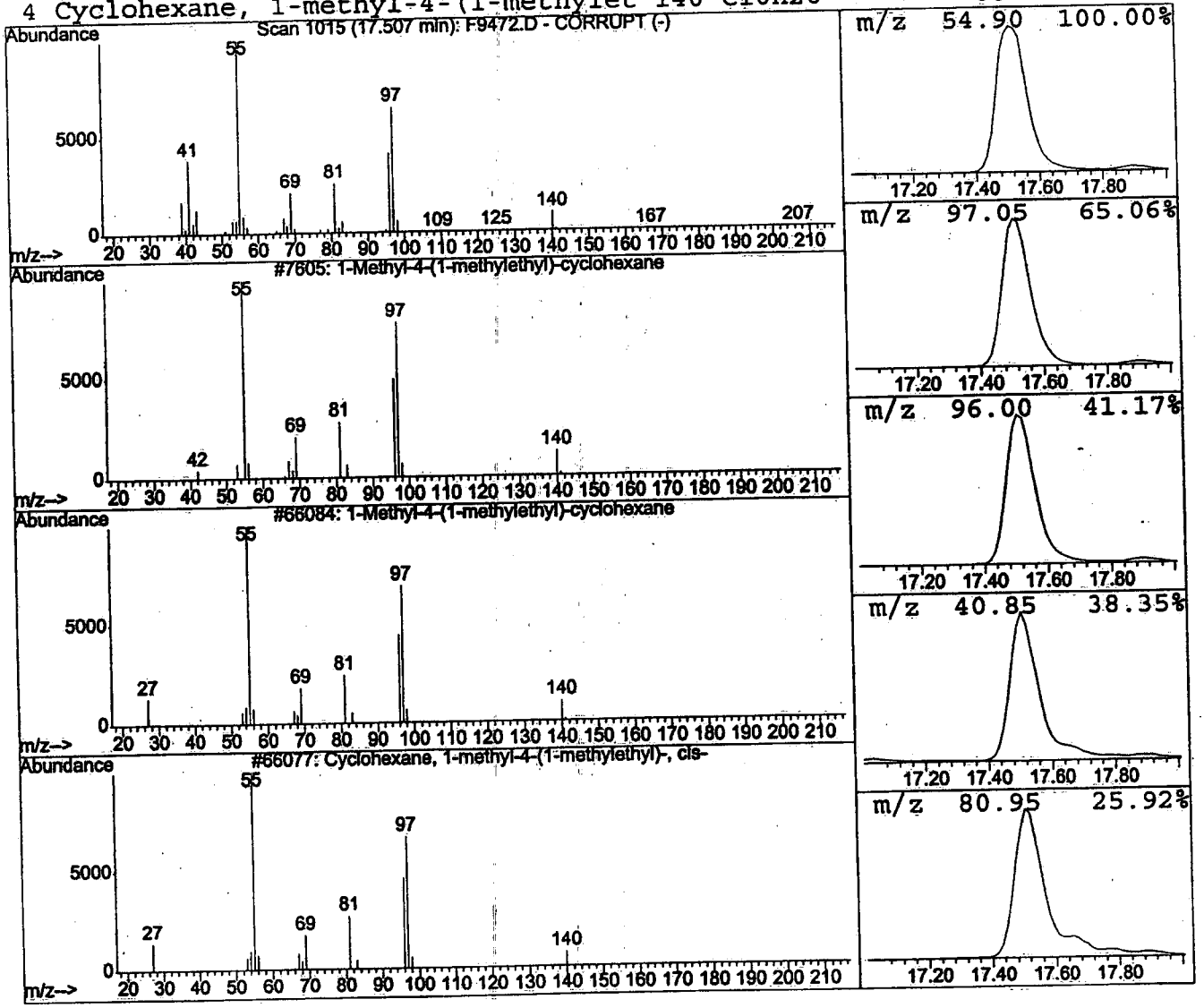
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Unknown cyclic hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.51	1067.26 UG	183845000	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Methyl-4-(1-methylethyl)-cyclohex	140	C10H20	000099-82-1	97
2	1-Methyl-4-(1-methylethyl)-cyclohex	140	C10H20	000099-82-1	94
3	Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	006069-98-3	94
4	Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	001678-82-6	93



000289

1324

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 40
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

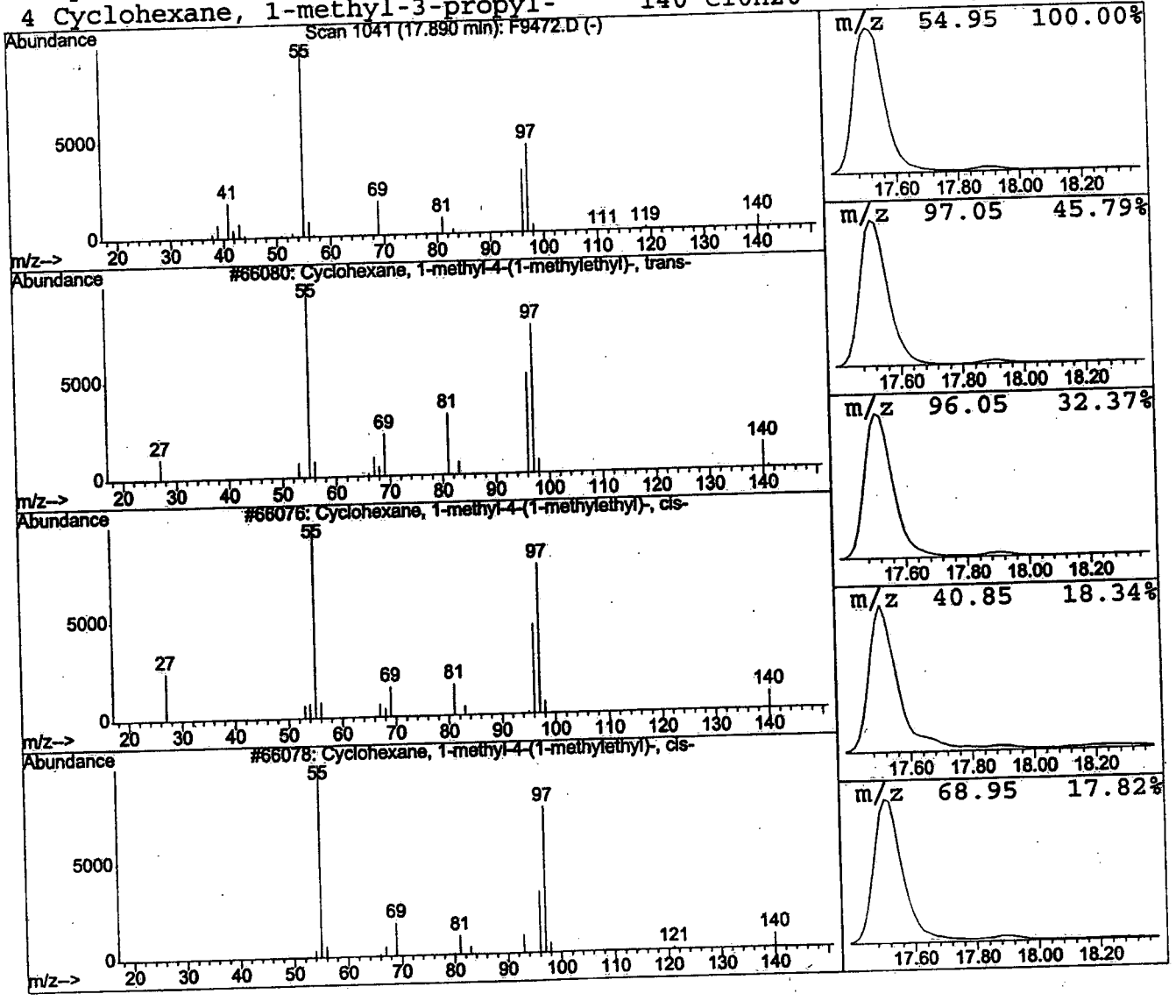
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Unknown cyclic hydrocarbon Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.89	17.15 UG	2954410	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	001678-82-6	78
2	Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	006069-98-3	64
3	Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	006069-98-3	59
4	Cyclohexane, 1-methyl-3-propyl-	140	C10H20	004291-80-9	59



1325

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 40
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

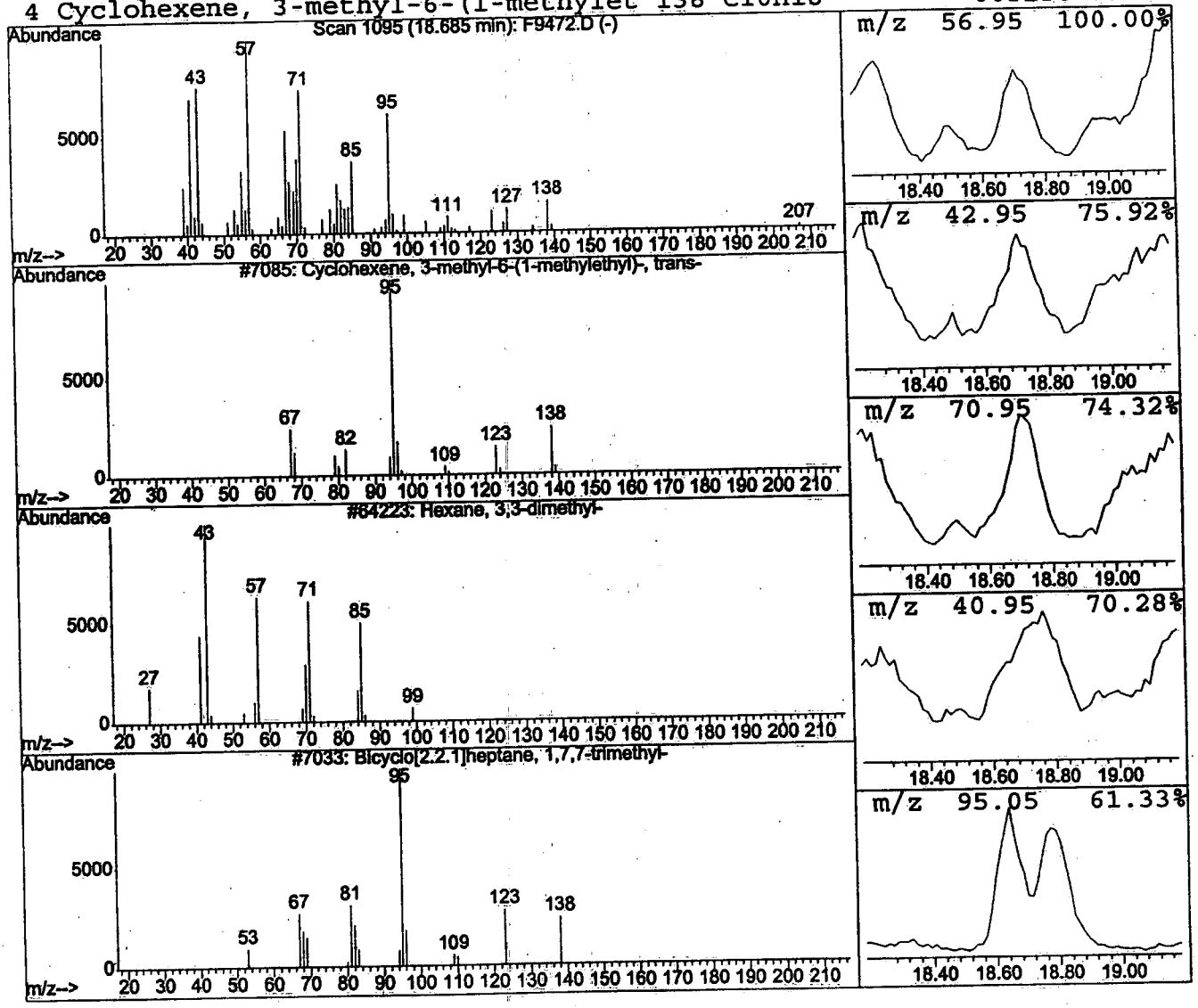
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 5 Unknown hydrocarbon Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.69	18.62 UG	3207230	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 3-methyl-6-(1-methylet	138	C10H18	001124-26-1	72
2	Hexane, 3,3-dimethyl-	114	C8H18	000563-16-6	43
3	Bicyclo[2.2.1]heptane, 1,7,7-trimet	138	C10H18	000464-15-3	38
4	Cyclohexene, 3-methyl-6-(1-methylet	138	C10H18	005256-65-5	35



1326

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 40
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

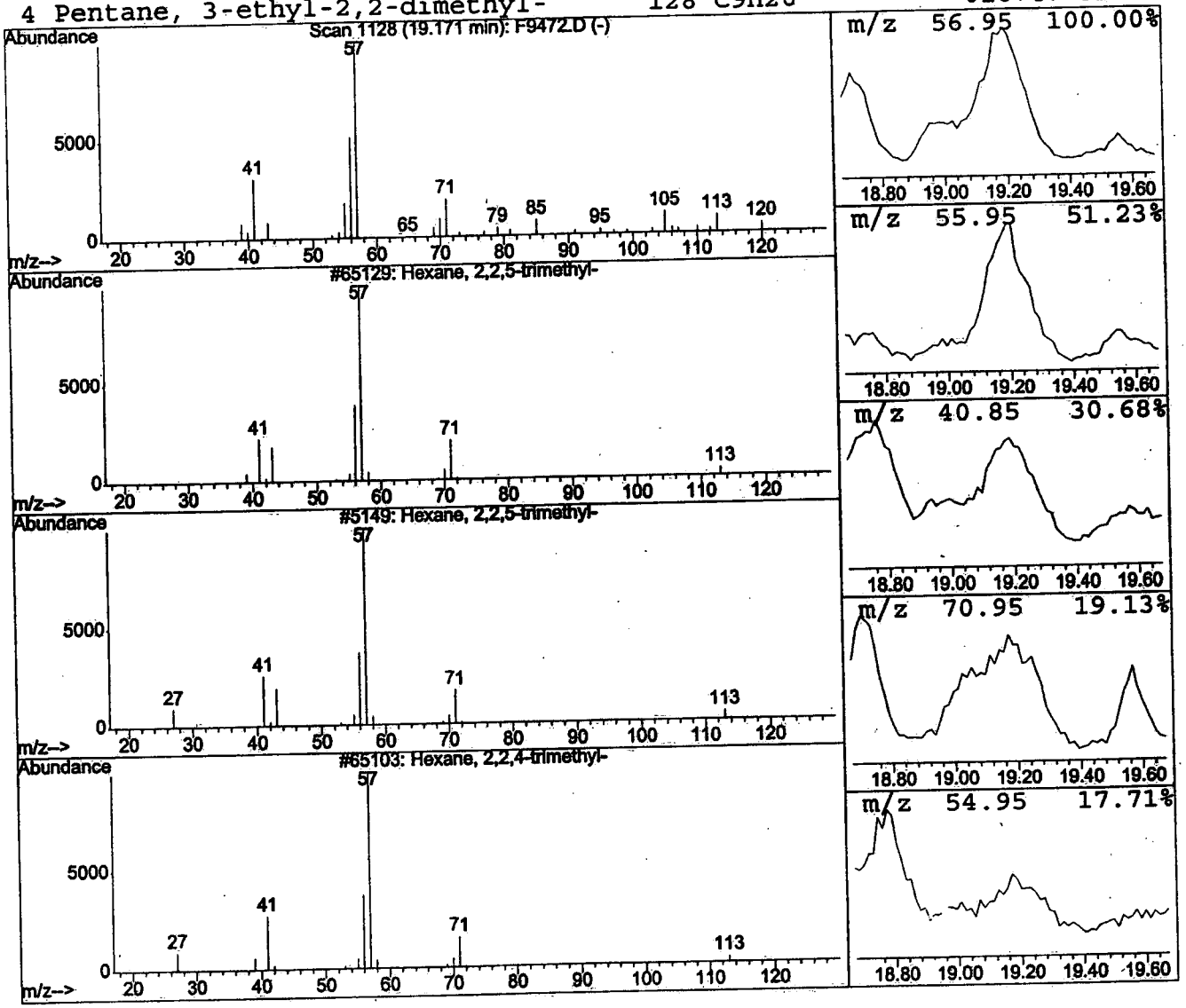
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 6 Unknown alkane — Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.17	29.13 UG	5017700	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 2,2,5-trimethyl-	128	C9H20	003522-94-9	64
2	Hexane, 2,2,5-trimethyl-	128	C9H20	003522-94-9	50
3	Hexane, 2,2,4-trimethyl-	128	C9H20	016747-26-5	50
4	Pentane, 3-ethyl-2,2-dimethyl-	128	C9H20	016747-32-3	45



000292

1327

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 40
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

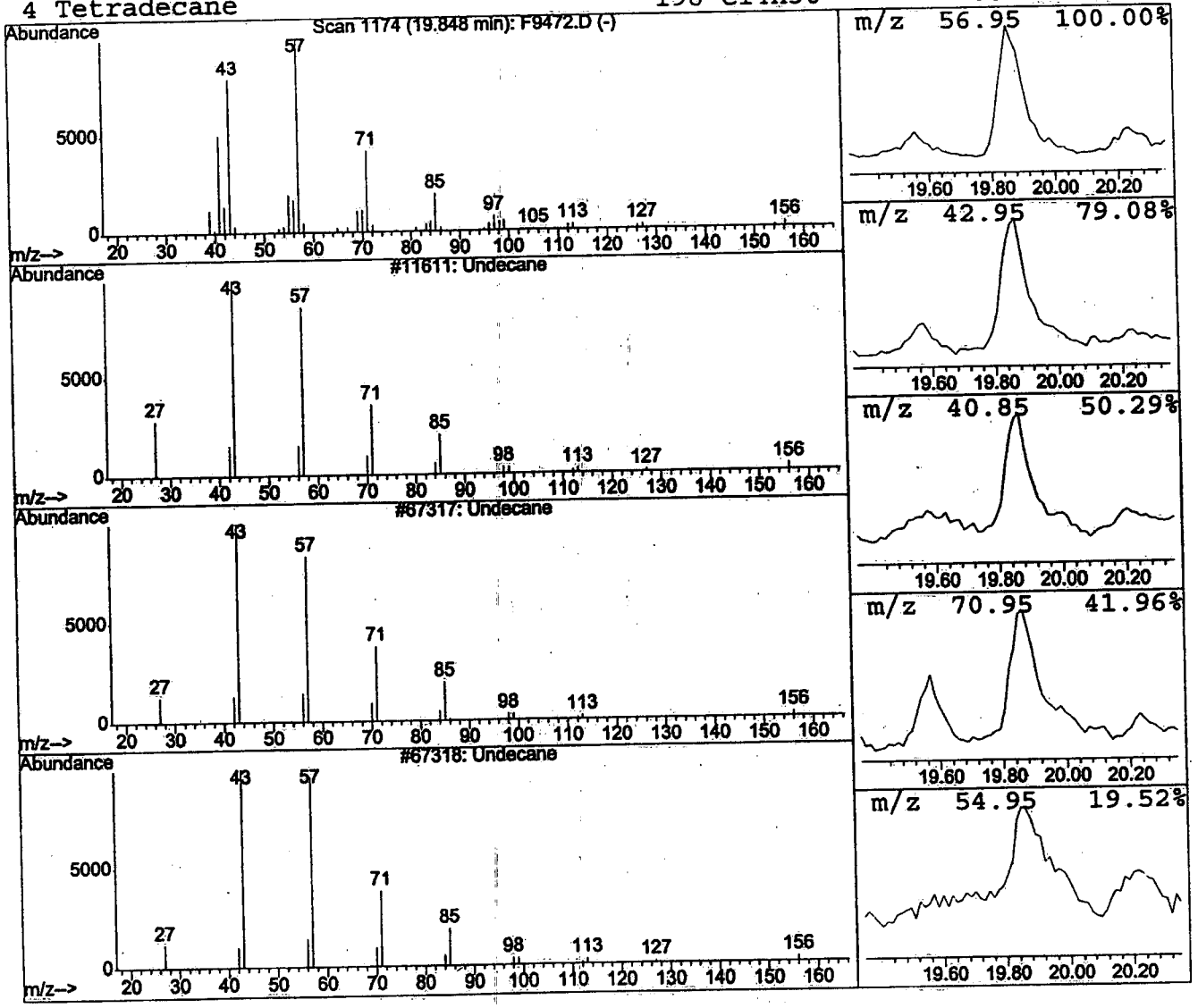
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 7 Unknown alkane Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.85	15.21 UG	2619970	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane	156	C11H24	001120-21-4	94
2	Undecane	156	C11H24	001120-21-4	87
3	Undecane	156	C11H24	001120-21-4	87
4	Tetradecane	198	C14H30	000629-59-4	80



1328

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 40
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

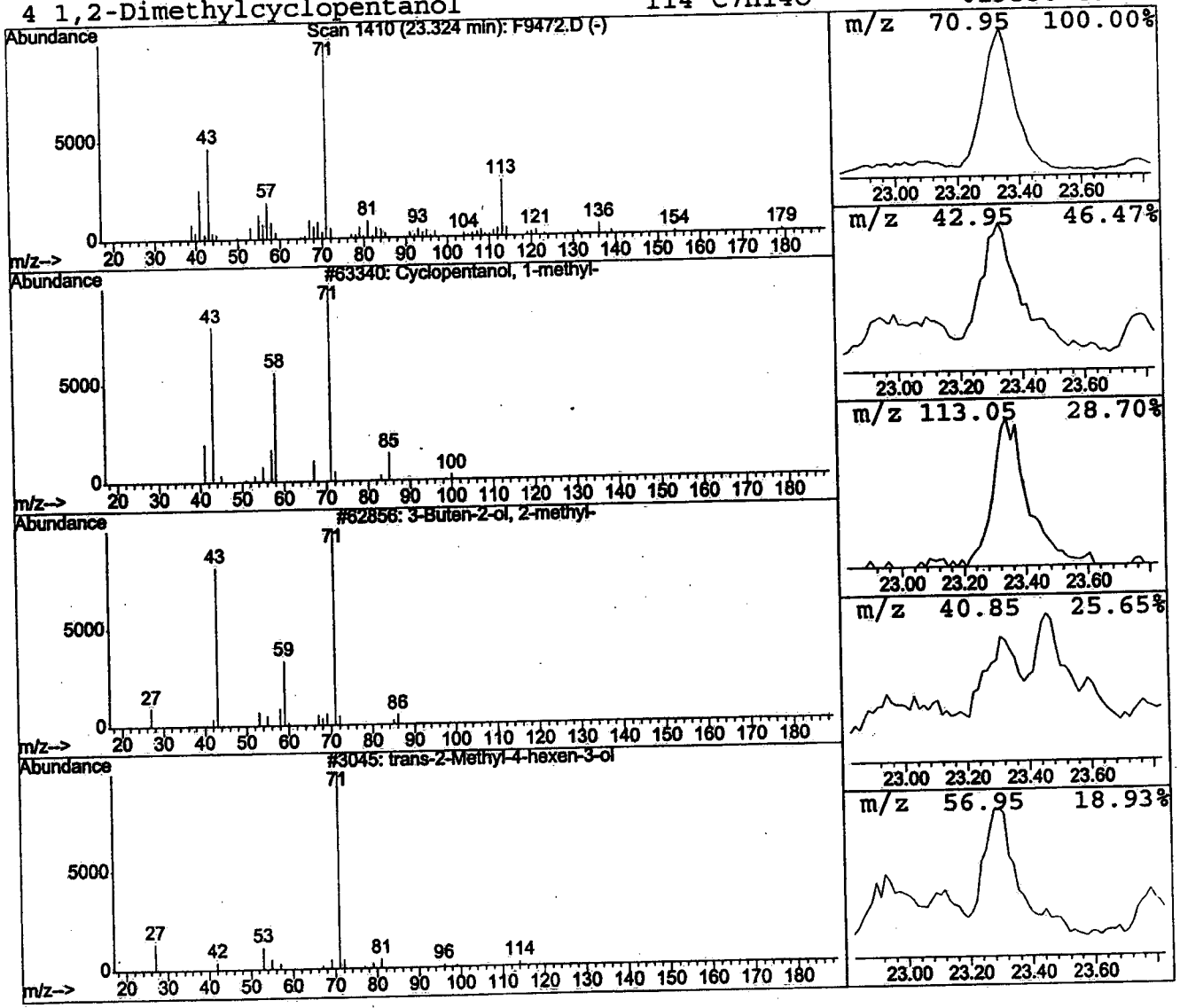
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 8 Unknown aliphatic Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.32	21.58 UG	3716580	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentanol, 1-methyl-	100	C6H12O	001462-03-9	50
2	3-Buten-2-ol, 2-methyl-	86	C5H10O	000115-18-4	50
3	trans-2-Methyl-4-hexen-3-ol	114	C7H14O	096346-76-8	47
4	1,2-Dimethylcyclopentanol	114	C7H14O	019550-45-9	47



1329

000294

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 40
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

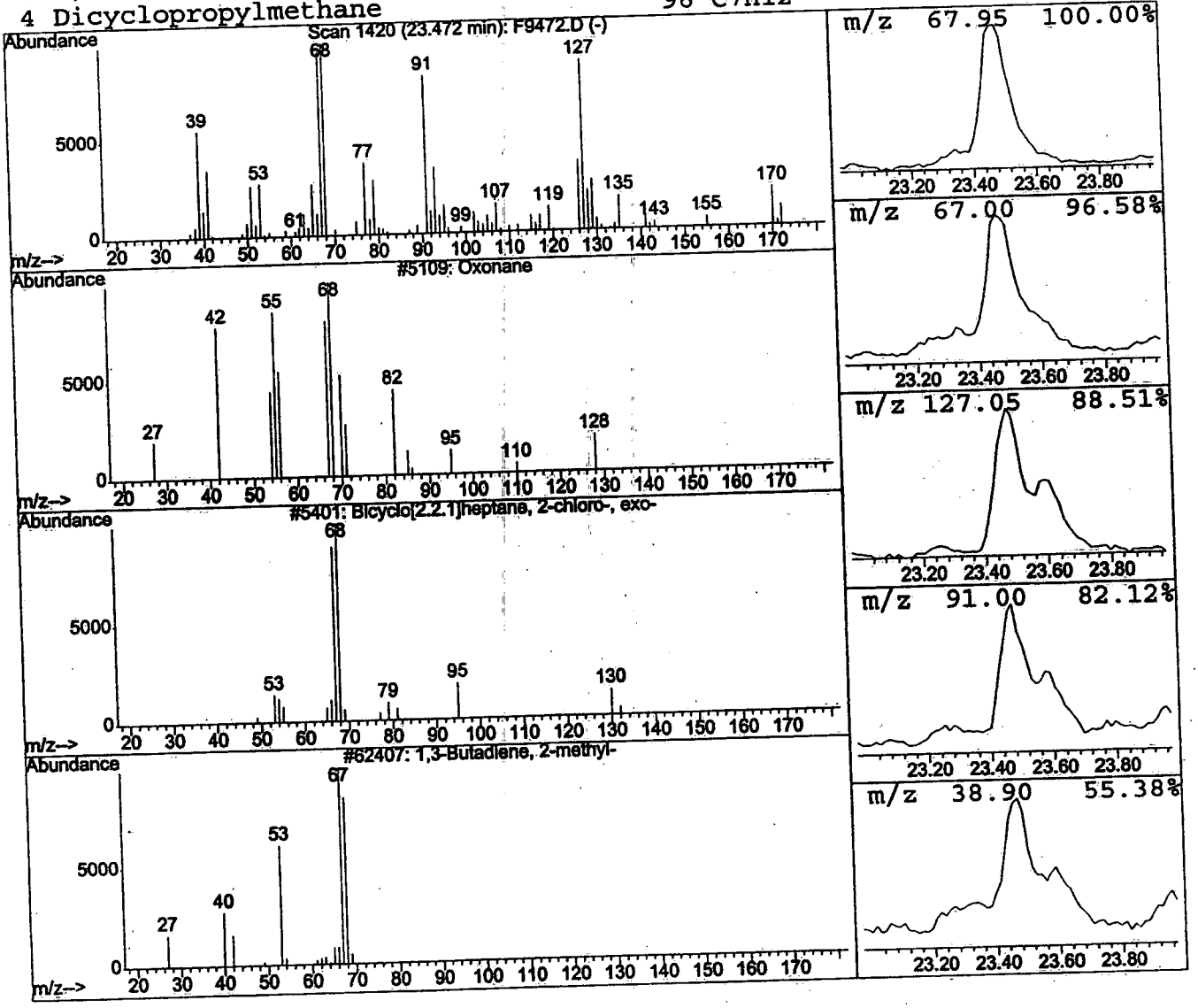
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 9 Unknown aromatic Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.47	21.96 UG	3783110	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxonane	128	C8H16O	006573-50-8	38
2	Bicyclo[2.2.1]heptane, 2-chloro-, e	130	C7H11Cl	000765-91-3	35
3	1,3-Butadiene, 2-methyl-	68	C5H8	000078-79-5	35
4	Dicyclopropylmethane	96	C7H12	000000-00-0	25



1330

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 40
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

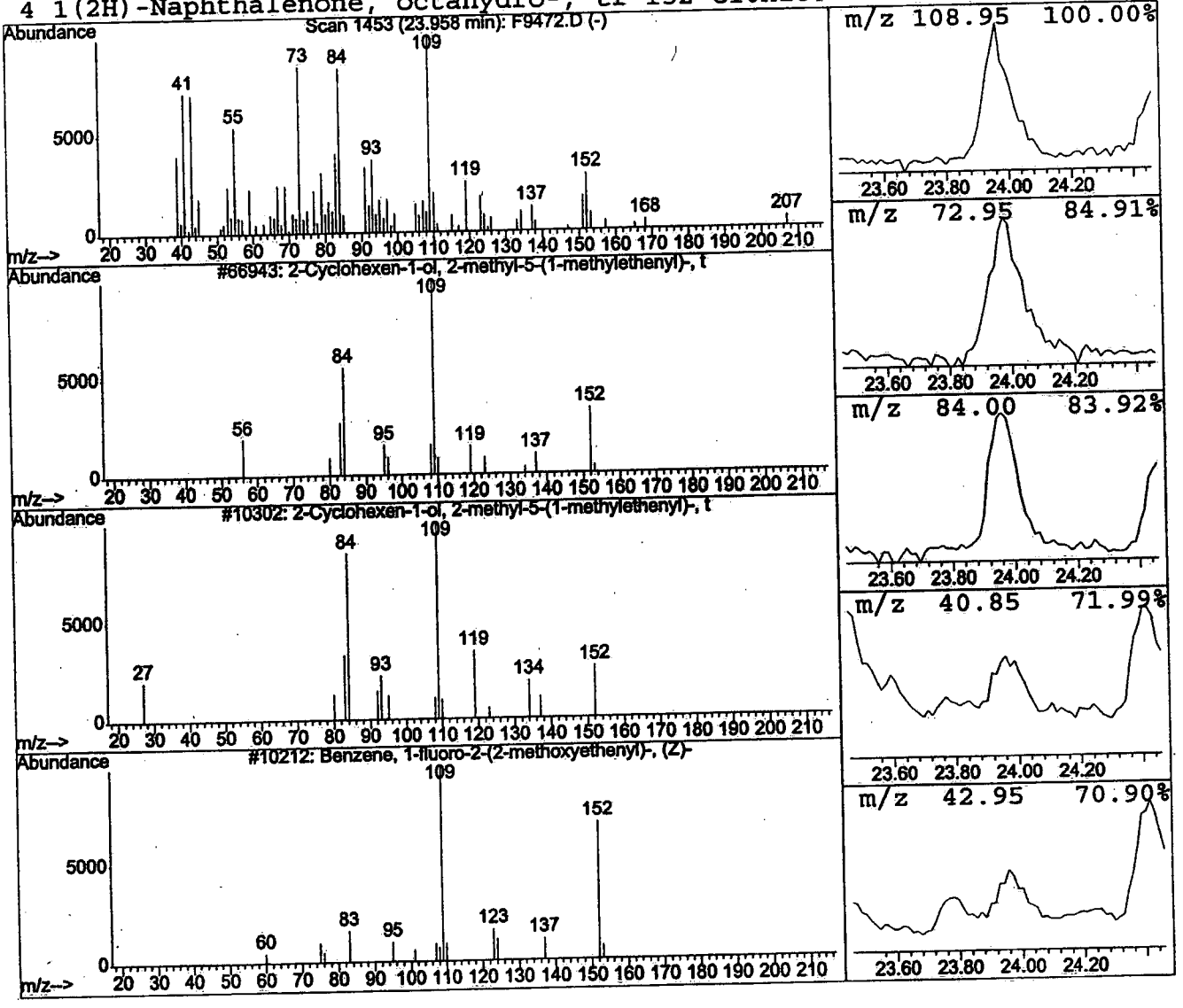
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 10 Unknown aromatic Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.96	18.35 UG	3160800	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclohexen-1-ol, 2-methyl-5-(1-me	152	C10H16O	001197-07-5	59
2	2-Cyclohexen-1-ol, 2-methyl-5-(1-me	152	C10H16O	001197-07-5	58
3	Benzene, 1-fluoro-2-(2-methoxyethen	152	C9H9FO	054533-36-7	27
4	1(2H)-Naphthalenone, octahydro-, tr	152	C10H16O	021370-71-8	25



1331

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9472.D
Acq On : 30 Mar 2001 7:50
Sample : S-28,1922-012,M,0.022g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,2
MS Integration Params: LSCINT.P

Vial: 40
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

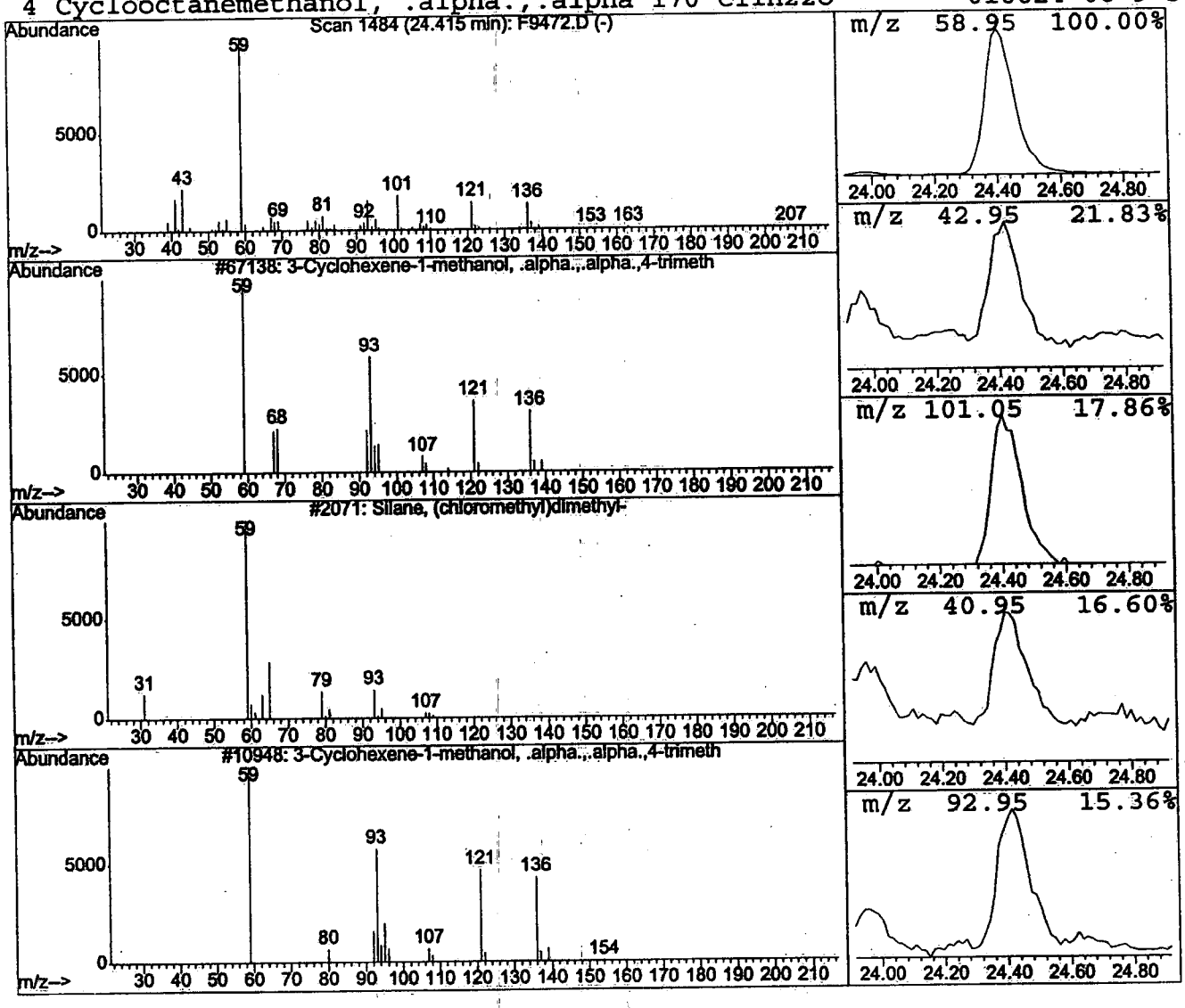
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 11 Unknown aromatic Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.42	40.31 UG	6943140	Chlorobenzene-d5	14.81

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Cyclohexene-1-methanol, .alpha.,.	154	C10H18O	010482-56-1	56
2	Silane, (chloromethyl)dimethyl-	108	C3H9ClSi	003144-74-9	40
3	3-Cyclohexene-1-methanol, .alpha.,.	154	C10H18O	010482-56-1	38
4	Cyclooctanemethanol, .alpha.,.alpha	170	C11H22O	016624-06-9	38



1332

Quantitation Report (QT/LSC Reviewed)

Data File : C:\HPCHEM\1\DATA\03-30-01\F9504.D
Acq On : 31 Mar 2001 00:20
Sample : S-29,1922-013,M,0.043g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
S Integration Params: rteint.p
Quant Time: Apr 2 11:13 2001

Vial: 16
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	8.77	168	3177684	50.00	UG	0.05
31) 1,4-Difluorobenzene	9.97	114	3186805	50.00	UG	0.06
50) Chlorobenzene-d5	14.83	117	2293838	50.00	UG	0.06
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	9.26	65	1631399	51.38	UG	0.06
Spiked Amount 50.000	Range 27 - 176		Recovery = 102.76%			
41) Toluene-d8	12.36	98	2875433	49.08	UG	0.07
Spiked Amount 50.000	Range 20 - 158		Recovery = 98.16%			
59) Bromofluorobenzene	16.91	95	2259713	45.56	UG	0.06
Spiked Amount 50.000	Range 28 - 148		Recovery = 91.12%			
Target Compounds						Qvalue
32) Benzene	9.33	78	7970004	112.52	UG	100
42) Toluene	12.48	92	181460	4.13	UG	96

(#) = qualifier out of range (m) = manual integration

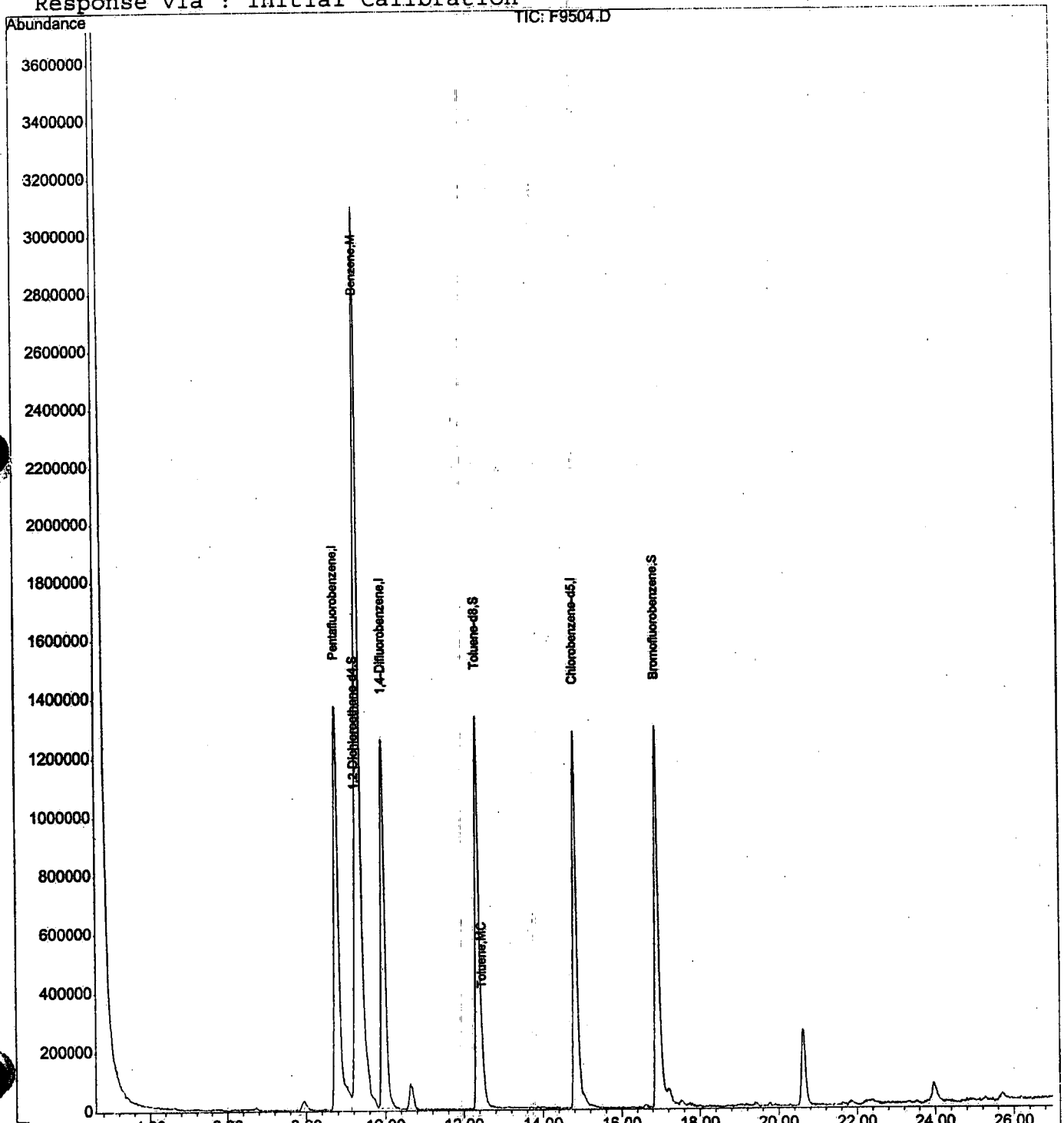
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-30-01\F9504.D
Acq On : 31 Mar 2001 00:20
Sample : S-29,1922-013,M,0.043g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
MS Integration Params: rteint.p
Quant Time: Apr 2 11:13 2001

Vial: 16
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



1334

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\03-30-01\F9504.D
Acq On : 31 Mar 2001 00:20
Sample : S-29,1922-013,M,0.043g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01
S Integration Params: LSCINT.P

Vial: 16
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

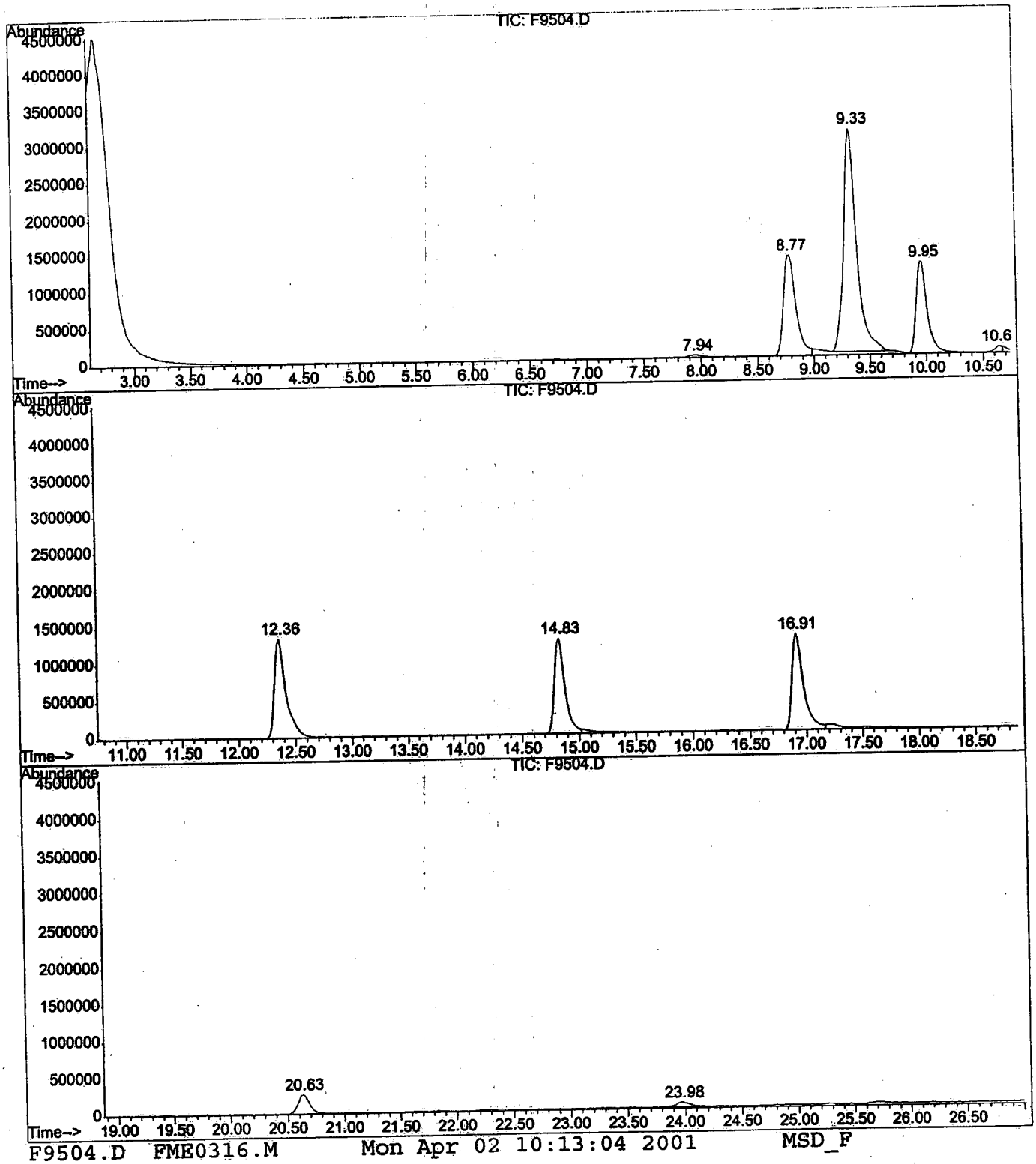
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.937	357	364	375	rBV3	32383	260834	1.06%	0.353%
2	8.774	410	421	435	rBV	1375392	10638036	43.03%	14.408%
3	9.333	447	459	483	rVB3	3058460	24721261	100.00%	33.481%
4	9.951	493	501	520	rBV	1253059	8563987	34.64%	11.599%
5	10.641	540	548	550	rBV4	89981	389154	1.57%	0.527%
6	12.359	657	665	687	rBV2	1339117	9414388	38.08%	12.750%
7	14.827	825	833	846	rBV2	1281754	8238027	33.32%	11.157%
8	16.912	967	975	992	rBV	1299277	9180708	37.14%	12.434%
9	20.627	1217	1228	1239	rBV	261273	1881192	7.61%	2.548%
10	23.975	1447	1456	1471	rVB2	66884	548484	2.22%	0.743%

Sum of corrected areas: 73836071

F9504.D FME0316.M Mon Apr 02 10:13:03 2001 MSD_F

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\03-30-01\F9504.D
Operator : GREGG
Acquired : 31 Mar 2001 00:20 using AcqMethod VOAF
Instrument : 5970 - In
Sample Name: S-29,1922-013,M,0.043g
Misc Info : ENVTACT/ORBIS,03/28/01,03/28/01
Vial Number: 16
Quant File :FME0316.RES (RTE Integrator)



F9504.D FME0316.M Mon Apr 02 10:13:04 2001 MSD_F

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-29-01\F9461.D
Acq On : 30 Mar 2001 1:46
Sample : TB,1922-014,MB,0.04g,0
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
IS Integration Params: rteint.p
Quant Time: Mar 30 9:54 2001

Vial: 29
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	8.79	168	3203036	50.00	UG	0.06
31) 1,4-Difluorobenzene	9.95	114	3259118	50.00	UG	0.04
50) Chlorobenzene-d5	14.81	117	2316003	50.00	UG	0.05
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	9.26	65	2038822	63.70	UG	0.06
Spiked Amount 50.000	Range 27 - 176		Recovery = 127.40%			
41) Toluene-d8	12.34	98	3734589	62.33	UG	0.05
Spiked Amount 50.000	Range 20 - 158		Recovery = 124.66%			
59) Bromofluorobenzene	16.90	95	2510536	50.13	UG	0.04
Spiked Amount 50.000	Range 28 - 148		Recovery = 100.26%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

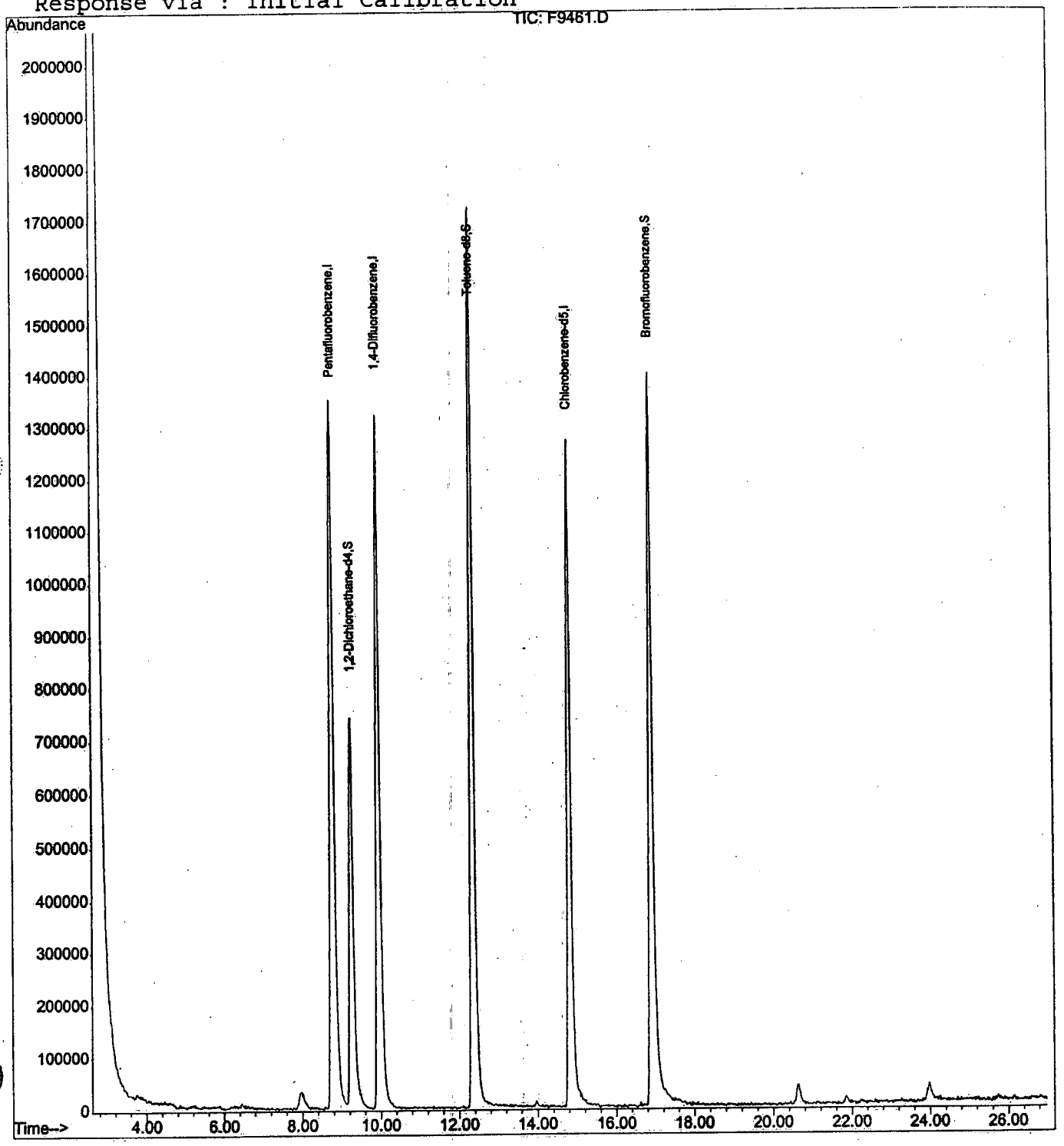
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9461.D
Acq On : 30 Mar 2001 1:46
Sample : TB,1922-014,MB,0.04g,0
Misc : ENVTACT/ORBIS,03/27/01,03/28/01
MS Integration Params: rteint.p
Quant Time: Mar 30 9:54 2001

Vial: 29
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



1338

000303

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-29-01\F9475.D
Acq On : 30 Mar 2001 9:29
Sample : S-30,1922-015,M,0.0009g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50
IS Integration Params: rteint.p
Quant Time: Mar 30 11:15 2001

Vial: 43
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	8.79	168	3292080	50.00	UG	0.06
31) 1,4-Difluorobenzene	9.98	114	3127613	50.00	UG	0.07
50) Chlorobenzene-d5	14.83	117	2264234	50.00	UG	0.06
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	9.29	65	31575	0.96	UG	0.09
Spiked Amount 50.000	Range 27 - 176		Recovery =	1.92%#		
41) Toluene-d8	12.37	98	52692	0.92	UG	0.08
Spiked Amount 50.000	Range 20 - 158		Recovery =	1.84%#		
59) Bromofluorobenzene	16.97	95	53331	1.09	UG	0.12
Spiked Amount 50.000	Range 28 - 148		Recovery =	2.18%#		
Target Compounds						Qvalue
32) Benzene	9.35	78	120238	1.73	UG	99
42) Toluene	12.48	92	8302199	192.61	UG	98

(#) = qualifier out of range (m) = manual integration

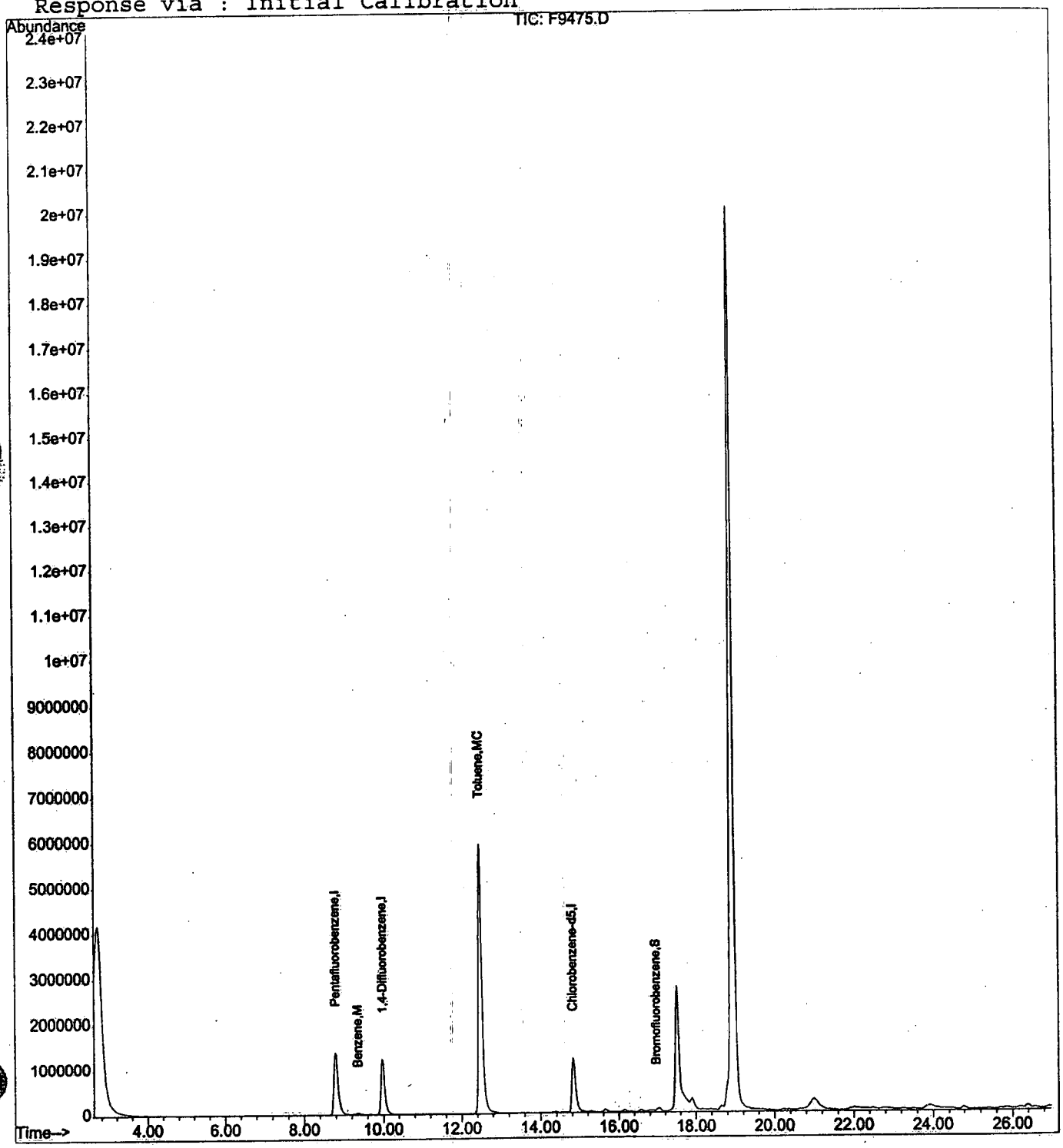
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9475.D
Acq On : 30 Mar 2001 9:29
Sample : S-30,1922-015,M,0.0009g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50
MS Integration Params: rteint.p
Quant Time: Mar 30 11:15 2001

Vial: 43
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



1340

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9475.D
Acq On : 30 Mar 2001 9:29
Sample : S-30,1922-015,M,0.0009g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50
LS Integration Params: LSCINT.P

Vial: 43
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

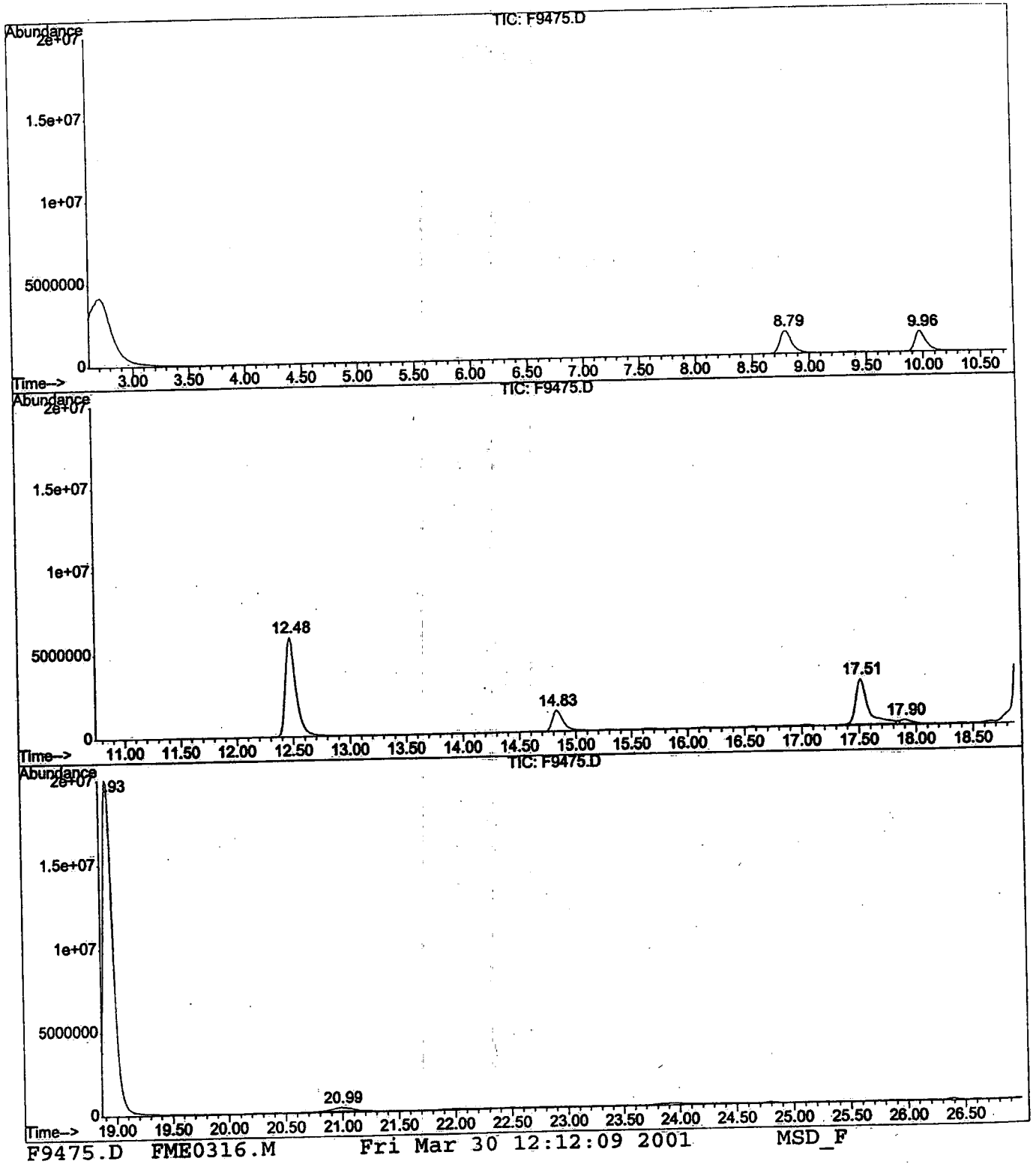
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	8.789	411	422	446	rBV2	1387459	10277204	7.98%	4.698%
2	9.964	494	502	522	rBV2	1243565	8716337	6.77%	3.985%
3	12.475	661	673	700	rBV	5949429	38482769	29.89%	17.593%
4	14.826	826	833	851	rBV	1226461	8207171	6.37%	3.752%
5	17.515	1007	1016	1037	rBV	2727391	20276879	15.75%	9.270%
6	17.898	1039	1042	1054	rVB2	246862	1481032	1.15%	0.677%
7	18.927	1097	1112	1135	rVB	20030180	128760709	100.00%	58.865%
8	20.986	1240	1252	1267	rBV10	203999	2536228	1.97%	1.159%

Sum of corrected areas: 218738329

F9475.D FME0316.M Fri Mar 30 12:12:08 2001 MSD_F

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\03-29-01\F9475.D
Operator : GREGG
Acquired : 30 Mar 2001 9:29 using AcqMethod VOAF
Instrument : 5970 - In
Sample Name: S-30,1922-015,M,0.0009g
Misc Info : ENVTACT/ORBIS,03/28/01,03/28/01,50
Vial Number: 43
Quant File :FME0316.RES (RTE Integrator)



1342

000307

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9475.D
Acq On : 30 Mar 2001 9:29
Sample : S-30,1922-015,M,0.0009g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50
MS Integration Params: LSCINT.P

Vial: 43
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

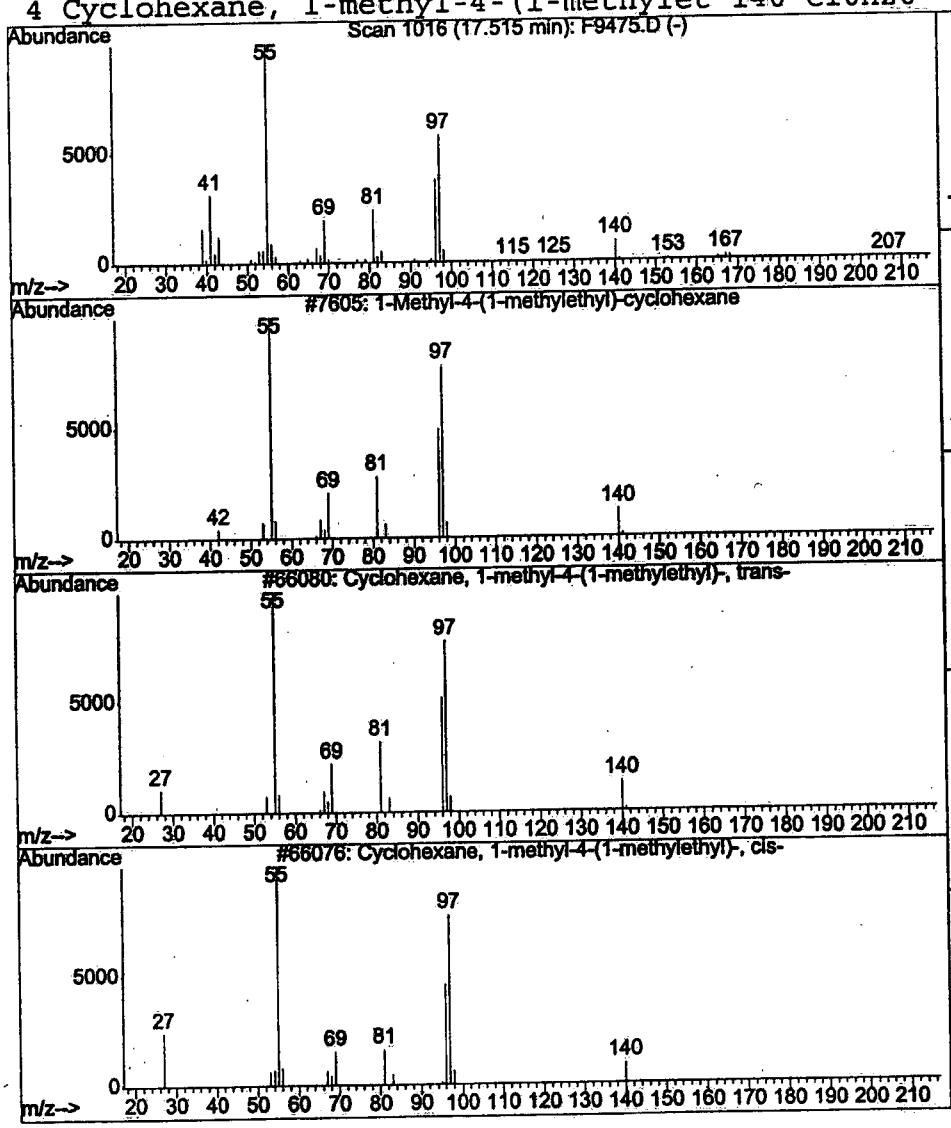
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

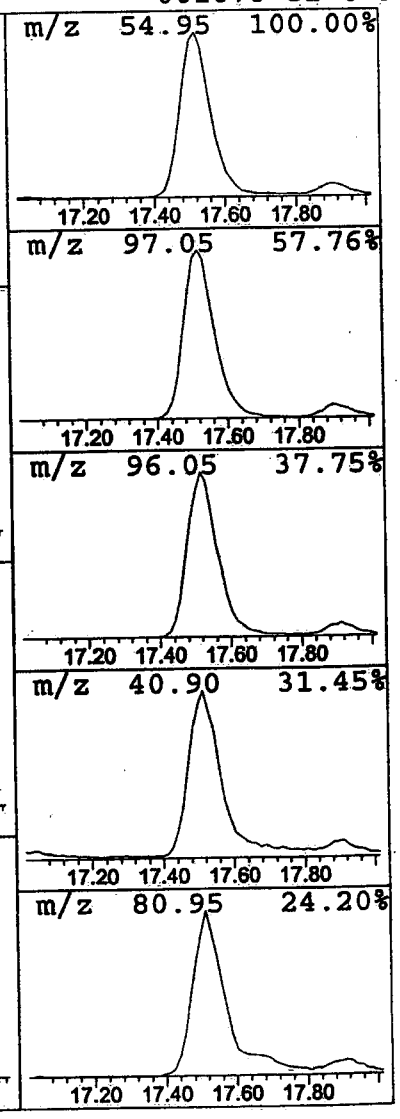
****

Peak Number 1 Unknown cyclic hydrocarbon Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.51	123.53 UG	20276900	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Methyl-4-(1-methylethyl)-cyclohex	140	C10H20	000099-82-1	95
2	Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	001678-82-6	93
3	Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	006069-98-3	90
4	Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	001678-82-6	90





1343

000308

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9475.D Vial: 43
Acq On : 30 Mar 2001 9:29 Operator: GREGG
Sample : S-30,1922-015,M,0.0009g Inst : 5970 - In
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
MS Integration Params: LSCINT.P

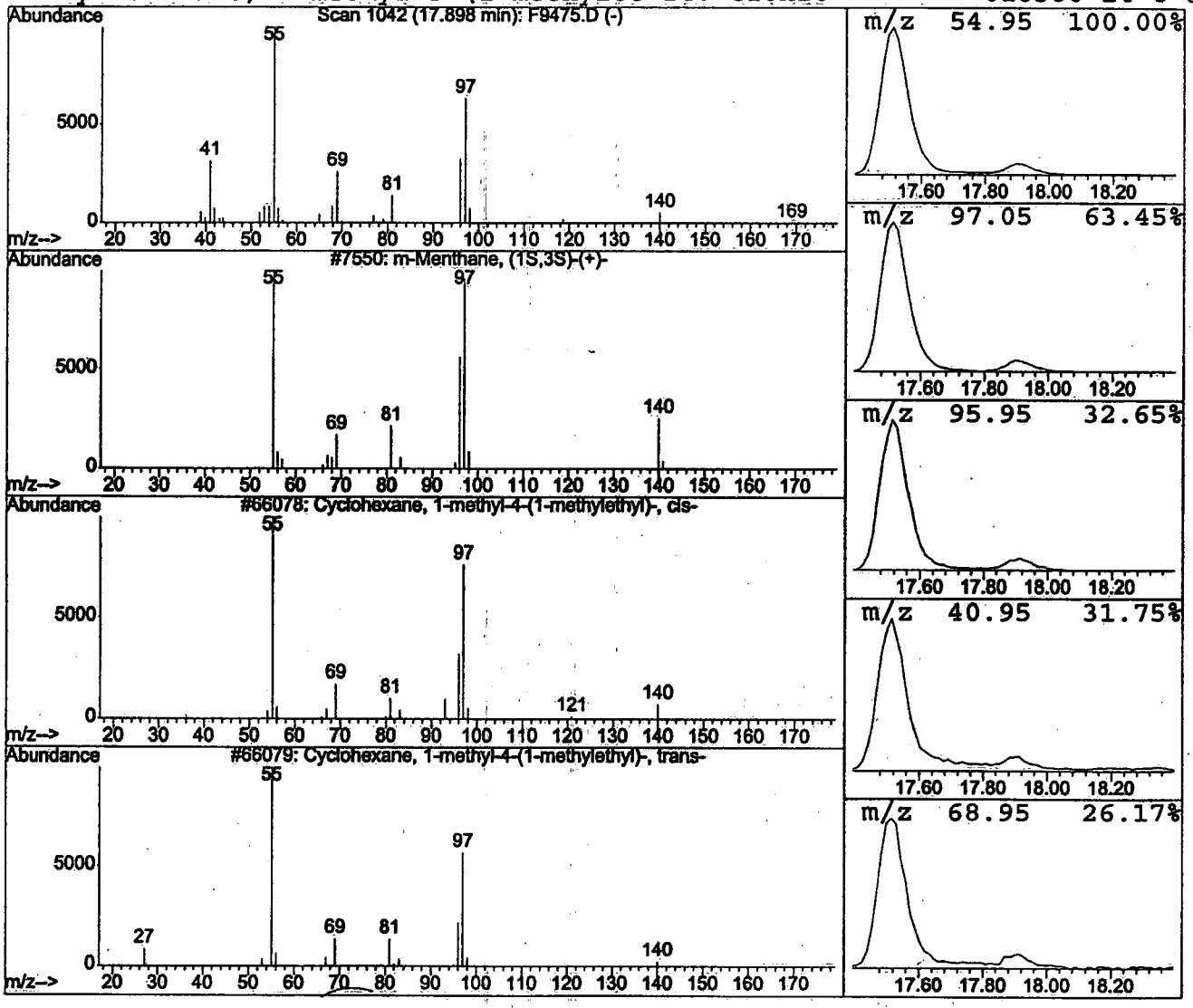
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Unknown cyclic hydrocarbon Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.90	9.02 UG	1481030	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	m-Menthane, (1S,3S)-(+)-	140	C10H20	013837-67-7	90
2	Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	006069-98-3	86
3	Cyclohexane, 1-methyl-4-(1-methylet	140	C10H20	001678-82-6	86
4	Cyclohexane, 1-methyl-3-(1-methylet	140	C10H20	016580-24-8	86



1344

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9475.D
Acq On : 30 Mar 2001 9:29
Sample : S-30,1922-015,M,0.0009g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50
MS Integration Params: LSCINT.P

Vial: 43
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

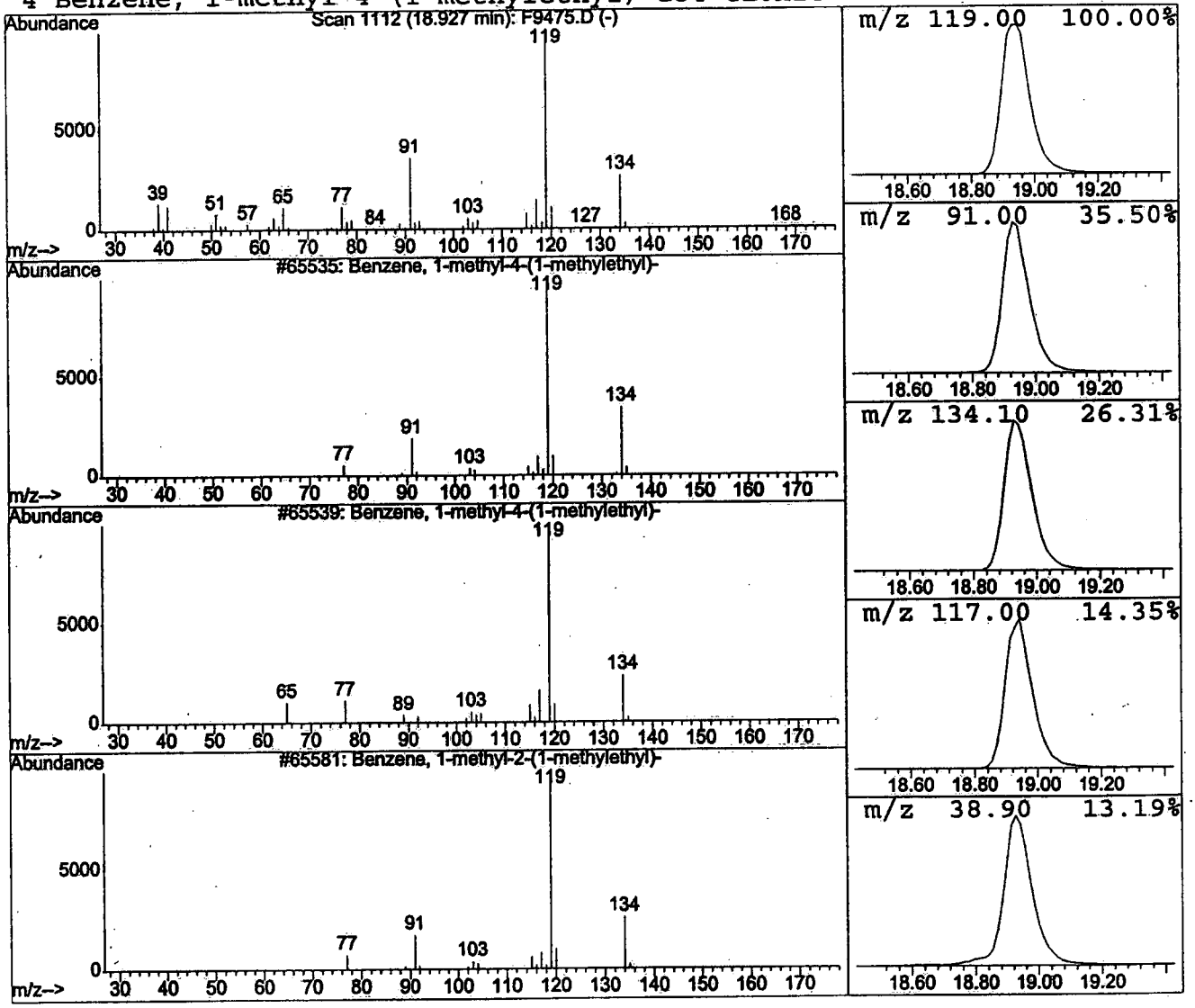
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.93	784.44 UG	128761000	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methylethyl)	134	C10H14	000099-87-6	94
2	Benzene, 1-methyl-4-(1-methylethyl)	134	C10H14	000099-87-6	94
3	Benzene, 1-methyl-2-(1-methylethyl)	134	C10H14	000527-84-4	93
4	Benzene, 1-methyl-4-(1-methylethyl)	134	C10H14	000099-87-6	93



1345

000310

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9475.D
Acq On : 30 Mar 2001 9:29
Sample : S-30,1922-015,M,0.0009g
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50
MS Integration Params: LSCINT.P

Vial: 43
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

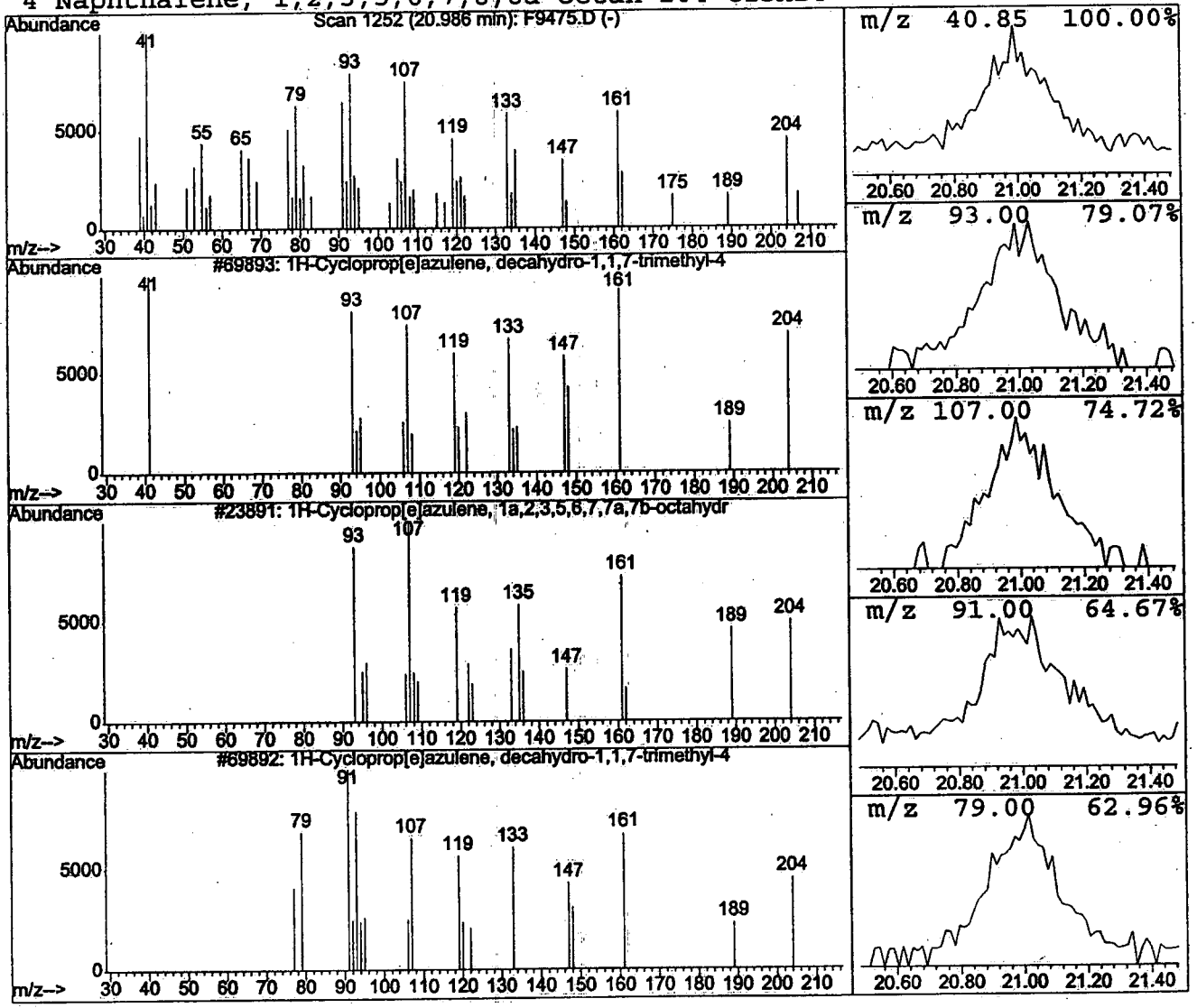
Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Unknown aromatic Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.99	15.45 UG	2536230	Chlorobenzene-d5	14.83

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Cycloprop[e]azulene, decahydro-1	204	C15H24	025246-27-9	70
2	1H-Cycloprop[e]azulene, 1a,2,3,5,6,	204	C15H24	021747-46-6	64
3	1H-Cycloprop[e]azulene, decahydro-1	204	C15H24	025246-27-9	64
4	Naphthalene, 1,2,3,5,6,7,8,8a-octah	204	C15H24	004630-07-3	53



1346

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8818.D
Acq On : 9 Apr 2001 13:47
Sample : N/A,METHOD-BLK,S,0.1g,0
Misc :
IS Integration Params: LSCINT.P
Quant Time: Apr 09 14:06:51 2001

Vial: 4
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	482262	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.22	114	704897	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	547347	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.73	65	318591	53.42	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 106.84%			
41) Toluene-d8	8.89	98	682975	47.81	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 95.62%			
59) Bromofluorobenzene	11.98	95	335643	47.87	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 95.74%			

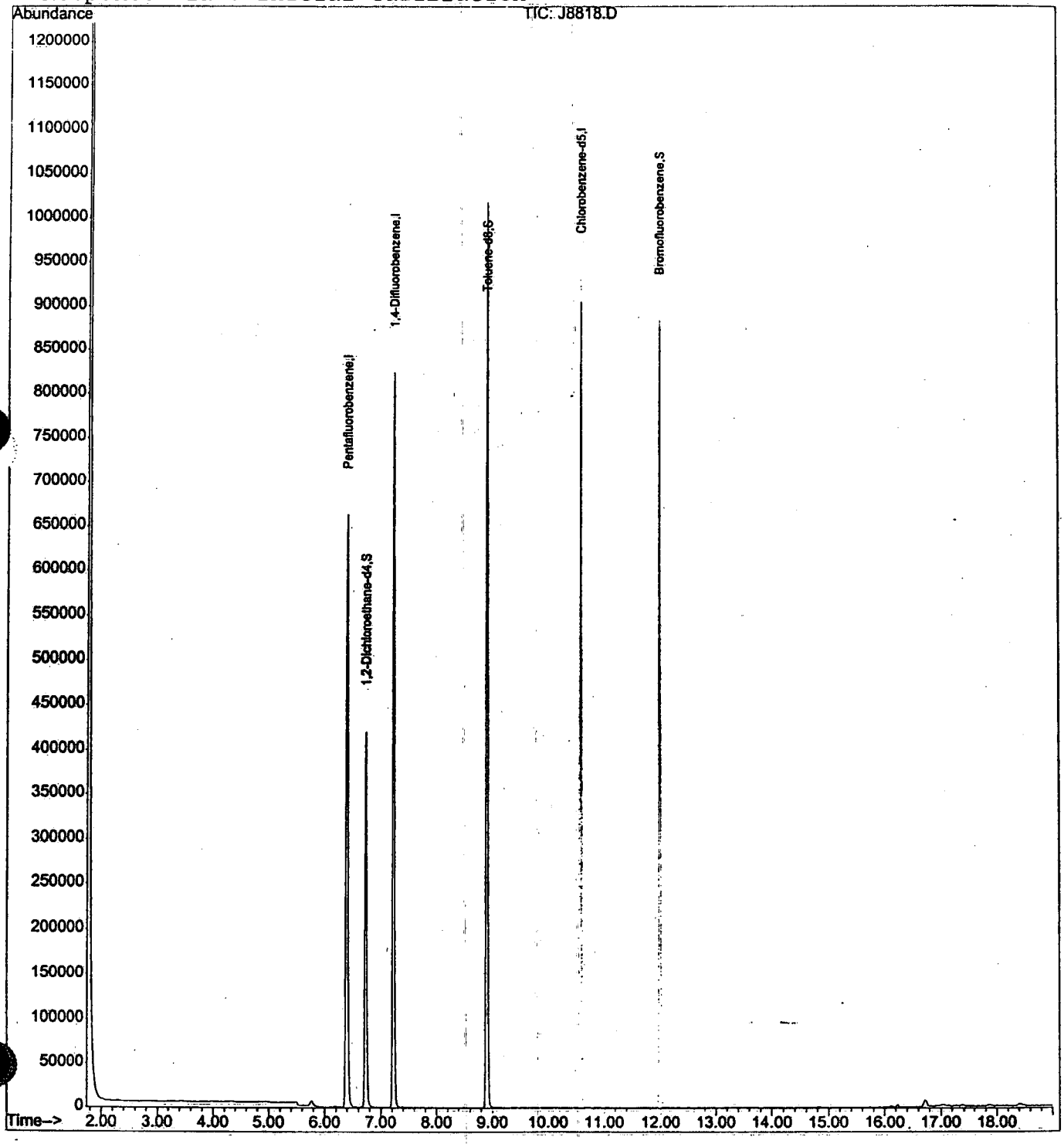
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8818.D Vial: 4
Acq On : 9 Apr 2001 13:47 Operator: XINGFANG WAN
Sample : N/A,METHOD-BLK,S,0.1g,0 Inst : MSD_J
Misc : Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 9 14:16 2001 Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 09 14:14:46 2001
Response via : Initial Calibration



1348

000313

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8818.D
Acq On : 9 Apr 2001 13:47
Sample : N/A,METHOD-BLK,S,0.1g,0
Misc :
S Integration Params: Lscint.p

Vial: 4
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Filtering: 5
Sampling : 1
Min Area= 1 % of largest Peak
Start Thrs: 0.2
Max Peaks: 100
Stop Thrs : 0
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.765	393	399	421	rVB2	7190	36132	1.85%	0.389%
2	6.393	452	461	476	rBV	663370	1456174	74.67%	15.689%
3	6.727	484	494	516	rVB	420346	889419	45.61%	9.583%
4	7.224	535	543	555	rBV	824544	1675932	85.94%	18.057%
5	8.894	701	708	724	rBV	1018602	1950216	100.00%	21.012%
6	10.575	868	874	885	rBV	931460	1705626	87.46%	18.376%
7	11.983	1004	1013	1030	rBV	884901	1537786	78.85%	16.568%
	16.722	1474	1481	1489	rBV3	7600	30305	1.55%	0.327%

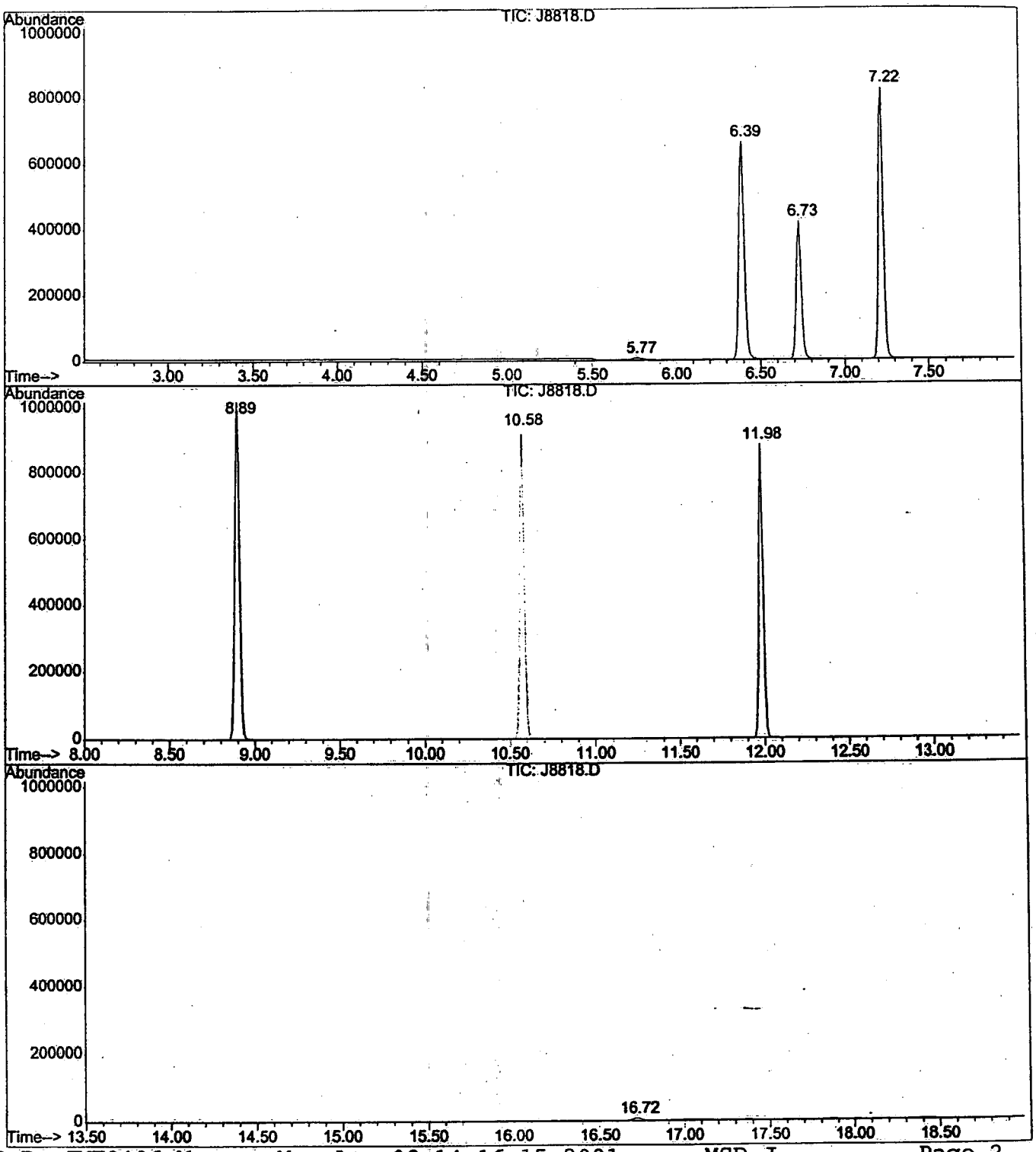
Sum of corrected areas: 9281590

000314

1349

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-09-01\J8818.D
Operator : XINGFANG WANG
Acquired : 9 Apr 2001 13:47 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: N/A,METHOD-BLK,S,0.1g,0
Misc Info :
Vial Number: 4
Quant File :JME0406.RES (RTE Integrator)



000315

1350

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-29-01\F9460.D
Acq On : 30 Mar 2001 1:14
Sample : N/A,METHOD_BLK,S,0.1g,0
Misc : N/A,N/A,N/A
IS Integration Params: rteint.p
Quant Time: Mar 30 8:34 2001

Vial: 28
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	8.80	168	3029415	50.00	UG	0.08
31) 1,4-Difluorobenzene	9.95	114	3106587	50.00	UG	0.04
50) Chlorobenzene-d5	14.84	117	2254495	50.00	UG	0.08
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	9.27	65	1406302	46.46	UG	0.07
Spiked Amount 50.000	Range 27 - 176		Recovery = 92.92%			
41) Toluene-d8	12.36	98	2969142	51.98	UG	0.07
Spiked Amount 50.000	Range 20 - 158		Recovery = 103.96%			
59) Bromofluorobenzene	16.92	95	2267696	46.51	UG	0.07
Spiked Amount 50.000	Range 28 - 148		Recovery = 93.02%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

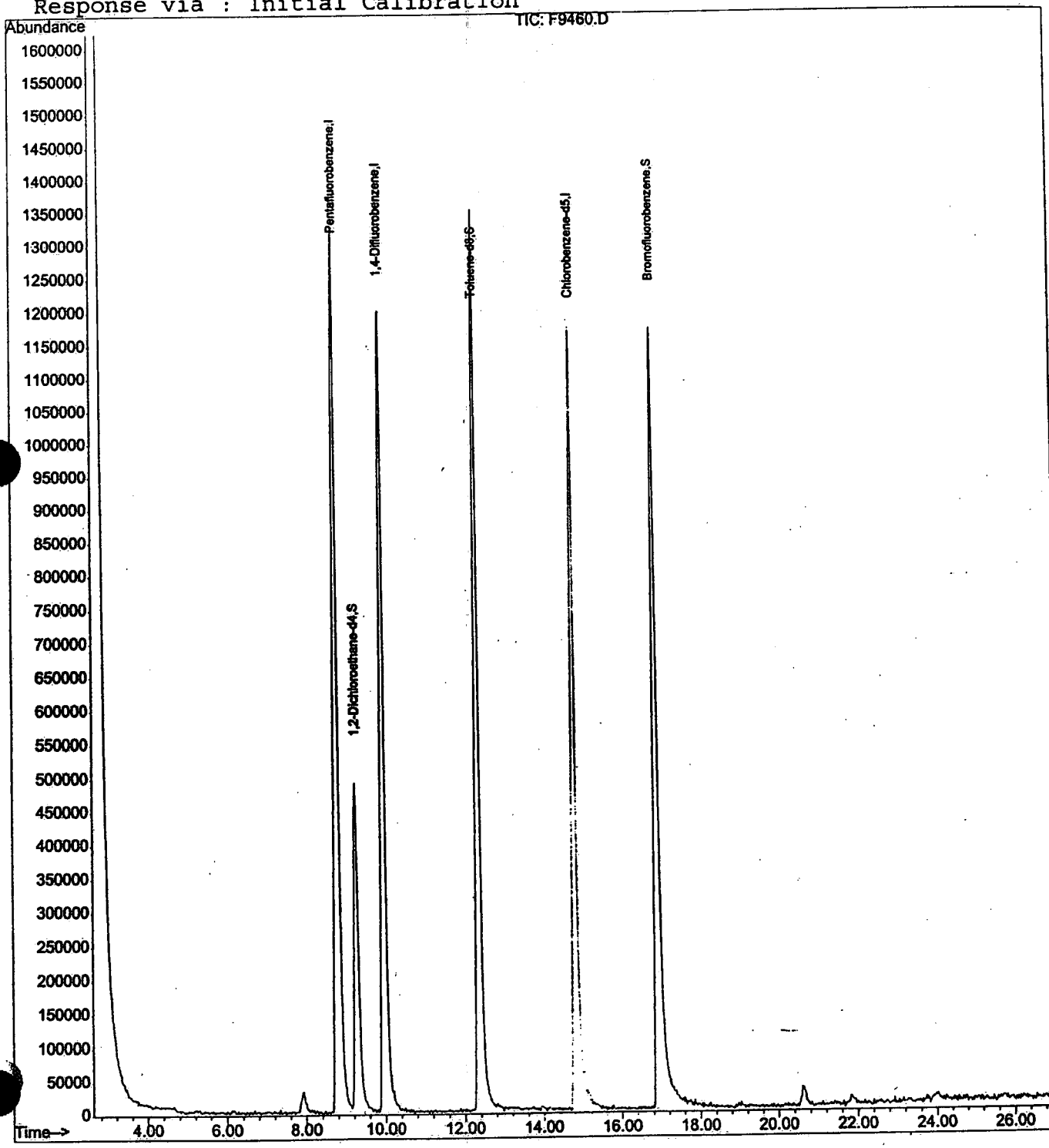
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9460.D
Acq On : 30 Mar 2001 1:14
Sample : N/A,METHOD_BLK,S,0.1g,0
Misc : N/A,N/A,N/A
MS Integration Params: rteint.p
Quant Time: Mar 30 8:34 2001

Vial: 28
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



1352

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\03-29-01\F9460.D
Acq On : 30 Mar 2001 1:14
Sample : N/A,METHOD_BLK,S,0.1g,0
Misc : N/A,N/A,N/A
IS Integration Params: LSCINT.P

Vial: 28
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

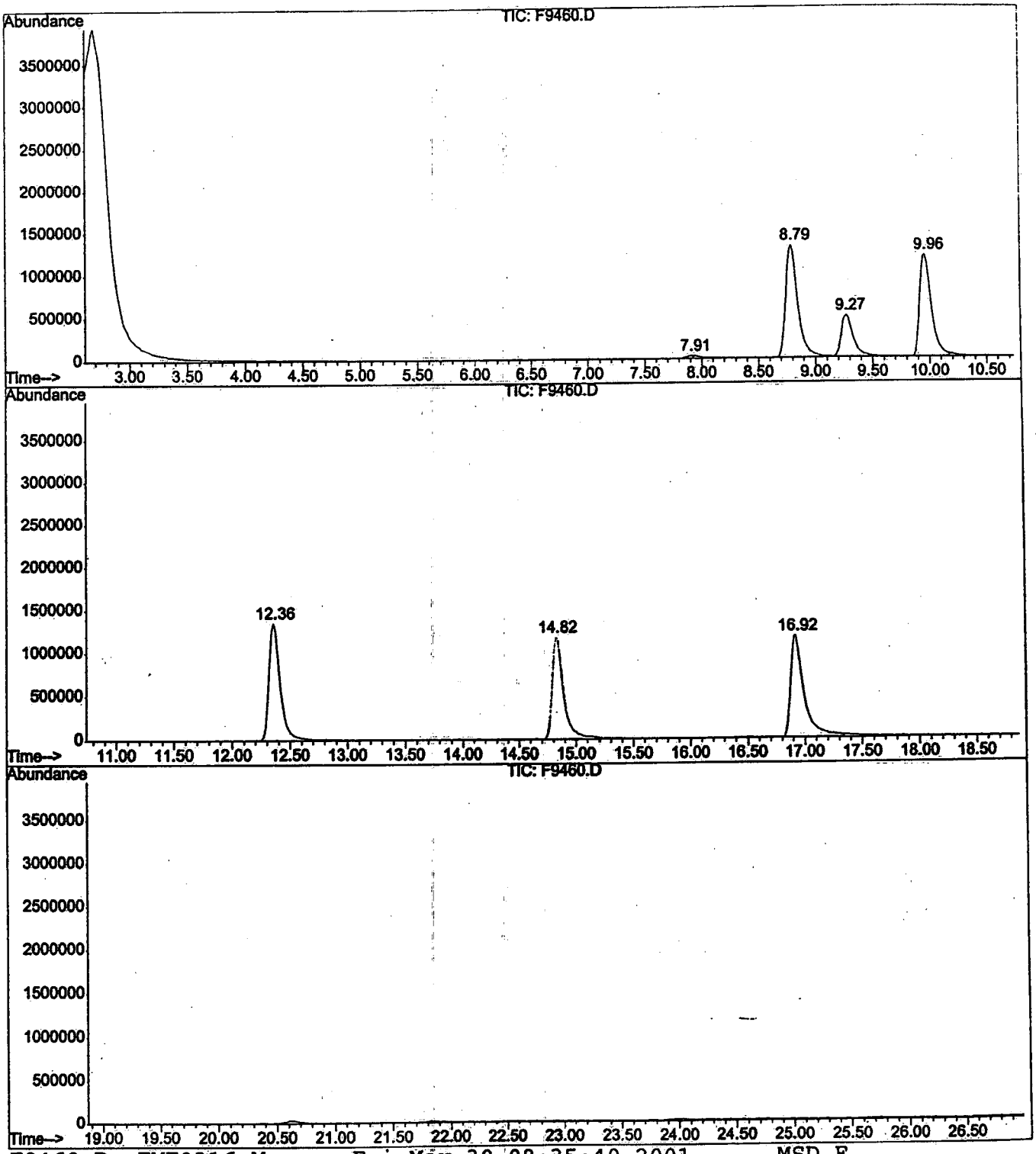
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.907	356	362	363	rBV2	30772	116600	1.21%	0.242%
2	8.788	413	422	446	rBV2	1319729	9644073	100.00%	19.984%
3	9.273	446	455	475	rVV3	486189	3505990	36.35%	7.265%
4	9.964	494	502	516	rBV	1197255	8352430	86.61%	17.308%
5	12.357	656	665	693	rBV	1348958	9011842	93.44%	18.674%
6	14.825	825	833	861	rBV	1173547	8291714	85.98%	17.182%
7	16.925	968	976	1004	rBV2	1169050	9335182	96.80%	19.344%

Sum of corrected areas: 48257831

F9460.D FME0316.M Fri Mar 30 08:35:39 2001 MSD_F

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\03-29-01\F9460.D
Operator : GREGG
Acquired : 30 Mar 2001 1:14 using AcqMethod VOAF
Instrument : 5970 - In
Sample Name: N/A,METHOD_BLK,S,0.1g,0
Misc Info : N/A,N/A,N/A
Vial Number: 28
Quant File :FME0316.RES (RTE Integrator)



F9460.D FME0316.M Fri Mar 30 08:35:40 2001 MSD_F

000319

1354

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\03-30-01\F9491.D
Acq On : 30 Mar 2001 17:12
Sample : N/A,METHOD_BLK,S,0.1g,0
Misc : N/A,N/A,N/A
S Integration Params: rteint.p
Quant Time: Apr 2 11:43 2001

Vial: 4
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Quant Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration
DataAcq Meth : VOAF

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	8.79	168	3260648	50.00	UG	0.06
31) 1,4-Difluorobenzene	9.96	114	3144613	50.00	UG	0.06
50) Chlorobenzene-d5	14.84	117	2329722	50.00	UG	0.08
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	9.29	65	1389220	42.64	UG	0.09
Spiked Amount 50.000	Range 27 - 176		Recovery = 85.28%			
41) Toluene-d8	12.37	98	2811212	48.62	UG	0.08
Spiked Amount 50.000	Range 20 - 158		Recovery = 97.24%			
59) Bromofluorobenzene	16.93	95	2230778	44.28	UG	0.07
Spiked Amount 50.000	Range 28 - 148		Recovery = 88.56%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

000320

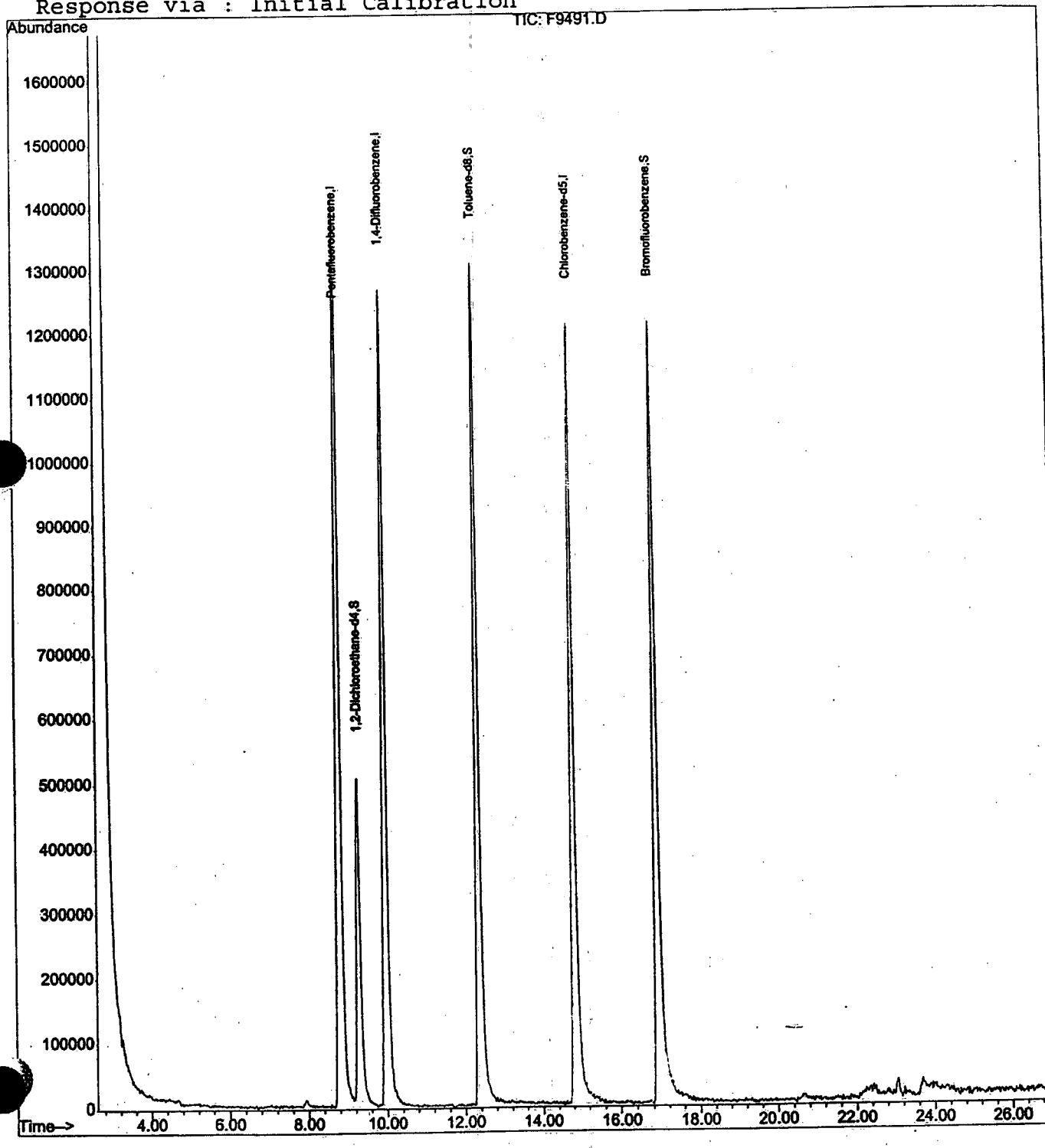
Quantitation Report

Data File : C:\HPCHEM\1\DATA\03-30-01\F9491.D
Acq On : 30 Mar 2001 17:12
Sample : N/A,METHOD_BLK,S,0.1g,0
Misc : N/A,N/A,N/A
MS Integration Params: rteint.p
Quant Time: Apr 2 11:43 2001

Vial: 4
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: FME0316.RES

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Mar 16 14:54:56 2001
Response via : Initial Calibration



000321

1356

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\03-30-01\F9491.D
Acq On : 30 Mar 2001 17:12
Sample : N/A,METHOD_BLK,S,0.1g,0
Misc : N/A,N/A,N/A
S Integration Params: LSCINT.P

Vial: 4
Operator: GREGG
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FME0316.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Filtering: 5
Sampling : 1
Min Area: 3 % of largest Peak
Start Thrs: 0.2
Max Peaks: 100
Stop Thrs : 0
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

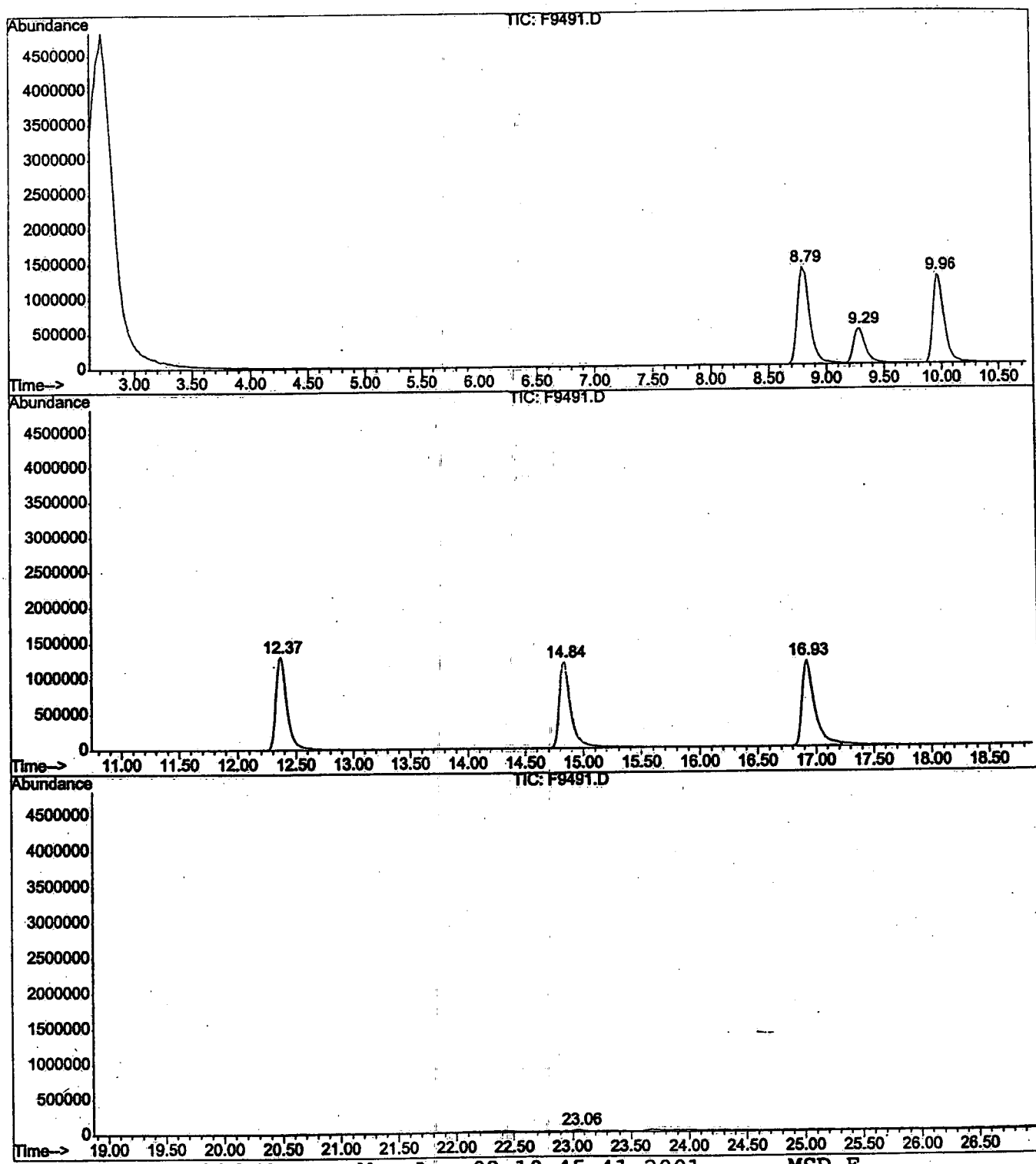
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	8.789	413	422	443	rBV	1394326	10194072	100.00%	21.055%
2	9.289	448	456	474	rVB	500792	3543789	34.76%	7.319%
3	9.964	495	502	517	rBV	1263950	8431461	82.71%	17.414%
4	12.373	657	666	687	rBV2	1307976	8771828	86.05%	18.117%
5	14.840	825	834	858	rBV	1208729	8243669	80.87%	17.027%
6	16.925	967	976	996	rBV	1213040	9083646	89.11%	18.761%
7	23.063	1389	1394	1401	rVB6	28955	148054	1.45%	0.306%

Sum of corrected areas: 48416519

F9491.D FME0316.M Mon Apr 02 10:45:40 2001 MSD_F

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\03-30-01\F9491.D
Operator : GREGG
Acquired : 30 Mar 2001 17:12 using AcqMethod VOAF
Instrument : 5970 - In
Sample Name: N/A,METHOD_BLK,S,0.1g,0
Misc Info : N/A,N/A,N/A
Vial Number: 4
Quant File :FME0316.RES (RTE Integrator)



F9491.D FME0316.M Mon Apr 02 10:45:41 2001 MSD_F

1358

000323

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1645.D

DFTPP Injection Date: 04/02/2001

Inst ID: MSDB

DFTPP Injection Time: 06:13

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	33.1			
68	Less than 2.0% of mass 69	0.6	(	1.5	)1
69	Mass 69 relative abundance	39.5			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	53.3			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.2			
275	10.0 - 30.0% of mass 198	23.0			
365	Greater than 1.0% of mass 198	2.5			
441	Present, but less than mass 443	8.71	(	72.4	)3
442	40.0 - 100.0% of mass 198	62.0			
443	17.0 - 23.0% of mass 442	12.0	(	19.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
.	BNA-STD-INJ-FOR	B1646.D	04/02/2001	06:20
.	BNA-STD-INJ-FOR	B1647.D	04/02/2001	06:36
.	BNA-STD-INJ-FOR	B1648.D	04/02/2001	06:51
.	BNA-STD-INJ-FOR	B1649.D	04/02/2001	07:05
.	BNA-STD-INJ-FOR	B1650.D	04/02/2001	07:19
.	OLMO4-STD-INJ-F	B1651.D	04/02/2001	07:33
.	OLMO4-STD-INJ-F	B1652.D	04/02/2001	07:48
.	OLMO4-STD-INJ-F	B1653.D	04/02/2001	08:02
.	OLMO4-STD-INJ-F	B1654.D	04/02/2001	08:16
.	OLMO4-STD-INJ-F	B1655.D	04/02/2001	08:31
.	Method-Blank	B1656.D	04/02/2001	08:45
03-04-B6-1	1899-006	B1657.D	04/02/2001	09:00
03-04-B6-3.5	1899-010	B1658.D	04/02/2001	09:14
02-10-B1-1.5	1899-011	B1659.D	04/02/2001	09:28
02-10-B1-14	1899-012	B1660.D	04/02/2001	09:42
02-10-B1-16	1899-013	B1661.D	04/02/2001	09:57
02-10-B2-1.5	1899-014	B1662.D	04/02/2001	10:11
02-10-B2-15	1899-015	B1663.D	04/02/2001	10:26
03-02-B1-3.5	1899-007	B1664.D	04/02/2001	10:40
03-02-B1-4	1899-008	B1665.D	04/02/2001	10:54
03-02-B1-4.5	1899-009	B1666.D	04/02/2001	11:09
.	Method-Blank	B1667.D	04/02/2001	11:24
S-17	1922-001	B1668.D	04/02/2001	11:38

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1645.D DFTPP Injection Date : 04/02/2001

Inst ID: MSDB DFTPP Injection Time: 06:13

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	33.1			
68	Less than 2.0% of mass 69	0.6	(	1.5	)1
69	Mass 69 relative abundance	39.5			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	53.3			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.2			
275	10.0 - 30.0% of mass 198	23.0			
365	Greater than 1.0% of mass 198	2.5			
441	Present, but less than mass 443	8.7	(	72.4	)3
442	40.0 - 100.0% of mass 198	62.0			
443	17.0 - 23.0% of mass 442	12.0	(	19.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
S-18	1922-002	B1669.D	04/02/2001	11:52
S-19	1922-003	B1670.D	04/02/2001	12:07
S-20	1922-004	B1671.D	04/02/2001	12:21
S-21	1922-005	B1672.D	04/02/2001	12:36
S-22	1922-006	B1673.D	04/02/2001	12:50
S-23	1922-007	B1674.D	04/02/2001	13:05
S-24	1922-008	B1675.D	04/02/2001	13:19
S-25	1922-009	B1676.D	04/02/2001	13:34
S-27	1922-011	B1677.D	04/02/2001	13:48
S-28	1922-012	B1678.D	04/02/2001	14:08
S-29	1922-013	B1679.D	04/02/2001	14:22
S-30	1922-015	B1680.D	04/02/2001	14:37
TP-4	1820-004	B1681.D	04/02/2001	14:51
FDS-2_4.5-5'	1920-004	B1682.D	04/02/2001	15:06
FDS-2_4.5-5'	1920-004M	B1683.D	04/02/2001	15:20
FDS-2_4.5-5'	1920-004M	B1684.D	04/02/2001	15:34
	Method-Blank	B1685.D	04/02/2001	15:49
TP-2	1929-001	B1686.D	04/02/2001	16:03
TP-5	1929-002	B1687.D	04/02/2001	16:18
TP-6	1929-003	B1688.D	04/02/2001	16:32
TP-1	1929-004	B1689.D	04/02/2001	16:47
TP-7	1929-005	B1690.D	04/02/2001	17:01

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1645.D

DFTPP Injection Date : 04/02/2001

Inst ID: MSDB

DFTPP Injection Time: 06:13

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	33.1			
68	Less than 2.0% of mass 69	0.6	(	1.5	)1
69	Mass 69 relative abundance	39.5			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	53.3			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.2			
275	10.0 - 30.0% of mass 198	23.0			
365	Greater than 1.0% of mass 198	2.5			
441	Present, but less than mass 443	8.71	(	72.4	)3
442	40.0 - 100.0% of mass 198	62.0			
443	17.0 - 23.0% of mass 442	12.0	(	19.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
SB-1	1929-006	B1691.D	04/02/2001	17:16
SB-2	1929-007	B1692.D	04/02/2001	17:30
S1	1951-001	B1693.D	04/02/2001	17:44
PE-1_0.5-1	1925-001	B1694.D	04/02/2001	17:59
PE-3_0.5-1	1925-003	B1695.D	04/02/2001	18:14
PE-4_0.5-1	1925-005	B1696.D	04/02/2001	18:28
PE-44_1-1.5	1925-007	B1697.D	04/02/2001	18:42
T4/PE-3	1897-003	B1698.D	04/02/2001	18:57
SS-1A/1B_8'	1933-001	B1699.D	04/02/2001	19:11
SS-2A/2B_8'	1933-002	B1700.D	04/02/2001	19:25
SS-3A/3B_8'	1933-003	B1701.D	04/02/2001	19:40
1252-P16N(E)	1958-001	B1702.D	04/02/2001	19:54
1252-P16N(E)	1958-001M	B1703.D	04/02/2001	20:09
1252-P16N(E)	1958-001M	B1704.D	04/02/2001	20:23
SS-4A/4B_8'	1933-004	B1705.D	04/02/2001	20:38

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1696.D

DFTPP Injection Date : 04/03/2001

Inst ID: MSDB

DFTPP Injection Time: 05:56

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	30.0			
68	Less than 2.0% of mass 69	0.6	(	1.6	)1
69	Mass 69 relative abundance	38.2			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	49.8			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.4			
275	10.0 - 30.0% of mass 198	23.1			
365	Greater than 1.0% of mass 198	2.8			
441	Present, but less than mass 443	11.31	(	78.5	)3
442	40.0 - 100.0% of mass 198	78.3			
443	17.0 - 23.0% of mass 442	14.4	(	18.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
.	BNA-STD-INJ-FOR	B1697.D	04/03/2001	06:27
.	OLMO4-STD-INJ-F	B1698.D	04/03/2001	06:41
S-22	1922-006	B1699.D	04/03/2001	06:56
PE-3_0.5-1	1925-003	B1700.D	04/03/2001	07:10
PE-4_0.5-1	1925-005	B1701.D	04/03/2001	07:24
PE-44_1-1.5	1925-007	B1702.D	04/03/2001	07:38
T4/PE-3	1897-003	B1703.D	04/03/2001	07:52
T4/PE-3	1897-003	B1704.D	04/03/2001	08:07
SS-1A/1B_8'	1933-001	B1705.D	04/03/2001	08:21
SS-2A/2B_8'	1933-002	B1706.D	04/03/2001	08:35
SS-3A/3B_8'	1933-003	B1707.D	04/03/2001	08:49
1252-P16N(E)	1958-001	B1708.D	04/03/2001	09:06
PE-1_0.5-1	1925-001MSD	B1709.D	04/03/2001	09:20
PE-1_05-1	1925-001MSD	B1710.D	04/03/2001	09:34
SS-4A/4B_8'	1933-004	B1711.D	04/03/2001	09:49
.	Method-Blank	B1712.D	04/03/2001	10:03
4052-B2	2014-002	B1713.D	04/03/2001	10:36
4052-B3	2014-003	B1714.D	04/03/2001	10:50
4052-B1	2014-001	B1715.D	04/03/2001	11:05
4052-B4	2014-004	B1716.D	04/03/2001	11:19
4052-B7	2014-007	B1717.D	04/03/2001	11:59
4052-B5	2014-005	B1718.D	04/03/2001	12:13
4052-B9	2014-009	B1719.D	04/03/2001	12:28

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1696.D

DFTPP Injection Date : 04/03/2001

Inst ID: MSDB

DFTPP Injection Time: 05:56

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	30.0			
68	Less than 2.0% of mass 69	0.6	(	1.6	)1
69	Mass 69 relative abundance	38.2			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	49.8			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.4			
275	10.0 - 30.0% of mass 198	23.1			
365	Greater than 1.0% of mass 198	2.8			
441	Present, but less than mass 443	11.3	(	78.5	)3
442	40.0 - 100.0% of mass 198	78.3			
443	17.0 - 23.0% of mass 442	14.4	(	18.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
4052-B6	2014-006	B1720.D	04/03/2001	12:42
4052-B8	2014-008	B1721.D	04/03/2001	12:56
4052-B10	2014-010	B1722.D	04/03/2001	13:11
4052-B11	2014-011	B1723.D	04/03/2001	13:25
4052-B12	2014-012	B1724.D	04/03/2001	13:40
S-40	2006-010	B1725.D	04/03/2001	13:55
S-41	2006-011	B1726.D	04/03/2001	14:09
S-42	2006-012	B1727.D	04/03/2001	14:24
S-43	2006-013	B1728.D	04/03/2001	14:38
S-44	2006-014	B1729.D	04/03/2001	14:53
ESA	2020-001	B1730.D	04/03/2001	15:07
4052-B1	2014-001MS	B1731.D	04/03/2001	15:22
4052-B1	2014-001MSD	B1732.D	04/03/2001	15:36
.	Method-Blank	B1733.D	04/03/2001	15:51
B-6A	2028-001	B1734.D	04/03/2001	16:06
B-6B	2028-002	B1735.D	04/03/2001	16:20
B-6C	2028-003	B1736.D	04/03/2001	16:35
B-6D	2028-004	B1738.D	04/03/2001	16:49
B-6A	2028-001MS	B1739.D	04/03/2001	17:03
B-6A	2028-001MSD	B1740.D	04/03/2001	17:18
15-4	1994-001	B1741.D	04/03/2001	17:33
15-1	1994-002	B1742.D	04/03/2001	17:47

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: B1667.D

Instrument ID: MSDA

Date Extracted: 03/30/01

Matrix: SOIL

Date Analyzed: 04/02/2001

Time Analyzed: 11:24

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S-17	1922-001	04/02/2001	11:38
S-18	1922-002	04/02/2001	11:52
S-19	1922-003	04/02/2001	12:07
S-20	1922-004	04/02/2001	12:21
S-21	1922-005	04/02/2001	12:36
S-22	1922-006	04/02/2001	12:50
S-23	1922-007	04/02/2001	13:05
S-24	1922-008	04/02/2001	13:19
S-25	1922-009	04/02/2001	13:34
S-27	1922-011	04/02/2001	13:48
S-28	1922-012	04/02/2001	14:08
S-29	1922-013	04/02/2001	14:22
S-30	1922-015	04/02/2001	14:37
TP-4	1820-004	04/02/2001	14:51
FDS-2_4.5-5'	1920-004	04/02/2001	15:06
FDS-2_4.5-5'	1920-004M	04/02/2001	15:20
FDS-2_4.5-5'	1920-004M	04/02/2001	15:34
S-22	1922-006	04/03/2001	06:56

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1667.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		33.3
Phenol	ND		33.3
Aniline	ND		33.3
bis(2-Chloroethyl)ether	ND		33.3
2-Chlorophenol	ND		33.3
1,3-Dichlorobenzene	ND		33.3
1,4-Dichlorobenzene	ND		33.3
Benzyl alcohol	ND		33.3
1,2-Dichlorobenzene	ND		33.3
2-Methylphenol	ND		33.3
bis(2-chloroisopropyl)ether	ND		33.3
4-Methylphenol	ND		33.3
N-Nitroso-di-n-propylamine	ND		33.3
Hexachloroethane	ND		33.3
Nitrobenzene	ND		33.3
Isophorone	ND		33.3
2-Nitrophenol	ND		33.3
2,4-Dimethylphenol	ND		33.3
bis(2-Chloroethoxy)methane	ND		33.3
Benzoic acid	ND		33.3
2,4-Dichlorophenol	ND		33.3
1,2,4-Trichlorobenzene	ND		33.3
Naphthalene	ND		33.3
4-Chloroaniline	ND		33.3
Hexachlorobutadiene	ND		33.3
4-Chloro-3-methylphenol	ND		33.3
2-Methylnaphthalene	ND		33.3
Hexachlorocyclopentadiene	ND		33.3
2,4,6-Trichlorophenol	ND		33.3
2,4,5-Trichlorophenol	ND		33.3
2-Chloronaphthalene	ND		33.3
2-Nitroaniline	ND		33.3
Dimethylphthalate	ND		33.3
2,6-Dinitrotoluene	ND		33.3
Acenaphthylene	ND		33.3

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1667.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		33.3
Acenaphthene	ND		33.3
2,4-Dinitrophenol	ND		33.3
4-Nitrophenol	ND		33.3
2,4-Dinitrotoluene	ND		33.3
Dibenzofuran	ND		33.3
Diethylphthalate	ND		33.3
Fluorene	ND		33.3
4-Chlorophenyl-phenylether	ND		33.3
4-Nitroaniline	ND		33.3
4,6-Dinitro-2-methylphenol	ND		33.3
N-Nitrosodiphenylamine	ND		33.3
1,2-Diphenylhydrazine/Azobenzene	ND		33.3
4-Bromophenyl-phenylether	ND		33.3
Hexachlorobenzene	ND		33.3
Pentachlorophenol	ND		33.3
Phenanthrene	ND		33.3
Anthracene	ND		33.3
Carbazole	ND		33.3
Di-n-butylphthalate	ND		33.3
Fluoranthene	ND		33.3
Benzidine	ND		33.3
Pyrene	ND		33.3
3,3'-Dimethylbenzidine	ND		33.3
Butylbenzylphthalate	ND		33.3
3,3'-Dichlorobenzidine	ND		33.3
Benzo[a]anthracene	ND		33.3
Chrysene	ND		33.3
bis(2-Ethylhexyl)phthalate	ND		33.3
Di-n-octylphthalate	ND		33.3
Benzo[b]fluoranthene	ND		33.3
Benzo[k]fluoranthene	ND		33.3
Benzo[a]pyrene	ND		33.3
Indeno[1,2,3-cd]pyrene	ND		33.3
Dibenz[a,h]anthracene	ND		33.3
Benzo[g,h,i]perylene	ND		33.3

Total Target Compounds: 0

000331

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: B1667.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

1367

Response Factor Report MSD_B

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
[illegible] Update : Mon Apr 02 09:42:41 2001
[illegible]ponse via : Initial Calibration

Calibration Files
160 =B1650.D 80 =B1647.D 50 =B1646.D
20 =B1648.D 120 =B1649.D

		Compound	160	80	50	20	120	Avg	%RSD
			ISTD						
1)	I	1,4-Dichlorobenzene-d							
2)	T	N-Nitrosodimethylam	0.514	0.613	0.713	0.688	0.598	0.625	12.63
3)	T	Pyridine	0.579	0.665	0.663	0.661	0.624	0.638	5.84
4)	S	2-Fluorophenol	1.218	1.152	1.145	1.086	1.153	1.151	4.07
5)	T	Benzaldehyde	0.888	0.877	1.051	1.075	0.968	0.972	9.35
6)	S	Phenol-d5	1.419	1.402	1.410	1.433	1.380	1.409	1.42
7)	MC	Phenol	1.479	1.457	1.594	1.486	1.539	1.511	3.66
8)	T	Aniline	1.649	1.858	1.984	1.969	1.805	1.853	7.37
9)	T	bis(2-Chloroethyl)e	1.023	1.088	1.142	1.201	1.136	1.118	5.96
10)	M	2-Chlorophenol	1.062	1.227	1.296	1.335	1.279	1.240	8.60
11)	T	1,3-Dichlorobenzene	1.154	1.361	1.450	1.488	1.282	1.347	9.97
12)	MC	1,4-Dichlorobenzene	1.182	1.414	1.479	1.522	1.275	1.375	10.35
13)	T	Benzyl alcohol	0.724	0.795	0.908	0.855	0.797	0.816	8.50
14)	T	1,2-Dichlorobenzene	1.116	1.342	1.408	1.456	1.233	1.311	10.49
15)	T	2-Methylphenol	0.999	1.156	1.254	1.246	1.125	1.156	9.00
16)	T	bis(2-chloroisoprop	0.945	1.185	1.299	1.349	1.075	1.171	14.07
[illegible]	T	4-Methylphenol	1.069	1.398	1.408	1.804	1.282	1.392	19.22
[illegible]	MP	N-Nitroso-di-n-prop	0.566	0.768	0.664	0.919	0.704	0.724	18.16
[illegible]	T	Acetophenone	1.562	1.778	1.910	1.901	1.752	1.781	7.93
20)	T	2-Aminotoluene +4-A	2.501	2.856	3.699	3.862	2.721	3.128	19.56
21)	T	Hexachloroethane	0.386	0.506	0.521	0.536	0.471	0.484	12.36
			ISTD						
22)	I	Naphthalene-d8							
23)	S	Nitrobenzene-d5	0.292	0.286	0.317	0.272	0.284	0.290	5.66
24)	T	Nitrobenzene	0.227	0.317	0.284	0.295	0.279	0.280	11.89
25)	T	Isophorone	0.507	0.584	0.607	0.604	0.567	0.574	7.06
26)	TC	2-Nitrophenol	0.160	0.179	0.192	0.173	0.186	0.178	6.82
27)	T	2,4-Dimethylphenol	0.262	0.308	0.332	0.320	0.296	0.303	8.86
28)	T	bis(2-Chloroethoxy)	0.305	0.358	0.376	0.372	0.346	0.352	8.15
29)	T	Benzoic acid	0.139	0.187	0.171	0.123	0.122	0.148	19.80
30)	T	2,4-Dimethylaniline	0.424	0.508	0.544	0.584	0.488	0.510	11.82
31)	TC	2,4-Dichlorophenol	0.217	0.261	0.268	0.279	0.260	0.257	9.26
32)	M	1,2,4-Trichlorobenz	0.253	0.297	0.317	0.326	0.276	0.294	10.19
33)	T	Naphthalene	0.765	0.881	0.965	0.996	0.793	0.880	11.57
34)	T	4-Chloroaniline	0.336	0.418	0.469	0.437	0.390	0.410	12.32
35)	TC	Hexachlorobutadiene	0.139	0.173	0.185	0.189	0.164	0.170	11.67
36)	T	Caprolactam	0.107	0.128	0.142	0.132	0.124	0.127	10.16
37)	MC	4-Chloro-3-methylph	0.256	0.258	0.296	0.289	0.270	0.274	6.60
38)	T	2-Methylnaphthalene	0.538	0.659	0.724	0.702	0.569	0.638	12.80
			ISTD						
39)	I	Acenaphthene-d10							
40)	TP	Hexachlorocyclopent	0.563	0.593	0.648	0.654	0.592	0.610	6.46
[illegible]	TC	2,4,6-Trichlorophen	0.285	0.337	0.335	0.373	0.314	0.329	9.84
[illegible]	T	2,4,5-Trichlorophen	0.285	0.353	0.388	0.361	0.347	0.347	10.96
43)	S	2-Fluorobiphenyl	1.121	1.093	1.113	1.073	1.096	1.099	1.67
44)	T	1-1'-Biphenyl	0.822	0.945	1.141	1.318	1.037	1.053	17.95
45)	T	2-Chloronaphthalene	0.679	0.835	0.897	1.028	0.749	0.837	16.08
46)	T	2-Nitroaniline	0.234	0.252	0.242	0.239	0.213	0.236	6.16
47)	T	Dimethylphthalate	0.999	1.109	1.234	1.289	1.116	1.149	9.89

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48)	T	2,6-Dinitrotoluene	0.216	0.257	0.263	0.271	0.207	0.243	11.97
49)	T	Acenaphthylene	1.217	1.346	1.636	1.707	1.264	1.434	15.57
50)	T	3-Nitroaniline	0.272	0.314	0.347	0.329	0.255	0.303	12.74
51)	MC	Acenaphthene	0.707	0.920	0.937	1.071	0.873	0.902	14.55
52)	T	2,4-Dinitrophenol	0.102	0.113	0.098	0.077	0.130	0.104	18.92
53)	MP	4-Nitrophenol	0.169	0.167	0.184	0.184	0.175	0.176	4.49
	M	2,4-Dinitrotoluene	0.284	0.313	0.341	0.341	0.363	0.328	9.29
55)	T	Dibenzofuran	1.133	1.373	1.449	1.598	1.189	1.348	14.10
56)	T	Diethylphthalate	0.946	1.149	1.232	1.316	1.067	1.142	12.59
57)	T	Fluorene	0.822	0.998	1.124	1.289	0.902	1.027	17.97
58)	T	4-Chlorophenyl-phen	0.365	0.498	0.549	0.613	0.444	0.494	19.31
59)	T	4-Nitroaniline	0.285	0.307	0.313	0.320	0.329	0.311	5.35
60)	I	Phenanthrene-d10	ISTD						
61)	T	4,6-Dinitro-2-methy	0.078	0.095	0.091	0.073	0.093	0.086	11.15
62)	TC	N-Nitrosodiphenylam	0.356	0.429	0.442	0.469	0.368	0.413	11.77
63)	T	1,2-Diphenylhydrazi	0.477	0.605	0.605	0.651	0.521	0.572	12.35
64)	S	2,4,6-Tribromopheno	0.131	0.138	0.132	0.132	0.133	0.133	2.13
65)	T	4-Bromophenyl-pheny	0.156	0.181	0.192	0.202	0.173	0.181	9.76
66)	T	Hexachlorobenzene	0.182	0.220	0.233	0.251	0.210	0.219	11.75
67)	T	Atrazine	0.240	0.300	0.297	0.178	0.265	0.256	19.48
68)	MC	Pentachlorophenol	0.126	0.143	0.146	0.137	0.140	0.138	5.47
69)	T	Phenanthrene	0.645	0.805	0.911	0.955	0.800	0.823	14.59
70)	T	Anthracene	0.719	0.809	0.884	0.958	0.753	0.825	11.79
71)	T	Carbazole	0.666	0.733	0.804	0.892	0.699	0.759	11.90
72)	T	Di-n-butylphthalate	0.822	0.993	1.024	1.085	0.932	0.971	10.30
73)	TC	Fluoranthene	0.774	0.851	0.931	0.983	0.850	0.878	9.23
74)	T	Benzidine	0.476	0.549	0.553	0.388	0.540	0.501	14.10
75)	I	Chrysene-d12	ISTD						
76)	M	Pyrene	0.952	1.016	1.112	1.151	1.038	1.054	7.48
77)	S	Terphenyl-d14	1.031	0.957	0.928	0.890	0.963	0.954	5.43
78)	T	3,3'-Dimethylbenzid	0.503	0.551	0.489	0.435	0.520	0.499	8.56
79)	T	Butylbenzylphthalat	0.452	0.496	0.516	0.498	0.487	0.490	4.83
80)	T	3,3'-Dichlorobenzid	0.291	0.343	0.366	0.384	0.329	0.343	10.41
81)	T	Benzo[a]anthracene	0.849	0.967	1.024	0.994	0.968	0.961	6.92
82)	T	Chrysene	0.778	0.876	0.905	1.010	0.861	0.886	9.47
83)	T	bis(2-Ethylhexyl)ph	0.637	0.692	0.715	0.674	0.687	0.681	4.23
84)	I	Perylene-d12	ISTD						
85)	TC	Di-n-octylphthalate	0.964	1.074	0.921	0.823	0.989	0.954	9.67
86)	T	Benzo[b]fluoranthen	1.128	1.362	0.969	0.958	0.995	1.082	15.75
87)	T	Benzo[k]fluoranthen	0.719	0.996	0.966	0.991	0.942	0.923	12.58
88)	TC	Benzo[a]pyrene	0.724	0.869	0.893	0.873	0.816	0.835	8.18
89)	T	Indeno[1,2,3-cd]pyr	0.896	0.910	0.797	0.836	0.811	0.850	5.94
90)	T	Dibenz[a,h]anthrace	0.848	0.865	0.778	0.822	0.773	0.817	5.03
91)	T	Benzo[g,h,i]perylen	0.783	0.807	0.669	0.713	0.707	0.736	7.78

(#) = Out of Range

BS1201.M Mon Apr 02 09:42:54 2001 MSD_B

Instrument ID: MSD_B
Method ID: BS1201.M
Date: 04/02/2001

Average %RSD = 10.91

Refer to SW846 Method 8000B Section 7.5.1.

000335

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Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1697.D
Acq On : 3 Apr 2001 6:27
Sample : .,BNA-STD-INJ-FOR-04/03/01
Misc :
Integration Params: rteint.p

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Multiple Level Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	150	0.00
2	T	N-Nitrosodimethylamine	0.625	0.576	7.8	121	0.01
3	T	Pyridine	0.638	0.637	0.2	144	0.01
4	S	2-Fluorophenol	1.151	1.088	5.5	143	0.00
5	T	Benzaldehyde	0.972	1.191	-22.5	168	0.00
6	S	Phenol-d5	1.409	1.338	5.0	142	-0.01
7	MC	Phenol	1.511	1.479	2.1	139	-0.01
8	T	Aniline	1.853	1.881	-1.5	142	0.00
9	T	bis(2-Chloroethyl)ether	1.118	1.106	1.1	145	0.00
10	M	2-Chlorophenol	1.240	1.299	-4.8	150	0.00
11	T	1,3-Dichlorobenzene	1.347	1.414	-5.0	146	0.00
12	MC	1,4-Dichlorobenzene	1.375	1.436	-4.4	146	0.00
13	T	Benzyl alcohol	0.816	0.836	-2.5	138	0.00
14	T	1,2-Dichlorobenzene	1.311	1.351	-3.1	144	0.00
15	T	2-Methylphenol	1.156	1.136	1.7	136	-0.01
[illegible]	T	bis(2-chloroisopropyl)ether	1.171	1.205	-2.9	139	-0.01
[illegible]	T	4-Methylphenol	1.392	1.192	14.4	127	-0.02
18	MP	N-Nitroso-di-n-propylamine	0.724	0.591	18.4	134	-0.02
19	T	Acetophenone	1.781	1.706	4.2	134	-0.02
20	T	2-Aminotoluene +4-Aminotolu	3.128	3.112	0.5	126	-0.01
21	T	Hexachloroethane	0.484	0.544	-12.4	157	0.00
22	I	Naphthalene-d8	1.000	1.000	0.0	139	0.00
23	S	Nitrobenzene-d5	0.290	0.316	-9.0	138	-0.01
24	T	Nitrobenzene	0.280	0.272	2.9	133	-0.01
25	T	Isophorone	0.574	0.560	2.4	128	-0.01
26	TC	2-Nitrophenol	0.178	0.171	3.9	124	-0.01
27	T	2,4-Dimethylphenol	0.303	0.317	-4.6	132	-0.01
28	T	bis(2-Chloroethoxy)methane	0.352	0.357	-1.4	131	-0.01
29	T	Benzoic acid	0.148	0.148	0.0	120	-0.01
30	T	2,4-Dimethylaniline	0.510	0.506	0.8	129	-0.01
31	TC	2,4-Dichlorophenol	0.257	0.249	3.1	129	-0.02
32	M	1,2,4-Trichlorobenzene	0.294	0.320	-8.8	140	-0.01
33	T	Naphthalene	0.880	0.847	3.8	122	-0.01
34	T	4-Chloroaniline	0.410	0.378	7.8	112	-0.01
35	TC	Hexachlorobutadiene	0.170	0.194	-14.1	146	0.00
36	T	Caprolactam	0.127	0.086	32.3	84	-0.04
37	MC	4-Chloro-3-methylphenol	0.274	0.247	9.9	116	-0.02
38	T	2-Methylnaphthalene	0.638	0.637	0.2	122	0.00
[illegible]	I	Acenaphthene-d10	1.000	1.000	0.0	113	0.00
[illegible]	TP	Hexachlorocyclopentadiene	0.610	0.798	-30.8	139	-0.01
41	TC	2,4,6-Trichlorophenol	0.329	0.364	-10.6	123	-0.01
42	T	2,4,5-Trichlorophenol	0.347	0.377	-8.6	110	0.00
43	S	2-Fluorobiphenyl	1.099	1.186	-7.9	121	0.00
44	T	1-1'-Biphenyl	1.053	1.144	-8.6	113	-0.01
45	T	2-Chloronaphthalene	0.837	0.994	-18.8	125	0.00

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1371

46	T	2-Nitroaniline	0.236	0.228	3.4	106	-0.02
47	T	Dimethylphthalate	1.149	1.131	1.6	104	-0.01
48	T	2,6-Dinitrotoluene	0.243	0.212	12.8	91	-0.02
49	T	Acenaphthylene	1.434	1.586	-10.6	110	0.00
50	T	3-Nitroaniline	0.303	0.237	21.8	77	-0.02
	MC	Acenaphthene	0.902	0.969	-7.4	117	-0.01
	T	2,4-Dinitrophenol	0.104	0.080	23.1	92	-0.01
	MP	4-Nitrophenol	0.176	0.149	15.3	92	-0.02
54	M	2,4-Dinitrotoluene	0.328	0.268	18.3	89	-0.01
55	T	Dibenzofuran	1.348	1.516	-12.5	118	0.00
56	T	Diethylphthalate	1.142	1.106	3.2	101	0.00
57	T	Fluorene	1.027	1.077	-4.9	108	0.00
58	T	4-Chlorophenyl-phenylether	0.494	0.516	-4.5	106	-0.01
59	T	4-Nitroaniline	0.311	0.231	25.7	84	-0.02
60	I	Phenanthrene-d10	1.000	1.000	0.0	94	-0.01
61	T	4,6-Dinitro-2-methylphenol	0.086	0.067	22.1	69	-0.02
62	TC	N-Nitrosodiphenylamine	0.413	0.471	-14.0	99	-0.02
63	T	1,2-Diphenylhydrazine/Azobe	0.572	0.700	-22.4	108	-0.01
64	S	2,4,6-Tribromophenol	0.133	0.147	-10.5	104	0.00
65	T	4-Bromophenyl-phenylether	0.181	0.211	-16.6	103	-0.01
66	T	Hexachlorobenzene	0.219	0.244	-11.4	98	-0.01
67	T	Atrazine	0.256	0.222	13.3	70	-0.02
68	MC	Pentachlorophenol	0.138	0.152	-10.1	97	0.00
69	T	Phenanthrene	0.823	0.883	-7.3	91	-0.01
70	T	Anthracene	0.825	0.866	-5.0	92	-0.02
71	T	Carbazole	0.759	0.741	2.4	86	-0.01
72	T	Di-n-butylphthalate	0.971	1.010	-4.0	92	-0.01
73	TC	Fluoranthene	0.878	0.797	9.2	80	-0.02
74	T	Benzidine	0.501	0.396	21.0	67	-0.01
	I	Chrysene-d12	1.000	1.000	0.0	71	-0.02
	M	Pyrene	1.054	1.171	-11.1	75	-0.01
77	S	Terphenyl-d14	0.954	1.009	-5.8	77	0.00
78	T	3,3'-Dimethylbenzidine	0.499	0.522	-4.6	76	-0.02
79	T	Butylbenzylphthalate	0.490	0.519	-5.9	72	-0.02
80	T	3,3'-Dichlorobenzidine	0.343	0.374	-9.0	73	-0.02
81	T	Benzo[a]anthracene	0.961	0.979	-1.9	68	-0.02
82	T	Chrysene	0.886	0.906	-2.3	71	-0.02
83	T	bis(2-Ethylhexyl)phthalate	0.681	0.737	-8.2	73	-0.01
84	I	Perylene-d12	1.000	1.000	0.0	77	-0.01
85	TC	Di-n-octylphthalate	0.954	0.860	9.9	72	-0.02
86	T	Benzo[b]fluoranthene	1.082	1.149	-6.2	92	-0.02
87	T	Benzo[k]fluoranthene	0.923	0.971	-5.2	78	-0.02
88	TC	Benzo[a]pyrene	0.835	0.866	-3.7	75	-0.02
89	T	Indeno[1,2,3-cd]pyrene	0.850	1.030	-21.2	100	-0.03
90	T	Dibenz[a,h]anthracene	0.817	0.973	-19.1	97	-0.03
91	T	Benzo[g,h,i]perylene	0.736	0.896	-21.7	104	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

B1646.D BS1201.M Tue Apr 03 06:42:37 2001 MSD_B

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/02/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
Method-Blank	SOIL	B1656.D	61	70	69	78	79	82
1899-006	SOIL	B1657.D	65	73	77	85	92	100
1899-010	SOIL	B1658.D	62	68	69	76	89	86
1899-011	SOIL	B1659.D	57	66	68	80	94	105
1899-012	SOIL	B1660.D	66	70	76	79	91	90
1899-013	SOIL	B1661.D	64	69	71	79	89	96
1899-014	SOIL	B1662.D	63	69	73	78	86	87
1899-015	SOIL	B1663.D	66	71	73	80	87	85
1899-007	SOIL	B1664.D	N/A	N/A	70	79	N/A	85
1899-008	SOIL	B1665.D	N/A	N/A	77	84	N/A	100
1899-009	SOIL	B1666.D	N/A	N/A	75	84	N/A	96
Method-Blank	SOIL	B1667.D	61	69	71	77	82	92
1922-001	SOIL	B1668.D	54	61	65	74	87	89
1922-002	SOIL	B1669.D	64	71	75	83	93	99
1922-003	SOIL	B1670.D	69	69	67	85	108	102
1922-004	SOIL	B1671.D	66	80	74	86	114	85
1922-005	SOIL	B1672.D	59	68	67	80	100	99
1922-006	SOIL	B1673.D	65	77	75	90	79	98
1922-007	SOIL	B1674.D	67	71	69	90	105	86
1922-008	SOIL	B1675.D	47	56	56	64	72	68
1922-009	SOIL	B1676.D	63	69	68	81	88	97
1922-011	SOIL	B1677.D	66	78	71	78	97	101
1922-012	SOIL	B1678.D	60	65	68	80	97	94

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	36-93	42-83
S2 (PHL) = Phenol-d5	40-101	63-101
S3 (NBZ) = Nitrobenzene-d5	45-98	47-120
S4 (FBP) = 2-Fluorobiphenyl	48-104	55-112
S5 (TBP) = 2,4,6-Tribromophenol	54-135	52-151
S6 (TPH) = Terphenyl-d14	58-147	63-132

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/02/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
1922-013	SOIL	B1679.D	60	70	64	77	89	90
1922-015	SOIL	B1680.D	59	73	70	82	96	99
1820-004	SOIL	B1681.D	N/A	N/A	73	85	N/A	102
1920-004	SOIL	B1682.D	N/A	N/A	73	87	N/A	100
1920-004M	SOIL	B1683.D	65	70	74	84	88	109
1920-004M	SOIL	B1684.D	61	66	62	76	85	100
Method-Blank	SOIL	B1685.D	61	71	68	73	80	95
1929-001	SOIL	B1686.D	61	74	67	80	89	98
1929-002	SOIL	B1687.D	59	71	67	80	83	87
1929-003	SOIL	B1688.D	56	66	66	81	85	82
1929-004	SOIL	B1689.D	63	73	74	79	85	103
1929-005	SOIL	B1690.D	61	73	76	84	81	99
1929-006	SOIL	B1691.D	58	68	70	80	84	103
1929-007	SOIL	B1692.D	58	68	66	75	80	87
1951-001	SOIL	B1693.D	54	63	61	70	72	95
1925-001	SOIL	B1694.D	62	71	70	74	76	91

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	36-93	42-83
S2 (PHL) = Phenol-d5	40-101	63-101
S3 (NBZ) = Nitrobenzene-d5	45-98	47-120
S4 (FBP) = 2-Fluorobiphenyl	48-104	55-112
S5 (TBP) = 2,4,6-Tribromophenol	54-135	52-151
S6 (TPH) = Terphenyl-d14	58-147	63-132

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/03/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
1922-006	SOIL	B1699.D	64	72	69	90	64	79
1925-003	SOIL	B1700.D	N/A	N/A	71	77	N/A	96
1925-005	SOIL	B1701.D	N/A	N/A	73	84	N/A	98
1925-007	SOIL	B1702.D	N/A	N/A	76	87	N/A	104
1897-003	SOIL	B1704.D	N/A	N/A	64	79	N/A	74
1933-001	SOIL	B1705.D	N/A	N/A	73	85	N/A	98
1933-002	SOIL	B1706.D	N/A	N/A	63	81	N/A	97
1933-003	SOIL	B1707.D	N/A	N/A	70	88	N/A	100
1958-001	SOIL	B1708.D	N/A	N/A	63	80	N/A	96
1925-001MSD	SOIL	B1709.D	56	63	67	76	91	91
1925-001MSD	SOIL	B1710.D	53	59	64	72	86	95
1933-004	SOIL	B1711.D	N/A	N/A	72	86	N/A	79
Method-Blank	SOIL	B1712.D	63	72	70	82	89	79
2014-002	SOIL	B1713.D	66	78	69	89	104	84
2014-003	SOIL	B1714.D	66	79	72	93	98	81
2014-001	SOIL	B1715.D	64	75	71	86	92	81
2014-004	SOIL	B1716.D	63	71	65	81	97	86
2014-007	SOIL	B1717.D	72	86	77	100	110	88
2014-005	SOIL	B1718.D	68	76	77	96	110	97
2014-009	SOIL	B1719.D	72	77	76	92	100	82
2014-006	SOIL	B1720.D	73	84	93	103	110	90
2014-008	SOIL	B1721.D	59	69	63	80	97	84
2014-010	SOIL	B1722.D	72	85	80	94	104	92

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	36-93	42-83
S2 (PHL) = Phenol-d5	40-101	63-101
S3 (NBZ) = Nitrobenzene-d5	45-98	47-120
S4 (FBP) = 2-Fluorobiphenyl	48-104	55-112
S5 (TBP) = 2,4,6-Tribromophenol	54-135	52-151
S6 (TPH) = Terphenyl-d14	58-147	63-132

* Column to be used to flag recovery values

SOIL SEMIVOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 1920-004 Batch No.: B033001S

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	100.0	0.0	66.0	66	26 - 90
2-Chlorophenol	100.0	0.0	68.2	68	25 - 102
1,4-Dichlorobenzene	50.0	0.0	35.6	71	28 - 104
N-Nitroso-di-n-propylamine	50.0	0.0	43.5	87	41 - 126
1,2,4-Trichlorobenzene	50.0	0.0	38.5	77	38 - 107
4-Chloro-3-methylphenol	100.0	0.0	72.3	72	26 - 103
Acenaphthene	50.0	0.0	45.5	91	31 - 137
4-Nitrophenol	100.0	0.0	68.1	68	11 - 114
2,4-Dinitrotoluene	50.0	0.0	31.1	62	28 - 89
Pentachlorophenol	100.0	0.0	78.9	79	17 - 109
Pyrene	50.0	0.0	54.3	109	35 - 142

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	0.0	57.6	58	13	42	26 - 90
2-Chlorophenol	0.0	61.6	62	9	40	25 - 102
1,4-Dichlorobenzene	0.0	32.1	64	10	28	28 - 104
N-Nitroso-di-n-propylamine	0.0	39.7	79	10	38	41 - 126
1,2,4-Trichlorobenzene	0.0	33.2	66	15	28	38 - 107
4-Chloro-3-methylphenol	0.0	70.1	70	3	42	26 - 103
Acenaphthene	0.0	42.1	84	8	31	31 - 137
4-Nitrophenol	0.0	66.2	66	3	50	11 - 114
2,4-Dinitrotoluene	0.0	29.0	58	7	38	28 - 89
Pentachlorophenol	0.0	76.6	77	3	50	17 - 109
Pyrene	0.0	48.3	97	12	31	35 - 142

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __11__ outside limits

Spike Recovery: __0___ out of __22__ outside limits

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D Date Analyzed: 04/02/2001

Instrument ID: MSDB Time Analyzed: 06:20

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	36881	1.51	151207	2.04	96676	2.76
	UPPER LIMIT	73762	2.01	302414	2.54	193352	3.26
	LOWER LIMIT	18441	1.01	75604	1.54	48338	2.26
	LAB SAMPLE ID						
01	BNA-STD-INJ-FOR-04	36743	1.51	151152	2.04	96310	2.76
02	BNA-STD-INJ-FOR-04	33112	1.51	140132	2.04	87573	2.75
03	BNA-STD-INJ-FOR-04	32726	1.52	136697	2.04	87875	2.76
04	BNA-STD-INJ-FOR-04	34266	1.52	142297	2.04	88430	2.76
05	OLMO4-STD-INJ-FOR	31064	1.51	128572	2.03	81325	2.75
06	OLMO4-STD-INJ-FOR	31159	1.51	127308	2.03	79409	2.75
07	OLMO4-STD-INJ-FOR	31513	1.51	127648	2.03	79178	2.75
08	OLMO4-STD-INJ-FOR	32356	1.51	130005	2.03	78981	2.75
09	OLMO4-STD-INJ-FOR	33341	1.51	130832	2.03	81762	2.75
10	Method-Blank	28329	1.51	115940	2.03	71793	2.75
11	1899-006	34055	1.51	137101	2.03	82341	2.75
12	1899-010	30678	1.51	126095	2.03	76923	2.75
13	1899-011	34754	1.51	140624	2.03	81681	2.75
14	1899-012	30183	1.51	121174	2.03	75921	2.75
15	1899-013	34254	1.51	140407	2.03	80349	2.75
16	1899-014	29618	1.51	118162	2.03	73960	2.75
17	1899-015	31099	1.51	126228	2.03	76487	2.75
18	1899-007	30951	1.51	126898	2.03	76788	2.75
19	1899-008	31661	1.51	126623	2.03	76638	2.75
20	1899-009	31580	1.51	127776	2.03	76167	2.75
21	Method-Blank	34412	1.51	136974	2.03	82557	2.75
22	1922-001	32570	1.51	131387	2.03	80326	2.75

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	40UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	36881		1.51		151207		2.04		96676		2.76	
	UPPER LIMIT	73762		2.01		302414		2.54		193352		3.26	
	LOWER LIMIT	18441		1.01		75604		1.54		48338		2.26	
	LAB SAMPLE ID												
01	1922-002	36337		1.51		141176		2.03		83172		2.75	
02	1922-003	34650		1.53		136527		2.04		77038		2.76	
03	1922-004	39736		1.52		151714		2.03		84723		2.75	
04	1922-005	35209		1.51		140210		2.03		79164		2.75	
05	1922-006	35675		1.52		138723		2.03		77740		2.75	
06	1922-007	38473		1.52		149270		2.04		79636		2.75	
07	1922-008	37351		1.52		143251		2.03		83915		2.75	
08	1922-009	34572		1.52		140033		2.04		81085		2.75	
09	1922-011	33186		1.51		129524		2.03		77650		2.75	
10	1922-012	37532		1.51		145757		2.03		83122		2.75	
11	1922-013	34543		1.52		137747		2.03		78175		2.75	
12	1922-015	33567		1.52		132055		2.03		77328		2.75	
13	1820-004	35074		1.51		139139		2.03		79904		2.75	
14	1920-004	32328		1.51		131674		2.03		78301		2.75	
15	1920-004M	32095		1.51		126593		2.03		76365		2.75	
16	1920-004M	34258		1.52		137293		2.04		78572		2.75	
17	Method-Blank	31553		1.51		126485		2.03		78216		2.75	
18	1929-001	33108		1.52		130006		2.03		78225		2.75	
19	1929-002	36474		1.51		141042		2.03		80658		2.75	
20	1929-003	38075		1.52		141386		2.03		78340		2.75	
21	1929-004	32699		1.51		131831		2.03		80866		2.75	
22	1929-005	34919		1.51		135265		2.03		81294		2.75	

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT
Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	36881	1.51	151207	2.04	96676	2.76
	UPPER LIMIT	73762	2.01	302414	2.54	193352	3.26
	LOWER LIMIT	18441	1.01	75604	1.54	48338	2.26
	LAB SAMPLE ID						
01	1929-006	33756	1.51	131394	2.03	78645	2.75
02	1929-007	36181	1.51	138778	2.03	81951	2.75
03	1951-001	36532	1.51	143248	2.03	85029	2.75
04	1925-001	36095	1.51	139696	2.03	85719	2.75
05	1925-003	39239	1.52	141362	2.03	78662	2.75
06	1925-005	31964	1.51	130986	2.03	80391	2.75
07	1925-007	34982	1.51	133665	2.03	81677	2.75
08	1897-003	33347	1.51	128194	2.04	71254	2.76
09	1933-001	33183	1.51	133677	2.03	81259	2.75
10	1933-002	31872	1.51	128063	2.03	79531	2.75
11	1933-003	33032	1.51	131159	2.03	81708	2.75
12	1958-001	34244	1.52	135673	2.03	80715	2.75
13	1958-001M	32332	1.51	134257	2.03	81468	2.75
14	1958-001M	34058	1.51	136767	2.03	83974	2.75
15	1933-004	35277	1.51	140465	2.03	84935	2.75
16							
17							
18							
19							
20							
21							
22							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D Date Analyzed: 04/02/2001

Instrument ID: MSDB Time Analyzed: 06:20

	40UG/L	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	184640		3.35		168344		4.51		215285		5.31	
	UPPER LIMIT	369280		3.85		336688		5.01		430570		5.81	
	LOWER LIMIT	92320		2.85		84172		4.01		107643		4.81	
	LAB SAMPLE ID												
01	BNA-STD-INJ-FOR-04	181134		3.35		161513		4.53		175110		5.31	
02	BNA-STD-INJ-FOR-04	171207		3.35		157638		4.50		200500		5.30	
03	BNA-STD-INJ-FOR-04	168453		3.35		146690		4.52		175671		5.31	
04	BNA-STD-INJ-FOR-04	172202		3.36		139992		4.51		150684		5.31	
05	OLMO4-STD-INJ-FOR	166561		3.34		153718		4.50		187282		5.30	
06	OLMO4-STD-INJ-FOR	161259		3.34		146543		4.50		176823		5.30	
07	OLMO4-STD-INJ-FOR	159401		3.34		142343		4.50		169699		5.29	
08	OLMO4-STD-INJ-FOR	161657		3.34		146386		4.50		154959		5.30	
09	OLMO4-STD-INJ-FOR	157496		3.34		146999		4.50		152247		5.30	
10	Method-Blank	146803		3.34		137417		4.50		147999		5.30	
11	1899-006	153364		3.35		125037		4.51		139066		5.31	
12	1899-010	149195		3.34		140879		4.49		139336		5.29	
13	1899-011	150404		3.35		115335		4.50		134275		5.30	
14	1899-012	144225		3.34		129000		4.50		126108		5.29	
15	1899-013	149656		3.34		125563		4.49		123412		5.29	
16	1899-014	138837		3.34		127531		4.49		124760		5.29	
17	1899-015	146299		3.34		131062		4.49		130422		5.29	
18	1899-007	145189		3.34		130603		4.49		127124		5.28	
19	1899-008	142288		3.34		126113		4.49		120739		5.29	
20	1899-009	142733		3.34		125140		4.50		126524		5.29	
21	Method-Blank	148580		3.34		126027		4.50		124487		5.29	
22	1922-001	152972		3.34		132933		4.50		134210		5.29	

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	50UG/L	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	184640		3.35		168344		4.51		215285		5.31	
	UPPER LIMIT	369280		3.85		336688		5.01		430570		5.81	
	LOWER LIMIT	92320		2.85		84172		4.01		107643		4.81	
	LAB SAMPLE ID												
01	1922-002	150145		3.34		114820		4.50		129614		5.3	
02	1922-003	129883		3.35		103664		4.50		123339		5.3	
03	1922-004	127015		3.34		106381		4.50		136907		5.31	
04	1922-005	142865		3.34		111790		4.50		135384		5.29	
05	1922-006	124927		3.35		96926		4.51		108800		5.32	
06	1922-007	130223		3.34		108279		4.50		135978		5.29	
07	1922-008	144059		3.34		112972		4.50		138504		5.29	
08	1922-009	143760		3.34		111961		4.49		135307		5.29	
09	1922-011	143139		3.34		112924		4.49		131066		5.29	
10	1922-012	137906		3.35		113756		4.51		139246		5.31	
11	1922-013	141804		3.34		109515		4.49		133249		5.29	
12	1922-015	140298		3.34		113683		4.49		134674		5.29	
13	1820-004	144263		3.34		111064		4.49		137554		5.29	
14	1920-004	143439		3.34		113098		4.48		132655		5.28	
15	1920-004M	137264		3.34		103579		4.48		123787		5.28	
16	1920-004M	141869		3.34		106174		4.48		133332		5.28	
17	Method-Blank	142023		3.34		112974		4.48		130808		5.28	
18	1929-001	149350		3.34		110719		4.48		135834		5.28	
19	1929-002	137891		3.34		108684		4.48		137226		5.28	
20	1929-003	124410		3.34		107250		4.48		139297		5.28	
21	1929-004	146268		3.34		112600		4.47		134345		5.28	
22	1929-005	143465		3.34		107659		4.47		136470		5.28	

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D Date Analyzed: 04/02/2001

Instrument ID: MSDB Time Analyzed: 06:20

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	184640	3.35	168344	4.51	215285	5.31
	UPPER LIMIT	369280	3.85	336688	5.01	430570	5.81
	LOWER LIMIT	92320	2.85	84172	4.01	107643	4.81
	LAB SAMPLE ID						
01	1929-006	145712	3.34	110440	4.47	135361	5.27
02	1929-007	143575	3.34	111226	4.48	137528	5.28
03	1951-001	152206	3.34	117261	4.47	143921	5.28
04	1925-001	153368	3.34	115006	4.47	139597	5.28
05	1925-003	124571	3.34	108675	4.47	140163	5.28
06	1925-005	152583	3.34	116872	4.48	138027	5.28
07	1925-007	142544	3.34	108641	4.48	132936	5.28
08	1897-003	130893	3.35	100261	4.49	120971	5.29
09	1933-001	148160	3.34	116711	4.48	144091	5.28
10	1933-002	141835	3.34	113489	4.48	138366	5.28
11	1933-003	144930	3.34	116941	4.48	140668	5.28
12	1958-001	144416	3.34	110988	4.47	140179	5.27
13	1958-001M	145873	3.34	117553	4.48	141018	5.28
14	1958-001M	153249	3.34	121522	4.47	143684	5.28
15	1933-004	150325	3.34	113310	4.48	145537	5.28
16							
17							
18							
19							
20							
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1697.D Date Analyzed: 04/03/2001

Instrument ID: MSDB Time Analyzed: 06:27

	40UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	55357		1.51		209609		2.04		109315		2.75	
	UPPER LIMIT	110714		2.01		419218		2.54		218630		3.25	
	LOWER LIMIT	27679		1.01		104805		1.54		54658		2.25	
	LAB SAMPLE ID												
01	OLMO4-STD-INJ-FOR	54743		1.51		211909		2.03		115041		2.75	
02	1922-006	45793		1.51		168992		2.03		81483		2.75	
03	1925-003	50226		1.51		195248		2.03		105533		2.75	
04	1925-005	49427		1.51		190273		2.03		99147		2.75	
05	1925-007	47951		1.51		185064		2.03		94817		2.75	
06	1897-003	40256		1.51		141220		2.03		66911		2.75	
07	1897-003	45888		1.51		166332		2.03		87873		2.75	
08	1933-001	45216		1.51		173761		2.03		93652		2.75	
09	1933-002	42417		1.51		167760		2.03		85914		2.75	
10	1933-003	44247		1.51		170920		2.03		87483		2.75	
11	1958-001	45706		1.51		176015		2.03		90374		2.75	
12	1925-001MSD	46154		1.51		172318		2.03		89933		2.75	
13	1925-001MSD	44837		1.51		171286		2.03		91986		2.75	
14	1933-004	42350		1.51		156296		2.03		75795		2.75	
15	Method-Blank	39333		1.51		150574		2.03		75510		2.75	
16	2014-002	35900		1.51		134336		2.03		67955		2.75	
17	2014-003	34788		1.51		132591		2.03		64003		2.75	
18	2014-001	35555		1.51		133226		2.03		67264		2.75	
19	2014-004	34329		1.51		135184		2.03		66872		2.75	
20	2014-007	34439		1.51		126557		2.03		60511		2.75	
21	2014-005	33555		1.51		125599		2.03		63012		2.75	
22	2014-009	39182		1.51		146891		2.03		73510		2.75	

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1697.D

Date Analyzed: 04/03/2001

Instrument ID: MSDB

Time Analyzed: 06:27

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	55357	1.51	209609	2.04	109315	2.75
	UPPER LIMIT	110714	2.01	419218	2.54	218630	3.25
	LOWER LIMIT	27679	1.01	104805	1.54	54658	2.25
	LAB SAMPLE ID						
01	2014-006	36196	1.51	125707	2.03	63264	2.75
02	2014-008	41989	1.51	155385	2.03	74078	2.75
03	2014-010	36405	1.51	134642	2.03	70632	2.75
04	2014-011	38415	1.51	143115	2.03	73731	2.75
05	2014-012	38718	1.51	141457	2.03	73216	2.75
06	2006-010	35469	1.51	135886	2.03	70991	2.75
07	2006-011	38178	1.51	144940	2.03	72568	2.75
08	2006-012	38366	1.51	144575	2.03	73351	2.75
09	2006-013	39014	1.51	147278	2.03	73677	2.75
10	2006-014	39329	1.51	145879	2.03	73093	2.75
11	2020-001	39932	1.51	150407	2.03	75644	2.75
12	2014-001MS	46125	1.51	170853	2.03	90870	2.75
13	2014-001MSD	44837	1.51	173347	2.03	92066	2.75
14	Method-Blank	38775	1.51	148609	2.03	77024	2.75
15	2028-001	39049	1.51	147528	2.03	74477	2.75
16	2028-002	39923	1.51	152690	2.03	77666	2.75
17	2028-003	39203	1.51	148879	2.03	76181	2.75
18	2028-004	39459	1.51	149593	2.03	76283	2.75
19	2028-001MS	36759	1.51	144437	2.03	73467	2.75
20	2028-001MSD	40059	1.51	156250	2.03	80397	2.75
21	1994-001	39121	1.51	147724	2.03	75214	2.75
22	1994-002	37615	1.51	142490	2.03	73374	2.75

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1697.D Date Analyzed: 04/03/2001

Instrument ID: MSDB Time Analyzed: 06:27

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	172639	3.34	119756	4.50	166811	5.29
	UPPER LIMIT	345278	3.84	239512	5.00	333622	5.79
	LOWER LIMIT	86320	2.84	59878	4.00	83406	4.79
	LAB SAMPLE ID						
01	OLMO4-STD-INJ-FOR	187486	3.34	117245	4.47	136569	5.27
02	1922-006	119671	3.34	101135	4.47	129606	5.28
03	1925-003	168522	3.34	115062	4.47	133579	5.27
04	1925-005	164455	3.34	112624	4.47	128140	5.27
05	1925-007	160116	3.34	107147	4.47	119856	5.27
06	1897-003	110802	3.34	99132	4.48	125571	5.28
07	1897-003	136577	3.34	114885	4.48	145435	5.28
08	1933-001	147689	3.34	105108	4.48	136167	5.28
09	1933-002	138810	3.34	99708	4.47	131031	5.27
10	1933-003	145606	3.34	98983	4.47	133244	5.27
11	1958-001	144672	3.34	99408	4.48	133381	5.27
12	1925-001MSD	137838	3.34	99953	4.48	129699	5.27
13	1925-001MSD	145911	3.34	105484	4.47	134185	5.27
14	1933-004	119892	3.34	110569	4.47	148296	5.27
15	Method-Blank	121084	3.34	104243	4.47	137664	5.27
16	2014-002	109706	3.34	93086	4.51	124885	5.29
17	2014-003	102069	3.34	95191	4.48	127370	5.28
18	2014-001	107877	3.34	93379	4.47	126937	5.27
19	2014-004	106844	3.34	92453	4.48	126118	5.27
20	2014-007	94507	3.34	91248	4.52	117724	5.31
21	2014-005	98757	3.34	88451	4.48	115823	5.28
22	2014-009	121514	3.34	115096	4.48	148460	5.28

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
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SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1697.D

Date Analyzed: 04/03/2001

Instrument ID: MSDB

Time Analyzed: 06:27

	50UG/L	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	172639		3.34		119756		4.50		166811		5.29	
	UPPER LIMIT	345278		3.84		239512		5.00		333622		5.79	
	LOWER LIMIT	86320		2.84		59878		4.00		83406		4.79	
	LAB SAMPLE ID												
01	2014-006	103952		3.34		109283		4.48		136559		5.27	
02	2014-008	114422		3.34		108084		4.48		140744		5.28	
03	2014-010	125838		3.34		112830		4.48		142086		5.27	
04	2014-011	114702		3.34		107321		4.48		137041		5.27	
05	2014-012	123044		3.34		113002		4.47		146327		5.27	
06	2006-010	119450		3.34		111152		4.47		140820		5.27	
07	2006-011	124838		3.34		111975		4.47		142504		5.27	
08	2006-012	118233		3.34		110859		4.47		141503		5.27	
09	2006-013	126042		3.34		113871		4.47		144168		5.27	
10	2006-014	118627		3.34		109866		4.47		143596		5.27	
11	2020-001	124853		3.34		114400		4.47		148095		5.27	
12	2014-001MS	147214		3.34		134936		4.47		175847		5.27	
13	2014-001MSD	152261		3.34		140417		4.47		176489		5.27	
14	Method-Blank	123119		3.34		111458		4.47		140549		5.27	
15	2028-001	125816		3.34		113687		4.46		143951		5.27	
16	2028-002	128368		3.34		118020		4.47		156476		5.27	
17	2028-003	128901		3.34		118926		4.46		153552		5.26	
18	2028-004	130052		3.34		121558		4.46		157628		5.27	
19	2028-001MS	122789		3.34		113433		4.46		143763		5.26	
20	2028-001MSD	130358		3.34		118451		4.46		149607		5.26	
21	1994-001	120089		3.34		116678		4.47		146285		5.27	
22	1994-002	120441		3.34		115566		4.47		145792		5.27	

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1668.D Vial: 16
Acq On : 2 Apr 2001 11:38 Operator: JC
Sample : S-17,1922-001,S,10.68g,15.1,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
} Integration Params: rteint.p
Quant Time: Apr 02 11:47:26 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 09:42:41 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	32570	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	131387	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	80326	40.00	UG	0.00
60) Phenanthrene-d10	3.34	188	152972	40.00	UG	-0.01
75) Chrysene-d12	4.50	240	132933	40.00	UG	-0.01
84) Perylene-d12	5.29	264	134210	40.00	UG	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol	0.99	112	50956	54.38	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 54.38%			
6) Phenol-d5	1.39	99	70070	61.09	UG	-0.02
Spiked Amount 100.000	Range 40 - 101		Recovery = 61.09%			
23) Nitrobenzene-d5	1.74	82	31162	32.69	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 65.38%			
43) 2-Fluorobiphenyl	2.48	172	82048	37.17	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 74.34%			
64) 2,4,6-Tribromophenol	3.07	330	44567	87.49	UG	-0.01
Spiked Amount 100.000	Range 54 - 135		Recovery = 87.49%			
77) Terphenyl-d14	4.03	244	141299	44.57	UG	0.00
Spiked Amount 50.000	Range 58 - 147		Recovery = 89.14%			

Target Compounds **Qvalue**

(#) = qualifier out of range (m) = manual integration

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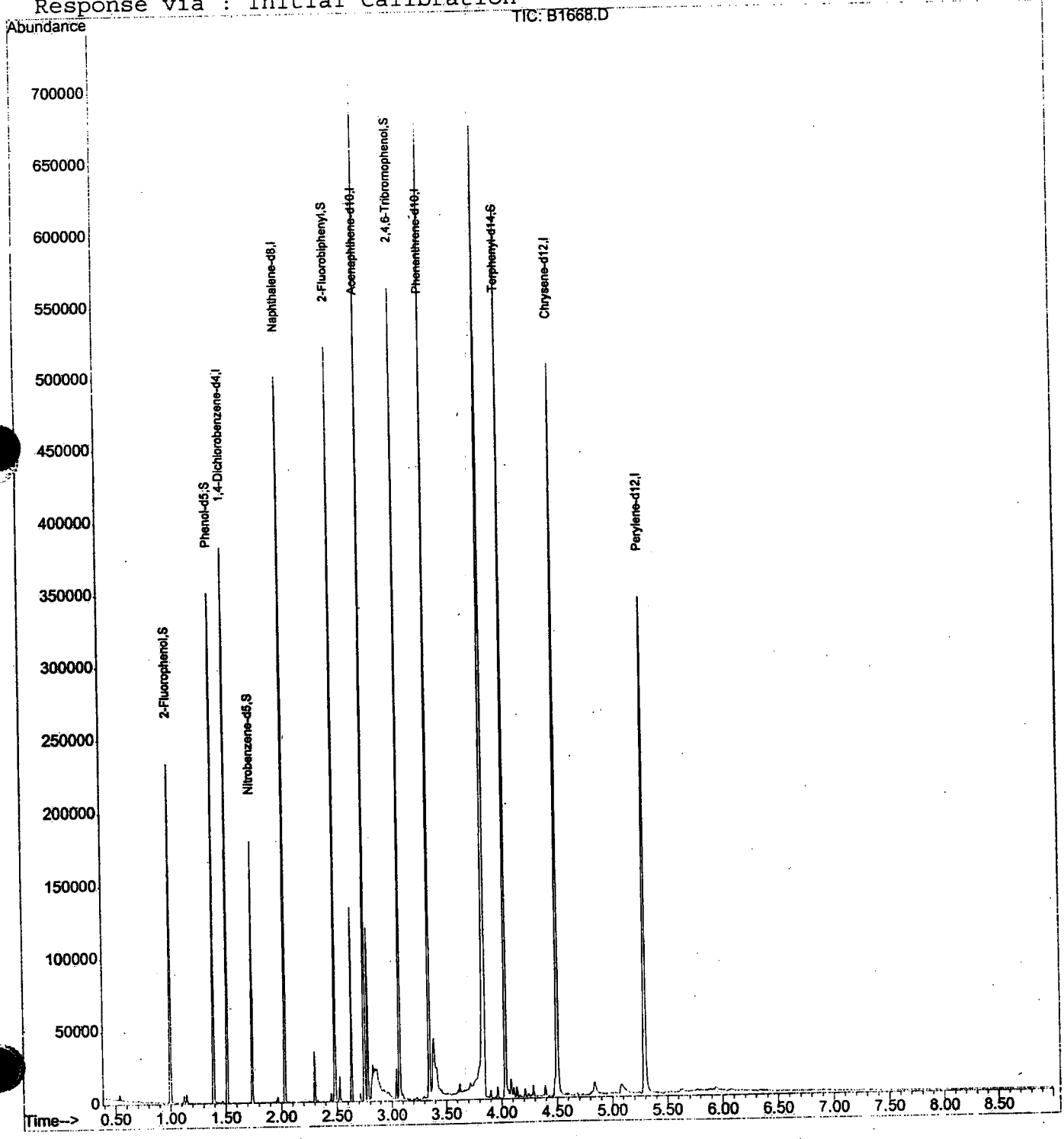
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1668.D
Acq On : 2 Apr 2001 11:38
Sample : S-17,1922-001,S,10.68g,15.1,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: rteint.p
Quant Time: Apr 2 13:07 2001

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



1388

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rteres
LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1668.D
Acq On : 2 Apr 2001 11:38
Sample : S-17,1922-001,S,10.68g,15.1,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Filtering: 5
Sampling : 1
Min Area: 3 % of largest
Peak
Start Thrs: 0.2
Max Peaks: 100
Stop Thrs : 0
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangen
t >
Peak separation: 5

Signal : TIC

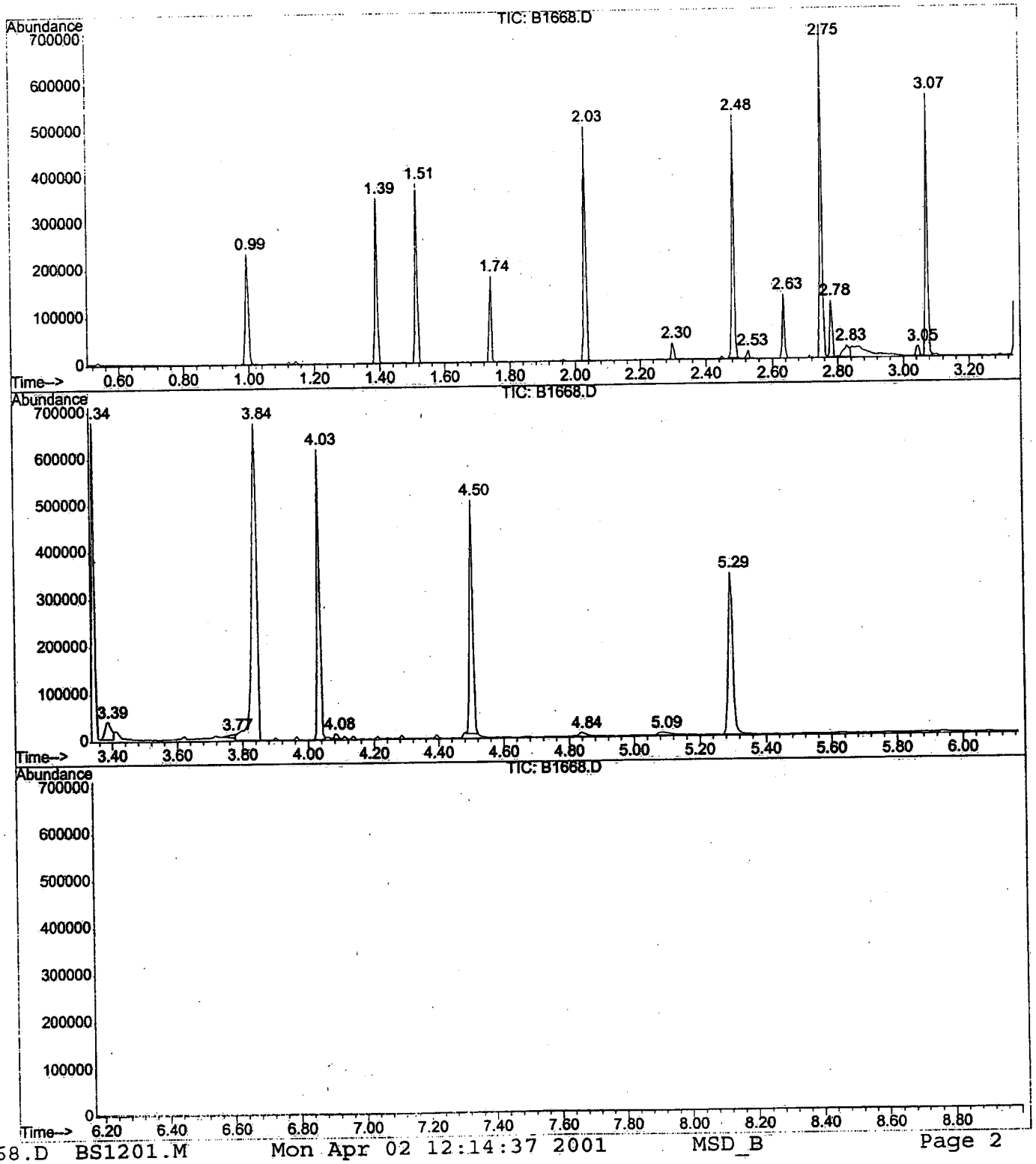
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.994	112	115	118	rBV	233277	148845	20.16%	3.632%
2	1.389	186	189	192	rBV	351413	167500	22.69%	4.087%
3	1.512	210	212	215	rVB	382827	182500	24.72%	4.453%
4	1.742	252	255	257	rBV	180818	86760	11.75%	2.117%
5	2.031	307	309	312	rBV	500697	251573	34.08%	6.138%
6	2.298	357	359	362	rBV	35310	19649	2.66%	0.479%
7	2.485	391	394	396	rVV	519207	224341	30.39%	5.474%
8	2.527	399	402	403	rBV	17296	8316	1.13%	0.203%
9	2.634	420	422	425	rBB	134354	57755	7.82%	1.409%
10	2.752	441	444	447	rBV	714102	326583	44.23%	7.969%
11	2.778	447	449	452	rBV	119280	63237	8.57%	1.543%
12	2.826	454	458	460	rBV	24197	31663	4.29%	0.773%
13	3.046	496	499	501	rVB	20937	13786	1.87%	0.336%
14	3.072	501	504	507	rBV	560681	283763	38.44%	6.924%
15	3.345	552	555	558	rBV	679048	358969	48.62%	8.759%
16	3.387	558	563	566	rBV	36936	54288	7.35%	1.325%
17	3.772	629	635	636	rBV2	5455	10219	1.38%	0.249%
18	3.842	636	648	651	rVB	674828	738291	100.00%	18.014%
19	4.034	681	684	687	rBV	618010	354628	48.03%	8.653%
20	4.082	691	693	696	rVB	11226	8398	1.14%	0.205%

21	4.504	768	772	775	rVB	496429	337957	45.78%	8.246%
22	4.841	825	835	842	rBV2	9121	18113	2.45%	0.442%
23	5.086	877	881	895	rBV2	6550	18300	2.48%	0.447%
24	5.295	915	920	929	rBV	342031	332922	45.09%	8.123%

Sum of corrected areas: 4098356

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-02-01\B1668.D
Operator : JC
Acquired : 2 Apr 2001 11:38 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-17,1922-001,S,10.68g,15.1,03/30/01
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,1
Vial Number: 16
Quant File :BS1201.RES (RTE Integrator)



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000356

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1668.D
Acq On : 2 Apr 2001 11:38
Sample : S-17,1922-001,S,10.68g,15.1,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

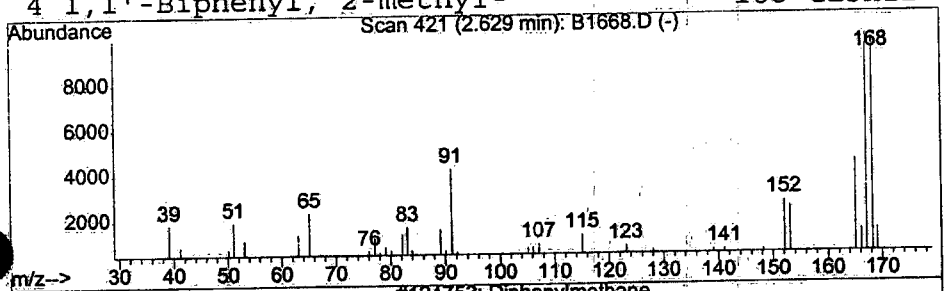
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

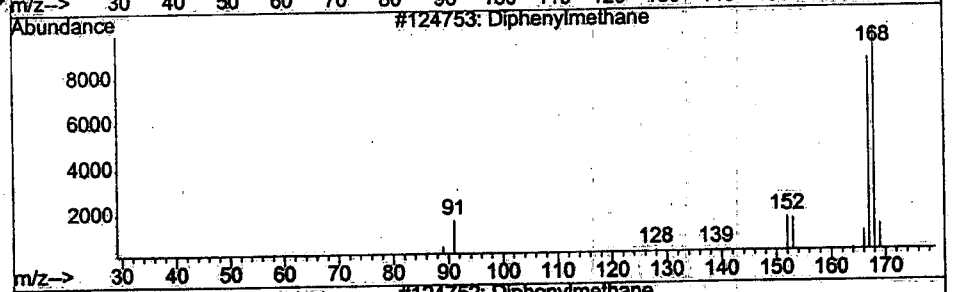
****

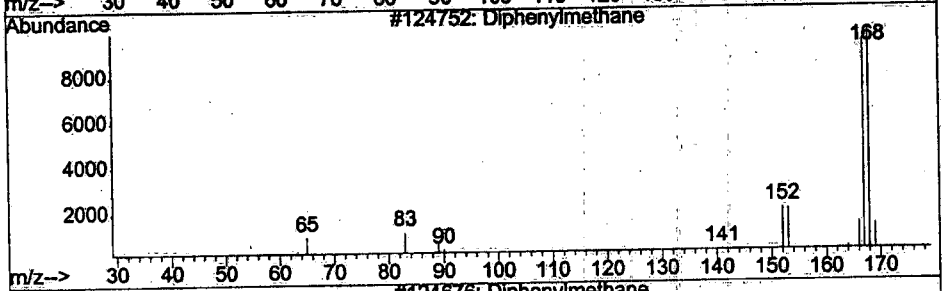
Peak Number 1 Unknown — Concentration Rank 2

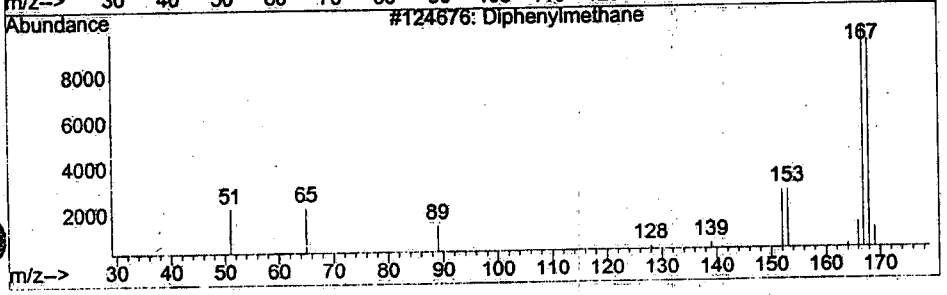
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.63	7.07 UG	57755	Acenaphthene-d10	2.75

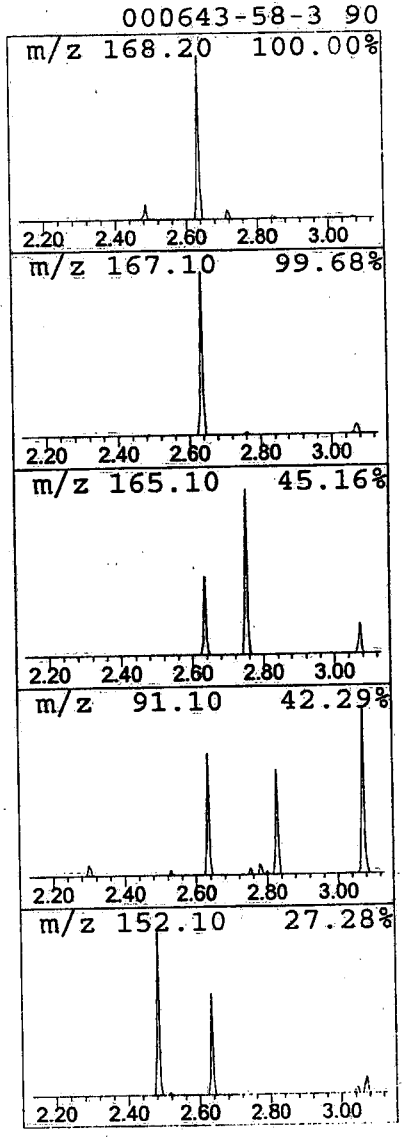
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diphenylmethane	168	C13H12	000101-81-5	96
2	Diphenylmethane	168	C13H12	000101-81-5	96
3	Diphenylmethane	168	C13H12	000101-81-5	95
4	1,1'-Biphenyl, 2-methyl-	168	C13H12	000643-58-3	90











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Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1668.D
Acq On : 2 Apr 2001 11:38
Sample : S-17,1922-001,S,10.68g,15.1,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
; Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

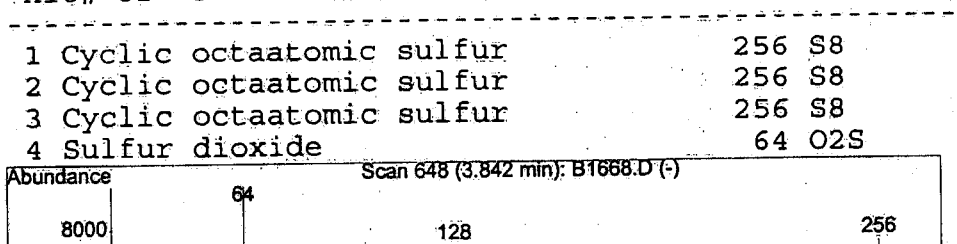
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

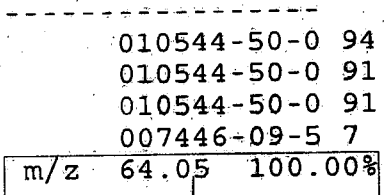
****

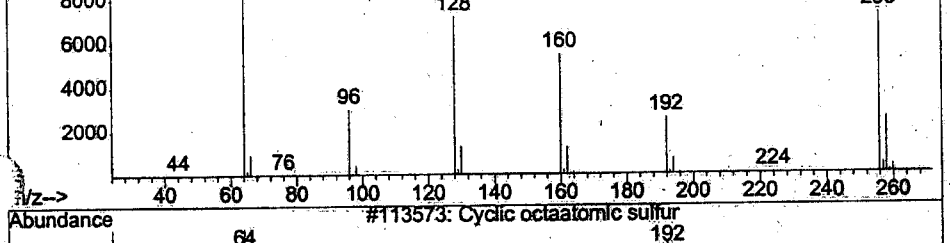
Peak Number 2 Cyclic octaatomic sulfur Concentration Rank 1

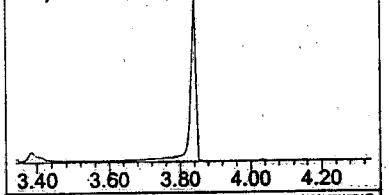
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.84	82.27 UG	738291	Phenanthrene-d10	3.34

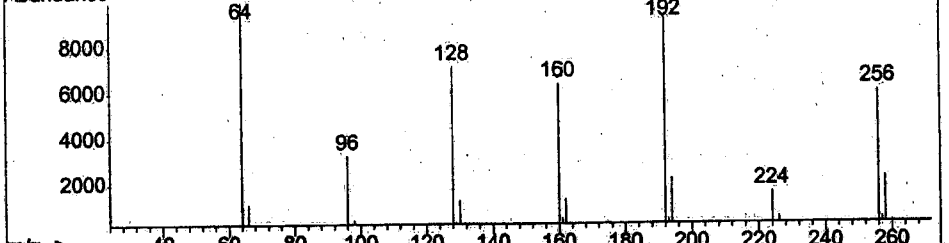
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclic octaatomic sulfur	256	S8	010544-50-0	94
2	Cyclic octaatomic sulfur	256	S8	010544-50-0	91
3	Cyclic octaatomic sulfur	256	S8	010544-50-0	91
4	Sulfur dioxide	64	O2S	007446-09-5	7

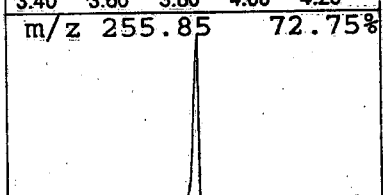


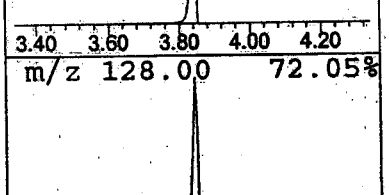


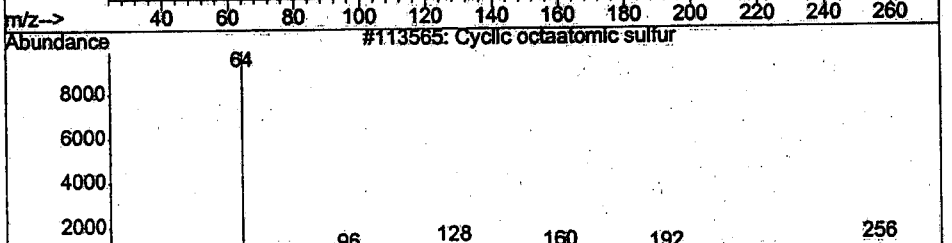


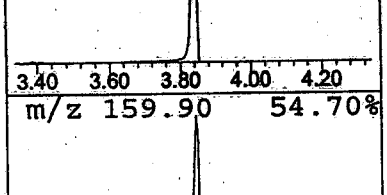












1393

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1669.D
Acq On : 2 Apr 2001 11:52
Sample : S-18,1922-002,S,5.09g,26.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
RTE Integration Params: rteint.p
Quant Time: Apr 02 12:02:02 2001

Vial: 17
Operator: JC
Inst : MSD_B
Multiplr: 1.00
Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 09:42:41 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	36337	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	141176	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	83172	40.00	UG	0.00
60) Phenanthrene-d10	3.34	188	150145	40.00	UG	-0.01
75) Chrysene-d12	4.50	240	114820	40.00	UG	-0.01
84) Perylene-d12	5.30	264	129614	40.00	UG	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	67156	64.24	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 64.24%			
6) Phenol-d5	1.39	99	91183	71.26	UG	-0.02
Spiked Amount 100.000	Range 40 - 101		Recovery = 71.26%			
23) Nitrobenzene-d5	1.74	82	38433	37.52	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 75.04%			
43) 2-Fluorobiphenyl	2.48	172	95021	41.57	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 83.14%			
64) 2,4,6-Tribromophenol	3.07	330	46363	92.73	UG	-0.01
Spiked Amount 100.000	Range 54 - 135		Recovery = 92.73%			
77) Terphenyl-d14	4.03	244	135598	49.52	UG	0.00
Spiked Amount 50.000	Range 58 - 147		Recovery = 99.04%			

Target Compounds						Qvalue
33) Naphthalene	2.04	128	2711	0.87	UG	97
49) Acenaphthylene	2.69	152	2319	0.78	UG #	85
51) Acenaphthene	2.76	153	5302	2.83	UG	97
55) Dibenzofuran	2.83	168	4366	1.56	UG #	78
57) Fluorene	2.97	166	6546	3.07	UG #	97
69) Phenanthrene	3.36	178	94256	30.50	UG	99
70) Anthracene	3.37	178	20599m	6.65	UG	
71) Carbazole	3.44	167	8269	2.90	UG	99
72) Di-n-butylphthalate	3.63	149	115091	31.57	UG #	96
73) Fluoranthene	3.86	202	128870m	39.11	UG	
76) Pyrene	3.95	202	118522	39.18	UG	96
81) Benzo[a]anthracene	4.50	228	52485m	19.04	UG	
82) Chrysene	4.51	228	43831	17.24	UG	98
83) bis(2-Ethylhexyl)phthalate	4.58	149	38789	19.84	UG #	93
86) Benzo[b]fluoranthene	5.08	252	48239m	13.76	UG	
87) Benzo[k]fluoranthene	5.08	252	34697m	11.60	UG	
88) Benzo[a]pyrene	5.26	252	45697	16.89	UG	95
89) Indeno[1,2,3-cd]pyrene	5.82	276	30001m	10.89	UG	
90) Dibenz[a,h]anthracene	5.83	278	9672	3.65	UG #	79
91) Benzo[g,h,i]perylene	5.94	276	28553	11.98	UG #	92

(#) = qualifier out of range (m) = manual integration

1394

000359

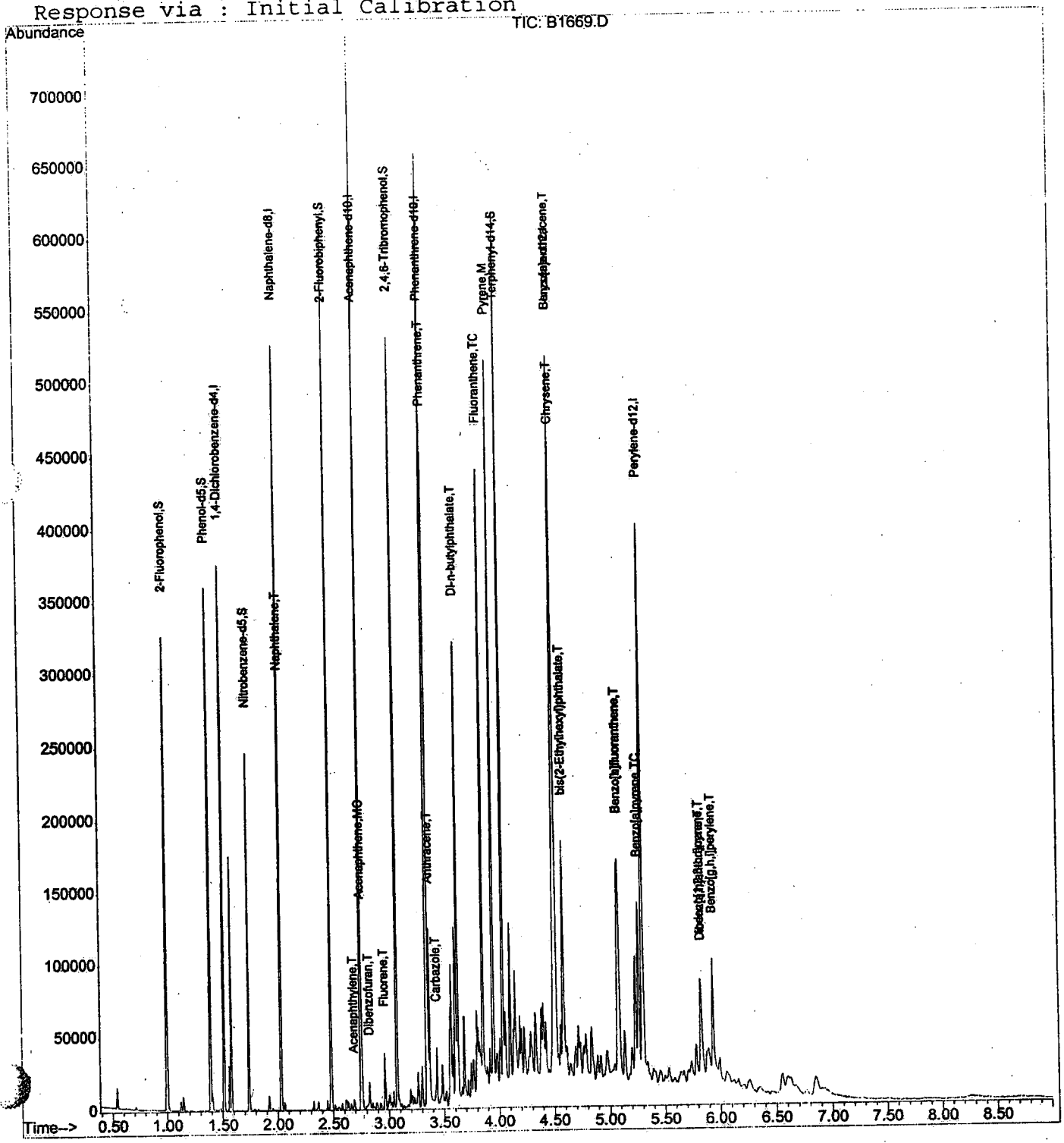
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1669.D
Acq On : 2 Apr 2001 11:52
Sample : S-18,1922-002,S,5.09g,26.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: rteint.p
Quant Time: Apr 2 13:11 2001

Vial: 17
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



000360

1395

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1669.D
Acq On : 2 Apr 2001 11:52
Sample : S-18,1922-002,S,5.09g,26.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
[redacted] Integration Params: LSCINT.P

Vial: 17
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.999	113	116	119	rBV	325193	198368	31.31%	2.699%
2	1.389	187	189	191	rBV	359349	212027	33.47%	2.885%
3	1.512	210	212	215	rVB	375574	200316	31.62%	2.726%
4	1.560	219	221	223	rBV	30859	20023	3.16%	0.272%
5	1.582	223	225	227	rVB	175342	82370	13.00%	1.121%
6	1.742	252	255	257	rBV	245901	108501	17.13%	1.476%
7	2.030	307	309	312	rBV	525997	277158	43.75%	3.771%
[redacted]	2.485	391	394	396	rVB	608320	262074	41.37%	3.566%
[redacted]	2.752	441	444	450	rVB	748382	360366	56.88%	4.904%
10	2.826	454	458	460	rVB2	18069	10370	1.64%	0.141%
11	2.965	481	484	487	rBV	39378	23082	3.64%	0.314%
12	3.003	487	491	493	rBV	10378	10699	1.69%	0.146%
13	3.072	501	504	507	rBV	529791	291886	46.07%	3.972%
14	3.195	523	527	528	rBV	12551	7795	1.23%	0.106%
15	3.264	535	540	543	rVB2	24851	19140	3.02%	0.260%
16	3.302	543	547	550	rBV	28504	21649	3.42%	0.295%
17	3.345	552	555	559	rVV2	655930	574837	90.74%	7.822%
18	3.371	559	560	565	rVV	121311	51377	8.11%	0.699%
19	3.435	567	572	574	rVB	38049	24658	3.89%	0.336%
20	3.484	579	581	583	rVB2	24709	14053	2.22%	0.191%
21	3.521	583	588	590	rVB2	10697	12141	1.92%	0.165%
22	3.558	592	595	596	rBV	60679	46448	7.33%	0.632%
23	3.569	596	597	599	rVV	88991	36276	5.73%	0.494%
24	3.585	599	600	601	rVB	27102	8725	1.38%	0.119%
25	3.601	601	603	606	rBV2	114898	103907	16.40%	1.414%
26	3.628	606	608	610	rVB	309658	176881	27.92%	2.407%
27	3.681	616	618	621	rBV	53418	38795	6.12%	0.528%
28	3.745	628	630	632	rBV	23802	17243	2.72%	0.235%
[redacted]	3.767	632	634	637	rVB	22460	16948	2.68%	0.231%
[redacted]	3.799	637	640	643	rBV2	55780	59692	9.42%	0.812%
31	3.857	648	651	653	rVV	431188	299737	47.31%	4.079%

1396

000361

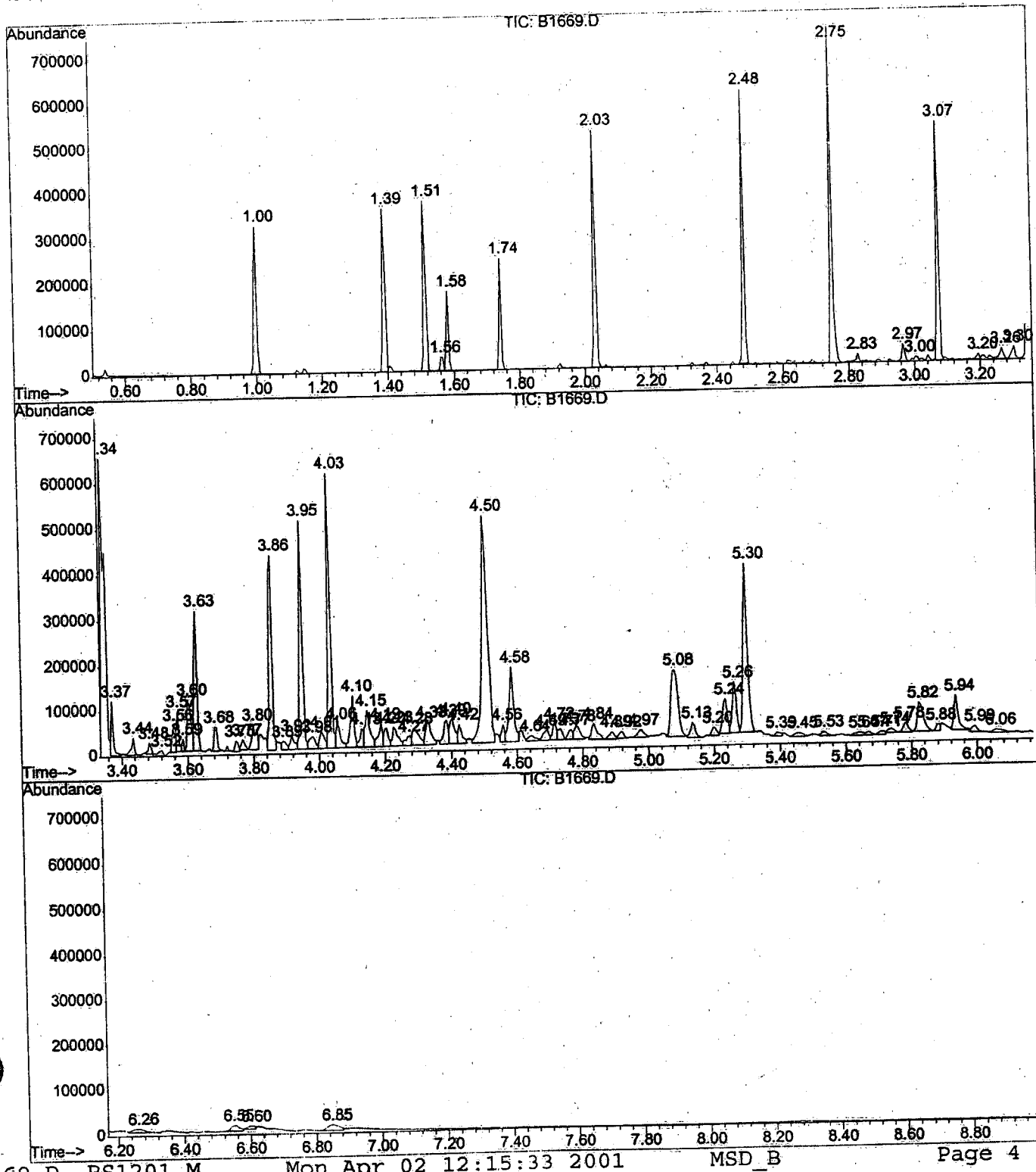
32	3.890	656	657	660	rVV2	18998	17495	2.76%	0.238%
33	3.916	660	662	665	rVV2	31333	29302	4.63%	0.399%
34	3.948	665	668	671	rVV	504782	321864	50.81%	4.380%
35	3.980	671	674	677	rVV2	27112	35550	5.61%	0.484%
[illegible]	4.007	677	679	682	rVV3	37178	39570	6.25%	0.538%
	4.034	682	684	687	rVV	606424	367498	58.01%	5.001%
38	4.055	687	688	693	rVV	54669	47905	7.56%	0.652%
39	4.103	693	697	699	rVV	115711	89930	14.20%	1.224%
40	4.130	699	702	703	rVV	41700	34715	5.48%	0.472%
41	4.146	703	705	709	rVV2	81808	76735	12.11%	1.044%
42	4.189	709	713	714	rVV2	50355	46424	7.33%	0.632%
43	4.205	714	716	718	rVV2	41341	34581	5.46%	0.471%
44	4.226	718	720	725	rVV4	41993	48924	7.72%	0.666%
45	4.274	725	729	730	rVV3	21314	27379	4.32%	0.373%
46	4.285	730	731	737	rVV3	37877	52144	8.23%	0.710%
47	4.328	737	739	744	rVV2	50593	61739	9.75%	0.840%
48	4.386	746	750	751	rVV2	53229	52541	8.29%	0.715%
49	4.402	751	753	756	rVV2	56457	62036	9.79%	0.844%
50	4.424	756	757	761	rVV	42717	32842	5.18%	0.447%
51	4.504	764	772	777	rVV2	500853	633503	100.00%	8.620%
52	4.557	780	782	783	rVV	39219	25930	4.09%	0.353%
53	4.584	783	787	791	rVV	166738	166326	26.25%	2.263%
54	4.643	795	798	803	rVV5	11262	17934	2.83%	0.244%
55	4.691	803	807	809	rVV4	22445	27743	4.38%	0.378%
56	4.718	809	812	813	rVV	36629	33497	5.29%	0.456%
57	4.734	813	815	817	rVV	24683	20568	3.25%	0.280%
[illegible]	4.766	817	821	822	rVV2	21811	23183	3.66%	0.315%
[illegible]	4.782	822	824	829	rVV4	29692	35166	5.55%	0.479%
60	4.835	831	834	840	rVB3	36306	43582	6.88%	0.593%
61	4.889	840	844	847	rBV4	17124	20043	3.16%	0.273%
62	4.921	847	850	853	rVB4	14986	14489	2.29%	0.197%
63	4.974	856	860	865	rBV5	17460	24395	3.85%	0.332%
64	5.081	875	880	887	rVB	149764	228631	36.09%	3.111%
65	5.134	887	890	895	rVB	34008	34333	5.42%	0.467%
66	5.198	899	902	905	rBV2	18866	20094	3.17%	0.273%
67	5.236	905	909	911	rVV	77863	77440	12.22%	1.054%
68	5.262	911	914	917	rVV	114030	101162	15.97%	1.377%
69	5.300	917	921	926	rVB	373656	341422	53.89%	4.646%
70	5.391	935	938	941	rBV3	8740	10741	1.70%	0.146%
71	5.455	945	950	954	rBV4	9010	14568	2.30%	0.198%
72	5.535	962	965	970	rVB3	10126	12358	1.95%	0.168%
73	5.642	980	985	988	rBV6	7786	13910	2.20%	0.189%
74	5.668	988	990	994	rVB3	8285	7774	1.23%	0.106%
75	5.711	994	998	1000	rBV5	8564	12377	1.95%	0.168%
76	5.738	1000	1003	1008	rVB4	10278	12110	1.91%	0.165%
77	5.781	1008	1011	1015	rBV	21837	24408	3.85%	0.332%
78	5.823	1016	1019	1026	rVB2	64872	80664	12.73%	1.098%
[illegible]	5.877	1026	1029	1031	rBV2	14703	16156	2.55%	0.220%
[illegible]	5.936	1037	1040	1048	rVV	77425	73547	11.61%	1.001%
81	5.994	1048	1051	1055	rVB	14987	16284	2.57%	0.222%

82	6.058	1059	1063	1070	rVB10	7729	14944	2.36%	0.203%
83	6.261	1095	1101	1108	rVB10	7593	17499	2.76%	0.238%
84	6.550	1150	1155	1160	rBV2	12394	22710	3.58%	0.309%
85	6.603	1160	1165	1167	rBV4	6694	11248	1.78%	0.153%
	6.849	1205	1211	1217	rBV5	12397	31680	5.00%	0.431%

Sum of corrected areas: 7349135

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-02-01\B1669.D
Operator : JC
Acquired : 2 Apr 2001 11:52 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-18,1922-002,S,5.09g,26.7,03/30/01
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,1
Vial Number: 17
Quant File :BS1201.RES (RTE Integrator)



1399

000364

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1669.D
Acq On : 2 Apr 2001 11:52
Sample : S-18,1922-002,S,5.09g,26.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 17
Operator: JC
Inst : MSD_B
Multiplr: 1.00

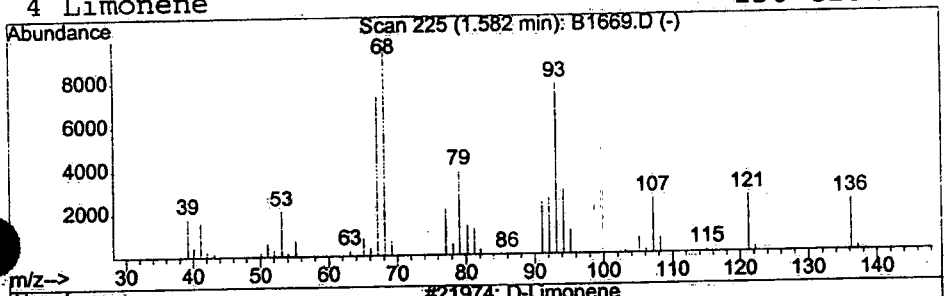
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

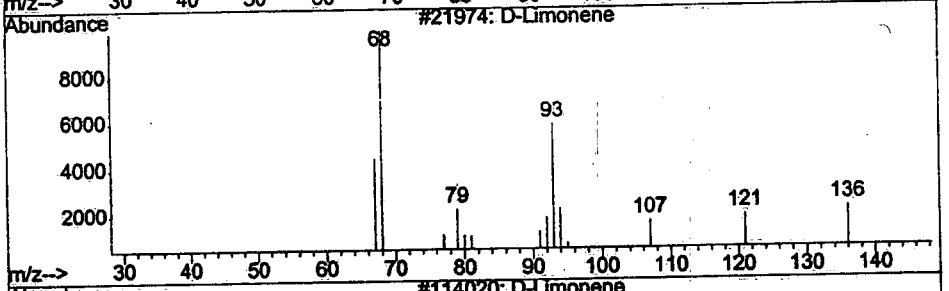
****

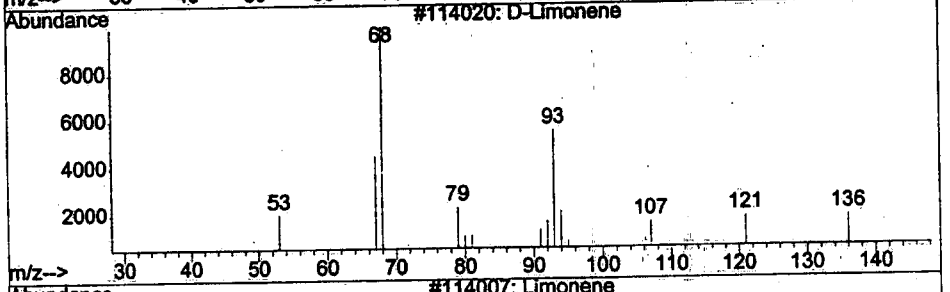
Peak Number 1 D-Limonene — Concentration Rank 1

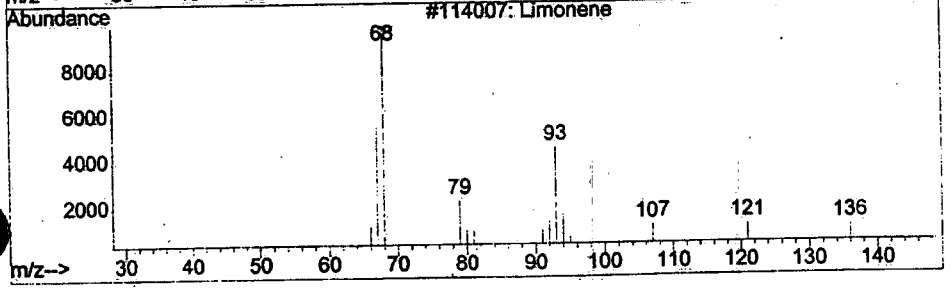
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.58	16.45 UG	82370	1,4-Dichlorobenzene-d4	1.51

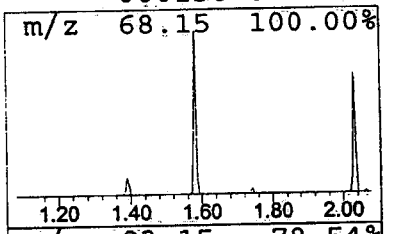
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Limonene	136	C10H16	005989-27-5	94
2	D-Limonene	136	C10H16	005989-27-5	93
3	Limonene	136	C10H16	000138-86-3	93
4	Limonene	136	C10H16	000138-86-3	91

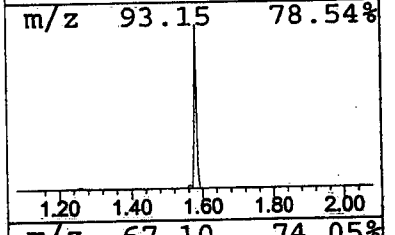


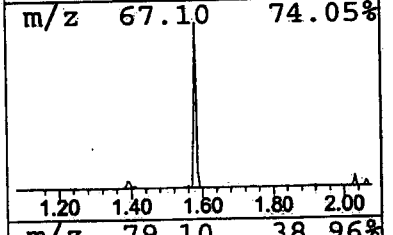


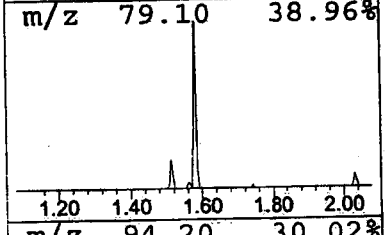


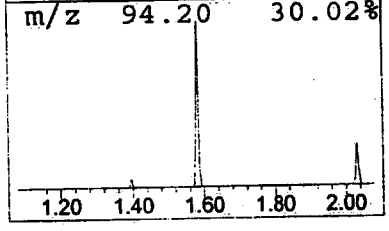












000365

1400

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1669.D
Acq On : 2 Apr 2001 11:52
Sample : S-18,1922-002,S,5.09g,26.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 17
Operator: JC
Inst : MSD_B
Multiplr: 1.00

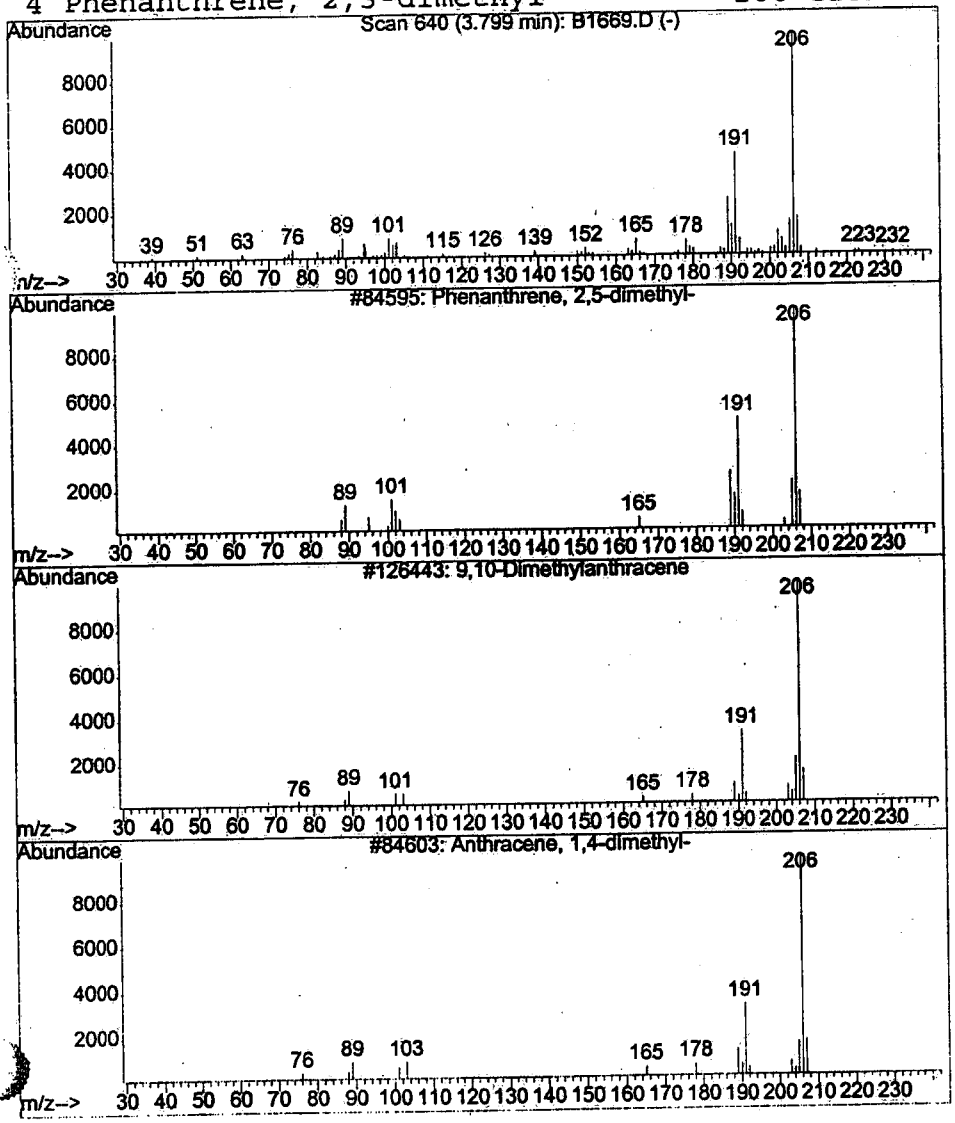
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

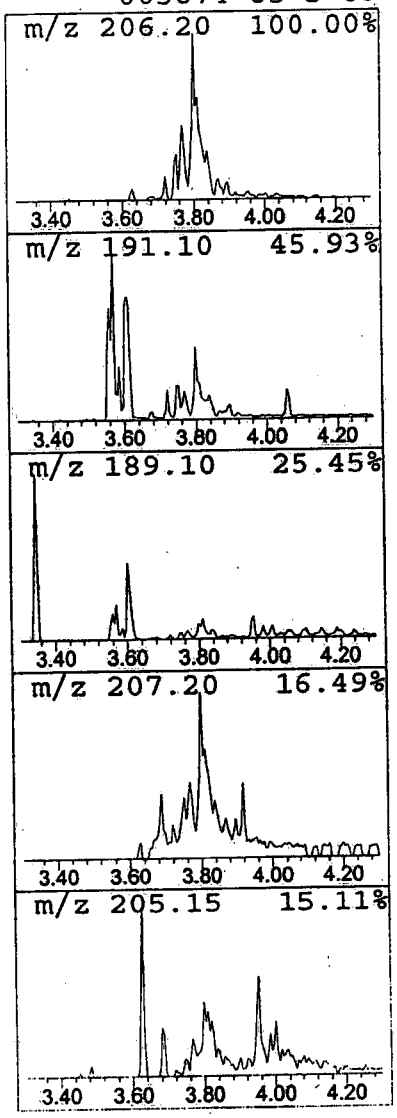
****

Peak Number 2 Unknown aromatic — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.80	4.15 UG	59692	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	93
2	9,10-Dimethylanthracene	206	C16H14	000781-43-1	89
3	Anthracene, 1,4-dimethyl-	206	C16H14	000781-92-0	86
4	Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	83





000366

1401

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1669.D
Acq On : 2 Apr 2001 11:52
Sample : S-18,1922-002,S,5.09g,26.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 17
Operator: JC
Inst : MSD_B
Multiplr: 1.00

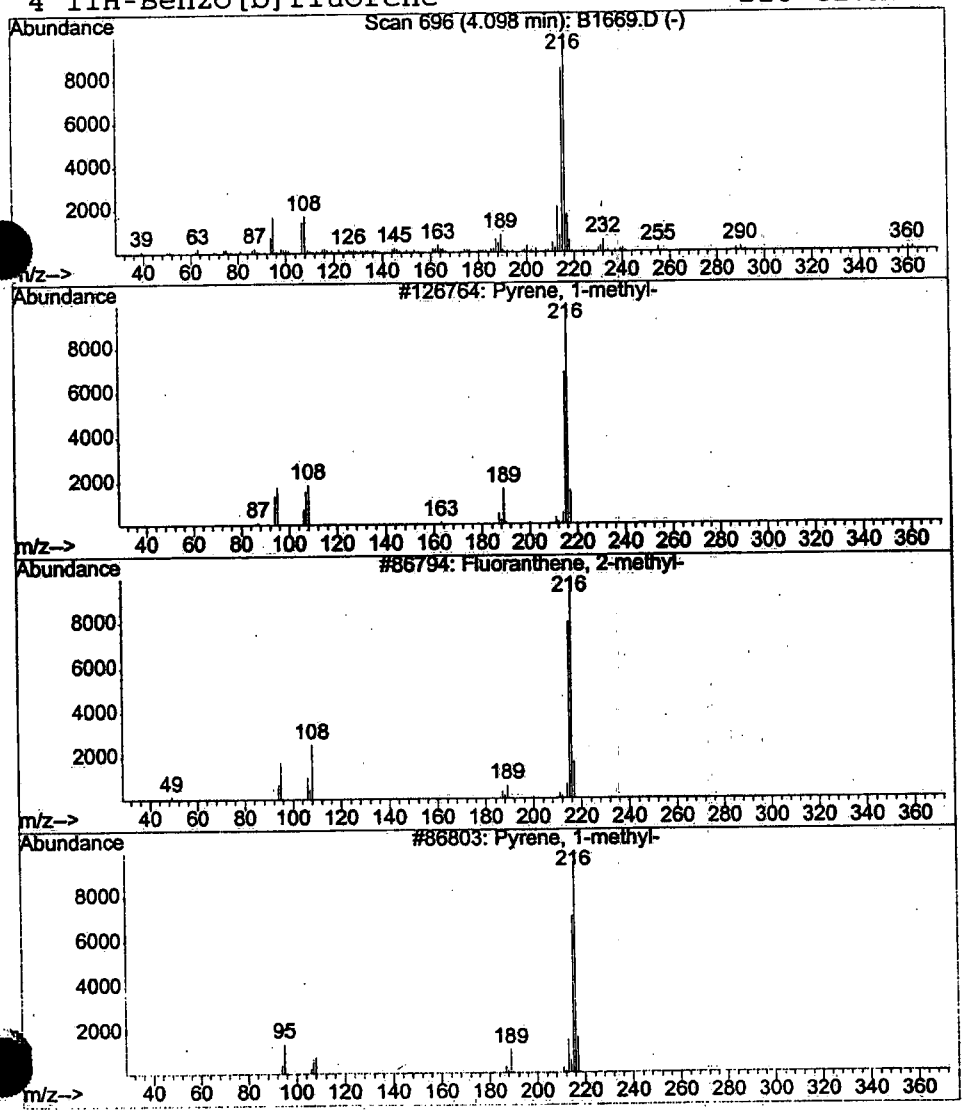
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

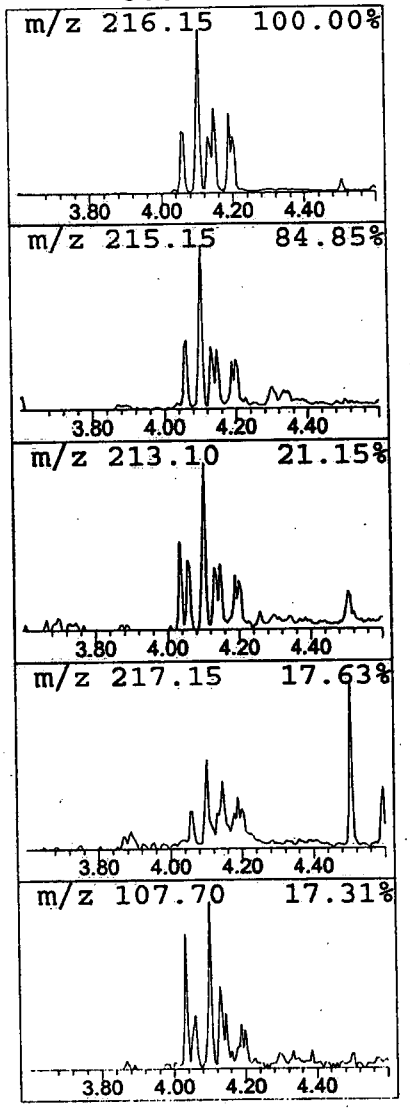
****

Peak Number 3 Unknown aromatic Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.10	5.68 UG	89930	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrene, 1-methyl-	216	C17H12	002381-21-7	93
2	Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	93
3	Pyrene, 1-methyl-	216	C17H12	002381-21-7	91
4	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	90





1402

000367

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1669.D
Acq On : 2 Apr 2001 11:52
Sample : S-18,1922-002,S,5.09g,26.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 17
Operator: JC
Inst : MSD_B
Multiplr: 1.00

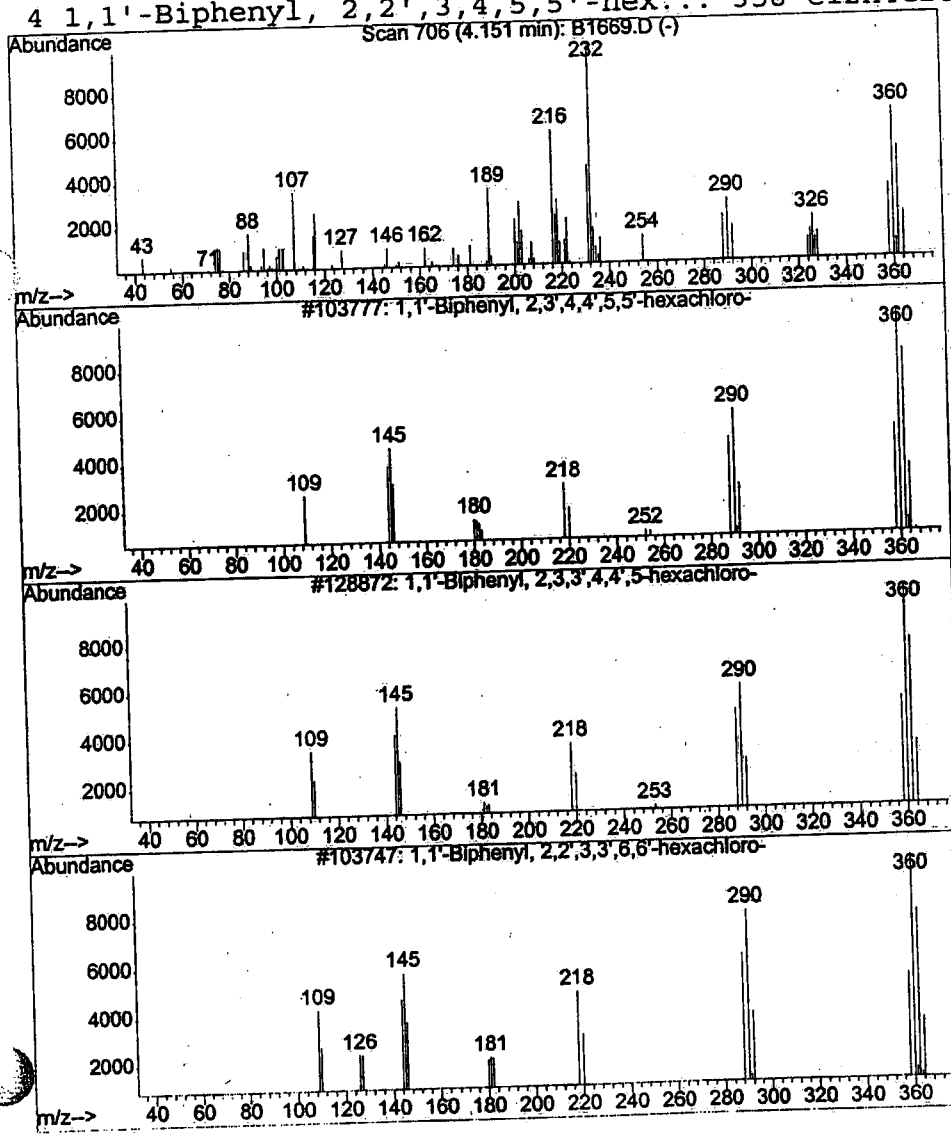
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

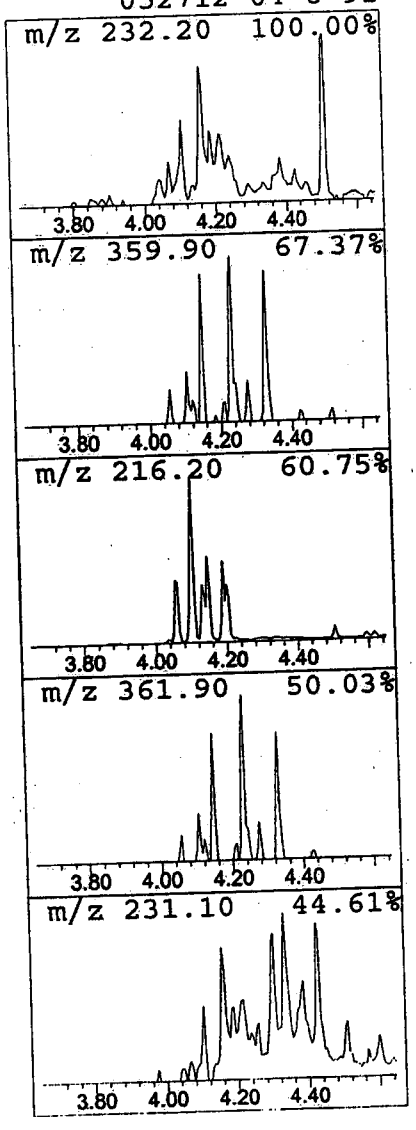
****

Peak Number 4 Unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.15	4.85 UG	76735	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3',4,4',5,5'-he...	358	C12H4Cl6	052663-72-6	93
2	1,1'-Biphenyl, 2,3,3',4,4',5-hex...	358	C12H4Cl6	038380-08-4	93
3	1,1'-Biphenyl, 2,2',3,3',6,6'-he...	358	C12H4Cl6	038411-22-2	91
4	1,1'-Biphenyl, 2,2',3,4,5,5'-hex...	358	C12H4Cl6	052712-04-6	91





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1669.D
Acq On : 2 Apr 2001 11:52
Sample : S-18,1922-002,S,5.09g,26.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 17
Operator: JC
Inst : MSD_B
Multiplr: 1.00

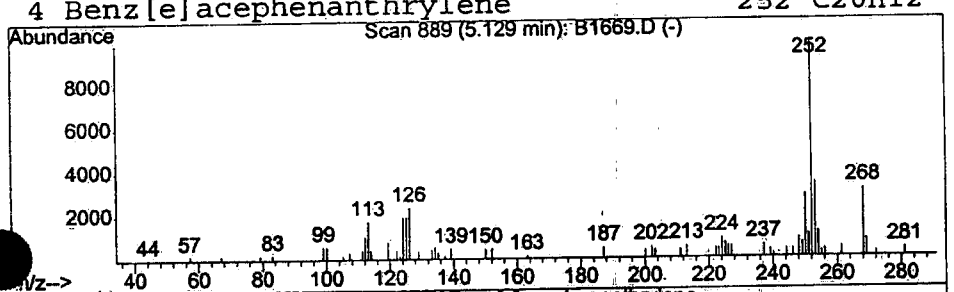
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

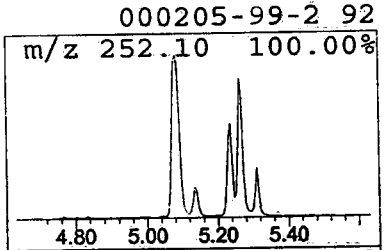
****

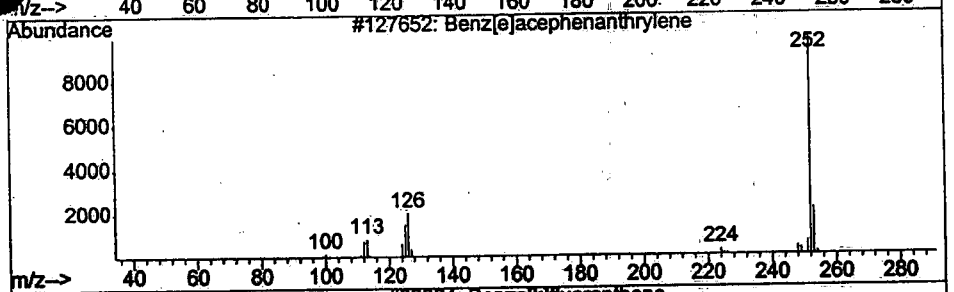
Peak Number 5 Unknown aromatic — Concentration Rank 5

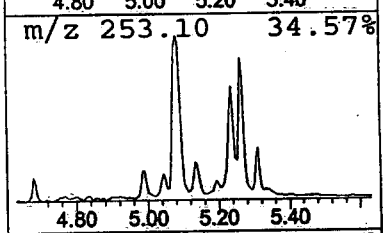
R.T.	EstConc	Area	Relative to ISTD	R.T.
5.13	4.02 UG	34333	Perylene-d12	5.30

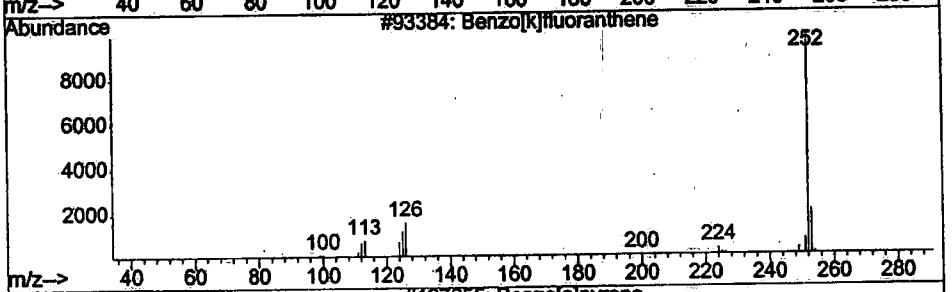
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benz[e]acephenanthrylene	252	C20H12	000205-99-2	93
2	Benzo[k]fluoranthene	252	C20H12	000207-08-9	93
3	Benzo[a]pyrene	252	C20H12	000050-32-8	93
4	Benz[e]acephenanthrylene	252	C20H12	000205-99-2	92

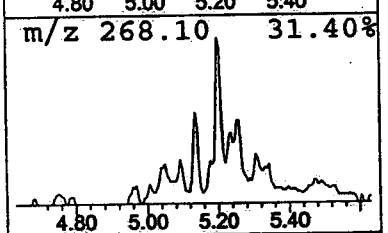


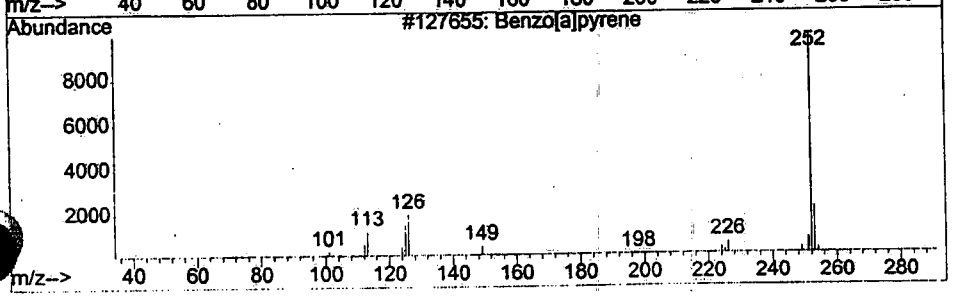


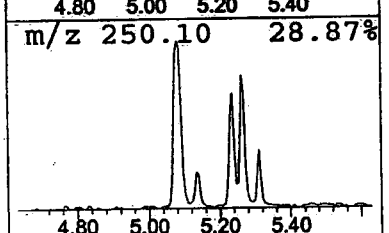


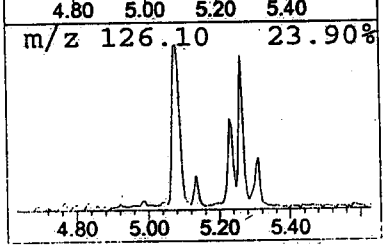












1404

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: rteint.p
Quant Time: Apr 02 12:16:18 2001

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00
Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.53	152	34650	40.00	UG	0.02
22) Naphthalene-d8	2.04	136	136527	40.00	UG	0.00
39) Acenaphthene-d10	2.76	164	77038	40.00	UG	0.00
60) Phenanthrene-d10	3.35	188	129883	40.00	UG	0.00
75) Chrysene-d12	4.50	240	103664	40.00	UG	-0.01
84) Perylene-d12	5.30	264	123339	40.00	UG	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	69005	69.22	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 69.22%			
6) Phenol-d5	1.39	99	84173	68.98	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 68.98%			
23) Nitrobenzene-d5	1.76	82	33149	33.46	UG	0.00
Spiked Amount 50.000	Range 45 - 98		Recovery = 66.92%			
43) 2-Fluorobiphenyl	2.49	172	89563	42.30	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 84.60%			
64) 2,4,6-Tribromophenol	3.08	330	46757	108.11	UG	0.00
Spiked Amount 100.000	Range 54 - 135		Recovery = 108.11%			
77) Terphenyl-d14	4.04	244	126477	51.16	UG	0.00
Spiked Amount 50.000	Range 58 - 147		Recovery = 102.32%			

Target Compounds						Qvalue
8) Aniline	1.41	93	126795m	78.99	UG	
33) Naphthalene	2.01	128	26135m	8.70	UG	
38) 2-Methylnaphthalene	2.33	142	3179	1.46	UG	# 100
69) Phenanthrene	3.36	178	13717m	5.13	UG	
70) Anthracene	3.37	178	14841m	5.54	UG	
71) Carbazole	3.46	167	7038	2.86	UG	# 1
83) bis(2-Ethylhexyl)phthalate	4.58	149	6327	3.58	UG	# 78

(#) = qualifier out of range (m) = manual integration

1405

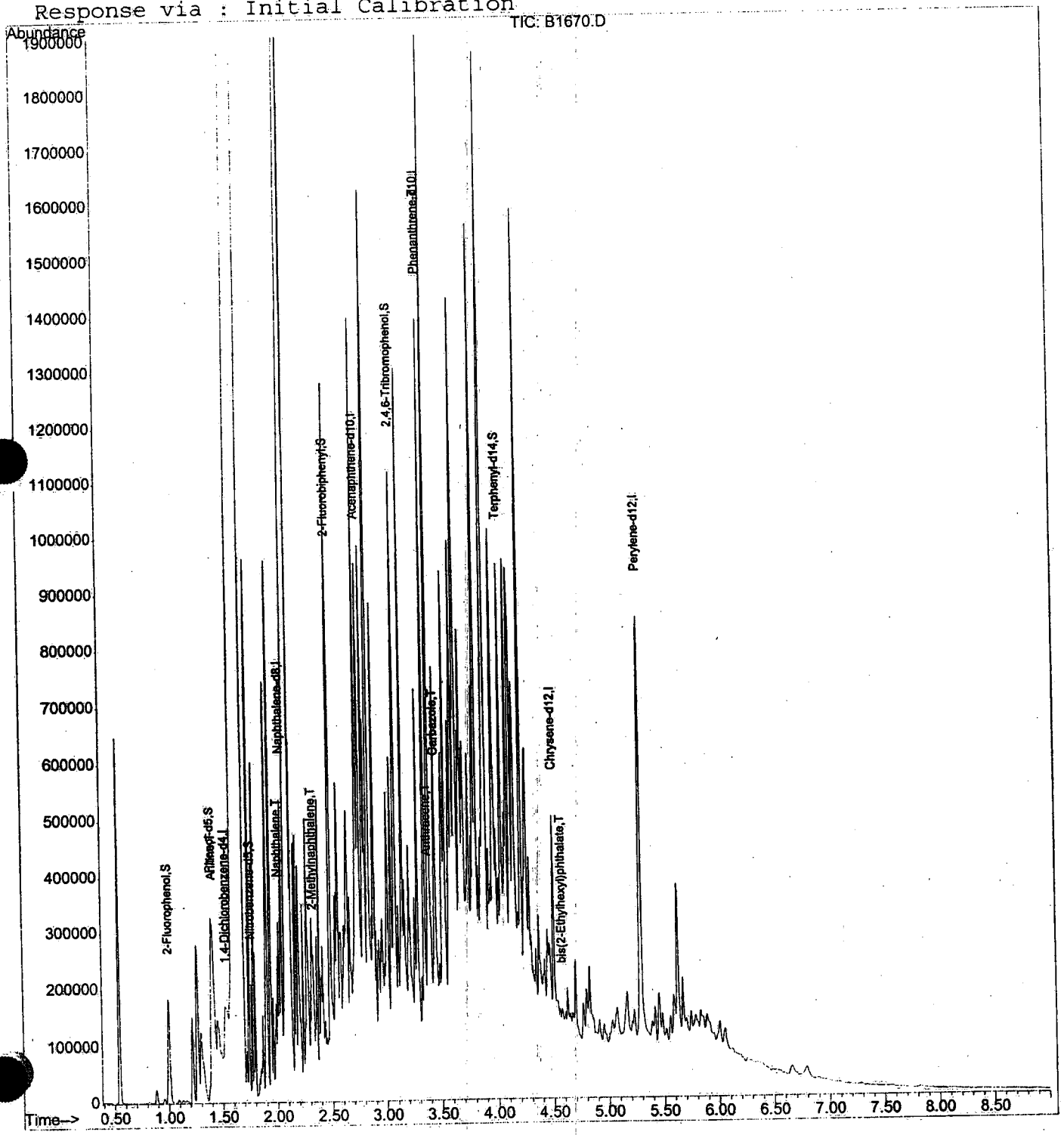
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: rteint.p
Quant Time: Apr 2 13:29 2001

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



000371

1406

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

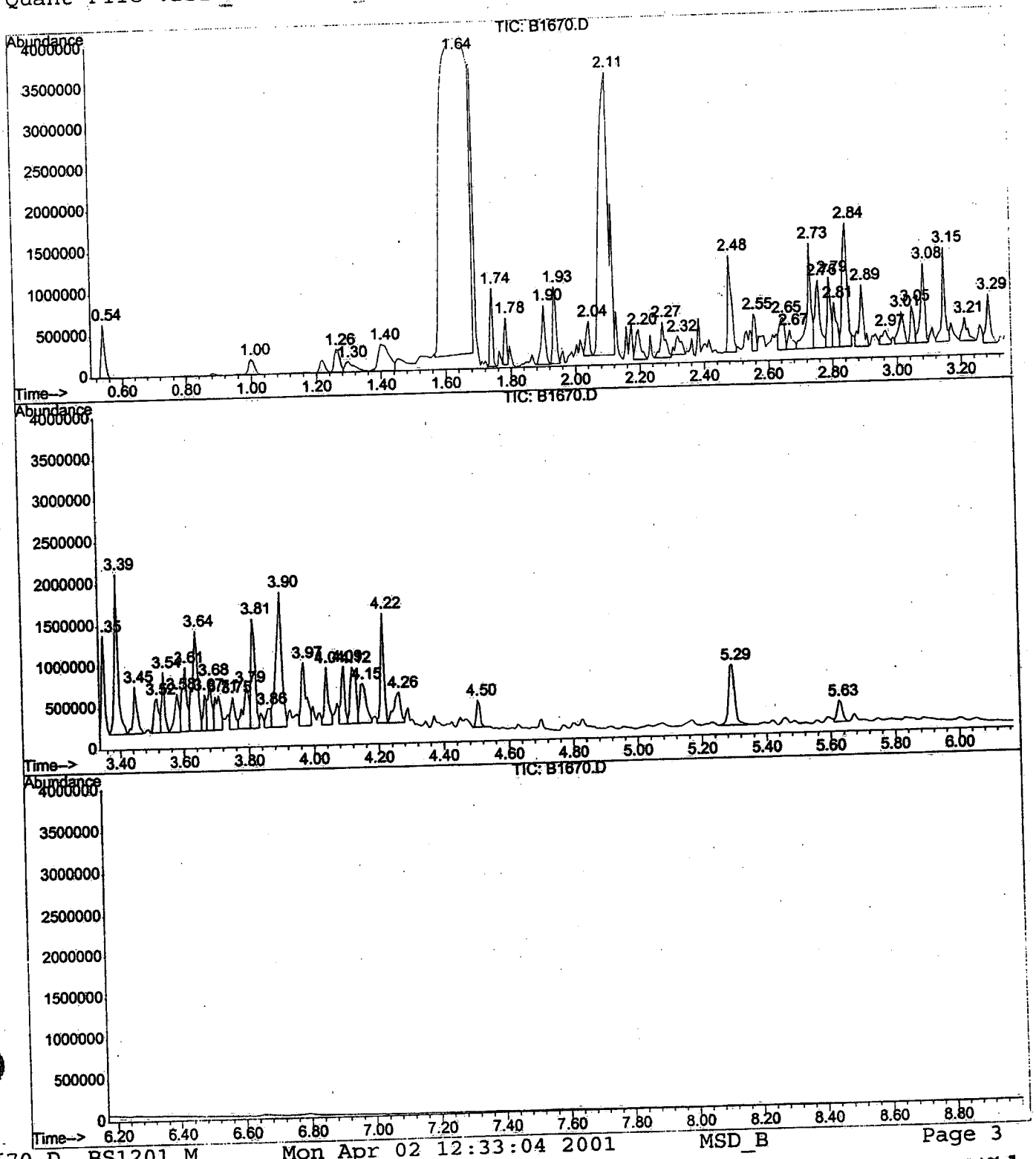
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.540	27	30	37	rVB	647033	470789	2.12%	0.731%
2	1.000	111	116	123	rBV2	182152	231629	1.04%	0.360%
3	1.261	162	165	169	rBV	274777	335402	1.51%	0.521%
4	1.299	169	172	184	rVB4	121692	244929	1.10%	0.380%
5	1.400	184	191	199	rBV4	324654	785751	3.54%	1.220%
6	1.641	222	236	244	rVV9	3854132	22222304	100.00%	34.514%
7	1.742	252	255	257	rVB	943044	512810	2.31%	0.796%
8	1.785	261	263	264	rBV	565890	307572	1.38%	0.478%
9	1.902	280	285	289	rBV	719772	596794	2.69%	0.927%
10	1.934	289	291	294	rBV	930256	655822	2.95%	1.019%
11	2.041	308	311	313	rVB	420710	300932	1.35%	0.467%
12	2.105	313	323	326	rBV5	3437841	7019443	31.59%	10.902%
13	2.196	337	340	345	rVB5	367536	402332	1.81%	0.625%
14	2.271	349	354	359	rBV4	435369	453995	2.04%	0.705%
15	2.319	359	363	367	rBV5	226924	308472	1.39%	0.479%
16	2.479	391	393	397	rBV2	1170496	960341	4.32%	1.492%
17	2.554	406	407	409	rVV2	449380	286040	1.29%	0.444%
18	2.645	421	424	426	rVV3	392750	437326	1.97%	0.679%
19	2.666	426	428	432	rVV5	236730	240768	1.08%	0.374%
20	2.730	432	440	442	rVV	1267858	1175933	5.29%	1.826%
21	2.757	442	445	449	rVV4	819327	841048	3.78%	1.306%
22	2.789	449	451	453	rVV	848627	646215	2.91%	1.004%
23	2.805	453	454	457	rVV2	538000	398592	1.79%	0.619%
24	2.843	457	461	464	rVV4	1485859	1613083	7.26%	2.505%
25	2.891	466	470	474	rVB4	744033	655377	2.95%	1.018%
26	2.966	480	484	487	rVV3	170508	239376	1.08%	0.372%
27	3.014	489	493	497	rVV3	391156	431988	1.94%	0.671%
28	3.046	497	499	501	rVV	449465	331519	1.49%	0.515%
29	3.083	501	506	509	rVV3	956274	897455	4.04%	1.394%
30	3.147	513	518	521	rVV2	1136809	781216	3.52%	1.213%
31	3.211	527	530	537	rVB6	282717	311001	1.40%	0.483%

2	3.286	541	544	549	rVB4	590645	480119	2.16%	0.746%
3	3.350	553	556	559	rBV	1218241	799143	3.60%	1.241%
4	3.393	559	564	570	rVV	1941075	1524963	6.86%	2.368%
5	3.446	570	574	579	rVV2	571267	493283	2.22%	0.766%
[redacted]	3.516	583	587	589	rVV2	414424	474320	2.13%	0.737%
	3.537	589	591	594	rVB	735637	446592	2.01%	0.694%
	3.580	594	599	601	rBV5	470557	554258	2.49%	0.861%
39	3.607	601	604	606	rVV3	783003	776165	3.49%	1.205%
40	3.639	606	610	613	rVV3	1217421	1425979	6.42%	2.215%
41	3.665	613	615	616	rVV	439826	317171	1.43%	0.493%
42	3.681	616	618	620	rVV	617150	507161	2.28%	0.788%
43	3.708	620	623	625	rVV4	416465	502884	2.26%	0.781%
44	3.751	629	631	634	rVV2	390898	357698	1.61%	0.556%
45	3.794	634	639	641	rVV4	506190	674892	3.04%	1.048%
46	3.815	641	643	646	rVV	1333430	1115655	5.02%	1.733%
47	3.858	649	651	653	rVV3	232491	264039	1.19%	0.410%
48	3.900	653	659	662	rVV2	1638597	2008307	9.04%	3.119%
49	3.970	669	672	676	rVV4	770038	882442	3.97%	1.371%
50	4.039	682	685	688	rVV	700457	578669	2.60%	0.899%
51	4.093	692	695	697	rVV	705183	538681	2.42%	0.837%
52	4.119	697	700	703	rVV2	685271	862849	3.88%	1.340%
53	4.152	703	706	711	rVV4	478325	653086	2.94%	1.014%
54	4.216	714	718	720	rVB	1335763	930775	4.19%	1.446%
55	4.264	720	727	730	rBV4	369834	573720	2.58%	0.891%
56	4.504	769	772	777	rVB	331704	257678	1.16%	0.400%
57	5.295	913	920	934	rVB2	742721	1000925	4.50%	1.555%
[redacted]	5.626	979	982	987	rVB	260175	288501	1.30%	0.448%

Sum of corrected areas: 64386209

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Operator : JC
Acquired : 2 Apr 2001 12:07 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-19,1922-003,S,5.08g,22.7,03/30/01
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,1
Vial Number: 18
Quant File :BS1201.RES (RTE Integrator)



000374

1409

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

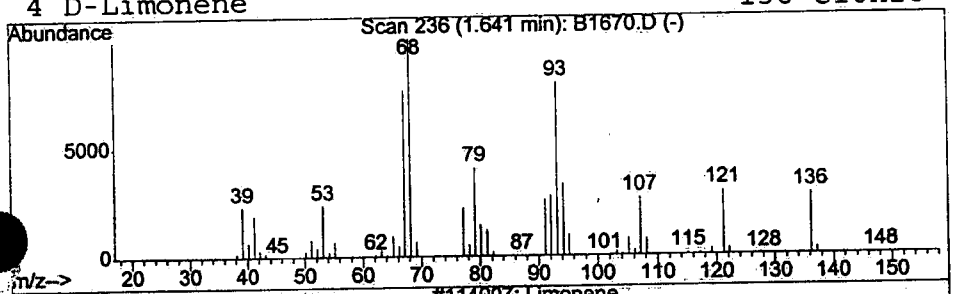
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

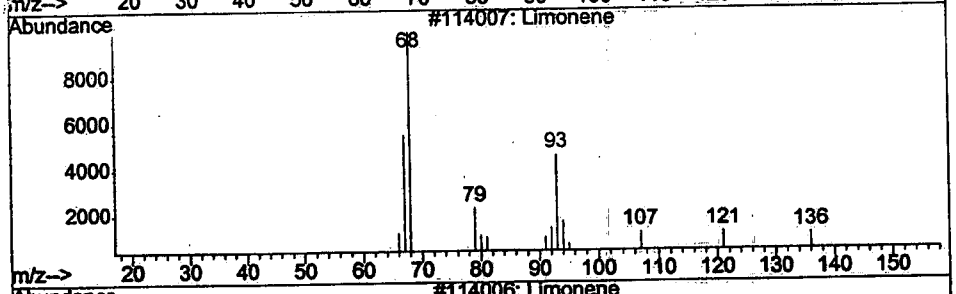
****

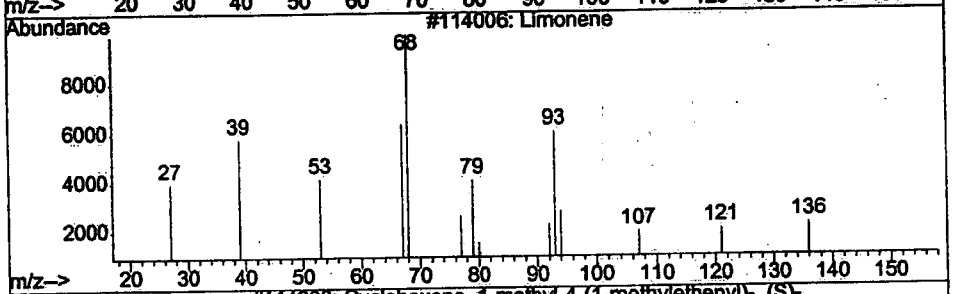
Peak Number 1 Limonene — Concentration Rank 16

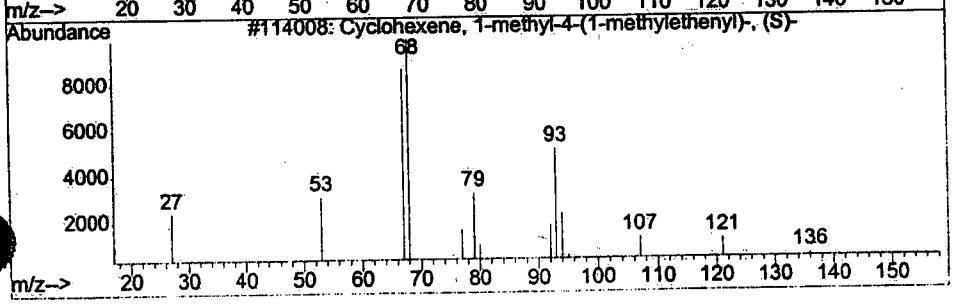
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.64	40.00 UG	22222300	1,4-Dichlorobenzene-d4	1.53

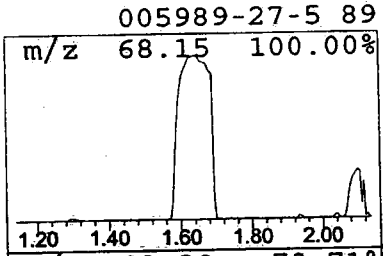
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Limonene	136	C10H16	000138-86-3	91
2	Limonene	136	C10H16	000138-86-3	90
3	Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	005989-54-8	90
4	D-Limonene	136	C10H16	005989-27-5	89

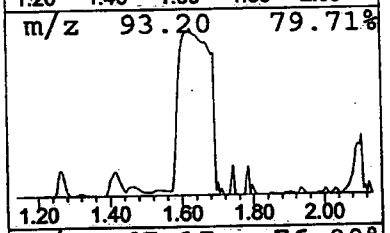


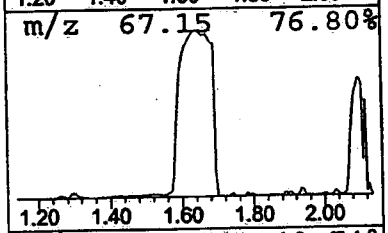


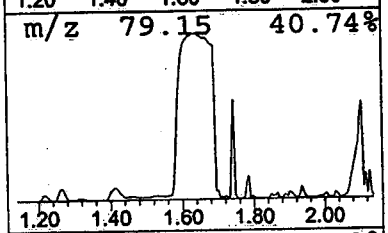


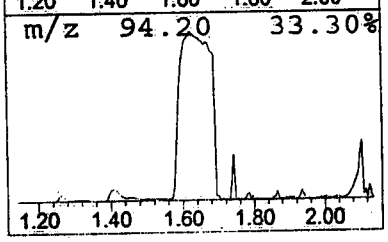












1410

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

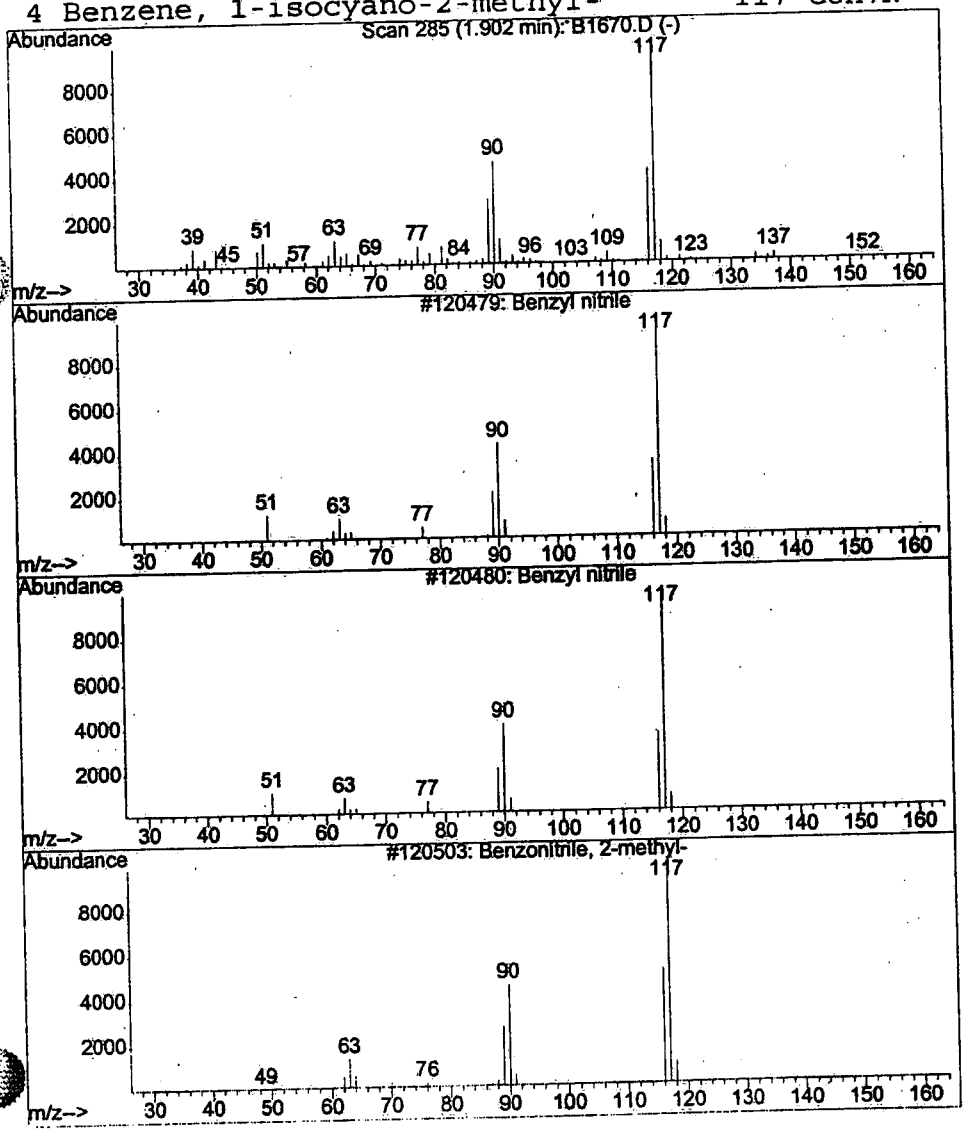
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

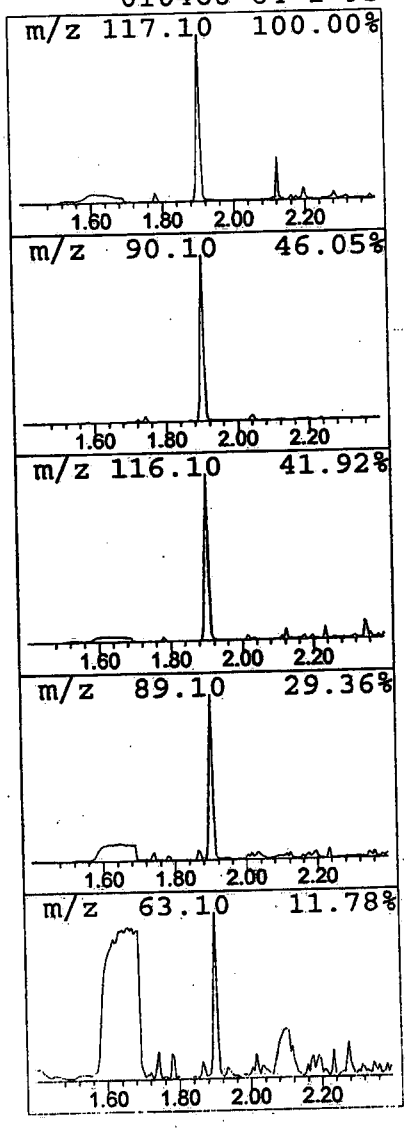
****

Peak Number 2 Benzyl nitrile — Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.90	79.33 UG	596794	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzyl nitrile	117	C8H7N	000140-29-4	97
2	Benzyl nitrile	117	C8H7N	000140-29-4	96
3	Benzonitrile, 2-methyl-	117	C8H7N	000529-19-1	95
4	Benzene, 1-isocyano-2-methyl-	117	C8H7N	010468-64-1	95





000376

1411

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

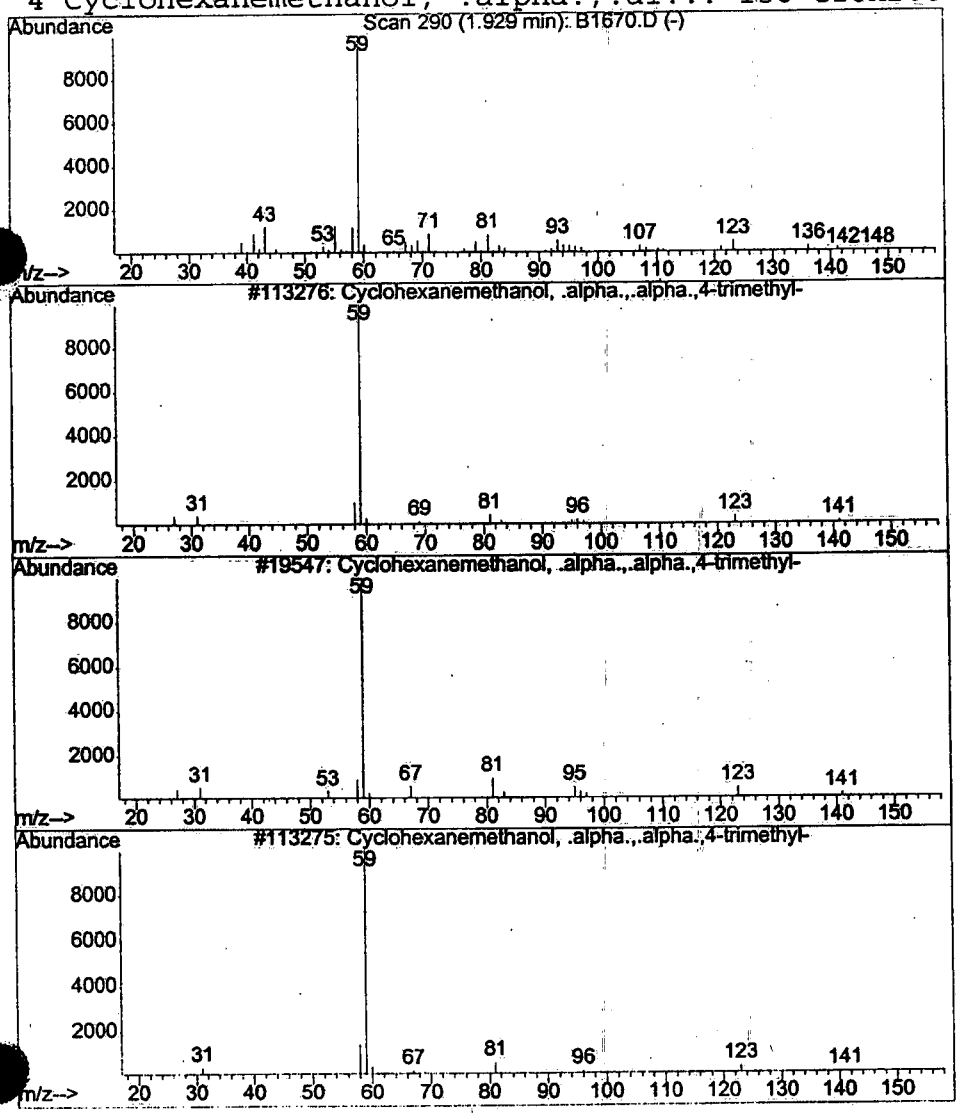
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

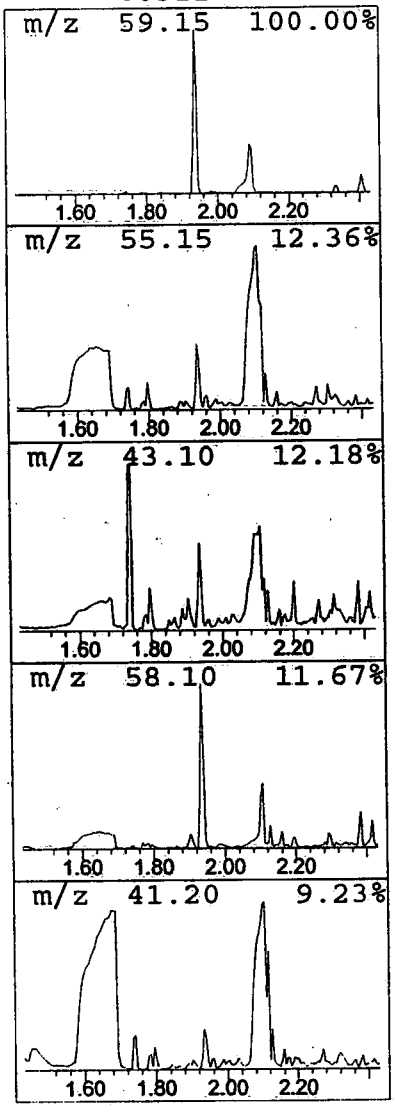
****

Peak Number 3 Unknown — Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.93	87.17 UG	655822	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	000498-81-7	78
2	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	000498-81-7	78
3	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	000498-81-7	78
4	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	005114-00-1	64





14/2

000377

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
3 Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

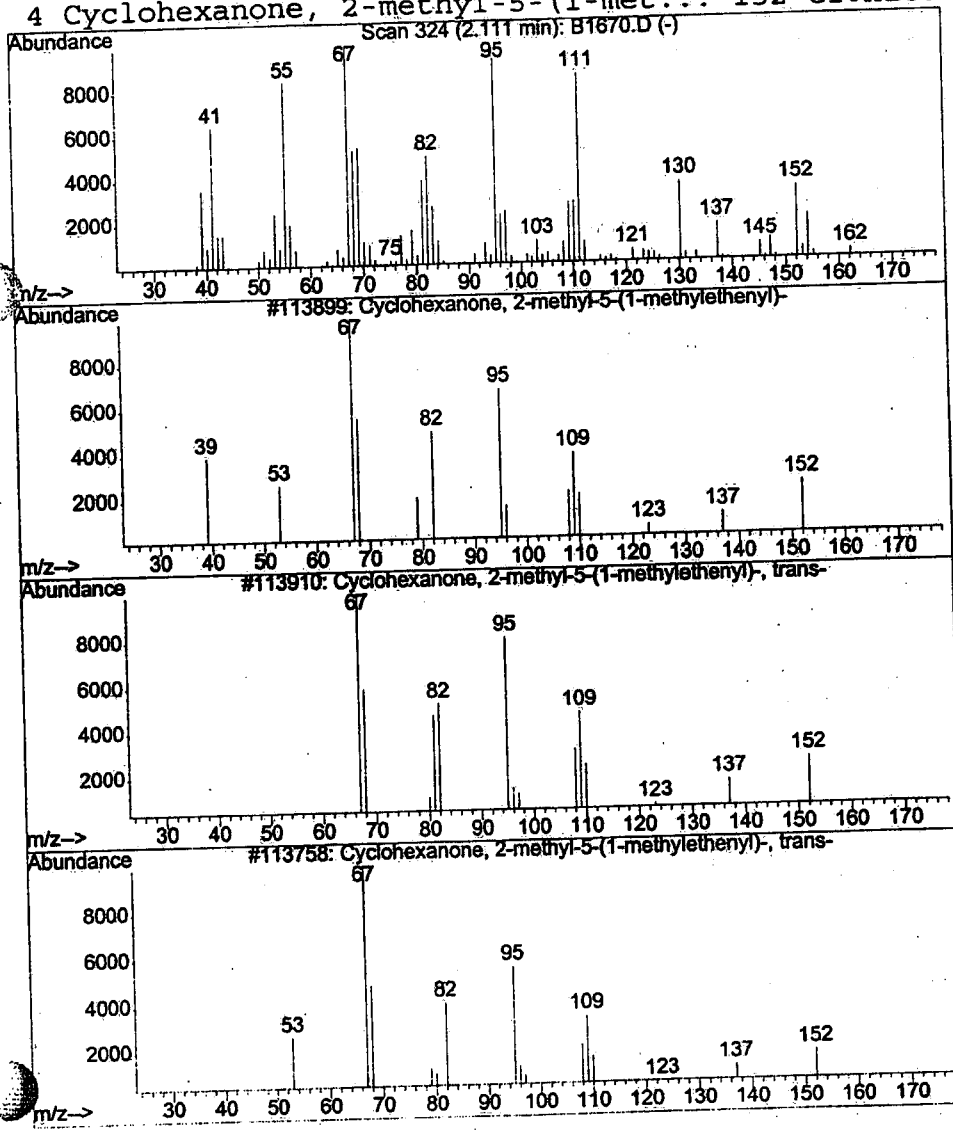
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

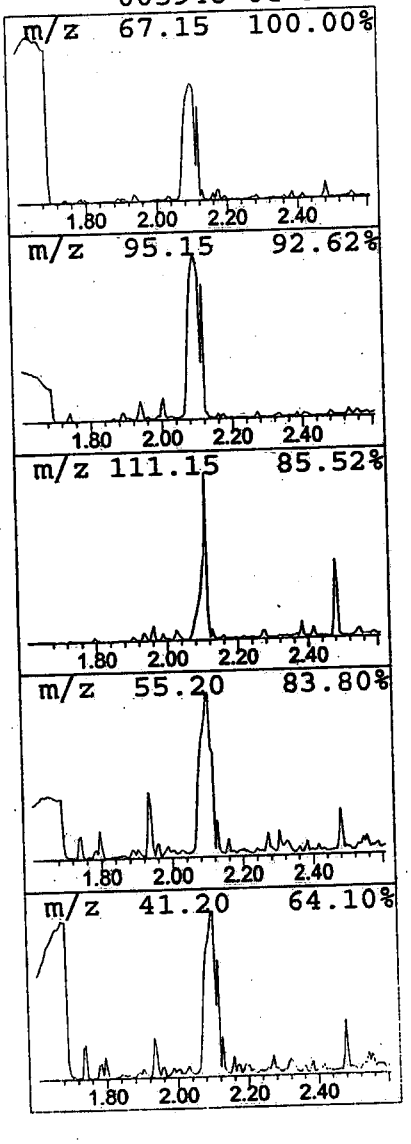
****

Peak Number 4 Unknown alkane — Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.11	933.03 UG	7019440	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanone, 2-methyl-5-(1-met...	152	C10H16O	007764-50-3	95
2	Cyclohexanone, 2-methyl-5-(1-met...	152	C10H16O	005948-04-9	92
3	Cyclohexanone, 2-methyl-5-(1-met...	152	C10H16O	005948-04-9	92
4	Cyclohexanone, 2-methyl-5-(1-met...	152	C10H16O	005948-04-9	91





000378
1413

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
mple : S-19,1922-003,S,5.08g,22.7,03/30/01
sc : ENVTACT/ORBIS,03/27/01,03/28/01,1
; Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

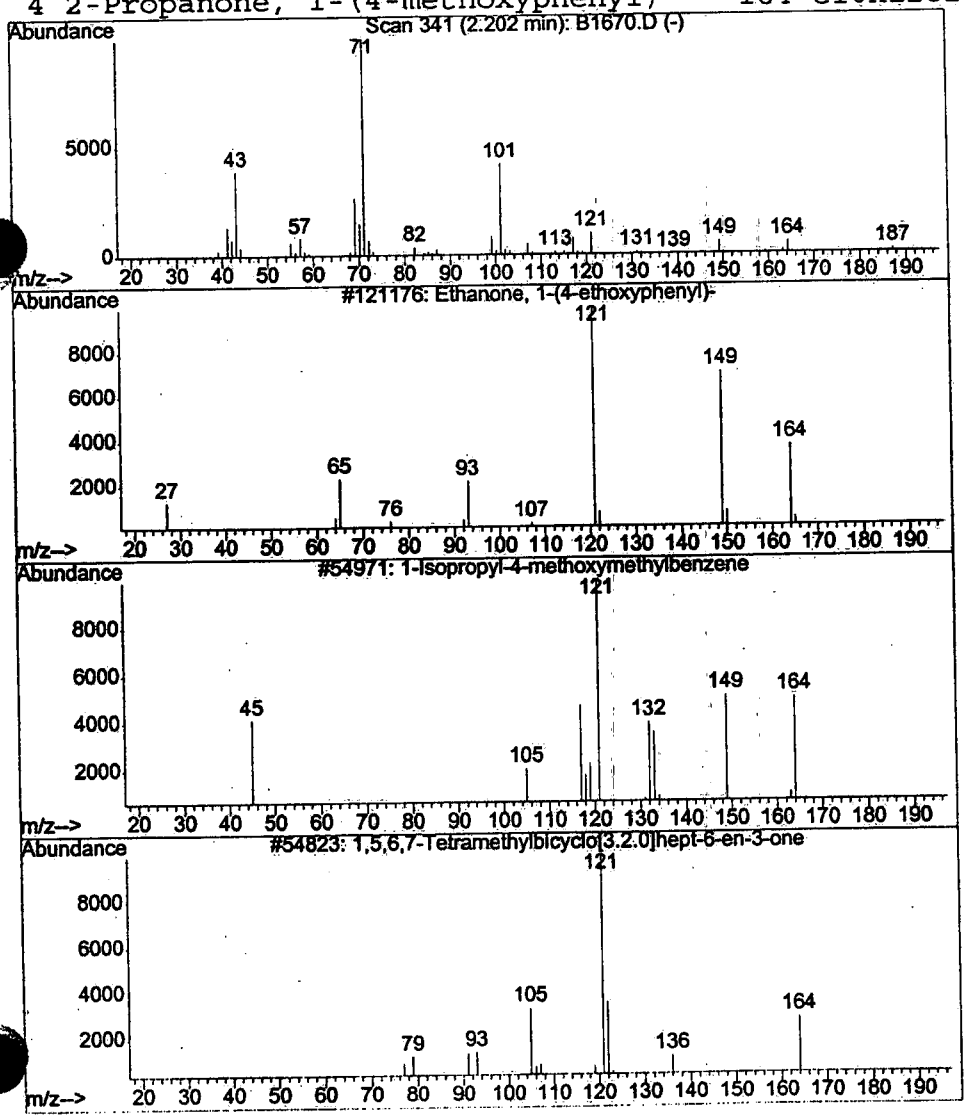
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

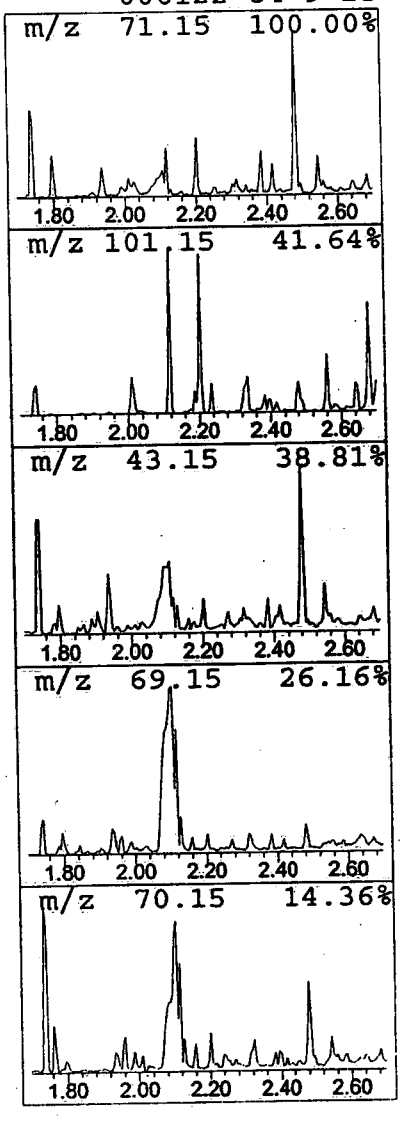
****

Peak Number 5 Unknown alkane Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.20	53.48 UG	402332	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanone, 1-(4-ethoxyphenyl)-	164	C10H12O2	001676-63-7	45
2	1-Isopropyl-4-methoxymethylbenzene	164	C11H16O	1000202-11-6	30
3	1,5,6,7-Tetramethylbicyclo[3.2.0...	164	C11H16O	120345-87-1	27
4	2-Propanone, 1-(4-methoxyphenyl)-	164	C10H12O2	000122-84-9	25





000379

1414

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

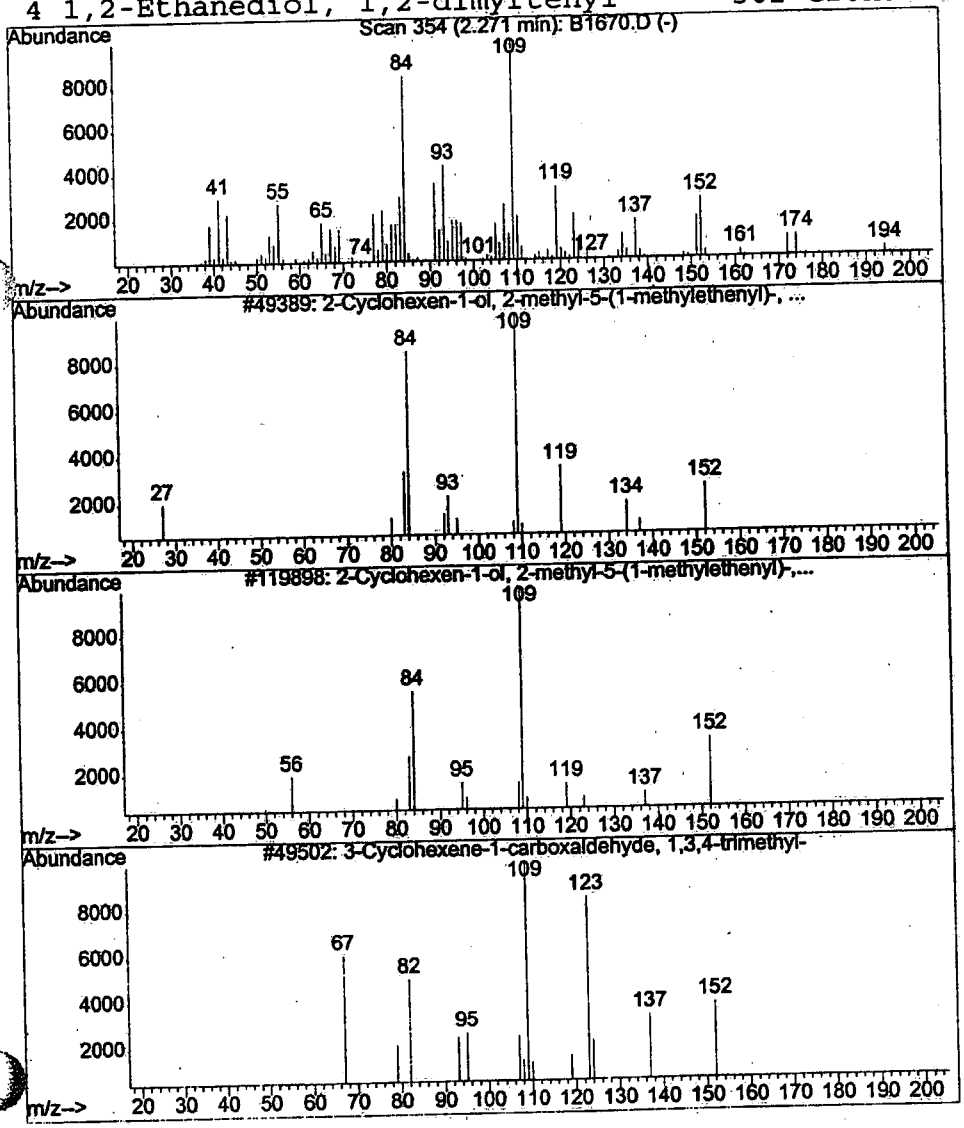
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

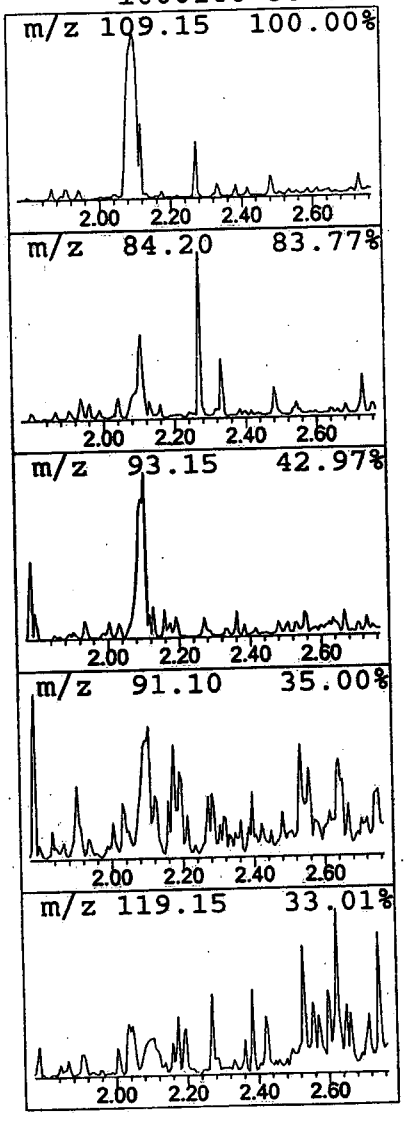
****

Peak Number 6 Unknown alkane — Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.27	60.35 UG	453995	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclohexen-1-ol, 2-methyl-5-(1...	152	C10H16O	001197-07-5	58
2	2-Cyclohexen-1-ol, 2-methyl-5-(1...	152	C10H16O	001197-07-5	38
3	3-Cyclohexene-1-carboxaldehyde, ...	152	C10H16O	040702-26-9	35
4	1,2-Ethanediol, 1,2-dimyrtenyl-	302	C20H30O2	1000160-38-0	35





1415

000380

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

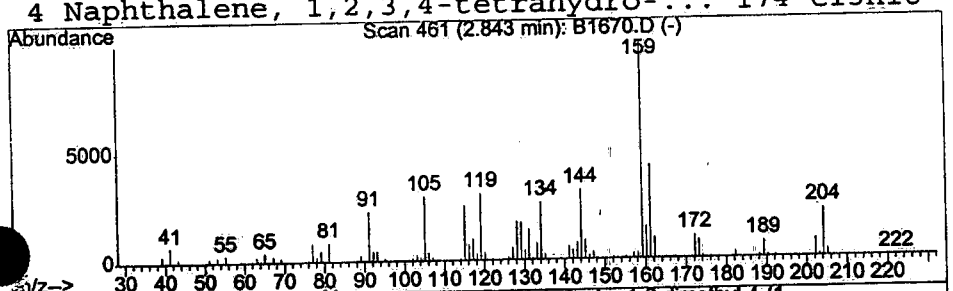
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

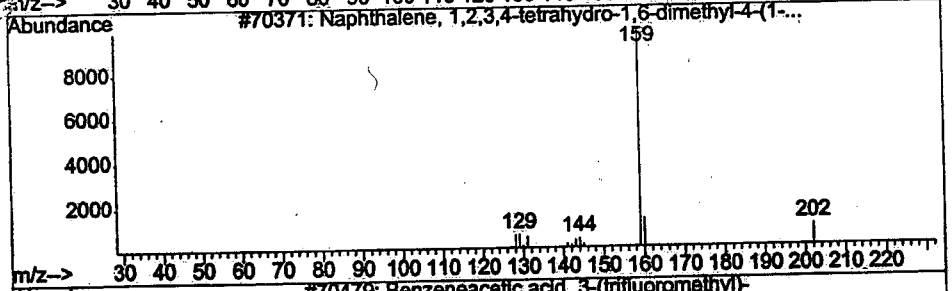
****

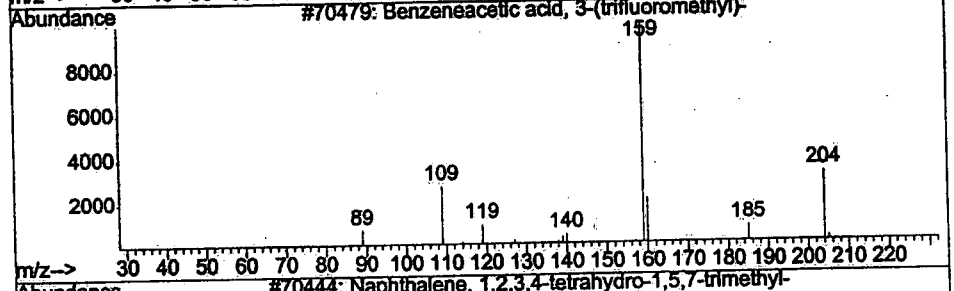
Peak Number 7 Substituted naphthalene Concentration Rank 11

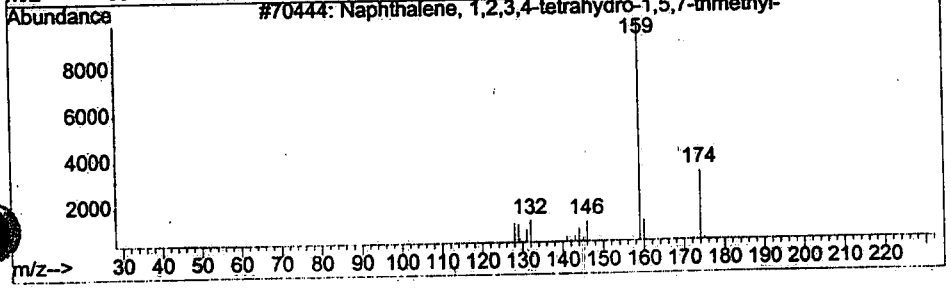
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.84	76.72 UG	1613080	Acenaphthene-d10	2.76

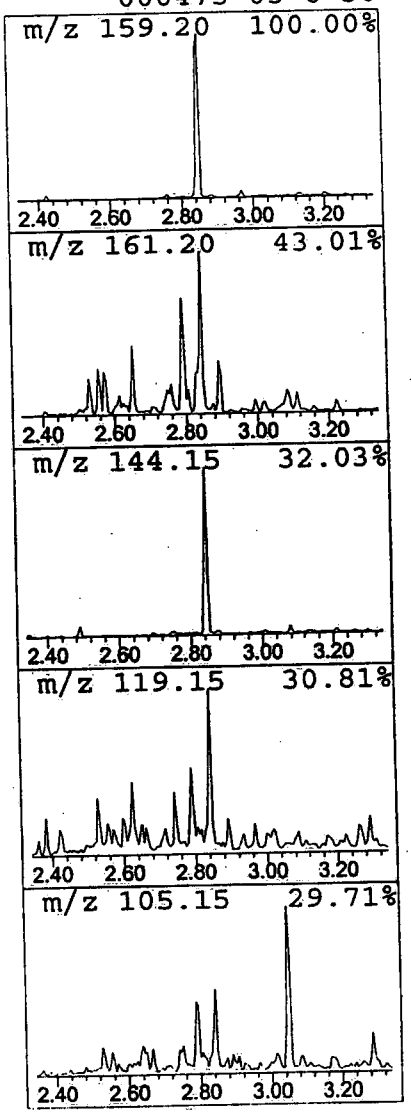
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-...	202	C15H22	000483-77-2	56
2	Benzeneacetic acid, 3-(trifluoro...	204	C9H7F3O2	000351-35-9	35
3	Naphthalene, 1,2,3,4-tetrahydro-...	174	C13H18	021693-55-0	35
4	Naphthalene, 1,2,3,4-tetrahydro-...	174	C13H18	000475-03-6	30











1416

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
3 Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

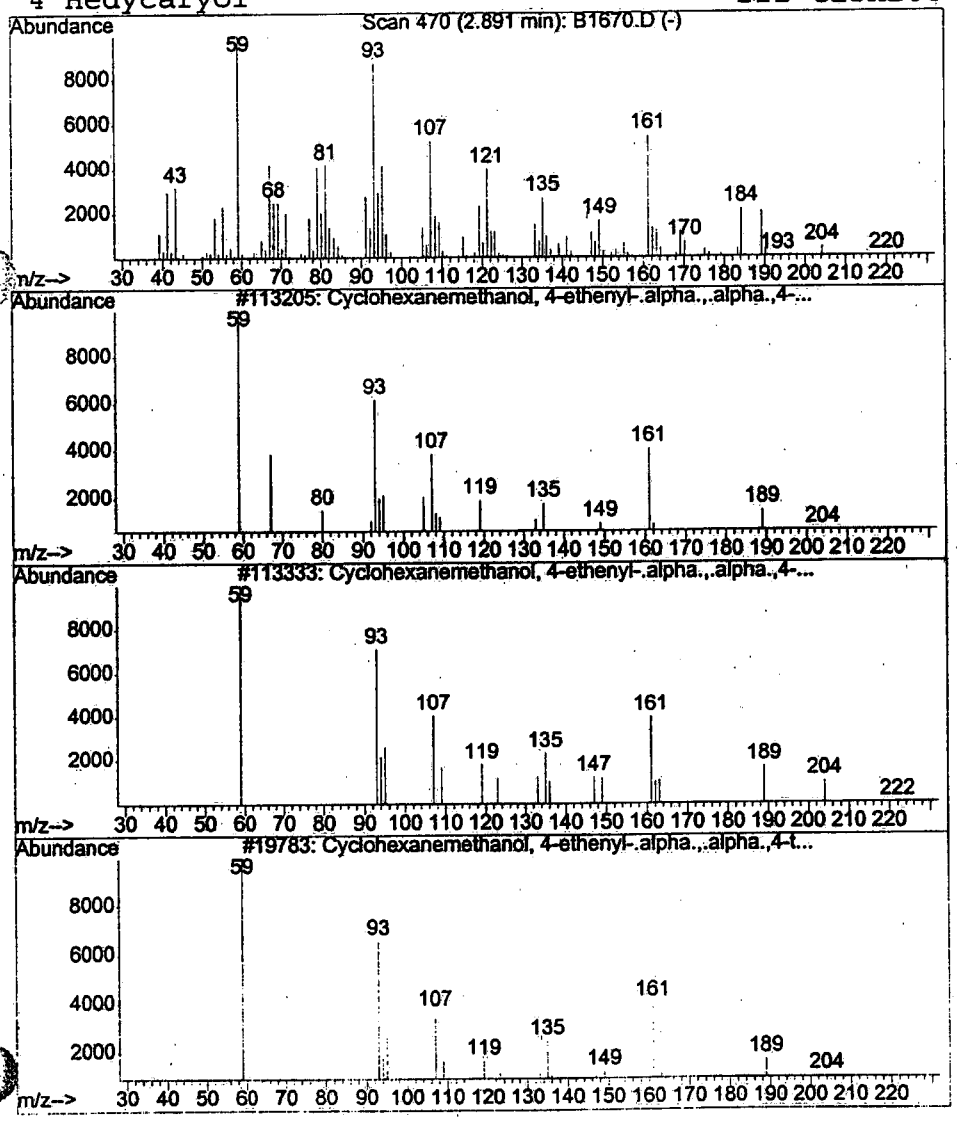
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

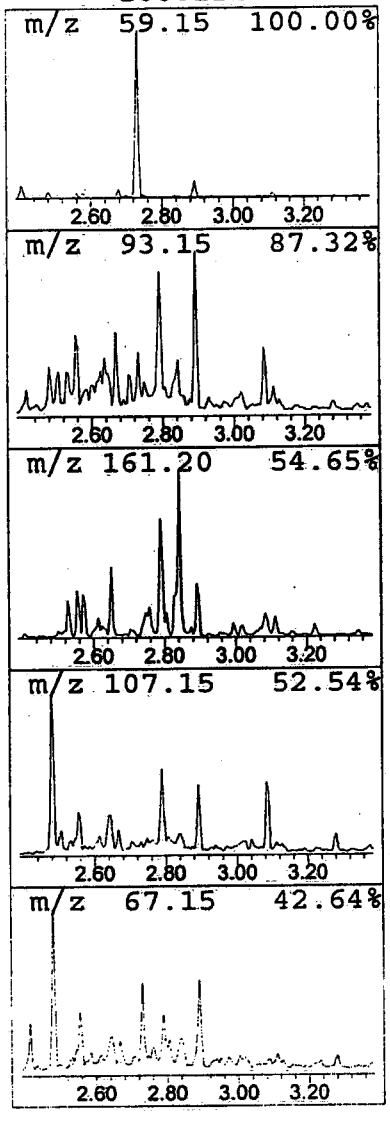
****

Peak Number 8 Unknown alkane Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.89	31.17 UG	655377	Acenaphthene-d10	2.76

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanemethanol, 4-ethenyl-....	222	C15H26O	000639-99-6	90
2	Cyclohexanemethanol, 4-ethenyl-....	222	C15H26O	000639-99-6	90
3	Cyclohexanemethanol, 4-ethenyl-....	222	C15H26O	000639-99-6	87
4	Hedycaryol	222	C15H26O	1000122-12-6	70





1417

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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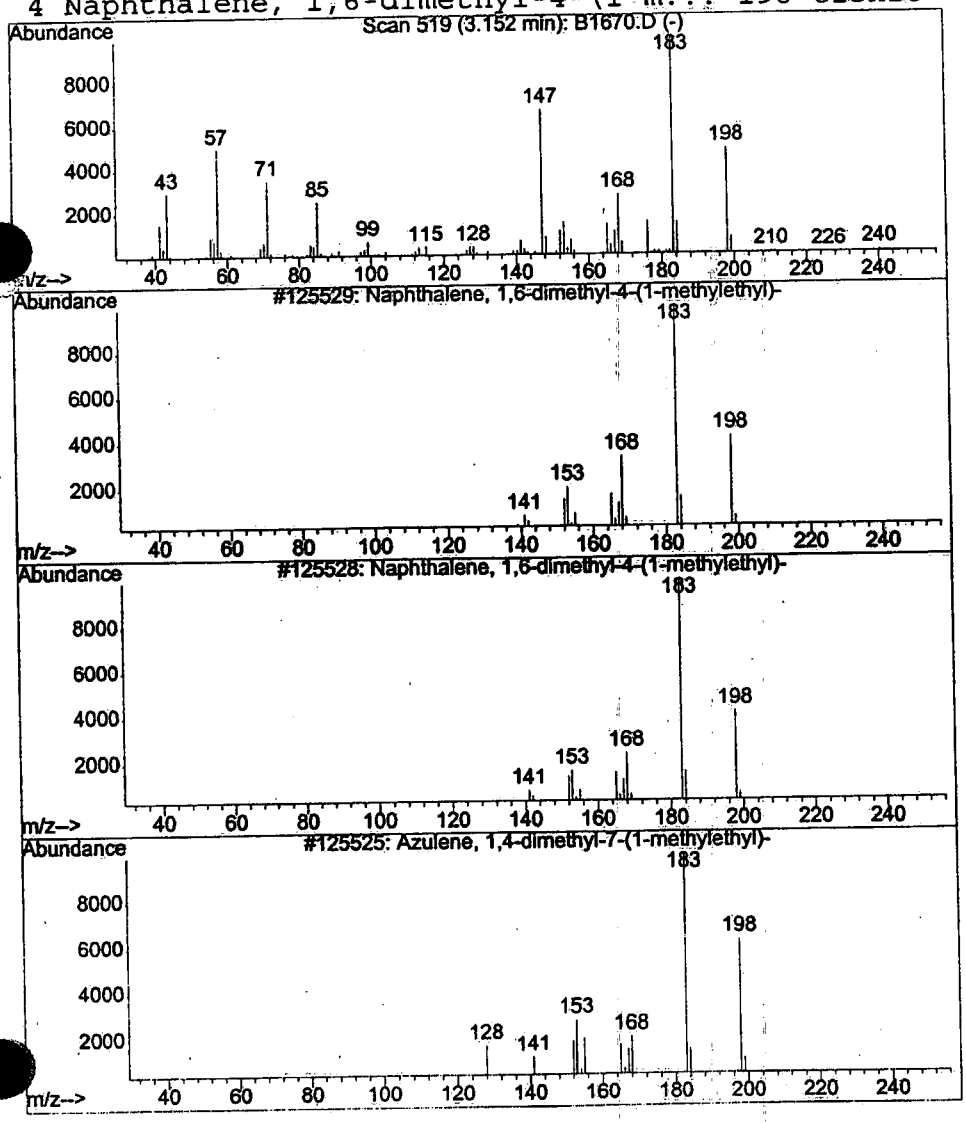
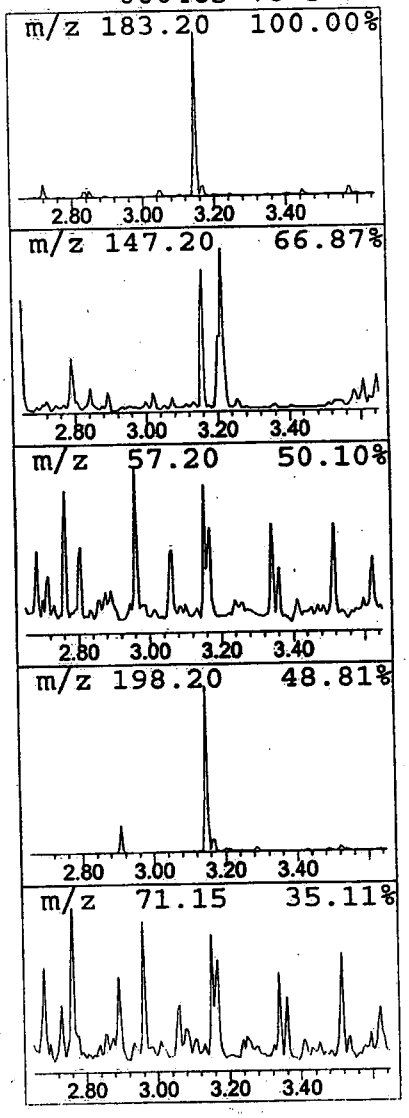
Peak Number 9 Substituted naphthalene Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.15	39.10 UG	781216	Phenanthrene-d10	3.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,6-dimethyl-4-(1-m...	198	C15H18	000483-78-3	99
2	Naphthalene, 1,6-dimethyl-4-(1-m...	198	C15H18	000483-78-3	95
3	Azulene, 1,4-dimethyl-7-(1-methy...	198	C15H18	000489-84-9	94
4	Naphthalene, 1,6-dimethyl-4-(1-m...	198	C15H18	000483-78-3	93





000383
14/18

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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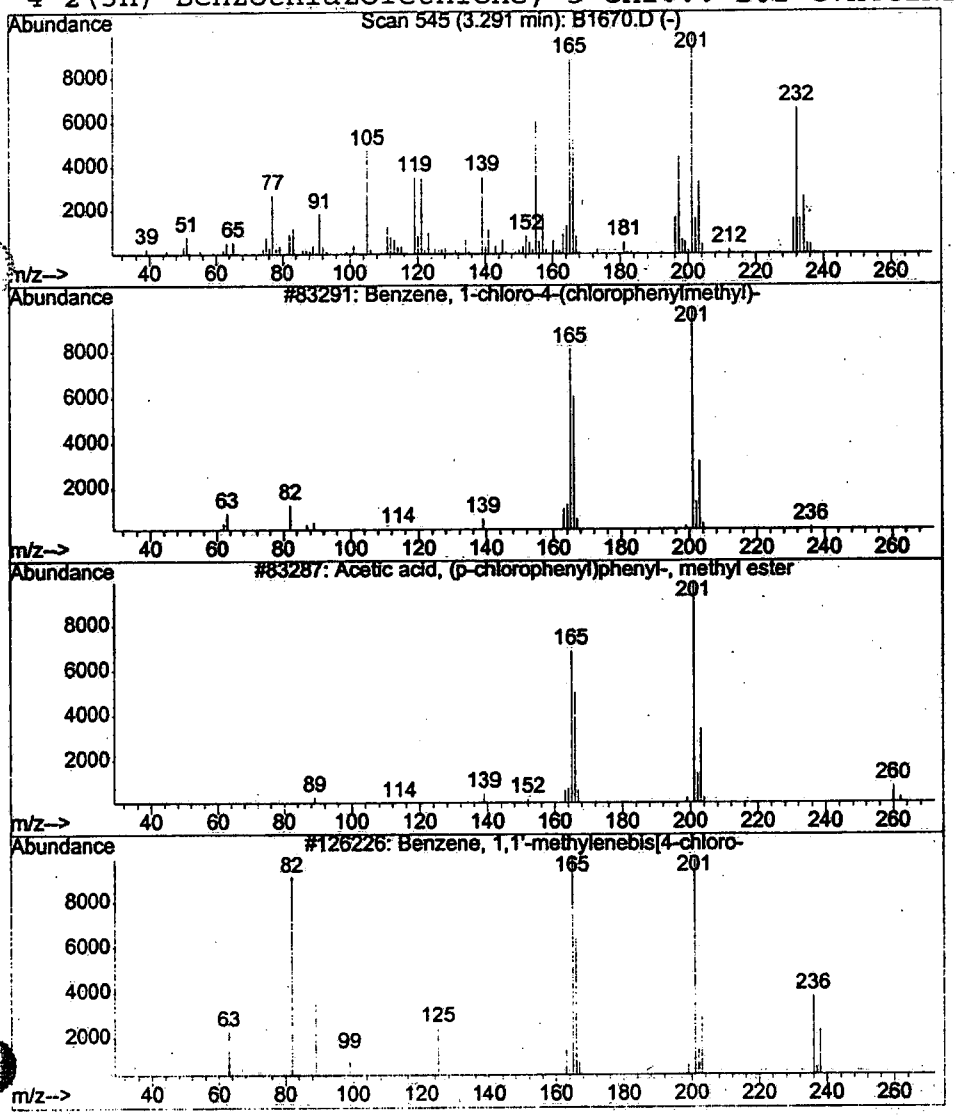
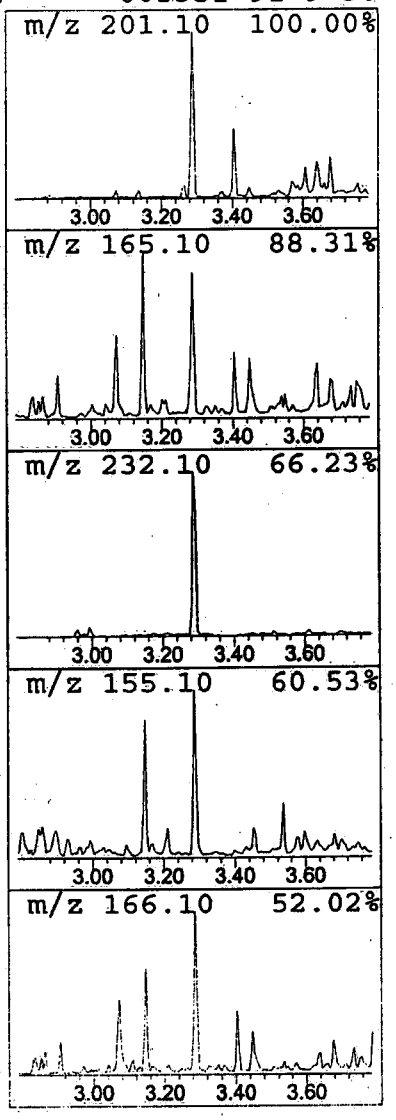
Peak Number 10 Unknown aromatic Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.29	24.03 UG	480119	Phenanthrene-d10	3.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	66
2	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	38
3	Benzene, 1,1'-methylenebis[4-chl...	236	C13H10Cl2	000101-76-8	35
4	2(3H)-Benzothiazolethione, 5-chl...	201	C7H4ClNS2	005331-91-9	30





1419

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D Vial: 18
Acq On : 2 Apr 2001 12:07 Operator: JC
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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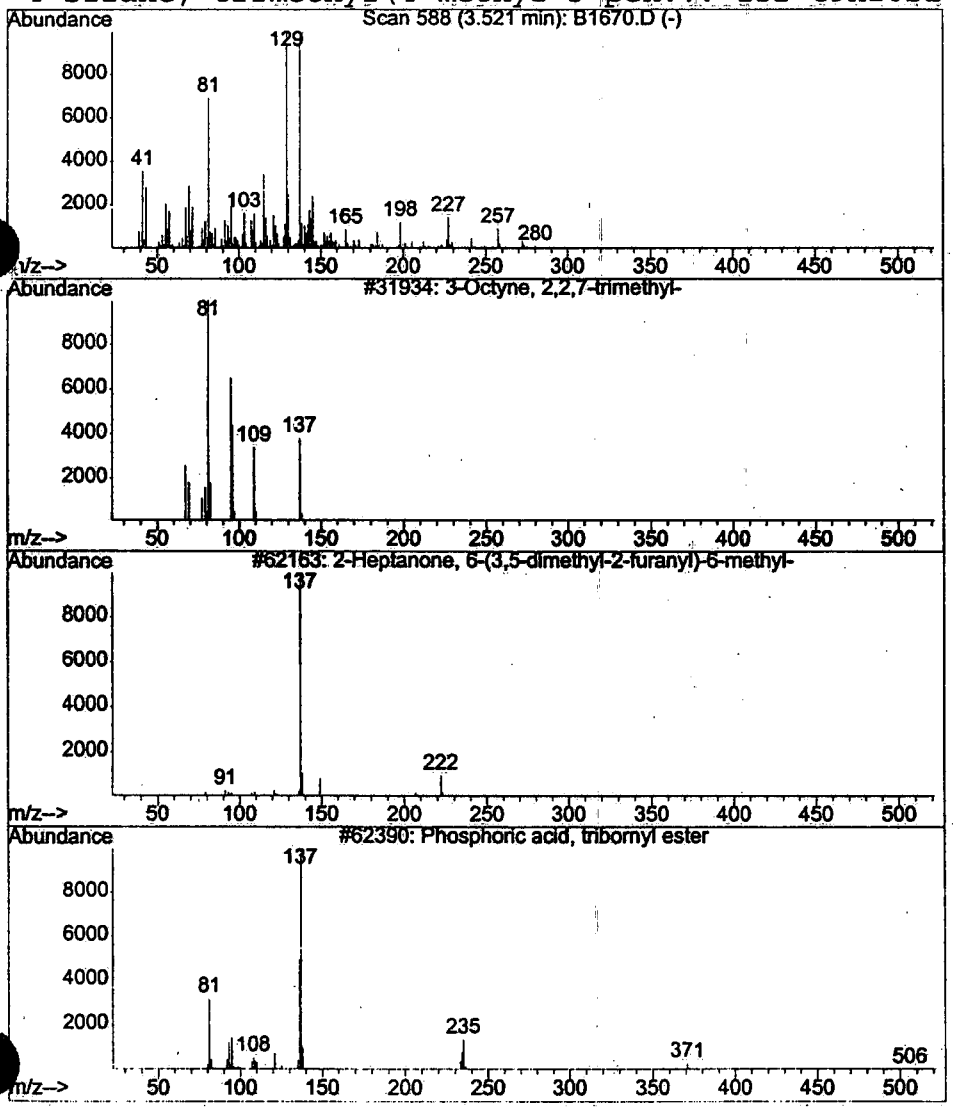
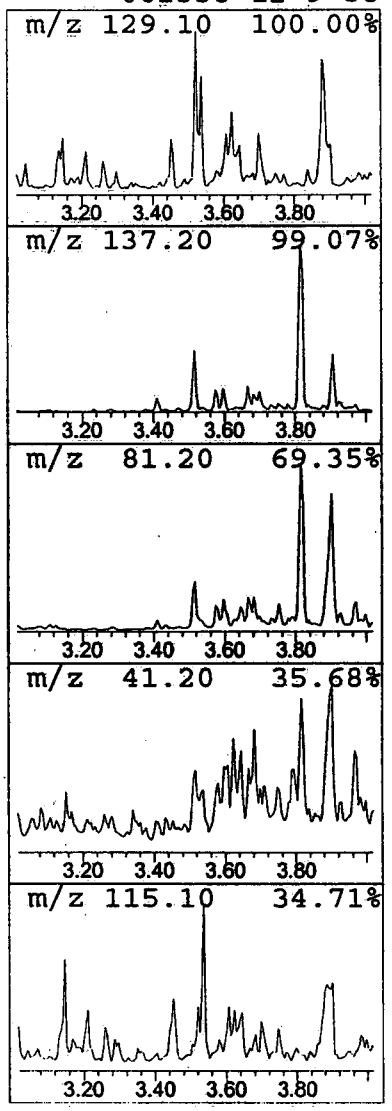
Peak Number 11 Unknown alkane Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.52	23.74 UG	474320	Phenanthrene-d10	3.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Octyne, 2,2,7-trimethyl-	152	C11H20	055402-13-6	50
2	2-Heptanone, 6-(3,5-dimethyl-2-f...	222	C14H22O2	090165-09-6	43
3	Phosphoric acid, tribornyl ester	506	C30H51O4P	1000158-10-2	40
4	Silane, trimethyl(4-methyl-3-pen...	152	C9H16Si	062338-12-9	38





1420

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

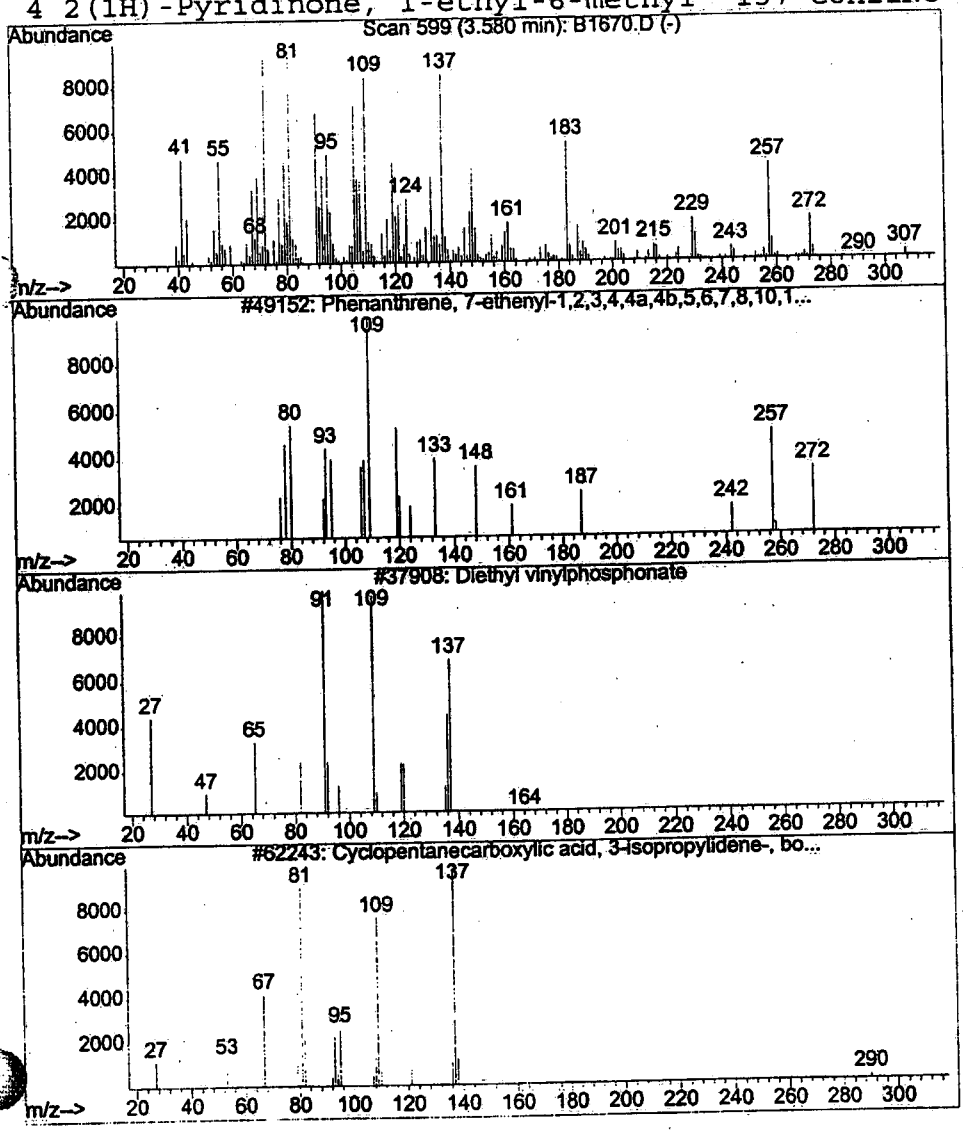
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

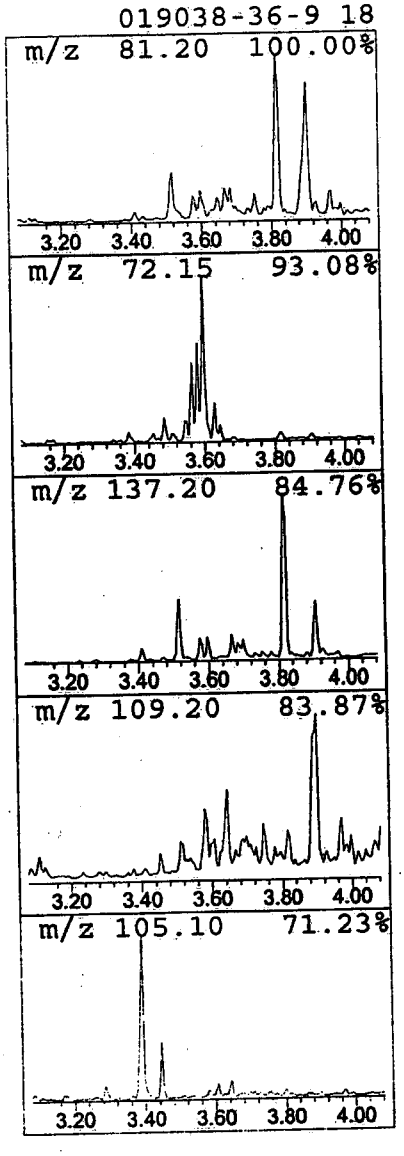
****

Peak Number 12 Unknown aromatic — Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.58	27.74 UG	554258	Phenanthrene-d10	3.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 7-ethenyl-1,2,3,4,...	272	C20H32	001686-66-4	46
2	Diethyl vinylphosphonate	164	C6H13O3P	000682-30-4	25
3	Cyclopentanecarboxylic acid, 3-i...	290	C19H30O2	1000151-83-4	18
4	2(1H)-Pyridinone, 1-ethyl-6-methyl-	137	C8H11NO	019038-36-9	18





1421

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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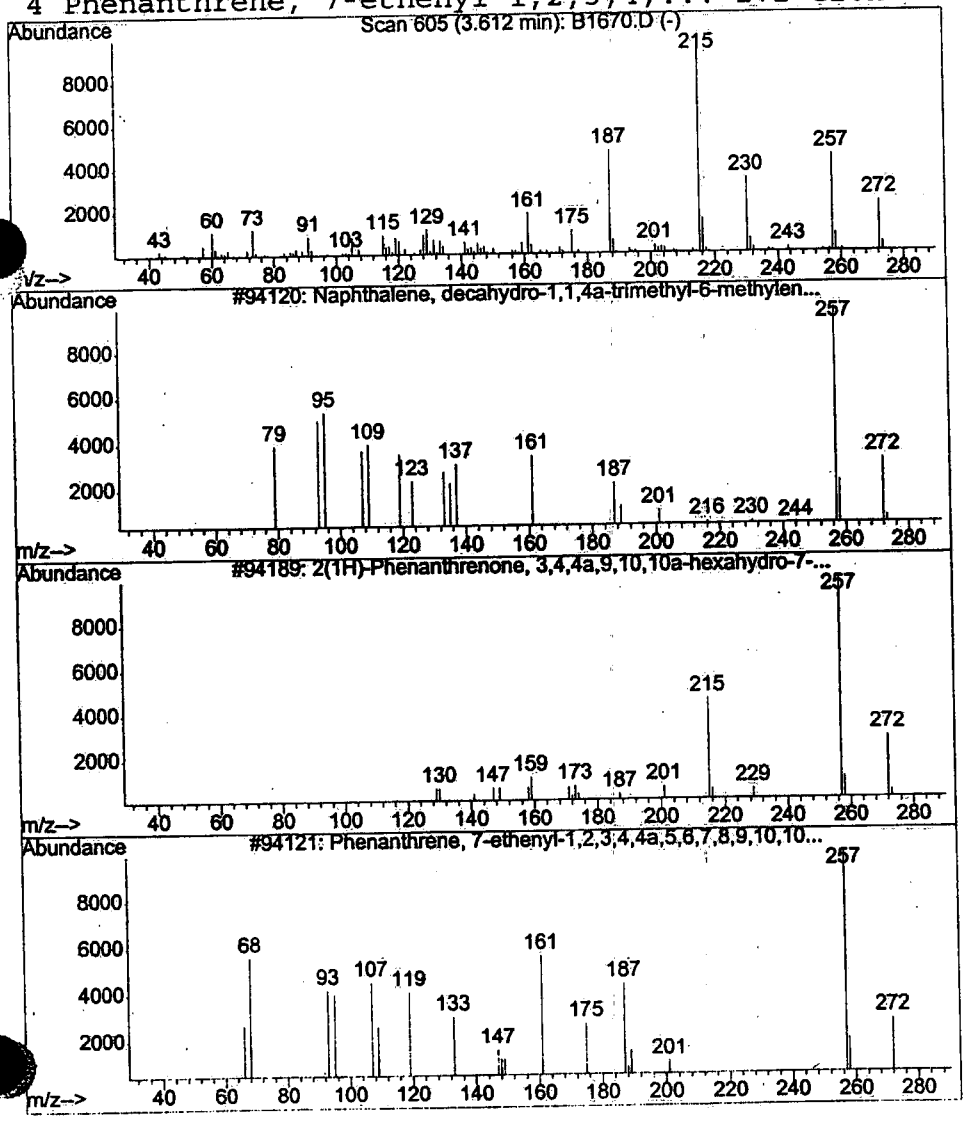
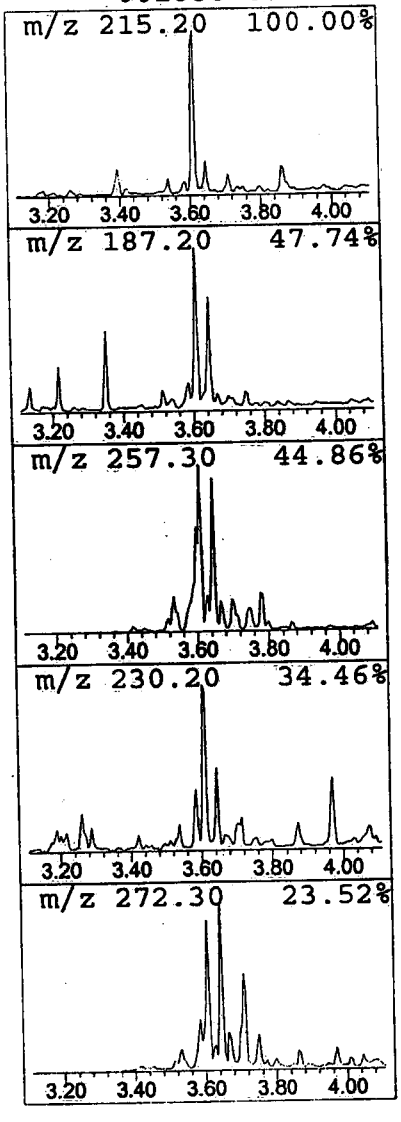
Peak Number 13 Substituted naphthalene Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.61	38.85 UG	776165	Phenanthrene-d10	3.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, decahydro-1,1,4a-tr...	272	C20H32	005957-33-5	60
2	2(1H)-Phenanthrenone, 3,4,4a,9,1...	272	C18H24O2	055255-51-1	55
3	Phenanthrene, 7-ethenyl-1,2,3,4,...	272	C20H32	055255-56-6	50
4	Phenanthrene, 7-ethenyl-1,2,3,4,...	272	C20H32	001686-67-5	43





1422

00387

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
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Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
3 Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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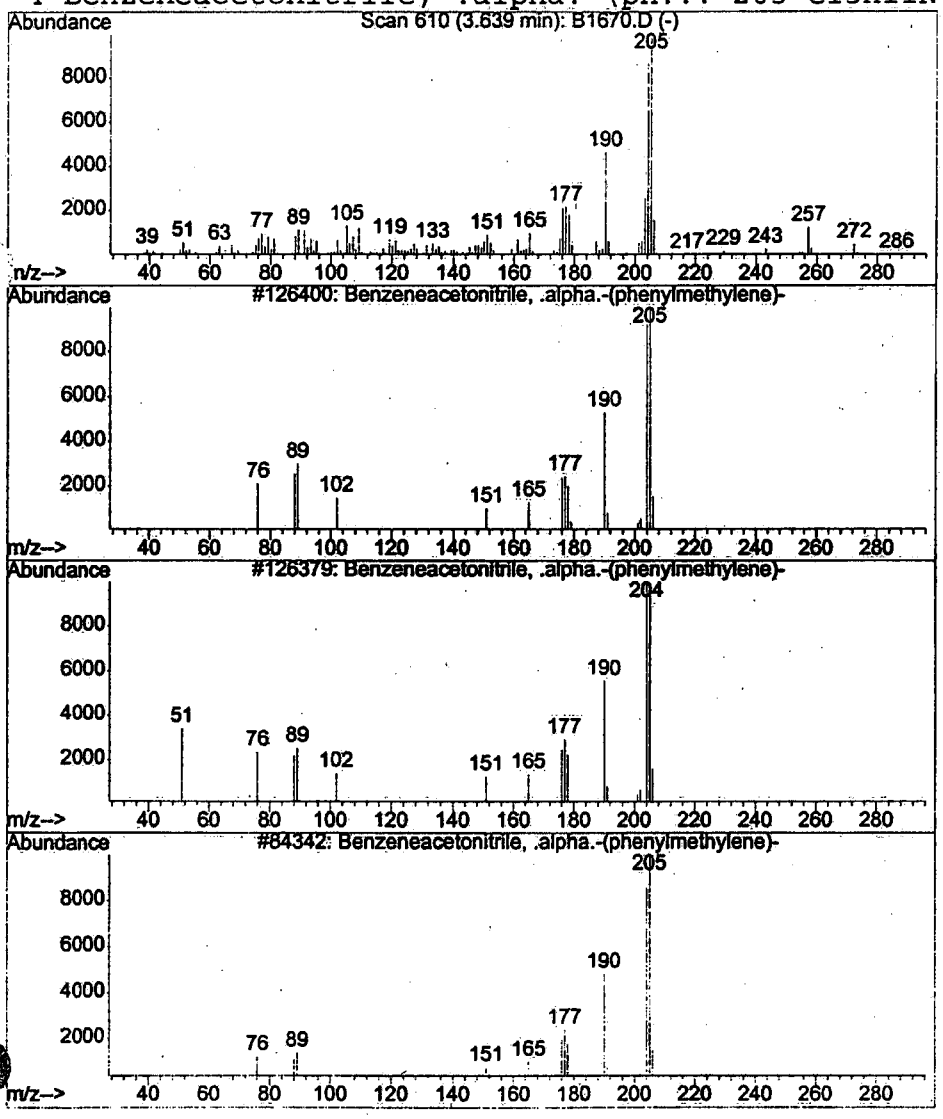
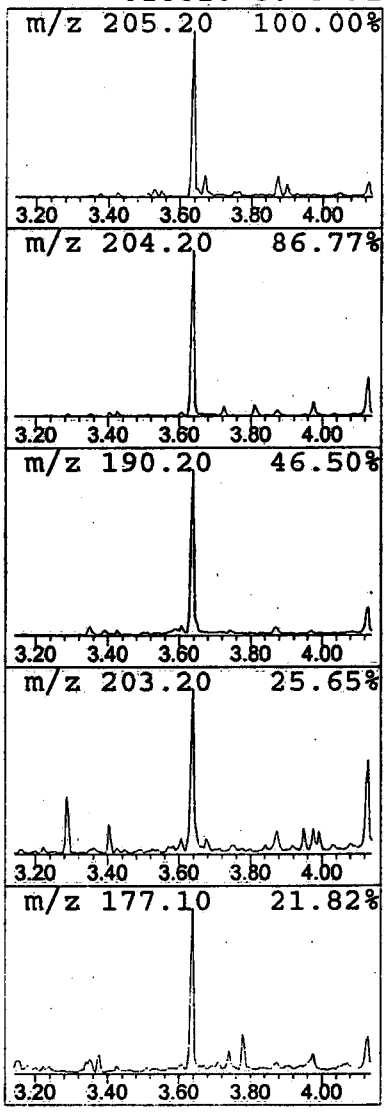
Peak Number 14 Unknown aromatic Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.64	71.38 UG	1425980	Phenanthrene-d10	3.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneacetonitrile, .alpha.-(ph...	205	C15H11N	002510-95-4	98
2	Benzeneacetonitrile, .alpha.-(ph...	205	C15H11N	002510-95-4	97
3	Benzeneacetonitrile, .alpha.-(ph...	205	C15H11N	002510-95-4	97
4	Benzeneacetonitrile, .alpha.-(ph...	205	C15H11N	016610-80-3	91





1423

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
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Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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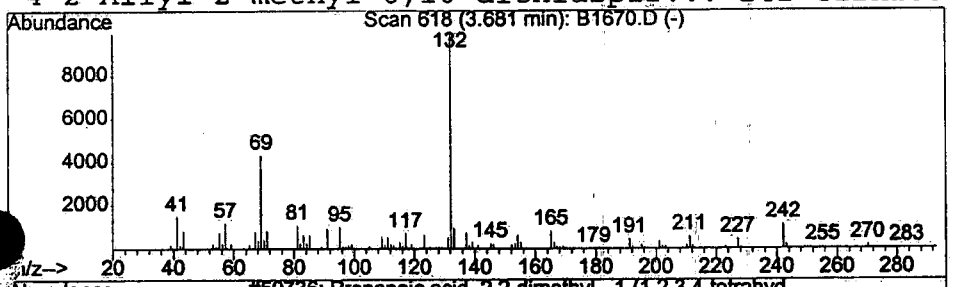
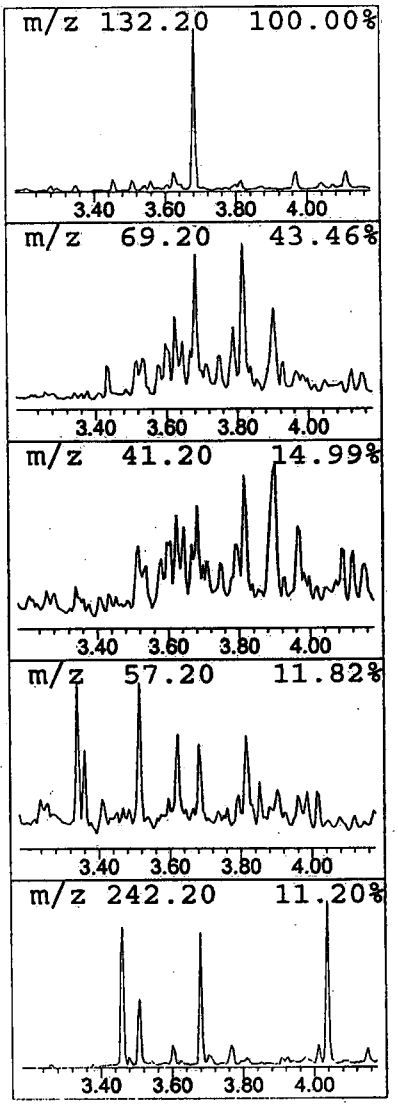
Peak Number 15 Unknown — Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.68	25.39 UG	507161	Phenanthrene-d10	3.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanoic acid, 2,2-dimethyl-, 1...	275	C17H25NO2	076069-00-6	50
2	1-(2,2-Dimethylpropyl)-1,2,3,4-t...	203	C14H21N	1000194-87-8	50
3	Isoquinoline, 1,2,3,4-tetrahydro...	189	C13H19N	1000197-55-4	40
4	2-Allyl-2-methyl-6,10-dithiaspir...	242	C12H18OS2	059579-81-6	40





1424

000389

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
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Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

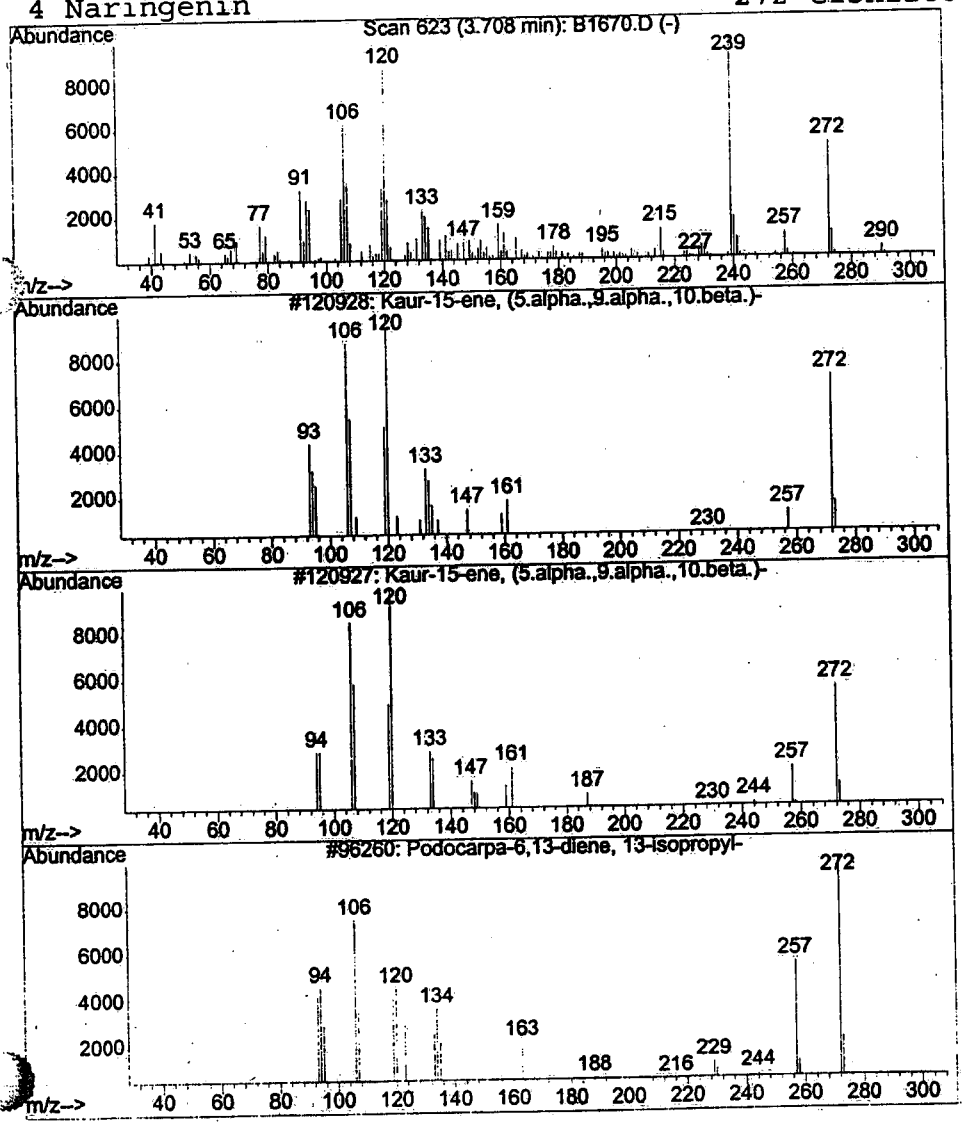
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

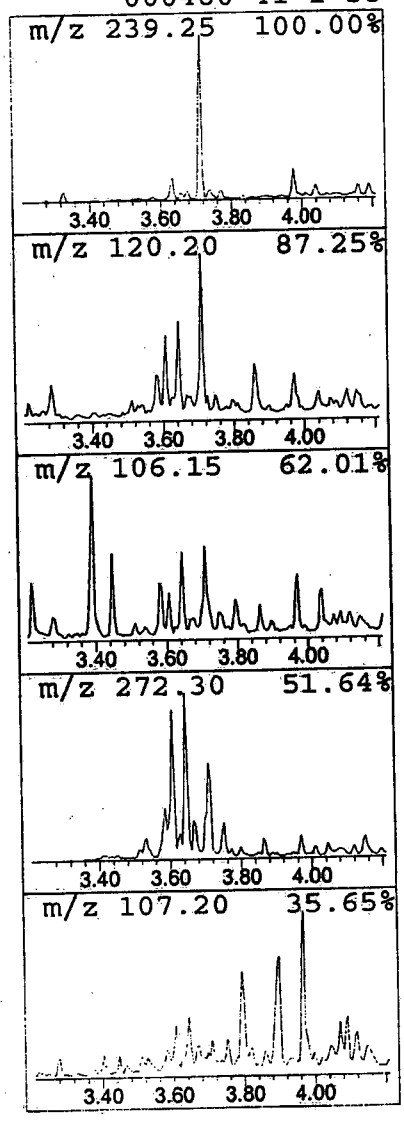
****

Peak Number 16 Unknown — Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.71	25.17 UG	502884	Phenanthrene-d10	3.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Kaur-15-ene, (5.alpha.,9.alpha.,...	272	C20H32	000511-85-3	96
2	Kaur-15-ene, (5.alpha.,9.alpha.,...	272	C20H32	000511-85-3	58
3	Podocarpa-6,13-diene, 13-isopropyl-	272	C20H32	005939-62-8	38
4	Naringenin	272	C15H12O5	000480-41-1	35





1425

000390

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
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Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

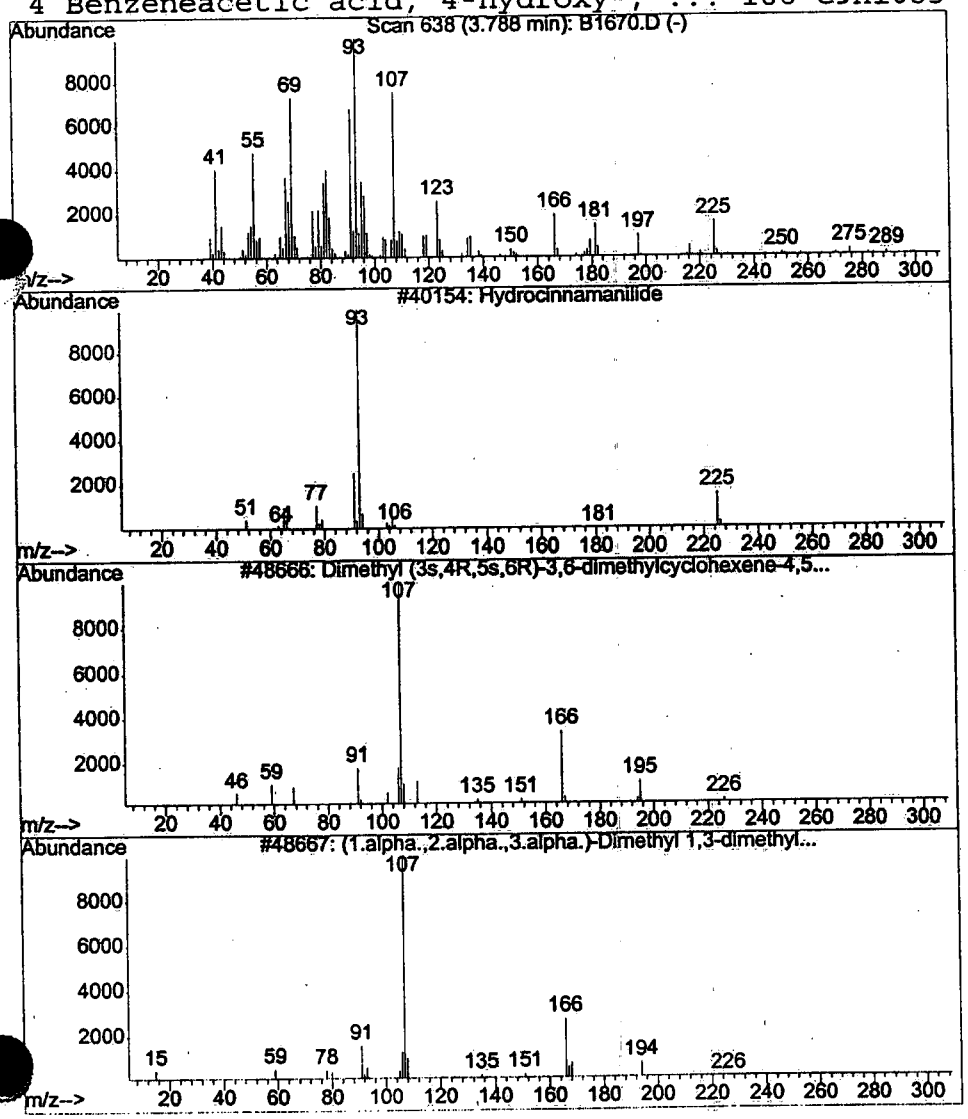
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

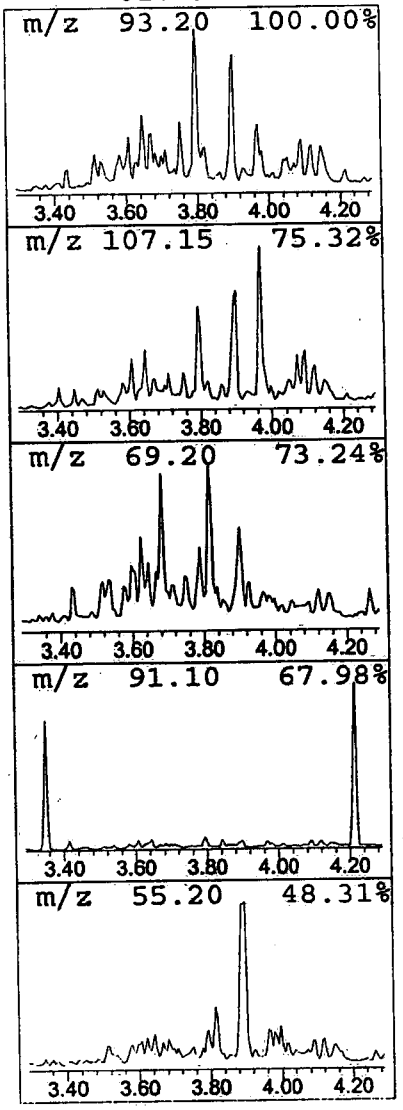
****

Peak Number 17 Unknown — Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.79	33.78 UG	674892	Phenanthrene-d10	3.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hydrocinnamanilide	225	C15H15NO	003271-81-6	38
2	Dimethyl (3s,4R,5s,6R)-3,6-dimet...	226	C12H18O4	036337-44-7	38
3	(1.alpha.,2.alpha.,3.alpha.)-Dim...	226	C12H18O4	082166-41-4	35
4	Benzeneacetic acid, 4-hydroxy-, ...	166	C9H10O3	014199-15-6	30





1426

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
} Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

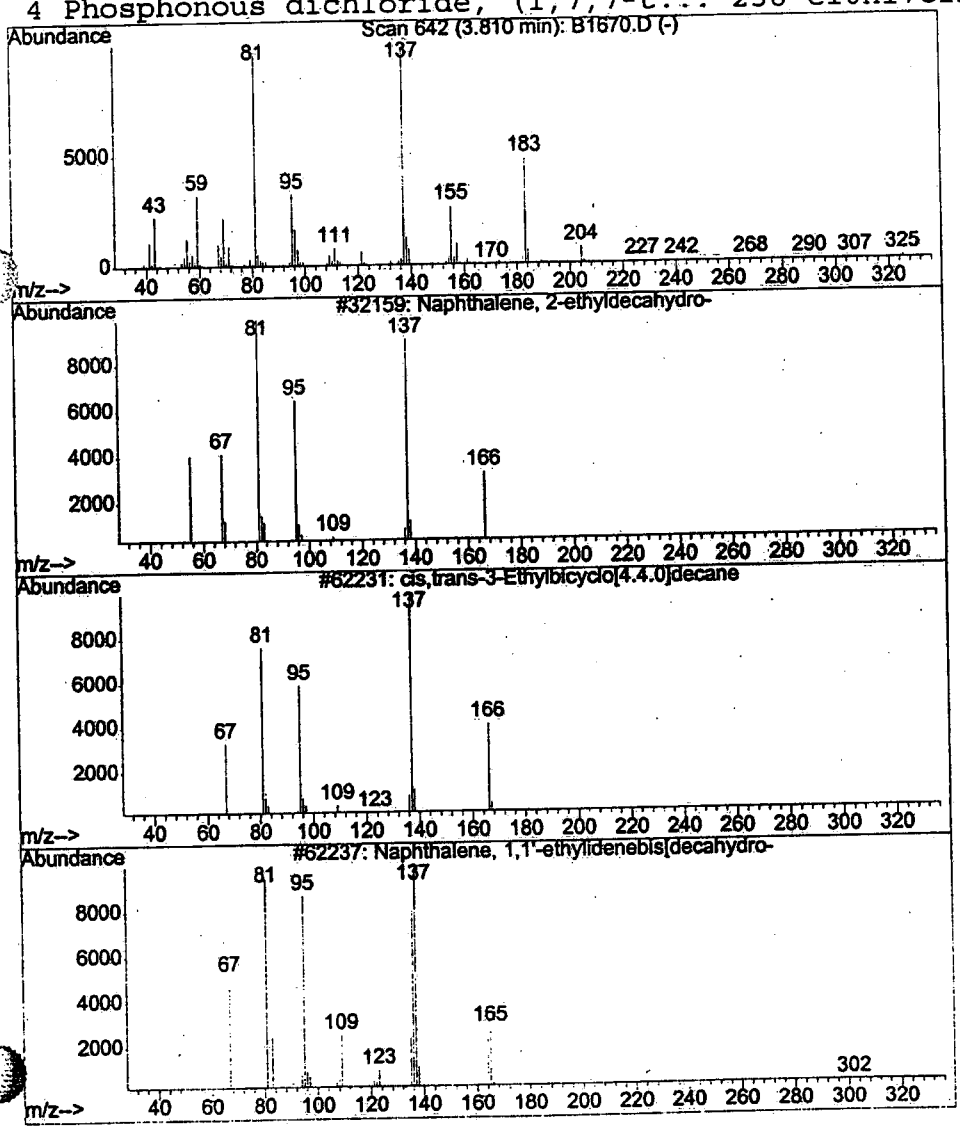
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

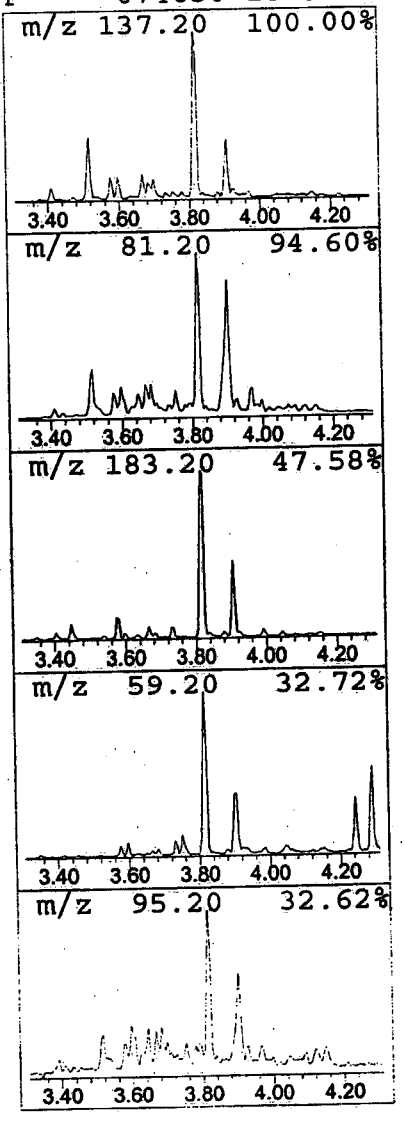
****

Peak Number 18 Unknown aromatic — Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.81	55.84 UG	1115660	Phenanthrene-d10	3.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-ethyldecahydro-	166	C12H22	001618-23-1	47
2	cis,trans-3-Ethylbicyclo[4.4.0]d...	166	C12H22	066660-41-1	38
3	Naphthalene, 1,1'-ethylidenebis[...	302	C22H38	054934-70-2	38
4	Phosphonous dichloride, (1,7,7-t...	238	C10H17Cl2P	074630-16-3	33





1427

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

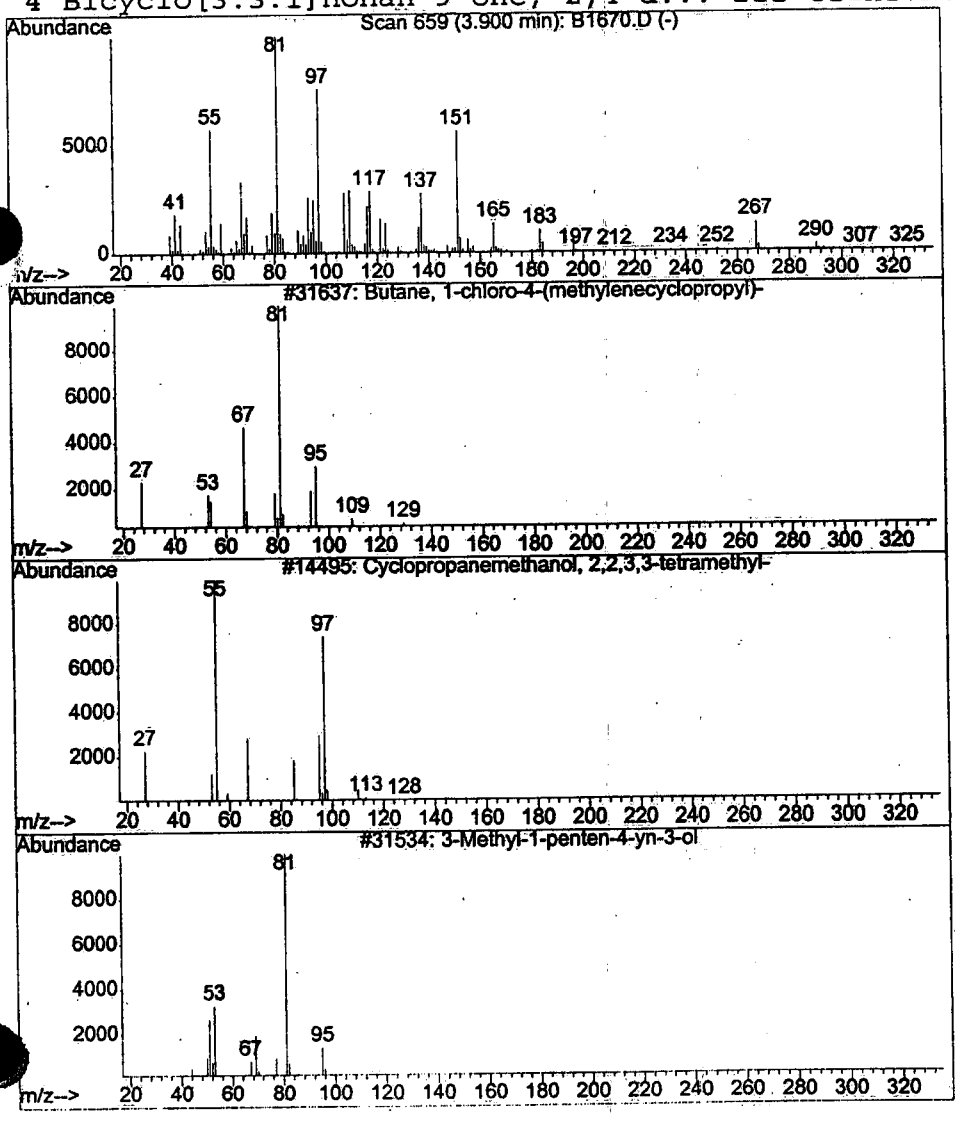
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

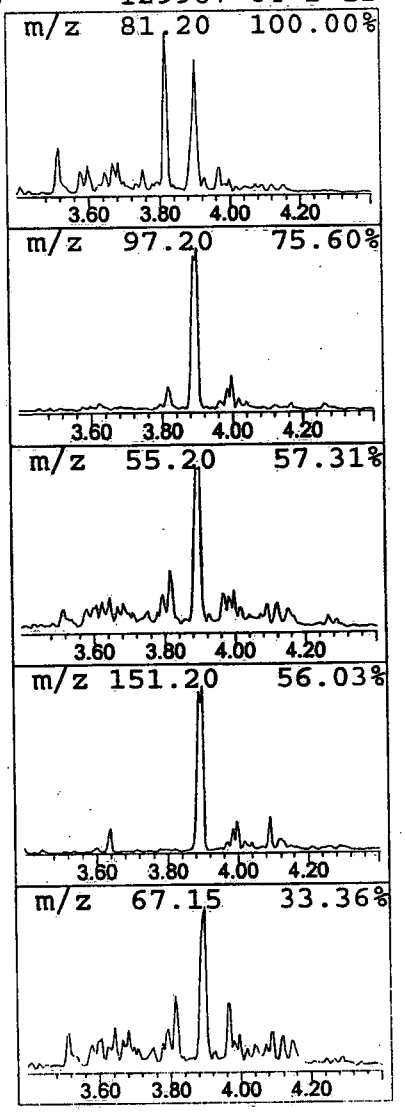
****

Peak Number 19 Unknown aromatic Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.90	100.52 UG	2008310	Phenanthrene-d10	3.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 1-chloro-4-(methylenecyc...	144	C8H13Cl	1000158-48-9	14
2	Cyclopropanemethanol, 2,2,3,3-te...	128	C8H16O	002415-96-5	14
3	3-Methyl-1-penten-4-yn-3-ol	96	C6H8O	003230-69-1	14
4	Bicyclo[3.3.1]nonan-9-one, 2,4-d...	211	C11H17NO3	129967-64-2	12





1428

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
3 Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

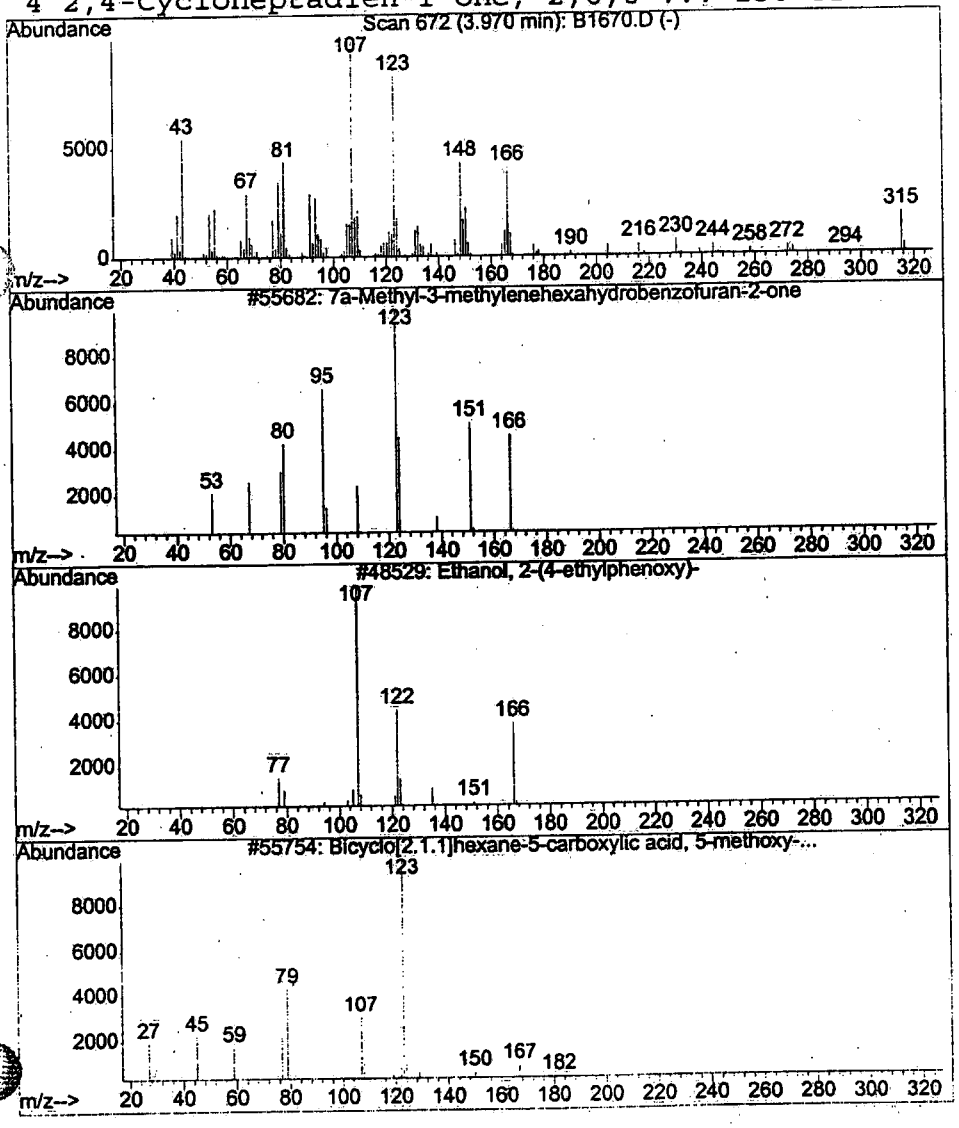
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

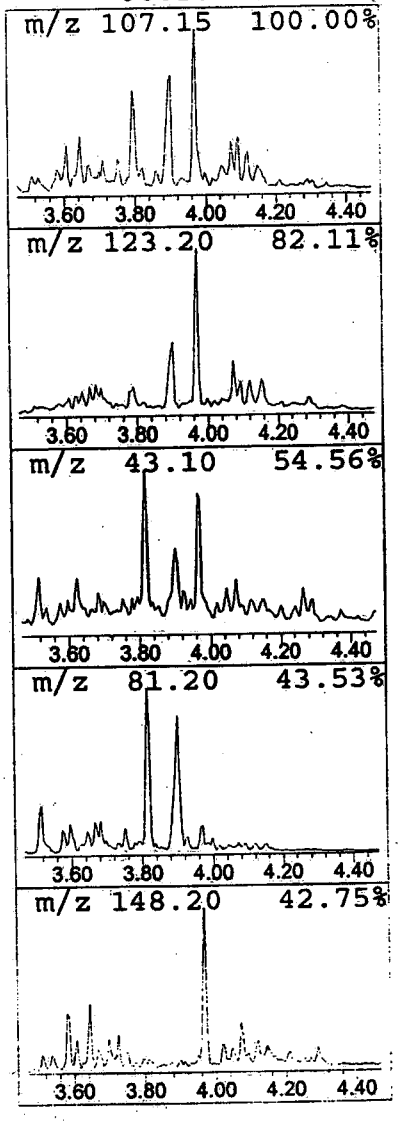
****

Peak Number 20 Unknown aromatic Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.97	136.98 UG	882442	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	7a-Methyl-3-methylenehexahydrobe...	166	C10H14O2	067498-53-7	30
2	Ethanol, 2-(4-ethylphenoxy)-	166	C10H14O2	054411-10-8	27
3	Bicyclo[2.1.1]hexane-5-carboxyli...	182	C10H14O3	1000217-20-4	22
4	2,4-Cycloheptadien-1-one, 2,6,6-...	150	C10H14O	000503-93-5	22





1429

000394

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

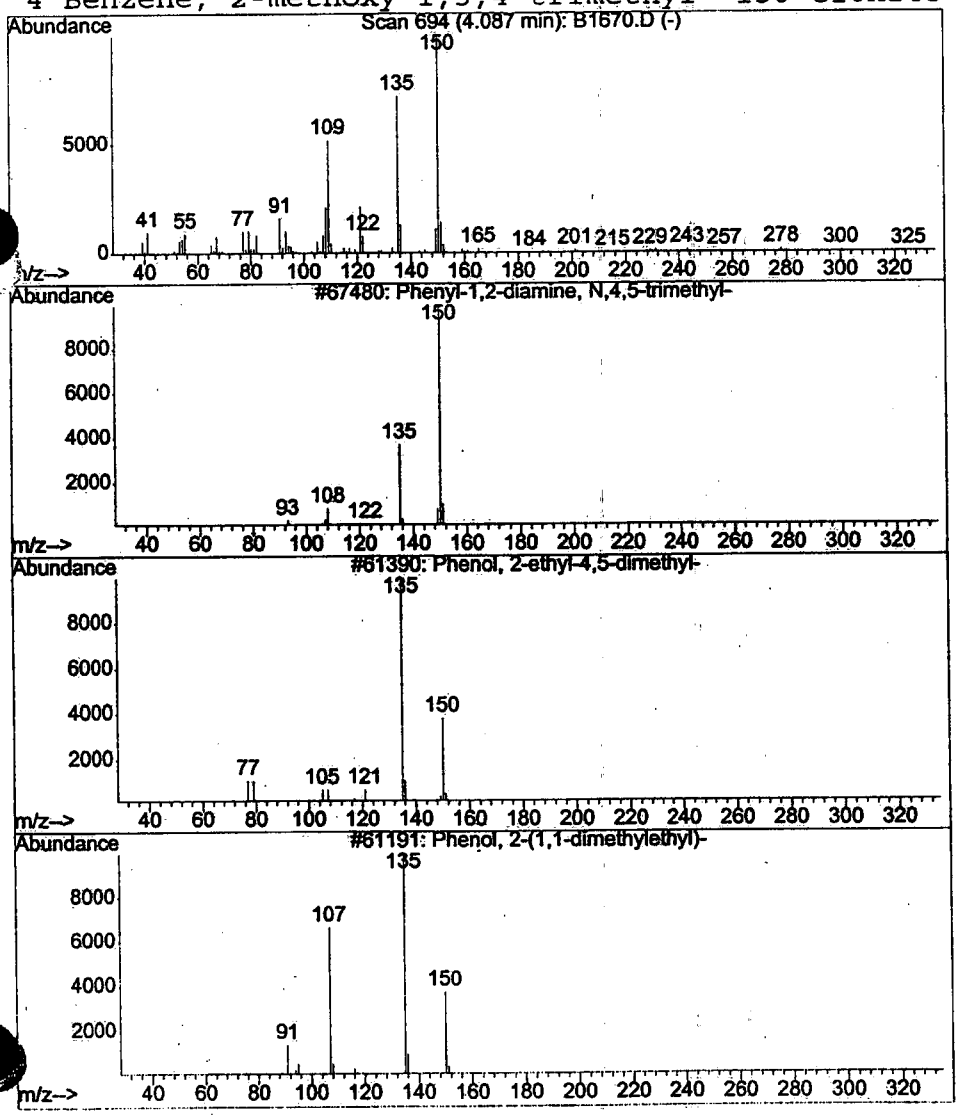
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

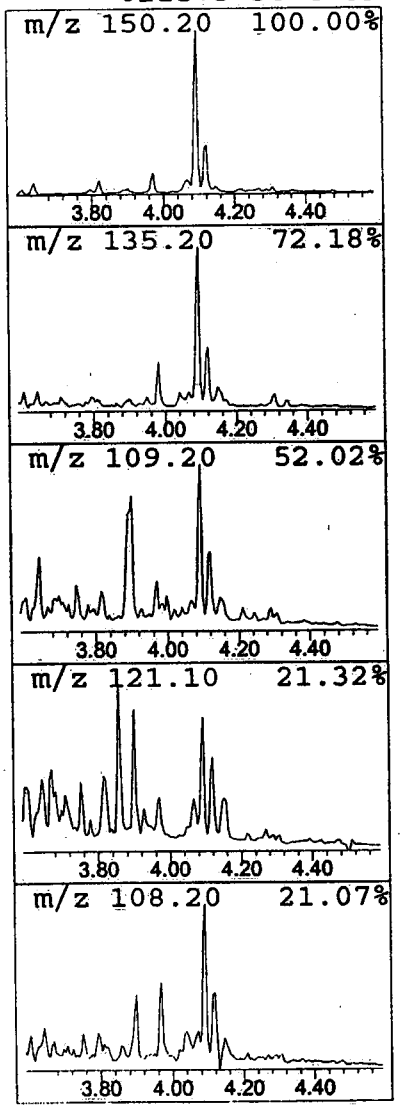
****

Peak Number 21 Unknown aromatic Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.09	83.62 UG	538681	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenyl-1,2-diamine, N,4,5-trimet...	150	C9H14N2	1000127-83-8	59
2	Phenol, 2-ethyl-4,5-dimethyl-	150	C10H14O	002219-78-5	53
3	Phenol, 2-(1,1-dimethylethyl)-	150	C10H14O	000088-18-6	52
4	Benzene, 2-methoxy-1,3,4-trimethyl-	150	C10H14O	021573-36-4	52





1430

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D
Acq On : 2 Apr 2001 12:07
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

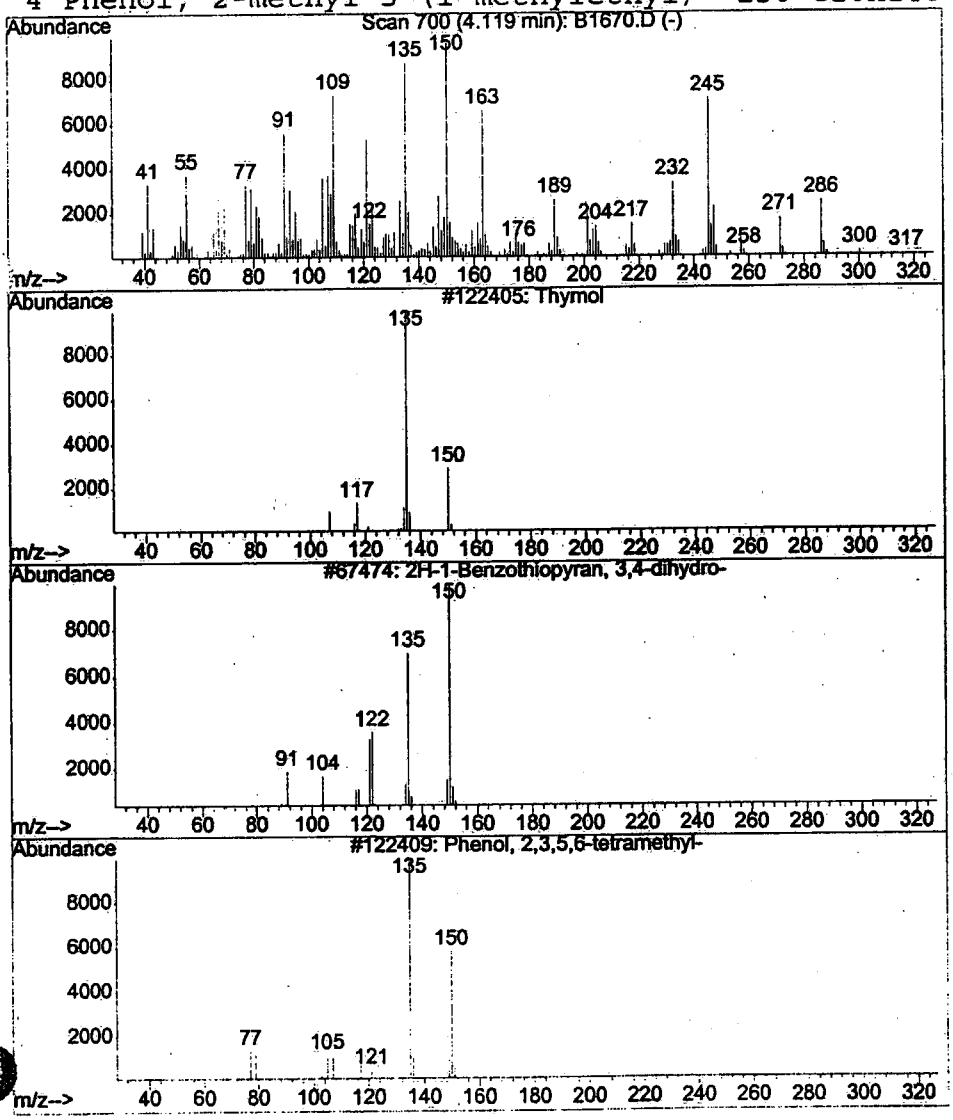
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

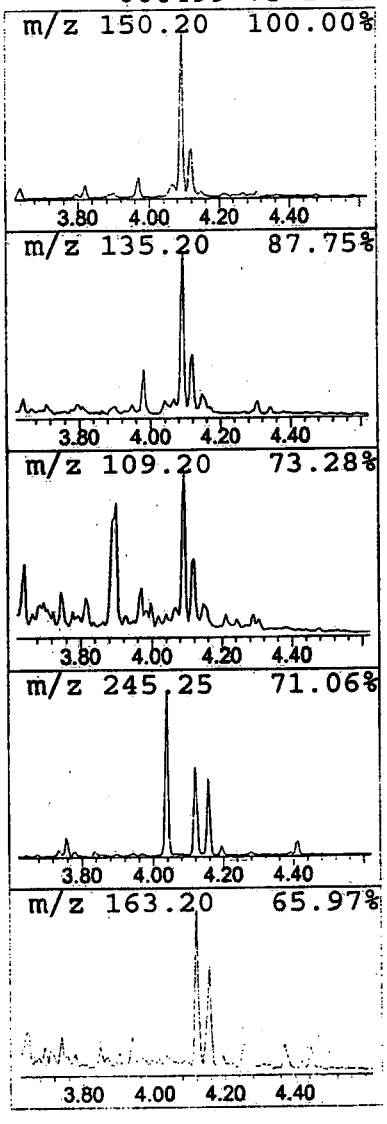
****

Peak Number 22 Unknown — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.12	133.94 UG	862849	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Thymol	150	C10H14O	000089-83-8	42
2	2H-1-Benzothiopyran, 3,4-dihydro-	150	C9H10S	002054-35-5	38
3	Phenol, 2,3,5,6-tetramethyl-	150	C10H14O	000527-35-5	30
4	Phenol, 2-methyl-5-(1-methylethyl)-	150	C10H14O	000499-75-2	27





1431

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D Vial: 18
Acq On : 2 Apr 2001 12:07 Operator: JC
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
Integration Params: LSCINT.P

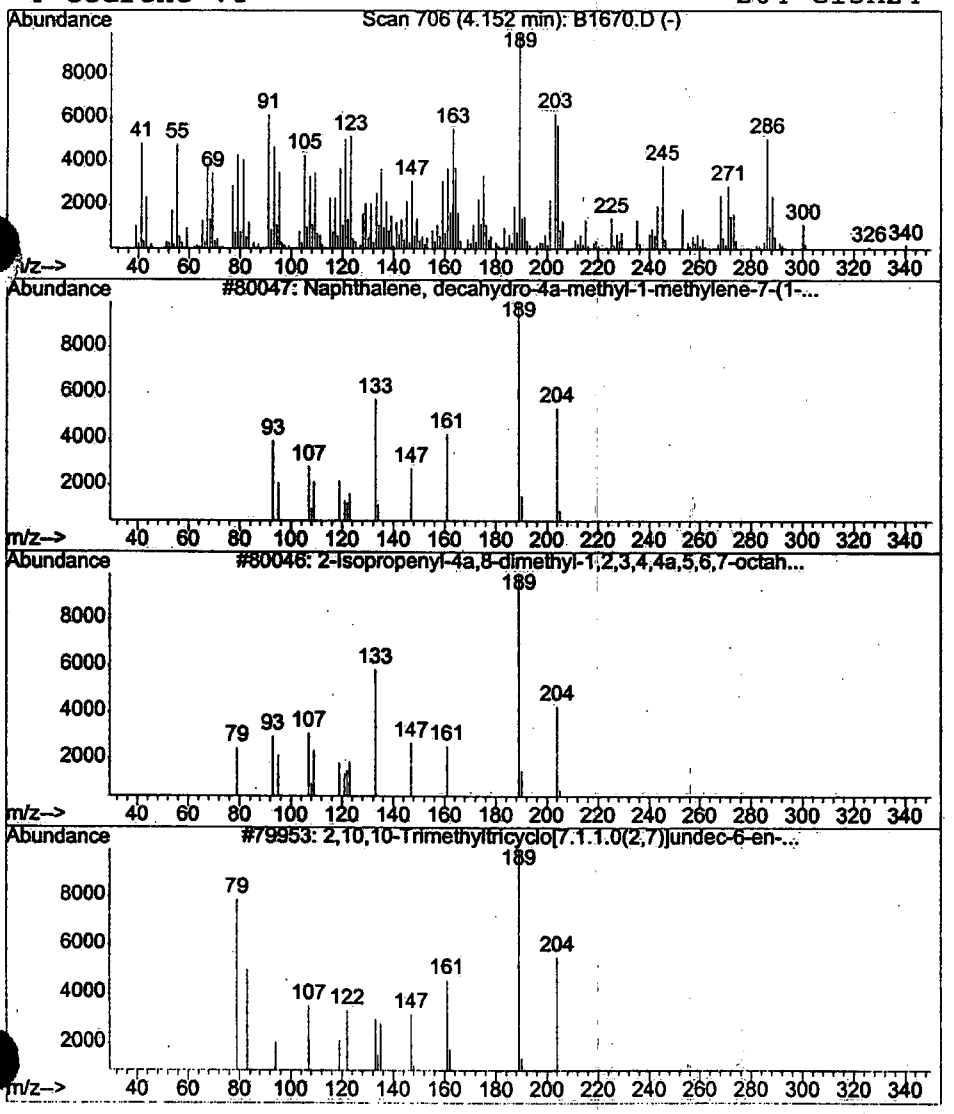
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

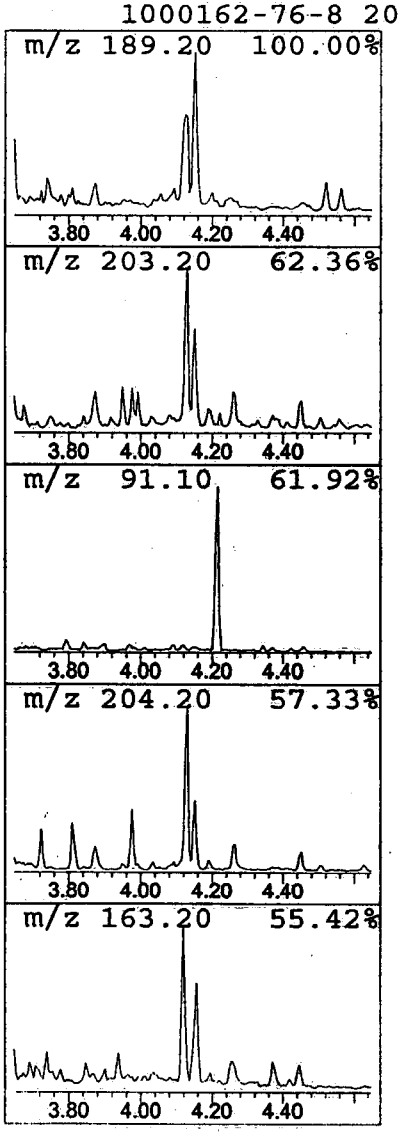
****

Peak Number 23 Unknown aromatic Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.15	101.38 UG	653086	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, decahydro-4a-methyl...	204	C15H24	000515-17-3	70
2	2-Isopropenyl-4a,8-dimethyl-1,2,...	204	C15H24	1000192-43-5	51
3	2,10,10-Trimethyltricyclo[7.1.1....	204	C14H20O	1000210-81-9	35
4	Cedrene-V6	204	C15H24	1000162-76-8	20





1432

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D Vial: 18
Acq On : 2 Apr 2001 12:07 Operator: JC
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
S Integration Params: LSCINT.P

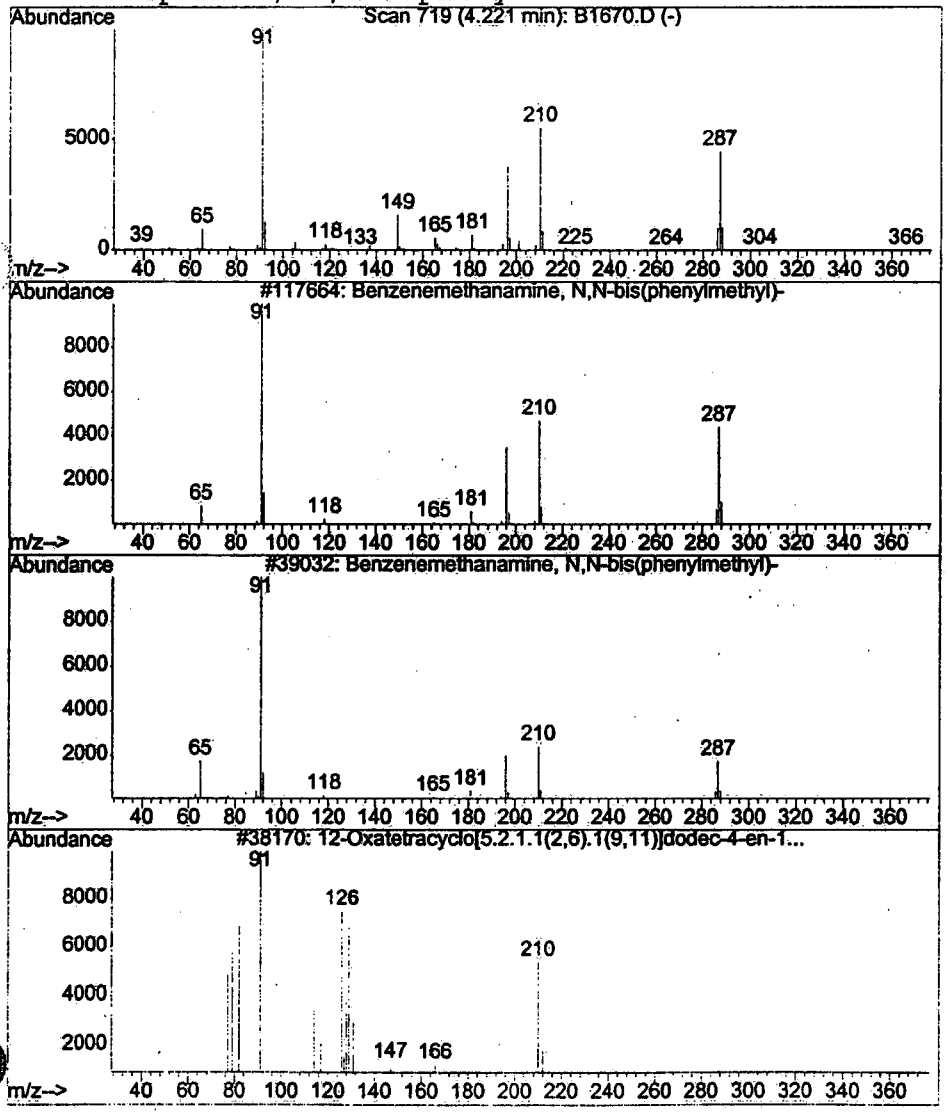
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

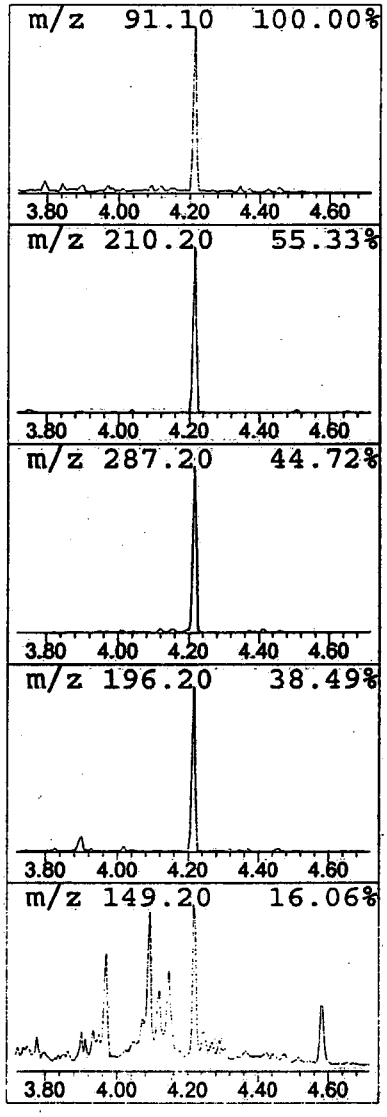
****

Peak Number 24 Unknown aromatic Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.22	144.49 UG	930775	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	97
2	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	95
3	12-Oxatetracyclo[5.2.1.1(2,6).1(...	210	C11H11ClO2	1000191-06-4	83
4	2-Propanone, 1,3-diphenyl-	210	C15H14O	000102-04-5	52





1433

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1670.D Vial: 18
Acq On : 2 Apr 2001 12:07 Operator: JC
Sample : S-19,1922-003,S,5.08g,22.7,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
Integration Params: LSCINT.P

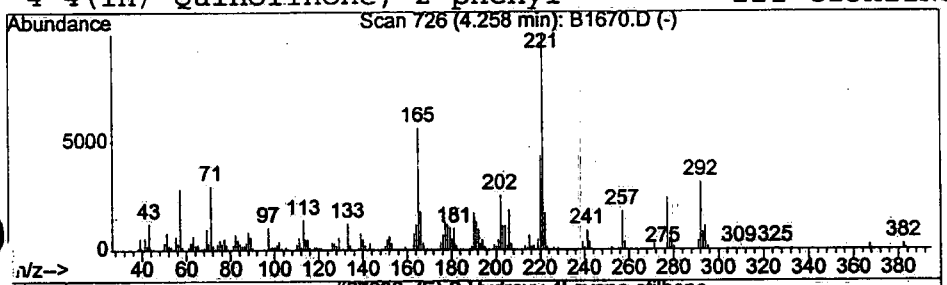
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

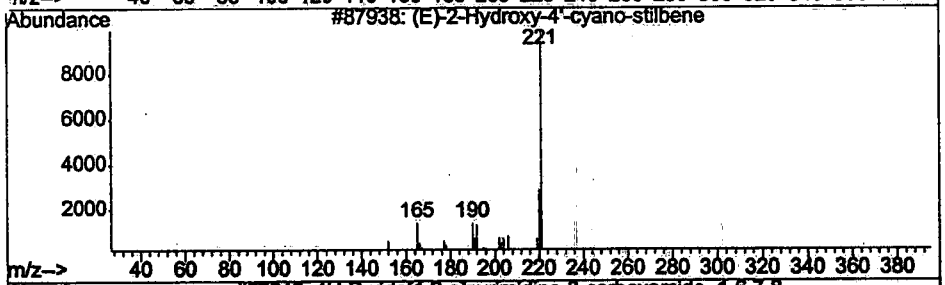
****

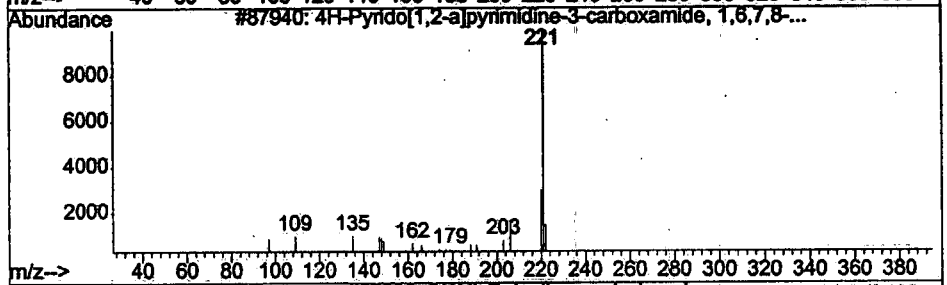
Peak Number 25 Unknown aromatic Concentration Rank 7

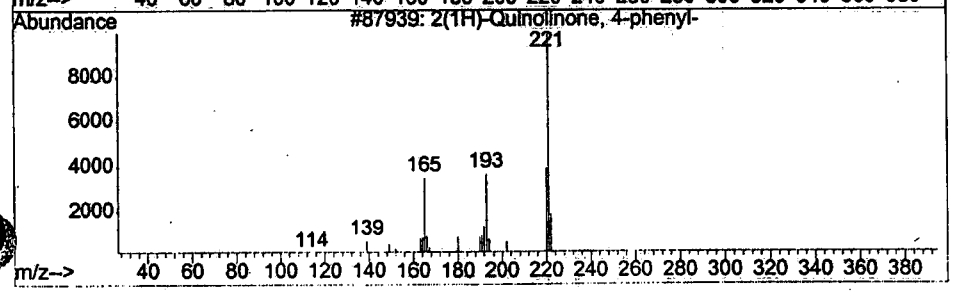
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.26	89.06 UG	573720	Chrysene-d12	4.50

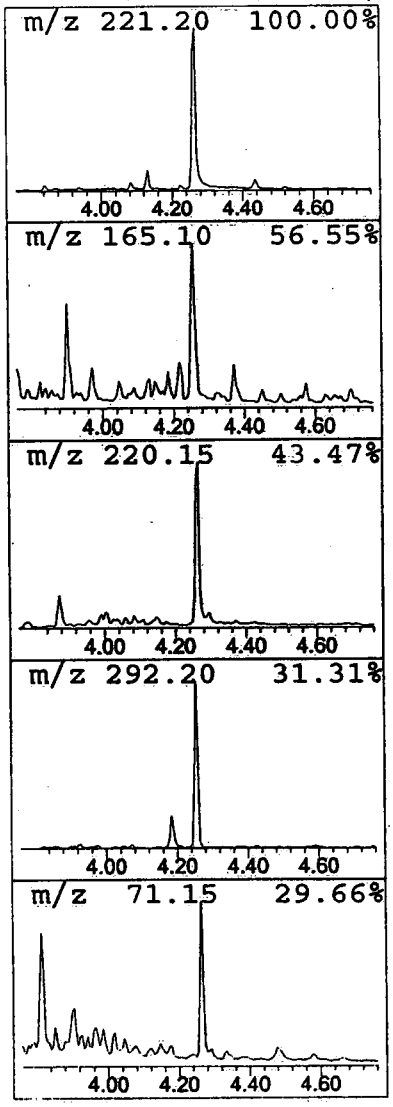
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(E)-2-Hydroxy-4'-cyano-stilbene	221	C15H11NO	1000147-85-5	70
2	4H-Pyrido[1,2-a]pyrimidine-3-car...	221	C11H15N3O2	064399-29-7	45
3	2(1H)-Quinolinone, 4-phenyl-	221	C15H11NO	005855-57-2	45
4	4(1H)-Quinolinone, 2-phenyl-	221	C15H11NO	014802-18-7	30











1434

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D Vial: 19
Acq On : 2 Apr 2001 12:21 Operator: JC
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: Apr 02 12:30:43 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

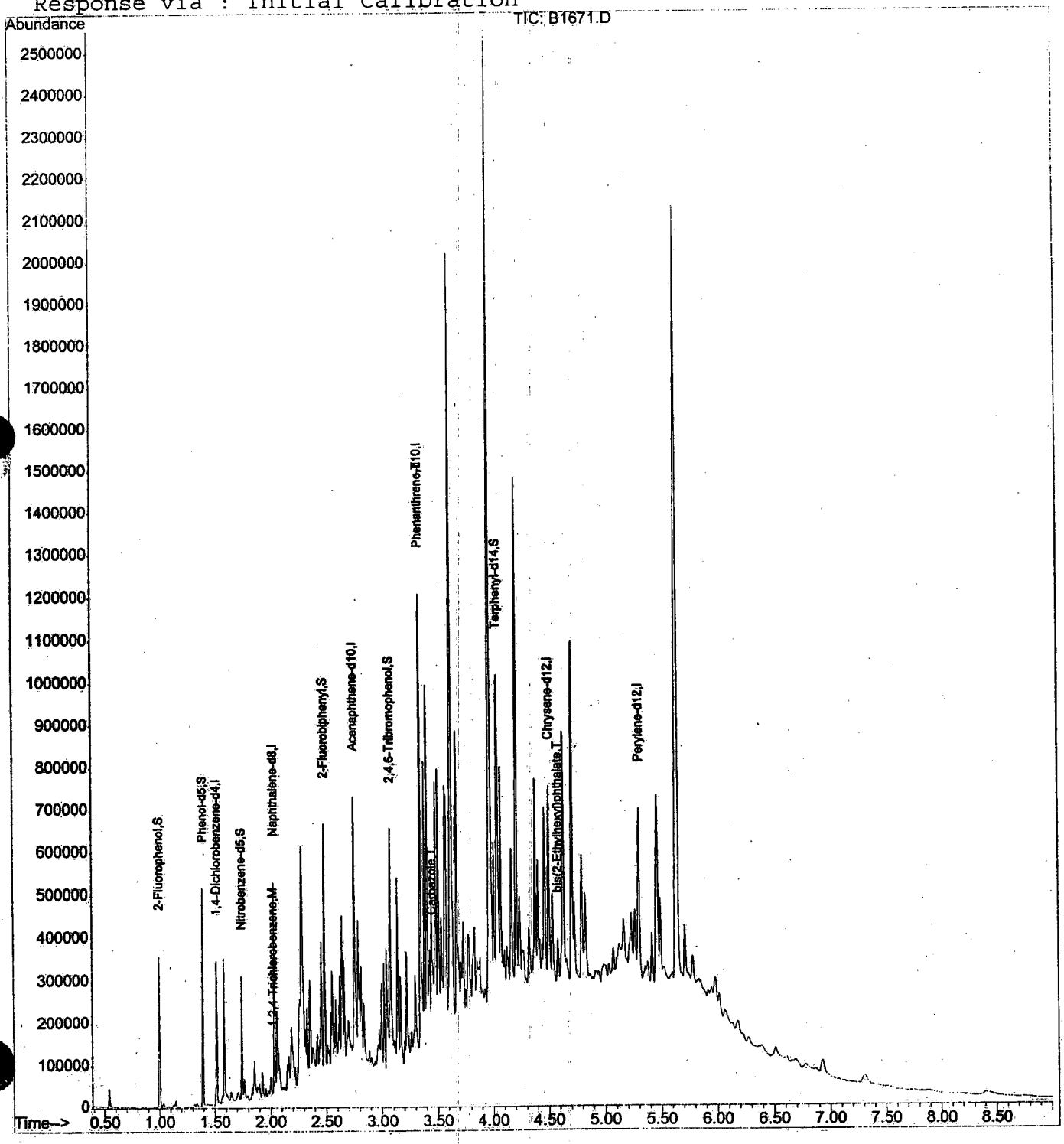
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.52	152	39736	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	151714	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	84723	40.00	UG	0.00
60) Phenanthrene-d10	3.34	188	127015	40.00	UG	-0.01
75) Chrysene-d12	4.50	240	106381	40.00	UG	-0.01
84) Perylene-d12	5.31	264	136907	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	74994	65.60	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 65.60%			
6) Phenol-d5	1.39	99	112435	80.35	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 80.35%			
23) Nitrobenzene-d5	1.74	82	40934	37.18	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 74.36%			
43) 2-Fluorobiphenyl	2.48	172	100626	43.22	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 86.44%			
64) 2,4,6-Tribromophenol	3.08	330	48384	114.40	UG	0.00
Spiked Amount 100.000	Range 54 - 135		Recovery = 114.40%			
77) Terphenyl-d14	4.04	244	108139	42.63	UG	0.00
Spiked Amount 50.000	Range 58 - 147		Recovery = 85.26%			
Target Compounds						Qvalue
32) 1,2,4-Trichlorobenzene	2.02	180	1181	1.06	UG	99
69) Phenanthrene	3.34	178	7086	2.71	UG	# 37
71) Carbazole	3.46	167	6685	2.77	UG	# 1
83) bis(2-Ethylhexyl)phthalate	4.58	149	23830	13.16	UG	# 85

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D Vial: 19
Acq On : 2 Apr 2001 12:21 Operator: JC
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 2 13:49 2001 Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



1436

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
'S Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.540	28	30	36	rBV	44600	25363	1.05%	0.093%
2	1.000	113	116	119	rVB	356069	221048	9.19%	0.813%
3	1.395	187	190	192	rBV	514118	270553	11.24%	0.995%
4	1.518	209	213	215	rBV	341859	244123	10.15%	0.898%
5	1.582	223	225	228	rBV	331025	176345	7.33%	0.649%
6	1.705	244	248	252	rBV5	20249	26097	1.08%	0.096%
7	1.742	252	255	257	rBV	293250	144545	6.01%	0.532%
8	1.764	257	259	262	rVB	45774	29757	1.24%	0.109%
9	1.854	273	276	280	rBV2	84333	67650	2.81%	0.249%
10	1.924	287	289	293	rBV2	63109	45276	1.88%	0.167%
11	2.031	307	309	312	rBV	494727	325829	13.54%	1.199%
12	2.057	312	314	321	rVB4	188490	194651	8.09%	0.716%
13	2.164	329	334	336	rBV3	81258	116163	4.83%	0.427%
14	2.186	336	338	343	rVV5	143116	170890	7.10%	0.629%
15	2.266	347	353	354	rBV4	205153	294486	12.24%	1.083%
16	2.282	354	356	361	rVV2	547850	666459	27.70%	2.452%
17	2.330	363	365	367	rVV	162459	99623	4.14%	0.366%
18	2.357	367	370	372	rVV2	222425	187154	7.78%	0.688%
19	2.378	372	374	379	rVV4	57839	77092	3.20%	0.284%
20	2.421	379	382	384	rVV4	83132	71878	2.99%	0.264%
21	2.442	384	386	387	rVV	64189	50387	2.09%	0.185%
22	2.458	387	389	391	rVB	293144	167916	6.98%	0.618%
23	2.485	391	394	397	rBV	568767	313272	13.02%	1.152%
24	2.511	397	399	401	rBV3	46707	34865	1.45%	0.128%
25	2.554	403	407	409	rBV2	222362	186271	7.74%	0.685%
26	2.586	411	413	415	rVV2	131696	62381	2.59%	0.229%
27	2.624	415	420	421	rVV2	187656	143442	5.96%	0.528%
28	2.645	421	424	425	rVV2	319083	233417	9.70%	0.859%
29	2.661	425	427	429	rVB	227037	120339	5.00%	0.443%
30	2.698	429	434	436	rBV6	85269	98424	4.09%	0.362%
31	2.752	442	444	449	rBV	590724	508799	21.14%	1.872%

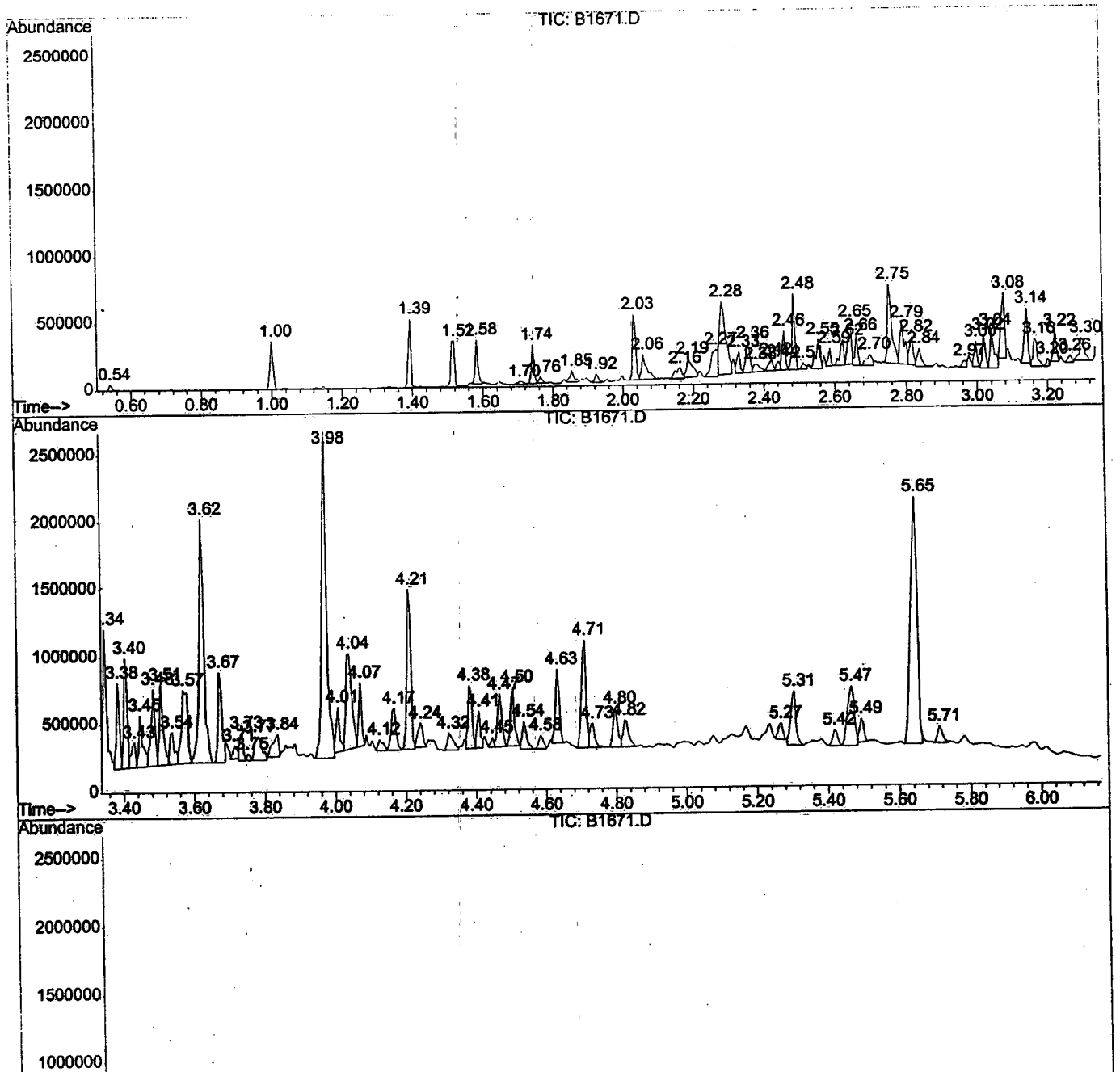
32	2.789	449	451	454	rVV3	311944	285939	11.88%	1.052%
33	2.816	454	456	458	rVV2	212511	143164	5.95%	0.527%
34	2.837	458	460	467	rVB3	138275	106390	4.42%	0.391%
35	2.966	481	484	485	rBV3	49146	45811	1.90%	0.169%
[redacted]	2.998	488	490	492	rVB	189649	102977	4.28%	0.379%
	3.019	492	494	496	rVB2	251470	133612	5.55%	0.491%
[redacted]	3.040	496	498	502	rBV2	285193	274073	11.39%	1.008%
39	3.078	502	505	506	rBV2	492725	347183	14.43%	1.277%
40	3.142	514	517	519	rBV2	414585	257727	10.71%	0.948%
41	3.163	519	521	526	rVB2	209945	176376	7.33%	0.649%
42	3.201	526	528	529	rBV	57238	34590	1.44%	0.127%
43	3.222	529	532	534	rBV	232924	135550	5.63%	0.499%
44	3.265	537	540	542	rBV2	53280	45915	1.91%	0.169%
45	3.297	542	546	552	rVB2	173517	168707	7.01%	0.621%
46	3.345	552	555	560	rBV	1067691	818065	34.00%	3.009%
47	3.382	560	562	564	rVV	634538	388146	16.13%	1.428%
48	3.404	564	566	568	rVV	812009	550133	22.86%	2.024%
49	3.430	568	571	572	rVV2	183692	152043	6.32%	0.559%
50	3.446	572	574	578	rVV3	378495	314486	13.07%	1.157%
51	3.484	578	581	583	rVV2	565490	434728	18.07%	1.599%
52	3.505	583	585	589	rVV2	589459	452627	18.81%	1.665%
53	3.537	589	591	594	rVV3	232744	227038	9.44%	0.835%
54	3.569	594	597	601	rVV3	536636	650213	27.02%	2.392%
55	3.623	601	607	613	rVB	1802583	1741666	72.38%	6.407%
56	3.671	613	616	619	rBV2	664813	539471	22.42%	1.984%
[redacted]	3.713	622	624	626	rVV3	93453	82241	3.42%	0.303%
	3.735	626	628	630	rVB2	202969	134498	5.59%	0.495%
	3.751	630	631	633	rVB2	46538	28563	1.19%	0.105%
60	3.772	633	635	641	rBV5	174881	261557	10.87%	0.962%
61	3.836	641	647	648	rBV4	163520	198400	8.25%	0.730%
62	3.975	666	673	677	rBV2	2423959	2320938	96.45%	8.538%
63	4.007	677	679	682	rVV3	329646	231765	9.63%	0.853%
64	4.039	682	685	689	rVV4	700449	841749	34.98%	3.096%
65	4.071	689	691	693	rVB2	463110	261125	10.85%	0.961%
66	4.125	699	701	705	rBV2	80986	79969	3.32%	0.294%
67	4.168	705	709	713	rBV2	308938	301271	12.52%	1.108%
68	4.210	713	717	720	rBV	1178760	972847	40.43%	3.579%
69	4.242	720	723	726	rVB3	173892	173237	7.20%	0.637%
70	4.322	736	738	743	rBV5	124154	141636	5.89%	0.521%
71	4.381	747	749	752	rVV2	466496	366976	15.25%	1.350%
72	4.408	752	754	756	rVV	271436	188805	7.85%	0.695%
73	4.445	759	761	762	rVV	71359	42633	1.77%	0.157%
74	4.467	762	765	769	rVV	387784	339586	14.11%	1.249%
75	4.504	769	772	776	rVV	432829	332357	13.81%	1.223%
76	4.536	776	778	783	rVB	206236	174855	7.27%	0.643%
77	4.584	784	787	790	rBV2	99646	95411	3.97%	0.351%
78	4.632	793	796	799	rVB2	542420	425619	17.69%	1.566%
[redacted]	4.712	806	811	813	rBV	796550	754064	31.34%	2.774%
	4.734	813	815	823	rVV	179284	157109	6.53%	0.578%
81	4.798	824	827	830	rBV	287431	275982	11.47%	1.015%

82	4.825	830	832	838	rVB	196672	208532	8.67%	0.767%
83	5.268	912	915	917	rVV2	120152	108144	4.49%	0.398%
84	5.305	918	922	927	rVB	401407	400939	16.66%	1.475%
85	5.418	940	943	947	rVB	118068	113468	4.72%	0.417%
86	5.466	947	952	955	rBV	440955	594054	24.69%	2.185%
	5.492	955	957	960	rVB	171577	145448	6.04%	0.535%
88	5.647	979	986	989	rBV	1830164	2406274	100.00%	8.851%
89	5.711	995	998	1003	rBV	123364	123887	5.15%	0.456%

Sum of corrected areas: 27185064

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Operator : JC
Acquired : 2 Apr 2001 12:21 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-20,1922-004,S,5.20g,15.7,03/30/01
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,1
Vial Number: 19
Quant File :BS1201.RES (RTE Integrator)



1440

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
'S Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

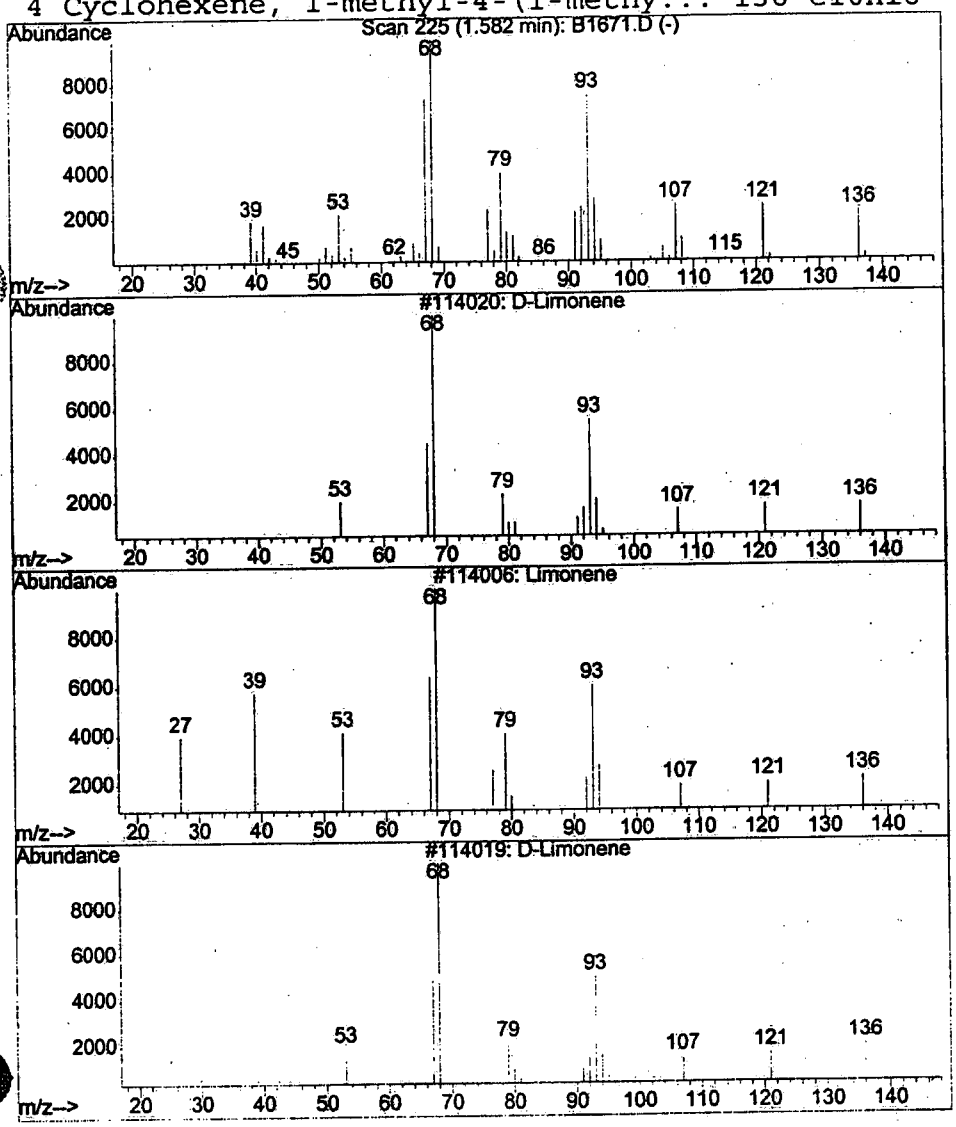
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

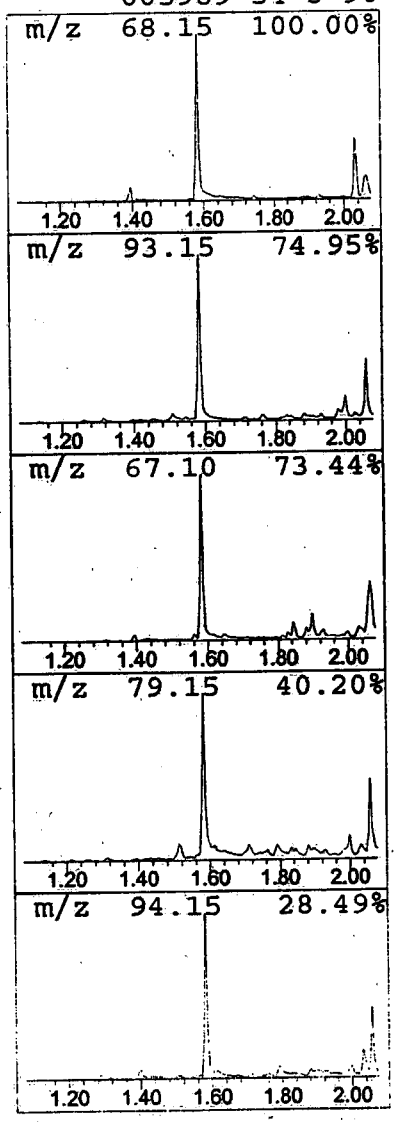
****

Peak Number 1 D-Limonene Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.58	28.89 UG	176345	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Limonene	136	C10H16	005989-27-5	94
2	Limonene	136	C10H16	000138-86-3	94
3	D-Limonene	136	C10H16	005989-27-5	93
4	Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	005989-54-8	90





1441

000106

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
IS Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

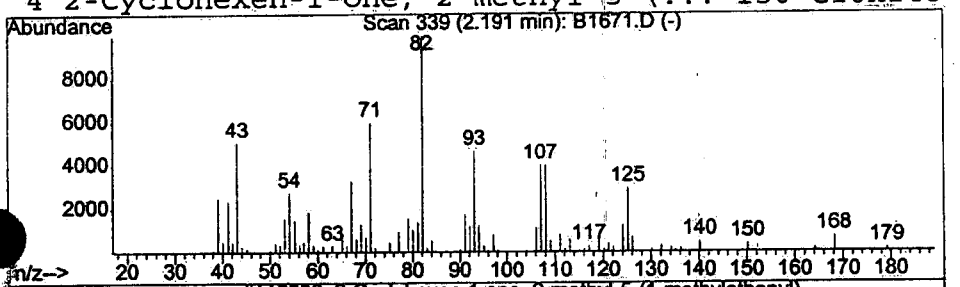
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

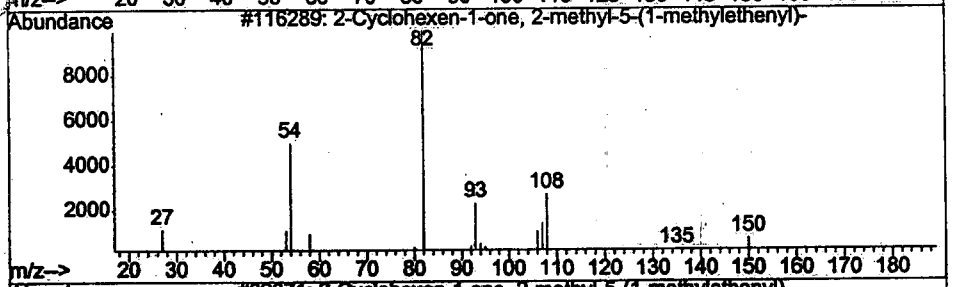
****

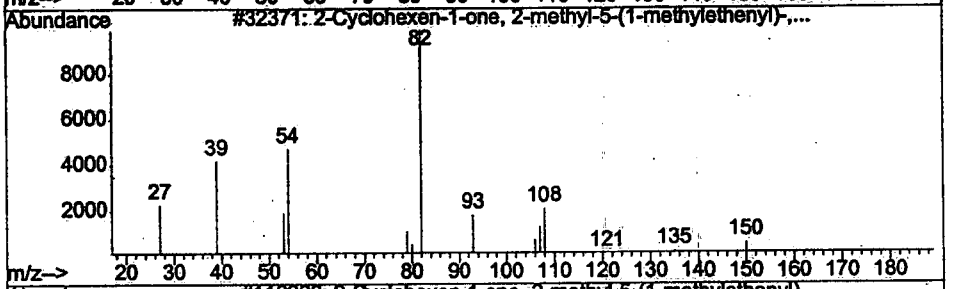
Peak Number 2 Unknown alkane Concentration Rank 19

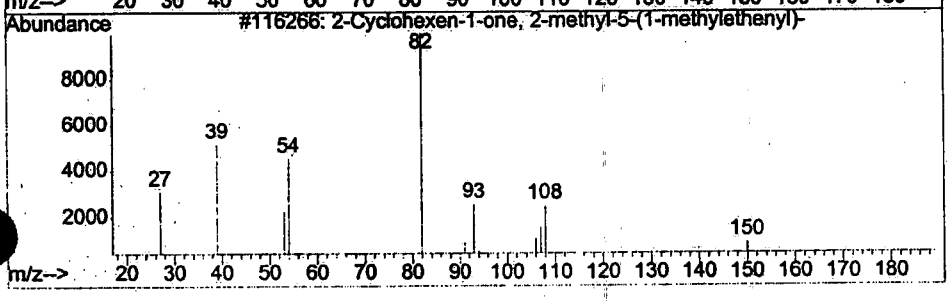
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.19	20.98 UG	170890	Naphthalene-d8	2.03

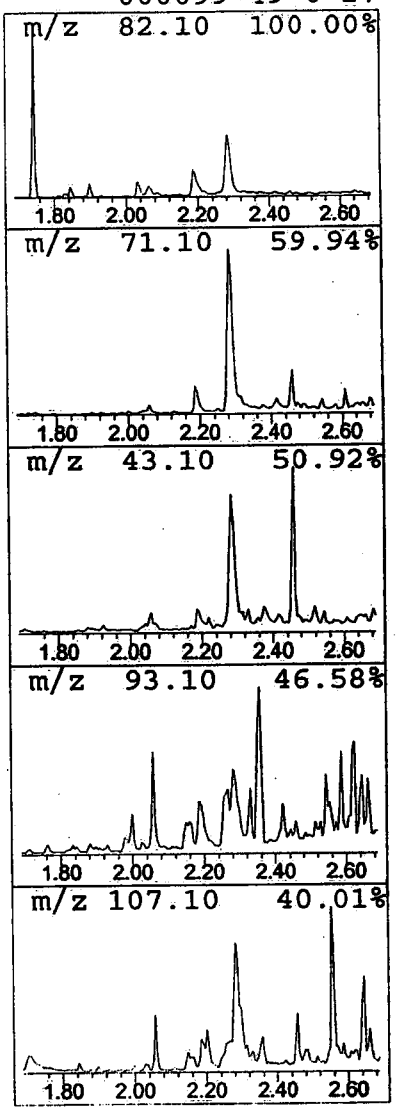
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclohexen-1-one, 2-methyl-5-(...	150	C10H14O	000099-49-0	32
2	2-Cyclohexen-1-one, 2-methyl-5-(...	150	C10H14O	006485-40-1	32
3	2-Cyclohexen-1-one, 2-methyl-5-(...	150	C10H14O	000099-49-0	27
4	2-Cyclohexen-1-one, 2-methyl-5-(...	150	C10H14O	000099-49-0	27











1442

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
'S Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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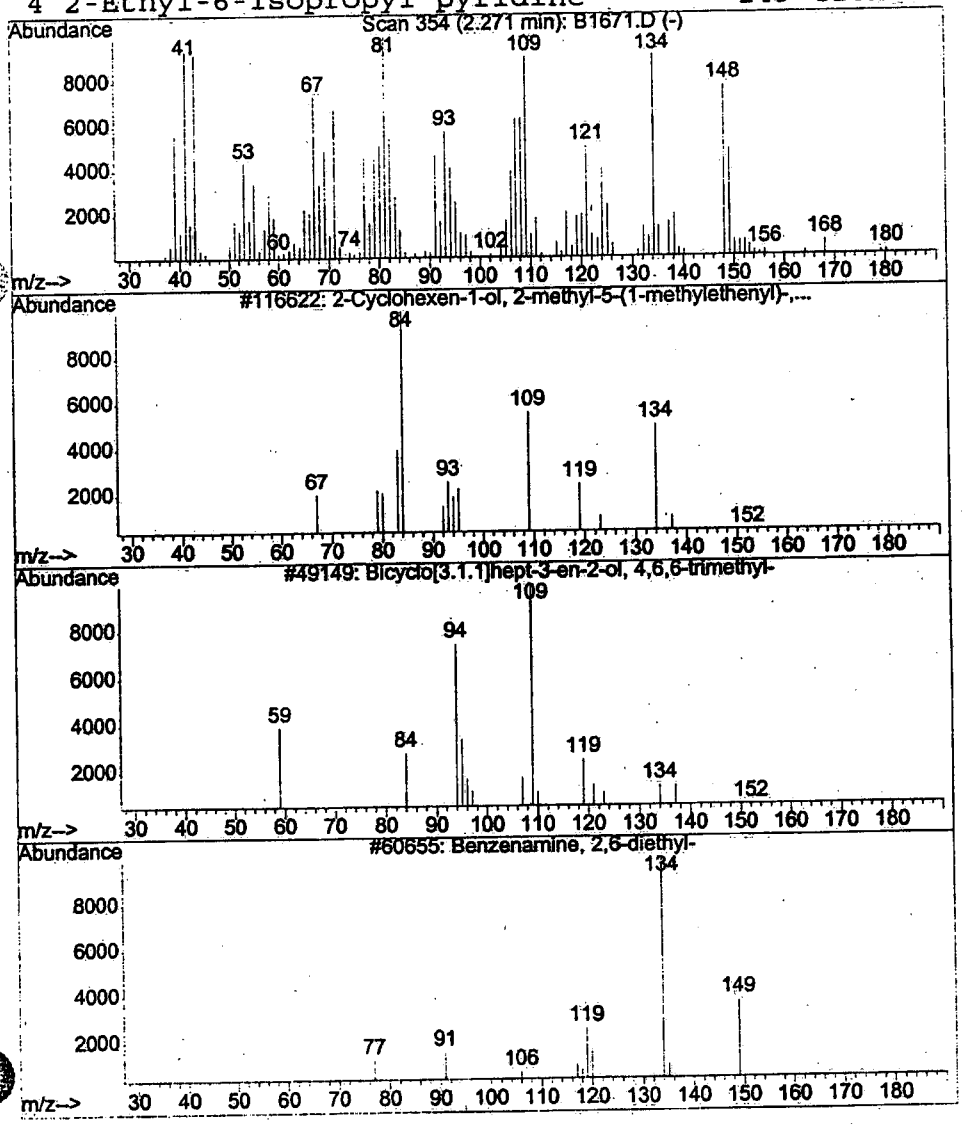
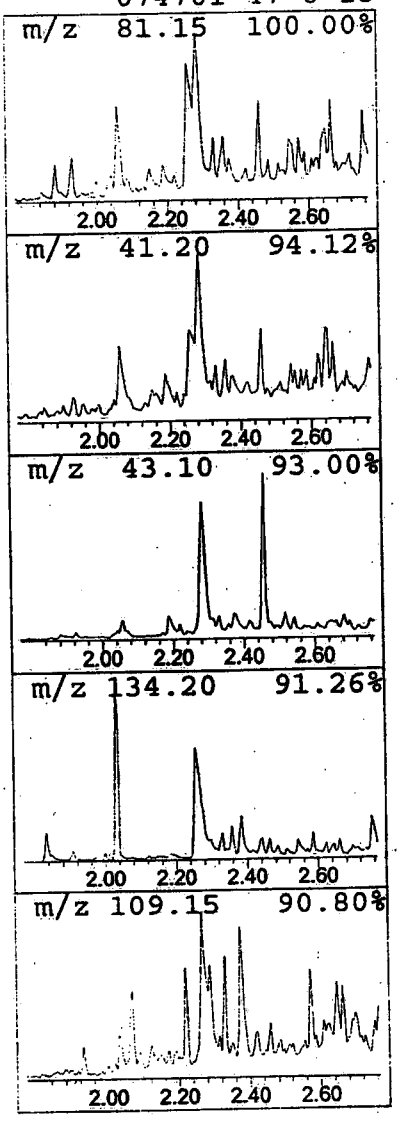
Peak Number 3 Unknown alkane Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.27	36.15 UG	294486	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclohexen-1-ol, 2-methyl-5-(1...	152	C10H16O	001197-06-4	35
2	Bicyclo[3.1.1]hept-3-en-2-ol, 4,...	152	C10H16O	000473-67-6	30
3	Benzenamine, 2,6-diethyl-	149	C10H15N	000579-66-8	20
4	2-Ethyl-6-isopropyl pyridine	149	C10H15N	074701-47-6	18





1443

000408

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
IS Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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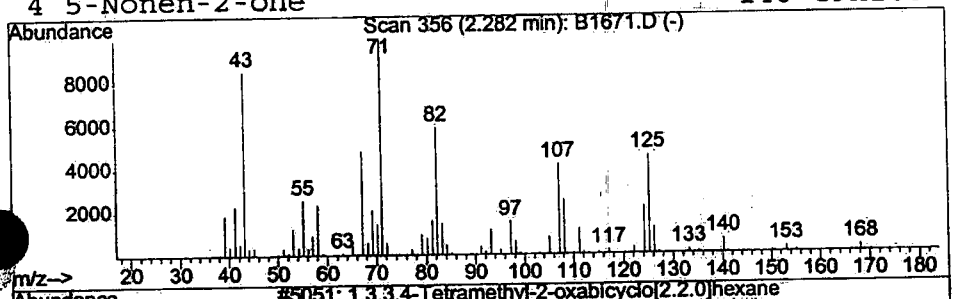
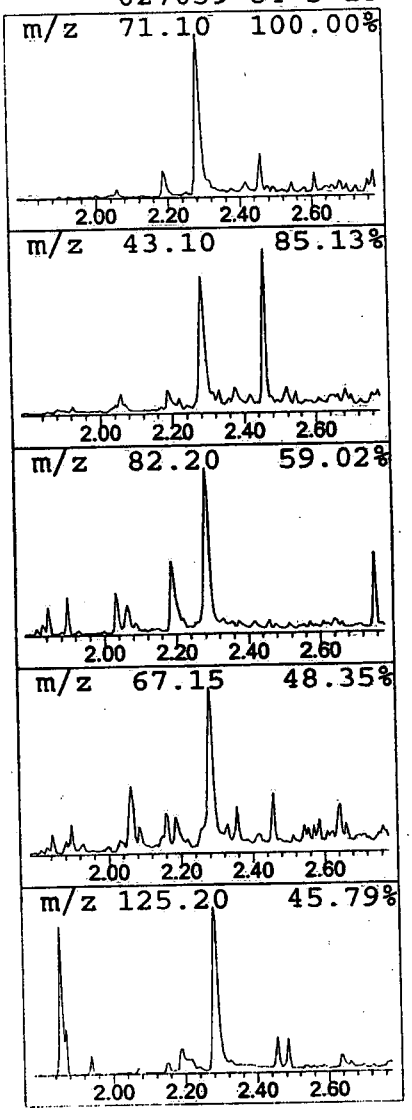
Peak Number 4 Unknown alkane — Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.28	81.82 UG	666459	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3,3,4-Tetramethyl-2-oxabicyclo...	140	C9H16O	1000191-68-1	38
2	3-Nonen-2-one, 3-ethyl-	168	C11H20O	056312-56-2	25
3	Ethanone, 1-(3-ethylcyclobutyl)-	126	C8H14O	056335-71-8	22
4	5-Nonen-2-one	140	C9H16O	027039-84-5	18





1414

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
IS Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

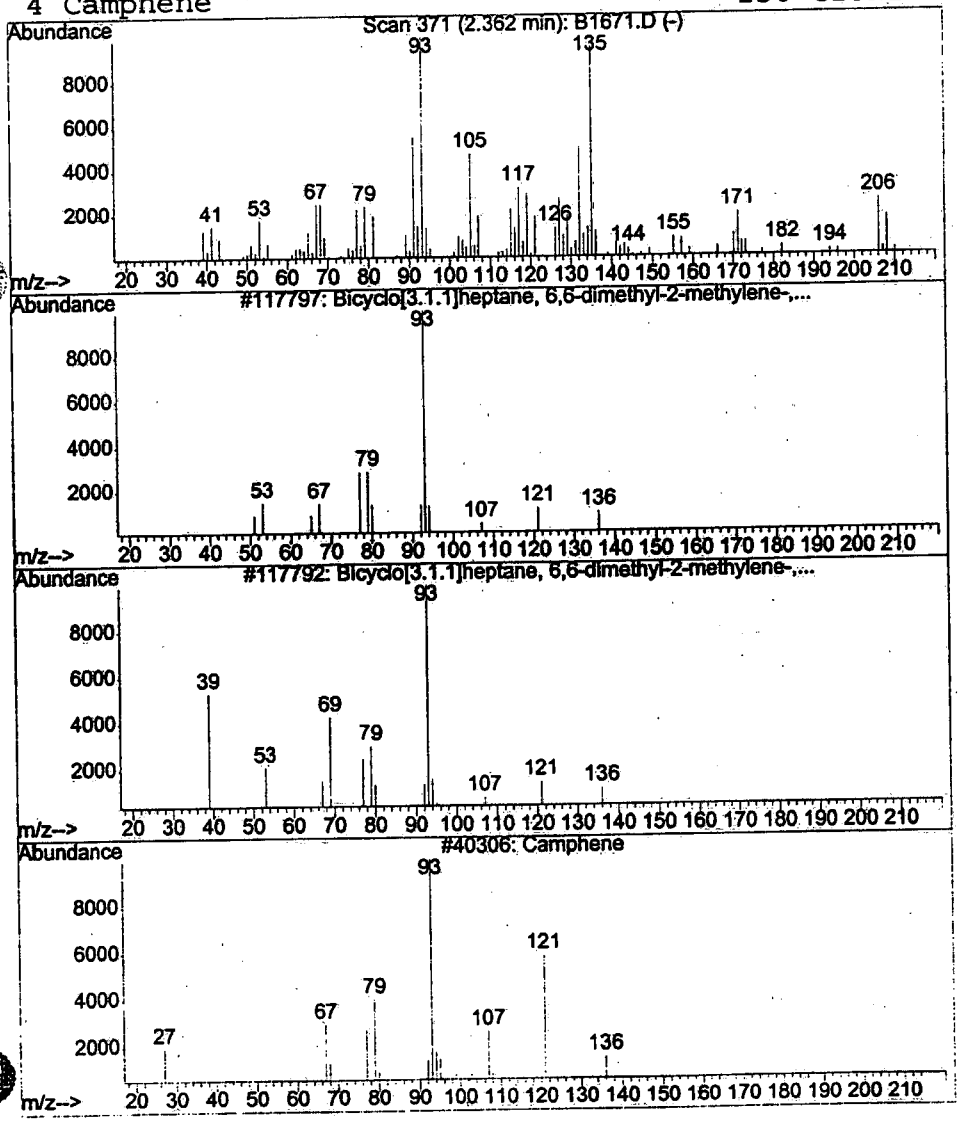
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

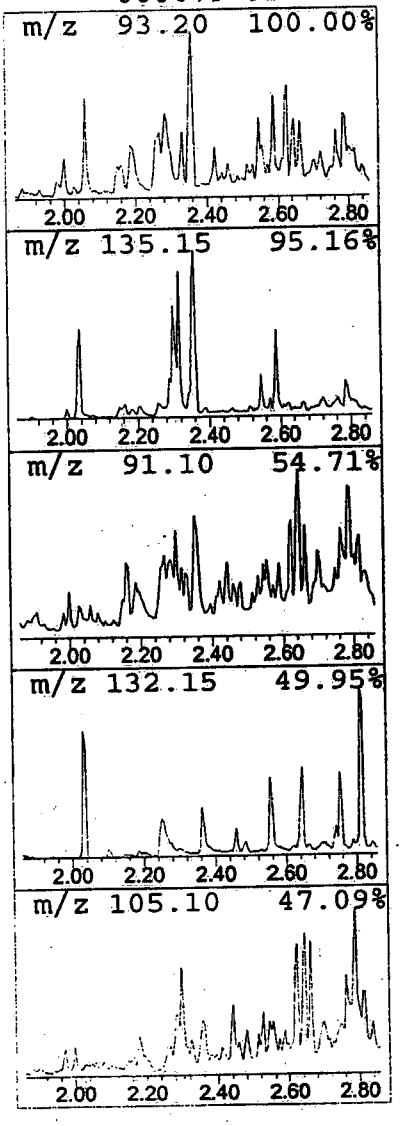
****

Peak Number 5 Unknown alkane — Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.36	22.98 UG	187154	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[3.1.1]heptane, 6,6-dimet...	136	C10H16	018172-67-3	38
2	Bicyclo[3.1.1]heptane, 6,6-dimet...	136	C10H16	018172-67-3	38
3	Camphene	136	C10H16	000079-92-5	38
4	Camphene	136	C10H16	000079-92-5	38





1445

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D Vial: 19
Acq On : 2 Apr 2001 12:21 Operator: JC
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
IS Integration Params: LSCINT.P

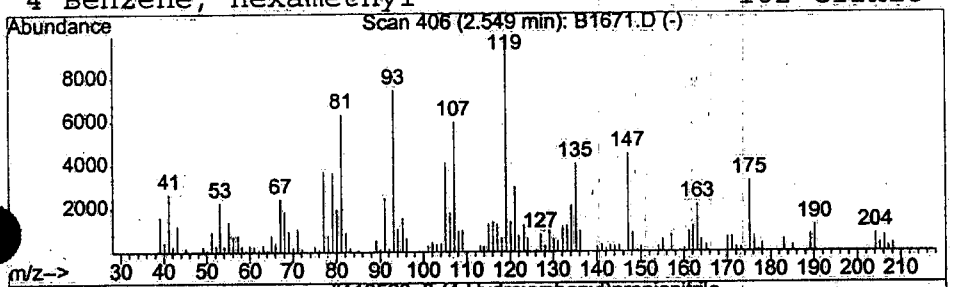
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

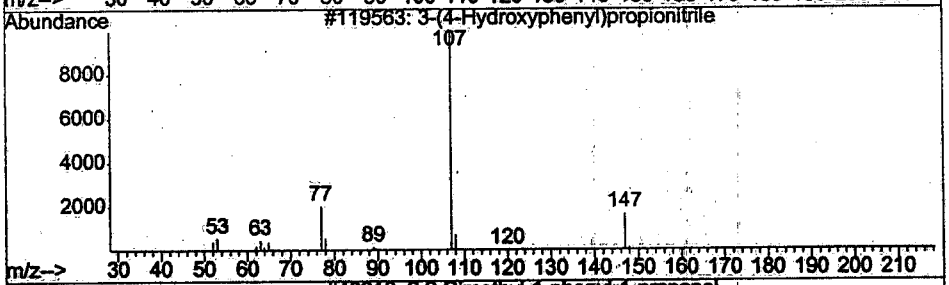
****

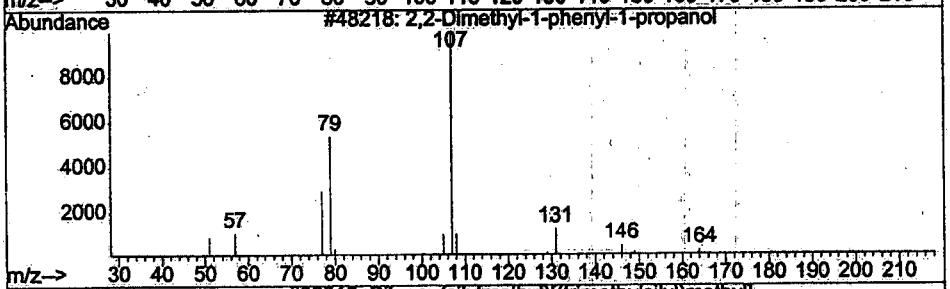
Peak Number 6 Unknown aromatic Concentration Rank 24

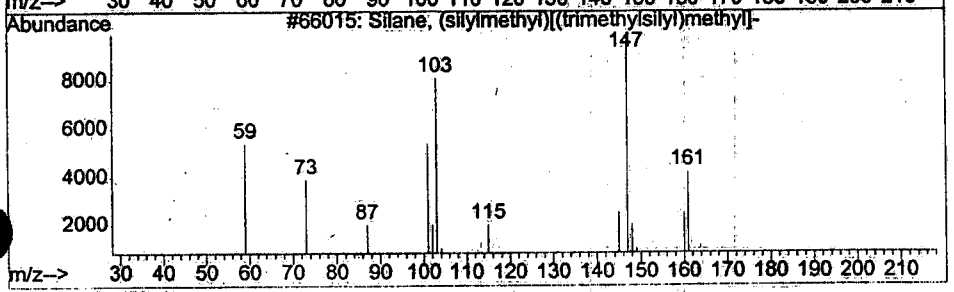
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.55	14.64 UG	186271	Acenaphthene-d10	2.75

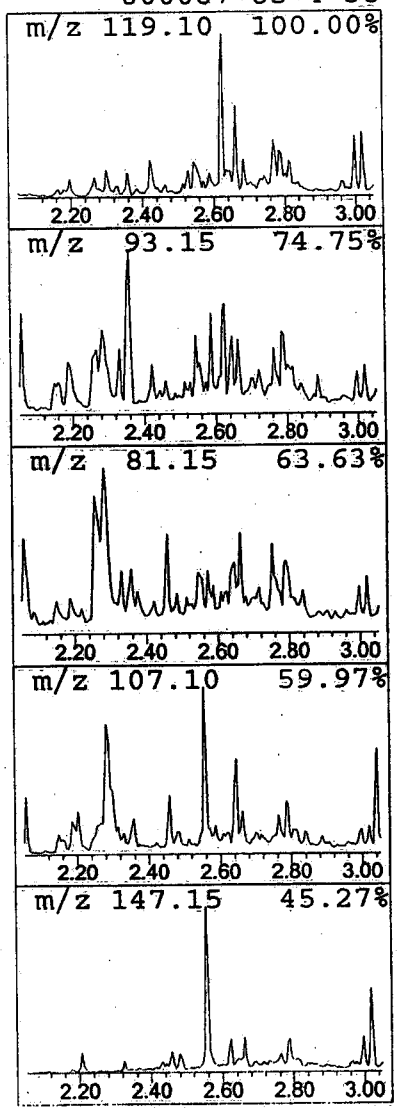
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-(4-Hydroxyphenyl)propionitrile	147	C9H9NO	017362-17-3	52
2	2,2-Dimethyl-1-phenyl-1-propanol	164	C11H16O	003835-64-1	38
3	Silane, (silylmethyl)[(trimethyl...	162	C5H18Si3	055836-80-1	38
4	Benzene, hexamethyl-	162	C12H18	000087-85-4	38











1446

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

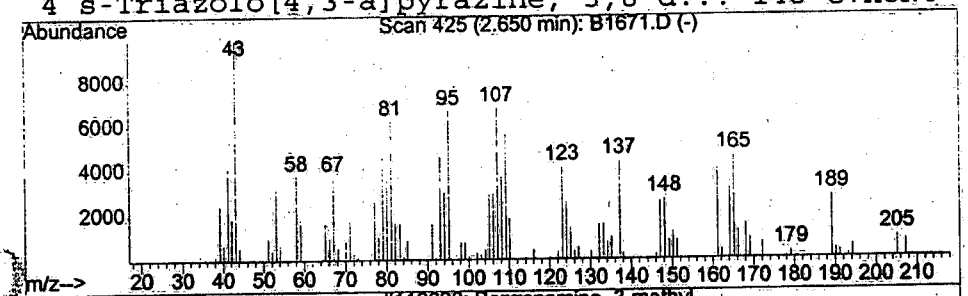
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

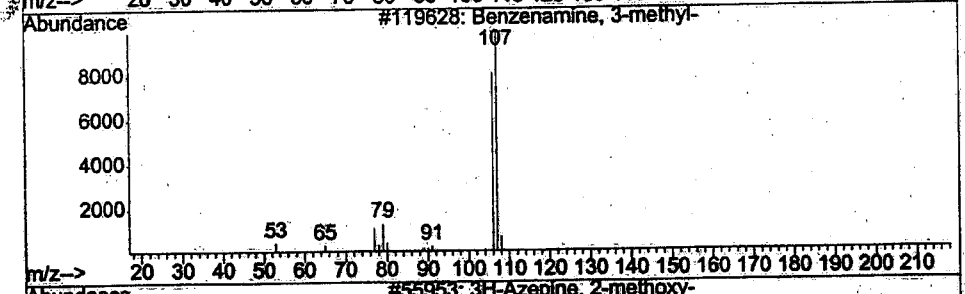
****

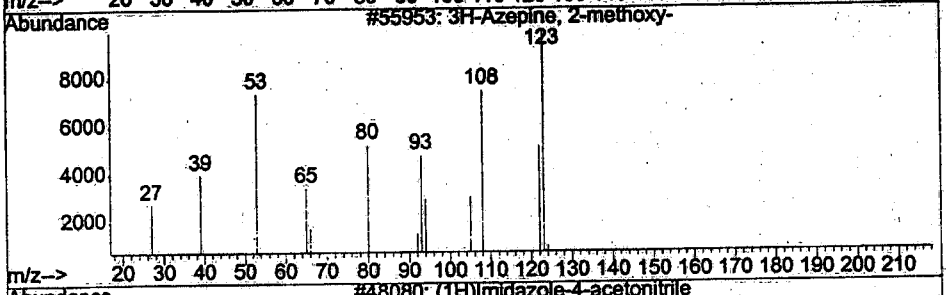
Peak Number 7 Unknown aromatic — Concentration Rank 22

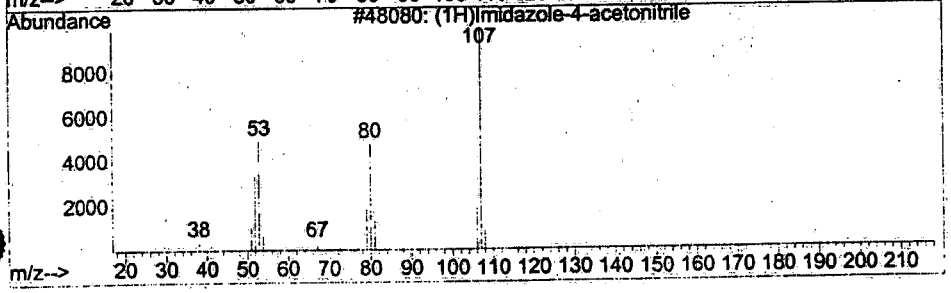
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.65	18.35 UG	233417	Acenaphthene-d10	2.75

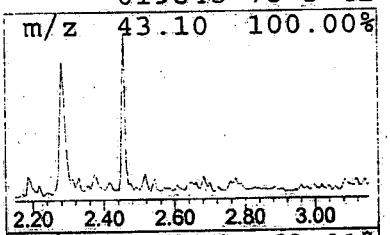
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenamine, 3-methyl-	107	C7H9N	000108-44-1	46
2	3H-Azepine, 2-methoxy-	123	C7H9NO	1000161-33-4	45
3	(1H)Imidazole-4-acetonitrile	107	C5H5N3	018502-05-1	43
4	s-Triazolo[4,3-a]pyrazine, 3,8-d...	148	C7H8N4	019848-78-3	42

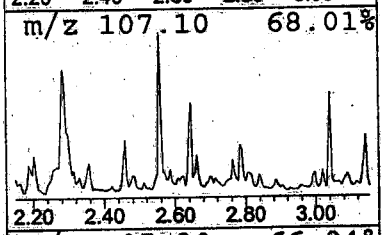


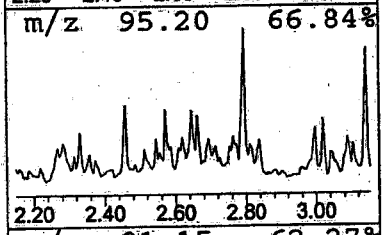


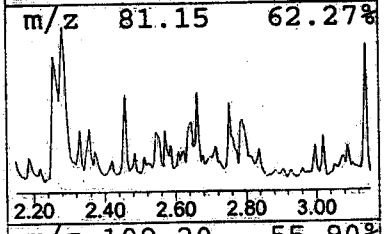


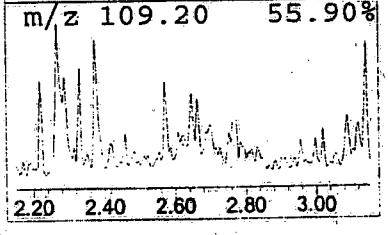












1447

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
IS Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

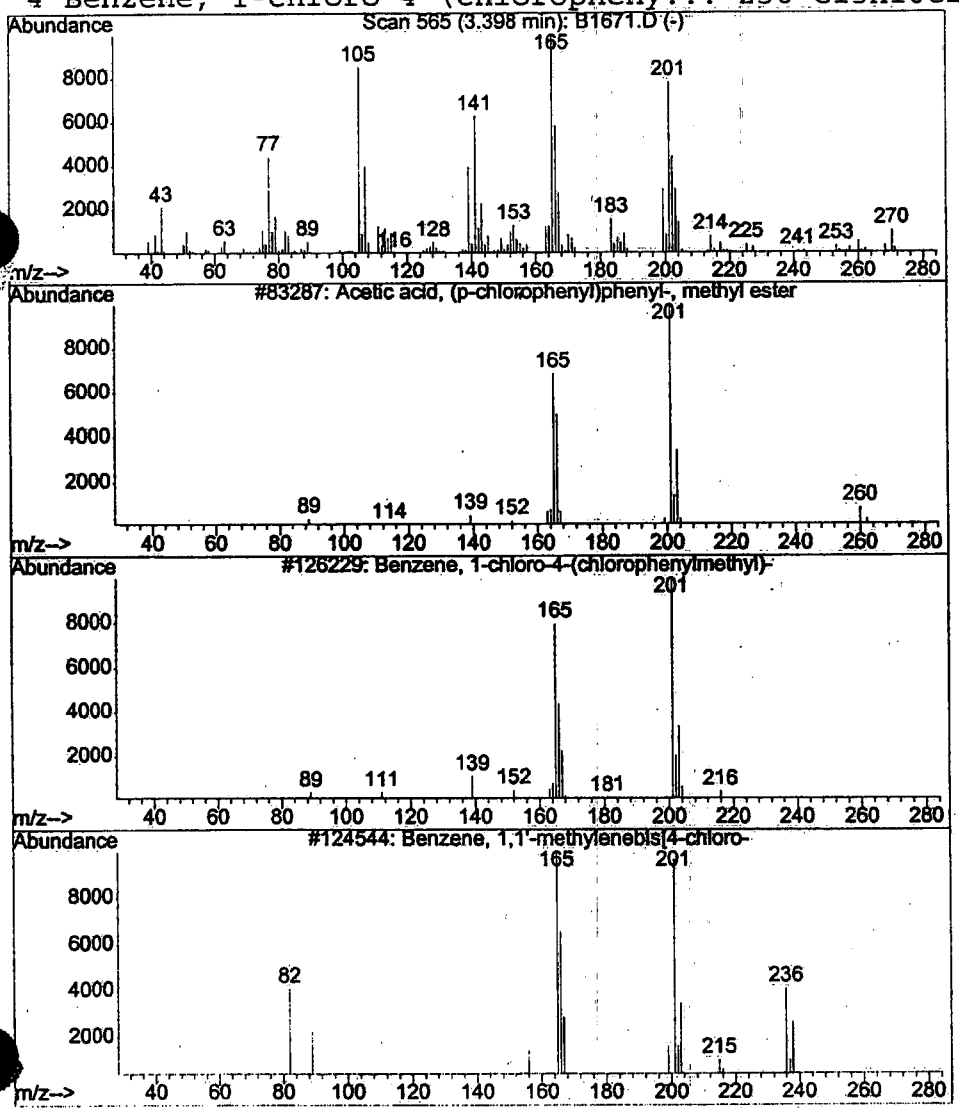
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

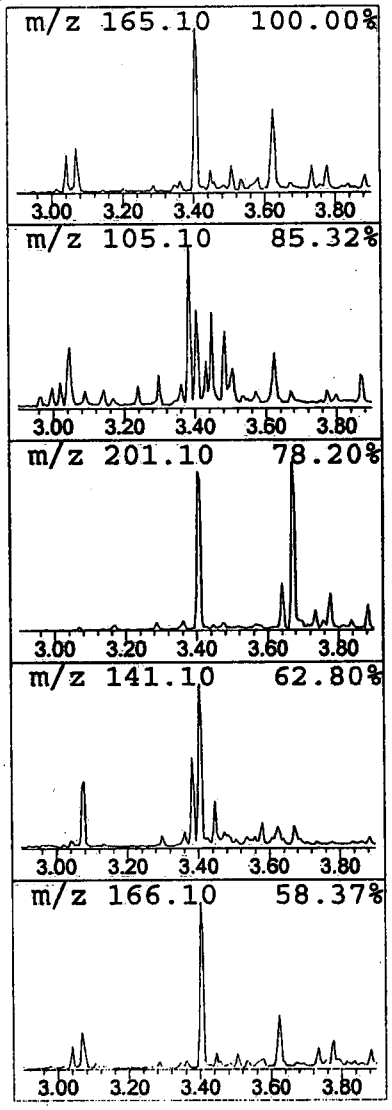
****

Peak Number 8 Unknown aromatic — Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.40	26.90 UG	550133	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	60
2	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	53
3	Benzene, 1,1'-methylenebis[4-chl...	236	C13H10Cl2	000101-76-8	50
4	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	47





1448

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

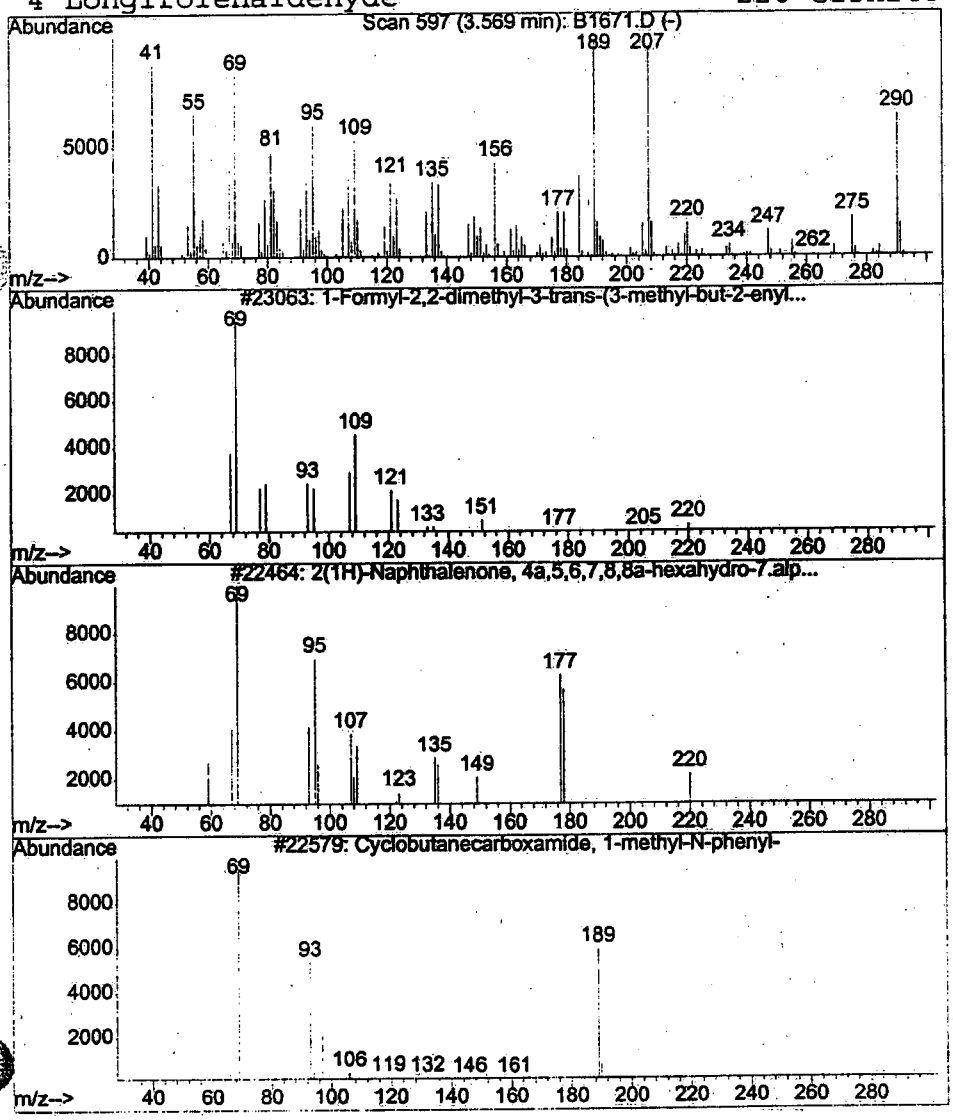
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

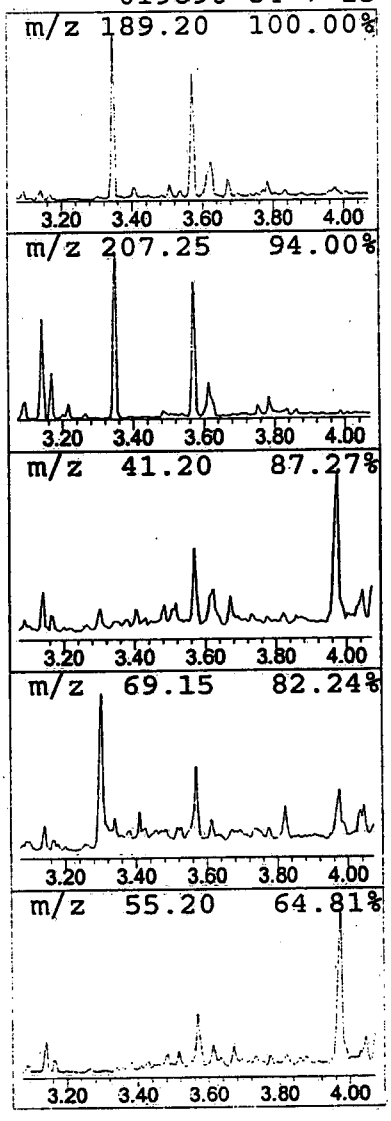
****

Peak Number 9 Unknown — Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.57	31.79 UG	650213	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Formyl-2,2-dimethyl-3-trans-(3...	220	C15H24O	1000144-09-7	47
2	2(1H)-Naphthalenone, 4a,5,6,7,8,...	220	C15H24O	017408-66-1	30
3	Cyclobutanecarboxamide, 1-methyl...	189	C12H15NO	1000159-19-5	22
4	Longifolenaldehyde	220	C15H24O	019890-84-7	15





1449

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
[redacted]ple : S-20,1922-004,S,5.20g,15.7,03/30/01
[redacted]c : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

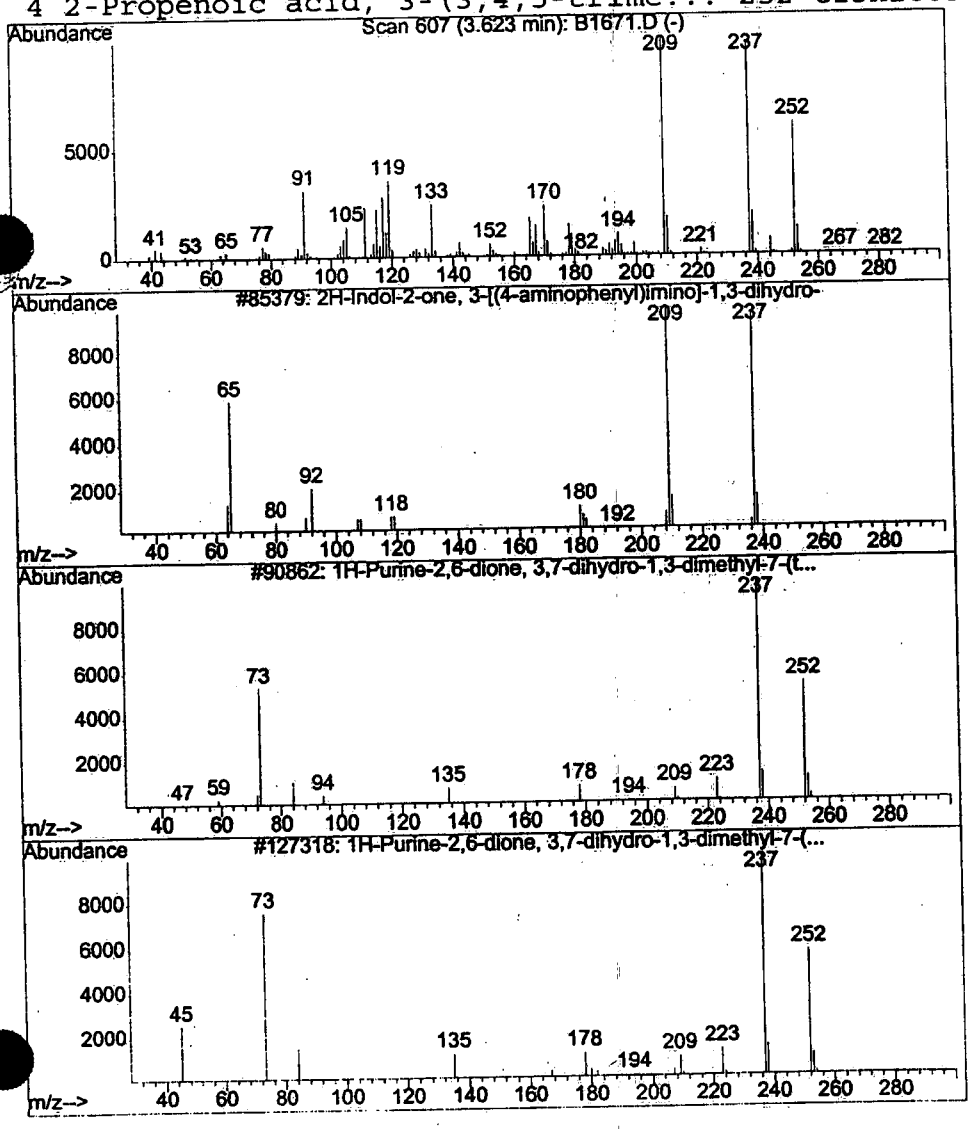
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

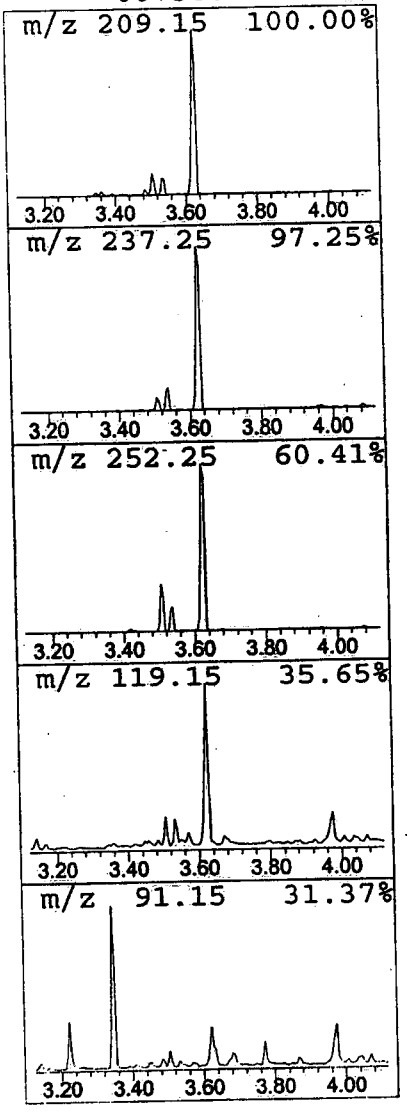
****

Peak Number 10 Unknown aromatic | Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.62	85.16 UG	1741670	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2H-Indol-2-one, 3-[(4-aminopheny...	237	C14H11N3O	033829-07-1	47
2	1H-Purine-2,6-dione, 3,7-dihydro...	252	C10H16N4O2Si	062374-32-7	35
3	1H-Purine-2,6-dione, 3,7-dihydro...	252	C10H16N4O2Si	062374-32-7	35
4	2-Propenoic acid, 3-(3,4,5-trime...	252	C13H16O5	007560-49-8	32





1450

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

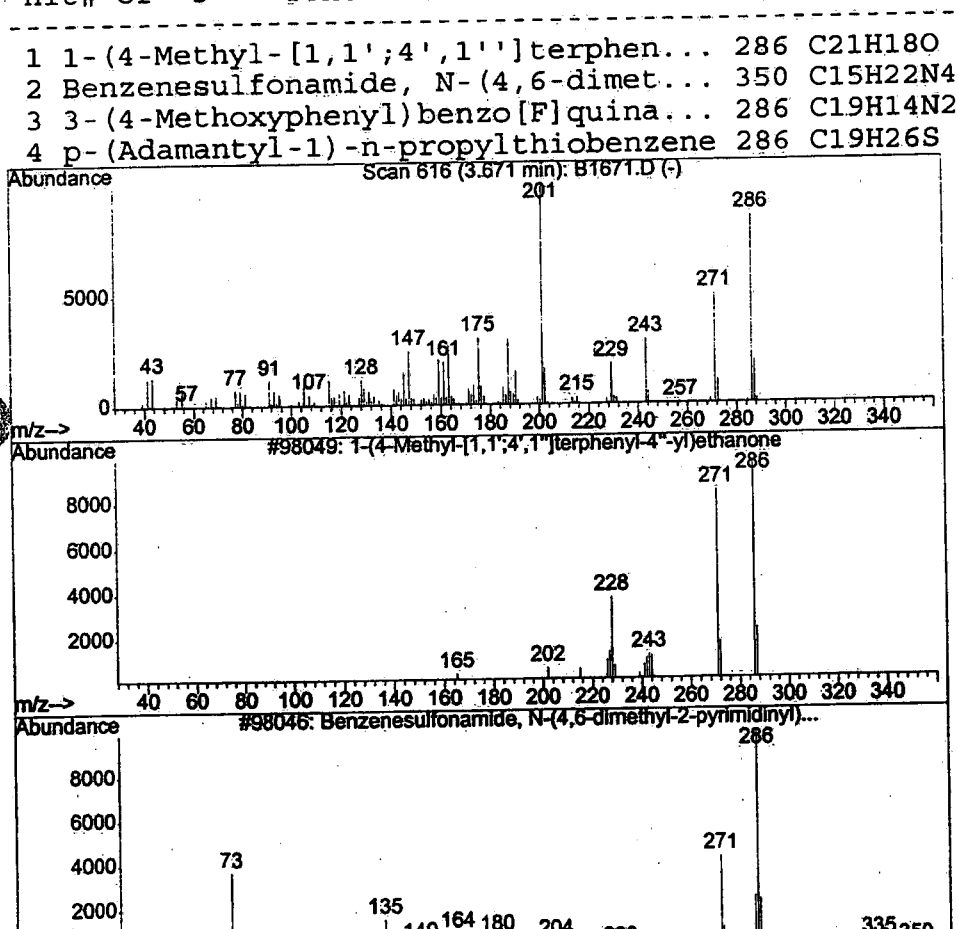
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

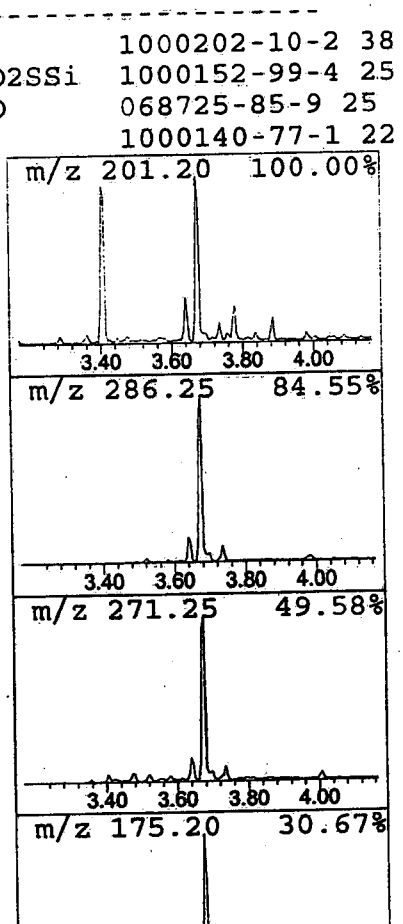
****

Peak Number 11 Unknown aromatic — Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.67	26.38 UG	539471	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-(4-Methyl-[1,1';4',1'']terphen...	286	C21H18O	1000202-10-2	38
2	Benzenesulfonamide, N-(4,6-dimet...	350	C15H22N4O2SSi	1000152-99-4	25
3	3-(4-Methoxyphenyl)benzo[F]quina...	286	C19H14N2O	068725-85-9	25
4	p-(Adamantyl-1)-n-propylthiobenzene	286	C19H26S	1000140-77-1	22





1451

000416

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

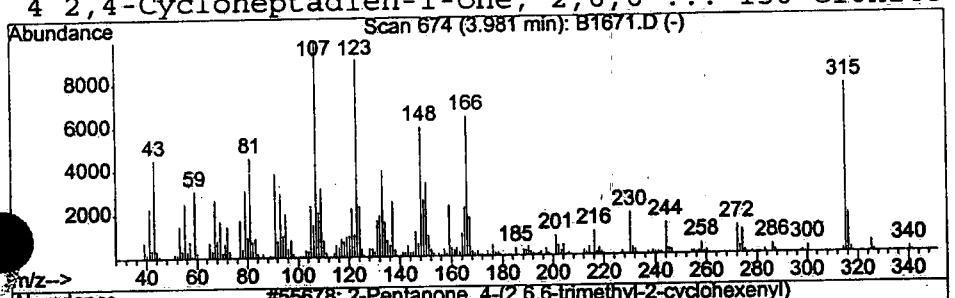
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

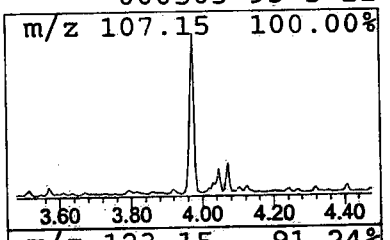
****

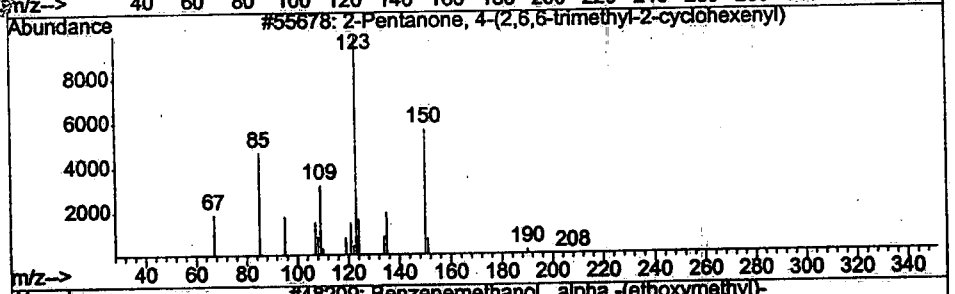
Peak Number 12 Unknown aromatic — Concentration Rank 1

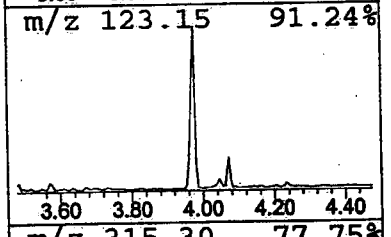
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.98	279.33 UG	2320940	Chrysene-d12	4.50

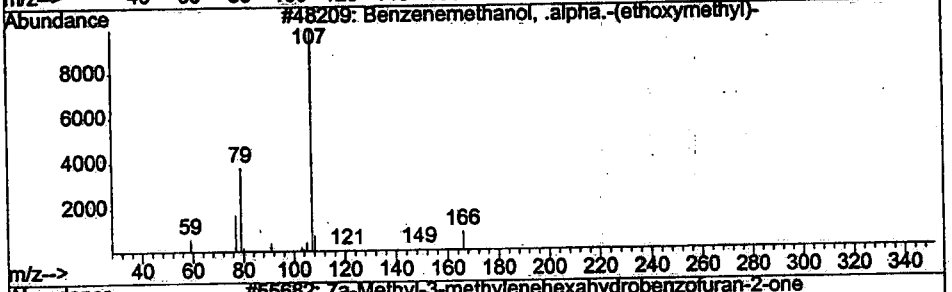
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-(2,6,6-trimethyl-...	208	C14H24O	1000197-62-8	30
2	Benzenemethanol, .alpha.-(ethoxy...	166	C10H14O2	022383-53-5	25
3	7a-Methyl-3-methylenehexahydrobe...	166	C10H14O2	067498-53-7	22
4	2,4-Cycloheptadien-1-one, 2,6,6-...	150	C10H14O	000503-93-5	22

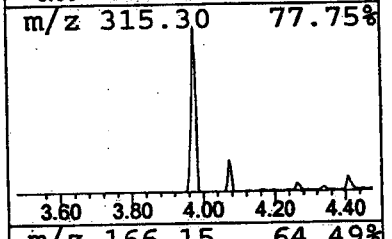


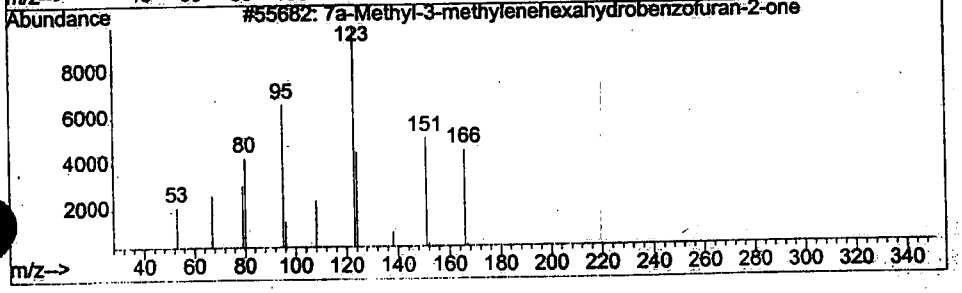


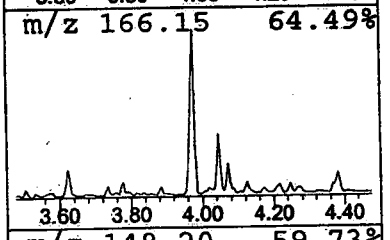


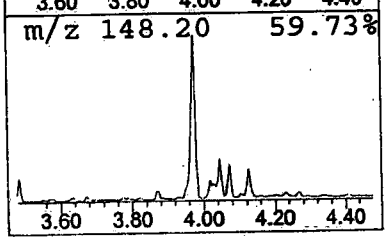












1452

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

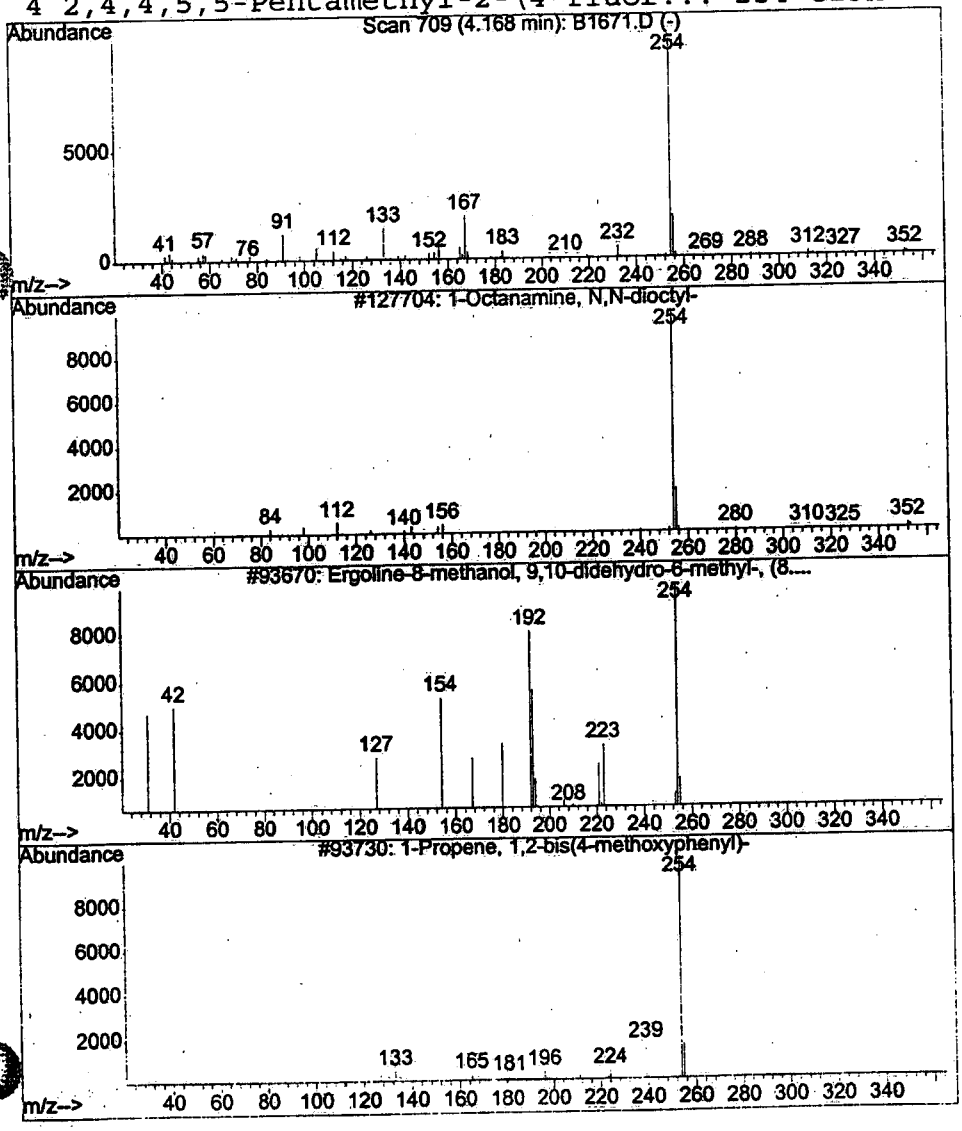
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

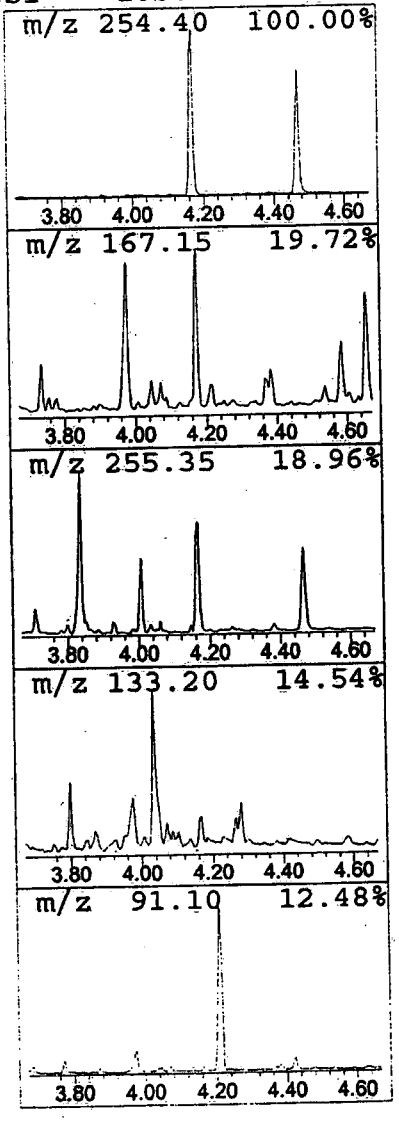
****

Peak Number 13 Unknown aromatic — Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.17	36.26 UG	301271	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Octanamine, N,N-dioctyl-	353	C24H51N	001116-76-3	86
2	Ergoline-8-methanol, 9,10-didehy...	254	C16H18N2O	000602-85-7	59
3	1-Propene, 1,2-bis(4-methoxyphen...	254	C17H18O2	020802-02-2	58
4	2,4,4,5,5-Pentamethyl-2-(4-fluor...	254	C13H19FO2Si	1000148-28-1	52





1453

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

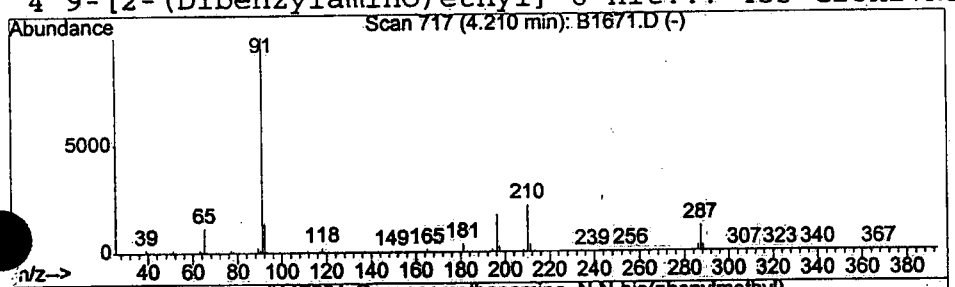
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

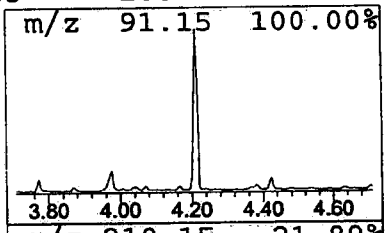
****

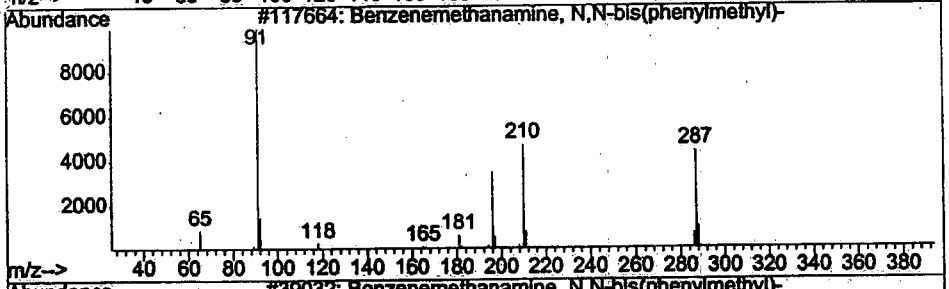
Peak Number 14 Unknown aromatic Concentration Rank 3

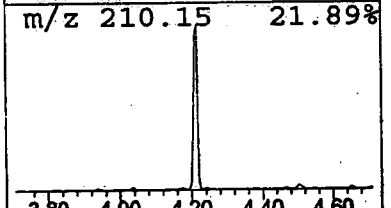
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.21	117.09 UG	972847	Chrysene-d12	4.50

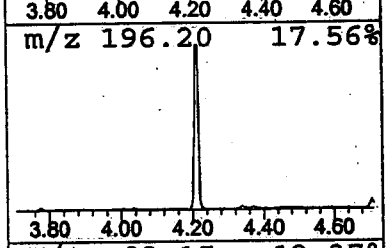
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	97
2	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	96
3	12-Oxatetracyclo[5.2.1.1(2,6).1(...	210	C11H11ClO2	1000191-06-4	83
4	9-[2-(Dibenzylamino)ethyl]-6-nit...	453	C28H27N3O3	1000225-88-1	50

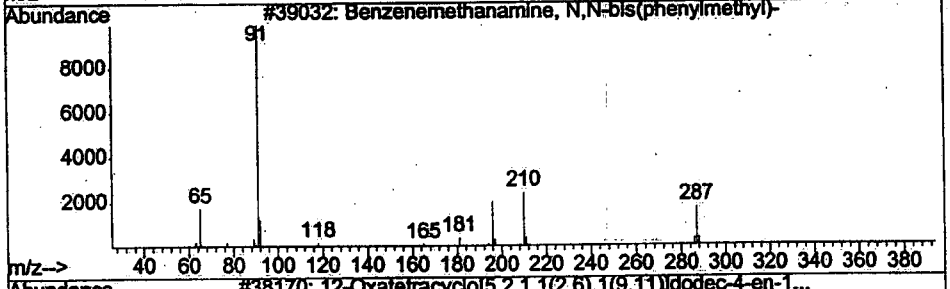


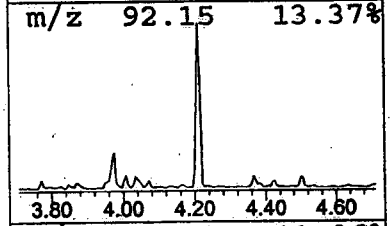


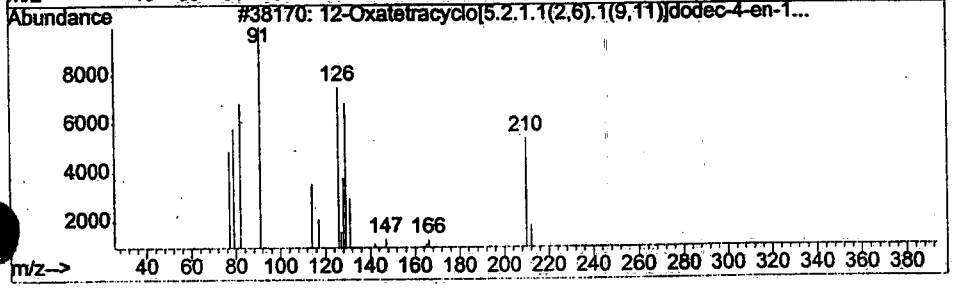


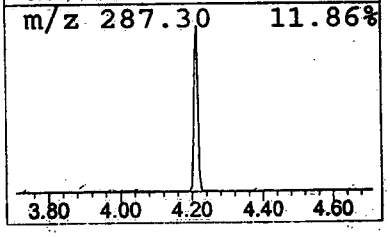












1454

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

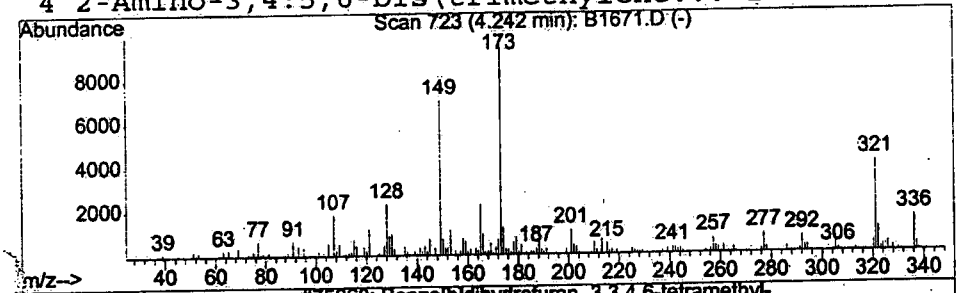
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

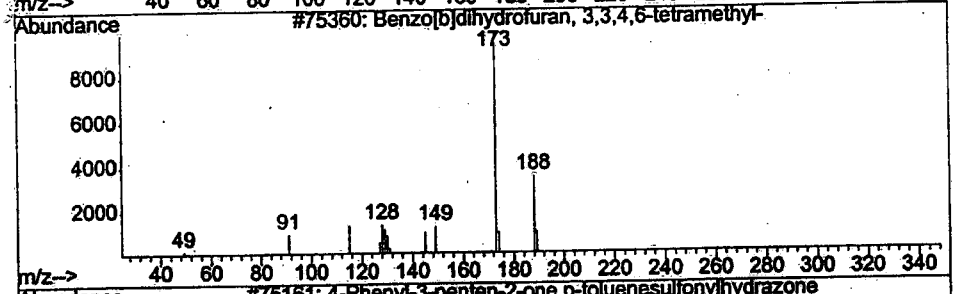
****

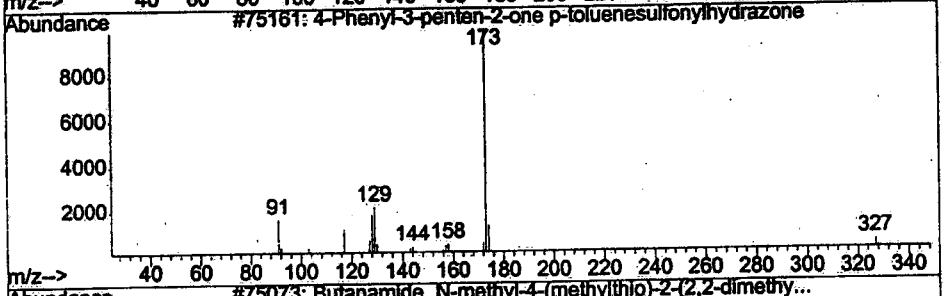
Peak Number 15 Unknown aromatic — Concentration Rank 20

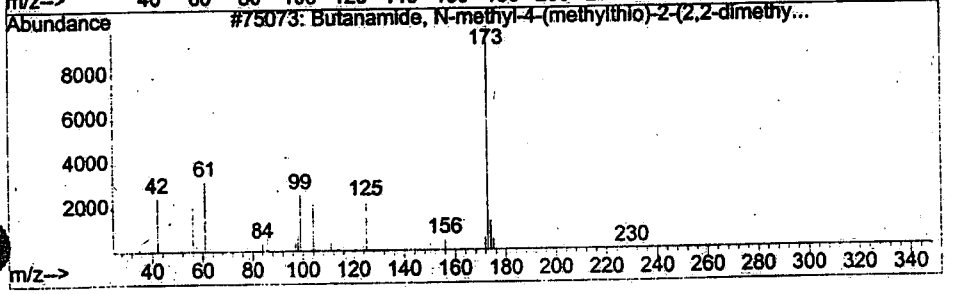
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.24	20.85 UG	173237	Chrysene-d12	4.50

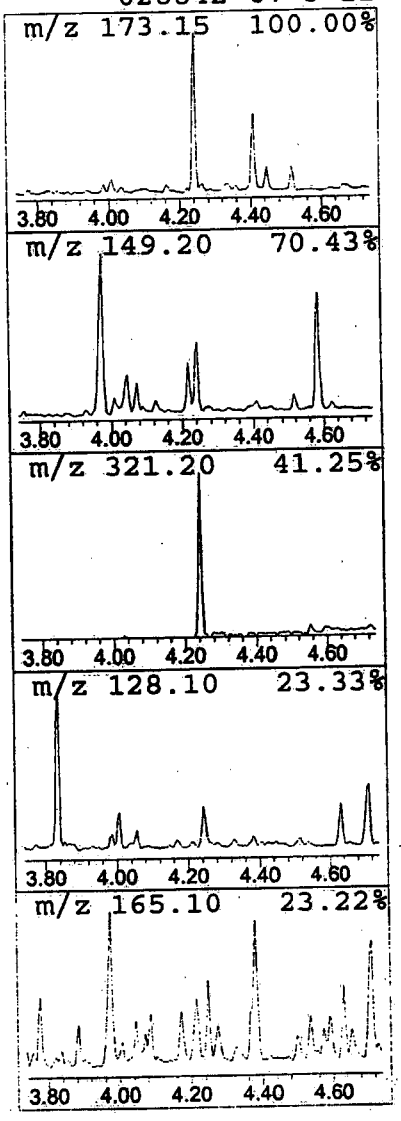
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]dihydrofuran, 3,3,4,6-te...	188	C13H16O	1000129-19-2	32
2	4-Phenyl-3-penten-2-one p-toluen...	328	C18H20N2O2S	1000211-12-1	30
3	Butanamide, N-methyl-4-(methylth...	230	C11H22N2OS	097443-86-2	22
4	2-Amino-3,4:5,6-bis(trimethylene...	174	C11H14N2	028842-67-3	22











1455

000420

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
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[redacted]c : ENVTACT/ORBIS,03/27/01,03/28/01,1
3 Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

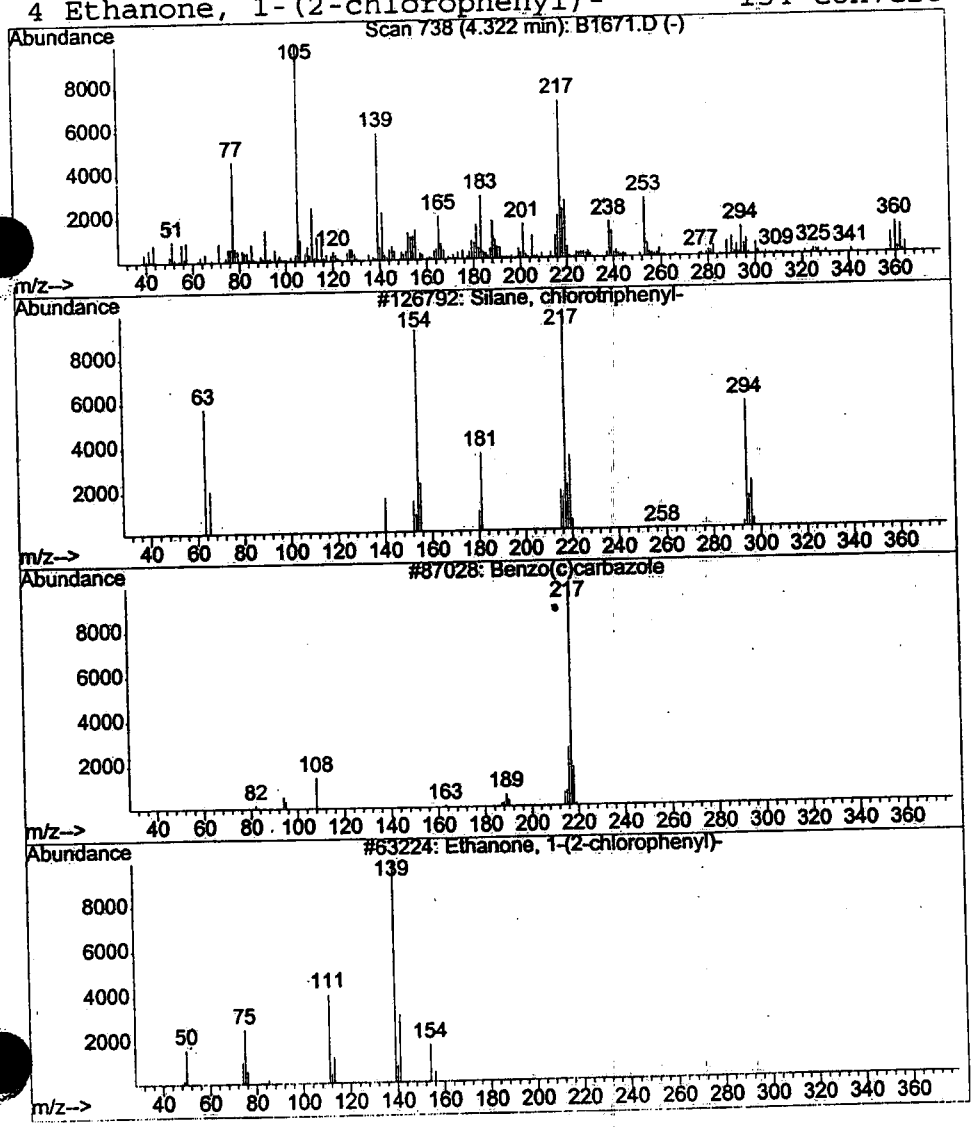
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

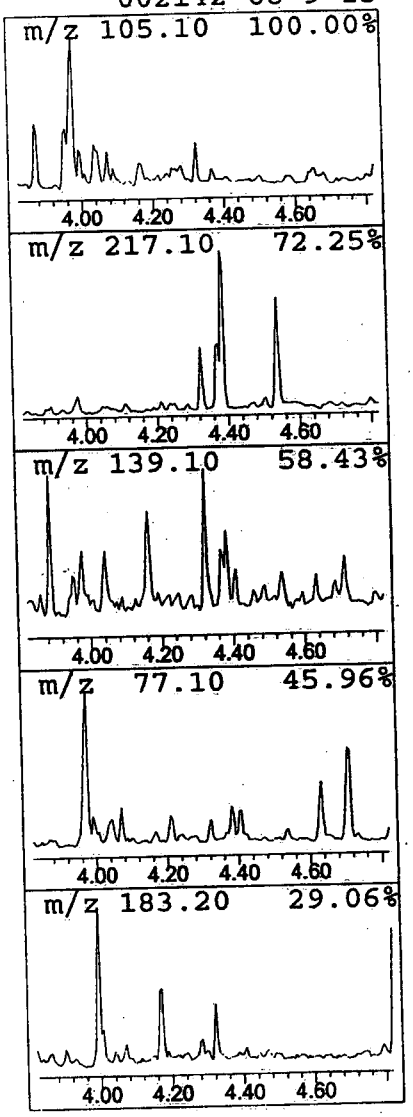
****

Peak Number 16 Unknown aromatic — Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.32	17.05 UG	141636	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Silane, chlorotriphenyl-	294	C18H15ClSi	000076-86-8	25
2	Benzo(c)carbazole	217	C16H11N	034777-33-8	22
3	Ethanone, 1-(2-chlorophenyl)-	154	C8H7ClO	002142-68-9	15
4	Ethanone, 1-(2-chlorophenyl)-	154	C8H7ClO	002142-68-9	15





1456
000421

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
'S Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

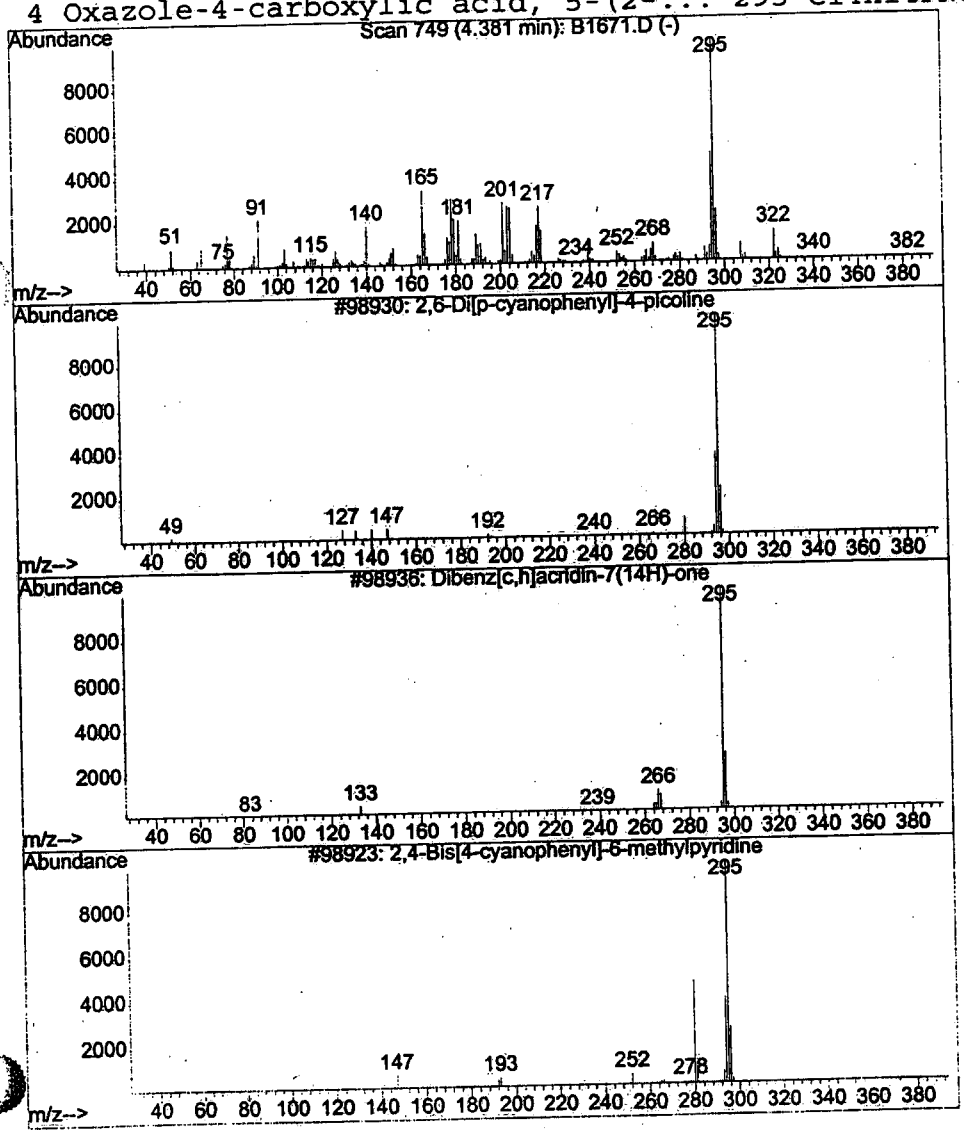
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

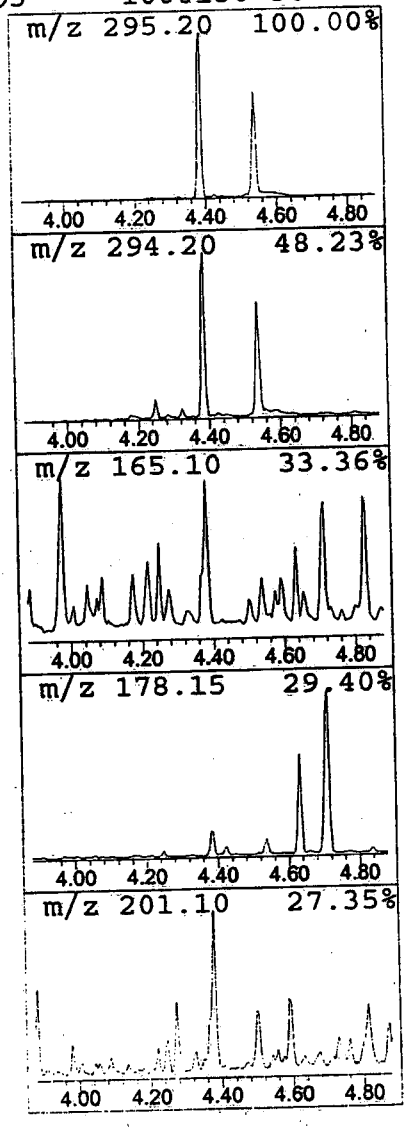
****

Peak Number 17 Unknown aromatic — Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.38	44.17 UG	366976	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,6-Di[p-cyanophenyl]-4-picoline	295	C20H13N3	1000212-46-7	32
2	Dibenz[c,h]acridin-7(14H)-one	295	C21H13NO	050405-28-2	27
3	2,4-Bis[4-cyanophenyl]-6-methylp...	295	C20H13N3	1000212-36-7	25
4	Oxazole-4-carboxylic acid, 5-(2-...	295	C14H14FNO5	1000130-36-7	25





000422

1457

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
IS Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

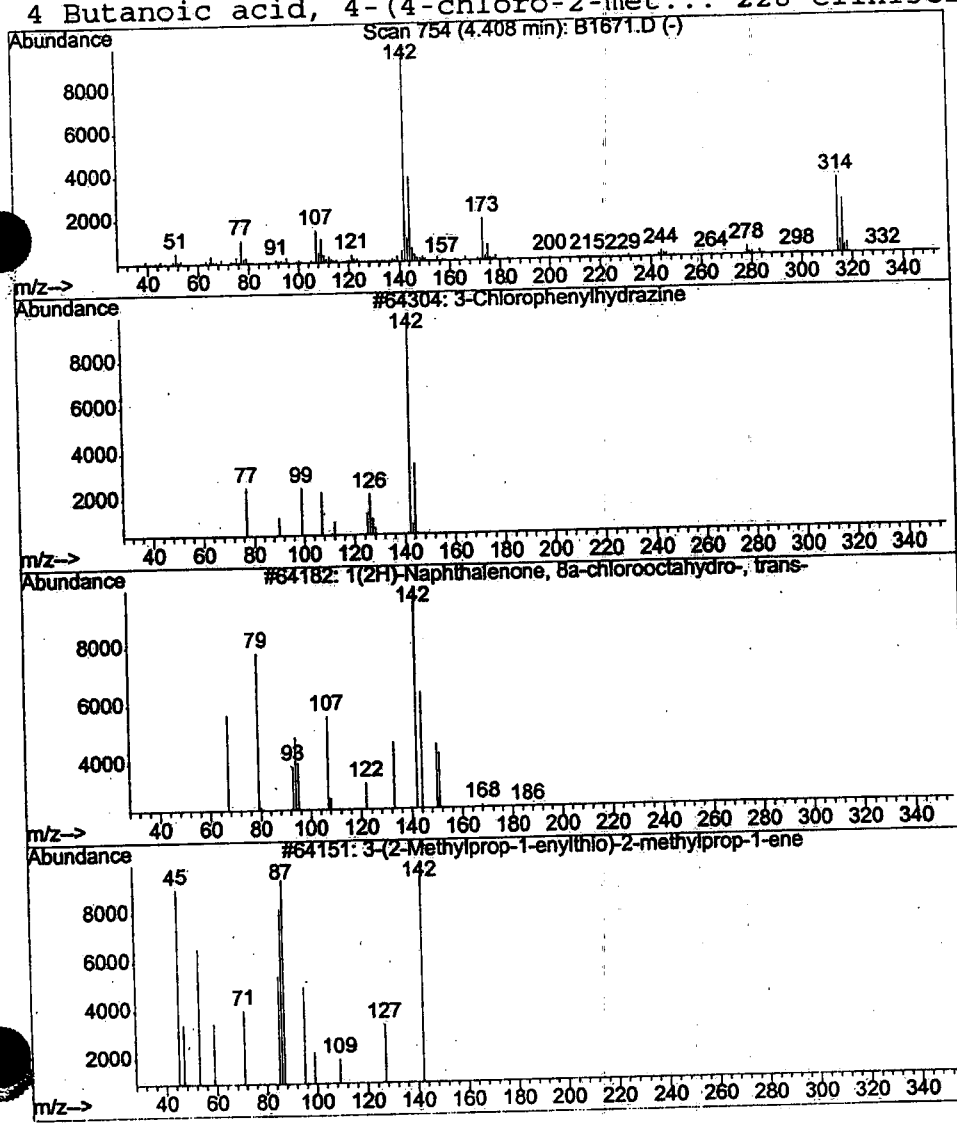
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

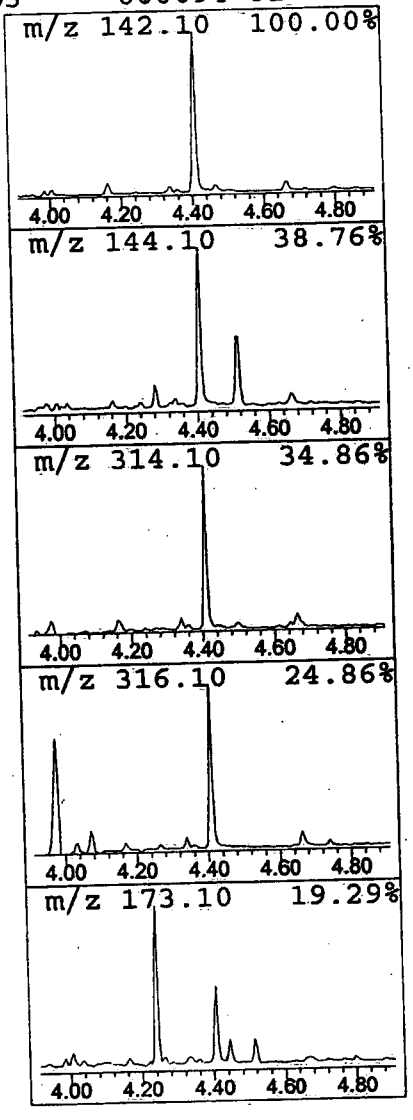
****

Peak Number 18 Unknown — Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.41	22.72 UG	188805	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Chlorophenylhydrazine	142	C6H7ClN2	1000131-91-4	47
2	1(2H)-Naphthalenone, 8a-chlorooc...	186	C10H15ClO	1000141-71-3	43
3	3-(2-Methylprop-1-enylthio)-2-me...	142	C8H14S	1000122-39-8	30
4	Butanoic acid, 4-(4-chloro-2-met...	228	C11H13ClO3	000094-81-5	28





1458

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
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Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

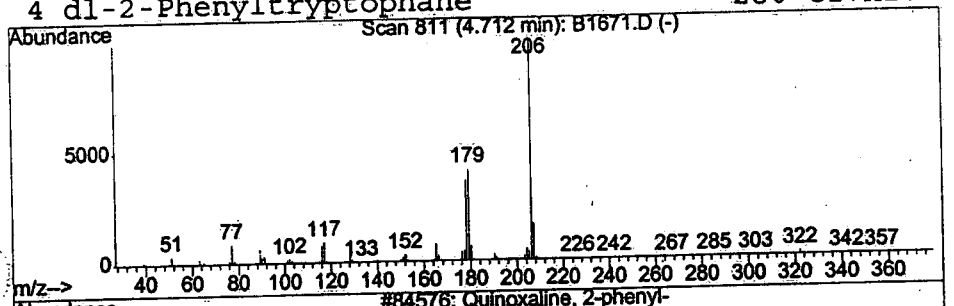
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

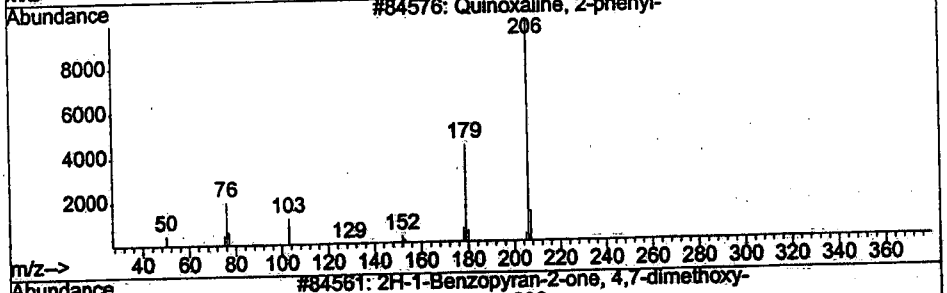
****

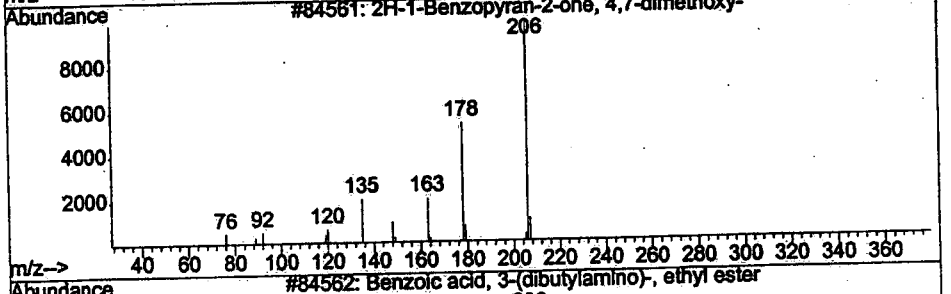
Peak Number 19 Unknown — Concentration Rank 4

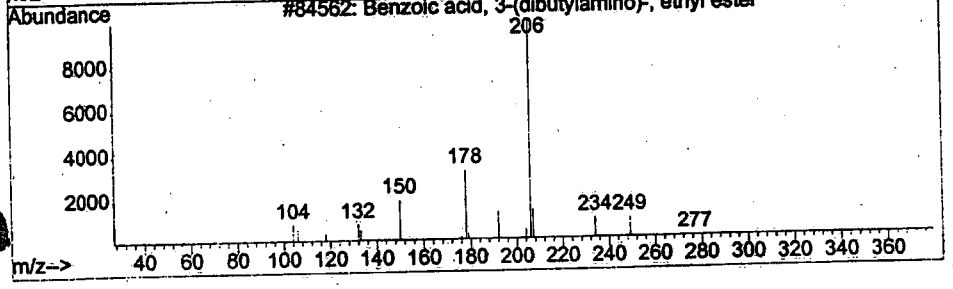
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.71	90.75 UG	754064	Chrysene-d12	4.50

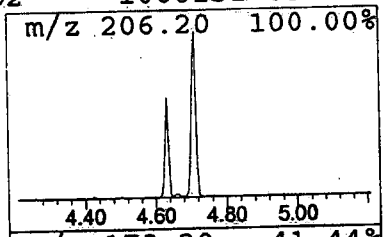
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Quinoxaline, 2-phenyl-	206	C14H10N2	005021-43-2	72
2	2H-1-Benzopyran-2-one, 4,7-dimet...	206	C11H10O4	017575-27-8	50
3	Benzoic acid, 3-(dibutylamino)-,...	277	C17H27NO2	1000115-73-3	50
4	dl-2-Phenyltryptophane	280	C17H16N2O2	1000131-03-6	42

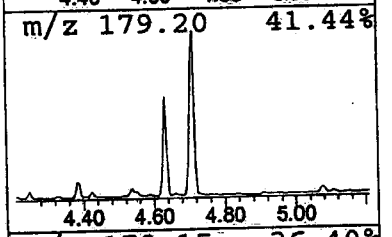


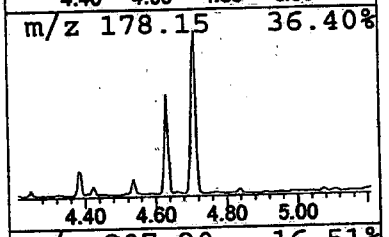


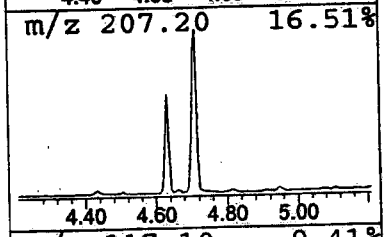


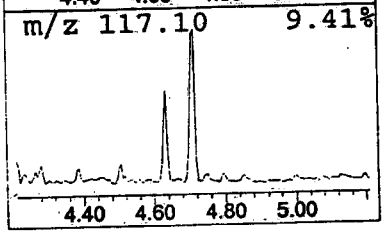












1459

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
ALS Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

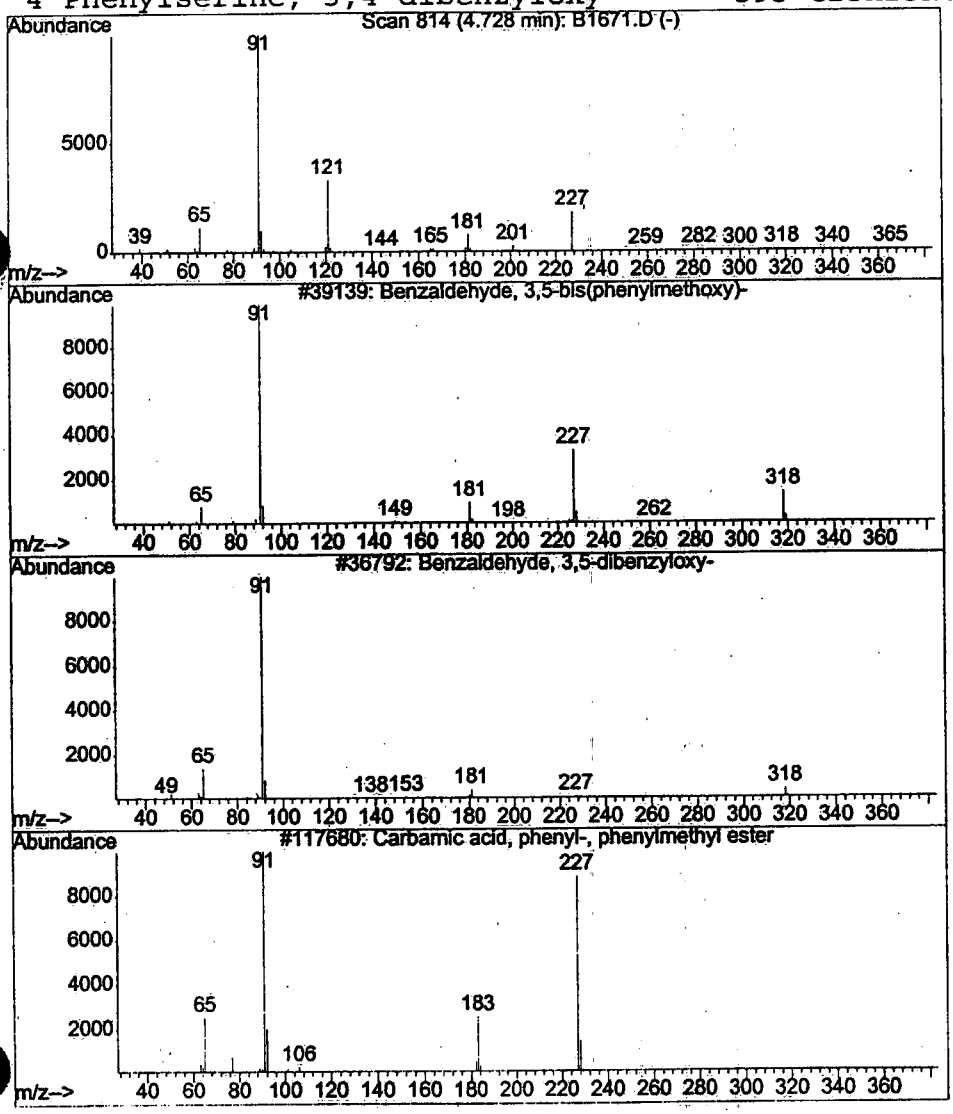
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

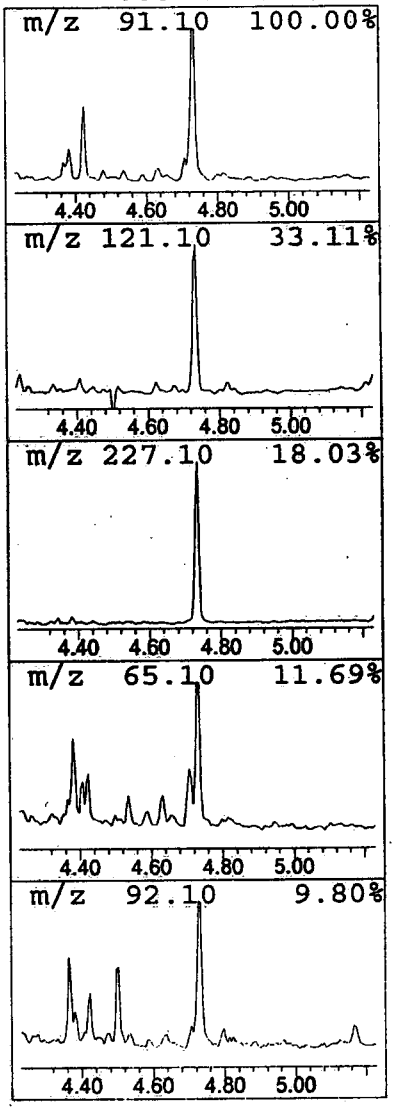
****

Peak Number 20 Unknown aromatic Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.73	18.91 UG	157109	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzaldehyde, 3,5-bis(phenylmeth...	318	C21H18O3	014615-72-6	64
2	Benzaldehyde, 3,5-dibenzyloxy-	318	C21H18O3	1000125-97-3	45
3	Carbamic acid, phenyl-, phenylme...	227	C14H13NO2	003422-02-4	43
4	Phenylserine, 3,4-dibenzyloxy-	393	C23H23NO5	055637-52-0	38





006423

1460

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

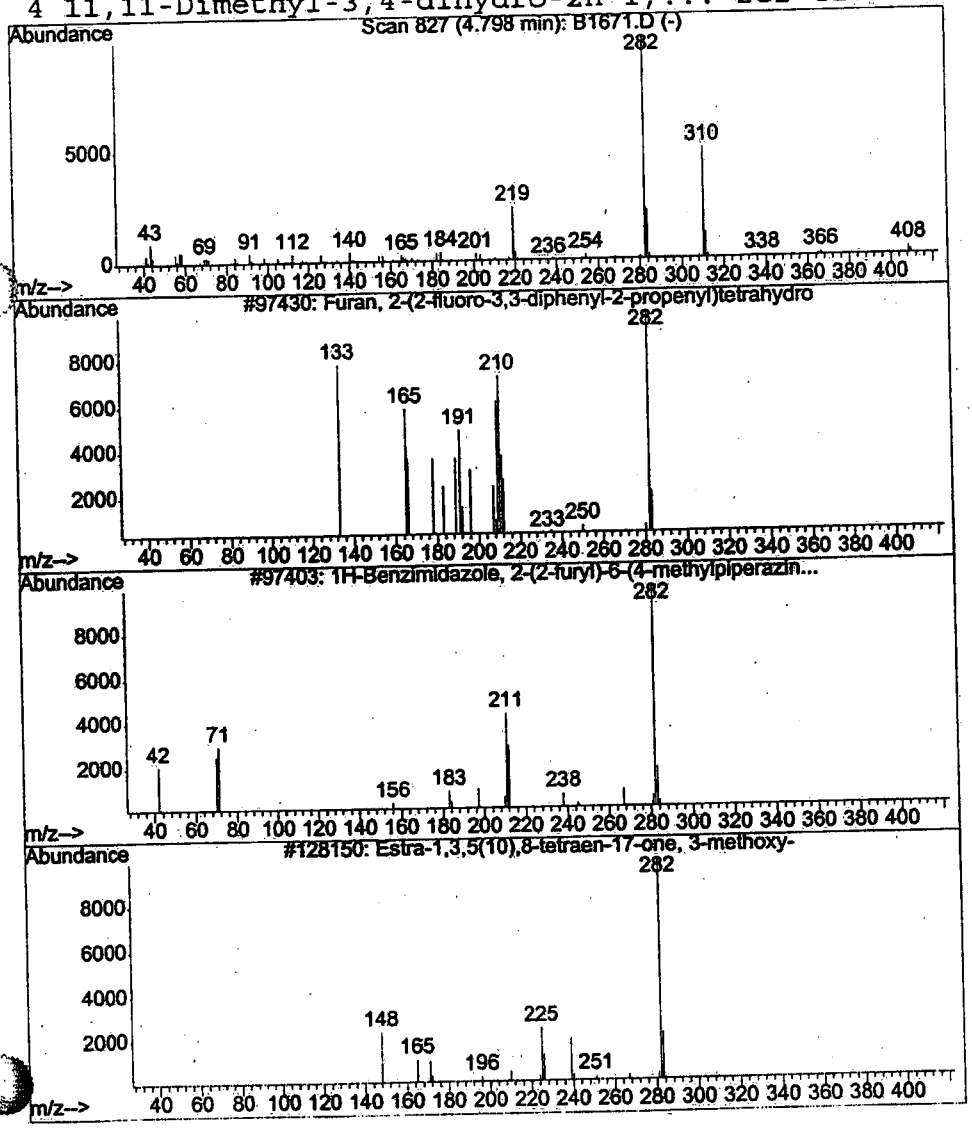
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

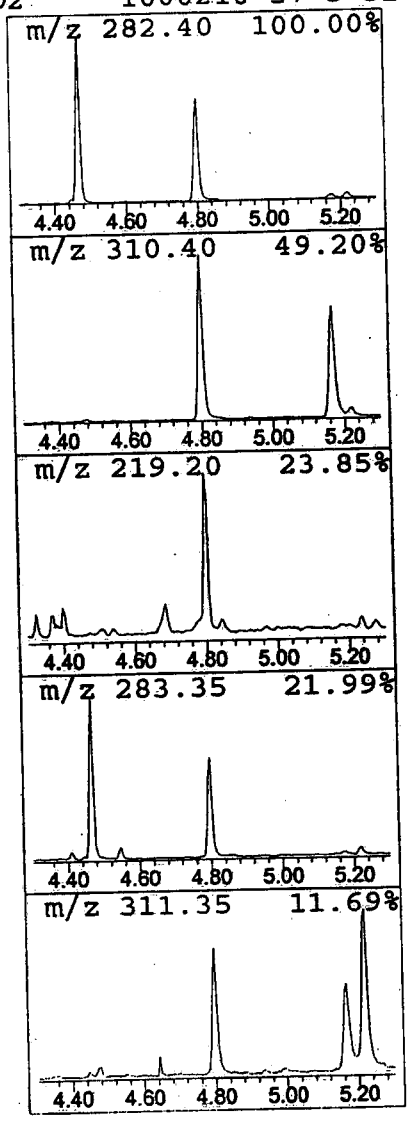
****

Peak Number 21 Unknown aromatic — Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.80	33.22 UG	275982	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Furan, 2-(2-fluoro-3,3-diphenyl-...	282	C19H19FO	056701-23-6	38
2	1H-Benzimidazole, 2-(2-furyl)-6-...	282	C16H18N4O	1000217-29-4	37
3	Estra-1,3,5(10),8-tetraen-17-one...	282	C19H22O2	006885-44-5	32
4	11,11-Dimethyl-3,4-dihydro-2H-1,...	282	C17H18N2O2	1000210-57-3	32





1461

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
ALS Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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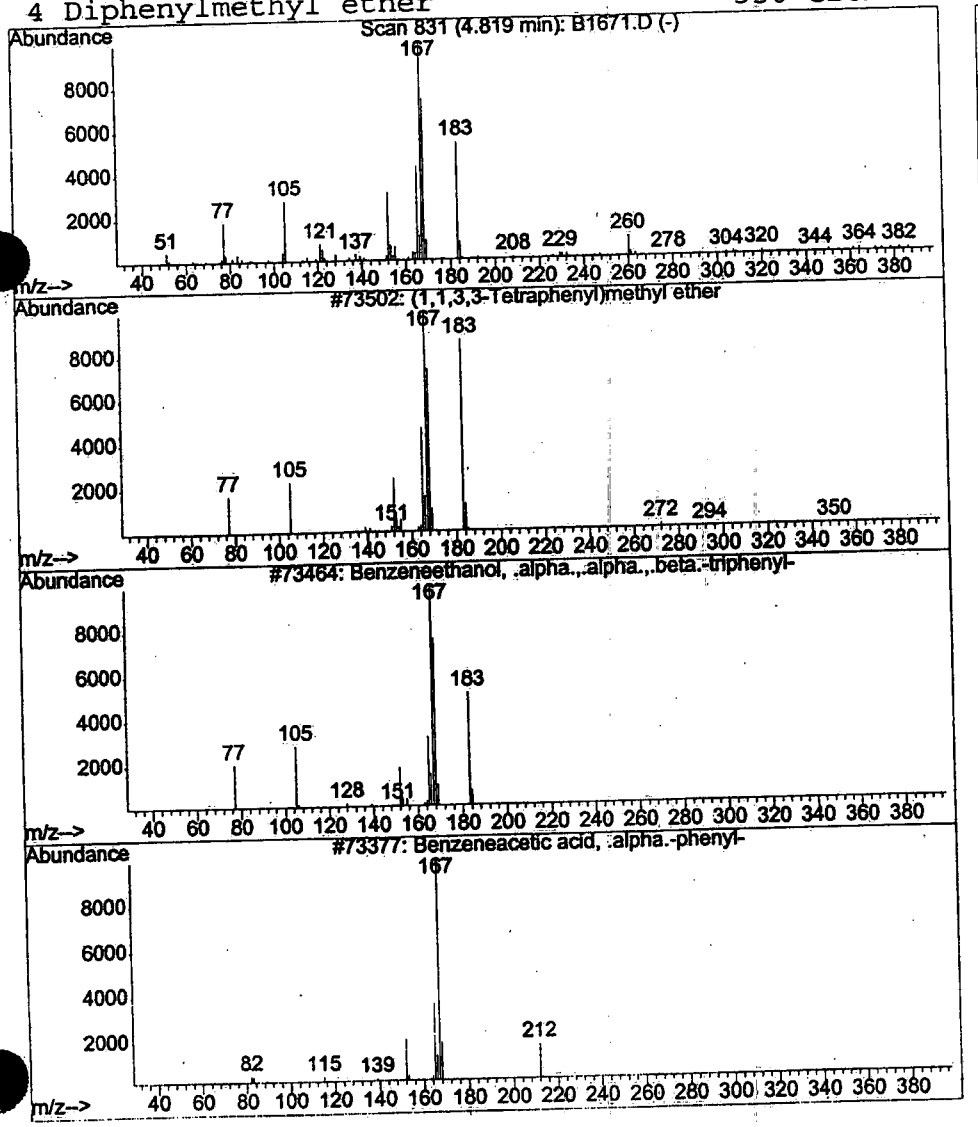
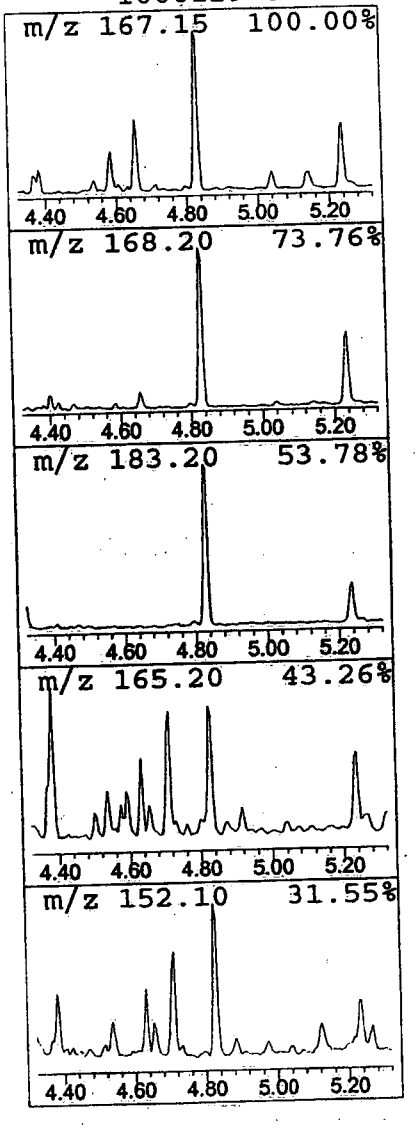
Peak Number 22 Unknown aromatic — Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.82	25.10 UG	208532	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(1,1,3,3-Tetraphenyl)methyl ether	350	C26H22O	1000130-50-6	91
2	Benzeneethanol, .alpha.,.alpha.,...	350	C26H22O	000981-24-8	87
3	Benzeneacetic acid, .alpha.-phenyl-	212	C14H12O2	000117-34-0	47
4	Diphenylmethyl ether	350	C26H22O	1000129-36-6	38





000427
146Z

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

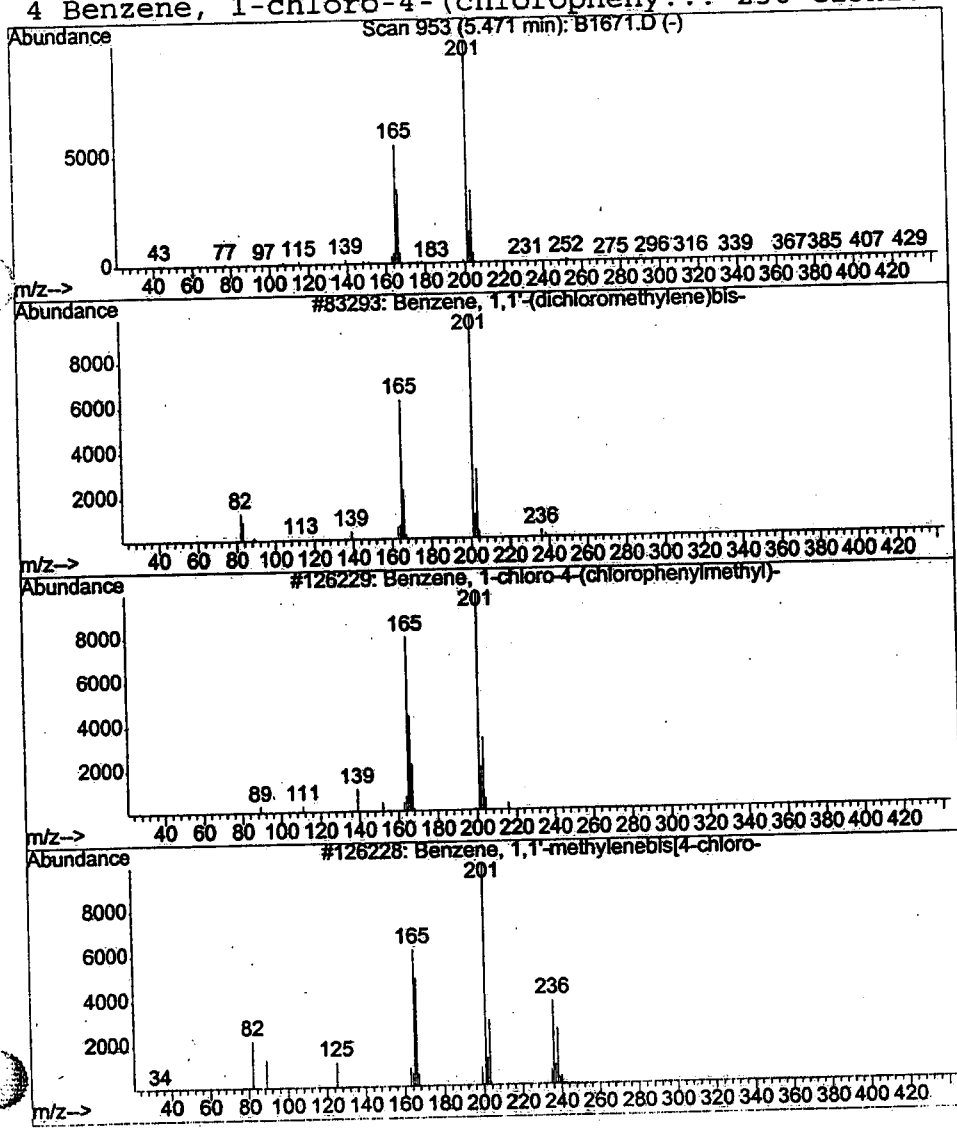
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

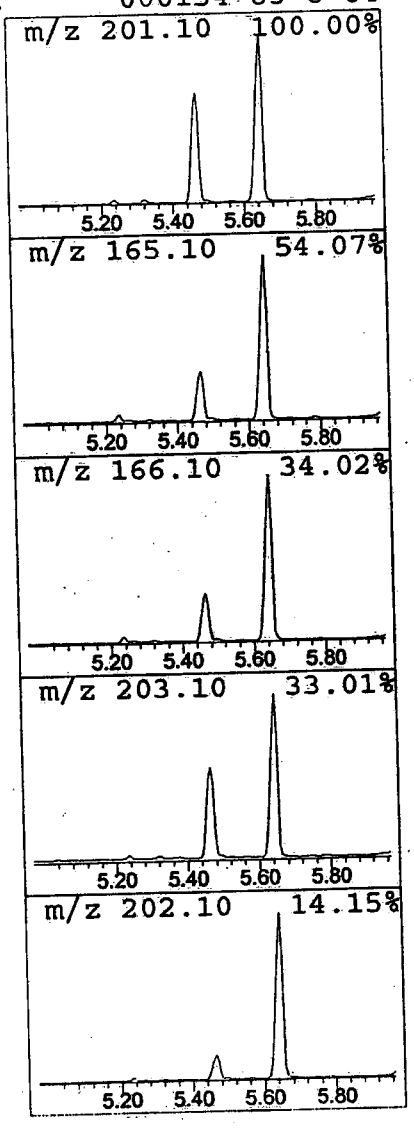
****

Peak Number 23 Unknown aromatic — Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.47	59.27 UG	594054	Perylene-d12	5.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	78
2	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	74
3	Benzene, 1,1'-methylenebis[4-chl...	236	C13H10Cl2	000101-76-8	64
4	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	64





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
Acq On : 2 Apr 2001 12:21
Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

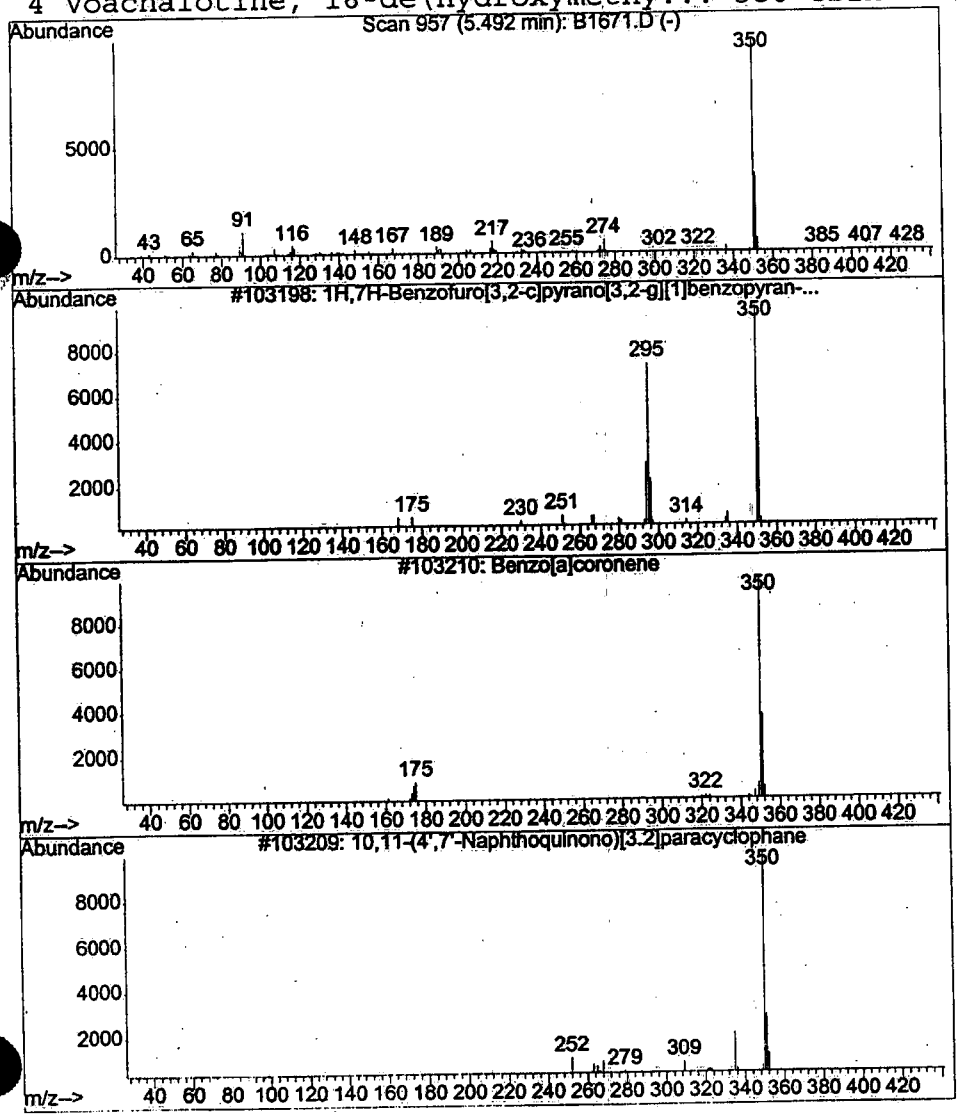
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

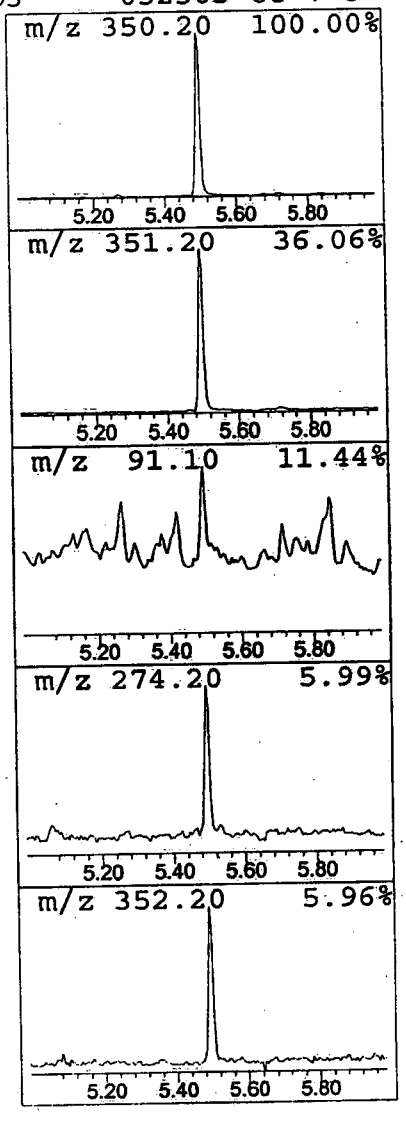
****

Peak Number 24 Unknown — Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.49	14.51 UG	145448	Perylene-d12	5.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H,7H-Benzofuro[3,2-c]pyrano[3,2...	350	C21H18O5	072060-16-3	64
2	Benzo[a]coronene	350	C28H14	000190-70-5	50
3	10,11-(4',7'-Naphthoquinono)[3.2...	350	C25H18O2	1000202-31-9	5
4	Voachalotine, 16-de(hydroxymethy...	350	C21H22N2O3	032303-68-7	5





1464

000429

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1671.D
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Sample : S-20,1922-004,S,5.20g,15.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 19
Operator: JC
Inst : MSD_B
Multiplr: 1.00

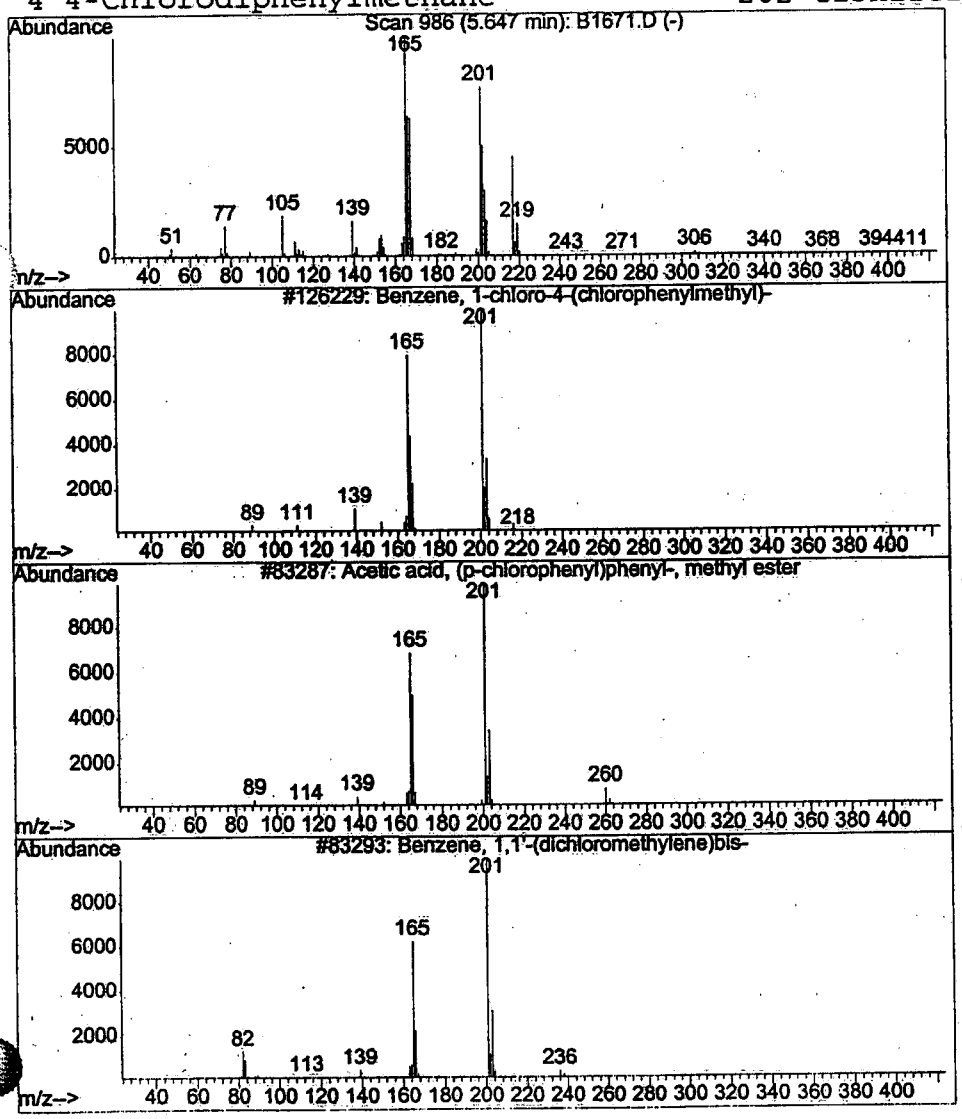
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

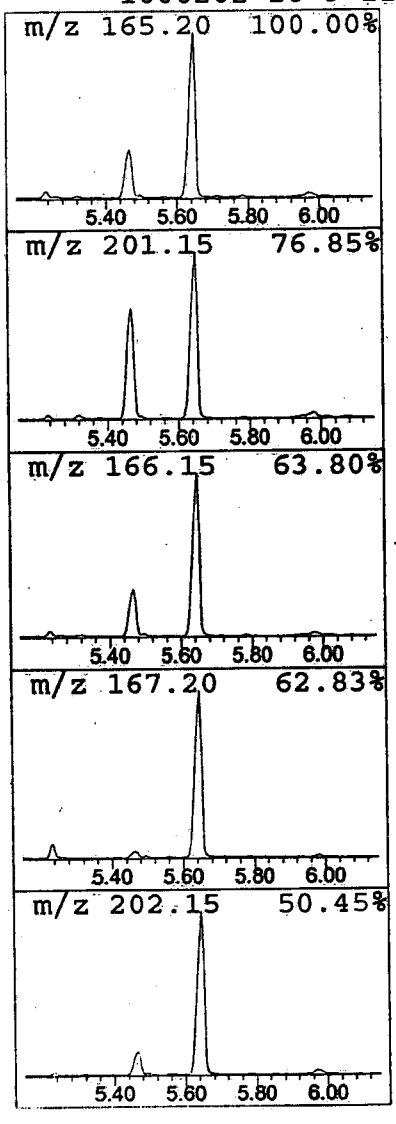
****

Peak Number 25 Unknown aromatic Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.65	240.06 UG	2406270	Perylene-d12	5.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-4-(chlorophenyl...	236	C13H10Cl2	000134-83-8	40
2	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	40
3	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	25
4	4-Chlorodiphenylmethane	202	C13H11Cl	1000202-28-9	22





000430
1465

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1672.D Vial: 20
Acq On : 2 Apr 2001 12:36 Operator: JC
Sample : S-21,1922-005,S,1.38g,14.6,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
RTE Integration Params: rteint.p
Quant Time: Apr 02 12:45:11 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	35209	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	140210	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	79164	40.00	UG	0.00
60) Phenanthrene-d10	3.34	188	142865	40.00	UG	-0.01
75) Chrysene-d12	4.50	240	111790	40.00	UG	-0.02
84) Perylene-d12	5.29	264	135384	40.00	UG	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	59294	58.54	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 58.54%			
6) Phenol-d5	1.39	99	83863	67.64	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 67.64%			
23) Nitrobenzene-d5	1.74	82	33899	33.32	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 66.64%			
43) 2-Fluorobiphenyl	2.48	172	87101	40.04	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 80.08%			
64) 2,4,6-Tribromophenol	3.08	330	47579	100.01	UG	0.00
Spiked Amount 100.000	Range 54 - 135		Recovery = 100.01%			
77) Terphenyl-d14	4.03	244	132302	49.63	UG	0.00
Spiked Amount 50.000	Range 58 - 147		Recovery = 99.26%			

Target Compounds **Qvalue**

(#) = qualifier out of range (m) = manual integration

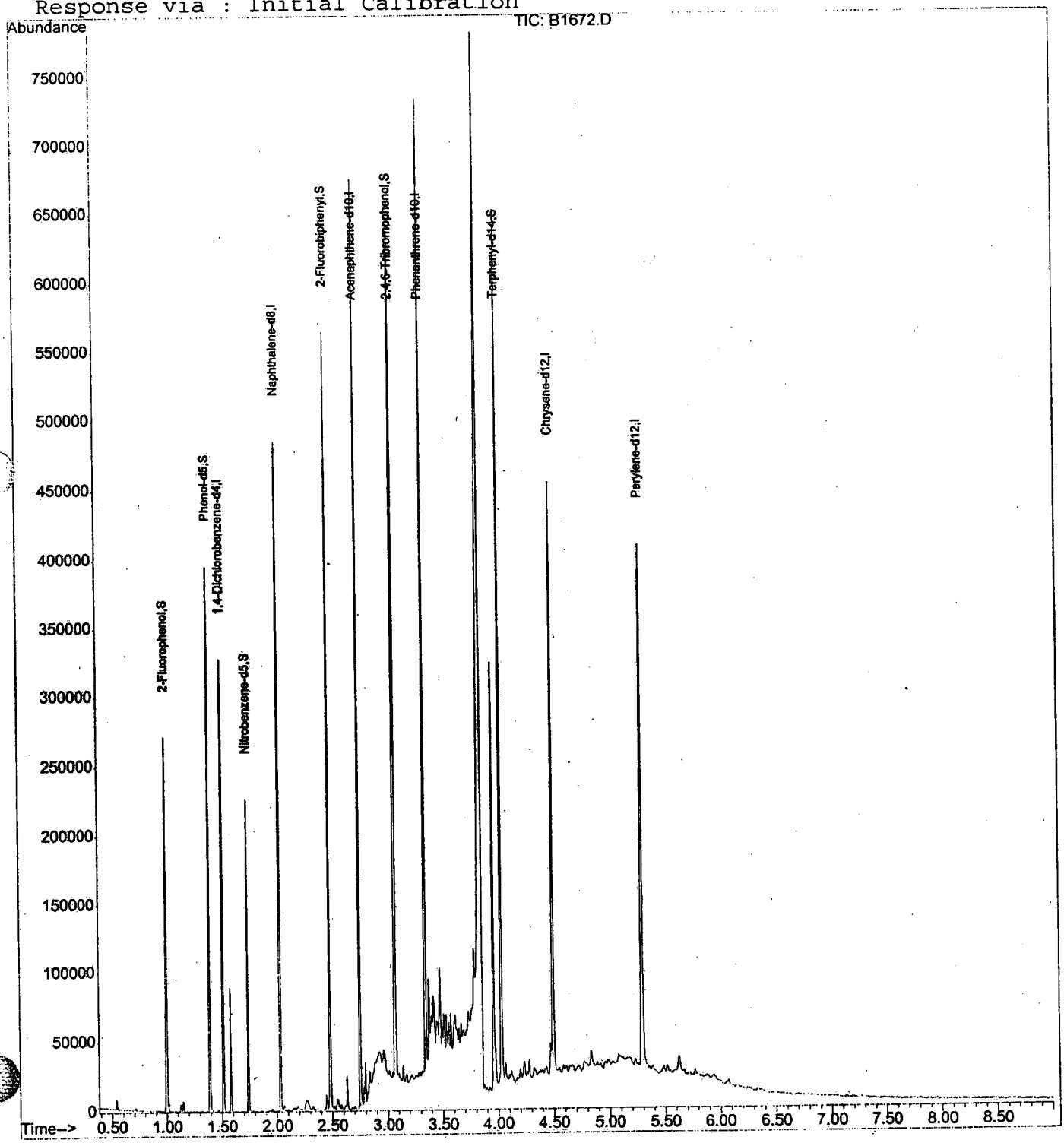
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1672.D
Acq On : 2 Apr 2001 12:36
Sample : S-21,1922-005,S,1.38g,14.6,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: rteint.p
Quant Time: Apr 2 13:50 2001

Vial: 20
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1672.D
Acq On : 2 Apr 2001 12:36
[redacted]mple : S-21,1922-005,S,1.38g,14.6,03/30/01
[redacted]sc : ENVTACT/ORBIS,03/27/01,03/28/01,1
'S Integration Params: LSCINT.P

Vial: 20
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

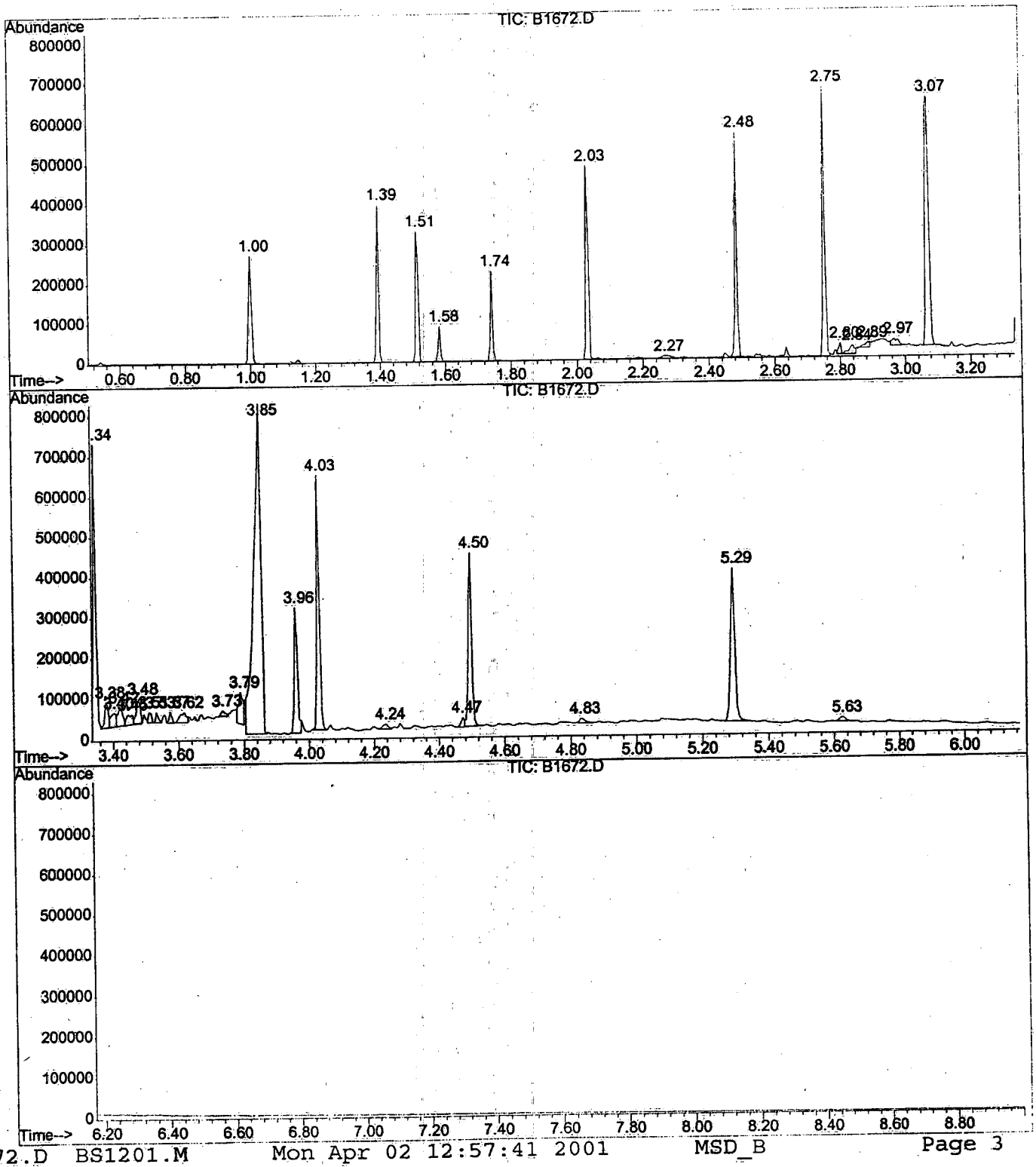
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.999	113	116	119	rBV	270741	174857	14.65%	3.220%
2	1.395	187	190	192	rBV	395443	199582	16.72%	3.675%
3	1.512	210	212	215	rBV	327497	195149	16.35%	3.593%
4	1.582	223	225	228	rVB	88615	41495	3.48%	0.764%
5	1.742	252	255	258	rBV	226066	96556	8.09%	1.778%
6	2.030	307	309	312	rBV	485045	270323	22.65%	4.977%
[redacted]	2.265	348	353	360	rBV5	6791	12896	1.08%	0.237%
[redacted]	2.485	391	394	397	rVB	561206	243974	20.44%	4.492%
[redacted]	2.752	441	444	447	rBV	673640	328131	27.49%	6.042%
10	2.800	451	453	454	rVB	28685	13948	1.17%	0.257%
11	2.837	454	460	462	rBV2	22558	30017	2.51%	0.553%
12	2.885	464	469	470	rBV2	13206	15642	1.31%	0.288%
13	2.965	482	484	491	rVB2	17765	22281	1.87%	0.410%
14	3.072	501	504	507	rBV3	621670	547083	45.84%	10.073%
15	3.345	552	555	558	rBV	706384	373760	31.31%	6.882%
16	3.377	558	561	563	rVV	63271	49459	4.14%	0.911%
17	3.403	563	566	567	rVV3	34075	38047	3.19%	0.701%
18	3.419	567	569	572	rVV2	45679	47408	3.97%	0.873%
19	3.446	572	574	577	rVV2	24826	32374	2.71%	0.596%
20	3.478	577	580	582	rVV3	60351	49411	4.14%	0.910%
21	3.510	585	586	588	rVB	24900	15172	1.27%	0.279%
22	3.532	588	590	593	rBV	24198	13990	1.17%	0.258%
23	3.574	596	598	600	rVB	25836	14154	1.19%	0.261%
24	3.617	601	606	608	rBV3	24027	34271	2.87%	0.631%
25	3.735	626	628	631	rBV3	12690	12391	1.04%	0.228%
26	3.788	636	638	640	rVV	77257	77712	6.51%	1.431%
27	3.852	641	650	653	rVB	816231	1193560	100.00%	21.977%
28	3.959	667	670	673	rBV2	308505	205094	17.18%	3.776%
[redacted]	4.028	680	683	688	rVB	629928	363519	30.46%	6.693%
[redacted]	4.237	718	722	725	rBV3	11832	12323	1.03%	0.227%
31	4.472	763	766	767	rBV2	23338	17489	1.47%	0.322%

32	4.499	767	771	777	rVB	428333	316298	26.50%	5.824%
33	4.830	831	833	840	rVB5	11383	13791	1.16%	0.254%
34	5.295	915	920	928	rVB	378896	345610	28.96%	6.364%
35	5.626	979	982	987	rVB6	10575	13214	1.11%	0.243%

Sum of corrected areas: 5430981

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-02-01\B1672.D
Operator : JC
Acquired : 2 Apr 2001 12:36 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-21,1922-005,S,1.38g,14.6,03/30/01
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,1
Vial Number: 20
Quant File :BS1201.RES (RTE Integrator)



1470

000435

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1672.D Vial: 20
Acq On : 2 Apr 2001 12:36 Operator: JC
Sample : S-21,1922-005,S,1.38g,14.6,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
S Integration Params: LSCINT.P

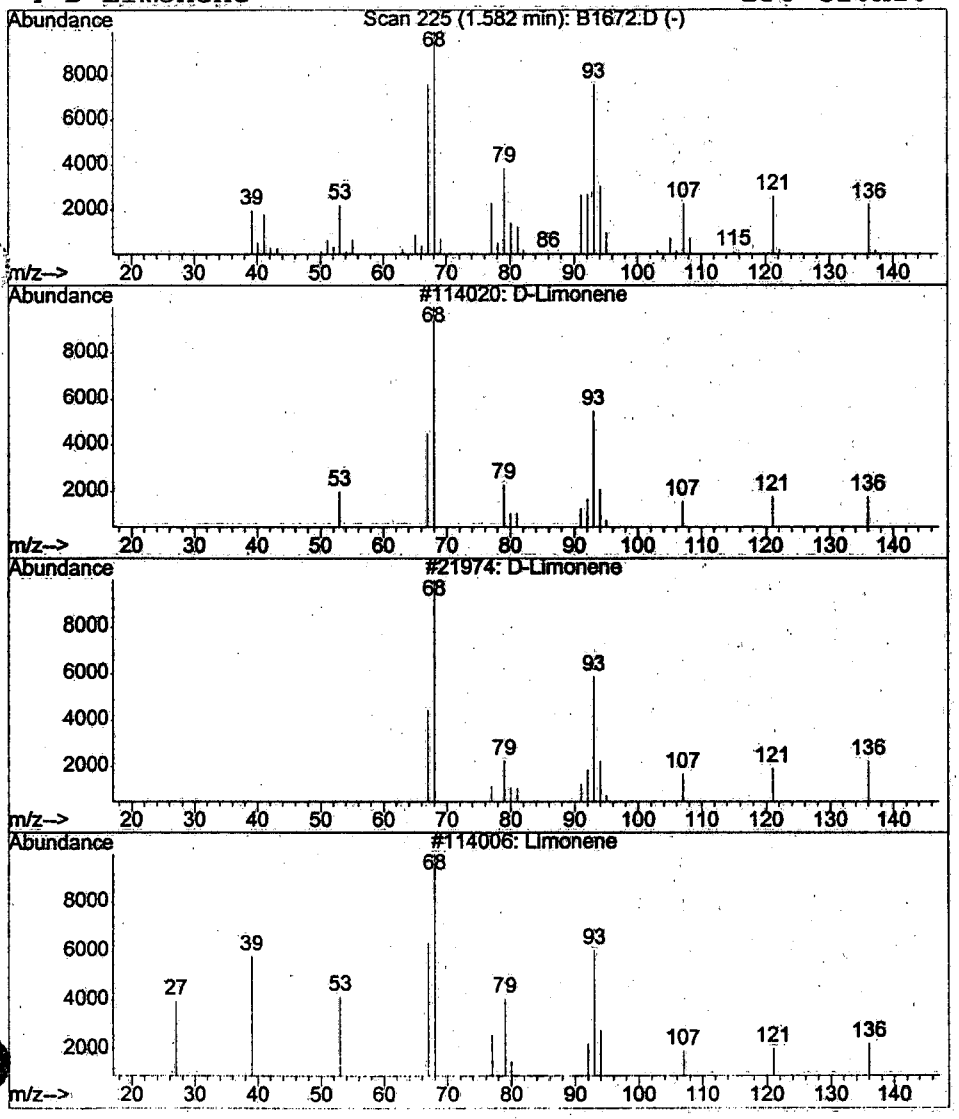
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

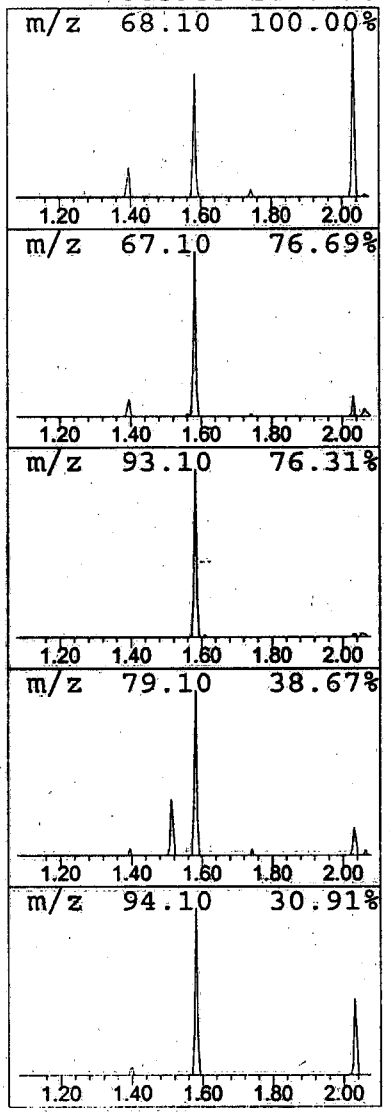
****

Peak Number 1 D-Limonene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.58	8.51 UG	41495	1,4-Dichlorobenzene-d4	1.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Limonene	136	C10H16	005989-27-5	95
2	D-Limonene	136	C10H16	005989-27-5	94
3	Limonene	136	C10H16	000138-86-3	94
4	D-Limonene	136	C10H16	005989-27-5	93





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1672.D
Acq On : 2 Apr 2001 12:36
Sample : S-21,1922-005,S,1.38g,14.6,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
LS Integration Params: LSCINT.P

Vial: 20
Operator: JC
Inst : MSD_B
Multiplr: 1.00

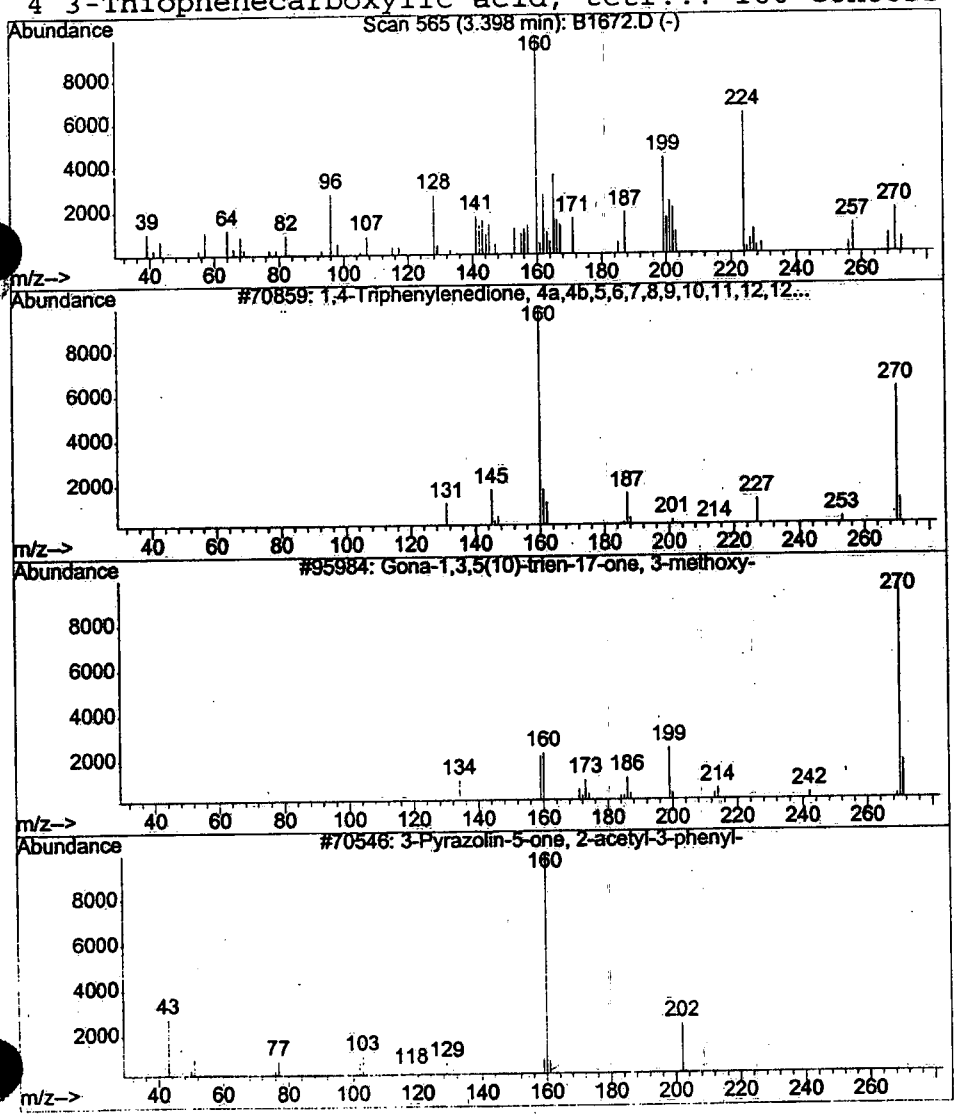
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

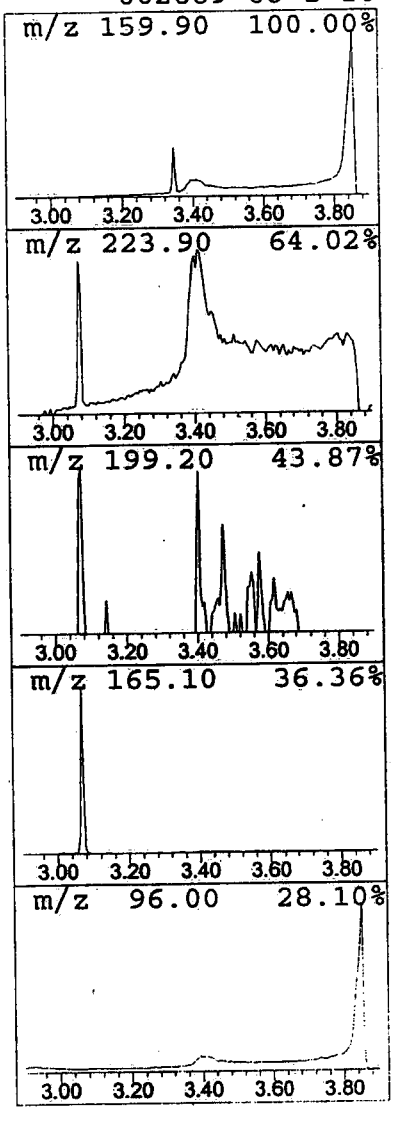
****

Peak Number 2 Unknown aromatic — Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.40	4.07 UG	38047	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Triphenylenedione, 4a,4b,5,6...	270	C18H22O2	033283-44-2	35
2	Gona-1,3,5(10)-trien-17-one, 3-m...	270	C18H22O2	004147-10-8	25
3	3-Pyrazolin-5-one, 2-acetyl-3-ph...	202	C11H10N2O2	024768-95-4	11
4	3-Thiophenecarboxylic acid, tetr...	160	C6H8O3S	002689-68-1	10





1472

000437

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1672.D
Acq On : 2 Apr 2001 12:36
Sample : S-21,1922-005,S,1.38g,14.6,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
'S Integration Params: LSCINT.P

Vial: 20
Operator: JC
Inst : MSD_B
Multiplr: 1.00

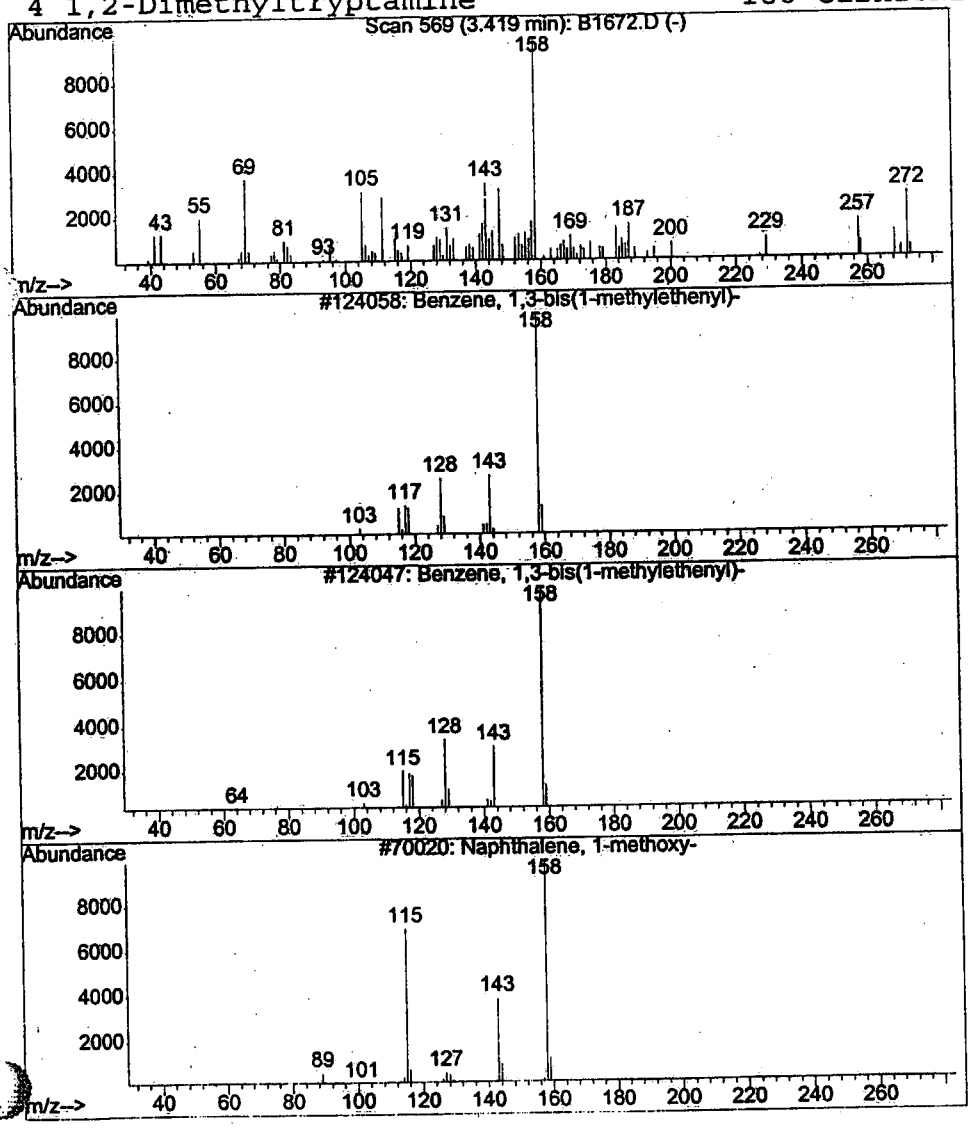
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

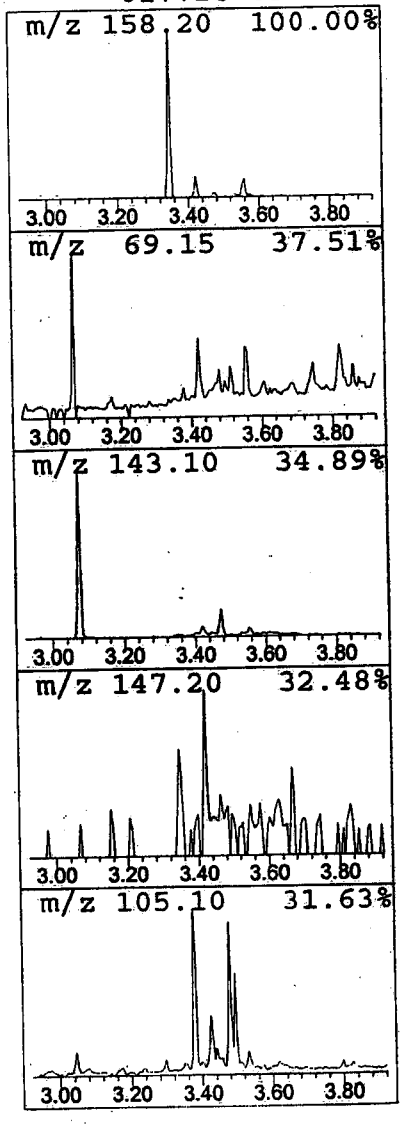
****

Peak Number 3 Unknown aromatic Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.42	5.07 UG	47408	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3-bis(1-methylethenyl)-	158	C12H14	003748-13-8	38
2	Benzene, 1,3-bis(1-methylethenyl)-	158	C12H14	003748-13-8	38
3	Naphthalene, 1-methoxy-	158	C11H10O	002216-69-5	38
4	1,2-Dimethyltryptamine	188	C12H16N2	017726-03-3	38





000438

1473

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1672.D
Acq On : 2 Apr 2001 12:36
Sample : S-21,1922-005,S,1.38g,14.6,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 20
Operator: JC
Inst : MSD_B
Multiplr: 1.00

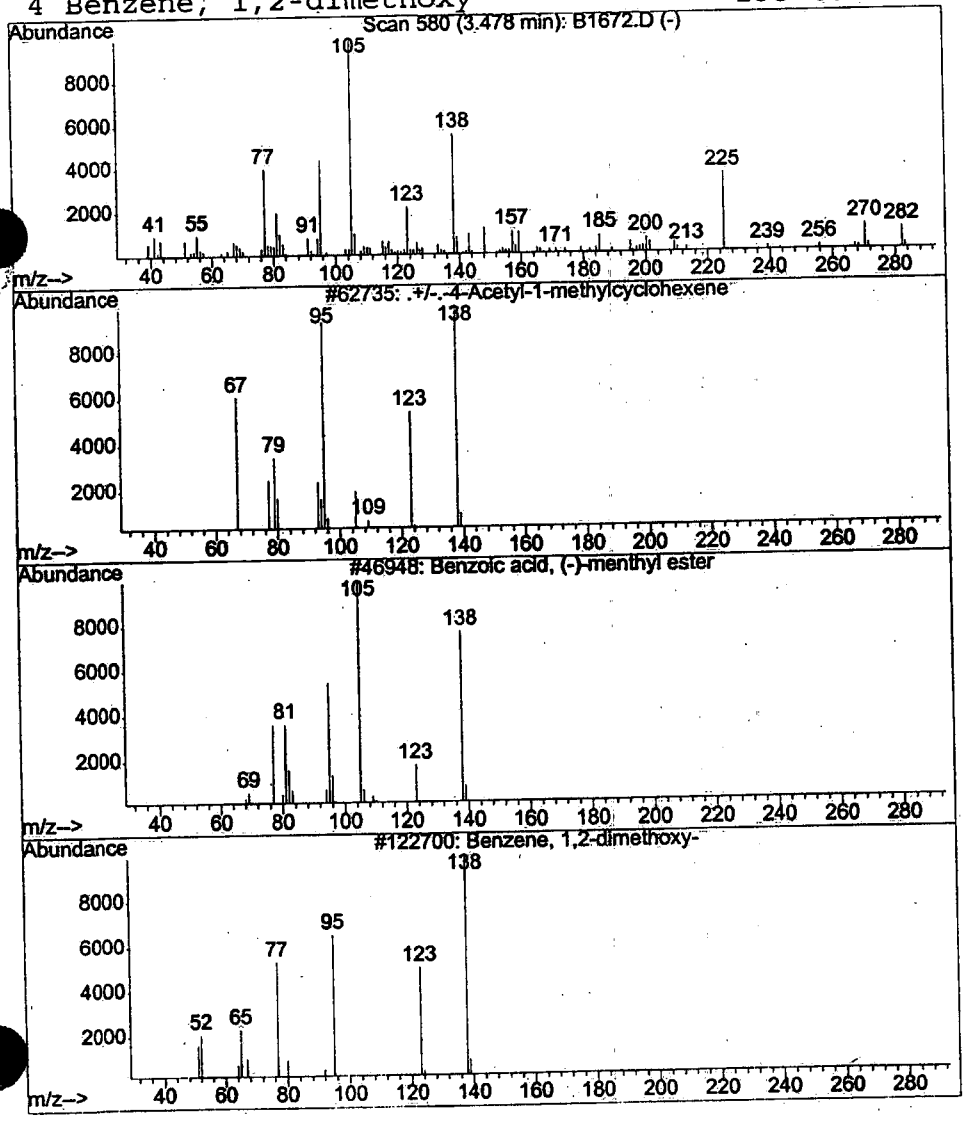
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

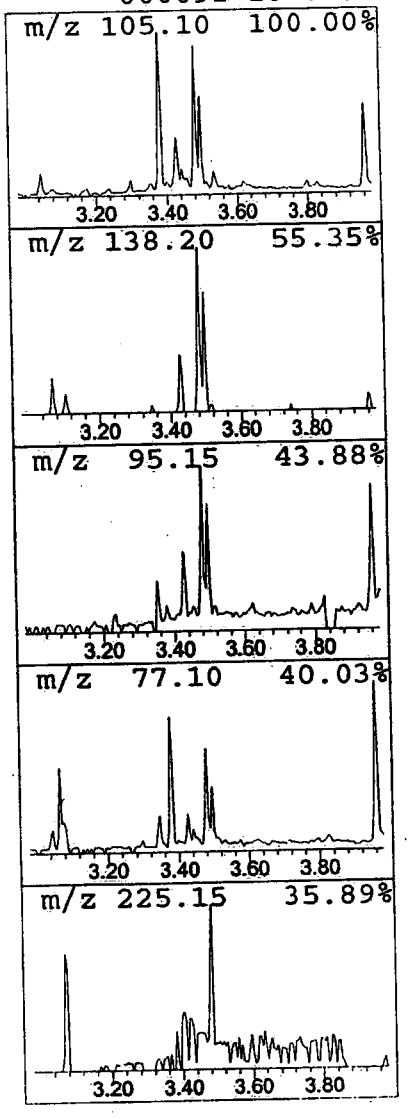
****

Peak Number 4 Unknown aromatic Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.48	5.29 UG	49411	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.+/-.-4-Acetyl-1-methylcyclohexene	138	C9H14O	070286-20-3	43
2	Benzoic acid, (-)-menthyl ester	260	C17H24O2	1000158-46-9	38
3	Benzene, 1,2-dimethoxy-	138	C8H10O2	000091-16-7	38
4	Benzene, 1,2-dimethoxy-	138	C8H10O2	000091-16-7	30





1474

000439

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1672.D
Acq On : 2 Apr 2001 12:36
Sample : S-21,1922-005,S,1.38g,14.6,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 20
Operator: JC
Inst : MSD_B
Multiplr: 1.00

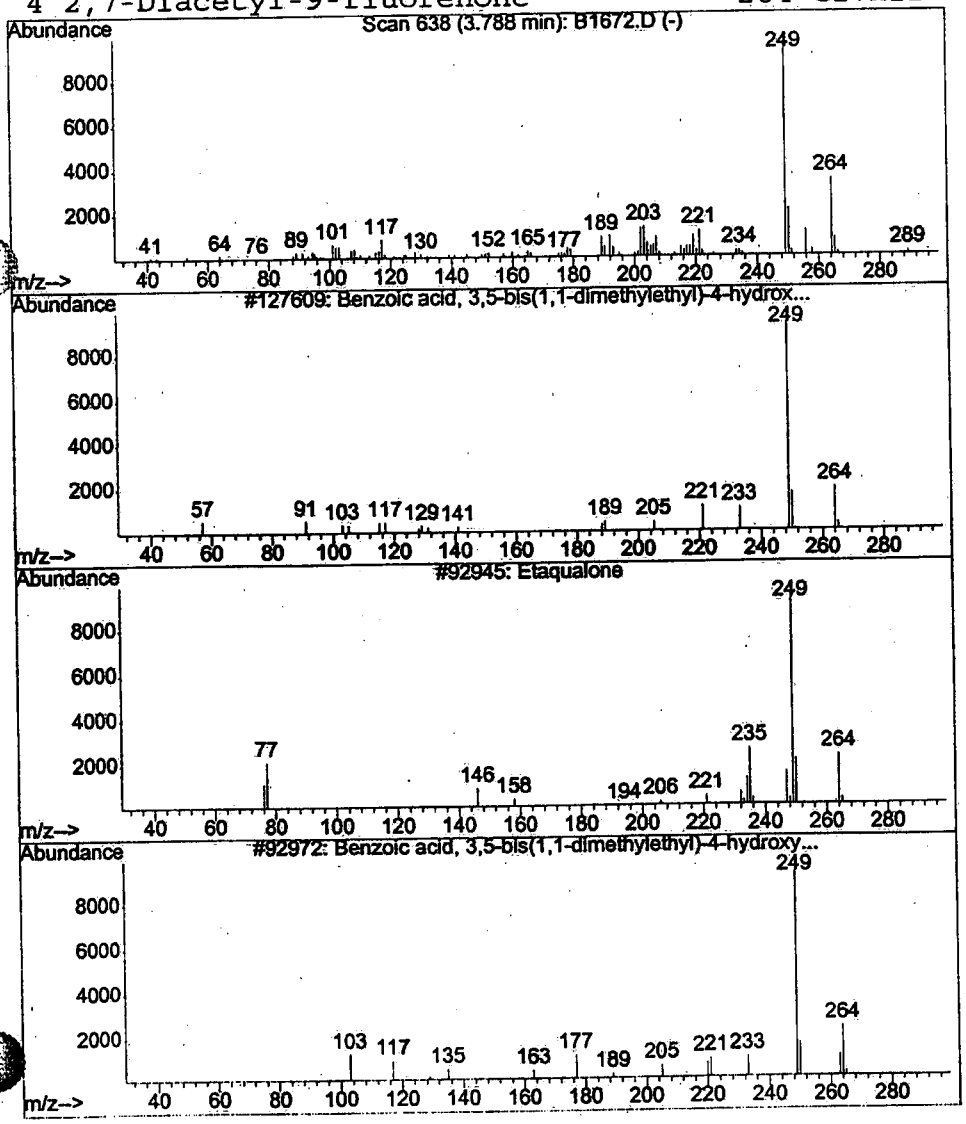
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

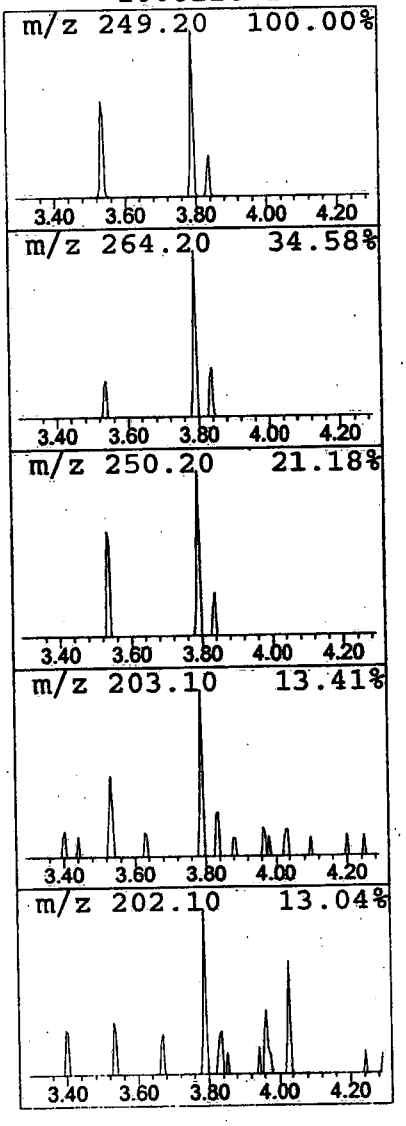
****

Peak Number 5 Substituted phenol Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.79	8.32 UG	77712	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 3,5-bis(1,1-dimeth...	264	C16H24O3	002511-22-0	59
2	Etaqualone	264	C17H16N2O	007432-25-9	53
3	Benzoic acid, 3,5-bis(1,1-dimeth...	264	C16H24O3	002511-22-0	53
4	2,7-Diacetyl-9-fluorenone	264	C17H12O3	1000226-11-0	53





1675

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1672.D
Acq On : 2 Apr 2001 12:36
Sample : S-21,1922-005,S,1.38g,14.6,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 20
Operator: JC
Inst : MSD_B
Multiplr: 1.00

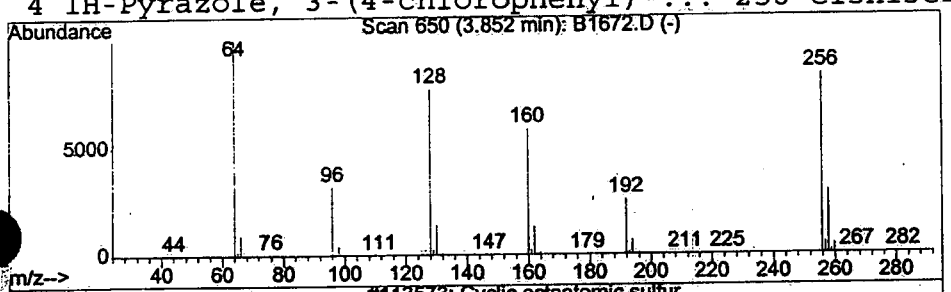
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

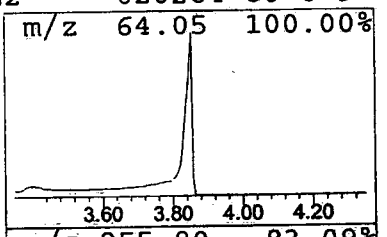
****

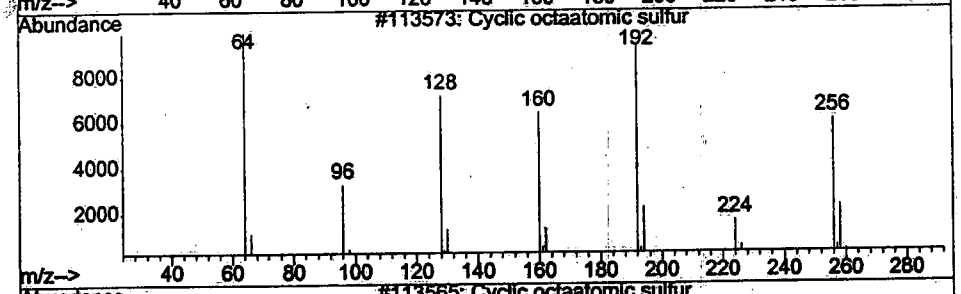
Peak Number 6 Cyclic octaatomic sulfur Concentration Rank 1

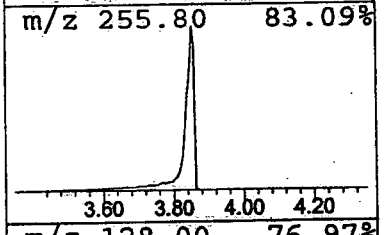
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.85	127.74 UG	1193560	Phenanthrene-d10	3.34

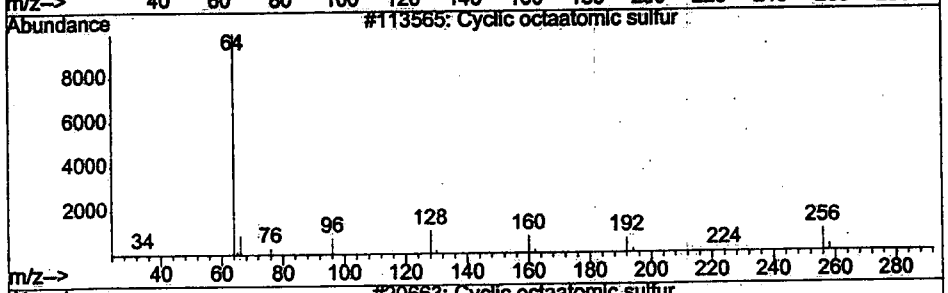
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclic octaatomic sulfur	256	S8	010544-50-0	94
2	Cyclic octaatomic sulfur	256	S8	010544-50-0	91
3	Cyclic octaatomic sulfur	256	S8	010544-50-0	91
4	1H-Pyrazole, 3-(4-chlorophenyl)-...	256	C15H13ClN2	020264-80-6	9

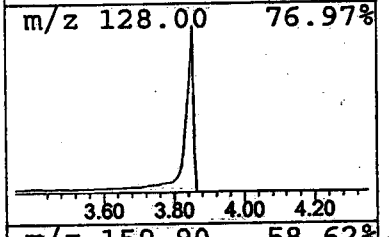


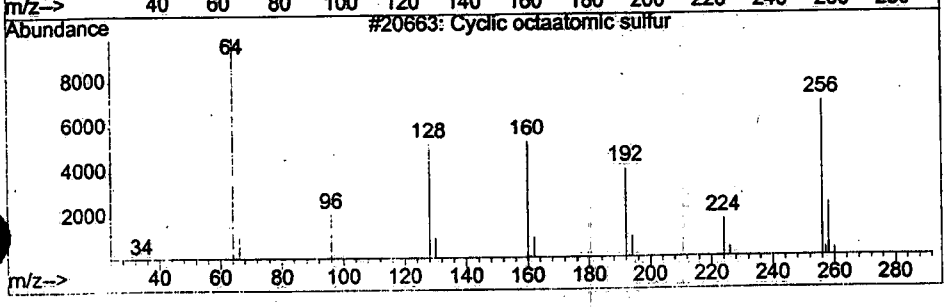


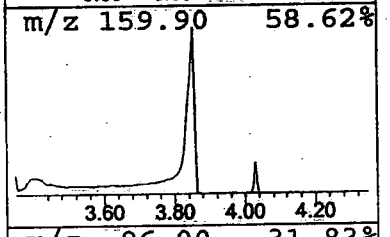


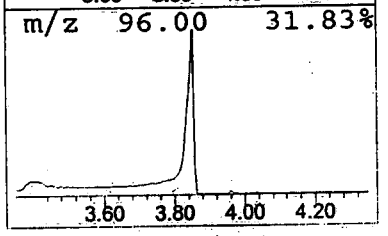












1476

000441

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1672.D
Acq On : 2 Apr 2001 12:36
Sample : S-21,1922-005,S,1.38g,14.6,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
3 Integration Params: LSCINT.P

Vial: 20
Operator: JC
Inst : MSD_B
Multiplr: 1.00

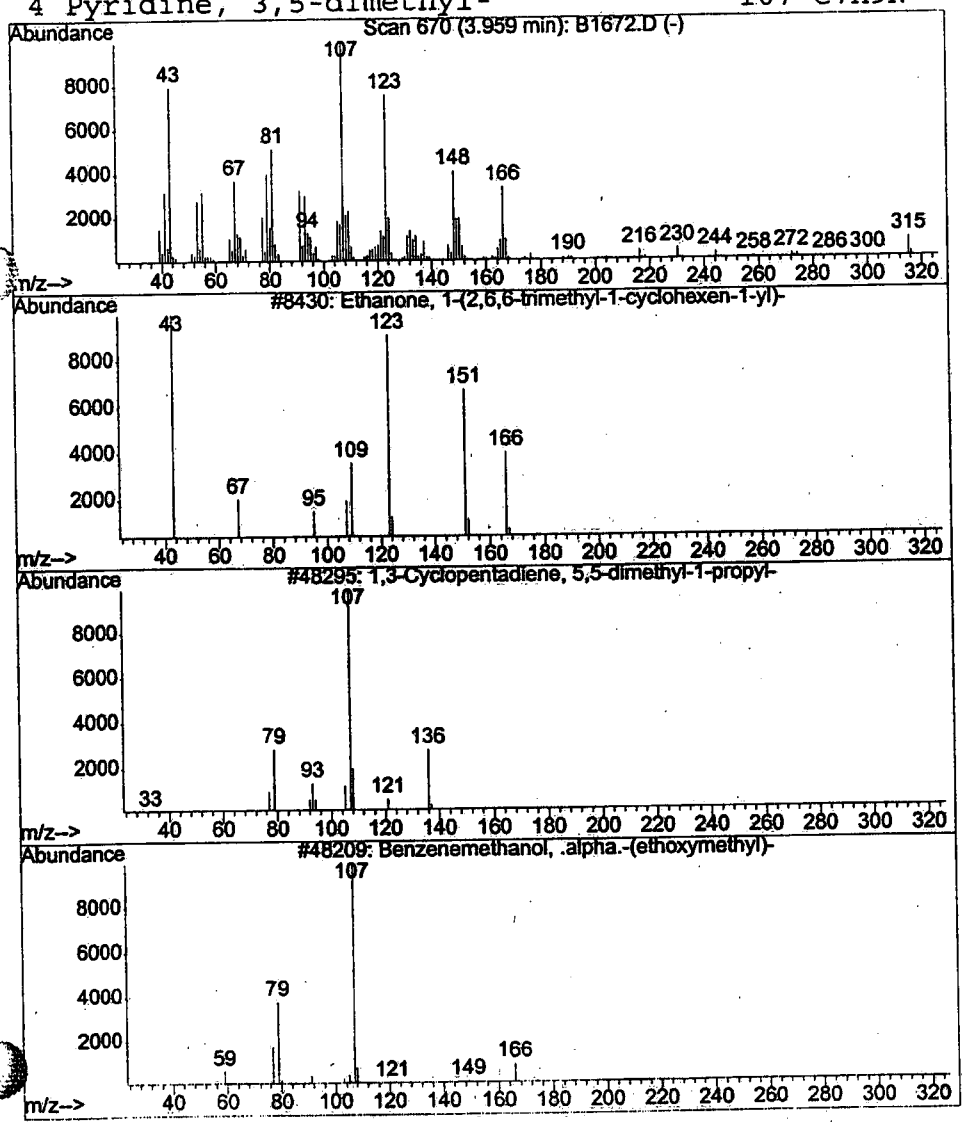
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

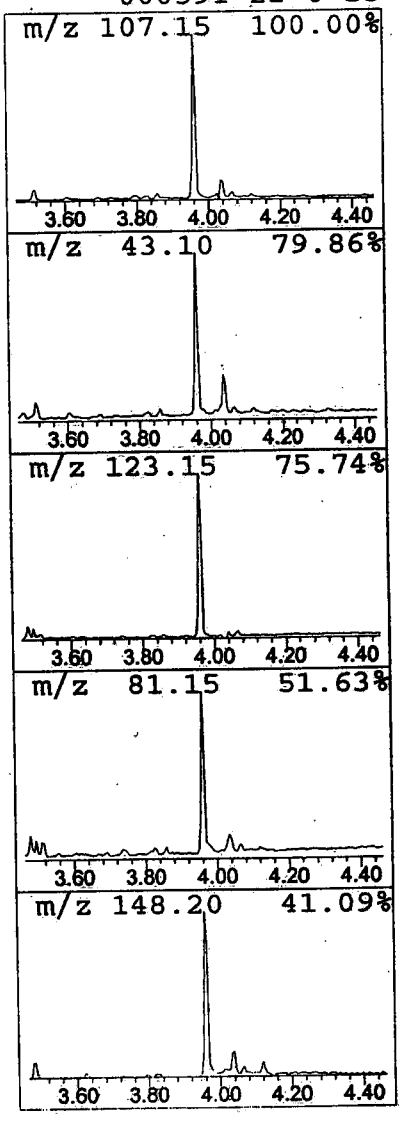
****

Peak Number 7 Unknown aromatic Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.96	25.94 UG	205094	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanone, 1-(2,6,6-trimethyl-1-c...	166	C11H18O	001197-92-8	30
2	1,3-Cyclopentadiene, 5,5-dimethy...	136	C10H16	1000163-57-1	27
3	Benzenemethanol, .alpha.-(ethoxy...	166	C10H14O2	022383-53-5	27
4	Pyridine, 3,5-dimethyl-	107	C7H9N	000591-22-0	25





1477

000442

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D Vial: 4
Acq On : 3 Apr 2001 6:56 Operator: JC
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2 Multiplr: 1.00
3 Integration Params: rteint.p
Quant Time: Apr 03 07:05:30 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	45793	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	168992	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	81483	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	119671	40.00	UG	-0.02
75) Chrysene-d12	4.47	240	101135	40.00	UG	-0.04
84) Perylene-d12	5.28	264	129606	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	41891	31.80	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 31.80%#			
6) Phenol-d5	1.39	99	58228	36.11	UG	-0.02
Spiked Amount 100.000	Range 40 - 101		Recovery = 36.11%#			
23) Nitrobenzene-d5	1.74	82	21234	17.32	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 34.64%#			
43) 2-Fluorobiphenyl	2.48	172	50479	22.54	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 45.08%#			
64) 2,4,6-Tribromophenol	3.09	330	12836	32.21	UG	0.01
Spiked Amount 100.000	Range 54 - 135		Recovery = 32.21%#			
77) Terphenyl-d14	4.01	244	47712	19.78	UG	-0.03
Spiked Amount 50.000	Range 58 - 147		Recovery = 39.56%#			
Target Compounds						Qvalue
12) 1,4-Dichlorobenzene	1.52	146	1134m	0.72	UG	
14) 1,2-Dichlorobenzene	1.59	146	6964	4.64	UG	98
32) 1,2,4-Trichlorobenzene	2.01	180	1478	1.19	UG	98
69) Phenanthrene	3.34	178	3041	1.23	UG #	29
71) Carbazole	3.45	167	3041	1.34	UG #	1
73) Fluoranthene	3.82	202	1854	0.71	UG #	1
82) Chrysene	4.48	228	1519m	0.68	UG	

(#) = qualifier out of range (m) = manual integration

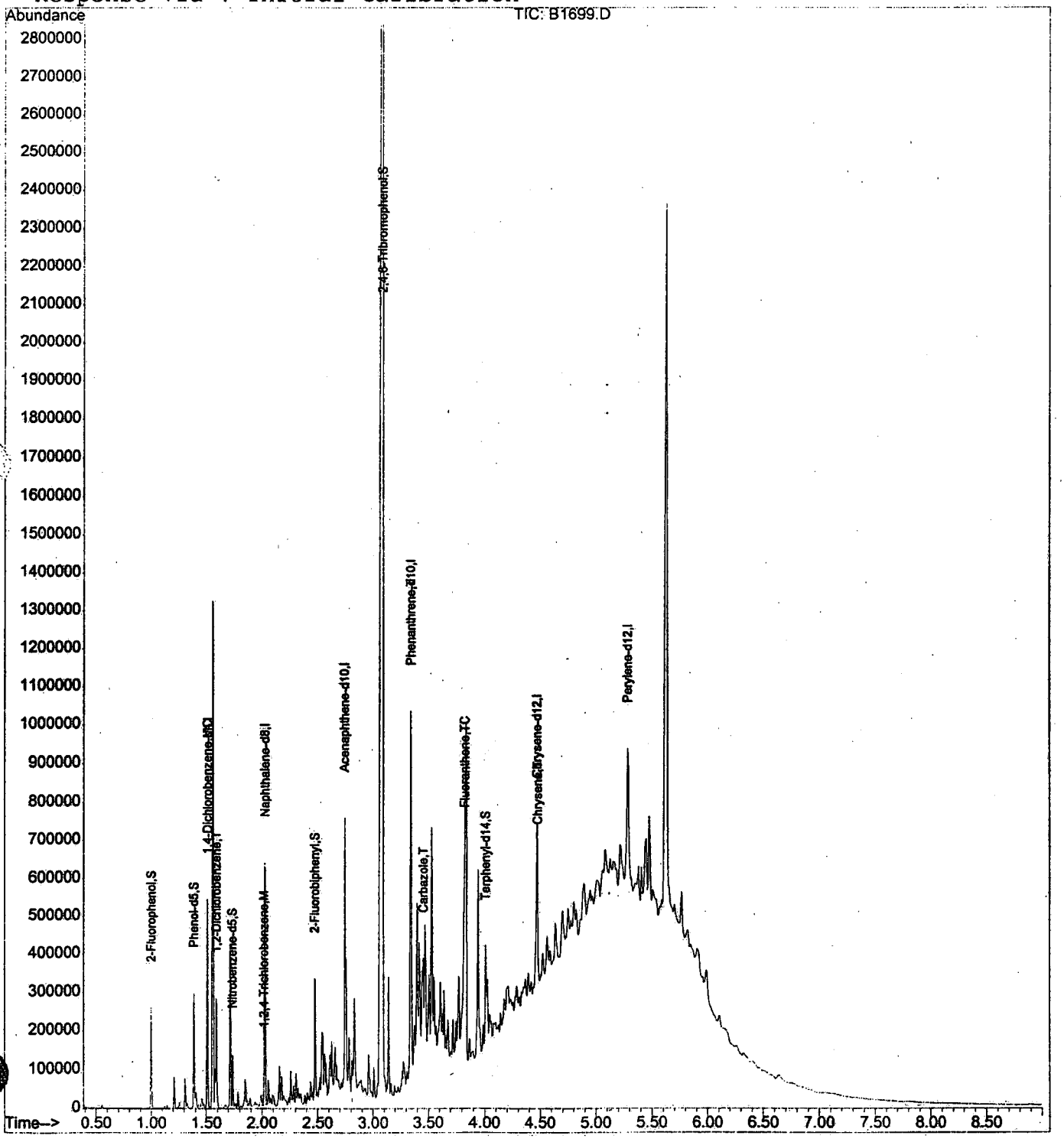
14178

000443

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D Vial: 4
Acq On : 3 Apr 2001 6:56 Operator: JC
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 3 11:05 2001 Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



1479

000444

PAR/SIR/RIW

Orbis Products Corporation
55 Virginia Street
Newark, Essex County, NJ
Case #86-11-17-0100 R-f 15
Attachment 10
Soil Laboratory Reports
(4 of 6)

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

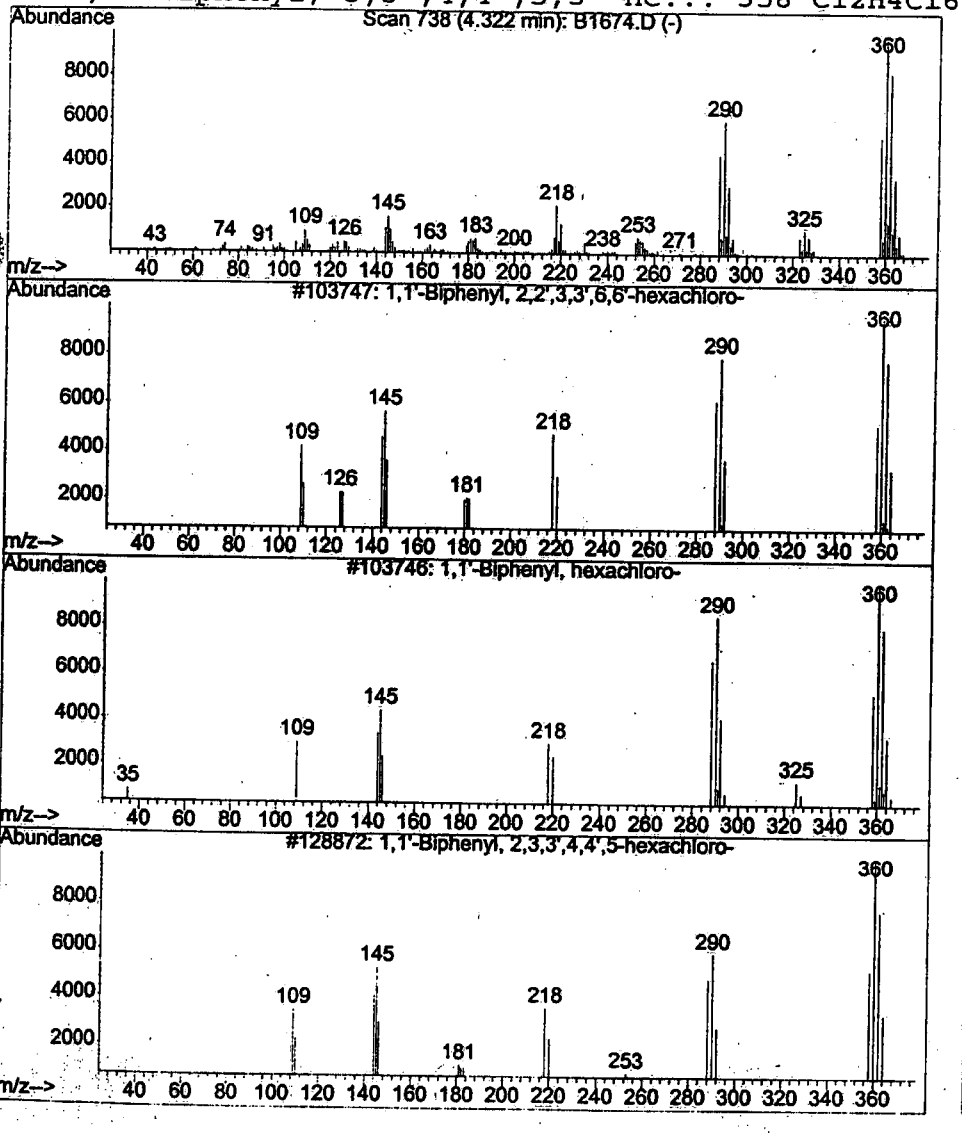
****

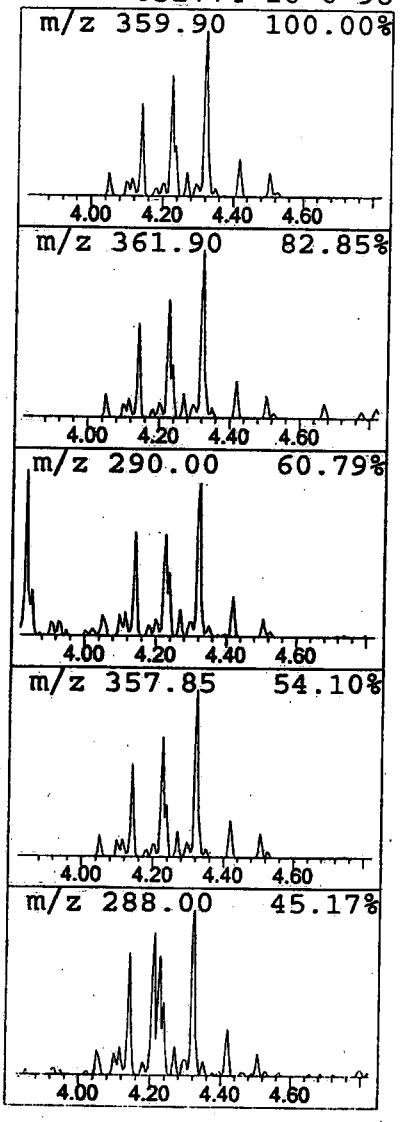
Peak Number 21 1,1'-Biphenyl, 2,2',3,3',6,... Concentration Rank 5

substituted Biphenyl

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.32	18.02 UG	182866	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,3',6,6'-he...	358	C12H4Cl6	038411-22-2	99
2	1,1'-Biphenyl, hexachloro-	358	C12H4Cl6	026601-64-9	99
3	1,1'-Biphenyl, 2,3,3',4,4',5-hex...	358	C12H4Cl6	038380-08-4	99
4	1,1'-Biphenyl, 3,3',4,4',5,5'-he...	358	C12H4Cl6	032774-16-6	98





1481

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.000	113	116	119	rBV	259627	125756	2.10%	0.628%
2	1.390	186	189	191	rBV	296616	155115	2.59%	0.775%
3	1.512	209	212	215	rVB	544446	269234	4.50%	1.345%
4	1.560	217	221	223	rBV2	1324655	795697	13.30%	3.975%
5	1.593	225	227	229	rVB	268781	121948	2.04%	0.609%
6	1.715	248	250	252	rVB	423033	205499	3.44%	1.027%
[illegible]	1.849	269	275	279	rBV	72064	63991	1.07%	0.320%
[illegible]	2.031	305	309	311	rBV	637462	372552	6.23%	1.861%
[illegible]	2.159	327	333	334	rBV2	105440	69874	1.17%	0.349%
10	2.479	390	393	395	rBV	316119	168169	2.81%	0.840%
11	2.543	402	405	407	rBV3	150252	147488	2.47%	0.737%
12	2.613	415	418	420	rBV3	99844	95885	1.60%	0.479%
13	2.661	423	427	428	rBV2	98710	69230	1.16%	0.346%
14	2.746	438	443	447	rBV2	708096	511063	8.54%	2.553%
15	2.784	447	450	453	rVB3	141815	105151	1.76%	0.525%
16	2.832	456	459	463	rVB2	232943	182100	3.04%	0.910%
17	2.960	480	483	487	rBV3	106072	88510	1.48%	0.442%
18	3.088	499	507	509	rBV	4358868	5982339	100.00%	29.887%
19	3.142	515	517	519	rVB	303355	154744	2.59%	0.773%
20	3.275	535	542	546	rBV4	81059	136348	2.28%	0.681%
21	3.339	550	554	558	rVV2	985756	800921	13.39%	4.001%
22	3.377	558	561	562	rVV2	156259	162593	2.72%	0.812%
23	3.398	562	565	567	rVV2	475437	412859	6.90%	2.063%
24	3.414	567	568	571	rVV3	366320	304116	5.08%	1.519%
25	3.452	571	575	576	rVV	323633	405864	6.78%	2.028%
26	3.468	576	578	581	rVV4	407647	410514	6.86%	2.051%
27	3.505	581	585	587	rVV2	270662	326470	5.46%	1.631%
28	3.526	587	589	592	rVV	656772	536051	8.96%	2.678%
[illegible]	3.548	592	593	596	rVV3	257826	213553	3.57%	1.067%
[illegible]	3.607	598	604	606	rVV5	239023	354523	5.93%	1.771%
31	3.639	609	610	612	rVV	210581	134011	2.24%	0.669%

1482

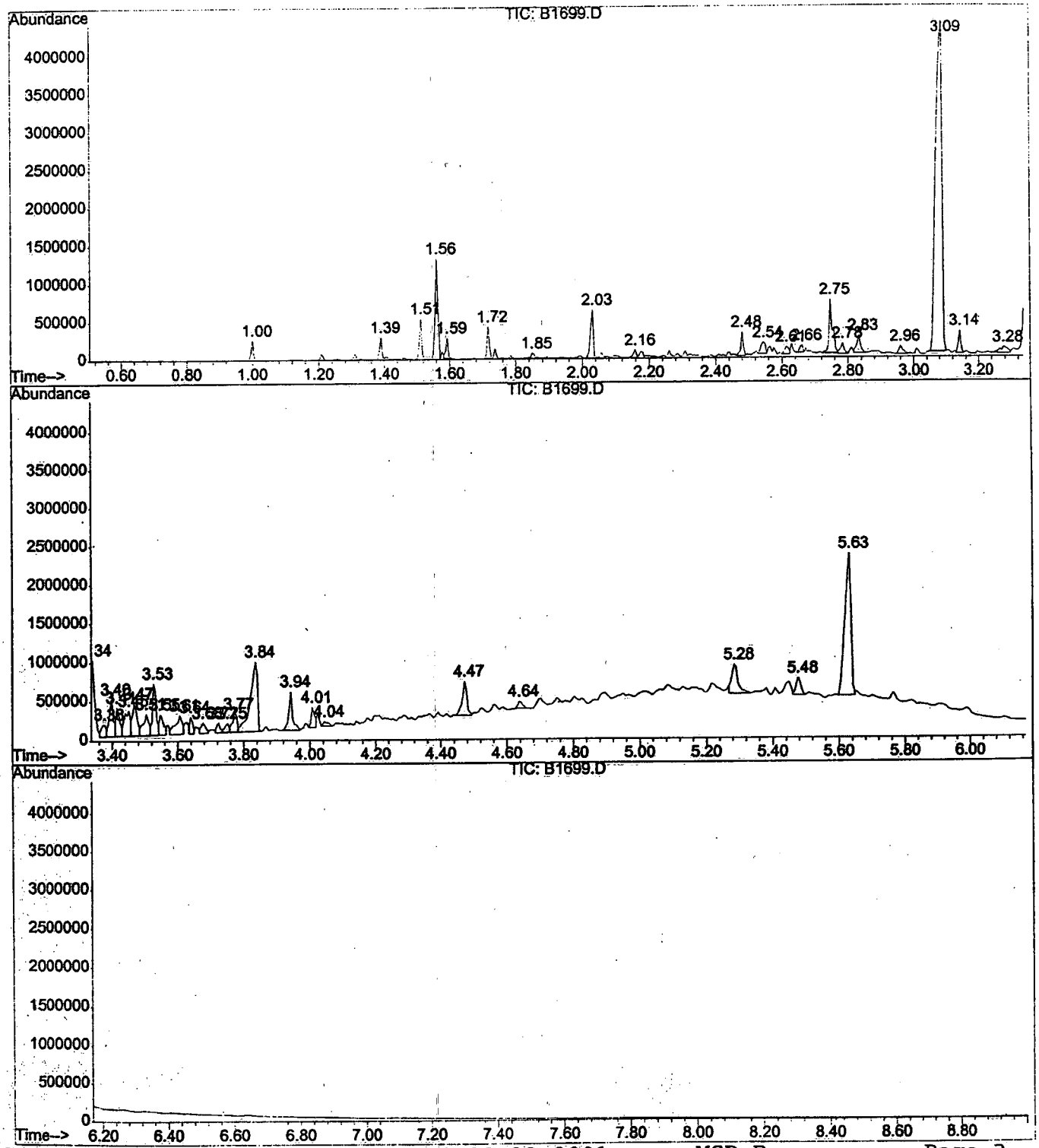
000445

32	3.676	615	617	620	rVV2	128053	128767	2.15%	0.643%
33	3.724	624	626	628	rVV	124332	98435	1.65%	0.492%
34	3.751	628	631	632	rVV2	116417	101225	1.69%	0.506%
35	3.772	632	635	637	rVV2	230138	240146	4.01%	1.200%
36	3.836	637	647	650	rVB	885015	1346821	22.51%	6.728%
	3.943	662	667	672	rBV2	491682	400949	6.70%	2.003%
[illegible]	4.007	677	679	681	rBV	259724	194838	3.26%	0.973%
39	4.045	684	686	690	rVB3	58773	63368	1.06%	0.317%
40	4.472	761	766	770	rBV2	433687	420328	7.03%	2.100%
41	4.638	795	797	802	rVB	89530	84949	1.42%	0.424%
42	5.284	915	918	927	rVB	373311	477578	7.98%	2.386%
43	5.476	951	954	958	rVB	222168	213761	3.57%	1.068%
44	5.631	976	983	986	rBV	1831274	2363481	39.51%	11.807%

Sum of corrected areas: 20016814

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Operator : JC
Acquired : 3 Apr 2001 6:56 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-22,1922-006,S,5.34g,16.5,03/30/01
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,2
Vial Number: 4
Quant File :BS1201.RES (RTE Integrator)



000447

1484

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
'S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

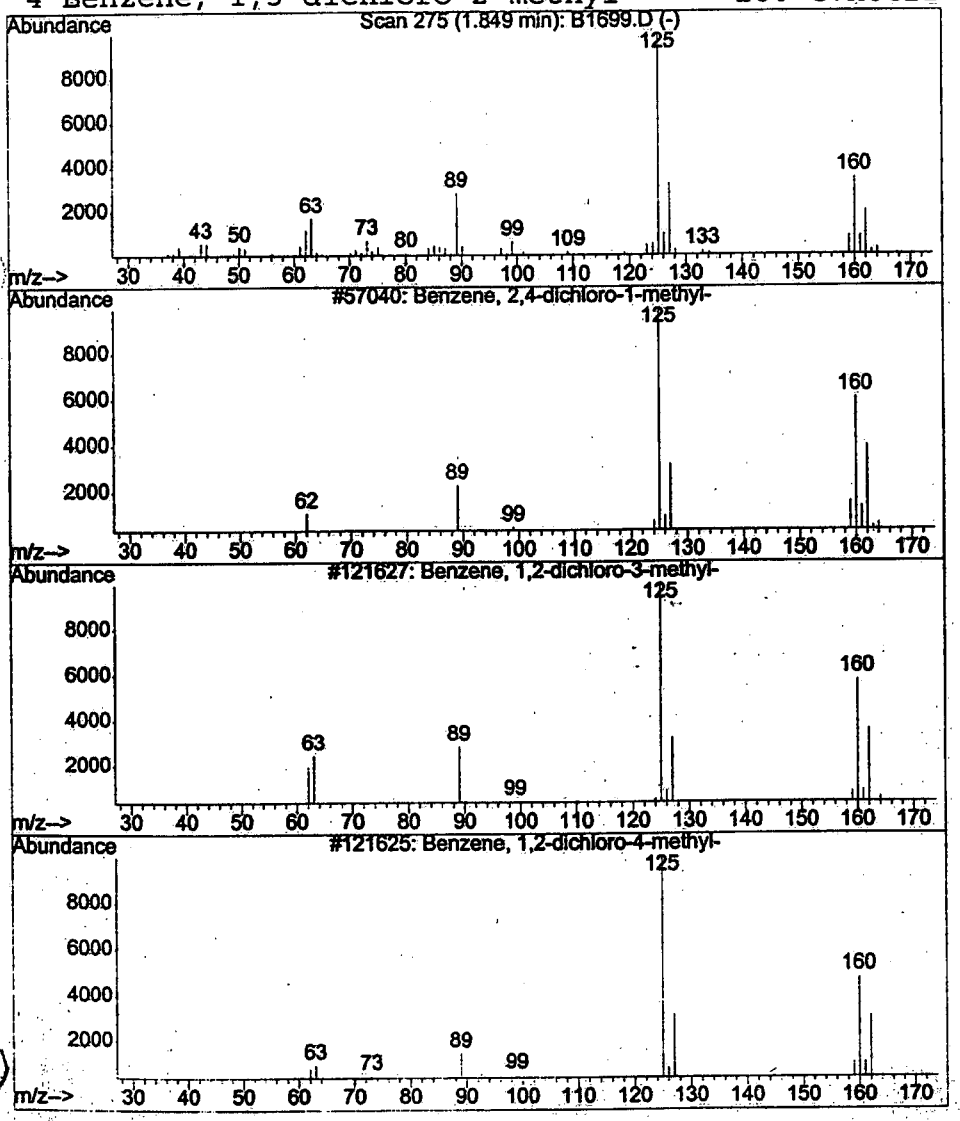
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

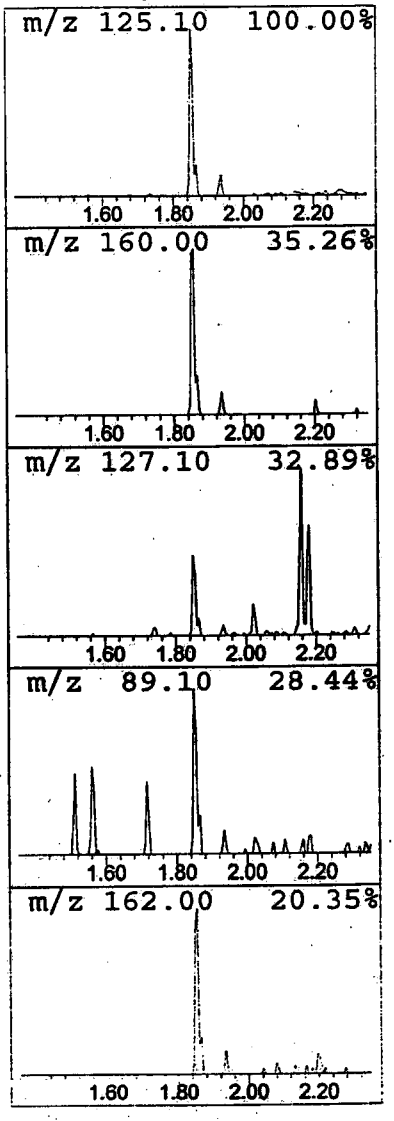
****

Peak Number 1 Substituted benzene Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.85	6.87 UG	63991	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2,4-dichloro-1-methyl-	160	C7H6Cl2	000095-73-8	97
2	Benzene, 1,2-dichloro-3-methyl-	160	C7H6Cl2	032768-54-0	97
3	Benzene, 1,2-dichloro-4-methyl-	160	C7H6Cl2	000095-75-0	97
4	Benzene, 1,3-dichloro-2-methyl-	160	C7H6Cl2	000118-69-4	97





14/85

000448

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

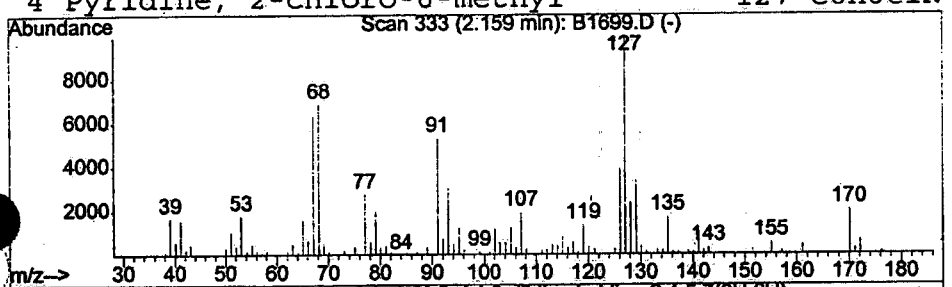
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

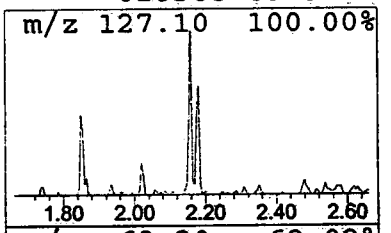
****

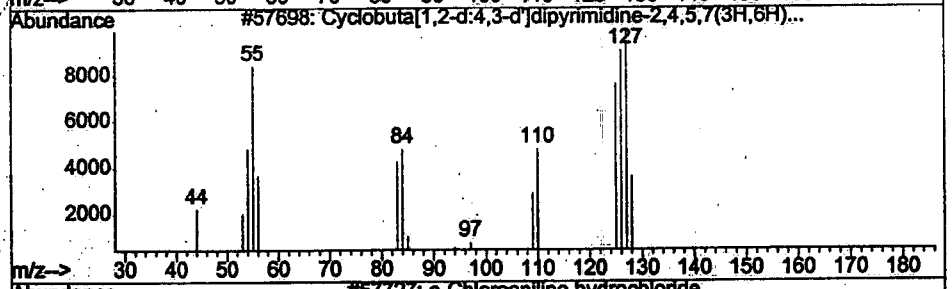
Peak Number 2 Unknown aromatic Concentration Rank 13

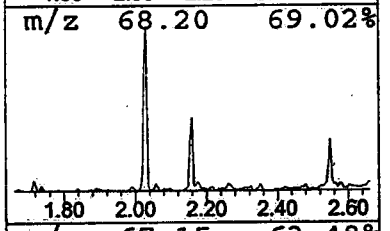
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.16	7.50 UG	69874	Naphthalene-d8	2.03

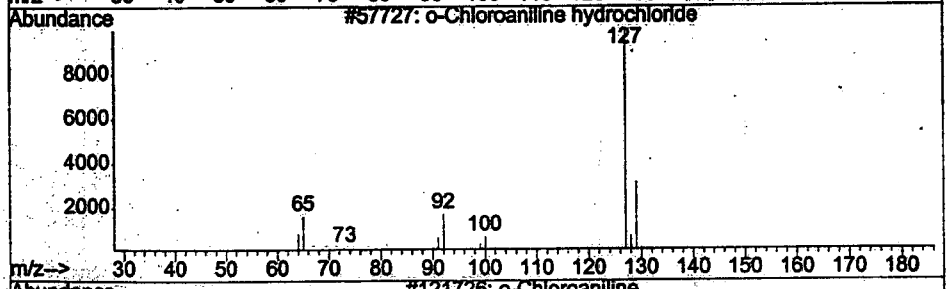
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclobuta[1,2-d:4,3-d']dipyrimid...	252	C10H12N4O4	003660-32-0	38
2	o-Chloroaniline hydrochloride	127	C6H6ClN	000137-04-2	25
3	o-Chloroaniline	127	C6H6ClN	000095-51-2	22
4	Pyridine, 2-chloro-6-methyl-	127	C6H6ClN	018368-63-3	22

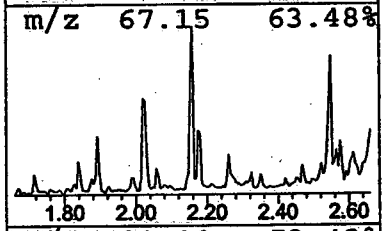


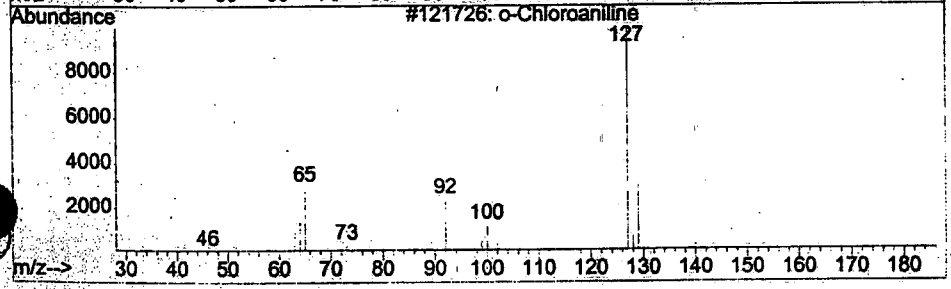


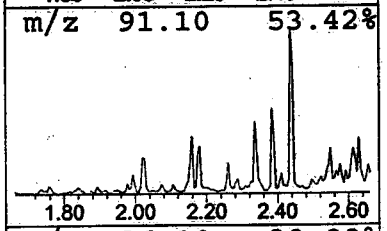


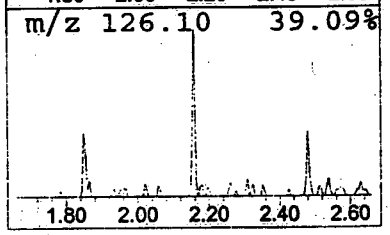












1406

000449

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

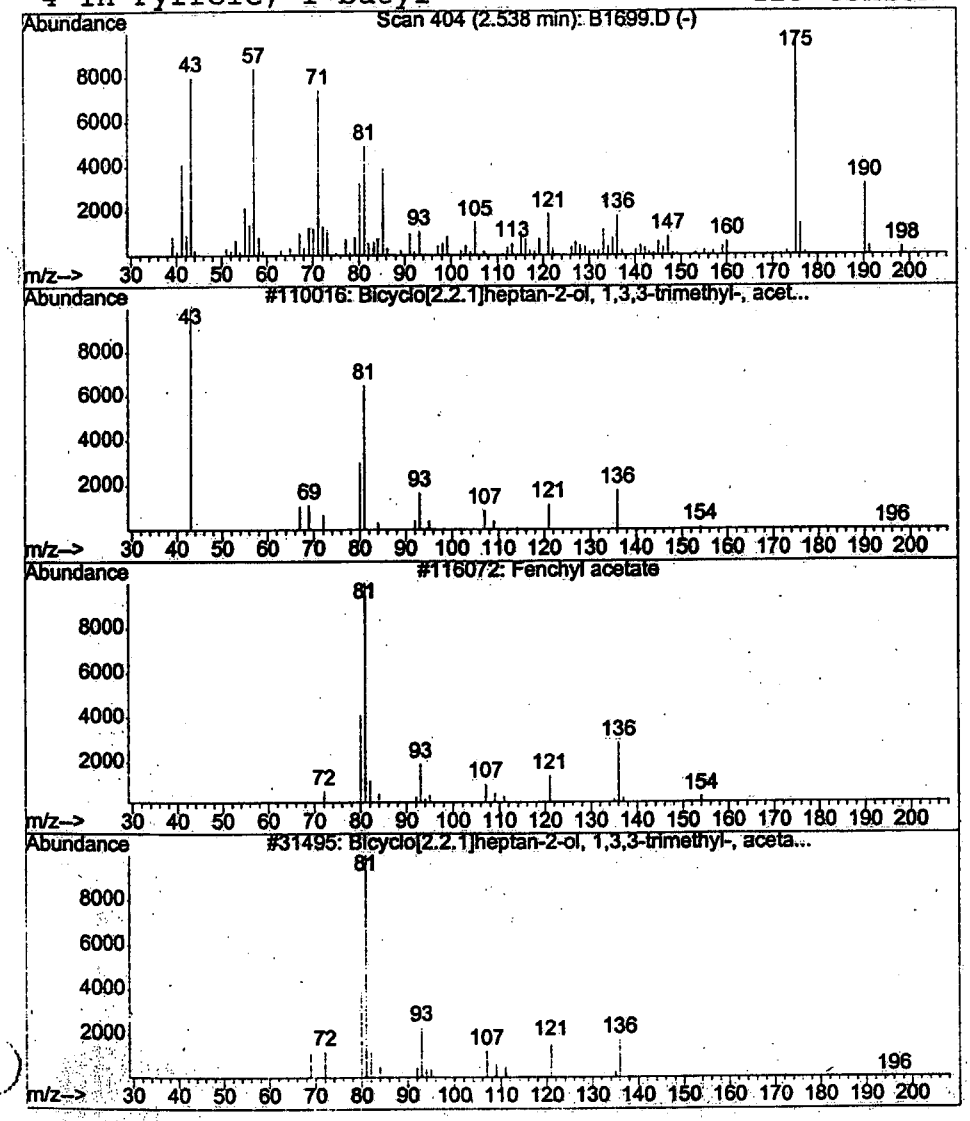
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

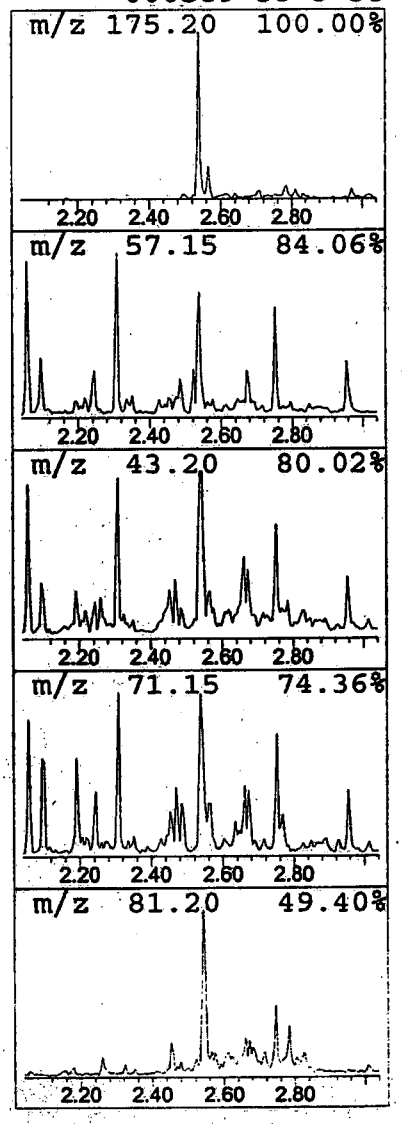
****

Peak Number 3 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.54	11.54 UG	147488	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[2.2.1]heptan-2-ol, 1,3,3...	196	C12H20O2	076109-40-5	59
2	Fenchyl acetate	196	C12H20O2	013851-11-1	47
3	Bicyclo[2.2.1]heptan-2-ol, 1,3,3...	196	C12H20O2	076109-40-5	43
4	1H-Pyrrole, 1-butyl-	123	C8H13N	000589-33-3	38





1487
000450

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

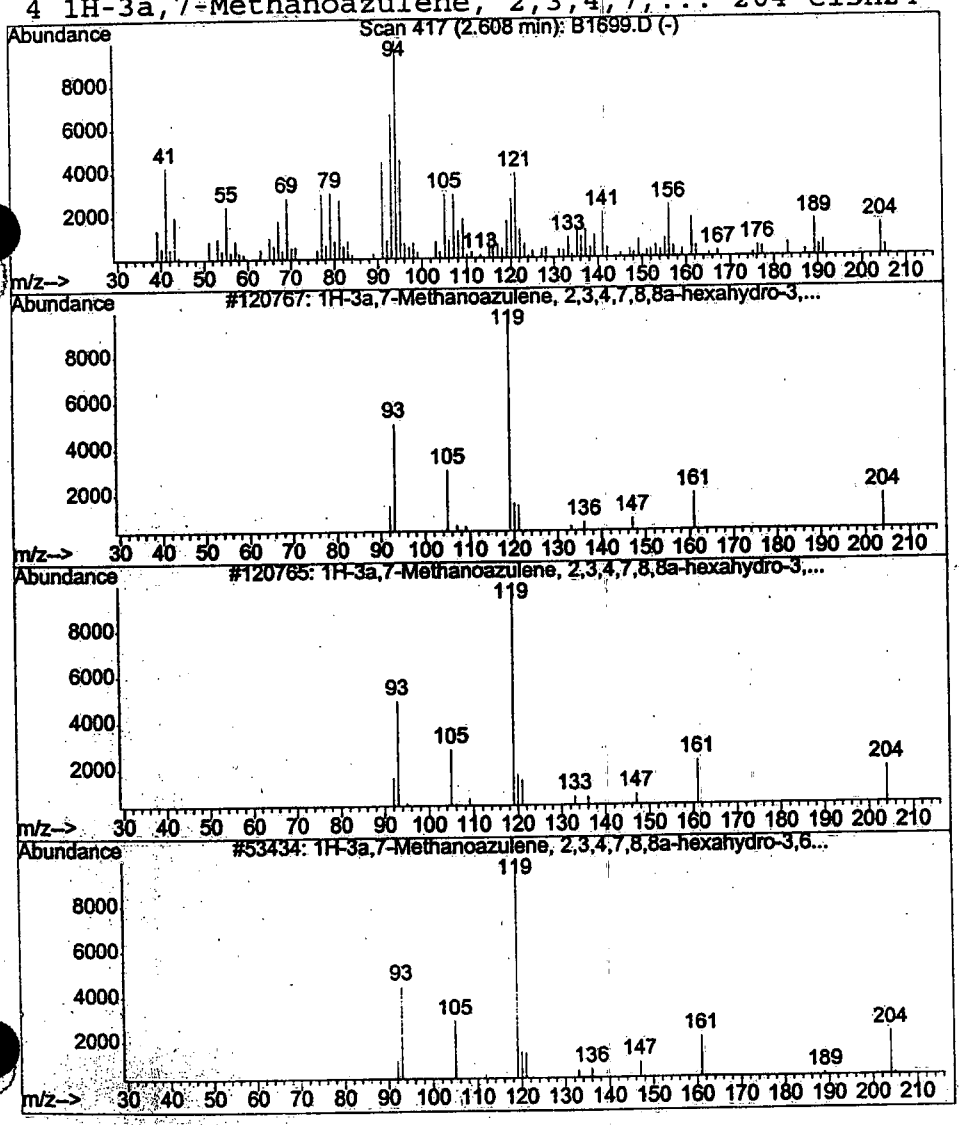
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

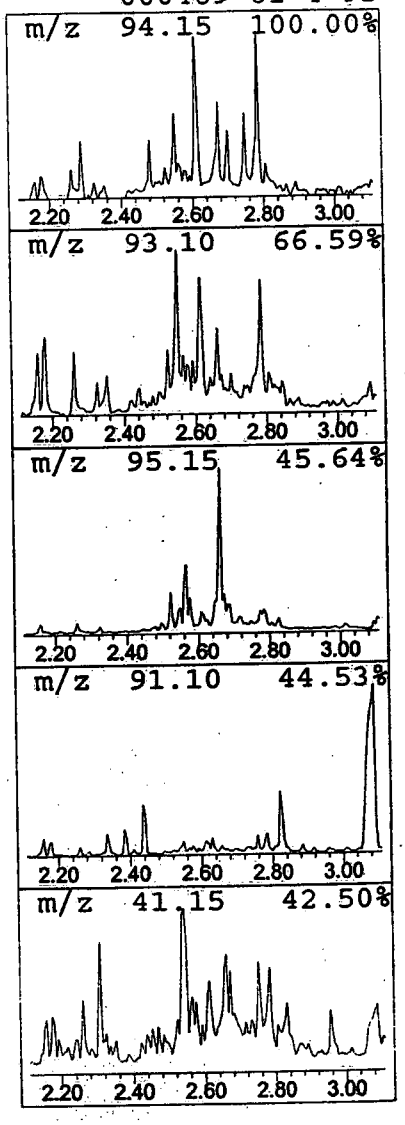
****

Peak Number 4 Unknown — Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.61	7.50 UG	95885	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	98
2	1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	96
3	1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	95
4	1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	95





1488

000451

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

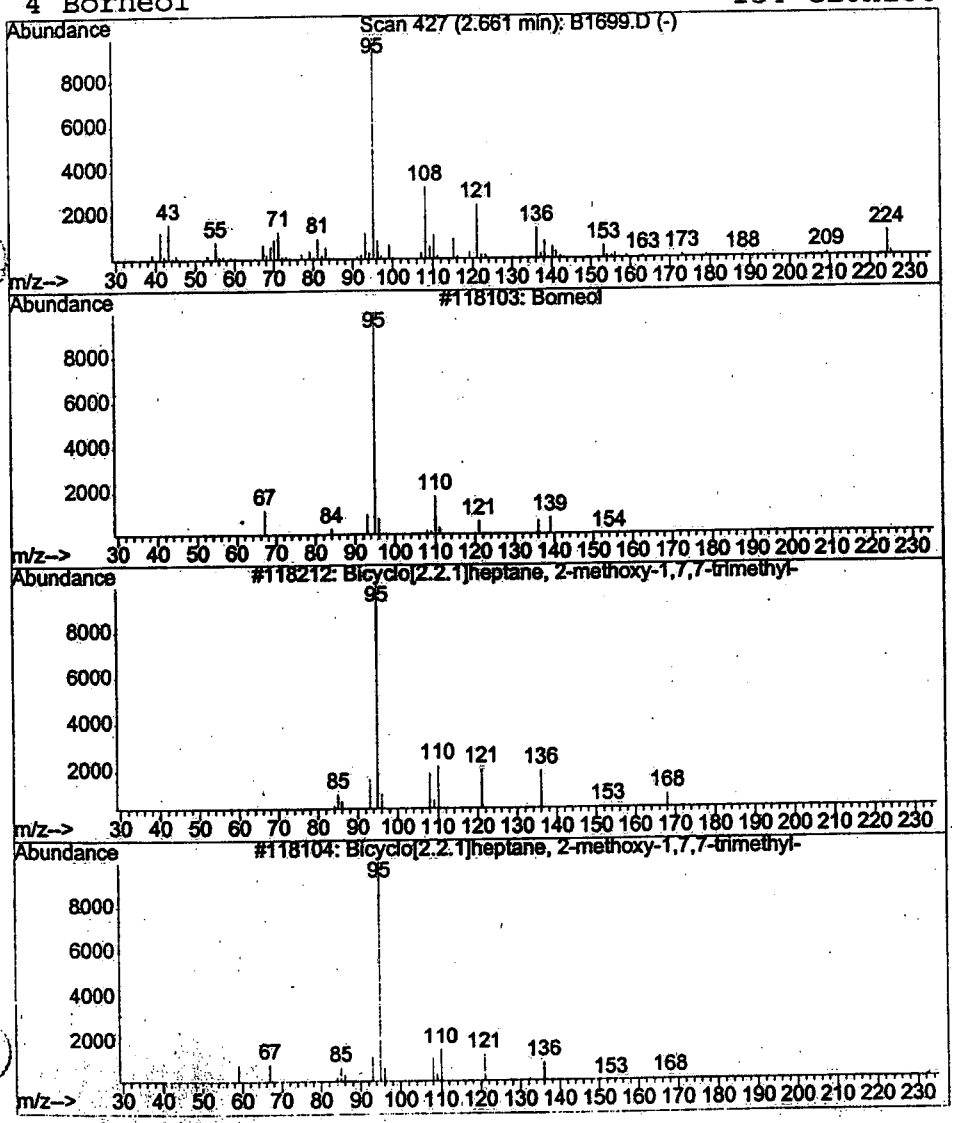
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

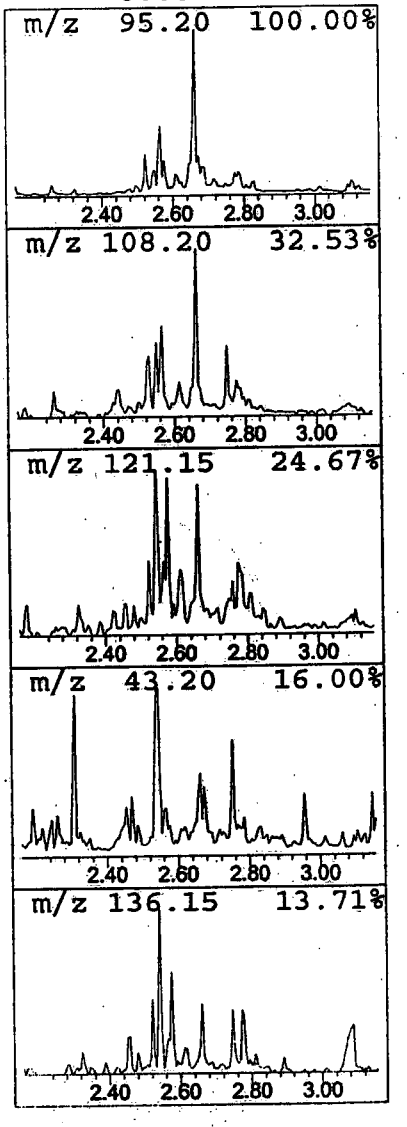
****

Peak Number 5 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.66	5.42 UG	69230	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Borneol	154	C10H18O	010385-78-1	47
2	Bicyclo[2.2.1]heptane, 2-methoxy...	168	C11H20O	004443-51-0	42
3	Bicyclo[2.2.1]heptane, 2-methoxy...	168	C11H20O	004443-51-0	42
4	Borneol	154	C10H18O	000507-70-0	40





1489

000452

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
IS Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

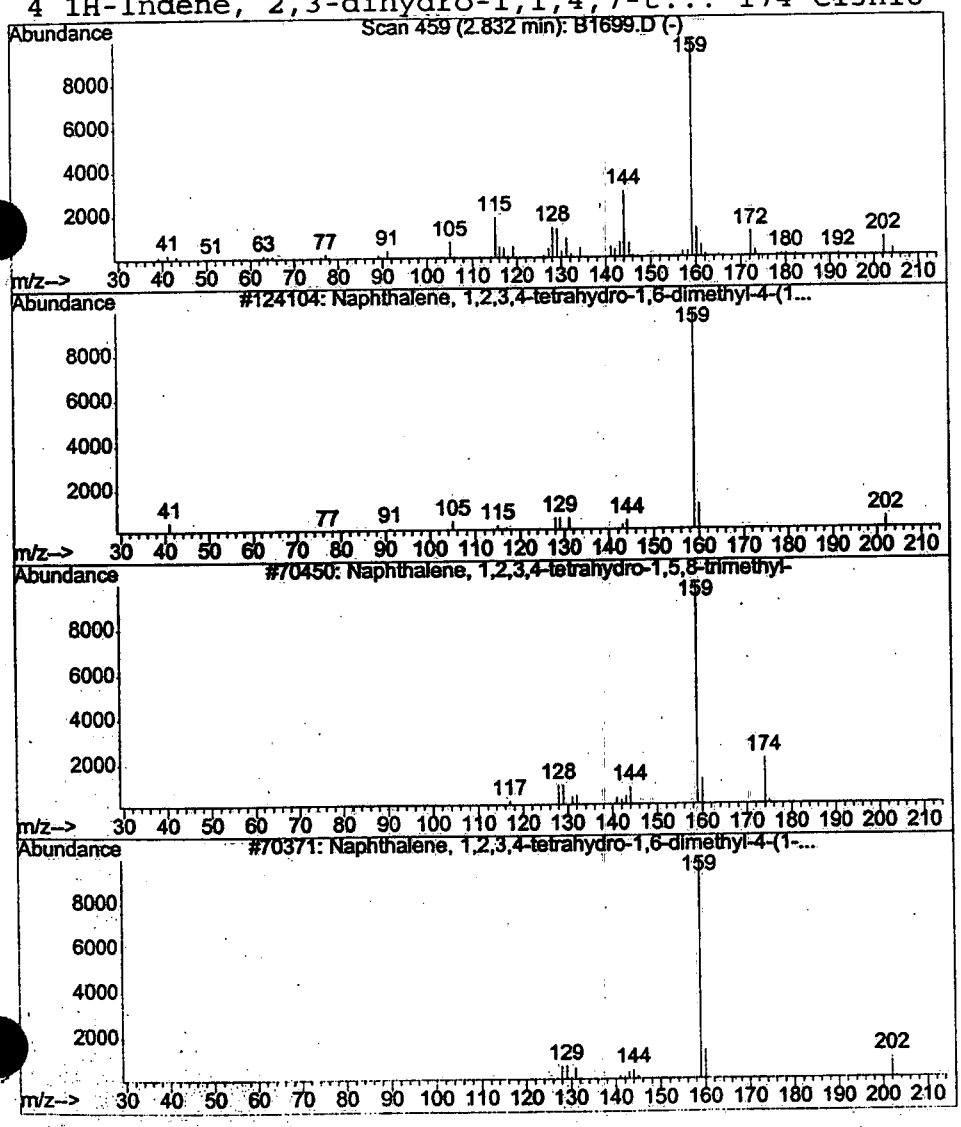
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

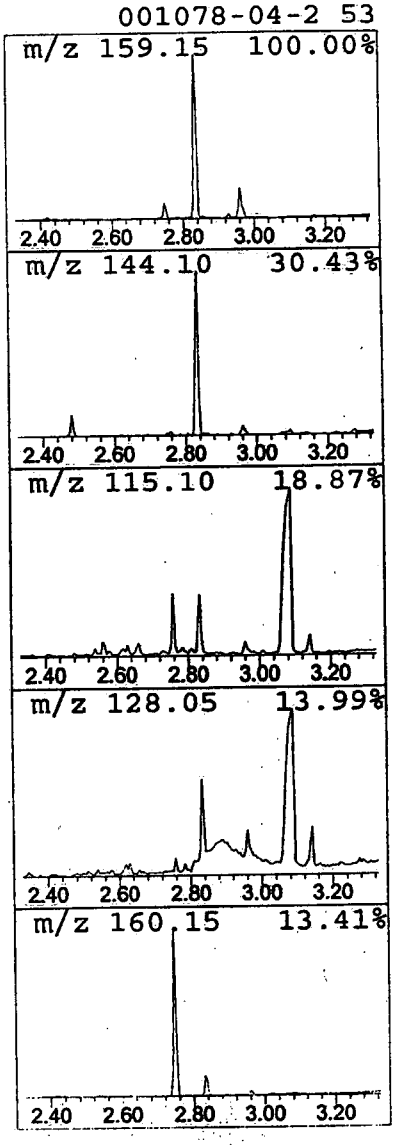
****

Peak Number 6 Substituted naphthalene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.83	14.25 UG	182100	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-...	202	C15H22	000483-77-2	81
2	Naphthalene, 1,2,3,4-tetrahydro-...	174	C13H18	021693-51-6	72
3	Naphthalene, 1,2,3,4-tetrahydro-...	202	C15H22	000483-77-2	62
4	1H-Indene, 2,3-dihydro-1,1,4,7-t...	174	C13H18	001078-04-2	53





1490

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

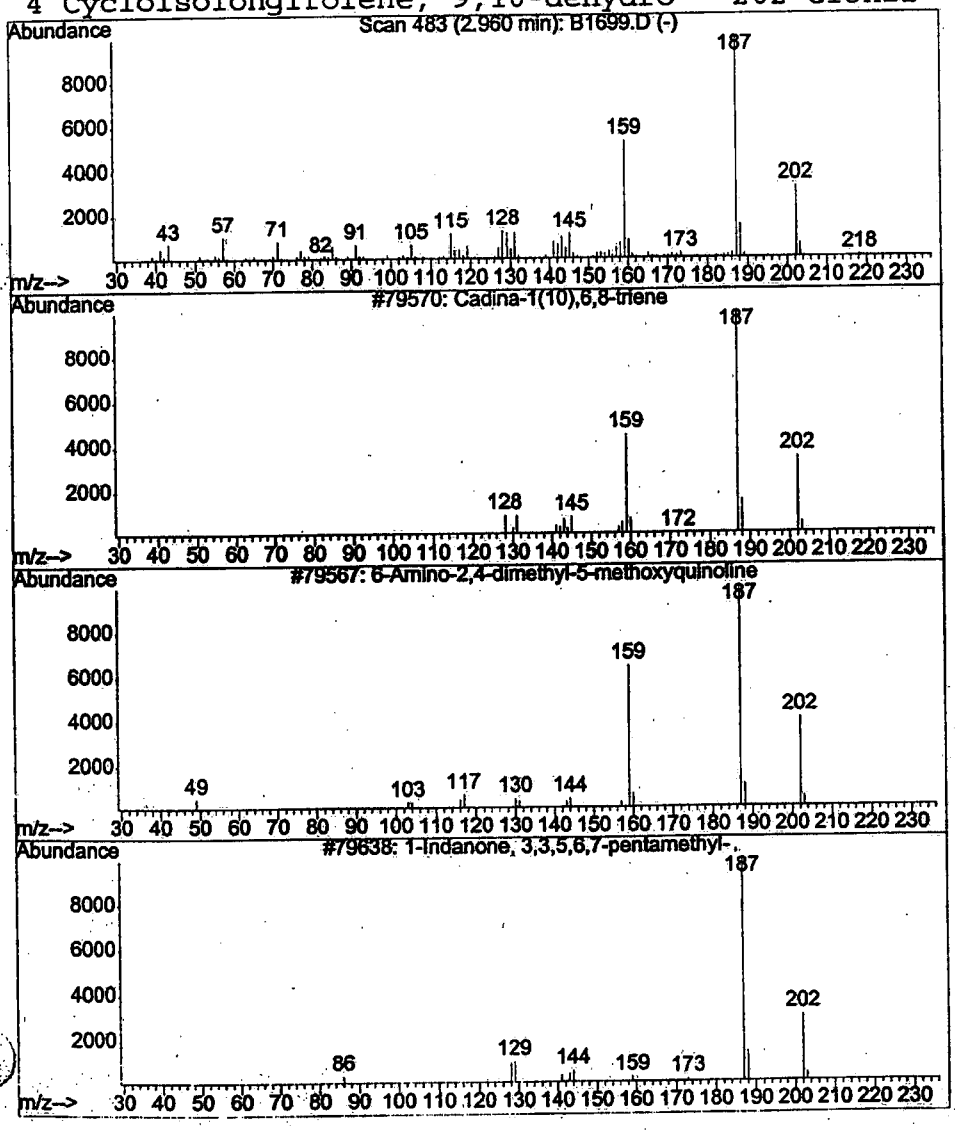
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

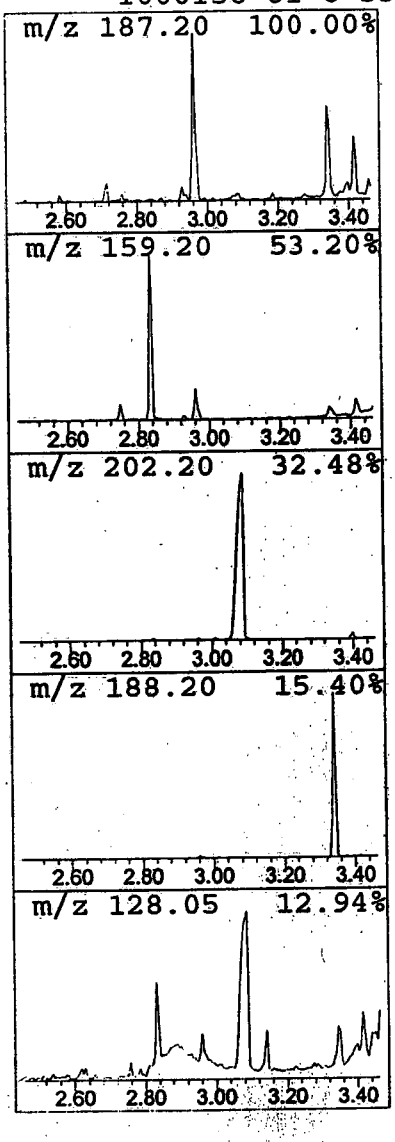
****

Peak Number 7 Unknown — Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.96	6.93 UG	88510	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cadina-1(10),6,8-triene	202	C15H22	001460-96-4	98
2	6-Amino-2,4-dimethyl-5-methoxyqu...	202	C12H14N2O	1000214-42-7	89
3	1-Indanone, 3,3,5,6,7-pentamethyl-	202	C14H18O	016204-69-6	86
4	Cycloisolongifolene, 9,10-dehydro-	202	C15H22	1000156-81-6	53





1491

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
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Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

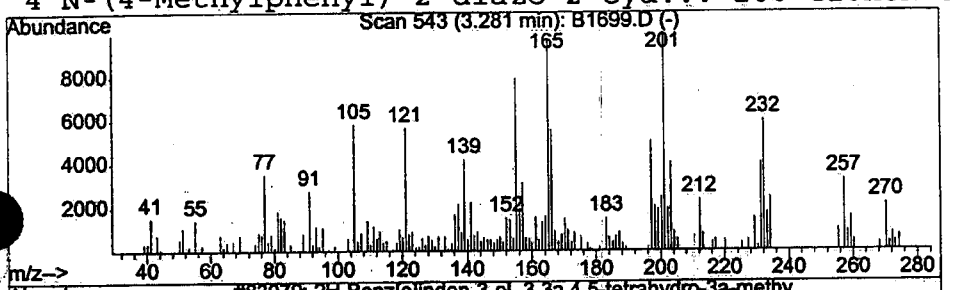
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

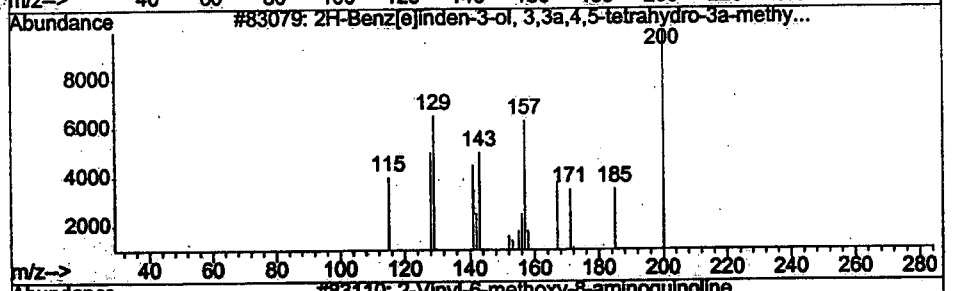
****

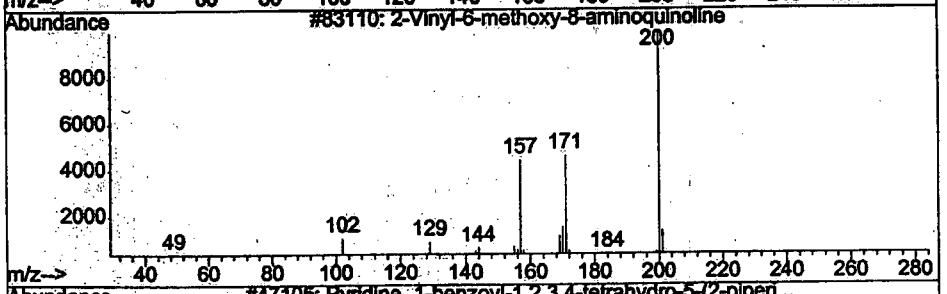
Peak Number 8 Unknown — Concentration Rank 16

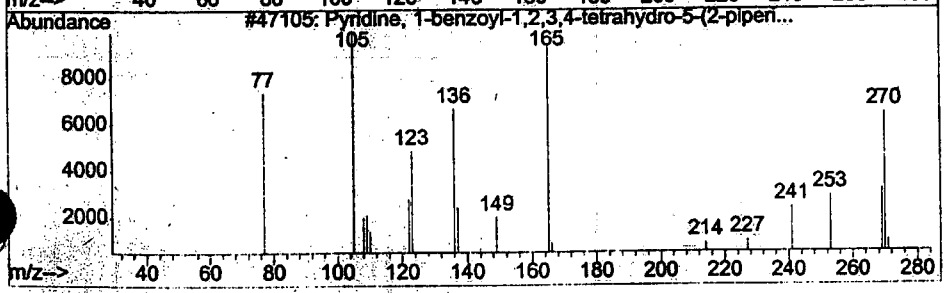
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.28	6.81 UG	136348	Phenanthrene-d10	3.34

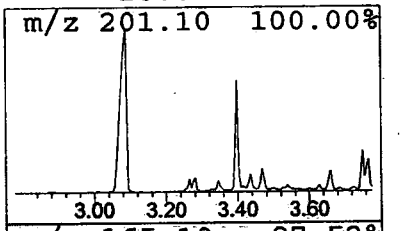
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2H-Benz[e]inden-3-ol, 3,3a,4,5-t...	200	C14H16O	071805-91-9	47
2	2-Vinyl-6-methoxy-8-aminoquinoline	200	C12H12N2O	1000213-65-0	30
3	Pyridine, 1-benzoyl-1,2,3,4-tetr...	270	C17H22N2O	047077-87-2	25
4	N-(4-Methylphenyl)-2-diazo-2-cya...	200	C10H8N4O	1000147-54-3	18

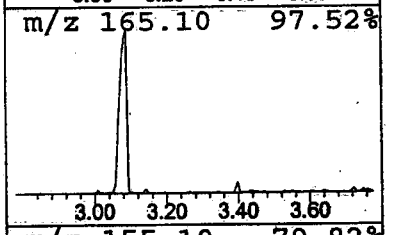


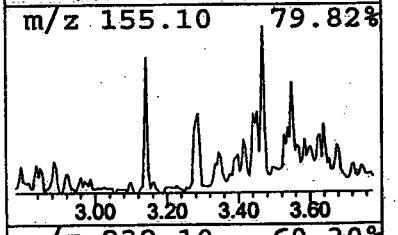


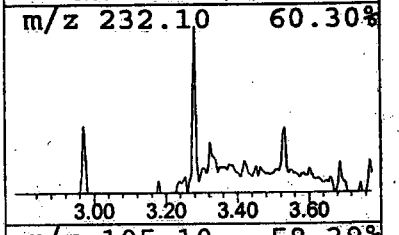


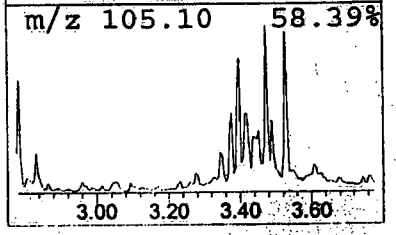












1492

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

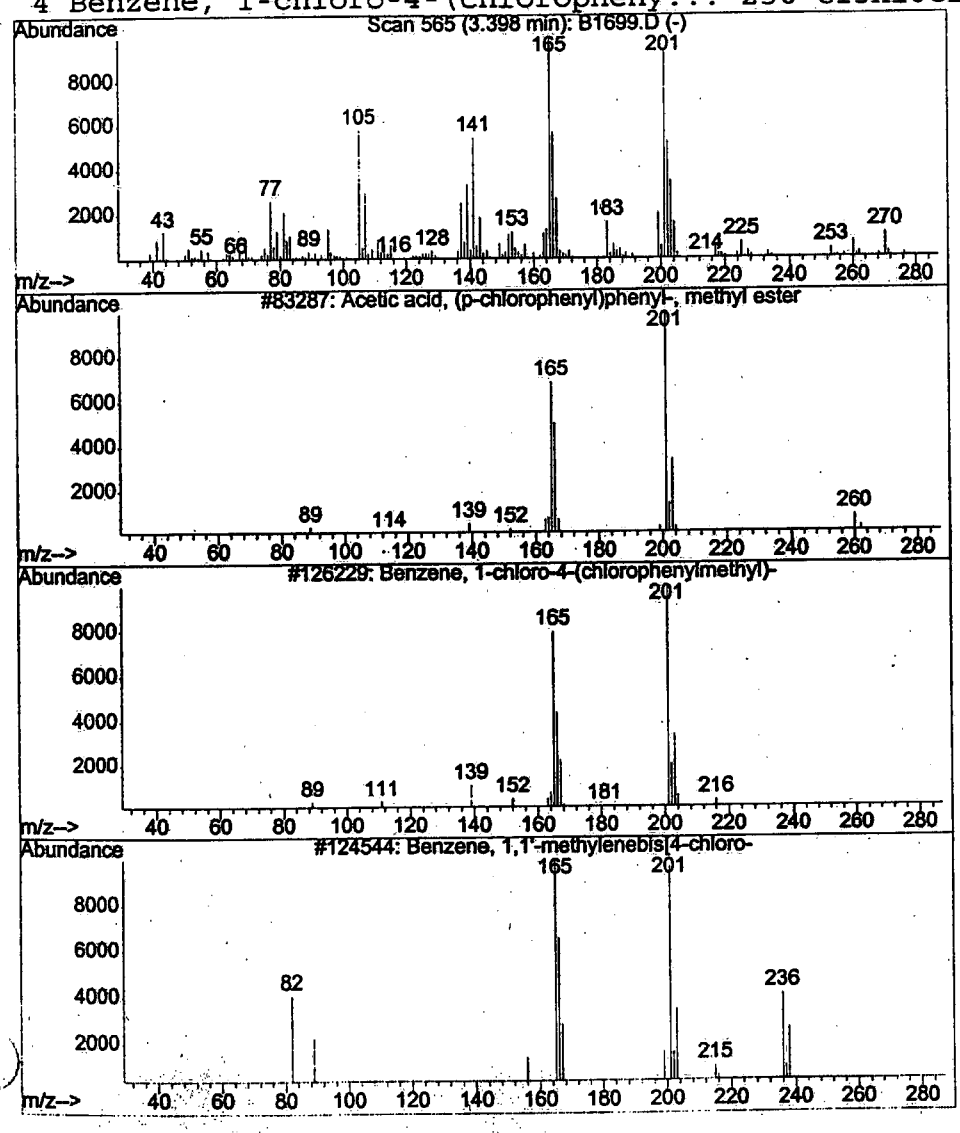
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

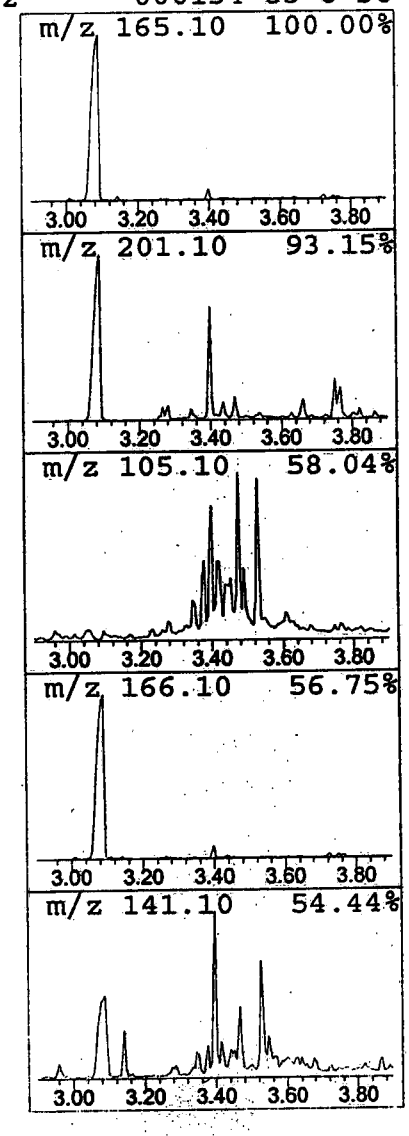
****

Peak Number 9 Unknown aromatic Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.40	20.62 UG	412859	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	64
2	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	53
3	Benzene, 1,1'-methylenebis[4-chl...	236	C13H10Cl2	000101-76-8	42
4	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	38





14/93

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

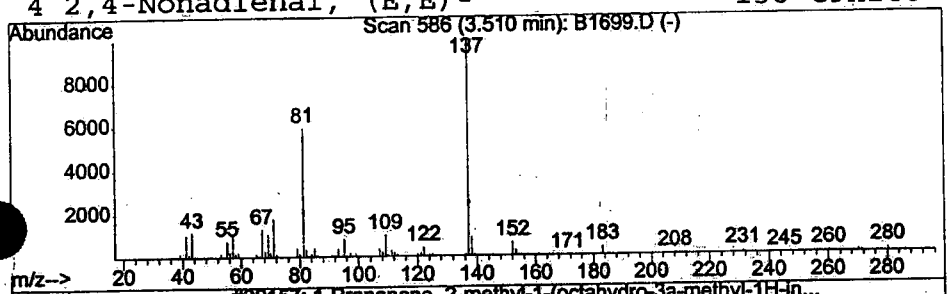
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

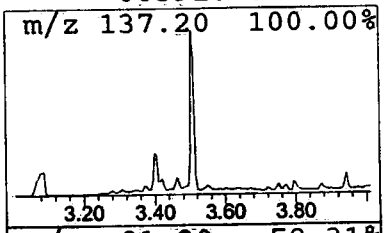
****

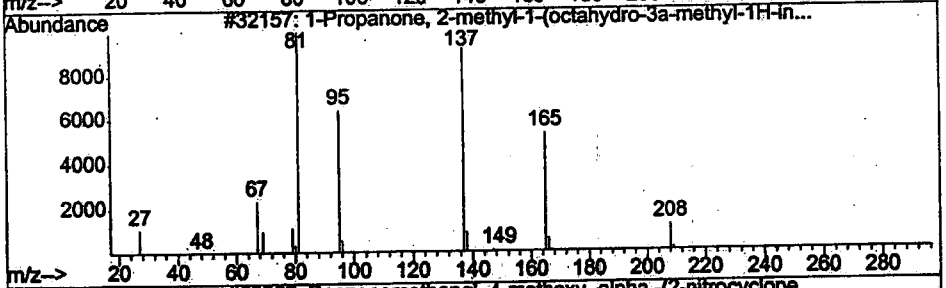
Peak Number 10 Unknown — Concentration Rank 7

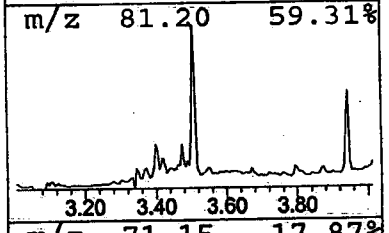
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.51	16.30 UG	326470	Phenanthrene-d10	3.34

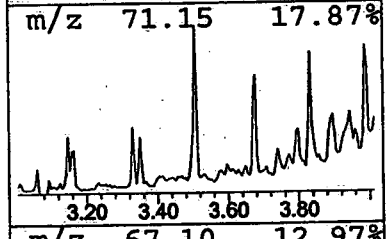
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propanone, 2-methyl-1-(octahyd...	208	C14H24O	066708-25-6	36
2	Benzenemethanol, 4-methoxy-.alph...	251	C13H17NO4	103130-05-8	35
3	3,6-Dimethyl-2,3,3a,4,5,7a-hexah...	152	C10H16O	070786-44-6	35
4	2,4-Nonadienal, (E,E)-	138	C9H14O	005910-87-2	27

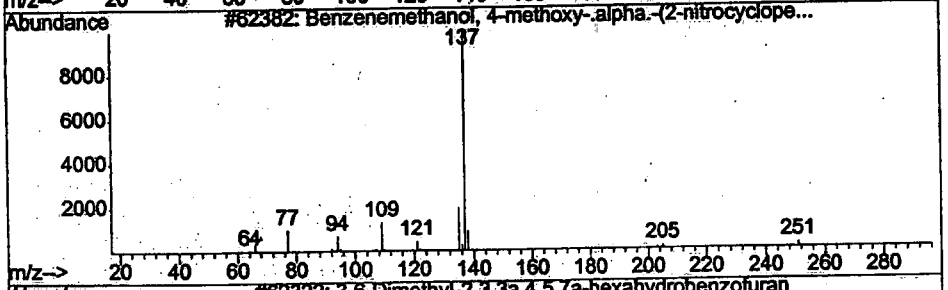


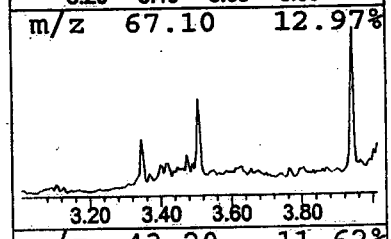


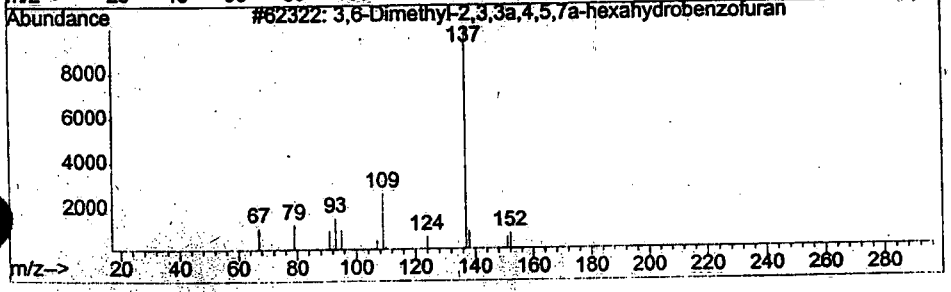


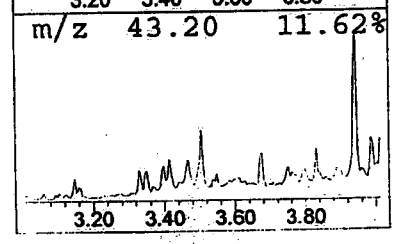












1494

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

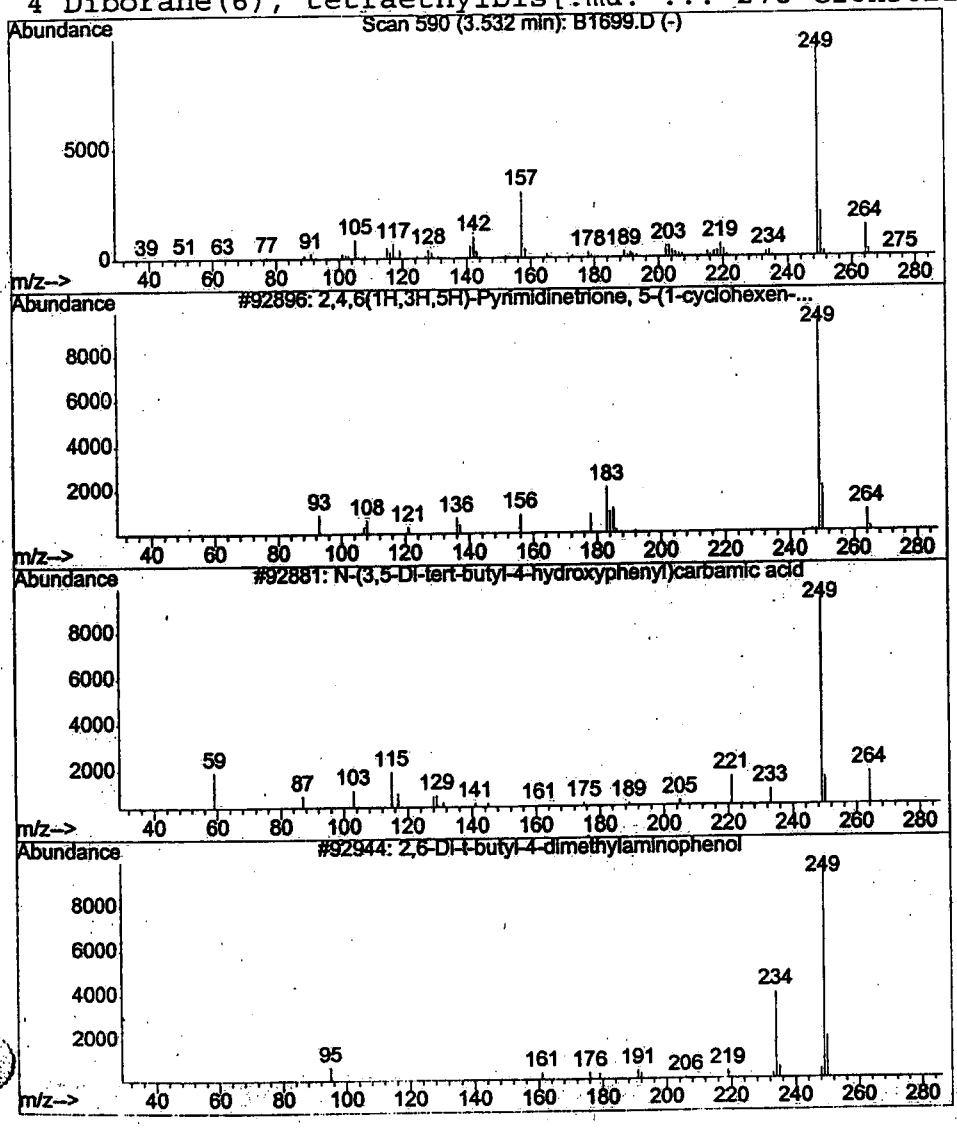
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

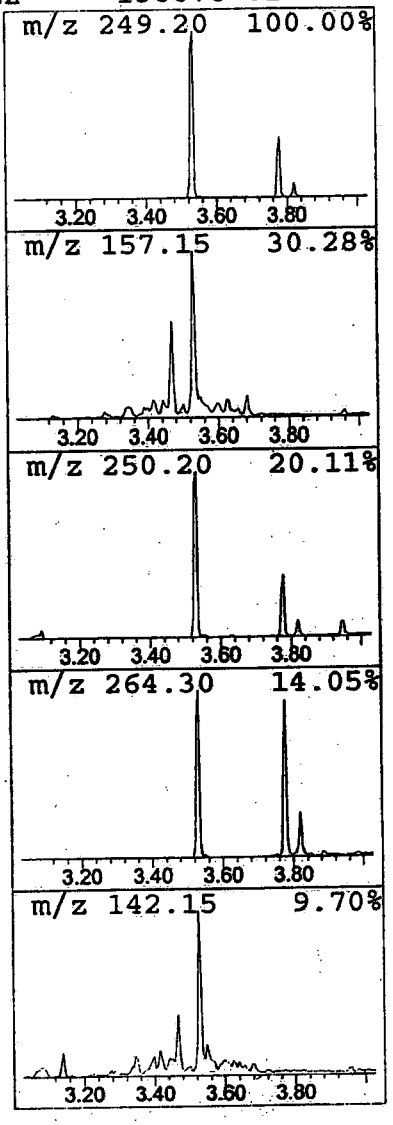
****

Peak Number 11 Unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.53	26.77 UG	536051	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4,6(1H,3H,5H)-Pyrimidinetrione...	264	C14H20N2O3	055044-42-3	46
2	N-(3,5-Di-tert-butyl-4-hydroxyph...	265	C15H23NO3	1000223-17-3	37
3	2,6-Di-t-butyl-4-dimethylaminoph...	249	C16H27NO	1000194-76-7	32
4	Diborane(6), tetraethylbis[.mu.-...	278	C16H36B2N2	136676-01-2	25





1495

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
IS Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

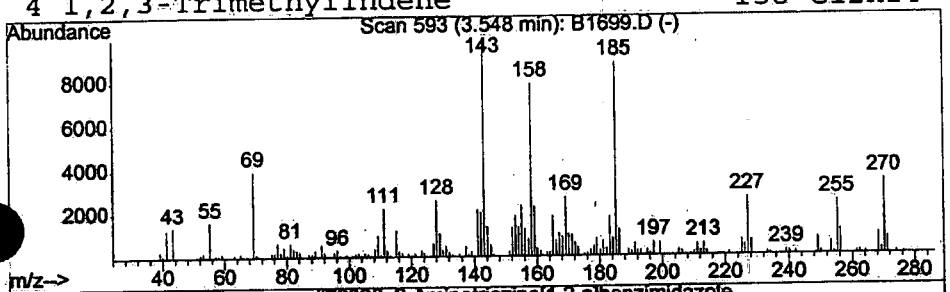
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

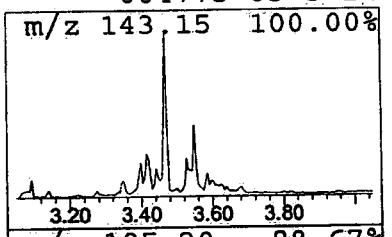
****

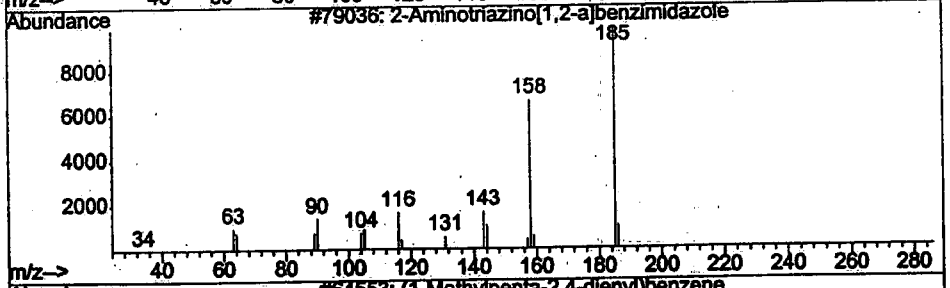
Peak Number 12 Unknown aromatic — Concentration Rank 10

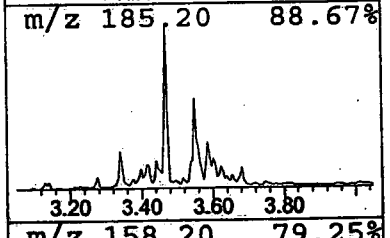
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.55	10.67 UG	213553	Phenanthrene-d10	3.34

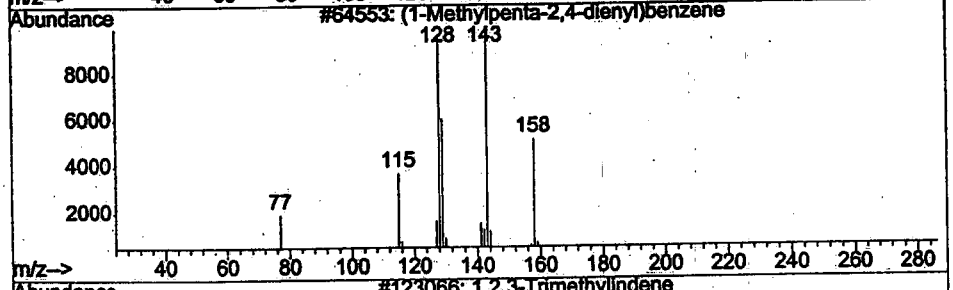
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Aminotriazino[1,2-a]benzimidazole	185	C9H7N5	1000223-24-7	38
2	(1-Methylpenta-2,4-dienyl)benzene	158	C12H14	1000210-01-1	35
3	1,2,3-Trimethylindene	158	C12H14	004773-83-5	35
4	1,2,3-Trimethylindene	158	C12H14	004773-83-5	22

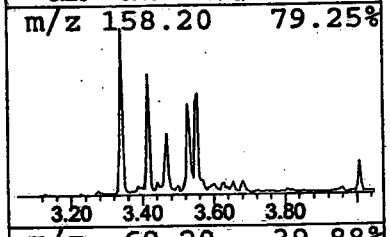


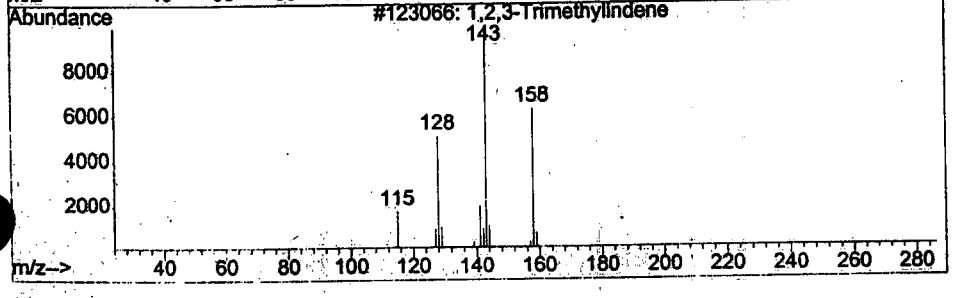


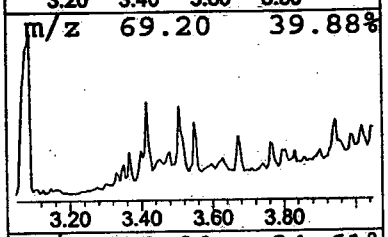


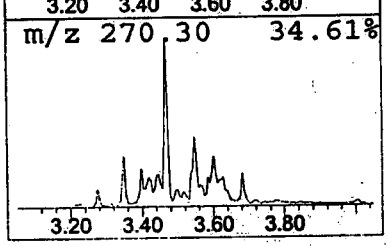












000459

1496

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

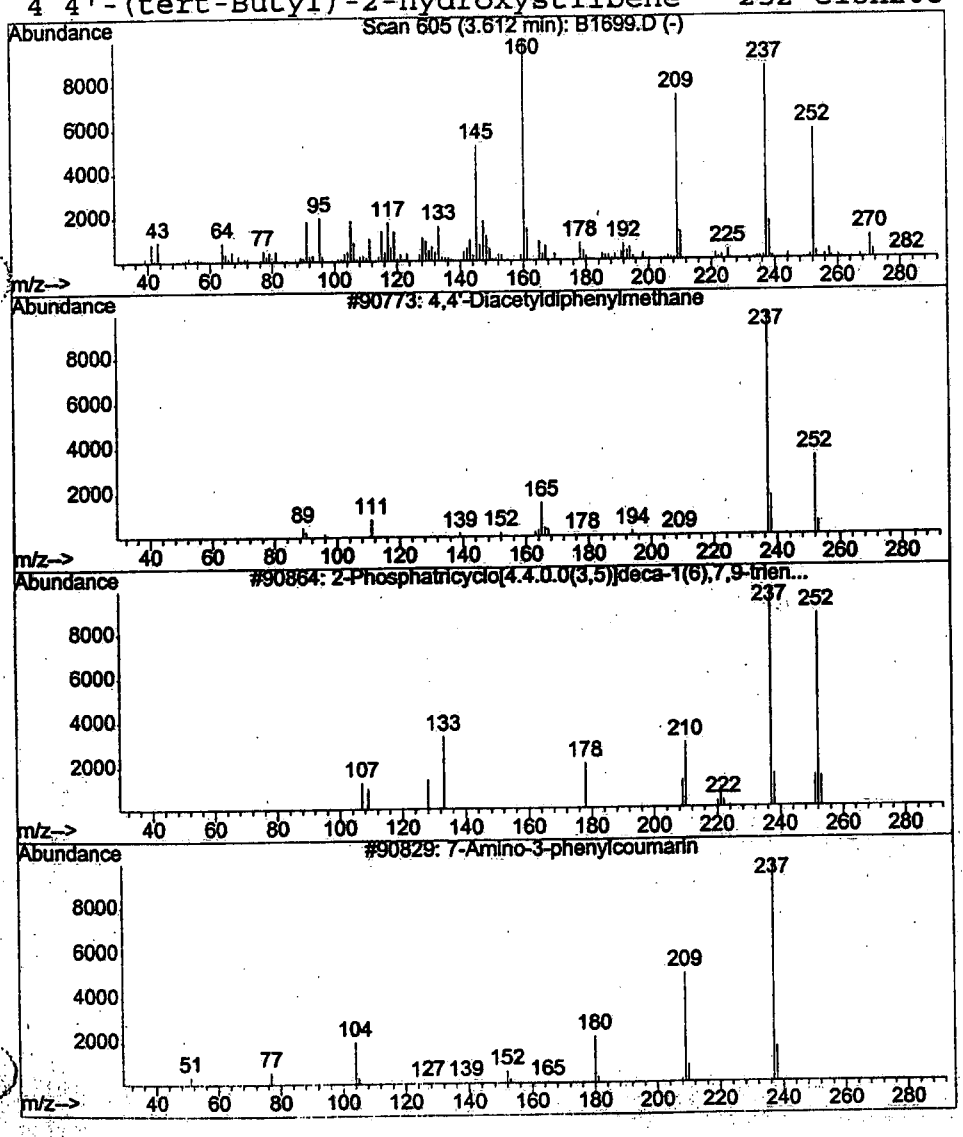
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

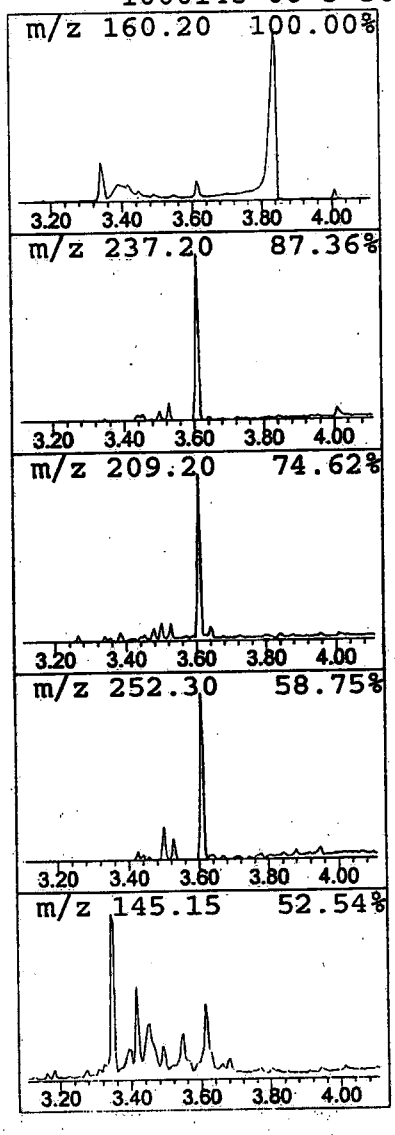
****

Peak Number 13 Unknown — Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.61	17.71 UG	354523	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4,4'-Diacetyldiphenylmethane	252	C17H16O2	000790-82-9	38
2	2-Phosphatricyclo[4.4.0.0(3,5)]d...	252	C17H17P	1000163-24-7	38
3	7-Amino-3-phenylcoumarin	237	C15H11NO2	004108-61-6	38
4	4'-(tert-Butyl)-2-hydroxystilbene	252	C18H20O	1000148-06-3	30





1497

000460

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

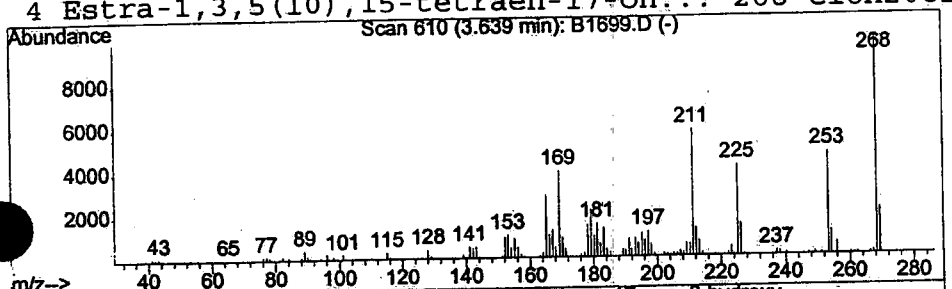
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

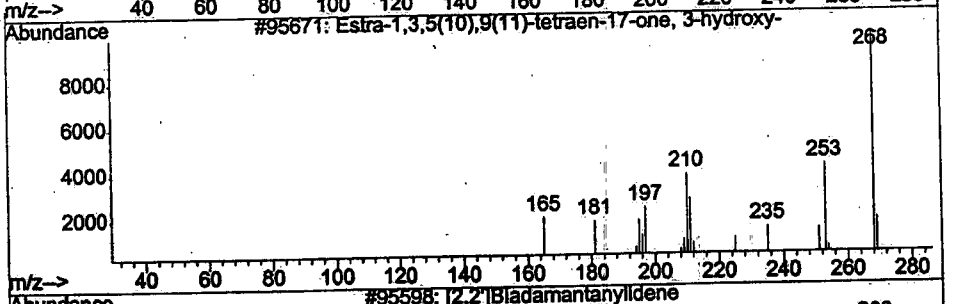
****

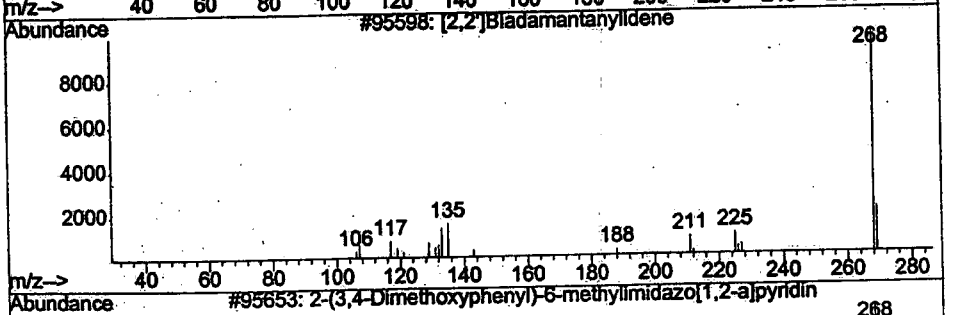
Peak Number 14 Unknown — Concentration Rank 17

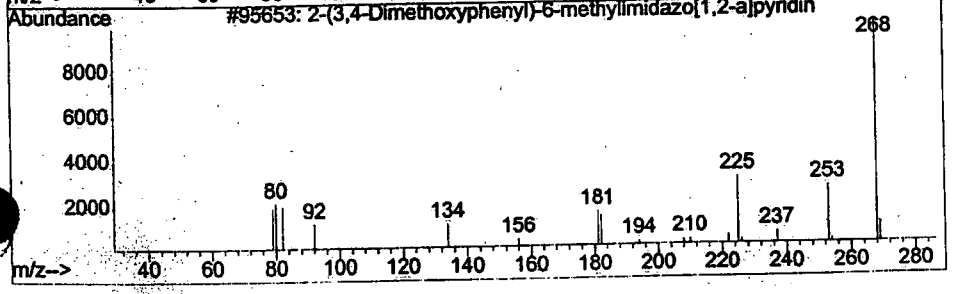
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.64	6.69 UG	134011	Phenanthrene-d10	3.34

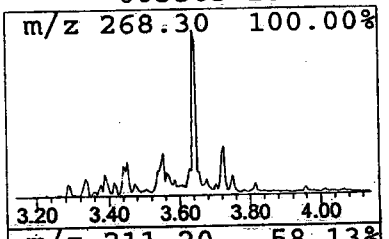
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Estra-1,3,5(10),9(11)-tetraen-17...	268	C18H20O2	001089-80-1	47
2	[2,2']Biadamantanylidene	268	C20H28	1000192-64-3	43
3	2-(3,4-Dimethoxyphenyl)-6-methyl...	268	C16H16N2O2	1000225-64-4	43
4	Estra-1,3,5(10),15-tetraen-17-on...	268	C18H20O2	003563-25-5	38

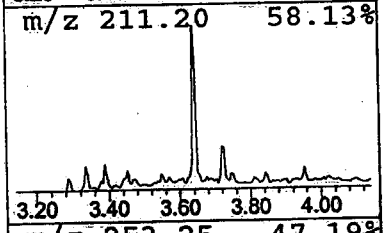


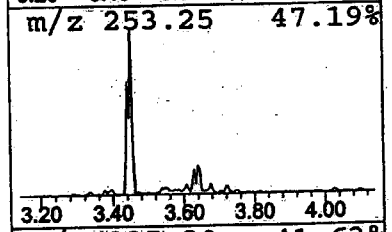


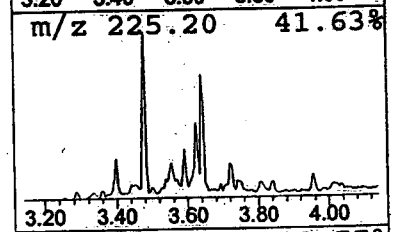


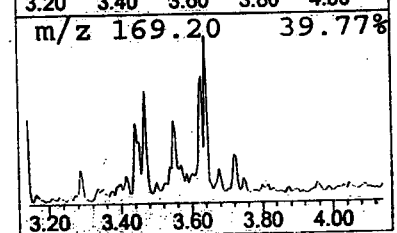












14/98

000461

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D Vial: 4
Acq On : 3 Apr 2001 6:56 Operator: JC
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2 Multiplr: 1.00
S Integration Params: LSCINT.P

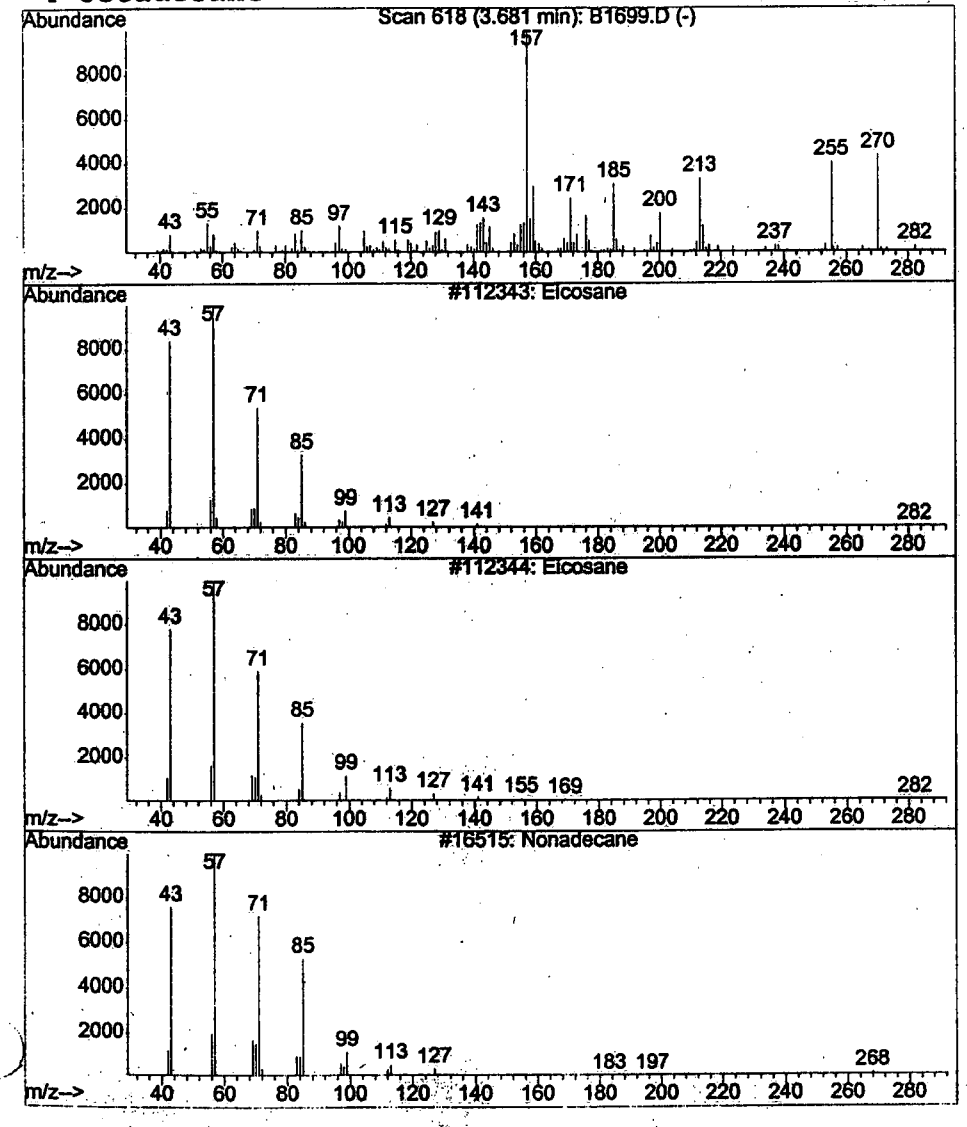
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

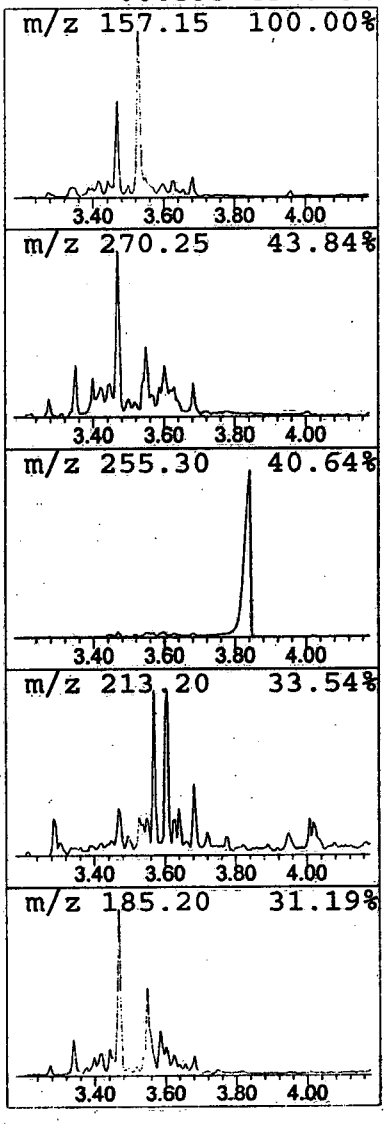
****

Peak Number 15 Unknown alkane Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.68	6.43 UG	128767	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	96
2	Eicosane	282	C20H42	000112-95-8	95
3	Nonadecane	268	C19H40	000629-92-5	95
4	Octadecane	254	C18H38	000593-45-3	95





14/99

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
ALS Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

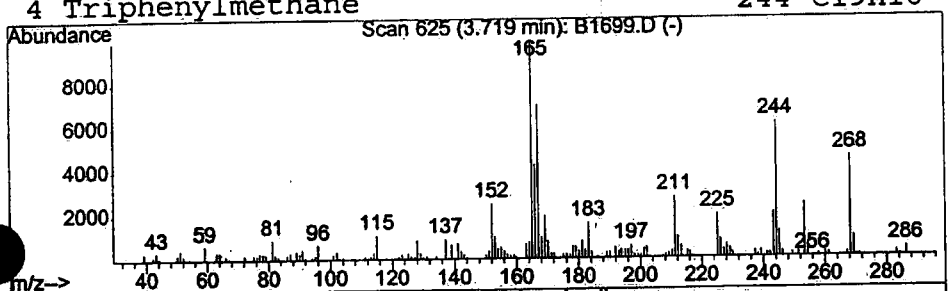
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

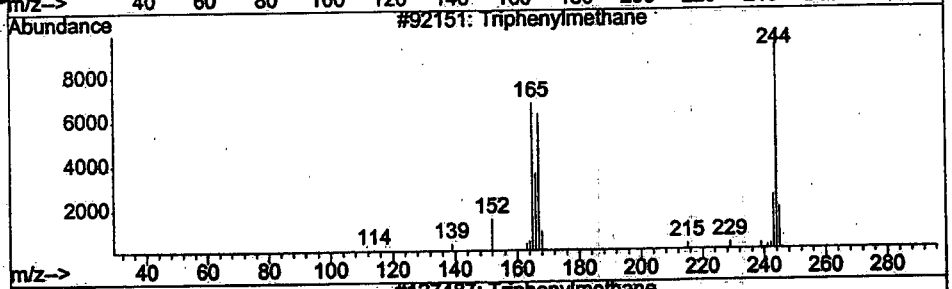
****

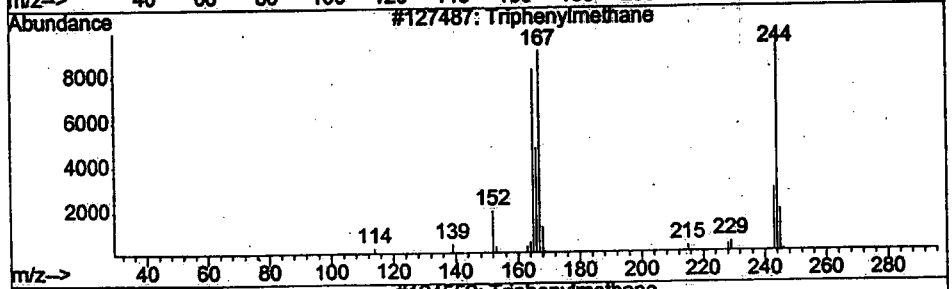
Peak Number 16 Unknown — Concentration Rank 21

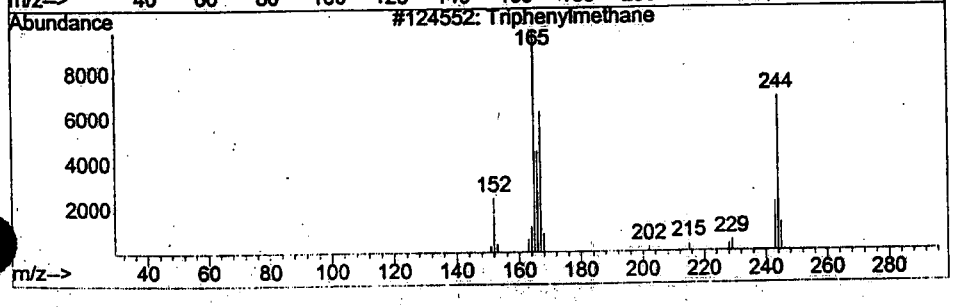
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.72	4.92 UG	98435	Phenanthrene-d10	3.34

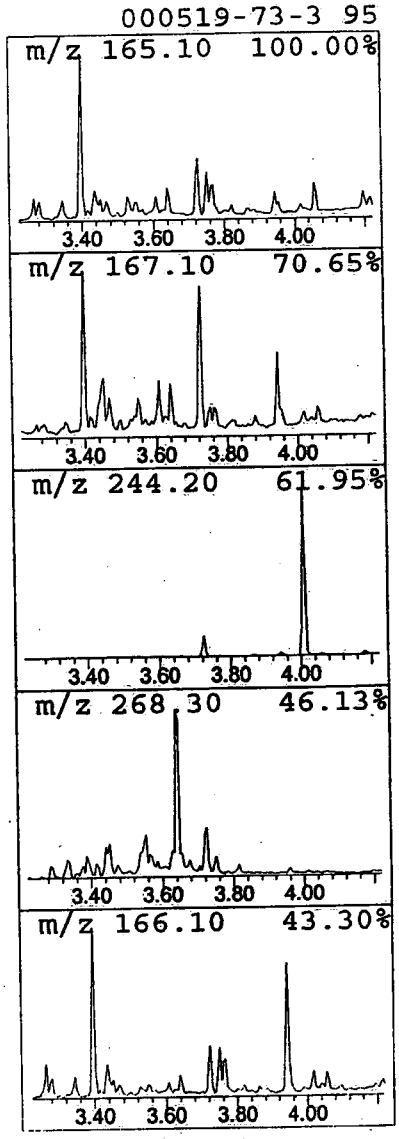
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Triphenylmethane	244	C19H16	000519-73-3	98
2	Triphenylmethane	244	C19H16	000519-73-3	96
3	Triphenylmethane	244	C19H16	000519-73-3	95
4	Triphenylmethane	244	C19H16	000519-73-3	95











000463

1500

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
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Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

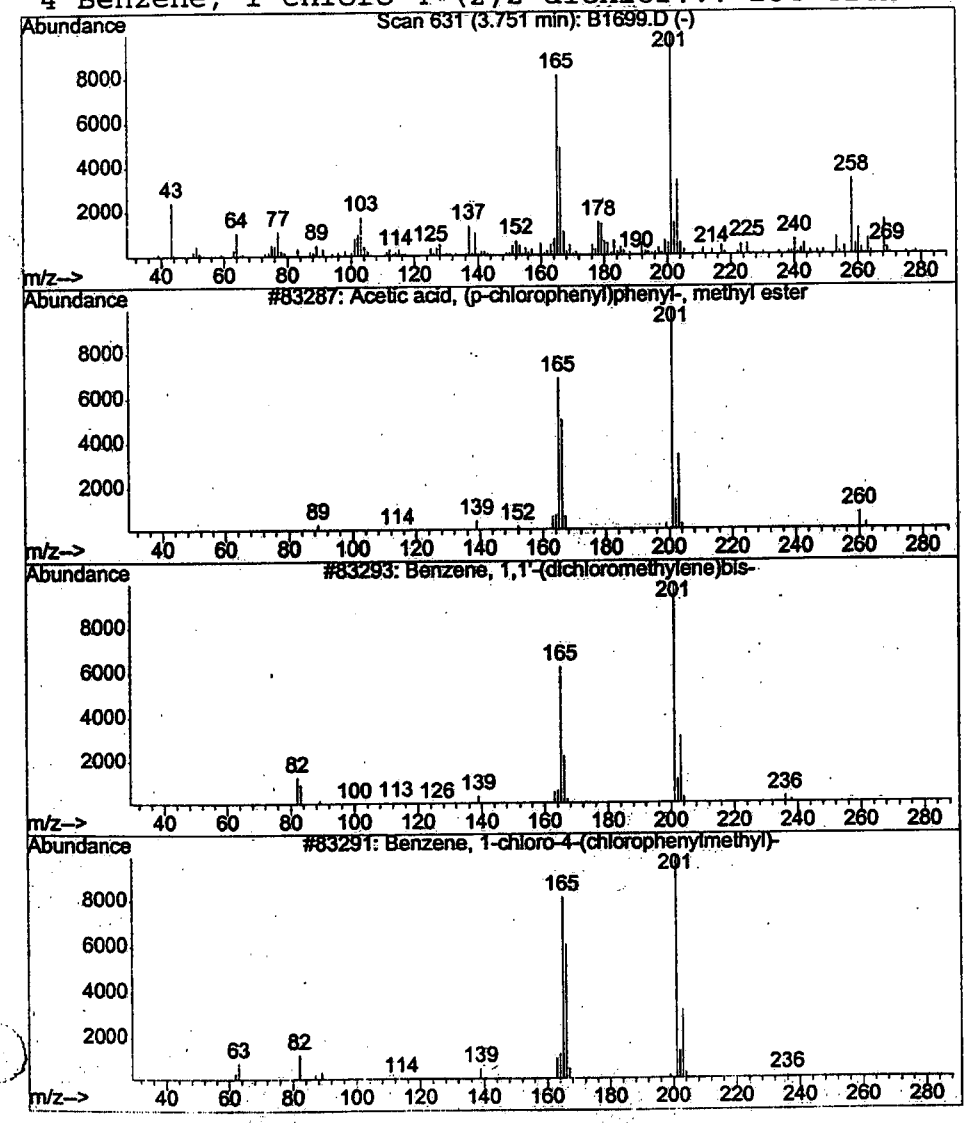
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

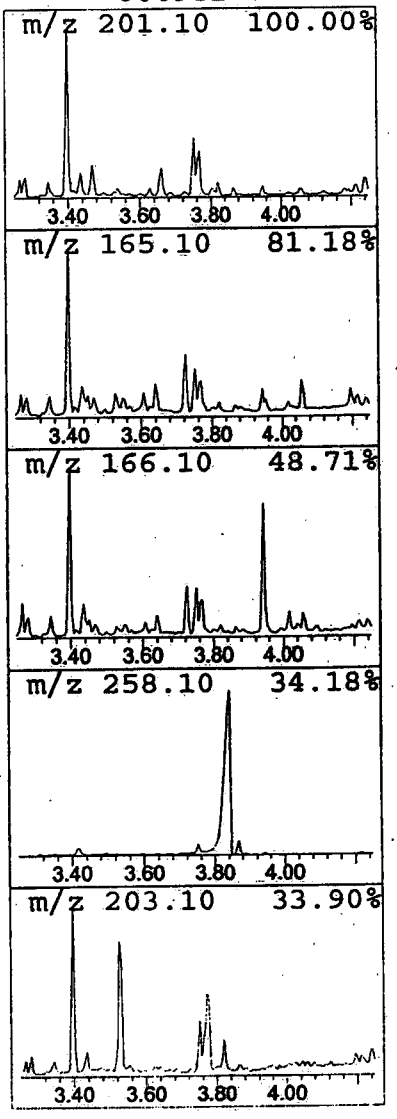
****

Peak Number 17 Unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.75	5.06 UG	101225	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	94
2	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	37
3	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	32
4	Benzene, 1-chloro-4-(2,2-dichlor...	284	C14H11Cl3	006952-08-5	32





1501

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

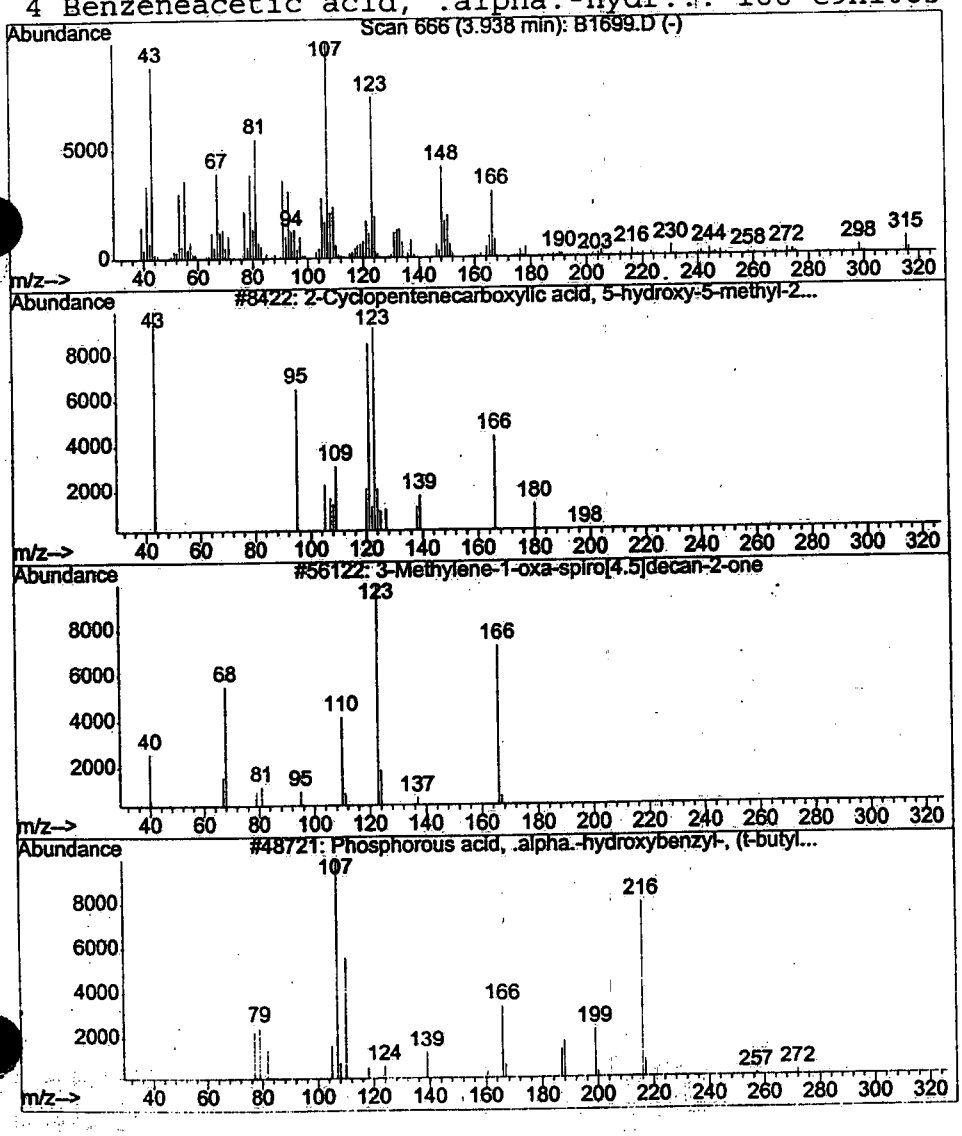
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

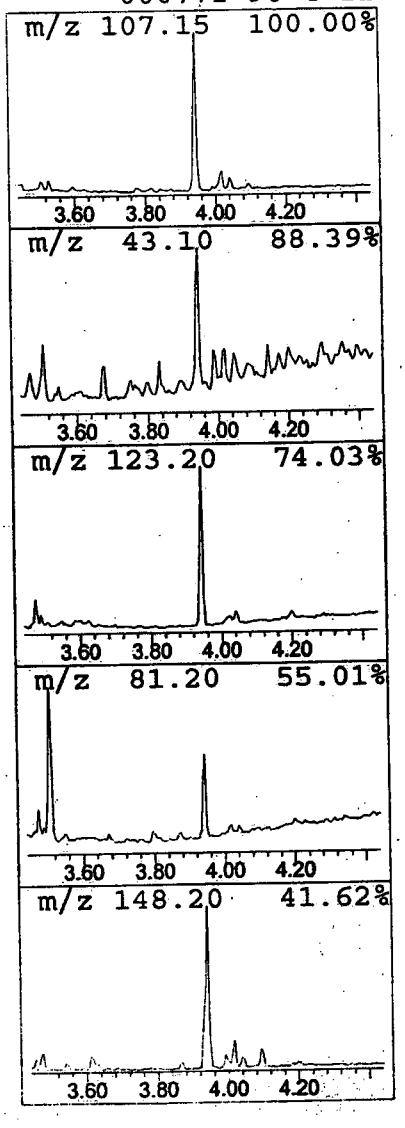
****

Peak Number 18 Unknown — Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.94	38.16 UG	400949	Chrysene-d12	4.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclopentenecarboxylic acid, 5...	198	C11H18O3	111511-58-1	35
2	3-Methylene-1-oxa-spiro[4.5]deca...	166	C10H14O2	052978-85-5	27
3	Phosphorous acid, .alpha.-hydrox...	272	C13H21O4P	1000163-03-1	25
4	Benzeneacetic acid, .alpha.-hydr...	166	C9H10O3	000771-90-4	22





1502

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

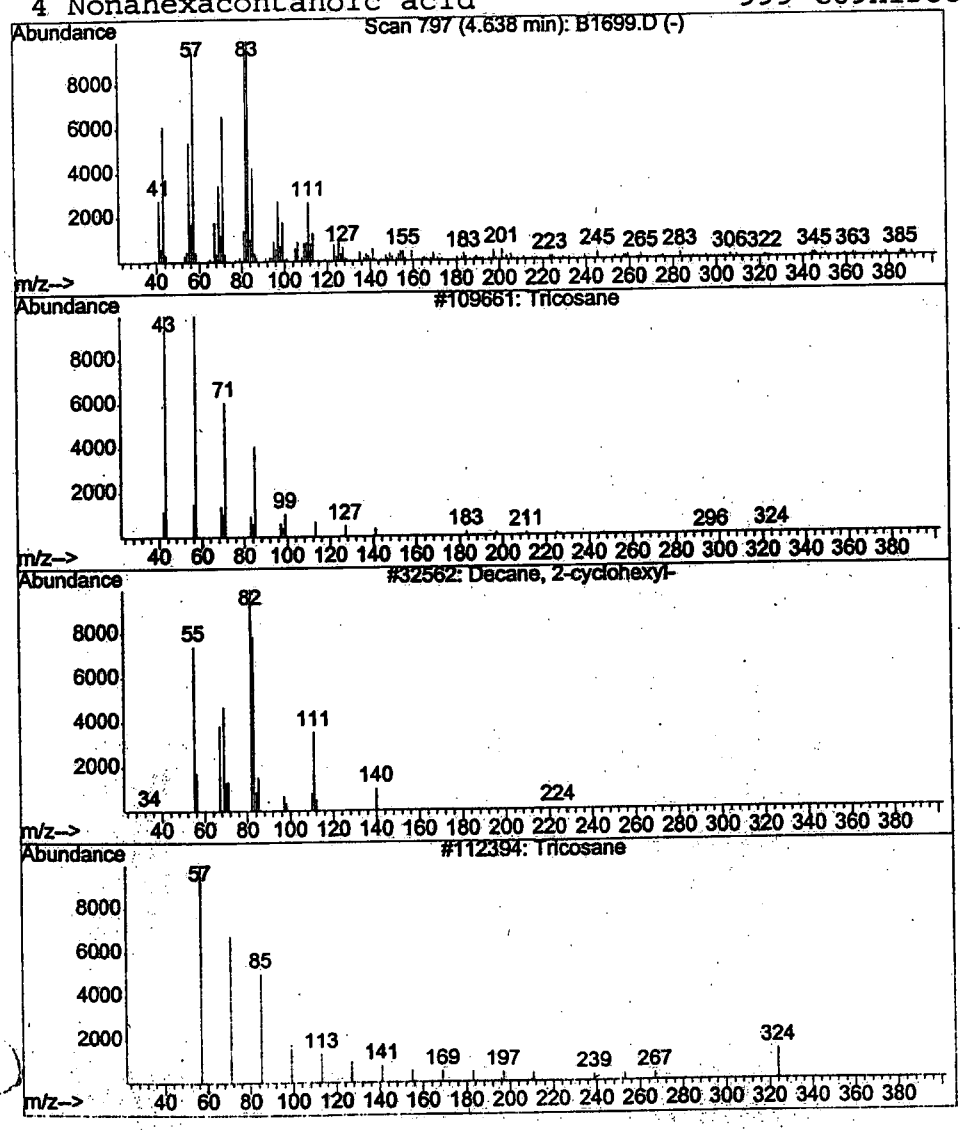
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

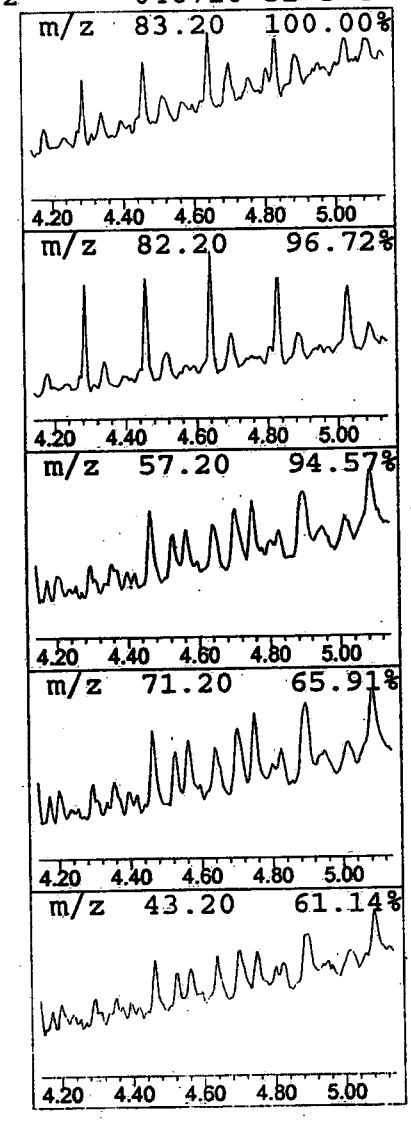
****

Peak Number 19 Unknown alkane — Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.64	8.08 UG	84949	Chrysene-d12	4.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tricosane	324	C23H48	000638-67-5	52
2	Decane, 2-cyclohexyl-	224	C16H32	013151-73-0	50
3	Tricosane	324	C23H48	000638-67-5	45
4	Nonahexacontanoic acid	999	C69H138O2	040710-32-5	41





1503

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
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Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

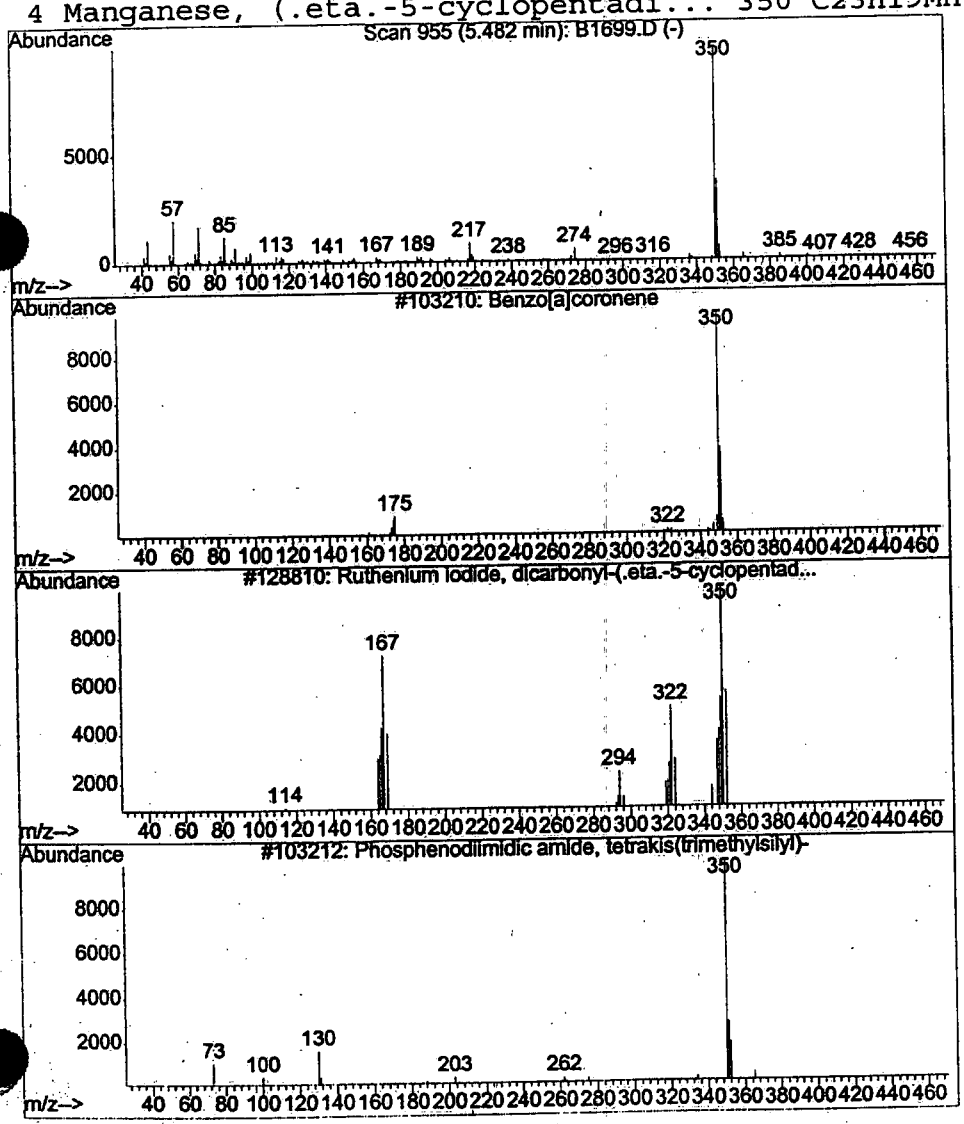
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

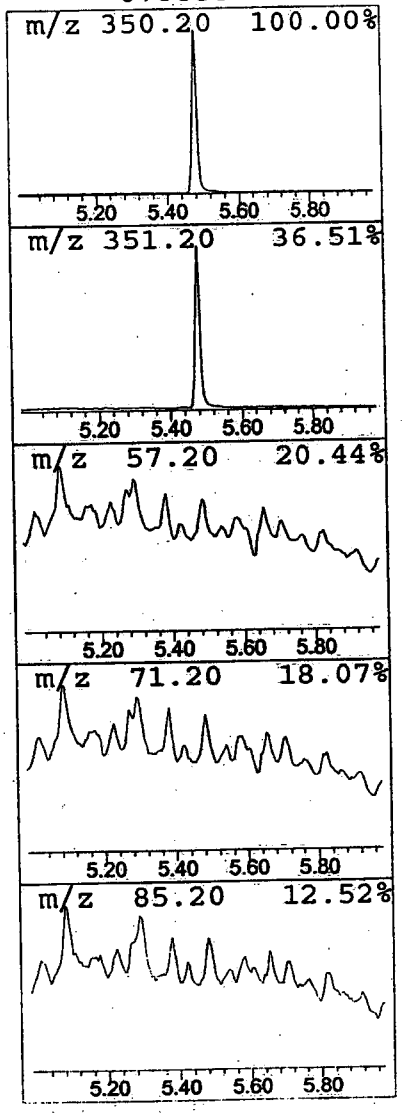
****

Peak Number 20 Unknown aromatic Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.48	17.90 UG	213761	Perylene-d12	5.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[a]coronene	350	C28H14	000190-70-5	39
2	Ruthenium iodide, dicarbonyl-(.e...	350	C7H5IO2Ru	031781-83-6	22
3	Phosphenodiimidic amide, tetraki...	365	C12H36N3PSi4	052111-28-1	9
4	Manganese, (.eta.-5-cyclopentadi...	350	C23H19Mn	078688-02-5	9





1504

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1699.D
Acq On : 3 Apr 2001 6:56
Sample : S-22,1922-006,S,5.34g,16.5,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,2
'S Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

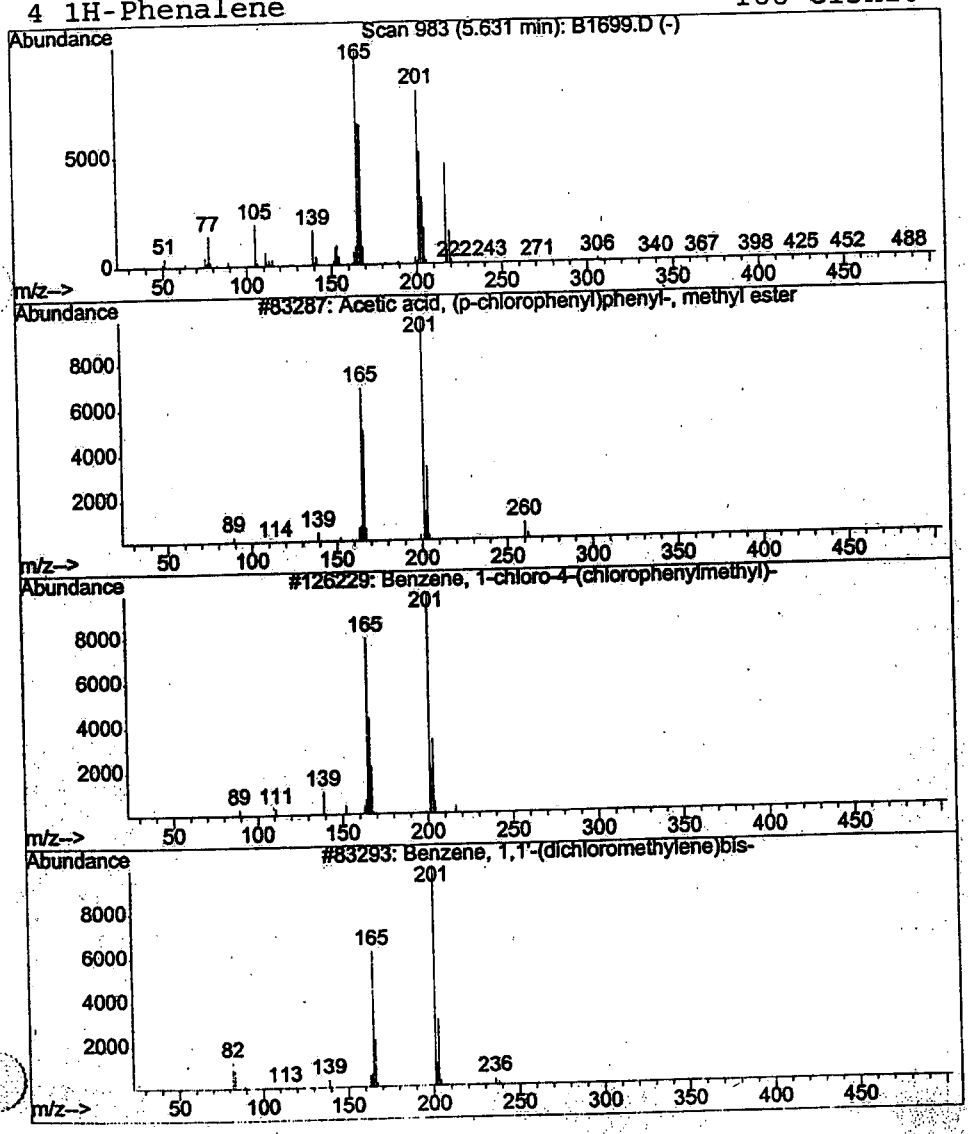
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

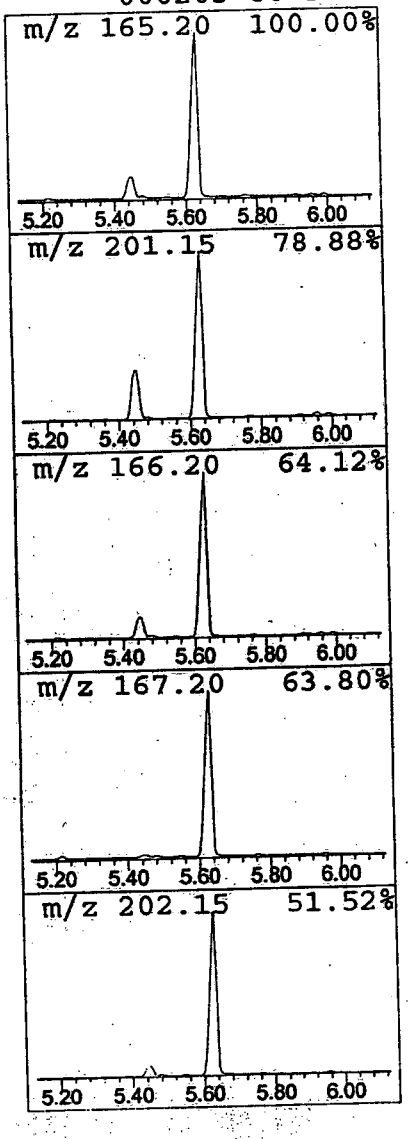
****

Peak Number 21 Unknown — Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.63	197.96 UG	2363480	Perylene-d12	5.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	40
2	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	32
3	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	16
4	1H-Phenalene	166	C13H10	000203-80-5	14





000467

1505

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D Vial: 22
[illegible] On : 2 Apr 2001 13:05 Operator: JC
[illegible]ple : S-23,1922-007,S,5.01g,17.8,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
[illegible]S Integration Params: rteint.p
Quant Time: Apr 02 13:14:14 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.52	152	38473	40.00	UG	0.00
22) Naphthalene-d8	2.04	136	149270	40.00	UG	0.00
39) Acenaphthene-d10	2.75	164	79636	40.00	UG	0.00
60) Phenanthrene-d10	3.34	188	130223	40.00	UG	-0.01
75) Chrysene-d12	4.50	240	108279	40.00	UG	-0.02
84) Perylene-d12	5.29	264	135978	40.00	UG	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	73781	66.66	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 66.66%			
6) Phenol-d5	1.39	99	95935	70.81	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 70.81%			
23) Nitrobenzene-d5	1.74	82	37282	34.42	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 68.84%			
43) 2-Fluorobiphenyl	2.48	172	98717	45.11	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 90.22%			
64) 2,4,6-Tribromophenol	3.08	330	45517	104.97	UG	0.00
Spiked Amount 100.000	Range 54 - 135		Recovery = 104.97%			
77) Terphenyl-d14	4.03	244	110961	42.97	UG	0.00
Spiked Amount 50.000	Range 58 - 147		Recovery = 85.94%			
Target Compounds						Qvalue
49) Acenaphthylene	2.69	152	3326	1.16	UG	97
69) Phenanthrene	3.36	178	7398	2.76	UG #	96
70) Anthracene	3.37	178	2053	0.76	UG #	91
73) Fluoranthene	3.85	202	12353	4.32	UG	99
76) Pyrene	3.94	202	16298	5.71	UG	95
81) Benzo[a]anthracene	4.49	228	8367	3.22	UG #	88
82) Chrysene	4.51	228	10069	4.20	UG	96
83) bis(2-Ethylhexyl)phthalate	4.58	149	2826	1.53	UG #	95
86) Benzo[b]fluoranthene	5.08	252	16124m	4.38	UG	
87) Benzo[k]fluoranthene	5.08	252	10651m	3.40	UG	
88) Benzo[a]pyrene	5.26	252	13430	4.73	UG	97
89) Indeno[1,2,3-cd]pyrene	5.82	276	11412	3.95	UG #	84
90) Dibenz[a,h]anthracene	5.83	278	3963	1.43	UG #	65
91) Benzo[g,h,i]perylene	5.94	276	12311	4.92	UG #	84

(#) = qualifier out of range (m) = manual integration

1506

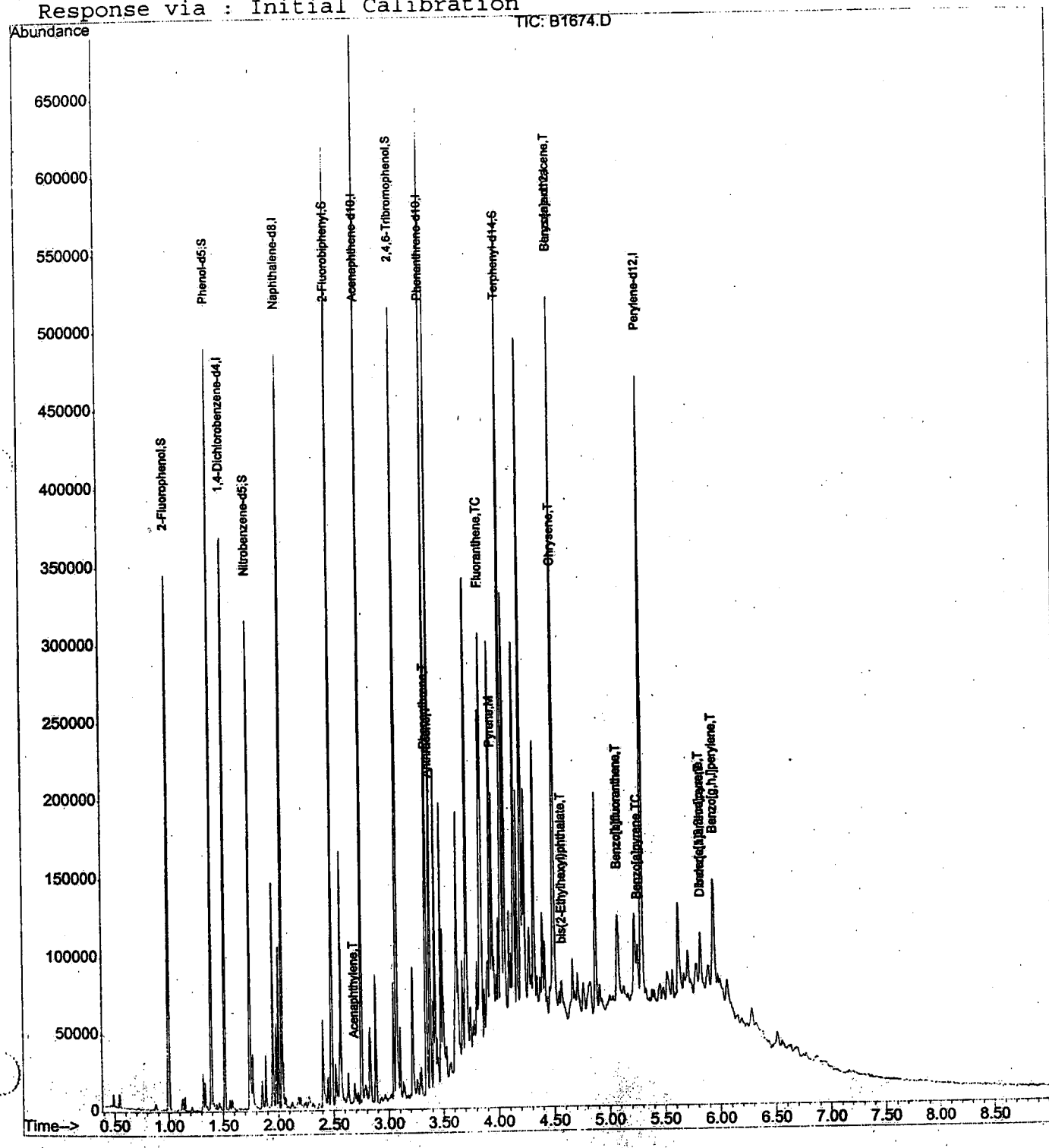
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: rteint.p
Quant Time: Apr 3 6:50 2001

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



1507

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.000	113	116	119	rBV	343729	217290	45.08%	2.391%
2	1.315	172	175	177	rBV	24448	14419	2.99%	0.159%
3	1.331	177	178	181	rVB	16564	10824	2.25%	0.119%
4	1.395	187	190	192	rBV	487562	229943	47.70%	2.530%
5	1.518	210	213	215	rBV	368064	215588	44.72%	2.372%
6	1.742	252	255	258	rBV	314007	173223	35.93%	1.906%
[illegible]	1.769	259	260	263	rVB	33144	14881	3.09%	0.164%
[illegible]	1.854	273	276	279	rBV	18674	13479	2.80%	0.148%
[illegible]	1.886	279	282	286	rVB	34285	16466	3.42%	0.181%
10	1.950	288	294	297	rBV	144916	69938	14.51%	0.770%
11	1.983	297	300	302	rVV	53555	32688	6.78%	0.360%
12	2.004	302	304	306	rVB	104623	60009	12.45%	0.660%
13	2.036	307	310	311	rBV	483672	293833	60.96%	3.233%
14	2.047	311	312	314	rVB	27410	9222	1.91%	0.101%
15	2.276	351	355	360	rBV5	7789	8703	1.81%	0.096%
16	2.405	376	379	382	rBV	57323	38833	8.06%	0.427%
17	2.453	385	388	390	rVV2	18588	13655	2.83%	0.150%
18	2.485	390	394	397	rVB	616685	293092	60.80%	3.225%
19	2.517	397	400	402	rBV	26858	18649	3.87%	0.205%
20	2.554	405	407	408	rVV	39835	28327	5.88%	0.312%
21	2.565	408	409	414	rVV2	161517	71041	14.74%	0.782%
22	2.634	417	422	426	rVB2	20750	15380	3.19%	0.169%
23	2.688	428	432	434	rBV	13392	9281	1.93%	0.102%
24	2.752	441	444	447	rBV	732095	327077	67.85%	3.599%
25	2.789	447	451	455	rVV3	10360	13360	2.77%	0.147%
26	2.832	455	459	462	rVV3	48373	41938	8.70%	0.461%
27	2.880	464	468	472	rVB	82984	51128	10.61%	0.563%
28	3.019	488	494	497	rBV7	4552	7541	1.56%	0.083%
[illegible]	3.046	497	499	501	rVV	76111	45903	9.52%	0.505%
[illegible]	3.072	501	504	507	rVV2	507996	353089	73.25%	3.885%
31	3.104	508	510	513	rVB	45702	23016	4.77%	0.253%

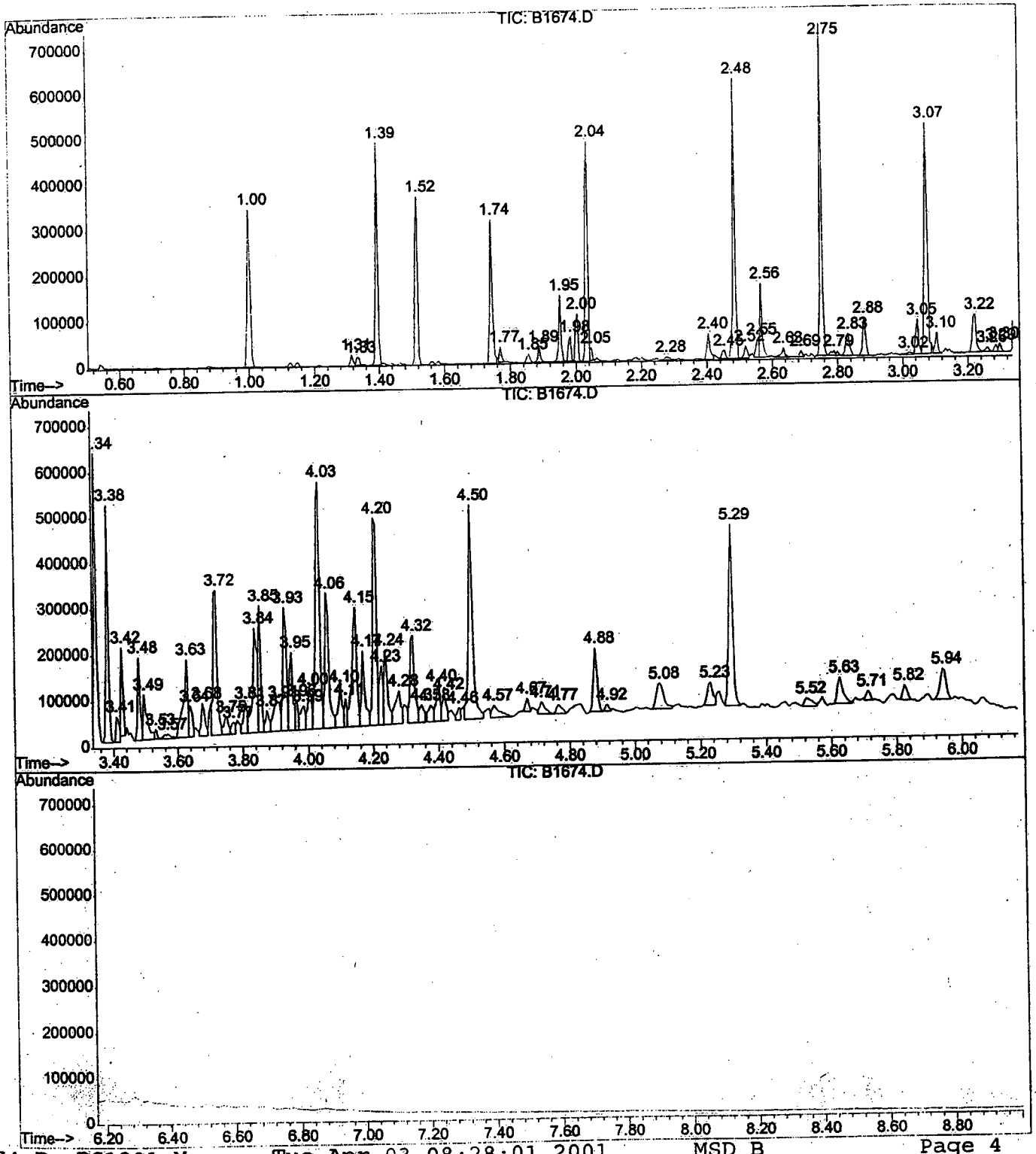
32	3.222	529	532	536	rBV2	83674	69428	14.40%	0.764%
33	3.259	536	539	542	rVB2	10674	8255	1.71%	0.091%
34	3.286	542	544	545	rBV	15211	9478	1.97%	0.104%
35	3.297	545	546	549	rVB2	18974	8462	1.76%	0.093%
	3.345	552	555	559	rBV	636560	344170	71.40%	3.787%
	3.382	559	562	565	rBV	518760	260554	54.05%	2.867%
38	3.409	565	567	569	rBV	56173	43534	9.03%	0.479%
39	3.425	569	570	572	rVB	190138	89277	18.52%	0.982%
40	3.478	577	580	582	rBV	179456	99282	20.60%	1.092%
41	3.494	582	583	589	rVV2	97961	86868	18.02%	0.956%
42	3.532	589	590	592	rVV	20962	7916	1.64%	0.087%
43	3.569	592	597	601	rVV2	10207	15909	3.30%	0.175%
44	3.628	601	608	609	rVV4	168683	166667	34.57%	1.834%
45	3.639	609	610	612	rVV2	67151	44592	9.25%	0.491%
46	3.676	615	617	620	rVV2	71422	58787	12.20%	0.647%
47	3.719	622	625	628	rVV2	315298	265907	55.16%	2.926%
48	3.751	628	631	633	rVV3	38875	39052	8.10%	0.430%
49	3.772	633	635	636	rVV2	25731	21597	4.48%	0.238%
50	3.810	639	642	643	rVV2	66193	54056	11.21%	0.595%
51	3.836	643	647	649	rVV2	226525	237730	49.32%	2.616%
52	3.852	649	650	652	rVV	274921	118009	24.48%	1.298%
53	3.874	652	654	656	rVV	46336	38044	7.89%	0.419%
54	3.911	656	661	662	rVV3	63173	98042	20.34%	1.079%
55	3.927	662	664	666	rVV	267116	203216	42.16%	2.236%
56	3.948	666	668	670	rVV2	168817	131254	27.23%	1.444%
57	3.965	670	671	672	rVV	63953	31552	6.55%	0.347%
	3.986	672	675	676	rVV2	51501	53583	11.12%	0.590%
59	4.002	676	678	680	rVV	87162	77316	16.04%	0.851%
60	4.034	680	684	686	rVV	539715	482046	100.00%	5.304%
61	4.055	686	688	693	rVV2	293242	254269	52.75%	2.798%
62	4.098	693	696	698	rVV2	88338	80616	16.72%	0.887%
63	4.114	698	699	700	rVV	60510	31671	6.57%	0.348%
64	4.146	700	705	707	rVV3	258758	255905	53.09%	2.816%
65	4.168	707	709	713	rVV	162296	130622	27.10%	1.437%
66	4.205	713	716	718	rVV	451404	368286	76.40%	4.052%
67	4.226	718	720	721	rVV	126856	100178	20.78%	1.102%
68	4.237	721	722	726	rVV3	160584	120944	25.09%	1.331%
69	4.280	726	730	732	rVV3	71174	91022	18.88%	1.002%
70	4.322	735	738	741	rVV	188550	182866	37.94%	2.012%
71	4.349	741	743	745	rVV2	37844	37395	7.76%	0.411%
72	4.376	746	748	750	rVV	35729	37421	7.76%	0.412%
73	4.397	750	752	754	rVV2	76452	65934	13.68%	0.725%
74	4.419	754	756	758	rVV	57536	49969	10.37%	0.550%
75	4.461	762	764	765	rVV	26619	20621	4.28%	0.227%
76	4.499	767	771	778	rVV	466679	405990	84.22%	4.467%
77	4.568	782	784	794	rVB6	25178	43914	9.11%	0.483%
78	4.670	800	803	805	rBV	28519	20593	4.27%	0.227%
80	4.712	809	811	818	rVB3	25763	28709	5.96%	0.316%
80	4.766	818	821	825	rBV4	19064	22860	4.74%	0.252%
81	4.878	839	842	846	rBV	137714	107853	22.37%	1.187%

82	4.915	846	849	851	rBV3	14401	11962	2.48%	0.132%
83	5.076	875	879	886	rBV	55246	87344	18.12%	0.961%
84	5.231	904	908	911	rBV	49753	61375	12.73%	0.675%
85	5.295	916	920	925	rVB	395767	341792	70.90%	3.761%
86	5.524	960	963	969	rBV5	18315	30558	6.34%	0.336%
87	5.626	979	982	989	rBV	56819	67931	14.09%	0.747%
88	5.711	996	998	1001	rVB4	20828	18208	3.78%	0.200%
89	5.824	1017	1019	1024	rVB2	32926	31244	6.48%	0.344%
90	5.941	1037	1041	1046	rVB2	66674	83879	17.40%	0.923%

Sum of corrected areas: 9088330

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Operator : JC
Acquired : 2 Apr 2001 13:05 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-23,1922-007,S,5.01g,17.8,03/30/01
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,1
Vial Number: 22
Quant File :BS1201.RES (RTE Integrator)



1511

000473

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
IS Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

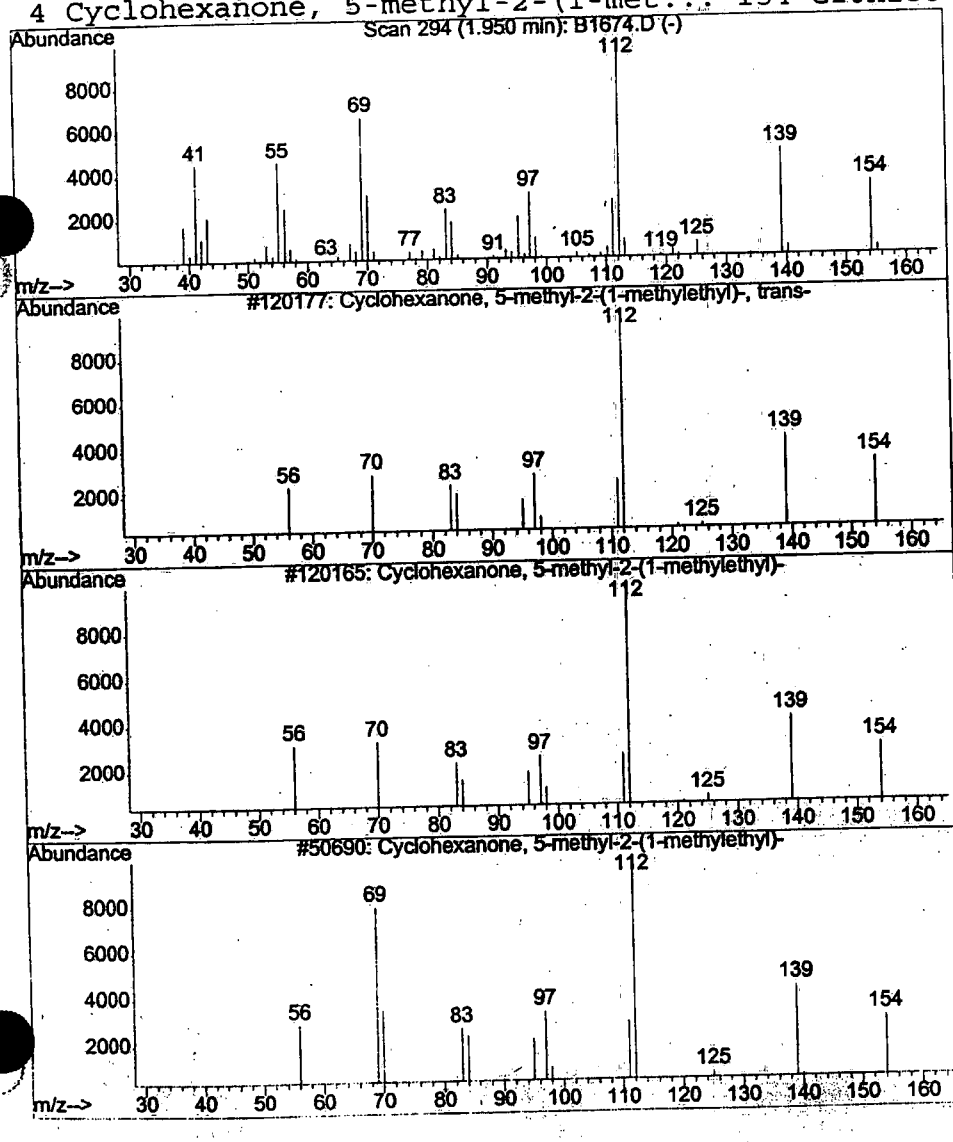
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

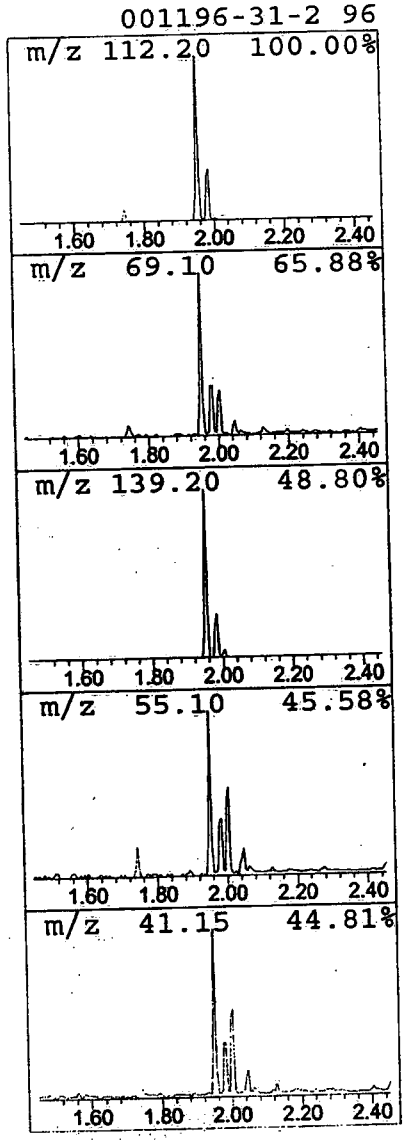
****

Peak Number 1 Unknown alkane — Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.95	9.52 UG	69938	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanone, 5-methyl-2-(1-met...	154	C10H18O	000089-80-5	98
2	Cyclohexanone, 5-methyl-2-(1-met...	154	C10H18O	010458-14-7	97
3	Cyclohexanone, 5-methyl-2-(1-met...	154	C10H18O	010458-14-7	97
4	Cyclohexanone, 5-methyl-2-(1-met...	154	C10H18O	001196-31-2	96





000474

1517

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

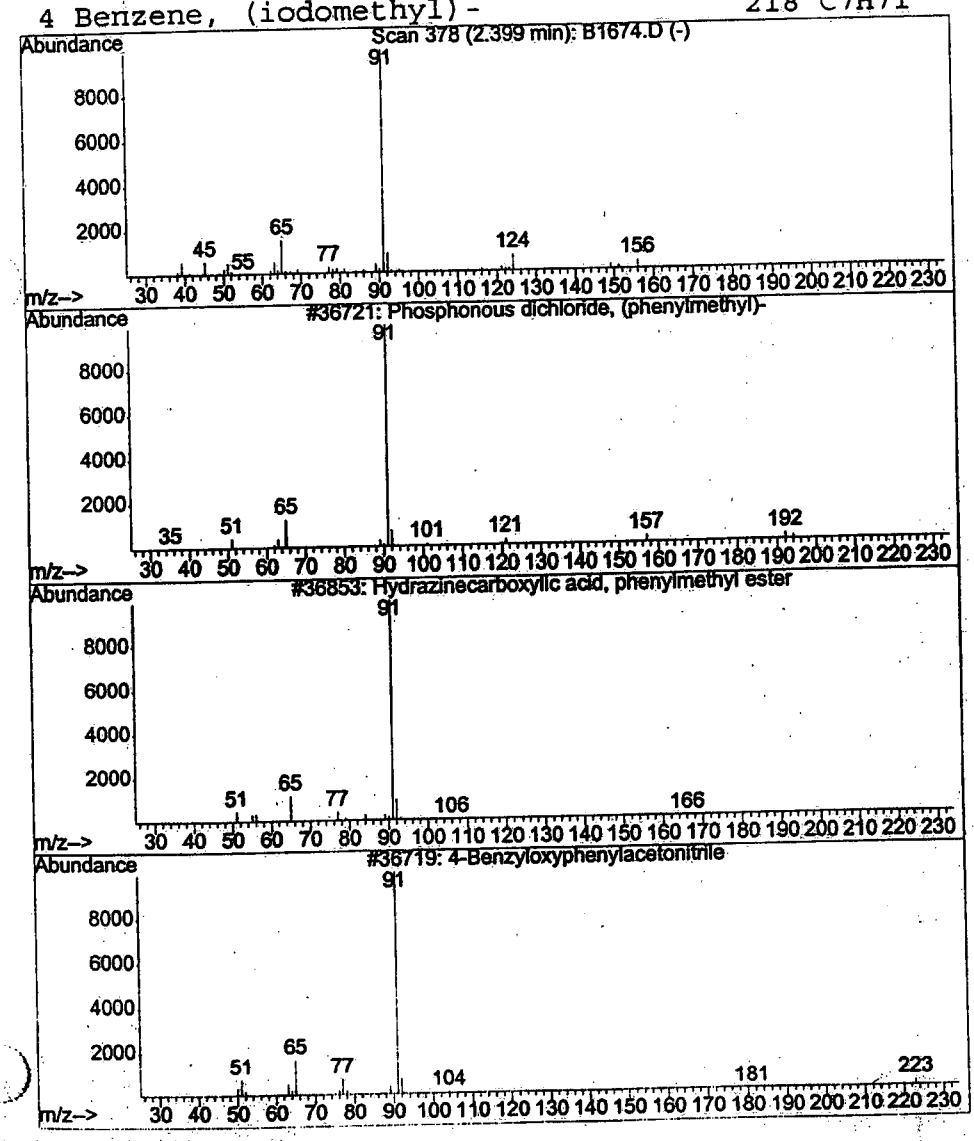
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

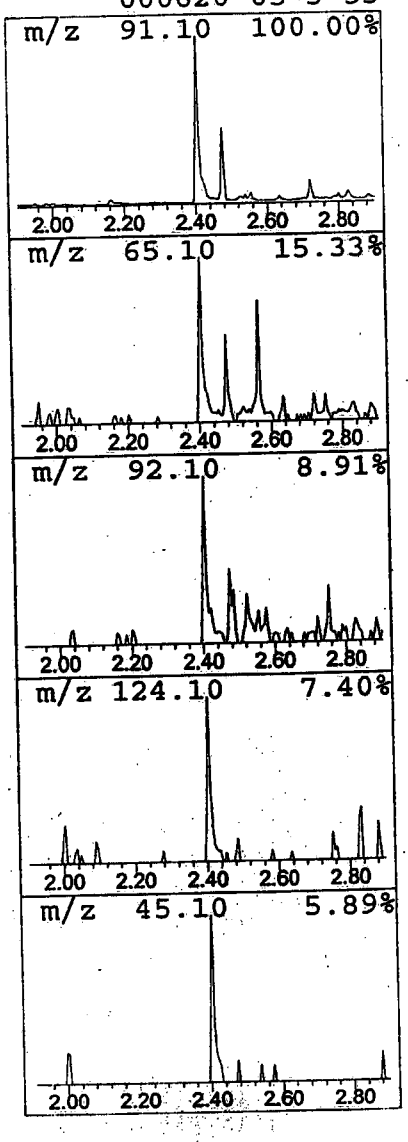
****

Peak Number 2 Substituted benzene Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.40	4.75 UG	38833	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phosphonous dichloride, (phenylm...	192	C7H7Cl2P	004545-85-1	59
2	Hydrazinecarboxylic acid, phenyl...	166	C8H10N2O2	005331-43-1	58
3	4-Benzyloxyphenylacetonitrile	223	C15H13NO	000838-96-0	53
4	Benzene, (iodomethyl)-	218	C7H7I	000620-05-3	53





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
LS Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

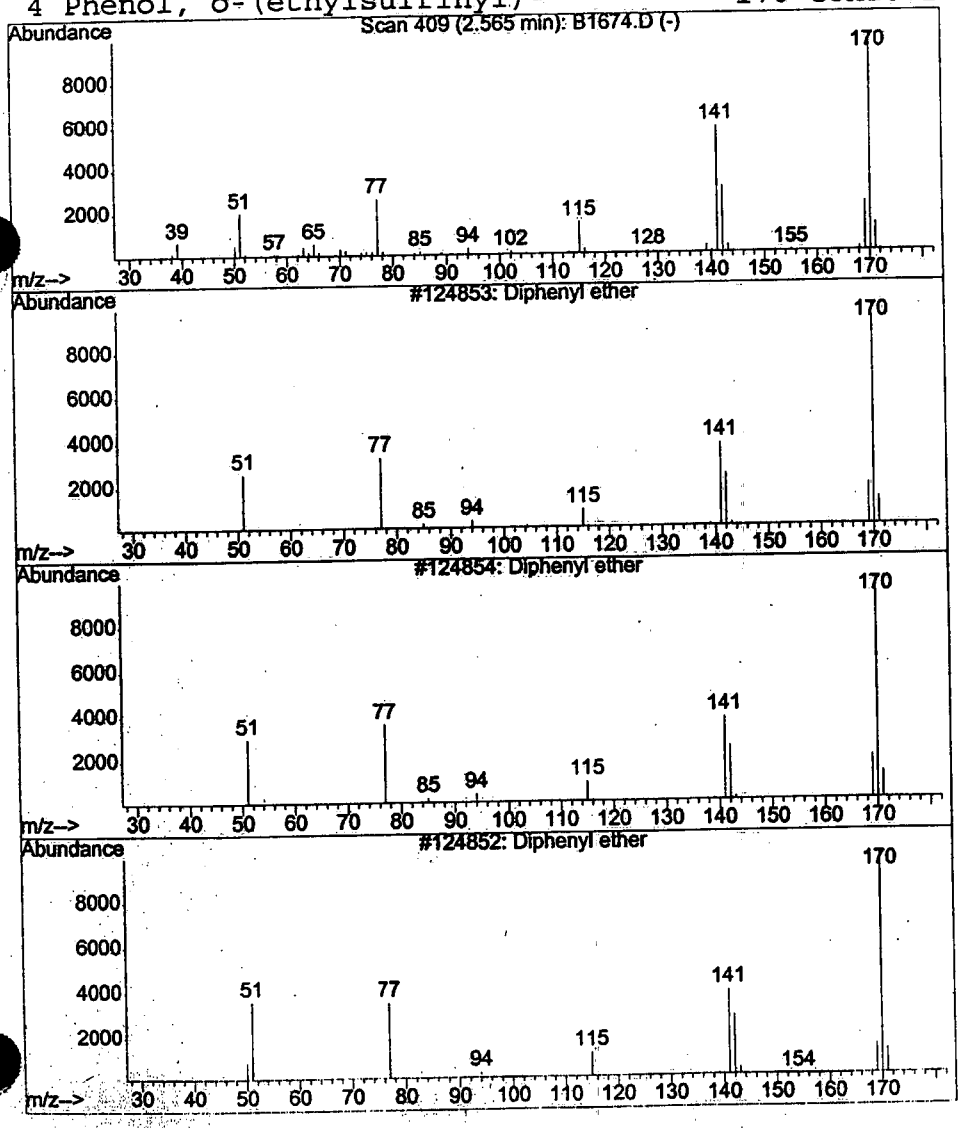
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

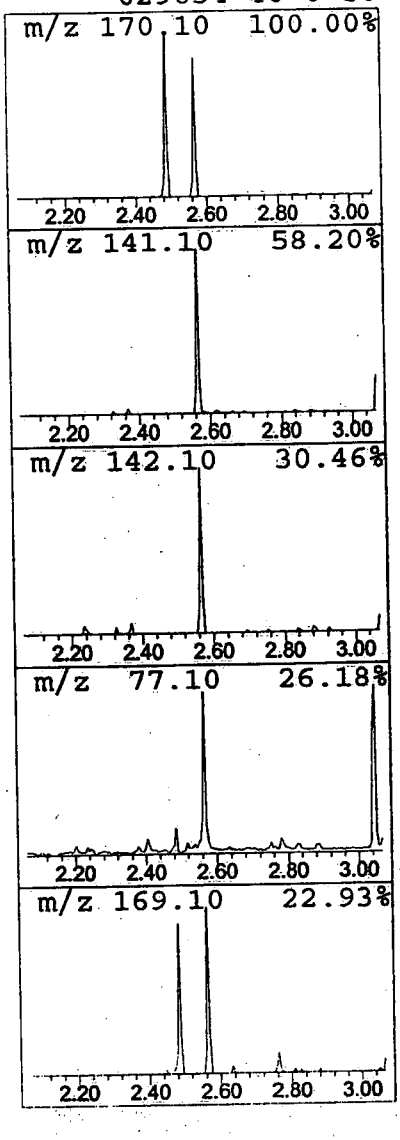
****

Peak Number 3 Diphenyl ether — Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.56	8.69 UG	71041	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diphenyl ether	170	C12H10O	000101-84-8	83
2	Diphenyl ether	170	C12H10O	000101-84-8	83
3	Diphenyl ether	170	C12H10O	000101-84-8	59
4	Phenol, o-(ethylsulfinyl)-	170	C8H10O2S	029634-40-0	50





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

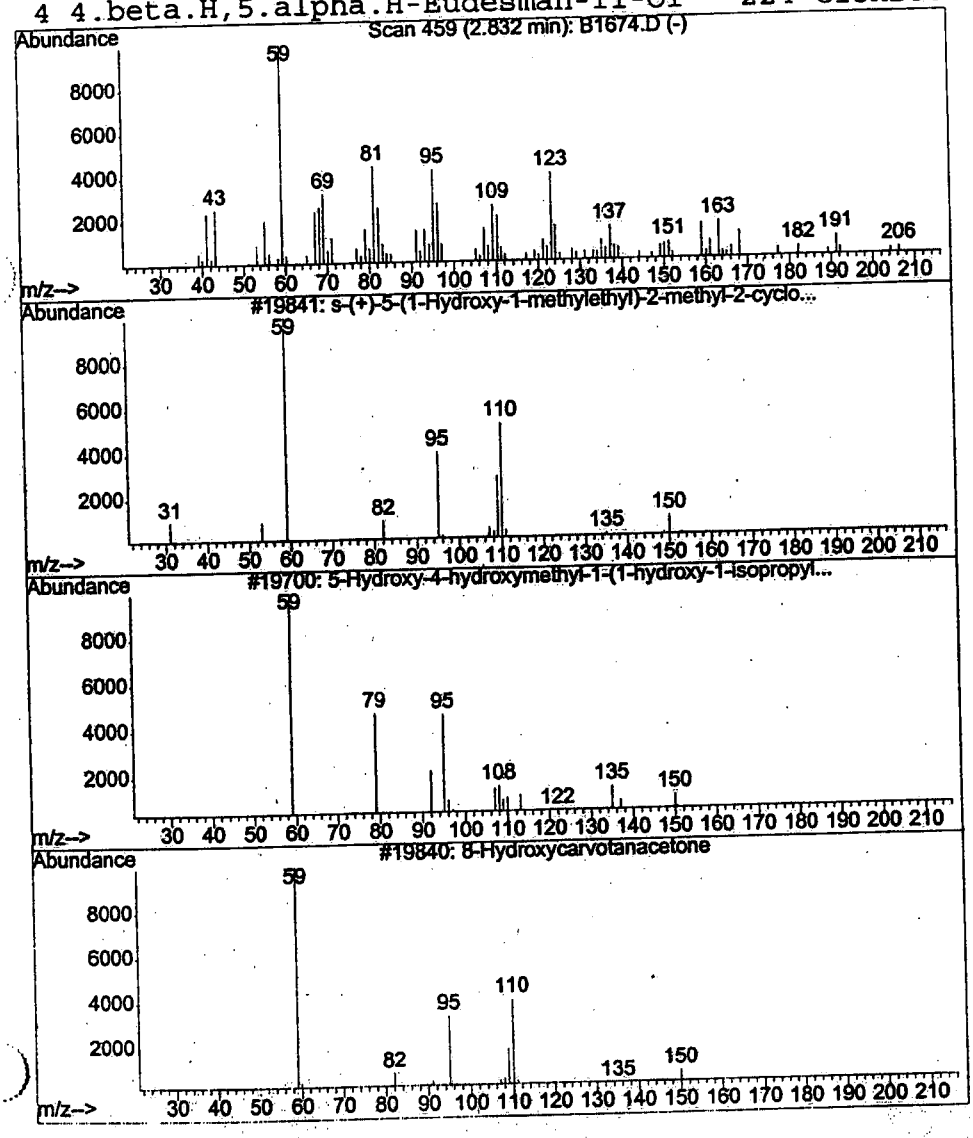
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

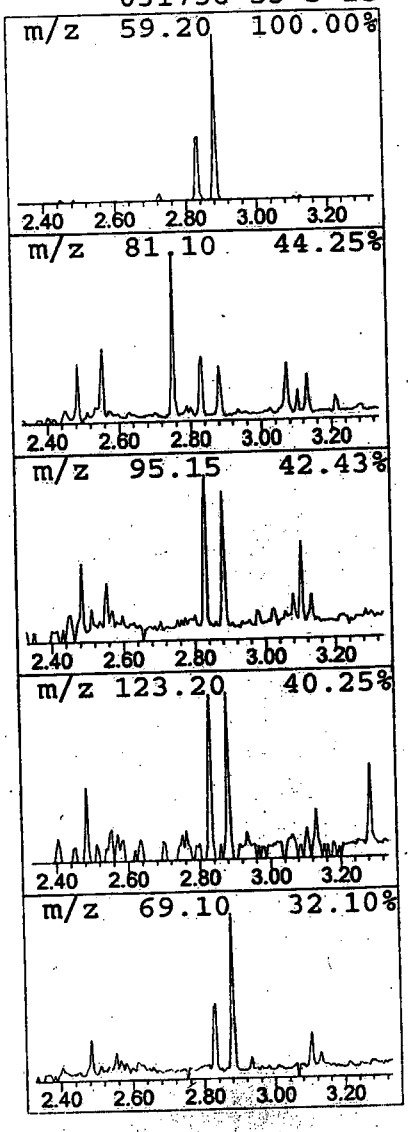
****

Peak Number 4 s-(+)-5-(1-Hydroxy-1-methyl... Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.83	5.13 UG	41938	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	s-(+)-5-(1-Hydroxy-1-methylethyl...	168	C10H16O2	060593-11-5	37
2	5-Hydroxy-4-hydroxymethyl-1-(1-h...	186	C10H18O3	087096-72-8	32
3	8-Hydroxycarvotanacetone	168	C10H16O2	007712-46-1	25
4	4.beta.H,5.alpha.H-Eudesman-11-ol	224	C15H28O	031756-53-3	25





1515

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

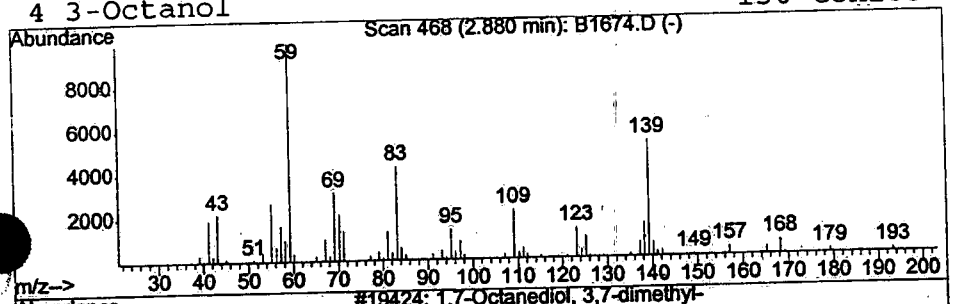
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

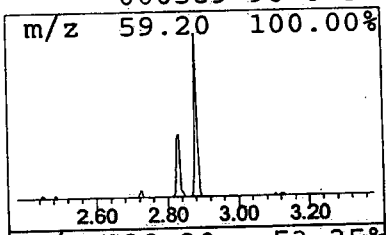
****

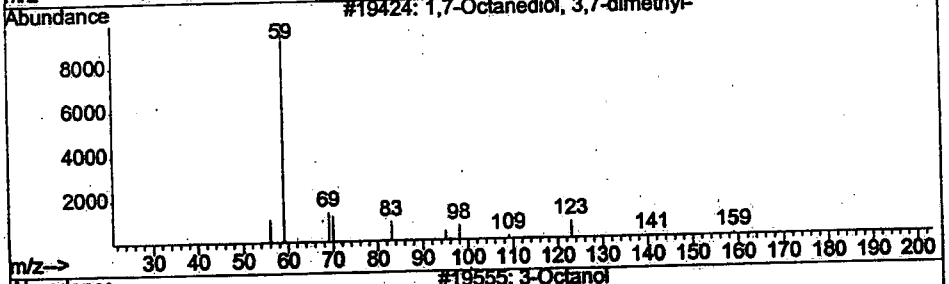
Peak Number 5 1,7-Octanediol, 3,7-dimethyl- Concentration Rank 21

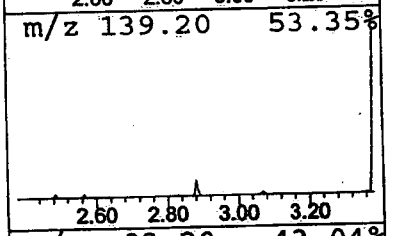
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.88	6.25 UG	51128	Acenaphthene-d10	2.75

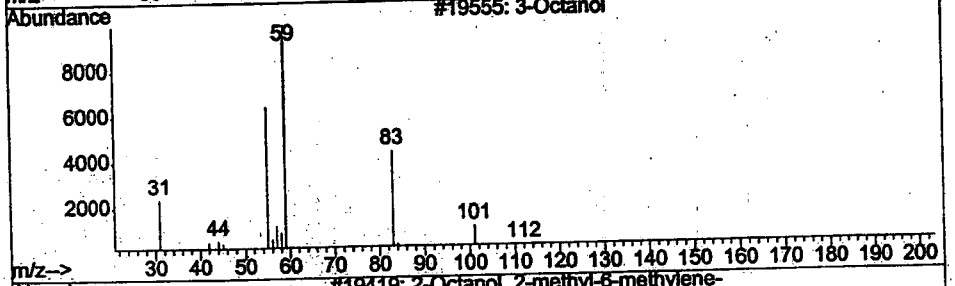
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,7-Octanediol, 3,7-dimethyl-	174	C10H22O2	000107-74-4	47
2	3-Octanol	130	C8H18O	000589-98-0	38
3	2-Octanol, 2-methyl-6-methylene-	156	C10H20O	1000132-19-1	37
4	3-Octanol	130	C8H18O	000589-98-0	32

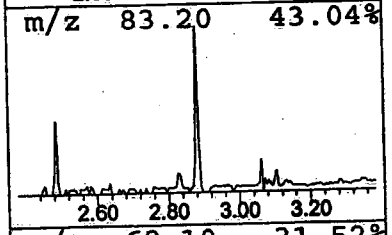


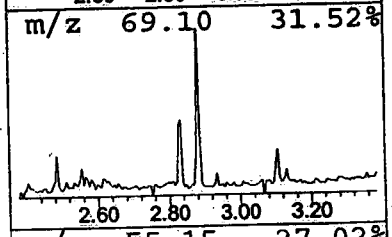


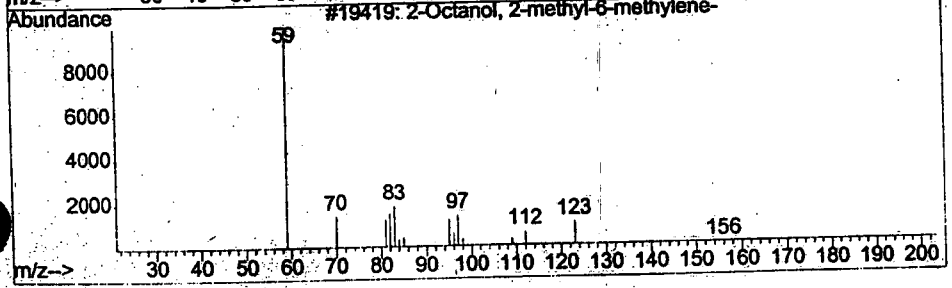


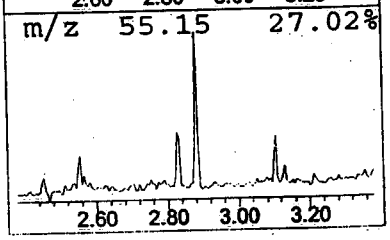












000478
1516

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

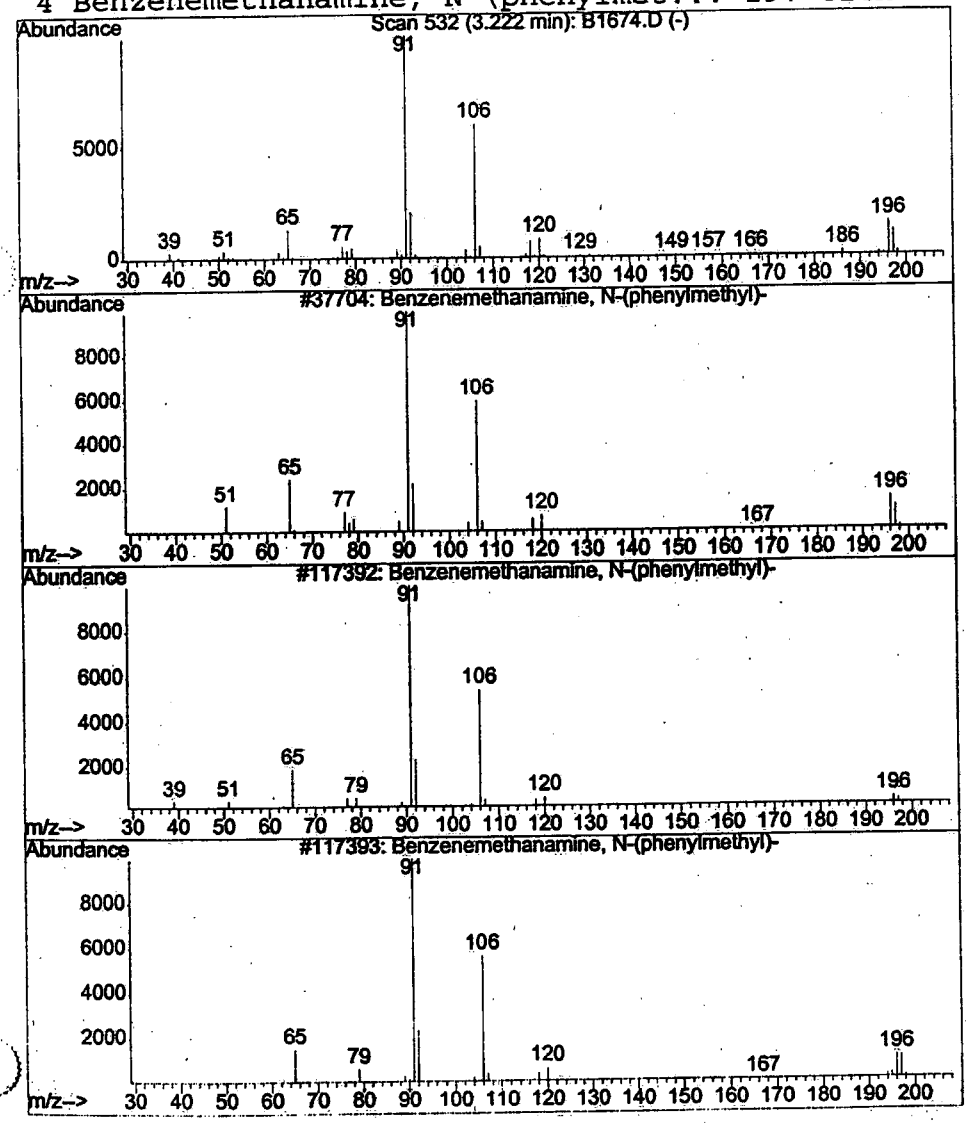
****

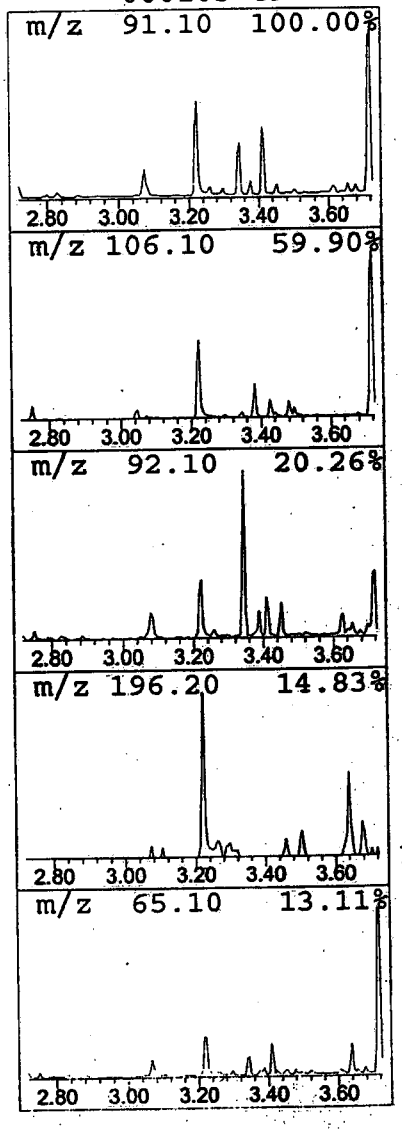
Peak Number 6 Benzenemethanamine, N-(phen... Concentration Rank 16

Substituted Benzene

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.22	8.07 UG	69428	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanamine, N-(phenylmet...	197	C14H15N	000103-49-1	97
2	Benzenemethanamine, N-(phenylmet...	197	C14H15N	000103-49-1	95
3	Benzenemethanamine, N-(phenylmet...	197	C14H15N	000103-49-1	94
4	Benzenemethanamine, N-(phenylmet...	197	C14H15N	000103-49-1	93





1517

000479

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

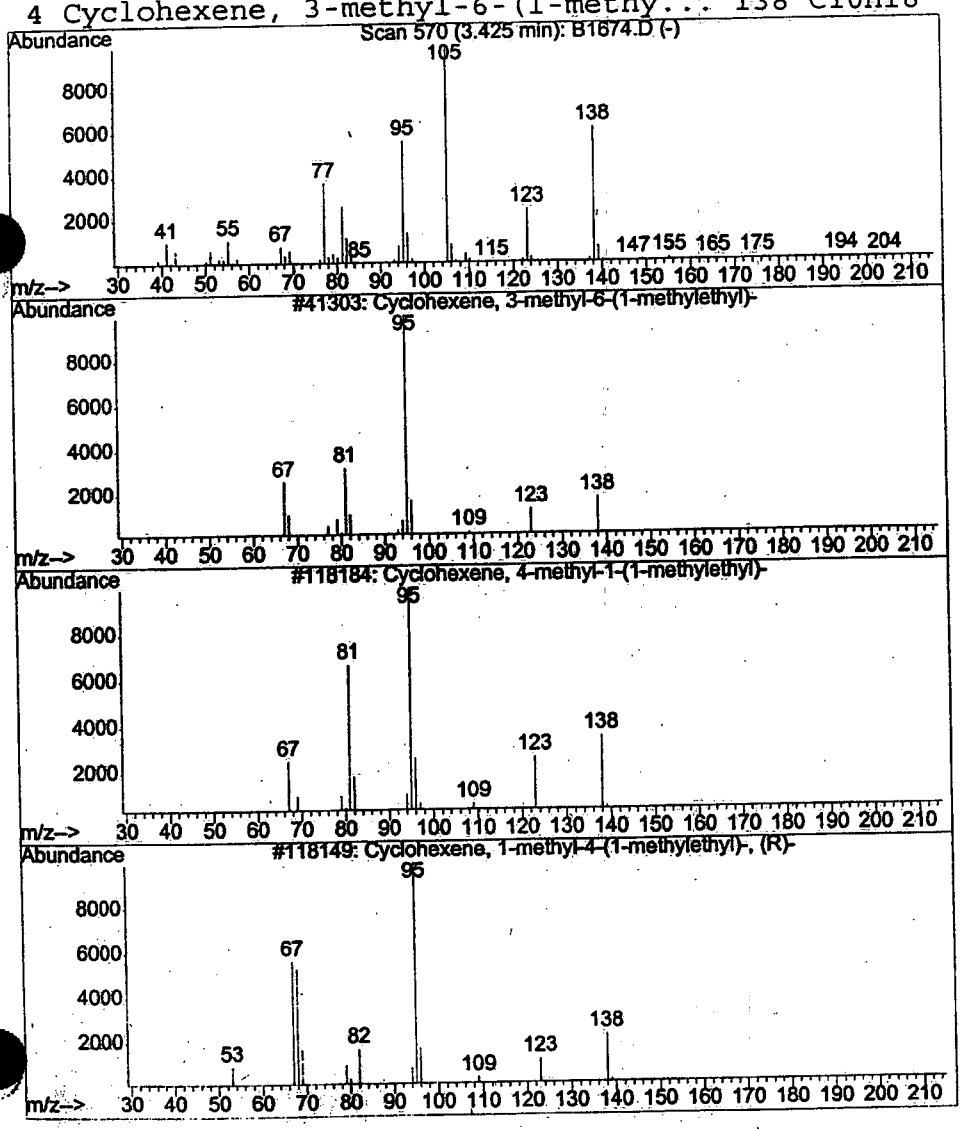
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

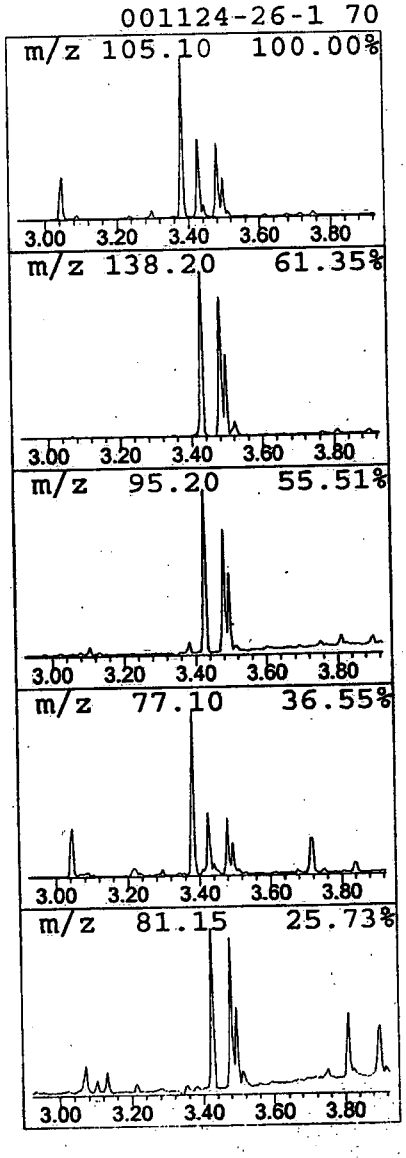
****

Peak Number 7 Cyclohexene, 3-methyl-6-(1-... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.42	10.38 UG	89277	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 3-methyl-6-(1-methy...	138	C10H18	005256-65-5	76
2	Cyclohexene, 4-methyl-1-(1-methy...	138	C10H18	000500-00-5	70
3	Cyclohexene, 1-methyl-4-(1-methy...	138	C10H18	001195-31-9	70
4	Cyclohexene, 3-methyl-6-(1-methy...	138	C10H18	001124-26-1	70





000480

1518

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

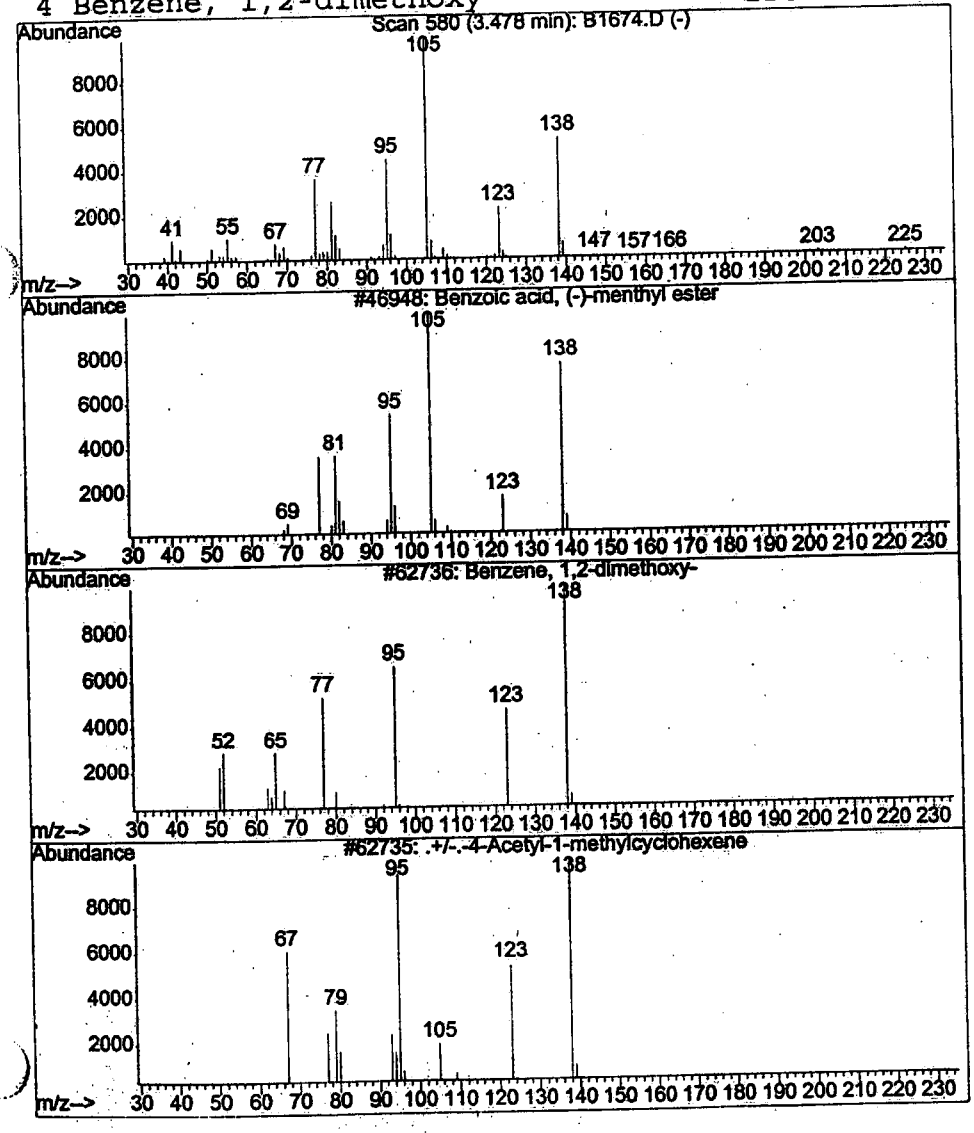
****

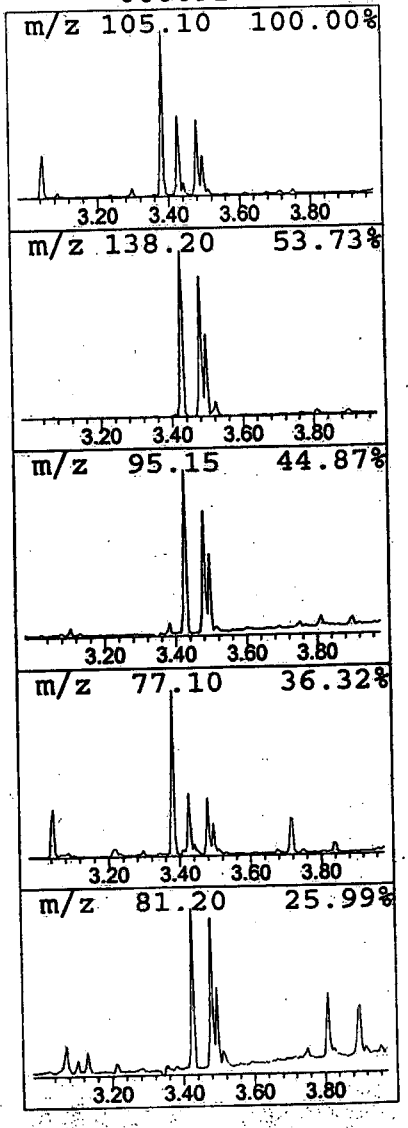
Peak Number 8 Benzoic acid, (-)-menthyl e... Concentration Rank 8

Substituted Benzene

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.48	11.54 UG	99282	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, (-)-menthyl ester	260	C17H24O2	1000158-46-9	91
2	Benzene, 1,2-dimethoxy-	138	C8H10O2	000091-16-7	64
3	.+/-.-4-Acetyl-1-methylcyclohexene	138	C9H14O	070286-20-3	64
4	Benzene, 1,2-dimethoxy-	138	C8H10O2	000091-16-7	53





1518

000101

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
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Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

****

Peak Number 9 Cyclohexene, 1-methyl-4-(1-... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.49	10.10 UG	86868	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 1-methyl-4-(1-methy...	138	C10H18	005502-88-5	70
2	Cyclohexene, 4-methyl-1-(1-methy...	138	C10H18	000500-00-5	70
3	Cyclohexene, 3-methyl-6-(1-methy...	138	C10H18	001124-26-1	70
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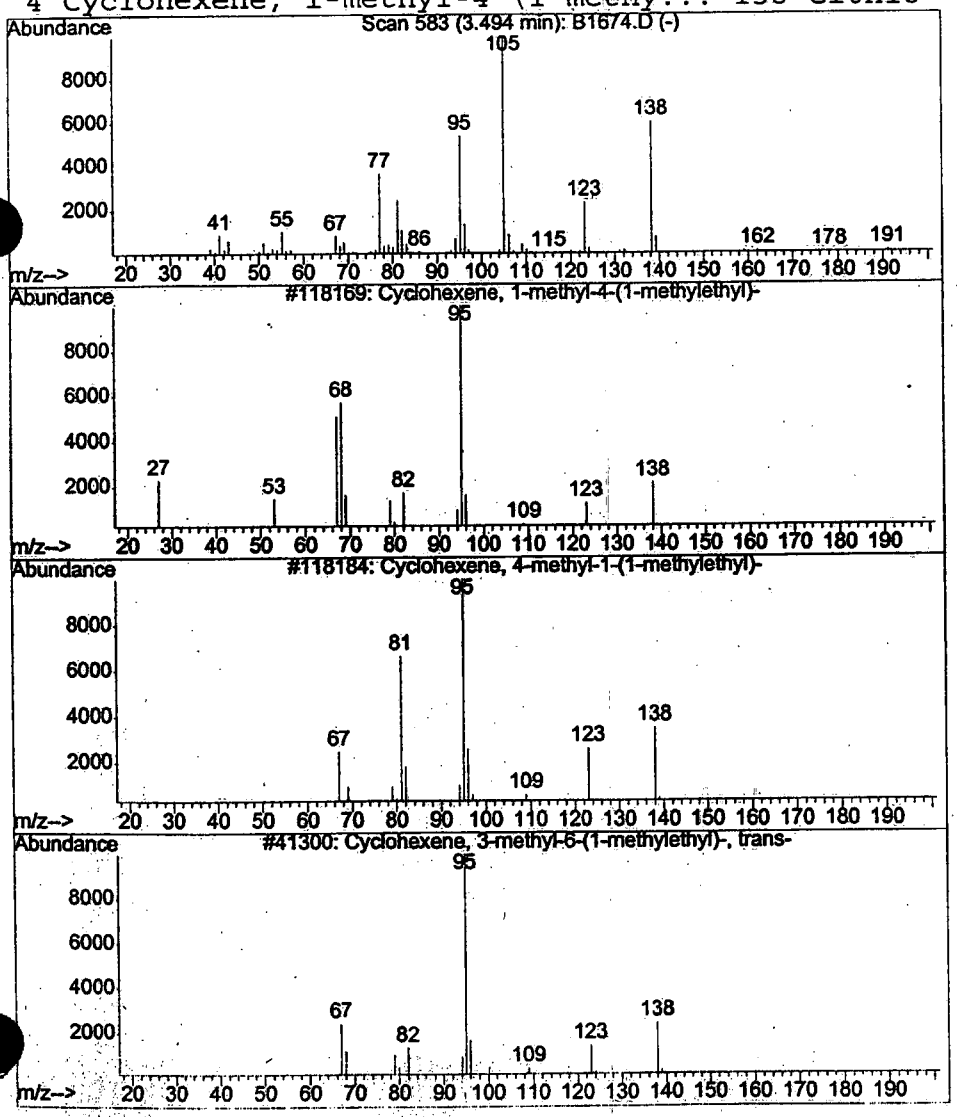

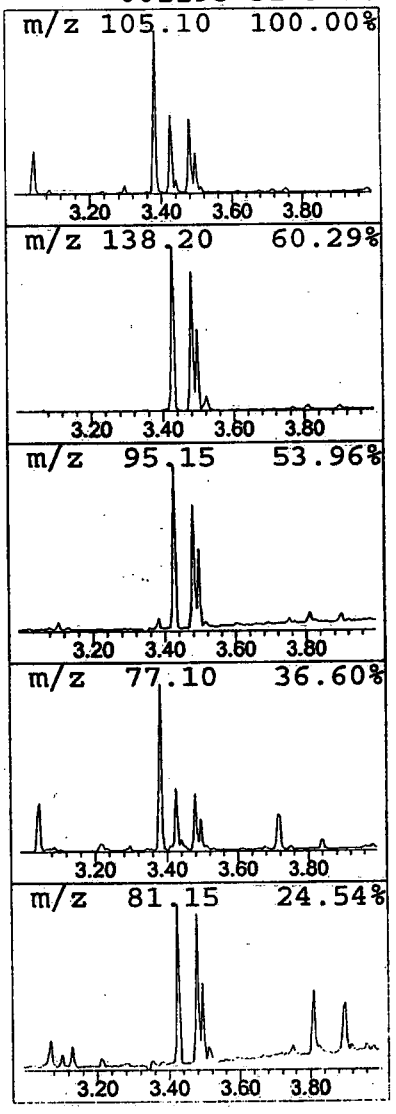

1570

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
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Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

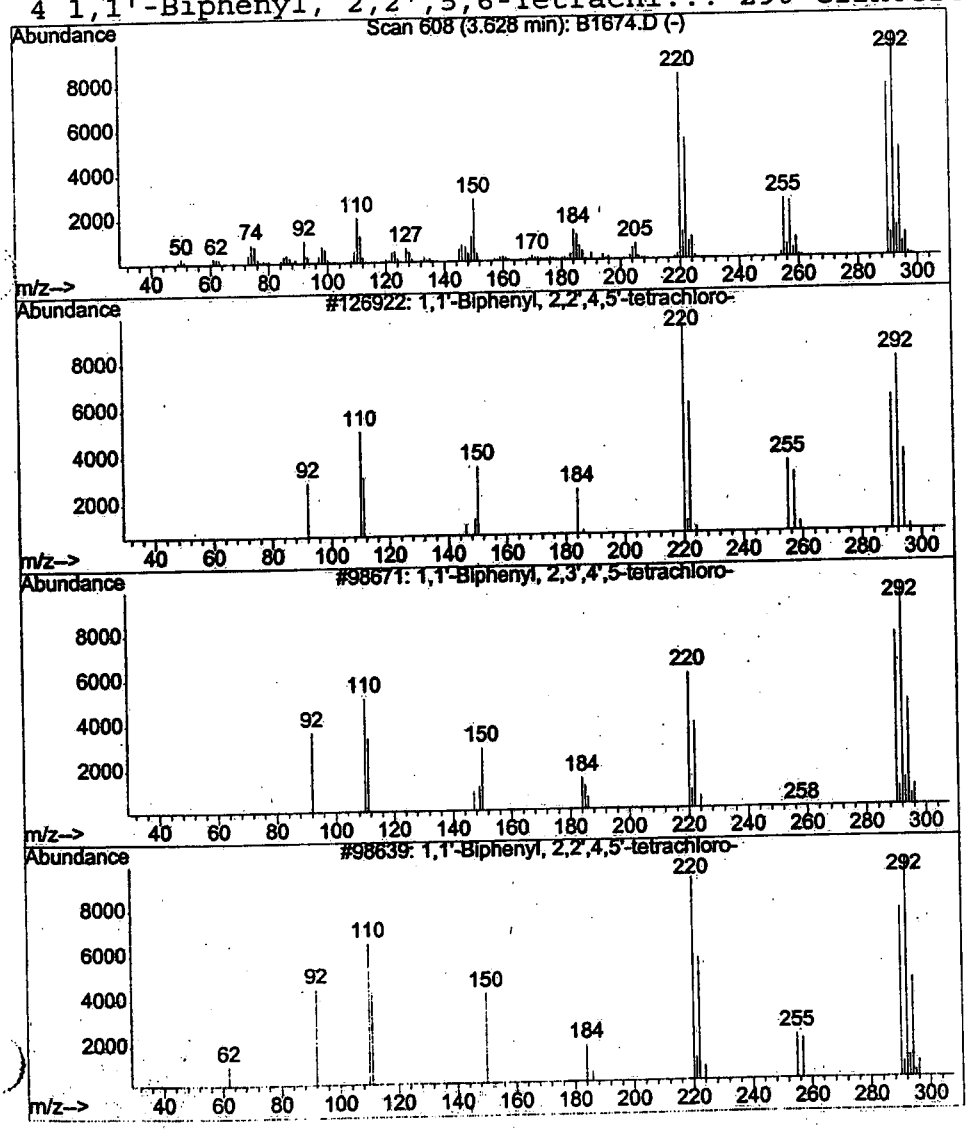
****

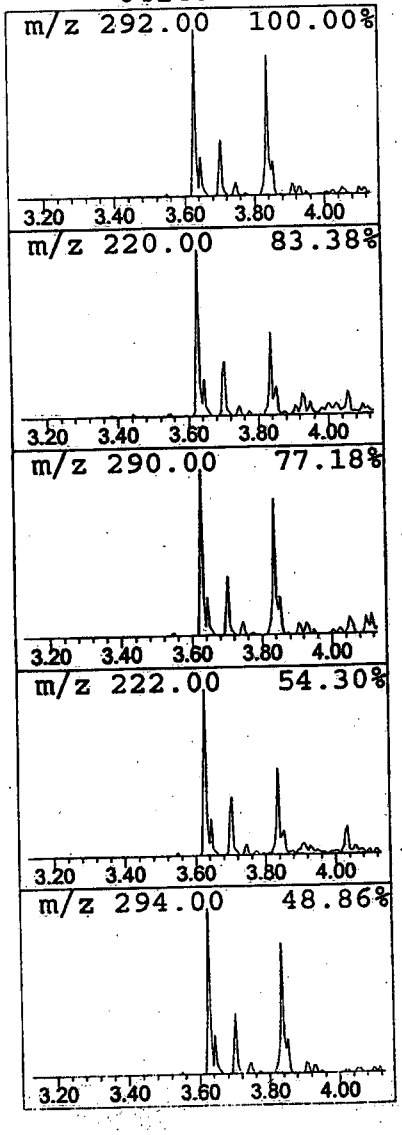
Peak Number 10 1,1'-Biphenyl, 2,2',4,5'-te... Concentration Rank 4

Substituted Biphenyls

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.63	19.37 UG	166667	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',4,5'-tetrach...	290	C12H6Cl4	041464-40-8	99
2	1,1'-Biphenyl, 2,3',4',5-tetrach...	290	C12H6Cl4	032598-11-1	99
3	1,1'-Biphenyl, 2,2',4,5'-tetrach...	290	C12H6Cl4	041464-40-8	99
4	1,1'-Biphenyl, 2,2',5,6-Tetrachl...	290	C12H6Cl4	041464-41-9	99





000483

1521

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

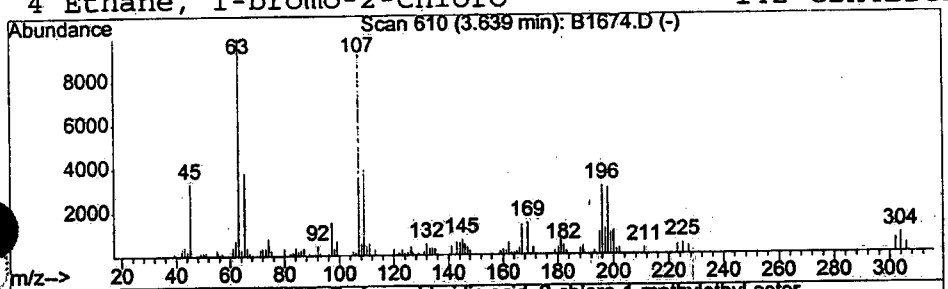
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

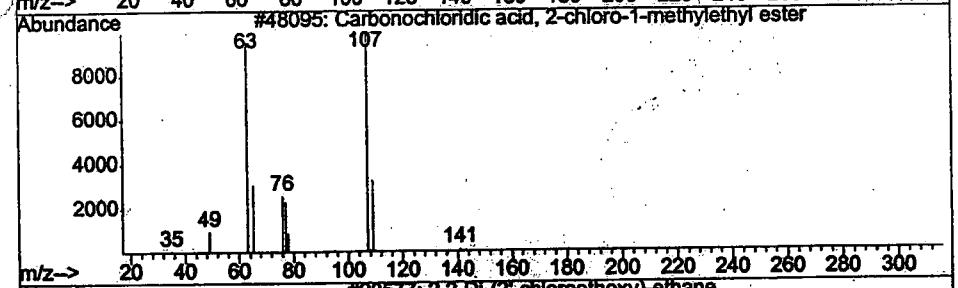
****

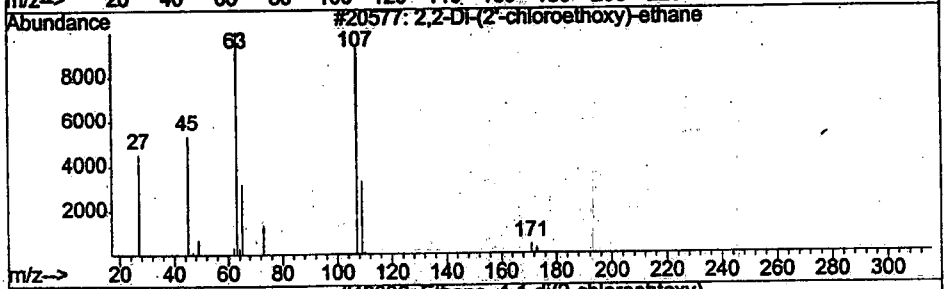
Peak Number 11 Carbonochloridic acid, 2-ch... Concentration Rank 22

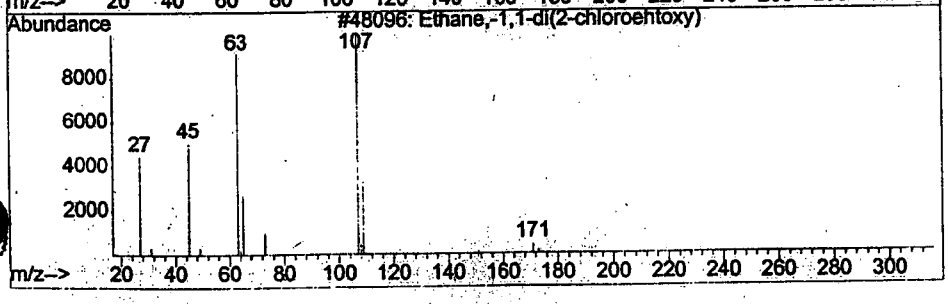
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.64	5.18 UG	44592	Phenanthrene-d10	3.34

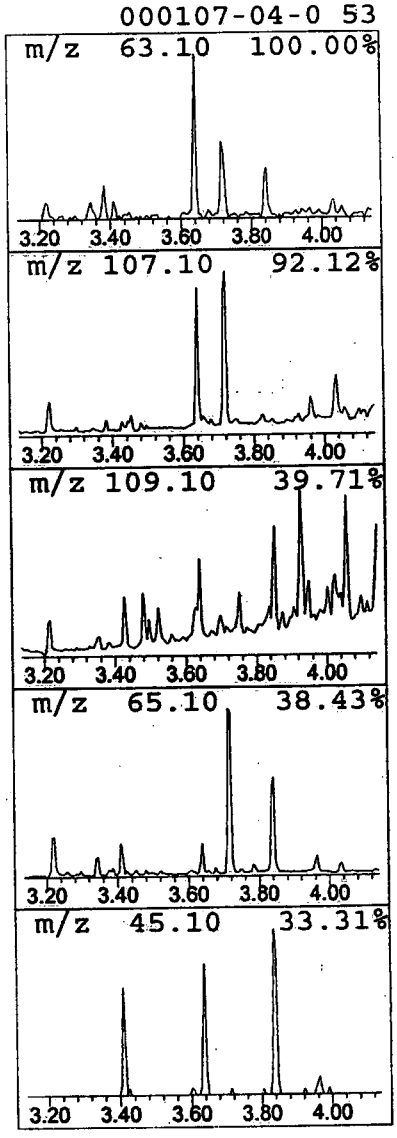
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbonochloridic acid, 2-chloro-...	156	C4H6Cl2O2	000817-80-1	78
2	2,2-Di-(2'-chloroethoxy)-ethane	186	C6H12Cl2O2	1000222-25-5	64
3	Ethane,-1,1-di(2-chloroehtoxy)	186	C6H12Cl2O2	1000221-88-2	64
4	Ethane, 1-bromo-2-chloro-	142	C2H4BrCl	000107-04-0	53











1522

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
IS Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

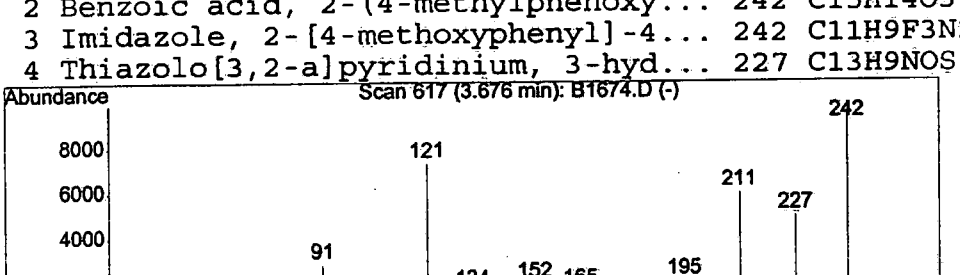
****

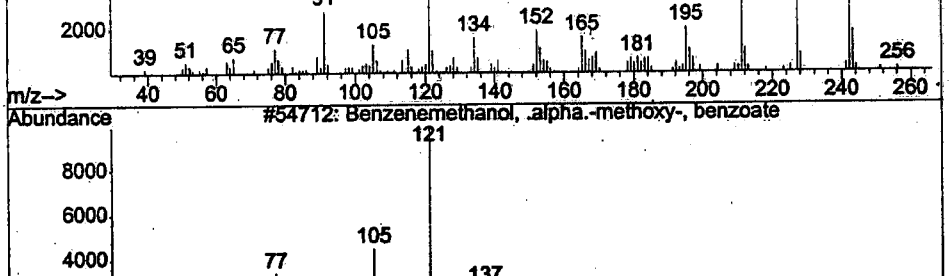
Peak Number 12 Benzenemethanol, .alpha.-me... Concentration Rank 19

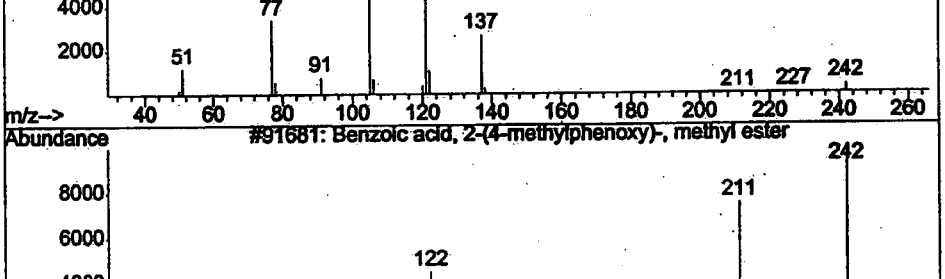
unknown Aromatic

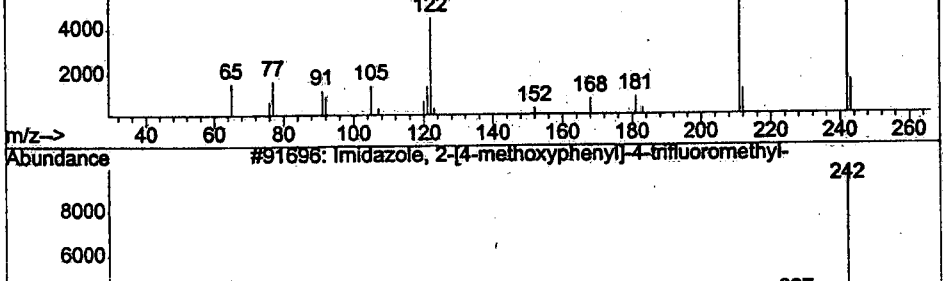
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.68	6.83 UG	58787	Phenanthrene-d10	3.34

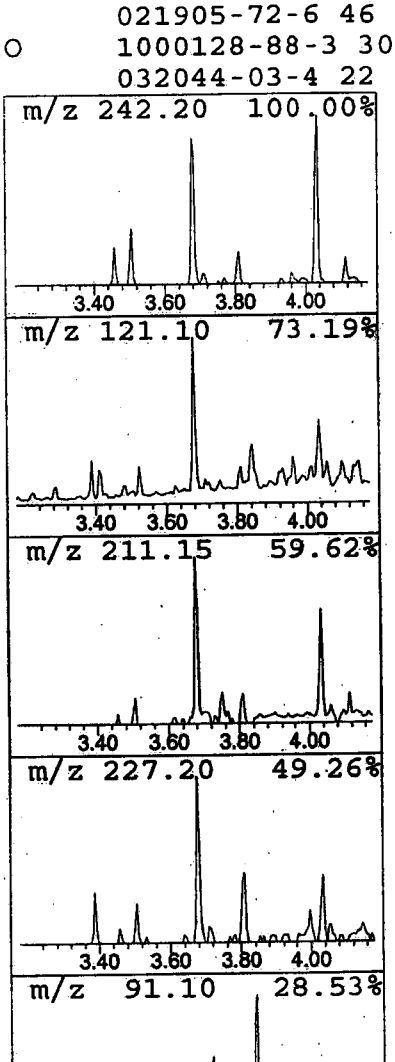
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanol, .alpha.-methoxy...	242	C15H14O3	051835-46-2	46
2	Benzoic acid, 2-(4-methylphenoxy...	242	C15H14O3	021905-72-6	46
3	Imidazole, 2-[4-methoxyphenyl]-4...	242	C11H9F3N2O	1000128-88-3	30
4	Thiazolo[3,2-a]pyridinium, 3-hyd...	227	C13H9NOS	032044-03-4	22











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000485

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

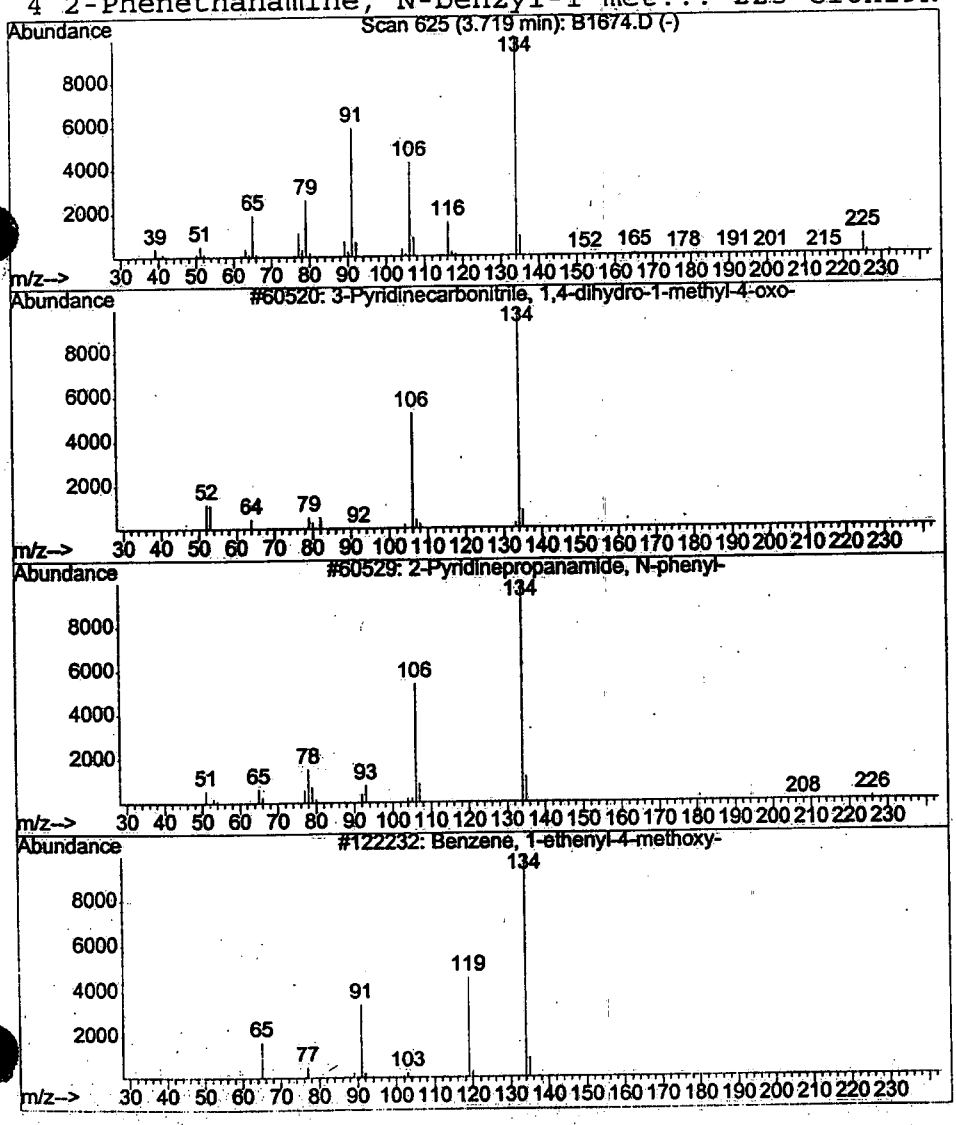
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

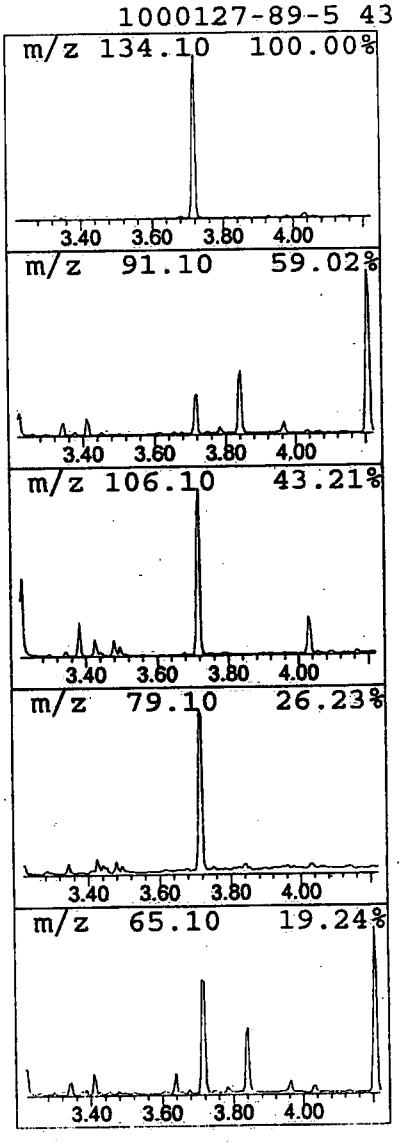
****

Peak Number 13 3-Pyridinecarbonitrile, 1,4... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.72	30.90 UG	265907	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Pyridinecarbonitrile, 1,4-dihy...	134	C7H6N2O	000767-98-6	59
2	2-Pyridinepropanamide, N-phenyl-	226	C14H14N2O	020745-52-2	59
3	Benzene, 1-ethenyl-4-methoxy-	134	C9H10O	000637-69-4	46
4	2-Phenethanamine, N-benzyl-1-met...	225	C16H19N	1000127-89-5	43





1574

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

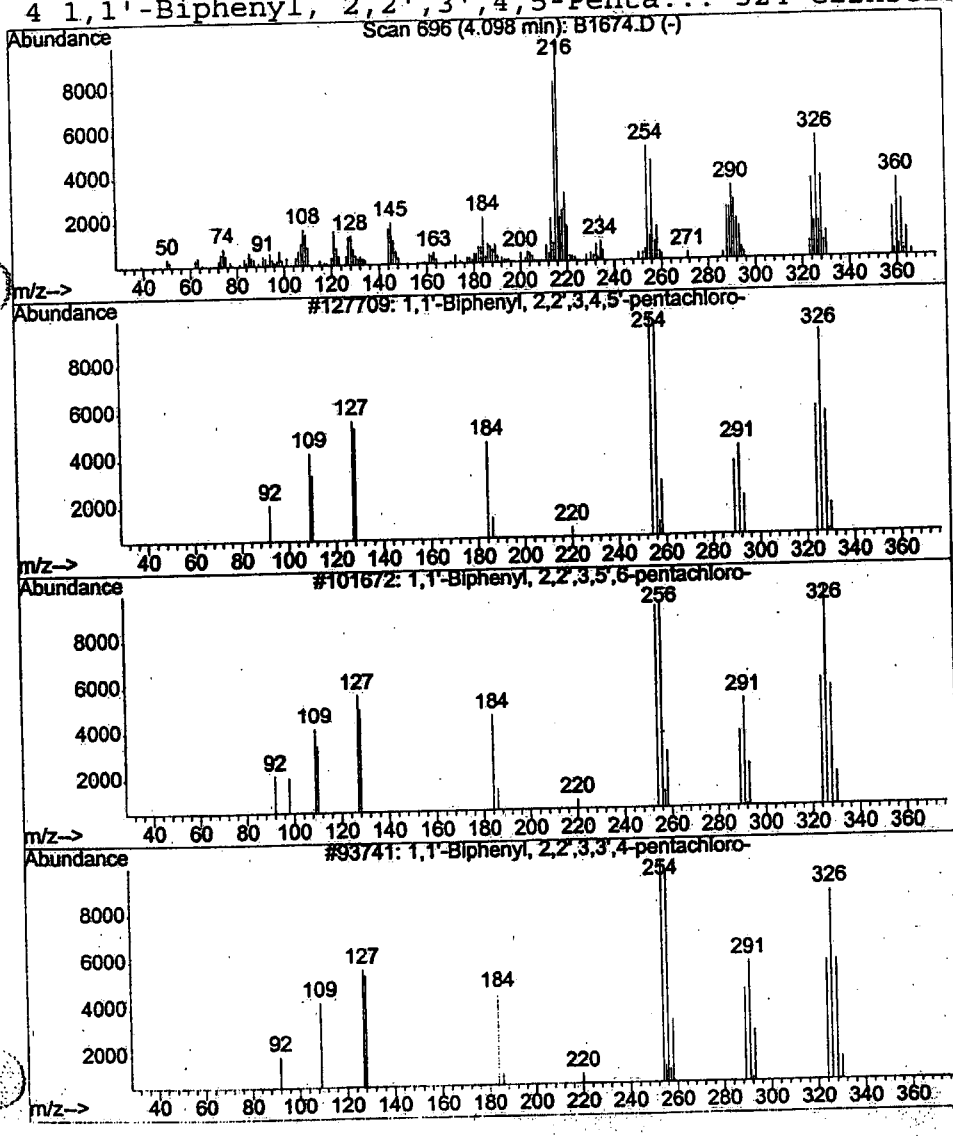
****

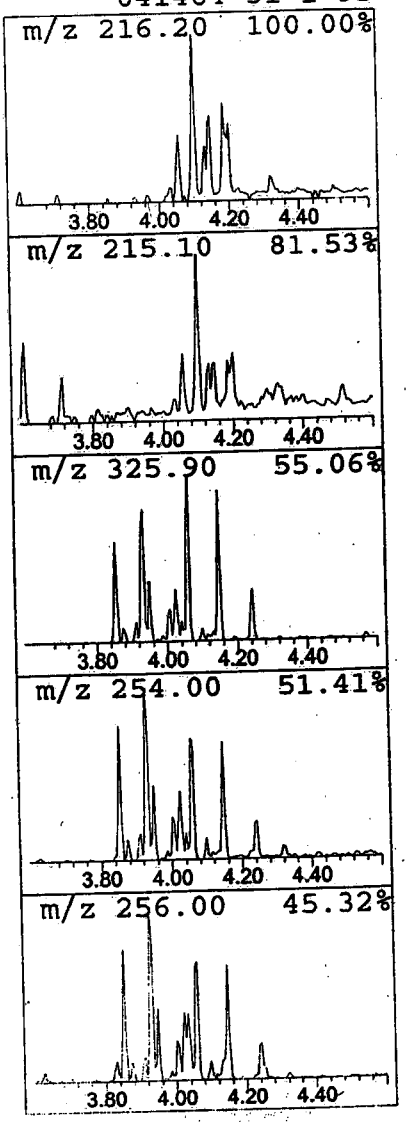
Peak Number 14 1,1'-Biphenyl, 2,2',3,4,5'-... Concentration Rank 18

Substituted Biphenyls

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.10	7.94 UG	80616	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,4,5'-penta...	324	C12H5Cl5	038380-02-8	94
2	1,1'-Biphenyl, 2,2',3,5',6-penta...	324	C12H5Cl5	038379-99-6	94
3	1,1'-Biphenyl, 2,2',3,3',4-penta...	324	C12H5Cl5	052663-62-4	94
4	1,1'-Biphenyl, 2,2',3',4,5-Penta...	324	C12H5Cl5	041464-51-1	93





000487

1525

Library Search Compound Report

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Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
IS Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

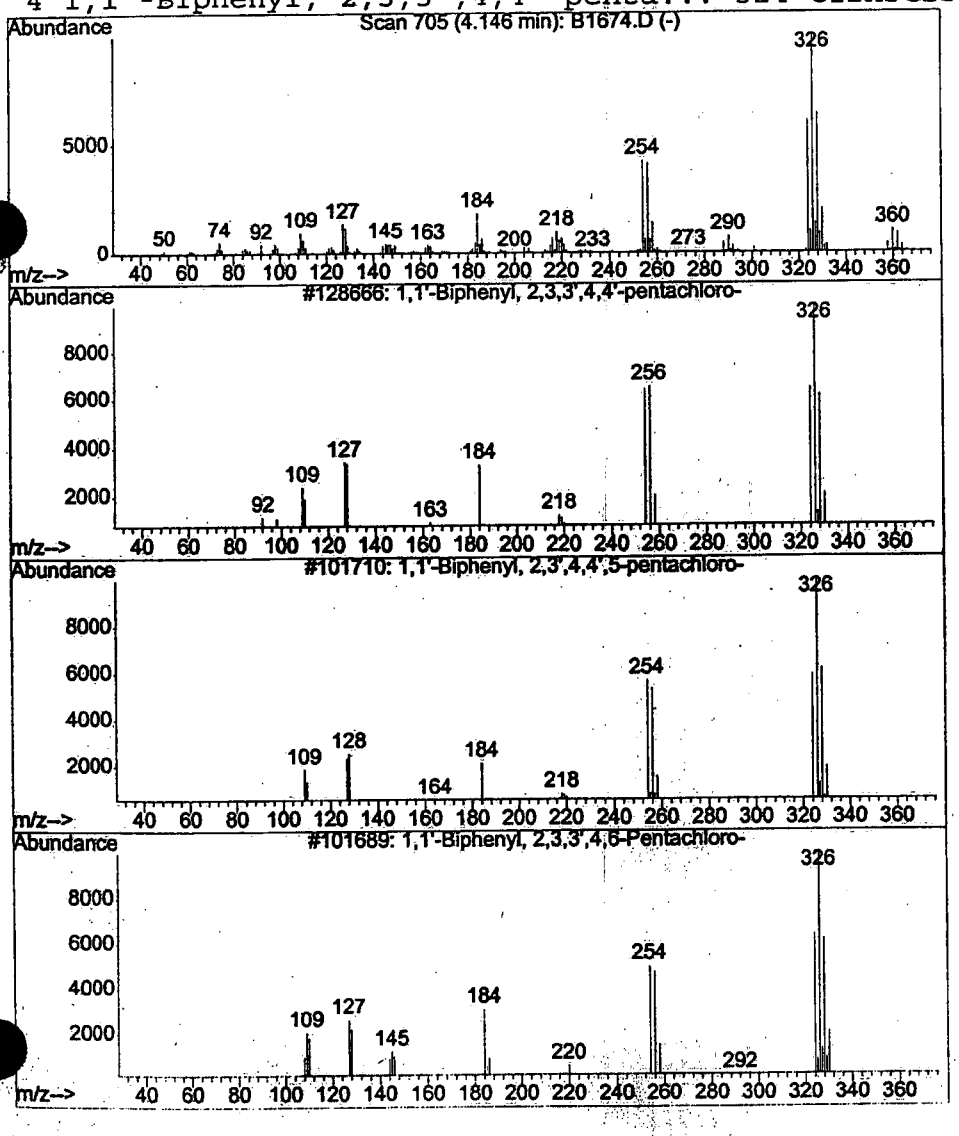
****

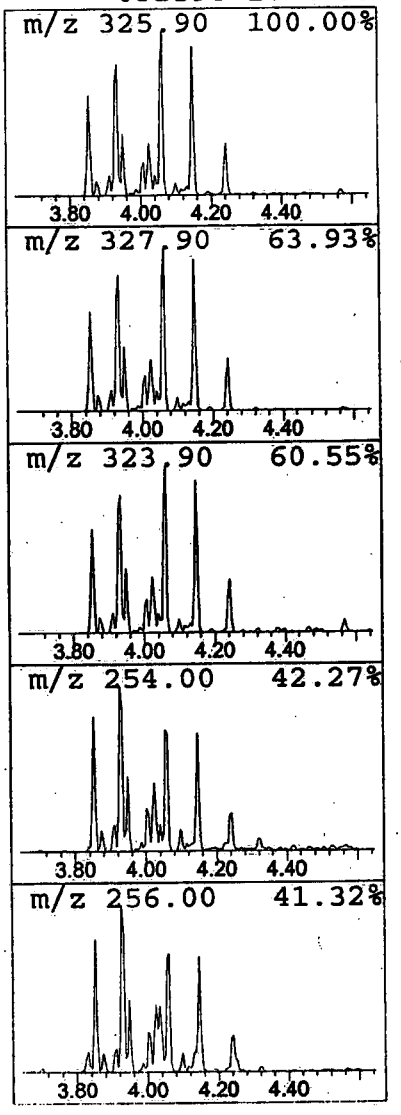
Peak Number 15 1,1'-Biphenyl, 2,3,3',4,4'-... Concentration Rank 3

Substituted Biphenyl

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.15	25.21 UG	255905	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,4'-penta...	324	C12H5Cl5	032598-14-4	99
2	1,1'-Biphenyl, 2,3',4,4',5-penta...	324	C12H5Cl5	031508-00-6	99
3	1,1'-Biphenyl, 2,3,3',4,6-Pentac...	324	C12H5Cl5	074472-35-8	99
4	1,1'-Biphenyl, 2,3,3',4,4'-penta...	324	C12H5Cl5	032598-14-4	99





157G

000488

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

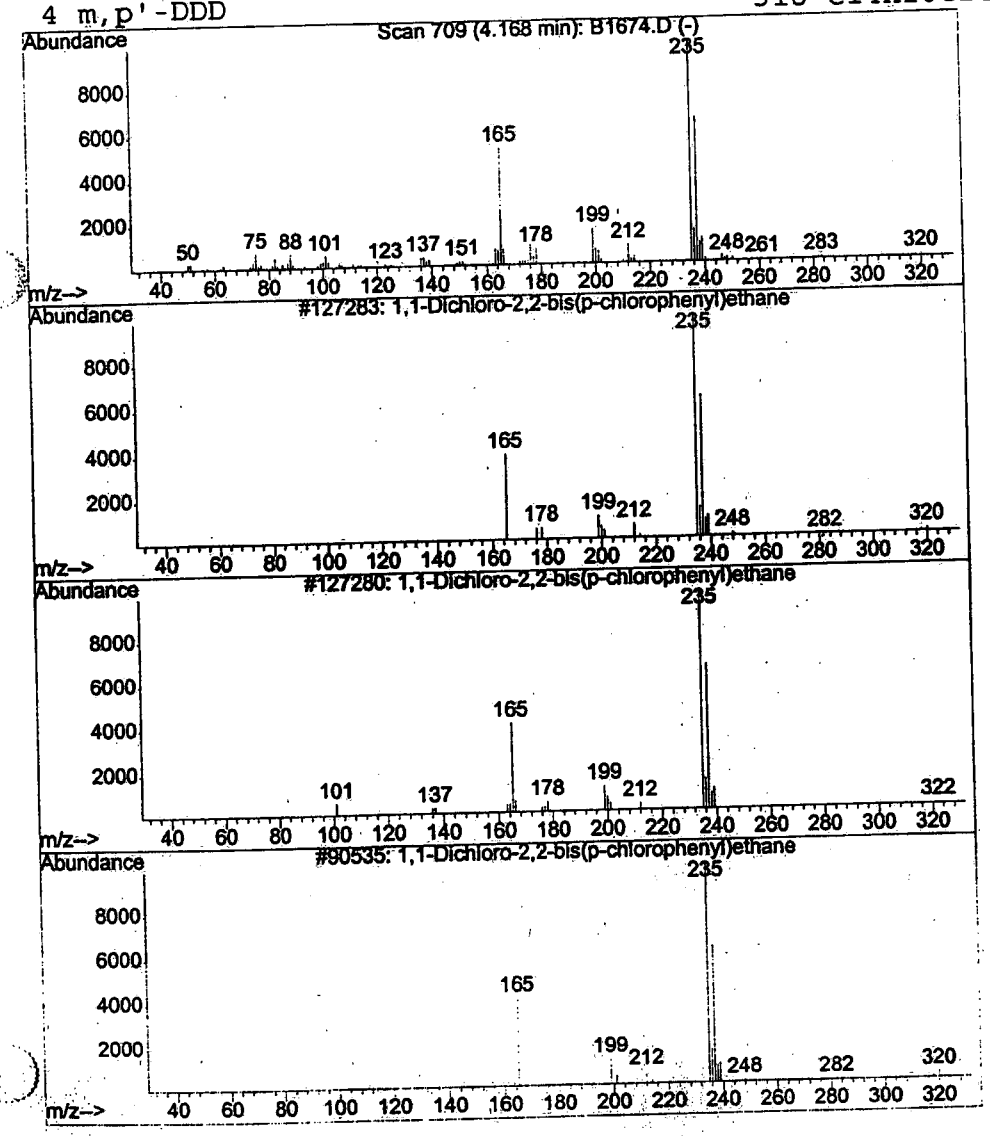
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

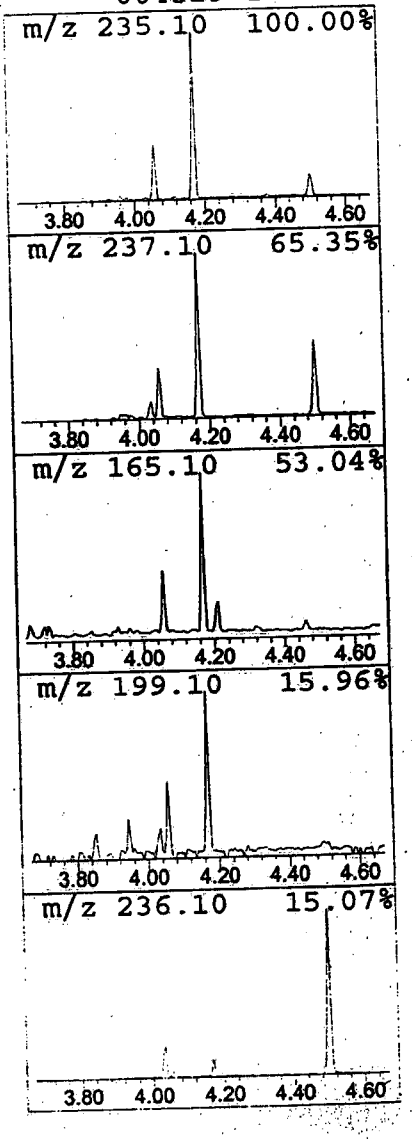
****

Peak Number 16 1,1-Dichloro-2,2-bis(p-chlo... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.17	12.87 UG	130622	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1-Dichloro-2,2-bis(p-chlorophe...	318	C14H10Cl4	000072-54-8	99
2	1,1-Dichloro-2,2-bis(p-chlorophe...	318	C14H10Cl4	000072-54-8	96
3	1,1-Dichloro-2,2-bis(p-chlorophe...	318	C14H10Cl4	000072-54-8	94
4	m,p'-DDD	318	C14H10Cl4	004329-12-8	94





000489

1577

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

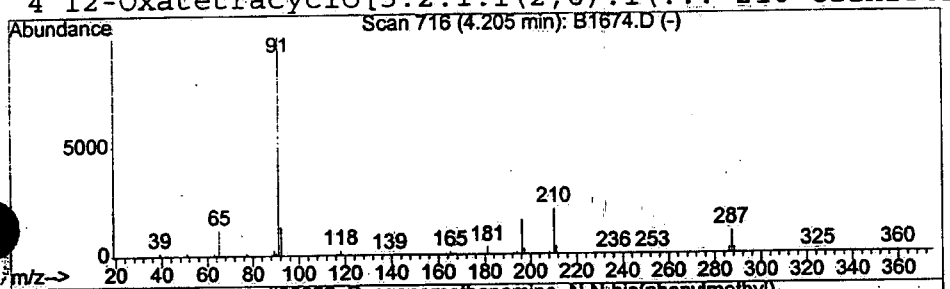
****

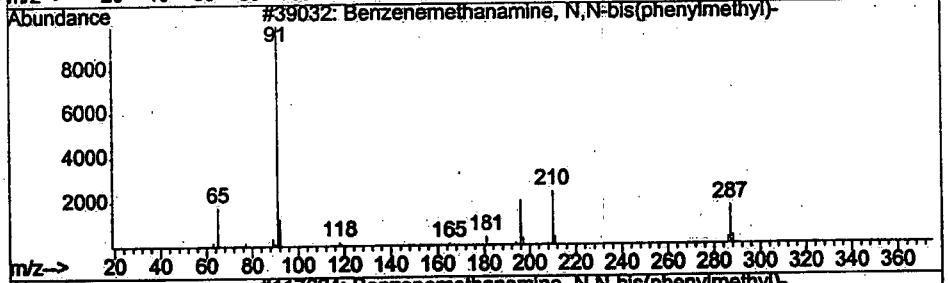
Peak Number 17 Benzenemethanamine, N,N-bis... Concentration Rank 1

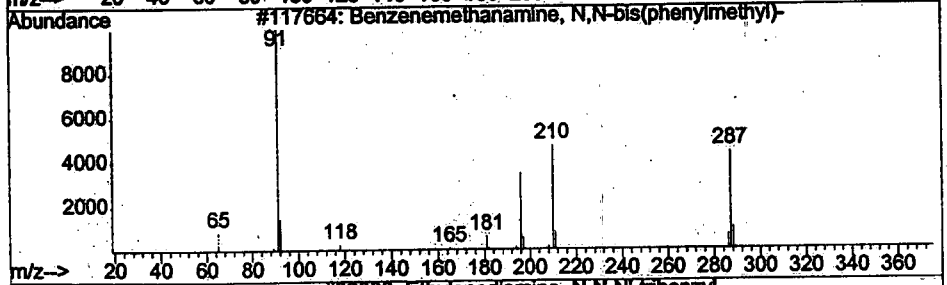
Substituted Benzene

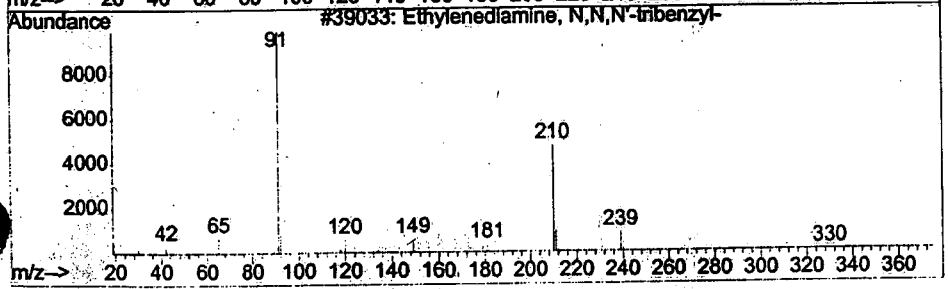
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.20	36.29 UG	368286	Chrysene-d12	4.50

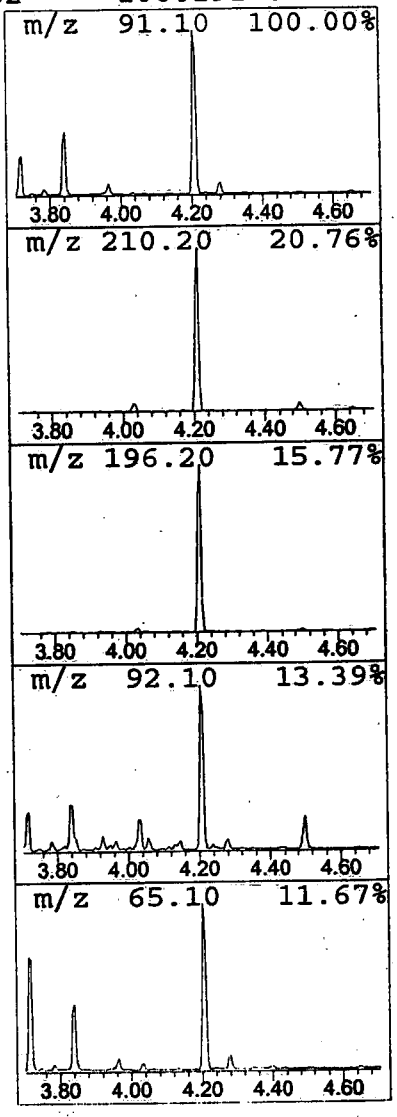
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	98
2	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	97
3	Ethylenediamine, N,N,N'-tribenzyl-	330	C23H26N2	1000164-17-9	50
4	12-Oxatetracyclo[5.2.1.1(2,6).1(...	210	C11H11ClO2	1000191-06-4	46











1578

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

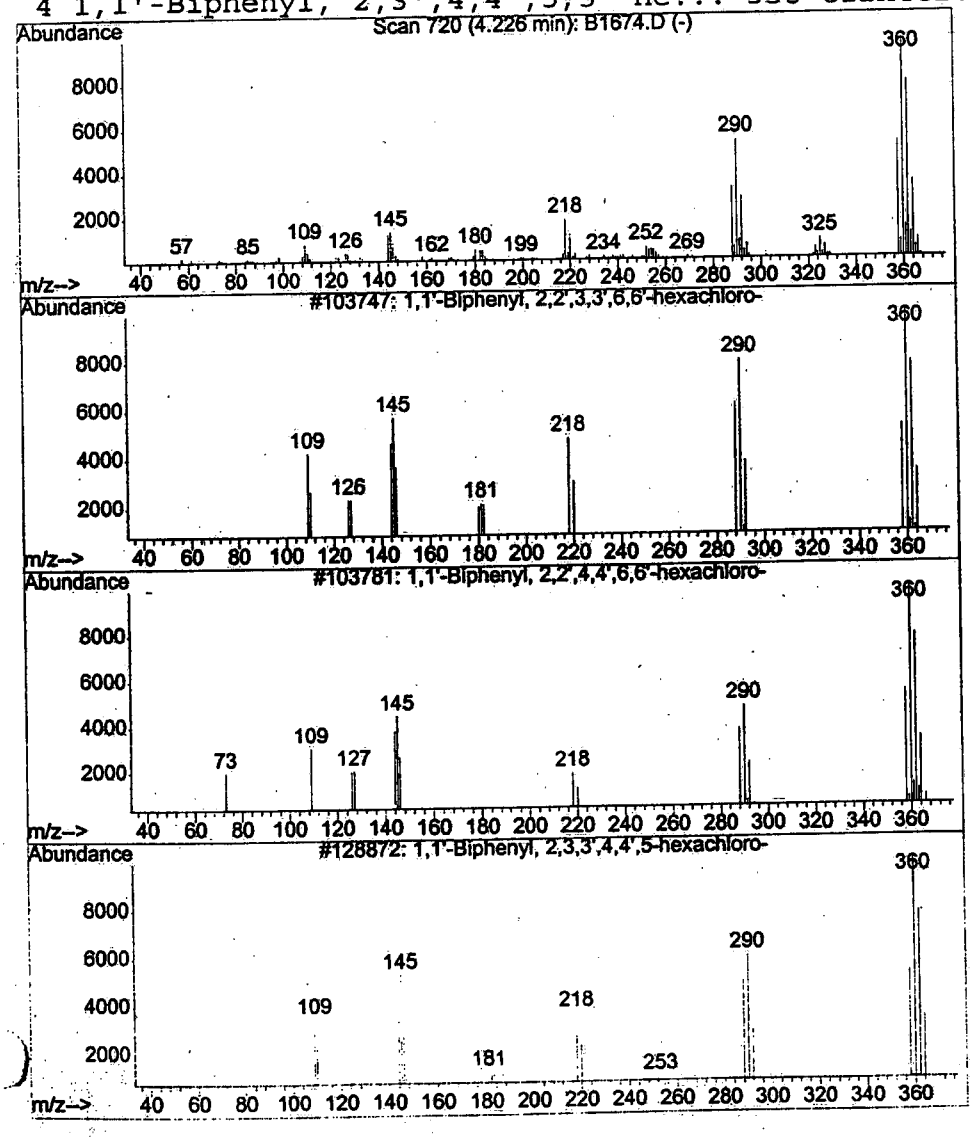
****

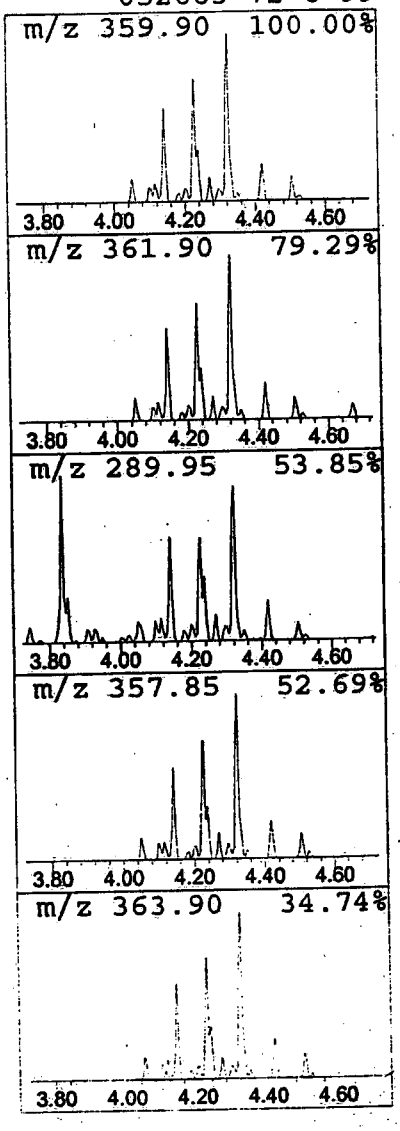
Peak Number 18 1,1'-Biphenyl, 2,2',3,3',6,... Concentration Rank 12

Substituted Biphenyls

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.23	9.87 UG	100178	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,3',6,6'-he...	358	C12H4Cl6	038411-22-2	99
2	1,1'-Biphenyl, 2,2',4,4',6,6'-he...	358	C12H4Cl6	033979-03-2	99
3	1,1'-Biphenyl, 2,3,3',4,4',5-hex...	358	C12H4Cl6	038380-08-4	99
4	1,1'-Biphenyl, 2,3',4,4',5,5'-he...	358	C12H4Cl6	052663-72-6	99





1679

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D Vial: 22
Acq On : 2 Apr 2001 13:05 Operator: JC
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
S Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

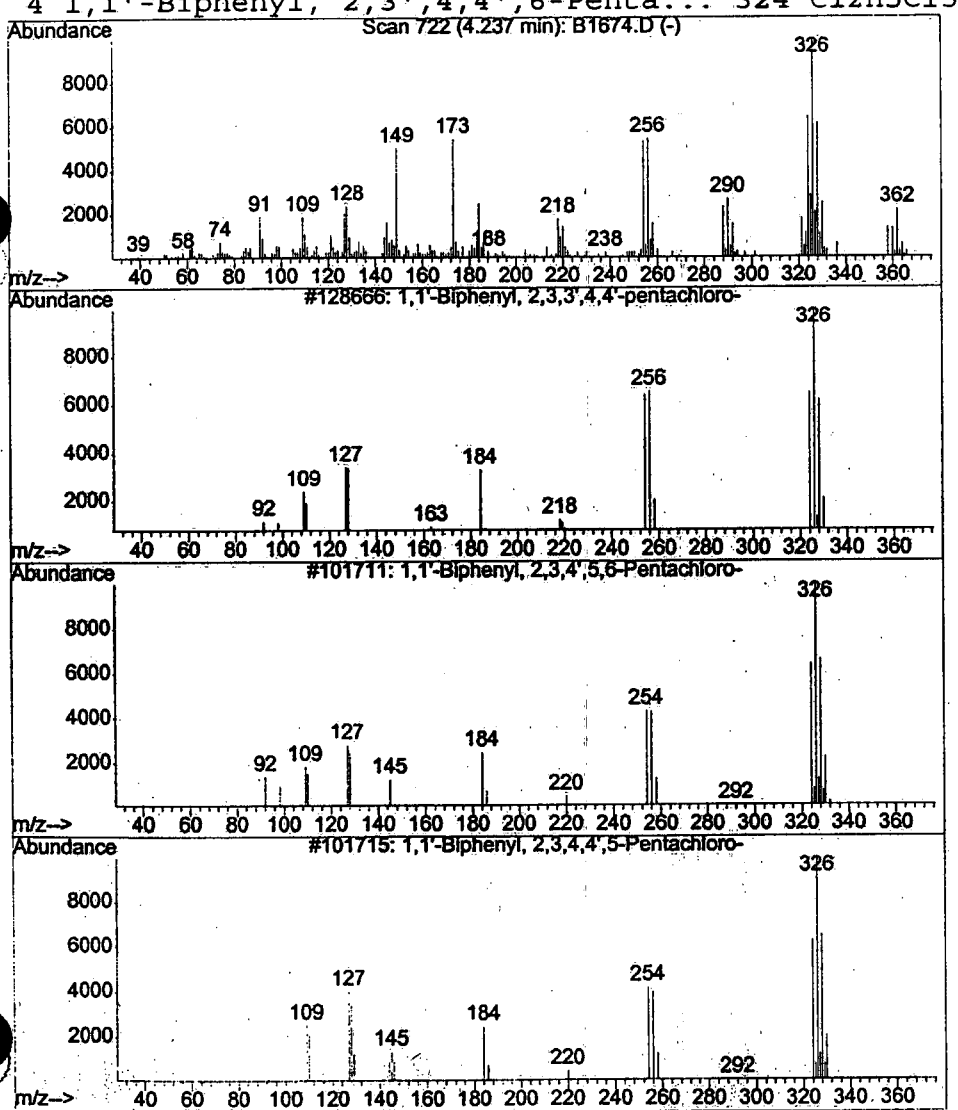
****

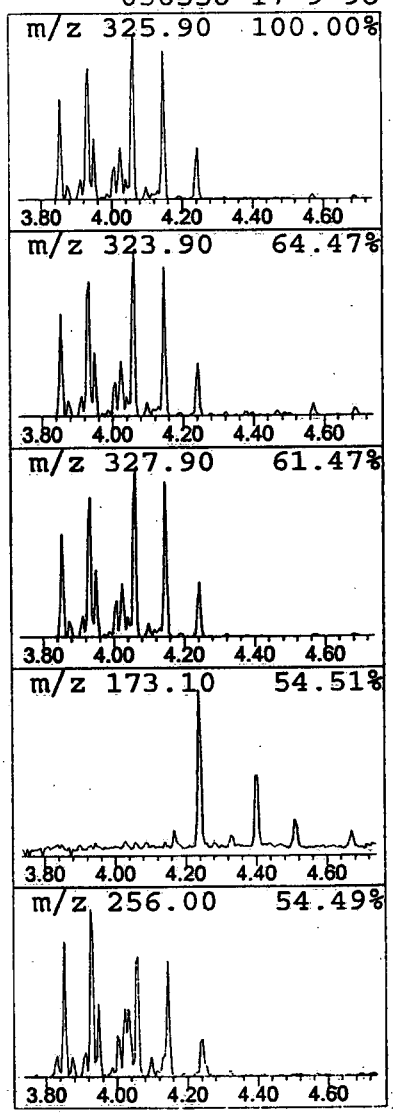
Peak Number 19 1,1'-Biphenyl, 2,3,3',4,4'-... Concentration Rank 7

Surrogate Related Byproduct

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.24	11.92 UG	120944	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,4'-penta...	324	C12H5Cl5	032598-14-4	99
2	1,1'-Biphenyl, 2,3,4',5,6-Pentac...	324	C12H5Cl5	068194-11-6	98
3	1,1'-Biphenyl, 2,3,4,4',5-Pentac...	324	C12H5Cl5	074472-37-0	98
4	1,1'-Biphenyl, 2,3',4,4',6-Penta...	324	C12H5Cl5	056558-17-9	98





000492

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

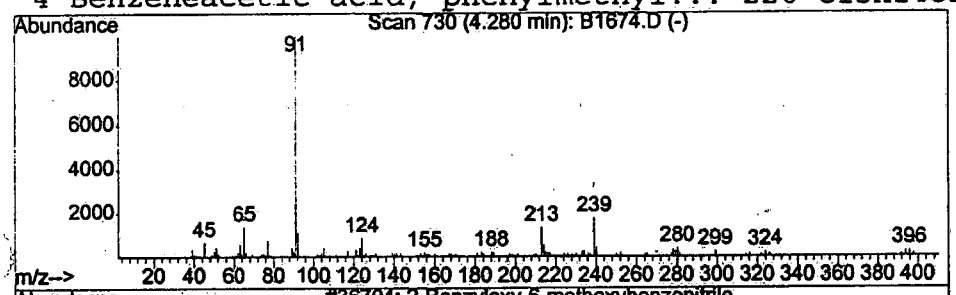
****

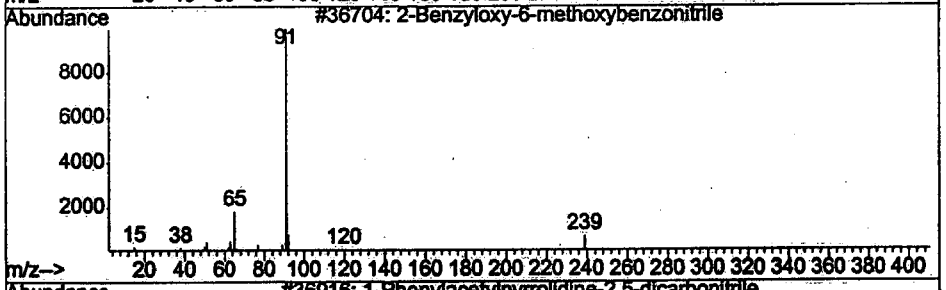
Peak Number 20 2-Benzyloxy-6-methoxybenzon... Concentration Rank 14

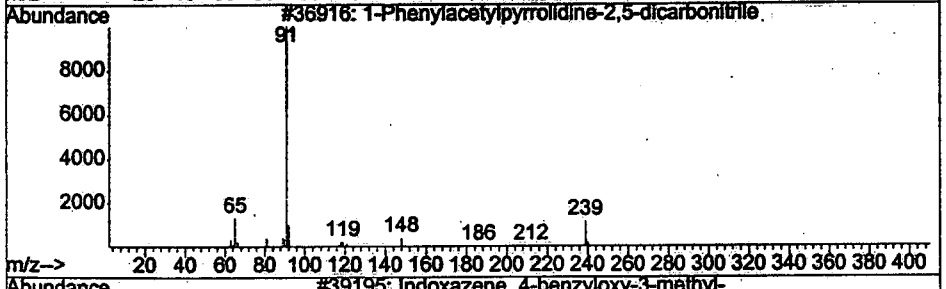
Subst. Fulfied Benzene

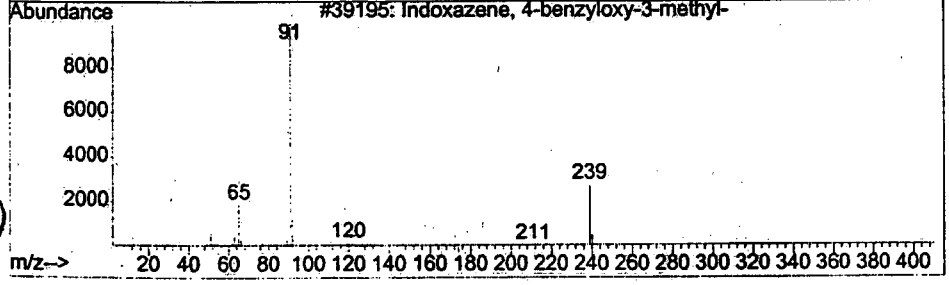
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.28	8.97 UG	91022	Chrysene-d12	4.50

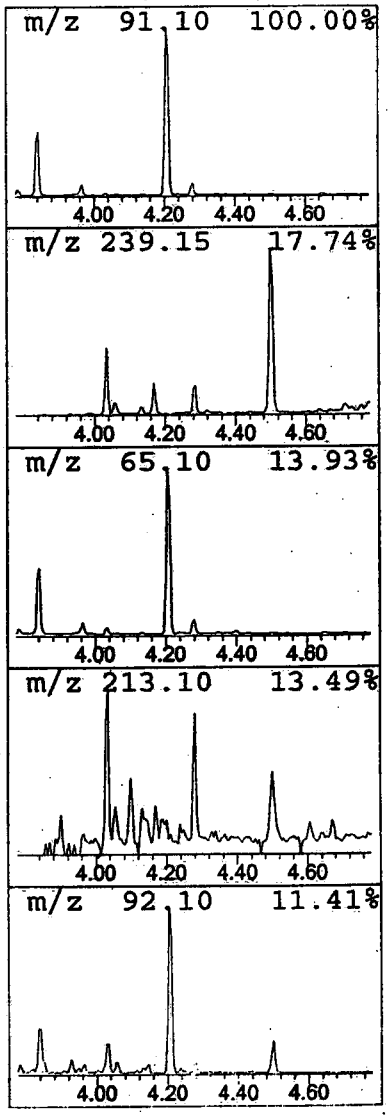
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Benzyloxy-6-methoxybenzonitrile	239	C15H13NO2	1000136-78-6	60
2	1-Phenylacetylpyrrolidine-2,5-di...	239	C14H13N3O	1000192-06-6	46
3	Indoxazene, 4-benzyloxy-3-methyl-	239	C15H13NO2	1000131-49-9	46
4	Benzeneacetic acid, phenylmethyl...	226	C15H14O2	000102-16-9	38











00493

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D Vial: 22
Acq On : 2 Apr 2001 13:05 Operator: JC
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
S Integration Params: LSCINT.P

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

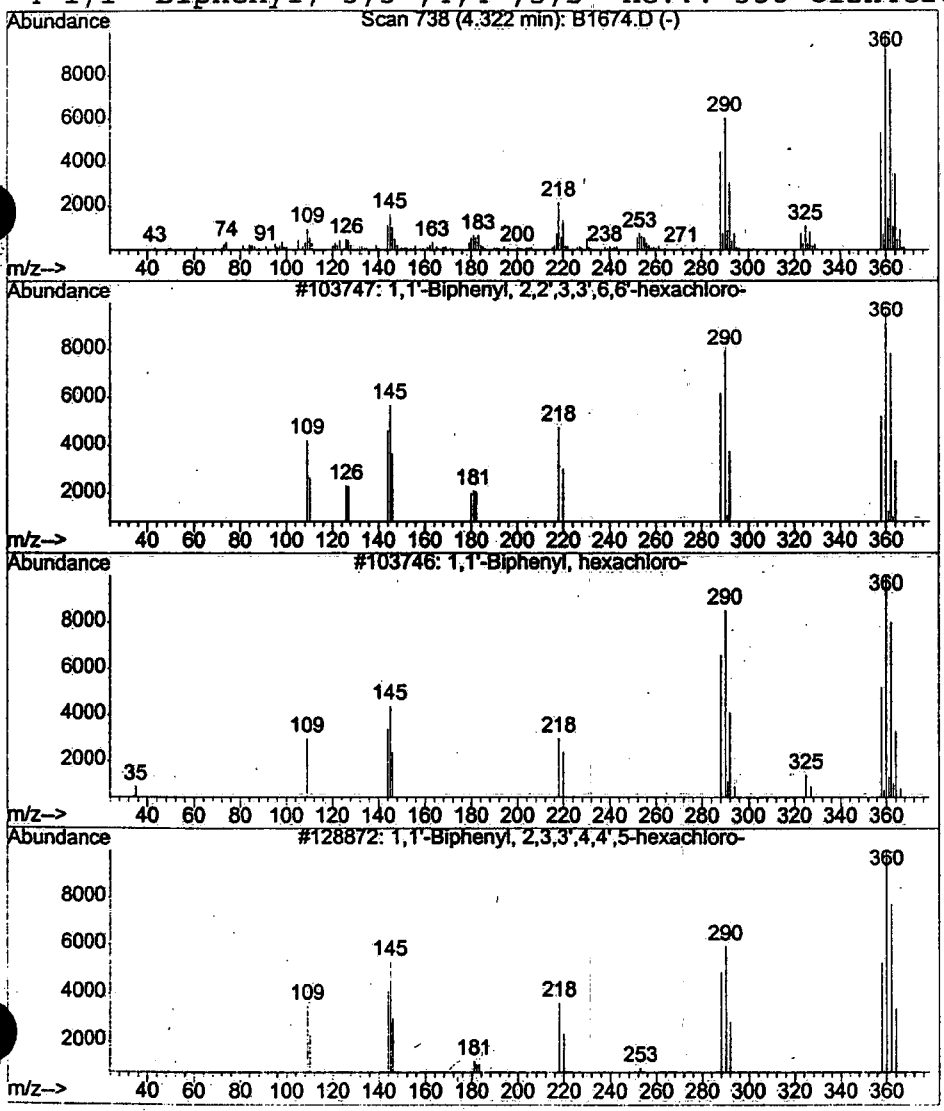
****

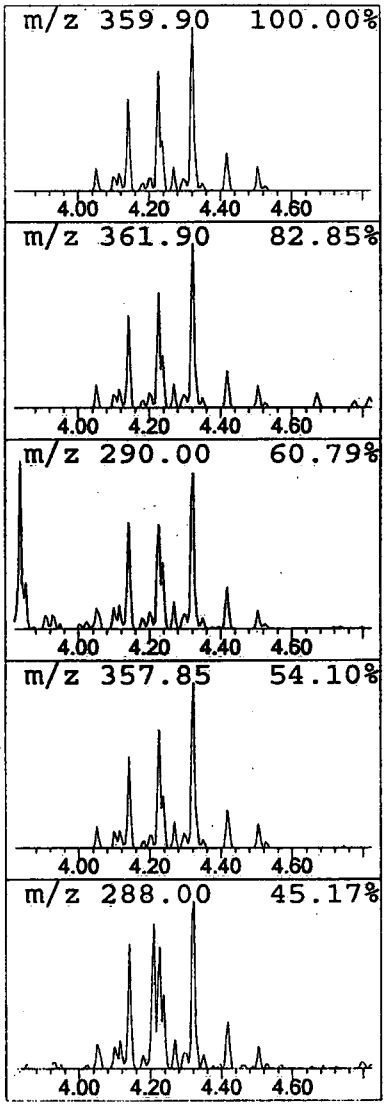
Peak Number 21 1,1'-Biphenyl, 2,2',3,3',6,... Concentration Rank 5

substituted Biphenyl

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.32	18.02 UG	182866	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,3',6,6'-he...	358	C12H4Cl6	038411-22-2	99
2	1,1'-Biphenyl, hexachloro-	358	C12H4Cl6	026601-64-9	99
3	1,1'-Biphenyl, 2,3,3',4,4',5-hex...	358	C12H4Cl6	038380-08-4	99
4	1,1'-Biphenyl, 3,3',4,4',5,5'-he...	358	C12H4Cl6	032774-16-6	98





1537

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

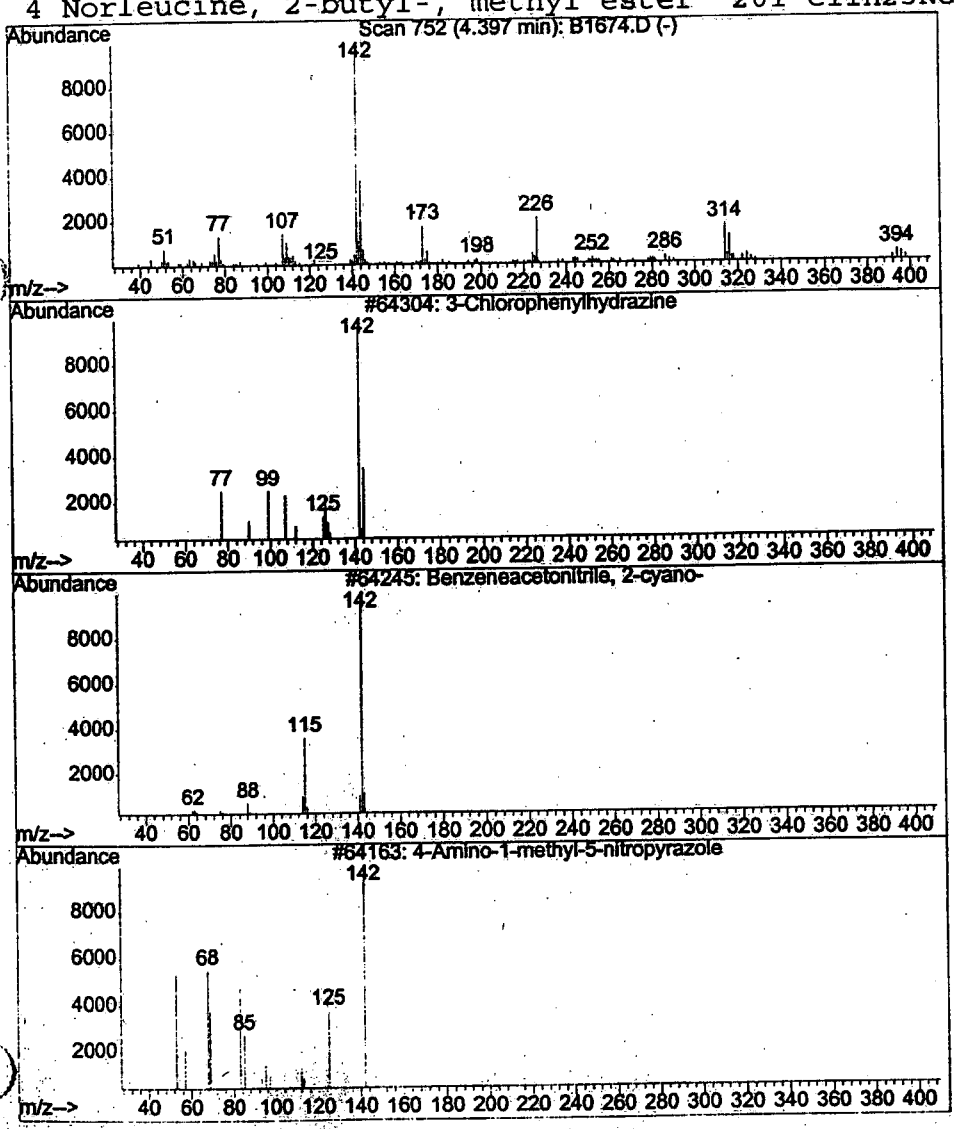
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

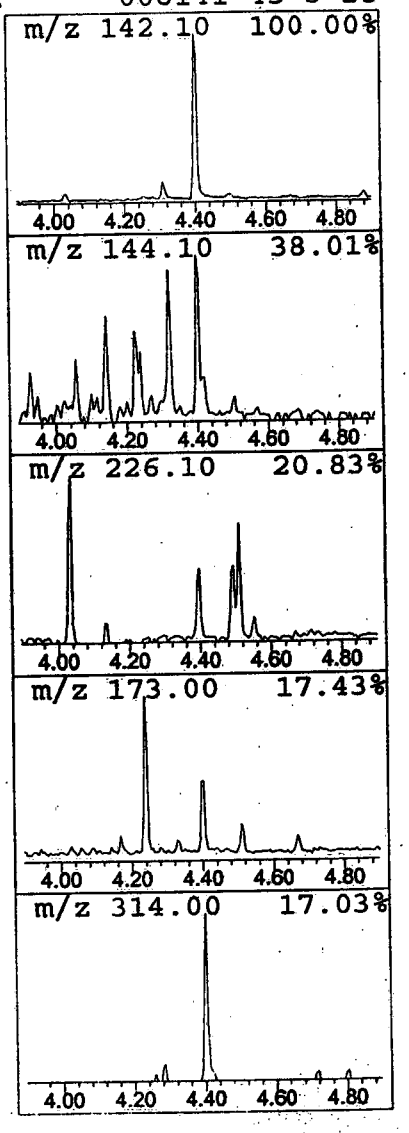
****

Peak Number 22 3-Chlorophenylhydrazine Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.40	6.50 UG	65934	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Chlorophenylhydrazine	142	C6H7ClN2	1000131-91-4	38
2	Benzeneacetonitrile, 2-cyano-	142	C9H6N2	003759-28-2	38
3	4-Amino-1-methyl-5-nitropyrazole	142	C4H6N4O2	089607-16-9	32
4	Norleucine, 2-butyl-, methyl ester	201	C11H23NO2	006141-45-3	28





1533

000495

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

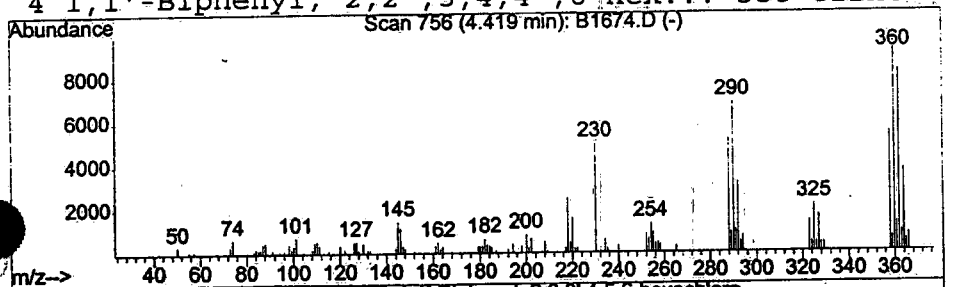
****

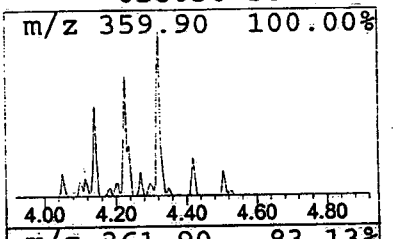
Peak Number 23 1,1'-Biphenyl, 2,3,3',4,5,6... Concentration Rank 24

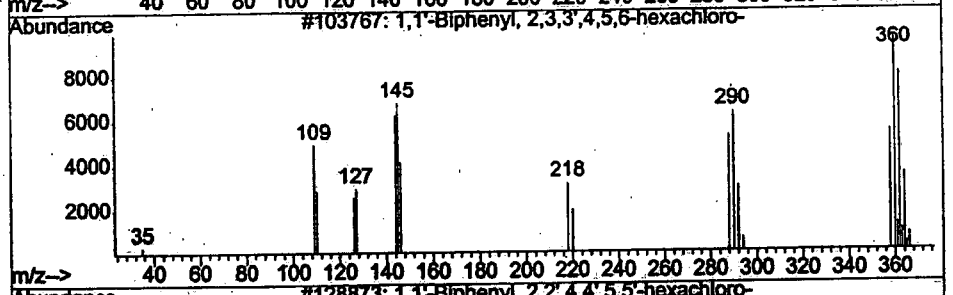
Substituted Biphenyls

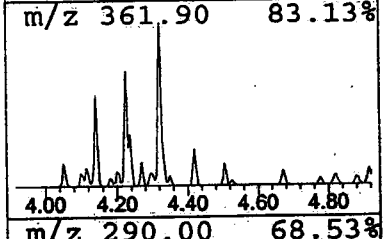
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.42	4.92 UG	49969	Chrysene-d12	4.50

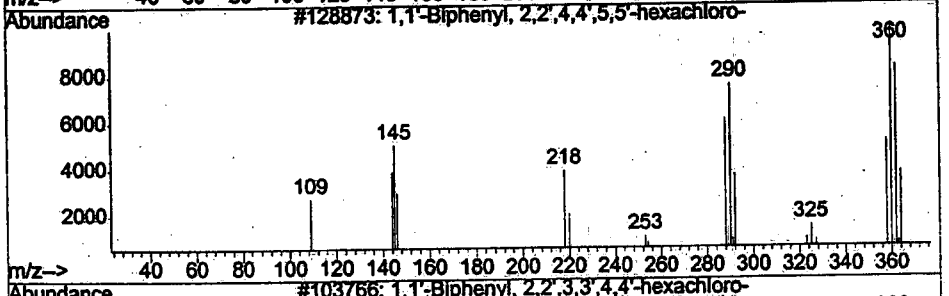
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,5,6-hexa...	358	C12H4Cl6	041411-62-5	95
2	1,1'-Biphenyl, 2,2',4,4',5,5'-he...	358	C12H4Cl6	035065-27-1	95
3	1,1'-Biphenyl, 2,2',3,3',4,4'-he...	358	C12H4Cl6	038380-07-3	95
4	1,1'-Biphenyl, 2,2',3,4,4',6-Hex...	358	C12H4Cl6	056030-56-9	95

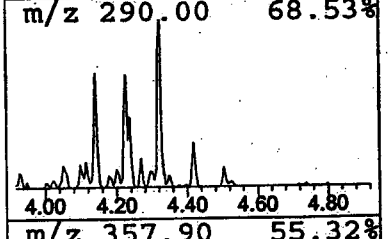


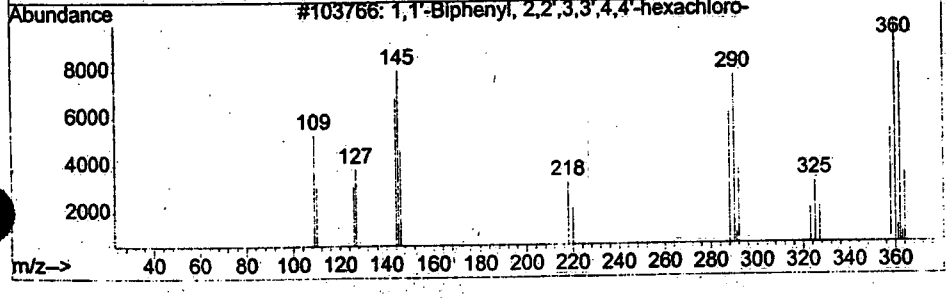


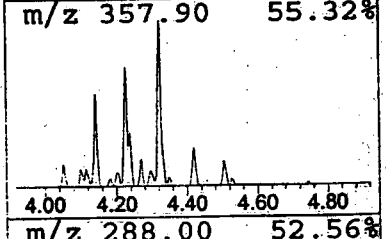


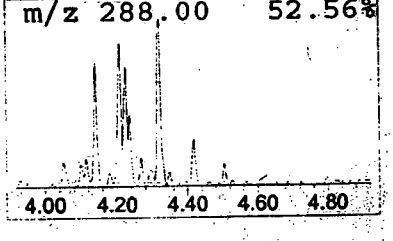












1534

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

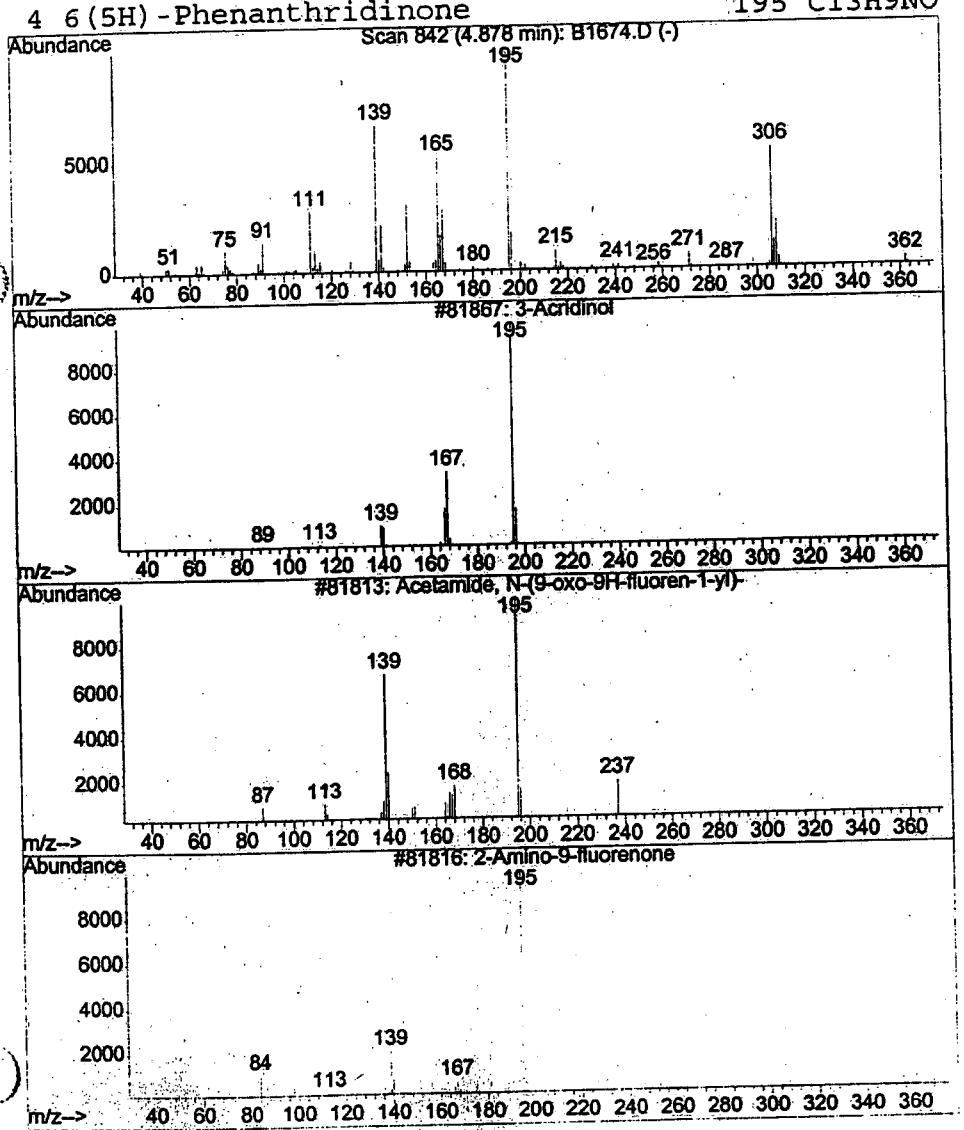
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

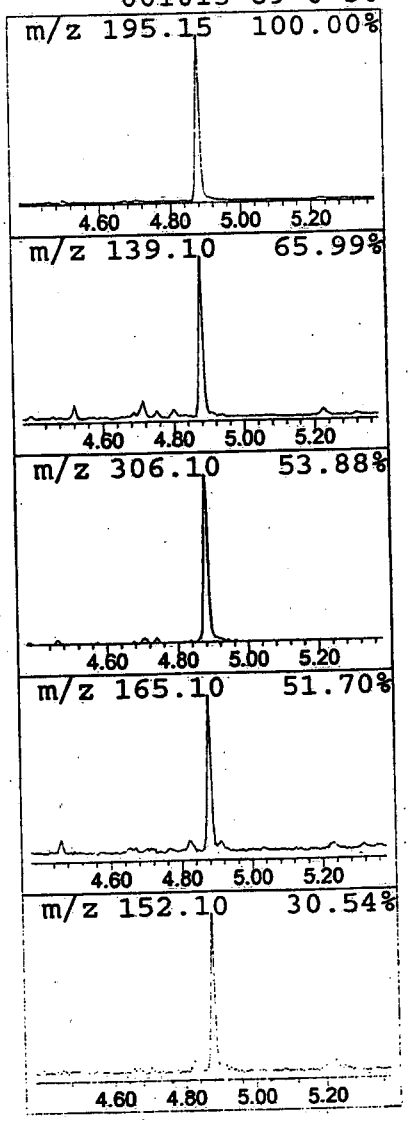
****

Peak Number 24 3-Acridinol Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.88	10.63 UG	107853	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Acridinol	195	C13H9NO	007132-70-9	35
2	Acetamide, N-(9-oxo-9H-fluoren-1...	237	C15H11NO2	006954-57-0	32
3	2-Amino-9-fluorenone	195	C13H9NO	003096-57-9	32
4	6(5H)-Phenanthridinone	195	C13H9NO	001015-89-0	30





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

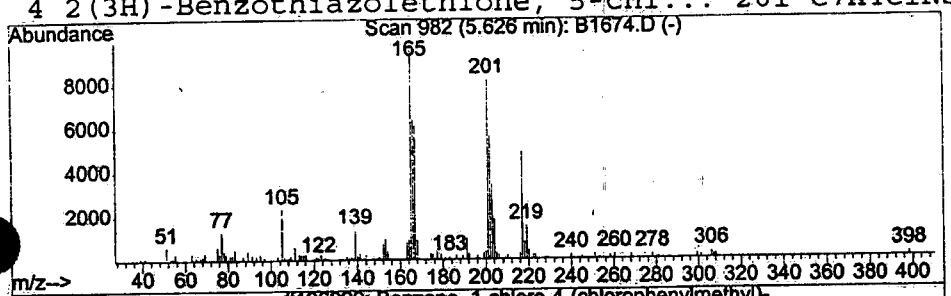
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

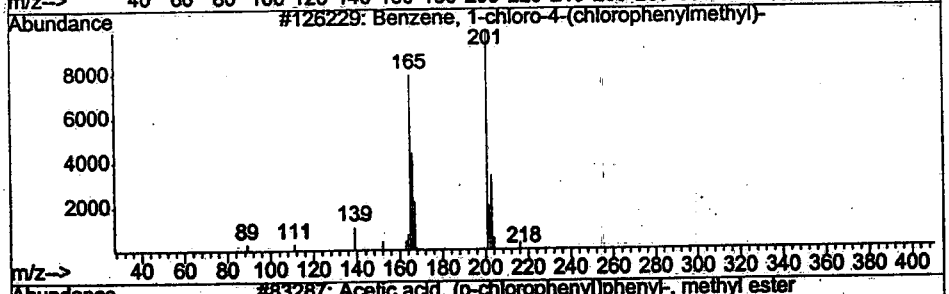
****

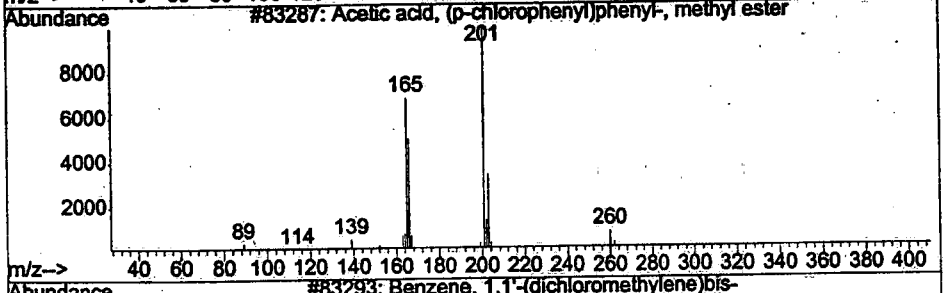
Peak Number 25 Benzene, 1-chloro-4-(chloro... Concentration Rank 17

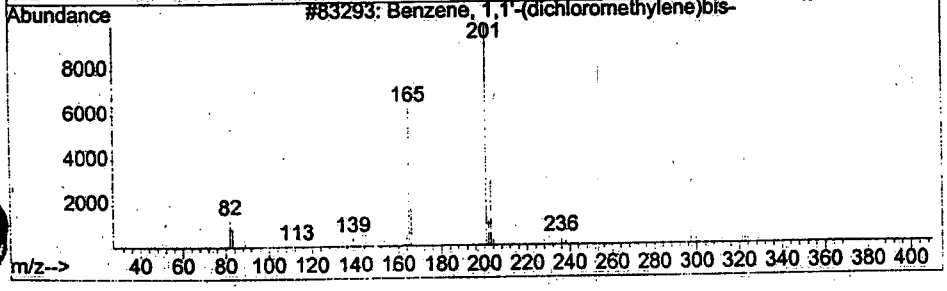
R.T.	EstConc	Area	Relative to ISTD	R.T.
5.63	7.95 UG	67931	Perylene-d12	5.29

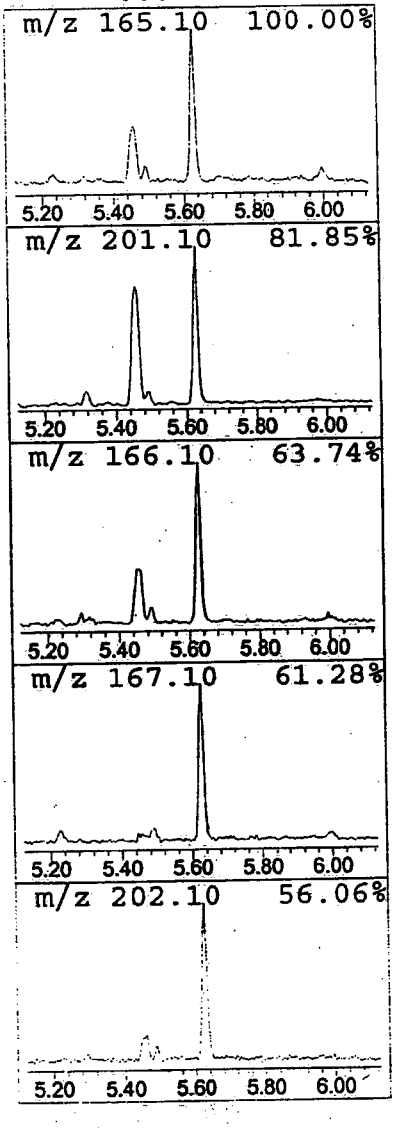
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	42
2	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	40
3	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	38
4	2(3H)-Benzothiazolethione, 5-chl...	201	C7H4ClNS2	005331-91-9	35











1536

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1674.D
Acq On : 2 Apr 2001 13:05
Sample : S-23,1922-007,S,5.01g,17.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
'S Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

Vial: 22
Operator: JC
Inst : MSD_B
Multiplr: 1.00

****

Peak Number 1 Unknown alkane — Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.95	9.52 UG	69938	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanone, 5-methyl-2-(1-met...	154	C10H18O	000089-80-5	98
2	Cyclohexanone, 5-methyl-2-(1-met...	154	C10H18O	010458-14-7	97
3	Cyclohexanone, 5-methyl-2-(1-met...	154	C10H18O	010458-14-7	97
4	Cyclohexanone, 5-methyl-2-(1-met...	154	C10H18O	001196-31-2	96
5	Cyclohexanone, 5-methyl-2-(1-met...	154	C10H18O	001196-31-2	96

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Peak Number 2 Substituted benzene — Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.40	4.75 UG	38833	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phosphonous dichloride, (phenylm...	192	C7H7Cl2P	004545-85-1	59
2	Hydrazinecarboxylic acid, phenyl...	166	C8H10N2O2	005331-43-1	58
3	4-Benzyloxyphenylacetonitrile	223	C15H13NO	000838-96-0	53
4	Benzene, (iodomethyl)-	218	C7H7I	000620-05-3	53
5	Benzaldehyde, 3-benzyloxy-2,6-di...	248	C14H10F2O2	1000116-47-5	53

****

Peak Number 3 Diphenyl ether — Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.56	8.69 UG	71041	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diphenyl ether	170	C12H10O	000101-84-8	83
2	Diphenyl ether	170	C12H10O	000101-84-8	83
3	Diphenyl ether	170	C12H10O	000101-84-8	59
4	Phenol, o-(ethylsulfinyl)-	170	C8H10O2S	029634-40-0	50
5	o-Hydroxybiphenyl	170	C12H10O	000090-43-7	50

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Peak Number 4 Unknown — Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.

2.83	5.13 UG	41938	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	s-(+)-5-(1-Hydroxy-1-methylethyl...	168	C10H16O2	060593-11-5	37
2	5-Hydroxy-4-hydroxymethyl-1-(1-h...	186	C10H18O3	087096-72-8	32
3	8-Hydroxycarvotanacetone	168	C10H16O2	007712-46-1	25
4	4.beta.H,5.alpha.H-Eudesman-11-ol	224	C15H28O	031756-53-3	25
5	2-Naphthalenemethanol, decahydro...	222	C15H26O	000473-15-4	25

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Peak Number 5 Unknown — Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.88	6.25 UG	51128	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,7-Octanediol, 3,7-dimethyl-	174	C10H22O2	000107-74-4	47
2	3-Octanol	130	C8H18O	000589-98-0	38
3	2-Octanol, 2-methyl-6-methylene-	156	C10H20O	1000132-19-1	37
4	3-Octanol	130	C8H18O	000589-98-0	32
5	3-Hexene, 1-(1-methoxyethoxy)-, ...	158	C9H18O2	054340-97-5	32

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Peak Number 6 Substituted benzene — Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.22	8.07 UG	69428	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanamine, N-(phenylmet...	197	C14H15N	000103-49-1	97
2	Benzenemethanamine, N-(phenylmet...	197	C14H15N	000103-49-1	95
3	Benzenemethanamine, N-(phenylmet...	197	C14H15N	000103-49-1	94
4	Benzenemethanamine, N-(phenylmet...	197	C14H15N	000103-49-1	93
5	Benzene, 1,2-dimethyl-	106	C8H10	000095-47-6	43

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Peak Number 7 Unknown alkane — Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.42	10.38 UG	89277	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 3-methyl-6-(1-methy...	138	C10H18	005256-65-5	76
2	Cyclohexene, 4-methyl-1-(1-methy...	138	C10H18	000500-00-5	70
3	Cyclohexene, 1-methyl-4-(1-methy...	138	C10H18	001195-31-9	70
4	Cyclohexene, 3-methyl-6-(1-methy...	138	C10H18	001124-26-1	70
5	Cyclohexene, 1-methyl-4-(1-methy...	138	C10H18	005502-88-5	68

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Peak Number 8 Substituted benzene — Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.48	11.54 UG	99282	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, (-)-menthyl ester	260	C17H24O2	1000158-46-9	91
2	Benzene, 1,2-dimethoxy-	138	C8H10O2	000091-16-7	64
3	.+/-.-4-Acetyl-1-methylcyclohexene	138	C9H14O	070286-20-3	64
4	Benzene, 1,2-dimethoxy-	138	C8H10O2	000091-16-7	53
5	Benzene, 1,2-dimethoxy-	138	C8H10O2	000091-16-7	46

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Peak Number 9 Unknown — Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.49	10.10 UG	86868	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 1-methyl-4-(1-methy...	138	C10H18	005502-88-5	70
2	Cyclohexene, 4-methyl-1-(1-methy...	138	C10H18	000500-00-5	70
3	Cyclohexene, 3-methyl-6-(1-methy...	138	C10H18	001124-26-1	70
4	Cyclohexene, 1-methyl-4-(1-methy...	138	C10H18	001195-31-9	70
5	Cyclohexane, 1-methyl-3-(1-methy...	138	C10H18	013828-34-7	64

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Peak Number 10 Substituted biphenyl — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.63	19.37 UG	166667	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',4,5'-tetrach...	290	C12H6Cl4	041464-40-8	99
2	1,1'-Biphenyl, 2,3',4',5-tetrach...	290	C12H6Cl4	032598-11-1	99
3	1,1'-Biphenyl, 2,2',4,5'-tetrach...	290	C12H6Cl4	041464-40-8	99
4	1,1'-Biphenyl, 2,2',5,6-Tetrachl...	290	C12H6Cl4	041464-41-9	99
5	1,1'-Biphenyl, 2,2',6,6'-tetrach...	290	C12H6Cl4	015968-05-5	99

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Peak Number 11 Carbonochloridic acid, 2-ch... Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.64	5.18 UG	44592	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbonochloridic acid, 2-chloro-...	156	C4H6Cl2O2	000817-80-1	78
2	2,2-Di-(2'-chloroethoxy)-ethane	186	C6H12Cl2O2	1000222-25-5	64
3	Ethane,-1,1-di(2-chloroehtoxy)	186	C6H12Cl2O2	1000221-88-2	64
4	Ethane, 1-bromo-2-chloro-	142	C2H4BrCl	000107-04-0	53
5	Ethane, 1-bromo-2-chloro-	142	C2H4BrCl	000107-04-0	53

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Peak Number 12 Unknown aromatic — Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.68	6.83 UG	58787	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanol, .alpha.-methoxy...	242	C15H14O3	051835-46-2	46
2	Benzoic acid, 2-(4-methylphenoxy...	242	C15H14O3	021905-72-6	46
3	Imidazole, 2-[4-methoxyphenyl]-4...	242	C11H9F3N2O	1000128-88-3	30
4	Thiazolo[3,2-a]pyridinium, 3-hyd...	227	C13H9NOS	032044-03-4	22
5	Ferrocene, 1,1'-diethyl-	242	C14H18Fe	001273-97-8	22

****

Peak Number 13 Unknown aromatic — Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.72	30.90 UG	265907	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Pyridinecarbonitrile, 1,4-dihy...	134	C7H6N2O	000767-98-6	59
2	2-Pyridinepropanamide, N-phenyl-	226	C14H14N2O	020745-52-2	59
3	Benzene, 1-ethenyl-4-methoxy-	134	C9H10O	000637-69-4	46
4	2-Phenethanamine, N-benzyl-1-met...	225	C16H19N	1000127-89-5	43
5	Benzene, 1-ethenyl-3-methoxy-	134	C9H10O	000626-20-0	43

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Peak Number 14 Substituted biphenyl — Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.10	7.94 UG	80616	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,4,5'-penta...	324	C12H5Cl5	038380-02-8	94
2	1,1'-Biphenyl, 2,2',3,5',6-penta...	324	C12H5Cl5	038379-99-6	94
3	1,1'-Biphenyl, 2,2',3,3',4-penta...	324	C12H5Cl5	052663-62-4	94
4	1,1'-Biphenyl, 2,2',3',4,5-Penta...	324	C12H5Cl5	041464-51-1	93
5	1,1'-Biphenyl, 2,2',4,4',5-penta...	324	C12H5Cl5	038380-01-7	93

****

Peak Number 15 Substituted biphenyl — Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.15	25.21 UG	255905	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,4'-penta...	324	C12H5Cl5	032598-14-4	99
2	1,1'-Biphenyl, 2,3',4,4',5-penta...	324	C12H5Cl5	031508-00-6	99
3	1,1'-Biphenyl, 2,3,3',4,6-Pentac...	324	C12H5Cl5	074472-35-8	99
4	1,1'-Biphenyl, 2,3,3',4,4'-penta...	324	C12H5Cl5	032598-14-4	99
5	1,1'-Biphenyl, 2',3,4,5,5'-Penta...	324	C12H5Cl5	070424-70-3	99

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F9489.D

Date Analyzed: 03/30/2001

Instrument ID: MSD_F

Time Analyzed: 16:06

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	3201873	8.81	3188334	9.98	2255204	14.85
	UPPER LIMIT	6403746	9.31	6376668	10.48	4510408	15.35
	LOWER LIMIT	1600936.5	8.31	1594167	9.48	1127602	14.35
	LAB SAMPLE ID						
01	METHOD_BLK	3260648	8.79	3144613	9.96	2329722	14.84
02	1889-015	3135286	8.77	3224018	9.96	2408711	14.84
03	1889-015MS	2906228	8.80	3082103	9.97	2325655	14.83
04	1889-015MSD	3033157	8.80	3136454	9.97	2311342	14.83
05	1836-004DIL	3138543	8.79	3135429	9.96	2311725	14.84
06	1920-003	3322854	8.77	3222921	9.96	2241078	14.83
07	1920-001DIL	3262526	8.79	3168108	9.95	2306814	14.83
08	1920-002DIL	3321811	8.79	3098103	9.96	2239247	14.83
09	1922-008	3290515	8.79	3328522	9.96	2319215	14.83
10	1922-007	3156583	8.77	3289844	9.95	2383587	14.83
11	1922-013	3177684	8.77	3186805	9.97	2293838	14.83
12	1922-003DIL	3111667	8.79	3093187	9.96	2237852	14.84
13	1864-001	3236603	8.79	3131433	9.96	2300924	14.83
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

Peak Number 16 1,1-Dichloro-2,2-bis(p-chlo... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.17	12.87 UG	130622	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1-Dichloro-2,2-bis(p-chlorophe...	318	C14H10Cl4	000072-54-8	99
2	1,1-Dichloro-2,2-bis(p-chlorophe...	318	C14H10Cl4	000072-54-8	96
3	1,1-Dichloro-2,2-bis(p-chlorophe...	318	C14H10Cl4	000072-54-8	94
4	m,p'-DDD	318	C14H10Cl4	004329-12-8	94
5	Mitotane	318	C14H10Cl4	000053-19-0	91

****

Peak Number 17 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.20	36.29 UG	368286	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	98
2	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	97
3	Ethylenediamine, N,N,N'-tribenzyl-	330	C23H26N2	1000164-17-9	50
4	12-Oxatetracyclo[5.2.1.1(2,6).1(...	210	C11H11ClO2	1000191-06-4	46
5	2-Propanone, 1,3-diphenyl-	210	C15H14O	000102-04-5	43

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Peak Number 18 Substituted biphenyl Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.23	9.87 UG	100178	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,3',6,6'-he...	358	C12H4Cl6	038411-22-2	99
2	1,1'-Biphenyl, 2,2',4,4',6,6'-he...	358	C12H4Cl6	033979-03-2	99
3	1,1'-Biphenyl, 2,3,3',4,4',5-hex...	358	C12H4Cl6	038380-08-4	99
4	1,1'-Biphenyl, 2,3',4,4',5,5'-he...	358	C12H4Cl6	052663-72-6	99
5	1,1'-Biphenyl, 3,3',4,4',5,5'-he...	358	C12H4Cl6	032774-16-6	99

****

Peak Number 19 Substituted biphenyl Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.24	11.92 UG	120944	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,4'-penta...	324	C12H5Cl5	032598-14-4	99
2	1,1'-Biphenyl, 2,3,4',5,6-Pentac...	324	C12H5Cl5	068194-11-6	98
3	1,1'-Biphenyl, 2,3,4,4',5-Pentac...	324	C12H5Cl5	074472-37-0	98
4	1,1'-Biphenyl, 2,3',4,4',6-Penta...	324	C12H5Cl5	056558-17-9	98
5	1,1'-Biphenyl, 2,3',4,5',6-Penta...	324	C12H5Cl5	056558-18-0	98

****

Peak Number 20 Substituted benzene — Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.28	8.97 UG	91022	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Benzyloxy-6-methoxybenzonitrile	239	C15H13NO2	1000136-78-6	60
2	1-Phenylacetylpyrrolidine-2,5-di...	239	C14H13N3O	1000192-06-6	46
3	Indoxazene, 4-benzyloxy-3-methyl-	239	C15H13NO2	1000131-49-9	46
4	Benzeneacetic acid, phenylmethyl...	226	C15H14O2	000102-16-9	38
5	2-Acetylphenol benzyl ether	226	C15H14O2	1000129-63-4	30

****

Peak Number 21 Substituted biphenyl — Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.32	18.02 UG	182866	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,3',6,6'-he...	358	C12H4Cl6	038411-22-2	99
2	1,1'-Biphenyl, hexachloro-	358	C12H4Cl6	026601-64-9	99
3	1,1'-Biphenyl, 2,3,3',4,4',5-hex...	358	C12H4Cl6	038380-08-4	99
4	1,1'-Biphenyl, 3,3',4,4',5,5'-he...	358	C12H4Cl6	032774-16-6	98
5	1,1'-Biphenyl, 2,3',4,4',5,5'-he...	358	C12H4Cl6	052663-72-6	98

****

Peak Number 22 Unknown — Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.40	6.50 UG	65934	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Chlorophenylhydrazine	142	C6H7ClN2	1000131-91-4	38
2	Benzeneacetonitrile, 2-cyano-	142	C9H6N2	003759-28-2	38
3	4-Amino-1-methyl-5-nitropyrazole	142	C4H6N4O2	089607-16-9	32
4	Norleucine, 2-butyl-, methyl ester	201	C11H23NO2	006141-45-3	28
5	Phenol, 2-chloro-5-methyl-, acetate	184	C9H9ClO2	088936-12-3	28

****

Peak Number 23 Substituted biphenyl — Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.42	4.92 UG	49969	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,5,6-hexa...	358	C12H4Cl6	041411-62-5	95
2	1,1'-Biphenyl, 2,2',4,4',5,5'-he...	358	C12H4Cl6	035065-27-1	95
3	1,1'-Biphenyl, 2,2',3,3',4,4'-he...	358	C12H4Cl6	038380-07-3	95
4	1,1'-Biphenyl, 2,2',3,4,4',6-Hex...	358	C12H4Cl6	056030-56-9	95
5	1,1'-Biphenyl, hexachloro-	358	C12H4Cl6	026601-64-9	95

****

Peak Number 24 Unknown — Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.88	10.63 UG	107853	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Acridinol	195	C13H9NO	007132-70-9	35
2	Acetamide, N-(9-oxo-9H-fluoren-1...	237	C15H11NO2	006954-57-0	32
3	2-Amino-9-fluorenone	195	C13H9NO	003096-57-9	32
4	6(5H)-Phenanthridinone	195	C13H9NO	001015-89-0	30
5	6(5H)-Phenanthridinone	195	C13H9NO	001015-89-0	30

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Peak Number 25 Unknown aromatic — Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.63	7.95 UG	67931	Perylene-d12	5.29

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	42
2	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	40
3	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	38
4	2(3H)-Benzothiazolethione, 5-chl...	201	C7H4ClNS2	005331-91-9	35
5	1,1'-Biphenyl, 4-(chloromethyl)-	202	C13H11Cl	001667-11-4	27

B1674.D BS1201.M Tue Apr 03 08:40:34 2001 MSD_B

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
.S Integration Params: rteint.p
Quant Time: Apr 02 13:28:41 2001

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00
Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.52	152	37351	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	143251	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	83915	40.00	UG	0.00
60) Phenanthrene-d10	3.34	188	144059	40.00	UG	-0.01
75) Chrysene-d12	4.50	240	112972	40.00	UG	-0.01
84) Perylene-d12	5.29	264	138504	40.00	UG	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	50533	47.03	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 47.03%			
6) Phenol-d5	1.39	99	73989	56.25	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 56.25%			
23) Nitrobenzene-d5	1.74	82	28883	27.79	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 55.58%			
43) 2-Fluorobiphenyl	2.48	172	73342	31.80	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 63.60%			
64) 2,4,6-Tribromophenol	3.07	330	34503	71.93	UG	-0.01
Spiked Amount 100.000	Range 54 - 135		Recovery = 71.93%			
77) Terphenyl-d14	4.03	244	91832	34.09	UG	0.00
Spiked Amount 50.000	Range 58 - 147		Recovery = 68.18%			
Target Compounds						Qvalue
71) Carbazole	3.45	167	3163	1.16	UG	# 78
83) bis(2-Ethylhexyl)phthalate	4.58	149	18220	9.47	UG	# 93

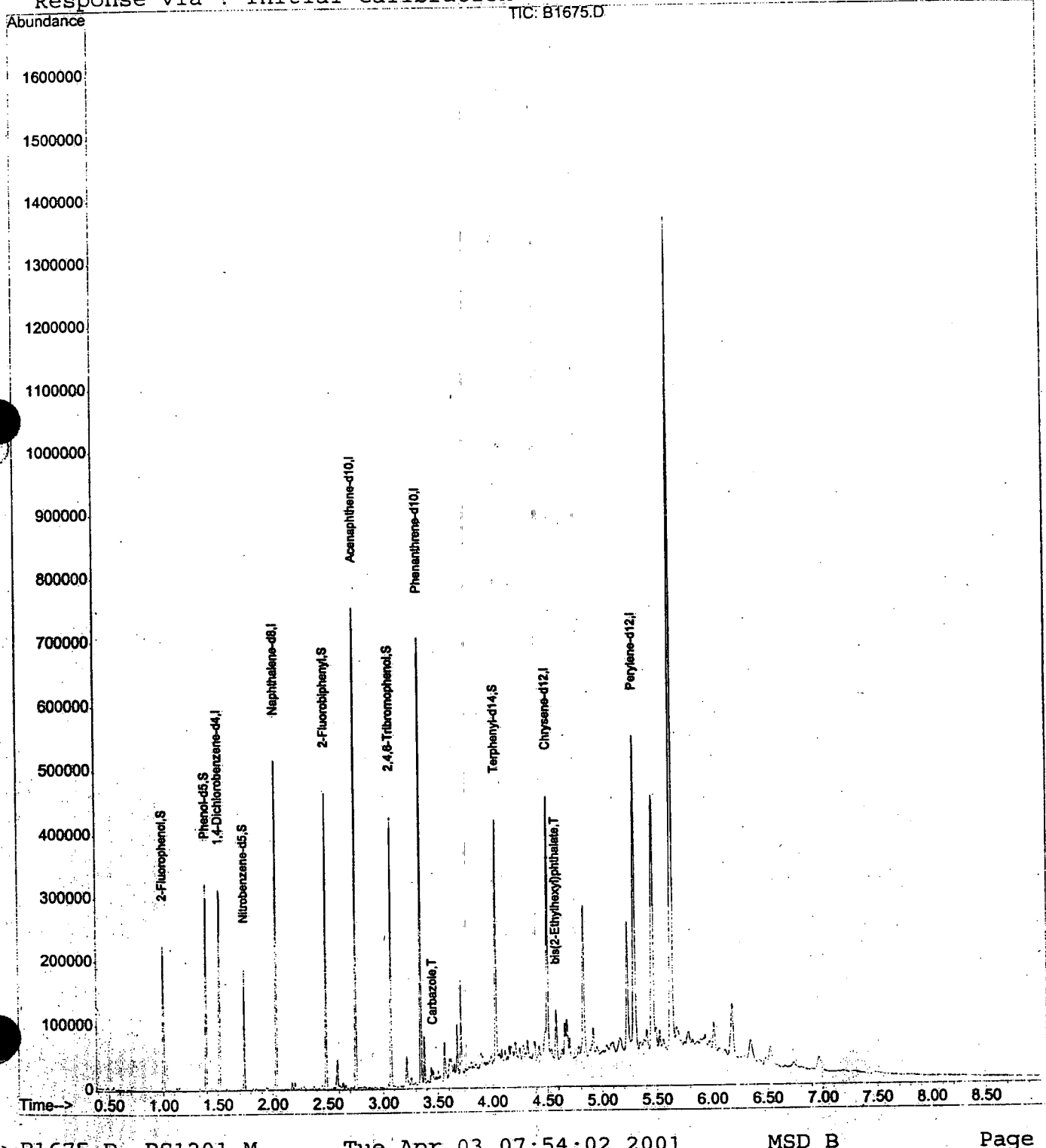
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: rteint.p
Quant Time: Apr 3 6:51 2001

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00
Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



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000507

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.999	113	116	120	rVB	226163	148461	10.18%	2.162%
2	1.395	187	190	192	rBV	324518	177179	12.15%	2.581%
3	1.512	210	212	215	rBV	314103	207723	14.24%	3.026%
4	1.742	252	255	257	rBV	190855	84465	5.79%	1.230%
5	2.030	307	309	312	rBV	515150	277057	19.00%	4.035%
6	2.485	391	394	396	rVB	461532	205280	14.08%	2.990%
7	2.586	409	413	415	rBV	47550	36232	2.48%	0.528%
8	2.752	441	444	447	rBV	750612	341594	23.42%	4.975%
9	3.072	501	504	507	rBV	420964	225998	15.50%	3.292%
10	3.216	528	531	533	rBV2	44314	30821	2.11%	0.449%
11	3.345	552	555	558	rBV	698652	350819	24.05%	5.110%
12	3.377	558	561	564	rVB	72568	45558	3.12%	0.664%
13	3.564	593	596	601	rBV	61284	52545	3.60%	0.765%
14	3.606	601	604	605	rBV2	30906	26090	1.79%	0.380%
15	3.676	614	617	620	rVB	85333	50325	3.45%	0.733%
16	3.713	621	624	629	rVB	146138	87769	6.02%	1.278%
17	3.895	655	658	660	rBV	24708	25578	1.75%	0.373%
18	4.034	680	684	687	rBV	380715	279389	19.16%	4.069%
19	4.167	707	709	714	rVV3	21155	28566	1.96%	0.416%
20	4.205	714	716	721	rVB2	26267	26265	1.80%	0.383%
21	4.280	727	730	733	rBV3	22193	28604	1.96%	0.417%
22	4.317	735	737	741	rVB2	28665	24197	1.66%	0.352%
23	4.381	745	749	752	rBV3	28060	29281	2.01%	0.426%
24	4.424	754	757	759	rBV2	19029	15337	1.05%	0.223%
25	4.504	768	772	775	rVB	402421	317196	21.75%	4.620%
26	4.579	782	786	790	rVB2	78068	72685	4.98%	1.059%
27	4.654	798	800	802	rBV	50843	43024	2.95%	0.627%
28	4.675	802	804	807	rVV2	57903	57395	3.94%	0.836%
29	4.696	807	808	815	rVB	33333	24329	1.67%	0.354%
30	4.830	829	833	839	rVB	238699	248497	17.04%	3.619%
31	4.915	847	849	852	rVB2	38452	29923	2.05%	0.436%

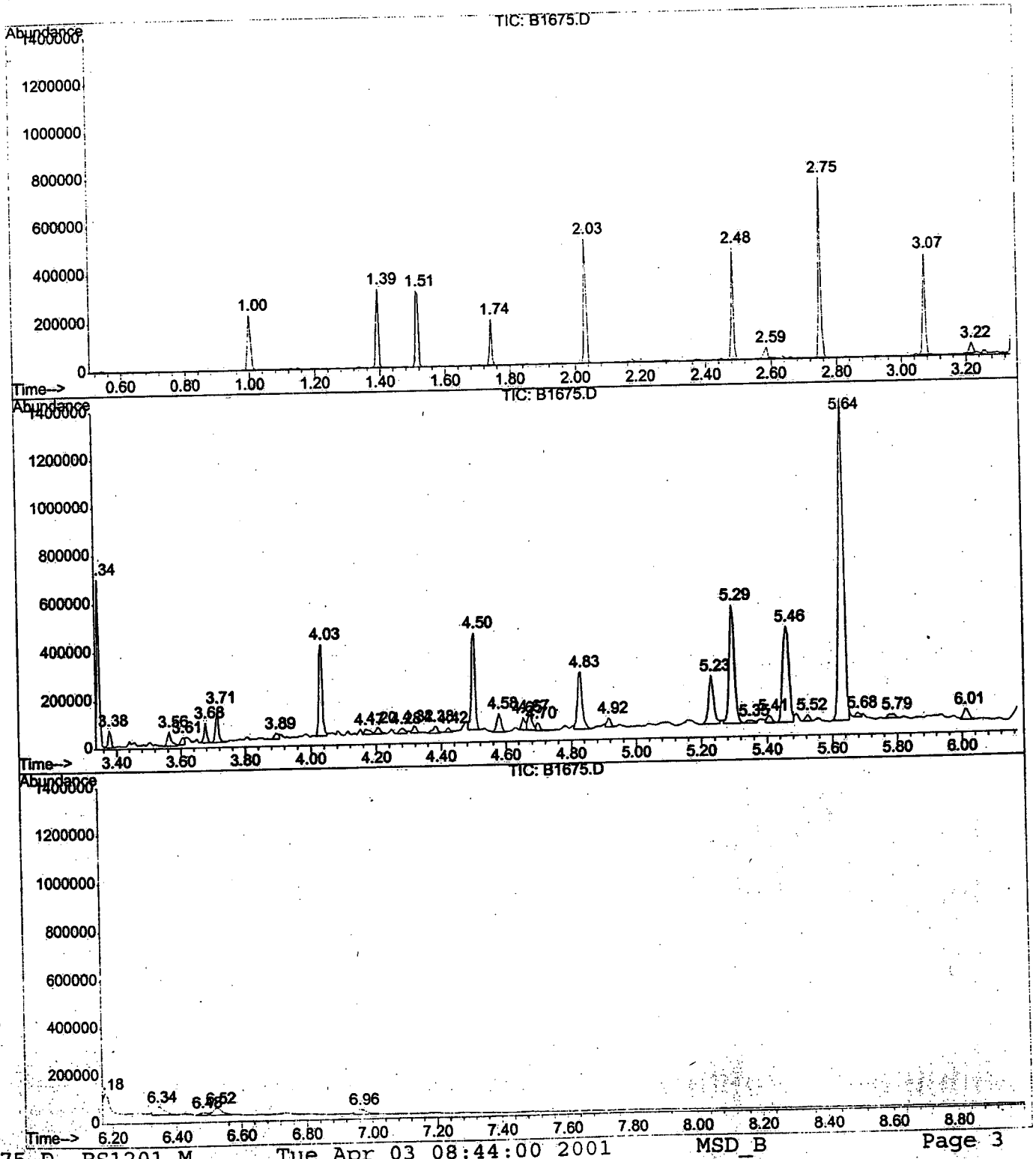
32	5.230	903	908	913	rBV	202007	217193	14.89%	3.163%
33	5.295	915	920	927	rVB	492322	533999	36.62%	7.778%
34	5.348	927	930	934	rBV5	11484	20469	1.40%	0.298%
35	5.407	939	941	945	rVB	30739	28919	1.98%	0.421%
36	5.460	946	951	955	rBV	398246	540211	37.04%	7.868%
	5.524	960	963	966	rVB2	26502	22830	1.57%	0.333%
38	5.636	977	984	987	rBV	1340464	1458412	100.00%	21.242%
39	5.679	989	992	994	rBV2	18031	18312	1.26%	0.267%
40	5.786	1008	1012	1016	rVB6	17294	24798	1.70%	0.361%
41	6.010	1051	1054	1060	rVB	44971	52744	3.62%	0.768%
42	6.176	1078	1085	1097	rVB2	86800	155972	10.69%	2.272%
43	6.342	1112	1116	1125	rVB7	34232	72107	4.94%	1.050%
44	6.481	1138	1142	1146	rBV6	11138	20437	1.40%	0.298%
45	6.523	1146	1150	1159	rVB2	28386	54320	3.72%	0.791%
46	6.961	1228	1232	1242	rVB4	21891	46823	3.21%	0.682%

Sum of corrected areas: 6865728

1548

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Operator : JC
Acquired : 2 Apr 2001 13:19 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-24,1922-008,S,2.88g,21.8,03/30/01
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,1
Vial Number: 23
Quant File :BS1201.RES (RTE Integrator)



1509

000510

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
ALS Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

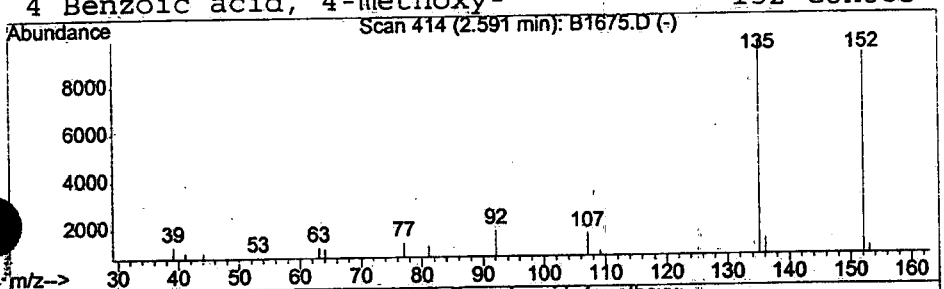
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

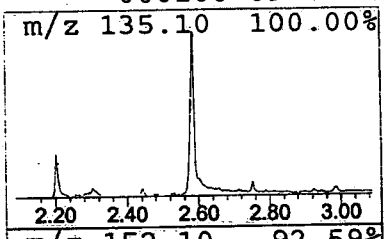
****

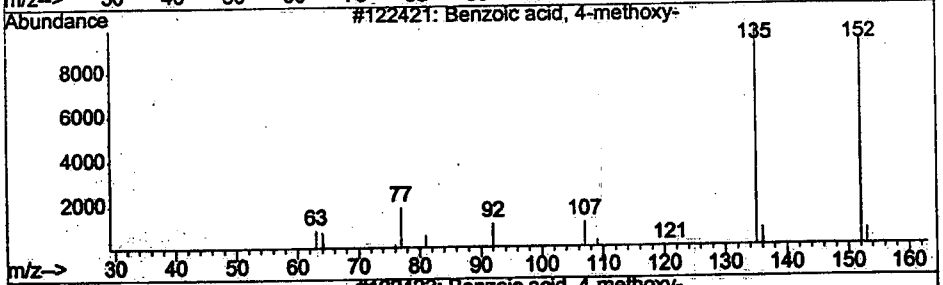
Peak Number 1 Benzoic acid, 4-methoxy- Concentration Rank 12

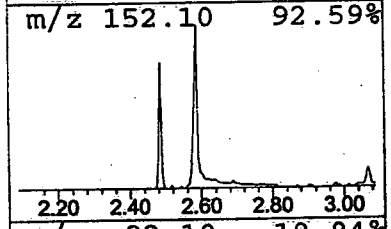
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.59	4.24 UG	36232	Acenaphthene-d10	2.75

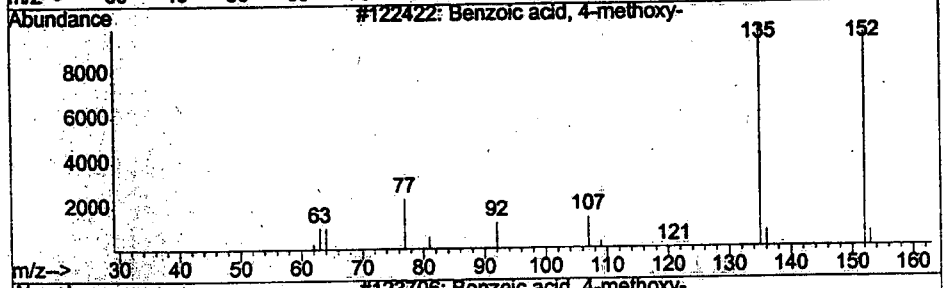
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 4-methoxy-	152	C8H8O3	000100-09-4	96
2	Benzoic acid, 4-methoxy-	152	C8H8O3	000100-09-4	96
3	Benzoic acid, 4-methoxy-	152	C8H8O3	000100-09-4	95
4	Benzoic acid, 4-methoxy-	152	C8H8O3	000100-09-4	90

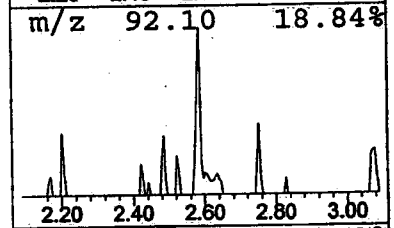


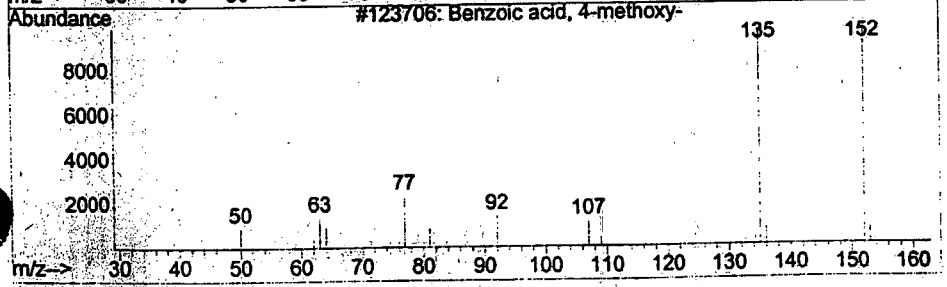


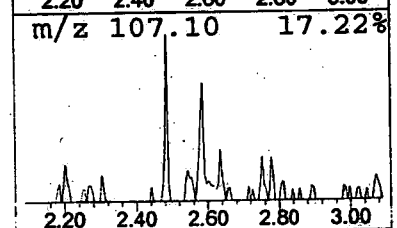


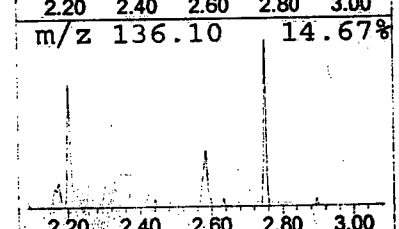












1550

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

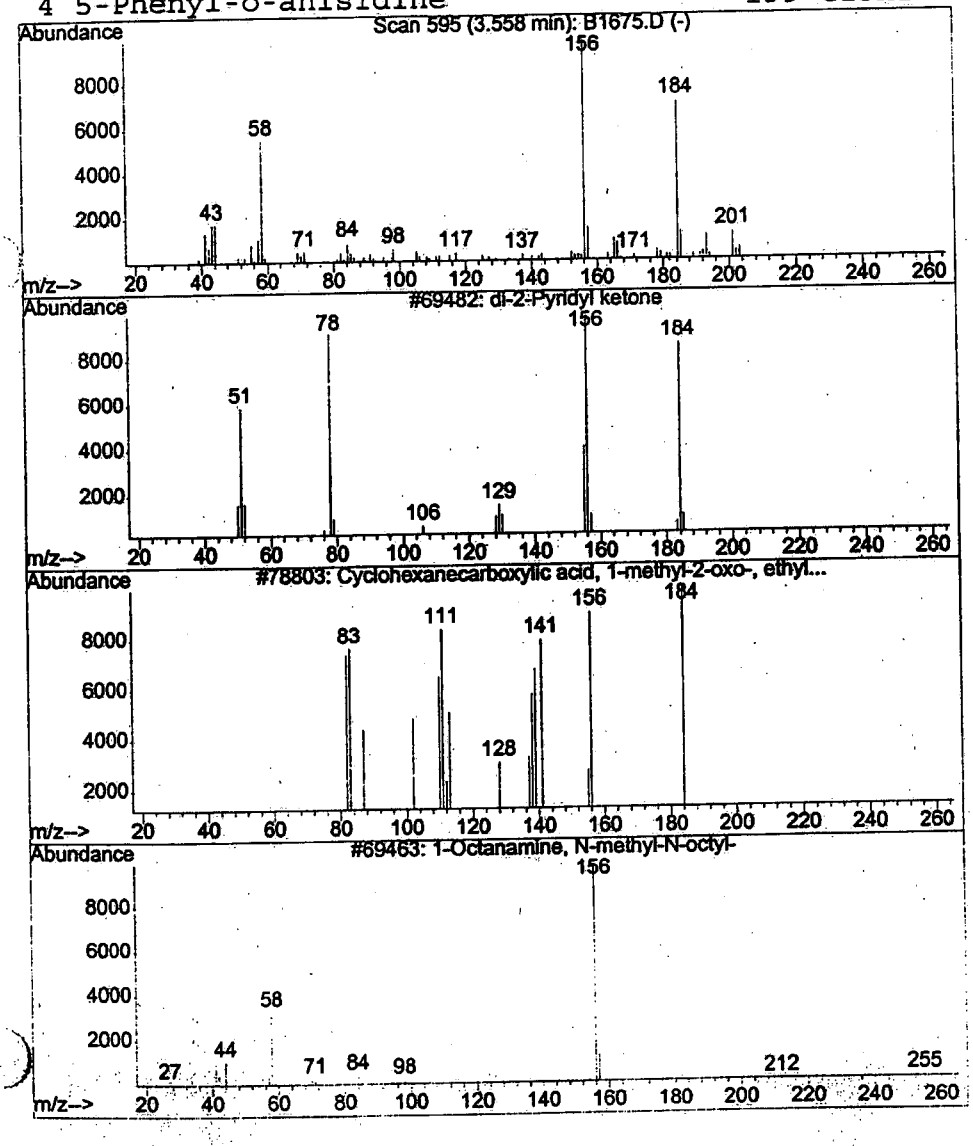
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

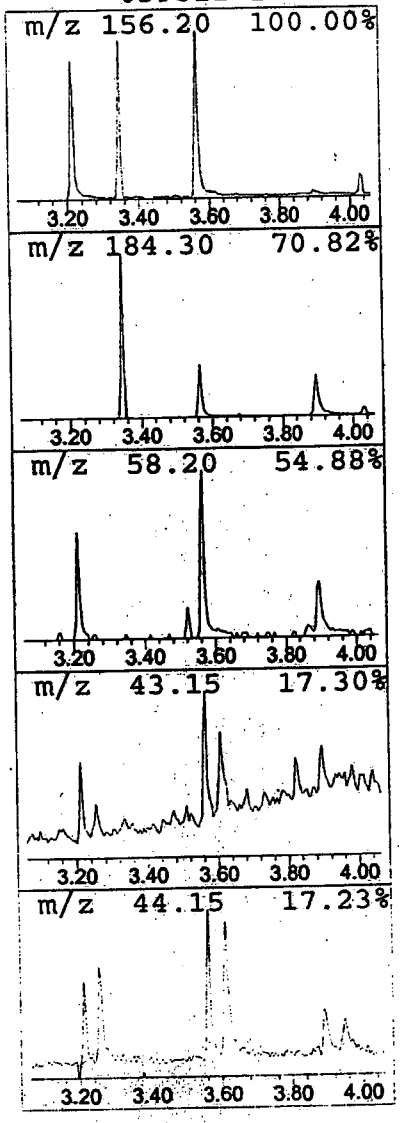
****

Peak Number 2 Unknown — Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.56	5.99 UG	52545	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	di-2-Pyridyl ketone	184	C11H8N2O	019437-26-4	59
2	Cyclohexanecarboxylic acid, 1-me...	184	C10H16O3	005453-94-1	52
3	1-Octanamine, N-methyl-N-octyl-	255	C17H37N	004455-26-9	46
4	5-Phenyl-o-anisidine	199	C13H13NO	039811-17-1	45





1551

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

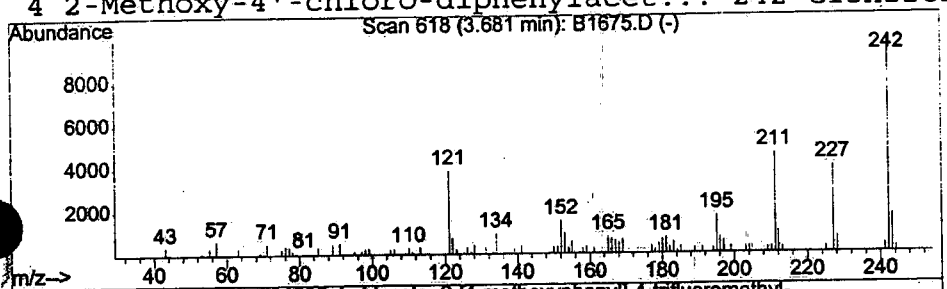
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

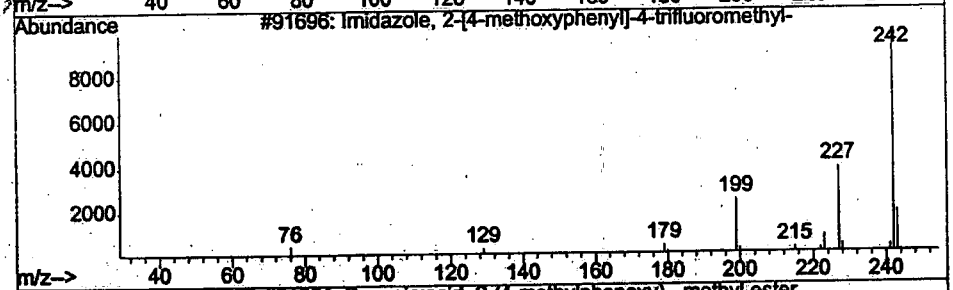
****

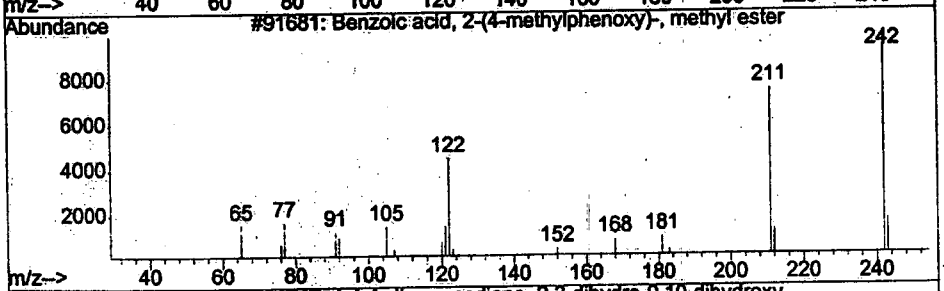
Peak Number 3 Unknown aromatic — Concentration Rank 9

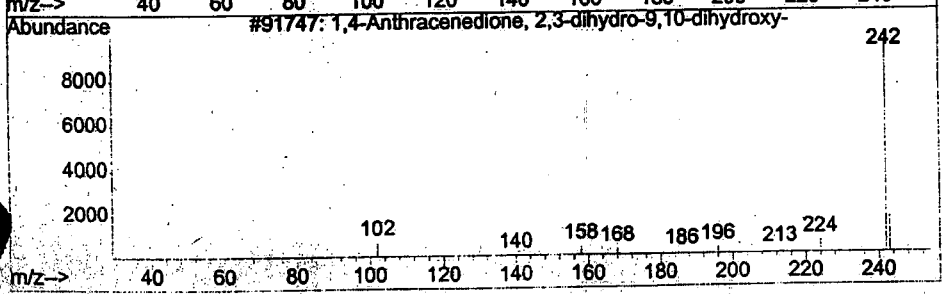
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.68	5.74 UG	50325	Phenanthrene-d10	3.34

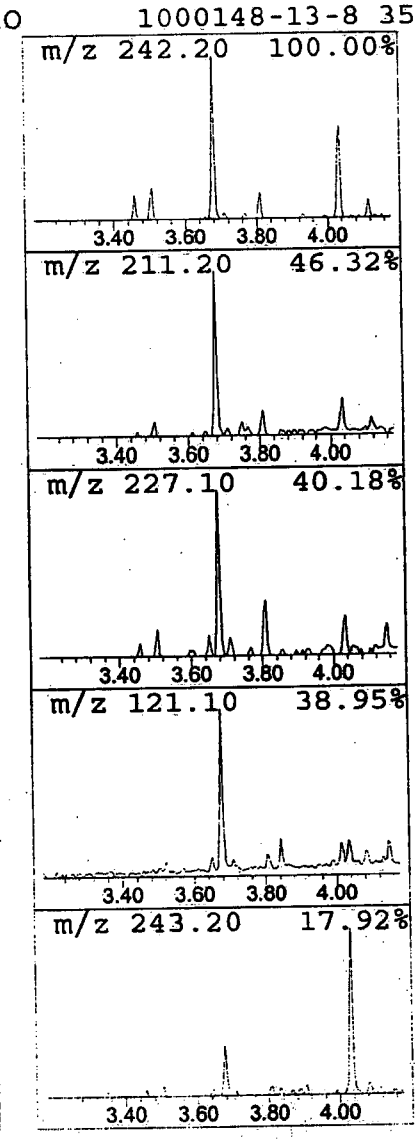
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Imidazole, 2-[4-methoxyphenyl]-4...	242	C11H9F3N2O	1000128-88-3	55
2	Benzoic acid, 2-(4-methylphenoxy...	242	C15H14O3	021905-72-6	53
3	1,4-Anthracenedione, 2,3-dihydro...	242	C14H10O4	017648-03-2	38
4	2-Methoxy-4'-chloro-diphenylacet...	242	C15H11ClO	1000148-13-8	35











1557

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

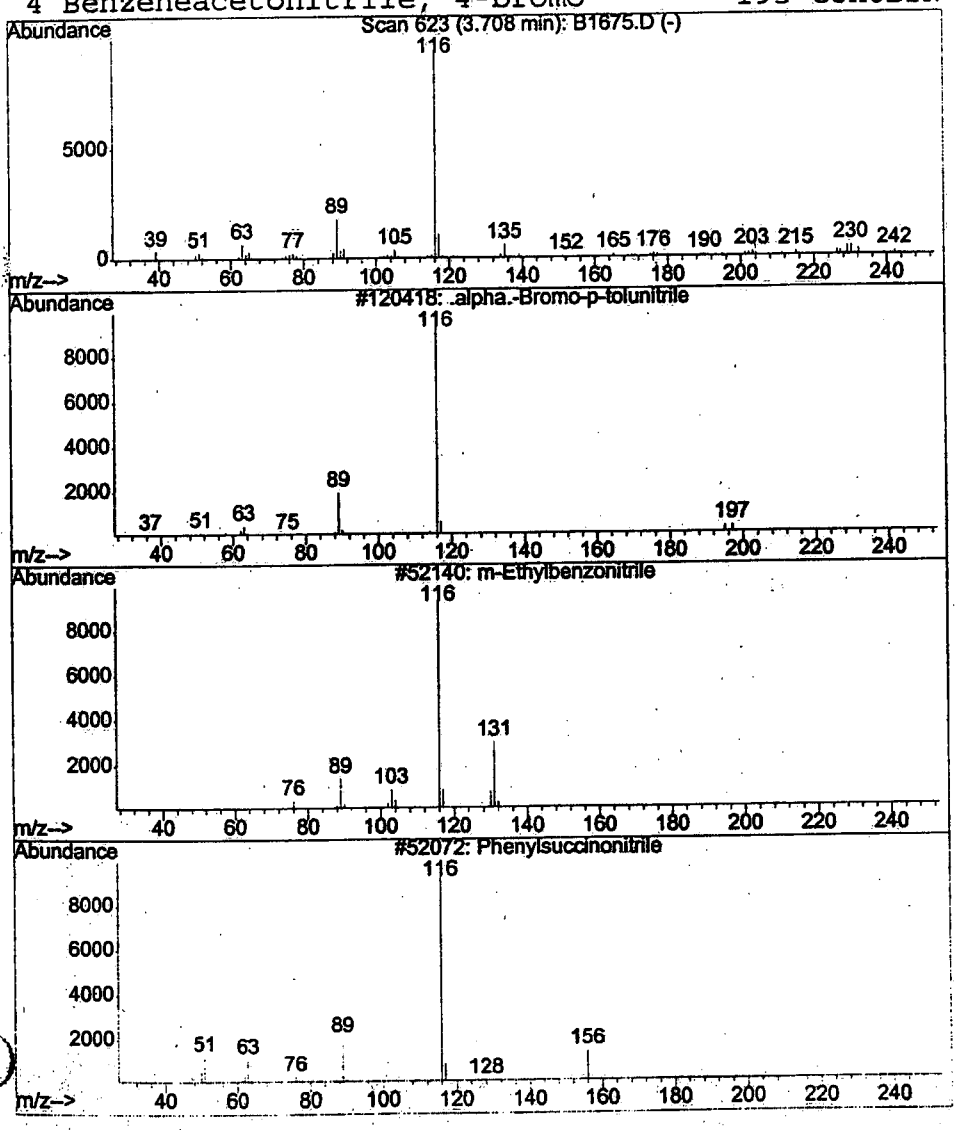
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

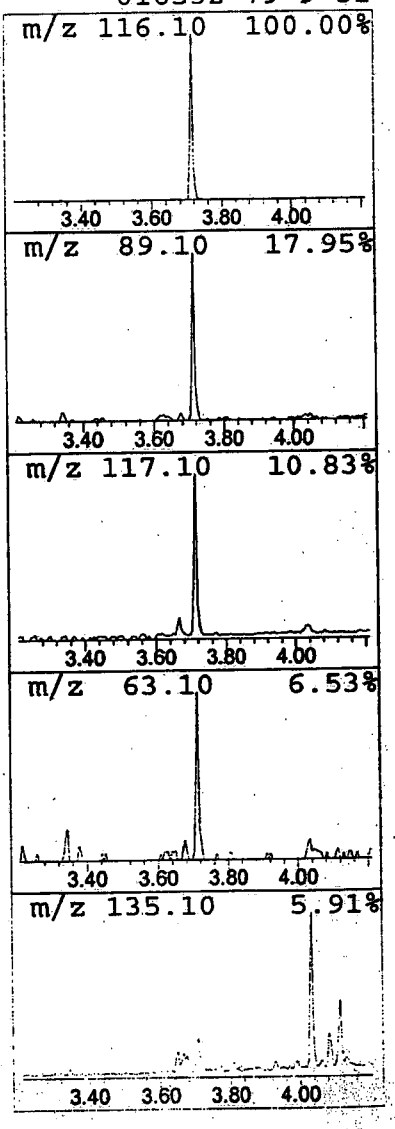
****

Peak Number 4 Unknown aromatic Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.71	10.01 UG	87769	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.alpha.-Bromo-p-tolunitrile	195	C8H6BrN	017201-43-3	72
2	m-Ethylbenzonitrile	131	C9H9N	1000118-64-1	56
3	Phenylsuccinonitrile	156	C10H8N2	013706-68-8	40
4	Benzeneacetonitrile, 4-bromo-	195	C8H6BrN	016532-79-9	32





1553

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

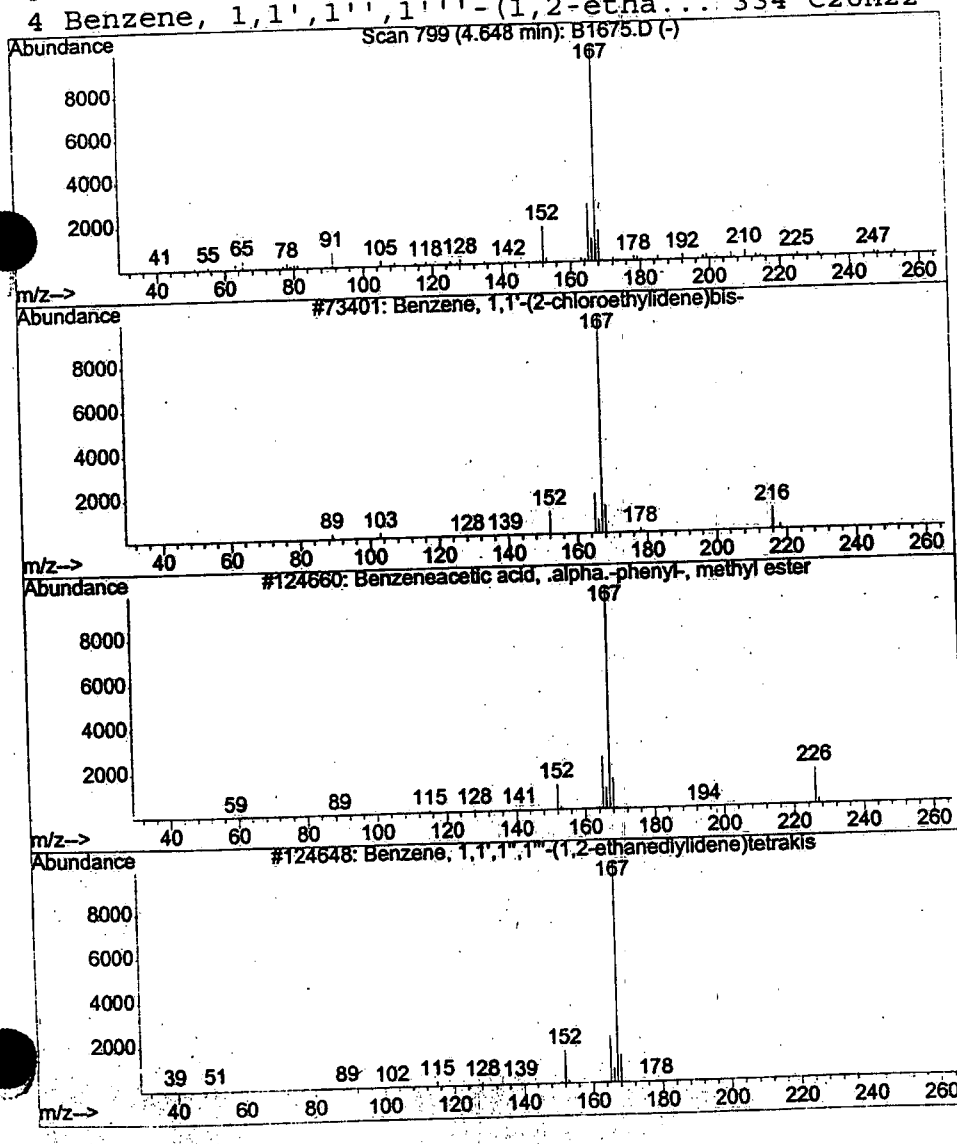
****

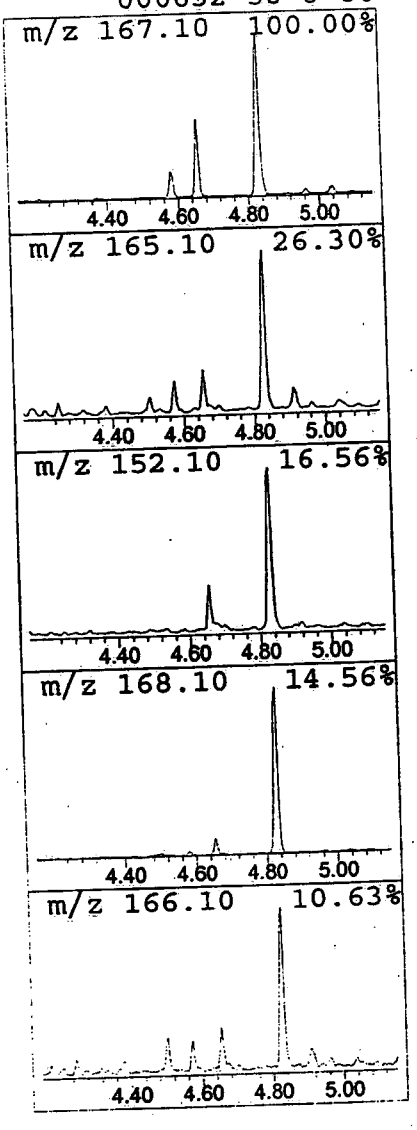
Peak Number 5 Unknown aromatic

Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.65	5.43 UG	43024	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,1'-(2-chloroethyliden...	216	C14H13Cl	005216-46-6	86
2	Benzeneacetic acid, .alpha.-phen...	226	C15H14O2	003469-00-9	80
3	Benzene, 1,1',1'',1'''-(1,2-etha...	334	C26H22	000632-50-8	80
4	Benzene, 1,1',1'',1'''-(1,2-etha...	334	C26H22	000632-50-8	80





1554

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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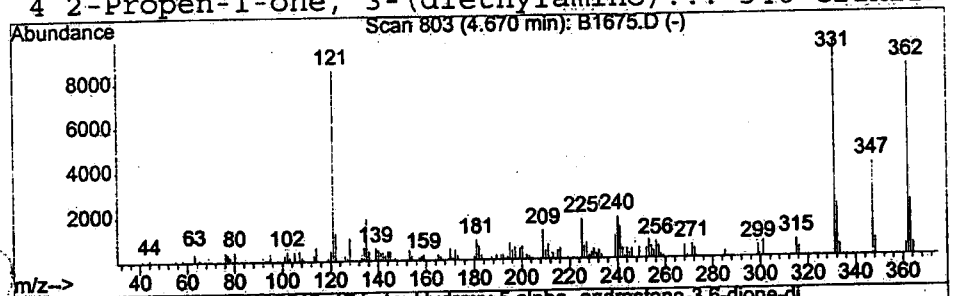
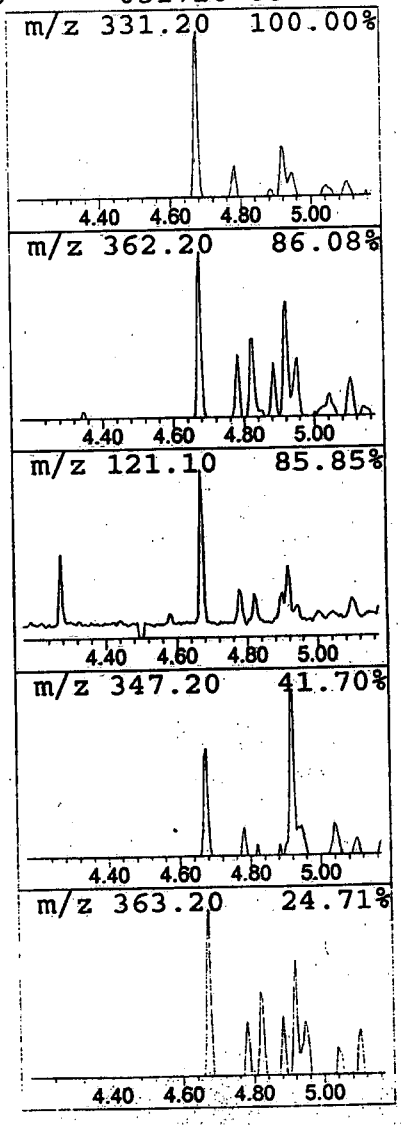
Peak Number 6 Substituted biphenyl Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.67	7.24 UG	57395	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	17.beta.-Hydroxy-5.alpha.-andros...	362	C21H34N2O3	1000069-37-1	43
2	Triphenylmethane, 3,3'-dimethyl-...	362	C24H26O3	1000196-03-6	25
3	1,1'-Biphenyl, 2,3,4,4'-tetramet...	362	C18H18O8	1000126-48-1	25
4	2-Propen-1-one, 3-(diethylamino)...	346	C21H22N4O	051720-08-2	25





1555
000516

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
3 Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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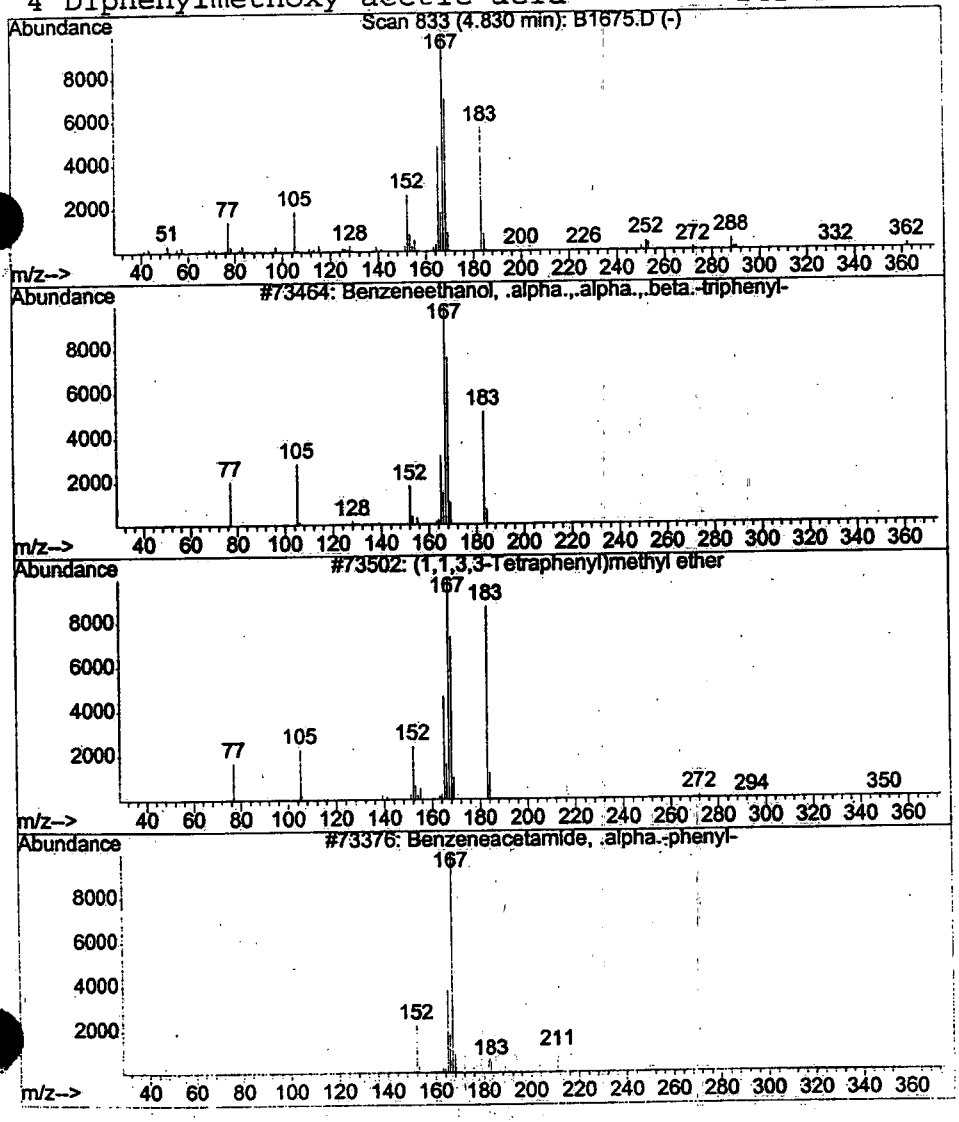
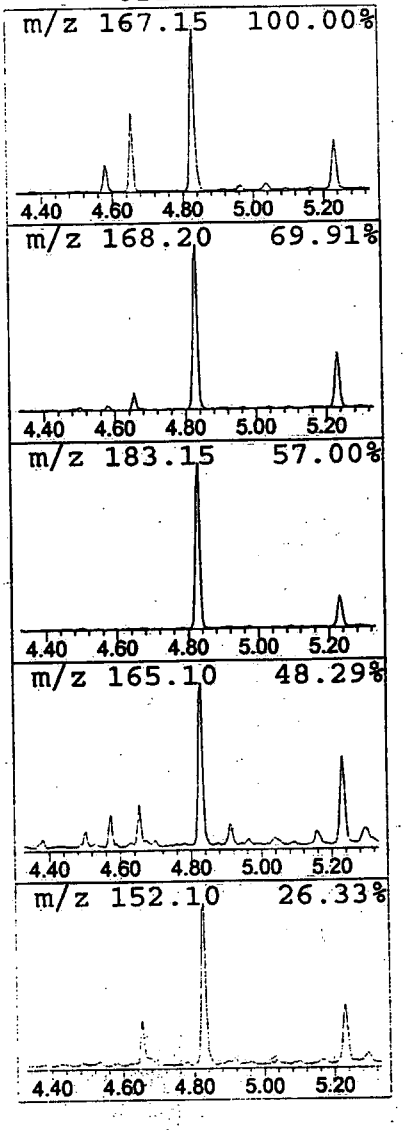
Peak Number 7 Unknown aromatic Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.83	31.34 UG	248497	Chrysene-d12	4.50

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneethanol, .alpha.,.alpha.,...	350	C26H22O	000981-24-8	72
2	(1,1,3,3-Tetraphenyl)methyl ether	350	C26H22O	1000130-50-6	58
3	Benzeneacetamide, .alpha.-phenyl-	211	C14H13NO	004695-13-0	50
4	Diphenylmethoxy acetic acid	242	C15H14O3	021409-25-6	50





155

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
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Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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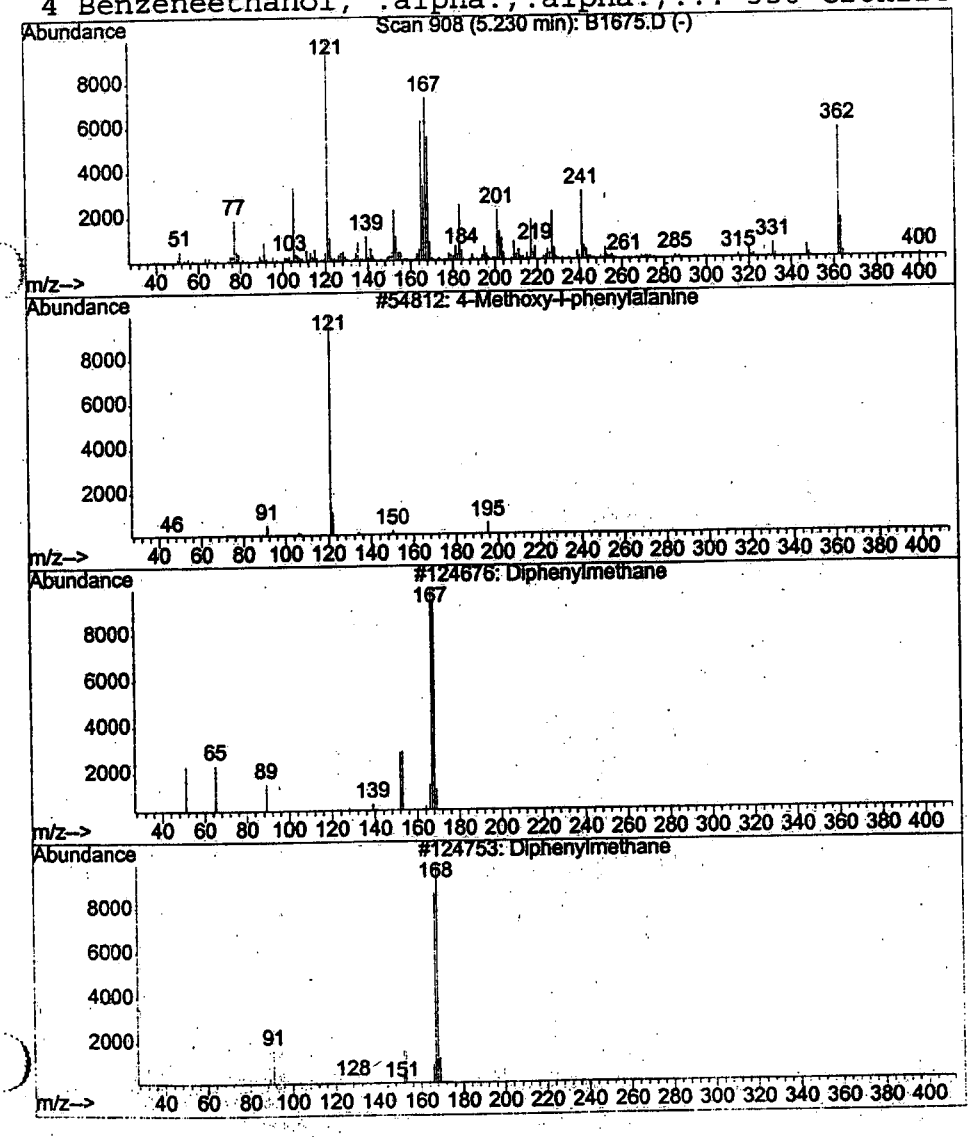
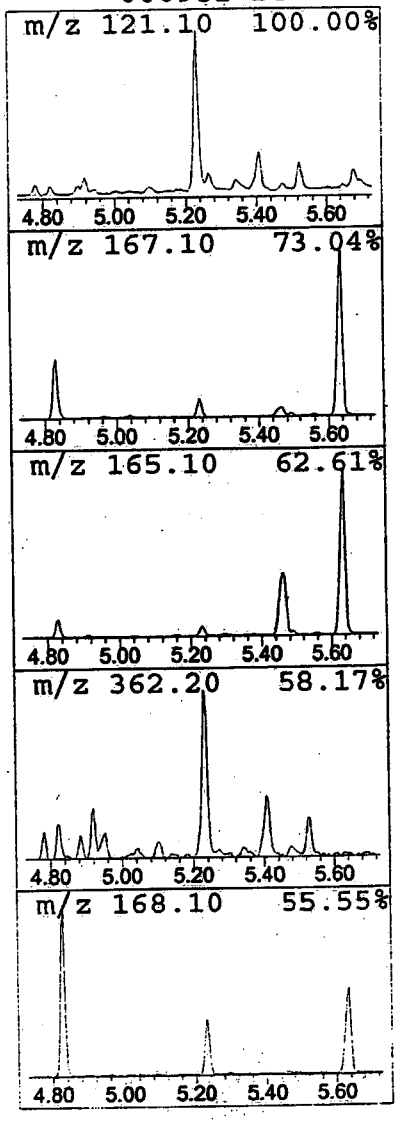
Peak Number 8 Unknown aromatic Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.23	16.27 UG	217193	Perylene-d12	5.29

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Methoxy-l-phenylalanine	195	C10H13NO3	1000131-29-2	25
2	Diphenylmethane	168	C13H12	000101-81-5	25
3	Diphenylmethane	168	C13H12	000101-81-5	25
4	Benzeneethanol, .alpha.,.alpha.,...	350	C26H22O	000981-24-8	22





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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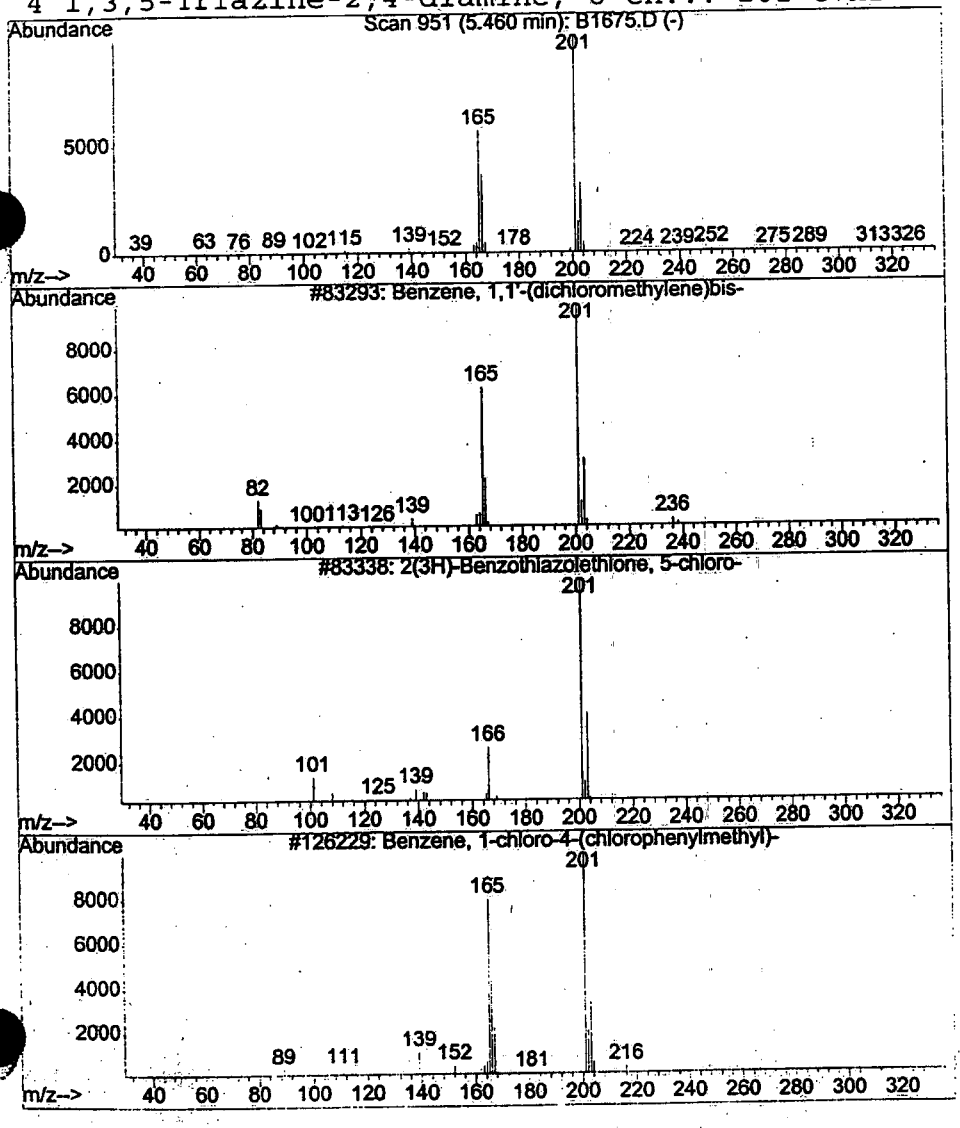
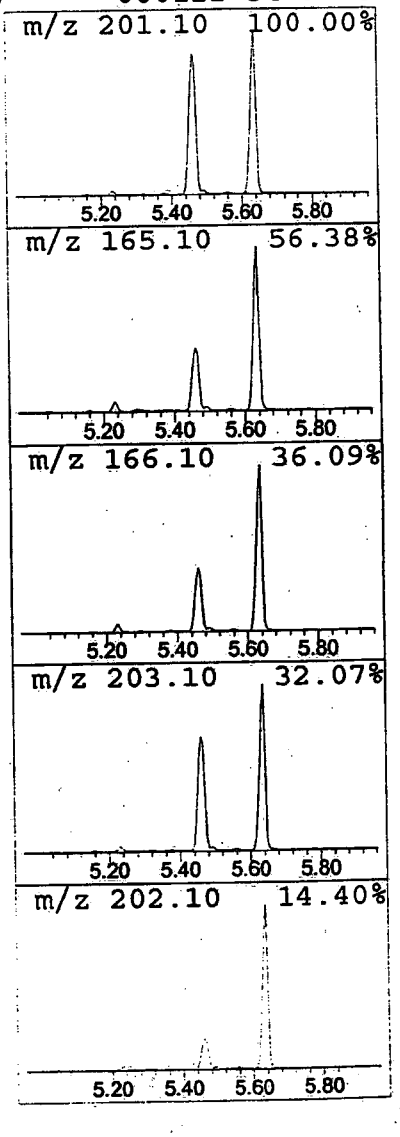
Peak Number 9 Unknown aromatic Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.46	40.47 UG	540211	Perylene-d12	5.29

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	64
2	2(3H)-Benzothiazolethione, 5-chl...	201	C7H4ClNS2	005331-91-9	59
3	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	45
4	1,3,5-Triazine-2,4-diamine, 6-ch...	201	C7H12ClN5	000122-34-9	43





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

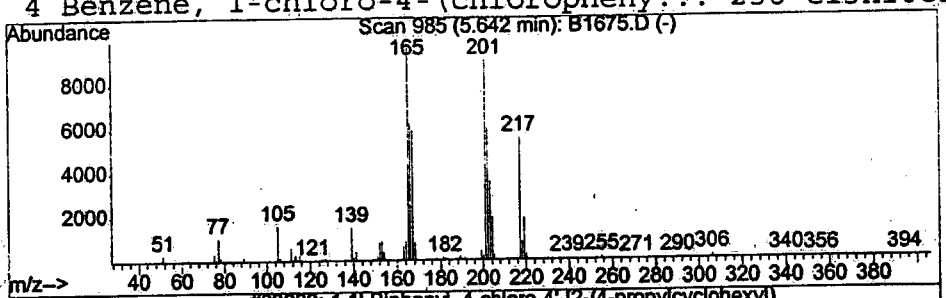
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

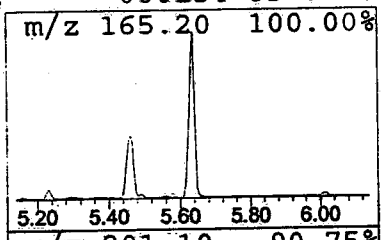
****

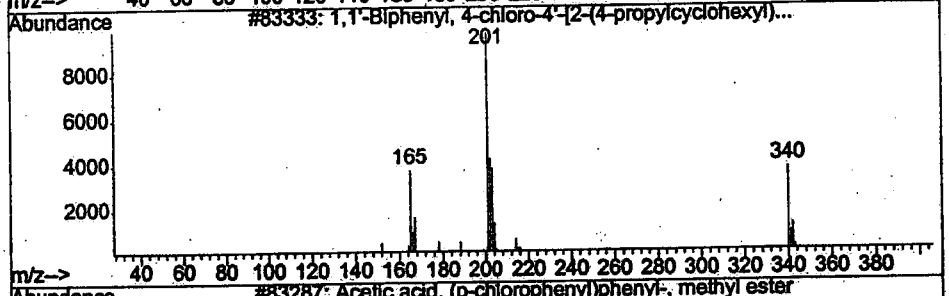
Peak Number 10 Substituted biphenyl Concentration Rank 1

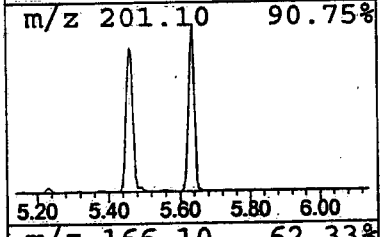
R.T.	EstConc	Area	Relative to ISTD	R.T.
5.64	109.25 UG	1458410	Perylene-d12	5.29

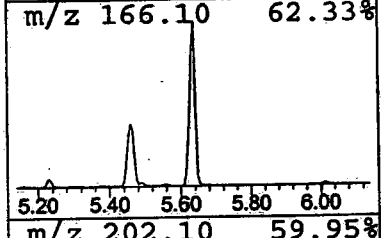
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 4-chloro-4'-[2-(4...	340	C23H29Cl	086512-31-4	33
2	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	32
3	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	25
4	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	25

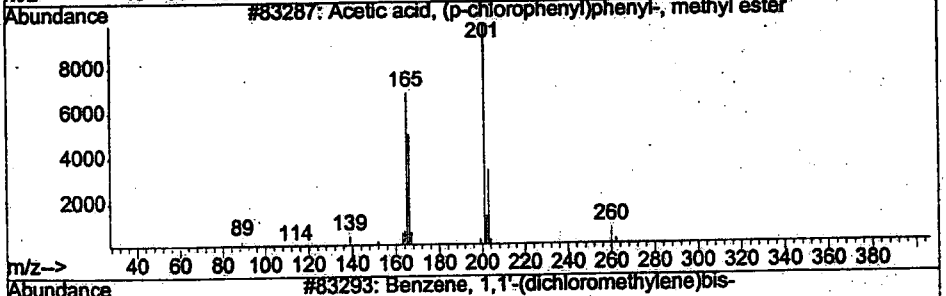


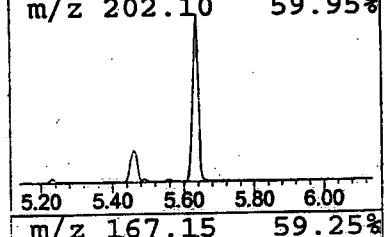


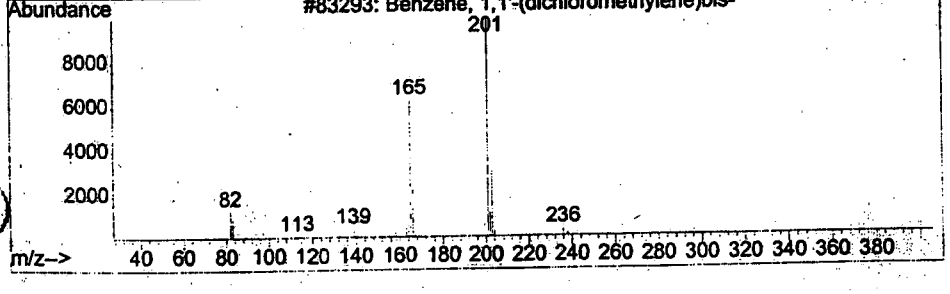


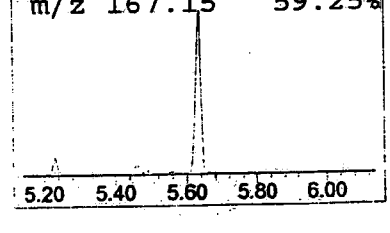












1559

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

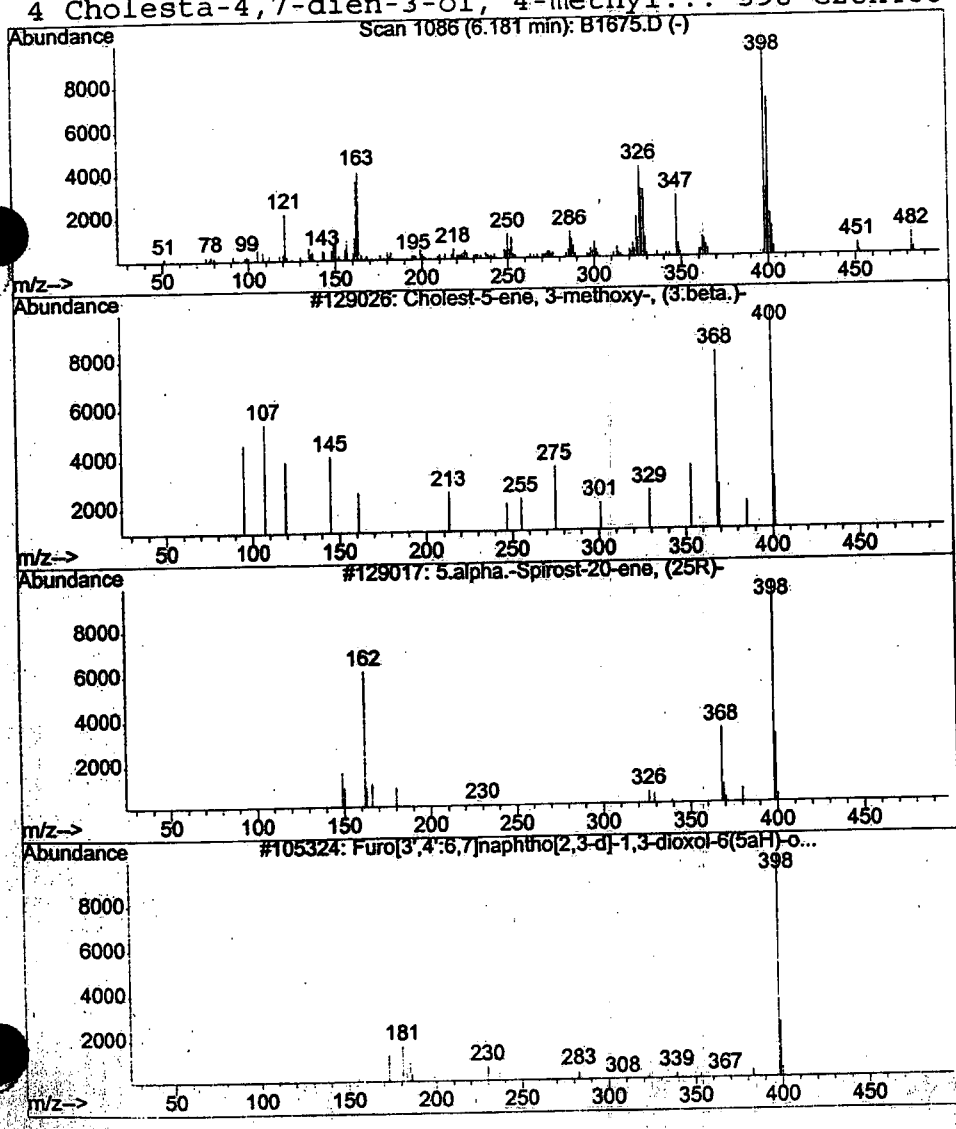
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

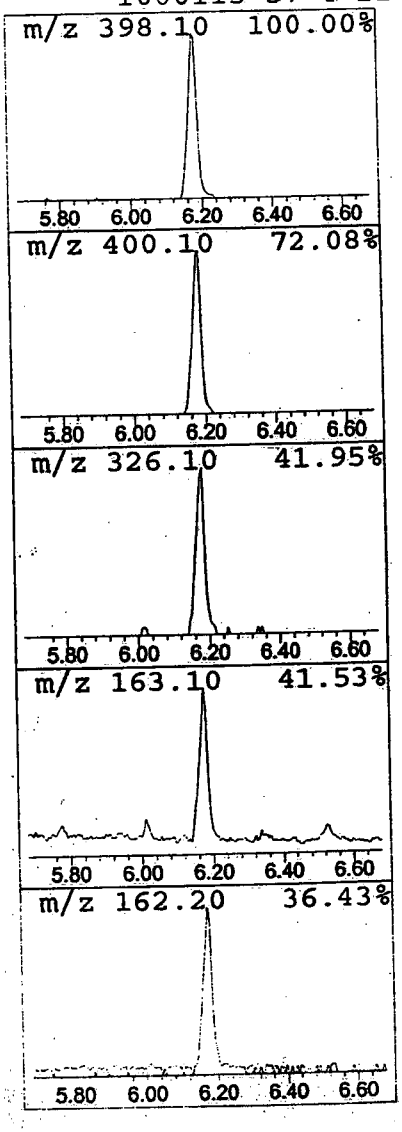
****

Peak Number 11 Unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.18	11.68 UG	155972	Perylene-d12	5.29

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cholest-5-ene, 3-methoxy-, (3.be...	400	C28H48O	001174-92-1	25
2	5.alpha.-Spirost-20-ene, (25R)-	398	C27H42O2	024742-74-3	22
3	Furo[3',4':6,7]naphtho[2,3-d]-1,...	398	C22H22O7	019186-35-7	22
4	Cholesta-4,7-dien-3-ol, 4-methyl...	398	C28H46O	1000115-57-4	22





1560

000521

Library Search Compound Report

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Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
.S Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

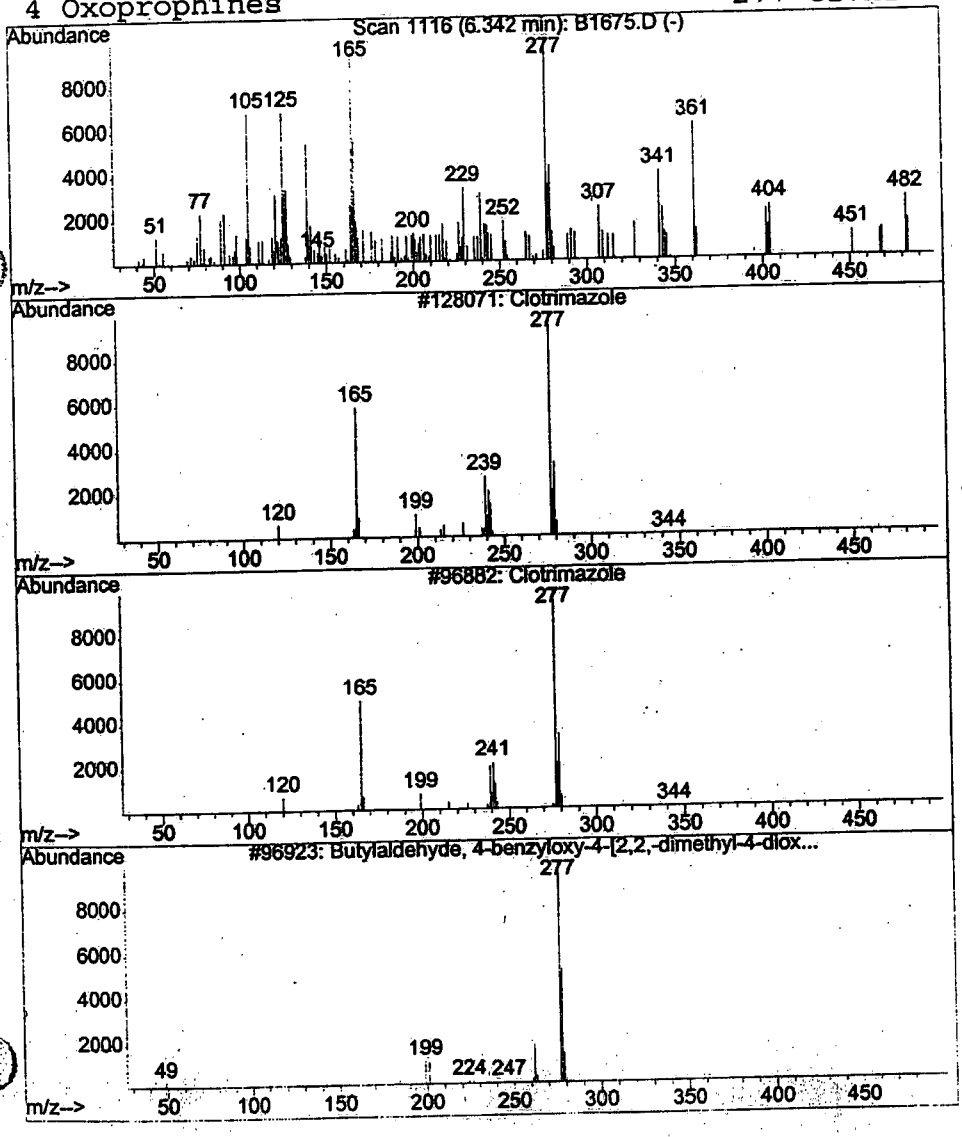
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

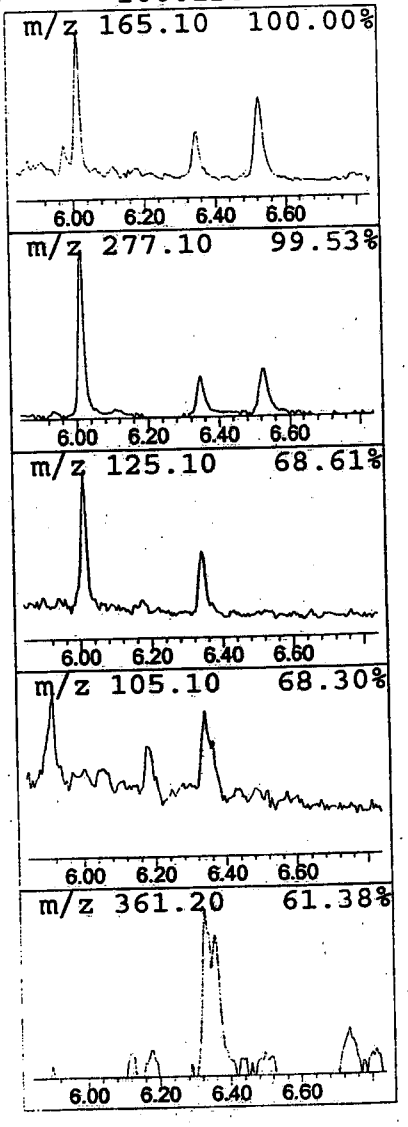
****

Peak Number 12 Unknown — Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.34	5.40 UG	72107	Perylene-d12	5.29

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Clotrimazole	344	C22H17ClN2	023593-75-1	32
2	Clotrimazole	344	C22H17ClN2	023593-75-1	25
3	Butylaldehyde, 4-benzyloxy-4-[2,...	278	C16H22O4	1000126-02-2	10
4	Oxoprophines	277	C17H11NO3	1000128-51-1	10





1561

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1675.D
Acq On : 2 Apr 2001 13:19
Sample : S-24,1922-008,S,2.88g,21.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
LS Integration Params: LSCINT.P

Vial: 23
Operator: JC
Inst : MSD_B
Multiplr: 1.00

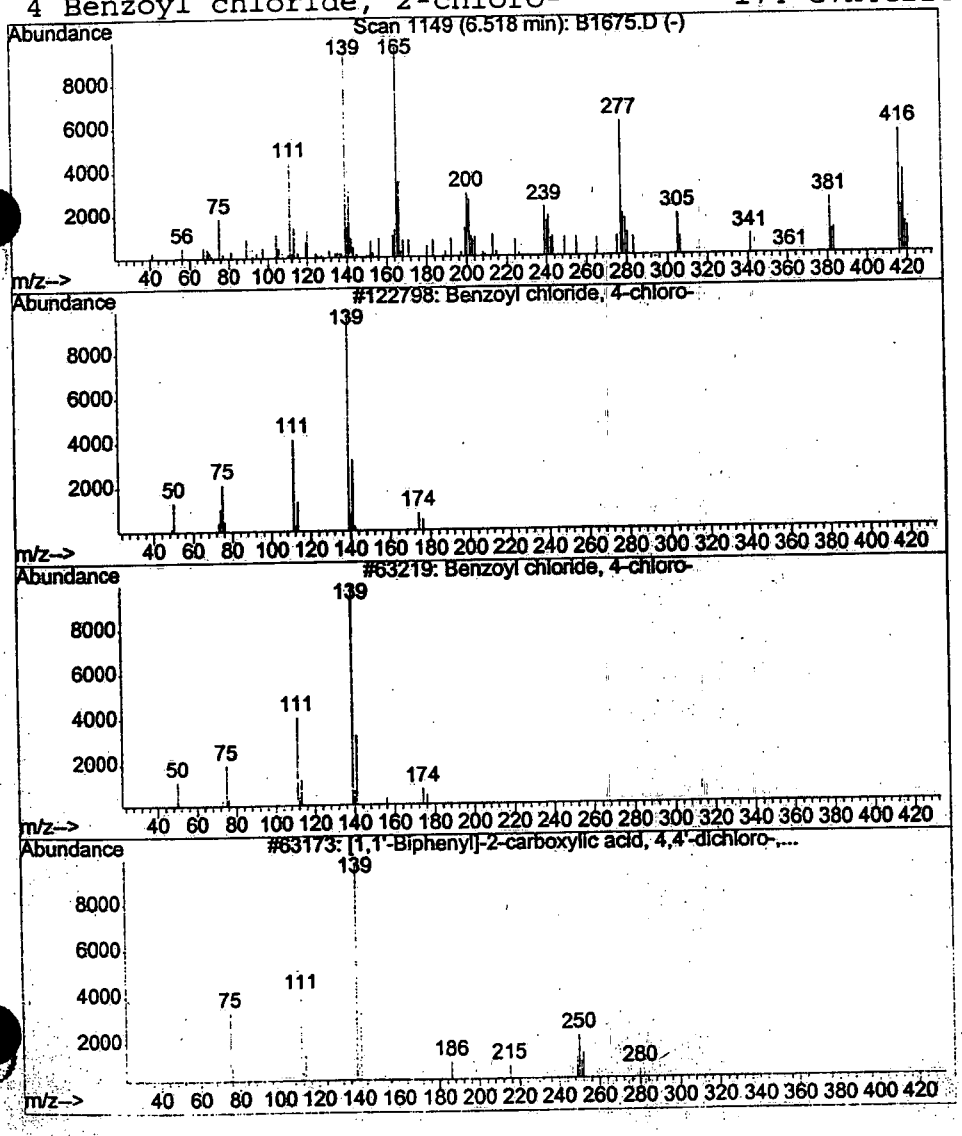
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

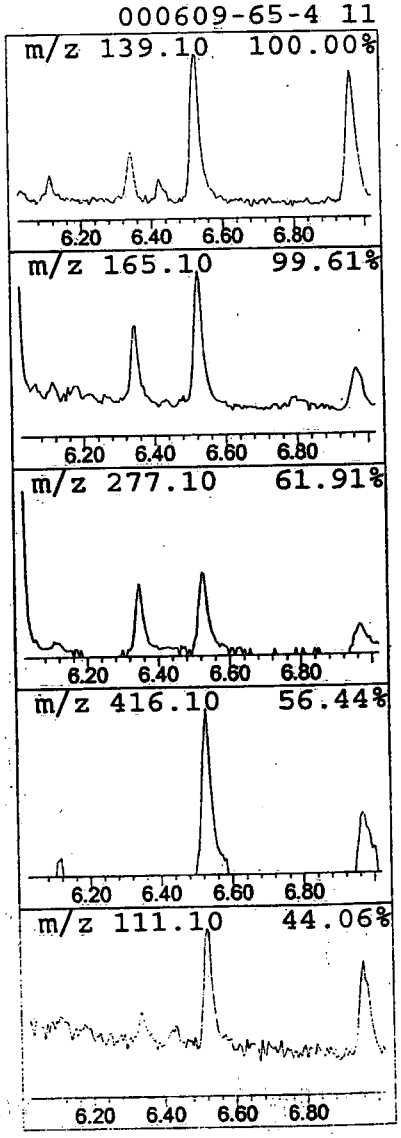
****

Peak Number 13 Unknown — Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.52	4.07 UG	54320	Perylene-d12	5.29

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoyl chloride, 4-chloro-	174	C7H4Cl2O	000122-01-0	25
2	Benzoyl chloride, 4-chloro-	174	C7H4Cl2O	000122-01-0	15
3	[1,1'-Biphenyl]-2-carboxylic aci...	280	C14H10Cl2O2	055702-42-6	11
4	Benzoyl chloride, 2-chloro-	174	C7H4Cl2O	000609-65-4	11





1567

006523

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D
Acq On : 2 Apr 2001 13:34
Sample : S-25,1922-009,S,5.81g,18.3,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: rteint.p
Quant Time: Apr 02 13:43:25 2001

Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00
Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.52	152	34572	40.00	UG	0.00
22) Naphthalene-d8	2.04	136	140033	40.00	UG	0.00
39) Acenaphthene-d10	2.75	164	81085	40.00	UG	0.00
60) Phenanthrene-d10	3.34	188	143760	40.00	UG	-0.01
75) Chrysene-d12	4.49	240	111961	40.00	UG	-0.02
84) Perylene-d12	5.29	264	135307	40.00	UG	-0.02

System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	63067	63.41	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 63.41%			
6) Phenol-d5	1.39	99	83773	68.81	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 68.81%			
23) Nitrobenzene-d5	1.74	82	34297	33.75	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 67.50%			
43) 2-Fluorobiphenyl	2.48	172	90319	40.53	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 81.06%			
64) 2,4,6-Tribromophenol	3.07	330	42346	88.46	UG	-0.01
Spiked Amount 100.000	Range 54 - 135		Recovery = 88.46%			
77) Terphenyl-d14	4.03	244	128900	48.28	UG	0.00
Spiked Amount 50.000	Range 58 - 147		Recovery = 96.56%			

Target Compounds						Qvalue
33) Naphthalene	2.04	128	50737	16.47	UG	# 96
38) 2-Methylnaphthalene	2.32	142	22417	10.03	UG	# 100
69) Phenanthrene	3.36	178	3655m	1.24	UG	
73) Fluoranthene	3.85	202	7297	2.31	UG	93
76) Pyrene	3.94	202	6526	2.21	UG	# 95
81) Benzo[a]anthracene	4.49	228	4284	1.59	UG	# 92
82) Chrysene	4.50	228	3263	1.32	UG	96
86) Benzo[b]fluoranthene	5.07	252	5652m	1.54	UG	
87) Benzo[k]fluoranthene	5.08	252	2269m	0.73	UG	
88) Benzo[a]pyrene	5.25	252	4003	1.42	UG	# 92
89) Indeno[1,2,3-cd]pyrene	5.82	276	3087m	1.07	UG	
91) Benzo[g,h,i]perylene	5.93	276	2847	1.14	UG	# 89

(#) = qualifier out of range (m) = manual integration

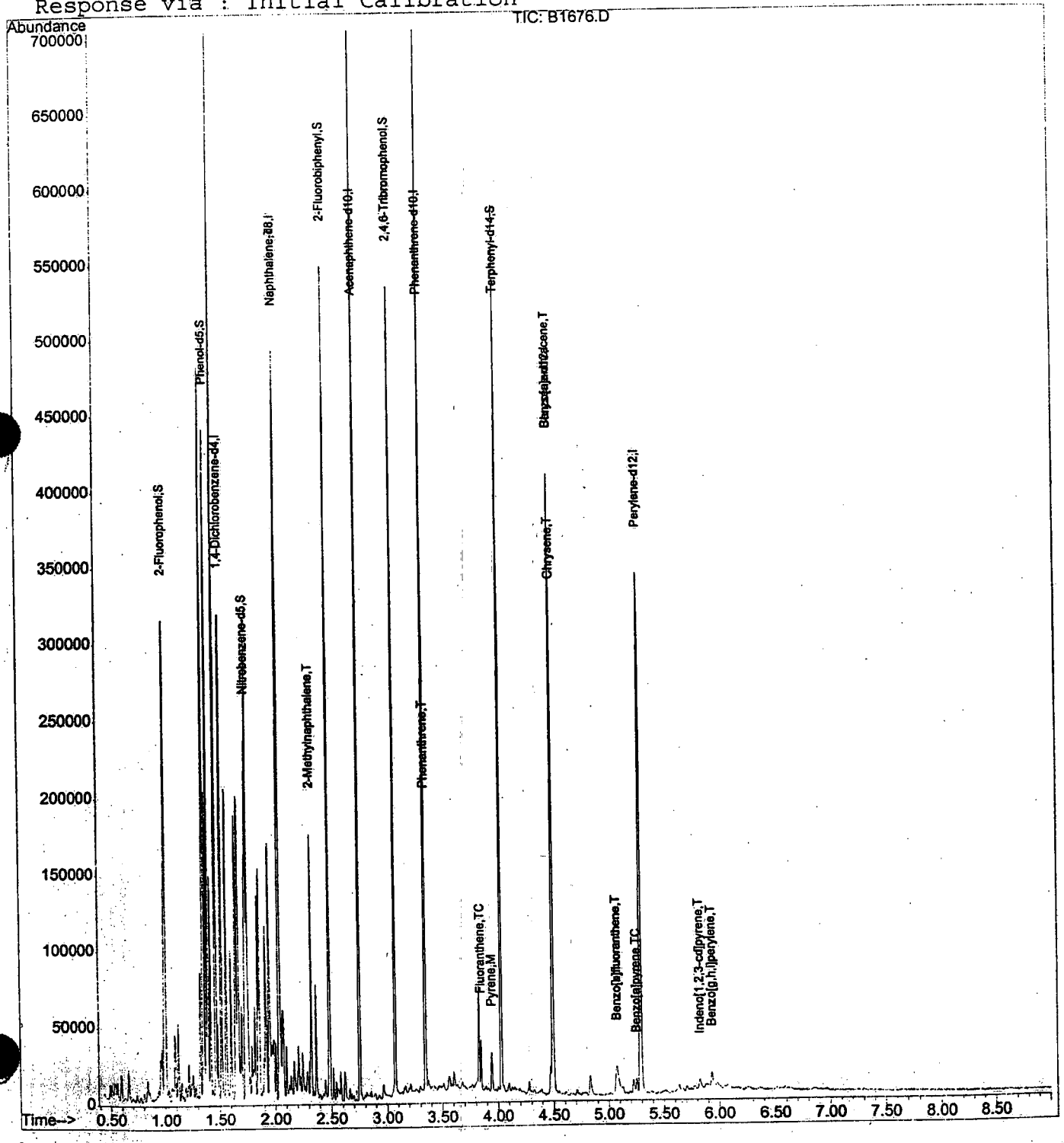
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D
Acq On : 2 Apr 2001 13:34
Sample : S-25,1922-009,S,5.81g,18.3,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: rteint.p
Quant Time: Apr 3 6:52 2001

Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



1564

000525

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D
Acq On : 2 Apr 2001 13:34
Sample : S-25,1922-009,S,5.81g,18.3,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.529	26	28	32	rBV3	8506	9088	2.23%	0.143%
2	0.588	36	39	43	rVB	17159	13548	3.32%	0.213%
3	0.658	49	52	56	rVB	20624	15223	3.73%	0.239%
4	0.834	82	85	92	rBV2	14249	15894	3.90%	0.250%
5	0.951	105	107	108	rBV	24468	14919	3.66%	0.234%
6	0.967	108	110	112	rVV	30261	21185	5.19%	0.333%
7	0.999	112	116	120	rVV2	309497	277483	68.02%	4.361%
8	1.058	124	127	130	rBV4	9021	11371	2.79%	0.179%
9	1.085	130	132	135	rVV	40838	29061	7.12%	0.457%
10	1.117	135	138	141	rVB	50374	36764	9.01%	0.578%
11	1.149	141	144	146	rBV2	12232	9580	2.35%	0.151%
12	1.213	153	156	158	rBV	21862	13455	3.30%	0.211%
13	1.251	158	163	166	rVB3	15291	15561	3.81%	0.245%
14	1.325	174	177	179	rBV	81801	59363	14.55%	0.933%
15	1.352	179	182	185	rVV	478622	333255	81.70%	5.237%
16	1.373	185	186	188	rVV	200049	133799	32.80%	2.103%
17	1.395	188	190	192	rVV	436785	209399	51.33%	3.291%
18	1.416	192	194	196	rVV	144913	75999	18.63%	1.194%
19	1.464	200	203	205	rVV	798293	388723	95.29%	6.109%
20	1.480	205	206	210	rVB	48329	21005	5.15%	0.330%
21	1.518	210	213	215	rBV	315040	213057	52.23%	3.348%
22	1.560	218	221	225	rVV2	200911	114793	28.14%	1.804%
23	1.603	225	229	233	rVB	97091	53078	13.01%	0.834%
24	1.646	234	237	239	rVV	183806	146719	35.97%	2.306%
25	1.667	239	241	243	rVV2	196071	177181	43.44%	2.785%
26	1.699	245	247	250	rVB	60651	33095	8.11%	0.520%
27	1.742	250	255	256	rBV2	233276	240351	58.92%	3.777%
28	1.753	256	257	262	rVV	294529	134699	33.02%	2.117%
29	1.790	262	264	265	rVV	32666	16594	4.07%	0.261%
30	1.817	268	269	272	rVV	57806	22506	5.52%	0.354%
31	1.844	272	274	275	rVV	130322	66300	16.25%	1.042%

1565

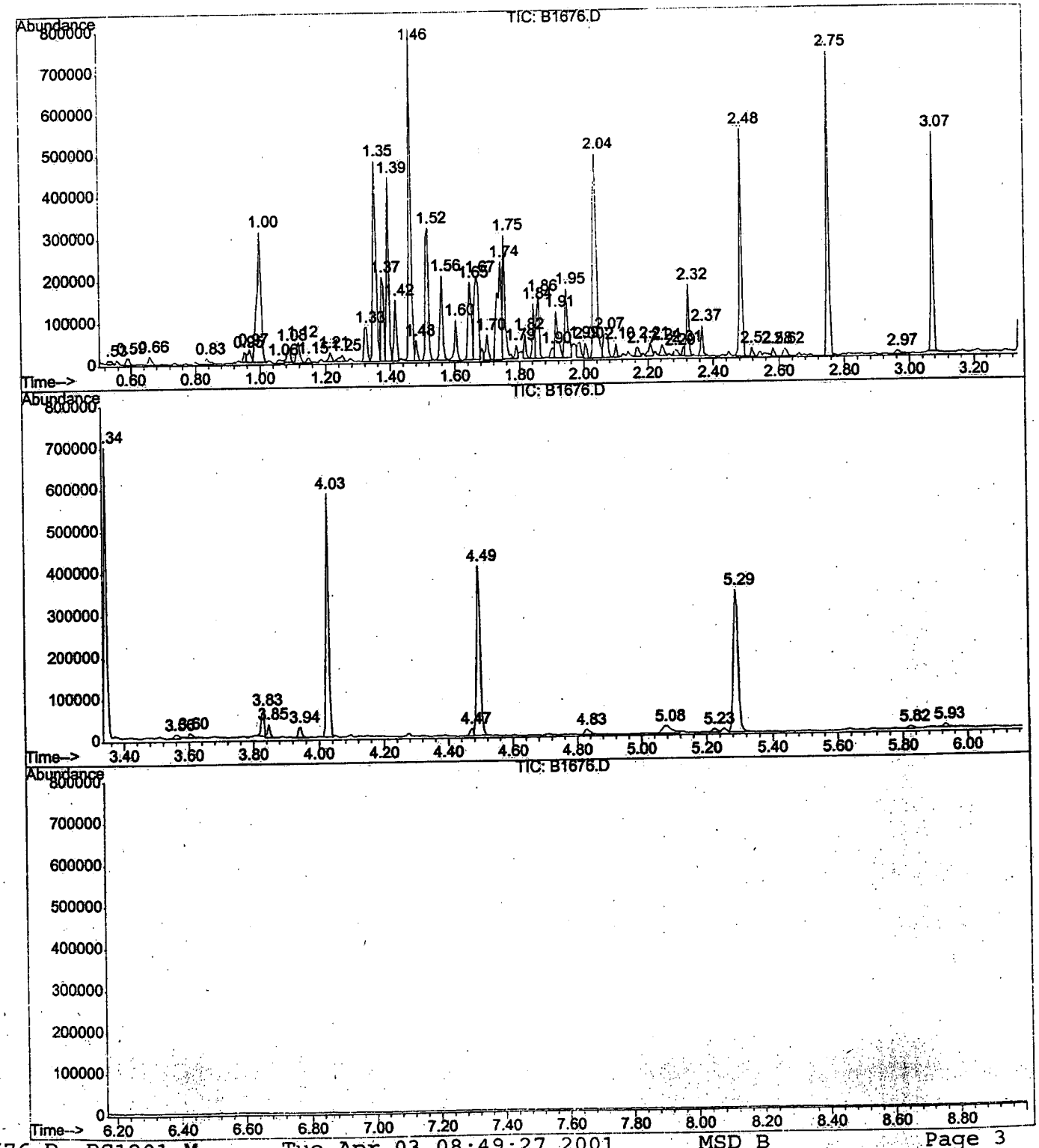
000526

32	1.860	275	277	279	rVV	148114	85702	21.01%	1.347%
33	1.902	283	285	286	rVV	24209	20423	5.01%	0.321%
34	1.913	286	287	291	rVV3	110213	72548	17.78%	1.140%
35	1.945	291	293	296	rVV2	164216	118376	29.02%	1.860%
[illegible]	1.988	299	301	303	rVV2	35597	25702	6.30%	0.404%
	2.004	303	304	307	rVB	35754	19072	4.68%	0.300%
38	2.036	307	310	314	rBV2	488711	407920	100.00%	6.411%
39	2.068	314	316	320	rVB2	56508	56691	13.90%	0.891%
40	2.100	320	322	324	rBV	32735	14975	3.67%	0.235%
41	2.169	333	335	337	rBV2	21711	18259	4.48%	0.287%
42	2.207	339	342	344	rVV2	31244	23903	5.86%	0.376%
43	2.244	347	349	352	rVV3	26594	18649	4.57%	0.293%
44	2.287	355	357	360	rVB3	14810	12767	3.13%	0.201%
45	2.308	360	361	362	rBV	21243	13496	3.31%	0.212%
46	2.324	362	364	366	rVB	170866	73254	17.96%	1.151%
47	2.367	369	372	374	rBV	72138	31924	7.83%	0.502%
48	2.485	391	394	397	rVB	545527	257299	63.08%	4.044%
49	2.517	398	400	403	rVB	21371	10400	2.55%	0.163%
50	2.581	411	412	415	rVB	19309	9338	2.29%	0.147%
51	2.618	417	419	425	rBV	18858	16154	3.96%	0.254%
52	2.752	441	444	447	rBV	732001	336551	82.50%	5.289%
53	2.965	481	484	491	rBV2	9243	12624	3.09%	0.198%
54	3.072	501	504	507	rVB	525566	262654	64.39%	4.128%
55	3.345	552	555	558	rBV	697334	348710	85.48%	5.480%
56	3.558	591	595	598	rBV2	8993	10958	2.69%	0.172%
[illegible]	3.601	601	603	608	rVV2	9990	8604	2.11%	0.135%
[illegible]	3.831	643	646	647	rVV	62783	40027	9.81%	0.629%
[illegible]	3.847	647	649	652	rVB	33059	16688	4.09%	0.262%
60	3.943	664	667	671	rBV2	25126	18630	4.57%	0.293%
61	4.029	680	683	686	rBV	579822	324089	79.45%	5.093%
62	4.472	761	766	767	rBV2	18825	16168	3.96%	0.254%
63	4.493	767	770	775	rVB	403577	315551	77.36%	4.959%
64	4.830	829	833	840	rBV3	12981	16756	4.11%	0.263%
65	5.076	871	879	887	rBV4	18448	38581	9.46%	0.606%
66	5.225	903	907	910	rBV	9002	9867	2.42%	0.155%
67	5.289	915	919	930	rVB	339248	337937	82.84%	5.311%
68	5.824	1015	1019	1024	rBV2	6406	8663	2.12%	0.136%
69	5.930	1036	1039	1046	rBV	9073	10145	2.49%	0.159%

Sum of corrected areas: 6363103

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D
Operator : JC
Acquired : 2 Apr 2001 13:34 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-25,1922-009,S,5.81g,18.3,03/30/01
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,1
Vial Number: 24
Quant File :BS1201.RES (RTE Integrator)



000528

1567

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D
Acq On : 2 Apr 2001 13:34
Sample : S-25,1922-009,S,5.81g,18.3,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00

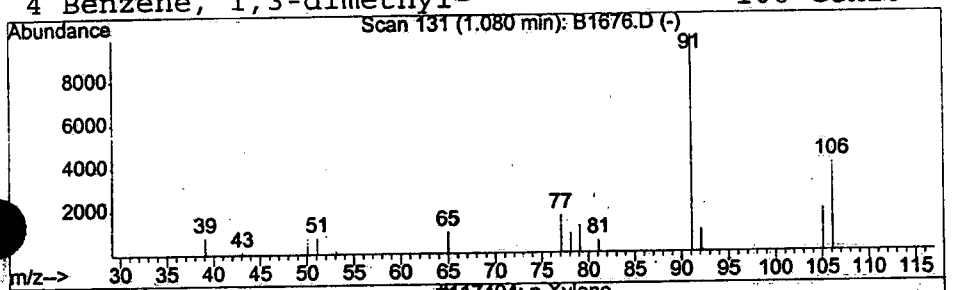
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

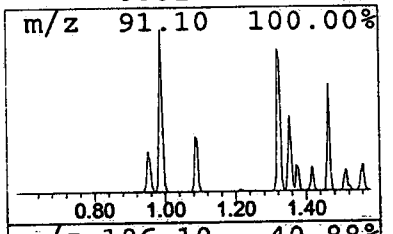
****

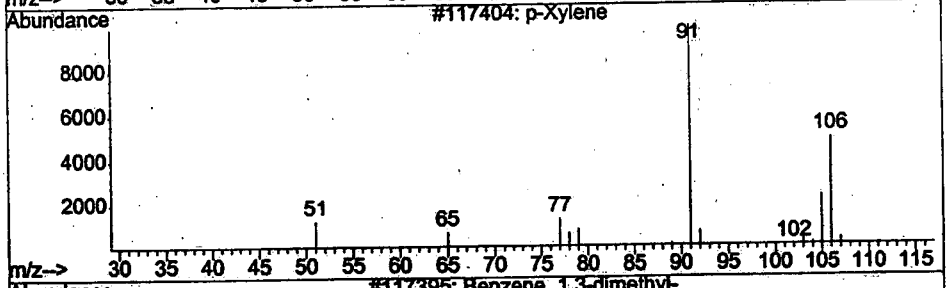
Peak Number 1 Substituted benzene Concentration Rank 11

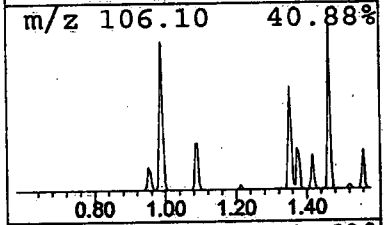
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.08	5.46 UG	29061	1,4-Dichlorobenzene-d4	1.52

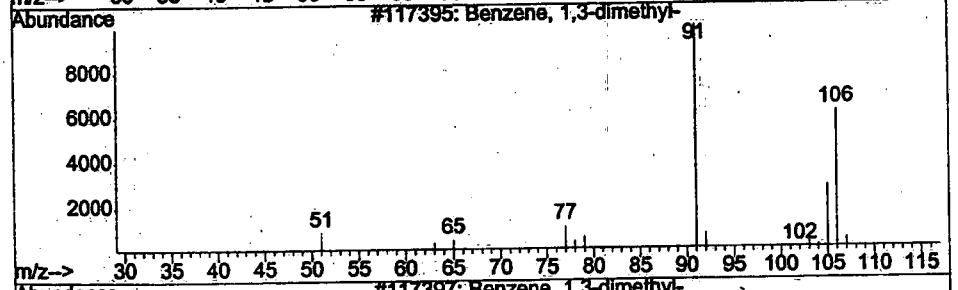
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	p-Xylene	106	C8H10	000106-42-3	97
2	Benzene, 1,3-dimethyl-	106	C8H10	000108-38-3	97
3	Benzene, 1,3-dimethyl-	106	C8H10	000108-38-3	97
4	Benzene, 1,3-dimethyl-	106	C8H10	000108-38-3	95

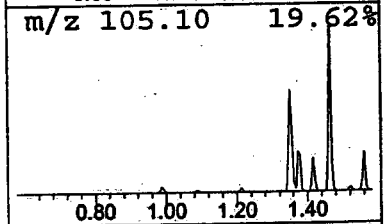


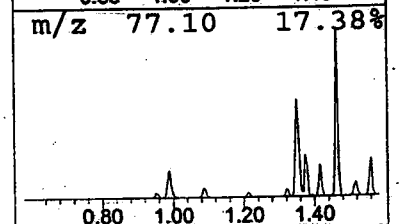


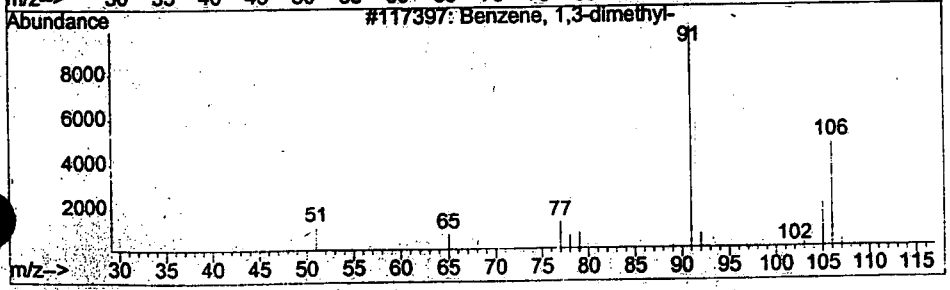


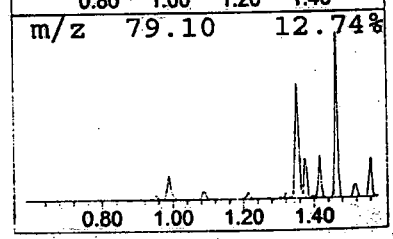












1518

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D
Acq On : 2 Apr 2001 13:34
Sample : S-25,1922-009,S,5.81g,18.3,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00

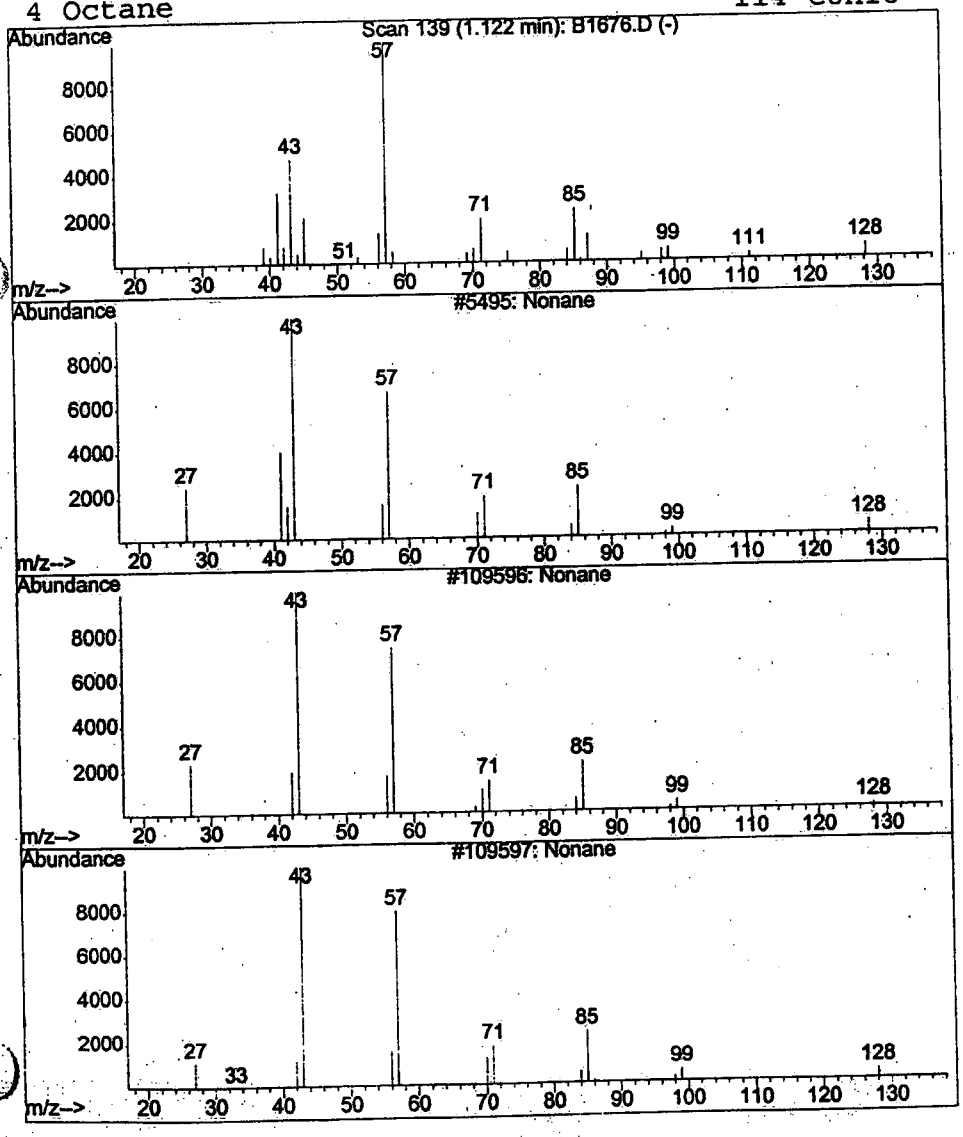
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

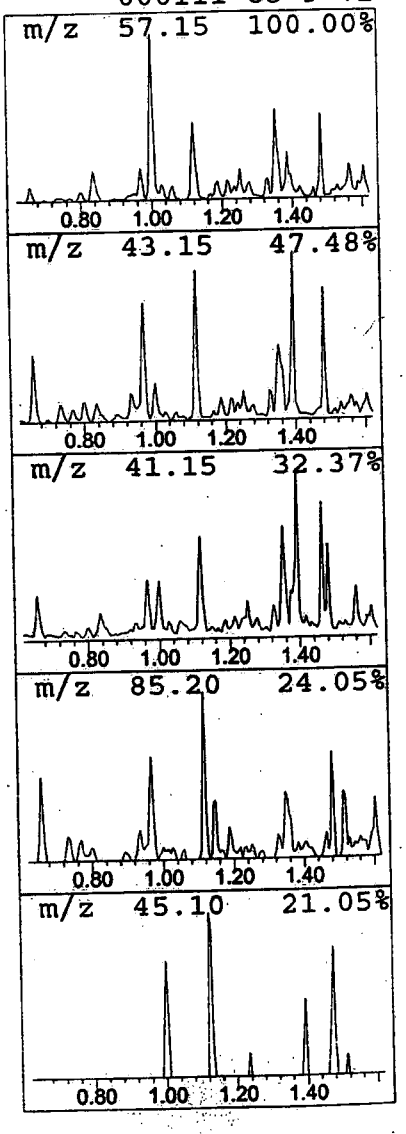
****

Peak Number 2 Unknown alkane — Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.12	6.90 UG	36764	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane	128	C9H20	000111-84-2	95
2	Nonane	128	C9H20	000111-84-2	91
3	Nonane	128	C9H20	000111-84-2	90
4	Octane	114	C8H18	000111-65-9	72





1569

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D
Acq On : 2 Apr 2001 13:34
Sample : S-25,1922-009,S,5.81g,18.3,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00

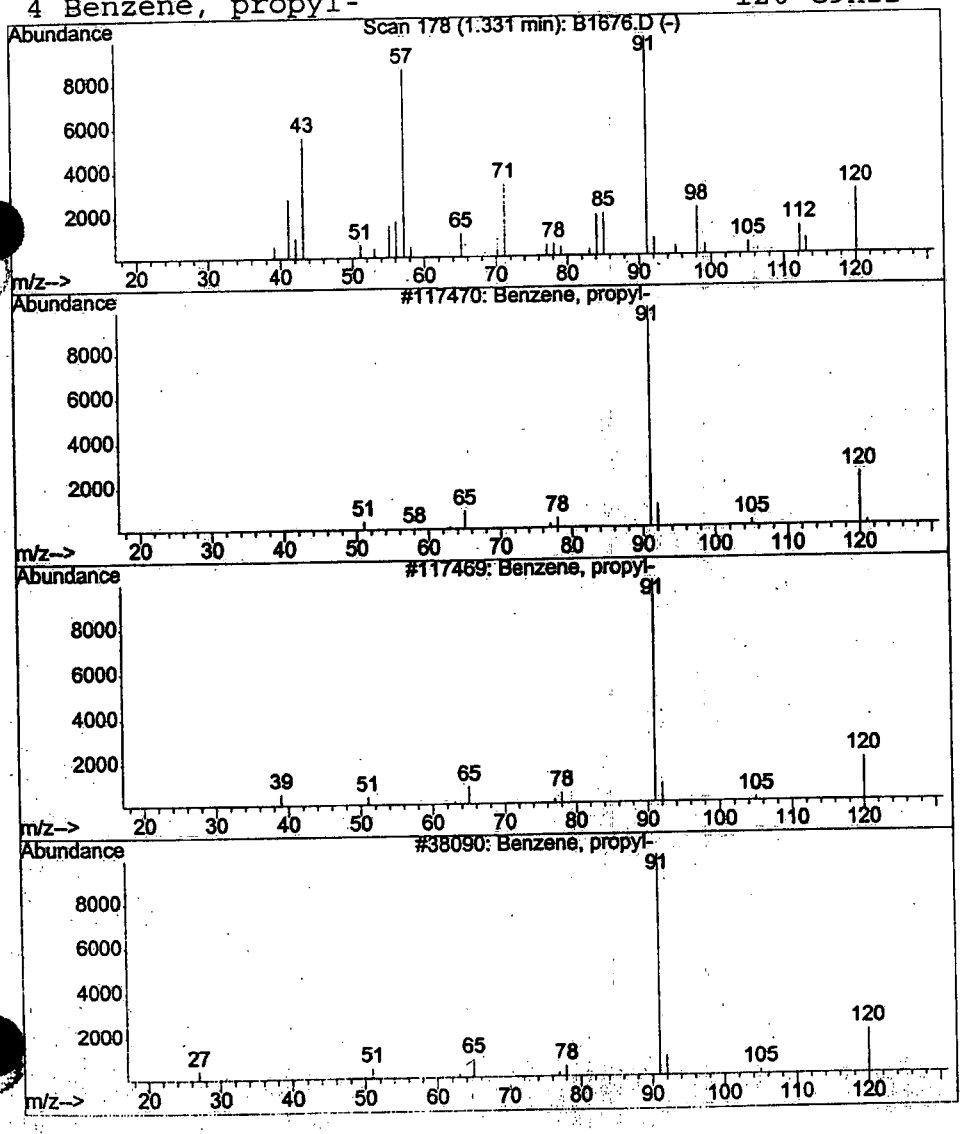
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

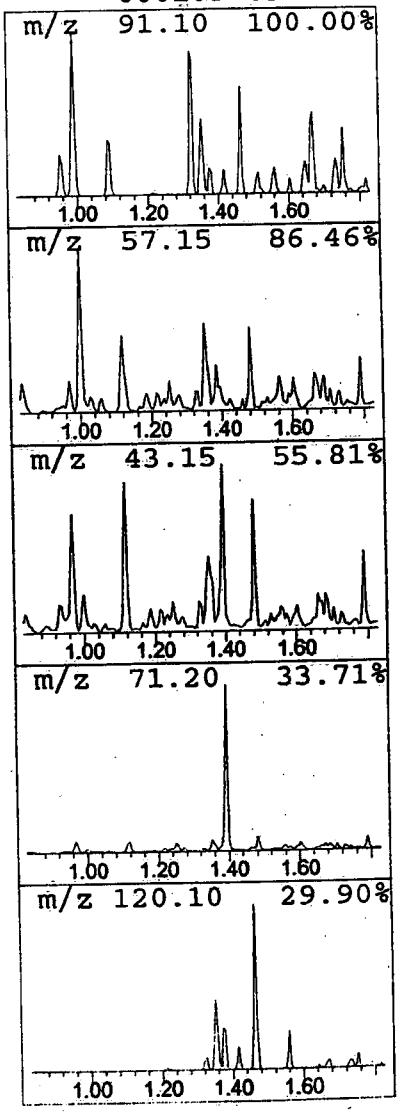
****

Peak Number 3 Substituted benzene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.33	11.15 UG	59363	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, propyl-	120	C9H12	000103-65-1	90
2	Benzene, propyl-	120	C9H12	000103-65-1	87
3	Benzene, propyl-	120	C9H12	000103-65-1	83
4	Benzene, propyl-	120	C9H12	000103-65-1	76





1570

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D
Acq On : 2 Apr 2001 13:34
Sample : S-25,1922-009,S,5.81g,18.3,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00

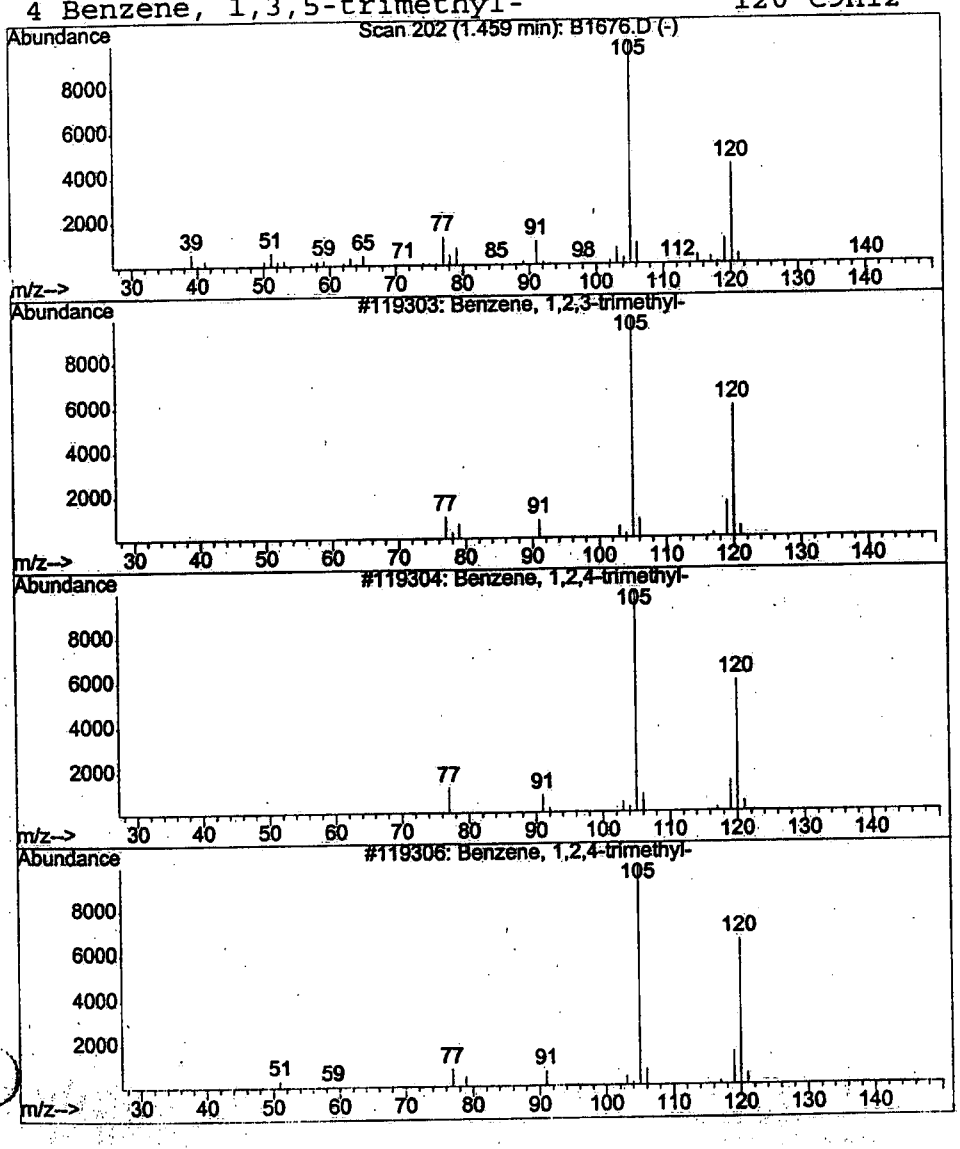
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

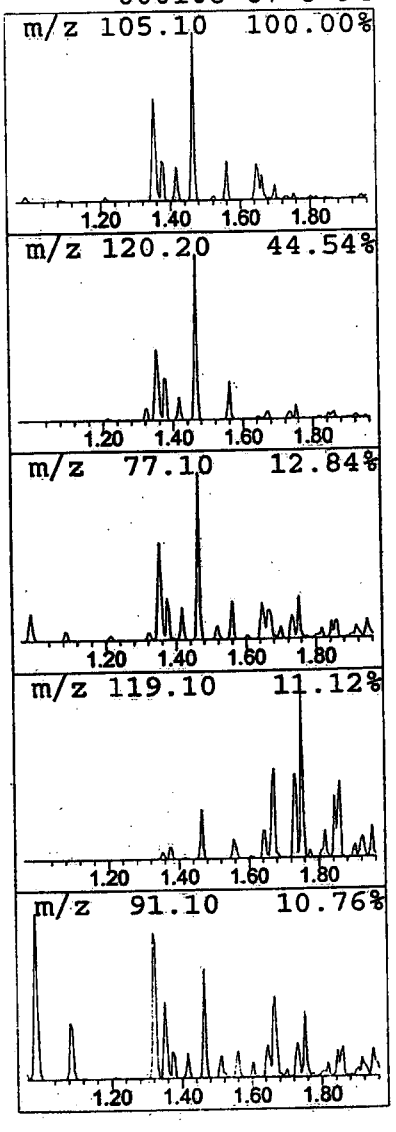
****

Peak Number 4 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.46	72.98 UG	388723	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	97
2	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	95
3	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	95
4	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94





1571

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D
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Sample : S-25,1922-009,S,5.81g,18.3,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
LS Integration Params: LSCINT.P

Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00

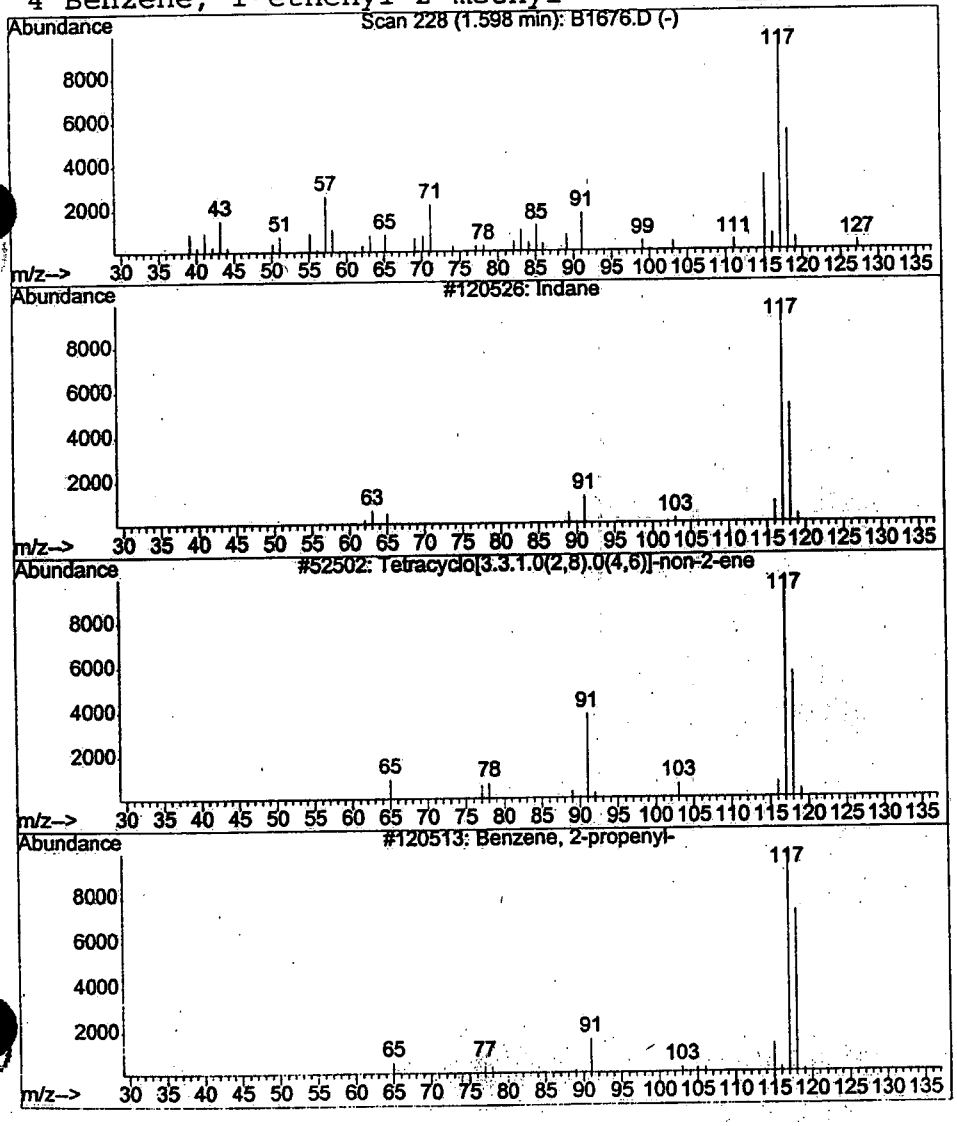
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

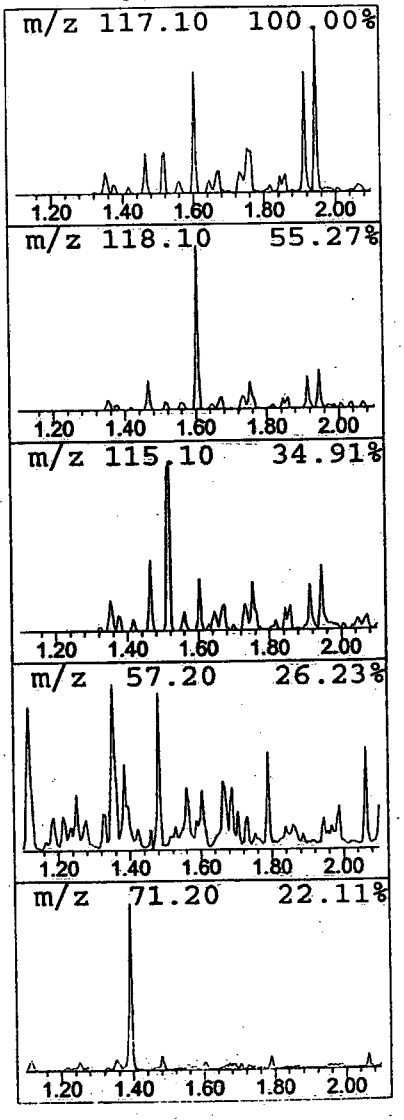
****

Peak Number 5 Unknown alkane — Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.60	9.97 UG	53078	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	76
2	Tetracyclo[3.3.1.0(2,8).0(4,6)]-...	118	C9H10	1000191-13-7	72
3	Benzene, 2-propenyl-	118	C9H10	000300-57-2	64
4	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	64





1577

Library Search Compound Report

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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00

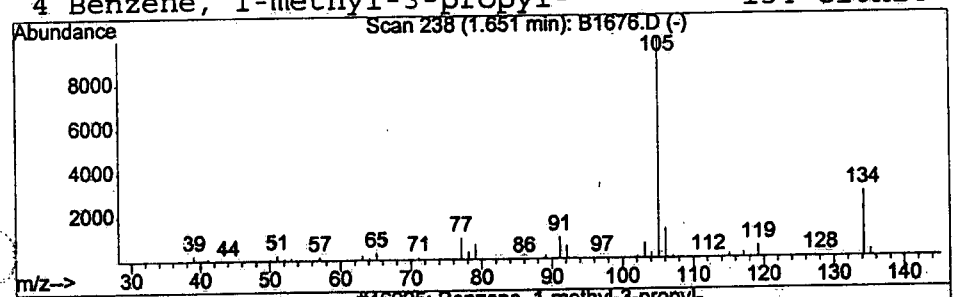
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

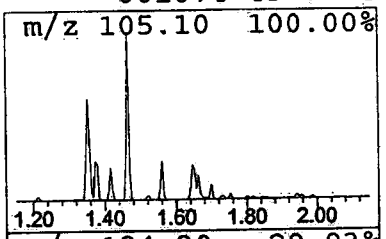
****

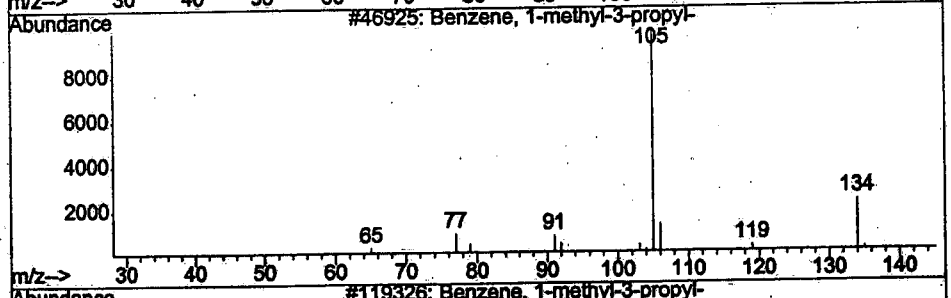
Peak Number 6 Substituted benzene Concentration Rank 3

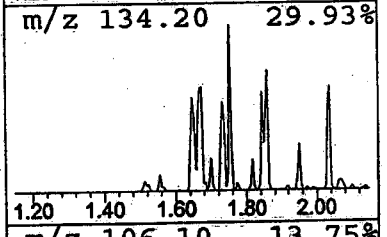
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.65	27.55 UG	146719	1,4-Dichlorobenzene-d4	1.52

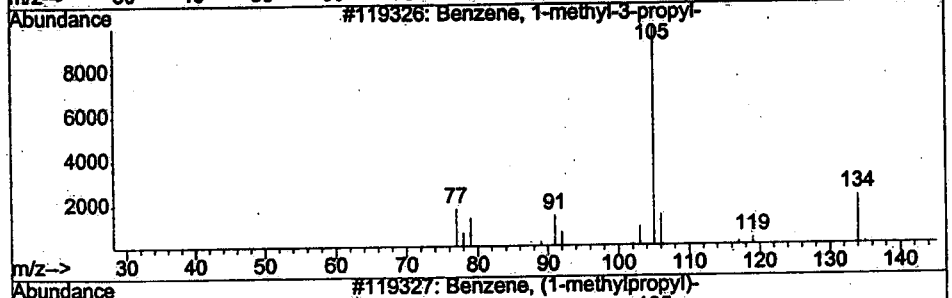
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	81
2	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	81
3	Benzene, (1-methylpropyl)-	134	C10H14	000135-98-8	76
4	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	74

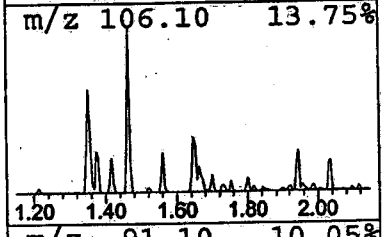


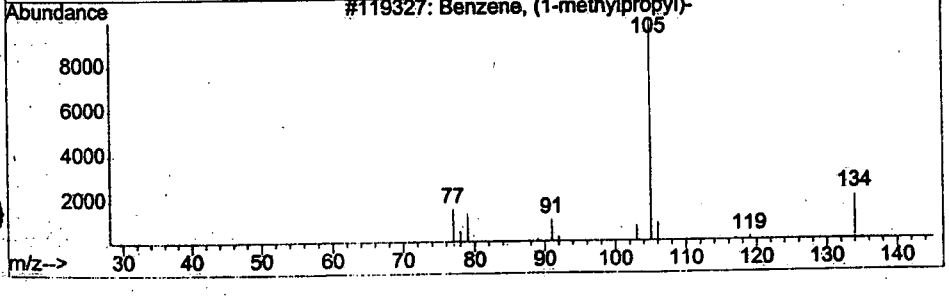


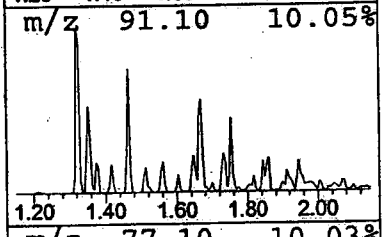


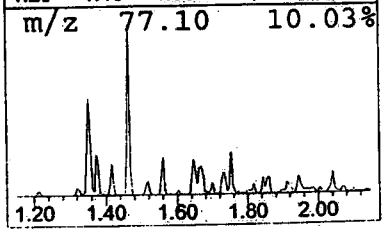












1573

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D Vial: 24
Acq On : 2 Apr 2001 13:34 Operator: JC
Sample : S-25,1922-009,S,5.81g,18.3,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
S Integration Params: LSCINT.P

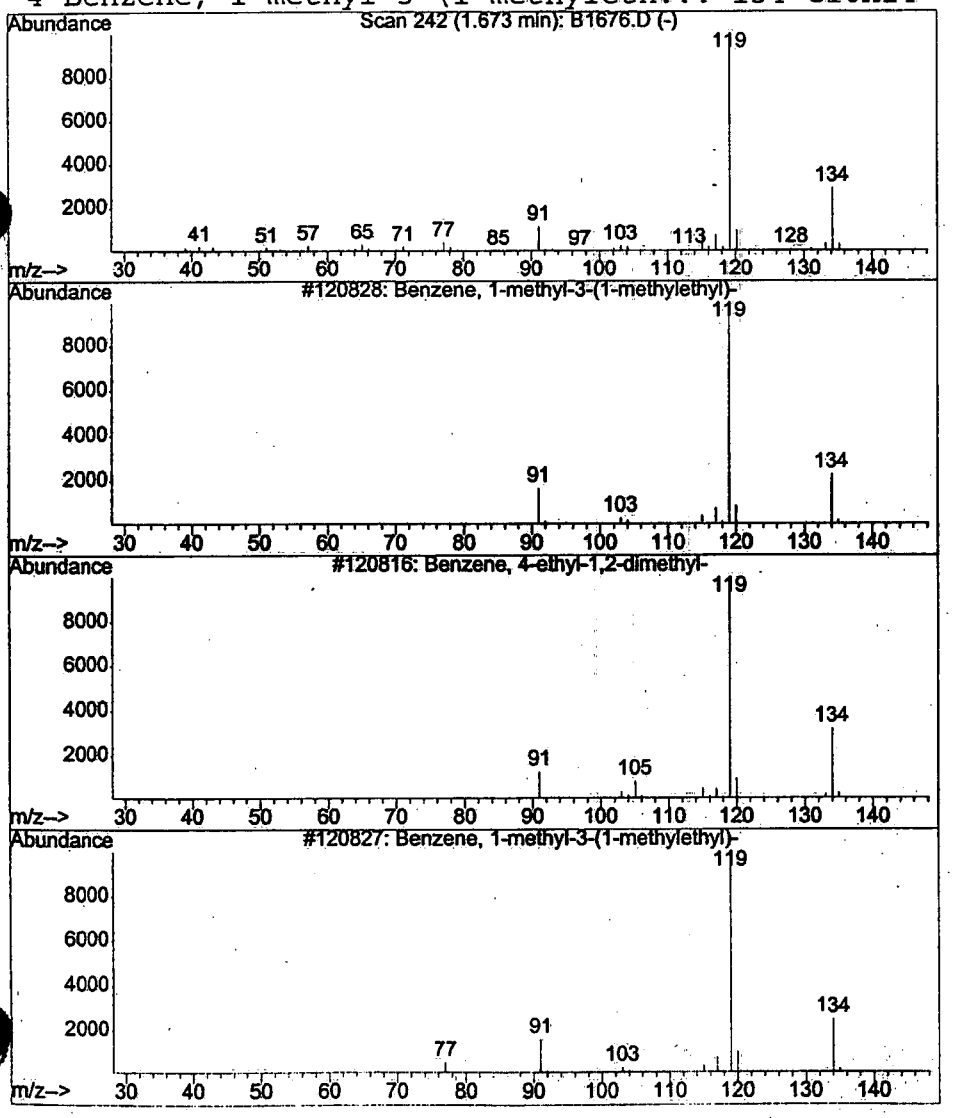
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

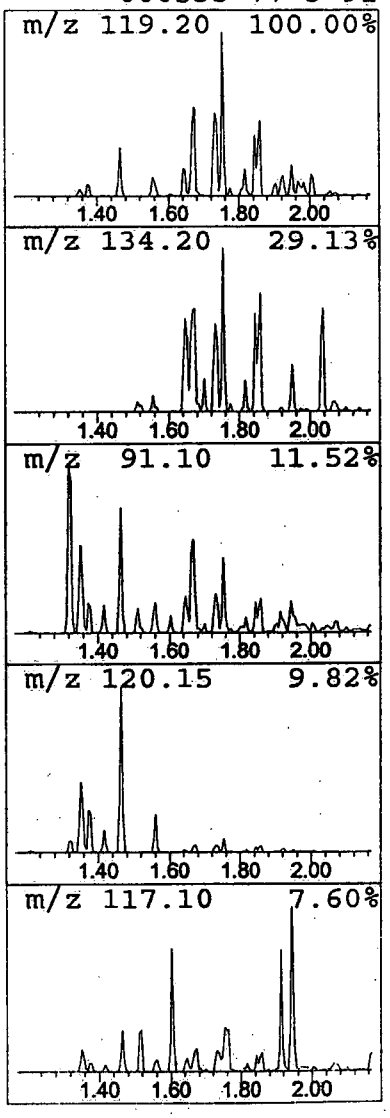
****

Peak Number 7 Substituted benzene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.67	33.26 UG	177181	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	94
2	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	93
3	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91
4	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91





1574

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D
Acq On : 2 Apr 2001 13:34
Sample : S-25,1922-009,S,5.81g,18.3,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00

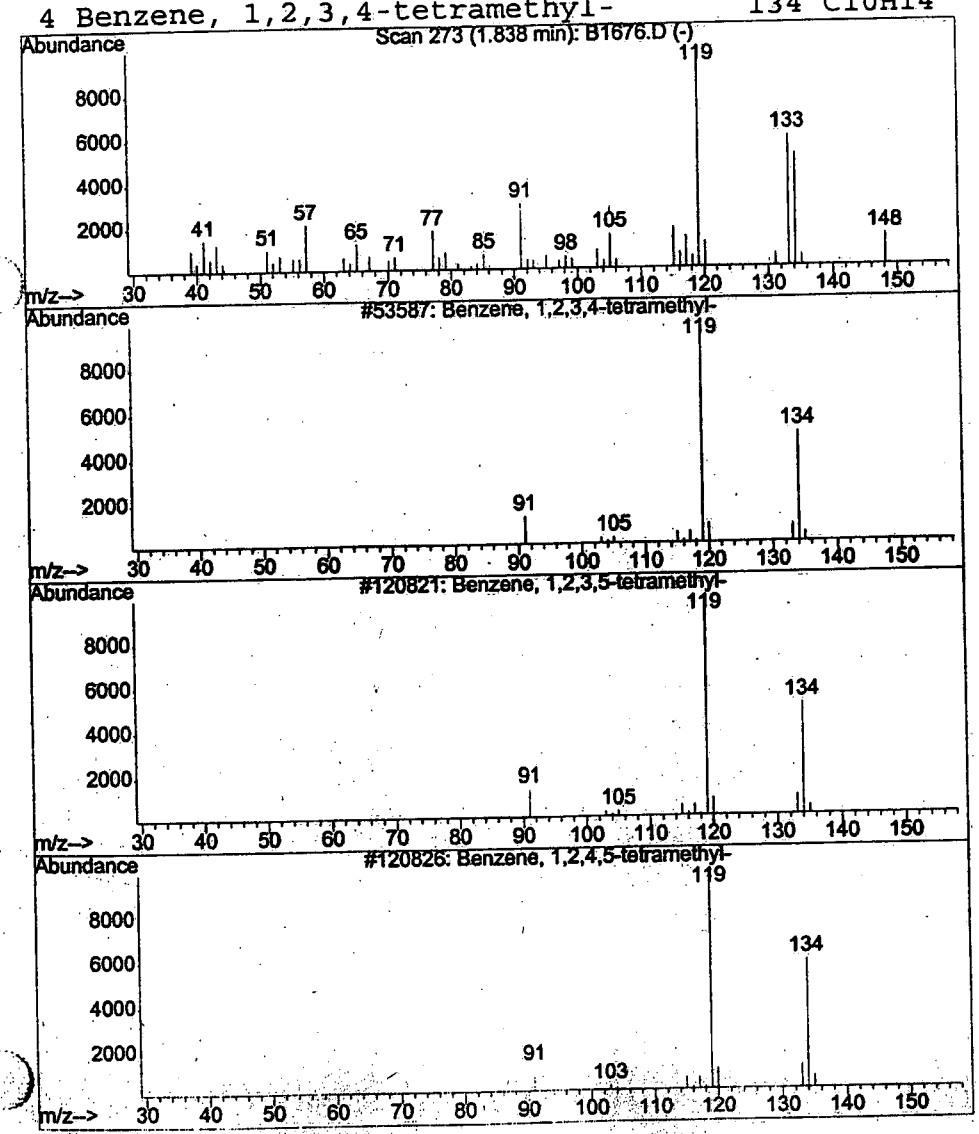
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

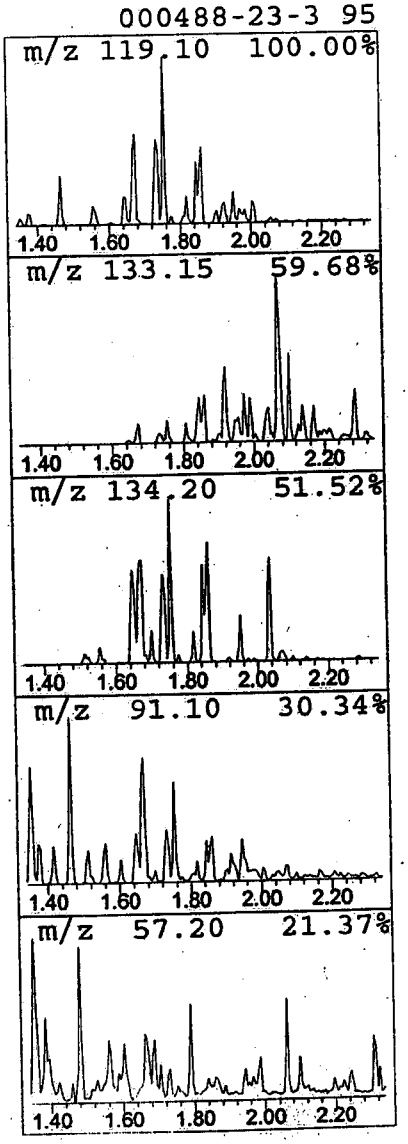
****

Peak Number 8 Substituted benzene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.84	6.50 UG	66300	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
2	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
3	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95





000536
1575

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D
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Sample : S-25,1922-009,S,5.81g,18.3,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
ALS Integration Params: LSCINT.P

Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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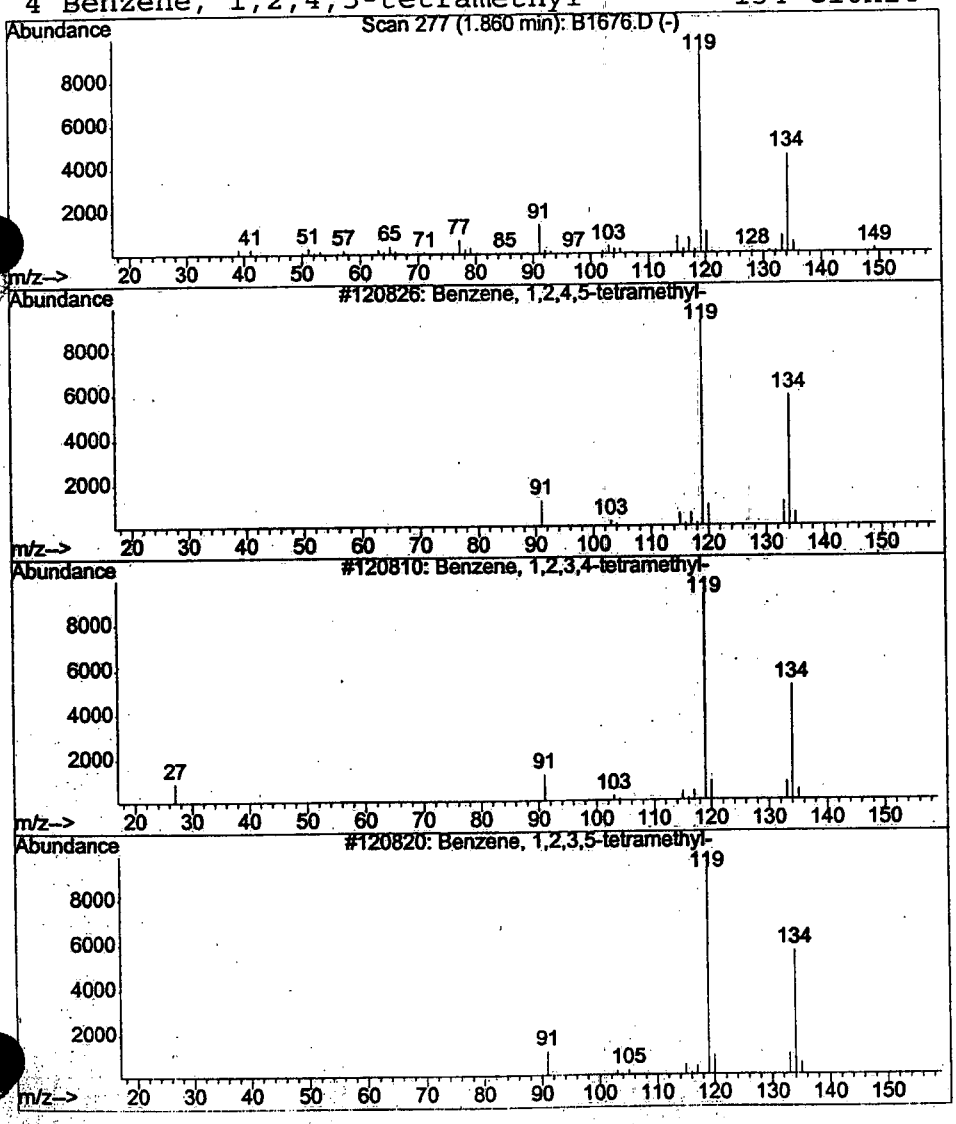
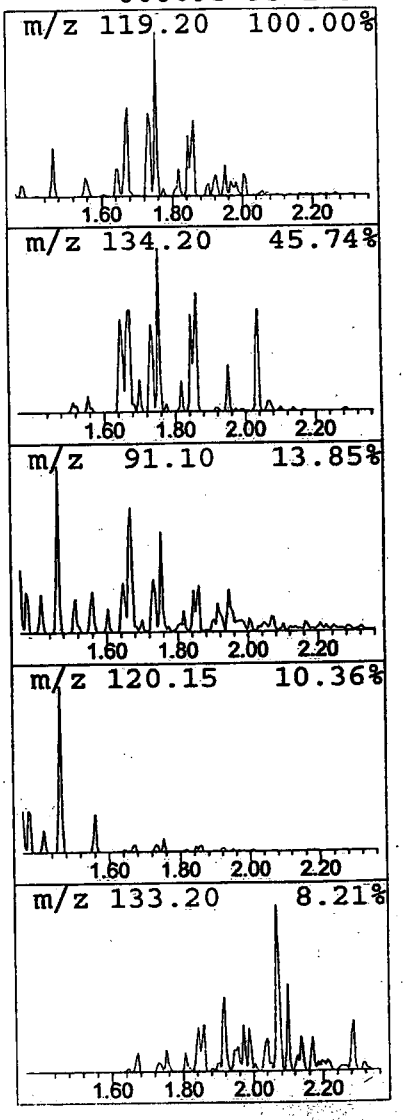
Peak Number 9 Substituted benzene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.86	8.40 UG	85702	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
2	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
4	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	94





1576

006537

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D
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Sample : S-25,1922-009,S,5.81g,18.3,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00

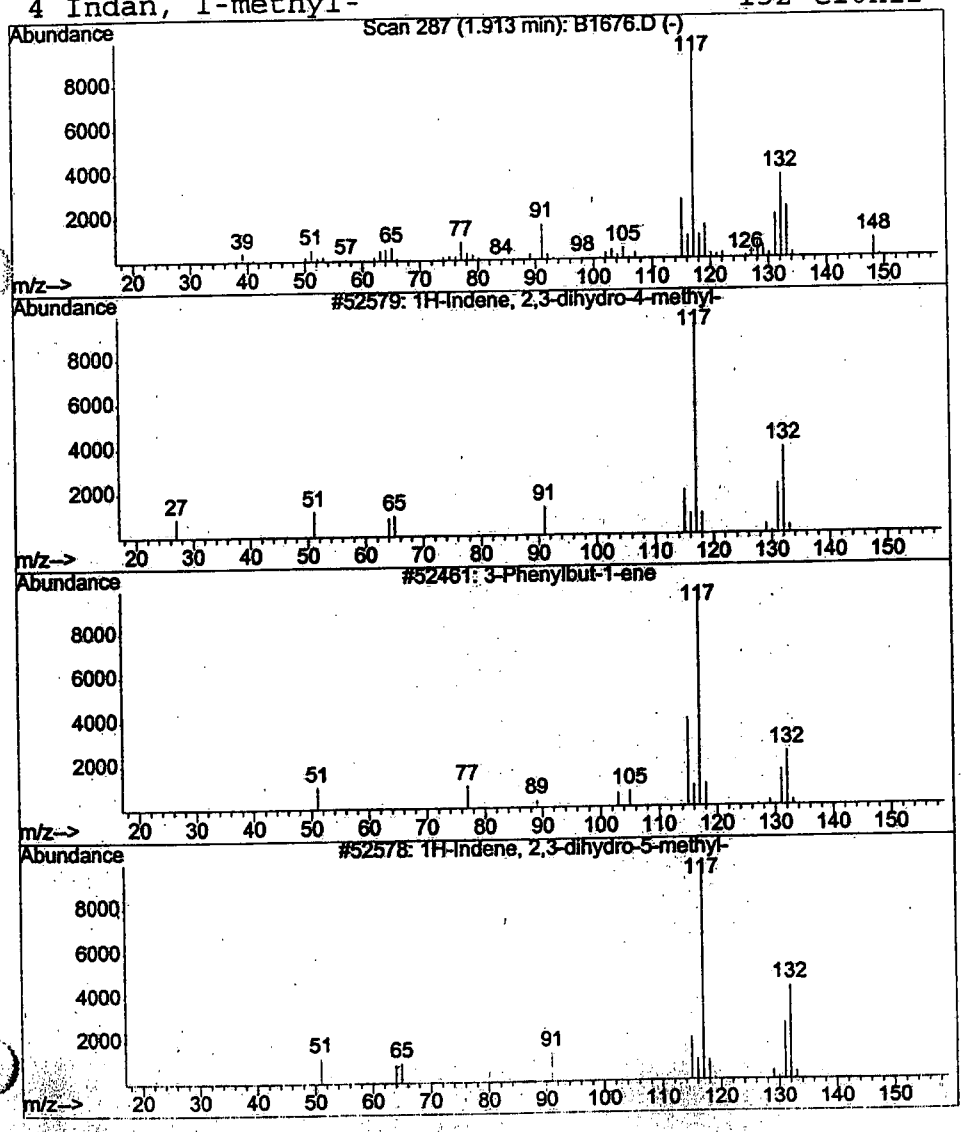
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

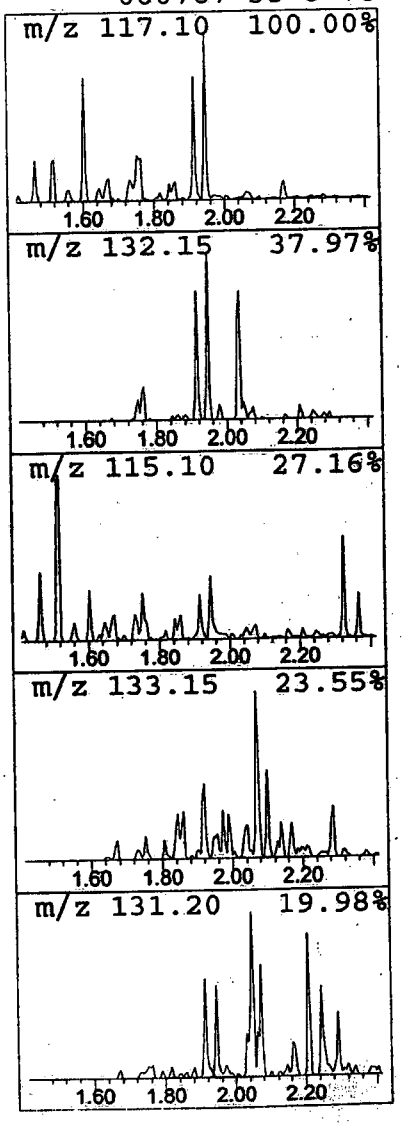
****

Peak Number 10 1H-Indene, 2,3-dihydro-4-me... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.91	7.11 UG	72548	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	87
2	3-Phenylbut-1-ene	132	C10H12	000934-10-1	81
3	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	81
4	Indan, 1-methyl-	132	C10H12	000767-58-8	76





1577

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1676.D
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Sample : S-25,1922-009,S,5.81g,18.3,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
ALS Integration Params: LSCINT.P

Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

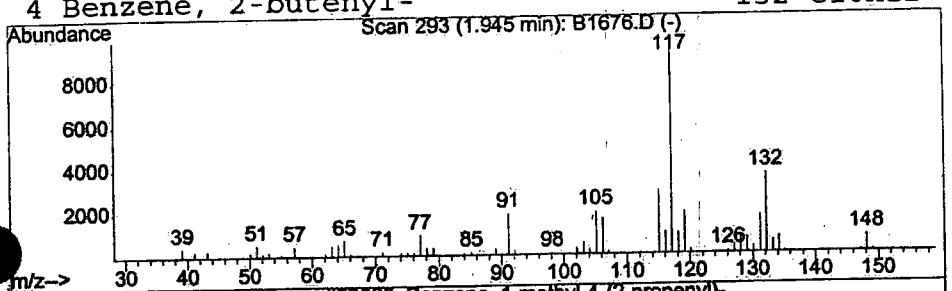
****

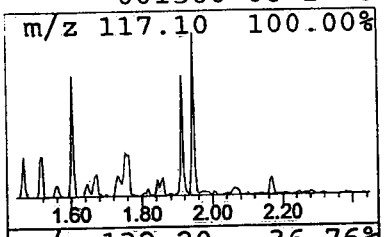
Peak Number 11 Benzene, 1-methyl-4-(2-prop... Concentration Rank 4

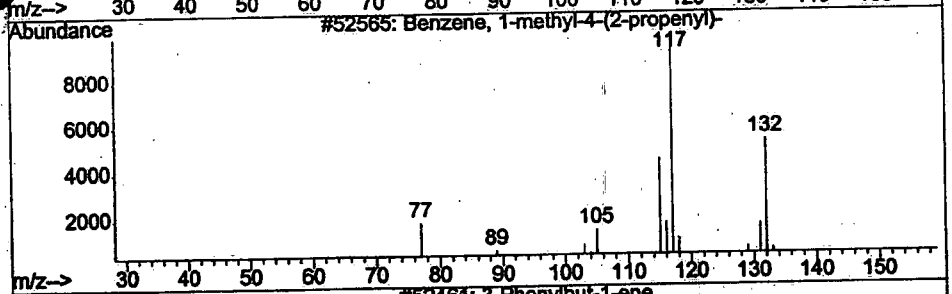
Substituted Benzene

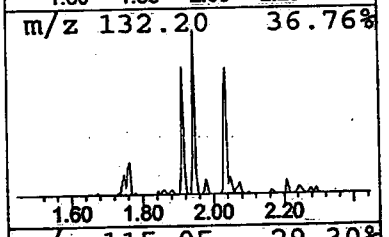
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.95	11.61 UG	118376	Naphthalene-d8	2.04

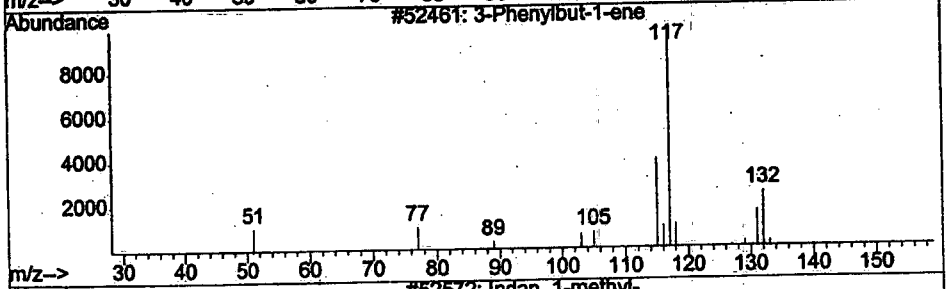
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(2-propenyl)-	132	C10H12	003333-13-9	90
2	3-Phenylbut-1-ene	132	C10H12	000934-10-1	76
3	Indan, 1-methyl-	132	C10H12	000767-58-8	70
4	Benzene, 2-butenyl-	132	C10H12	001560-06-1	70

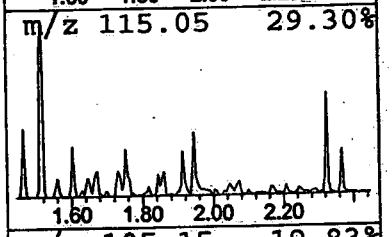


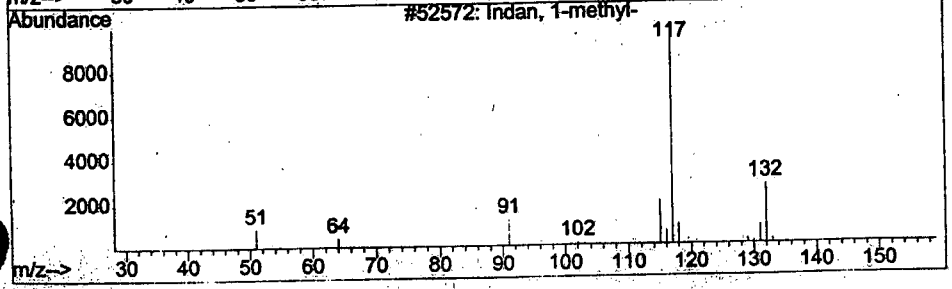


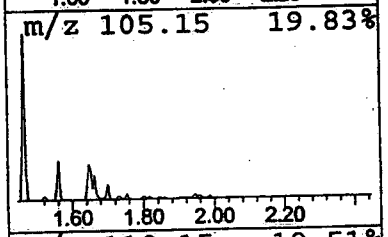


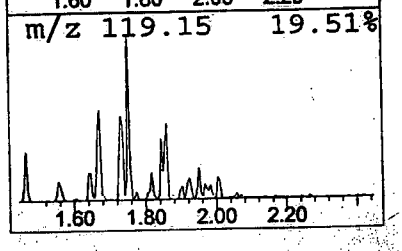












Library Search Compound Report

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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Vial: 24
Operator: JC
Inst : MSD_B
Multiplr: 1.00
S Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

****

Peak Number 1 Substituted benzene — Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.08	5.46 UG	29061	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	p-Xylene	106	C8H10	000106-42-3	97
2	Benzene, 1,3-dimethyl-	106	C8H10	000108-38-3	97
3	Benzene, 1,3-dimethyl-	106	C8H10	000108-38-3	97
4	Benzene, 1,3-dimethyl-	106	C8H10	000108-38-3	95
5	p-Xylene	106	C8H10	000106-42-3	95

****

Peak Number 2 Unknown alkane — Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.12	6.90 UG	36764	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane	128	C9H20	000111-84-2	95
2	Nonane	128	C9H20	000111-84-2	91
3	Nonane	128	C9H20	000111-84-2	90
4	Octane	114	C8H18	000111-65-9	72
5	Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	59

****

Peak Number 3 Substituted benzene — Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.33	11.15 UG	59363	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, propyl-	120	C9H12	000103-65-1	90
2	Benzene, propyl-	120	C9H12	000103-65-1	87
3	Benzene, propyl-	120	C9H12	000103-65-1	83
4	Benzene, propyl-	120	C9H12	000103-65-1	76
5	N-Benzyl-2-phenethylamine	211	C15H17N	003647-71-0	72

****

Peak Number 4 Substituted benzene — Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.

1579

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.46	72.98 UG	388723	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	97
2	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	95
3	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	95
4	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94

****

Peak Number 5 Unknown alkane — Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.60	9.97 UG	53078	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	76
2	Tetracyclo[3.3.1.0(2,8).0(4,6)]-...	118	C9H10	1000191-13-7	72
3	Benzene, 2-propenyl-	118	C9H10	000300-57-2	64
4	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	64
5	Indane	118	C9H10	000496-11-7	60

****

Peak Number 6 Substituted benzene — Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.65	27.55 UG	146719	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	81
2	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	81
3	Benzene, (1-methylpropyl)-	134	C10H14	000135-98-8	76
4	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	74
5	Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	74

****

Peak Number 7 Substituted benzene — Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.67	33.26 UG	177181	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	94
2	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	93
3	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91
4	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91
5	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	91

****

Peak Number 8 Substituted benzene — Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.84	6.50 UG	66300	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
2	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
3	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
5	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95

****

Peak Number 9 Substituted benzene — Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.86	8.40 UG	85702	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
2	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
4	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	94
5	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	94

****

Peak Number 10 Unknown alkane — Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.91	7.11 UG	72548	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	87
2	3-Phenylbut-1-ene	132	C10H12	000934-10-1	81
3	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	81
4	Indan, 1-methyl-	132	C10H12	000767-58-8	76
5	Indan, 1-methyl-	132	C10H12	000767-58-8	76

****

Peak Number 11 Substituted benzene — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.95	11.61 UG	118376	Naphthalene-d8	2.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(2-propenyl)-	132	C10H12	003333-13-9	90
2	3-Phenylbut-1-ene	132	C10H12	000934-10-1	76
3	Indan, 1-methyl-	132	C10H12	000767-58-8	70
4	Benzene, 2-butenyl-	132	C10H12	001560-06-1	70
5	Indan, 1-methyl-	132	C10H12	000767-58-8	70

B1676.D BS1201.M Tue Apr 03 08:51:03 2001 MSD_B

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1677.D Vial: 25
Acq On : 2 Apr 2001 13:48 Operator: JC
Sample : S-27,1922-011,S,5.14g,17.0,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: Apr 02 14:06:50 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	33186	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	129524	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	77650	40.00	UG	0.00
60) Phenanthrene-d10	3.34	188	143139	40.00	UG	-0.01
75) Chrysene-d12	4.49	240	112924	40.00	UG	-0.02
84) Perylene-d12	5.29	264	131066	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	62630	65.60	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 65.60%			
6) Phenol-d5	1.39	99	90630	77.55	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 77.55%			
23) Nitrobenzene-d5	1.74	82	33386	35.52	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 71.04%			
43) 2-Fluorobiphenyl	2.48	172	83240	39.01	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 78.02%			
64) 2,4,6-Tribromophenol	3.07	330	46112	96.74	UG	-0.01
Spiked Amount 100.000	Range 54 - 135		Recovery = 96.74%			
77) Terphenyl-d14	4.03	244	135846	50.45	UG	0.00
Spiked Amount 50.000	Range 58 - 147		Recovery = 100.90%			
Target Compounds						Qvalue
83) bis(2-Ethylhexyl)phthalate	4.57	149	2462	1.28	UG	96

(#) = qualifier out of range (m) = manual integration
B1677.D BS1201.M Tue Apr 03 07:54:05 2001 MSD_B

1582

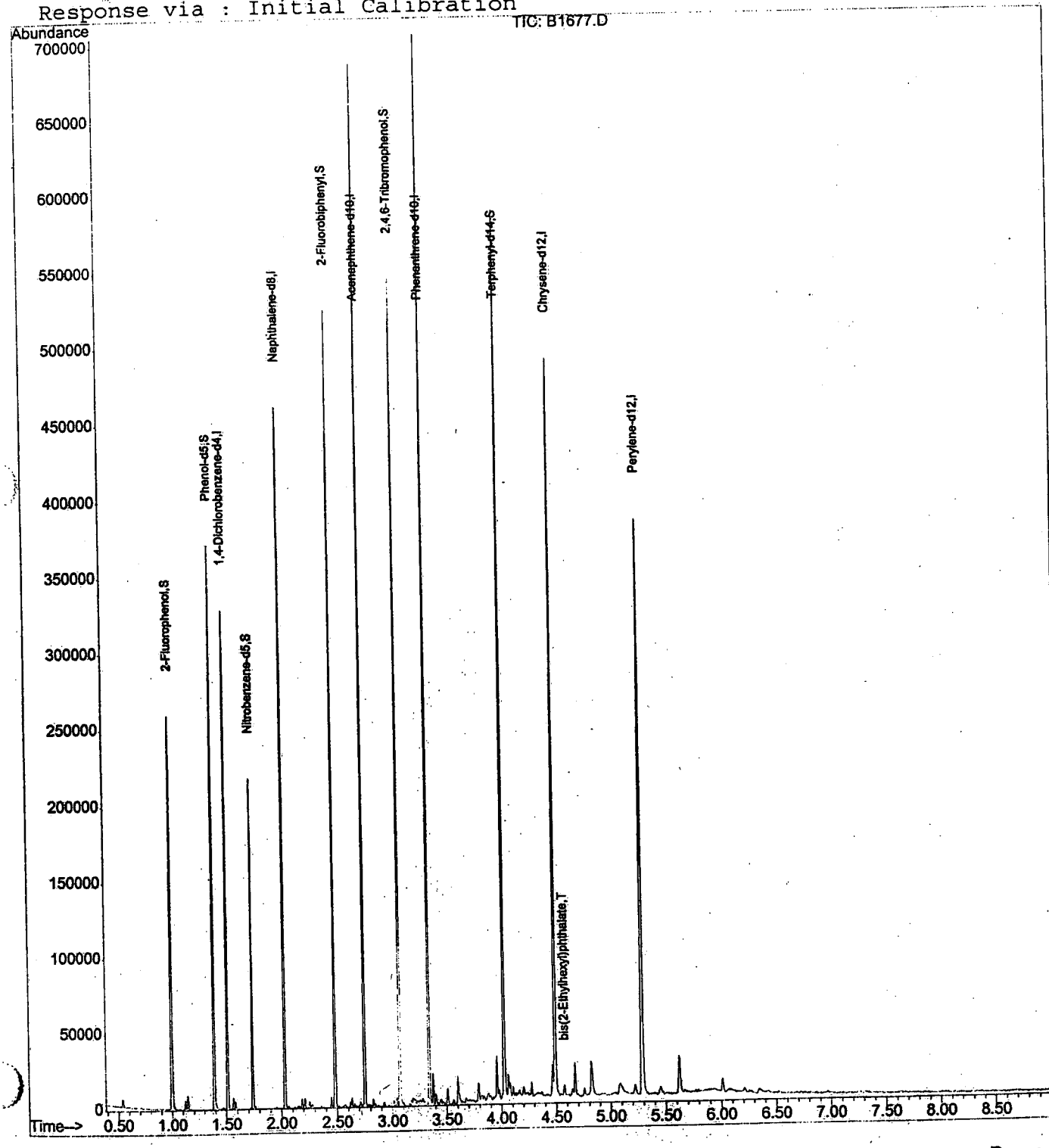
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1677.D
Acq On : 2 Apr 2001 13:48
Sample : S-27,1922-011,S,5.14g,17.0,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: rteint.p
Quant Time: Apr 3 6:55 2001

Vial: 25
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



1583

000544

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1677.D
Acq On : 2 Apr 2001 13:48
Sample : S-27,1922-011,S,5.14g,17.0,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Vial: 25
Operator: JC
Inst : MSD_B
Multiplr: 1.00

IS Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

No Library Search Compounds Detected

****
B1677.D BS1201.M Tue Apr 03 08:52:28 2001 MSD_B

000545

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D Vial: 26
Acq On : 2 Apr 2001 14:08 Operator: JC
Sample : S-28,1922-012,S,0.97g,22.7,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: Apr 02 14:17:09 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	37532	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	145757	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	83122	40.00	UG	0.00
60) Phenanthrene-d10	3.35	188	137906	40.00	UG	0.00
75) Chrysene-d12	4.51	240	113756	40.00	UG	0.00
84) Perylene-d12	5.31	264	139246	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.99	112	64403	59.65	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 59.65%			
6) Phenol-d5	1.39	99	86174	65.20	UG	-0.02
Spiked Amount 100.000	Range 40 - 101		Recovery = 65.20%			
23) Nitrobenzene-d5	1.74	82	36097	34.13	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 68.26%			
43) 2-Fluorobiphenyl	2.48	172	91420	40.02	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 80.04%			
64) 2,4,6-Tribromophenol	3.08	330	44401	96.69	UG	0.00
Spiked Amount 100.000	Range 54 - 135		Recovery = 96.69%			
77) Terphenyl-d14	4.04	244	127544	47.02	UG	0.01
Spiked Amount 50.000	Range 58 - 147		Recovery = 94.04%			
Target Compounds						Qvalue
49) Acenaphthylene	2.63	152	14208	4.77	UG	# 7
57) Fluorene	2.97	166	2533	1.19	UG	# 11
69) Phenanthrene	3.36	178	18612	6.56	UG	# 64
70) Anthracene	3.36	178	7093m	2.49	UG	
71) Carbazole	3.46	167	6012	2.30	UG	# 61
73) Fluoranthene	3.86	202	2694	0.89	UG	98
76) Pyrene	3.95	202	3253	1.09	UG	97
81) Benzo[a]anthracene	4.53	228	3664	1.34	UG	# 56
83) bis(2-Ethylhexyl)phthalate	4.59	149	40824	21.08	UG	# 94

(#) = qualifier out of range (m) = manual integration

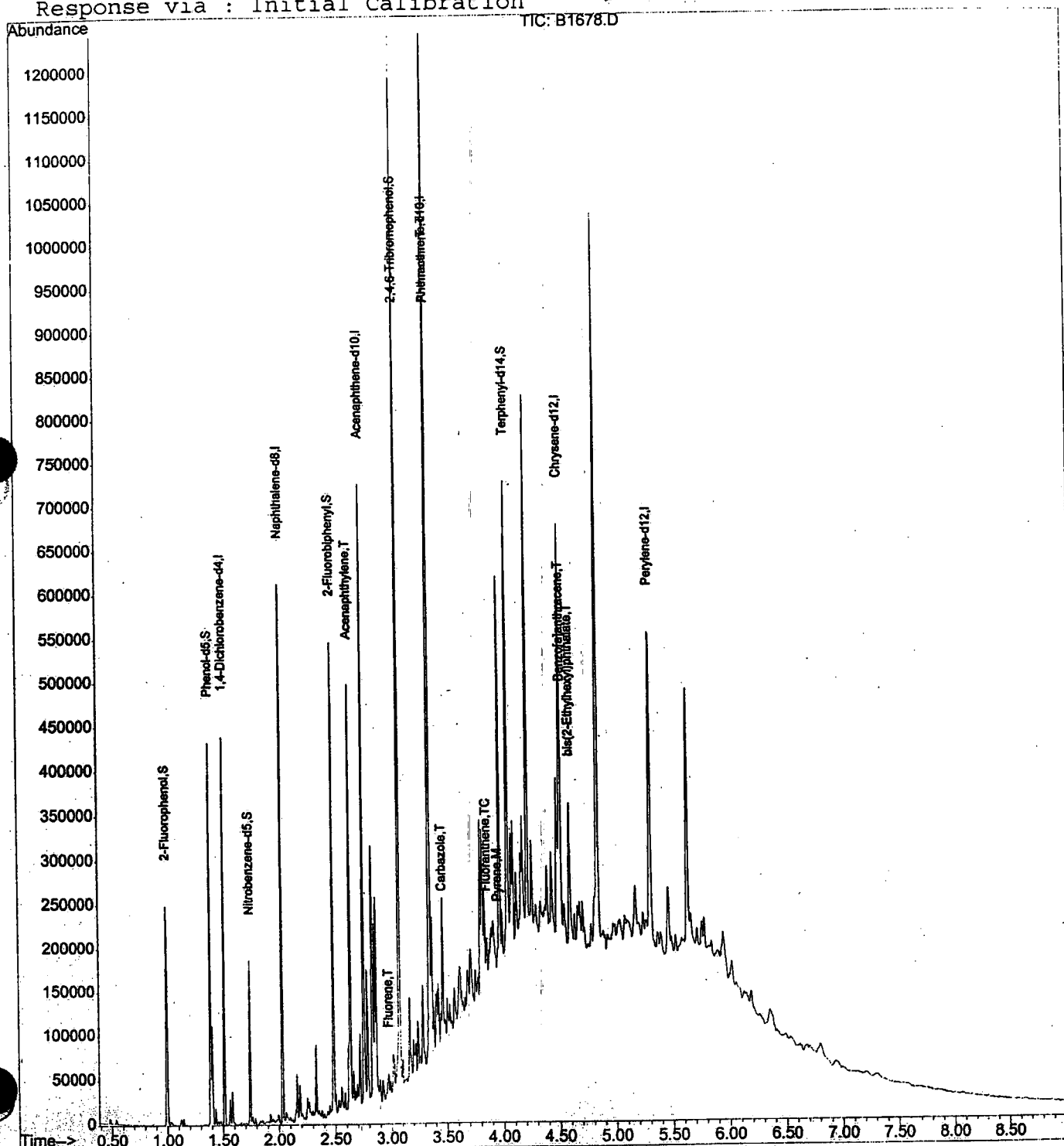
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Acq On : 2 Apr 2001 14:08
Sample : S-28,1922-012,S,0.97g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: rteint.p
Quant Time: Apr 3 6:58 2001

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



1586

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Acq On : 2 Apr 2001 14:08
Sample : S-28,1922-012,S,0.97g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.994	112	115	119	rBV	248520	188443	16.35%	1.910%
2	1.389	186	189	191	rBV	431235	220851	19.16%	2.239%
3	1.405	191	192	195	rVB	110321	44085	3.82%	0.447%
4	1.512	209	212	214	rBV	437737	209552	18.18%	2.124%
5	1.560	218	221	223	rBV	28930	15846	1.37%	0.161%
6	1.582	223	225	228	rBV	35647	21485	1.86%	0.218%
7	1.742	252	255	257	rBV	184209	104139	9.03%	1.056%
8	2.030	306	309	312	rBV	610148	293724	25.48%	2.977%
9	2.159	332	333	335	rVB	49249	25166	2.18%	0.255%
10	2.185	335	338	340	rBV2	36556	25050	2.17%	0.254%
11	2.249	347	350	351	rBV2	24851	16476	1.43%	0.167%
12	2.330	362	365	367	rBV	76600	39484	3.43%	0.400%
13	2.485	391	394	396	rBV	529484	268184	23.27%	2.719%
14	2.634	420	422	425	rVB	468007	269571	23.39%	2.733%
15	2.720	435	438	440	rVB	79442	51996	4.51%	0.527%
16	2.752	441	444	448	rVV	701113	391151	33.93%	3.965%
17	2.784	448	450	454	rVB2	147702	98971	8.59%	1.003%
18	2.832	456	459	461	rVV	285631	209634	18.19%	2.125%
19	2.848	461	462	464	rVV	195945	121516	10.54%	1.232%
20	2.864	464	465	467	rVV	225213	85506	7.42%	0.867%
21	2.896	469	471	474	rVB2	25376	20442	1.77%	0.207%
22	2.923	474	476	480	rBV2	25009	22174	1.92%	0.225%
23	2.976	480	486	487	rBV3	29512	31669	2.75%	0.321%
24	3.013	490	493	496	rBV3	44173	45118	3.91%	0.457%
25	3.072	501	504	508	rVB2	1192244	773894	67.14%	7.845%
26	3.168	520	522	526	rBV	89786	64961	5.64%	0.658%
27	3.200	526	528	529	rBV	38681	21383	1.86%	0.217%
28	3.222	530	532	533	rVB2	31884	17760	1.54%	0.180%
29	3.238	533	535	537	rBV	57206	42001	3.64%	0.426%
30	3.286	541	544	546	rBV2	90582	74541	6.47%	0.756%
31	3.350	549	556	558	rBV	1573530	1152683	100.00%	11.685%

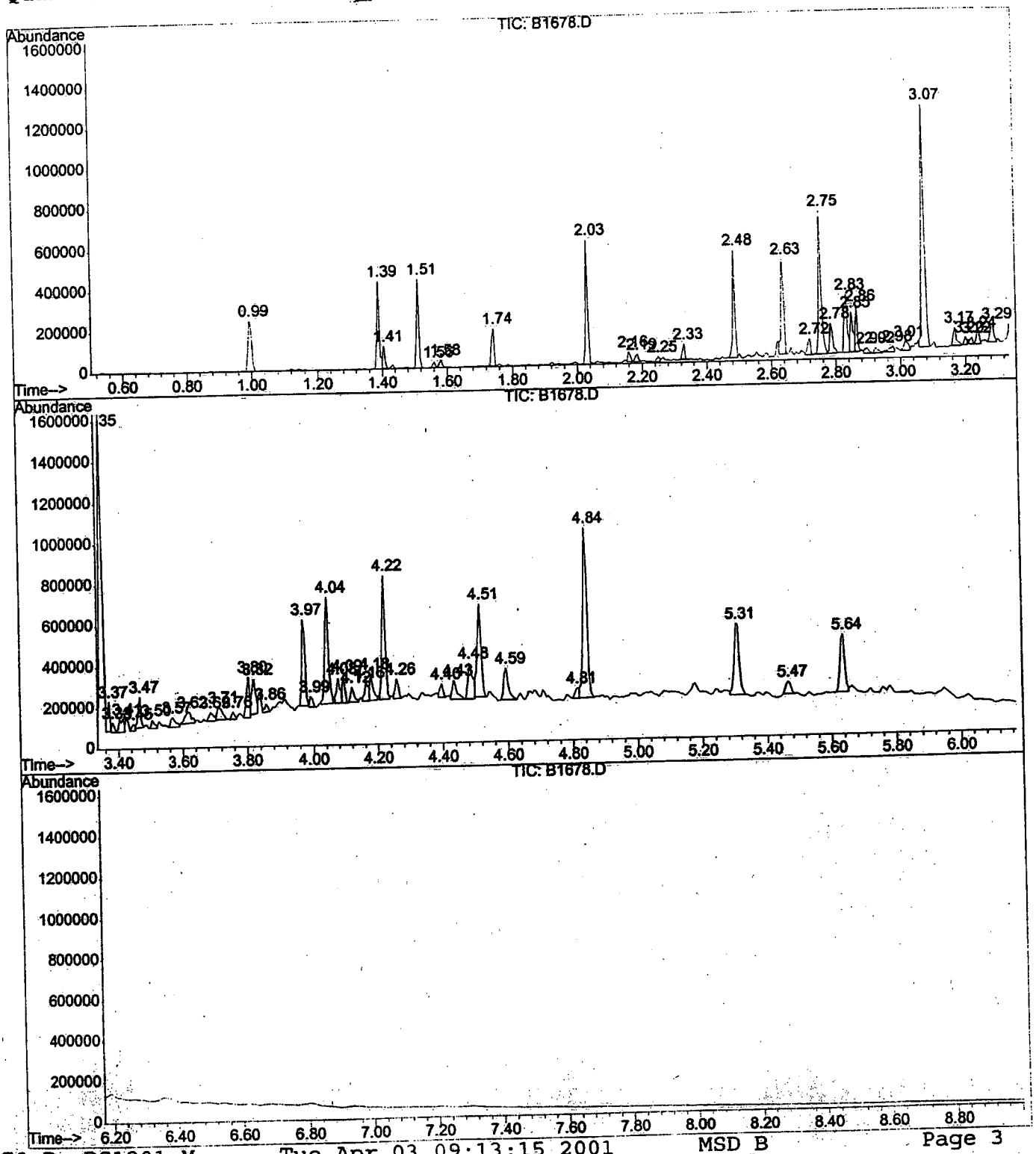
1587

32	3.371	558	560	561	rVV	145918	83232	7.22%	0.844%
33	3.382	561	562	564	rVB	46701	22421	1.95%	0.227%
34	3.414	564	568	569	rBV2	64771	72273	6.27%	0.733%
35	3.446	572	574	575	rBV2	33274	24576	2.13%	0.249%
36	3.467	575	578	580	rVV2	149626	98211	8.52%	0.996%
	3.505	583	585	588	rBV3	41184	32710	2.84%	0.332%
38	3.569	594	597	601	rBV3	46935	54781	4.75%	0.555%
39	3.617	602	606	610	rVV5	53704	82103	7.12%	0.832%
40	3.687	616	619	622	rBV4	41924	45013	3.91%	0.456%
41	3.713	622	624	630	rVB4	61074	71610	6.21%	0.726%
42	3.756	630	632	634	rBV2	36776	27262	2.37%	0.276%
43	3.804	638	641	642	rBV	198693	146633	12.72%	1.486%
44	3.820	642	644	646	rVV2	168776	138454	12.01%	1.403%
45	3.857	649	651	653	rVB3	38326	26410	2.29%	0.268%
46	3.970	670	672	675	rBV	421023	286734	24.88%	2.907%
47	3.991	675	676	679	rVB2	50940	30981	2.69%	0.314%
48	4.044	682	686	689	rVV	522774	410068	35.58%	4.157%
49	4.077	690	692	694	rVV3	119378	96727	8.39%	0.981%
50	4.093	694	695	697	rVB	133300	63362	5.50%	0.642%
51	4.119	698	700	704	rVV4	71781	58111	5.04%	0.589%
52	4.162	706	708	710	rVV2	89149	80894	7.02%	0.820%
53	4.178	710	711	715	rVV	128283	88400	7.67%	0.896%
54	4.221	716	719	722	rVV	604568	426776	37.02%	4.326%
55	4.258	724	726	729	rVB3	93736	68954	5.98%	0.699%
56	4.397	750	752	754	rVB	65968	43178	3.75%	0.438%
57	4.434	757	759	765	rVB	92231	86245	7.48%	0.874%
58	4.483	765	768	771	rBV	174048	186727	16.20%	1.893%
59	4.515	771	774	778	rVB	454724	367589	31.89%	3.726%
60	4.595	786	789	795	rBV	154591	151479	13.14%	1.536%
61	4.814	827	830	831	rBV	51098	48957	4.25%	0.496%
62	4.840	831	835	840	rVB	829591	744754	64.61%	7.549%
63	5.305	918	922	927	rVB	348069	384559	33.36%	3.898%
64	5.465	949	952	956	rVB	62012	67107	5.82%	0.680%
65	5.636	980	984	987	rBV	281317	280284	24.32%	2.841%

Sum of corrected areas: 9865031

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Operator : JC
Acquired : 2 Apr 2001 14:08 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-28,1922-012,S,0.97g,22.7,03/30/01
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,1
Vial Number: 26
Quant File :BS1201.RES (RTE Integrator)



000550

1589

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Acq On : 2 Apr 2001 14:08
Sample : S-28,1922-012,S,0.97g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
IS Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

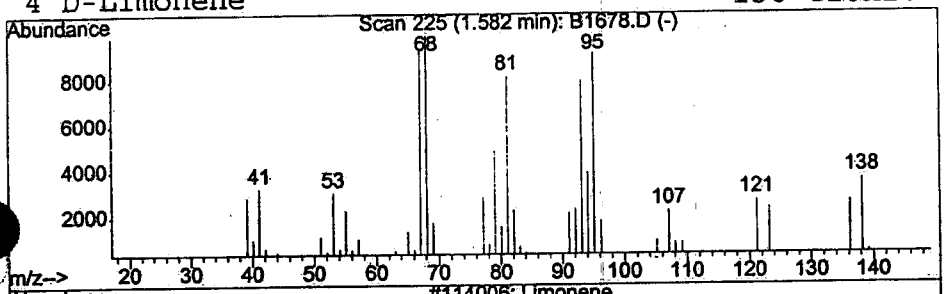
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

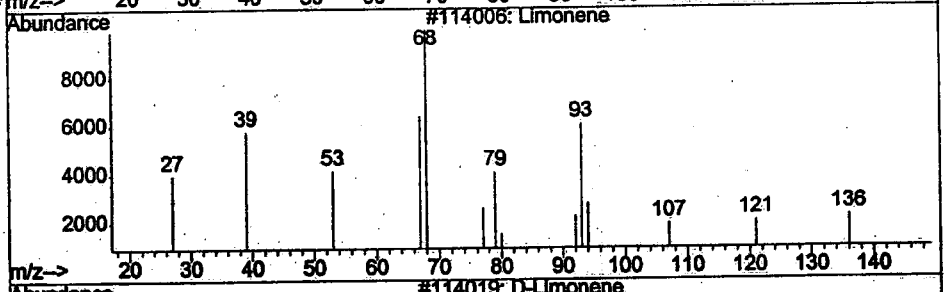
****

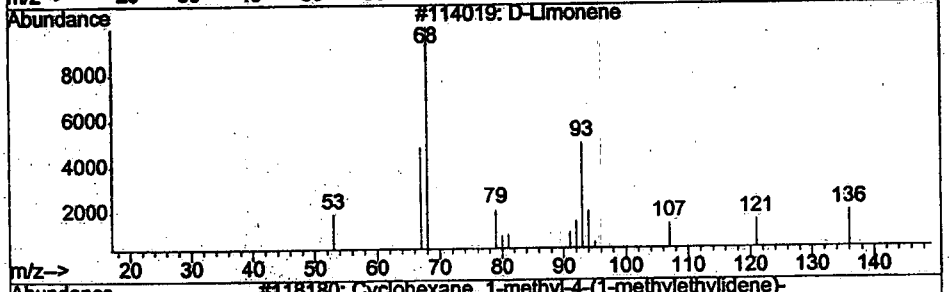
Peak Number 1 D-Limonene Concentration Rank 17

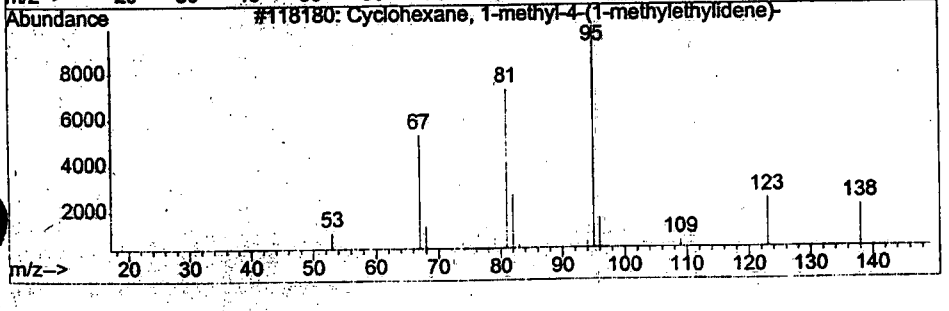
R.T.	EstConc	Area	Relative to ISTD	R.T.
1.58	4.10 UG	21485	1,4-Dichlorobenzene-d4	1.51

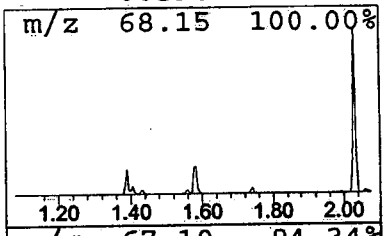
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Limonene	136	C10H16	000138-86-3	78
2	D-Limonene	136	C10H16	005989-27-5	64
3	Cyclohexane, 1-methyl-4-(1-methy...	138	C10H18	001124-27-2	60
4	D-Limonene	136	C10H16	005989-27-5	55

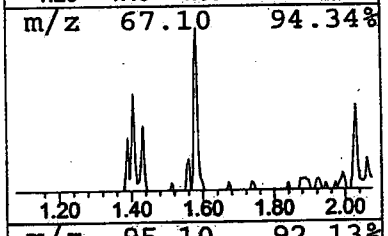


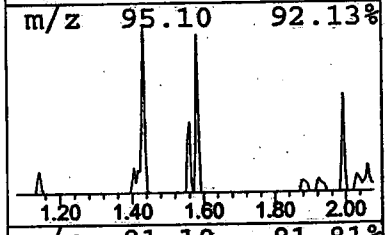


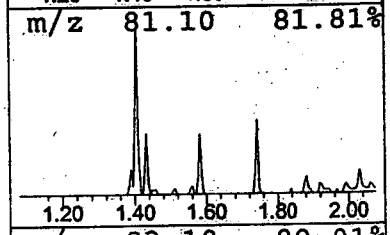


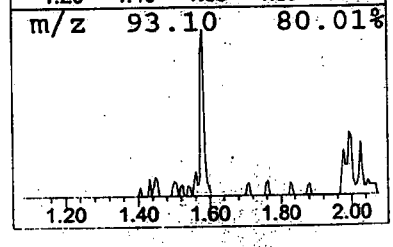












1590

000551

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
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Sample : S-28,1922-012,S,0.97g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
'S Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

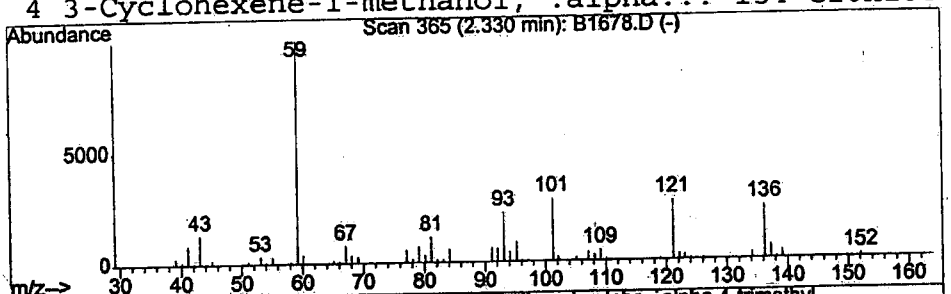
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

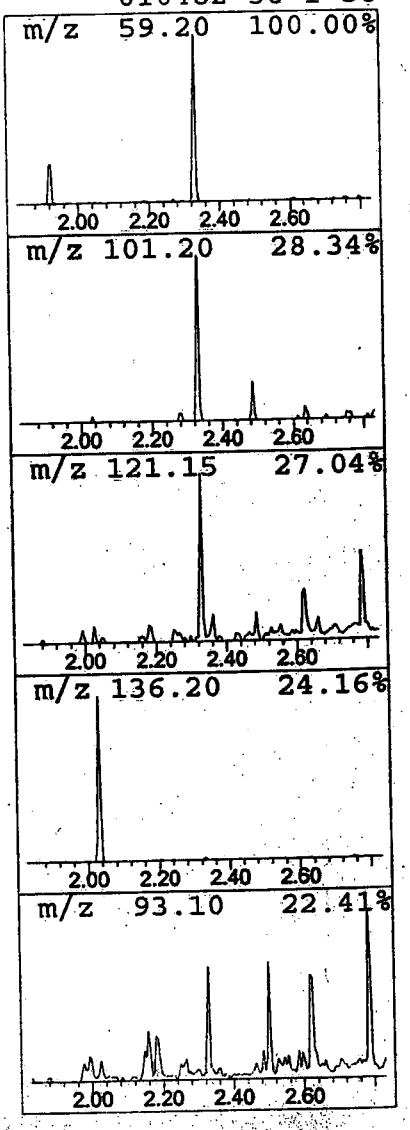
****

Peak Number 2 Unknown — Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.33	5.38 UG	39484	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Cyclohexene-1-methanol, .alpha...	154	C10H18O	000098-55-5	72
2	3-Cyclohexene-1-methanol, .alpha...	154	C10H18O	010482-56-1	72
3	3-Cyclohexene-1-methanol, .alpha...	154	C10H18O	000098-55-5	72
4	3-Cyclohexene-1-methanol, .alpha...	154	C10H18O	010482-56-1	56





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Library Search Compound Report

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S Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

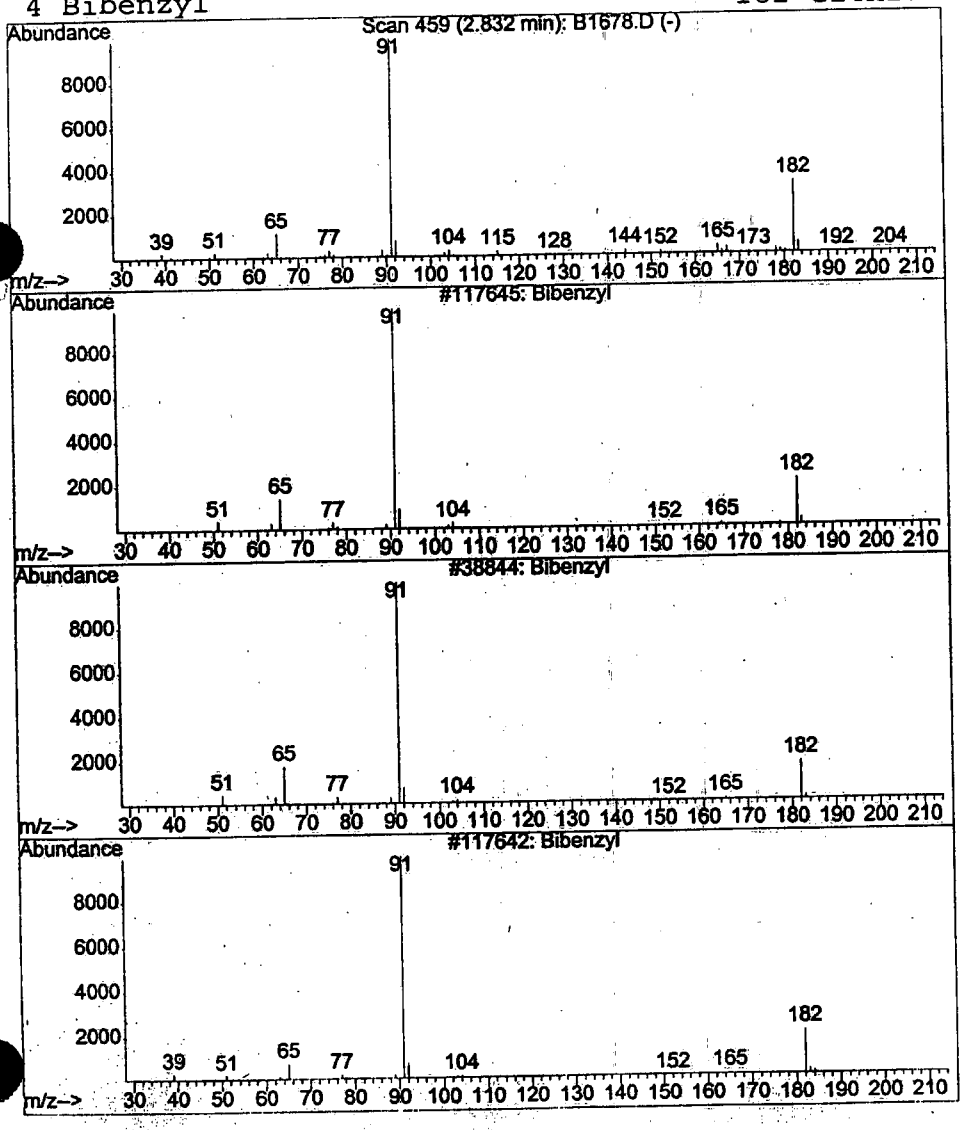
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

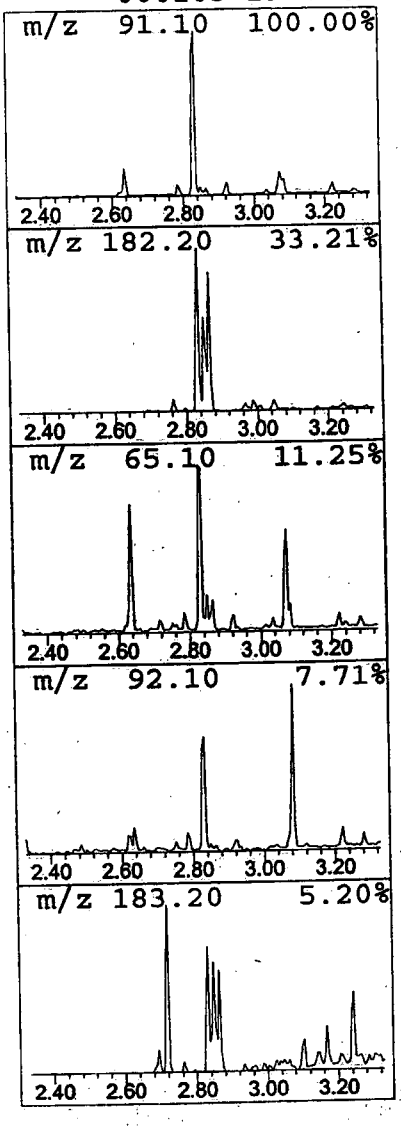
****

Peak Number 3 Bibenzyl — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.83	21.44 UG	209634	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bibenzyl	182	C14H14	000103-29-7	93
2	Bibenzyl	182	C14H14	000103-29-7	90
3	Bibenzyl	182	C14H14	000103-29-7	87
4	Bibenzyl	182	C14H14	000103-29-7	87





1597

Library Search Compound Report

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Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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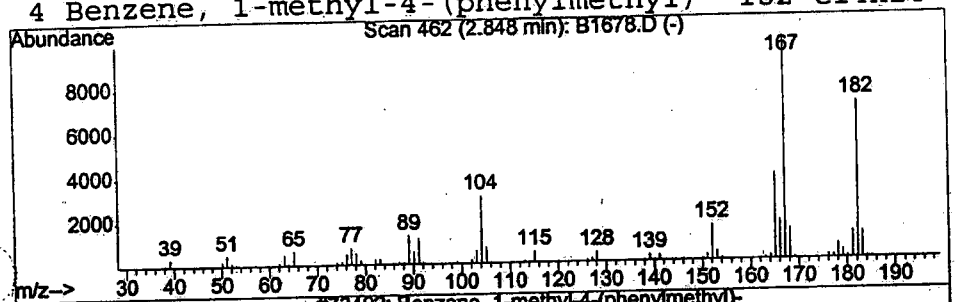
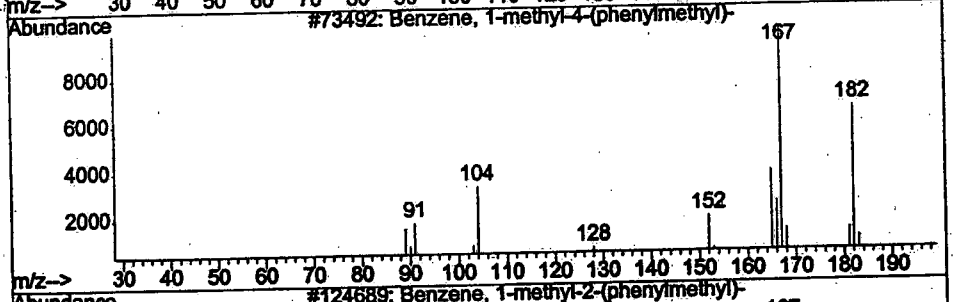
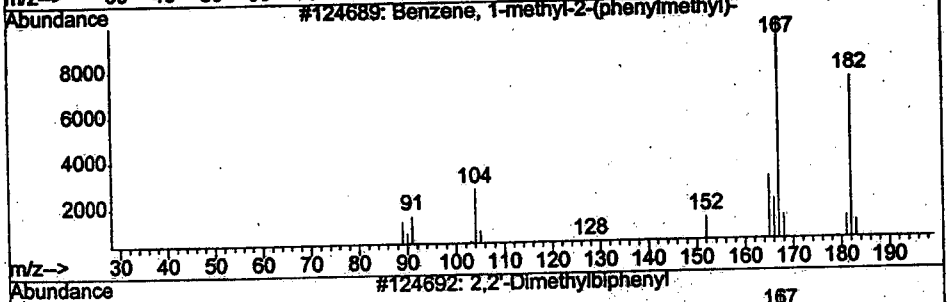
Peak Number 4 Substituted benzene Concentration Rank 5

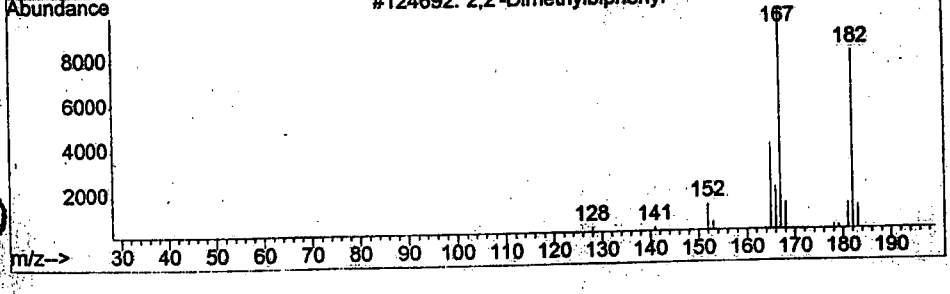
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.85	12.43 UG	121516	Acenaphthene-d10	2.75

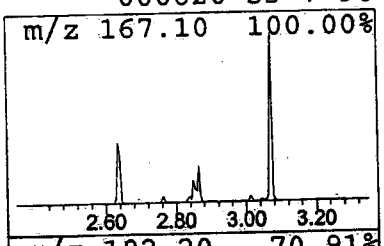
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(phenylmethyl)-	182	C14H14	000620-83-7	98
2	Benzene, 1-methyl-2-(phenylmethyl)-	182	C14H14	000713-36-0	97
3	2,2'-Dimethylbiphenyl	182	C14H14	000605-39-0	96
4	Benzene, 1-methyl-4-(phenylmethyl)-	182	C14H14	000620-83-7	96

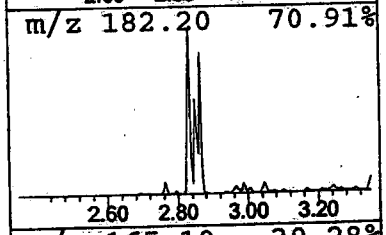


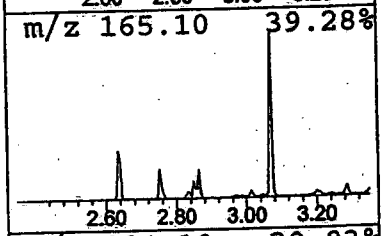


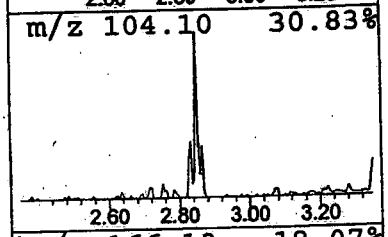


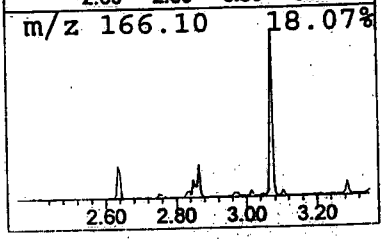












1593

Library Search Compound Report

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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

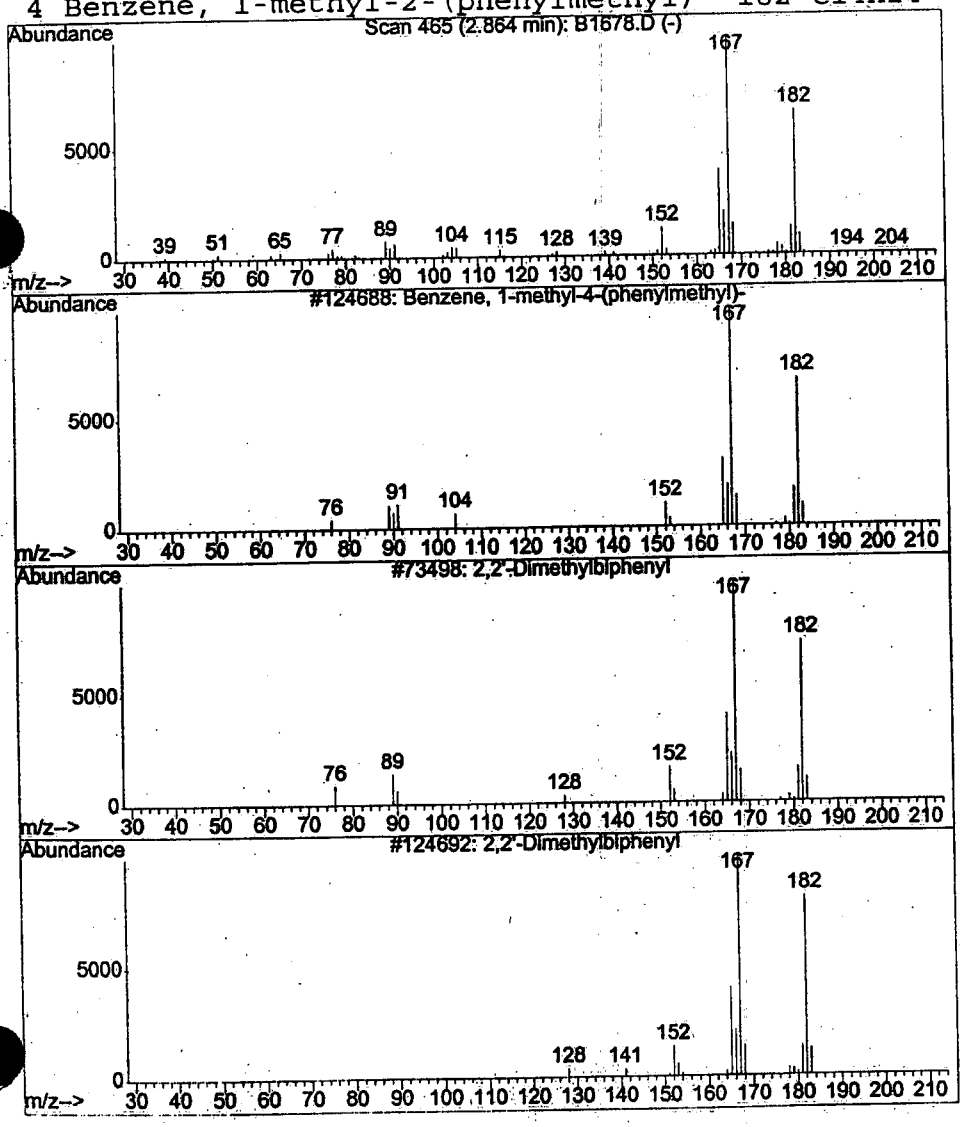
****

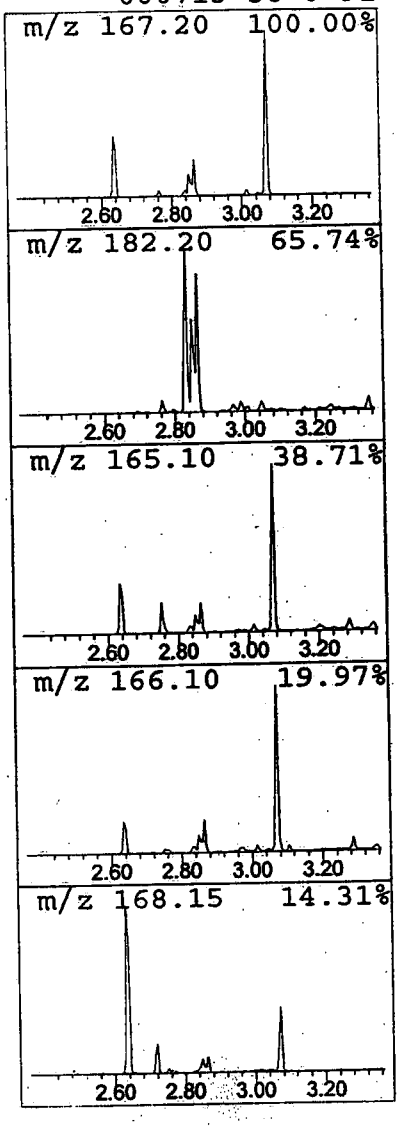
Peak Number 5 Benzene, 1-methyl-4-(phenyl... Concentration Rank 9

Substituted Biphenyl — Unknown Aromatic

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.86	8.74 UG	85506	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(phenylmethyl)-	182	C14H14	000620-83-7	95
2	2,2'-Dimethylbiphenyl	182	C14H14	000605-39-0	94
3	2,2'-Dimethylbiphenyl	182	C14H14	000605-39-0	94
4	Benzene, 1-methyl-2-(phenylmethyl)-	182	C14H14	000713-36-0	91





1594

Library Search Compound Report

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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

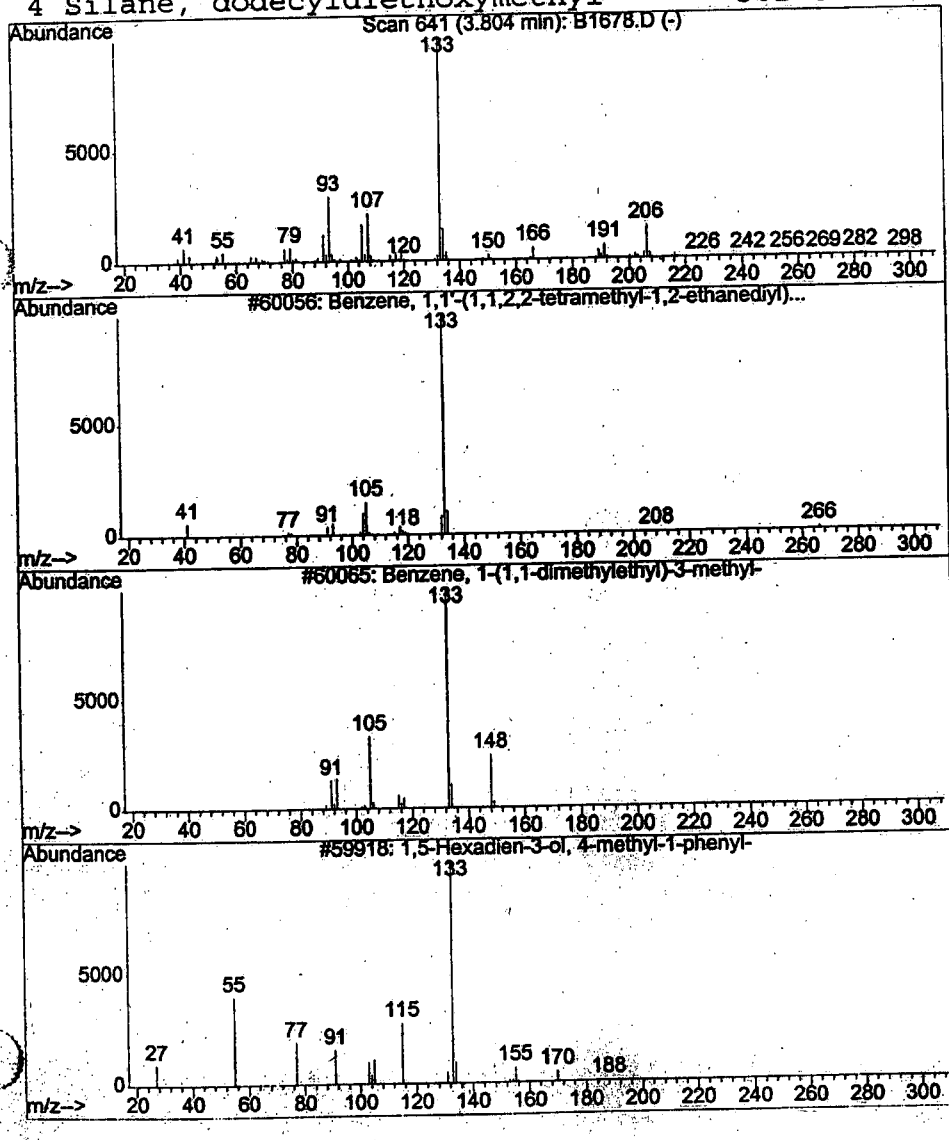
****

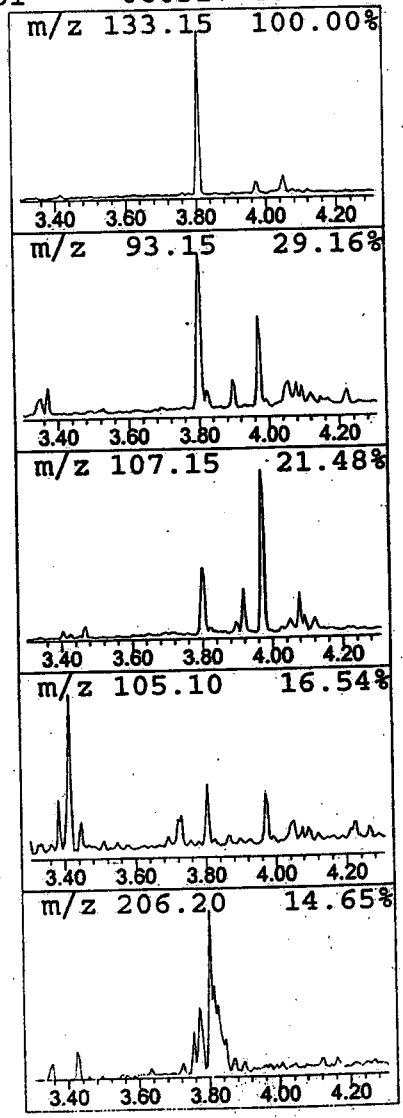
Peak Number 6 Benzene, 1,1'-(1,1,2,2-tetr... Concentration Rank 15

Substituted Benzene

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.80	5.09 UG	146633	Phenanthrene-d10	3.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,1'-(1,1,2,2-tetrameth...	266	C20H26	000734-17-8	47
2	Benzene, 1-(1,1-dimethylethyl)-3...	148	C11H16	001075-38-3	47
3	1,5-Hexadien-3-ol, 4-methyl-1-ph...	188	C13H16O	109062-28-4	43
4	Silane, dodecyldiethoxymethyl-	302	C17H38O2Si	060317-40-0	43





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1595

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
IS Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

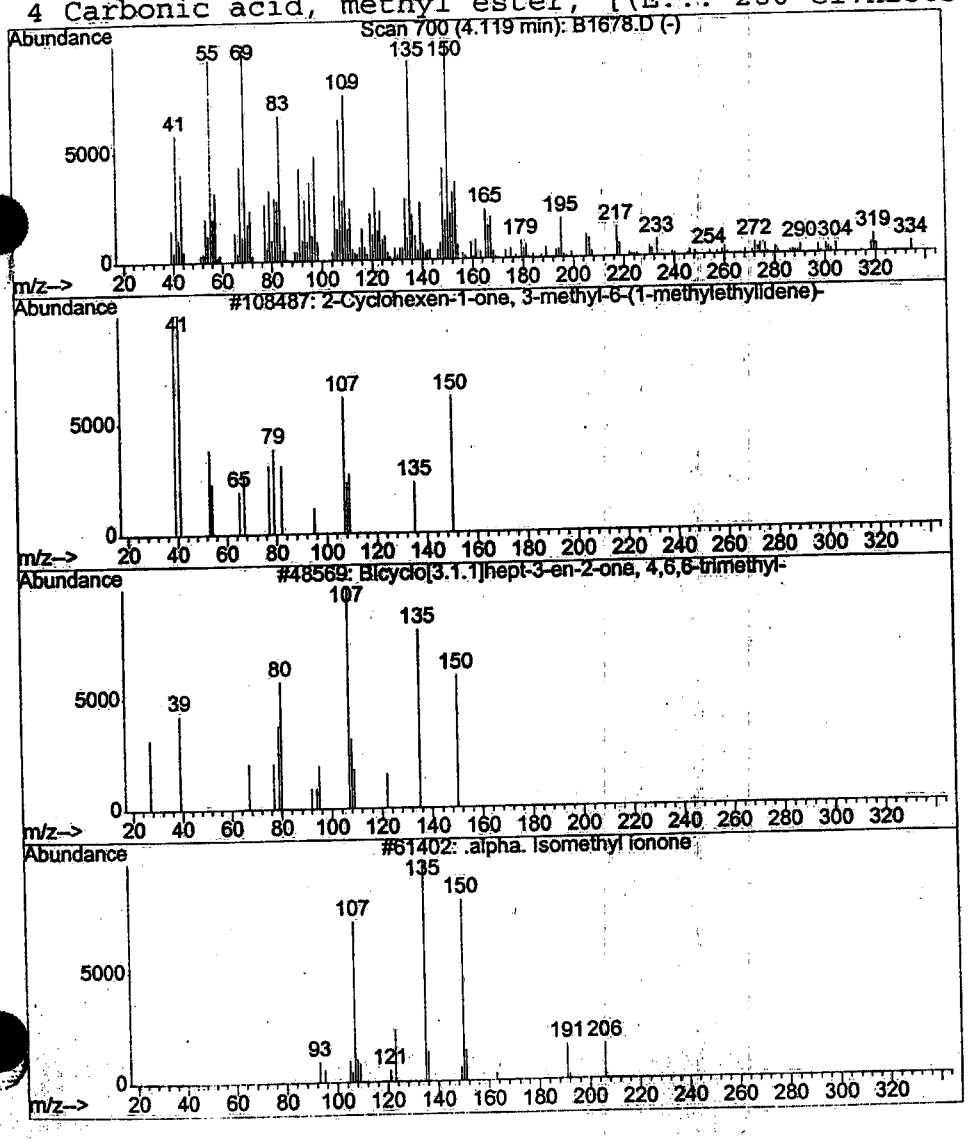
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

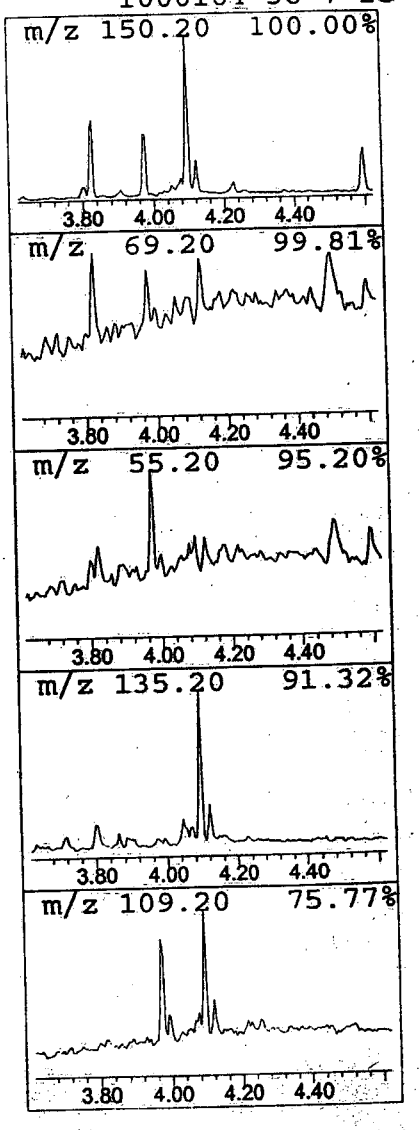
****

Peak Number 7 2-Cyclohexen-1-one, 3-methy... Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.12	6.32 UG	58111	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclohexen-1-one, 3-methyl-6-(...	150	C10H14O	000491-09-8	35
2	Bicyclo[3.1.1]hept-3-en-2-one, 4...	150	C10H14O	000080-57-9	30
3	.alpha. Isomethyl ionone	206	C14H22O	000127-51-5	27
4	Carbonic acid, methyl ester, [(E...	280	C17H28O3	1000164-38-7	25





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S Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

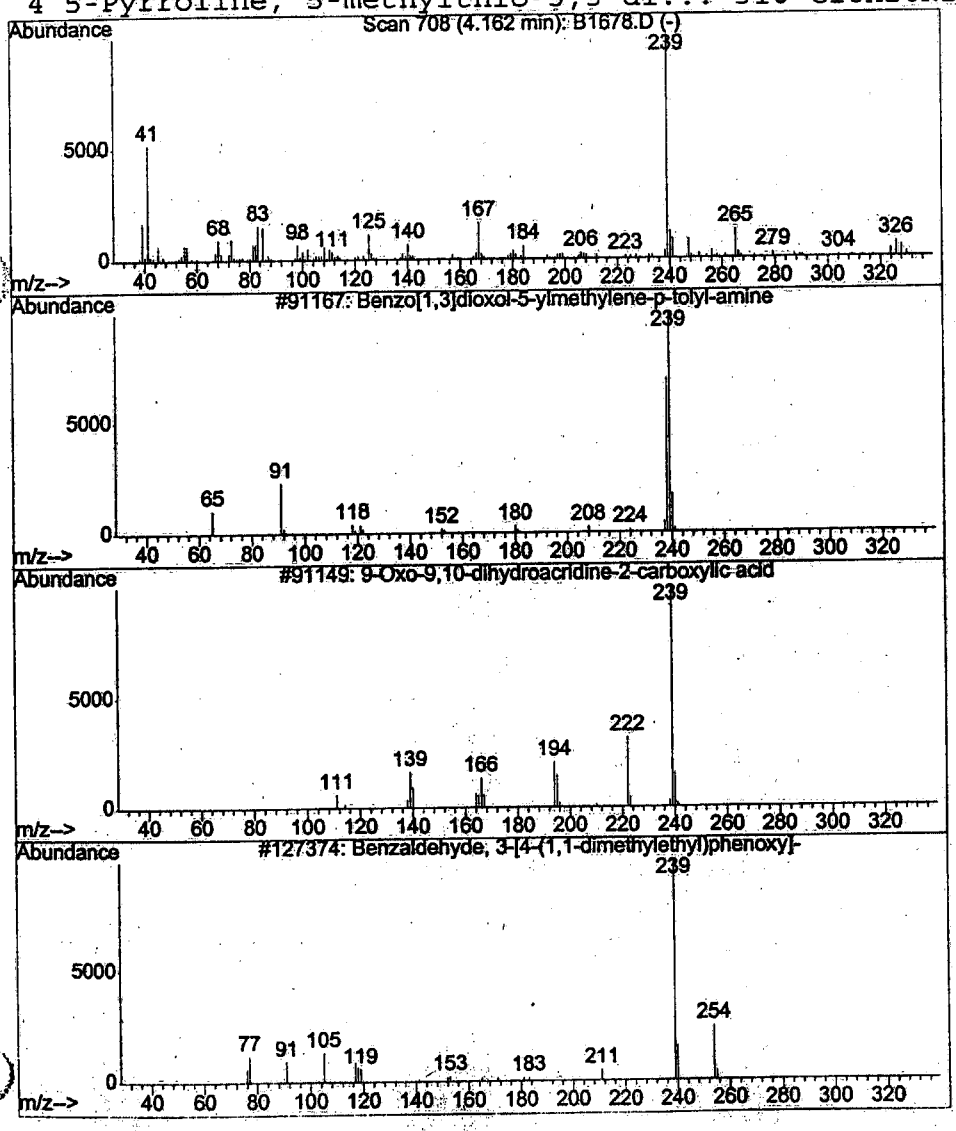
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

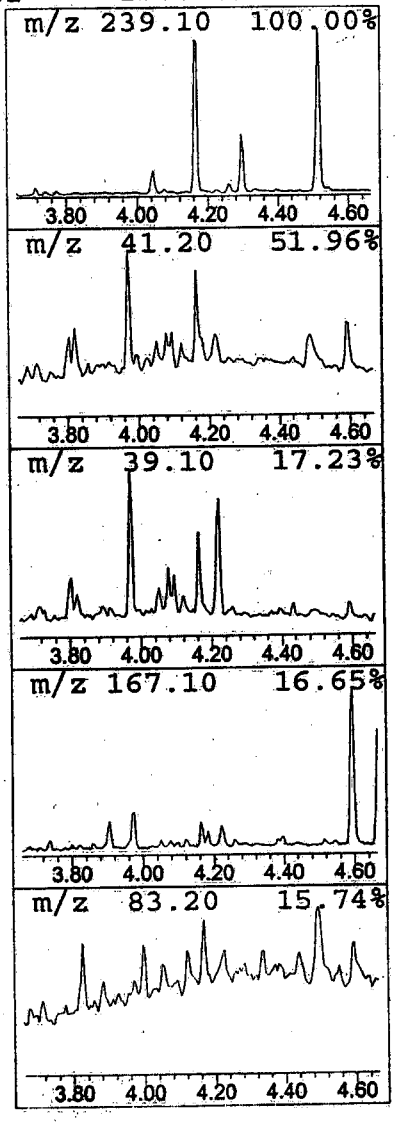
****

Peak Number 8 Benzo[1,3]dioxol-5-ylmethyl... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.16	8.80 UG	80894	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[1,3]dioxol-5-ylmethylene-p...	239	C15H13NO2	1000193-65-6	38
2	9-Oxo-9,10-dihydroacridine-2-car...	239	C14H9NO3	042946-36-1	28
3	Benzaldehyde, 3-[4-(1,1-dimethyl...	254	C17H18O2	069770-23-6	28
4	5-Pyrroline, 5-methylthio-3,3-di...	310	C16H26N2S2	1000190-49-2	28





1597

000558

Library Search Compound Report

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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
LS Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

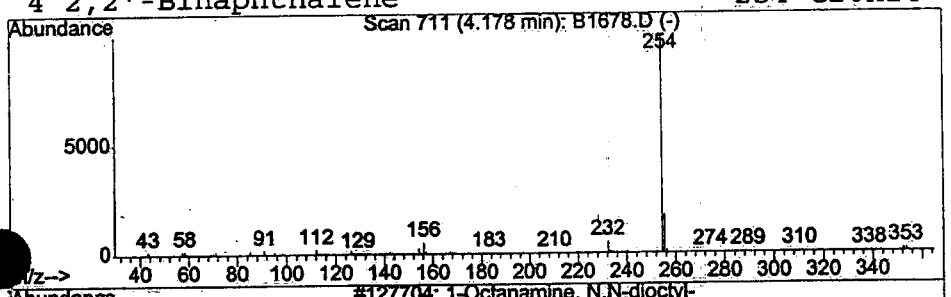
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

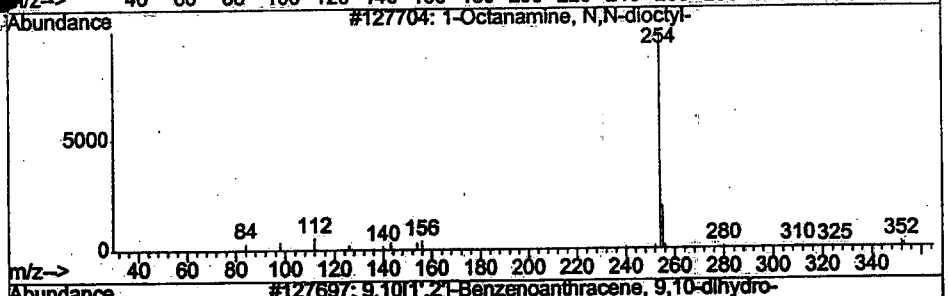
****

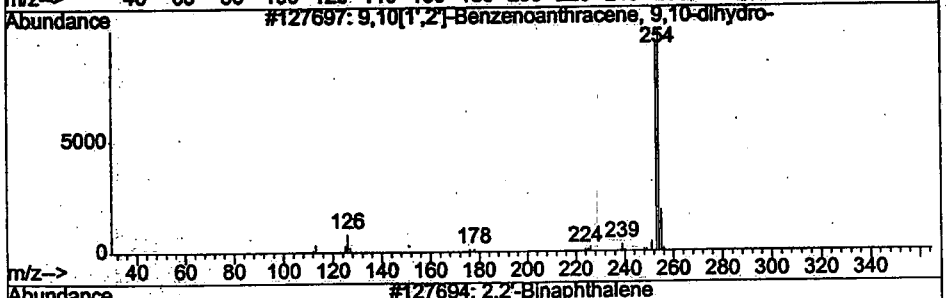
Peak Number 9 1-Octanamine, N,N-dioctyl- Concentration Rank 6

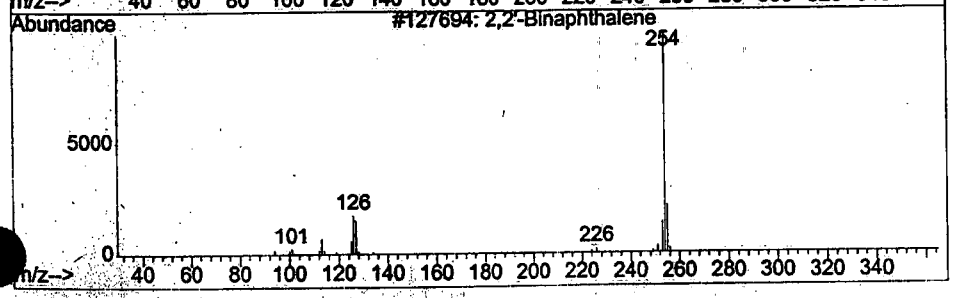
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.18	9.62 UG	88400	Chrysene-d12	4.51

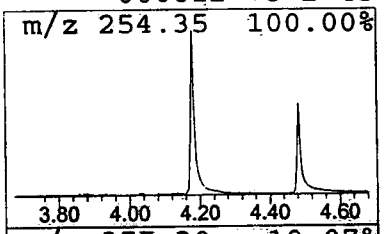
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Octanamine, N,N-dioctyl-	353	C24H51N	001116-76-3	49
2	9,10[1',2']-Benzenoanthracene, 9...	254	C20H14	000477-75-8	45
3	2,2'-Binaphthalene	254	C20H14	000612-78-2	45
4	2,2'-Binaphthalene	254	C20H14	000612-78-2	45

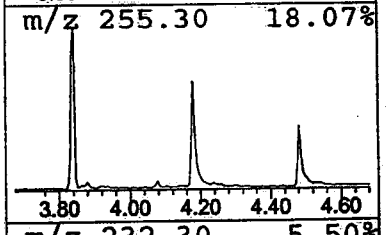


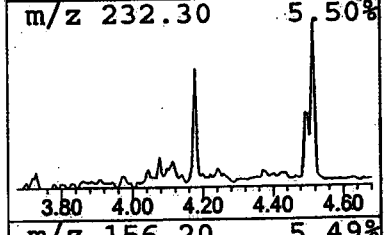


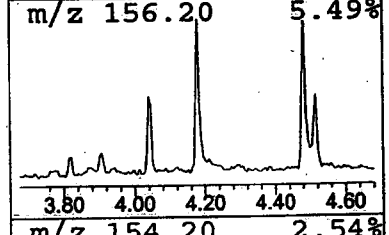


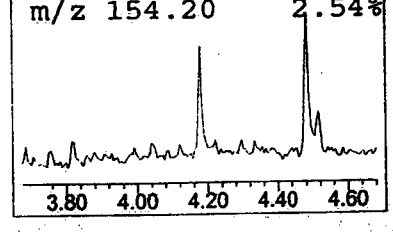












1598

000559

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Acq On : 2 Apr 2001 14:08
Sample : S-28,1922-012,S,0.97g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

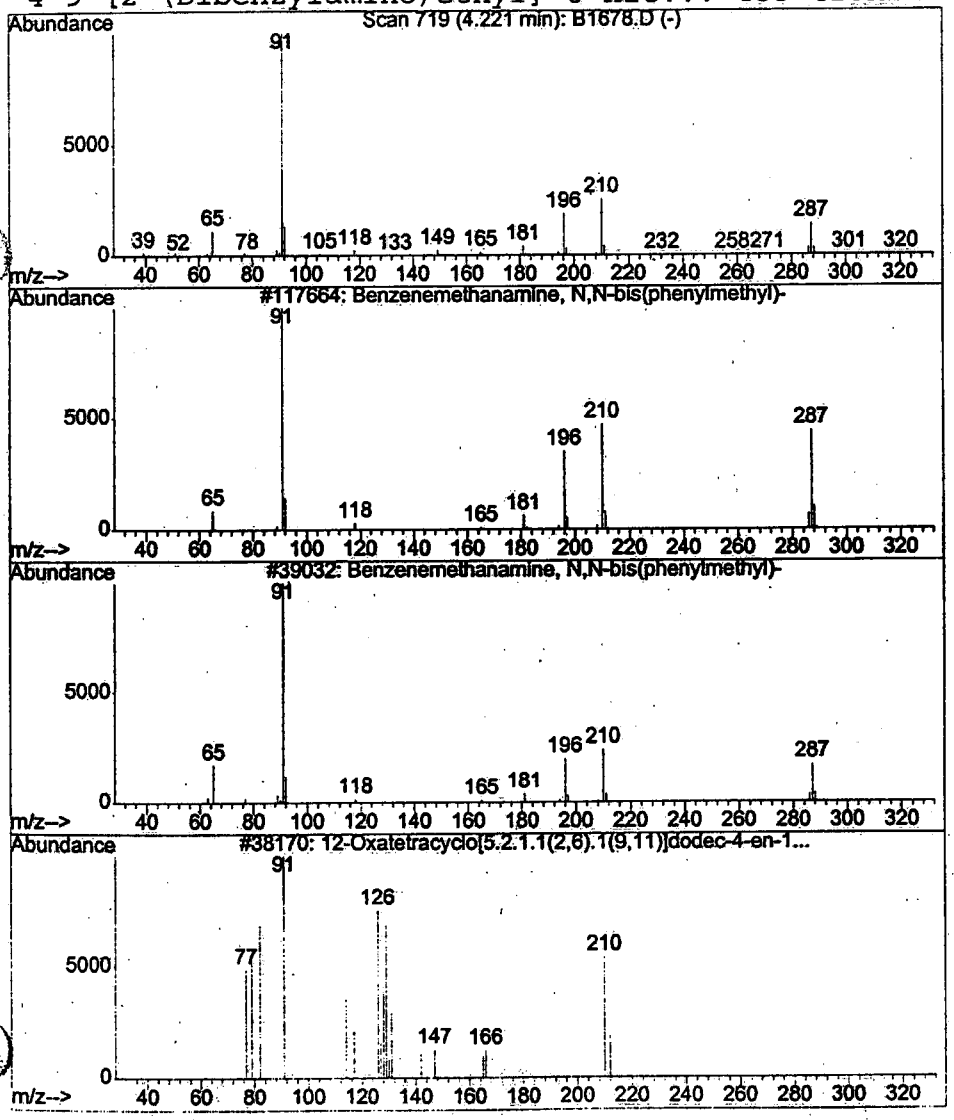
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

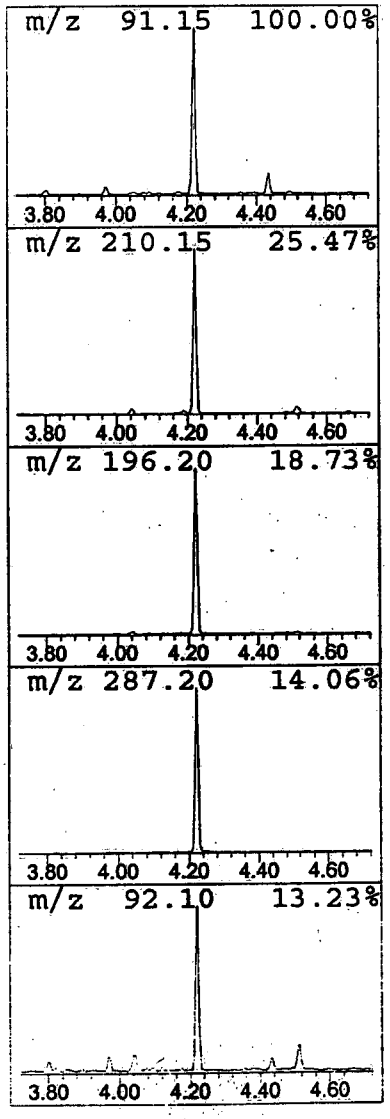
****

Peak Number 10 Benzenemethanamine, N,N-bis... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.22	46.44 UG	426776	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	97
2	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	95
3	12-Oxatetracyclo[5.2.1.1(2,6).1(...	210	C11H11ClO2	1000191-06-4	83
4	9-[2-(Dibenzylamino)ethyl]-6-nit...	453	C28H27N3O3	1000225-88-1	40





1599

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Acq On : 2 Apr 2001 14:08
Sample : S-28,1922-012,S,0.97g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

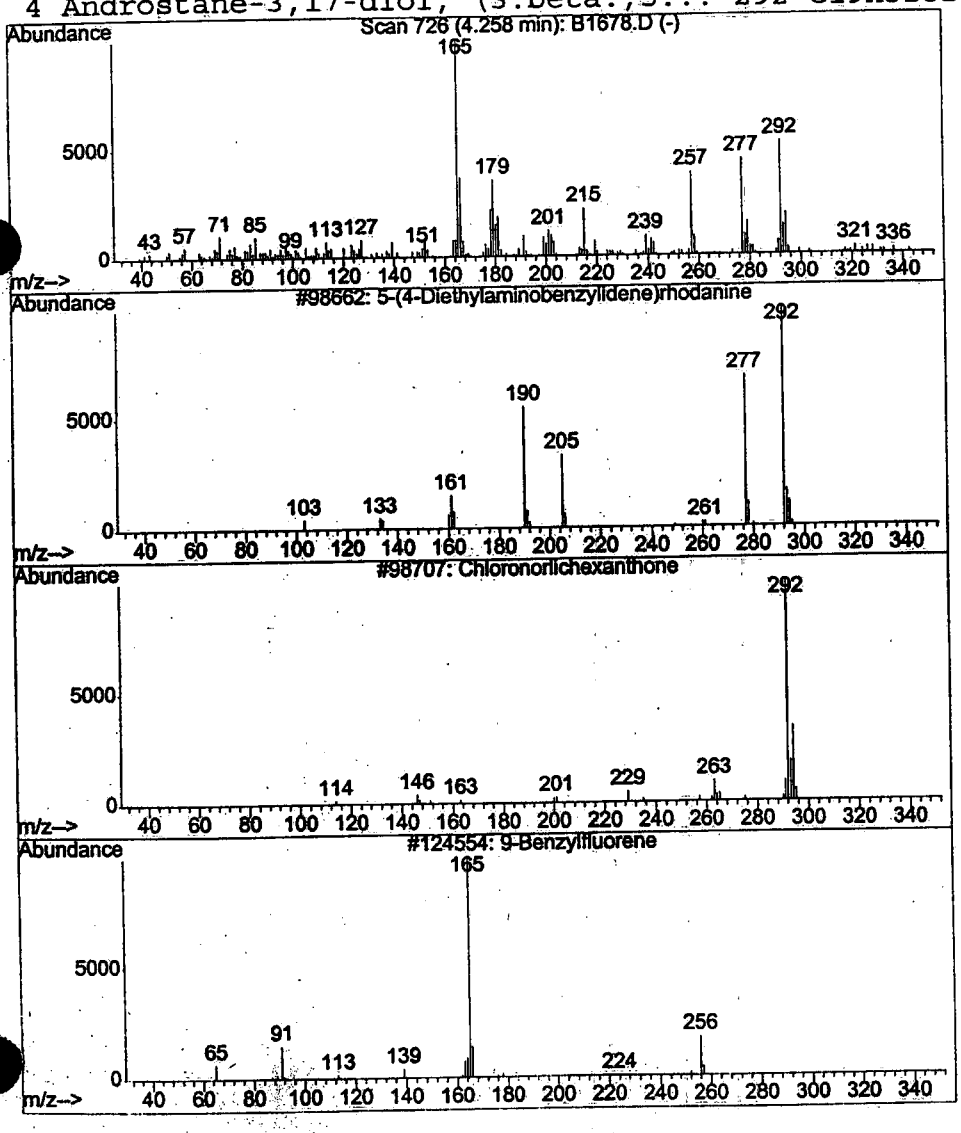
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

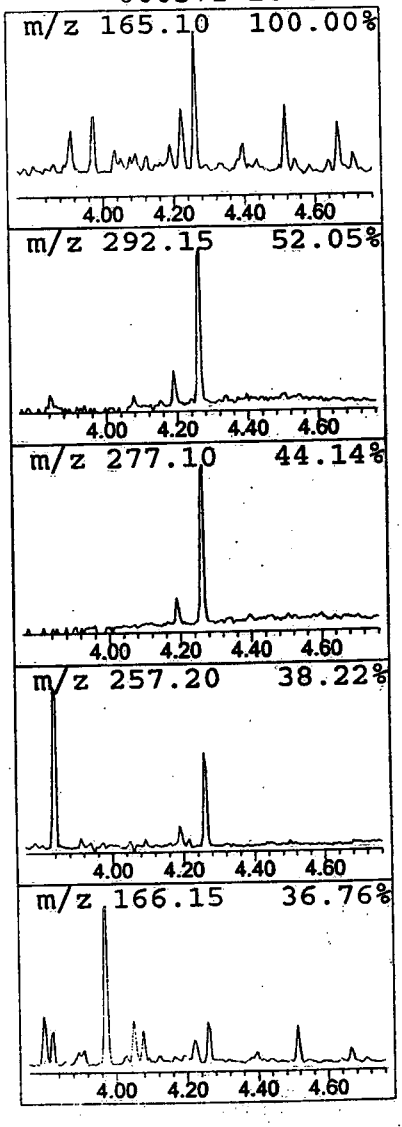
****

Peak Number 11 5-(4-Diethylaminobenzyliden... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.26	7.50 UG	68954	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-(4-Diethylaminobenzylidene)rho...	292	C14H16N2OS2	035778-58-6	25
2	Chloronorlichexanthone	292	C14H9ClO5	065658-58-4	15
3	9-Benzylfluorene	256	C20H16	001572-46-9	14
4	Androstane-3,17-diol, (3.beta.,5...	292	C19H32O2	000571-20-0	12





1600

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Acq On : 2 Apr 2001 14:08
Sample : S-28,1922-012,S,0.97g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
ALS Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

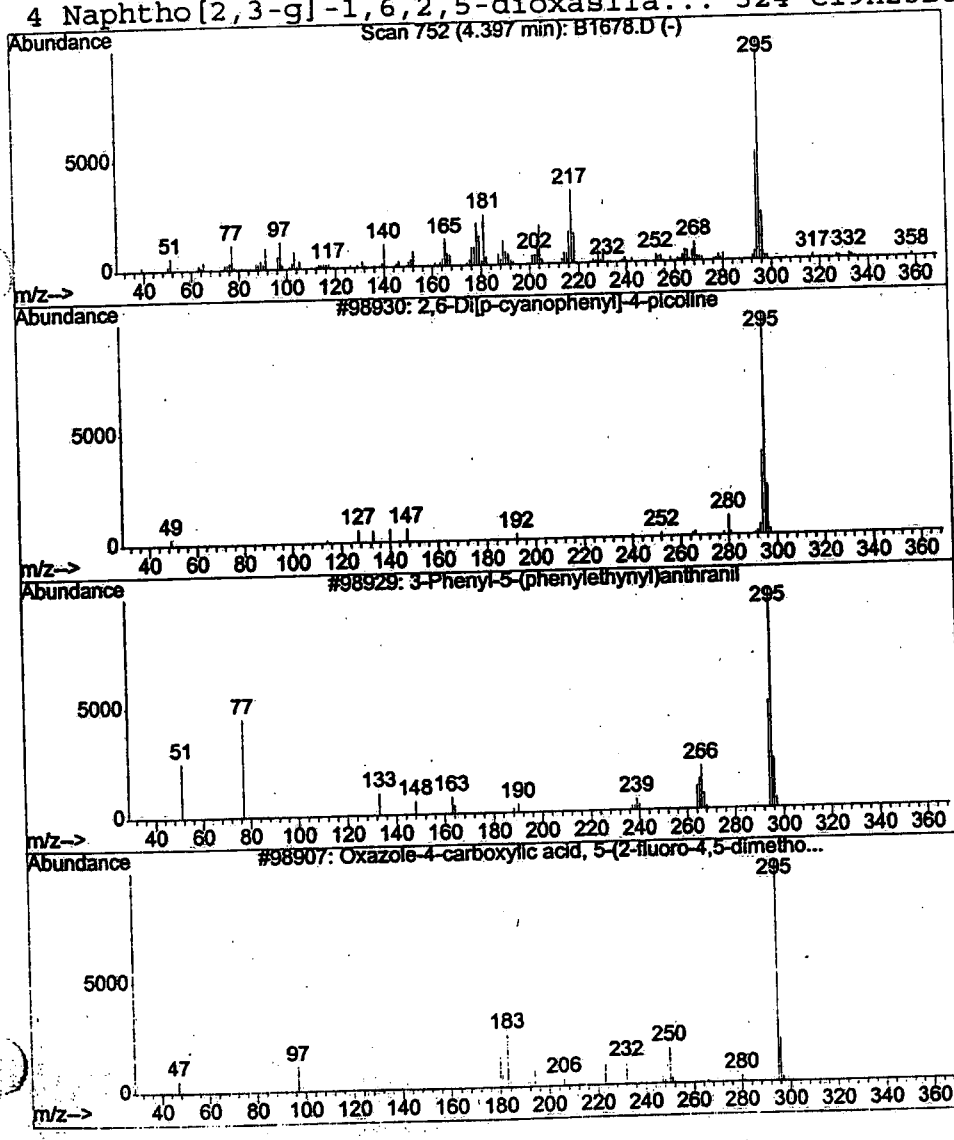
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

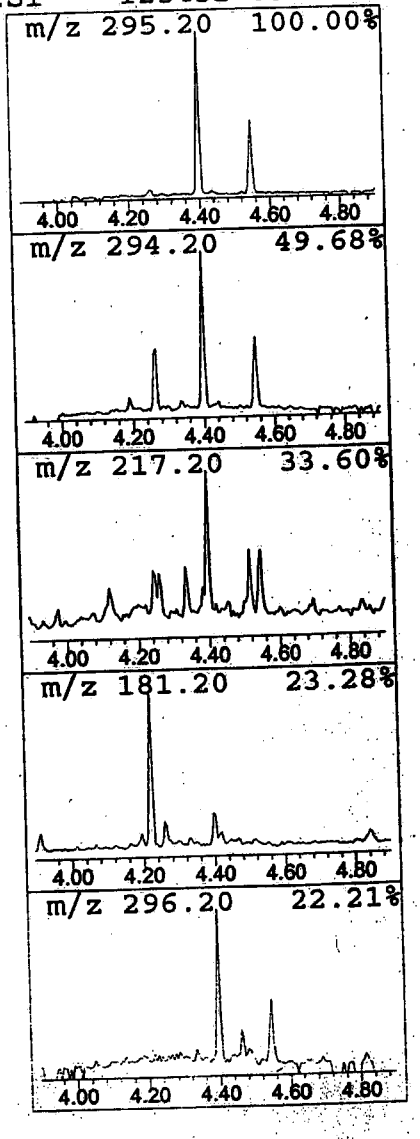
****

Peak Number 12 2,6-Di[p-cyanophenyl]-4-pic... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.40	4.70 UG	43178	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,6-Di[p-cyanophenyl]-4-picoline	295	C20H13N3	1000212-46-7	52
2	3-Phenyl-5-(phenylethynyl)anthranil	295	C21H13NO	1000225-97-4	49
3	Oxazole-4-carboxylic acid, 5-(2-...	295	C14H14FNO5	1000130-36-7	38
4	Naphtho[2,3-g]-1,6,2,5-dioxasila...	324	C19H25BO2Si	125452-03-1	25





1601

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Acq On : 2 Apr 2001 14:08
Sample : S-28,1922-012,S,0.97g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
ALS Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

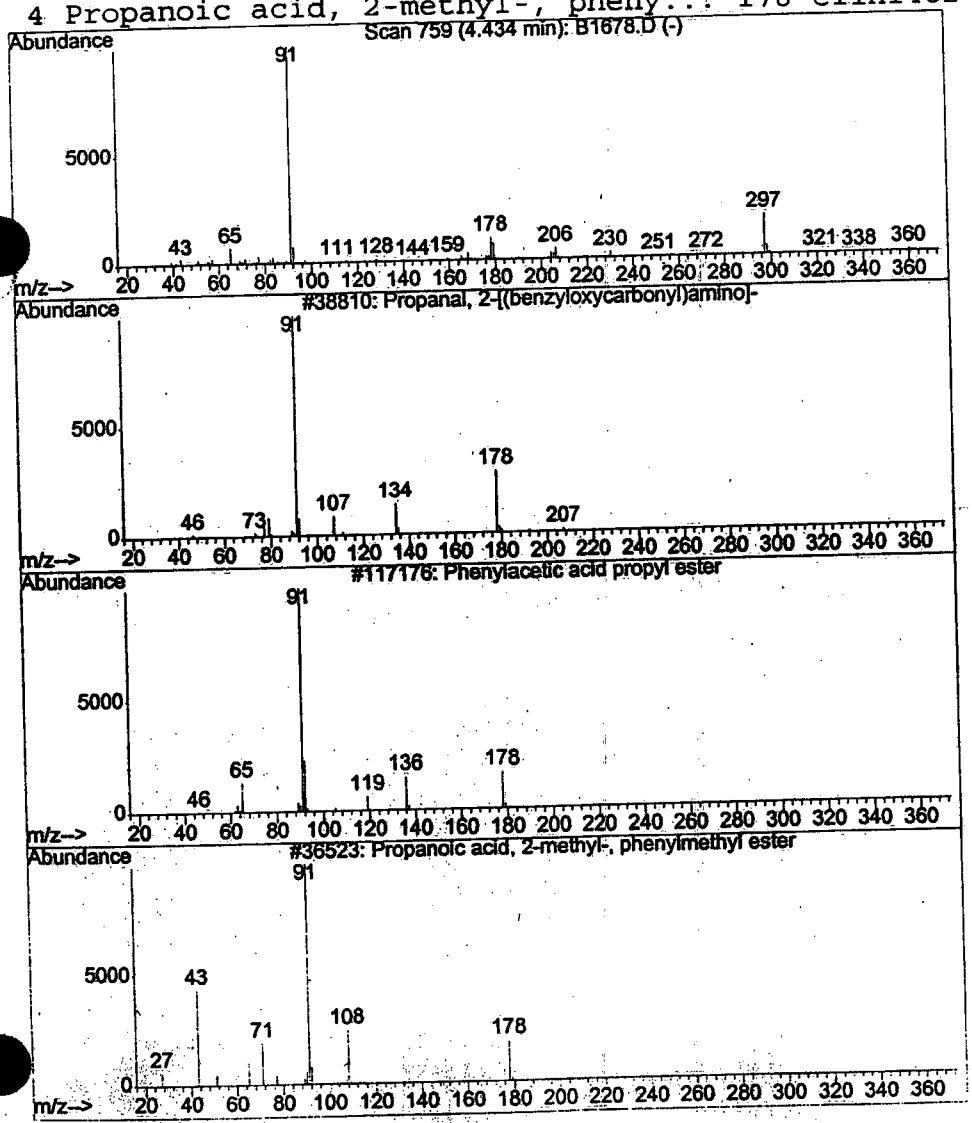
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

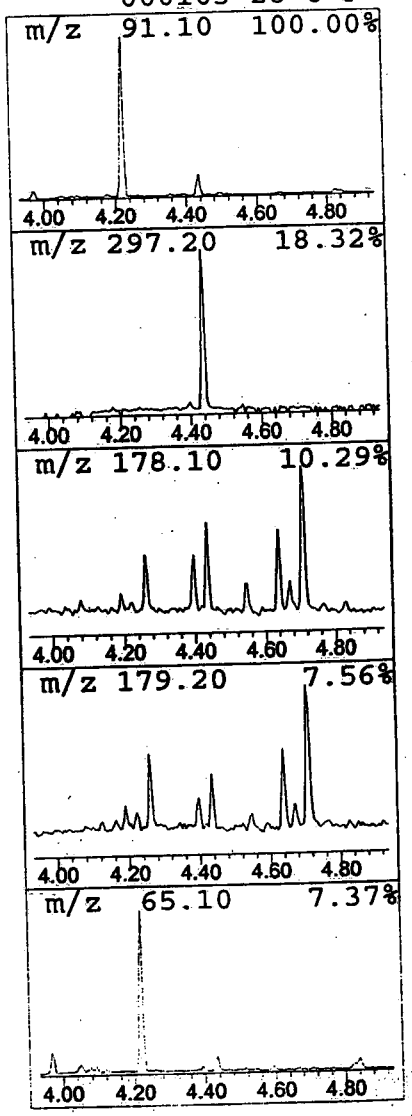
****

Peak Number 13 Propanal, 2-[(benzyloxycarb... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.43	9.38 UG	86245	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanal, 2-[(benzyloxycarbonyl)...	207	C11H13NO3	105499-10-3	37
2	Phenylacetic acid propyl ester	178	C11H14O2	004606-15-9	10
3	Propanoic acid, 2-methyl-, pheny...	178	C11H14O2	000103-28-6	9
4	Propanoic acid, 2-methyl-, pheny...	178	C11H14O2	000103-28-6	9





1602

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Acq On : 2 Apr 2001 14:08
Sample : S-28,1922-012,S,0.97g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

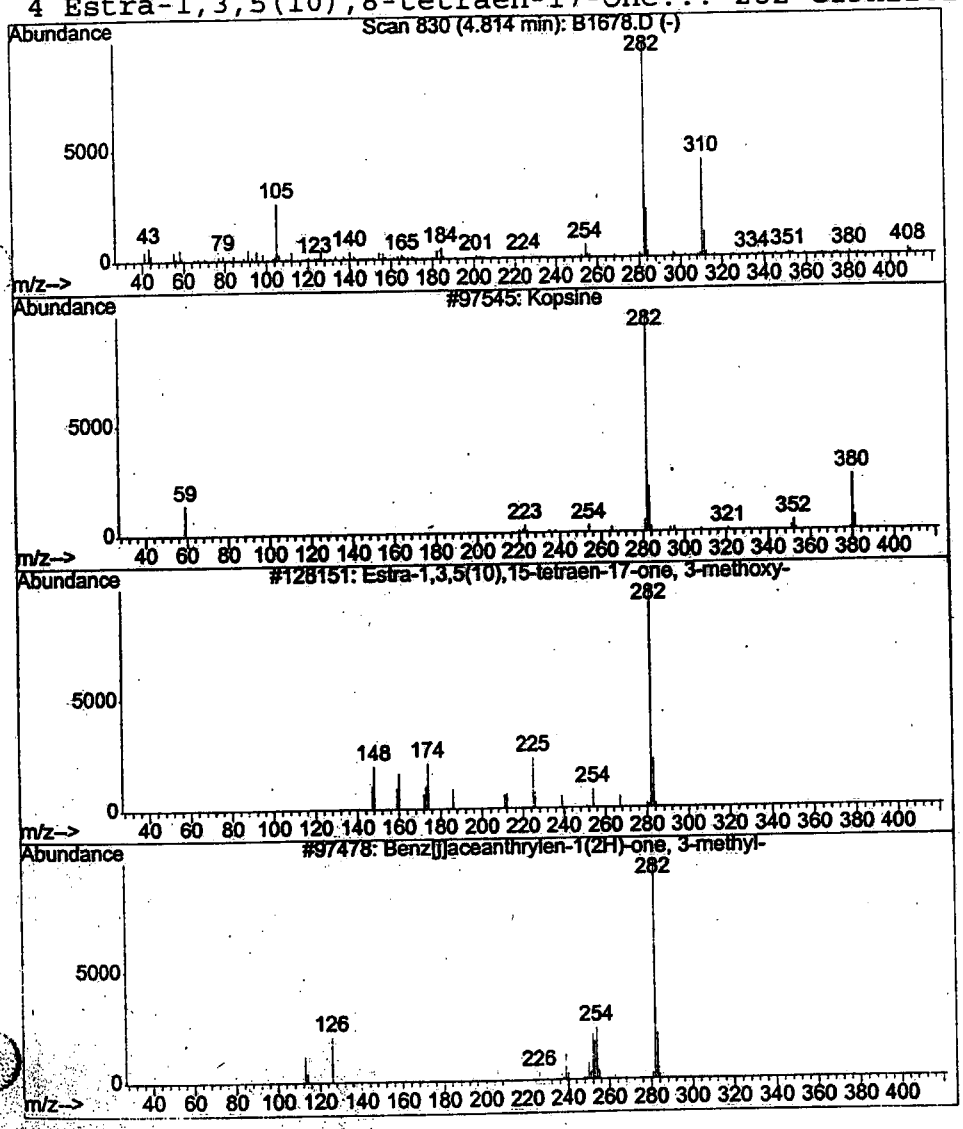
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

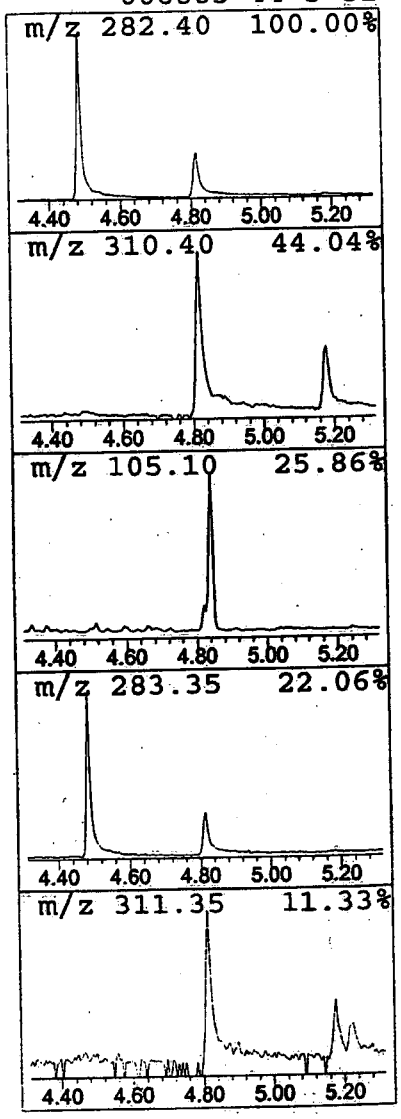
****

Peak Number 14 Kopsine unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.81	5.33 UG	48957	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Kopsine	380	C22H24N2O4	000559-48-8	46
2	Estra-1,3,5(10),15-tetraen-17-on...	282	C19H22O2	017748-68-4	46
3	Benz[j]aceanthrylen-1(2H)-one, 3...	282	C21H14O	003343-07-5	38
4	Estra-1,3,5(10),8-tetraen-17-one...	282	C19H22O2	006885-44-5	32





1603

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Acq On : 2 Apr 2001 14:08
Sample : S-28,1922-012,S,0.97g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
LS Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

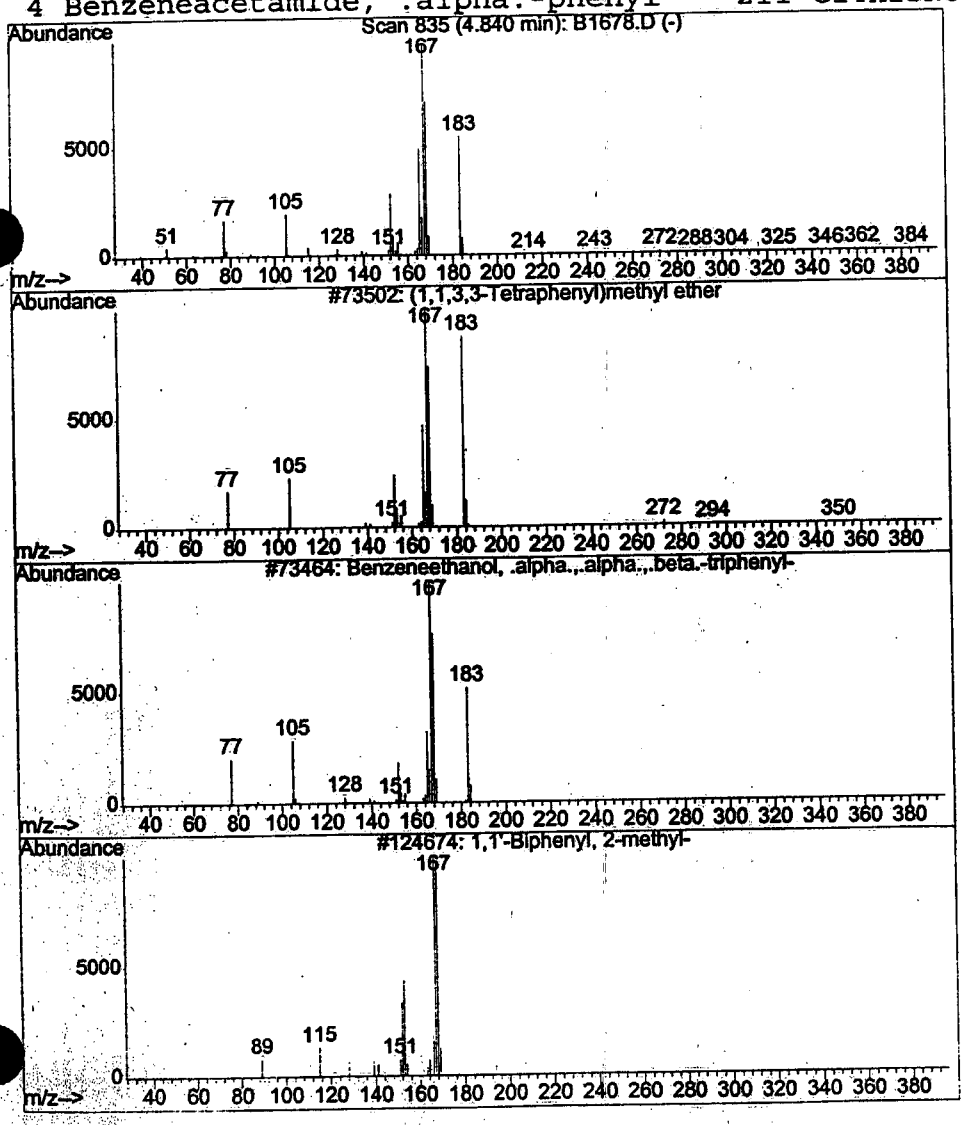
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

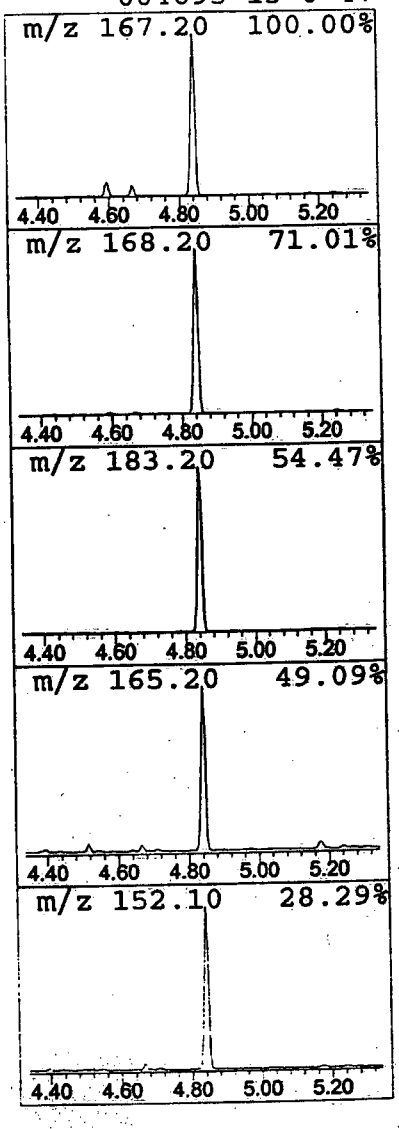
****

Peak Number 15 (1,1,3,3-Tetraphenyl)methyl... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.84	81.04 UG	744754	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(1,1,3,3-Tetraphenyl)methyl ether	350	C26H22O	1000130-50-6	97
2	Benzeneethanol, .alpha.,.alpha.,...	350	C26H22O	000981-24-8	72
3	1,1'-Biphenyl, 2-methyl-	168	C13H12	000643-58-3	47
4	Benzeneacetamide, .alpha.-phenyl-	211	C14H13NO	004695-13-0	47





000565

1604

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Acq On : 2 Apr 2001 14:08
Sample : S-28,1922-012,S,0.97g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
'S Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

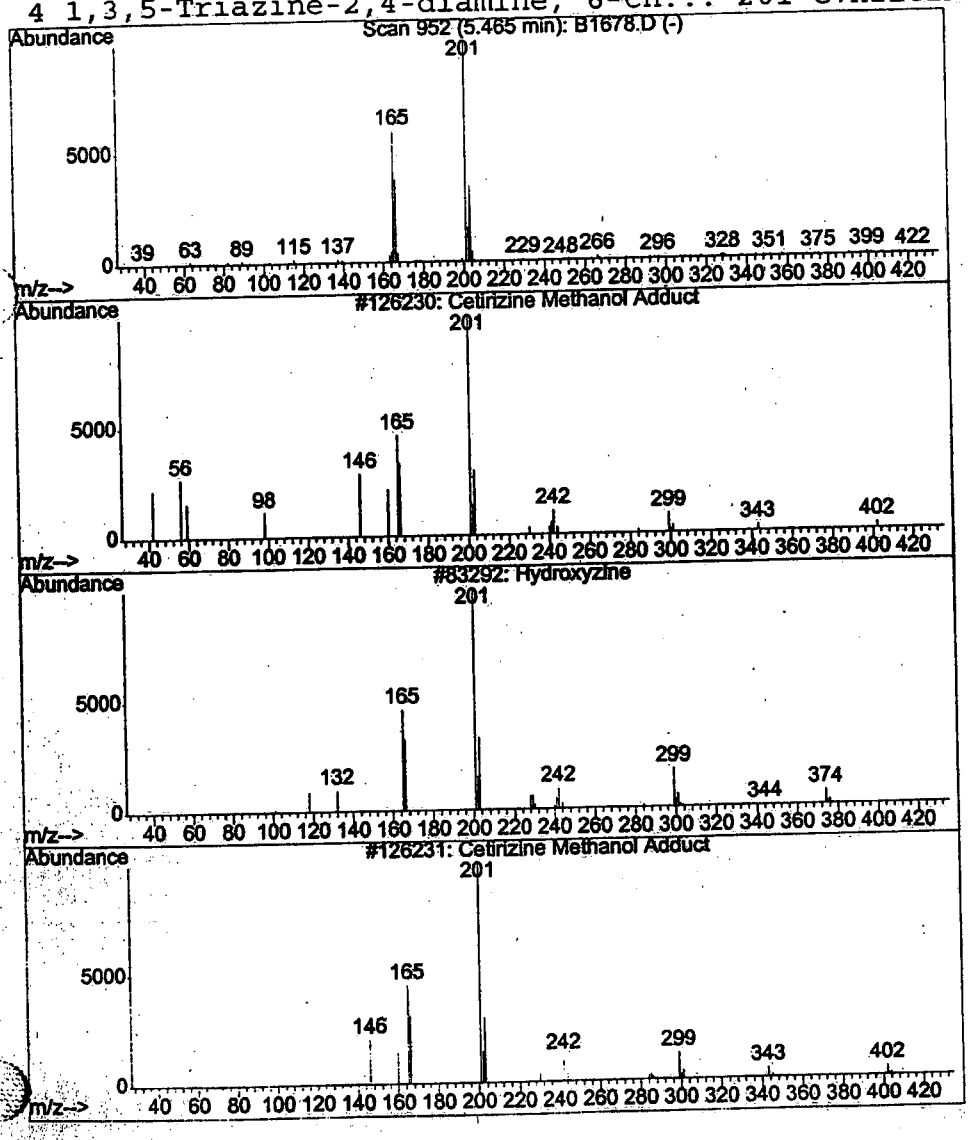
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

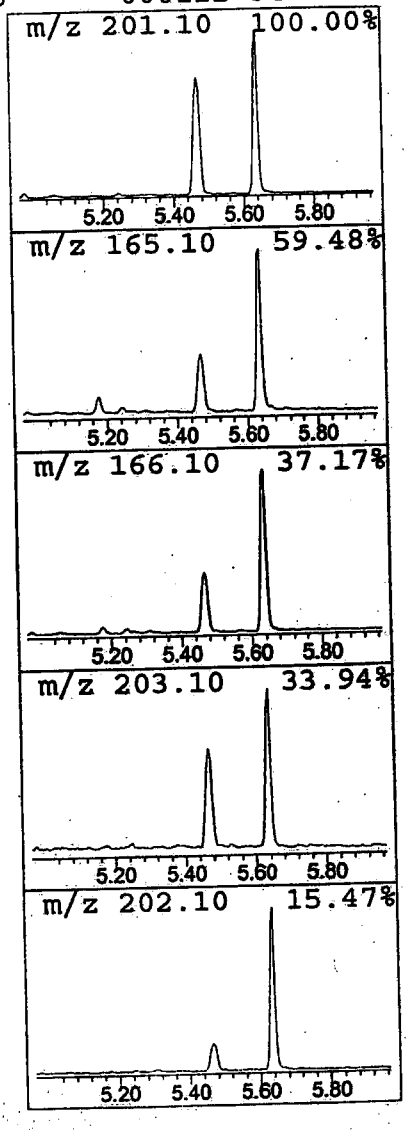
****

Peak Number 16 Cetirizine Methanol Adduct Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.47	6.98 UG	67107	Perylene-d12	5.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cetirizine Methanol Adduct	402	C22H27ClN2O3	083881-46-3	64
2	Hydroxyzine	374	C21H27ClN2O2	000068-88-2	64
3	Cetirizine Methanol Adduct	402	C22H27ClN2O3	083881-46-3	64
4	1,3,5-Triazine-2,4-diamine, 6-ch...	201	C7H12ClN5	000122-34-9	47





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Acq On : 2 Apr 2001 14:08
Sample : S-28,1922-012,S,0.97g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

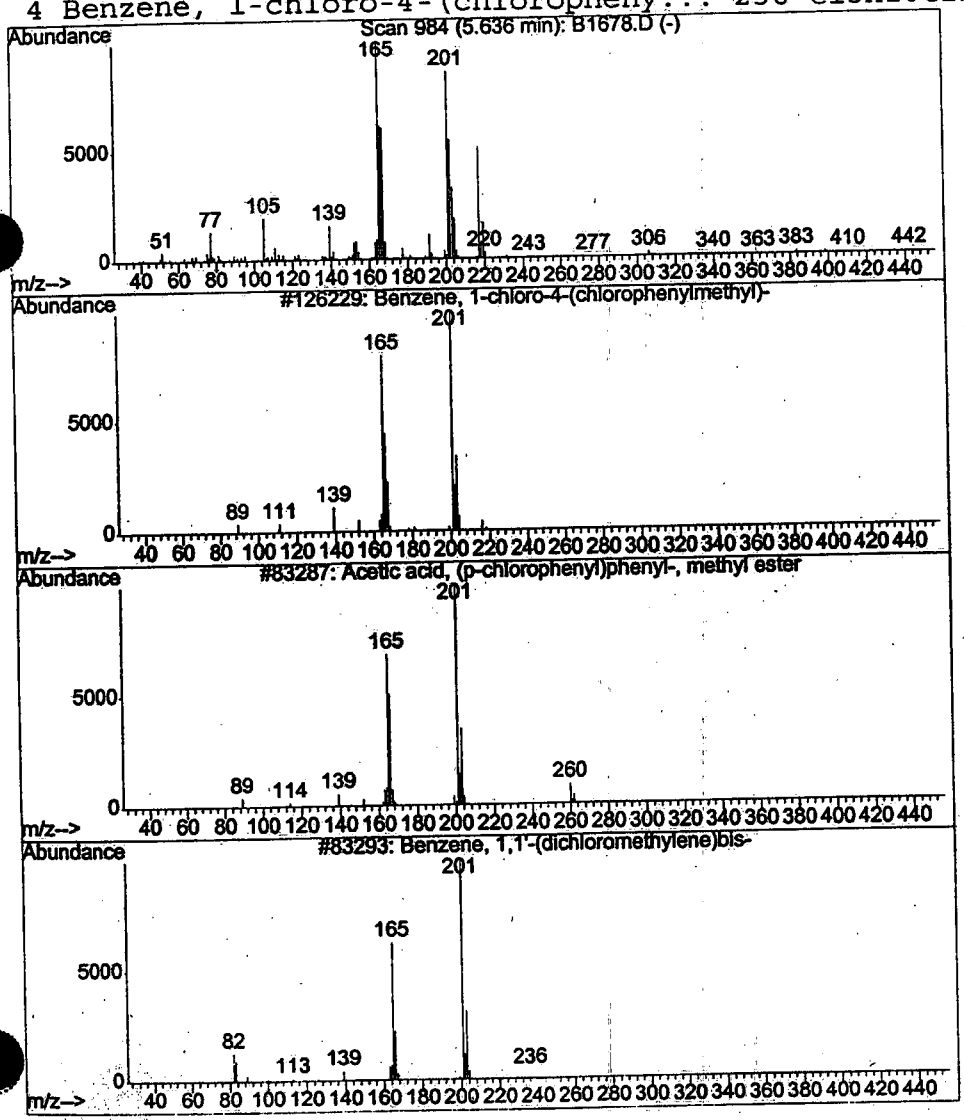
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

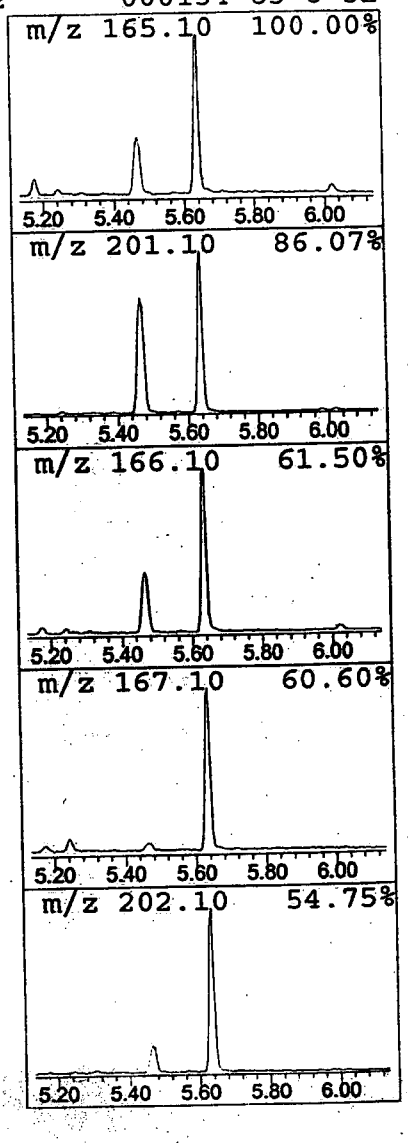
****

Peak Number 17 Benzene, 1-chloro-4-(chloro... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.64	29.15 UG	280284	Perylene-d12	5.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-4-(chlorophenyl...	236	C13H10Cl2	000134-83-8	47
2	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	40
3	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	35
4	Benzene, 1-chloro-4-(chlorophenyl...	236	C13H10Cl2	000134-83-8	32





Tentatively Identified Compound (LSC) summary

Operator ID: JC Date Acquired: 2 Apr 2001 14:08
Data File: C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Name: S-28,1922-012,S,0.97g,22.7,03/30/01
Misc: ENVTACT/ORBIS,03/27/01,03/28/01,1
Method: C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title: BNA CALIBRATION METHOD
Library Searched: C:\DATABASE\NIST98.L

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
					1.58		4.1	000138-86-3
Limonene								
21485 1	1.51	209552	40.0					
3-Cyclohexene-1-methanol, .alpha.,.alpha.4-trimet					2.33		5.4	000098-55-5
39484 2	2.03	293724	40.0					
					2.83		21.4	000103-29-7
Bibenzyl								
209634 3	2.75	391151	40.0					
Benzene, 1-methyl-4-(phenylmethyl)-					2.85		12.4	000620-83-7
121516 3	2.75	391151	40.0					
Benzene, 1-methyl-4-(phenylmethyl)-					2.86		8.7	000620-83-7
85506 3	2.75	391151	40.0					
Benzene, 1,1'-(1,1,2,2-tetramethyl-1,2-ethanediyl					3.80		5.1	000734-17-8
146633 4	3.35	1152680	40.0					
2-Cyclohexen-1-one, 3-methyl-6-(1-methylethyliden					4.12		6.3	000491-09-8
58111 5	4.51	367589	40.0					
Benzo[1,3]dioxol-5-ylmethylene-p-tolyl-amine					4.16		8.8	1000193-65-6
80894 5	4.51	367589	40.0					
1-Octanamine, N,N-dioctyl-					4.18		9.6	001116-76-3
88400 5	4.51	367589	40.0					
Benzenemethanamine, N,N-bis(phenylmethyl)-					4.22		46.4	000620-40-6
426776 5	4.51	367589	40.0					
5-(4-Diethylaminobenzylidene)rhodanine					4.26		7.5	035778-58-6
68954 5	4.51	367589	40.0					
2,6-Di[p-cyanophenyl]-4-picoline					4.40		4.7	1000212-46-7
43178 5	4.51	367589	40.0					
Propanal, 2-[(benzyloxycarbonyl)amino]-					4.43		9.4	105499-10-3
86245 5	4.51	367589	40.0					
Kopsine					4.81		5.3	000559-48-8
48957 5	4.51	367589	40.0					
(1,1,3,3-Tetraphenyl)methyl ether					4.84		81.0	1000130-50-6
744754 5	4.51	367589	40.0					
Cetirizine Methanol Adduct					5.47		7.0	083881-46-3
67107 6	5.31	384559	40.0					
Benzene, 1-chloro-4-(chlorophenylmethyl)-					5.64		29.2	000134-83-8
280284 6	5.31	384559	40.0					

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1678.D
Acq On : 2 Apr 2001 14:08
Sample : S-28,1922-012,S,0.97g,22.7,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
ALS Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

Vial: 26
Operator: JC
Inst : MSD_B
Multiplr: 1.00

****

Peak Number 1 D-Limonene — Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.58	4.10 UG	21485	1,4-Dichlorobenzene-d4	1.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Limonene	136	C10H16	000138-86-3	78
2	D-Limonene	136	C10H16	005989-27-5	64
3	Cyclohexane, 1-methyl-4-(1-methy...	138	C10H18	001124-27-2	60
4	D-Limonene	136	C10H16	005989-27-5	55
5	Limonene	136	C10H16	000138-86-3	50

****

Peak Number 2 Unknown — Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.33	5.38 UG	39484	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Cyclohexene-1-methanol, .alpha...	154	C10H18O	000098-55-5	72
2	3-Cyclohexene-1-methanol, .alpha...	154	C10H18O	010482-56-1	72
3	3-Cyclohexene-1-methanol, .alpha...	154	C10H18O	000098-55-5	72
4	3-Cyclohexene-1-methanol, .alpha...	154	C10H18O	010482-56-1	56
5	(+)-.alpha.-Terpineol (p-menth-1...	154	C10H18O	1000157-89-9	56

****

Peak Number 3 Bibenzyl — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.83	21.44 UG	209634	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bibenzyl	182	C14H14	000103-29-7	93
2	Bibenzyl	182	C14H14	000103-29-7	90
3	Bibenzyl	182	C14H14	000103-29-7	87
4	Bibenzyl	182	C14H14	000103-29-7	87
5	Bibenzyl	182	C14H14	000103-29-7	83

****

Peak Number 4 Substituted benzene — Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.

2.85	12.43 UG	121516	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(phenylmethyl)-	182	C14H14	000620-83-7	98
2	Benzene, 1-methyl-2-(phenylmethyl)-	182	C14H14	000713-36-0	97
3	2,2'-Dimethylbiphenyl	182	C14H14	000605-39-0	96
4	Benzene, 1-methyl-4-(phenylmethyl)-	182	C14H14	000620-83-7	96
5	Benzene, 1-methyl-4-(phenylmethyl)-	182	C14H14	000620-83-7	96

****

Peak Number 5 Substituted biphenyl — Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.86	8.74 UG	85506	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(phenylmethyl)-	182	C14H14	000620-83-7	95
2	2,2'-Dimethylbiphenyl	182	C14H14	000605-39-0	94
3	2,2'-Dimethylbiphenyl	182	C14H14	000605-39-0	94
4	Benzene, 1-methyl-2-(phenylmethyl)-	182	C14H14	000713-36-0	91
5	Benzene, 1-methyl-4-(phenylmethyl)-	182	C14H14	000620-83-7	91

****

Peak Number 6 Substituted benzene — Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.80	5.09 UG	146633	Phenanthrene-d10	3.35

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,1'-(1,1,2,2-tetrameth...	266	C20H26	000734-17-8	47
2	Benzene, 1-(1,1-dimethylethyl)-3...	148	C11H16	001075-38-3	47
3	1,5-Hexadien-3-ol, 4-methyl-1-ph...	188	C13H16O	109062-28-4	43
4	Silane, dodecyldiethoxymethyl-	302	C17H38O2Si	060317-40-0	43
5	1-Propanone, 2-chloro-1-(4-ethyl...	210	C12H15ClO	055012-69-6	43

****

Peak Number 7 Unknown alkane — Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.12	6.32 UG	58111	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclohexen-1-one, 3-methyl-6-(...	150	C10H14O	000491-09-8	35
2	Bicyclo[3.1.1]hept-3-en-2-one, 4...	150	C10H14O	000080-57-9	30
3	.alpha. Isomethyl ionone	206	C14H22O	000127-51-5	27
4	Carbonic acid, methyl ester, [(E...	280	C17H28O3	1000164-38-7	25
5	4-n-Hexylthiane, S,S-dioxide	218	C11H22O2S	1000215-67-3	25

****

Peak Number 8 Unknown aromatic — Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.16	8.80 UG	80894	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[1,3]dioxol-5-ylmethylene-p...	239	C15H13NO2	1000193-65-6	38
2	9-Oxo-9,10-dihydroacridine-2-car...	239	C14H9NO3	042946-36-1	28
3	Benzaldehyde, 3-[4-(1,1-dimethyl...	254	C17H18O2	069770-23-6	28
4	5-Pyrroline, 5-methylthio-3,3-di...	310	C16H26N2S2	1000190-49-2	28
5	9,10-Anthracenedione, 1-amino-4-...	239	C14H9NO3	000116-85-8	28

****

Peak Number 9 Unknown — Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.18	9.62 UG	88400	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Octanamine, N,N-dioctyl-	353	C24H51N	001116-76-3	49
2	9,10[1',2']-Benzenoanthracene, 9...	254	C20H14	000477-75-8	45
3	2,2'-Binaphthalene	254	C20H14	000612-78-2	45
4	2,2'-Binaphthalene	254	C20H14	000612-78-2	45
5	Ethanamine, 1,N-dimethyl-N-(n-te...	361	C24H43NO	1000197-41-1	38

****

Peak Number 10 Unknown aromatic — Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.22	46.44 UG	426776	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	97
2	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	95
3	12-Oxatetracyclo[5.2.1.1(2,6).1(...	210	C11H11ClO2	1000191-06-4	83
4	9-[2-(Dibenzylamino)ethyl]-6-nit...	453	C28H27N3O3	1000225-88-1	40
5	2-Propanone, 1,3-diphenyl-	210	C15H14O	000102-04-5	40

****

Peak Number 11 Unknown — Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.26	7.50 UG	68954	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-(4-Diethylaminobenzylidene)rho...	292	C14H16N2OS2	035778-58-6	25
2	Chloronorlichexanthone	292	C14H9ClO5	065658-58-4	15
3	9-Benzylfluorene	256	C20H16	001572-46-9	14
4	Androstane-3,17-diol, (3.beta.,5...	292	C19H32O2	000571-20-0	12
5	Stannane, ethyltrimethyl-	194	C5H14Sn	003531-44-0	11

****

Peak Number 12 Unknown — Concentration Rank 16

000571

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.40	4.70 UG	43178	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,6-Di[p-cyanophenyl]-4-picoline	295	C20H13N3	1000212-46-7	52
2	3-Phenyl-5-(phenylethynyl)anthranil	295	C21H13NO	1000225-97-4	49
3	Oxazole-4-carboxylic acid, 5-(2-...	295	C14H14FNO5	1000130-36-7	38
4	Naphtho[2,3-g]-1,6,2,5-dioxasila...	324	C19H25BO2Si	125452-03-1	25
5	Phenanthro[9,10-d]oxazole, 2-phe...	295	C21H13NO	004410-14-4	25

****

Peak Number 13 Unknown aromatic — Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.43	9.38 UG	86245	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanal, 2-[(benzyloxycarbonyl)...	207	C11H13NO3	105499-10-3	37
2	Phenylacetic acid propyl ester	178	C11H14O2	004606-15-9	10
3	Propanoic acid, 2-methyl-, pheny...	178	C11H14O2	000103-28-6	9
4	Propanoic acid, 2-methyl-, pheny...	178	C11H14O2	000103-28-6	9
5	1-Benzylamino-4-benzyloxybutane	269	C18H23NO	1000144-86-6	9

****

Peak Number 14 Unknown — Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.81	5.33 UG	48957	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Kopsine	380	C22H24N2O4	000559-48-8	46
2	Estra-1,3,5(10),15-tetraen-17-on...	282	C19H22O2	017748-68-4	46
3	Benz[j]aceanthrylen-1(2H)-one, 3...	282	C21H14O	003343-07-5	38
4	Estra-1,3,5(10),8-tetraen-17-one...	282	C19H22O2	006885-44-5	32
5	9-(1,6-Dimethyl-bicyclo[4.1.0]he...	282	C22H18	1000190-17-6	23

****

Peak Number 15 Unknown aromatic — Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.84	81.04 UG	744754	Chrysene-d12	4.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(1,1,3,3-Tetraphenyl)methyl ether	350	C26H22O	1000130-50-6	97
2	Benzeneethanol, .alpha.,.alpha.,...	350	C26H22O	000981-24-8	72
3	1,1'-Biphenyl, 2-methyl-	168	C13H12	000643-58-3	47
4	Benzeneacetamide, .alpha.-phenyl-	211	C14H13NO	004695-13-0	47
5	Benzene, 1,1'-[(ethylthio)methyl...	228	C15H16S	038793-64-5	47

****

Peak Number 16 Unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.47	6.98 UG	67107	Perylene-d12	5.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cetirizine Methanol Adduct	402	C22H27ClN2O3	083881-46-3	64
2	Hydroxyzine	374	C21H27ClN2O2	000068-88-2	64
3	Cetirizine Methanol Adduct	402	C22H27ClN2O3	083881-46-3	64
4	1,3,5-Triazine-2,4-diamine, 6-ch...	201	C7H12ClN5	000122-34-9	47
5	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	43

****

Peak Number 17 Unknown aromatic Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.64	29.15 UG	280284	Perylene-d12	5.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	47
2	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	40
3	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	35
4	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	32
5	1,1'-Biphenyl, 4-(chloromethyl)-	202	C13H11Cl	001667-11-4	27

1678.D BS1201.M Tue Apr 03 09:19:28 2001 MSD_B

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1679.D
Acq On : 2 Apr 2001 14:22
Sample : S-29,1922-013,S,5.51g,23.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: rteint.p
Quant Time: Apr 02 14:31:51 2001

Vial: 27
Operator: JC
Inst : MSD_B
Multiplr: 1.00
Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.52	152	34543	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	137747	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	78175	40.00	UG	0.00
60) Phenanthrene-d10	3.34	188	141804	40.00	UG	-0.01
75) Chrysene-d12	4.49	240	109515	40.00	UG	-0.02
84) Perylene-d12	5.29	264	133249	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	59934	60.31	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 60.31%			
6) Phenol-d5	1.39	99	85495	70.28	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 70.28%			
23) Nitrobenzene-d5	1.74	82	32223	32.24	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 64.48%			
43) 2-Fluorobiphenyl	2.48	172	82564	38.43	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 76.86%			
64) 2,4,6-Tribromophenol	3.07	330	41954	88.85	UG	-0.01
Spiked Amount 100.000	Range 54 - 135		Recovery = 88.85%			
77) Terphenyl-d14	4.02	244	117655	45.05	UG	-0.01
Spiked Amount 50.000	Range 58 - 147		Recovery = 90.10%			

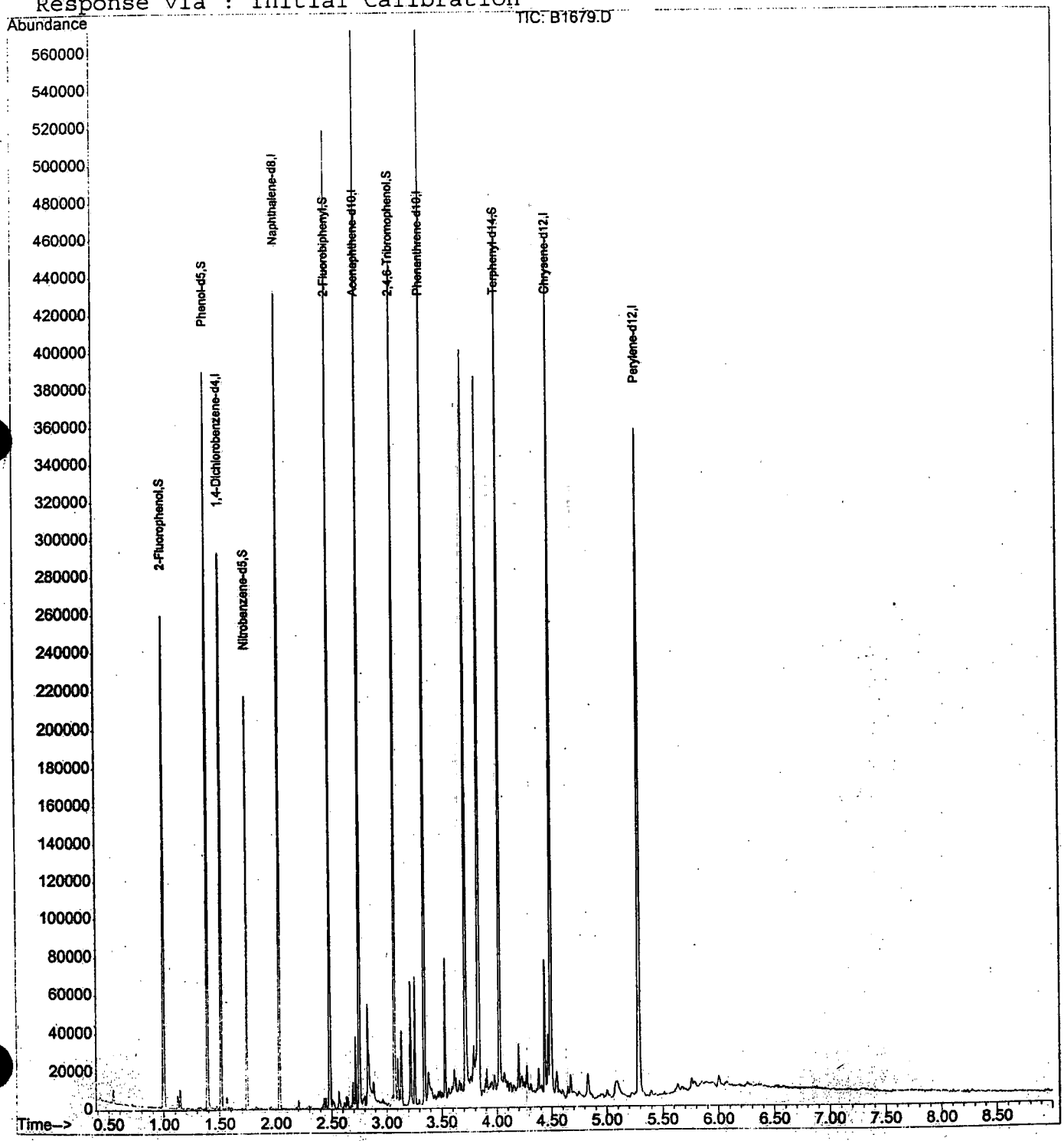
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1679.D Vial: 27
Acq On : 2 Apr 2001 14:22 Operator: JC
Sample : S-29,1922-013,S,5.51g,23.8,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 3 6:59 2001 Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



1614

000575

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1679.D
Acq On : 2 Apr 2001 14:22
Sample : S-29,1922-013,S,5.51g,23.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
LS Integration Params: LSCINT.P

Vial: 27
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

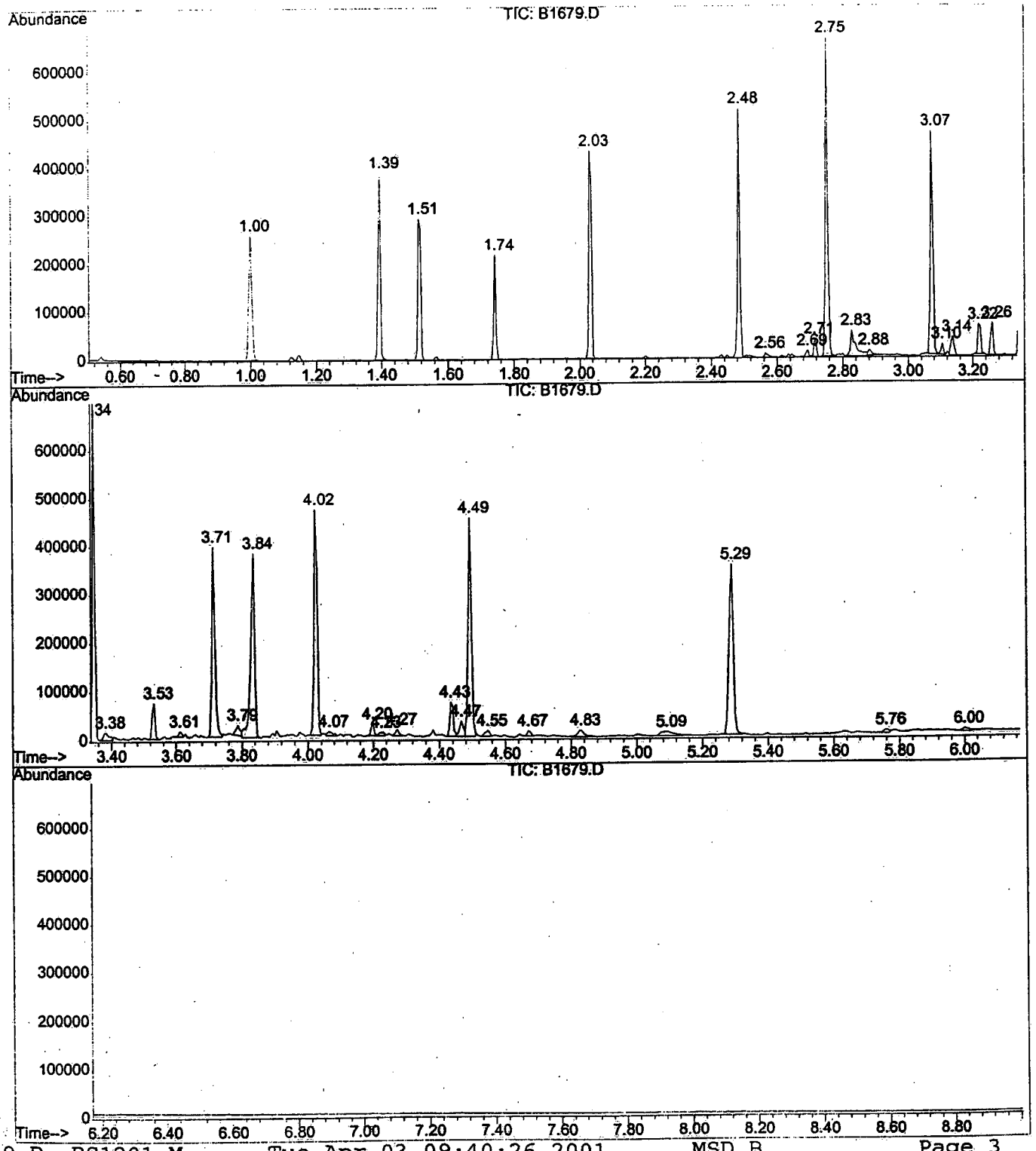
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.000	113	116	119	rBV	258174	175430	51.84%	4.265%
2	1.395	187	190	192	rBV	389449	203926	60.26%	4.958%
3	1.512	210	212	215	rVB	292940	191290	56.53%	4.651%
4	1.742	252	255	258	rBV	217015	93143	27.52%	2.265%
5	2.031	307	309	312	rBV	433074	264293	78.10%	6.426%
6	2.485	390	394	397	rBV	518759	234049	69.16%	5.691%
7	2.565	406	409	416	rVB2	9634	8404	2.48%	0.204%
8	2.693	431	433	436	rBV	13515	8478	2.51%	0.206%
9	2.714	436	437	440	rVB	37851	19363	5.72%	0.471%
10	2.752	441	444	447	rBV	663776	329102	97.25%	8.002%
11	2.827	454	458	467	rBV2	53556	59293	17.52%	1.442%
12	2.880	467	468	475	rVB	11205	9276	2.74%	0.226%
13	3.072	502	504	507	rBV	464902	258472	76.38%	6.284%
14	3.104	507	510	512	rVV	23185	11761	3.48%	0.286%
15	3.136	514	516	519	rVB2	39658	26990	7.98%	0.656%
16	3.217	529	531	534	rBV	62036	40159	11.87%	0.976%
17	3.259	536	539	541	rBV	66757	36946	10.92%	0.898%
18	3.345	552	555	558	rBV	696455	338400	100.00%	8.228%
19	3.382	558	562	566	rBV2	15363	20375	6.02%	0.495%
20	3.532	587	590	592	rVB	72861	44223	13.07%	1.075%
21	3.612	602	605	607	rBV3	10647	7570	2.24%	0.184%
22	3.713	621	624	629	rBV2	390896	250958	74.16%	6.102%
23	3.788	635	638	640	rBV2	19652	18798	5.55%	0.457%
24	3.836	640	647	650	rVB	378580	316375	93.49%	7.692%
25	4.023	679	682	685	rBV	465452	305545	90.29%	7.429%
26	4.066	688	690	694	rVB4	8464	9126	2.70%	0.222%
27	4.200	712	715	717	rBV	23623	15049	4.45%	0.366%
28	4.226	717	720	722	rVV2	6866	7689	2.27%	0.187%
29	4.274	726	729	733	rVB	13193	10250	3.03%	0.249%
30	4.435	757	759	762	rBV	69970	52386	15.48%	1.274%
31	4.467	762	765	767	rVV	30780	26131	7.72%	0.635%

32	4.493	767	770	773	rVV	451287	308642	91.21%	7.504%
33	4.547	776	780	782	rBV	11619	10865	3.21%	0.264%
34	4.670	800	803	806	rBV	10105	8017	2.37%	0.195%
35	4.830	827	833	843	rVB7	13753	22410	6.62%	0.545%
	5.092	875	882	891	rBV3	8782	25308	7.48%	0.615%
	5.289	914	919	925	rBV	351108	327376	96.74%	7.960%
38	5.760	1001	1007	1009	rBV4	6935	8642	2.55%	0.210%
39	6.000	1049	1052	1057	rBV7	6118	8436	2.49%	0.205%

Sum of corrected areas: 4112946

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-02-01\B1679.D
Operator : JC
Acquired : 2 Apr 2001 14:22 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-29,1922-013,S,5.51g,23.8,03/30/01
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,1
Vial Number: 27
Quant File :BS1201.RES (RTE Integrator)



1617

000578

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1679.D
Acq On : 2 Apr 2001 14:22
Sample : S-29,1922-013,S,5.51g,23.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
LS Integration Params: LSCINT.P

Vial: 27
Operator: JC
Inst : MSD_B
Multiplr: 1.00

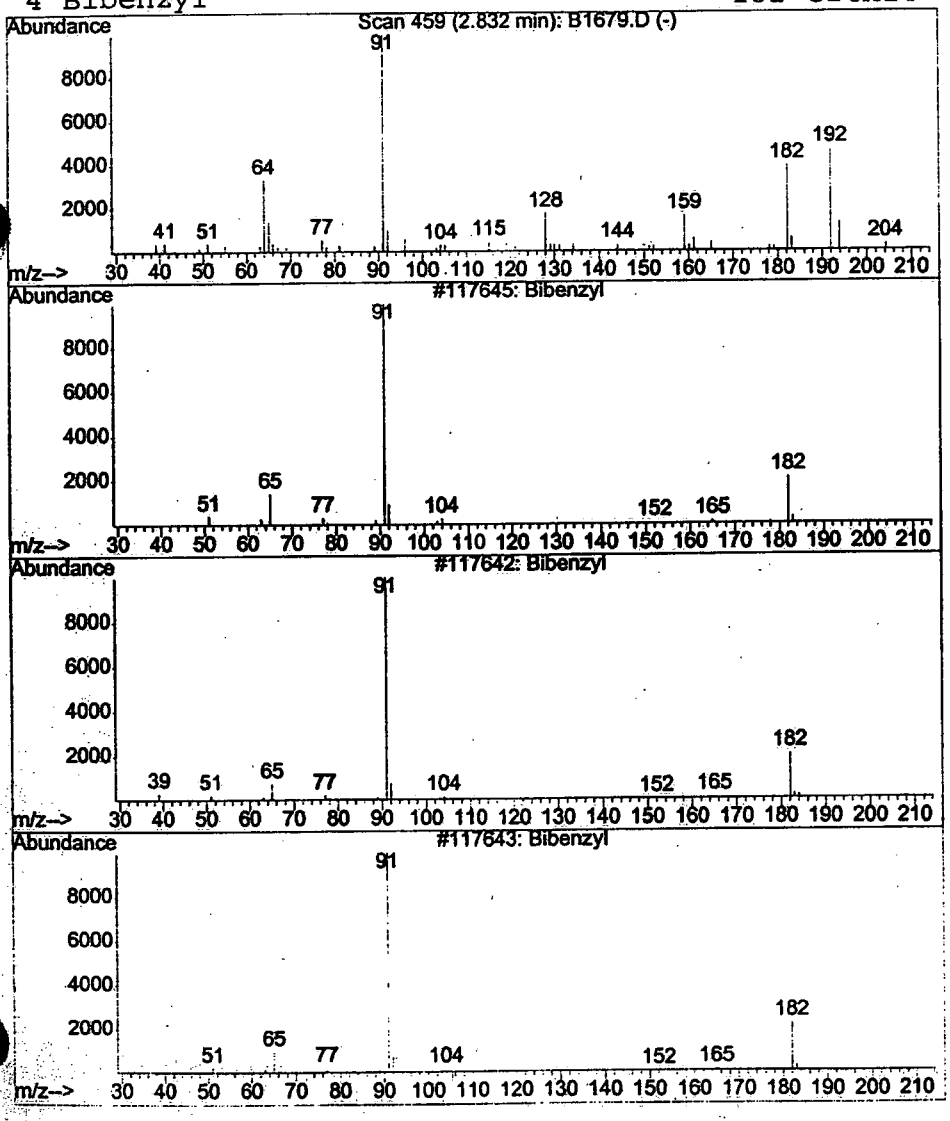
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

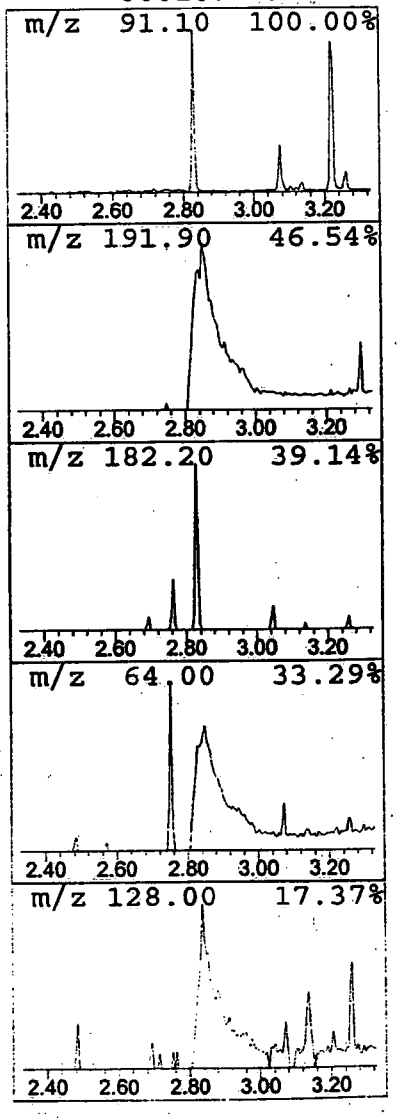
****

Peak Number 1 Bibenzyl Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.83	7.21 UG	59293	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bibenzyl	182	C14H14	000103-29-7	92
2	Bibenzyl	182	C14H14	000103-29-7	91
3	Bibenzyl	182	C14H14	000103-29-7	70
4	Bibenzyl	182	C14H14	000103-29-7	64





1118

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1679.D
Acq On : 2 Apr 2001 14:22
Sample : S-29,1922-013,S,5.51g,23.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 27
Operator: JC
Inst : MSD_B
Multiplr: 1.00

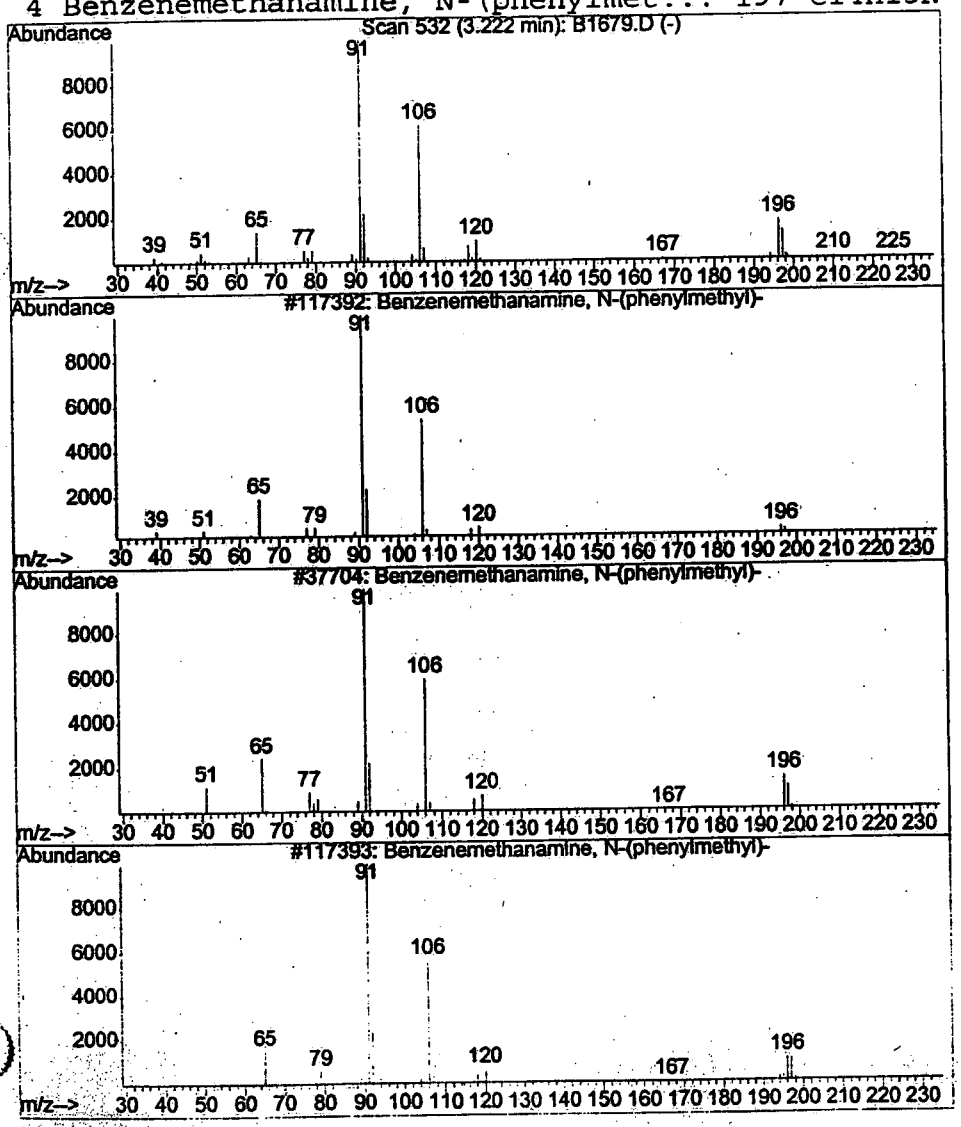
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

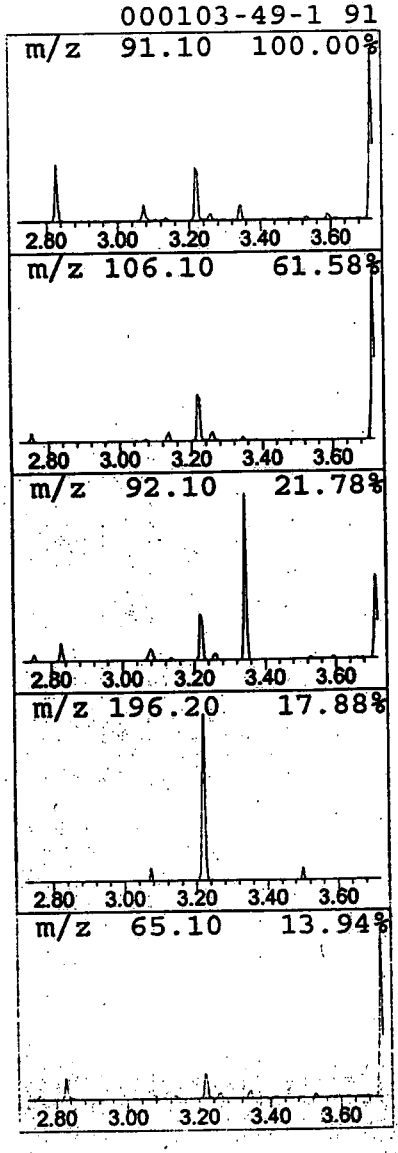
****

Peak Number 2 Substituted benzene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.22	4.75 UG	40159	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanamine, N-(phenylmet...	197	C14H15N	000103-49-1	97
2	Benzenemethanamine, N-(phenylmet...	197	C14H15N	000103-49-1	96
3	Benzenemethanamine, N-(phenylmet...	197	C14H15N	000103-49-1	94
4	Benzenemethanamine, N-(phenylmet...	197	C14H15N	000103-49-1	91





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1679.D
Acq On : 2 Apr 2001 14:22
Sample : S-29,1922-013,S,5.51g,23.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
LS Integration Params: LSCINT.P

Vial: 27
Operator: JC
Inst : MSD_B
Multiplr: 1.00

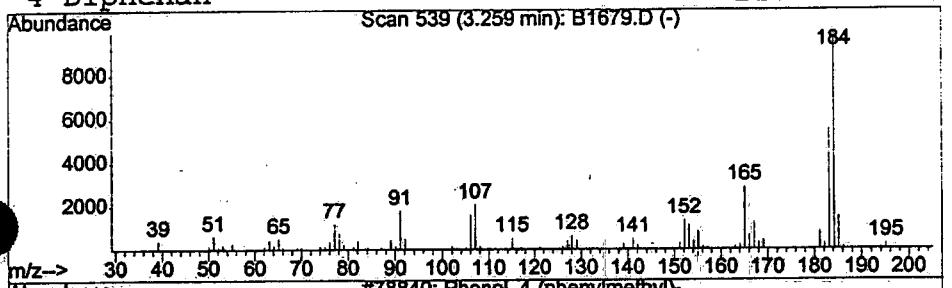
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

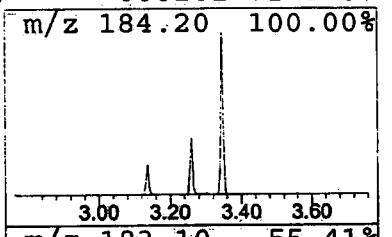
****

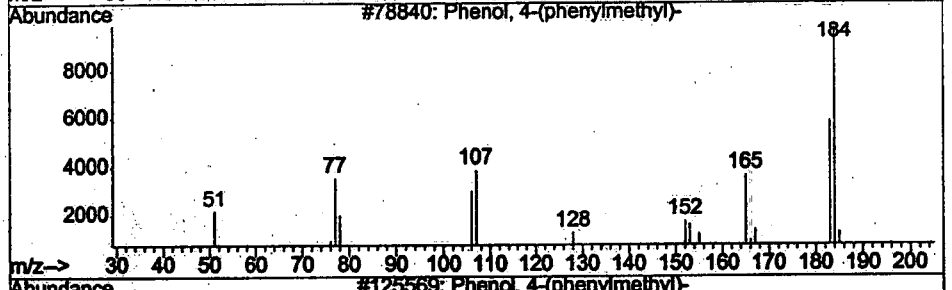
Peak Number 3 Substituted phenol Concentration Rank 7

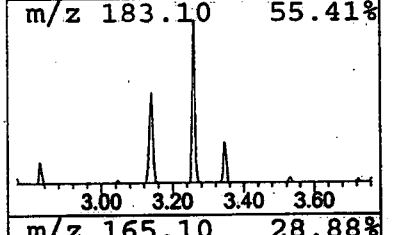
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.26	4.37 UG	36946	Phenanthrene-d10	3.34

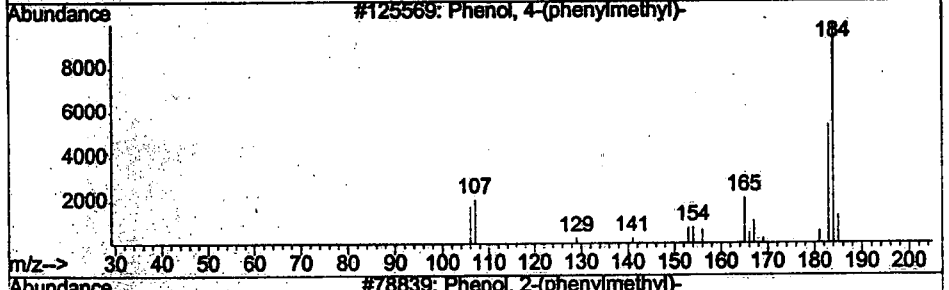
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 4-(phenylmethyl)-	184	C13H12O	000101-53-1	97
2	Phenol, 4-(phenylmethyl)-	184	C13H12O	000101-53-1	95
3	Phenol, 2-(phenylmethyl)-	184	C13H12O	028994-41-4	89
4	Diphenan	227	C14H13NO2	000101-71-3	87

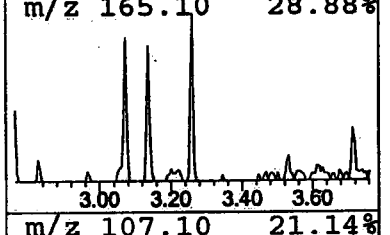


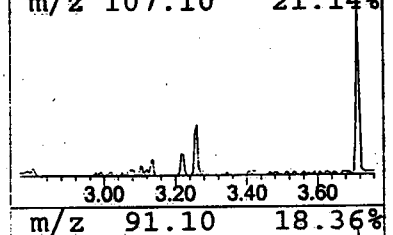


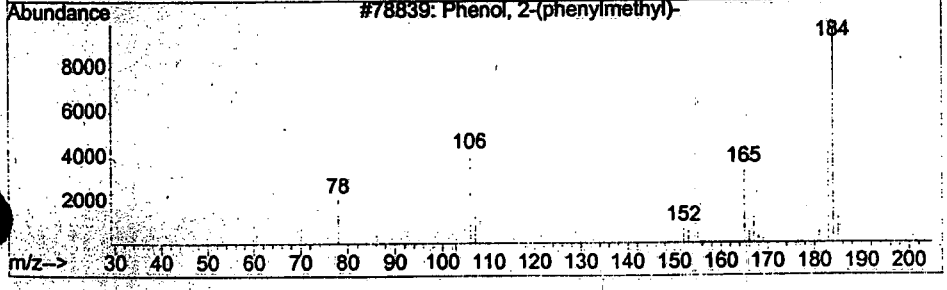


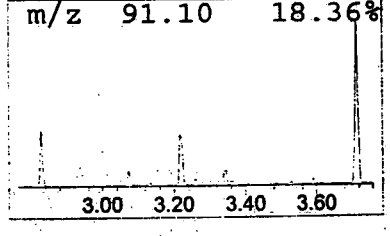












1670

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1679.D
Acq On : 2 Apr 2001 14:22
Sample : S-29,1922-013,S,5.51g,23.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 27
Operator: JC
Inst : MSD_B
Multiplr: 1.00

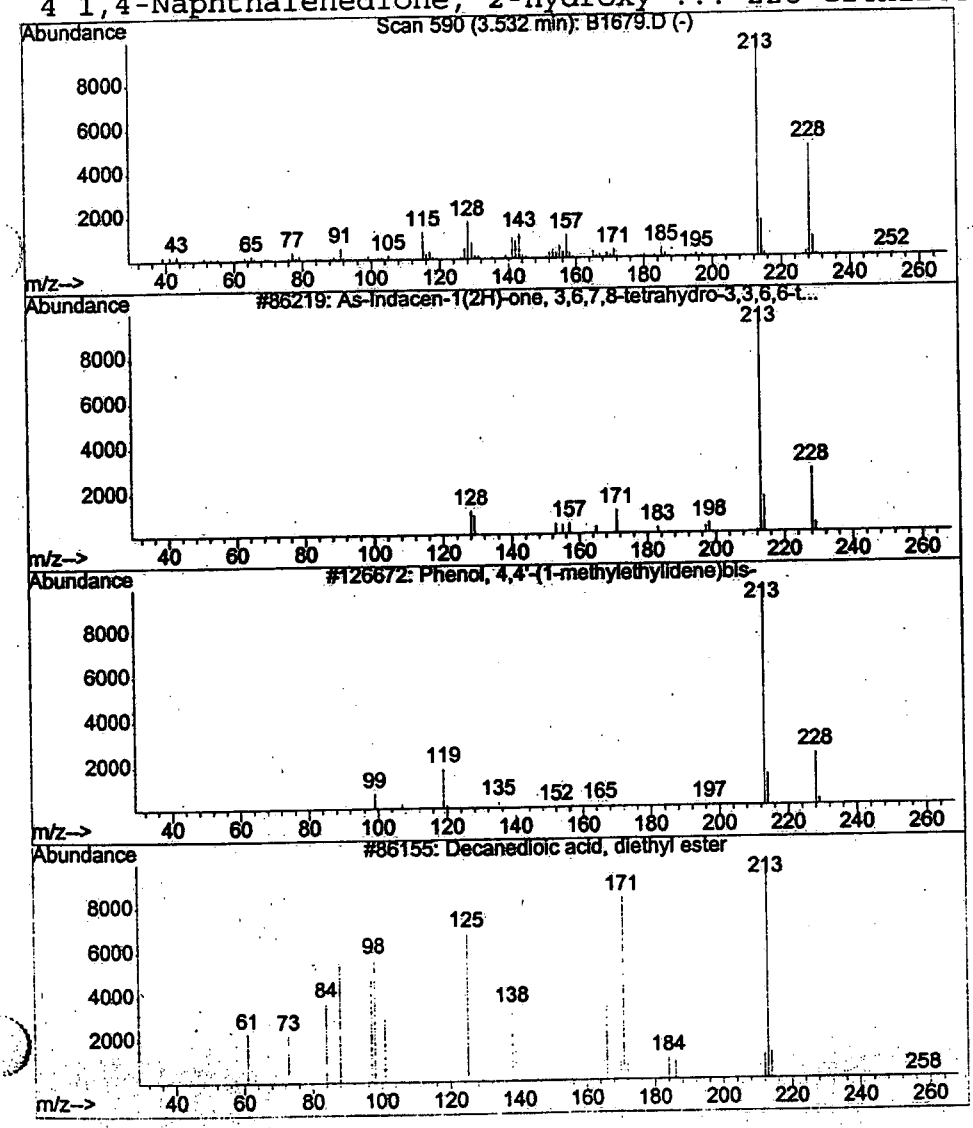
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

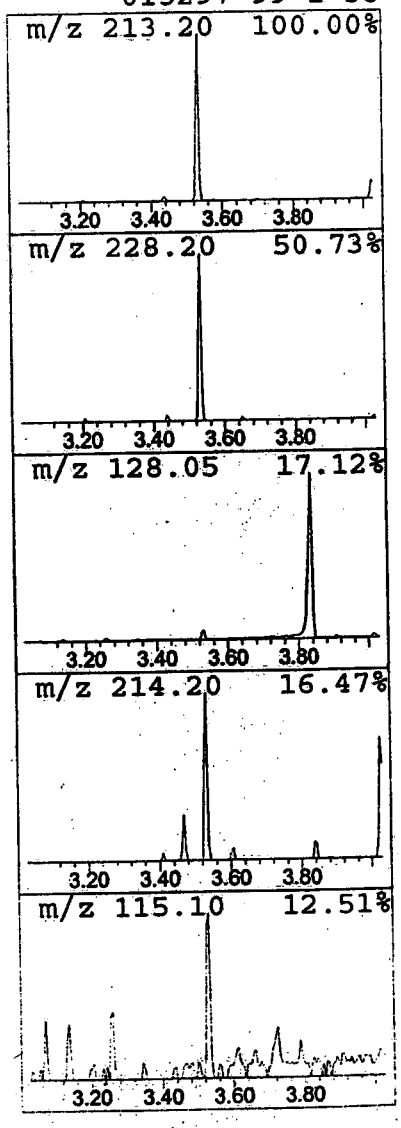
****

Peak Number 4 Substituted phenol Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.53	5.23 UG	44223	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	As-Indacen-1(2H)-one, 3,6,7,8-te...	228	C16H20O	055591-18-9	72
2	Phenol, 4,4'-(1-methylethylidene...	228	C15H16O2	000080-05-7	53
3	Decanedioic acid, diethyl ester	258	C14H26O4	000110-40-7	43
4	1,4-Naphthalenedione, 2-hydroxy-...	228	C14H12O3	015297-99-1	38





1671

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1679.D
Acq On : 2 Apr 2001 14:22
mple : S-29,1922-013,S,5.51g,23.8,03/30/01
sc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 27
Operator: JC
Inst : MSD_B
Multiplr: 1.00

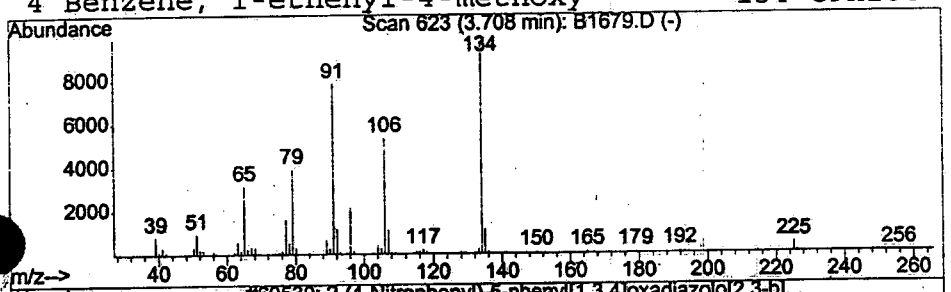
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

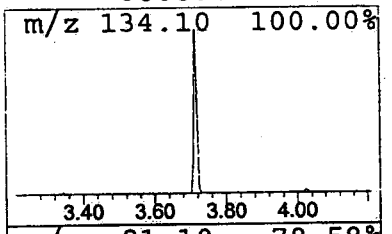
****

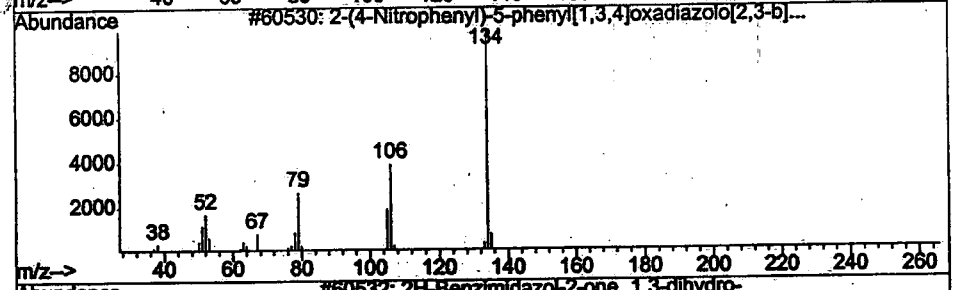
Peak Number 5 Unknown aromatic Concentration Rank 2

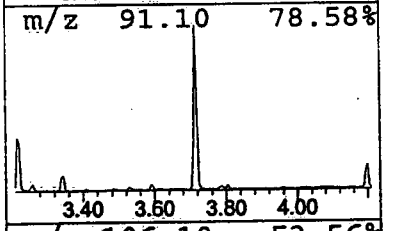
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.71	29.66 UG	250958	Phenanthrene-d10	3.34

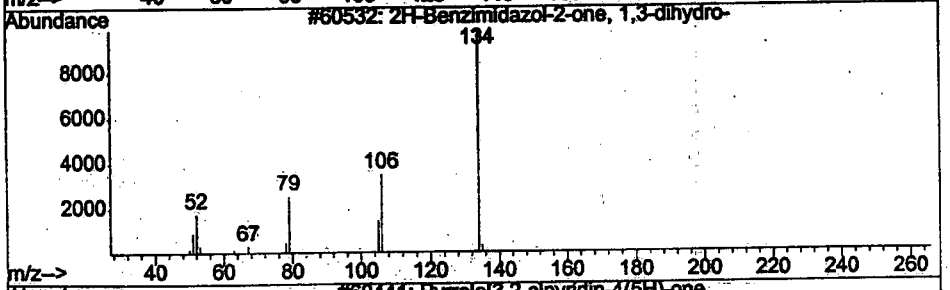
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-(4-Nitrophenyl)-5-phenyl[1,3,4...	383	C21H13N5O3	1000223-27-2	53
2	2H-Benzimidazol-2-one, 1,3-dihydro-	134	C7H6N2O	000615-16-7	53
3	Pyrrolo[3,2-c]pyridin-4(5H)-one	134	C7H6N2O	1000212-18-8	47
4	Benzene, 1-ethenyl-4-methoxy-	134	C9H10O	000637-69-4	43

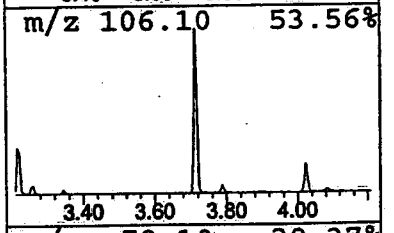


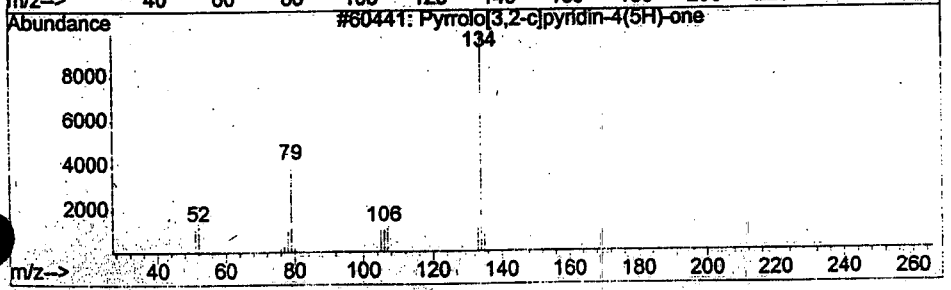


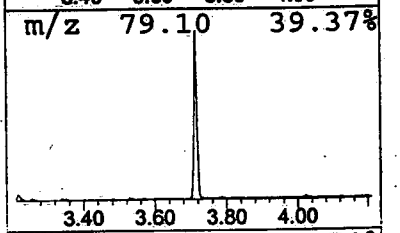


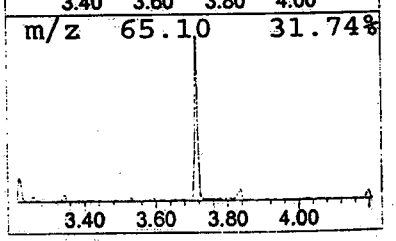












1622

006583

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1679.D
Acq On : 2 Apr 2001 14:22
Sample : S-29,1922-013,S,5.51g,23.8,03/30/01
isc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 27
Operator: JC
Inst : MSD_B
Multiplr: 1.00

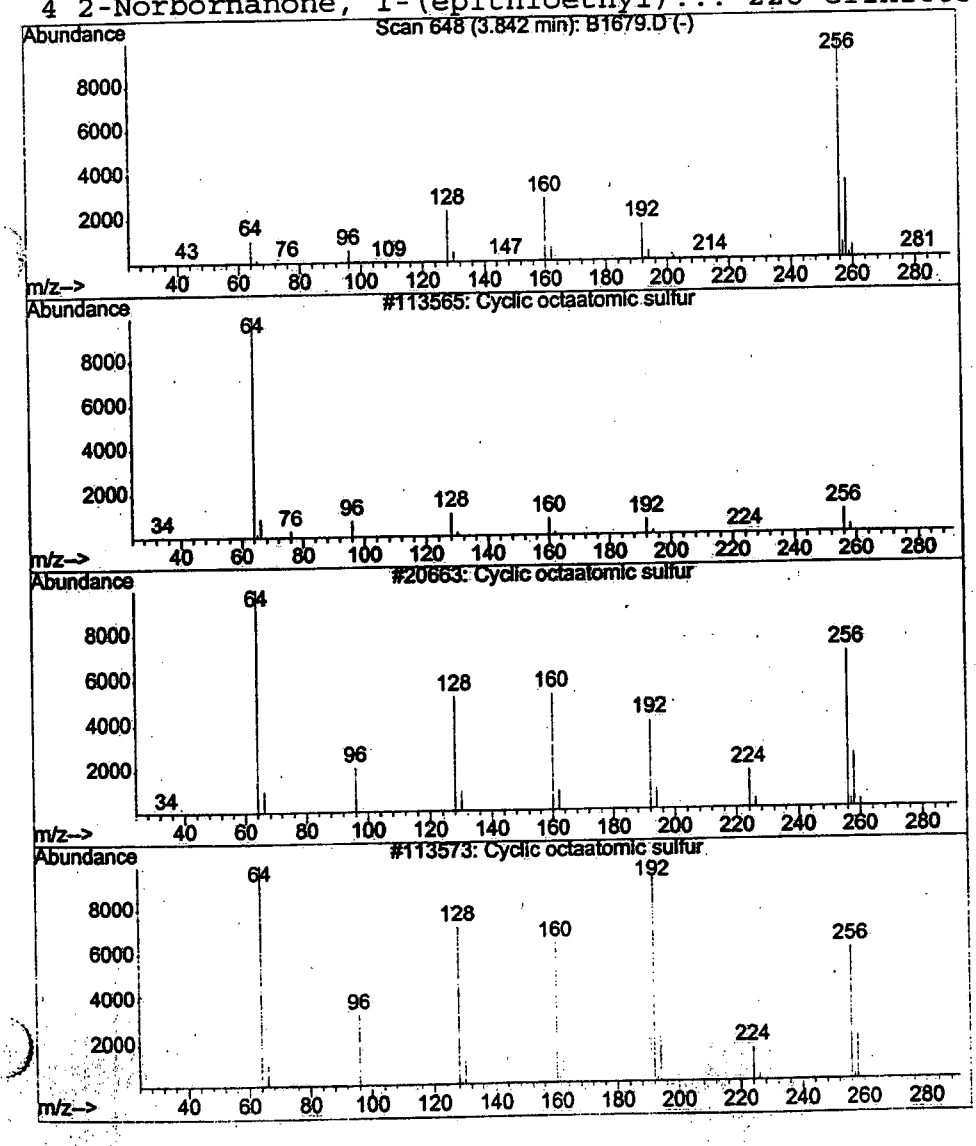
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

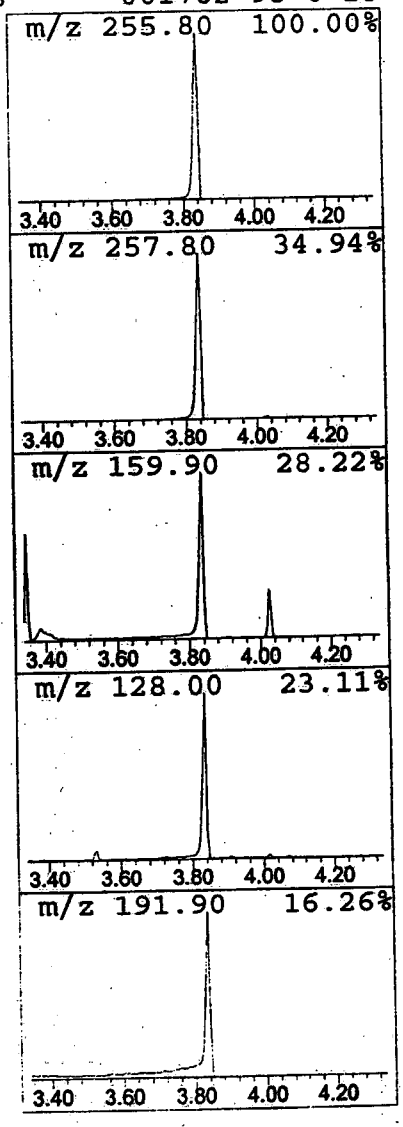
****

Peak Number 6 Cyclic octaatomic sulfur Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.84	37.40 UG	316375	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclic octaatomic sulfur	256	S8	010544-50-0	91
2	Cyclic octaatomic sulfur	256	S8	010544-50-0	91
3	Cyclic octaatomic sulfur	256	S8	010544-50-0	83
4	2-Norbornanone, 1-(epithioethyl)...	228	C11H16O3S	001782-93-0	23





1623
007584

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1679.D
Acq On : 2 Apr 2001 14:22
Sample : S-29,1922-013,S,5.51g,23.8,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
.S Integration Params: LSCINT.P

Vial: 27
Operator: JC
Inst : MSD_B
Multiplr: 1.00

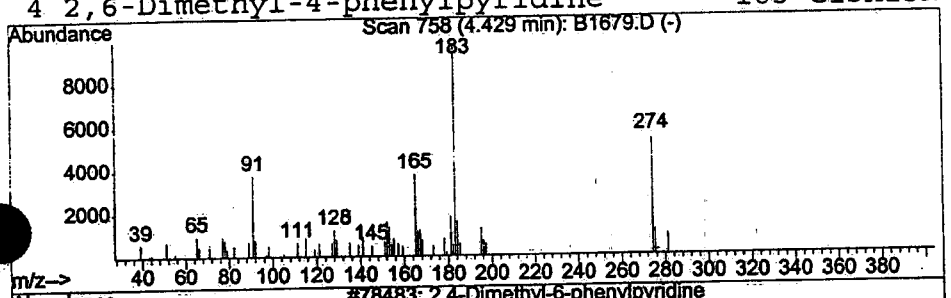
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

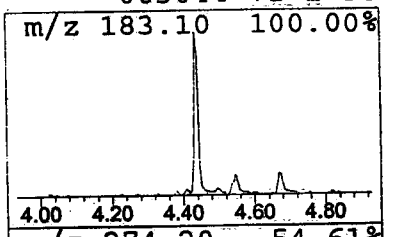
****

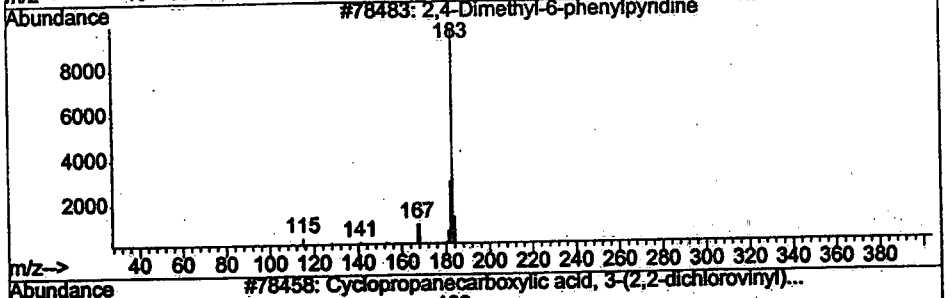
Peak Number 7 Unknown aromatic Concentration Rank 4

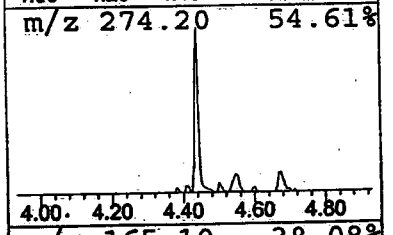
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.43	6.79 UG	52386	Chrysene-d12	4.49

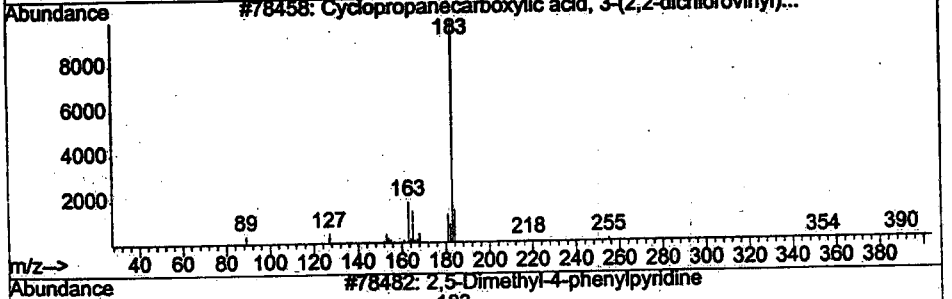
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4-Dimethyl-6-phenylpyridine	183	C13H13N	027068-65-1	46
2	Cyclopropanecarboxylic acid, 3-(...	390	C21H20Cl2O3	054774-45-7	43
3	2,5-Dimethyl-4-phenylpyridine	183	C13H13N	1000216-56-2	38
4	2,6-Dimethyl-4-phenylpyridine	183	C13H13N	003044-71-1	38

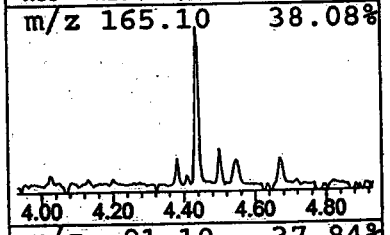


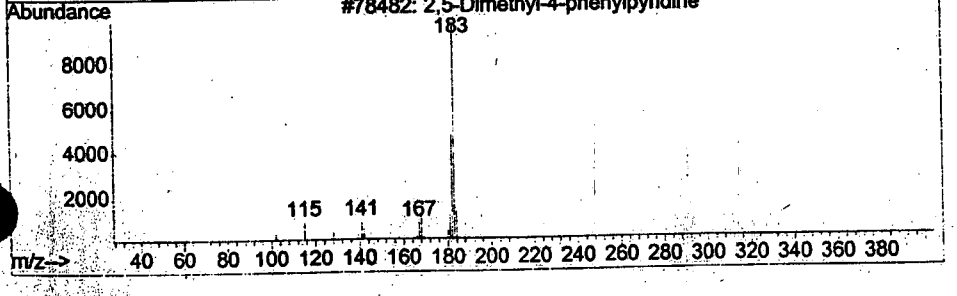


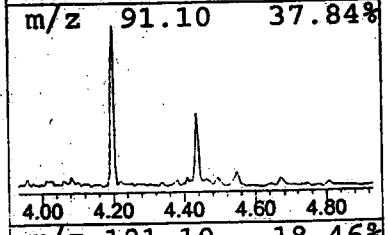


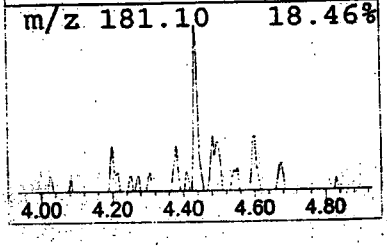












1624

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D Vial: 28
Acq On : 2 Apr 2001 14:37 Operator: JC
Sample : S-30,1922-015,S,5.06g,26.4,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 02 14:46:14 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.52	152	33567	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	132055	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	77328	40.00	UG	0.00
60) Phenanthrene-d10	3.34	188	140298	40.00	UG	-0.01
75) Chrysene-d12	4.49	240	113683	40.00	UG	-0.03
84) Perylene-d12	5.29	264	134674	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	56770	58.79	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 58.79%			
6) Phenol-d5	1.39	99	86578	73.24	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 73.24%			
23) Nitrobenzene-d5	1.74	82	33722	35.19	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 70.38%			
43) 2-Fluorobiphenyl	2.48	172	87630	41.23	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 82.46%			
64) 2,4,6-Tribromophenol	3.08	330	44834	95.97	UG	0.00
Spiked Amount 100.000	Range 54 - 135		Recovery = 95.97%			
77) Terphenyl-d14	4.02	244	134440	49.59	UG	-0.01
Spiked Amount 50.000	Range 58 - 147		Recovery = 99.18%			
Target Compounds						Qvalue
69) Phenanthrene	3.36	178	3458	1.20	UG	# 1
72) Di-n-butylphthalate	3.62	149	2153	0.63	UG	# 73
73) Fluoranthene	3.63	202	2911	0.95	UG	97

(#) = qualifier out of range (m) = manual integration

1625

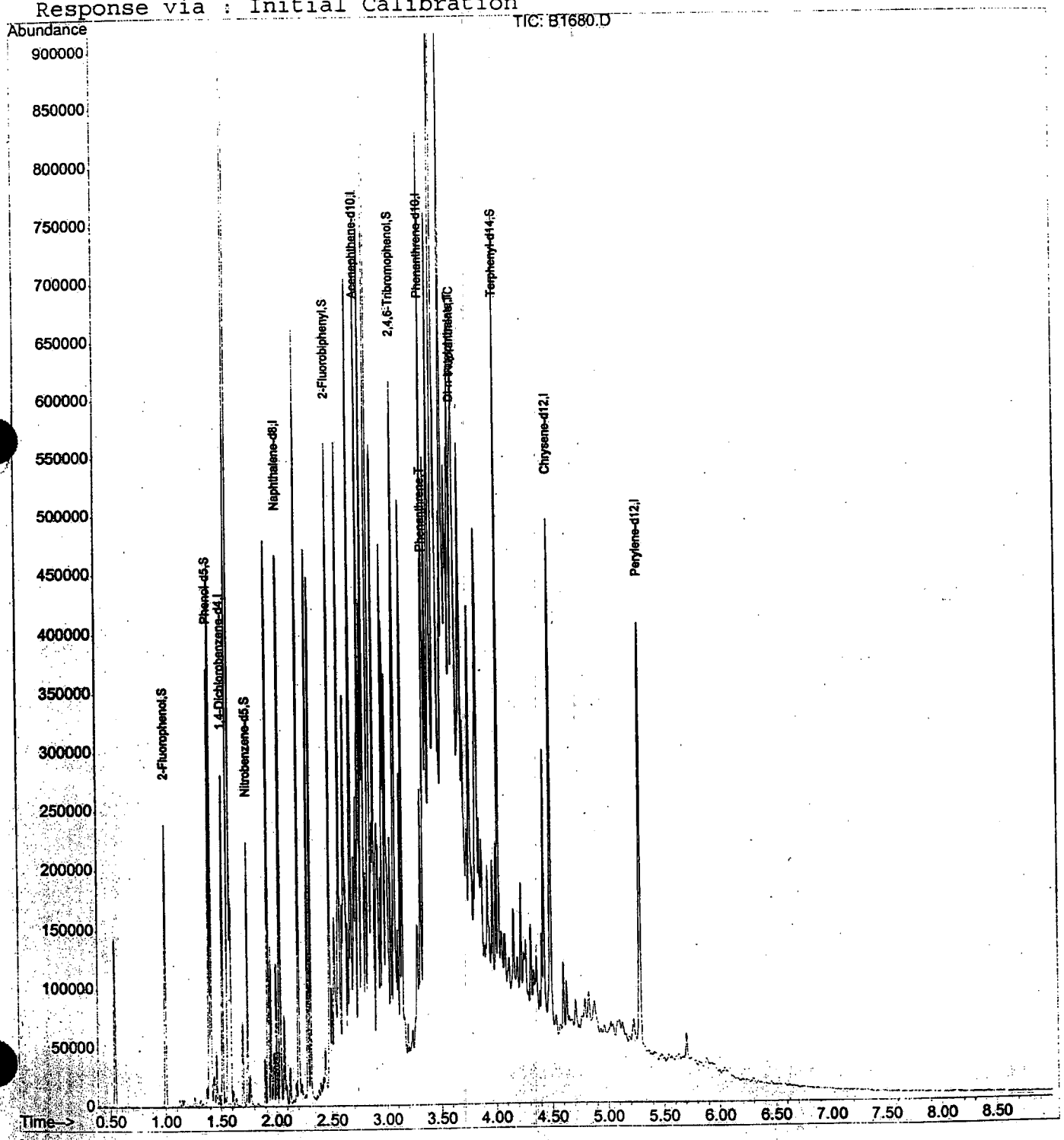
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
Acq On : 2 Apr 2001 14:37
Sample : S-30,1922-015,S,5.06g,26.4,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: rteint.p
Quant Time: Apr 3 7:02 2001

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



1626

000597

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
Acq On : 2 Apr 2001 14:37
Sample : S-30,1922-015,S,5.06g,26.4,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.535	27	29	34	rBV	143996	104906	3.77%	0.510%
2	1.000	113	116	119	rBV	238892	168232	6.04%	0.818%
3	1.395	187	190	191	rBV	364620	213119	7.65%	1.036%
4	1.411	191	193	196	rVB	457471	273757	9.83%	1.331%
5	1.518	209	213	215	rBV	280313	193079	6.93%	0.939%
6	1.576	219	224	225	rVV	3519596	2784444	100.00%	13.538%
7	1.592	225	227	229	rVB	173526	108744	3.91%	0.529%
8	1.699	244	247	249	rBV	71589	45183	1.62%	0.220%
9	1.742	252	255	257	rBV	222851	97542	3.50%	0.474%
10	1.924	286	289	292	rBV	476402	261675	9.40%	1.272%
11	1.950	292	294	296	rVV	131273	58767	2.11%	0.286%
12	1.982	296	300	301	rVB2	41084	35574	1.28%	0.173%
13	1.998	301	303	305	rBV	116611	70710	2.54%	0.344%
14	2.031	307	309	314	rVB	460812	326901	11.74%	1.589%
15	2.073	314	317	319	rBV	72869	46832	1.68%	0.228%
16	2.201	339	341	345	rBV	655173	330973	11.89%	1.609%
17	2.287	354	357	360	rBV	464252	257462	9.25%	1.252%
18	2.314	360	362	364	rVB	434629	228465	8.21%	1.111%
19	2.485	390	394	396	rBV	547994	284564	10.22%	1.384%
20	2.501	396	397	399	rVV2	81130	58112	2.09%	0.283%
21	2.527	399	402	406	rVV4	138163	171905	6.17%	0.836%
22	2.570	408	410	414	rVV	534361	306731	11.02%	1.491%
23	2.597	414	415	416	rVV	137333	77262	2.77%	0.376%
24	2.618	416	419	420	rVV2	312534	260946	9.37%	1.269%
25	2.645	423	424	426	rVV2	115007	72715	2.61%	0.354%
26	2.677	428	430	432	rVV	659469	406126	14.59%	1.975%
27	2.704	432	435	437	rVV2	162287	174515	6.27%	0.848%
28	2.725	437	439	440	rVV	209845	137236	4.93%	0.667%
29	2.741	440	442	443	rVV	262141	176523	6.34%	0.858%
30	2.752	443	444	446	rVV	676373	362589	13.02%	1.763%
31	2.773	446	448	450	rVV2	366311	328352	11.79%	1.596%

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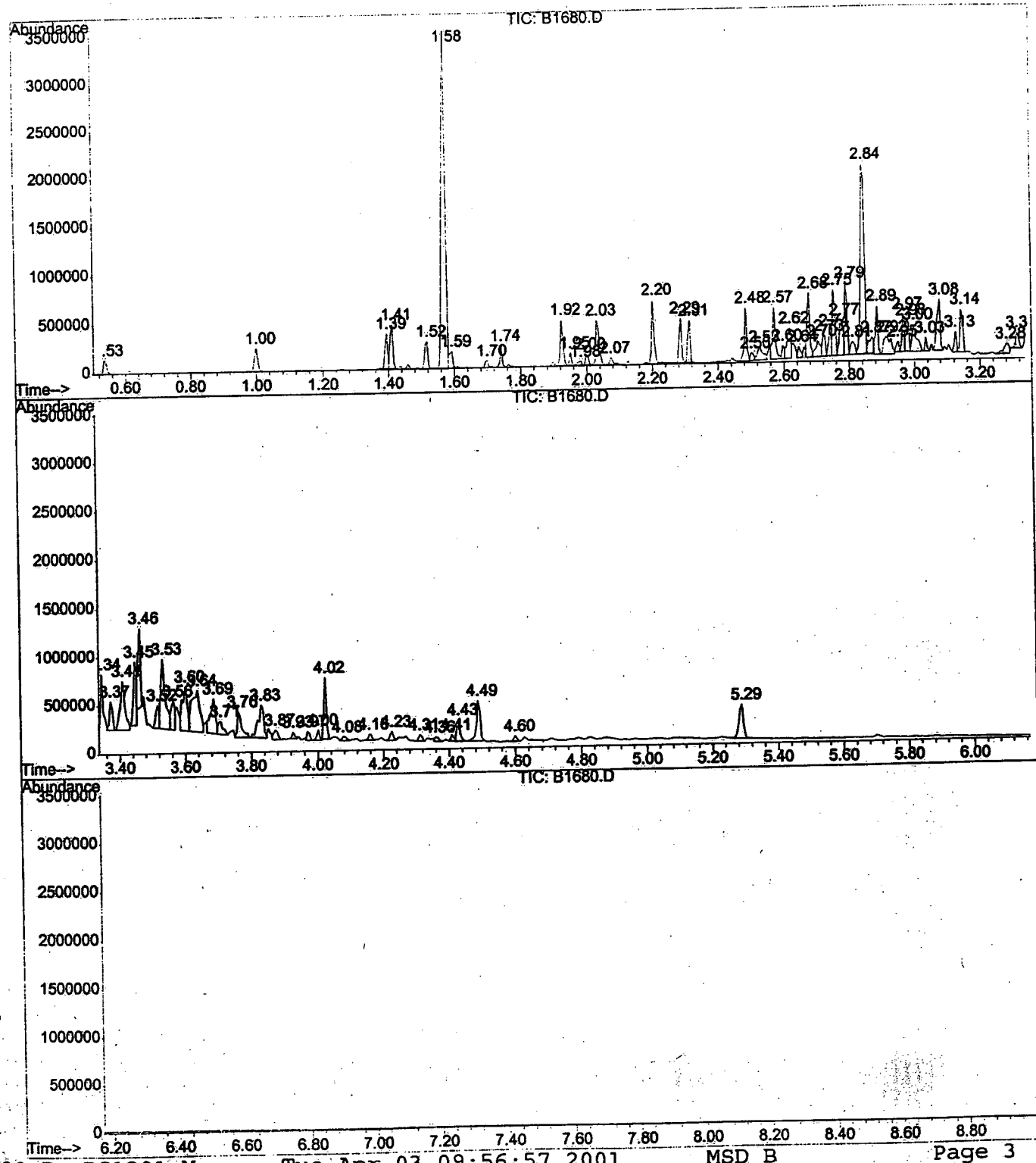
32	2.789	450	451	453	rVV	740624	414757	14.90%	2.016%
33	2.811	453	455	457	rVV2	132703	121094	4.35%	0.589%
34	2.843	457	461	463	rVV2	1958787	1671574	60.03%	8.127%
35	2.869	463	466	467	rVV3	166536	178604	6.41%	0.868%
	2.885	467	469	471	rVB	497970	240488	8.64%	1.169%
	2.917	471	475	479	rBV4	176463	284859	10.23%	1.385%
38	2.949	479	481	482	rVV	108027	64327	2.31%	0.313%
39	2.965	482	484	485	rVV	387689	205444	7.38%	0.999%
40	2.976	485	486	488	rVV2	321323	206848	7.43%	1.006%
41	2.998	488	490	495	rVB3	279239	274793	9.87%	1.336%
42	3.035	495	497	499	rBV	140921	57495	2.06%	0.280%
43	3.078	501	505	507	rBV2	525237	445364	15.99%	2.165%
44	3.126	512	514	515	rVV	210757	104044	3.74%	0.506%
45	3.142	515	517	520	rVB	440315	265197	9.52%	1.289%
46	3.281	537	543	545	rBV3	104893	128344	4.61%	0.624%
47	3.313	547	549	552	rBV	165016	104666	3.76%	0.509%
48	3.345	552	555	558	rBV	727654	587100	21.08%	2.854%
49	3.371	558	560	563	rVB	294602	183531	6.59%	0.892%
50	3.409	563	567	571	rBV4	505213	522266	18.76%	2.539%
51	3.446	571	574	575	rBV2	658638	457454	16.43%	2.224%
52	3.462	575	577	578	rVB	806938	450880	16.19%	2.192%
53	3.516	584	587	588	rBV	231599	175562	6.31%	0.854%
54	3.532	588	590	594	rVV3	720618	695935	24.99%	3.384%
55	3.564	594	596	597	rVV	291692	237426	8.53%	1.154%
56	3.601	600	603	605	rVV3	452659	476540	17.11%	2.317%
	3.639	605	610	613	rVV6	426261	733180	26.33%	3.565%
	3.687	615	619	621	rVV3	357691	380639	13.67%	1.851%
59	3.708	621	623	627	rVV4	136805	127928	4.59%	0.622%
60	3.761	631	633	640	rVB4	266292	241062	8.66%	1.172%
61	3.831	640	646	649	rBV2	343635	401184	14.41%	1.950%
62	3.874	652	654	657	rVB2	99013	86087	3.09%	0.419%
63	3.927	662	664	666	rBV2	69813	43654	1.57%	0.212%
64	3.970	671	672	675	rVB	92951	54245	1.95%	0.264%
65	4.002	675	678	680	rBV	107507	61983	2.23%	0.301%
66	4.023	680	682	685	rVB	639040	333222	11.97%	1.620%
67	4.077	690	692	696	rVB2	41179	41093	1.48%	0.200%
68	4.157	705	707	710	rVB2	59287	40901	1.47%	0.199%
69	4.226	717	720	722	rBV	87887	59915	2.15%	0.291%
70	4.312	734	736	739	rBV2	65931	48302	1.73%	0.235%
71	4.360	744	745	749	rVB3	45955	34672	1.25%	0.169%
72	4.408	752	754	756	rBV	63368	44177	1.59%	0.215%
73	4.429	756	758	763	rVB	223427	152919	5.49%	0.743%
74	4.488	763	769	772	rBV	418196	324188	11.64%	1.576%
75	4.600	787	790	793	rBV	57228	40728	1.46%	0.198%
76	5.289	914	919	923	rVB	357357	339657	12.20%	1.651%

Sum of corrected areas: 20568269

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
Operator : JC
Acquired : 2 Apr 2001 14:37 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-30,1922-015,S,5.06g,26.4,03/30/01
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,1
Vial Number: 28
Quant File :BS1201.RES (RTE Integrator)



1629

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
Acq On : 2 Apr 2001 14:37
Sample : S-30,1922-015,S,5.06g,26.4,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

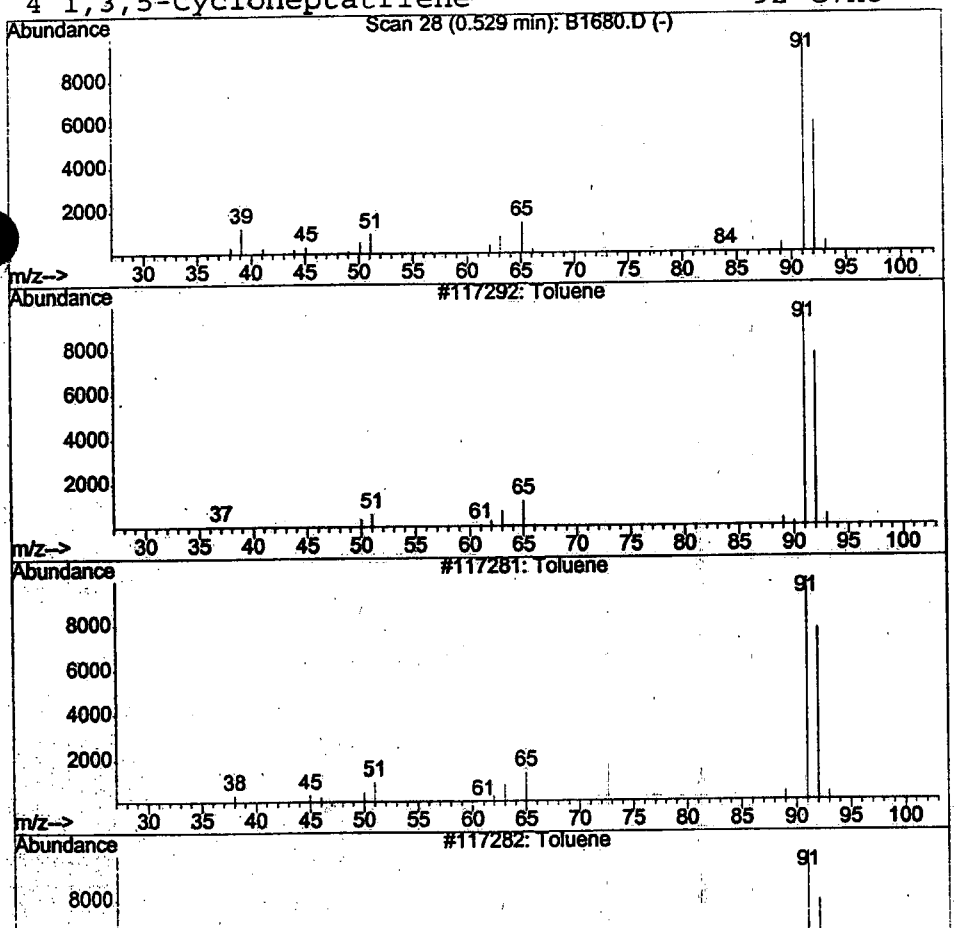
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

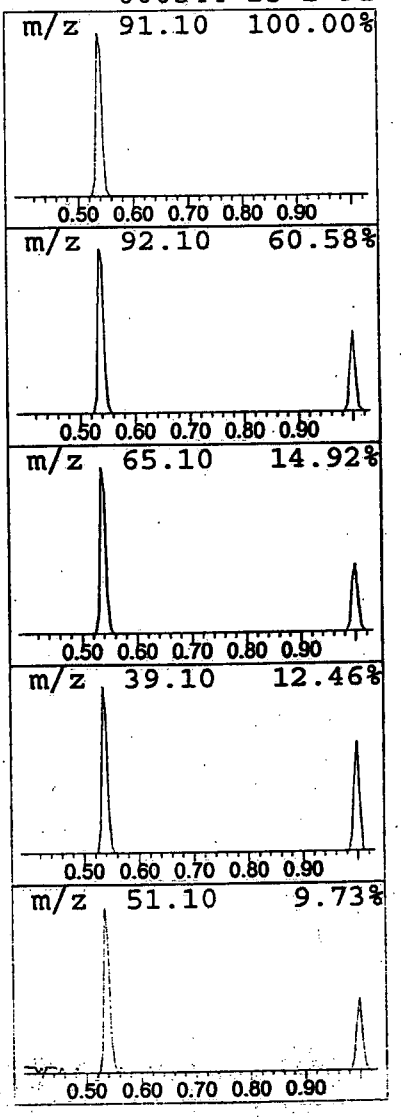
****

Peak Number 1 Substituted benzene Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
0.53	21.73 UG	104906	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Toluene	92	C7H8	000108-88-3	95
2	Toluene	92	C7H8	000108-88-3	91
3	Toluene	92	C7H8	000108-88-3	91
4	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	91





1630

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
Acq On : 2 Apr 2001 14:37
Sample : S-30,1922-015,S,5.06g,26.4,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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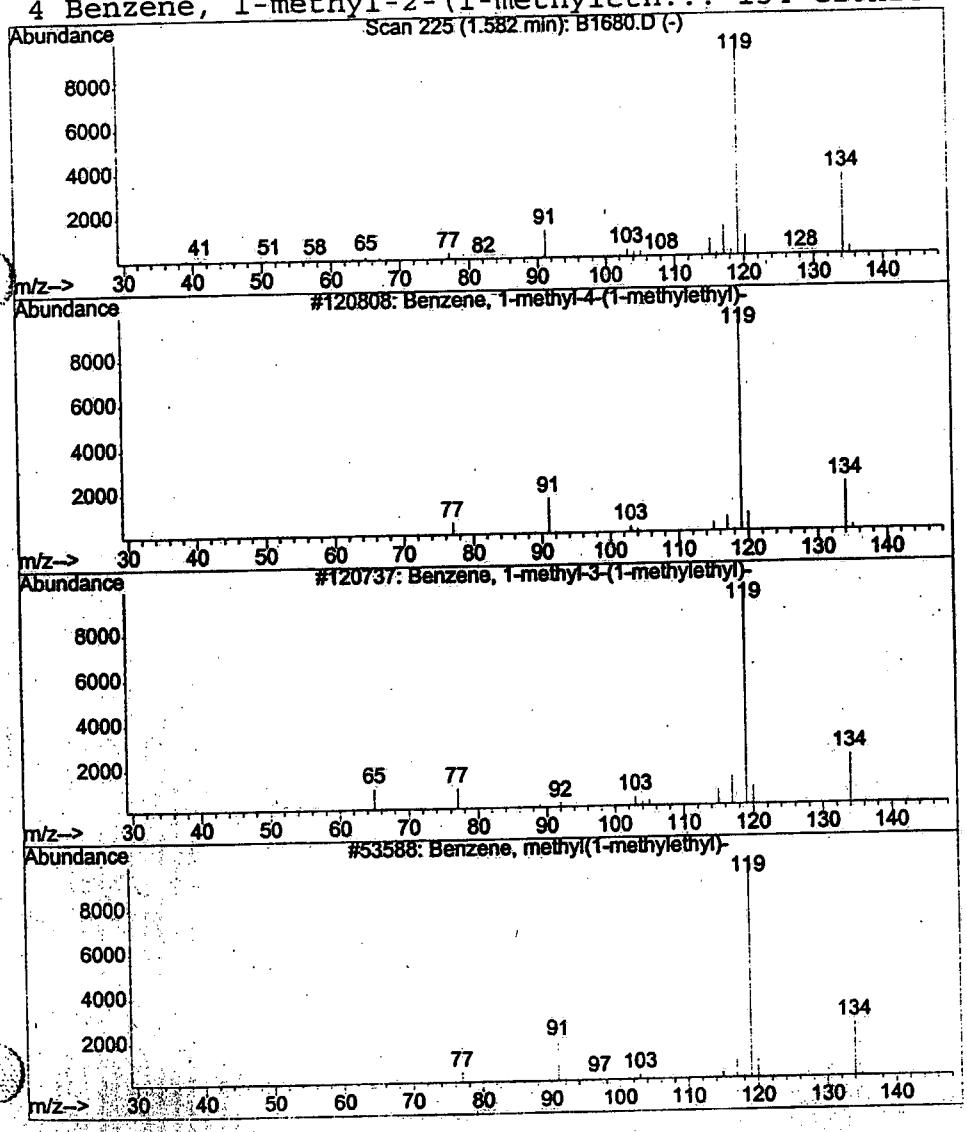
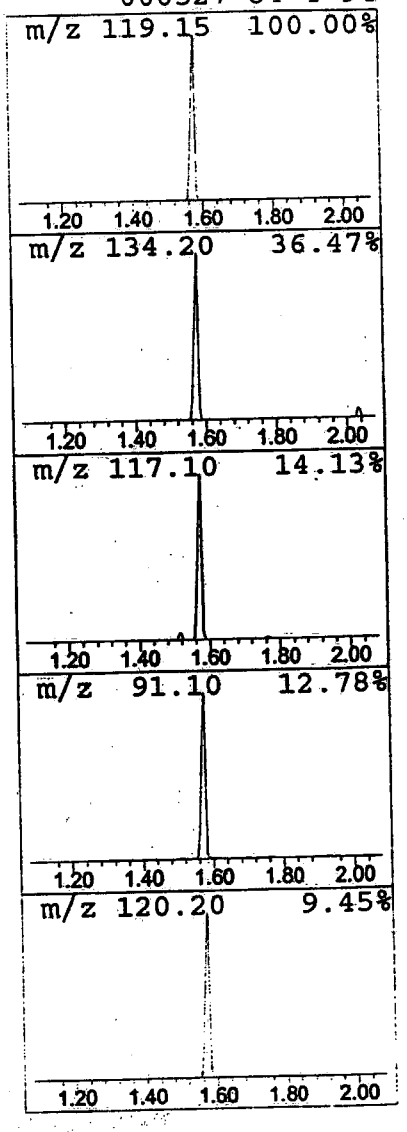
Peak Number 2 Substituted benzene Concentration Rank = 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.58	576.85 UG	2784440	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	97
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	95
3	Benzene, methyl(1-methylethyl)-	134	C10H14	025155-15-1	94
4	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	94





1631

000592

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
Acq On : 2 Apr 2001 14:37
Sample : S-30,1922-015,S,5.06g,26.4,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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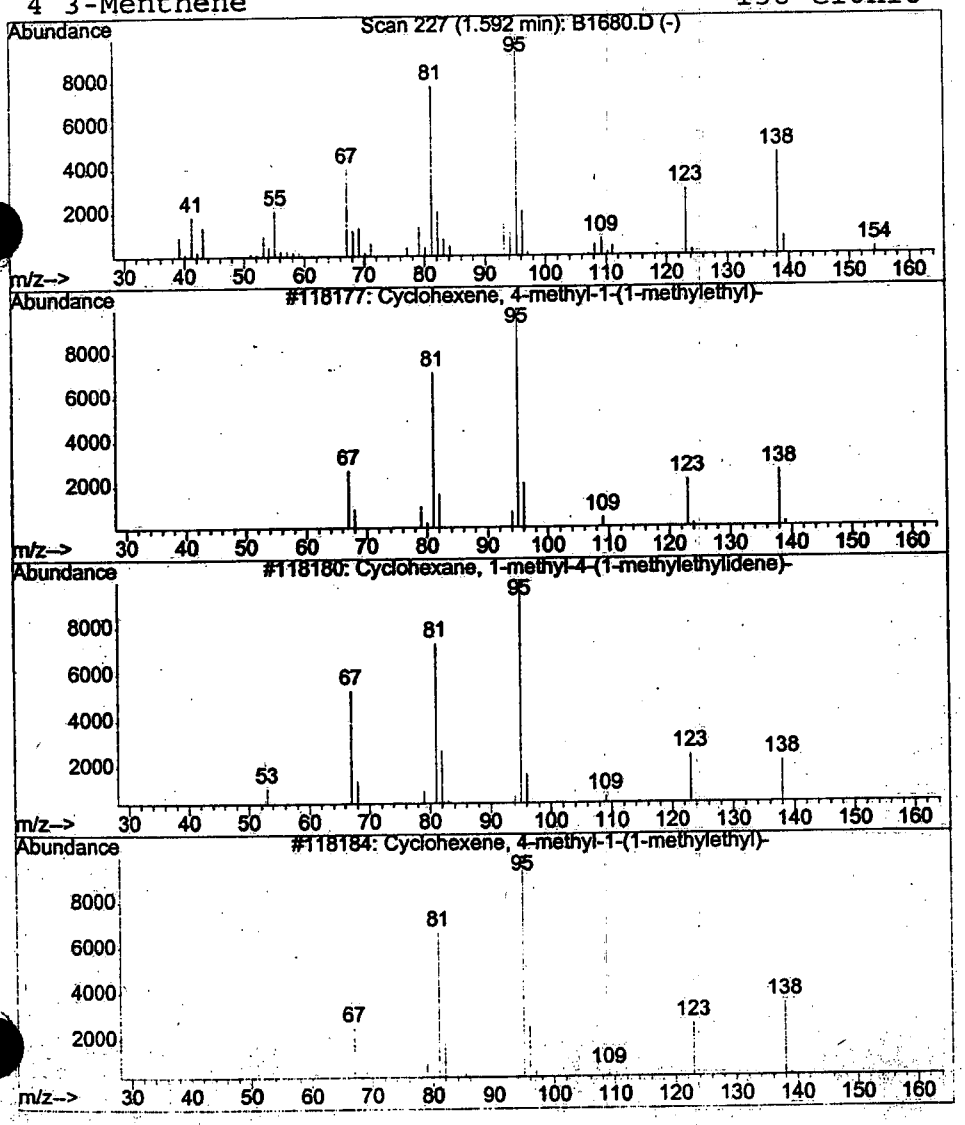
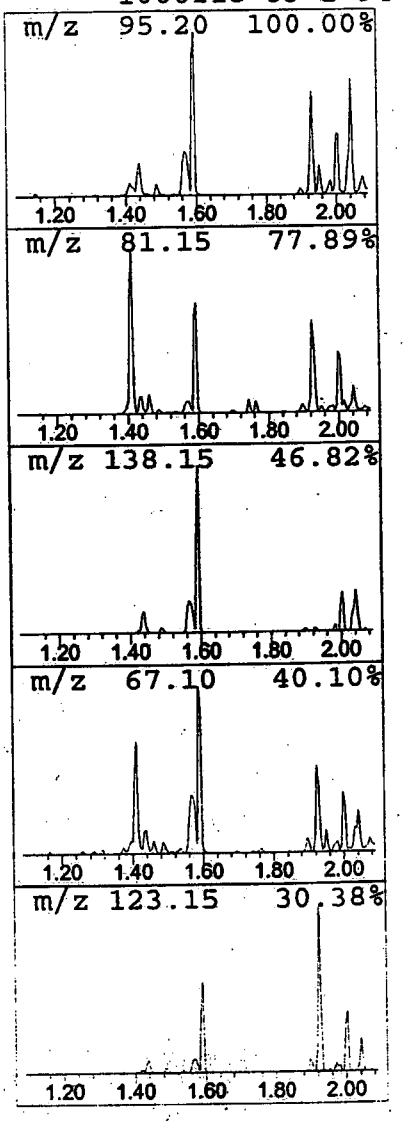
Peak Number 3 Unknown alkane — Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.59	22.53 UG	108744	1,4-Dichlorobenzene-d4	1.52

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 4-methyl-1-(1-methy...	138	C10H18	000500-00-5	97
2	Cyclohexane, 1-methyl-4-(1-methy...	138	C10H18	001124-27-2	95
3	Cyclohexene, 4-methyl-1-(1-methy...	138	C10H18	000500-00-5	94
4	3-Menthene	138	C10H18	1000118-83-1	94





1637

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
Acq On : 2 Apr 2001 14:37
Sample : S-30,1922-015,S,5.06g,26.4,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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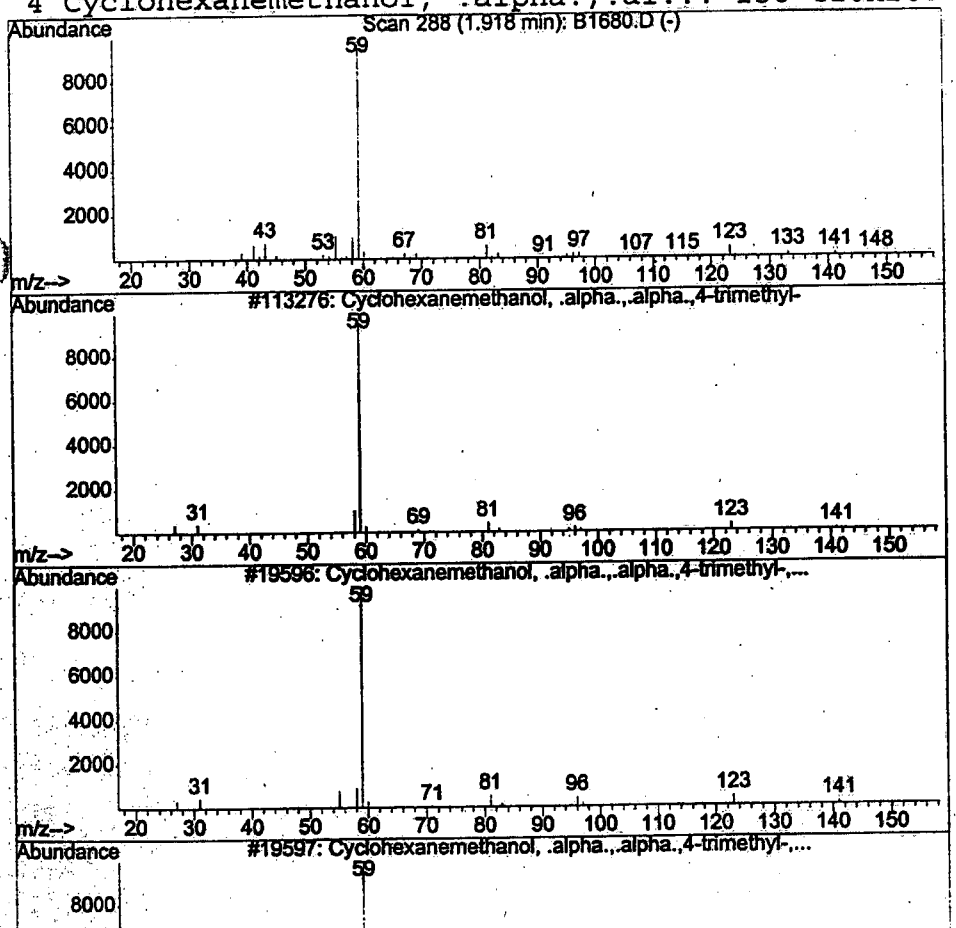
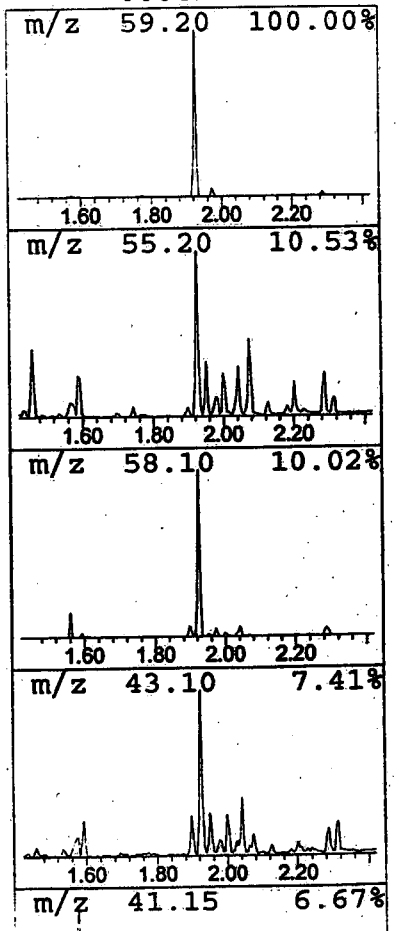
Peak Number 4 Unknown — Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.92	32.02 UG	261675	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	000498-81-7	83
2	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	007322-63-6	74
3	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	005114-00-1	64
4	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	000498-81-7	64





1633

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
Acq On : 2 Apr 2001 14:37
Sample : S-30,1922-015,S,5.06g,26.4,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

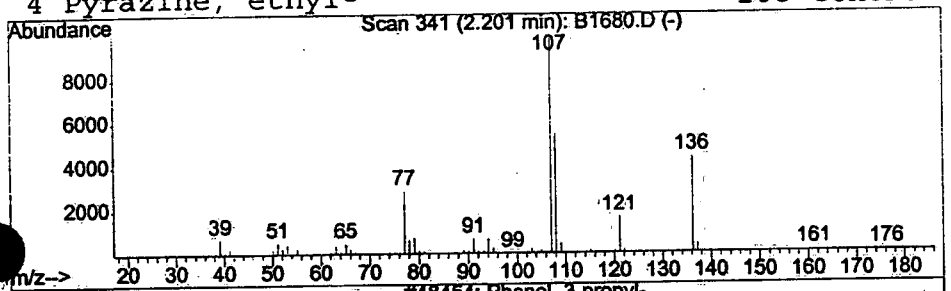
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

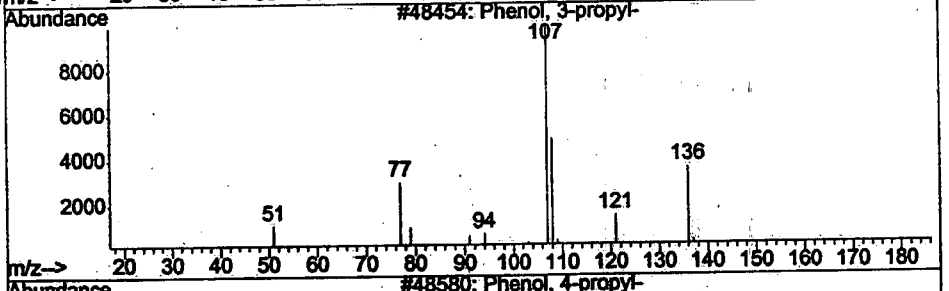
****

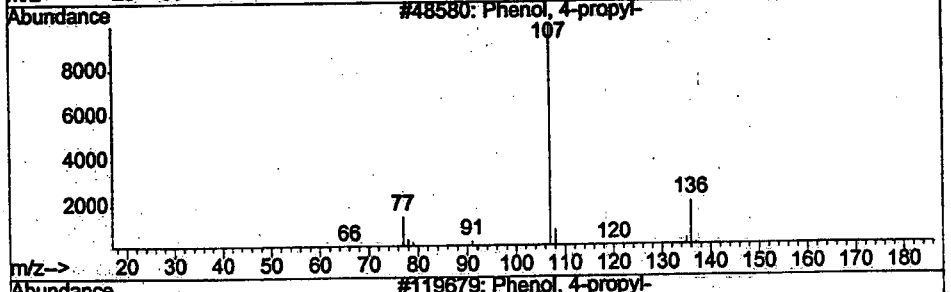
Peak Number 5 Substituted phenol Concentration Rank 5

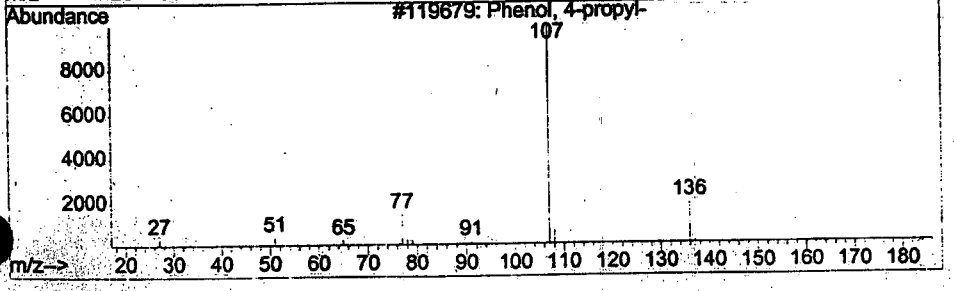
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.20	40.50 UG	330973	Naphthalene-d8	2.03

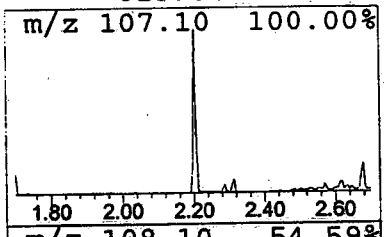
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 3-propyl-	136	C9H12O	000621-27-2	91
2	Phenol, 4-propyl-	136	C9H12O	000645-56-7	64
3	Phenol, 4-propyl-	136	C9H12O	000645-56-7	52
4	Pyrazine, ethyl-	108	C6H8N2	013925-00-3	47

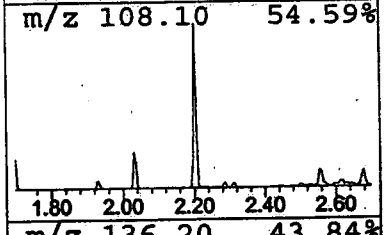


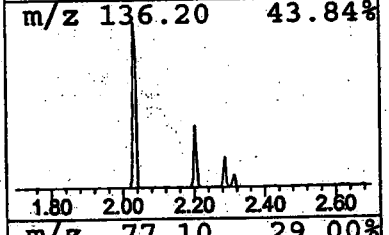


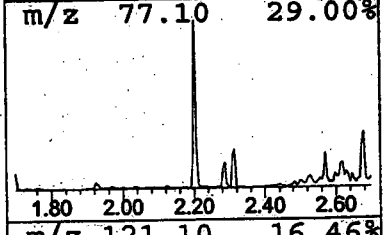


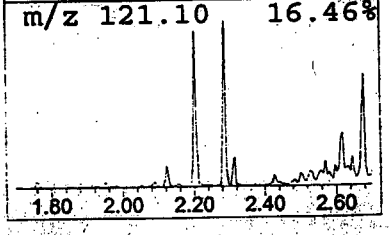












1634

000595

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
Acq On : 2 Apr 2001 14:37
Sample : S-30,1922-015,S,5.06g,26.4,03/30/01
isc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

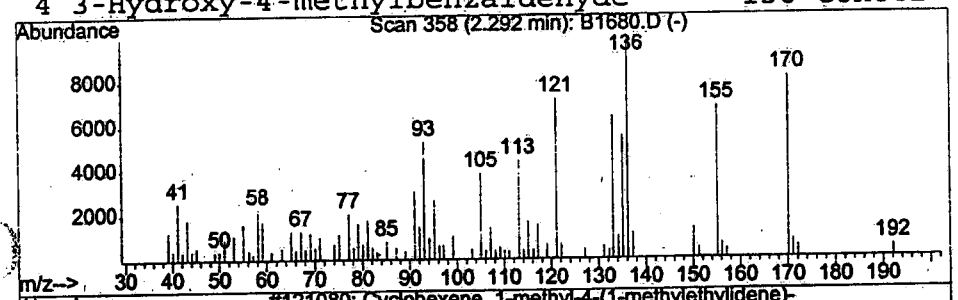
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

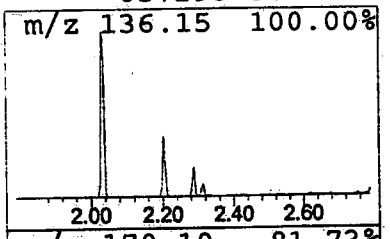
****

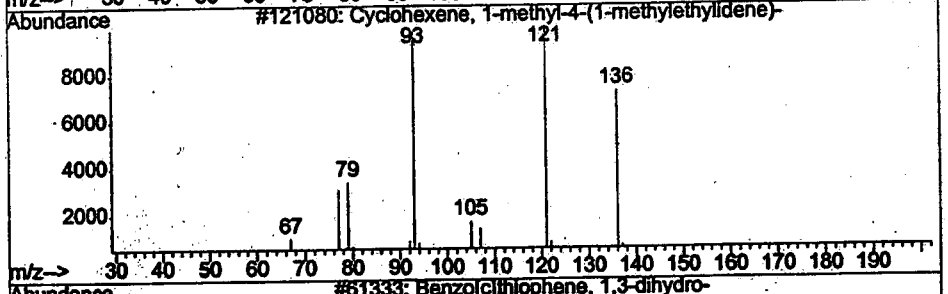
Peak Number 6 Unknown aromatic — Concentration Rank 9

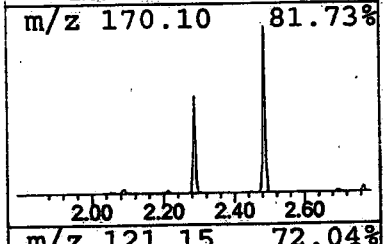
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.29	31.50 UG	257462	Naphthalene-d8	2.03

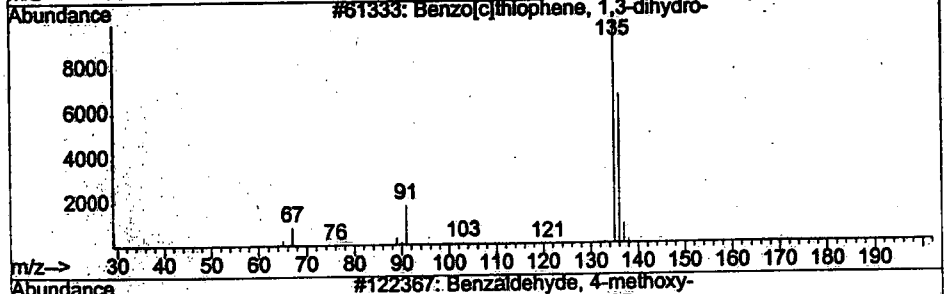
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	000586-62-9	38
2	Benzo[c]thiophene, 1,3-dihydro-	136	C8H8S	002471-92-3	38
3	Benzaldehyde, 4-methoxy-	136	C8H8O2	000123-11-5	30
4	3-Hydroxy-4-methylbenzaldehyde	136	C8H8O2	057295-30-4	30

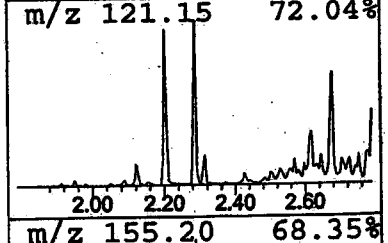


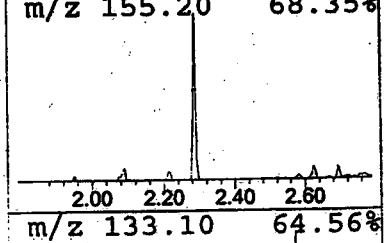


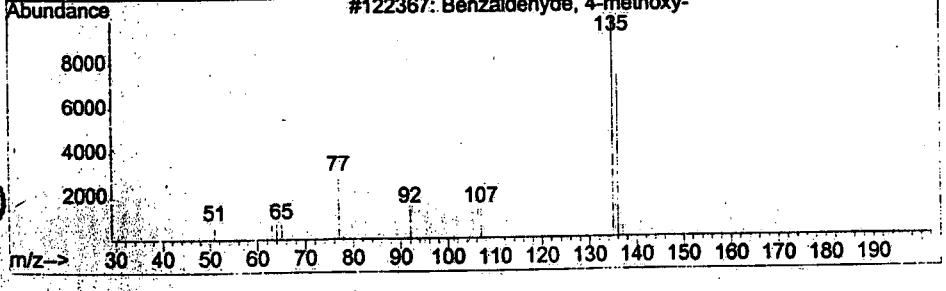


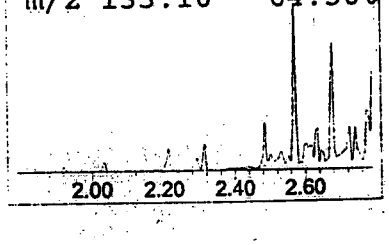












1635

000596

Library Search Compound Report

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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
LS Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

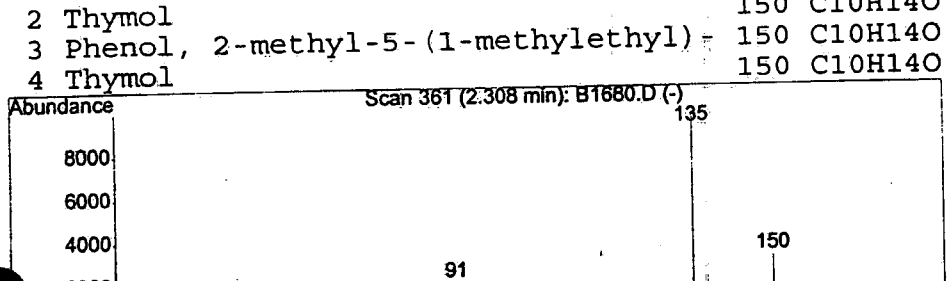
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

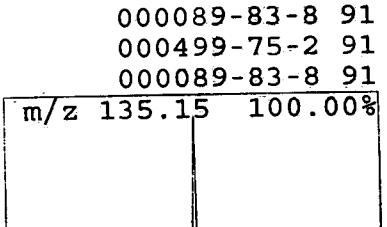
****

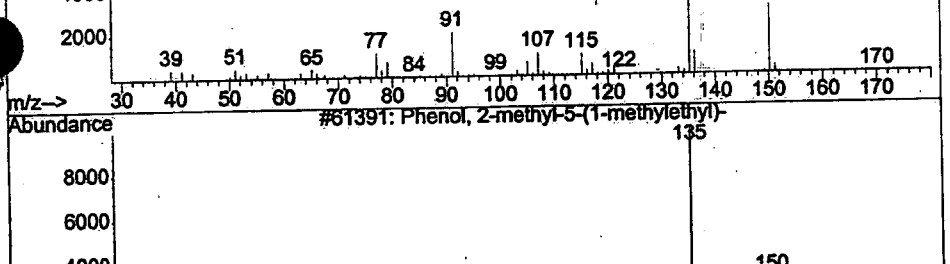
Peak Number 7 Substituted phenol Concentration Rank 15

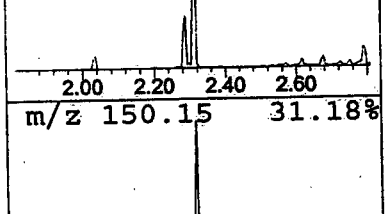
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.31	27.96 UG	228465	Naphthalene-d8	2.03

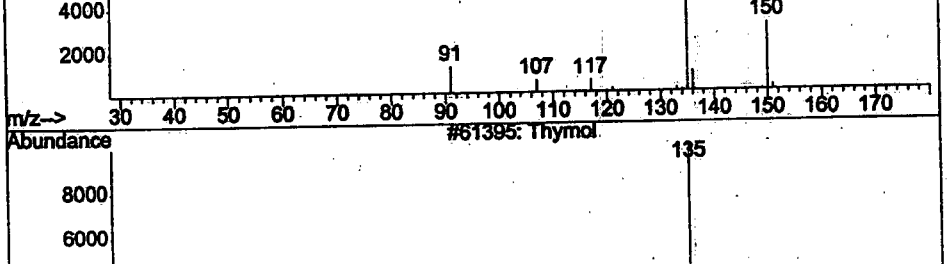
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 2-methyl-5-(1-methylethyl)-	150	C10H14O	000499-75-2	94
2	Thymol	150	C10H14O	000089-83-8	91
3	Phenol, 2-methyl-5-(1-methylethyl)-	150	C10H14O	000499-75-2	91
4	Thymol	150	C10H14O	000089-83-8	91

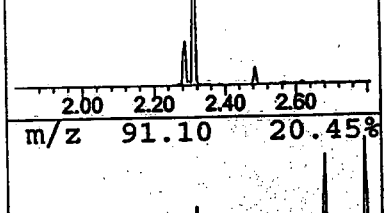


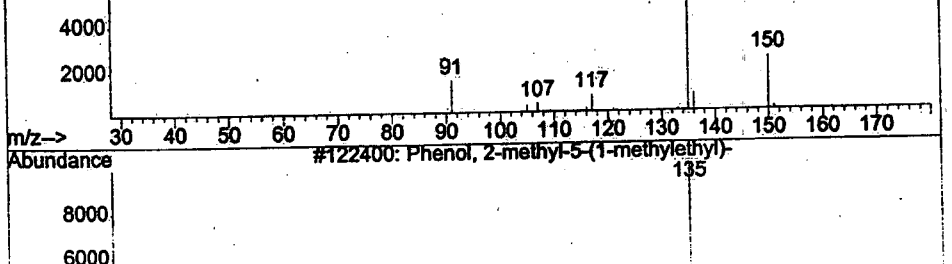


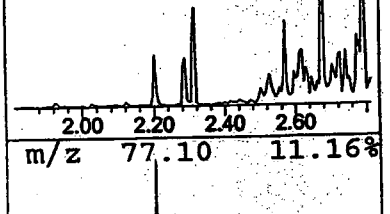


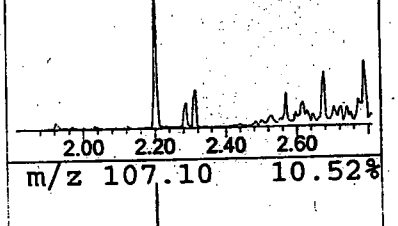












Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
Acq On : 2 Apr 2001 14:37
Sample : S-30,1922-015,S,5.06g,26.4,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
LS Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

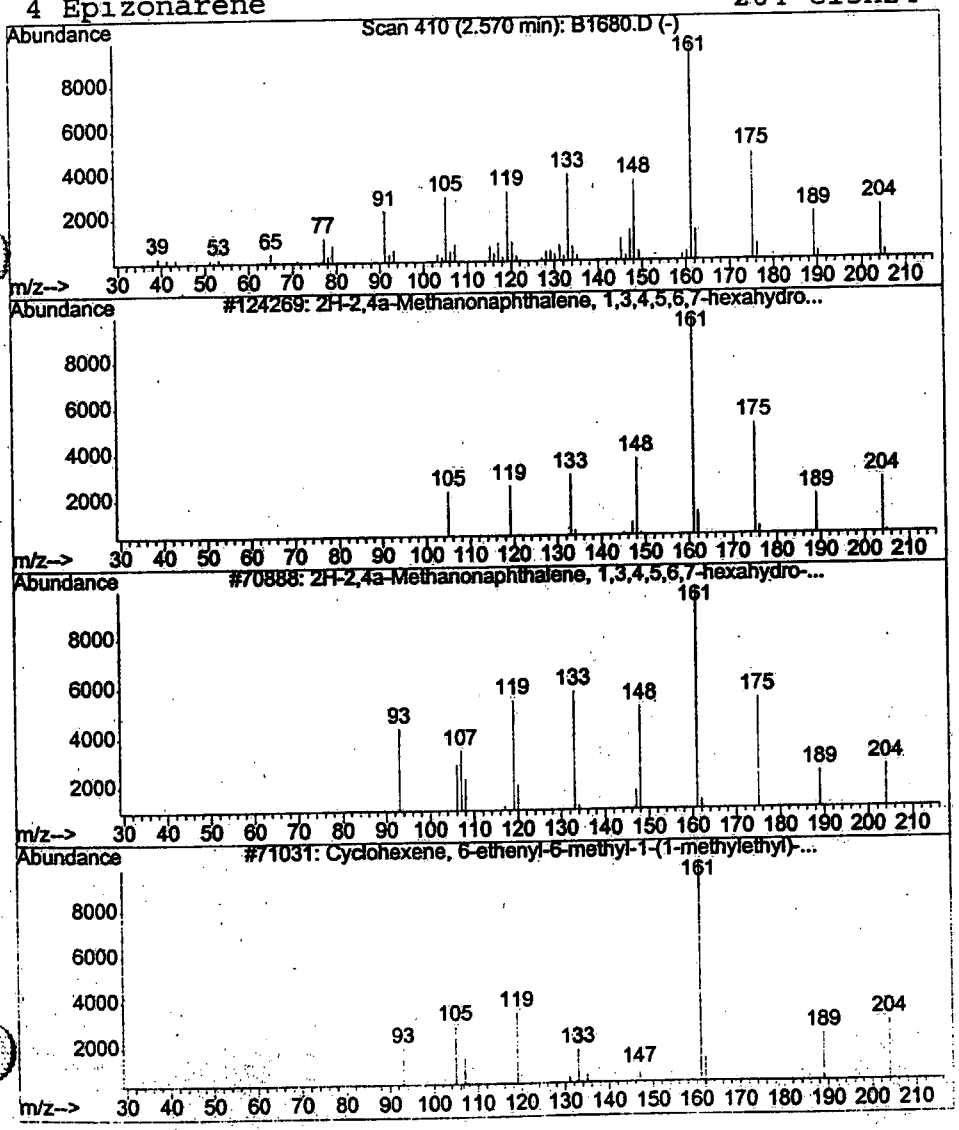
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

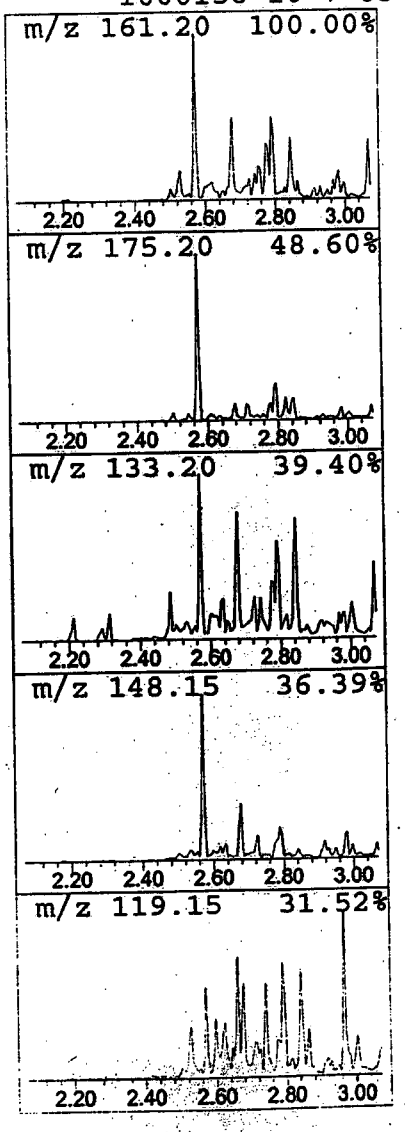
****

Peak Number 8 Unknown aromatic — Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.57	33.84 UG	306731	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2H-2,4a-Methanonaphthalene, 1,3,...	204	C15H24	001135-66-6	94
2	2H-2,4a-Methanonaphthalene, 1,3,...	204	C15H24	001135-66-6	90
3	Cyclohexene, 6-ethenyl-6-methyl-...	204	C15H24	005951-67-7	83
4	Epizonarene	204	C15H24	1000156-10-7	83





1637

Library Search Compound Report

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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

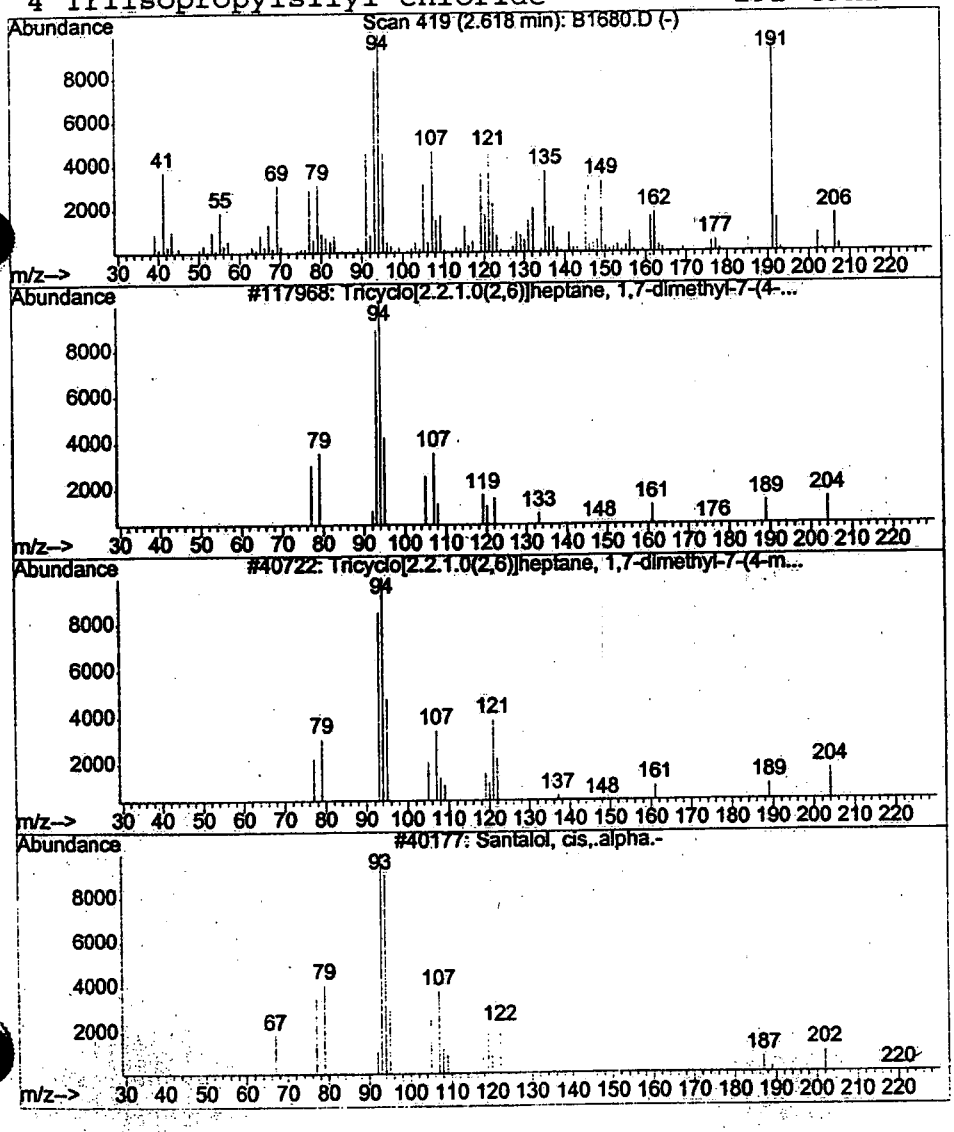
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

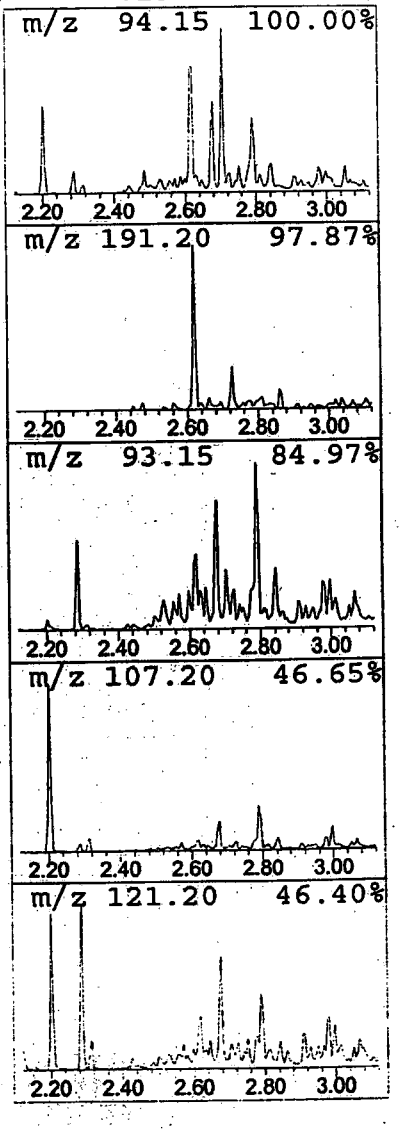
****

Peak Number 9 Unknown alkane Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.62	28.79 UG	260946	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tricyclo[2.2.1.0(2,6)]heptane, 1...	204	C15H24	000512-61-8	49
2	Tricyclo[2.2.1.0(2,6)]heptane, 1...	204	C15H24	000512-61-8	49
3	Santalol, cis,.alpha.-	220	C15H24O	019903-72-1	27
4	Triisopropylsilyl chloride	192	C9H21ClSi	013154-24-0	25





1638

000599

Library Search Compound Report

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'isc : ENVTACT/ORBIS,03/27/01,03/28/01,1
.S Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

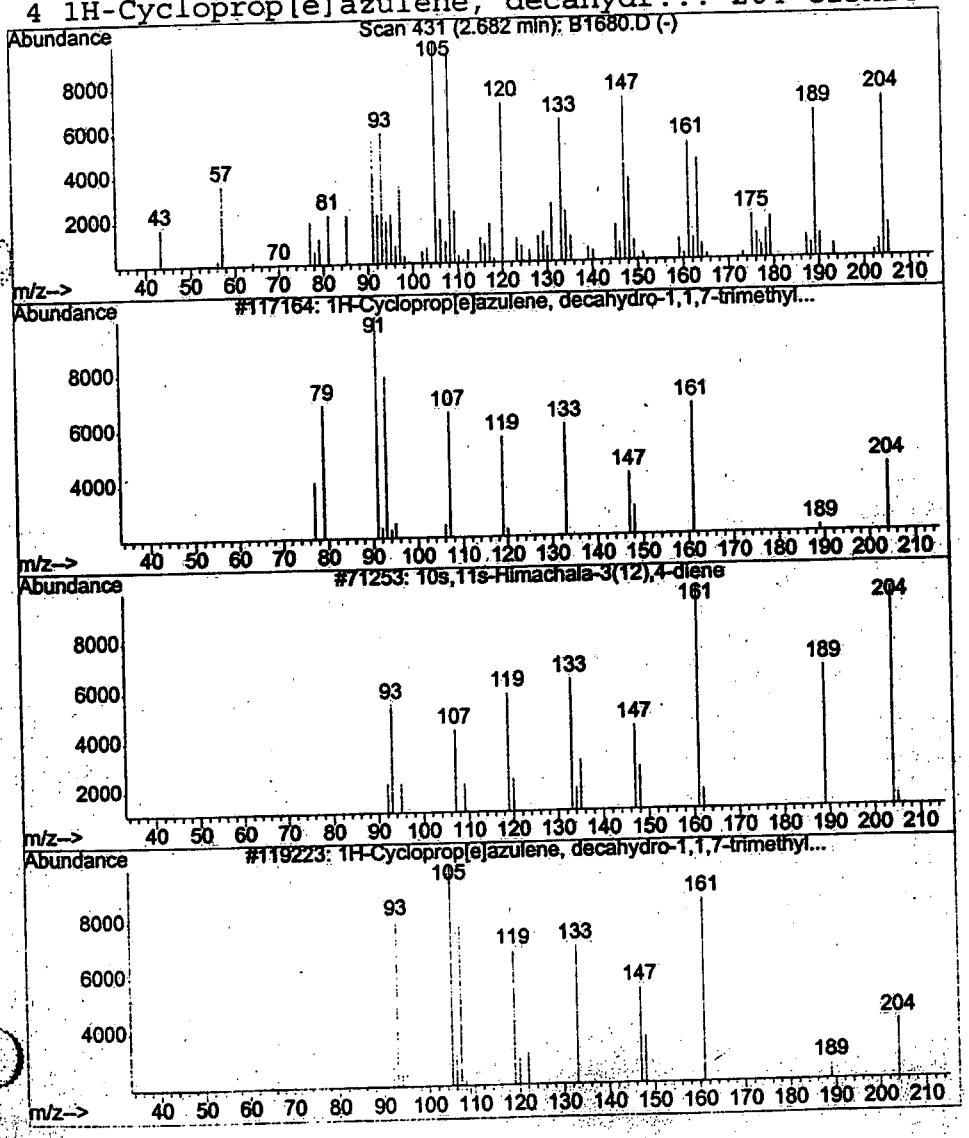
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

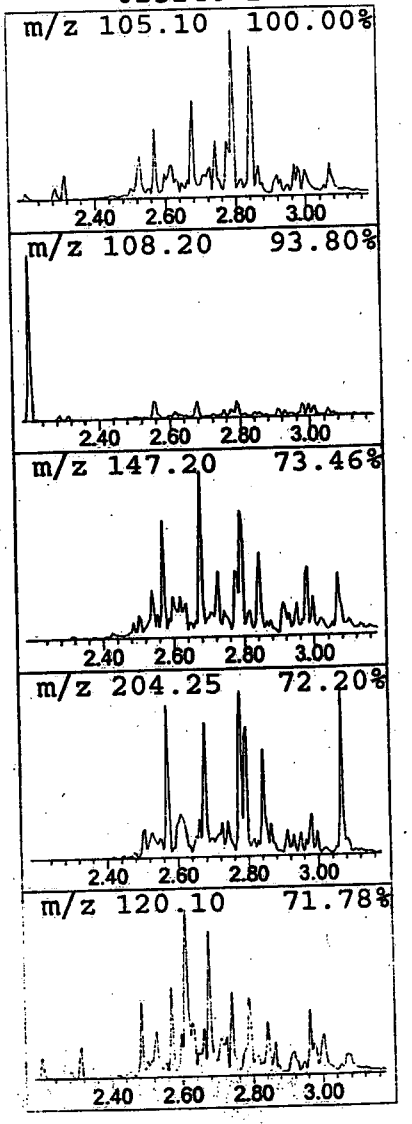
****

Peak Number 10 Unknown aromatic — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.68	44.80 UG	406126	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Cycloprop[e]azulene, decahydr...	204	C15H24	025246-27-9	99
2	10s,11s-Himachala-3(12),4-diene	204	C15H24	1000140-08-1	99
3	1H-Cycloprop[e]azulene, decahydr...	204	C15H24	025246-27-9	99
4	1H-Cycloprop[e]azulene, decahydr...	204	C15H24	025246-27-9	98





Library Search Compound Report

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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
LS Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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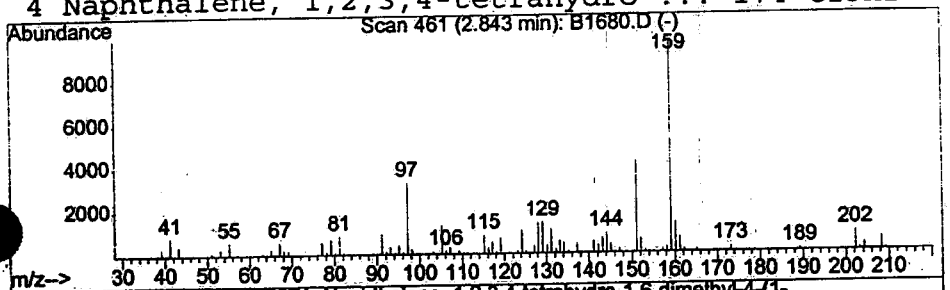
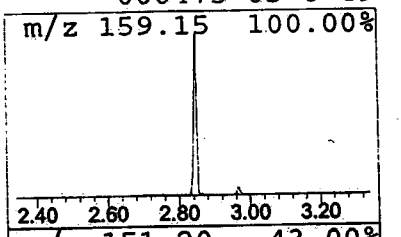
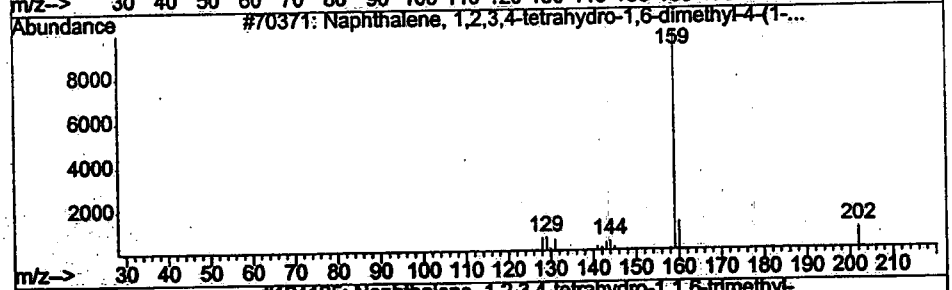
Peak Number 11 Substituted naphthalene Concentration Rank 2

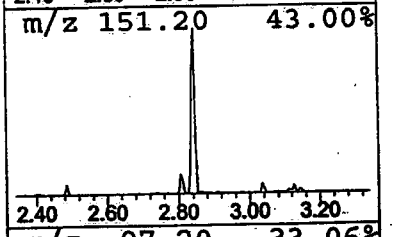
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.84	184.40 UG	1671570	Acenaphthene-d10	2.75

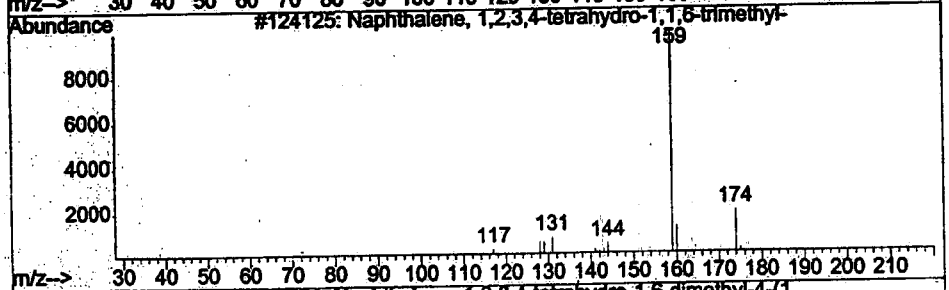
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-...	202	C15H22	000483-77-2	97
2	Naphthalene, 1,2,3,4-tetrahydro-...	174	C13H18	000475-03-6	90
3	Naphthalene, 1,2,3,4-tetrahydro-...	202	C15H22	000483-77-2	64
4	Naphthalene, 1,2,3,4-tetrahydro-...	174	C13H18	000475-03-6	49

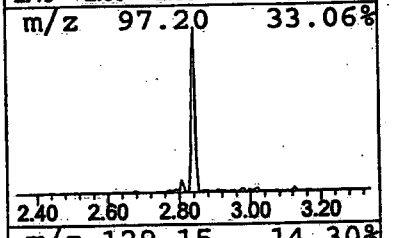


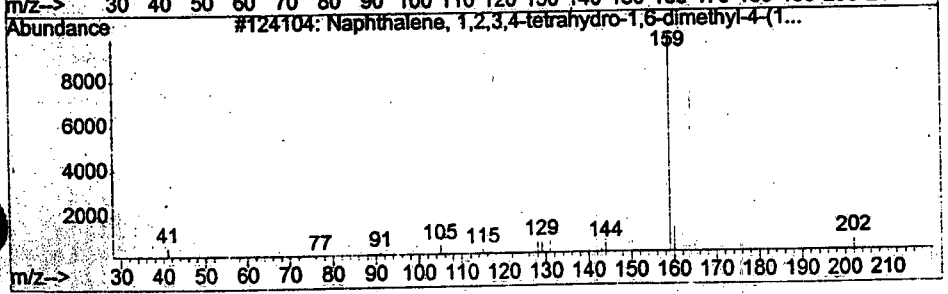


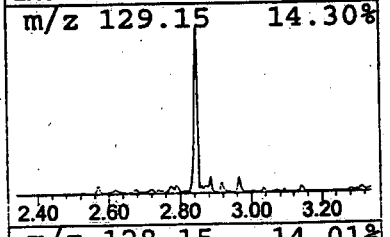


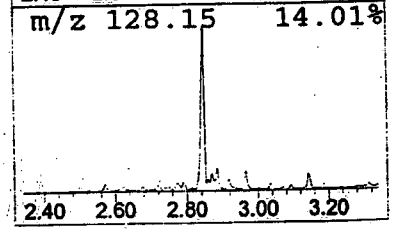












1641

Library Search Compound Report

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'isc : ENVTACT/ORBIS,03/27/01,03/28/01,1
.S Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

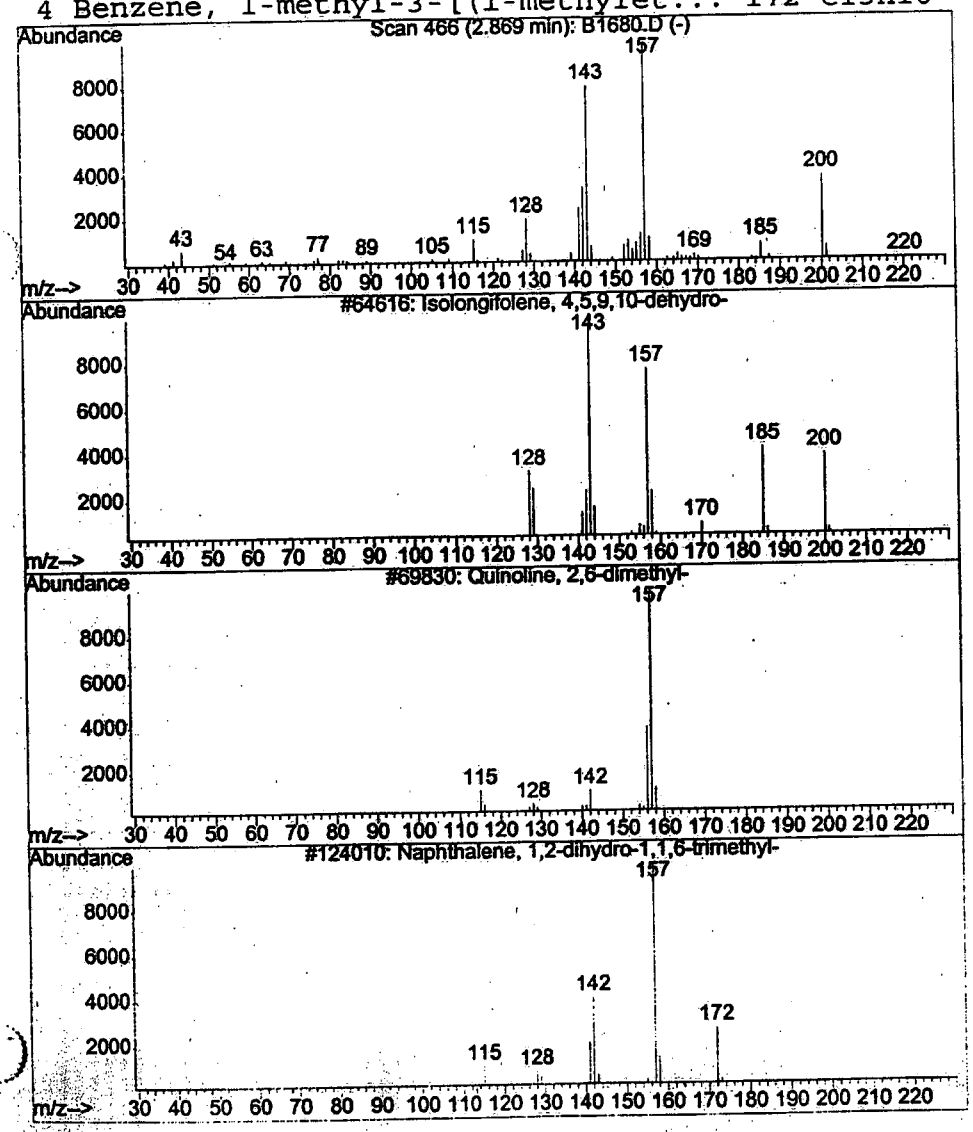
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

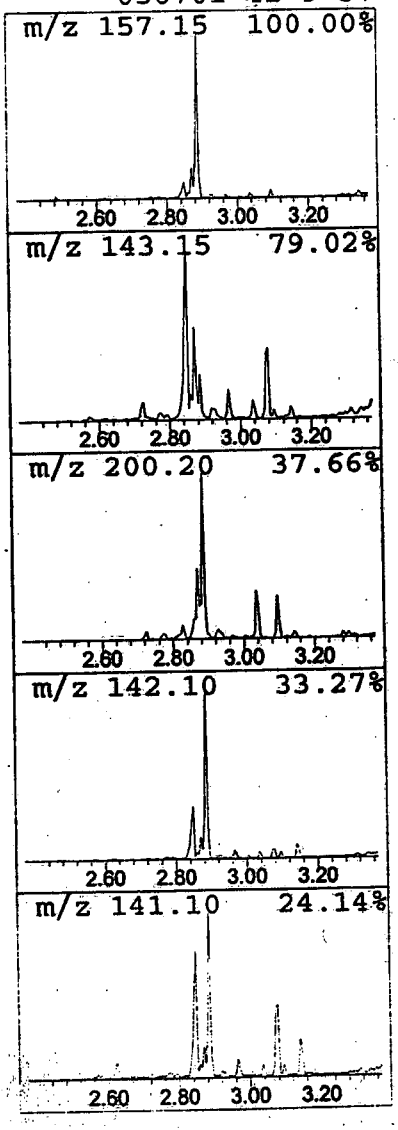
****

Peak Number 12 Unknown — Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.87	19.70 UG	178604	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Isolongifolene, 4,5,9,10-dehydro-	200	C15H20	1000151-55-0	46
2	Quinoline, 2,6-dimethyl-	157	C11H11N	000877-43-0	38
3	Naphthalene, 1,2-dihydro-1,1,6-t...	172	C13H16	030364-38-6	38
4	Benzene, 1-methyl-3-[(1-methylet...	172	C13H16	056701-42-9	37





1641
000602

Library Search Compound Report

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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

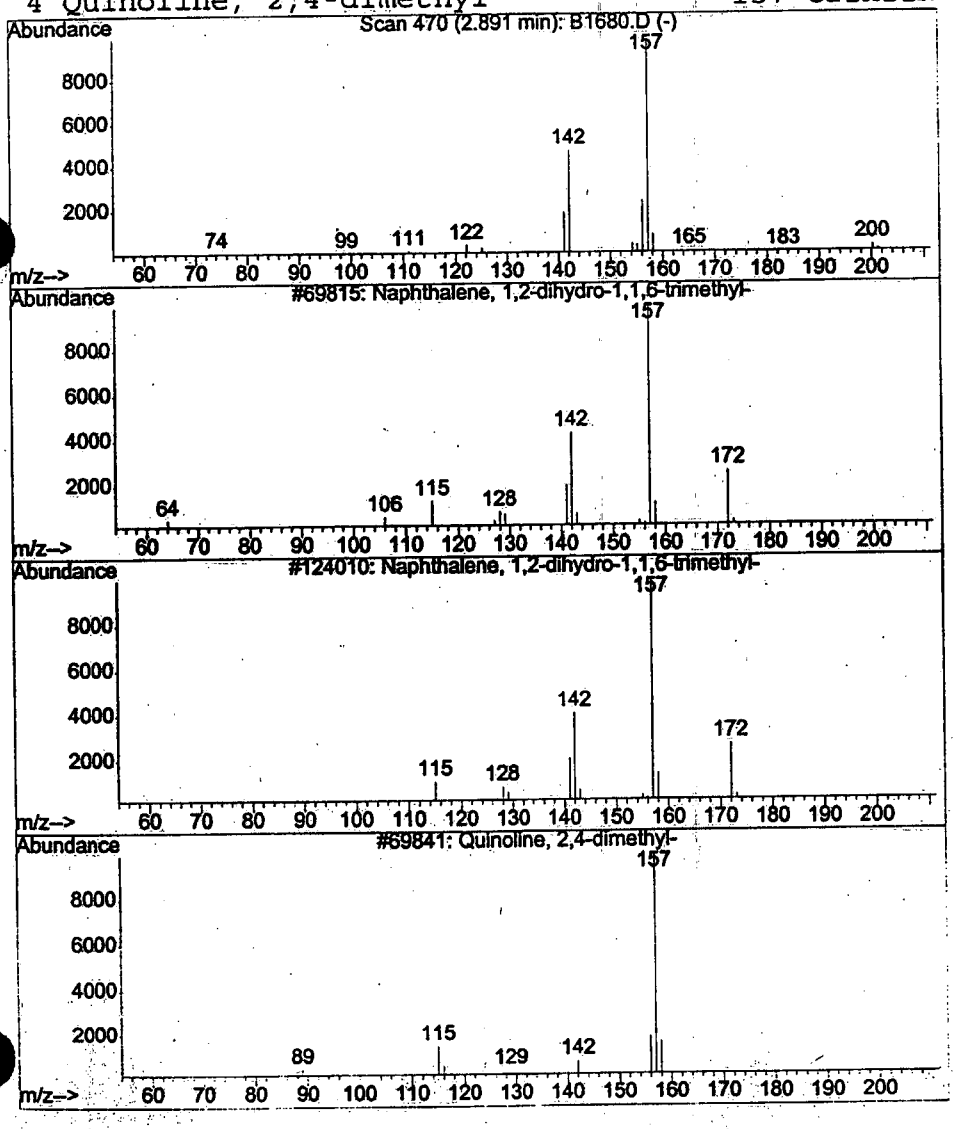
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

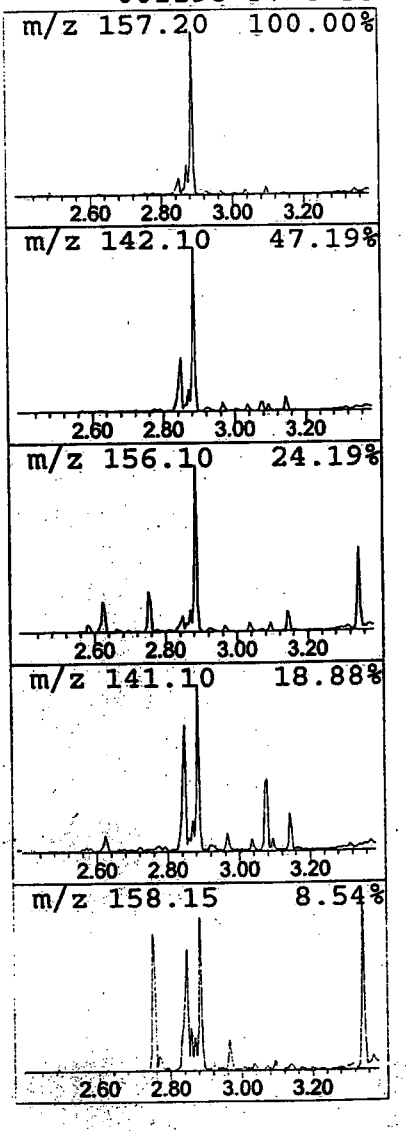
****

Peak Number 13 Substituted naphthalene Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.89	26.53 UG	240488	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2-dihydro-1,1,6-t...	172	C13H16	030364-38-6	72
2	Naphthalene, 1,2-dihydro-1,1,6-t...	172	C13H16	030364-38-6	72
3	Quinoline, 2,4-dimethyl-	157	C11H11N	001198-37-4	43
4	Quinoline, 2,4-dimethyl-	157	C11H11N	001198-37-4	38





1642

000503

Library Search Compound Report

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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

****

Peak Number 14 Substituted benzene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.92	31.43 UG	284859	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(1,2,2-trime...	202	C15H22	016982-00-6	83
2	Benzene, 1-methyl-4-(1,2,2-trime...	202	C15H22	016982-00-6	83
3	Benzene, 1-(1-methylethenyl)-2-(...	160	C12H16	005557-93-7	42
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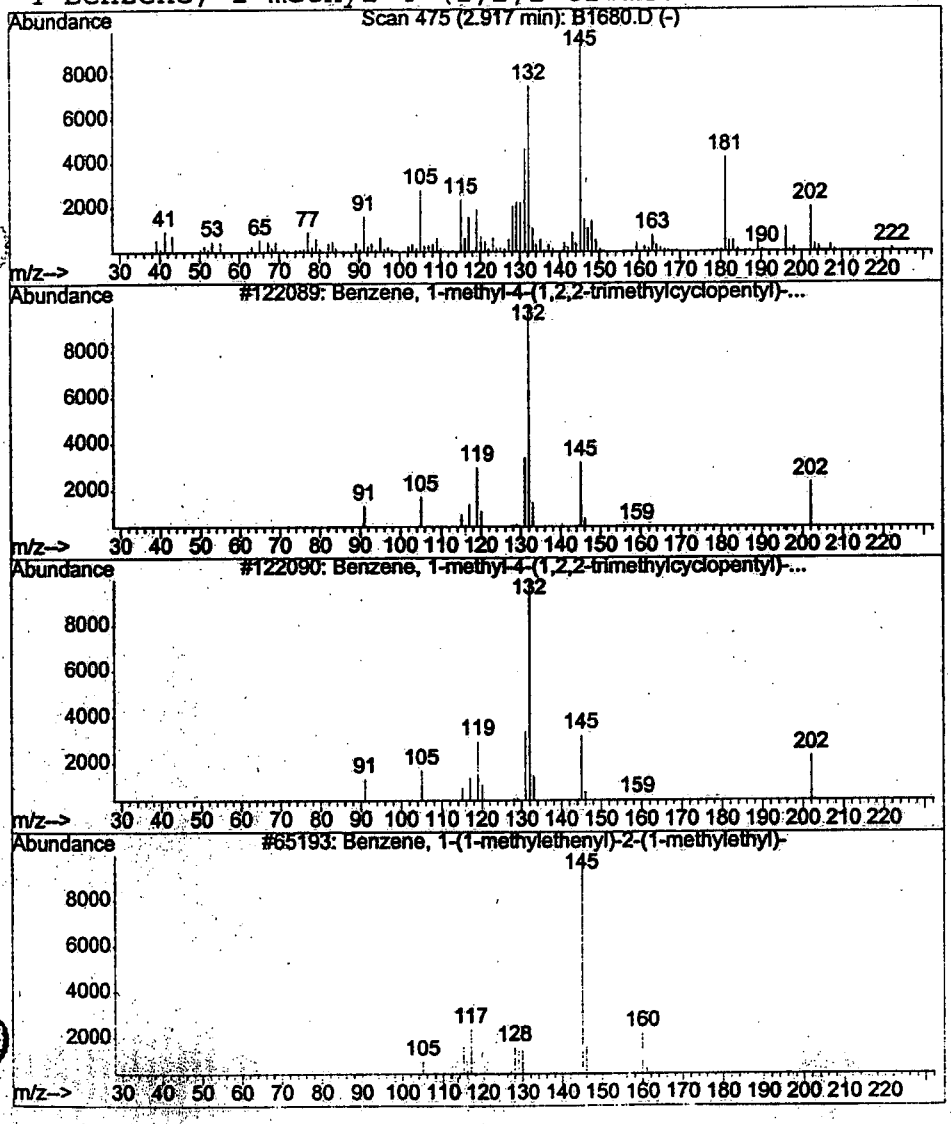

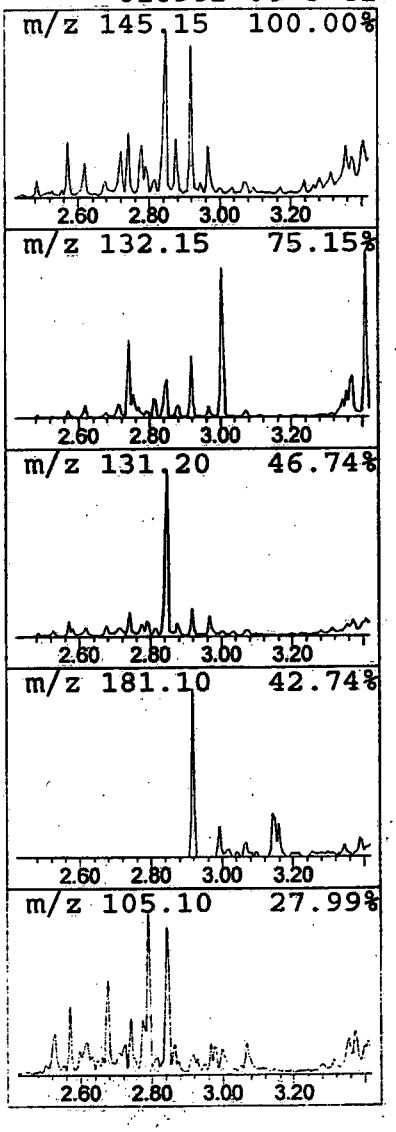

1643

000604

Library Search Compound Report

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Acq On : 2 Apr 2001 14:37
Sample : S-30,1922-015,S,5.06g,26.4,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
LS Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

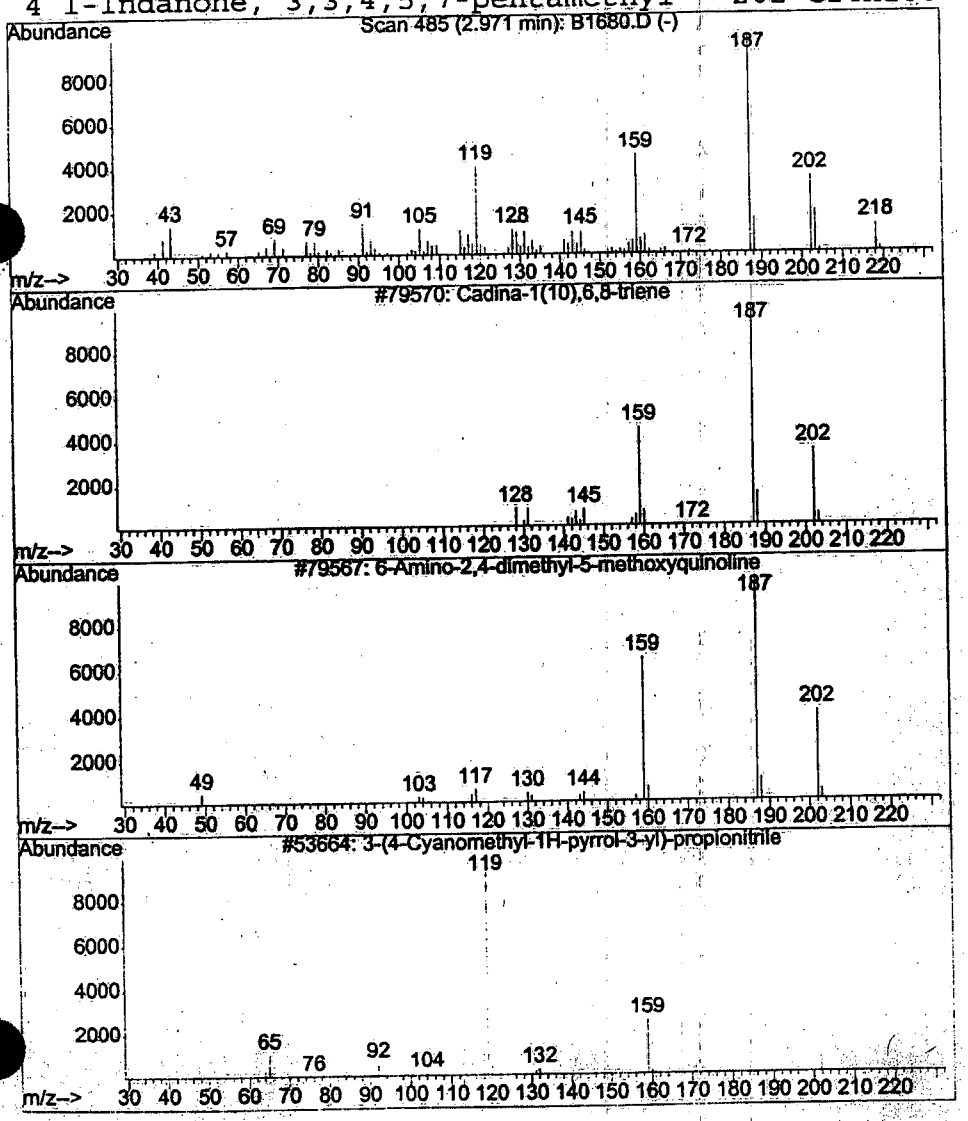
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

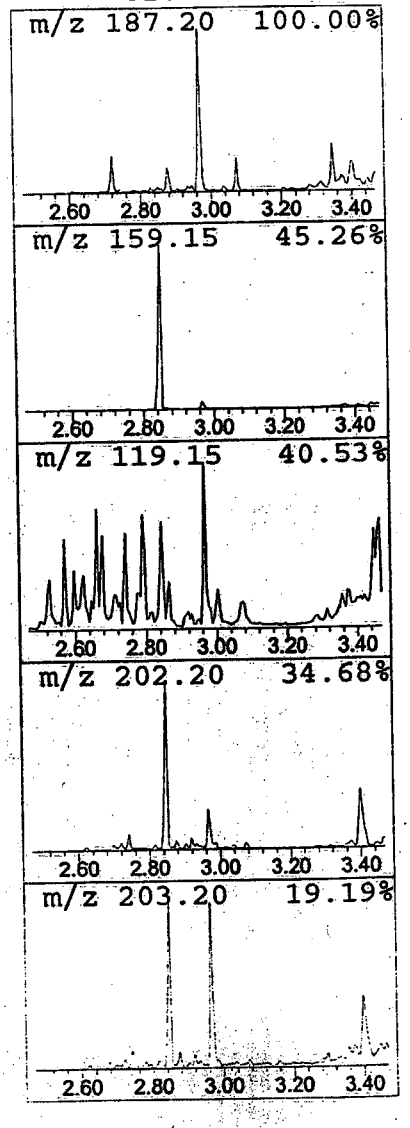
****

Peak Number 15 Unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.97	22.66 UG	205444	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cadina-1(10),6,8-triene	202	C15H22	001460-96-4	96
2	6-Amino-2,4-dimethyl-5-methoxyqu...	202	C12H14N2O	1000214-42-7	70
3	3-(4-Cyanomethyl-1H-pyrrol-3-yl)...	159	C9H9N3	106491-24-1	30
4	1-Indanone, 3,3,4,5,7-pentamethyl-	202	C14H18O	010425-83-9	27





1644

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

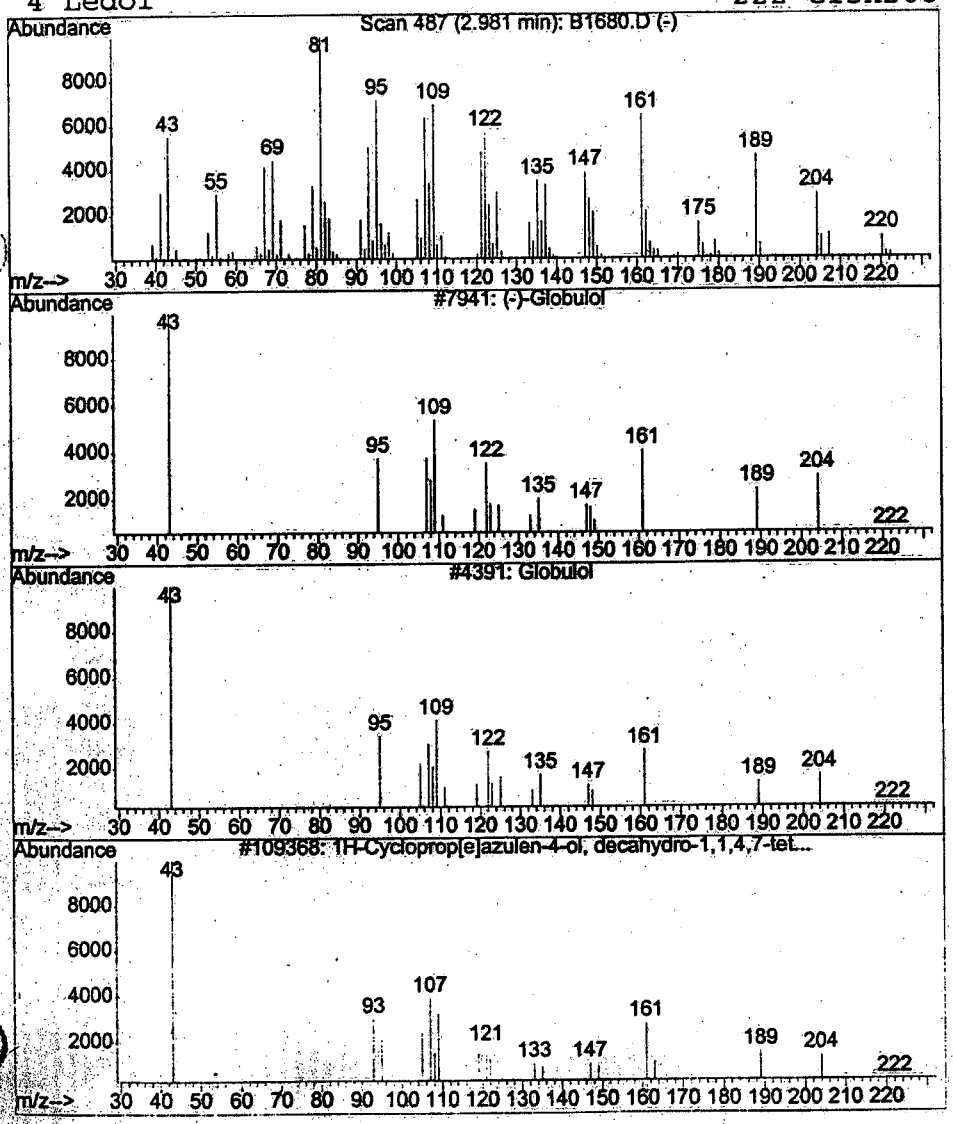
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

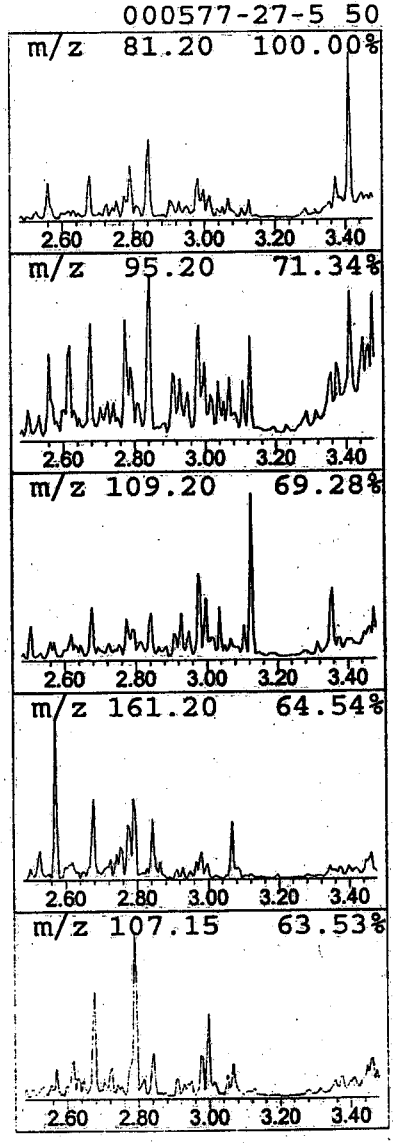
****

Peak Number 16 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.98	22.82 UG	206848	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(-)-Globulol	222	C15H26O	000489-41-8	97
2	Globulol	222	C15H26O	1000150-05-0	64
3	1H-Cycloprop[e]azulen-4-ol, deca...	222	C15H26O	000552-02-3	58
4	Ledol	222	C15H26O	000577-27-5	50





1605

C00506

Library Search Compound Report

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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

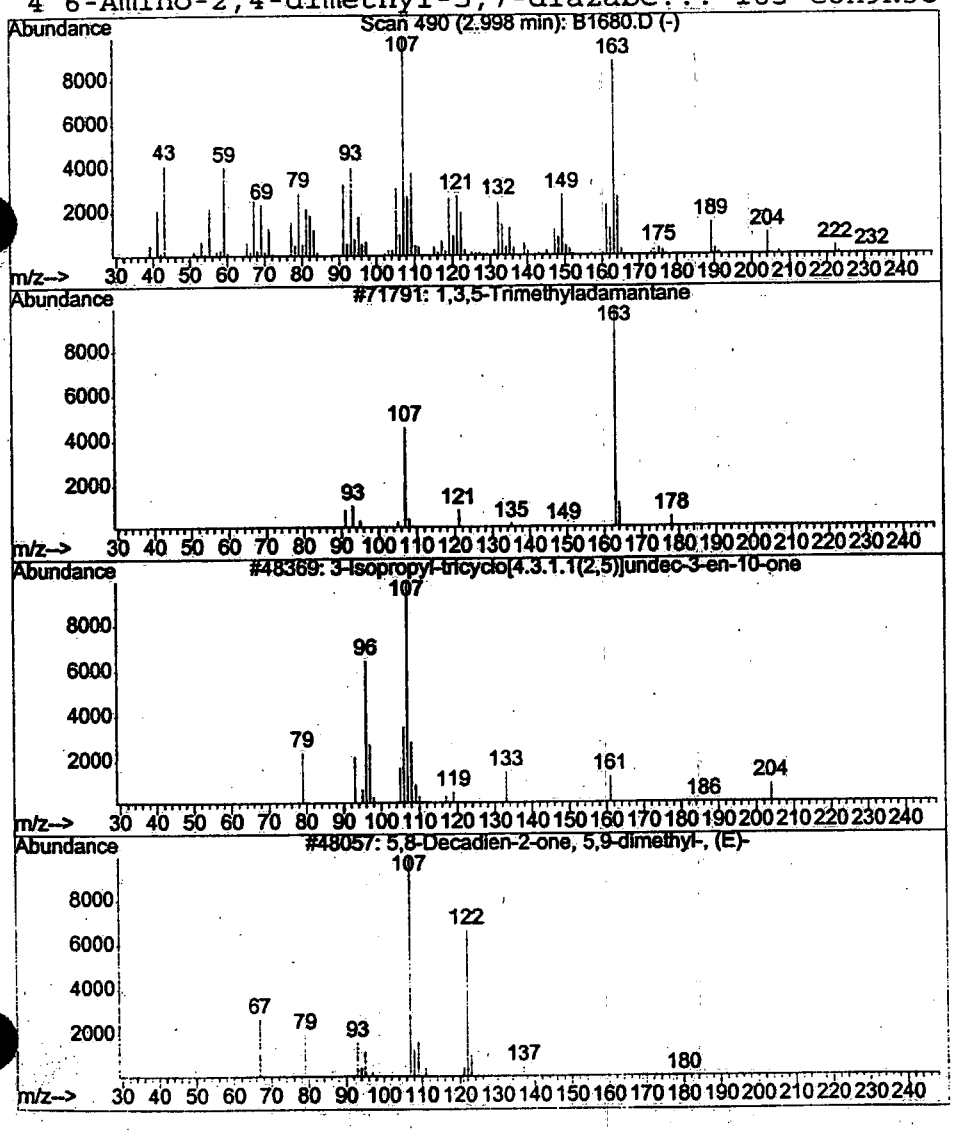
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

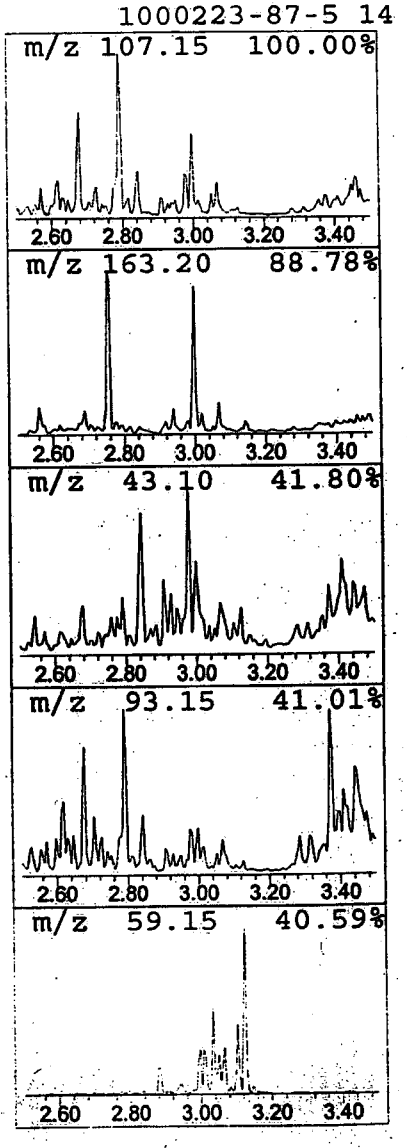
****

Peak Number 17 Unknown — Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.00	30.31 UG	274793	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3,5-Trimethyladamantane	178	C13H22	000707-35-7	38
2	3-Isopropyl-tricyclo[4.3.1.1(2,5...	204	C14H20O	1000191-47-2	18
3	5,8-Decadien-2-one, 5,9-dimethyl...	180	C12H20O	130876-99-2	18
4	6-Amino-2,4-dimethyl-5,7-diazabe...	163	C8H9N3O	1000223-87-5	14





Library Search Compound Report

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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

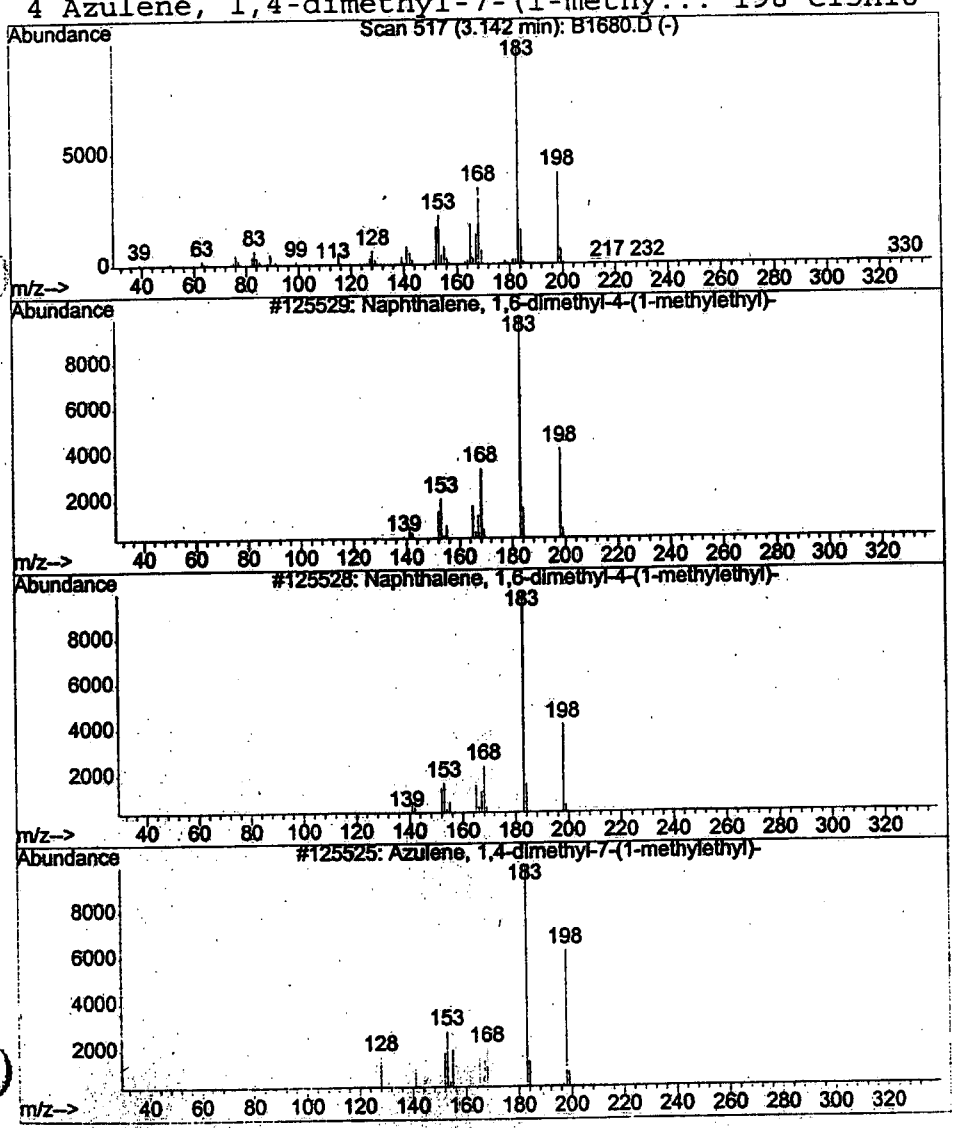
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

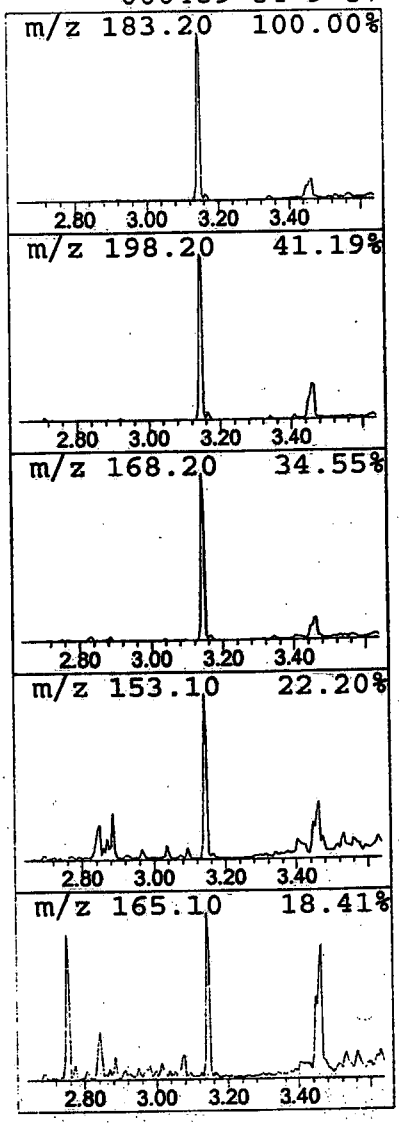
****

Peak Number 18 Substituted naphthalene Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.14	18.07 UG	265197	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,6-dimethyl-4-(1-m...	198	C15H18	000483-78-3	95
2	Naphthalene, 1,6-dimethyl-4-(1-m...	198	C15H18	000483-78-3	95
3	Azulene, 1,4-dimethyl-7-(1-methy...	198	C15H18	000489-84-9	94
4	Azulene, 1,4-dimethyl-7-(1-methy...	198	C15H18	000489-84-9	87





1647

000608

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

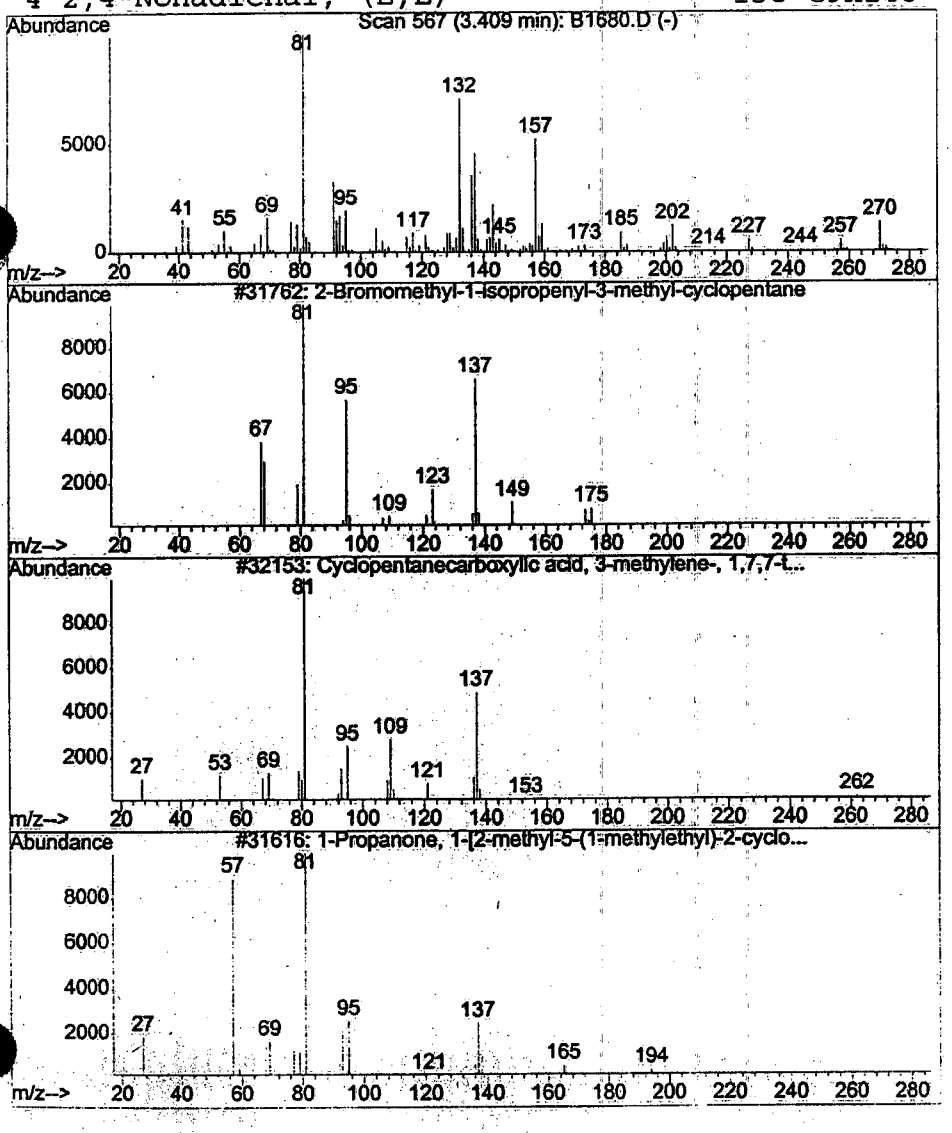
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

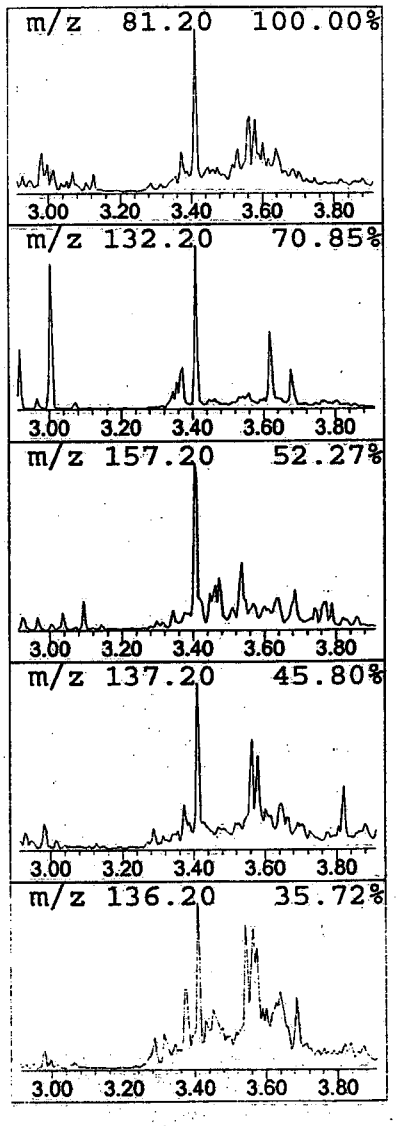
****

Peak Number 19 Unknown aromatic Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.41	35.58 UG	522266	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Bromomethyl-1-isopropenyl-3-me...	216	C10H17Br	1000187-07-8	27
2	Cyclopentanecarboxylic acid, 3-m...	262	C17H26O2	074793-59-2	25
3	1-Propanone, 1-[2-methyl-5-(1-me...	194	C13H22O	031375-17-4	17
4	2,4-Nonadienal, (E,E)-	138	C9H14O	005910-87-2	14





1648

000609

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

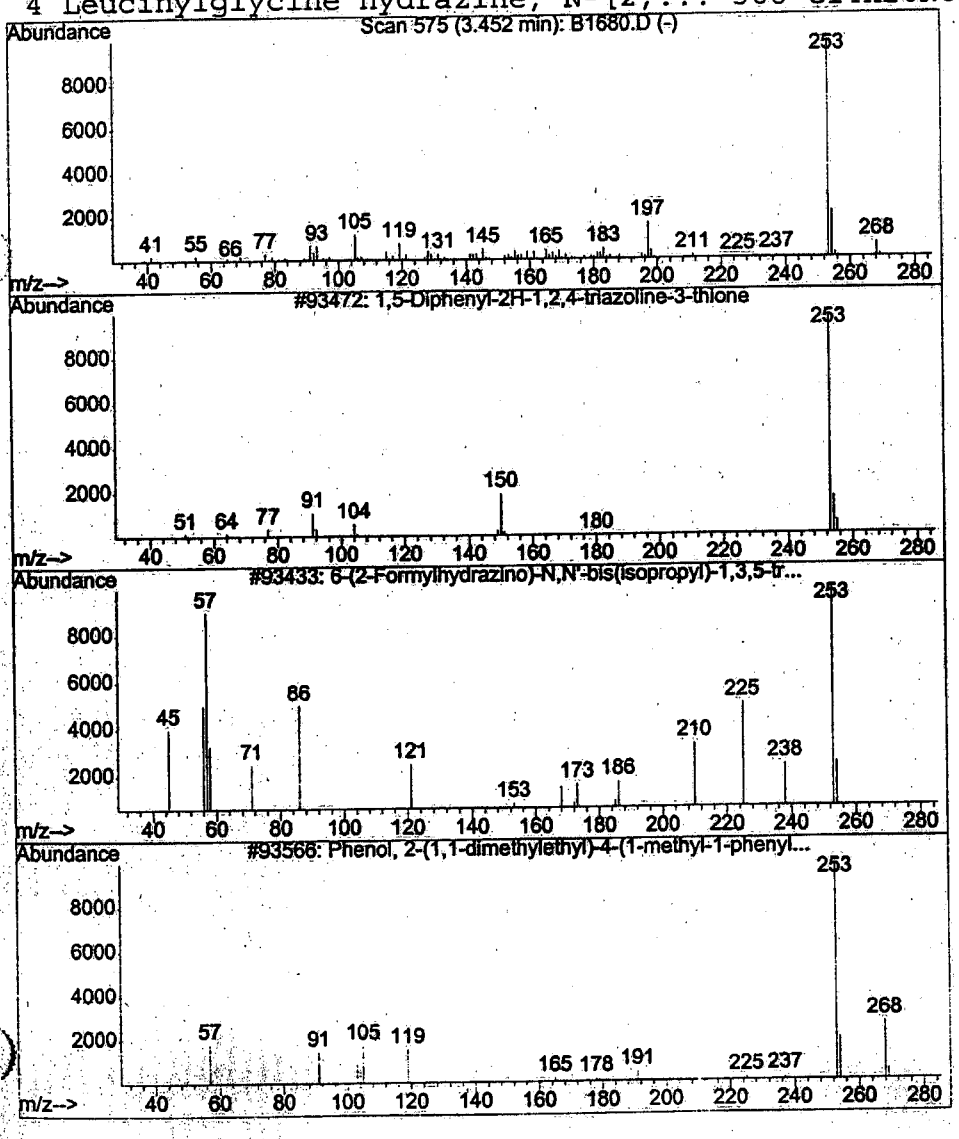
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

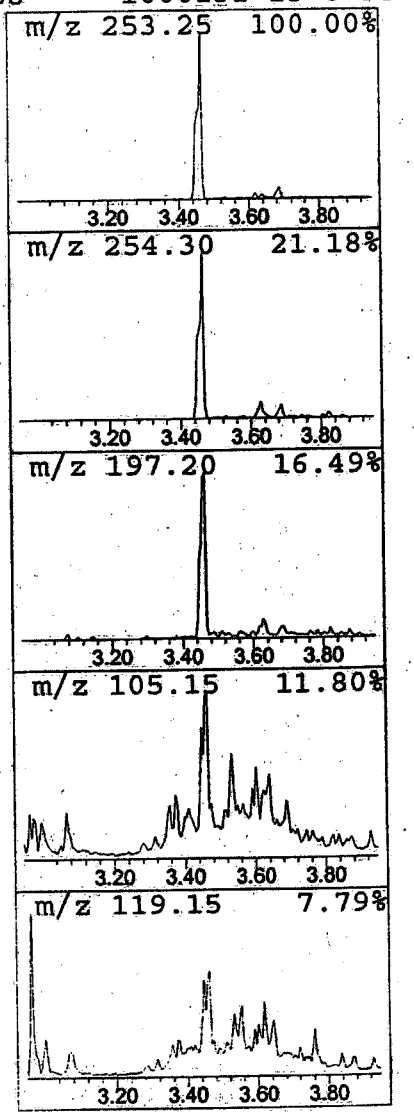
****

Peak Number 20 Unknown — Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.45	31.17 UG	457454	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,5-Diphenyl-2H-1,2,4-triazoline...	253	C14H11N3S	005055-74-3	52
2	6-(2-Formylhydrazino)-N,N'-bis(i...	253	C10H19N7O	084305-82-8	52
3	Phenol, 2-(1,1-dimethylethyl)-4-...	268	C19H24O	056187-92-9	45
4	Leucinylglycine hydrazine, N-[2,...	368	C14H20N6O6	1000131-15-6	38





1649

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
ALS Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

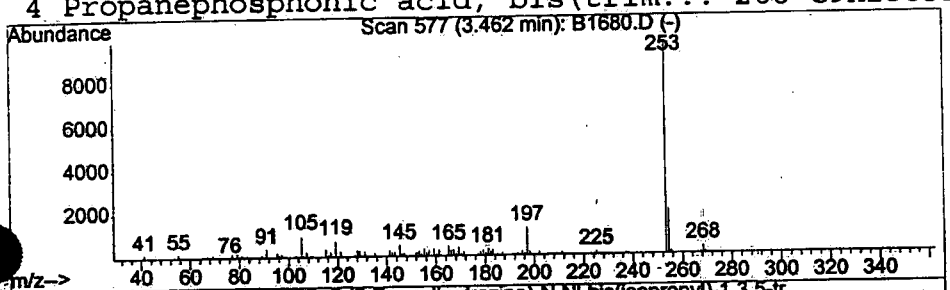
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

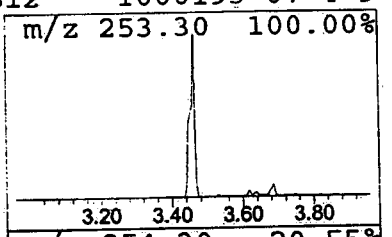
****

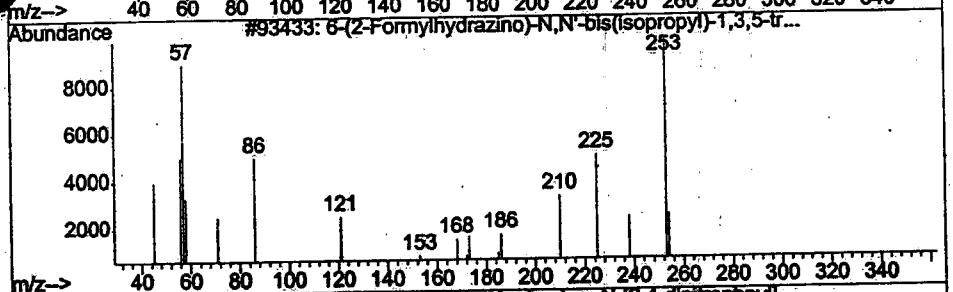
Peak Number 21 Unknown aromatic — Concentration Rank 12

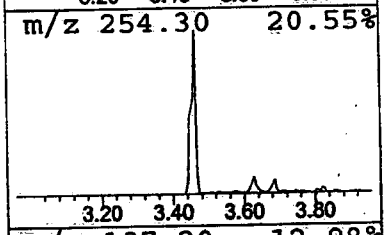
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.46	30.72 UG	450880	Phenanthrene-d10	3.34

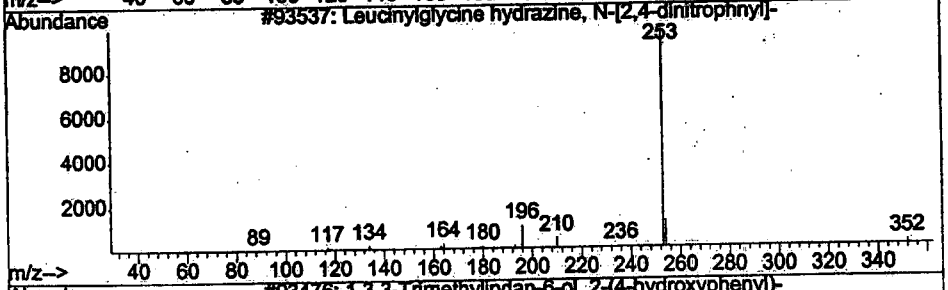
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	6-(2-Formylhydrazino)-N,N'-bis(i...	253	C10H19N7O	084305-82-8	27
2	Leucinylglycine hydrazine, N-[2,...	368	C14H20N6O6	1000131-15-6	10
3	1,3,3-Trimethylindan-6-ol, 2-(4-...	268	C18H20O2	1000204-18-7	9
4	Propanephosphonic acid, bis(trim...	268	C9H25O3PSi2	1000193-07-4	9

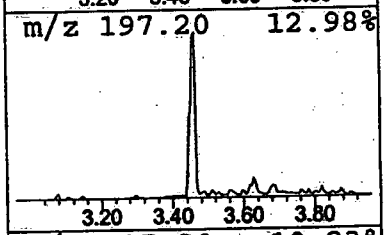


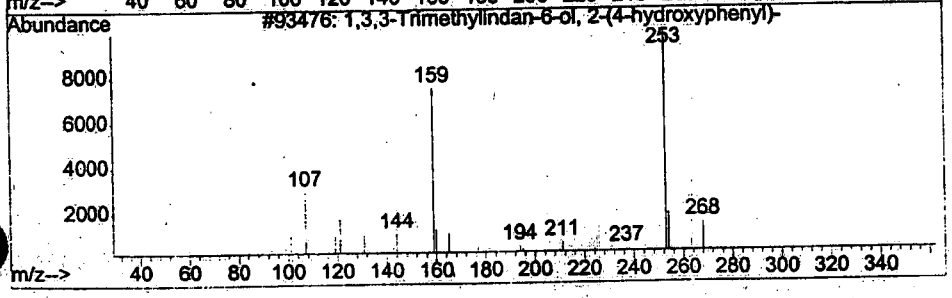


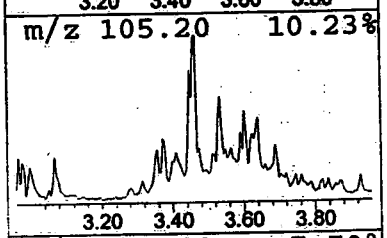


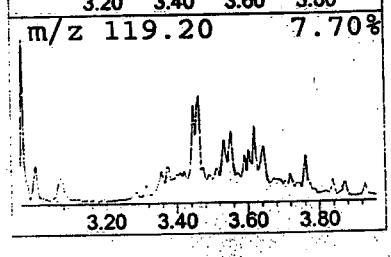












Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D
Acq On : 2 Apr 2001 14:37
Sample : S-30,1922-015,S,5.06g,26.4,03/30/01
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
MS Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

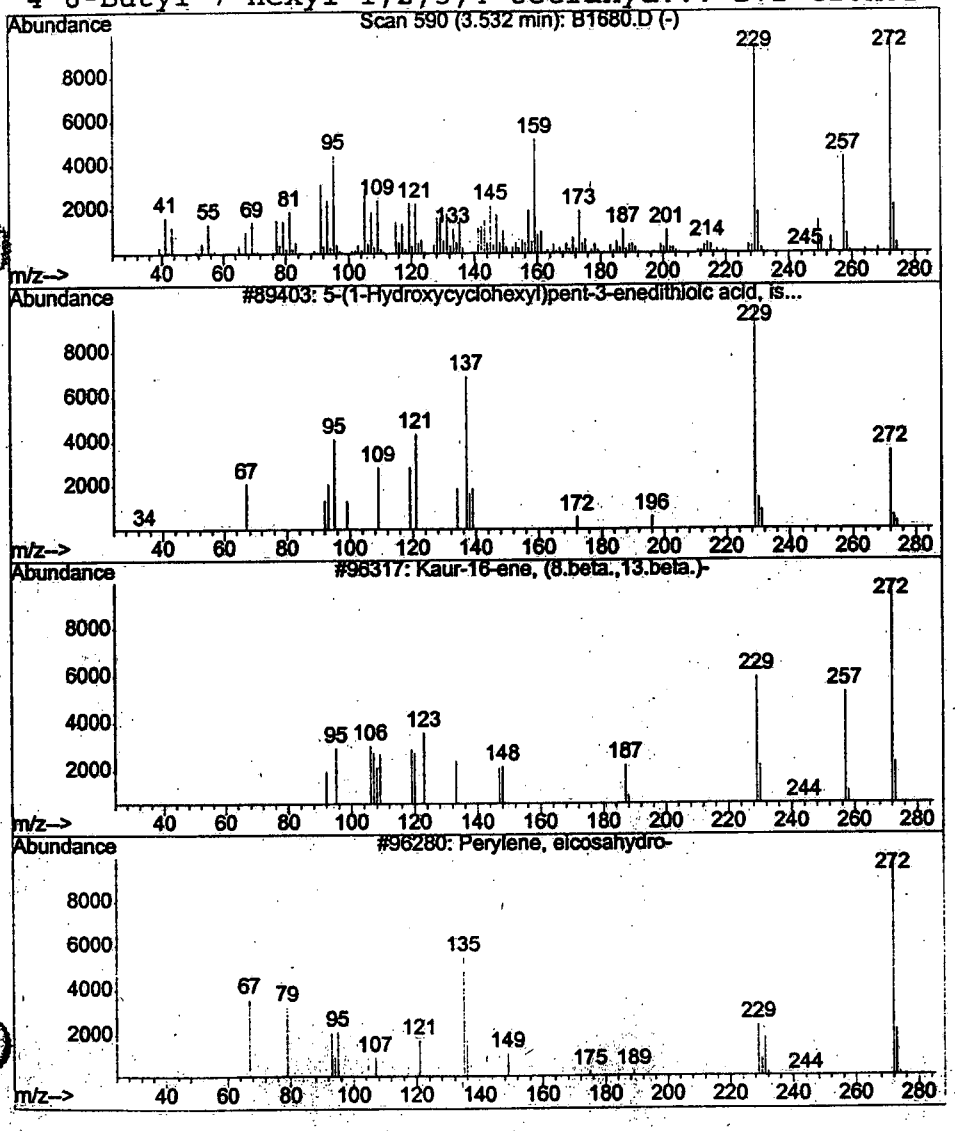
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

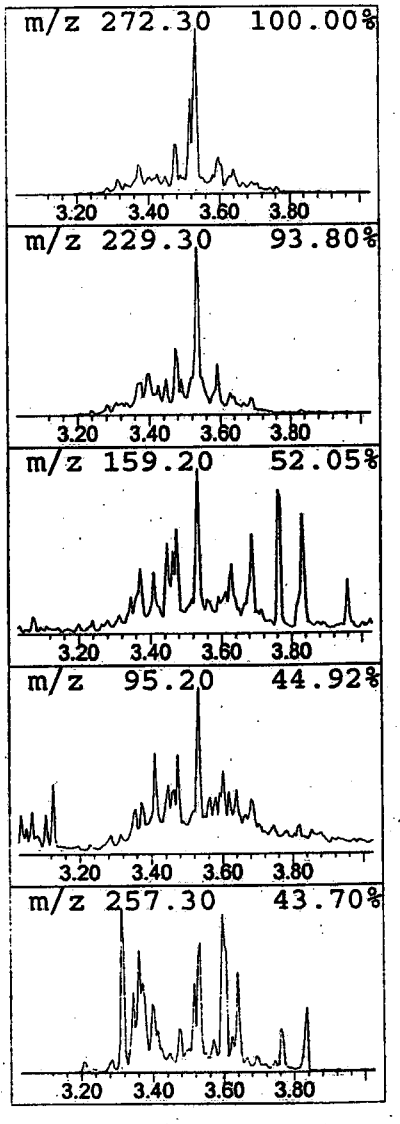
****

Peak Number 22 Unknown aromatic Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.53	47.42 UG	695935	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-(1-Hydroxycyclohexyl)pent-3-en...	272	C14H24OS2	083041-14-9	53
2	Kaur-16-ene, (8.beta.,13.beta.)-	272	C20H32	020070-61-5	46
3	Perylene, eicosahydro-	272	C20H32	047041-72-5	38
4	6-Butyl-7-hexyl-1,2,3,4-tetrahyd...	272	C20H32	1000202-98-6	35





1551

000612

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1680.D Vial: 28
Acq On : 2 Apr 2001 14:37 Operator: JC
Sample : S-30,1922-015,S,5.06g,26.4,03/30/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1 Multiplr: 1.00
B Integration Params: LSCINT.P

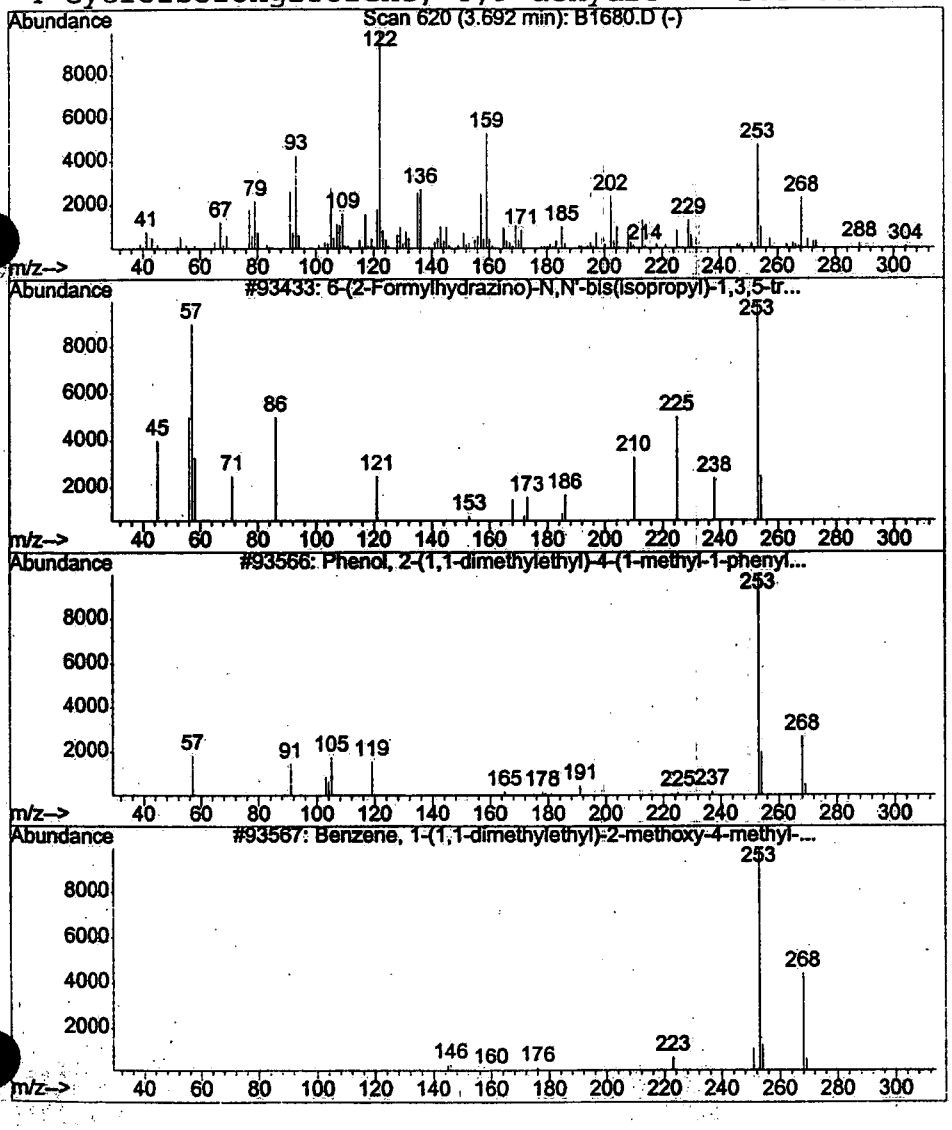
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

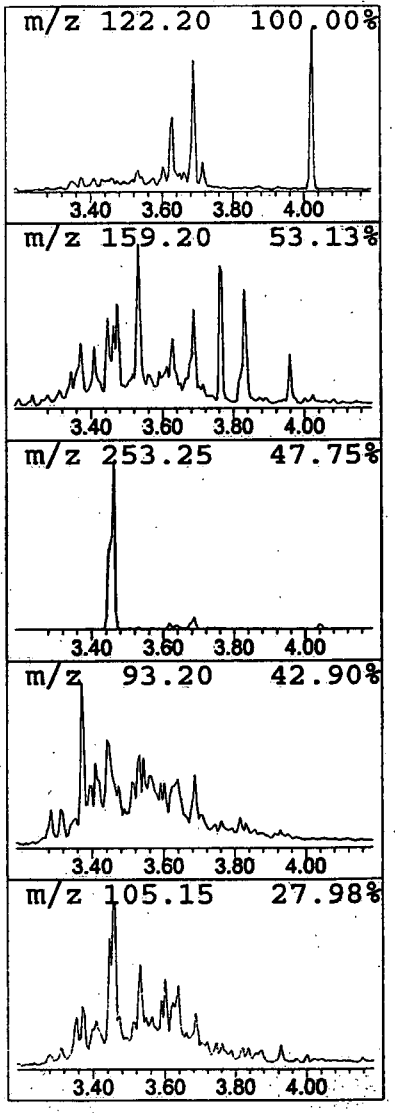
****

Peak Number 23 Unknown aromatic Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.69	25.93 UG	380639	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	6-(2-Formylhydrazino)-N,N'-bis(i...	253	C10H19N7O	084305-82-8	53
2	Phenol, 2-(1,1-dimethylethyl)-4-...	268	C19H24O	056187-92-9	30
3	Benzene, 1-(1,1-dimethylethyl)-2...	268	C12H16N2O5	000083-66-9	22
4	Cycloisolongifolene, 8,9-dehydro-	202	C15H22	1000151-28-0	15





1652

Library Search Compound Report

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Misc : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

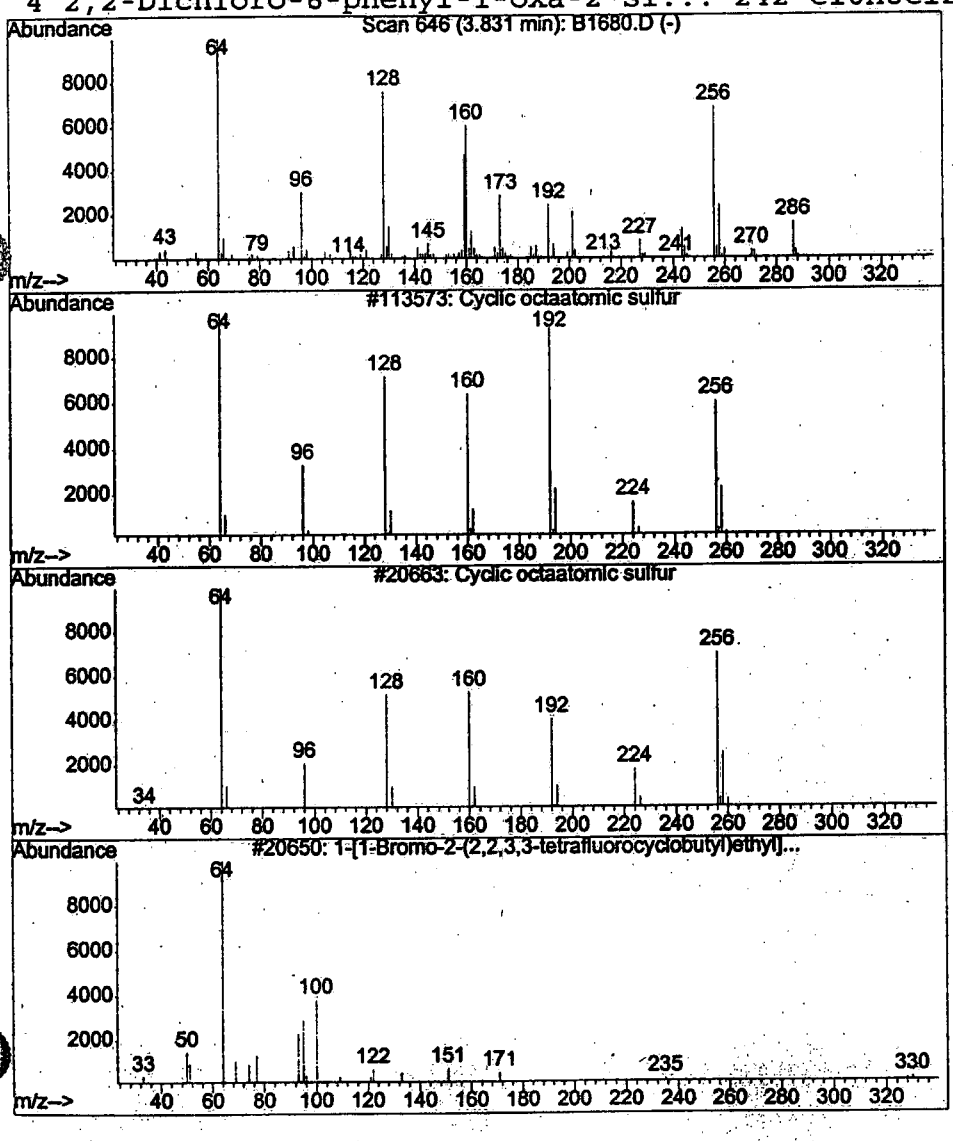
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

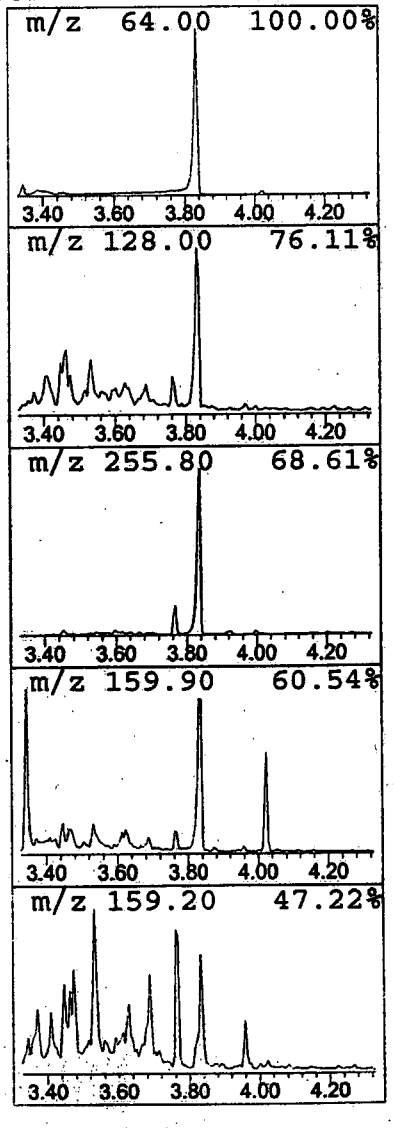
****

Peak Number 24 Cyclic octaatomic sulfur Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.83	27.33 UG	401184	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclic octaatomic sulfur	256	S8	010544-50-0	94
2	Cyclic octaatomic sulfur	256	S8	010544-50-0	90
3	1-[1-Bromo-2-(2,2,3,3-tetrafluor...	328	C12H10BrF5	1000223-18-3	9
4	2,2-Dichloro-6-phenyl-1-oxa-2-si...	242	C10H8Cl2OSi	077436-53-4	9





1653

Library Search Compound Report

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[redacted]c : ENVTACT/ORBIS,03/27/01,03/28/01,1
S Integration Params: LSCINT.P

Vial: 28
Operator: JC
Inst : MSD_B
Multiplr: 1.00

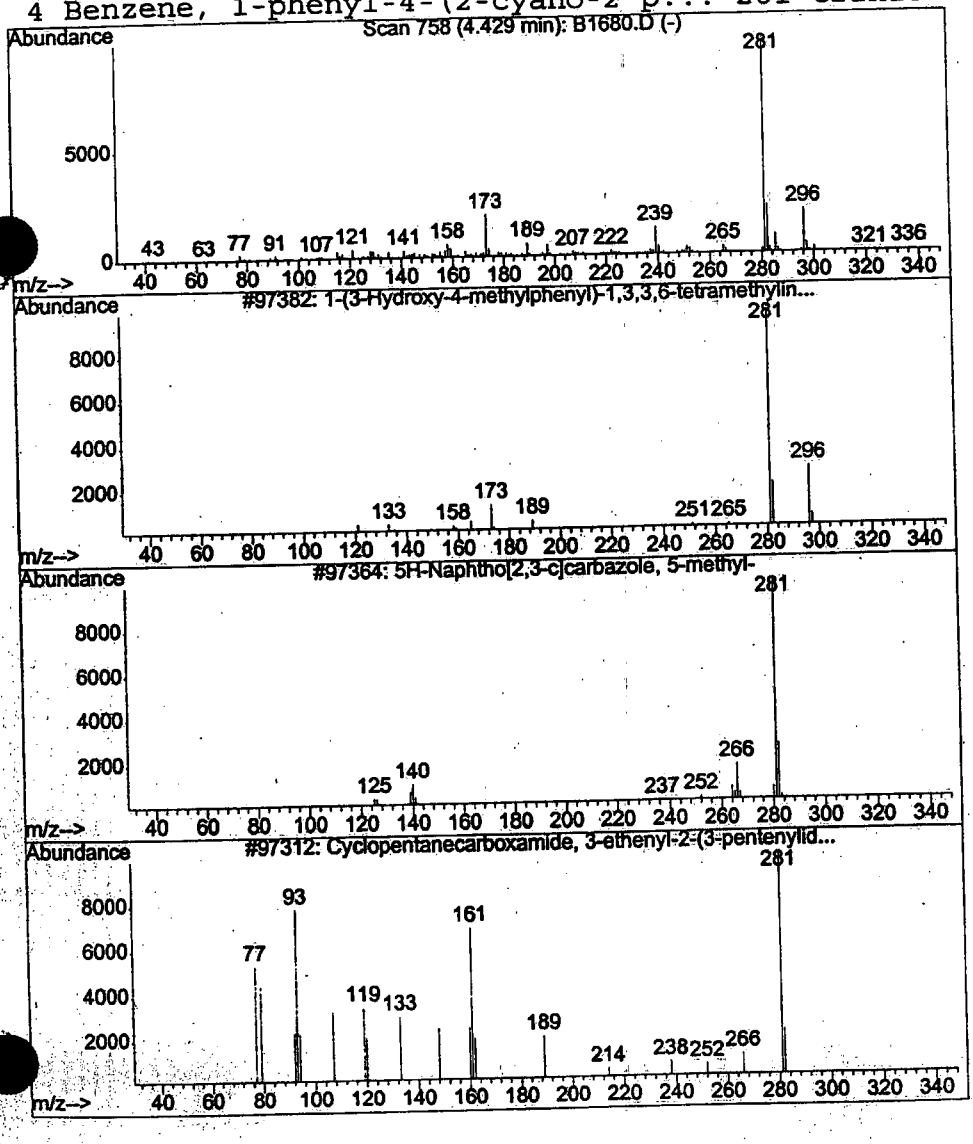
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

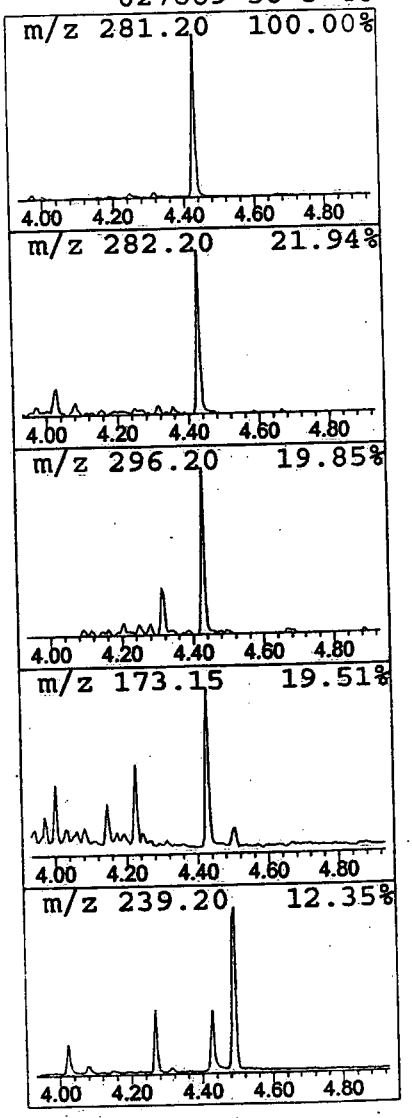
****

Peak Number 25 Unknown aromatic — Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.43	18.87 UG	152919	Chrysene-d12	4.49

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-(3-Hydroxy-4-methylphenyl)-1,3...	296	C20H24O2	107535-11-5	90
2	5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	49
3	Cyclopentanecarboxamide, 3-ethen...	281	C19H23NO	136091-23-1	46
4	Benzene, 1-phenyl-4-(2-cyano-2-p...	281	C21H15N	027869-56-3	40





1654

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1667.D Vial: 15
Acq On : 2 Apr 2001 11:24 Operator: JC
Sample : .,Method-Blank,S,30.0g,0.0,03/30/01 Inst : MSD_B
'isc : N/A,N/A,N/A,1 Multiplr: 1.00
.S Integration Params: rteint.p
Quant Time: Apr 02 11:33:04 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 09:42:41 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	34412	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	136974	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	82557	40.00	UG	0.00
60) Phenanthrene-d10	3.34	188	148580	40.00	UG	-0.01
75) Chrysene-d12	4.50	240	126027	40.00	UG	-0.02
84) Perylene-d12	5.29	264	124487	40.00	UG	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol	0.99	112	60682	61.30	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 61.30%			
6) Phenol-d5	1.39	99	83483	68.89	UG	-0.02
Spiked Amount 100.000	Range 40 - 101		Recovery = 68.89%			
23) Nitrobenzene-d5	1.74	82	35408	35.62	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 71.24%			
43) 2-Fluorobiphenyl	2.48	172	87254	38.46	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 76.92%			
64) 2,4,6-Tribromophenol	3.07	330	40735	82.33	UG	-0.01
Spiked Amount 100.000	Range 54 - 135		Recovery = 82.33%			
77) Terphenyl-d14	4.03	244	138605	46.12	UG	0.00
Spiked Amount 50.000	Range 58 - 147		Recovery = 92.24%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

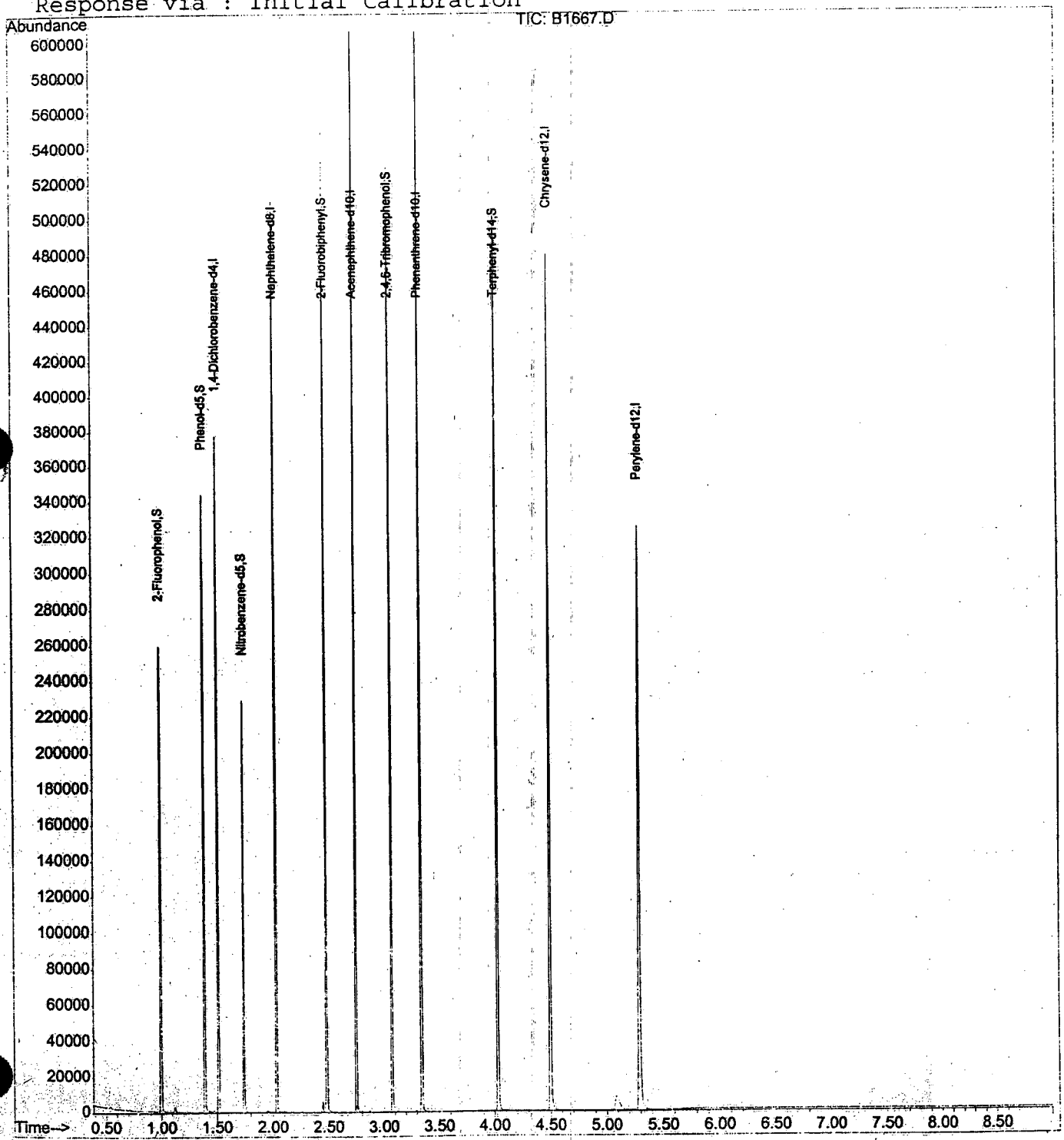
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1667.D
Acq On : 2 Apr 2001 11:24
Sample : .,Method-Blank,S,30.0g,0.0,03/30/01
Misc : N/A,N/A,N/A,1
MS Integration Params: rteint.p
Quant Time: Apr 2 12:57 2001

Vial: 15
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



000017

1656

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-02-01\B1667.D
Acq On : 2 Apr 2001 11:24
Sample : .,Method-Blank,S,30.0g,0.0,03/30/01
Misc : N/A,N/A,N/A,1
MS Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

Vial: 15
Operator: JC
Inst : MSD_B
Multiplr: 1.00

No Library Search Compounds Detected

****
B1667.D BS1201.M Mon Apr 02 12:13:21 2001 MSD_B

1657

PCB METHOD BLANK SUMMARY

Lab File ID: R3754.D

Instrument ID: GC-R

Date Extracted: 03/30/2001

Matrix: SOIL

Date Analyzed: 03/30/2001

Time Analyzed: 13:47

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S-18	1922-002	03/30/2001	14:39
S-19	1922-003	03/30/2001	15:06
S-20	1922-004	03/30/2001	15:32
S-23	1922-007	03/30/2001	16:51
S-24	1922-008	03/30/2001	17:17
S-25	1922-009	03/30/2001	17:43
S-27	1922-011	03/30/2001	18:09
TP-2	1929-001	03/30/2001	19:54
TP-5	1929-002	03/30/2001	20:21
TP-6	1929-003	03/30/2001	20:47
TP-1	1929-004	03/30/2001	21:13
TP-7	1929-005	03/30/2001	21:39
SB-1	1929-006	03/30/2001	22:05
SB-2	1929-007	03/30/2001	22:32
PCB	1929-007-MS2	03/30/2001	22:58
PCB	1929-007-MSD2	03/30/2001	23:24
PCB	PBS0330-MS2	03/30/2001	23:50
S-17	1922-001	04/02/2001	10:47
S-21	1922-005	04/02/2001	11:13
S-22	1922-006	04/02/2001	11:39
S-28	1922-012	04/02/2001	12:06
S-29	1922-013	04/02/2001	12:32
S-30	1922-015	04/02/2001	12:58

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0330-BLK2
Client ID: (1922..1929)
Date Received: NA
Date Extracted: 03/30/2001
Date Analyzed: 03/30/2001
Data file: R3754.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.668
Aroclor-1221	ND		0.668
Aroclor-1232	ND		0.668
Aroclor-1242	ND		0.668
Aroclor-1248	ND		0.668
Aroclor-1254	ND		0.668
Aroclor-1260	ND		0.668

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/07/2001

Instrument ID: GC-R

GC Column (1st): DB-5

Data File: R3330.D R3331.D R3332.D R3333.D R3334.D

Compound	RT OF STANDARDS 50	100	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	4.68	4.68	4.68	4.68	4.68	4.68	4.61	4.75
Aroclor-1016 {2}	5.61	5.61	5.61	5.61	5.61	5.61	5.54	5.68
Aroclor-1016 {3}	6.06	6.06	6.06	6.06	6.06	6.06	5.99	6.13
Aroclor-1016 {4}	7.82	7.82	7.82	7.81	7.81	7.81	7.74	7.88
Aroclor-1016 {5}	8.26	8.27	8.26	8.26	8.26	8.26	8.19	8.33
Aroclor-1221			2.97				2.90	3.04
Aroclor-1221 {2}			4.35				4.28	4.42
Aroclor-1221 {3}			4.55				4.48	4.62
Aroclor-1221 {4}			4.68				4.61	4.75
Aroclor-1221 {5}			5.65				5.58	5.72
Aroclor-1232			4.68				4.61	4.75
Aroclor-1232 {2}			6.06				5.99	6.13
Aroclor-1232 {3}			7.01				6.94	7.08
Aroclor-1232 {4}			7.81				7.74	7.88
Aroclor-1232 {5}			8.61				8.54	8.68
Aroclor-1242			6.06				5.99	6.13
Aroclor-1242 {2}			7.81				7.74	7.88
Aroclor-1242 {3}			8.35				8.28	8.42
Aroclor-1242 {4}			9.51				9.44	9.58
Aroclor-1242 {5}			10.01				9.94	10.08
Aroclor-1248			6.75				6.68	6.82
Aroclor-1248 {2}			7.81				7.74	7.88
Aroclor-1248 {3}			8.35				8.28	8.42
Aroclor-1248 {4}			9.52				9.45	9.59
Aroclor-1248 {5}			10.01				9.94	10.08
Aroclor-1254			10.25				10.18	10.32
Aroclor-1254 {2}			11.04				10.97	11.11
Aroclor-1254 {3}			11.35				11.28	11.42
Aroclor-1254 {4}			12.17				12.10	12.24
Aroclor-1254 {5}			12.91				12.84	12.98
Aroclor-1260	13.75	13.75	13.75	13.74	13.74	13.75	13.68	13.82
Aroclor-1260 {2}	14.31	14.30	14.30	14.30	14.30	14.30	14.23	14.37
Aroclor-1260 {3}	15.92	15.92	15.92	15.92	15.92	15.92	15.85	15.99
Aroclor-1260 {4}	16.83	16.83	16.83	16.83	16.83	16.83	16.76	16.90
Aroclor-1260 {5}	18.85	18.86	18.85	18.85	18.85	18.85	18.78	18.92

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/07/2001 Instrument ID: GC-R

GC Column (1st): DB-5

Data File: R3330.D R3331.D R3332.D R3333.D R3334.D

Compound	CALIBRATION FACTORS 50	100	500	1000	2000	MEAN	%RSD
Aroclor-1016	188357	180539	154060	160217	150043	166643	10.13
Aroclor-1016 {2}	193369	192604	149412	154111	143345	166568	14.66
Aroclor-1016 {3}	247365	243412	199574	209880	196956	219437	11.04
Aroclor-1016 {4}	160475	150814	129116	133205	125063	139734	10.87
Aroclor-1016 {5}	211571	195228	170276	175314	165523	183582	10.52
Aroclor-1221			94416				
Aroclor-1221 {2}			117591				
Aroclor-1221 {3}			105351				
Aroclor-1221 {4}			310766				
Aroclor-1221 {5}			72554				
Aroclor-1232			201496				
Aroclor-1232 {2}			114936				
Aroclor-1232 {3}			142945				
Aroclor-1232 {4}			74096				
Aroclor-1232 {5}			132663				
Aroclor-1242			208065				
Aroclor-1242 {2}			129887				
Aroclor-1242 {3}			165363				
Aroclor-1242 {4}			269569				
Aroclor-1242 {5}			247210				
Aroclor-1248			552070				
Aroclor-1248 {2}			194084				
Aroclor-1248 {3}			180859				
Aroclor-1248 {4}			474353				
Aroclor-1248 {5}			424555				
Aroclor-1254			508120				
Aroclor-1254 {2}			402048				
Aroclor-1254 {3}			739869				
Aroclor-1254 {4}			796355				
Aroclor-1254 {5}			350473				
Aroclor-1260	692164	666494	572127	614707	580096	625118	8.45
Aroclor-1260 {2}	419935	405873	336447	355071	329625	369390	11.13
Aroclor-1260 {3}	930041	936971	819559	915331	860926	892566	5.66
Aroclor-1260 {4}	433561	453976	385605	444499	422817	428092	6.18
Aroclor-1260 {5}	236224	244121	213201	241671	233740	233791	5.23
					Average %RSD		9.39

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/07/2001

Instrument ID: GC-R

GC Column (2nd): DB-1701P

Data File: R3330.C R3331.C R3332.C R3333.C R3334.C

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	50	100	500	1000	2000	RT	FROM	TO
Aroclor-1016	5.00	5.00	5.00	5.00	5.00	5.00	4.93	5.07
Aroclor-1016 {2}	5.97	5.97	5.97	5.97	5.97	5.97	5.90	6.04
Aroclor-1016 {3}	7.15	7.15	7.15	7.14	7.14	7.15	7.08	7.22
Aroclor-1016 {4}	7.53	7.53	7.53	7.53	7.53	7.53	7.46	7.60
Aroclor-1016 {5}	7.81	7.81	7.81	7.81	7.81	7.81	7.74	7.88
Aroclor-1221			3.12				3.05	3.19
Aroclor-1221 {2}			4.53				4.46	4.60
Aroclor-1221 {3}			4.87				4.80	4.94
Aroclor-1221 {4}			5.00				4.93	5.07
Aroclor-1221 {5}			6.24				6.17	6.31
Aroclor-1232			5.00				4.93	5.07
Aroclor-1232 {2}			6.59				6.52	6.66
Aroclor-1232 {3}			7.53				7.46	7.60
Aroclor-1232 {4}			7.81				7.74	7.88
Aroclor-1232 {5}			8.88				8.81	8.95
Aroclor-1242			6.47				6.40	6.54
Aroclor-1242 {2}			7.81				7.74	7.88
Aroclor-1242 {3}			8.88				8.81	8.95
Aroclor-1242 {4}			10.04				9.97	10.11
Aroclor-1242 {5}			10.73				10.66	10.80
Aroclor-1248			7.14				7.07	7.21
Aroclor-1248 {2}			8.19				8.12	8.26
Aroclor-1248 {3}			8.88				8.81	8.95
Aroclor-1248 {4}			9.17				9.10	9.24
Aroclor-1248 {5}			9.74				9.67	9.81
Aroclor-1254			10.76				10.69	10.83
Aroclor-1254 {2}			11.80				11.73	11.87
Aroclor-1254 {3}			12.84				12.77	12.91
Aroclor-1254 {4}			13.34				13.27	13.41
Aroclor-1254 {5}			14.42				14.35	14.49
Aroclor-1260	13.34	13.35	13.34	13.34	13.34	13.34	13.27	13.41
Aroclor-1260 {2}	14.42	14.42	14.41	14.41	14.41	14.41	14.34	14.48
Aroclor-1260 {3}	15.62	15.62	15.62	15.62	15.62	15.62	15.55	15.69
Aroclor-1260 {4}	16.53	16.54	16.54	16.53	16.53	16.53	16.46	16.60
Aroclor-1260 {5}	19.63	19.63	19.63	19.63	19.63	19.63	19.56	19.70

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/07/2001

Instrument ID: GC-R

GC Column (2nd): DB-1701P

Data File: R3330.C R3331.C R3332.C R3333.C R3334.C

Compound	CALIBRATION FACTORS 50	100	500	1000	2000	MEAN	%RSD
Aroclor-1016	273493	269889	216228	218743	201186	235908	14.15
Aroclor-1016 {2}	541234	524026	411495	417359	384724	455768	15.69
Aroclor-1016 {3}	1142940	1092386	882272	921975	871028	982120	12.87
Aroclor-1016 {4}	499332	487818	383902	392159	363947	425432	14.85
Aroclor-1016 {5}	290225	286499	229684	237330	222968	253341	12.79
Aroclor-1221			129791				
Aroclor-1221 {2}			165371				
Aroclor-1221 {3}			110260				
Aroclor-1221 {4}			409437				
Aroclor-1221 {5}			63243				
Aroclor-1232			268482				
Aroclor-1232 {2}			112119				
Aroclor-1232 {3}			207021				
Aroclor-1232 {4}			124280				
Aroclor-1232 {5}			230564				
Aroclor-1242			127469				
Aroclor-1242 {2}			236009				
Aroclor-1242 {3}			398732				
Aroclor-1242 {4}			280614				
Aroclor-1242 {5}			247760				
Aroclor-1248			732754				
Aroclor-1248 {2}			575069				
Aroclor-1248 {3}			575086				
Aroclor-1248 {4}			568653				
Aroclor-1248 {5}			346517				
Aroclor-1254			302889				
Aroclor-1254 {2}			218959				
Aroclor-1254 {3}			689024				
Aroclor-1254 {4}			484944				
Aroclor-1254 {5}			1066822				
Aroclor-1260	861580	799024	616564	632714	597266	701430	17.16
Aroclor-1260 {2}	1157595	1061140	840118	883219	846560	957726	14.98
Aroclor-1260 {3}	676235	630690	491848	508902	483935	558322	15.90
Aroclor-1260 {4}	1408998	1332394	1075476	1149397	1117322	1216717	11.96
Aroclor-1260 {5}	416730	400654	314553	327336	312186	354292	14.20
					Average %RSD		14.46

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/30/2001 Instrument ID: GC-R

Data File: R3752.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	4.69	4.62	4.76	166643	191099	14.68
Aroclor-1016 {2}	5.62	5.55	5.69	166568	165928	0.38
Aroclor-1016 {3}	6.07	6.00	6.14	219437	249356	13.63
Aroclor-1016 {4}	7.82	7.75	7.89	139734	169731	21.47
Aroclor-1016 {5}	8.27	8.20	8.34	183582	228454	24.44
Aroclor-1260	13.75	13.68	13.82	625118	711675	13.85
Aroclor-1260 {2}	14.30	14.23	14.37	369390	390457	5.70
Aroclor-1260 {3}	15.92	15.85	15.99	892566	948452	6.26
Aroclor-1260 {4}	16.82	16.75	16.89	428092	469811	9.75
Aroclor-1260 {5}	18.85	18.78	18.92	233791	224291	4.06
					Average %D	11.42

Data File: R3752.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.00	4.93	5.07	235908	260790	10.55
Aroclor-1016 {2}	5.96	5.89	6.03	455768	499799	9.66
Aroclor-1016 {3}	7.13	7.06	7.20	982120	1103761	12.39
Aroclor-1016 {4}	7.51	7.44	7.58	425432	476399	11.98
Aroclor-1016 {5}	7.79	7.72	7.86	253341	296632	17.09
Aroclor-1260	13.32	13.25	13.39	701430	781211	11.37
Aroclor-1260 {2}	14.39	14.32	14.46	957726	1076379	12.39
Aroclor-1260 {3}	15.59	15.52	15.66	558322	631438	13.10
Aroclor-1260 {4}	16.50	16.43	16.57	1216717	1359867	11.77
Aroclor-1260 {5}	19.60	19.53	19.67	354292	384133	8.42
					Average %D	11.87

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/31/2001 **Instrument ID:** GC-R

Data File: R3778.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	4.69	4.62	4.76	166643	178836	7.32
Aroclor-1016 {2}	5.62	5.55	5.69	166568	185703	11.49
Aroclor-1016 {3}	6.07	6.00	6.14	219437	233085	6.22
Aroclor-1016 {4}	7.82	7.75	7.89	139734	158010	13.08
Aroclor-1016 {5}	8.27	8.20	8.34	183582	212676	15.85
Aroclor-1260	13.75	13.68	13.82	625118	680549	8.87
Aroclor-1260 {2}	14.30	14.23	14.37	369390	378258	2.40
Aroclor-1260 {3}	15.92	15.85	15.99	892566	966891	8.33
Aroclor-1260 {4}	16.83	16.76	16.90	428092	484990	13.29
Aroclor-1260 {5}	18.86	18.79	18.93	233791	222485	4.84
					Average %D	9.17

Data File: R3778.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	4.99	4.92	5.06	235908	259585	10.04
Aroclor-1016 {2}	5.95	5.88	6.02	455768	497162	9.08
Aroclor-1016 {3}	7.13	7.06	7.20	982120	1096854	11.68
Aroclor-1016 {4}	7.51	7.44	7.58	425432	475280	11.72
Aroclor-1016 {5}	7.79	7.72	7.86	253341	300433	18.59
Aroclor-1260	13.31	13.24	13.38	701430	786265	12.09
Aroclor-1260 {2}	14.39	14.32	14.46	957726	1049790	9.61
Aroclor-1260 {3}	15.59	15.52	15.66	558322	636195	13.95
Aroclor-1260 {4}	16.50	16.43	16.57	1216717	1376871	13.16
Aroclor-1260 {5}	19.60	19.53	19.67	354292	395728	11.70
					Average %D	12.16

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/02/2001 Instrument ID: GC-R

Data File: R3800.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	4.69	4.62	4.76	166643	179465	7.69
Aroclor-1016 {2}	5.63	5.56	5.70	166568	181950	9.23
Aroclor-1016 {3}	6.07	6.00	6.14	219437	235894	7.50
Aroclor-1016 {4}	7.82	7.75	7.89	139734	161485	15.57
Aroclor-1016 {5}	8.27	8.20	8.34	183582	209492	14.11
Aroclor-1260	13.75	13.68	13.82	625118	655844	4.92
Aroclor-1260 {2}	14.30	14.23	14.37	369390	355499	3.76
Aroclor-1260 {3}	15.92	15.85	15.99	892566	844742	5.36
Aroclor-1260 {4}	16.83	16.76	16.90	428092	415978	2.83
Aroclor-1260 {5}	18.86	18.79	18.93	233791	193734	17.13
					Average %D	8.81

Data File: R3800.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.00	4.93	5.07	235908	247609	4.96
Aroclor-1016 {2}	5.96	5.89	6.03	455768	473254	3.84
Aroclor-1016 {3}	7.13	7.06	7.20	982120	1042276	6.13
Aroclor-1016 {4}	7.51	7.44	7.58	425432	450769	5.96
Aroclor-1016 {5}	7.79	7.72	7.86	253341	273317	7.88
Aroclor-1260	13.31	13.24	13.38	701430	743397	5.98
Aroclor-1260 {2}	14.38	14.31	14.45	957726	1010587	5.52
Aroclor-1260 {3}	15.59	15.52	15.66	558322	591400	5.92
Aroclor-1260 {4}	16.50	16.43	16.57	1216717	1277786	5.02
Aroclor-1260 {5}	19.59	19.52	19.66	354292	356423	0.60
					Average %D	5.18

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/02/2001 Instrument ID: GC-R

Data File: R3808.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	4.68	4.61	4.75	166643	171145	2.70
Aroclor-1016 {2}	5.61	5.54	5.68	166568	184437	10.73
Aroclor-1016 {3}	6.06	5.99	6.13	219437	225787	2.89
Aroclor-1016 {4}	7.82	7.75	7.89	139734	153251	9.67
Aroclor-1016 {5}	8.26	8.19	8.33	183582	205024	11.68
Aroclor-1260	13.75	13.68	13.82	625118	642272	2.74
Aroclor-1260 {2}	14.30	14.23	14.37	369390	355538	3.75
Aroclor-1260 {3}	15.92	15.85	15.99	892566	885313	0.81
Aroclor-1260 {4}	16.83	16.76	16.90	428092	441814	3.21
Aroclor-1260 {5}	18.85	18.78	18.92	233791	210721	9.87
					Average %D	5.81

Data File: R3808.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	4.98	4.91	5.05	235908	245108	3.90
Aroclor-1016 {2}	5.95	5.88	6.02	455768	474335	4.07
Aroclor-1016 {3}	7.12	7.05	7.19	982120	1038094	5.70
Aroclor-1016 {4}	7.50	7.43	7.57	425432	451192	6.06
Aroclor-1016 {5}	7.78	7.71	7.85	253341	287216	13.37
Aroclor-1260	13.31	13.24	13.38	701430	749847	6.90
Aroclor-1260 {2}	14.38	14.31	14.45	957726	992736	3.66
Aroclor-1260 {3}	15.59	15.52	15.66	558322	599140	7.31
Aroclor-1260 {4}	16.50	16.43	16.57	1216717	1296954	6.59
Aroclor-1260 {5}	19.59	19.52	19.66	354292	363972	2.73
					Average %D	6.03

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 03/30/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(1922..1929)	0330-BLK2	SOIL	84		79		87		83	
S-18	1922-002	SOIL	80		110		90		130	
S-19	1922-003	SOIL	70		90		80		110	
S-20	1922-004	SOIL	70		100		100		90	
S-23	1922-007	SOIL	60		100		110		110	
S-24	1922-008	SOIL	60		100		80		170	
S-25	1922-009	SOIL	70		110		90		110	
S-27	1922-011	SOIL	70		90		90		130	
TP-2	1929-001	SOIL	70		90		90		110	
TP-5	1929-002	SOIL	70		100		90		120	
TP-6	1929-003	SOIL	70		100		90		120	
TP-1	1929-004	SOIL	70		90		90		110	
TP-7	1929-005	SOIL	70		100		90		110	
SB-1	1929-006	SOIL	70		100		80		110	
SB-2	1929-007	SOIL	70		110		80		110	
PCB	1929-007-MS2	SOIL	79		90		83		97	
PCB	1929-007-MSD2	SOIL	82		89		87		96	
PCB	PBS0330-MS2	SOIL	82		78		87		84	

Surrogate QC Limits	Soil	Aqueous
TCMX = Tetrachloro-m-xylene	59-147	59-151
DCB = Decachlorobiphenyl	63-179	60-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 03/30/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
S-17	1922-001	SOIL	80		100		110		110	
S-21	1922-005	SOIL	70		90		100		100	
S-22	1922-006	SOIL	80		90		110		110	
S-28	1922-012	SOIL	70		90		90		50	*
S-29	1922-013	SOIL	60		100		80		90	
S-30	1922-015	SOIL	80		120		120		110	

Surrogate QC Limits	Soil	Aqueous
TCMX = Tetrachloro-m-xylene	59-147	59-151
DCB = Decachlorobiphenyl	63-179	60-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

SOIL PCB MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 1929-007-MSD2

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	10.0	0.0	9.6	96	77 - 168
Aroclor-1260	10.0	0.0	9.8	98	81 - 177

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	9.7	97	1	18	77 - 168
Aroclor-1260	0.0	10.1	101	3	19	81 - 177

 # Column to be used to flag recovery and RPD values with an asterisk

*** Values outside of QC limits**

NC Non calculable

RPD: __0___ out of __2__ outside limits

Spike Recovery: __0___ out of __4__ outside limits

SOIL PCB BLANK SPIKE RECOVERY

Matrix spike Lab sample ID: PBS0330-MS2

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	10.0	0.0	9.1	91	77 - 168
Aroclor-1260	10.0	0.0	8.7	87	81 - 177

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

Spike Recovery: __0___ out of __2__ outside limits

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 3.93 DCB 1 20.94 TCMX 2 3.79 DCB 2 20.94

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
(1922..1929)	0330-BLK2	03/30/2001	13:47	3.93		20.94		3.79		20.94	
S-18	1922-002	03/30/2001	14:39	3.94		20.94		3.79		20.94	
S-19	1922-003	03/30/2001	15:06	3.93		20.94		3.79		20.94	
S-20	1922-004	03/30/2001	15:32	3.94		20.94		3.79		20.95	
S-23	1922-007	03/30/2001	16:51	3.94		20.94		3.79		20.94	
S-24	1922-008	03/30/2001	17:17	3.94		20.94		3.79		20.95	
S-25	1922-009	03/30/2001	17:43	3.93		20.94		3.79		20.94	
S-27	1922-011	03/30/2001	18:09	3.94		20.94		3.79		20.94	
TP-2	1929-001	03/30/2001	19:54	3.94		20.94		3.79		20.94	
TP-5	1929-002	03/30/2001	20:21	3.94		20.94		3.79		20.94	
TP-6	1929-003	03/30/2001	20:47	3.94		20.94		3.79		20.94	
TP-1	1929-004	03/30/2001	21:13	3.94		20.94		3.79		20.94	
TP-7	1929-005	03/30/2001	21:39	3.94		20.94		3.79		20.94	
SB-1	1929-006	03/30/2001	22:05	3.94		20.94		3.79		20.94	
SB-2	1929-007	03/30/2001	22:32	3.94		20.94		3.79		20.94	
PCB	1929-007-MS2	03/30/2001	22:58	3.94		20.94		3.79		20.94	
PCB	1929-007-MSD2	03/30/2001	23:24	3.94		20.94		3.79		20.94	
PCB	PBS0330-MS2	03/30/2001	23:50	3.94		20.94		3.79		20.94	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.05 Minutes)

DCB = Decachlorobiphenyl (_ 0.05 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 3.93 DCB 1 20.94 TCMX 2 3.79 DCB 2 20.94

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
S-17	1922-001	04/02/2001	10:47	3.93		20.94		3.79		20.94	
S-21	1922-005	04/02/2001	11:13	3.94		20.94		3.79		20.94	
S-22	1922-006	04/02/2001	11:39	3.94		20.94		3.79		20.94	
S-28	1922-012	04/02/2001	12:06	3.94		20.94		3.79		21.01	
S-29	1922-013	04/02/2001	12:32	3.94		20.94		3.79		20.94	
S-30	1922-015	04/02/2001	12:58	3.94		20.94		3.79		20.94	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.05 Minutes)

DCB = Decachlorobiphenyl (_ 0.05 Minutes)

Column to be used to flag recovery values
***** Values outside of QC limits
D Surrogate diluted out
M Matrix interference

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3802.D\ECD1B.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3802.D\ECD2A.CH
Acq On : 02 Apr 2001 10:47 Operator:
Sample : S-17,1922-001,S,30.2g,15.1,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 02 11:10:36 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.93	3.79	16223961	28726218	1.741	2.259 #
Spiked Amount 205.000	Range 75 - 125		Recovery =		0.85%#	1.10%#
2) S DCB	20.94	20.94	17251525	26601079	2.090	2.328m
Spiked Amount 205.000			Recovery =		1.02%	1.14%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000

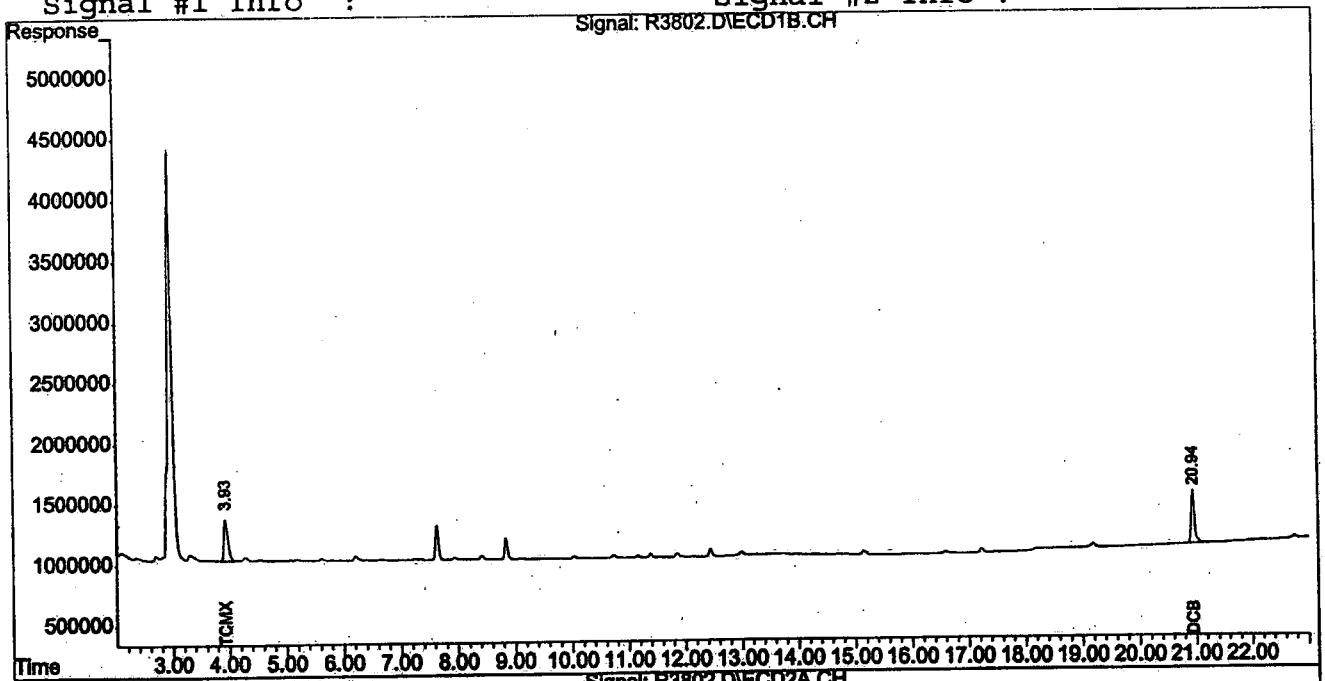
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

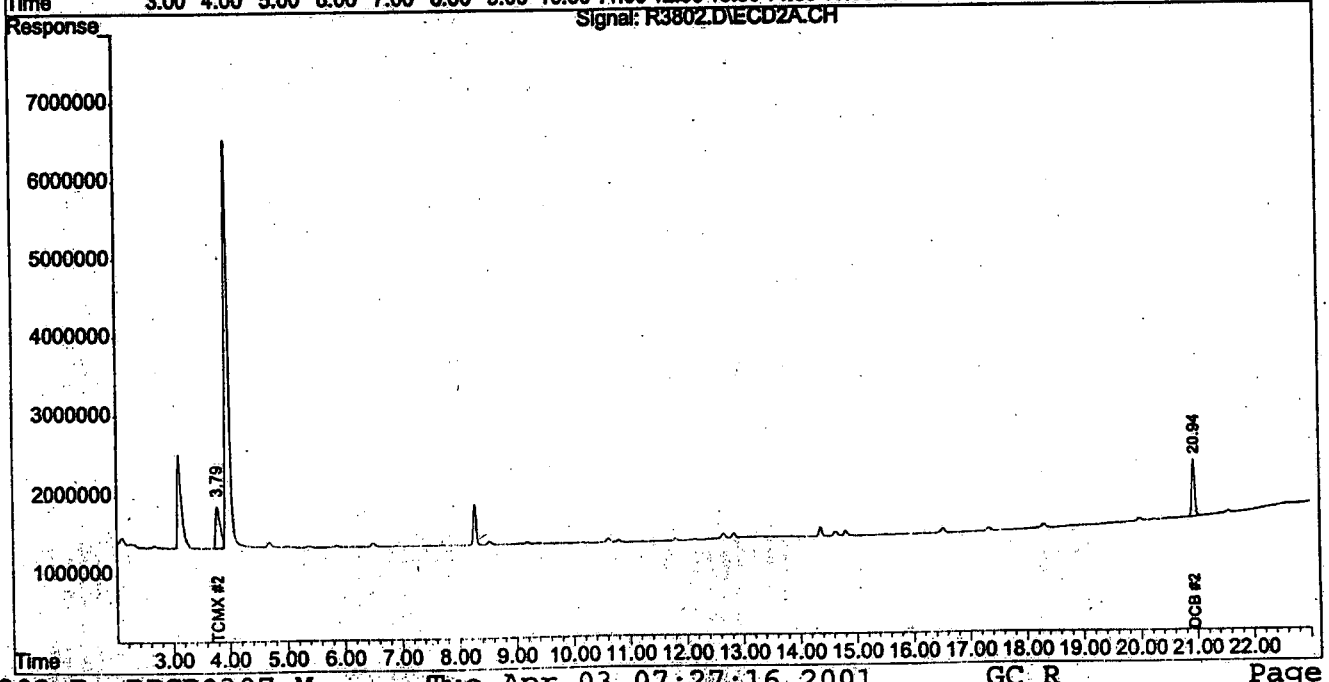
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3802.D\ECD1B.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3802.D\ECD2A.CH
Acq On : 02 Apr 2001 10:47 Operator:
Sample : S-17,1922-001,S,30.2g,15.1,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 15:06 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3756.D\ECD1B.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3756.D\ECD2A.CH
Acq On : 30 Mar 2001 14:39 Operator:
Sample : S-18,1922-002,S,30.4g,26.7,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 30 15:03:21 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.94	3.79	14775726	23194712	1.585	1.824
Spiked Amount 205.000 Range 75 - 125 Recovery =						0.77%#	0.89%#
2) S DCB		20.94	20.94	17982792	30686054	2.179	2.686
Spiked Amount 205.000 Recovery =						1.06%	1.31%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
Sum Aroclor-1254				0	0	N.D.	N.D.
Average Aroclor-1254						0.000	0.000
33) L8 Aroclor-1260		13.74	13.31	76645059	95412216	122.609	136.204
34) L8 Aroclor-1260	{2}	14.30	14.38	45238480	126.0E6	122.468	131.807
35) L8 Aroclor-1260	{3}	15.92	15.59	105.2E6	69439821	118.471	125.987
36) L8 Aroclor-1260	{4}	16.82	16.50	56200593	151.3E6	131.024	124.998
37) L8 Aroclor-1260	{5}	18.85	19.60	26144768	42479581	111.988	120.897
Sum Aroclor-1260				309.4E6	484.6E6	606.561	639.894
Average Aroclor-1260						121.312	127.979

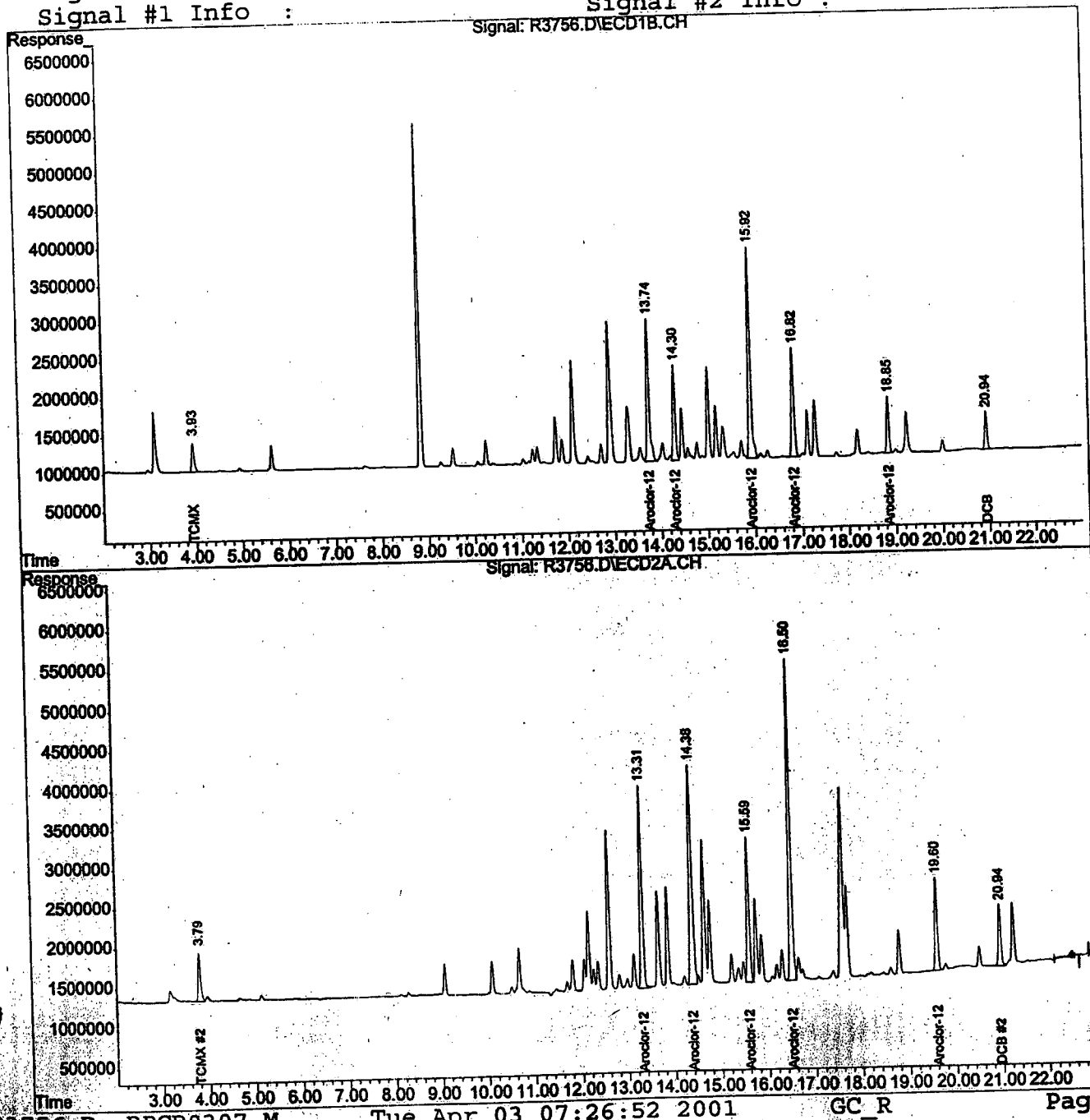
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3756.D\ECD1B.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3756.D\ECD2A.CH
Acq On : 30 Mar 2001 14:39 Operator:
Sample : S-18,1922-002,S,30.4g,26.7,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 11:01 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :



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Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3757.D\ECD1B.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3757.D\ECD2A.CH
Acq On : 30 Mar 2001 15:06 Operator:
Sample : S-19,1922-003,S,30.1g,22.7,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 30 15:29:35 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.93	3.79	13798943	21555490	1.481	1.695
Spiked Amount 205.000	Range 75 - 125		Recovery =		0.72%#	0.83%#
2) S DCB	20.94	20.94	15174755	26910812	1.839	2.355 #
Spiked Amount 205.000			Recovery =		0.90%	1.15%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

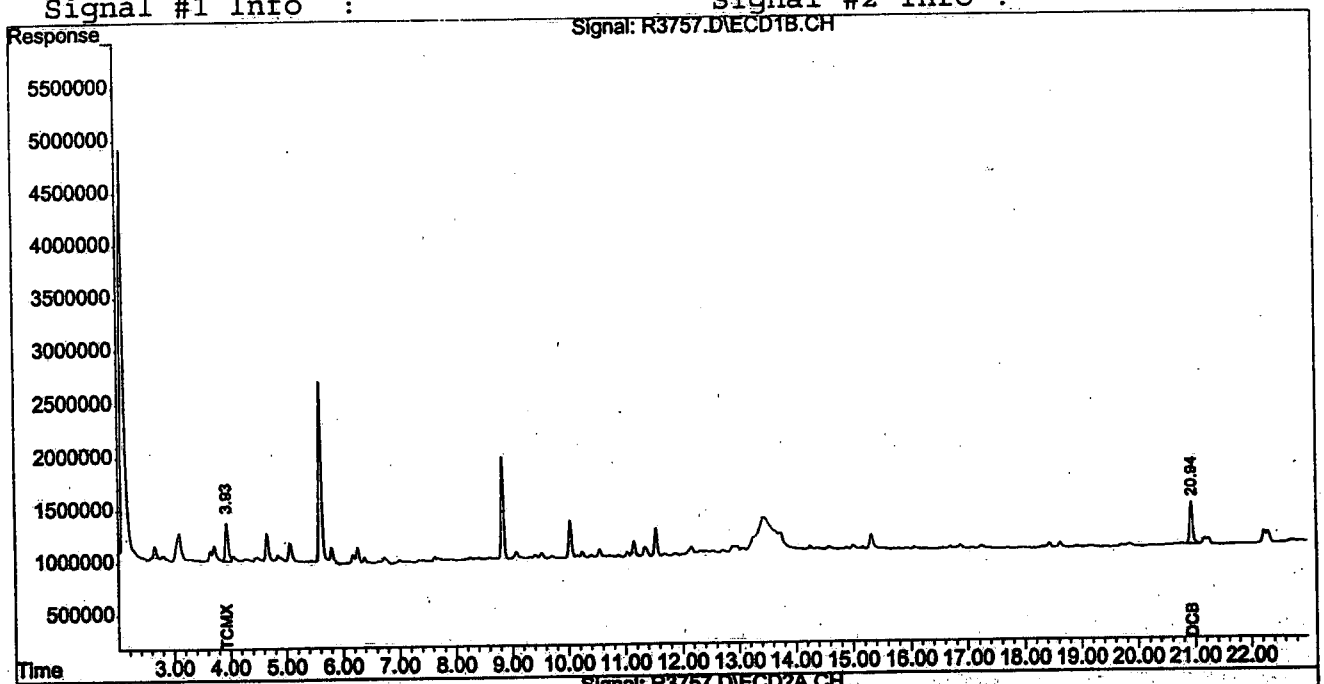
1678

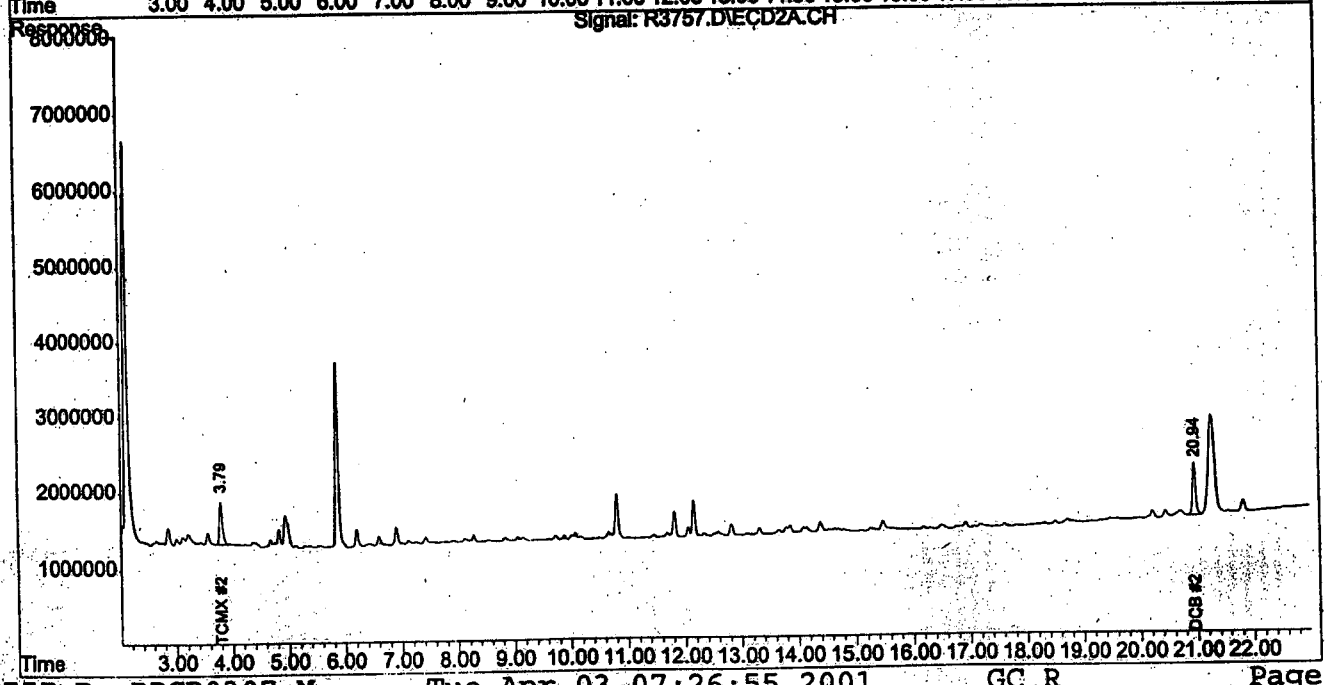
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3757.D\ECD1B.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3757.D\ECD2A.CH
Acq On : 30 Mar 2001 15:06 Operator:
Sample : S-19,1922-003,S,30.1g,22.7,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 11:02 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3758.D\ECD1B.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3758.D\ECD2A.CH
Acq On : 30 Mar 2001 15:32 Operator:
Sample : S-20,1922-004,S,30.2g,15.7,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 30 15:55:51 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.94	3.79	12469661	26183847	1.338	2.059 #
Spiked Amount	205.000	Range	75 - 125	Recovery	=	0.65%#	1.00%#
2) S DCB		20.94	20.95	16198509	22090362	1.963	1.934
Spiked Amount	205.000			Recovery	=	0.96%	0.94%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
28) L7 Aroclor-1254		10.25	10.74	36444324	30714347	71.724	101.405 #
29) L7 Aroclor-1254	{2}	11.04	11.81	26302409	66869780	65.421	305.399 #
30) L7 Aroclor-1254	{3}	11.35	12.81	61720696	74804702	83.421	108.566 #
31) L7 Aroclor-1254	{4}	12.16	13.31	58296718	48063441	73.204	99.111 #
32) L7 Aroclor-1254	{5}	12.91	14.38	25247383	108.0E6	72.038	101.245 #
Sum Aroclor-1254				208.0E6	328.5E6	365.809	715.726
Average Aroclor-1254						73.162	143.145
Sum Aroclor-1260				0	0	N.D.	N.D.
Average Aroclor-1260						0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

000841

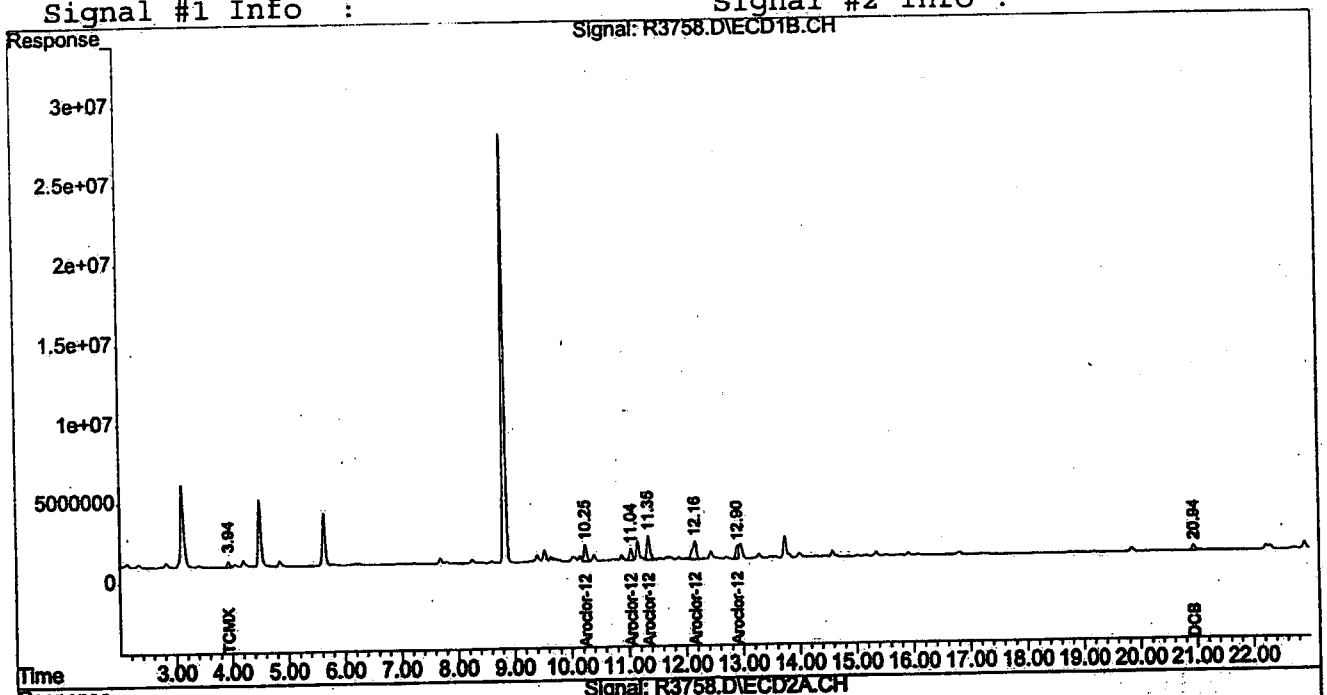
1680

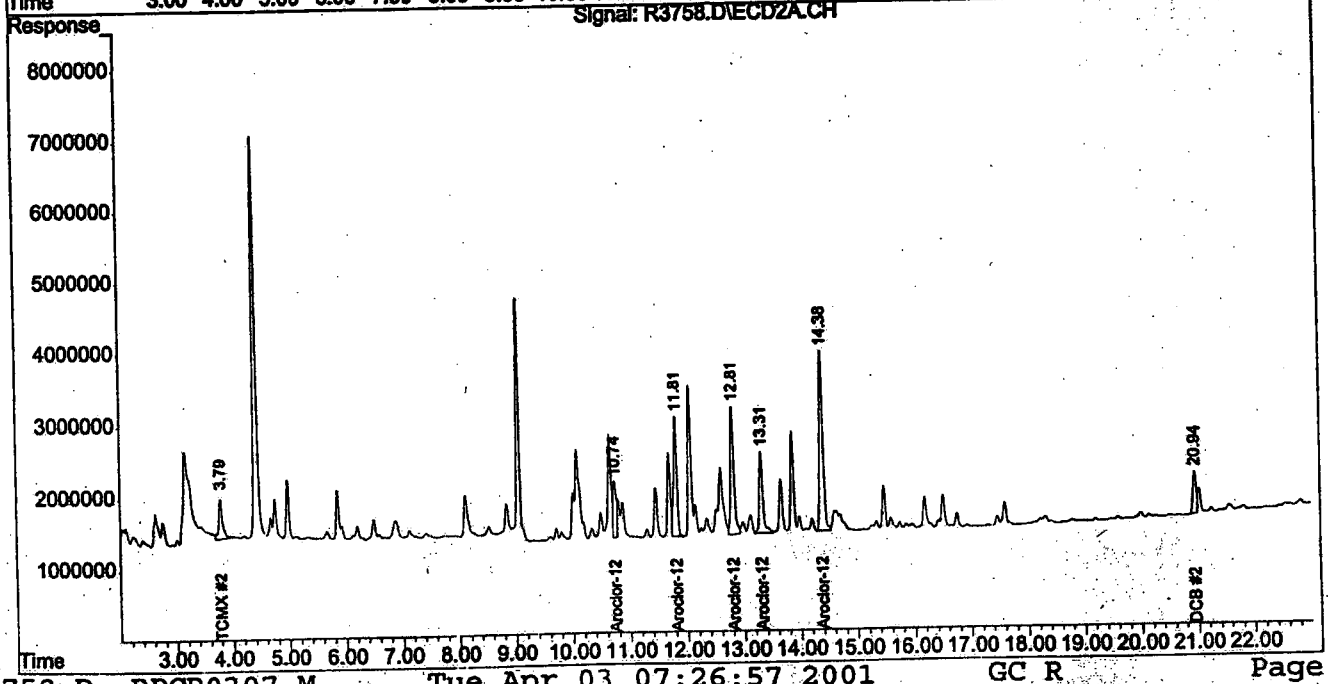
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3758.D\ECD1B.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3758.D\ECD2A.CH
Acq On : 30 Mar 2001 15:32 Operator:
Sample : S-20,1922-004,S,30.2g,15.7,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 11:04 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3803.D\ECD1B.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3803.D\ECD2A.CH
Acq On : 02 Apr 2001 11:13 Operator:
Sample : S-21,1922-005,S,30.9g,14.6,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 02 11:36:47 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.94	3.79	14168052	25065380	1.520	1.971 #
Spiked Amount 205.000		Range 75 - 125		Recovery =		0.74%#	0.96%#
2) S DCB		20.94	20.94	15894632	22952772	1.926	2.009
Spiked Amount 205.000				Recovery =		0.94%	0.98%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
28) L7 Aroclor-1254		10.25	10.74	7369372	4497164	14.503	14.848
29) L7 Aroclor-1254	{2}	11.05	11.82	4948909	24824073	12.309	113.373 #
30) L7 Aroclor-1254	{3}	11.36	12.82	11848258	15956098	16.014	23.158 #
31) L7 Aroclor-1254	{4}	12.17	13.31	9202293	6558720	11.556	13.525
32) L7 Aroclor-1254	{5}	12.91	14.37	3605000	43803655	10.286	41.060 #
Sum Aroclor-1254				36973833	95639710	64.668	205.963
Average Aroclor-1254						12.934	41.193
Sum Aroclor-1260				0	0	N.D.	N.D.
Average Aroclor-1260						0.000	0.000

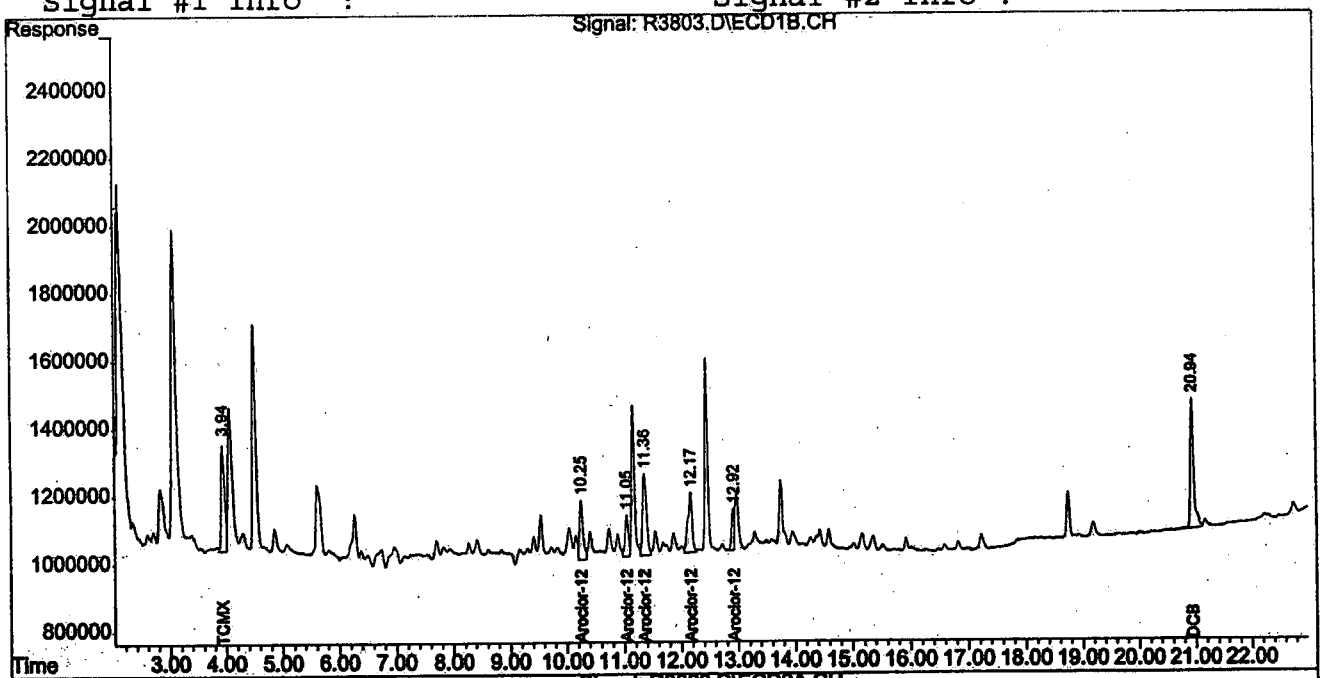
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

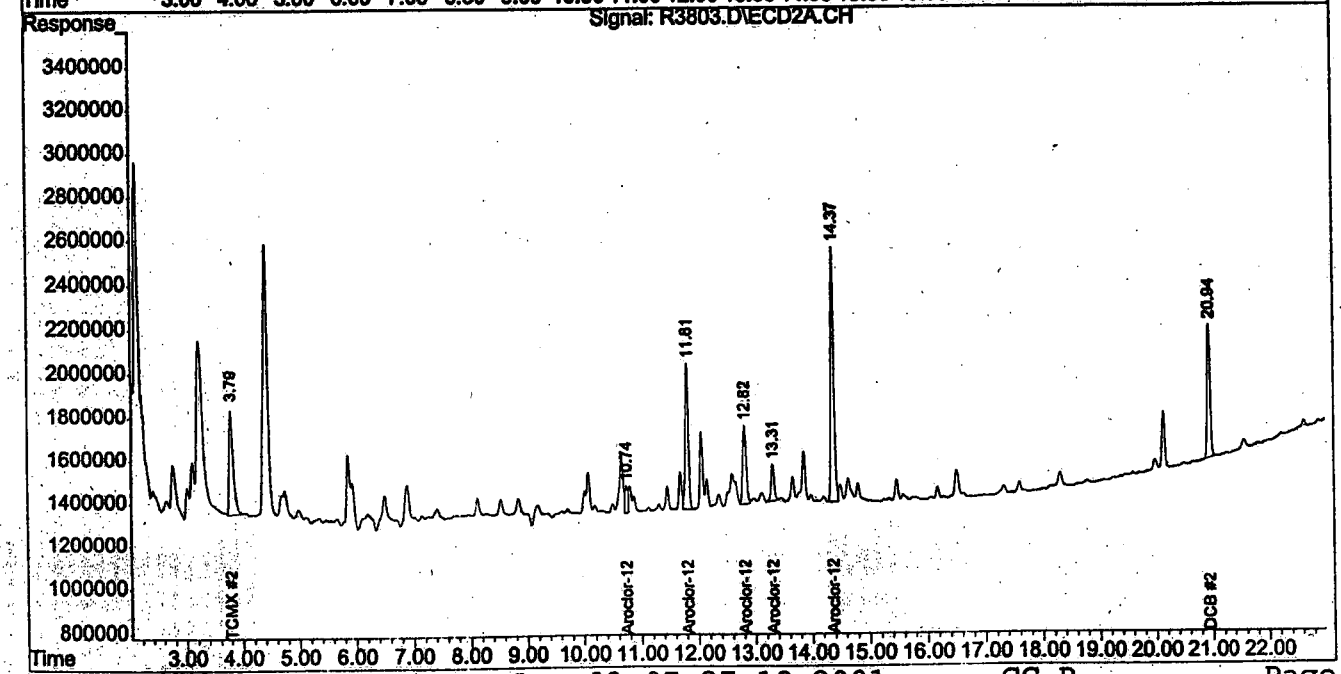
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3803.D\ECD1B.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3803.D\ECD2A.CH
Acq On : 02 Apr 2001 11:13 Operator:
Sample : S-21,1922-005,S,30.9g,14.6,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 15:07 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1683

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3804.D\ECD1B.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3804.D\ECD2A.CH
Acq On : 02 Apr 2001 11:39 Operator:
Sample : S-22,1922-006,S,30.9g,16.5,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 02 12:03:08 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.94	3.79	15296773	28934182	1.641	2.275 #
Spiked Amount	205.000	Range	75 - 125	Recovery	=	0.80%#	1.11%#
2) S DCB		20.94	20.94	14920881	25582961	1.808	2.239
Spiked Amount	205.000			Recovery	=	0.88%	1.09%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
28) L7 Aroclor-1254		10.25	10.73	25382782	26026370	49.954	85.927 #
29) L7 Aroclor-1254	{2}	11.04	11.82	19932411	115.7E6	49.577	528.418 #
30) L7 Aroclor-1254	{3}	11.35	12.81	44054685	55424283	59.544	80.439 #
31) L7 Aroclor-1254	{4}	12.17	13.32	38361806	56990212	48.172	117.519 #
32) L7 Aroclor-1254	{5}	12.91	14.38	16299585	100.0E6	46.507	93.772 #
Sum Aroclor-1254				144.0E6	354.2E6	253.755	906.076
Average Aroclor-1254						50.751	181.215
Sum Aroclor-1260				0	0	N.D.	N.D.
Average Aroclor-1260						0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

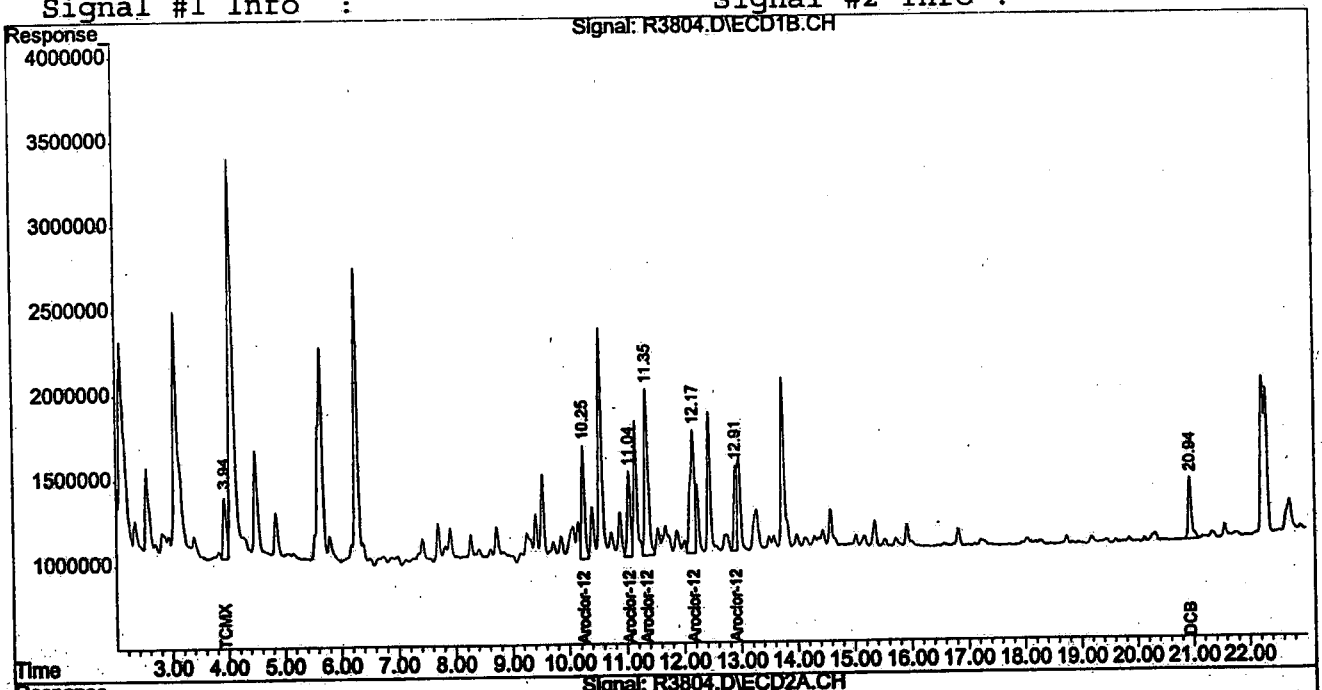
1/29/11

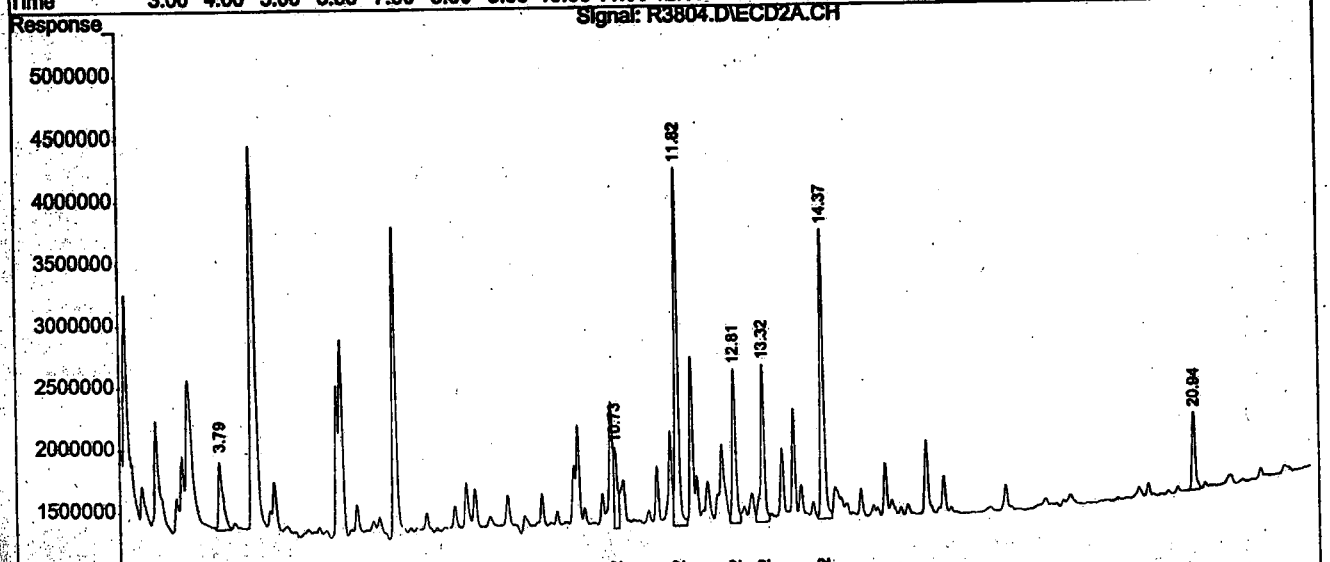
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3804.D\ECD1B.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3804.D\ECD2A.CH
Acq On : 02 Apr 2001 11:39 Operator:
Sample : S-22,1922-006,S,30.9g,16.5,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 15:07 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1685

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3761.D\ECD1B.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3761.D\ECD2A.CH
Acq On : 30 Mar 2001 16:51 Operator:
Sample : S-23,1922-007,S,30.8g,17.8,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 30 17:14:44 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

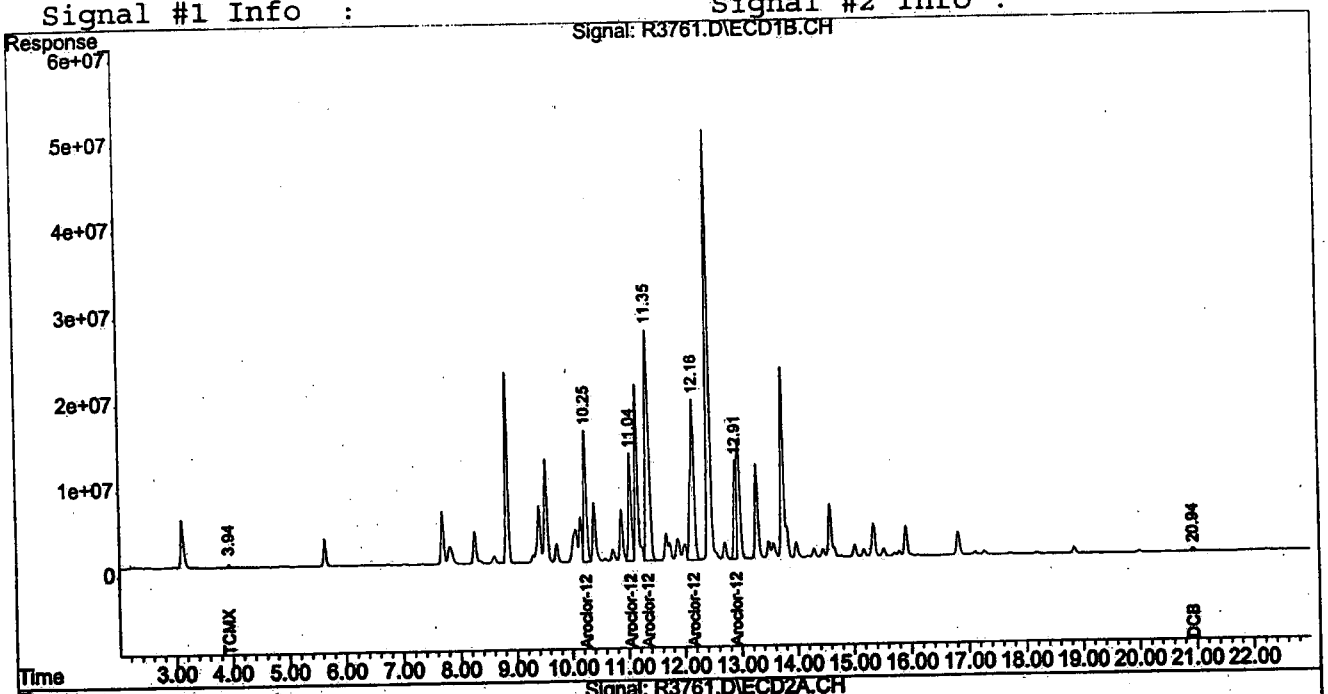
Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.94	3.79	11968912	29385454	1.284	2.311 #
Spiked Amount	205.000	Range	75 - 125	Recovery	=	0.63%#	1.13%#
2) S DCB		20.94	20.94	17235371	26641545	2.088	2.332
Spiked Amount	205.000			Recovery	=	1.02%	1.14%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
28) L7 Aroclor-1254		10.25	10.74	529.0E6	368.4E6	1040.995	1216.253m
29) L7 Aroclor-1254	{2}	11.04	11.82	444.5E6	1002.6E6	1105.530	4578.895m#
30) L7 Aroclor-1254	{3}	11.35	12.82	1224.9E6	1404.5E6	1655.627	2038.326
31) L7 Aroclor-1254	{4}	12.16	13.31	892.1E6	550.2E6	1120.205	1134.475
32) L7 Aroclor-1254	{5}	12.91	14.38	369.6E6	3749.5E6	1054.569	3514.621 #
Sum Aroclor-1254				3460.1E6	7075.1E6	5976.926	12482.571
Average Aroclor-1254						1195.385	2496.514
Sum Aroclor-1260				0	0	N.D.	N.D.
Average Aroclor-1260						0.000	0.000

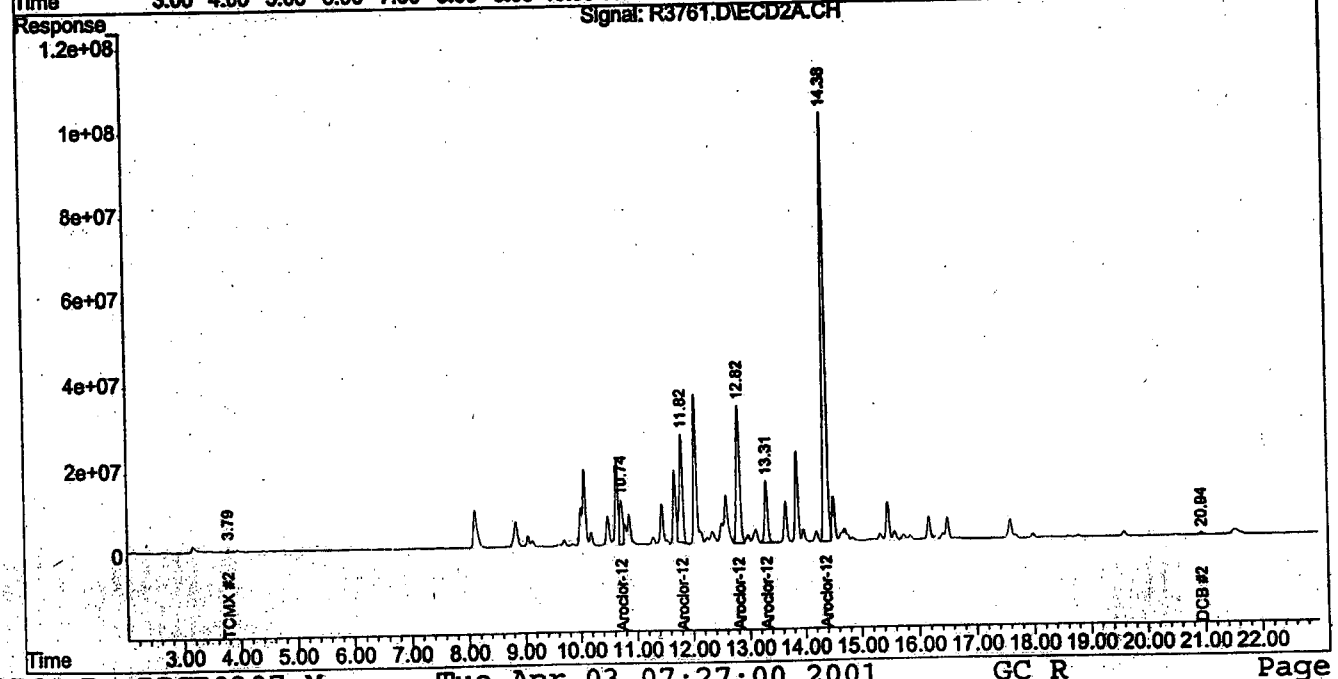
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3761.D\ECD1B.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3761.D\ECD2A.CH
Acq On : 30 Mar 2001 16:51 Operator:
Sample : S-23,1922-007,S,30.8g,17.8,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 11:07 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1687

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Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3762.D\ECD1B.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3762.D\ECD2A.CH
Acq On : 30 Mar 2001 17:17 Operator:
Sample : S-24,1922-008,S,30.0g,21.8,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 30 17:40:51 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.94	3.79	12348177	21799669	1.325	1.714 #
Spiked Amount	205.000	Range	75 - 125	Recovery	=	0.65%#	0.84%#
2) S DCB		20.94	20.95	16303552	39152757	1.975	3.427 #
Spiked Amount	205.000			Recovery	=	0.96%	1.67%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
28) L7 Aroclor-1254		10.25	10.80	25987382	68917029	51.144	227.533 #
29) L7 Aroclor-1254	{2}	11.04	11.82	20381347	310.9E6	50.694	1419.871 #
30) L7 Aroclor-1254	{3}	11.36	12.83	37031707	120.7E6	50.052m	175.246 #
31) L7 Aroclor-1254	{4}	12.16	13.31	48921469	35931703	61.432	74.095
32) L7 Aroclor-1254	{5}	12.91	14.38	23735925	216.8E6	67.725	203.202 #
Sum Aroclor-1254				156.1E6	753.3E6	281.047	2099.947
Average Aroclor-1254						56.209	419.989
Sum Aroclor-1260				0	0	N.D.	N.D.
Average Aroclor-1260						0.000	0.000

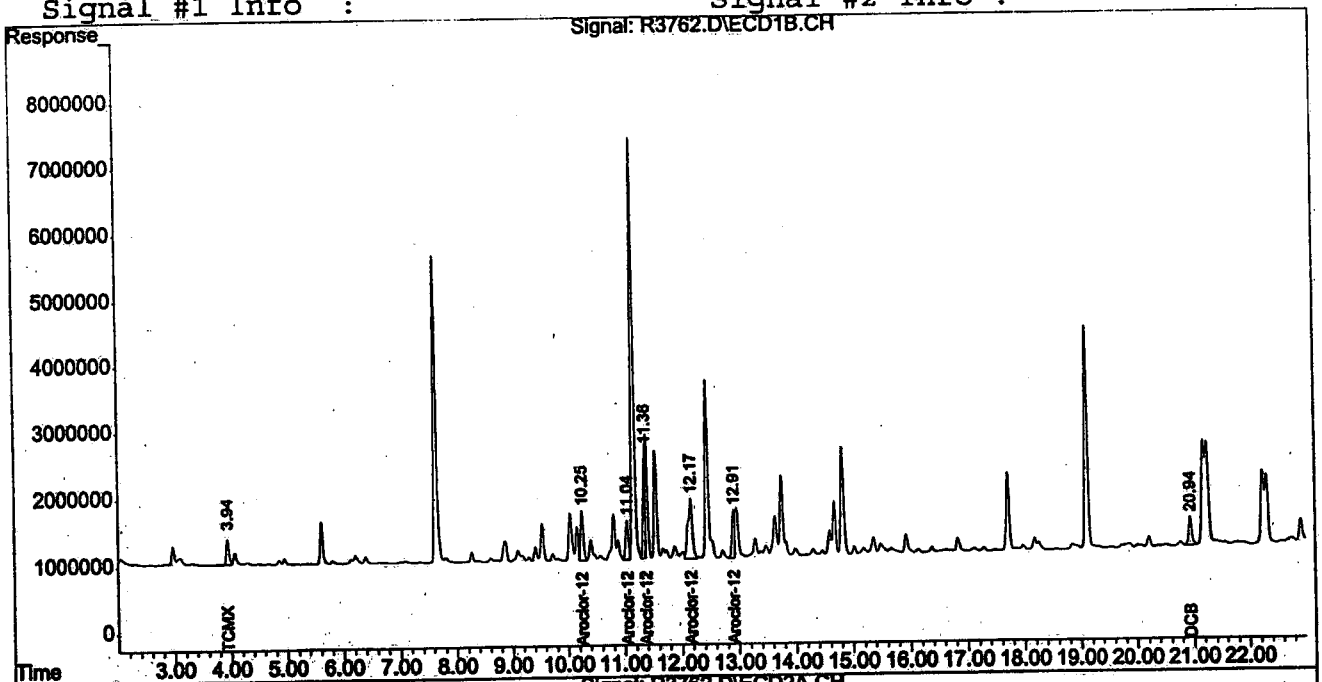
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

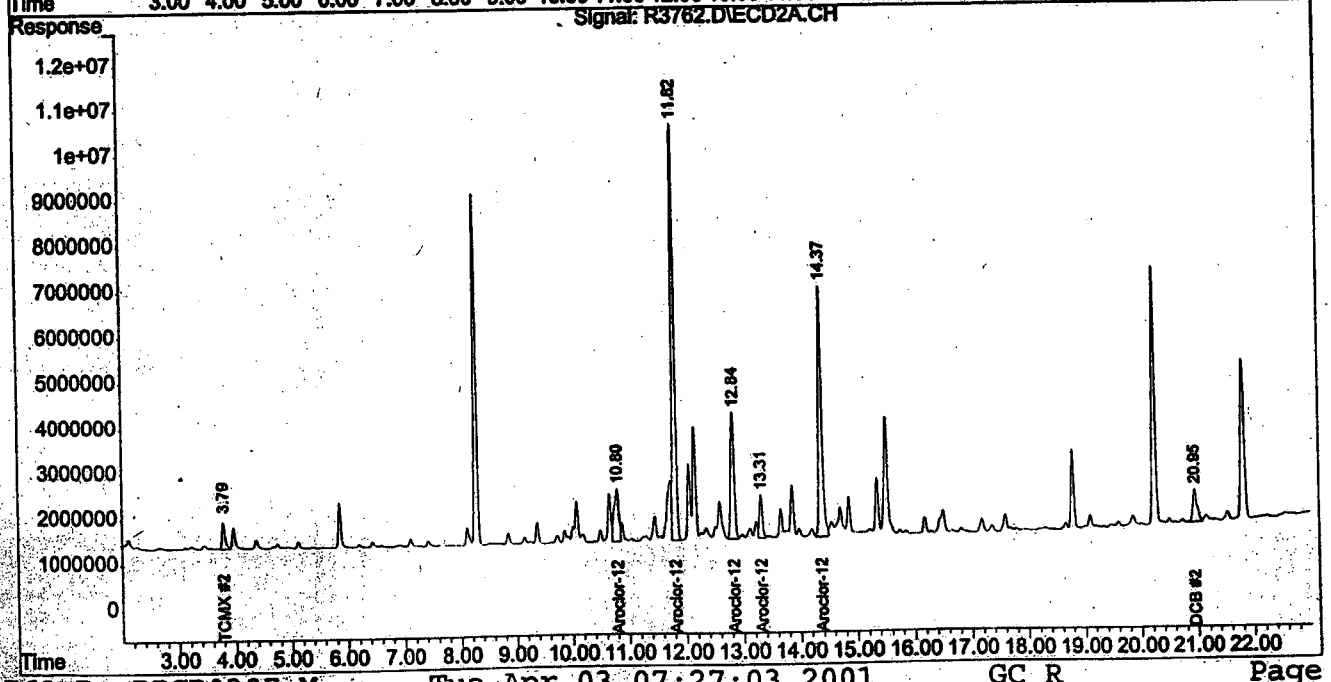
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3762.D\ECD1B.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3762.D\ECD2A.CH
Acq On : 30 Mar 2001 17:17 Operator:
Sample : S-24,1922-008,S,30.0g,21.8,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 11:08 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1689

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Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3763.D\ECD1B.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3763.D\ECD2A.CH
Acq On : 30 Mar 2001 17:43 Operator:
Sample : S-25,1922-009,S,30.4g,18.3,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 30 18:07:04 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.93	3.79	13721220	22413767	1.472	1.763
Spiked Amount 205.000	Range 75 - 125		Recovery =		0.72%#	0.86%#
2) S DCB	20.94	20.94	19200204	25696814	2.326	2.249
Spiked Amount 205.000			Recovery =		1.13%	1.10%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000

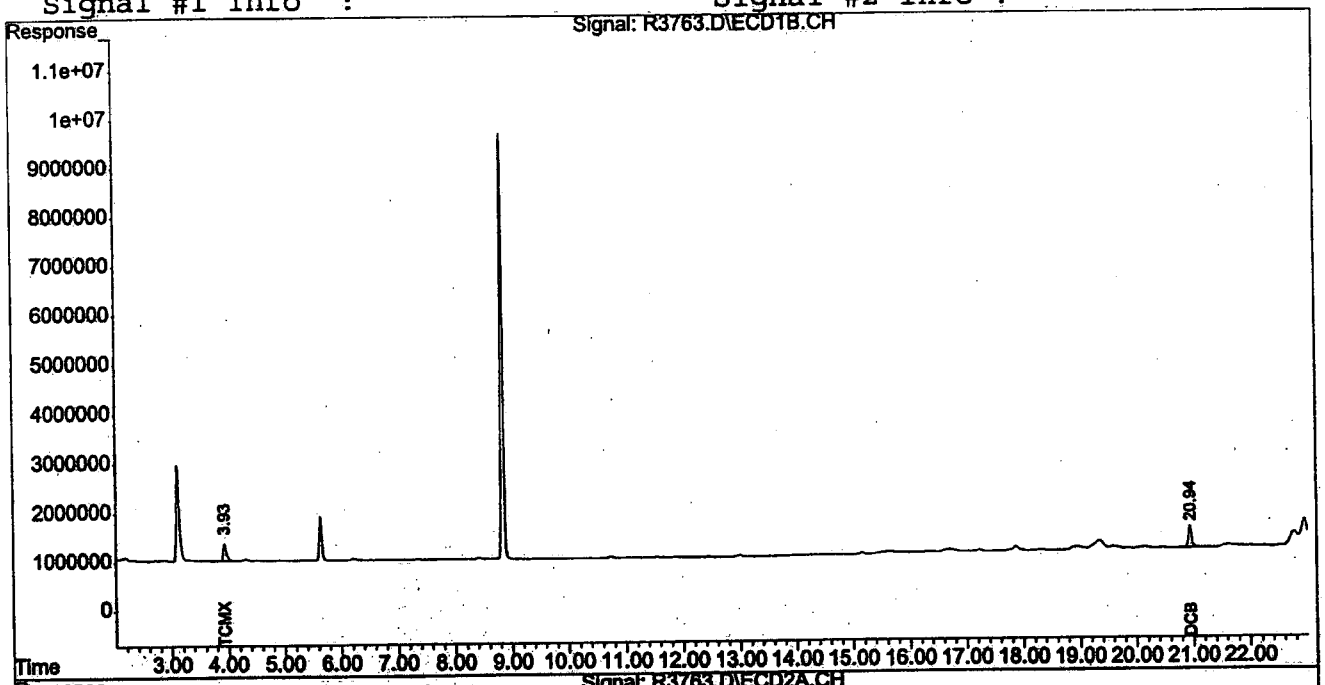
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

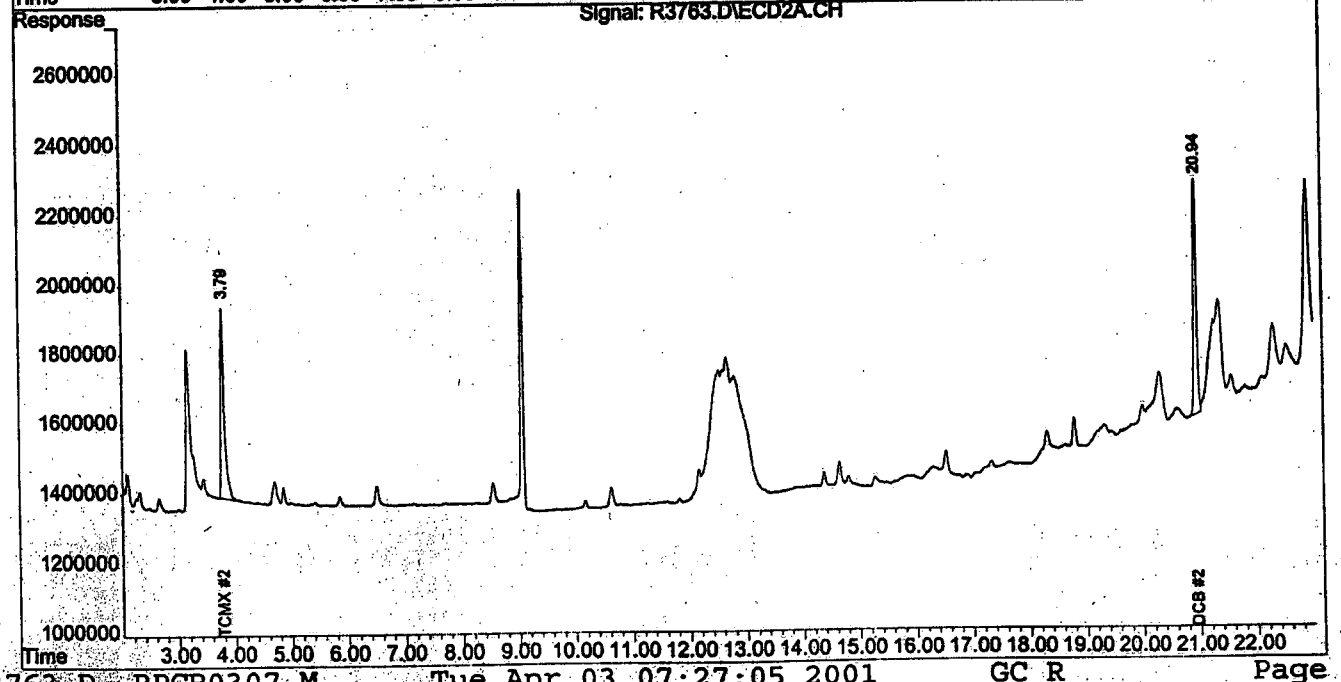
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3763.D\ECD1B.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3763.D\ECD2A.CH
Acq On : 30 Mar 2001 17:43 Operator:
Sample : S-25,1922-009,S,30.4g,18.3,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 11:17 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3764.D\ECD1B.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3764.D\ECD2A.CH
Acq On : 30 Mar 2001 18:09 Operator:
Sample : S-27,1922-011,S,30.8g,17.0,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 30 18:33:19 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.94	3.79	12720156	22325812	1.365	1.756 #
Spiked Amount	205.000	Range	75 - 125	Recovery	=	0.67%#	0.86%#
2) S DCB		20.94	20.94	15055002	30501375	1.824	2.670 #
Spiked Amount	205.000			Recovery	=	0.89%	1.30%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
28) L7 Aroclor-1254		10.25	10.74	3720311	2399597	7.322	7.922m
29) L7 Aroclor-1254	{2}	11.04	11.81	2882678	7134922	7.170	32.586 #
30) L7 Aroclor-1254	{3}	11.35	12.81	5616677	7506598	7.591	10.895 #
31) L7 Aroclor-1254	{4}	12.16	13.31	6697254	5306441	8.410	10.942 #
32) L7 Aroclor-1254	{5}	12.92	14.39	3753069	11466942	10.709m	10.749
Sum Aroclor-1254				22669988	33814500	41.202	73.094
Average Aroclor-1254						8.240	14.619
Sum Aroclor-1260				0	0	N.D.	N.D.
Average Aroclor-1260						0.000	0.000

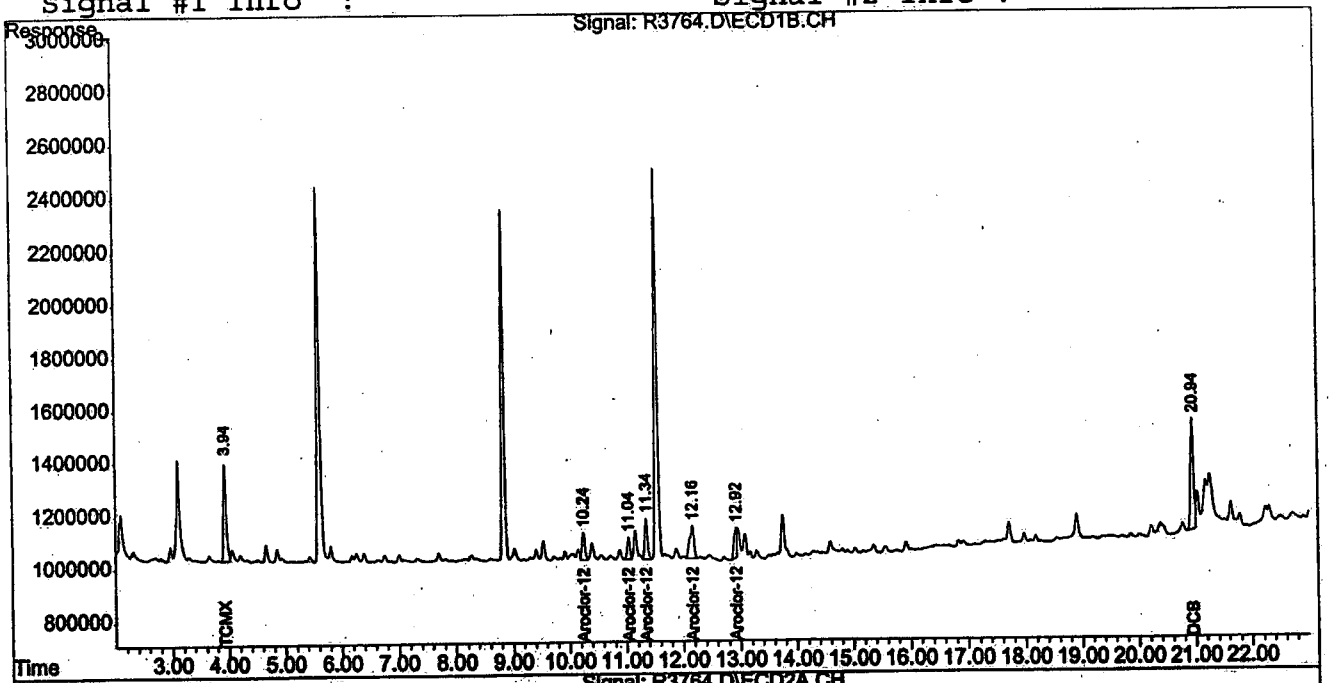
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

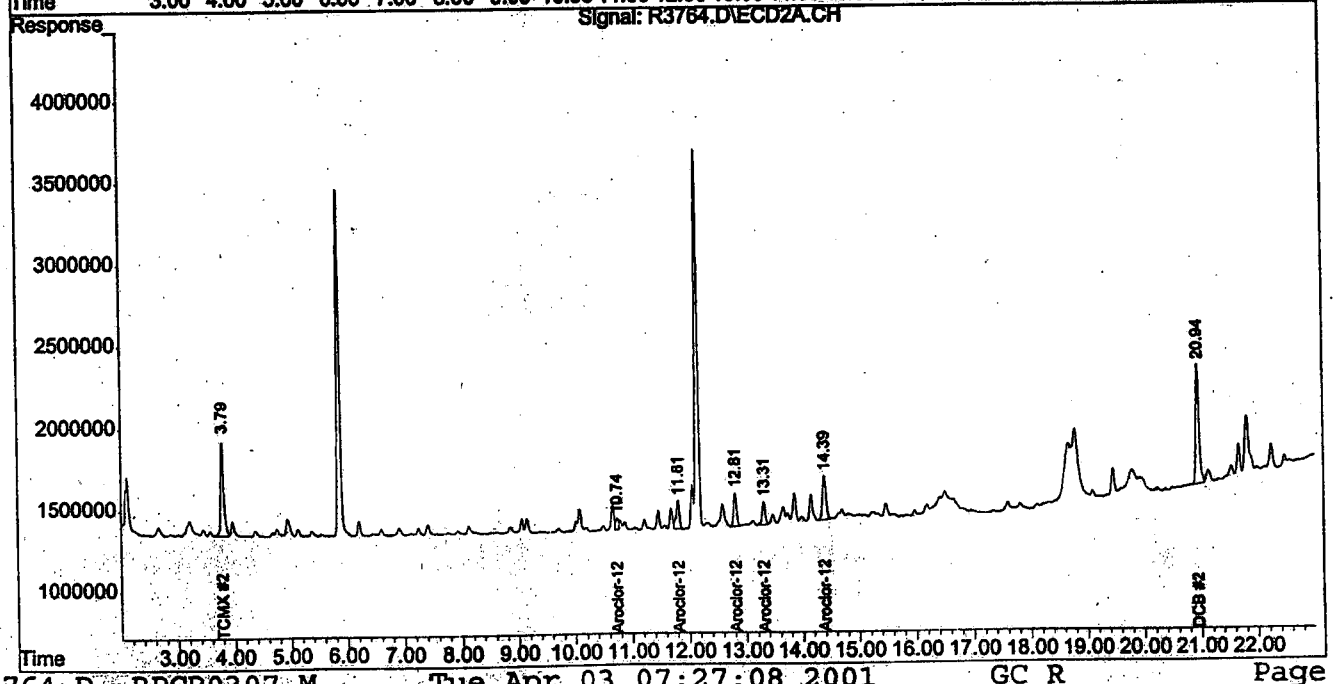
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3764.D\ECD1B.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3764.D\ECD2A.CH
Acq On : 30 Mar 2001 18:09 Operator:
Sample : S-27,1922-011,S,30.8g,17.0,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 11:18 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1693

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3805.D\ECD1B.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3805.D\ECD2A.CH
Acq On : 02 Apr 2001 12:06 Operator:
Sample : S-28,1922-012,S,30.2g,22.7,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 02 12:29:29 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.94	3.79	13162495	23960767	1.412	1.884 #
Spiked Amount	205.000	Range 75 - 125		Recovery =		0.69%#	0.92%#
2) S DCB		20.94	21.01	15126993	12408811	1.833	1.086 #
Spiked Amount	205.000			Recovery =		0.89%	0.53%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
28) L7 Aroclor-1254		10.25	10.74	38720624	40447823	76.204	133.540 #
29) L7 Aroclor-1254	{2}	11.04	11.81	30768973	50930836	76.531	232.605 #
30) L7 Aroclor-1254	{3}	11.35	12.81	61478130	100.1E6	83.093	145.330 #
31) L7 Aroclor-1254	{4}	12.17	13.31	73379861	59195825	92.145	122.067 #
32) L7 Aroclor-1254	{5}	12.92	14.39	37126701	123.9E6	105.933	116.098
Sum Aroclor-1254				241.5E6	374.6E6	433.905	749.640
Average Aroclor-1254						86.781	149.928
Sum Aroclor-1260				0	0	N.D.	N.D.
Average Aroclor-1260						0.000	0.000

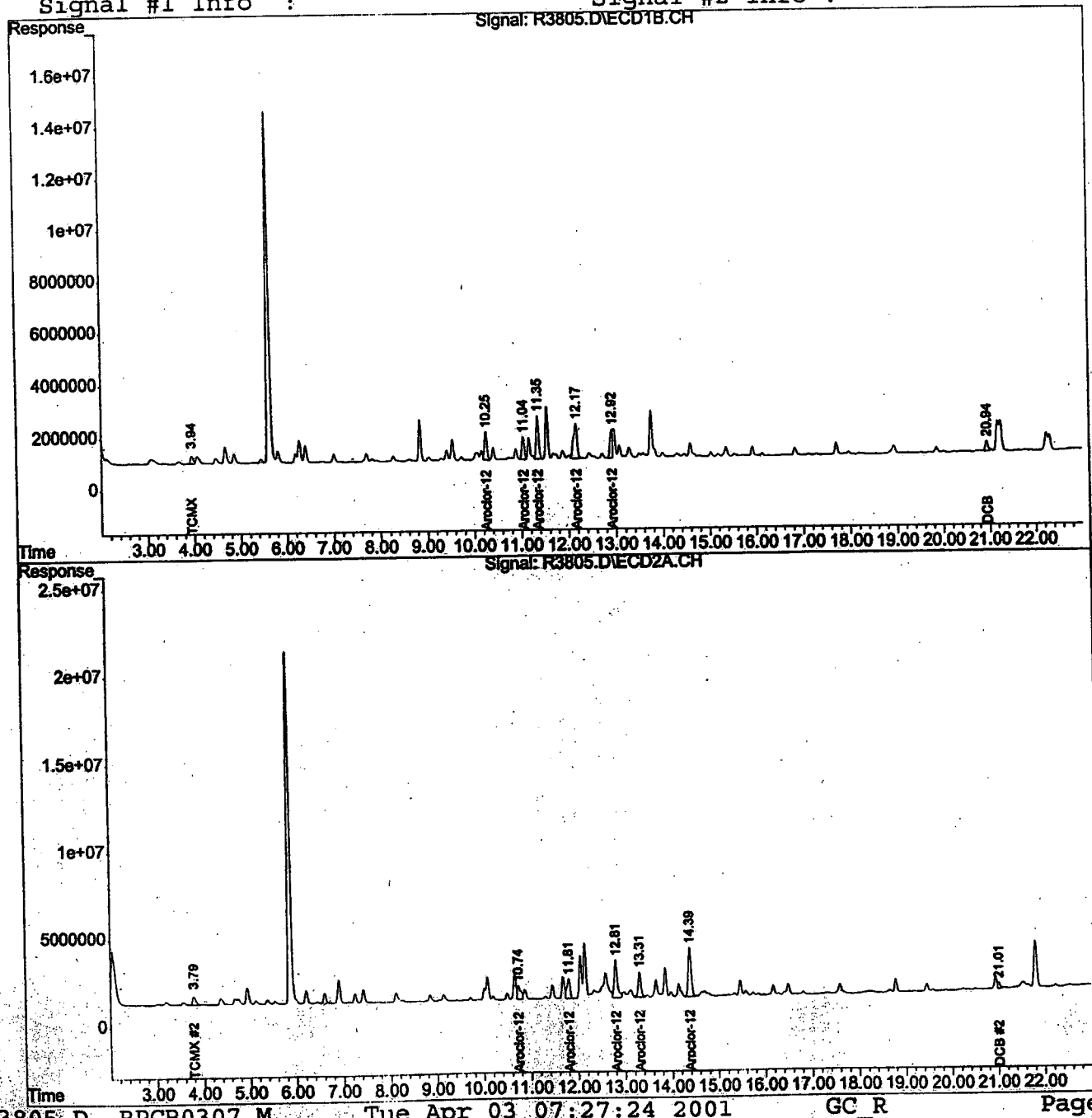
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3805.D\ECD1B.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3805.D\ECD2A.CH
Acq On : 02 Apr 2001 12:06 Operator:
Sample : S-28,1922-012,S,30.2g,22.7,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 15:08 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



1695

000656

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3806.D\ECD1B.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3806.D\ECD2A.CH
Acq On : 02 Apr 2001 12:32 Operator:
Sample : S-29,1922-013,S,30.7g,23.8,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 02 12:55:43 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.94	3.79	11626152	21010533	1.247	1.652 #
Spiked Amount 205.000	Range 75 - 125		Recovery =		0.61%#	0.81%#
2) S DCB	20.94	20.94	17510742	21326981	2.122	1.867
Spiked Amount 205.000			Recovery =		1.04%	0.91%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000

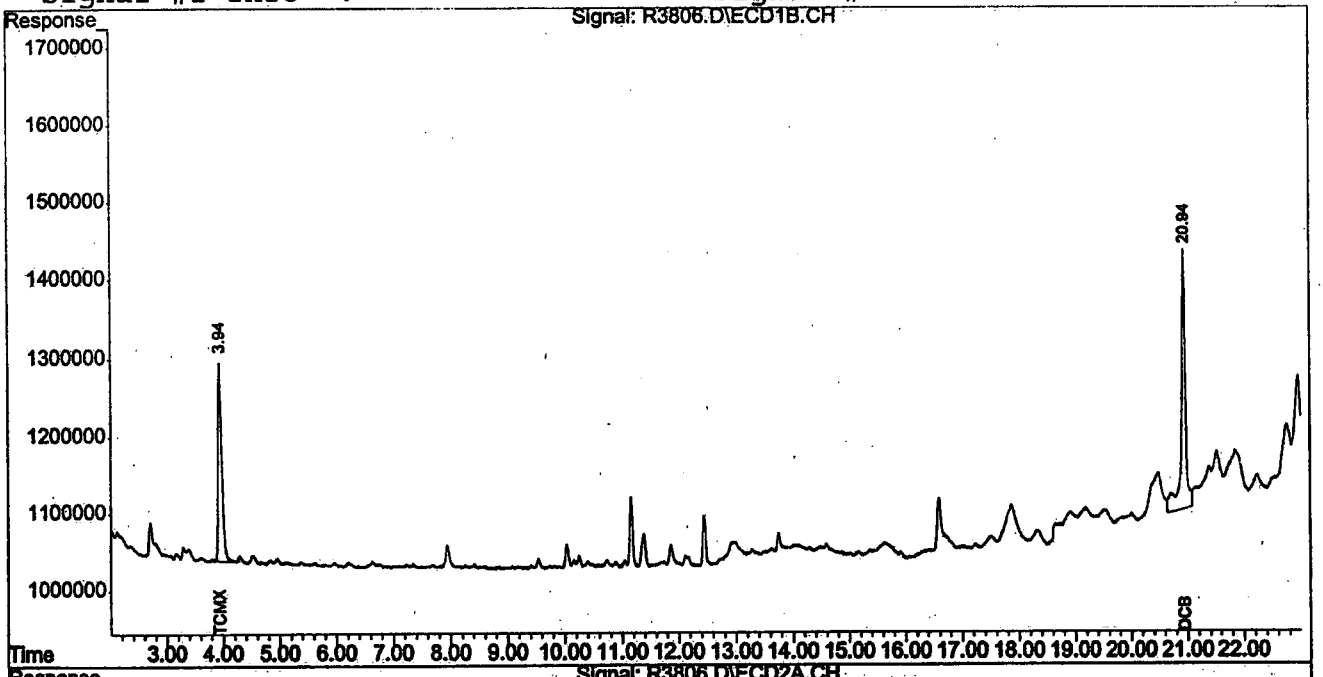
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

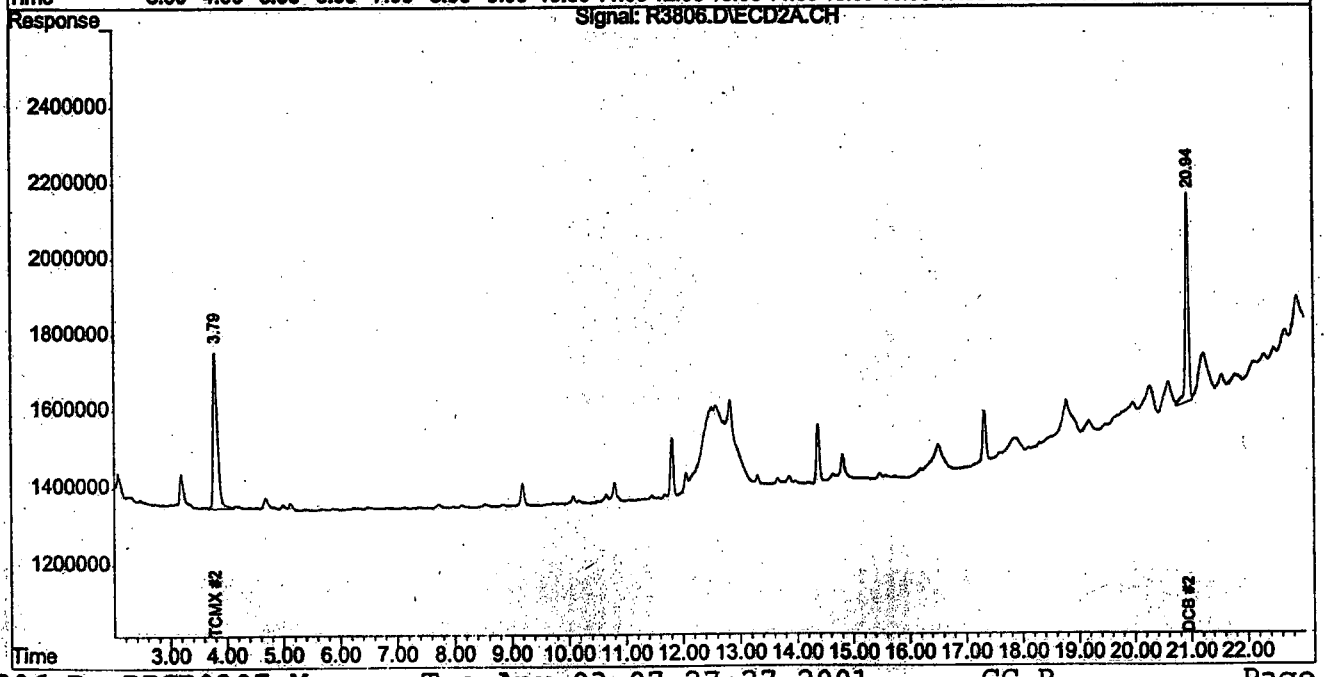
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3806.D\ECD1B.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3806.D\ECD2A.CH
Acq On : 02 Apr 2001 12:32 Operator:
Sample : S-29,1922-013,S,30.7g,23.8,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 15:08 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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1697

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3807.D\ECD1B.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3807.D\ECD2A.CH
Acq On : 02 Apr 2001 12:58 Operator:
Sample : S-30,1922-015,S,30.5g,26.4,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 02 13:21:53 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.94	3.79	15180733	32083553	1.629	2.523 #
Spiked Amount 205.000	Range 75 - 125		Recovery =		0.79%#	1.23%#
2) S DCB	20.94	20.94	19896360	26677683	2.411	2.335
Spiked Amount 205.000			Recovery =		1.18%	1.14%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
R3807.D RPCB0307.M Tue Apr 03 07:27:29 2001 GC_R Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3754.D\ECD1B.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3754.D\ECD2A.CH
Acq On : 30 Mar 2001 13:47 Operator:
Sample : (1922..1929),0330-BLK2,S,30.0g,0,03/30/0 Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 30 14:10:46 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.93	3.79	1595.0E6	2264.9E6	171.139	178.109
Spiked Amount 205.000	Range 75 - 125		Recovery =		83.48%	86.88%
2) S DCB	20.94	20.94	1338.4E6	1935.0E6	162.172	169.369
Spiked Amount 205.000			Recovery =		79.11%	82.62%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000

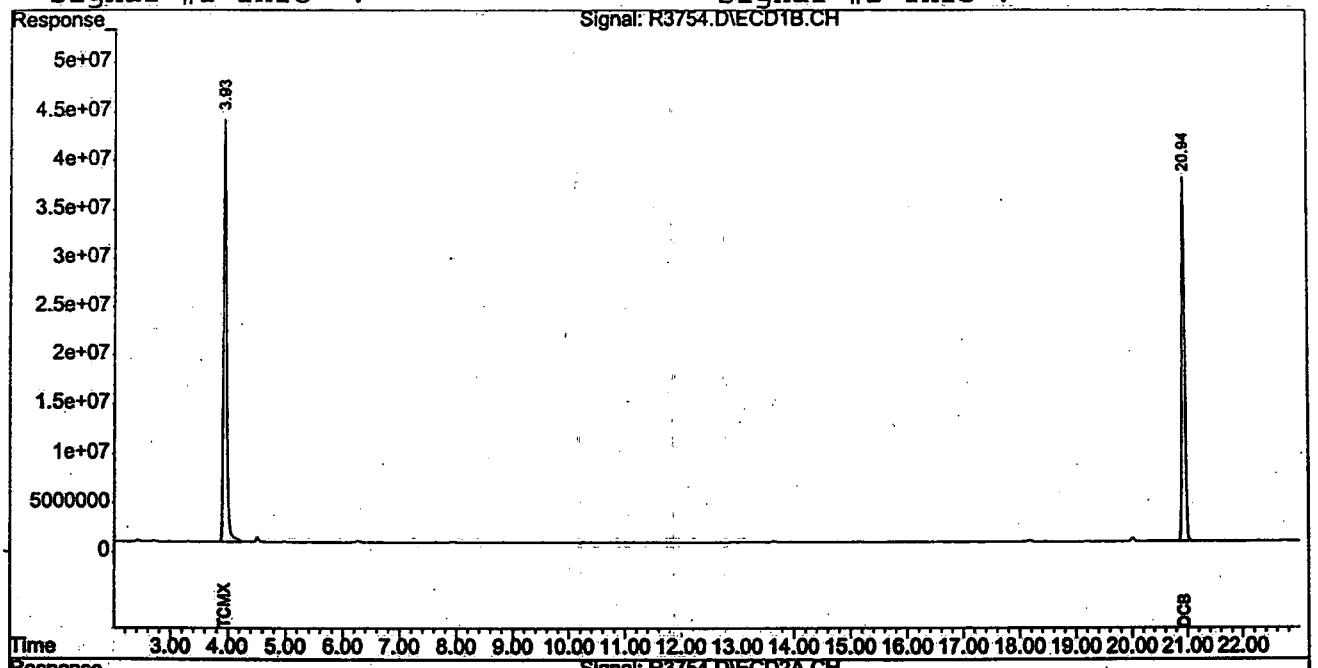
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

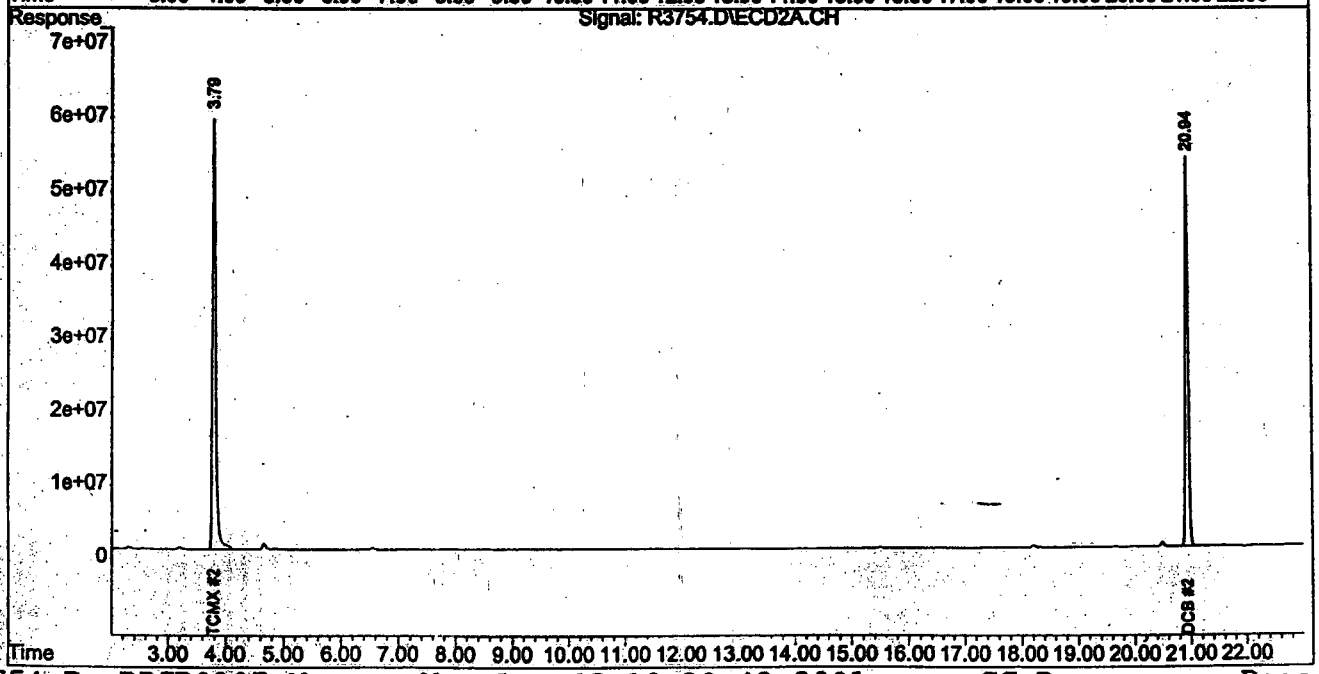
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3754.D\ECD1B.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3754.D\ECD2A.CH
Acq On : 30 Mar 2001 13:47 Operator:
Sample : (1922..1929),0330-BLK2,S,30.0g,0,03/30/0 Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 7:32 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1700

000662

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3752.D\ECD1B.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3752.D\ECD2A.CH
Acq On : 30 Mar 2001 12:54 Operator:
Sample : 8082_C_IAS1427,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 30 13:18:12 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.95	3.81	1142.8E6	1530.0E6	122.618	120.313
Spiked Amount 205.000	Range 75 - 125			Recovery =	59.81%#	58.69%#
2) S DCB	20.94	20.94	845.9E6	1186.5E6	102.502	103.851
Spiked Amount 205.000				Recovery =	50.00%	50.66%
Target Compounds						
3) L2 Aroclor-1016	4.69	5.00	95549703	130.4E6	580.110	558.370
4) L2 Aroclor-1016 {2}	5.62	5.96	82964019	249.9E6	501.091m	550.880
5) L2 Aroclor-1016 {3}	6.07	7.13	124.7E6	551.9E6	574.947	564.001
6) L2 Aroclor-1016 {4}	7.82	7.51	84865615	238.2E6	615.189m	563.438
7) L2 Aroclor-1016 {5}	8.27	7.79	114.2E6	148.3E6	630.914m	595.596m
Sum Aroclor-1016			502.3E6	1318.7E6	2902.251	2832.286
Average Aroclor-1016					580.450	566.457
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	13.75	13.32	355.8E6	390.6E6	569.233	557.603
34) L8 Aroclor-1260 {2}	14.30	14.39	195.2E6	538.2E6	528.515	563.186
35) L8 Aroclor-1260 {3}	15.92	15.59	474.2E6	315.7E6	534.019	572.818
36) L8 Aroclor-1260 {4}	16.82	16.50	234.9E6	679.9E6	547.651	561.711
37) L8 Aroclor-1260 {5}	18.85	19.60	112.1E6	192.1E6	480.363m	546.624m
Sum Aroclor-1260			1372.3E6	2116.5E6	2659.781	2801.942
Average Aroclor-1260					531.956	560.388

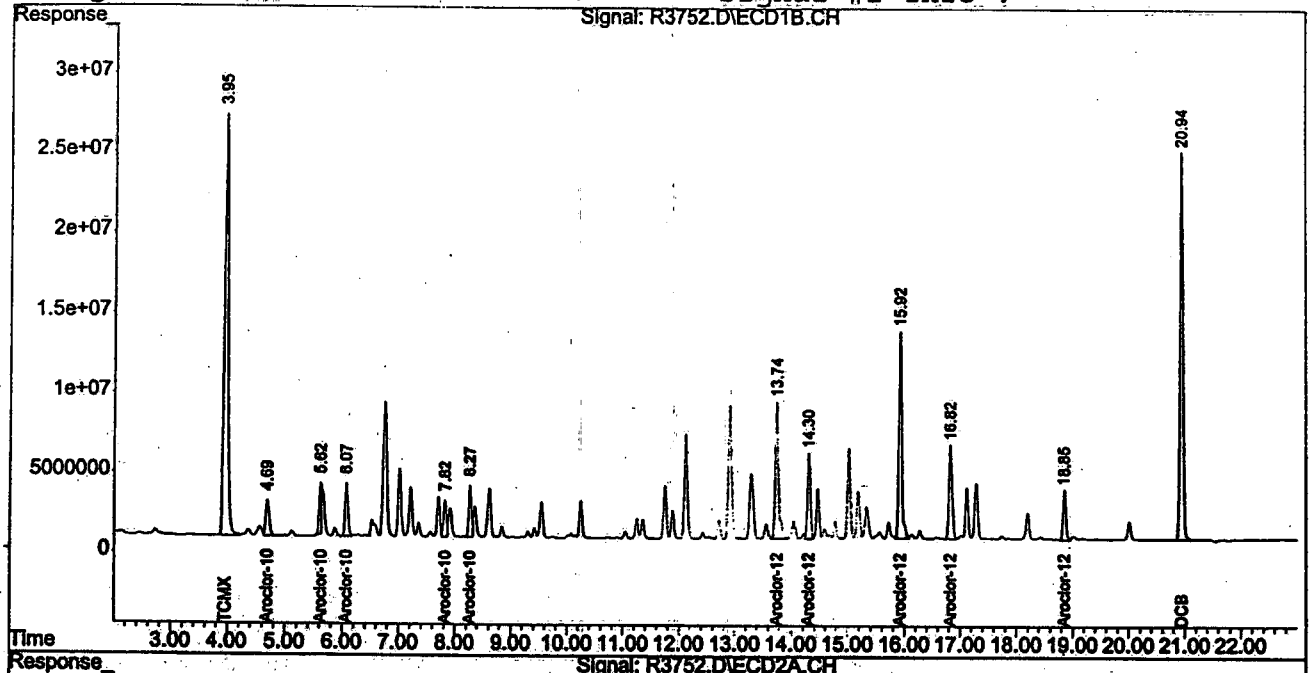
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

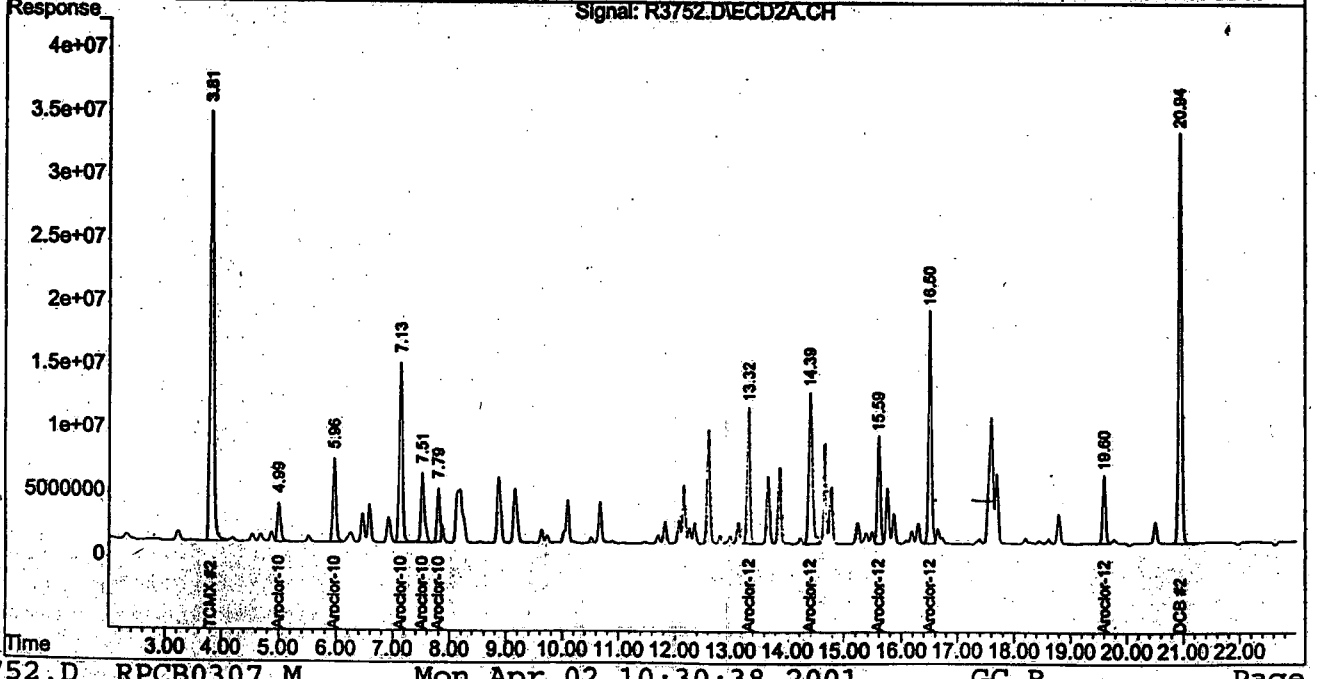
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3752.D\ECD1B.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3752.D\ECD2A.CH
Acq On : 30 Mar 2001 12:54 Operator:
Sample : 8082_C_IAS1427,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 7:31 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1707

000664

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3778.D\ECD1B.CH Vial: 26
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3778.D\ECD2A.CH
Acq On : 31 Mar 2001 00:17 Operator:
Sample : 8082_C_IAS1427,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 31 00:40:23 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.95	3.80	1067.2E6	1522.3E6	114.505	119.706
Spiked Amount 205.000		Range 75 - 125			Recovery =	55.86%#	58.39%#
2) S DCB		20.94	20.94	846.1E6	1209.9E6	102.518	105.899
Spiked Amount 205.000					Recovery =	50.01%	51.66%
Target Compounds							
3) L2 Aroclor-1016		4.69	4.99	89418100	129.8E6	542.883	555.791
L2 Aroclor-1016	(2)	5.62	5.95	92851650	248.6E6	560.811m	547.974
L2 Aroclor-1016	(3)	6.07	7.13	116.5E6	548.4E6	537.430	560.471
6) L2 Aroclor-1016	(4)	7.82	7.51	79005140	237.6E6	572.707	562.115
7) L2 Aroclor-1016	(5)	8.27	7.79	106.3E6	150.2E6	587.340	603.228m
Sum Aroclor-1016				484.2E6	1314.7E6	2801.171	2829.579
Average Aroclor-1016						560.234	565.916
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
Sum Aroclor-1254				0	0	N.D.	N.D.
Average Aroclor-1254						0.000	0.000
33) L8 Aroclor-1260		13.75	13.31	340.3E6	393.1E6	544.337	561.210
34) L8 Aroclor-1260	(2)	14.30	14.39	189.1E6	524.9E6	512.003	549.273
35) L8 Aroclor-1260	(3)	15.92	15.59	483.4E6	318.1E6	544.401	577.134
36) L8 Aroclor-1260	(4)	16.83	16.50	242.5E6	688.4E6	565.346	568.735
3) L8 Aroclor-1260	(5)	18.86	19.60	111.2E6	197.9E6	476.496	563.123m
Sum Aroclor-1260				1366.6E6	2122.4E6	2642.582	2819.475
Average Aroclor-1260						528.516	563.895

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

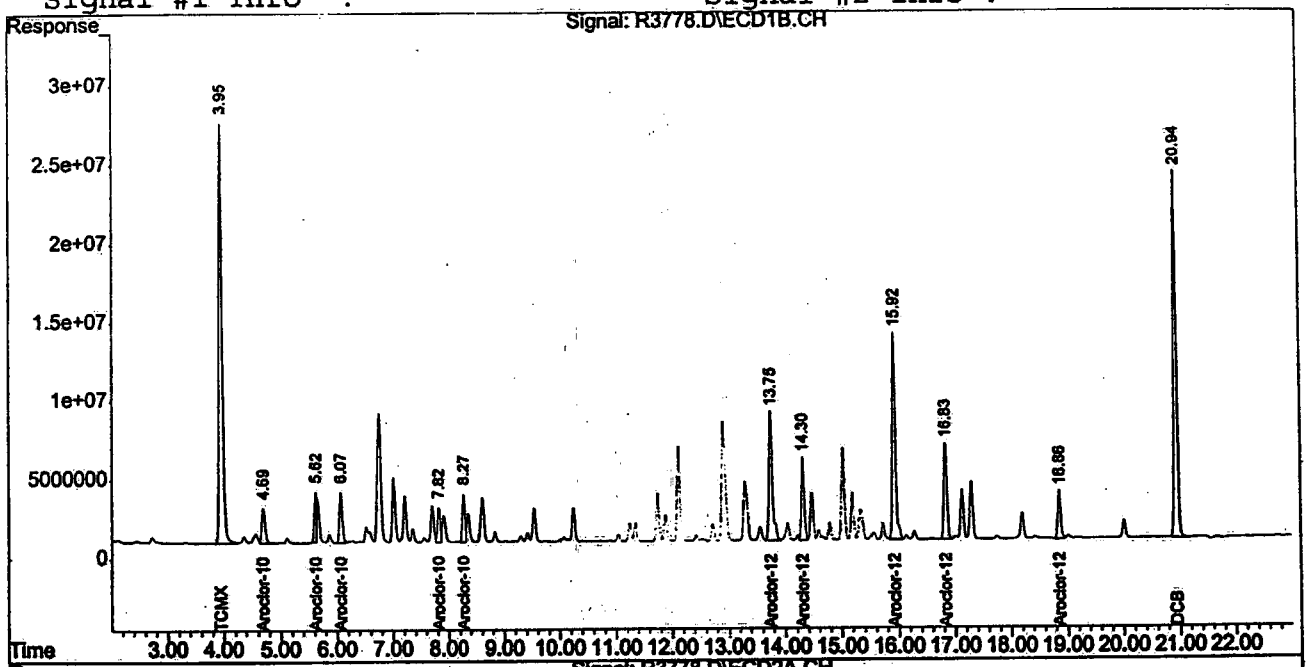
1203

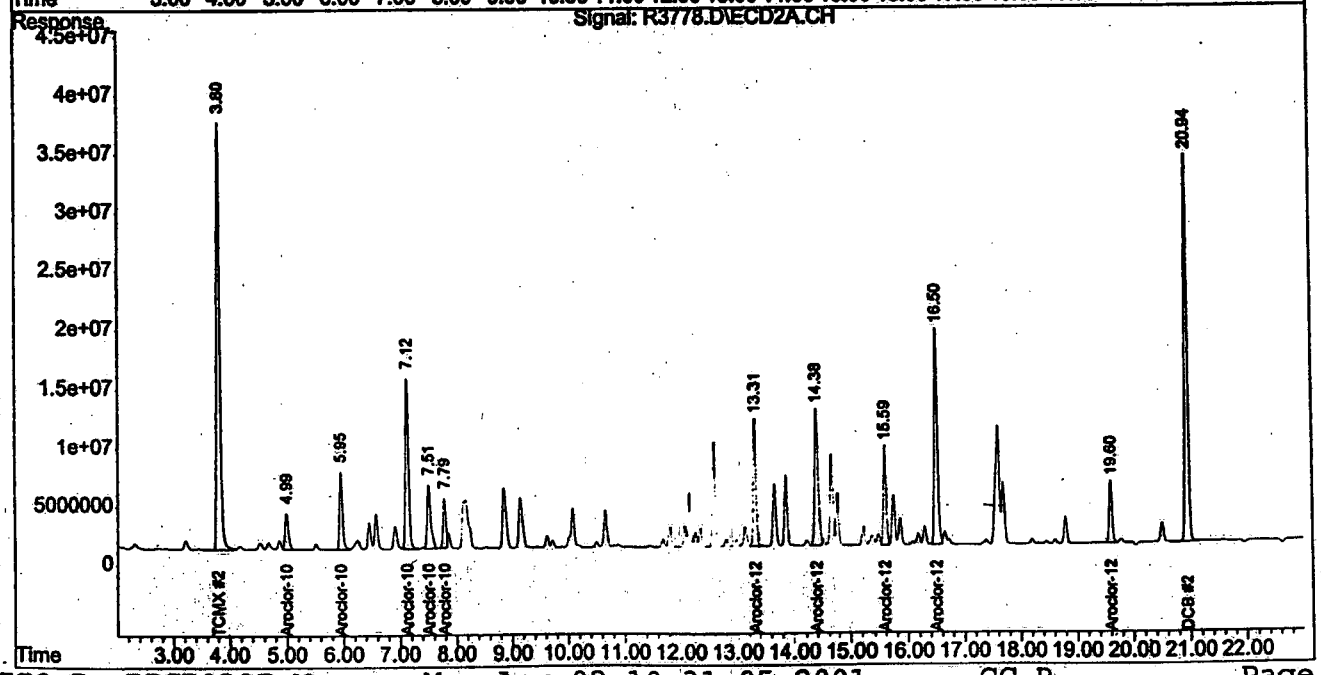
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-30-01\R3778.D\ECD1B.CH Vial: 26
Signal #2 : C:\MSDCHEM\1\DATA\03-30-01\R3778.D\ECD2A.CH
Acq On : 31 Mar 2001 00:17 Operator:
Sample : 8082_C_IAS1427,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 10:59 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1704

000666

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3800.D\ECD1B.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3800.D\ECD2A.CH
Acq On : 02 Apr 2001 9:54 Operator:
Sample : 8082_C_IAS1427,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 02 10:18:02 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.95	3.81	1074.3E6	1441.0E6	115.269	113.312
Spiked Amount 205.000		Range 75 - 125			Recovery =	56.23%#	55.27%#
2) S DCB		20.94	20.94	720.4E6	1053.1E6	87.290	92.177
Spiked Amount 205.000					Recovery =	42.58%	44.96%
Target Compounds							
4) L2 Aroclor-1016		4.69	5.00	89732489	123.8E6	544.792	530.149
L2 Aroclor-1016	(2)	5.63	5.96	90975084	236.6E6	549.477m	521.623
5) L2 Aroclor-1016	(3)	6.07	7.13	117.9E6	521.1E6	543.907	532.583
6) L2 Aroclor-1016	(4)	7.82	7.51	80742472	225.4E6	585.300m	533.127
7) L2 Aroclor-1016	(5)	8.27	7.79	104.7E6	136.7E6	578.548m	548.783m
Sum Aroclor-1016				484.1E6	1243.6E6	2802.024	2666.264
Average Aroclor-1016						560.405	533.253
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
Sum Aroclor-1254				0	0	N.D.	N.D.
Average Aroclor-1254						0.000	0.000
33) L8 Aroclor-1260		13.75	13.31	327.9E6	371.7E6	524.576	530.613
34) L8 Aroclor-1260	(2)	14.30	14.38	177.7E6	505.3E6	481.197	528.761
35) L8 Aroclor-1260	(3)	15.92	15.59	422.4E6	295.7E6	475.626	536.497
36) L8 Aroclor-1260	(4)	16.83	16.50	208.0E6	638.9E6	484.899	527.806
37) L8 Aroclor-1260	(5)	18.86	19.59	96867049	178.2E6	414.920	507.192m
Sum Aroclor-1260				1232.9E6	1989.8E6	2381.218	2630.870
Average Aroclor-1260						476.244	526.174

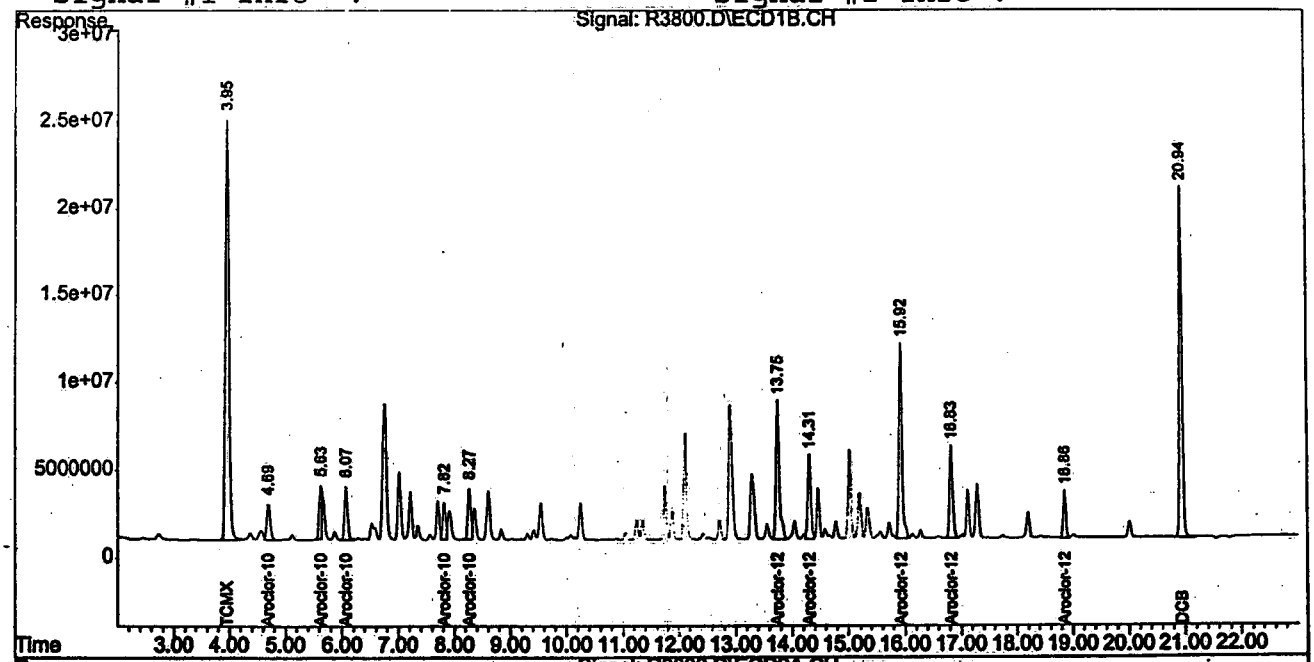
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

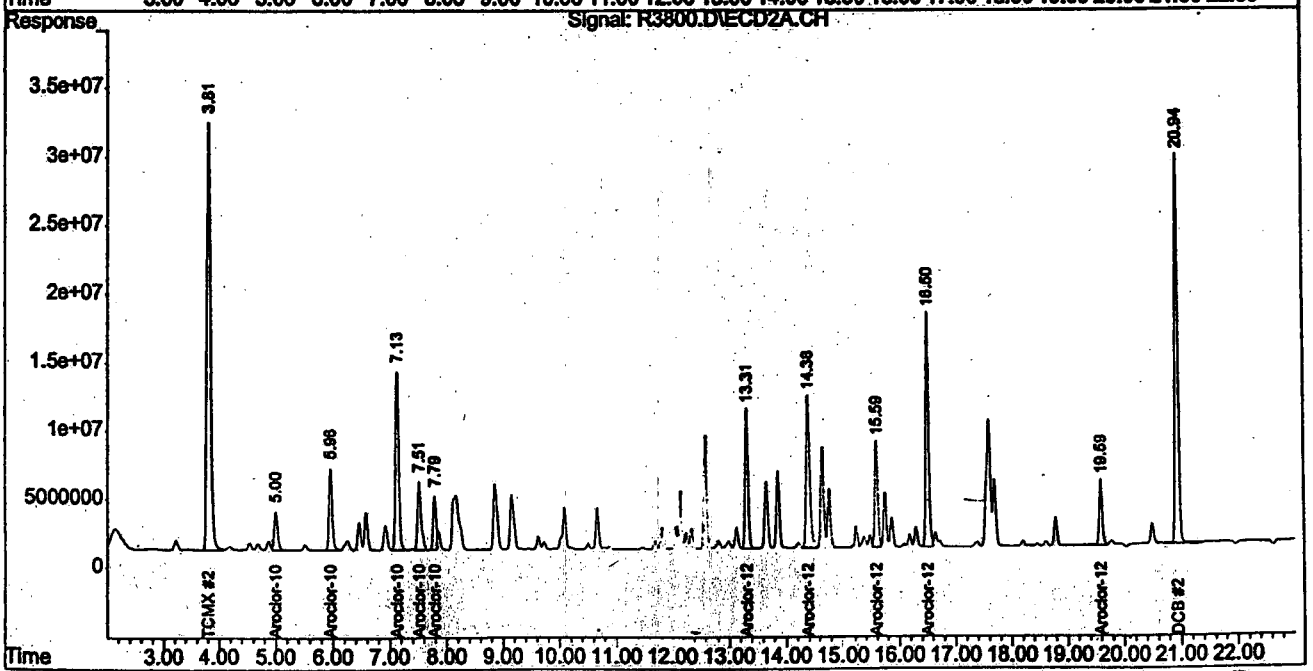
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3800.D\ECD1B.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3800.D\ECD2A.CH
Acq On : 02 Apr 2001 9:54 Operator:
Sample : 8082_C_IAS1427,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 8:45 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000668

1706

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3808.D\ECD1B.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3808.D\ECD2A.CH
Acq On : 02 Apr 2001 13:24 Operator:
Sample : 8082_C_IAS1427,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 02 13:48:16 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.94	3.79	1034.8E6	1445.0E6	111.037	113.628
Spiked Amount	205.000	Range	75 - 125	Recovery	=	54.16%#	55.43%#
2) S DCB		20.94	20.94	785.0E6	1144.7E6	95.112	100.193
Spiked Amount	205.000			Recovery	=	46.40%	48.87%
Target Compounds							
3) L2 Aroclor-1016		4.68	4.98	85572310	122.6E6	519.534	524.794
L2 Aroclor-1016	{2}	5.61	5.95	92218546	237.2E6	556.987m	522.814
L2 Aroclor-1016	{3}	6.06	7.12	112.9E6	519.0E6	520.603	530.446
6) L2 Aroclor-1016	{4}	7.82	7.50	76625684	225.6E6	555.458	533.626
7) L2 Aroclor-1016	{5}	8.26	7.78	102.5E6	143.6E6	566.207	576.691
Sum Aroclor-1016				469.8E6	1248.0E6	2718.788	2688.371
Average Aroclor-1016						543.758	537.674
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
Sum Aroclor-1254				0	0	N.D.	N.D.
Average Aroclor-1254						0.000	0.000
33) L8 Aroclor-1260		13.75	13.31	321.1E6	374.9E6	513.721	535.217
34) L8 Aroclor-1260	{2}	14.30	14.38	177.8E6	496.4E6	481.249	519.422
35) L8 Aroclor-1260	{3}	15.92	15.59	442.7E6	299.6E6	498.469	543.518
L8 Aroclor-1260	{4}	16.83	16.50	220.9E6	648.5E6	515.016	535.724
L8 Aroclor-1260	{5}	18.85	19.59	105.4E6	182.0E6	451.302m	517.935m
Sum Aroclor-1260				1267.8E6	2001.3E6	2459.757	2651.815
Average Aroclor-1260						491.951	530.363

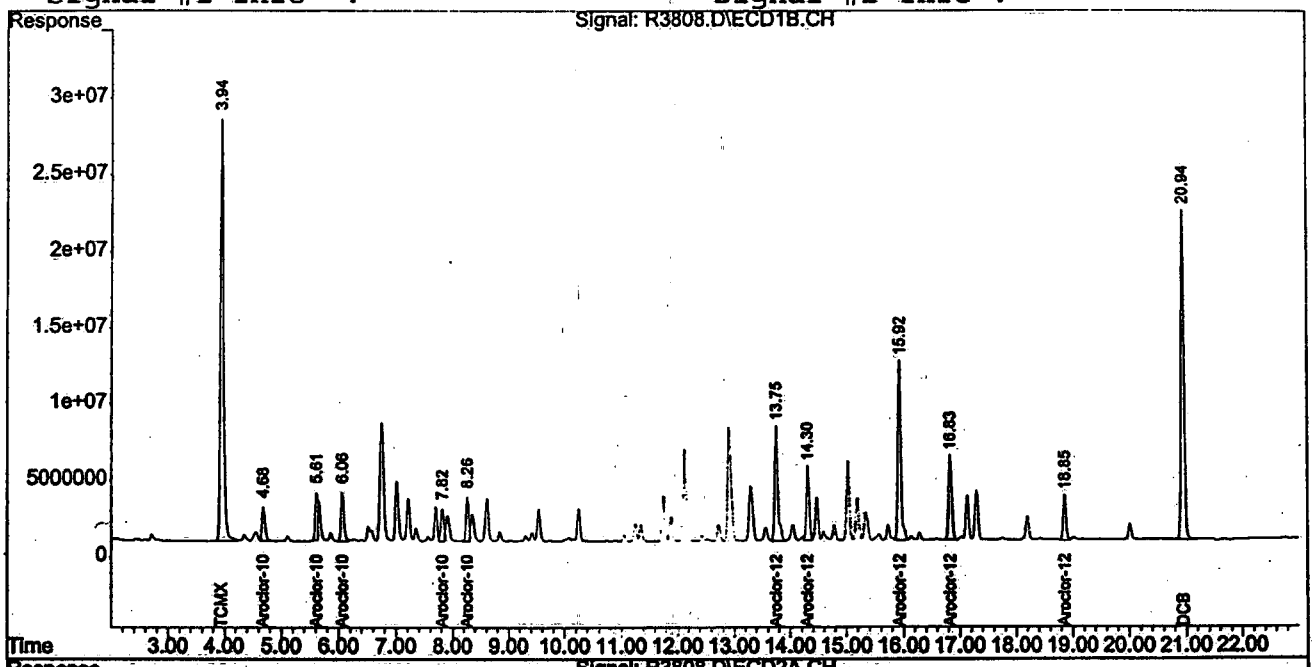
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

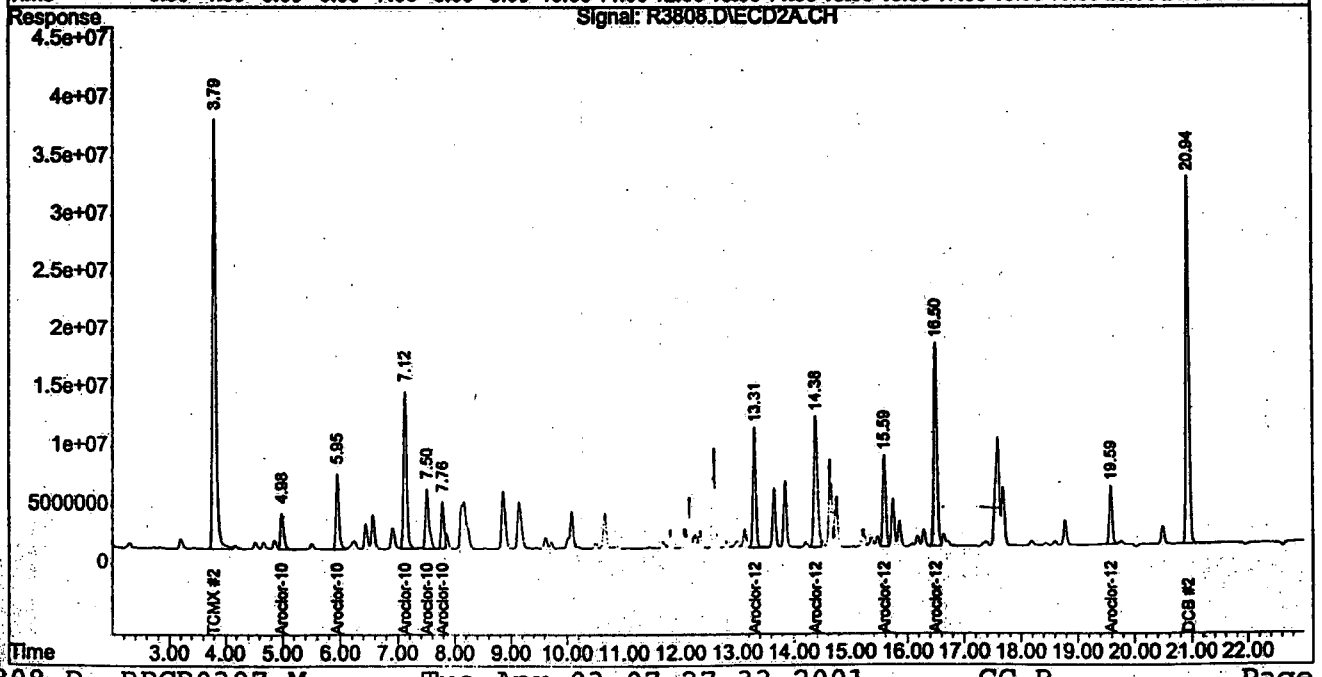
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-01-01\R3808.D\ECD1B.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\04-01-01\R3808.D\ECD2A.CH
Acq On : 02 Apr 2001 13:24 Operator:
Sample : 8082_C_IAS1427,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 15:15 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000670

17105

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-07-01\R3329.D\ECD1B.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\03-07-01\R3329.D\ECD2A.CH
Acq On : 07 Mar 2001 13:38 Operator:
Sample : 8082_1254_IAS1401,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 08 14:53:41 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.94	3.80	1265.1E6	1642.2E6	135.740	129.138
Spiked Amount	205.000	Range 75 - 125		Recovery =		66.21%#	62.99%#
2) S DCB		20.94	20.98	1118.5E6	1494.0E6	135.526	130.770
Spiked Amount	205.000			Recovery =		66.11%	63.79%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
28) L7 Aroclor-1254		10.25	10.76	254.1E6	151.4E6	500.000	500.000
29) L7 Aroclor-1254	{2}	11.04	11.80	201.0E6	109.5E6	500.000	500.000
30) L7 Aroclor-1254	{3}	11.35	12.84	369.9E6	344.5E6	500.000	500.000
31) L7 Aroclor-1254	{4}	12.17	13.34	398.2E6	242.5E6	500.000	500.000
32) L7 Aroclor-1254	{5}	12.91	14.42	175.2E6	533.4E6	500.000	500.000
Sum Aroclor-1254				1398.4E6	1381.3E6	2500.000	2500.000
Average Aroclor-1254						500.000	500.000
Sum Aroclor-1260				0	0	N.D.	N.D.
Average Aroclor-1260						0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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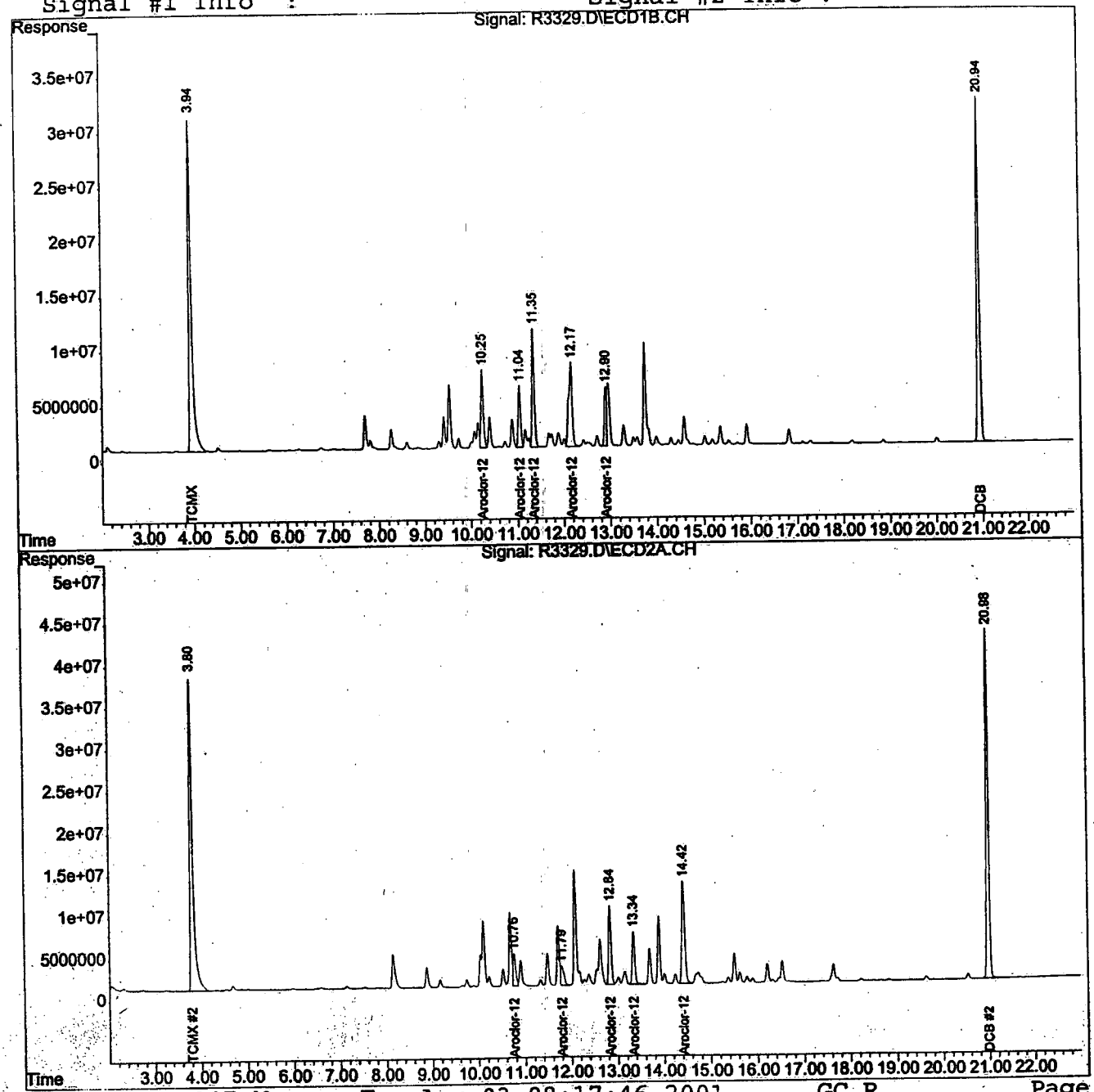
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-07-01\R3329.D\ECD1B.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\03-07-01\R3329.D\ECD2A.CH
Acq On : 07 Mar 2001 13:38 Operator:
Sample : 8082_1254_IAS1401,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 8 15:58 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



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1710

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: W5600.D

Instrument ID: GC-W

Date Extracted: 03/30/2001

Matrix: SOIL

Date Analyzed: 04/02/2001

Time Analyzed: 18:02

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
TP-2	1929-001	04/02/2001	18:27
TP-5	1929-002	04/02/2001	18:52
TP-6	1929-003	04/02/2001	19:16
TP-1	1929-004	04/02/2001	19:41
TP-7	1929-005	04/02/2001	20:06
SB-1	1929-006	04/02/2001	20:31
SB-2	1929-007	04/02/2001	20:56
S-17	1922-001	04/02/2001	21:46
S-18	1922-002	04/02/2001	22:11
S-19	1922-003	04/02/2001	22:36
S-20	1922-004	04/02/2001	23:01
S-21	1922-005	04/02/2001	23:26
PEST	1929-007-MS2	04/02/2001	23:51
PEST	1929-007-MSD2	04/03/2001	00:15
PEST	PBS0330-MS2	04/03/2001	00:40

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: NA

Lab ID: 0330-BK2
Client ID: (1922.1929)
Date Received: NA
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: W5600.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.167
beta-BHC	ND		0.167
gamma-BHC	ND		0.167
delta-BHC	ND		0.167
Heptachlor	ND		0.167
Aldrin	ND		0.167
Heptachlor epoxide	ND		0.167
Endosulfan I	ND		0.167
4,4'-DDE	ND		0.167
Dieldrin	ND		0.167
Endrin	ND		0.167
Endosulfan II	ND		0.167
4,4'-DDD	ND		0.167
Endrin aldehyde	ND		0.167
Endosulfan sulfate	ND		0.167
4,4'-DDT	ND		0.167
Chlordane	ND		0.835
Toxaphene	ND		0.835

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PESTICIDE METHOD BLANK SUMMARY

Lab File ID: W5623.D

Instrument ID: GC-W

Date Extracted: 03/30/2001

Matrix: SOIL

Date Analyzed: 04/03/2001

Time Analyzed: 03:35

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S-22	1922-006	04/03/2001	03:59
S-23	1922-007	04/03/2001	04:25
S-24	1922-008	04/03/2001	04:49
S-25	1922-009	04/03/2001	05:14
S-27	1922-011	04/03/2001	05:39
S-28	1922-012	04/03/2001	06:04
S-29	1922-013	04/03/2001	06:29
S-30	1922-015	04/03/2001	06:54

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: NA

Lab ID: 0330-BK2
Client ID: (1922.1929)
Date Received: NA
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Data file: W5623.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.167
beta-BHC	ND		0.167
gamma-BHC	ND		0.167
delta-BHC	ND		0.167
Heptachlor	ND		0.167
Aldrin	ND		0.167
Heptachlor epoxide	ND		0.167
Endosulfan I	ND		0.167
4,4'-DDE	ND		0.167
Dieldrin	ND		0.167
Endrin	ND		0.167
Endosulfan II	ND		0.167
4,4'-DDD	ND		0.167
Endrin aldehyde	ND		0.167
Endosulfan sulfate	ND		0.167
4,4'-DDT	ND		0.167
Chlordane	ND		0.835
Toxaphene	ND		0.835

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PESTICIDE METHOD BLANK SUMMARY

Lab File ID: W5638.D

Instrument ID: GC-W

Date Extracted: 03/30/2001

Matrix: SOIL

Date Analyzed: 04/03/2001

Time Analyzed: 12:58

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S-23	1922-007DIL	04/03/2001	13:23

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: NA

Lab ID: 0330-BK2
Client ID: (1922.1929)
Date Received: NA
Date Extracted: 03/30/2001
Date Analyzed: 04/03/2001
Data file: W5638.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.167
beta-BHC	ND		0.167
gamma-BHC	ND		0.167
delta-BHC	ND		0.167
Heptachlor	ND		0.167
Aldrin	ND		0.167
Heptachlor epoxide	ND		0.167
Endosulfan I	ND		0.167
4,4'-DDE	ND		0.167
Dieldrin	ND		0.167
Endrin	ND		0.167
Endosulfan II	ND		0.167
4,4'-DDD	ND		0.167
Endrin aldehyde	ND		0.167
Endosulfan sulfate	ND		0.167
4,4'-DDT	ND		0.167
Chlordane	ND		0.835
Toxaphene	ND		0.835

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1716

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/02/2001

Instrument ID: GC-W

GC Column (1st): DB-5

Data File: W5595.D W5594.D W5593.D W5592.D W5591.D

Compound	RT OF STANDARDS 10	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	4.53	4.53	4.53	4.53	4.53	4.53	4.46	4.60
beta-BHC	5.02	5.02	5.02	5.02	5.02	5.02	4.95	5.09
gamma-BHC	5.15	5.15	5.15	5.16	5.15	5.15	5.08	5.22
delta-BHC	5.63	5.63	5.63	5.63	5.63	5.63	5.56	5.70
Heptachlor	6.73	6.73	6.73	6.73	6.73	6.73	6.66	6.80
Aldrin	7.54	7.55	7.55	7.55	7.55	7.55	7.48	7.62
Heptachlor epoxide	8.56	8.55	8.56	8.56	8.56	8.56	8.49	8.63
Endosulfan I	9.47	9.47	9.47	9.47	9.47	9.47	9.40	9.54
4,4'-DDE	10.24	10.24	10.24	10.24	10.24	10.24	10.17	10.31
Dieldrin	10.17	10.16	10.17	10.17	10.17	10.17	10.10	10.24
Endrin	10.72	10.72	10.72	10.72	10.72	10.72	10.65	10.79
Endosulfan II	10.97	10.97	10.97	10.97	10.97	10.97	10.90	11.04
4,4'-DDD	11.36	11.36	11.36	11.36	11.36	11.36	11.29	11.43
Endrin aldehyde	11.50	11.50	11.50	11.50	11.50	11.50	11.43	11.57
Endosulfan sulfate	12.15	12.15	12.15	12.15	12.15	12.15	12.08	12.22
4,4'-DDT	12.38	12.38	12.38	12.38	12.38	12.38	12.31	12.45
Endrin ketone	13.36	13.36	13.36	13.36	13.36	13.36	13.29	13.43
Methoxychlor	14.06	14.06	14.06	14.06	14.06	14.06	13.99	14.13
alpha-Chlordane	9.58	9.58	9.58	9.58	9.58	9.58	9.51	9.65
gamma-Chlordane	9.17	9.17	9.17	9.17	9.17	9.17	9.10	9.24
Chlordane 500 ppb			9.17				9.10	9.24
Chlordane {2}			9.37				9.30	9.44
Chlordane {3}			9.58				9.51	9.65
Chlordane {4}			9.72				9.65	9.79
Chlordane {5}			11.57				11.50	11.64
Toxaphene 500 ppb			13.17				13.10	13.24
Toxaphene {2}			13.30				13.23	13.37
Toxaphene {3}			13.58				13.51	13.65
Toxaphene {4}			14.04				13.97	14.11
Toxaphene {5}			14.55				14.48	14.62

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/02/2001

Instrument ID: GC-W

GC Column (1st): DB-5

Data File: W5595.D W5594.D W5593.D W5592.D W5591.D

Compound	CALIBRATION FACTORS 10	50	100	200	300	MEAN	%RSD
alpha-BHC	42671048	49166970	48598737	46829377	46731791	46799585	5.44
beta-BHC	17739826	18067183	17788866	16990553	16827551	17482796	3.10
gamma-BHC	38897127	43320739	41803391	39037950	37937098	40199261	5.63
delta-BHC	39580293	44423687	44792211	43254720	42914184	42993019	4.80
Heptachlor	34980706	39383706	39364194	37264233	36481241	37494816	5.07
Aldrin	37925599	42586293	41771109	39618264	38730541	40126361	4.95
Heptachlor epoxide	34902338	37941120	36578791	34073389	33105916	35320311	5.50
Endosulfan I	32709932	35305480	34059429	31693725	30783481	32910409	5.50
4,4'-DDE	33482363	37631897	36944643	35025778	33906550	35398246	5.17
Dieldrin	34547105	38246404	37295734	34749103	33755969	35718863	5.43
Endrin	34004322	36343818	35273912	33152161	32362699	34227382	4.68
Endosulfan II	31176473	32432652	31483813	29411738	28573313	30615598	5.16
4,4'-DDD	27269018	30245709	29941443	28620526	27901366	28795612	4.45
Endrin aldehyde	24571107	22901877	21629744	18925577	17838535	21173368	13.13
Endosulfan sulfate	28414436	28955852	28372778	26563107	25923732	27645981	4.78
4,4'-DDT	24717503	27829175	28182389	27378952	27070044	27035613	5.04
Endrin ketone	34603606	34340001	33166021	30954655	30031163	32619089	6.26
Methoxychlor	13781772	13584139	13193651	12305260	11825025	12937969	6.51
alpha-Chlordane	34952154	38058613	37331413	35522175	34807184	36134308	4.07
gamma-Chlordane	35442688	39811221	39270930	37440698	36736544	37740416	4.78
Chlordane 500 ppb			3877776				
Chlordane {2}			715291				
Chlordane {3}			3695975				
Chlordane {4}			1720729				
Chlordane {5}			1213462				
Toxaphene 500 ppb			690635				
Toxaphene {2}			557091				
Toxaphene {3}			530156				
Toxaphene {4}			573954				
Toxaphene {5}			826668				

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1718

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/02/2001

Instrument ID: GC-W

GC Column (2nd): DB-1701P

Data File: W5595.C W5594.C W5593.C W5592.C W5591.C

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	100	200	300	RT	FROM	TO
alpha-BHC	5.58	5.58	5.58	5.59	5.58	5.58	5.51	5.65
beta-BHC	8.65	8.65	8.65	8.65	8.65	8.65	8.58	8.72
gamma-BHC	6.54	6.54	6.54	6.54	6.54	6.54	6.47	6.61
delta-BHC	9.21	9.21	9.21	9.22	9.21	9.21	9.14	9.28
Heptachlor	7.02	7.02	7.02	7.02	7.02	7.02	6.95	7.09
Aldrin	7.69	7.69	7.69	7.69	7.69	7.69	7.62	7.76
Heptachlor epoxide	9.54	9.54	9.54	9.54	9.54	9.54	9.47	9.61
Endosulfan I	10.22	10.22	10.22	10.23	10.22	10.22	10.15	10.29
4,4'-DDE	11.00	11.00	11.00	11.00	11.00	11.00	10.93	11.07
Dieldrin	11.26	11.26	11.26	11.26	11.26	11.26	11.19	11.33
Endrin	11.79	11.78	11.79	11.79	11.79	11.79	11.72	11.86
Endosulfan II	13.23	13.23	13.23	13.24	13.23	13.23	13.16	13.30
4,4'-DDD	13.23	13.23	13.23	13.24	13.23	13.23	13.16	13.30
Endrin aldehyde	14.38	14.37	14.38	14.38	14.38	14.38	14.31	14.45
Endosulfan sulfate	15.28	15.28	15.28	15.28	15.28	15.28	15.21	15.35
4,4'-DDT	13.69	13.68	13.69	13.69	13.68	13.69	13.62	13.76
Endrin ketone	16.30	16.30	16.30	16.30	16.31	16.30	16.23	16.37
Methoxychlor	15.55	15.55	15.55	15.55	15.55	15.55	15.48	15.62
alpha-Chlordane	10.62	10.62	10.62	10.62	10.62	10.62	10.55	10.69
gamma-Chlordane	10.46	10.46	10.46	10.46	10.46	10.46	10.39	10.53
Chlordane 500 ppb			8.38				8.31	8.45
Chlordane {2}			10.06				9.99	10.13
Chlordane {3}			10.46				10.39	10.53
Chlordane {4}			10.62				10.55	10.69
Chlordane {5}			10.67				10.60	10.74
Toxaphene 500 ppb			14.02				13.95	14.09
Toxaphene {2}			14.75				14.68	14.82
Toxaphene {3}			15.01				14.94	15.08
Toxaphene {4}			15.21				15.14	15.28
Toxaphene {5}			15.66				15.59	15.73

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/02/2001

Instrument ID: GC-W

GC Column (2nd): DB-1701P

Data File: W5595.C W5594.C W5593.C W5592.C W5591.C

Compound	CALIBRATION FACTORS 10	50	100	200	300	MEAN	%RSD
alpha-BHC	14259795	16574015	16549142	15992679	15789703	15833067	5.96
beta-BHC	7092917	6818095	6599606	6319562	6222285	6610493	5.41
gamma-BHC	13484034	15148986	15098267	14555368	14358582	14529047	4.66
delta-BHC	13073342	14420797	14481404	13843209	13638830	13891516	4.20
Heptachlor	11544599	12584777	12555861	12178619	12059820	12184735	3.49
Aldrin	12782266	14033841	13861698	13257520	13009362	13388938	4.04
Heptachlor epoxide	12328212	12761708	12504323	11905185	11696786	12239243	3.55
Endosulfan I	11454427	11953163	11720968	11153574	10933046	11443036	3.61
4,4'-DDE	11091880	12345948	12353094	11948545	11734496	11894793	4.38
Dieldrin	11920382	12923073	12813421	12305012	12122636	12416905	3.51
Endrin	11625522	12454562	12337245	11842909	11669179	11985883	3.21
Endosulfan II	20312721	20839534	20709788	19504366	19086035	20090489	3.81
4,4'-DDD	20312721	20839534	20709788	19504366	19086035	20090489	3.81
Endrin aldehyde	8867658	8152343	7988766	7448459	7222589	7935963	8.13
Endosulfan sulfate	9780135	9648681	9615795	9263049	9114543	9484441	2.97
4,4'-DDT	6605514	7911920	8297497	8367323	8418879	7920226	9.61
Endrin ketone	11003249	11045911	10912617	10400567	10191537	10710776	3.63
Methoxychlor	4448631	4485867	4435915	4311554	4245988	4385591	2.32
alpha-Chlordane	12118771	12692093	12516874	11992089	11791358	12222237	3.05
gamma-Chlordane	12096308	13006469	12903478	12436609	12258943	12540361	3.18
Chlordane 500 ppb			276643				
Chlordane {2}			295131				
Chlordane {3}			1285852				
Chlordane {4}			1172840				
Chlordane {5}			552603				
Toxaphene 500 ppb			214472				
Toxaphene {2}			202525				
Toxaphene {3}			144902				
Toxaphene {4}			118476				
Toxaphene {5}			182978				

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/03/2001 Instrument ID: GC-W

Data File: W5617.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	4.52	4.45	4.59	46799585	50346684	7.58
beta-BHC	5.02	4.95	5.09	17482796	18223083	4.23
gamma-BHC	5.15	5.08	5.22	40199261	42747693	6.34
delta-BHC	5.62	5.55	5.69	42993019	46279792	7.64
Heptachlor	6.73	6.66	6.80	37494816	39266909	4.73
Aldrin	7.54	7.47	7.61	40126361	43199214	7.66
Heptachlor epoxide	8.55	8.48	8.62	35320311	37857759	7.18
Endosulfan I	9.47	9.40	9.54	32910409	35220319	7.02
4,4'-DDE	10.24	10.17	10.31	35398246	38056130	7.51
Dieldrin	10.17	10.10	10.24	35718863	38391948	7.48
Endrin	10.72	10.65	10.79	34227382	36271803	5.97
Endosulfan II	10.97	10.90	11.04	30615598	32373204	5.74
4,4'-DDD	11.36	11.29	11.43	28795612	30949302	7.48
Endrin aldehyde	11.50	11.43	11.57	21173368	22923960	8.27
Endosulfan sulfate	12.15	12.08	12.22	27645981	29319702	6.05
4,4'-DDT	12.38	12.31	12.45	27035613	28485604	5.36
Endrin ketone	13.36	13.29	13.43	32619089	34512844	5.81
Methoxychlor	14.06	13.99	14.13	12937969	13322516	2.97
alpha-Chlordane	9.58	9.51	9.65	36134308	38552092	6.69
gamma-Chlordane	9.17	9.10	9.24	37740416	40578224	7.52
					Average %D	6.46

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1771

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/03/2001 Instrument ID: GC-W

Data File: W5617.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	5.58	5.51	5.65	15833067	17111403	8.07
beta-BHC	8.64	8.57	8.71	6610493	6888730	4.21
gamma-BHC	6.54	6.47	6.61	14529047	15857053	9.14
delta-BHC	9.21	9.14	9.28	13891516	15239783	9.71
Heptachlor	7.01	6.94	7.08	12184735	12838733	5.37
Aldrin	7.69	7.62	7.76	13388938	14535545	8.56
Heptachlor epoxide	9.54	9.47	9.61	12239243	13134861	7.32
Endosulfan I	10.22	10.15	10.29	11443036	12322646	7.69
4,4'-DDE	10.99	10.92	11.06	11894793	13002400	9.31
Dieldrin	11.26	11.19	11.33	12416905	13518870	8.87
Endrin	11.78	11.71	11.85	11985883	12880866	7.47
Endosulfan II	13.23	13.16	13.30	20090489	21889814	8.96
4,4'-DDD	13.23	13.16	13.30	20090489	21889814	8.96
Endrin aldehyde	14.37	14.30	14.44	7935963	8526716	7.44
Endosulfan sulfate	15.27	15.20	15.34	9484441	10134884	6.86
4,4'-DDT	13.68	13.61	13.75	7920226	8764771	10.66
Endrin ketone	16.30	16.23	16.37	10710776	11616394	8.46
Methoxychlor	15.55	15.48	15.62	4385591	4576427	4.35
alpha-Chlordane	10.61	10.54	10.68	12222237	13213684	8.11
gamma-Chlordane	10.46	10.39	10.53	12540361	13630667	8.69
					Average %D	7.91

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1777

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/03/2001 **Instrument ID:** GC-W

Data File: W5620.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	4.53	4.46	4.60	46799585	49697114	6.19
beta-BHC	5.02	4.95	5.09	17482796	18170902	3.94
gamma-BHC	5.15	5.08	5.22	40199261	42772022	6.40
delta-BHC	5.63	5.56	5.70	42993019	45633294	6.14
Heptachlor	6.73	6.66	6.80	37494816	39059162	4.17
Aldrin	7.55	7.48	7.62	40126361	42884917	6.87
Heptachlor epoxide	8.56	8.49	8.63	35320311	37760337	6.91
Endosulfan I	9.47	9.40	9.54	32910409	35143533	6.79
4,4'-DDE	10.24	10.17	10.31	35398246	37926674	7.14
Dieldrin	10.17	10.10	10.24	35718863	38335725	7.33
Endrin	10.72	10.65	10.79	34227382	35896233	4.88
Endosulfan II	10.97	10.90	11.04	30615598	32238374	5.30
4,4'-DDD	11.36	11.29	11.43	28795612	31131212	8.11
Endrin aldehyde	11.50	11.43	11.57	21173368	22585786	6.67
Endosulfan sulfate	12.15	12.08	12.22	27645981	29160815	5.48
4,4'-DDT	12.38	12.31	12.45	27035613	28233074	4.43
Endrin ketone	13.36	13.29	13.43	32619089	34707838	6.40
Methoxychlor	14.06	13.99	14.13	12937969	13179921	1.87
alpha-Chlordane	9.58	9.51	9.65	36134308	38517946	6.60
gamma-Chlordane	9.17	9.10	9.24	37740416	40489089	7.28
					Average %D	5.94
Chlordane 500 ppb	9.17	9.10	9.24	3877776	3980255	2.64
Chlordane {2}	9.37	9.30	9.44	715291	725412	1.41
Chlordane {3}	9.58	9.51	9.65	3695975	3821982	3.41
Chlordane {4}	9.72	9.65	9.79	1720729	1775145	3.16
Chlordane {5}	11.57	11.50	11.64	1213462	1253941	3.34
Toxaphene 500 ppb	13.17	13.10	13.24	690635	760103	10.06
Toxaphene {2}	13.30	13.23	13.37	557091	594211	6.66
Toxaphene {3}	13.58	13.51	13.65	530156	518734	2.15
Toxaphene {4}	14.04	13.97	14.11	573954	569356	0.80
Toxaphene {5}	14.55	14.48	14.62	826668	829279	0.32
					Average %D	3.40

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/03/2001 **Instrument ID:** GC-W

Data File: W5620.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	5.58	5.51	5.65	15833067	17132829	8.21
beta-BHC	8.64	8.57	8.71	6610493	6863730	3.83
gamma-BHC	6.54	6.47	6.61	14529047	15657253	7.77
delta-BHC	9.21	9.14	9.28	13891516	14980048	7.84
Heptachlor	7.02	6.95	7.09	12184735	12730515	4.48
Aldrin	7.69	7.62	7.76	13388938	14403538	7.58
Heptachlor epoxide	9.54	9.47	9.61	12239243	13030991	6.47
Endosulfan I	10.22	10.15	10.29	11443036	12255892	7.10
4,4'-DDE	10.99	10.92	11.06	11894793	12929971	8.70
Dieldrin	11.26	11.19	11.33	12416905	13411503	8.01
Endrin	11.78	11.71	11.85	11985883	12697356	5.94
Endosulfan II	13.23	13.16	13.30	20090489	21836367	8.69
4,4'-DDD	13.23	13.16	13.30	20090489	21836367	8.69
Endrin aldehyde	14.37	14.30	14.44	7935963	8502111	7.13
Endosulfan sulfate	15.27	15.20	15.34	9484441	10010164	5.54
4,4'-DDT	13.68	13.61	13.75	7920226	8674834	9.53
Endrin ketone	16.30	16.23	16.37	10710776	11627198	8.56
Methoxychlor	15.55	15.48	15.62	4385591	4564958	4.09
alpha-Chlordane	10.62	10.55	10.69	12222237	13112124	7.28
gamma-Chlordane	10.46	10.39	10.53	12540361	13521642	7.82
					Average %D	7.16
Chlordane 500 ppb	8.38	8.31	8.45	276643	291188	5.26
Chlordane {2}	10.06	9.99	10.13	295131	307202	4.09
Chlordane {3}	10.46	10.39	10.53	1285852	1356417	5.49
Chlordane {4}	10.61	10.54	10.68	1172840	1225590	4.50
Chlordane {5}	10.67	10.60	10.74	552603	597931	8.20
Toxaphene 500 ppb	14.02	13.95	14.09	214472	207961	3.04
Toxaphene {2}	14.75	14.68	14.82	202525	179512	11.36
Toxaphene {3}	15.01	14.94	15.08	144902	133657	7.76
Toxaphene {4}	15.21	15.14	15.28	118476	109740	7.37
Toxaphene {5}	15.66	15.59	15.73	182978	184954	1.08
					Average %D	5.81

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/03/2001 **Instrument ID:** GC-W

Data File: W5632.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	4.52	4.45	4.59	46799585	51645628	10.35
beta-BHC	5.02	4.95	5.09	17482796	18632723	6.58
gamma-BHC	5.15	5.08	5.22	40199261	43300079	7.71
delta-BHC	5.62	5.55	5.69	42993019	47213257	9.82
Heptachlor	6.73	6.66	6.80	37494816	40037200	6.78
Aldrin	7.54	7.47	7.61	40126361	43717636	8.95
Heptachlor epoxide	8.55	8.48	8.62	35320311	38282629	8.39
Endosulfan I	9.47	9.40	9.54	32910409	35574963	8.10
4,4'-DDE	10.24	10.17	10.31	35398246	38284095	8.15
Dieldrin	10.16	10.09	10.23	35718863	38752711	8.49
Endrin	10.72	10.65	10.79	34227382	36570757	6.85
Endosulfan II	10.97	10.90	11.04	30615598	32513022	6.20
4,4'-DDD	11.36	11.29	11.43	28795612	31308015	8.72
Endrin aldehyde	11.50	11.43	11.57	21173368	22828090	7.82
Endosulfan sulfate	12.15	12.08	12.22	27645981	29203867	5.64
4,4'-DDT	12.38	12.31	12.45	27035613	28106435	3.96
Endrin ketone	13.36	13.29	13.43	32619089	34352995	5.32
Methoxychlor	14.06	13.99	14.13	12937969	12947632	0.07
alpha-Chlordane	9.58	9.51	9.65	36134308	38863544	7.55
gamma-Chlordane	9.17	9.10	9.24	37740416	40974748	8.57
					Average %D	7.20

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/03/2001 Instrument ID: GC-W

Data File: W5632.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	5.58	5.51	5.65	15833067	17631341	11.36
beta-BHC	8.64	8.57	8.71	6610493	7121228	7.73
gamma-BHC	6.54	6.47	6.61	14529047	16275112	12.02
delta-BHC	9.21	9.14	9.28	13891516	15688479	12.94
Heptachlor	7.01	6.94	7.08	12184735	13192179	8.27
Aldrin	7.69	7.62	7.76	13388938	14919490	11.43
Heptachlor epoxide	9.53	9.46	9.60	12239243	13519331	10.46
Endosulfan I	10.22	10.15	10.29	11443036	12696113	10.95
4,4'-DDE	10.99	10.92	11.06	11894793	13382298	12.51
Dieldrin	11.26	11.19	11.33	12416905	13895357	11.91
Endrin	11.78	11.71	11.85	11985883	13241198	10.47
Endosulfan II	13.23	13.16	13.30	20090489	22577909	12.38
4,4'-DDD	13.23	13.16	13.30	20090489	22577909	12.38
Endrin aldehyde	14.37	14.30	14.44	7935963	8741886	10.16
Endosulfan sulfate	15.27	15.20	15.34	9484441	10334450	8.96
4,4'-DDT	13.68	13.61	13.75	7920226	8941063	12.89
Endrin ketone	16.30	16.23	16.37	10710776	11878731	10.90
Methoxychlor	15.55	15.48	15.62	4385591	4639381	5.79
alpha-Chlordane	10.61	10.54	10.68	12222237	13574561	11.06
gamma-Chlordane	10.46	10.39	10.53	12540361	14018692	11.79
					Average %D	10.82

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/03/2001 Instrument ID: GC-W

Data File: W5635.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	4.53	4.46	4.60	46799585	47702246	1.93
beta-BHC	5.02	4.95	5.09	17482796	17330057	0.87
gamma-BHC	5.15	5.08	5.22	40199261	41021470	2.05
delta-BHC	5.63	5.56	5.70	42993019	43251373	0.60
Heptachlor	6.73	6.66	6.80	37494816	36953352	1.44
Aldrin	7.55	7.48	7.62	40126361	40900290	1.93
Heptachlor epoxide	8.56	8.49	8.63	35320311	36305849	2.79
Endosulfan I	9.47	9.40	9.54	32910409	33768795	2.61
4,4'-DDE	10.24	10.17	10.31	35398246	35879424	1.36
Dieldrin	10.17	10.10	10.24	35718863	36583303	2.42
Endrin	10.72	10.65	10.79	34227382	33705769	1.52
Endosulfan II	10.97	10.90	11.04	30615598	30648681	0.11
4,4'-DDD	11.36	11.29	11.43	28795612	29146876	1.22
Endrin aldehyde	11.50	11.43	11.57	21173368	20554535	2.92
Endosulfan sulfate	12.15	12.08	12.22	27645981	27069680	2.08
4,4'-DDT	12.38	12.31	12.45	27035613	25752179	4.75
Endrin ketone	13.36	13.29	13.43	32619089	32633332	0.04
Methoxychlor	14.06	13.99	14.13	12937969	11897623	8.04
alpha-Chlordane	9.58	9.51	9.65	36134308	36689306	1.54
gamma-Chlordane	9.17	9.10	9.24	37740416	38542346	2.12
					Average %D	2.12
Chlordane 500 ppb	9.17	9.10	9.24	3877776	3976566	2.55
Chlordane {2}	9.37	9.30	9.44	715291	735092	2.77
Chlordane {3}	9.58	9.51	9.65	3695975	3694635	0.04
Chlordane {4}	9.72	9.65	9.79	1720729	1862643	8.25
Chlordane {5}	11.57	11.50	11.64	1213462	1232591	1.58
Toxaphene 500 ppb	13.17	13.10	13.24	690635	710003	2.80
Toxaphene {2}	13.30	13.23	13.37	557091	547023	1.81
Toxaphene {3}	13.58	13.51	13.65	530156	451462	14.84
Toxaphene {4}	14.04	13.97	14.11	573954	514771	10.31
Toxaphene {5}	14.55	14.48	14.62	826668	742034	10.24
					Average %D	5.52

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/03/2001 Instrument ID: GC-W

Data File: W5635.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	5.58	5.51	5.65	15833067	17171996	8.46
beta-BHC	8.65	8.58	8.72	6610493	6939770	4.98
gamma-BHC	6.54	6.47	6.61	14529047	15866888	9.21
delta-BHC	9.21	9.14	9.28	13891516	15102160	8.71
Heptachlor	7.02	6.95	7.09	12184735	12874688	5.66
Aldrin	7.69	7.62	7.76	13388938	14592581	8.99
Heptachlor epoxide	9.54	9.47	9.61	12239243	13280382	8.51
Endosulfan I	10.22	10.15	10.29	11443036	12480389	9.07
4,4'-DDE	11.00	10.93	11.07	11894793	13063786	9.83
Dieldrin	11.26	11.19	11.33	12416905	13609912	9.61
Endrin	11.79	11.72	11.86	11985883	12713238	6.07
Endosulfan II	13.23	13.16	13.30	20090489	21969343	9.35
4,4'-DDD	13.23	13.16	13.30	20090489	21969343	9.35
Endrin aldehyde	14.38	14.31	14.45	7935963	8174186	3.00
Endosulfan sulfate	15.27	15.20	15.34	9484441	9928648	4.68
4,4'-DDT	13.68	13.61	13.75	7920226	8603170	8.62
Endrin ketone	16.30	16.23	16.37	10710776	11633071	8.61
Methoxychlor	15.55	15.48	15.62	4385591	4490030	2.38
alpha-Chlordane	10.62	10.55	10.69	12222237	13317929	8.96
gamma-Chlordane	10.46	10.39	10.53	12540361	13713829	9.36
					Average %D	7.67
Chlordane 500 ppb	8.38	8.31	8.45	276643	306255	10.70
Chlordane {2}	10.06	9.99	10.13	295131	320996	8.76
Chlordane {3}	10.46	10.39	10.53	1285852	1419268	10.38
Chlordane {4}	10.62	10.55	10.69	1172840	1304345	11.21
Chlordane {5}	10.67	10.60	10.74	552603	603852	9.27
Toxaphene 500 ppb	14.02	13.95	14.09	214472	209124	2.49
Toxaphene {2}	14.75	14.68	14.82	202525	179353	11.44
Toxaphene {3}	15.01	14.94	15.08	144902	131897	8.98
Toxaphene {4}	15.21	15.14	15.28	118476	110937	6.36
Toxaphene {5}	15.66	15.59	15.73	182978	184998	1.10
					Average %D	8.07

1728

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/03/2001 **Instrument ID:** GC-W

Data File: W5650.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	4.53	4.46	4.60	46799585	50651939	8.23
beta-BHC	5.02	4.95	5.09	17482796	18729250	7.13
gamma-BHC	5.16	5.09	5.23	40199261	43974329	9.39
delta-BHC	5.63	5.56	5.70	42993019	47324688	10.08
Heptachlor	6.73	6.66	6.80	37494816	39586761	5.58
Aldrin	7.55	7.48	7.62	40126361	43674581	8.84
Heptachlor epoxide	8.56	8.49	8.63	35320311	38435376	8.82
Endosulfan I	9.48	9.41	9.55	32910409	35943046	9.21
4,4'-DDE	10.24	10.17	10.31	35398246	38813097	9.65
Dieldrin	10.17	10.10	10.24	35718863	39079175	9.41
Endrin	10.72	10.65	10.79	34227382	35570351	3.92
Endosulfan II	10.97	10.90	11.04	30615598	33165116	8.33
4,4'-DDD	11.36	11.29	11.43	28795612	31920696	10.85
Endrin aldehyde	11.50	11.43	11.57	21173368	23473414	10.86
Endosulfan sulfate	12.15	12.08	12.22	27645981	30472152	10.22
4,4'-DDT	12.38	12.31	12.45	27035613	27995774	3.55
Endrin ketone	13.36	13.29	13.43	32619089	36057700	10.54
Methoxychlor	14.06	13.99	14.13	12937969	13008837	0.55
alpha-Chlordane	9.58	9.51	9.65	36134308	39238137	8.59
gamma-Chlordane	9.17	9.10	9.24	37740416	41302761	9.44
					Average %D	8.16

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/03/2001 **Instrument ID:** GC-W

Data File: W5650.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	5.58	5.51	5.65	15833067	18104085	14.34
beta-BHC	8.65	8.58	8.72	6610493	7227233	9.33
gamma-BHC	6.54	6.47	6.61	14529047	16519965	13.70
delta-BHC	9.21	9.14	9.28	13891516	15949504	14.81
Heptachlor	7.02	6.95	7.09	12184735	13389046	9.88
Aldrin	7.69	7.62	7.76	13388938	15096277	12.75
Heptachlor epoxide	9.54	9.47	9.61	12239243	13673894	11.72
Endosulfan I	10.22	10.15	10.29	11443036	12856188	12.35
4,4'-DDE	11.00	10.93	11.07	11894793	13673230	14.95
Dieldrin	11.26	11.19	11.33	12416905	14059148	13.23
Endrin	11.78	11.71	11.85	11985883	13021031	8.64
Endosulfan II	13.23	13.16	13.30	20090489	23102770	14.99
4,4'-DDD	13.23	13.16	13.30	20090489	23102770	14.99
Endrin aldehyde	14.37	14.30	14.44	7935963	9032466	13.82
Endosulfan sulfate	15.27	15.20	15.34	9484441	10808299	13.96
4,4'-DDT	13.68	13.61	13.75	7920226	9078009	14.62
Endrin ketone	16.30	16.23	16.37	10710776	12497517	16.68
Methoxychlor	15.55	15.48	15.62	4385591	4758981	8.51
alpha-Chlordane	10.61	10.54	10.68	12222237	13779052	12.74
gamma-Chlordane	10.46	10.39	10.53	12540361	14182103	13.09
					Average %D	12.96

C00692

1730

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/02/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(1899)	0330-BK1	SOIL	93		87		91		85	
02-10-B2-1.5	1899-014	SOIL	85		115		95		145	
(1922.1929)	0330-BK2	SOIL	91		83		87		81	
TP-2	1929-001	SOIL	75		95		85		110	
TP-5	1929-002	SOIL	75		90		80		105	
TP-6	1929-003	SOIL	70		100		80		115	
TP-1	1929-004	SOIL	80		95		85		105	
TP-7	1929-005	SOIL	80		95		85		110	
SB-1	1929-006	SOIL	75		95		80		110	
SB-2	1929-007	SOIL	70		115		75		110	
S-17	1922-001	SOIL	70		80		65		95	
S-18	1922-002	SOIL	80		105		70		120	
S-19	1922-003	SOIL	100		100		80		100	
S-20	1922-004	SOIL	65		115		65		110	
S-21	1922-005	SOIL	85		75		80		100	
PEST	1929-007-MS2	SOIL	81		82		81		89	
PEST	1929-007-MSD2	SOIL	78		89		78		96	
PEST	PBS0330-MS2	SOIL	93		84		91		87	

Surrogate QC Limits	Soil	Aqueous
TCMX = Tetrachloro-m-xylene	59-147	59-151
DCB = Decachlorobiphenyl	63-179	60-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/03/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(1922.1929)	0330-BK2	SOIL	94		89		94		90	
S-22	1922-006	SOIL	85		110		105		135	
S-23	1922-007	SOIL	90		130		105		130	
S-24	1922-008	SOIL	75		185	*	90		115	
S-25	1922-009	SOIL	70		95		75		100	
S-27	1922-011	SOIL	85		110		75		105	
S-28	1922-012	SOIL	65		115		105		220	*
S-29	1922-013	SOIL	55	*	65		65		90	
S-30	1922-015	SOIL	60		100		75		110	

Surrogate QC Limits	Soil	Aqueous
TCMX = Tetrachloro-m-xylene	59-147	59-151
DCB = Decachlorobiphenyl	63-179	60-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/03/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(1922.1929)	0330-BK2	SOIL	94		87		97		94	
S-23	1922-007DIL	SOIL	100		150		110		140	
(1929)	0403-BK2	AQUEOUS	88		79		90		87	
SW-1	1929-008	AQUEOUS	86		81		89		92	
PEST	PBA0403-MS2	AQUEOUS	89		82		90		88	
(1866.2026)	0403-BK1	SOIL	97		91		99		97	
S-4	1866-006	SOIL	75		85		85		100	
SP-1	1921-001	SOIL	70		90		80		110	
CS1	1970-001	SOIL	65		90		75		110	
SP-1	2026-001	SOIL	75		95		85		110	
PEST	PBS0403-MS1	SOIL	89		82		88		86	

Surrogate QC Limits	Soil	Aqueous
TCMX = Tetrachloro-m-xylene	59-147	59-151
DCB = Decachlorobiphenyl	63-179	60-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

000695

1733

SOIL PESTICIDES MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 1929-007-MSD2

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC	100.0	0.0	96.4	96	44 - 149
Heptachlor	100.0	0.0	80.2	80	50 - 157
Aldrin	100.0	0.0	84.3	84	40 - 150
Dieldrin	100.0	0.0	87.6	88	56 - 134
Endrin	100.0	0.0	89.6	90	65 - 148
4,4'-DDT	100.0	0.0	92.8	93	42 - 175

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC	0.0	101.2	101	5	18	44 - 149
Heptachlor	0.0	86.5	87	8	18	50 - 157
Aldrin	0.0	87.4	87	4	18	40 - 150
Dieldrin	0.0	92.7	93	6	13	56 - 134
Endrin	0.0	96.6	97	7	14	65 - 148
4,4'-DDT	0.0	102.6	103	10	27	42 - 175

 # Column to be used to flag recovery and RPD values with an asterisk

*** Values outside of QC limits**

NC Non calculable

RPD: __0___ out of __6__ outside limits

Spike Recovery: __0___ out of __12__ outside limits

SOIL PESTICIDES BLANK SPIKE RECOVERY

Matrix spike Lab sample ID: PBS0330-MS2

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC	100.0	0.0	101.8	102	44 - 149
Heptachlor	100.0	0.0	91.1	91	50 - 157
Aldrin	100.0	0.0	96.1	96	40 - 150
Dieldrin	100.0	0.0	94.9	95	56 - 134
Endrin	100.0	0.0	93.6	94	65 - 148
4,4'-DDT	100.0	0.0	94.4	94	42 - 175

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

Spike Recovery: __0___ out of __6__ outside limits

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-W **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 3.85 DCB 1 18.68 TCMX 2 3.69 DCB 2 18.65

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
(1899)	0330-BK1	04/02/2001	17:12	3.85		18.68		3.69		18.65	
02-10-B2-1.5	1899-014	04/02/2001	17:37	3.85		18.68		3.69		18.65	
(1922.1929)	0330-BK2	04/02/2001	18:02	3.85		18.68		3.69		18.65	
TP-2	1929-001	04/02/2001	18:27	3.85		18.68		3.69		18.64	
TP-5	1929-002	04/02/2001	18:52	3.85		18.68		3.69		18.65	
TP-6	1929-003	04/02/2001	19:16	3.85		18.68		3.68		18.65	
TP-1	1929-004	04/02/2001	19:41	3.85		18.68		3.69		18.64	
TP-7	1929-005	04/02/2001	20:06	3.85		18.68		3.69		18.64	
SB-1	1929-006	04/02/2001	20:31	3.85		18.68		3.69		18.64	
SB-2	1929-007	04/02/2001	20:56	3.85		18.68		3.69		18.65	
S-17	1922-001	04/02/2001	21:46	3.85		18.68		3.69		18.64	
S-18	1922-002	04/02/2001	22:11	3.85		18.68		3.69		18.65	
S-19	1922-003	04/02/2001	22:36	3.85		18.68		3.69		18.64	
S-20	1922-004	04/02/2001	23:01	3.85		18.69		3.69		18.64	
S-21	1922-005	04/02/2001	23:26	3.84		18.68		3.68		18.64	
PEST	1929-007-MS2	04/02/2001	23:51	3.85		18.68		3.69		18.64	
PEST	1929-007-MSD2	04/03/2001	00:15	3.85		18.68		3.69		18.64	
PEST	PBS0330-MS2	04/03/2001	00:40	3.85		18.68		3.69		18.64	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.05 Minutes)

DCB = Decachlorobiphenyl (_ 0.05 Minutes)

\# Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

M Matrix interference

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-W **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 3.85 DCB 1 18.68 TCMX 2 3.69 DCB 2 18.64

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
(1922.1929)	0330-BK2	04/03/2001	03:35	3.85		18.68		3.69		18.64	
S-22	1922-006	04/03/2001	03:59	3.85		18.68		3.68		18.64	
S-23	1922-007	04/03/2001	04:25	3.85		18.68		3.69		18.64	
S-24	1922-008	04/03/2001	04:49	3.85		18.68		3.68		18.65	
S-25	1922-009	04/03/2001	05:14	3.85		18.68		3.69		18.64	
S-27	1922-011	04/03/2001	05:39	3.85		18.68		3.68		18.64	
S-28	1922-012	04/03/2001	06:04	3.85		18.69		3.69		18.64	
S-29	1922-013	04/03/2001	06:29	3.85		18.68		3.68		18.64	
S-30	1922-015	04/03/2001	06:54	3.85		18.68		3.69		18.64	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.05 Minutes)

DCB = Decachlorobiphenyl (_ 0.05 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-W **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 3.84 DCB 1 18.68 TCMX 2 3.69 DCB 2 18.65

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
(1922.1929)	0330-BK2	04/03/2001	12:58	3.84		18.68		3.69		18.65	
S-23	1922-007DIL	04/03/2001	13:23	3.84		18.68		3.68		18.64	
(1929)	0403-BK2	04/03/2001	14:21	3.84		18.68		3.69		18.65	
SW-1	1929-008	04/03/2001	14:46	3.85		18.68		3.68		18.65	
PEST	PBA0403-MS2	04/03/2001	15:11	3.85		18.68		3.68		18.64	
(1866.2026)	0403-BK1	04/03/2001	15:36	3.85		18.68		3.69		18.65	
S-4	1866-006	04/03/2001	16:01	3.85		18.68		3.68		18.64	
SP-1	1921-001	04/03/2001	16:26	3.85		18.68		3.68		18.64	
CS1	1970-001	04/03/2001	16:51	3.85		18.68		3.68		18.64	
SP-1	2026-001	04/03/2001	17:16	3.85		18.68		3.68		18.64	
PEST	PBS0403-MS1	04/03/2001	17:41	3.85		18.68		3.68		18.64	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.05 Minutes)

DCB = Decachlorobiphenyl (_ 0.05 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5609.D\ECD1B.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5609.D\ECD2A.CH
Acq On : 4-2-01 21:46:25 Operator:
Sample : S-17,1922-001,S,30.2g,15.1,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 9:52 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.69	64911065	22046461	1.438	1.324m
Spiked Amount 100.000			Recovery =		1.44%	1.32%
2) S DCB	18.68	18.64	73504443	27595856	1.614	1.933m
Spiked Amount 100.000			Recovery =		1.61%	1.93%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

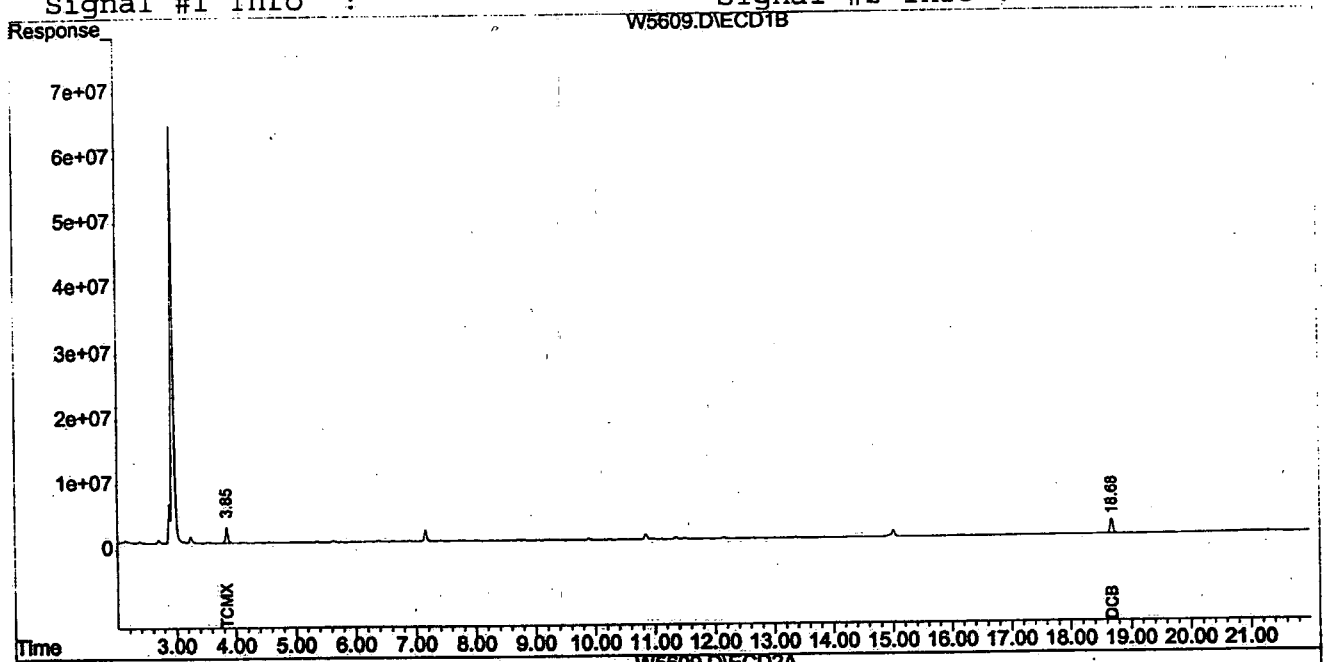
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5609.D WPTC0402.M Tue Apr 03 09:12:46 2001 GC_W Page 1

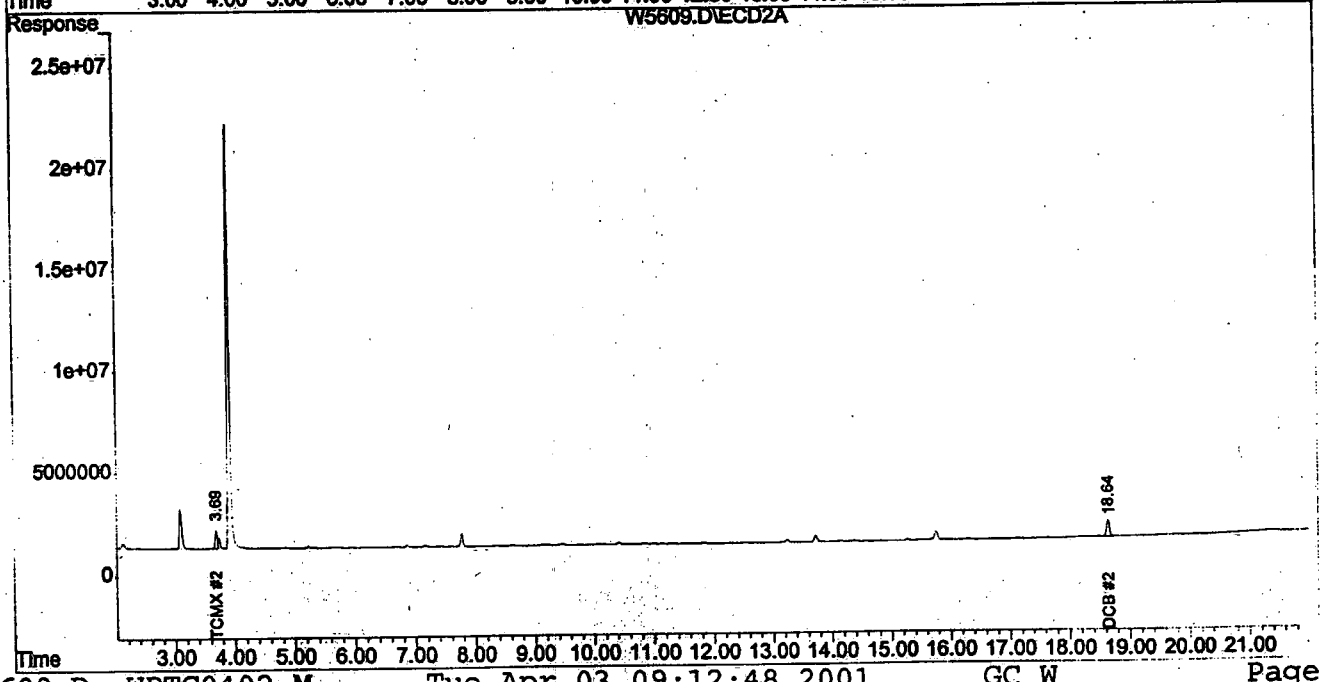
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5609.D\ECD1B.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5609.D\ECD2A.CH
Acq On : 4-2-01 21:46:25 Operator:
Sample : S-17,1922-001,S,30.2g,15.1,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 9:52 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1740

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5610.D\ECD1B.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5610.D\ECD2A.CH
Acq On : 4-2-01 22:11:23 Operator:
Sample : S-18,1922-002,S,30.4g,26.7,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 9:54 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.69	70333920	22492293	1.558	1.351m
Spiked Amount 100.000			Recovery =		1.56%	1.35%
2) S DCB	18.68	18.65	94905655	34333669	2.084m	2.405
Spiked Amount 100.000			Recovery =		2.08%	2.40%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5610.D WPTC0402.M Tue Apr 03 09:12:53 2001 GC_W Page 1

1741

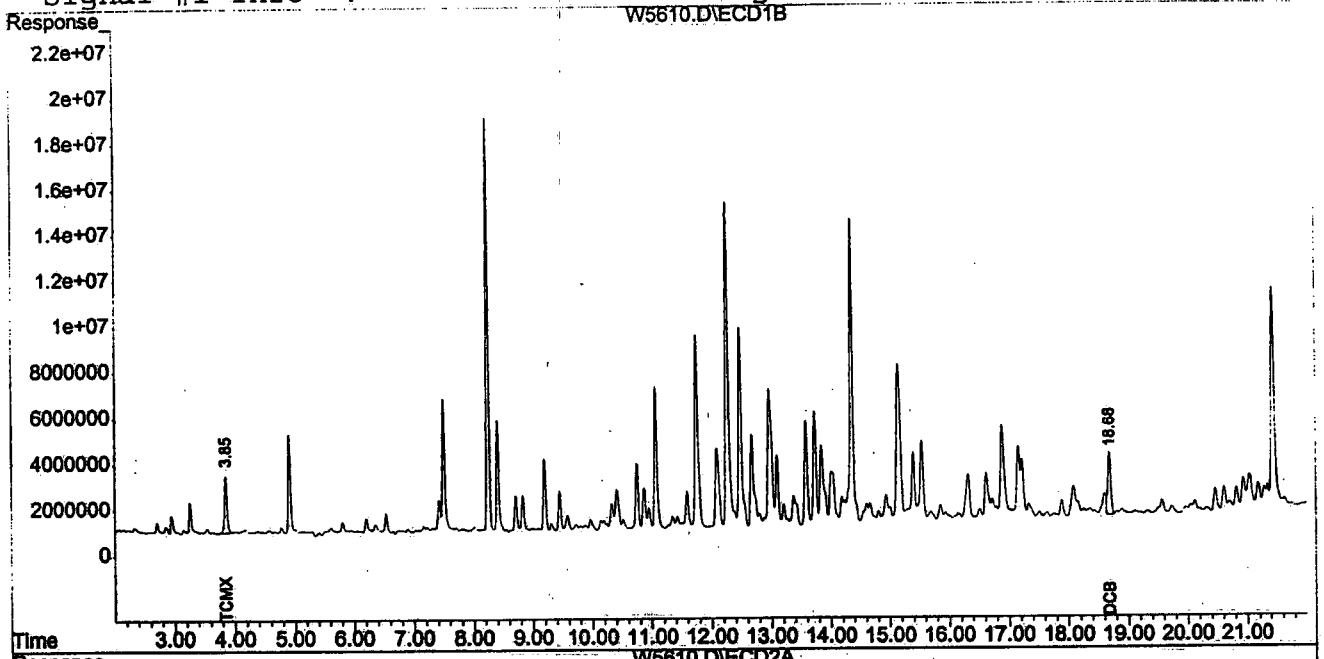
000703

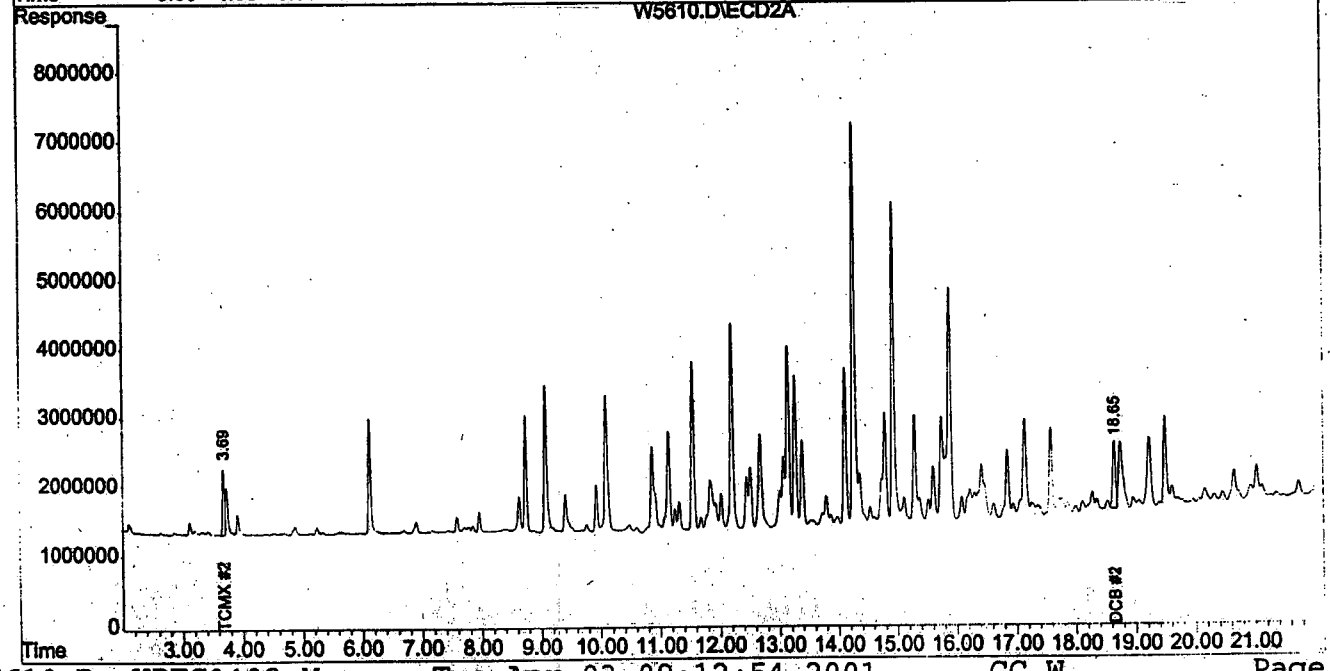
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5610.D\ECD1B.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5610.D\ECD2A.CH
Acq On : 4-2-01 22:11:23 Operator:
Sample : S-18,1922-002,S,30.4g,26.7,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 9:54 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1742

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5611.D\ECD1B.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5611.D\ECD2A.CH
Acq On : 4-2-01 22:36:18 Operator:
Sample : S-19,1922-003,S,30.1g,22.7,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 9:55 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.69	90957762	25986475	2.015	1.561m
Spiked Amount 100.000			Recovery	=	2.02%	1.56%
2) S DCB	18.68	18.64	91724501	28450043	2.015	1.993m
Spiked Amount 100.000			Recovery	=	2.02%	1.99%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5611.D WPTC0402.M Tue Apr 03 09:12:59 2001 GC_W Page 1

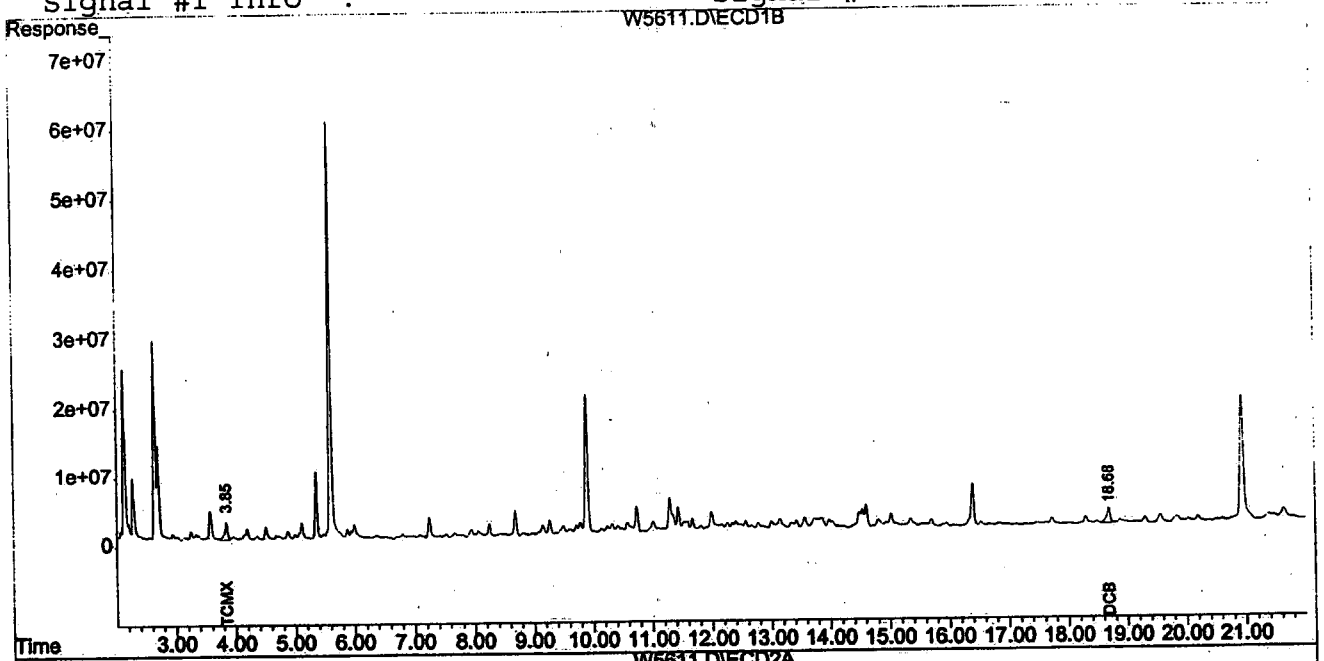
1743

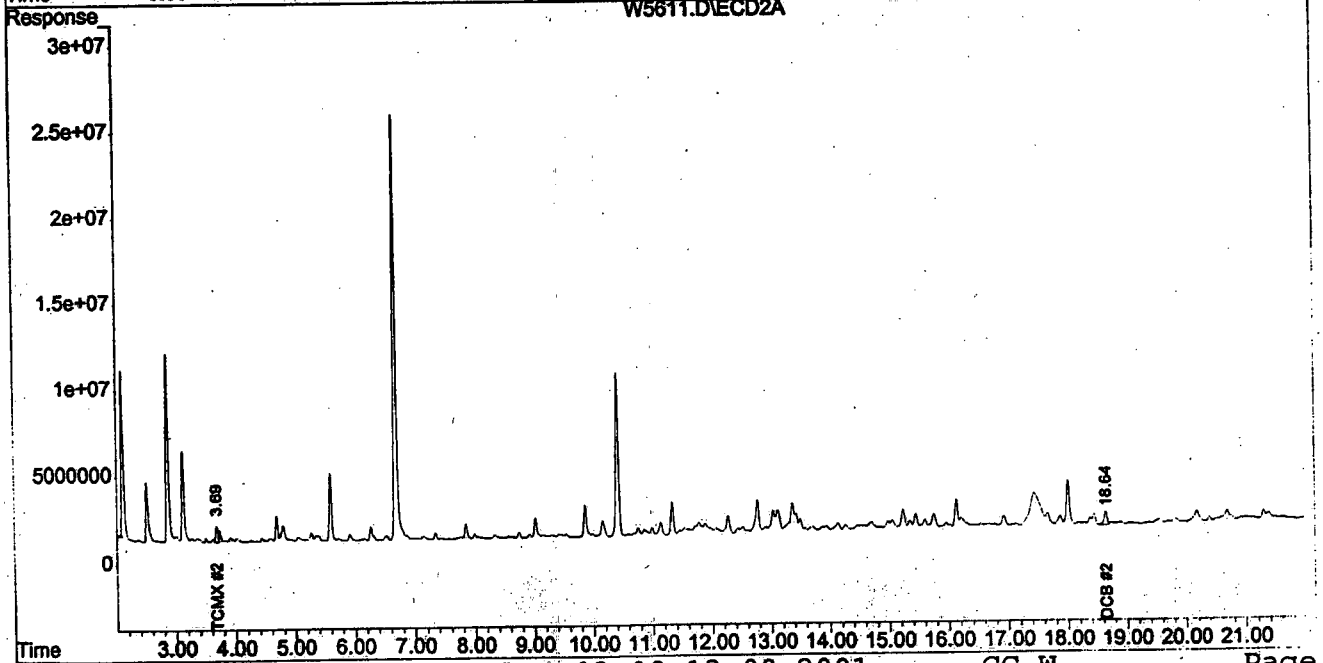
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5611.D\ECD1B.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5611.D\ECD2A.CH
Acq On : 4-2-01 22:36:18 Operator:
Sample : S-19,1922-003,S,30.1g,22.7,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 9:55 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1744

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\04-02-01\W5612.D\ECD1B.CH Vial: 23
Acq On : 4-2-01 23:01:08 Operator:
Sample : S-20,1922-004,S,30.2g,15.7,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\04-02-01\W5612.D\ECD2A.CH Vial: 23
Acq On : 4-2-01 23:01:09 Operator:
Sample : S-20,1922-004,S,30.2g,15.7,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 3 9:58 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.69	57490830	21498397	1.274	1.291
Spiked Amount 100.000			Recovery	=	1.27%	1.29%
2) S DCB	18.69	18.64	105.7E6	30790265	2.321m	2.157
Spiked Amount 100.000			Recovery	=	2.32%	2.16%
Target Compounds						
11) T 4,4'-DDE	10.24	10.99	320.6E6	63608217	9.058	5.348m#
15) T 4,4'-DDD	11.35	13.25	179.2E6	45689165	6.222	4.548m#
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5612.D WPTC0402.M Tue Apr 03 09:13:05 2001 GC_W Page 1

1745

000707

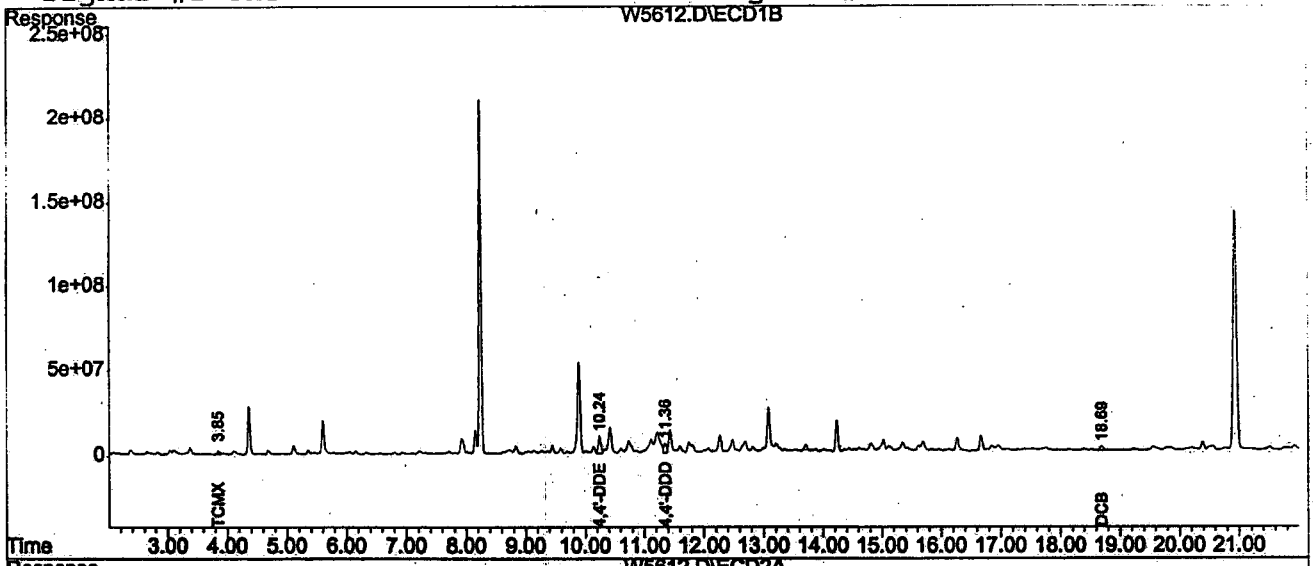
Quantitation Report (QT Reviewed)

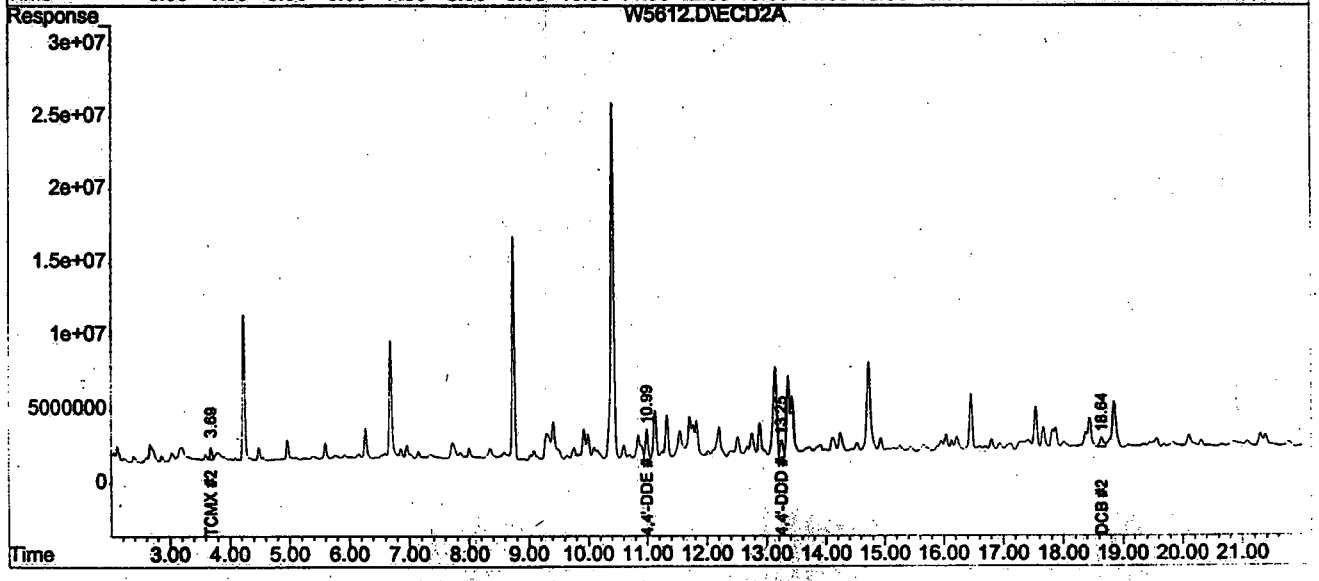
Data File : C:\HPCHEM\1\DATA\04-02-01\W5612.D\ECD1B.CH Vial: 23
Acq On : 4-2-01 23:01:08 Operator:
Sample : S-20,1922-004,S,30.2g,15.7,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\04-02-01\W5612.D\ECD2A.CH Vial: 23
Acq On : 4-2-01 23:01:09 Operator:
Sample : S-20,1922-004,S,30.2g,15.7,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 3 9:58 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\04-02-01\W5613.D\ECD1B.CH Vial: 24
Acq On : 4-2-01 23:26:10 Operator:
Sample : S-21,1922-005,S,30.9g,14.6,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\04-02-01\W5613.D\ECD2A.CH Vial: 24
Acq On : 4-2-01 23:26:09 Operator:
Sample : S-21,1922-005,S,30.9g,14.6,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 3 10:00 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1)	S TCMX	3.84	3.68	76335375	25912839	1.691m	1.557m
	Spiked Amount 100.000			Recovery	=	1.69%	1.56%
	S DCB	18.68	18.64	69889286	28250942	1.535m	1.979m#
	Spiked Amount 100.000			Recovery	=	1.53%	1.98%
	Target Compounds						
11)	T 4,4'-DDE	10.24	11.00	137.8E6	32036463	3.893	2.693 #
15)	T 4,4'-DDD	11.36	13.24	177.5E6	50554926	6.164	5.033m
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

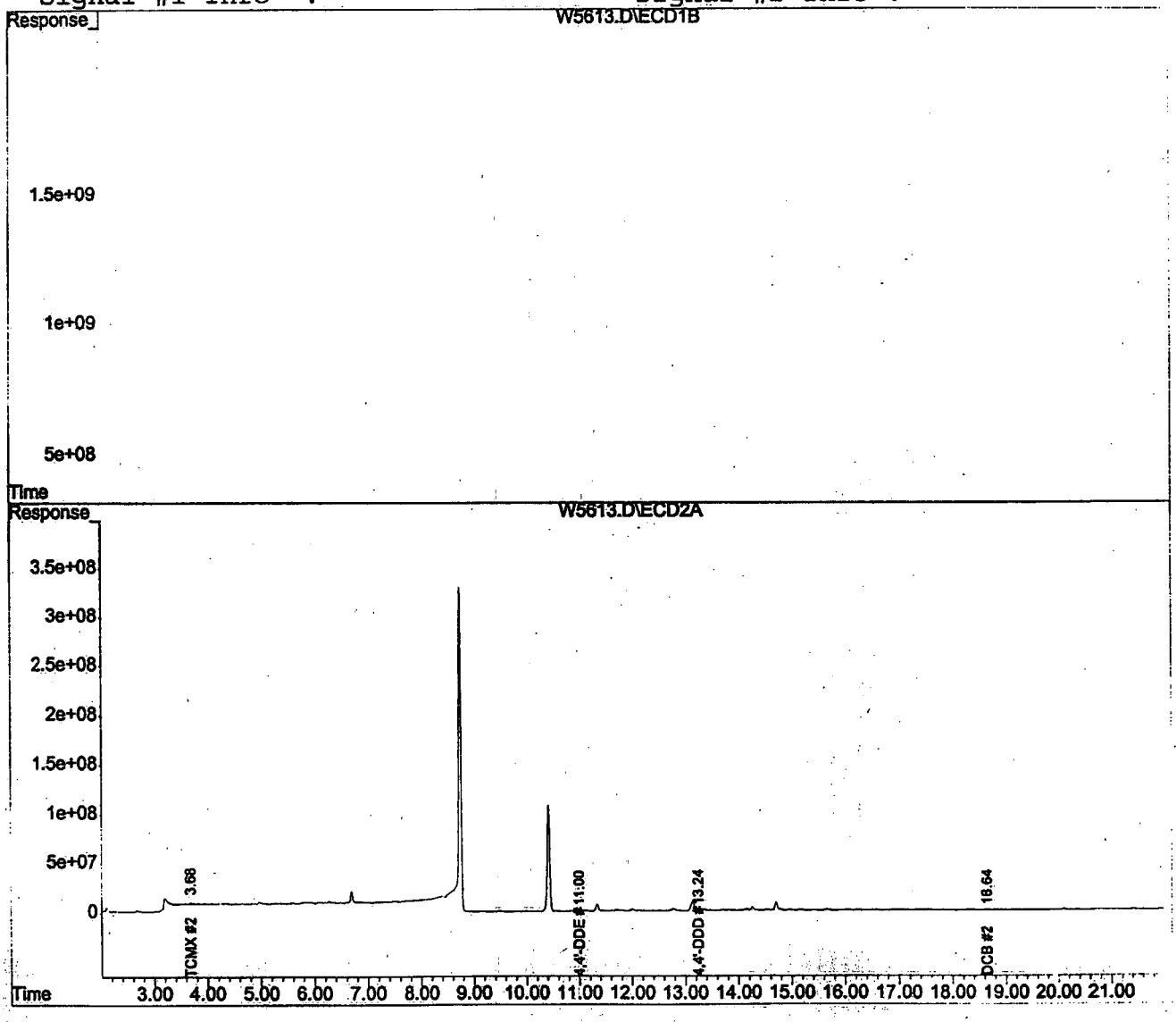
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\04-02-01\W5613.D\ECD1B.CH Vial: 24
Acq On : 4-2-01 23:26:10 Operator:
Sample : S-21,1922-005,S,30.9g,14.6,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\04-02-01\W5613.D\ECD2A.CH Vial: 24
Acq On : 4-2-01 23:26:09 Operator:
Sample : S-21,1922-005,S,30.9g,14.6,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 3 10:00 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

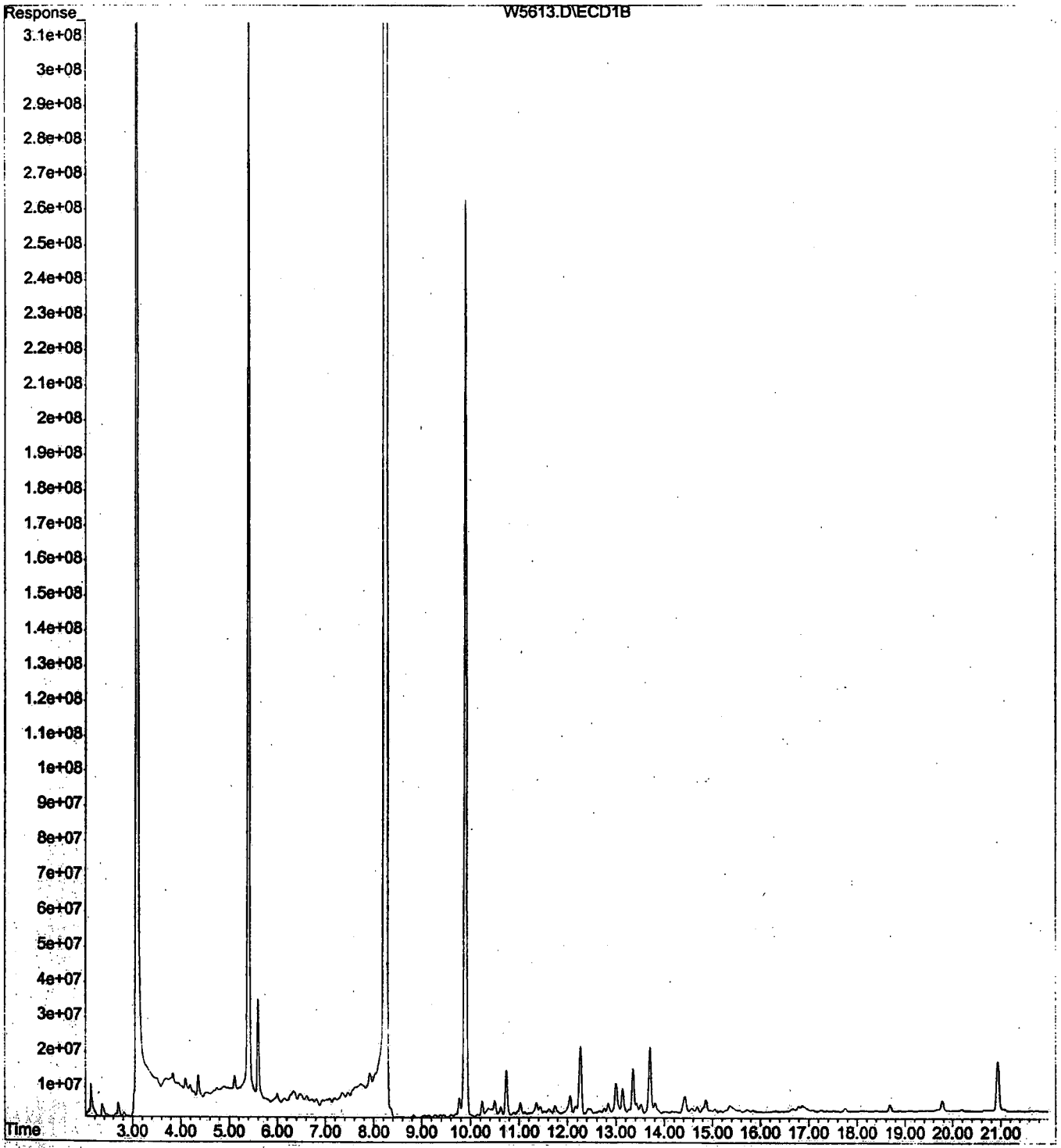
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



1748

000710

File : C:\HPCHEM\1\DATA\04-02-01\W5613.D
Operator :
Acquired : 4-2-01 23:26:10 using AcqMethod WPTC0402.M
Instrument : GC_W
Sample Name: S-21,1922-005,S,30.9g,14.6,03/30/01
Misc Info : ENVTACT/ORBIS,03/27/01,03/28/01,50
Vial Number: 24



Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5624.D\ECD1B.CH Vial: 35
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5624.D\ECD2A.CH
Acq On : 4-3-01 3:59:59 Operator:
Sample : S-22,1922-006,S,30.9g,16.5,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:20 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.68	76901686	35174975	1.704m	2.113m
Spiked Amount 100.000			Recovery	=	1.70%	2.11%
2) S DCB	18.68	18.64	99748010	38826147	2.191	2.720m
Spiked Amount 100.000			Recovery	=	2.19%	2.72%
Target Compounds						
11) T 4,4'-DDE	10.24	11.00	129.2E6	39657162	3.649	3.334
15) T 4,4'-DDD	11.36	13.25	186.5E6	57308060	6.478	5.705
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

000712

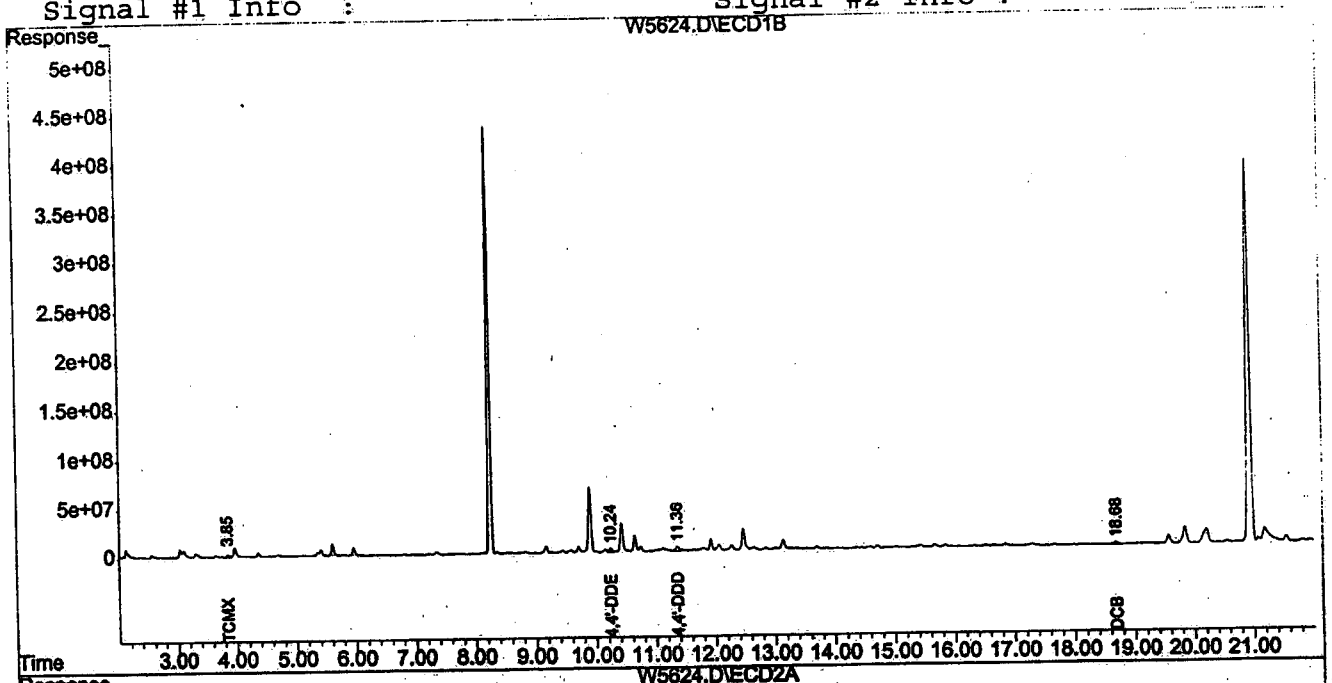
1750

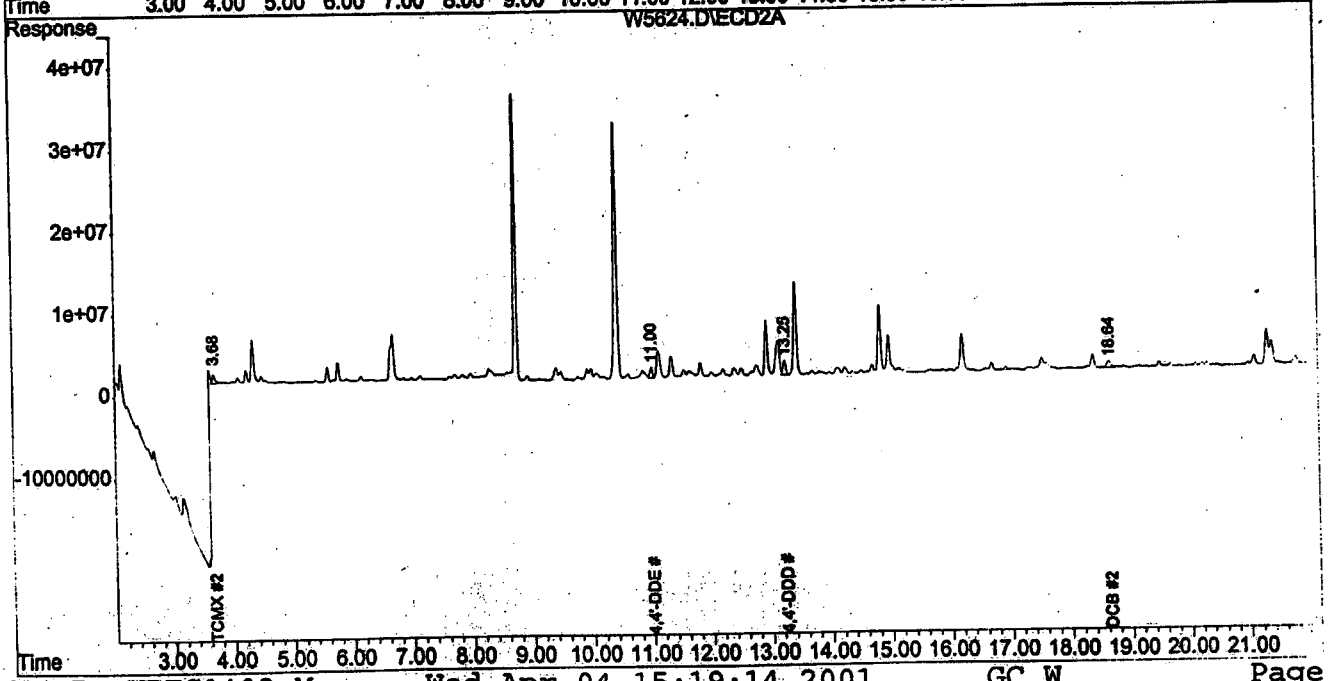
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5624.D\ECD1B.CH Vial: 35
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5624.D\ECD2A.CH
Acq On : 4-3-01 3:59:59 Operator:
Sample : S-22,1922-006,S,30.9g,16.5,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/27/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:20 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1751

000713

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5625.D\ECD1B.CH Vial: 36
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5625.D\ECD2A.CH
Acq On : 4-3-01 4:25:00 Operator:
Sample : S-23,1922-007,S,30.8g,17.8,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:24 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.69	82233535	35372070	1.822	2.125
Spiked Amount 100.000			Recovery	=	1.82%	2.13%
2) S DCB	18.68	18.64	119.0E6	36543392	2.613m	2.560
Spiked Amount 100.000			Recovery	=	2.61%	2.56%
Target Compounds						
1) T 4,4'-DDE	10.24	10.99	4115.4E6	1288.3E6	116.261	108.311
T 4,4'-DDD	11.36	13.25	10692.4E6	3874.7E6	371.321	385.721
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5625.D WPTC0402.M Wed Apr 04 08:47:10 2001 GC_W Page 1

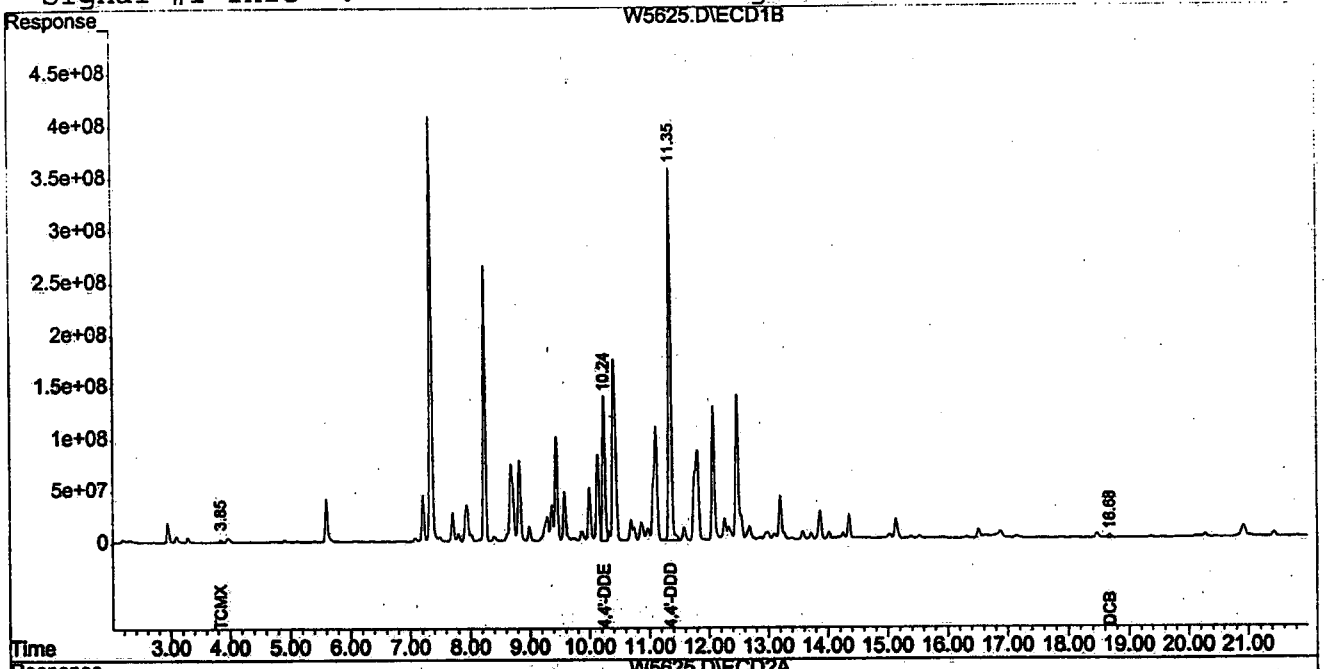
1752

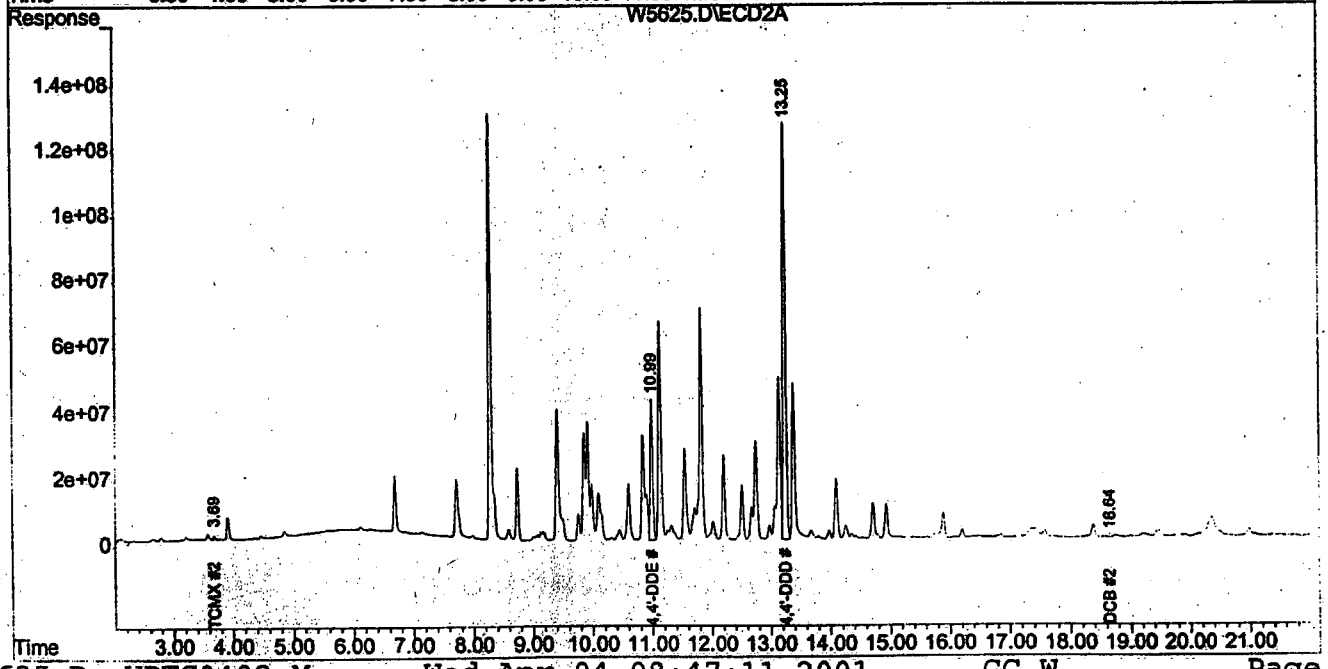
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5625.D\ECD1B.CH Vial: 36
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5625.D\ECD2A.CH
Acq On : 4-3-01 4:25:00 Operator:
Sample : S-23,1922-007,S,30.8g,17.8,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:24 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000715

1753

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-03-01\W5639.D\ECD1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\04-03-01\W5639.D\ECD2A.CH
Acq On : 4-3-01 13:23:19 Operator:
Sample : S-23,1922-007DIL,S,30.8g,17.8,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 9:49 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.84	3.68	42938853	17919057	0.951m	1.076
Spiked Amount 100.000			Recovery =		0.95%	1.08%
2) S DCB	18.68	18.64	66482764	20647708	1.460m	1.446m
Spiked Amount 100.000			Recovery =		1.46%	1.45%
Target Compounds						
11) T 4,4'-DDE	10.24	11.00	2272.5E6	709.8E6	64.199m	59.677
T 4,4'-DDD	11.36	13.25	6000.3E6	2264.7E6	208.374	225.451
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

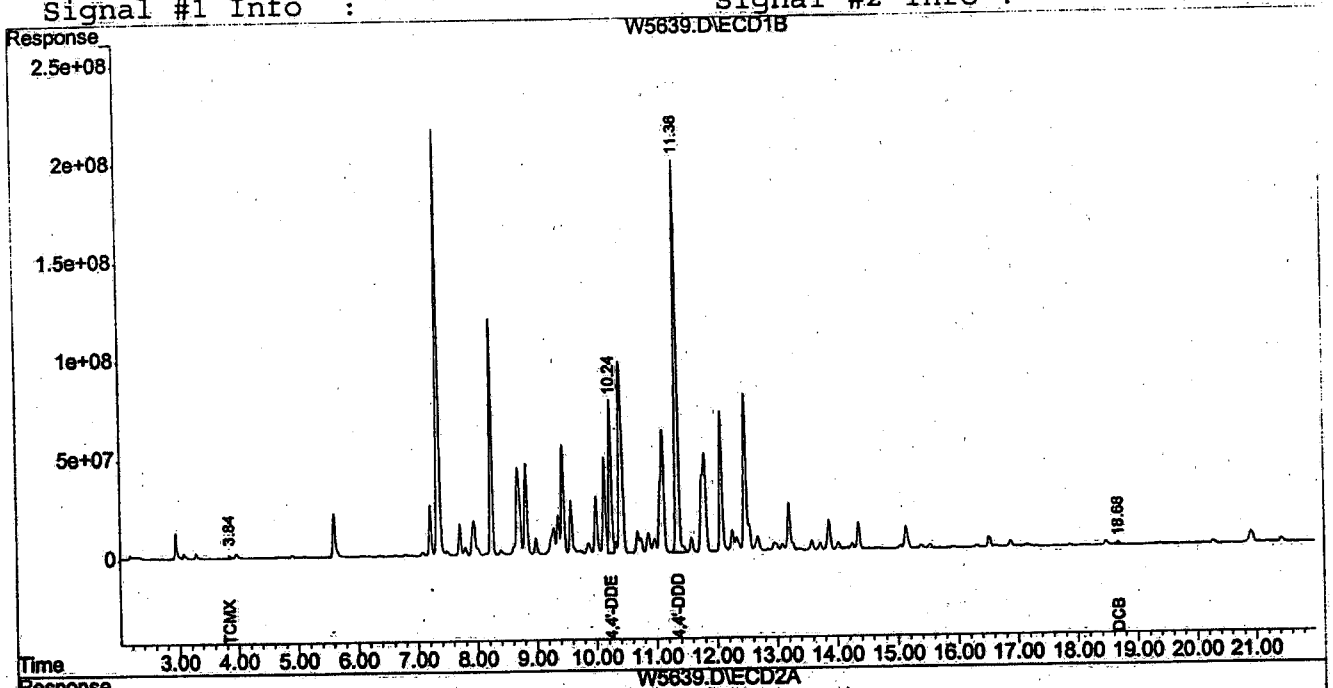
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5639.D WPTC0402.M Wed Apr 04 08:51:15 2001 GC_W Page 1

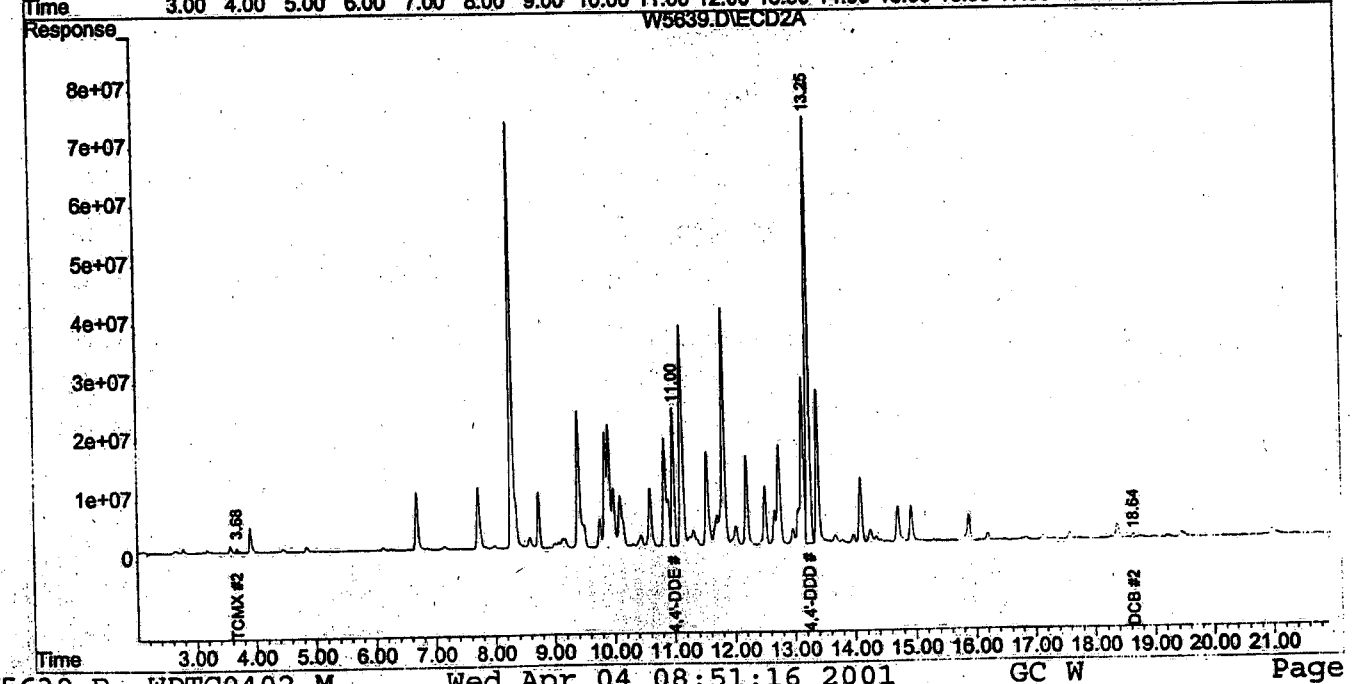
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-03-01\W5639.D\ECD1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\04-03-01\W5639.D\ECD2A.CH
Acq On : 4-3-01 13:23:19 Operator:
Sample : S-23,1922-007DIL,S,30.8g,17.8,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,100 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 9:49 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1755

000217

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5626.D\ECD1B.CH Vial: 37
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5626.D\ECD2A.CH
Acq On : 4-3-01 4:49:49 Operator:
Sample : S-24,1922-008,S,30.0g,21.8,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 16:20 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.68	66212619	30286289	1.467m	1.819m
Spiked Amount 100.000			Recovery	=	1.47%	1.82%
2) S DCB	18.68	18.65	166.5E6	33039429	3.658	2.314m#
Spiked Amount 100.000			Recovery	=	3.66%	2.31%
Target Compounds						
11) T 4,4'-DDE	10.24	10.99	1057.7E6	359.0E6	29.880	30.182
T 4,4'-DDD	11.36	13.25	436.7E6	169.3E6	15.164	16.854
T 4,4'-DDT	12.39	13.68	140.6E6	33112752	5.199	4.181
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

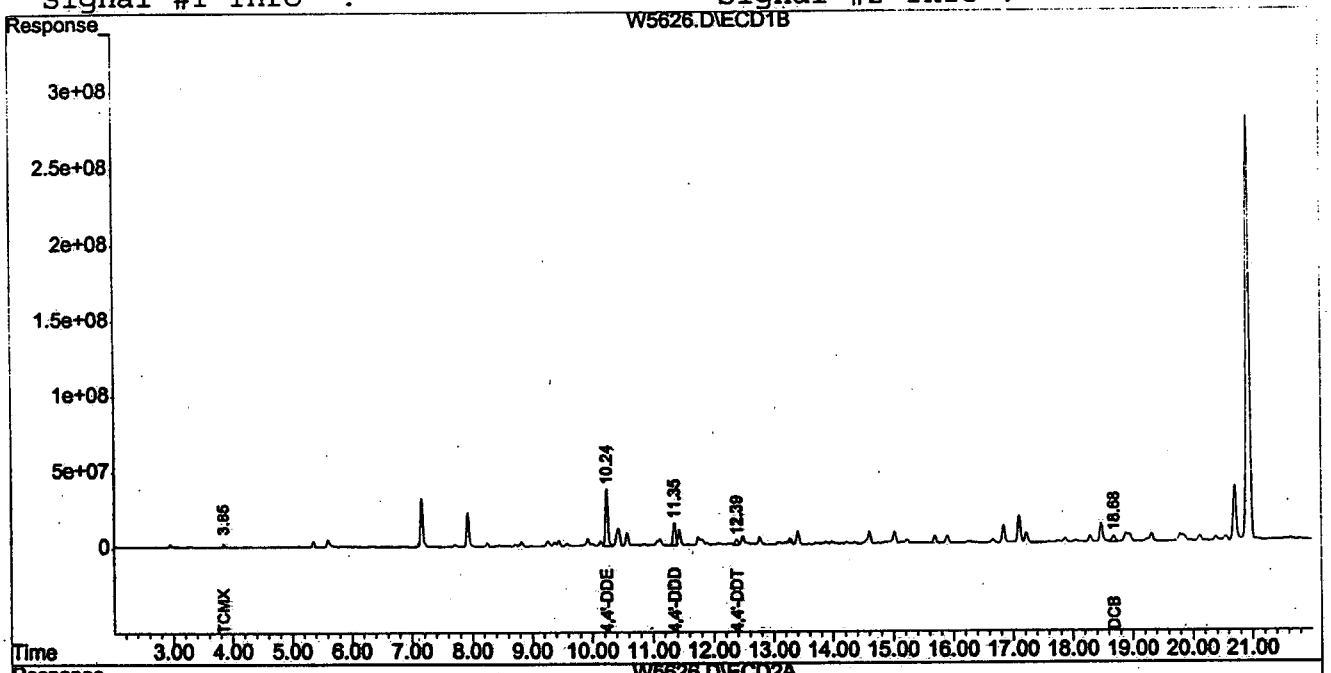
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5626.D WPTC0402.M Wed Apr 04 15:20:44 2001 GC_W Page 1

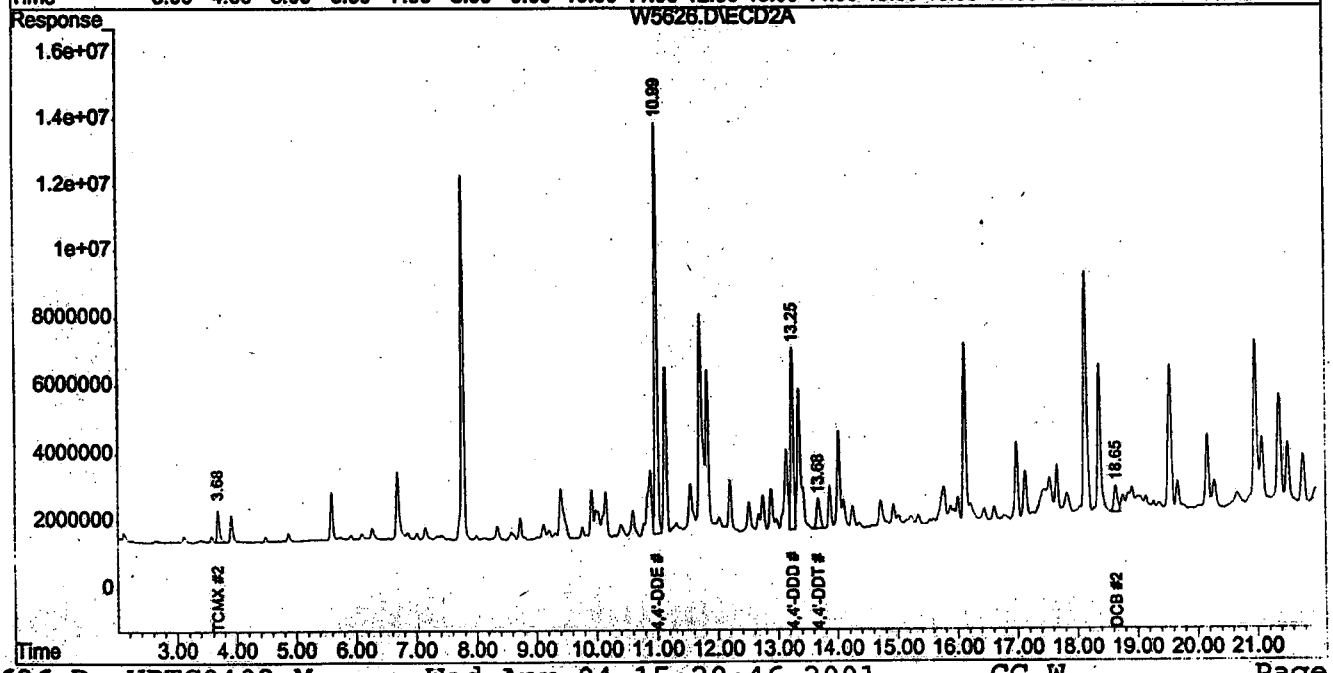
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5626.D\ECD1B.CH Vial: 37
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5626.D\ECD2A.CH
Acq On : 4-3-01 4:49:49 Operator:
Sample : S-24,1922-008,S,30.0g,21.8,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 16:20 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1757

000719

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5627.D\ECD1B.CH Vial: 38
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5627.D\ECD2A.CH
Acq On : 4-3-01 5:14:41 Operator:
Sample : S-25,1922-009,S,30.4g,18.3,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 16:21 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.69	61339040	25363922	1.359	1.524
Spiked Amount 100.000			Recovery	=	1.36%	1.52%
2) S DCB	18.68	18.64	88622400	28155838	1.946m	1.972m
Spiked Amount 100.000			Recovery	=	1.95%	1.97%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

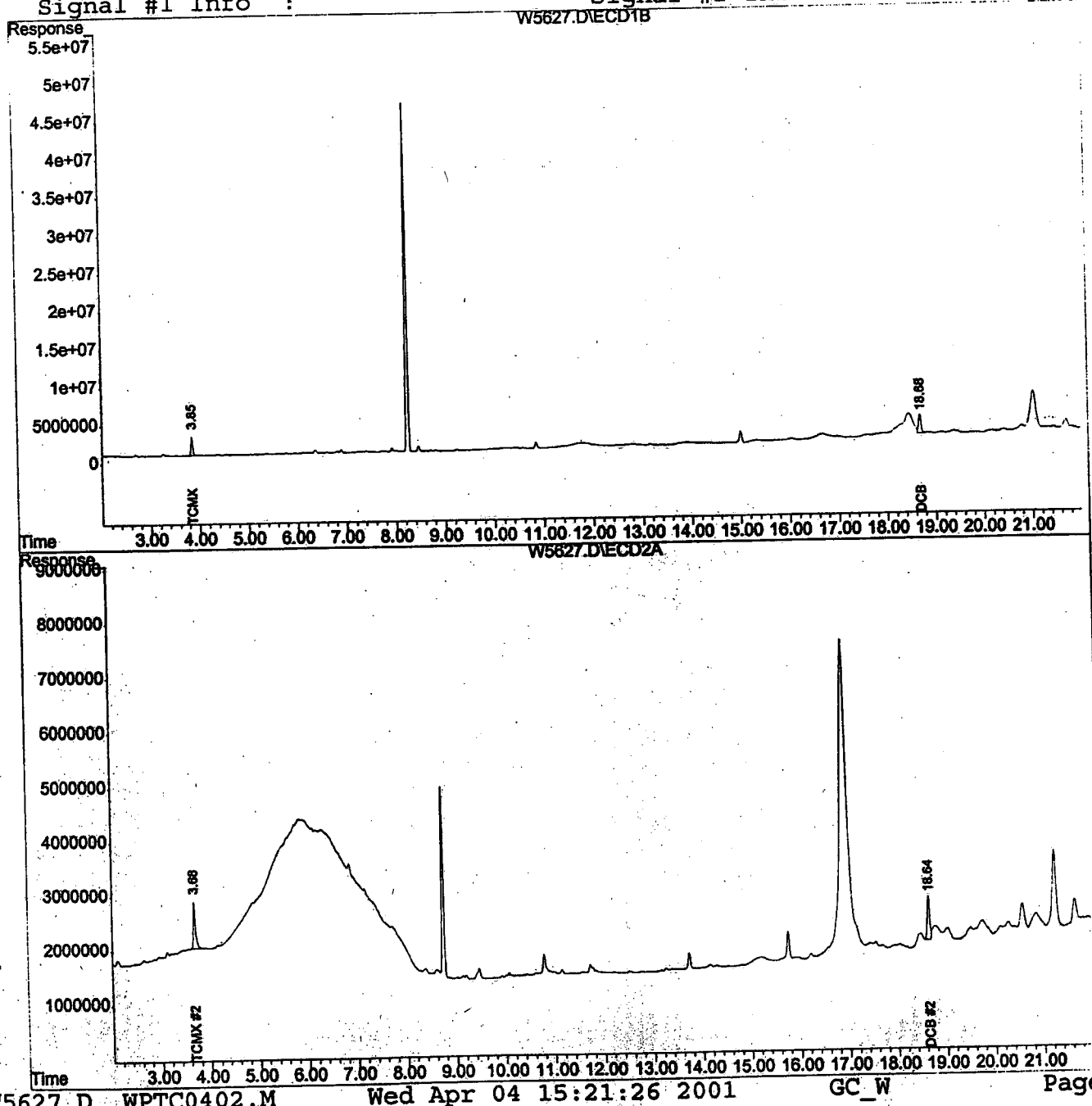
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5627.D WPTC0402.M Wed Apr 04 15:21:25 2001 GC_W Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5627.D\ECD1B.CH Vial: 38
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5627.D\ECD2A.CH
Acq On : 4-3-01 5:14:41 Operator:
Sample : S-25,1922-009,S,30.4g,18.3,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 16:21 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5628.D\ECD1B.CH Vial: 39
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5628.D\ECD2A.CH
Acq On : 4-3-01 5:39:37 Operator:
Sample : S-27,1922-011,S,30.8g,17.0,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 16:27 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.68	77508115	25528732	1.717m	1.534m
Spiked Amount 100.000			Recovery =		1.72%	1.53%
2) S DCB	18.68	18.64	100.2E6	29655000	2.201m	2.077m
Spiked Amount 100.000			Recovery =		2.20%	2.08%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

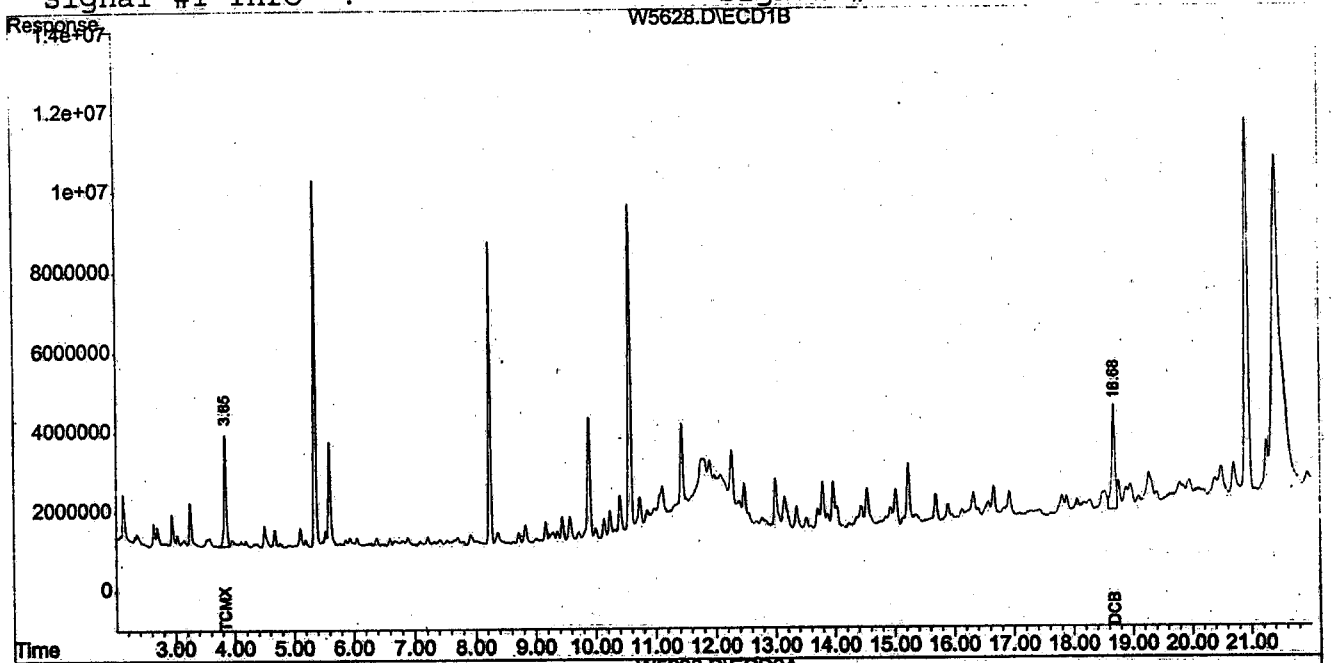
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

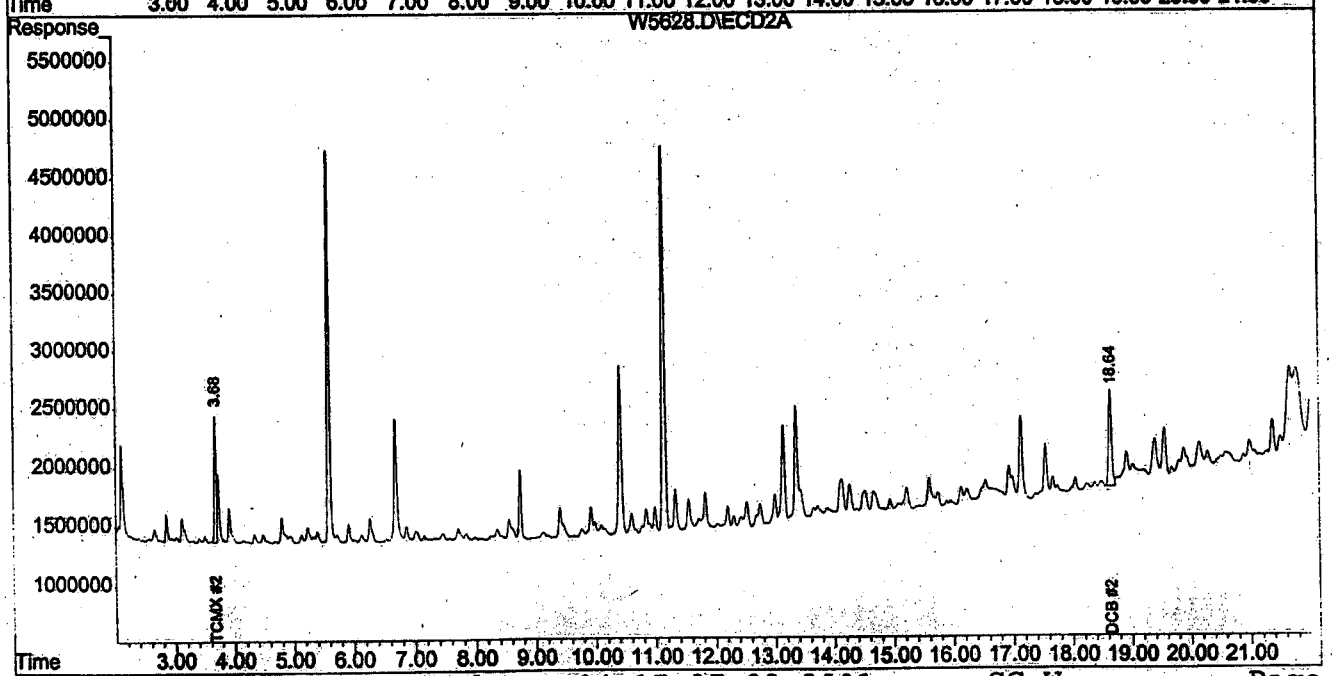
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5628.D\ECD1B.CH Vial: 39
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5628.D\ECD2A.CH
Acq On : 4-3-01 5:39:37 Operator:
Sample : S-27,1922-011,S,30.8g,17.0,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 16:27 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5629.D\ECD1B.CH Vial: 40
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5629.D\ECD2A.CH
Acq On : 4-3-01 6:04:30 Operator:
Sample : S-28,1922-012,S,30.2g,22.7,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 16:26 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.69	60131641	34876117	1.332m	2.095m#
Spiked Amount 100.000			Recovery	=	1.33%	2.10%
2) S DCB	18.69	18.64	104.5E6	63053154	2.295m	4.417m#
Spiked Amount 100.000			Recovery	=	2.29%	4.42%
Target Compounds						
11) T 4,4'-DDE	10.24	11.00	96565231	87785591	2.728m	7.380m#
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

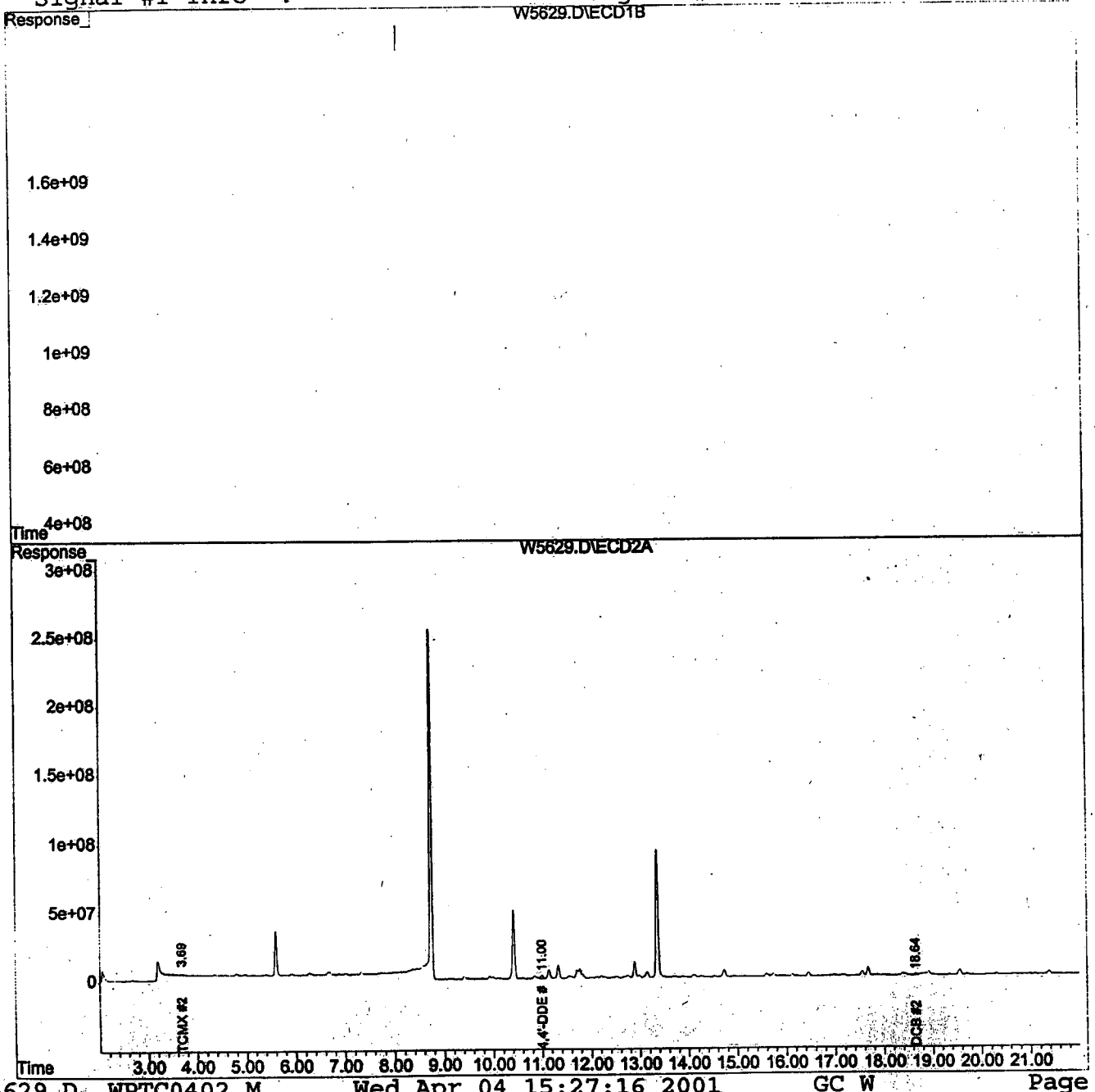
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5629.D\ECD1B.CH Vial: 40
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5629.D\ECD2A.CH
Acq On : 4-3-01 6:04:30 Operator:
Sample : S-28,1922-012,S,30.2g,22.7,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 16:26 2001 Quant Results File: WPTC0402.RES

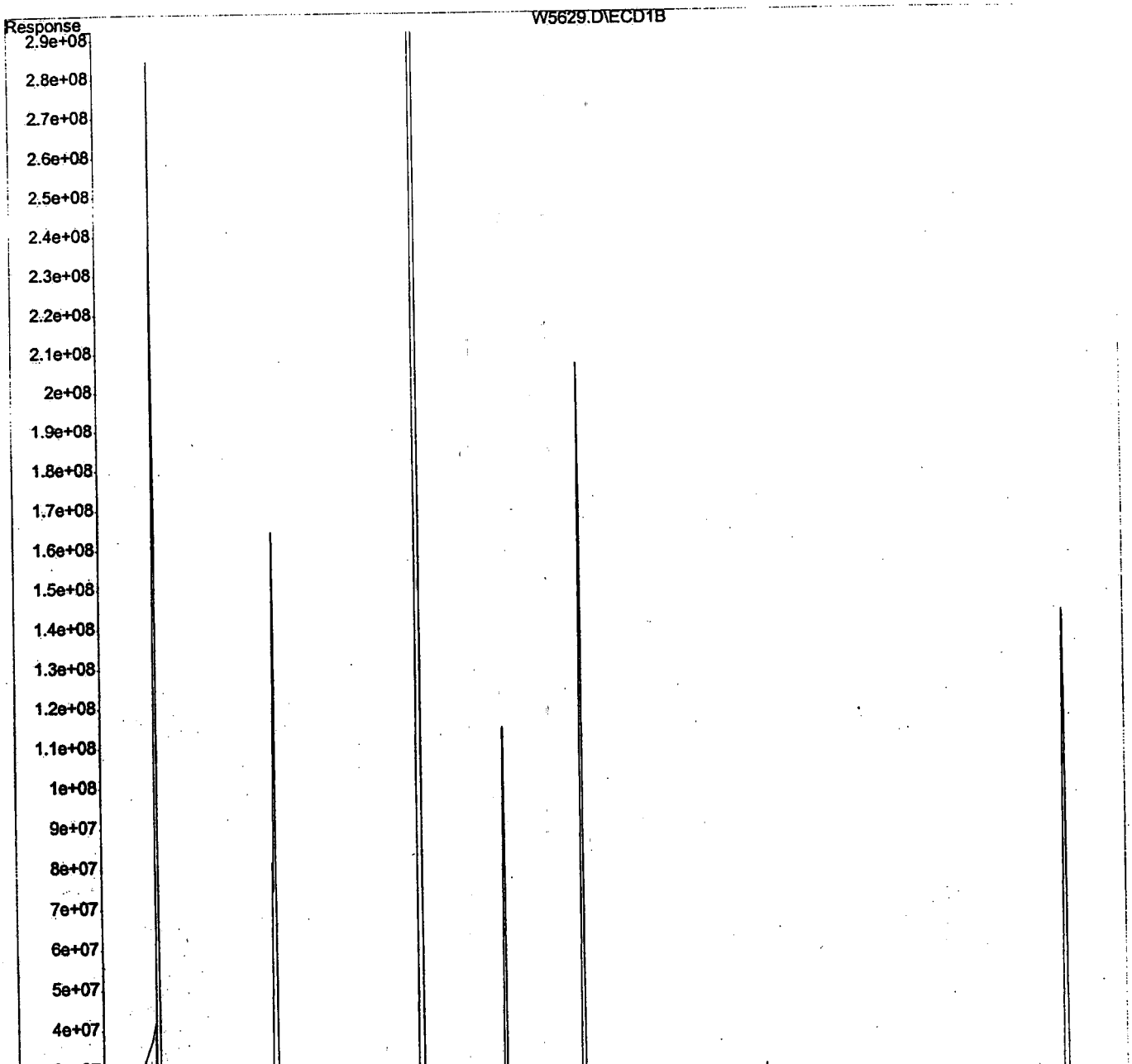
Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



1763

File : C:\HPCHEM\1\DATA\04-02-01\W5629.D
Operator :
Acquired : 4-3-01 6:04:30 using AcqMethod WPTC0402.M
Instrument : GC_W
Sample Name: S-28,1922-012,S,30.2g,22.7,03/30/01
Misc Info : ENVTACT/ORBIS,03/28/01,03/28/01,50
Vial Number: 40



000726

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5630.D\ECD1B.CH Vial: 41
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5630.D\ECD2A.CH
Acq On : 4-3-01 6:29:21 Operator:
Sample : S-29,1922-013,S,30.7g,23.8,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 16:28 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.68	51426963	22076869	1.140	1.326
Spiked Amount 100.000			Recovery	=	1.14%	1.33%
2) S DCB	18.68	18.64	57558219	26287088	1.264m	1.841m#
Spiked Amount 100.000			Recovery	=	1.26%	1.84%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

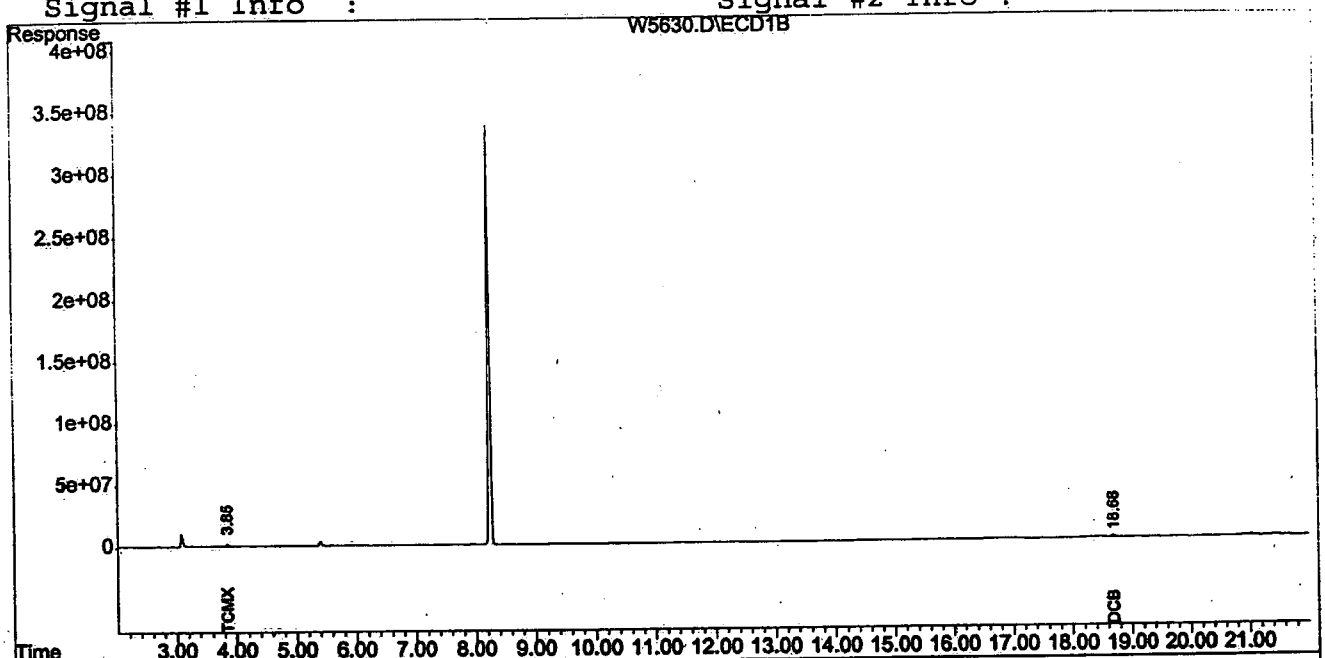
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

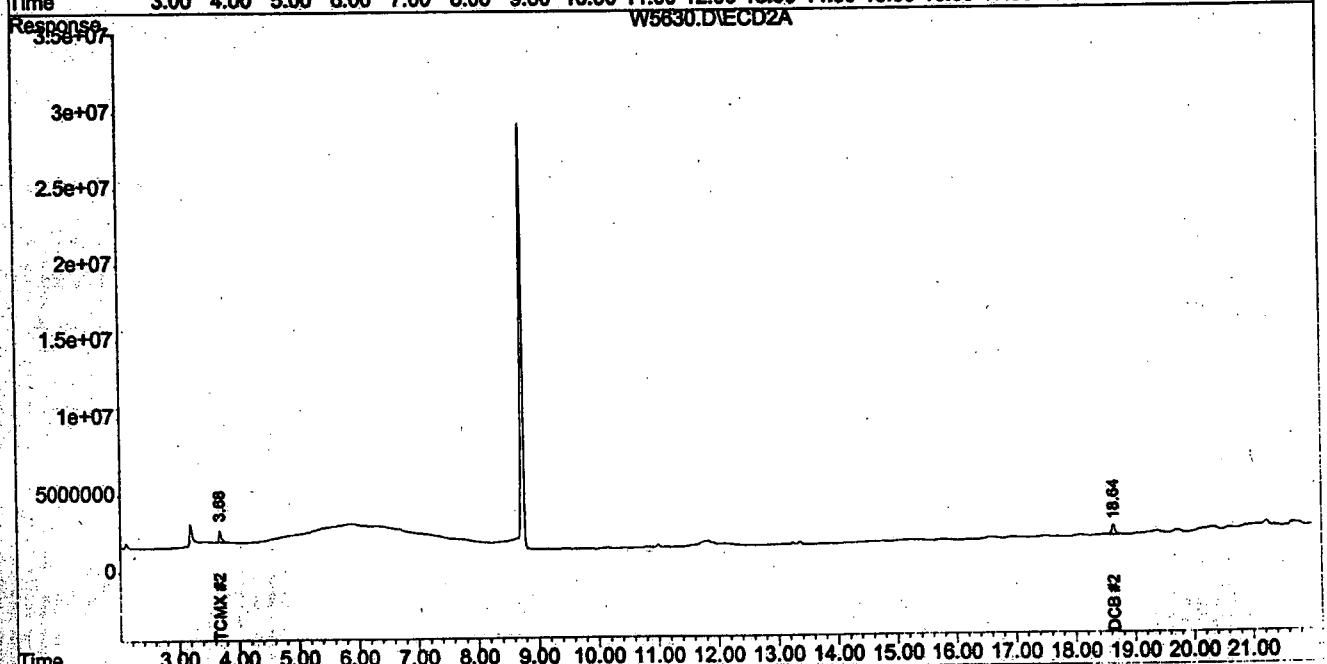
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5630.D\ECD1B.CH Vial: 41
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5630.D\ECD2A.CH
Acq On : 4-3-01 6:29:21 Operator:
Sample : S-29,1922-013,S,30.7g,23.8,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 16:28 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000728

1766

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5631.D\ECD1B.CH Vial: 42
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5631.D\ECD2A.CH
Acq On : 4-3-01 6:54:22 Operator:
Sample : S-30,1922-015,S,30.5g,26.4,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 16:30 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.69	52939445	24783612	1.173m	1.489 #
Spiked Amount 100.000			Recovery	=	1.17%	1.49%
2) S DCB	18.68	18.64	90165335	31019896	1.980m	2.173m
Spiked Amount 100.000			Recovery	=	1.98%	2.17%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

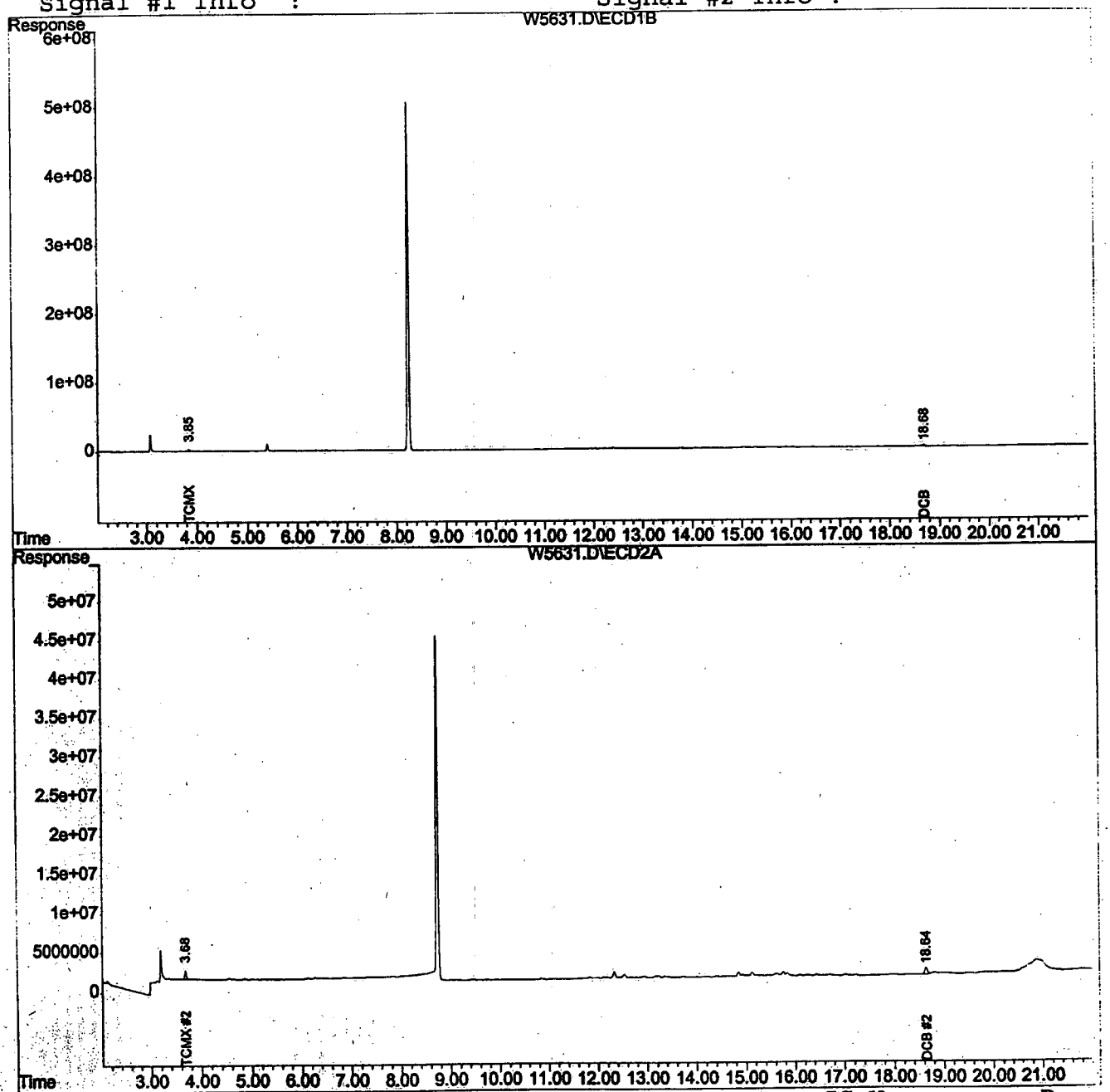
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5631.D WPTC0402.M Wed Apr 04 15:30:40 2001 GC_W Page 1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5631.D\ECD1B.CH Vial: 42
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5631.D\ECD2A.CH
Acq On : 4-3-01 6:54:22 Operator:
Sample : S-30,1922-015,S,30.5g,26.4,03/30/01 Inst : GC_W
Misc : ENVTACT/ORBIS,03/28/01,03/28/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 16:30 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



000730

1768

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5600.D\ECD1B.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5600.D\ECD2A.CH
Acq On : 4-2-01 18:02:11 Operator:
Sample : (1922.1929),0330-BK2,S,30.0g,0.0,03/30/0 Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 9:43 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.69	4090.8E6	1448.0E6	90.645	86.981
Spiked Amount 100.000			Recovery =		90.64%	86.98%
2) S DCB	18.68	18.65	3779.1E6	1159.9E6	83.001	81.249
Spiked Amount 100.000			Recovery =		83.00%	81.25%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5600.D WPTC0402.M Tue Apr 03 09:11:45 2001 GC_W

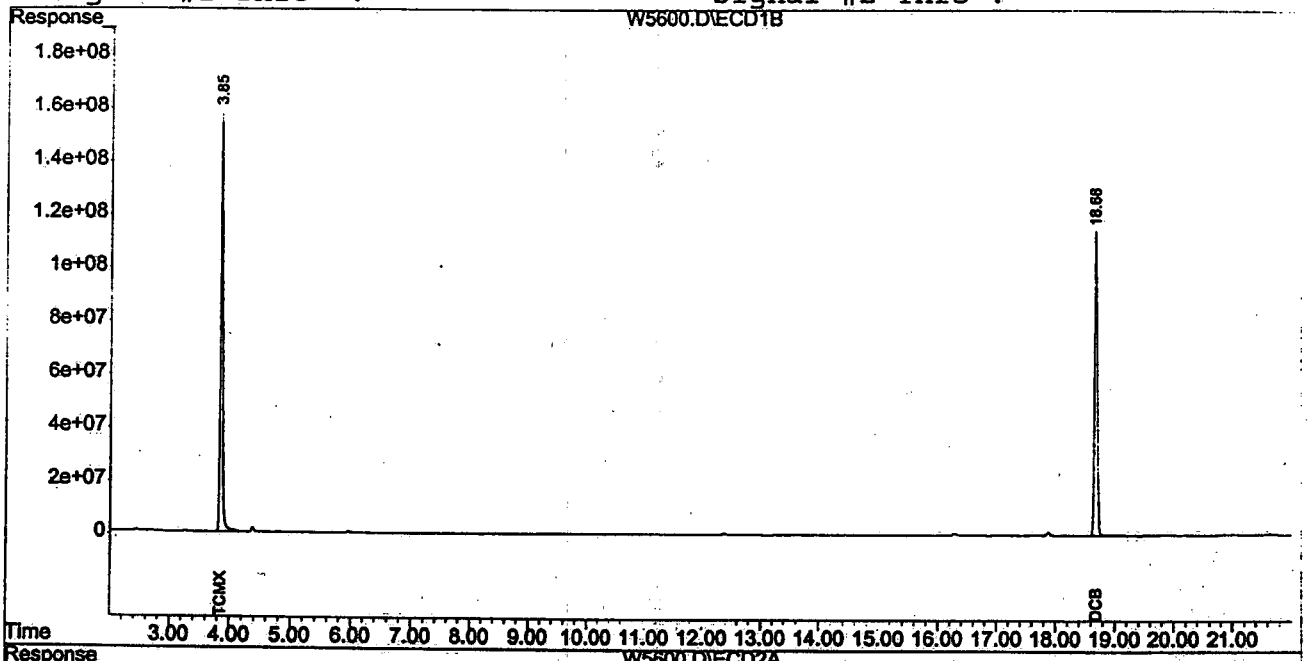
1769

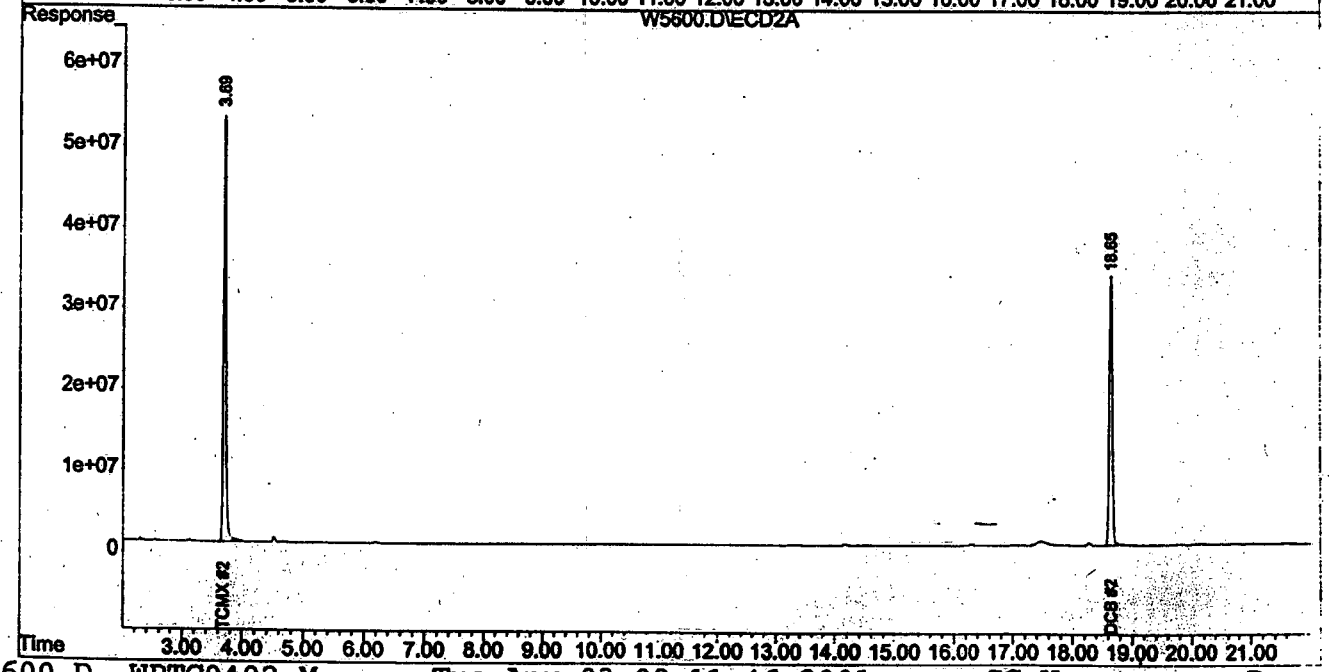
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5600.D\ECD1B.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5600.D\ECD2A.CH
Acq On : 4-2-01 18:02:11 Operator:
Sample : (1922.1929),0330-BK2,S,30.0g,0.0,03/30/0 Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 9:43 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1770

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5623.D\ECD1B.CH Vial: 34
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5623.D\ECD2A.CH
Acq On : 4-3-01 3:35:08 Operator:
Sample : (1922.1929),0330-BK2,S,30.0g,0.0,03/30/0 Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:18 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.69	4243.8E6	1566.4E6	94.037	94.097
Spiked Amount 100.000			Recovery	=	94.04%	94.10%
2) S DCB	18.68	18.64	4071.1E6	1278.0E6	89.414	89.517
Spiked Amount 100.000			Recovery	=	89.41%	89.52%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

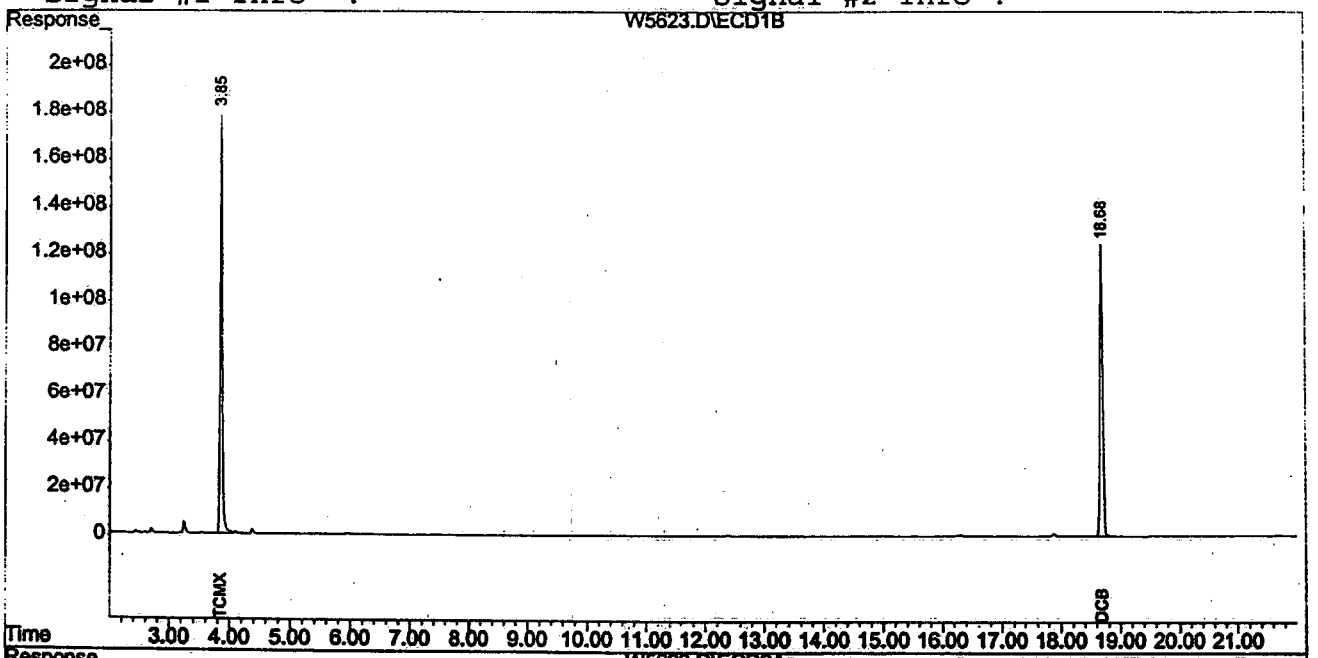
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5623.D WPTC0402.M Wed Apr 04 15:19:06 2001 GC_W Page 1

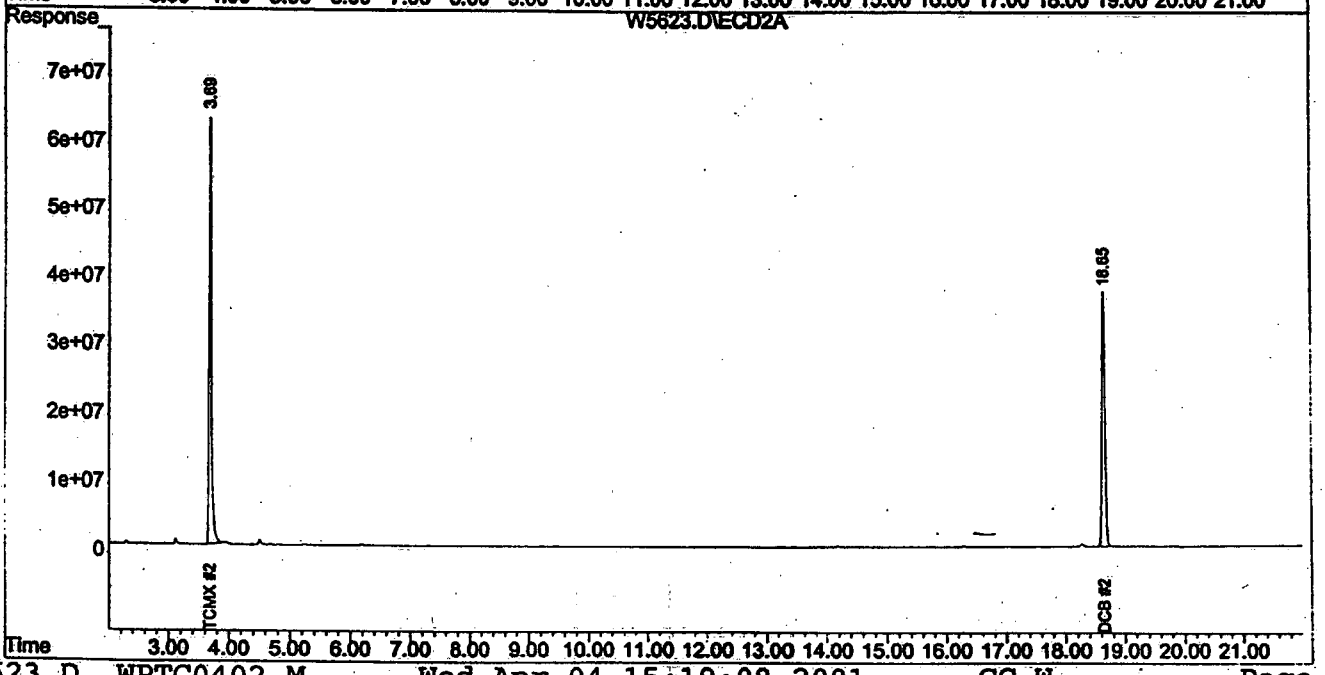
000733

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5623.D\ECD1B.CH Vial: 34
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5623.D\ECD2A.CH
Acq On : 4-3-01 3:35:08 Operator:
Sample : (1922.1929),0330-BK2,S,30.0g,0.0,03/30/0 Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:18 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1772

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-03-01\W5638.D\ECD1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\04-03-01\W5638.D\ECD2A.CH
Acq On : 4-3-01 12:58:13 Operator:
Sample : (1922.1929),0330-BK2,S,30.0g,0.0,03/30/0 Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 9:45 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.84	3.69	4256.3E6	1611.0E6	94.312	96.775
Spiked Amount 100.000			Recovery =		94.31%	96.78%
2) S DCB	18.68	18.65	3948.6E6	1335.1E6	86.724	93.515
Spiked Amount 100.000			Recovery =		86.72%	93.52%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

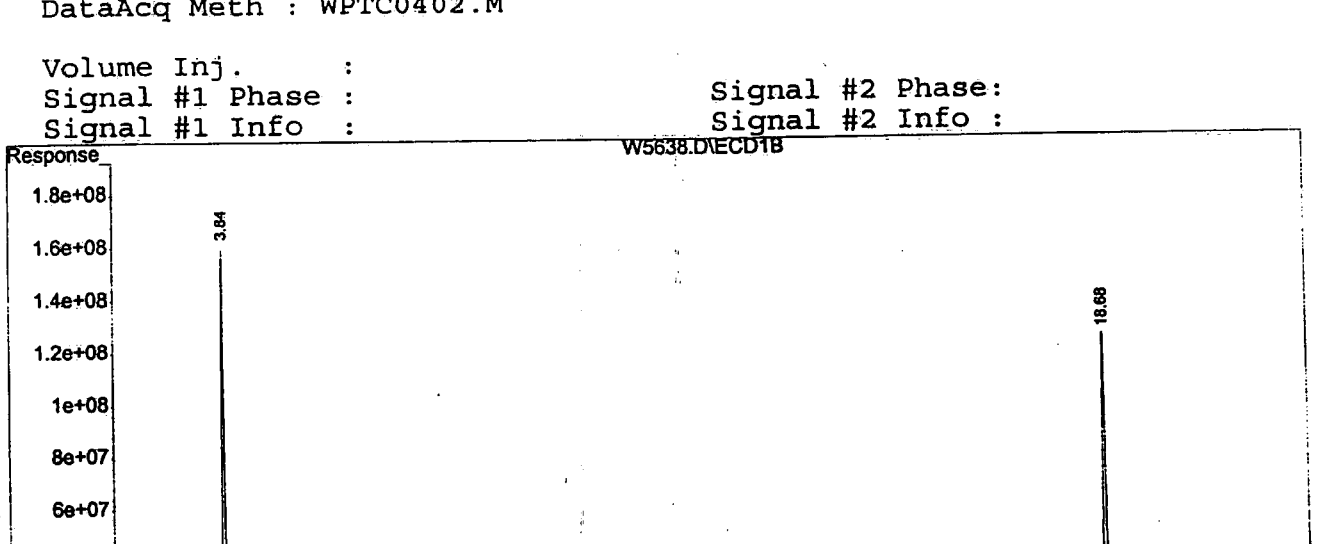
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5638.D WPTC0402.M Wed Apr 04 11:09:14 2001 GC_W Page 1

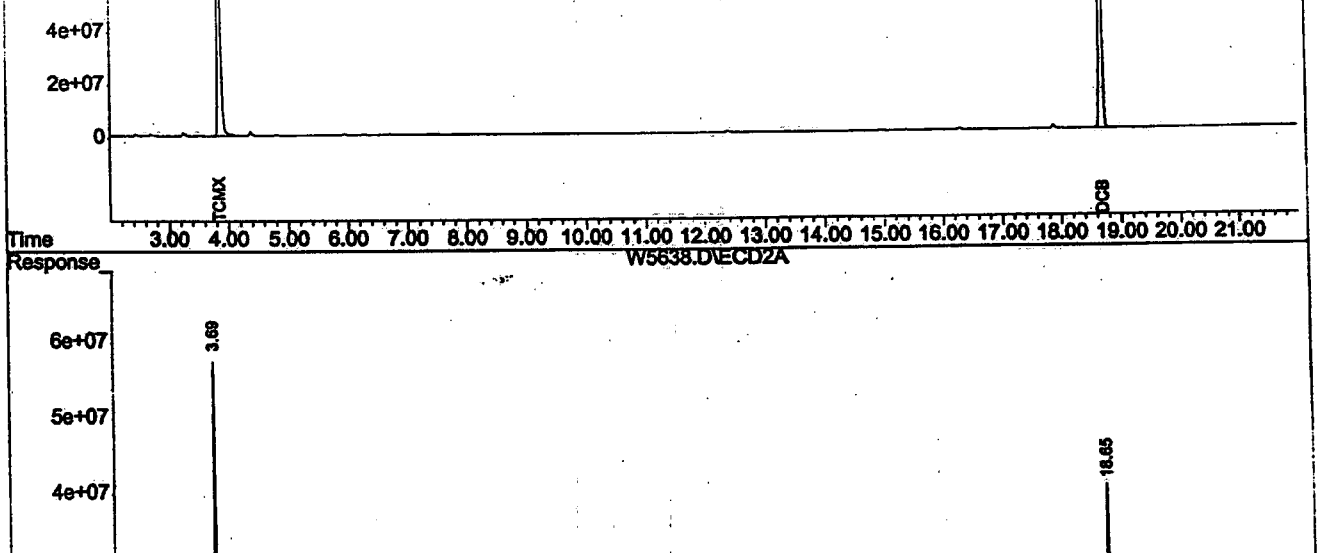
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-03-01\W5638.D\ECD1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\04-03-01\W5638.D\ECD2A.CH
Acq On : 4-3-01 12:58:13 Operator:
Sample : (1922.1929),0330-BK2,S,30.0g,0.0,03/30/0 Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 9:45 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1774

000736

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\04-02-01\W5593.D\ECD1B.CH Vial: 4
Acq On : 4-2-01 15:02:23 Operator:
Sample : PEST_L3_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\04-02-01\W5593.D\ECD2A.CH Vial: 4
Acq On : 4-2-01 15:02:23 Operator:
Sample : PEST_L3_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 2 15:48 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 14:48:07 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0327.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
	System Monitoring Compounds							
1) S	TCMX	3.86	3.69	4610.8E6	1694.0E6	103.313	90.067	
Spiked Amount	100.000			Recovery	=	103.31%	90.07%	
2) S	DCB	18.69	18.65	4567.4E6	1406.1E6	104.410	87.240	
Spiked Amount	100.000			Recovery	=	104.41%	87.24%	
	Target Compounds							
3) T	alpha-BHC	4.53	5.58	4859.9E6	1654.9E6	106.616	92.487	
4) T	beta-BHC	5.02	8.65	1778.9E6	660.0E6	104.556	88.040	
5) T	gamma-BHC	5.15	6.54	4180.3E6	1509.8E6	106.594	92.197	
6) T	delta-BHC	5.63	9.21	4479.2E6	1448.1E6	107.210	92.452	
7) T	Heptachlor	6.73	7.02	3936.4E6	1255.6E6	110.368	96.468	
8) T	Aldrin	7.55	7.69	4177.1E6	1386.2E6	107.270	91.647	
9) T	Heptachlor epoxi	8.56	9.54	3657.9E6	1250.4E6	105.954	89.758	
10) T	Endosulfan I	9.47	10.22	3405.9E6	1172.1E6	105.850	90.166	
11) T	4,4'-DDE	10.24	11.00	3694.5E6	1235.3E6	107.724	91.141	
12) T	Dieldrin	10.17	11.26	3729.6E6	1281.3E6	107.798	91.022	
13) T	Endrin	10.72	11.79	3527.4E6	1233.7E6	113.397	95.965	
14) T	Endosulfan II	10.97	13.23	3148.4E6	2071.0E6	105.448	178.584	#
15) T	4,4'-DDD	11.36	13.23	2994.1E6	2071.0E6	106.823	178.584	#
16) T	Endrin aldehyde	11.50	14.38	2163.0E6	798.9E6	109.192	94.524	
17) T	Endosulfan sulfa	12.15	15.28	2837.3E6	961.6E6	106.482	89.991	
18) T	4,4'-DDT	12.38	13.69	2818.2E6	829.7E6	119.798	100.770	
19) T	Endrin ketone	13.36	16.30	3316.6E6	1091.3E6	101.174	86.459	
20) T	Methoxychlor	14.06	15.55	1319.4E6	443.6E6	123.271	100.165	
21) T	alpha-Chlordane	9.58	10.62	3733.1E6	1251.7E6	106.040	90.154	
22) T	gamma-Chlordane	9.17	10.46	3927.1E6	1290.3E6	106.879	90.837	
	Sum Chlordane			0	0	N.D.	N.D.	
Average Chlordane						0.000	0.000	
	Sum Toxaphene			0	0	N.D.	N.D.	
Average Toxaphene						0.000	0.000	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1775

000737

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\04-02-01\W5593.D\ECD1B.CH Vial: 4
Acq On : 4-2-01 15:02:23 Operator:
Sample : PEST_L3_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\04-02-01\W5593.D\ECD2A.CH Vial: 4
Acq On : 4-2-01 15:02:23 Operator:
Sample : PEST_L3_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 2 15:48 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 14:48:07 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0327.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

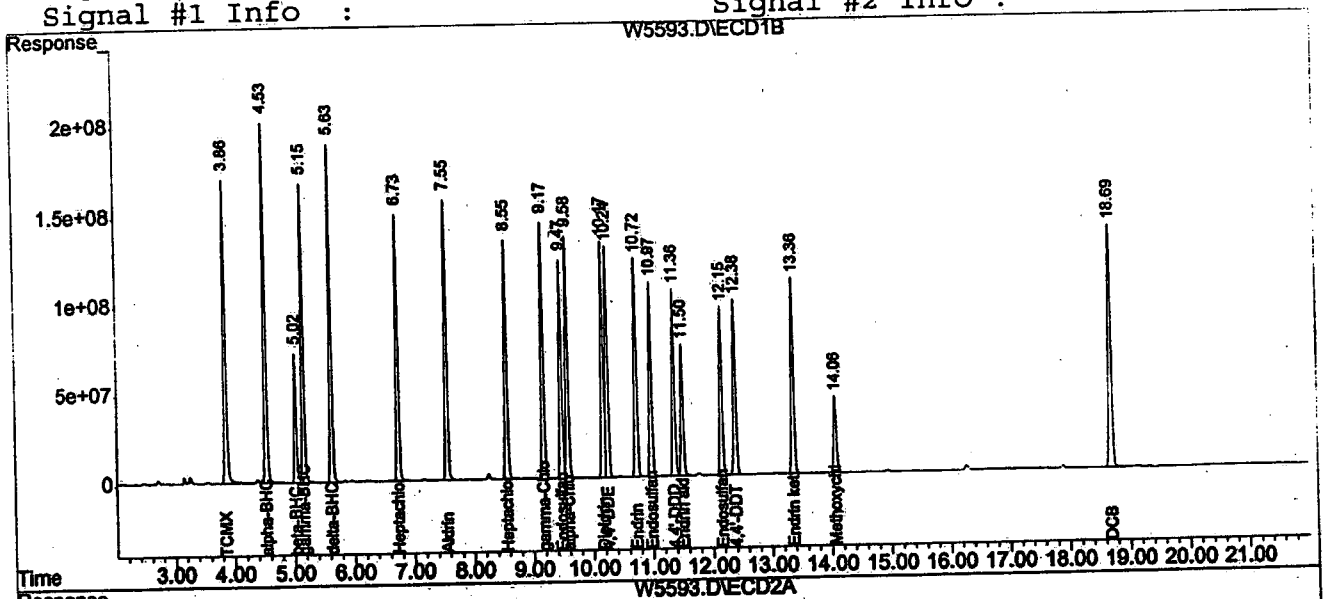
Quantitation Report (QT Reviewed)

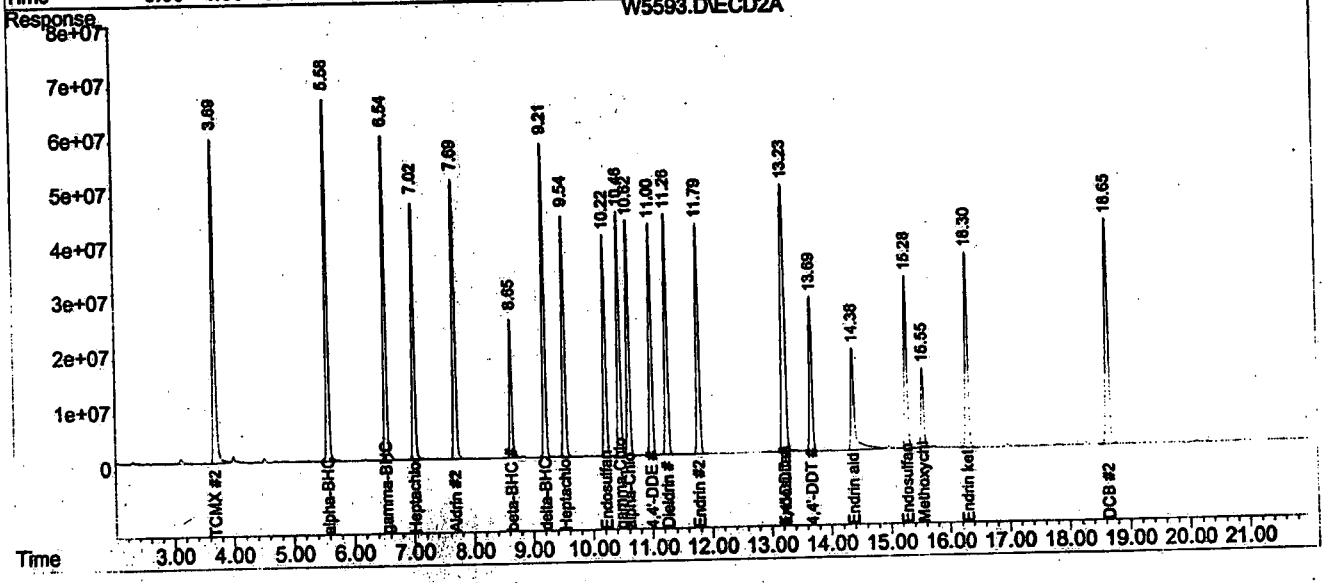
Data File : C:\HPCHEM\1\DATA\04-02-01\W5593.D\ECD1B.CH Vial: 4
Acq On : 4-2-01 15:02:23 Operator:
Sample : PEST_L3_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\04-02-01\W5593.D\ECD2A.CH Vial: 4
Acq On : 4-2-01 15:02:23 Operator:
Sample : PEST_L3_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 2 15:48 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 14:48:07 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0327.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





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1777

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5617.D\ECD1B.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5617.D\ECD2A.CH
Acq On : 4-3-01 1:05:43 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:09 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
	System Monitoring Compounds							
1) S	TCMX	3.85	3.69	4714.1E6	1747.7E6	104.457	104.986	
Spiked Amount	100.000			Recovery	=	104.46%	104.99%	
2) S	DCB	18.68	18.64	4493.8E6	1443.4E6	98.700	101.106	
Spiked Amount	100.000			Recovery	=	98.70%	101.11%	
	Target Compounds							
3) T	alpha-BHC	4.52	5.58	5034.7E6	1711.1E6	107.579	108.074	
4) T	beta-BHC	5.02	8.64	1822.3E6	688.9E6	104.234	104.209	
5) T	gamma-BHC	5.15	6.54	4274.8E6	1585.7E6	106.339	109.140	
6) T	delta-BHC	5.62	9.21	4628.0E6	1524.0E6	107.645	109.706	
7) T	Heptachlor	6.73	7.01	3926.7E6	1283.9E6	104.726	105.367	
8) T	Aldrin	7.54	7.69	4319.9E6	1453.6E6	107.658	108.564	
9) T	Heptachlor epoxi	8.55	9.54	3785.8E6	1313.5E6	107.184	107.318	
10) T	Endosulfan I	9.47	10.22	3522.0E6	1232.3E6	107.019	107.687	
11) T	4,4'-DDE	10.24	10.99	3805.6E6	1300.2E6	107.509	109.312	
12) T	Dieldrin	10.17	11.26	3839.2E6	1351.9E6	107.484	108.875	
13) T	Endrin	10.72	11.78	3627.2E6	1288.1E6	105.973	107.467	
14) T	Endosulfan II	10.97	13.23	3237.3E6	2189.0E6	105.741	217.912	#
15) T	4,4'-DDD	11.36	13.23	3094.9E6	2189.0E6	107.479	217.912	#
16) T	Endrin aldehyde	11.50	14.37	2292.4E6	852.7E6	108.268	107.444	
17) T	Endosulfan sulfa	12.15	15.27	2932.0E6	1013.5E6	106.054	106.858	
18) T	4,4'-DDT	12.38	13.68	2848.6E6	876.5E6	105.363	110.663	
19) T	Endrin ketone	13.36	16.30	3451.3E6	1161.6E6	105.806	108.455	
20) T	Methoxychlor	14.06	15.55	1332.3E6	457.6E6	102.972	104.351	
21) T	alpha-Chlordane	9.58	10.61	3855.2E6	1321.4E6	106.691	108.112	
22) T	gamma-Chlordane	9.17	10.46	4057.8E6	1363.1E6	107.519	108.694	
Sum	Chlordane			0	0	N.D.	N.D.	
Average	Chlordane					0.000	0.000	
Sum	Toxaphene			0	0	N.D.	N.D.	
Average	Toxaphene					0.000	0.000	

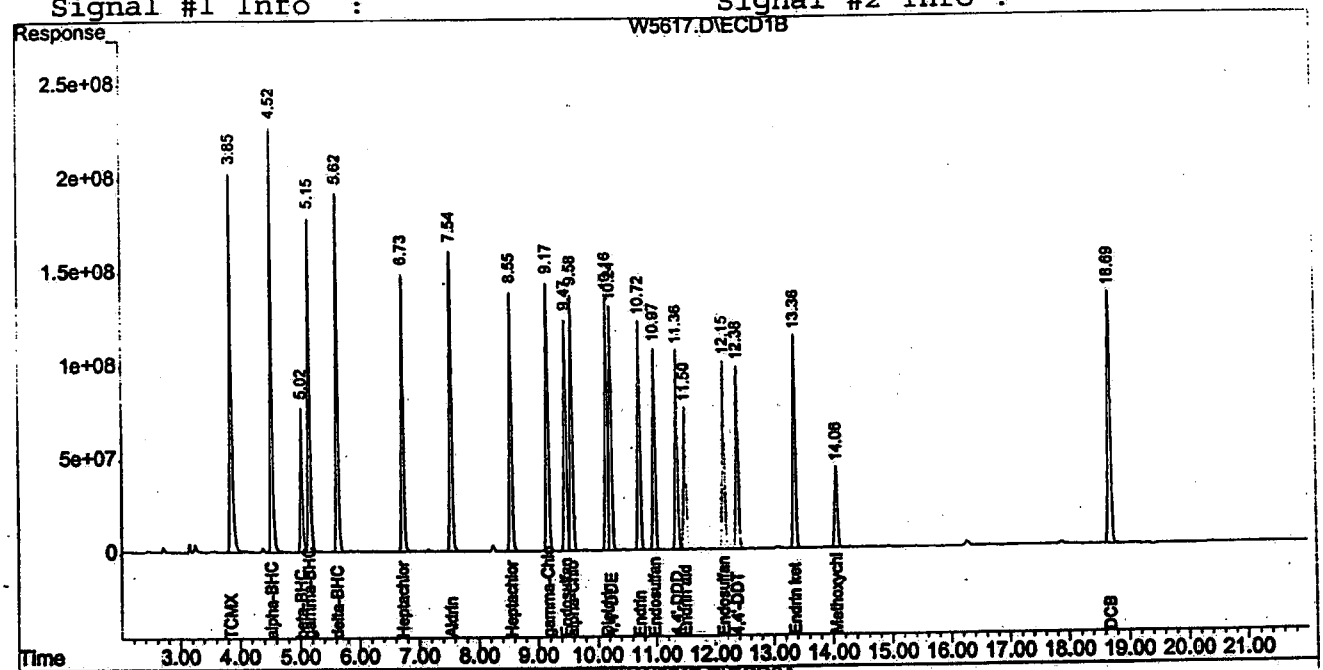
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

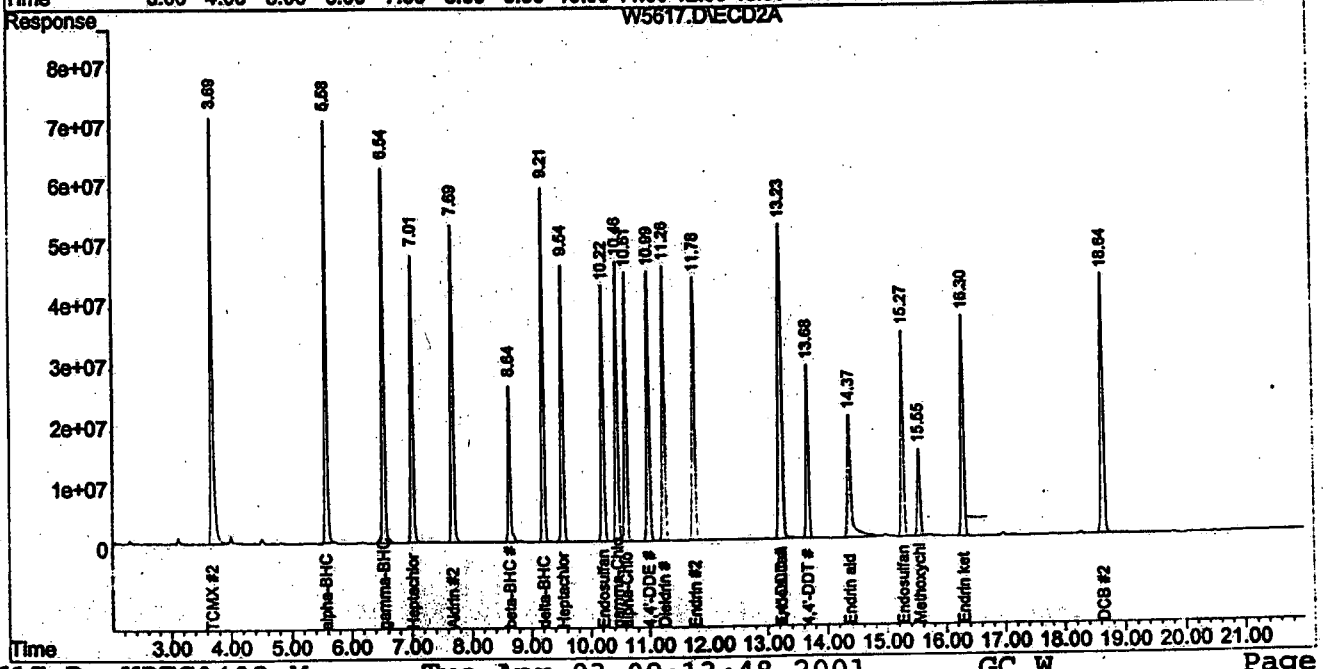
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5617.D\ECD1B.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5617.D\ECD2A.CH
Acq On : 4-3-01 1:05:43 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:09 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1779

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5596.D\ECD1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5596.D\ECD2A.CH
Acq On : 4-2-01 16:17:12 Operator:
Sample : TOX_IAS_1436,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 16:55 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 15:55:27 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0327.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.69	4713.6E6	1701.4E6	103.973	102.116
Spiked Amount 100.000			Recovery	=	103.97%	102.12%
2) S DCB	18.68	18.65	4362.0E6	1342.6E6	96.676	94.890
Spiked Amount 100.000			Recovery	=	96.68%	94.89%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
2. L2 Toxaphene	13.17	14.02	345.3E6	107.2E6	500.000	500.000
29) L2 Toxaphene {2}	13.30	14.75	278.5E6	101.3E6	500.000	500.000
30) L2 Toxaphene {3}	13.58	15.01	265.1E6	72451126	500.000	500.000
31) L2 Toxaphene {4}	14.04	15.21	287.0E6	59237896	500.000	500.000
32) L2 Toxaphene {5}	14.55	15.66	413.3E6	91488860	500.000	500.000
Sum Toxaphene			1589.3E6	431.7E6	2500.000	2500.000
Average Toxaphene					500.000	500.000

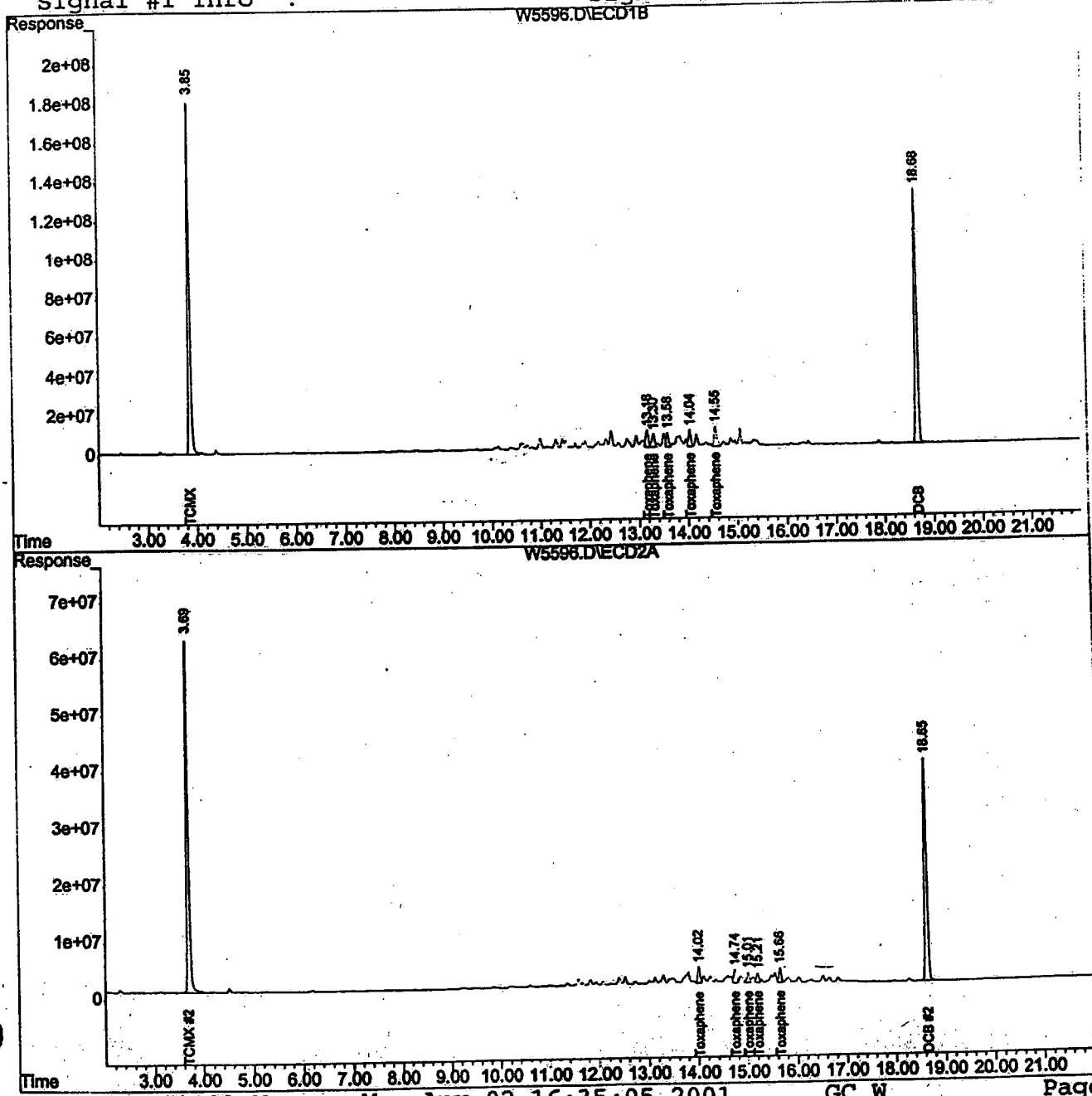
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5596.D\ECD1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5596.D\ECD2A.CH
Acq On : 4-2-01 16:17:12 Operator:
Sample : TOX_IAS_1436,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 16:55 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 15:55:27 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0327.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



1781

000743

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5597.D\ECD1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5597.D\ECD2A.CH
Acq On : 4-2-01 16:42:04 Operator:
Sample : CHLOR_IAS_1437,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 17:06 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:06:12 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0327.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1)	S TCMX	3.86	3.69	4338.7E6	1581.6E6	82.616	82.287
	Spiked Amount 100.000			Recovery	=	82.62%	82.29%
2)	S DCB	18.69	18.65	4127.9E6	1263.1E6	79.850	78.400
	Spiked Amount 100.000			Recovery	=	79.85%	78.40%
	Target Compounds						
3)	L1 Chlordane	9.17	8.38	1938.9E6	138.3E6	500.000	500.000
4)	L1 Chlordane {2}	9.37	10.06	357.6E6	147.6E6	500.000	500.000
5)	L1 Chlordane {3}	9.58	10.46	1848.0E6	642.9E6	500.000	500.000
6)	L1 Chlordane {4}	9.72	10.62	860.4E6	586.4E6	500.000	500.000
7)	L1 Chlordane {5}	11.57	10.67	606.7E6	276.3E6	500.000	500.000
	Sum Chlordane			5611.6E6	1791.5E6	2500.000	2500.000
	Average Chlordane					500.000	500.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

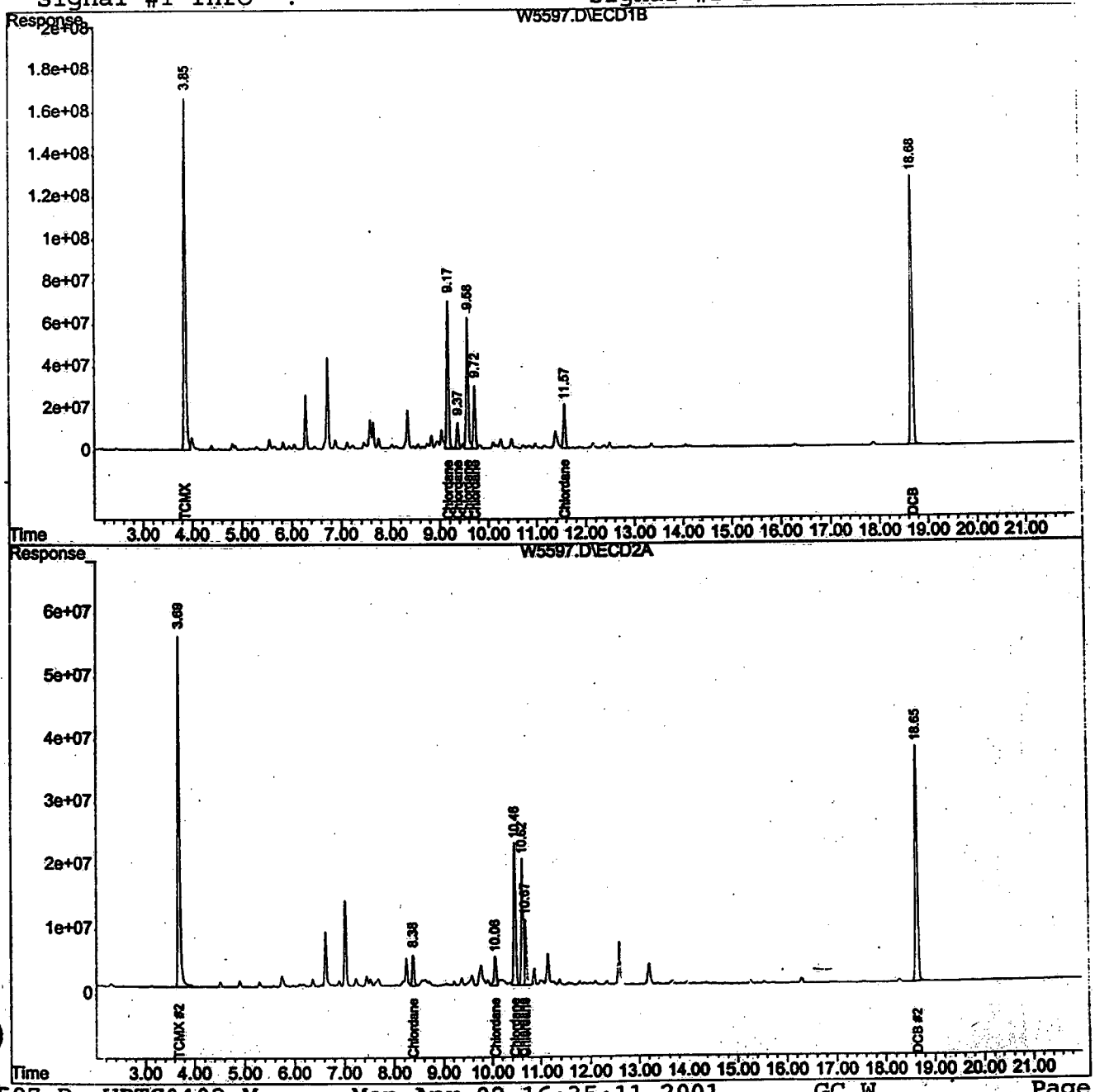
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5597.D\ECD1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5597.D\ECD2A.CH
Acq On : 4-2-01 16:42:04 Operator:
Sample : CHLOR_IAS_1437,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 17:06 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:06:12 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0327.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



000743

1783

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5620.D\ECD1B.CH Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5620.D\ECD2A.CH
Acq On : 4-3-01 2:20:23 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:14 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
	System Monitoring Compounds							
1)	S TCMX	3.85	3.69	4720.9E6	1746.0E6	104.607	104.884	
	Spiked Amount 100.000			Recovery	=	104.61%	104.88%	
2)	S DCB	18.68	18.64	4635.9E6	1468.7E6	101.821	102.873	
	Spiked Amount 100.000			Recovery	=	101.82%	102.87%	
	Target Compounds							
3)	T alpha-BHC	4.53	5.58	4969.7E6	1713.3E6	106.191	108.209	
4)	T beta-BHC	5.02	8.64	1817.1E6	686.4E6	103.936	103.831	
5)	T gamma-BHC	5.15	6.54	4277.2E6	1565.7E6	106.400	107.765	
6)	T delta-BHC	5.63	9.21	4563.3E6	1498.0E6	106.141	107.836	
7)	T Heptachlor	6.73	7.02	3905.9E6	1273.1E6	104.172	104.479	
8)	T Aldrin	7.55	7.69	4288.5E6	1440.4E6	106.875	107.578	
9)	T Heptachlor epoxi	8.56	9.54	3776.0E6	1303.1E6	106.908	106.469	
10)	T Endosulfan I	9.47	10.22	3514.4E6	1225.6E6	106.785	107.103	
11)	T 4,4'-DDE	10.24	10.99	3792.7E6	1293.0E6	107.143	108.703	
12)	T Dieldrin	10.17	11.26	3833.6E6	1341.2E6	107.326	108.010	
13)	T Endrin	10.72	11.78	3589.6E6	1269.7E6	104.876	105.936	
14)	T Endosulfan II	10.97	13.23	3223.8E6	2183.6E6	105.300	217.380	#
15)	T 4,4'-DDD	11.36	13.23	3113.1E6	2183.6E6	108.111	217.380	#
16)	T Endrin aldehyde	11.50	14.37	2258.6E6	850.2E6	106.671	107.134	
17)	T Endosulfan sulfa	12.15	15.27	2916.1E6	1001.0E6	105.479	105.543	
18)	T 4,4'-DDT	12.38	13.68	2823.3E6	867.5E6	104.429	109.528	
19)	T Endrin ketone	13.36	16.30	3470.8E6	1162.7E6	106.403	108.556	
20)	T Methoxychlor	14.06	15.55	1318.0E6	456.5E6	101.870	104.090	
21)	T alpha-Chlordane	9.58	10.62	3851.8E6	1311.2E6	106.597	107.281	
22)	T gamma-Chlordane	9.17	10.46	4048.9E6	1352.2E6	107.283	107.825	
	Sum Chlordane			0	0	N.D.	N.D.	
	Average Chlordane					0.000	0.000	
	Sum Toxaphene			0	0	N.D.	N.D.	
	Average Toxaphene					0.000	0.000	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

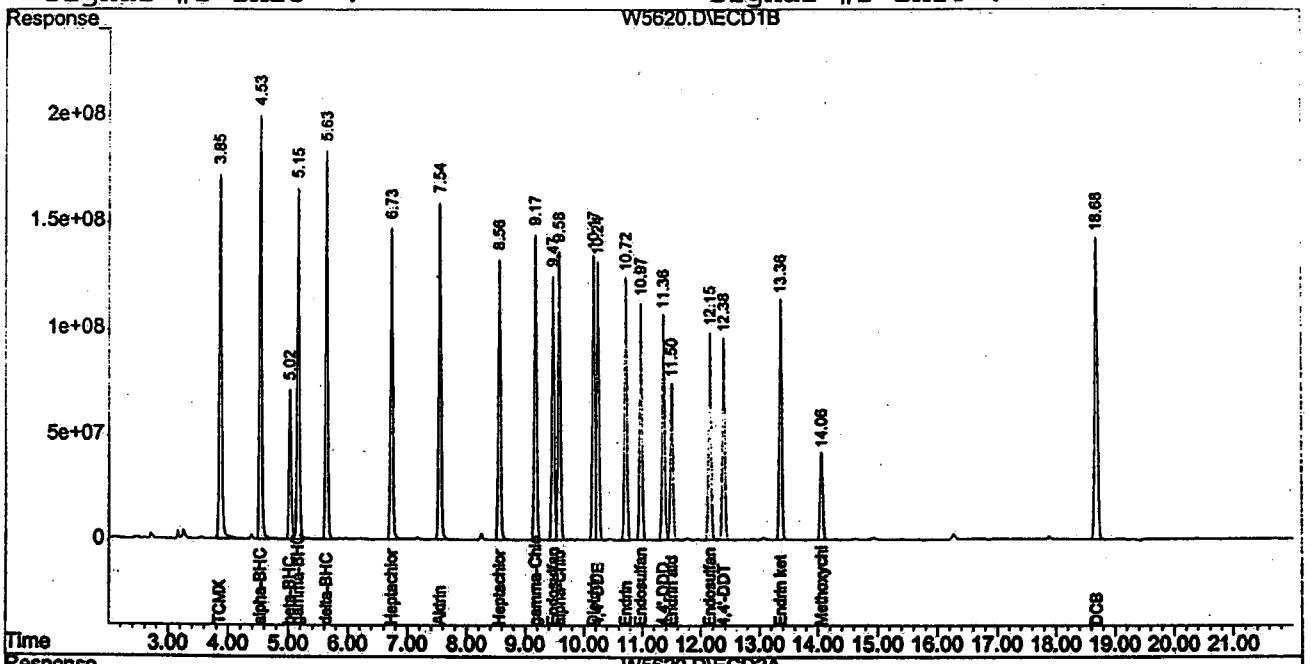
1784

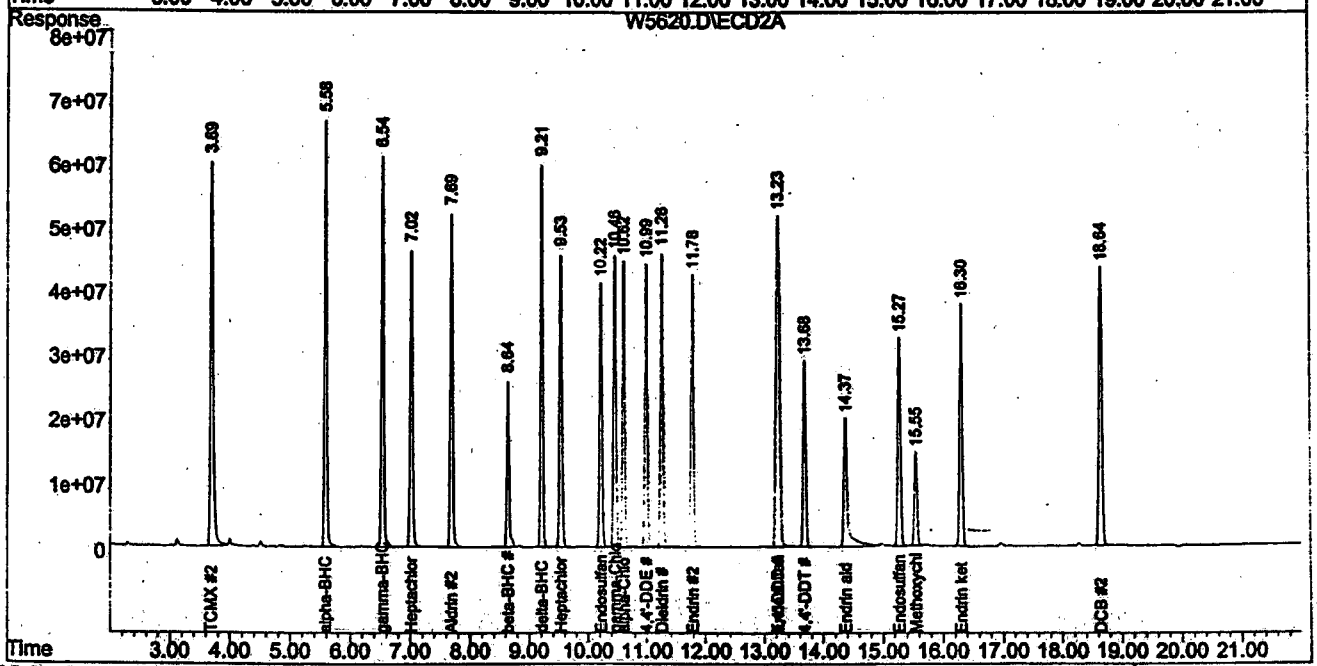
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5620.D\ECD1B.CH Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5620.D\ECD2A.CH
Acq On : 4-3-01 2:20:23 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:14 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1785

000747

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5632.D\ECD1B.CH Vial: 43
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5632.D\ECD2A.CH
Acq On : 4-3-01 7:19:17 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:17 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
	System Monitoring Compounds							
1) S	TCMX	3.85	3.69	4810.4E6	1750.5E6	106.590	105.158	
Spiked Amount	100.000			Recovery	=	106.59%	105.16%	
2) S	DCB	18.68	18.64	4388.4E6	1469.7E6	96.383	102.949	
Spiked Amount	100.000			Recovery	=	96.38%	102.95%	
	Target Compounds							
3) T	alpha-BHC	4.52	5.58	5164.6E6	1763.1E6	110.355	111.358	
4) T	beta-BHC	5.02	8.64	1863.3E6	712.1E6	106.577	107.726	
5) T	gamma-BHC	5.15	6.54	4330.0E6	1627.5E6	107.714	112.018	
6) T	delta-BHC	5.62	9.21	4721.3E6	1568.8E6	109.816	112.936	
7) T	Heptachlor	6.73	7.01	4003.7E6	1319.2E6	106.781	108.268	
8) T	Aldrin	7.54	7.69	4371.8E6	1491.9E6	108.950	111.431	
9) T	Heptachlor epoxi	8.55	9.53	3828.3E6	1351.9E6	108.387	110.459	
10) T	Endosulfan I	9.47	10.22	3557.5E6	1269.6E6	108.096	110.951	
11) T	4,4'-DDE	10.24	10.99	3828.4E6	1338.2E6	108.153	112.506	
12) T	Dieldrin	10.16	11.26	3875.3E6	1389.5E6	108.494	111.907	
13) T	Endrin	10.72	11.78	3657.1E6	1324.1E6	106.846	110.473	
14) T	Endosulfan II	10.97	13.23	3251.3E6	2257.8E6	106.198	224.762	#
15) T	4,4'-DDD	11.36	13.23	3130.8E6	2257.8E6	108.725	224.762	#
16) T	Endrin aldehyde	11.50	14.37	2282.8E6	874.2E6	107.815	110.155	
17) T	Endosulfan sulfa	12.15	15.27	2920.4E6	1033.4E6	105.635	108.962	
18) T	4,4'-DDT	12.38	13.68	2810.6E6	894.1E6	103.961	112.889	
19) T	Endrin ketone	13.36	16.30	3435.3E6	1187.9E6	105.316	110.904	
20) T	Methoxychlor	14.06	15.55	1294.8E6	463.9E6	100.075	105.787	
21) T	alpha-Chlordane	9.58	10.61	3886.4E6	1357.5E6	107.553	111.064	
22) T	gamma-Chlordane	9.17	10.46	4097.5E6	1401.9E6	108.570	111.789	
	Sum Chlordane			0	0	N.D.	N.D.	
Average	Chlordane					0.000	0.000	
	Sum Toxaphene			0	0	N.D.	N.D.	
Average	Toxaphene					0.000	0.000	

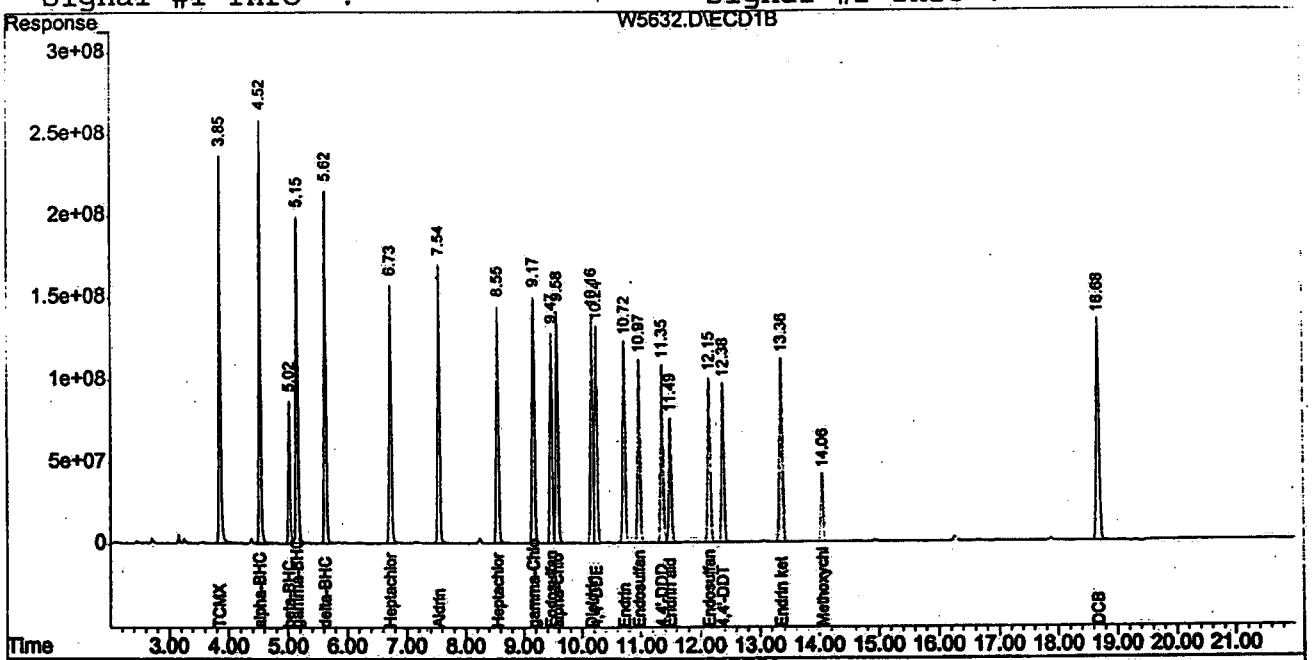
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5632.D WPTC0402.M Wed Apr 04 15:17:58 2001 GC_W Page 43

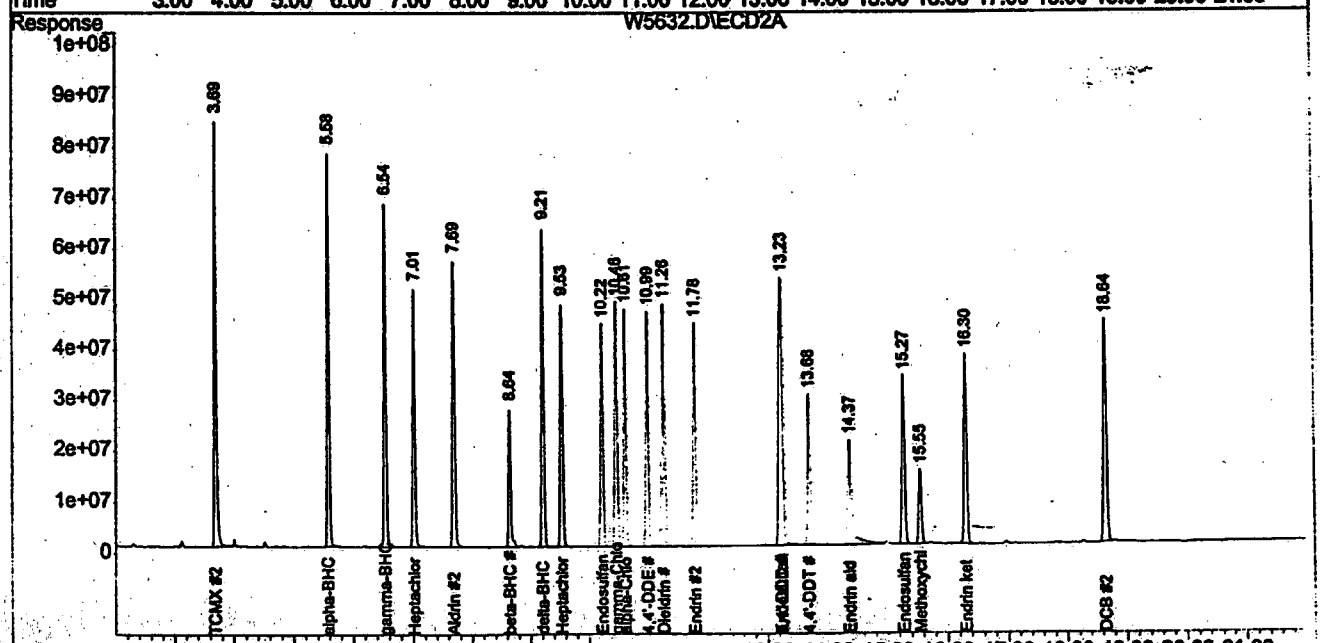
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5632.D\ECD1B.CH Vial: 43
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5632.D\ECD2A.CH
Acq On : 4-3-01 7:19:17 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:17 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1787

000749

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5621.D\ECD1B.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5621.D\ECD2A.CH
Acq On : 4-3-01 2:45:18 Operator:
Sample : TOX_C_IAS_1436,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:14 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.86	3.69	4813.3E6	1781.8E6	106.656	107.035
Spiked Amount	100.000			Recovery	=	106.66%	107.04%
2) S DCB		18.68	18.64	4504.2E6	1437.6E6	98.927	100.694
Spiked Amount	100.000			Recovery	=	98.93%	100.69%
Target Compounds							
Sum Chlordane				0	0	N.D.	N.D.
Average Chlordane						0.000	0.000
28) L2 Toxaphene		13.17	14.02	380.1E6	104.0E6	550.293	484.820
29) L2 Toxaphene	{2}	13.30	14.75	297.1E6	89756244	533.316	443.186
30) L2 Toxaphene	{3}	13.58	15.01	259.4E6	66828375	489.227	461.196
31) L2 Toxaphene	{4}	14.04	15.21	284.7E6	54869802	495.994	463.131
32) L2 Toxaphene	{5}	14.55	15.66	414.6E6	92476891	501.579	505.400
Sum Toxaphene				1635.8E6	407.9E6	2570.410	2357.734
Average Toxaphene						514.082	471.547

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

1788

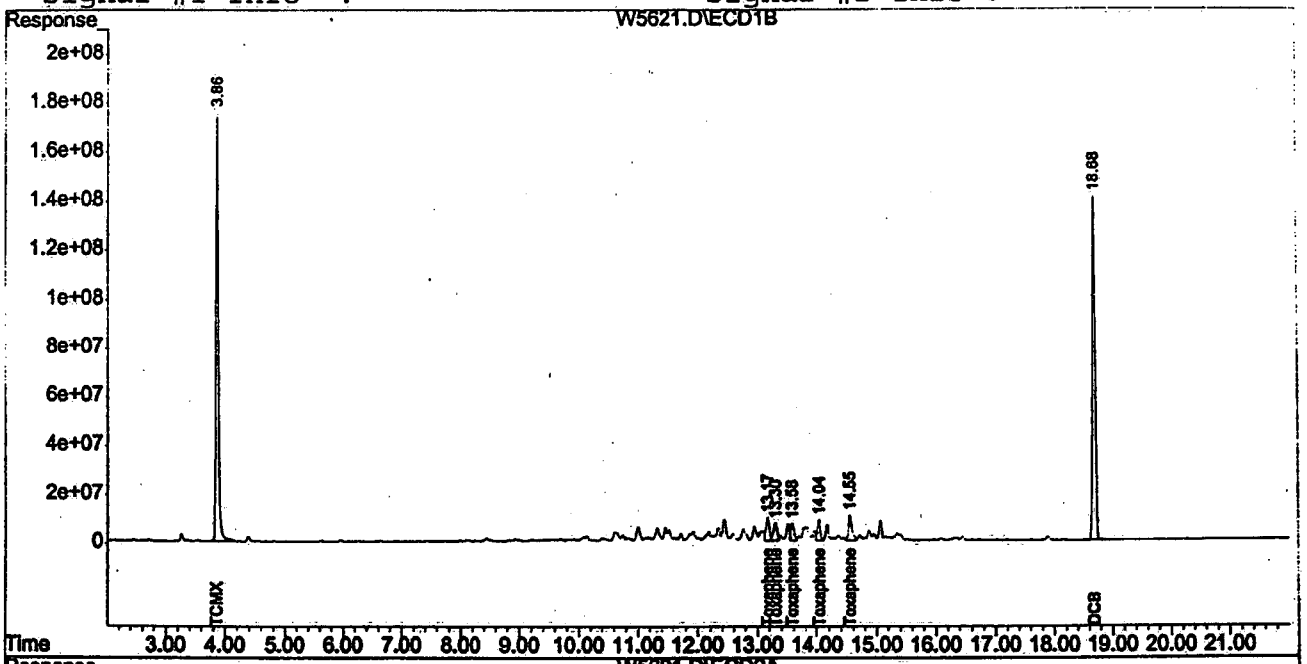
000750

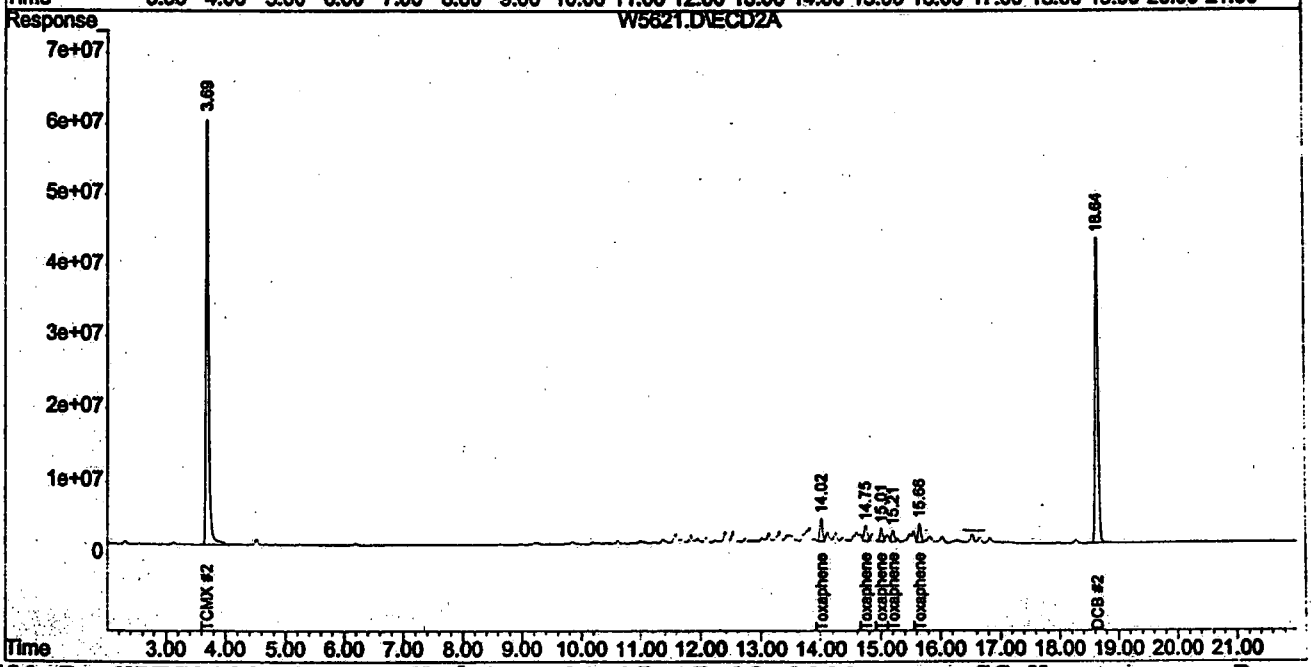
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5621.D\ECD1B.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5621.D\ECD2A.CH
Acq On : 4-3-01 2:45:18 Operator:
Sample : TOX_C_IAS_1436,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:14 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1789

000751

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5622.D\ECD1B.CH Vial: 33
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5622.D\ECD2A.CH
Acq On : 4-3-01 3:10:15 Operator:
Sample : CHLOR_C_IAS_1437,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:16 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

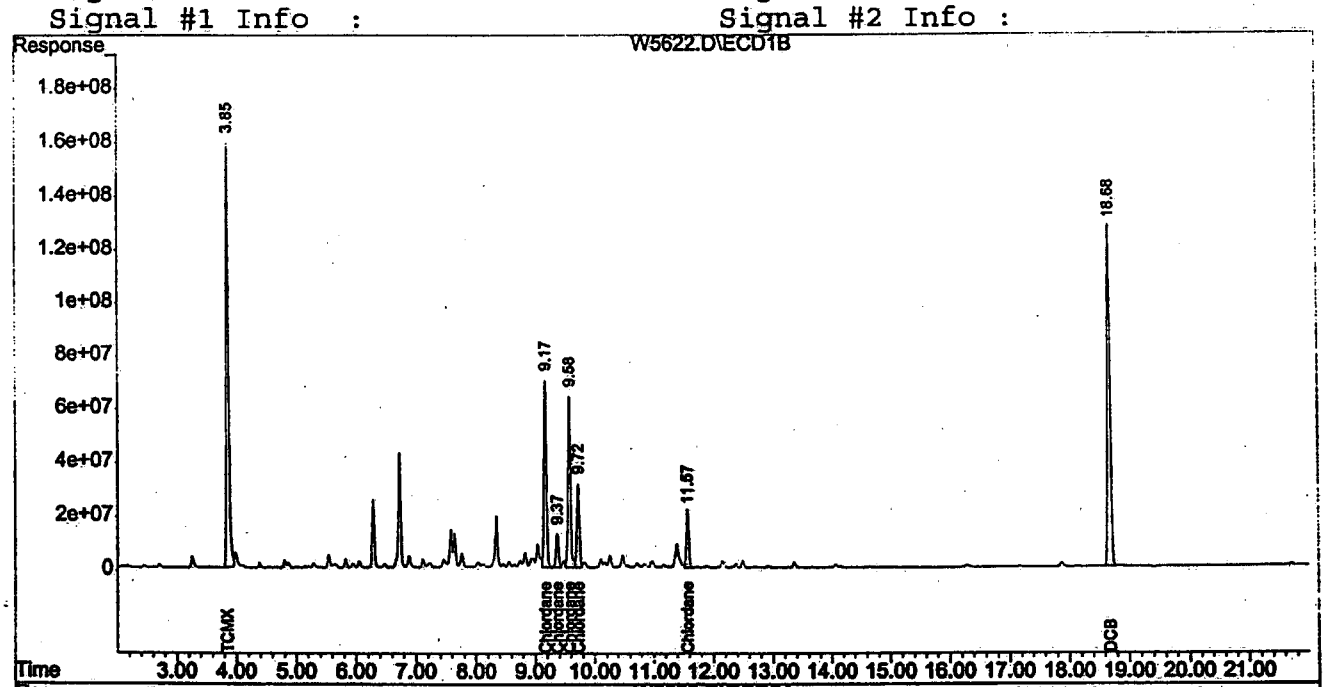
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.69	4346.7E6	1684.1E6	96.317	101.170
Spiked Amount 100.000			Recovery =		96.32%	101.17%
2) S DCB	18.68	18.64	4199.2E6	1330.9E6	92.228	93.224
Spiked Amount 100.000			Recovery =		92.23%	93.22%
Target Compounds						
23) L1 Chlordane	9.17	8.38	1990.1E6	145.6E6	513.214	526.289
24) L1 Chlordane {2}	9.37	10.06	362.7E6	153.6E6	507.075	520.450
2 L1 Chlordane {3}	9.58	10.46	1911.0E6	678.2E6	517.047	527.439
2 L1 Chlordane {4}	9.72	10.61	887.6E6	612.8E6	515.812	522.488
27) L1 Chlordane {5}	11.57	10.67	627.0E6	299.0E6	516.679	541.013
Sum Chlordane			5778.4E6	1889.2E6	2569.826	2637.679
Average Chlordane					513.965	527.536
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

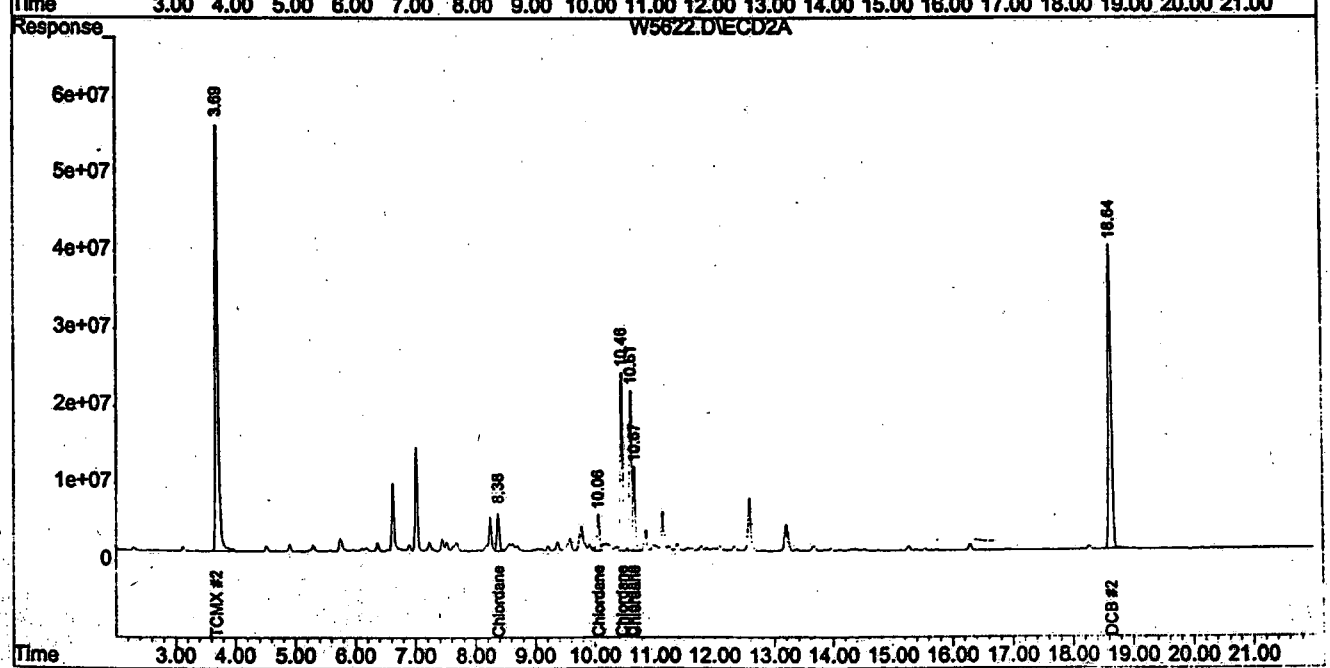
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\HPCHEM\1\DATA\04-02-01\W5622.D\ECD1B.CH Vial: 33
Signal #2 : C:\HPCHEM\1\DATA\04-02-01\W5622.D\ECD2A.CH
Acq On : 4-3-01 3:10:15 Operator:
Sample : CHLOR_C_IAS_1437,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 10:16 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1791

000753

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-03-01\W5635.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\04-03-01\W5635.D\ECD2A.CH
Acq On : 4-3-01 11:35:15 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 11:57 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
	System Monitoring Compounds							
1)	S TCMX	3.85	3.69	4478.5E6	1731.9E6	99.236	104.040	
	Spiked Amount 100.000			Recovery	=	99.24%	104.04%	
2)	S DCB	18.68	18.64	4325.0E6	1480.4E6	94.991	103.697	
	Spiked Amount 100.000			Recovery	=	94.99%	103.70%	
	Target Compounds							
3)	T alpha-BHC	4.53	5.58	4770.2E6	1717.2E6	101.929	108.457	
4)	T beta-BHC	5.02	8.65	1733.0E6	694.0E6	99.126	104.981	
5)	T gamma-BHC	5.15	6.54	4102.1E6	1586.7E6	102.045	109.208	
6)	T delta-BHC	5.63	9.21	4325.1E6	1510.2E6	100.601	108.715	
7)	T Heptachlor	6.73	7.02	3695.3E6	1287.5E6	98.556	105.662	
8)	T Aldrin	7.55	7.69	4090.0E6	1459.3E6	101.929	108.990	
9)	T Heptachlor epoxi	8.56	9.54	3630.6E6	1328.0E6	102.790	108.507	
10)	T Endosulfan I	9.47	10.22	3376.9E6	1248.0E6	102.608	109.065	
11)	T 4,4'-DDE	10.24	11.00	3587.9E6	1306.4E6	101.359	109.828	
12)	T Dieldrin	10.17	11.26	3658.3E6	1361.0E6	102.420	109.608	
13)	T Endrin	10.72	11.79	3370.6E6	1271.3E6	98.476	106.068	
14)	T Endosulfan II	10.97	13.23	3064.9E6	2196.9E6	100.108	218.704	#
15)	T 4,4'-DDD	11.36	13.23	2914.7E6	2196.9E6	101.220	218.704	#
16)	T Endrin aldehyde	11.50	14.38	2055.5E6	817.4E6	97.077	103.002	
17)	T Endosulfan sulfa	12.15	15.27	2707.0E6	992.9E6	97.915	104.684	
18)	T 4,4'-DDT	12.38	13.68	2575.2E6	860.3E6	95.253	108.623	
19)	T Endrin ketone	13.36	16.30	3263.3E6	1163.3E6	100.044	108.611	
20)	T Methoxychlor	14.06	15.55	1189.8E6	449.0E6	91.959	102.381	
21)	T alpha-Chlordane	9.58	10.62	3668.9E6	1331.8E6	101.536	108.965	
22)	T gamma-Chlordane	9.17	10.46	3854.2E6	1371.4E6	102.125	109.358	
	Sum Chlordane			0	0	N.D.	N.D.	
	Average Chlordane					0.000	0.000	
	Sum Toxaphene			0	0	N.D.	N.D.	
	Average Toxaphene					0.000	0.000	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5635.D WPTC0402.M Wed Apr 04 08:41:37 2001 GC_W Page 1

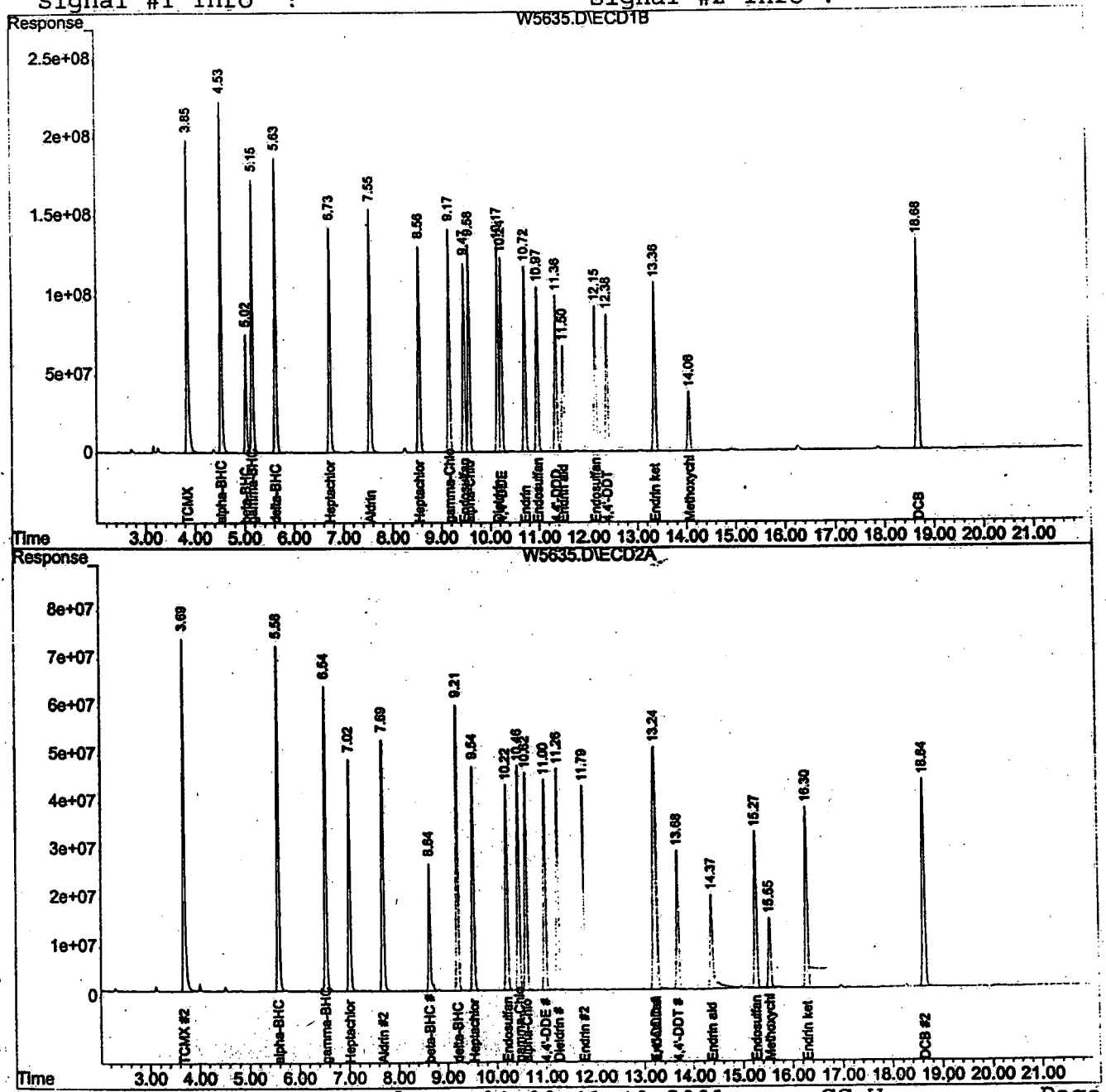
000754

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-03-01\W5635.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\04-03-01\W5635.D\ECD2A.CH
Acq On : 4-3-01 11:35:15 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 11:57 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



1793

000755

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-03-01\W5650.D\ECD1B.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\04-03-01\W5650.D\ECD2A.CH
Acq On : 4-3-01 18:06:09 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 9:25 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
	System Monitoring Compounds						
1)	S TCMX	3.86	3.70	4884.9E6	1848.0E6	108.241	111.011
	Spiked Amount 100.000			Recovery	=	108.24%	111.01%
2)	S DCB	18.68	18.64	4721.4E6	1572.0E6	103.698	110.109
	Spiked Amount 100.000			Recovery	=	103.70%	110.11%
	Target Compounds						
3)	T alpha-BHC	4.53	5.58	5065.2E6	1810.4E6	108.232	114.344
4)	T beta-BHC	5.02	8.65	1872.9E6	722.7E6	107.130	109.330
5)	T gamma-BHC	5.16	6.54	4397.4E6	1652.0E6	109.391	113.703
6)	T delta-BHC	5.63	9.21	4732.5E6	1595.0E6	110.075	114.815m
7)	T Heptachlor	6.73	7.02	3958.7E6	1338.9E6	105.579	109.884
8)	T Aldrin	7.55	7.69	4367.5E6	1509.6E6	108.843	112.752
9)	T Heptachlor epoxi	8.56	9.54	3843.5E6	1367.4E6	108.819	111.722
10)	T Endosulfan I	9.48	10.22	3594.3E6	1285.6E6	109.215	112.349
11)	T 4,4'-DDE	10.24	11.00	3881.3E6	1367.3E6	109.647	114.951
12)	T Dieldrin	10.17	11.26	3907.9E6	1405.9E6	109.408	113.226
13)	T Endrin	10.72	11.78	3557.0E6	1302.1E6	103.924	108.636
14)	T Endosulfan II	10.97	13.23	3316.5E6	2310.3E6	108.328	229.987 #
15)	T 4,4'-DDD	11.36	13.23	3192.1E6	2310.3E6	110.853	229.987 #
16)	T Endrin aldehyde	11.50	14.37	2347.3E6	903.2E6	110.863	113.817m
17)	T Endosulfan sulfa	12.15	15.27	3047.2E6	1080.8E6	110.223	113.958
18)	T 4,4'-DDT	12.38	13.68	2799.6E6	907.8E6	103.551	114.618
19)	T Endrin ketone	13.36	16.30	3605.8E6	1249.8E6	110.542	116.682m
20)	T Methoxychlor	14.06	15.55	1300.9E6	475.9E6	100.548	108.514
21)	T alpha-Chlordane	9.58	10.61	3923.8E6	1377.9E6	108.590	112.738
22)	T gamma-Chlordane	9.17	10.46	4130.3E6	1418.2E6	109.439	113.092
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

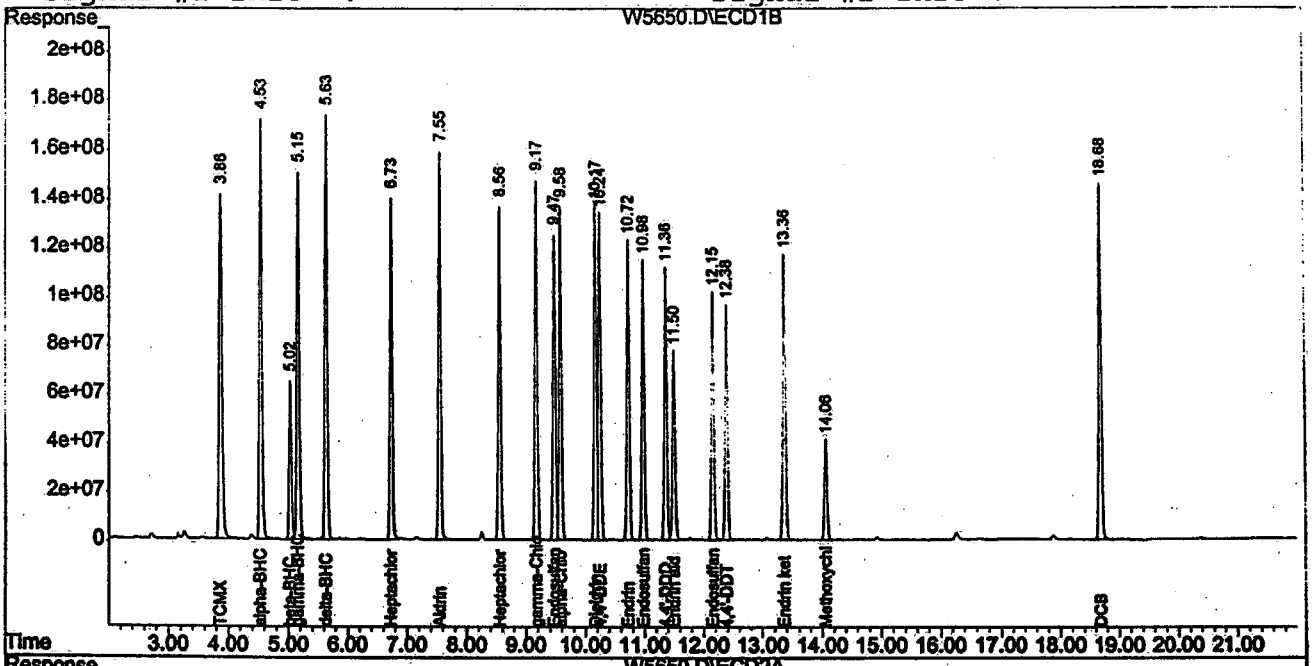
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

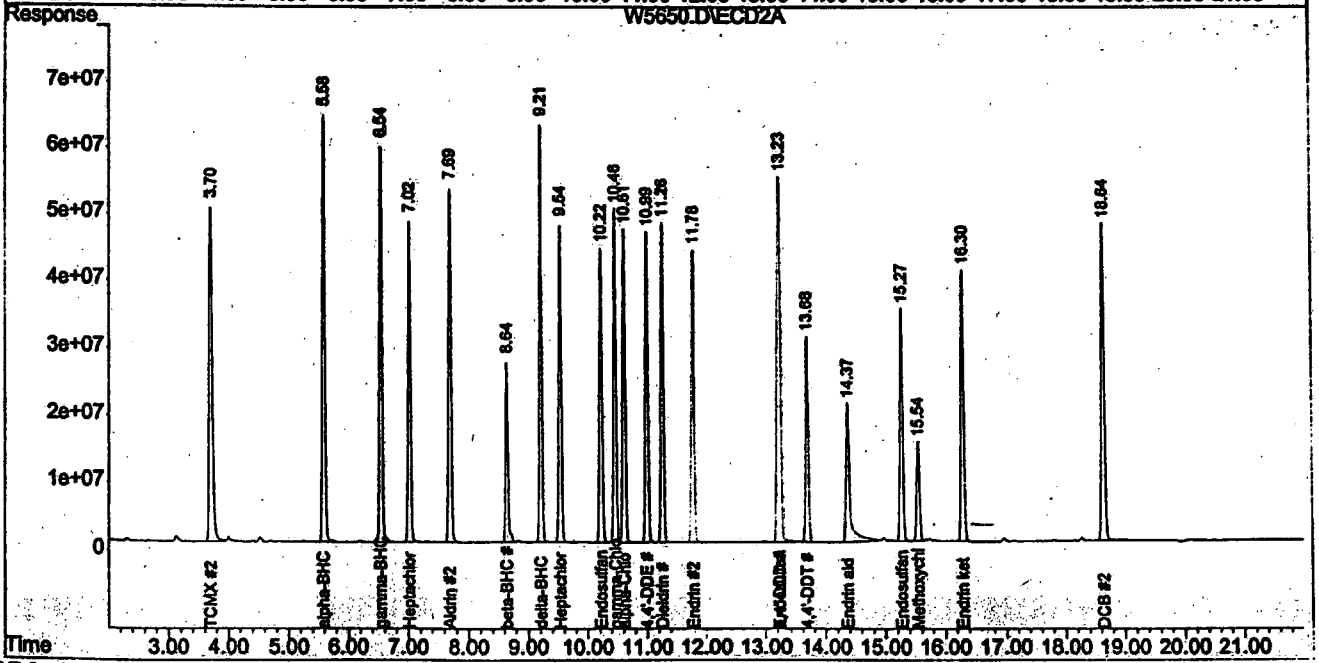
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-03-01\W5650.D\ECD1B.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\04-03-01\W5650.D\ECD2A.CH
Acq On : 4-3-01 18:06:09 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 9:25 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





1795

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-03-01\W5636.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\04-03-01\W5636.D\ECD2A.CH
Acq On : 4-3-01 12:00:26 Operator:
Sample : TOX_C_IAS_1436,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 9:40 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.86	3.69	4634.0E6	1794.8E6	102.683	107.820
Spiked Amount 100.000			Recovery	=	102.68%	107.82%
2) S DCB	18.69	18.65	4299.4E6	1482.4E6	94.428	103.837
Spiked Amount 100.000			Recovery	=	94.43%	103.84%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
2.. L2 Toxaphene	13.17	14.02	355.0E6	104.6E6	514.022	487.533
29) L2 Toxaphene (2)	13.30	14.75	273.5E6	89676367	490.964	442.792
30) L2 Toxaphene (3)	13.58	15.01	225.7E6	65948312	425.782	455.123
31) L2 Toxaphene (4)	14.04	15.21	257.4E6	55468305	448.443	468.183
32) L2 Toxaphene (5)	14.55	15.66	371.0E6	92499104	448.810	505.521
Sum Toxaphene			1482.6E6	408.2E6	2328.022	2359.151
Average Toxaphene					465.604	471.830

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5636.D WPTC0402.M Wed Apr 04 08:40:54 2001 GC_W Page 1

1796

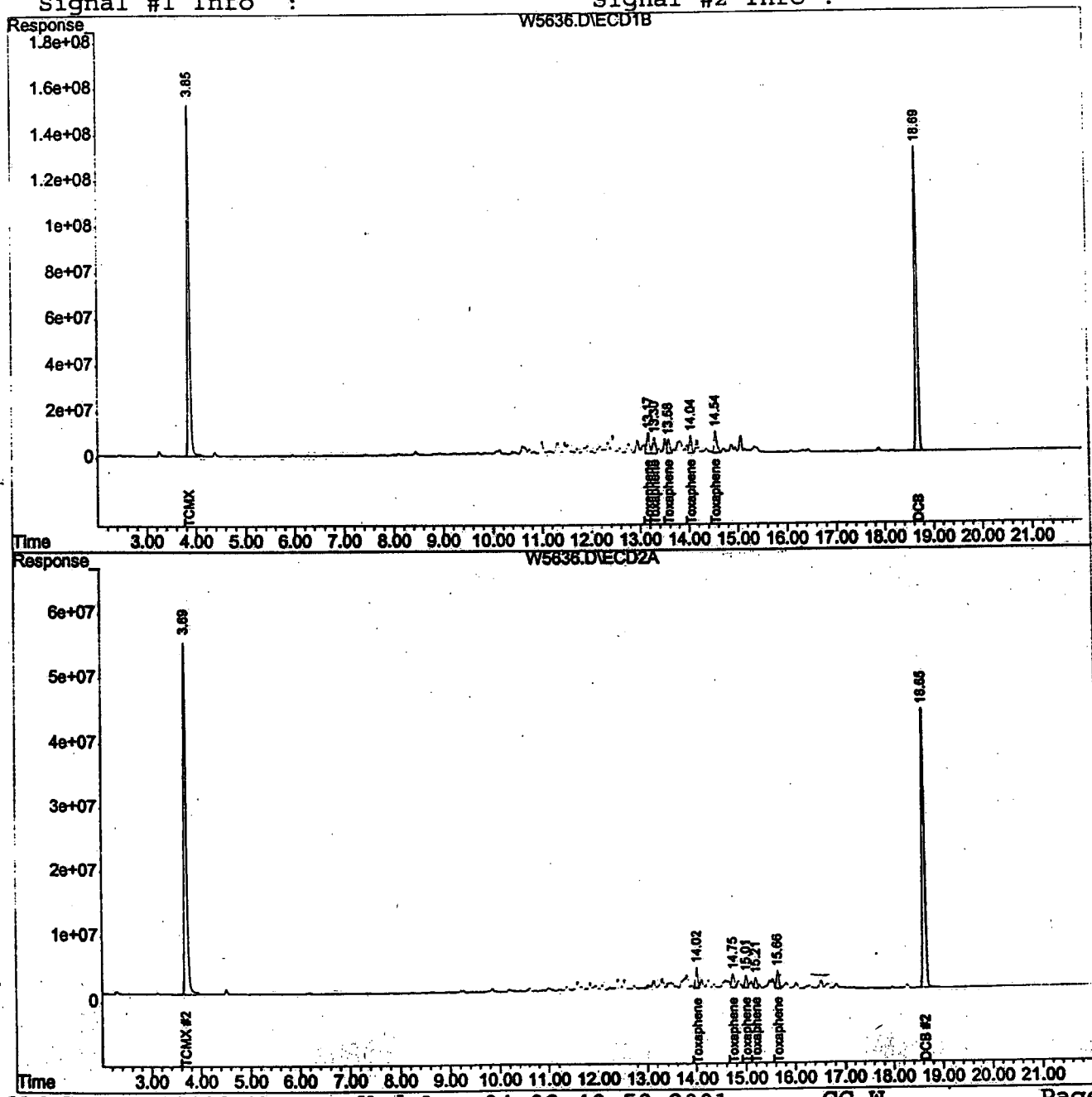
000758

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-03-01\W5636.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\04-03-01\W5636.D\ECD2A.CH
Acq On : 4-3-01 12:00:26 Operator:
Sample : TOX_C_IAS_1436,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 4 9:40 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



1797

000759

Signal #1 : C:\HPCHEM\1\DATA\04-03-01\W5637.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\04-03-01\W5637.D\ECD2A.CH
Acq On : 4-3-01 12:25:20 Operator:
Sample : CHLOR_C_IAS_1437,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 12:55 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.86	3.69	4418.0E6	1742.1E6	97.895	104.653
Spiked Amount 100.000			Recovery	=	97.89%	104.65%
2) S DCB	18.68	18.65	4128.6E6	1406.2E6	90.678	98.499
Spiked Amount 100.000			Recovery	=	90.68%	98.50%
Target Compounds						
23) L1 Chlordane	9.17	8.38	1988.3E6	153.1E6	512.738	553.520
24) L1 Chlordane {2}	9.37	10.06	367.5E6	160.5E6	513.841	543.819
25) L1 Chlordane {3}	9.58	10.46	1847.3E6	709.6E6	499.819	551.878
26) L1 Chlordane {4}	9.72	10.62	931.3E6	652.2E6	541.237	556.062
27) L1 Chlordane {5}	11.57	10.67	616.3E6	301.9E6	507.882	546.370
Sum Chlordane			5750.8E6	1977.4E6	2575.517	2751.650
Average Chlordane					515.103	550.330
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

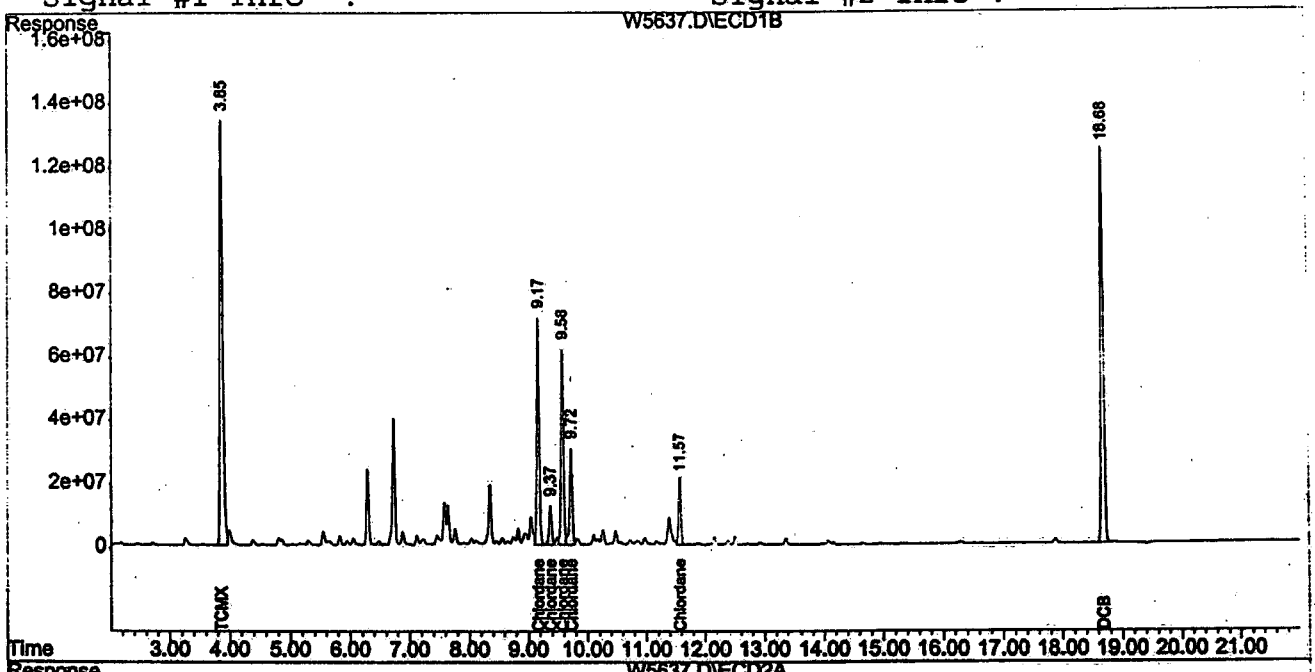
000760

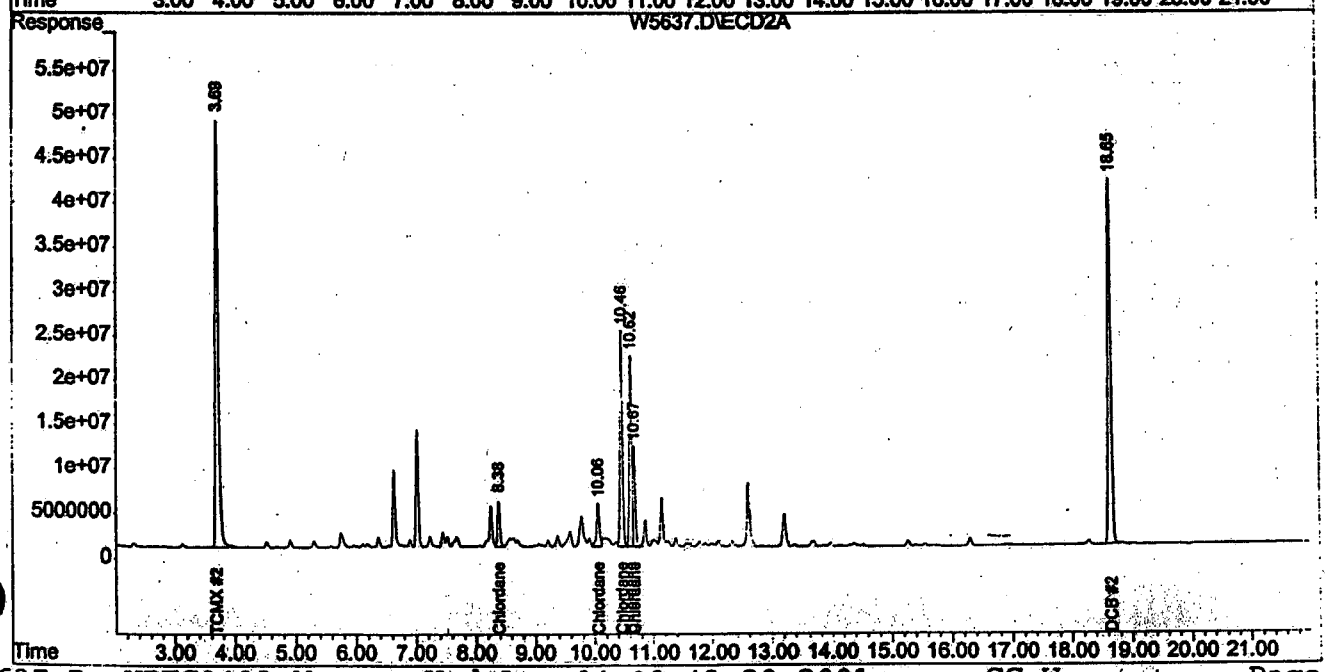
1798

Signal #1 : C:\HPCHEM\1\DATA\04-03-01\W5637.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\04-03-01\W5637.D\ECD2A.CH
Acq On : 4-3-01 12:25:20 Operator:
Sample : CHLOR_C_IAS_1437,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 12:55 2001 Quant Results File: WPTC0402.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0402.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 02 16:09:24 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

BLANK RESULTS SUMMARY

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	INITIAL CALIBRATION	CONTINUING CALIBRATION 1	CONTINUING CALIBRATION 2	INST. MDL	REAGENT BLANK	MDL	IDL
Aluminum	ND	ND	ND	0.100	ND	2.00	
Antimony	ND	ND	ND	0.100	ND	2.00	
Arsenic	ND	ND	ND	0.010	ND	0.200	
Barium	ND	ND	ND	0.250	ND	5.00	
Beryllium	ND	ND	ND	0.010	ND	0.200	
Cadmium	ND	ND	ND	0.010	ND	0.200	
Calcium	ND	ND	ND	1.00	ND	20.0	
Chromium	ND	ND	ND	0.030	ND	0.600	
Cobalt	ND	ND	ND	0.020	ND	0.400	
Copper	ND	ND	ND	0.020	ND	0.400	
Iron	ND	ND	ND	0.150	ND	3.00	
Lead	ND	ND	ND	0.100	ND	2.00	
Magnesium	ND	ND	ND	1.00	ND	20.0	
Manganese	ND	ND	ND	0.020	ND	0.400	
Mercury	ND	ND	ND	0.00025	ND	0.013	
Nickel	ND	ND	ND	0.030	ND	0.600	
Potassium	ND	ND	ND	1.00	ND	20.0	
Selenium	ND	ND	ND	0.100	ND	2.00	
Silver	ND	ND	ND	0.020	ND	0.500	
Sodium	ND	ND	ND	1.00	ND	20.0	
Thallium	ND	ND	ND	0.004	ND	0.080	
Vanadium	ND	ND	ND	0.015	ND	0.300	
Zinc	ND	ND	ND	0.050	ND	1.00	

This QC Blank applies to the following samples:

1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

1800

000762

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Concentration/Units: ppb (µg/L)

	INITIAL CALIBRATION			CONTINUING CALIBRATION						
ANALYTE	TRUE	FOUND	%R (1)	TRUE	FOUND	%R (1)	FOUND	%R (1)	MDL	IDL
Aluminum	400	409	102	400	440	110	422	106	100	
Antimony	120	129	108	120	122	102	124	103	100	
Arsenic	20.0	19.7	98.5	20.0	19.9	99.5	19.0	95.0	10.0	
Barium	400	414	104	400	418	105	411	103	250	
Beryllium	10.0	10.5	105	10.0	10.7	107	10.1	101	10.0	
Cadmium	10.0	9.92	99.2	10.0	10.6	106	9.91	99.1	10.0	
Calcium	10000	10200	102	10000	10300	103	10900	109	1000	
Chromium	20.0	21.0	105	20.0	21.6	108	21.3	107	30.0	
Cobalt	100	99.9	99.9	100	101	101	102	102	20.0	
Copper	50.0	49.8	99.6	50.0	51.2	102	52.3	105	20.0	
Iron	200	191	95.5	200	211	106	215	108	150	
Lead	10.0	10.5	105	10.0	10.6	106	10.6	106	100	
Magnesium	10000	9530	95.3	10000	10100	101	10100	101	1000	
Manganese	30.0	30.7	102	30.0	32.3	108	30.8	103	20.0	
Mercury	5.00	5.05	101	5.00	5.11	102	5.05	101	0.250	
Nickel	80.0	80.0	100	80.0	79.9	99.9	81.2	102	30.0	
Potassium	10000	10200	102	10000	10400	104	10800	108	1000	
Selenium	10.0	10.6	106	10.0	10.9	109	10.1	101	100	
Silver	500	463	92.6	500	464	92.8	467	93.4	20.0	
Sodium	10000	9750	97.5	10000	10200	102	10600	106	1000	
Thallium	20.0	21.3	107	20.0	21.6	108	21.4	107	4.00	
Vanadium	100	107	107	100	108	108	110	110	15.0	
Zinc	40.0	42.9	107	40.0	42.8	107	43.7	109	50.0	

(1) Control Limits: Mercury 80-120, Other Metals 90-110

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Aqueous Concentration/Units: ppb(ug/L)

ANALYTE / MASS	INITIAL			FINAL		
	SOL A	SOL AB	%R	SOL A	SOL AB	%R
Arsenic / 75	0.33	8.72	83.9	0.33	8.32	79.9
Cobalt / 59	0.28	9.29	90.1	0.28	9.34	90.7
Copper / 65	3.14	11.1	79.6	3.17	11.2	80.3
Manganese / 55	3.28	12.5	92.2	3.23	12.5	92.7
Nickel / 60	1.35	9.70	83.5	1.40	9.85	84.5
Zinc / 66	9.08	16.4	73.2	9.07	16.1	70.3

TRUE VALUE SOLN. B = 10 ppb

THERE ARE NO CONTROL LIMITS FOR SOLUTION AB

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SPIKE SAMPLE RECOVERY

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Soil

Concentration/Units: ppm (mg/kg)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	11000	10700	NC	222					70-130
Antimony	48.6	ND	109	44.4	56.1	ND	119	47.2	70-130
Arsenic	53.1	3.93	111	44.4	54.4	1.40	112	47.2	70-130
Barium	116	70.6	102	44.4					70-130
Beryllium	47.1	0.897	104	44.4	50.9	ND	108	47.2	70-130
Cadmium	49.9	0.394	112	44.4	54.6	0.573	114	47.2	70-130
Calcium	2090	1850	108	222					70-130
Chromium	70.7	19.9	114	44.4	69.7	13.4	119	47.2	70-130
Cobalt	54.3	7.77	105	44.4					70-130
Copper	63.3	17.8	102	44.4	113	63.3	105	47.2	70-130
Iron	13800	14500	NC	222					70-130
Lead	78.0	27.4	114	44.4	144	87.1	121	47.2	70-130
Magnesium	5700	5440	117	222					70-130
Manganese	761	729	72.1	44.4					70-130
Mercury	0.278	ND	100	0.278	0.414	0.125	98.0	0.295	75-125
Nickel	61.6	15.3	104	44.4	53.6	3.95	105	47.2	70-130
Potassium	3230	3030	90.1	222					70-130
Selenium	52.5	ND	118	44.4	56.7	ND	120	47.2	70-130
Silver	23.2	ND	83.5	27.8	26.3	ND	89.2	29.5	75-125
Sodium	559	386	77.9	222					70-130
Thallium	50.5	0.162	113	44.4	53.4	ND	113	47.2	70-130
Vanadium	82.7	33.2	111	44.4					70-130
Zinc	132	88.5	98.0	44.4	180	129	108	47.2	70-130

SSR = Spike Sample Result
SA = Spike Added

SR = Sample Result
%R = Percent Recovery

NC = Non-calculable % R; Sample concentration > 4 x Spike Concentration.

QC Sample 1 1899-012

QC Sample 1 for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

QC Sample 2 1922-001

QC Sample 2 for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

000765

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SPIKE SAMPLE RECOVERY

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Soil

Concentration/Units: ppm (mg/kg)

ANALYTE	SSR3	SR3	%R3	SA3	SSR4	SR4	%R4	SA4	CONTROL LIMIT %R
Antimony	53.1	ND	113	47.2					70-130
Arsenic	57.7	5.36	111	47.2					70-130
Beryllium	50.0	0.656	105	47.2					70-130
Cadmium	53.3	0.287	112	47.2					70-130
Chromium	74.0	19.9	115	47.2					70-130
Copper	77.0	28.9	102	47.2					70-130
Lead	68.0	12.9	117	47.2	69.7	23.4	109	42.4	70-130
Mercury	0.317	0.026	98.6	0.295					75-125
Nickel	71.4	22.7	103	47.2					70-130
Selenium	55.2	ND	117	47.2					70-130
Silver	25.3	ND	85.8	29.5					75-125
Thallium	54.3	ND	115	47.2					70-130
Zinc	112	67.5	94.3	47.2					70-130

SSR = Spike Sample Result
SA = Spike Added

SR = Sample Result
%R = Percent Recovery

NC = Non-calculable % R; Sample concentration > 4 x Spike Concentration.

QC Sample 3 1970-001

QC Sample 3 for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

QC Sample 4 2007-007

QC Sample 4 for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

DUPLICATE SAMPLE RECOVERY

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Aluminum	20	10700	10200	4.78				
Antimony	NA	ND	ND	NC	NA	ND	ND	NC
Arsenic	20	3.93	3.72	5.49	20	1.40	0.986	34.7
Barium	20	70.6	66.9	5.38				
Beryllium	20	0.897	0.896	0.112	NA	ND	ND	NC
Cadmium	20	0.394	0.369	6.55	0.236	0.573	0.433	0.14
Calcium	20	1850	1730	6.70				
Chromium	20	19.9	18.6	6.75	20	13.4	14.2	5.80
Cobalt	20	7.77	7.58	2.48				
Copper	20	17.8	17.4	2.27	20	63.3	56.6	11.2
Iron	20	14500	12600	14.0				
Lead	20	27.4	26.4	3.72	20	87.1	47.6	58.6
Magnesium	20	5440	5320	2.23				
Manganese	20	729	714	2.08				
Mercury	NA	ND	ND	NC	20	0.125	0.125	0
Nickel	20	15.3	14.7	4.00	20	3.95	3.37	15.8
Potassium	20	3030	2880	5.08				
Selenium	NA	ND	ND	NC	NA	ND	ND	NC
Silver	NA	ND	ND	NC	NA	ND	ND	NC
Sodium	20	386	348	10.4				
Thallium	20	0.162	0.151	7.03	NA	ND	ND	NC
Vanadium	20	33.2	31.7	4.62				
Zinc	20	88.5	88.9	0.451	20	129	70.3	58.9

S1 = Sample 1
D1 = Duplicate 1

S2 = Sample 2
D2 = Duplicate 2

NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

QC Sample 1 1899-012

QC Sample 1 for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

QC Sample 2 1922-001

QC Sample 2 for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

DUPLICATE SAMPLE RECOVERY

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 3	S3	D3	RPD3	CONTROL LIMIT 4	S4	D4	RPD4
Antimony	NA	ND	ND	NC				
Arsenic	20	5.36	4.95	7.95				
Beryllium	20	0.656	0.632	3.73				
Cadmium	0.236	0.287	0.163	0.124				
Chromium	20	19.9	18.4	7.83				
Copper	20	28.9	26.6	8.29				
Lead	20	12.9	12.2	5.58	20	23.4	22.8	2.60
Mercury	20	0.026	0.025	3.92				
Nickel	20	22.7	21.7	4.50				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				
Thallium	NA	ND	ND	NC				
Zinc	20	67.5	63.9	5.48				

S3 = Sample 3
D3 = Duplicate 3

S4 = Sample 4
D4 = Duplicate 4

NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

QC Sample 3 1970-001

QC Sample 3 for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

QC Sample 4 2007-007

QC Sample 4 for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

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1806

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

ANALYTE	AQUEOUS (ug/L)			SOLID (mg/kg)			
	TRUE	FOUND	%R(1)	TRUE	FOUND	LIMITS	%R(2)
Aluminum				5760	5490	3750-7760	95.3
Antimony				26.2	10.3	D.L.-53.1	39.3
Arsenic				36.2	38.4	26.9-45.4	106
Barium				117	119	90.2-144	102
Beryllium				59.4	73.7	60.4-93.7	124
Cadmium				35.6	32.1	27.4-43.8	90.2
Calcium				1320	1350	989-1660	102
Chromium				108	112	79.2-137	104
Cobalt				67.2	65.9	53.4-80.9	98.1
Copper				63.7	65.6	52.2-75.2	103
Iron				7540	8040	4290-10800	107
Lead				52.4	48.4	37.3-67.6	92.4
Magnesium				1190	1410	815-1570	118
Manganese				151	170	128-189	113
Mercury				1.00	0.902	.614-1.39	90.2
Nickel				49.8	49.5	39-60.6	99.4
Potassium				2130	2050	1660-2600	96.2
Selenium				56.8	47.7	41-72.6	84.0
Silver				34.1	34.5	25.4-42.9	101
Sodium				487	535	354-911	110
Thallium				68.2	68.2	39-97.3	100
Vanadium				80.0	82.0	54.6-105	103
Zinc				151	150	117-185	99.3

(1) Control Limits = 90-110%
(2)Manufacture's Recomended Limits

Aqueous LCS Source: MV Laboratories

Solid LCS Source: Environmental Resource Associates: PriorityPollutnT/CLP Inorganics Soils

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SERIAL DILUTIONS & POST SPIKES

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SERIAL DILUTION		%	POST SPIKE		%
	SR	SDR	Difference	SPR	SA	Recovery
Aluminum	10700	11000	2.76			
Antimony	ND			39.6	44.4	89.2
Arsenic	3.93	3.97	1.01			
Barium	70.6	67.8	4.05			
Beryllium	0.897	0.862	3.98			
Cadmium	0.394			49.7	44.4	111.0
Calcium	1850	1850	0			
Chromium	19.9	20.0	0.501			
Cobalt	7.77	7.56	2.74			
Copper	17.8	18.4	3.31			
Iron	14500	13900	4.23			
Lead	27.4	26.4	3.72			
Magnesium	5440	5520	1.46			
Manganese	729	743	1.90			
Mercury	ND			0.282	0.278	101
Nickel	15.3	15.0	1.98			
Potassium	3030	2940	3.02			
Selenium	ND			49.2	44.4	111
Silver	ND			29.2	27.8	105
Sodium	386	379	1.83			
Thallium	0.162			48.9	44.4	110.0
Vanadium	33.2	32.9	0.908			
Zinc	88.5	92.3	4.20			

SR = Sample Result
SDR = Sample Dilution Result

SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 85 - 115% Recovery

QC Sample : 1899-012

QC Sample for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

1808

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869
4/4/01

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Soil
Units: S-mg/Kg

Batch ID: AP013-0011

Blank

Parameter	Method Blank	MDL	Analysis Date
Total Cyanide	NA	1.00	04/04/01

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
Total Cyanide	1899-006S	12.8	12.8	0	20

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
Total Cyanide	1899-006	ND	15	12.8	92.1	75 - 125

The above blank result applies to the follow samples E01-

1899-006	1922-003
1899-006S	1922-004
1899-006SD	1922-005
1899-010	1922-006
1899-011	1922-008
1899-012	1922-009
1899-013	1922-011
1899-014	1922-012
1899-015	1922-013
1922-001	1922-015
1922-002	1922-007

++ = No Flash - Sample boiled at 100C
NA = Not Applicable
ND = Not Detected
NC = Non calculable RPD due to value less than the detection limit
No = Does Not Ignite
Yes = Sample Ignites

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Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869
4/2/01

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Soil
Units: S-mg/Kg

Batch ID: AP024-0017

Blank

Parameter	Method Blank	MDL	Analysis Date
Total Recoverable Phenol	ND	2.50	04/02/01

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
Total Recoverable Phenol	1899-015S	14.4	13.3	8	20

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
Total Recoverable Phenol	1899-015	ND	13.3	14.4	108	75 - 125

The above blank result applies to the follow samples E01-

1899-015
1899-015S
1899-015SD
1899-006
1899-010
1899-011
1899-012
1899-013
1899-014
1922-001
1922-002
1922-003
1922-004
1922-005
1922-006
1922-007
1922-008
1922-009
1922-010
1922-011
1922-012

++ = No Flash - Sample boiled at 100C
NA = Not Applicable
ND = Not Detected
NC = Non calculable RPD due to value less than the detection limit
No = Does Not Ignite
Yes = Sample Ignites

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Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869
4/2/01

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Soil
Units: S-mg/Kg

Batch ID: AP024-0018

Blank

Parameter	Method Blank	MDL	Analysis Date
Total Recoverable Phenol	ND	2.50	04/02/01

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
Total Recoverable Phenol	1922-013S	16.6	16.1	3	20

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
Total Recoverable Phenol	1922-013	ND	16.4	16.6	101	75 - 125

The above blank result applies to the follow samples E01-

1922-013	1929-004
1922-013S	1929-005
1922-013SD	1929-006
1929-001	1929-007
1929-002	1951-001
1929-003	1922-015

++ = No Flash - Sample boiled at 100C
NA = Not Applicable
ND = Not Detected
NC = Non calculable RPD due to value less than the detection limit
No = Does Not Ignite
Yes = Sample Ignites

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INTEGRATED ANALYTICAL LABORATORIES

General Chemistry Quality Control

Method Blank Results Summary

TPHC

Blank ID	Matrix-Unit	Blank Result	MDL
B0330	S-mg/Kg	ND	25

The above blank result applies to the follow samples E01-

LCS1-001	1922-008
1908-001SQC	1922-009
1908-001SQCD	1922-010
1908-001SQCS	1922-011
1908-001	1922-012
1922-001	1922-013
1922-002	1922-015
1922-003	1925-008
1922-004	1930-001
1922-005	1931-001
1922-006	1932-001
1922-007	1910-002

1817

INTEGRATED ANALYTICAL LABORATORIES

General Chemistry Quality Control

Spike Sample Results Summary

TPHC

QC Sample	Spiked Result	Sample Result	% Recovery	Spike Added	Matrix-Units	Control Limit
1908-001SQC	6010	3900	NC	537.06	S-mg/Kg	75%-125%

NC - Non-Calculable, Sample Result > 4x Spike Added.

The above spike result applies to the following samples E01-

1908-001
1922-001
1922-002
1922-003
1922-004
1922-005
1922-006
1922-007
1922-008
1922-009
1922-010
1922-011
1922-012
1922-013
1922-015
1925-008
1930-001
1931-001
1932-001
1910-002

1813

INTEGRATED ANALYTICAL LABORATORIES

General Chemistry Quality Control

Duplicate Sample Results Summary

TPHC

QC Sample	Sample Result	Duplicate Result	Matrix-Units	RPD	Control Limit
1908-001SQC	3900	3840	S-mg/Kg	1.55	20.0

The above duplicate results applies to the following samples E01-

1908-001	1922-010
1922-001	1922-011
1922-002	1922-012
1922-003	1922-013
1922-004	1922-015
1922-005	1925-008
1922-006	1930-001
1922-007	1931-001
1922-008	1932-001
1922-009	1910-002

1814

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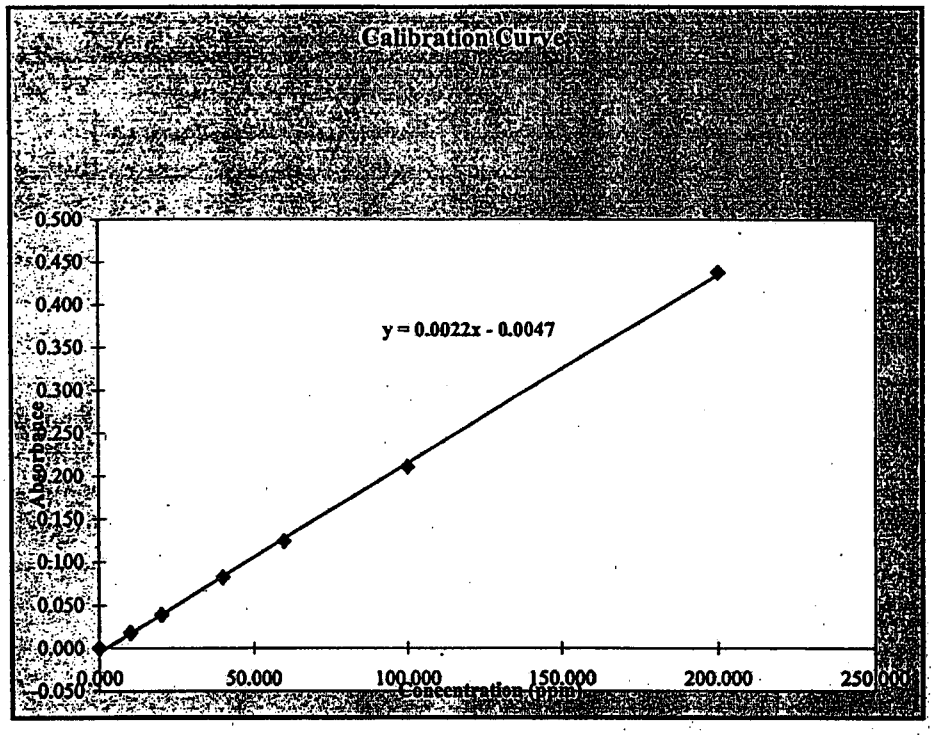
Integrated Analytical Laboratories

TPH

Date:	29-Jan-01
Method:	418.1
Matrix:	S/A
Analyst:	EDC

Conc.	Abs.
0.000	0.000
10.000	0.018
20.000	0.039
40.000	0.082
60.000	0.124
100.000	0.211
200.000	0.438

R^2=	0.999785534
Slope=	0.0022
Intercept=	-0.00471



Comments:

1815

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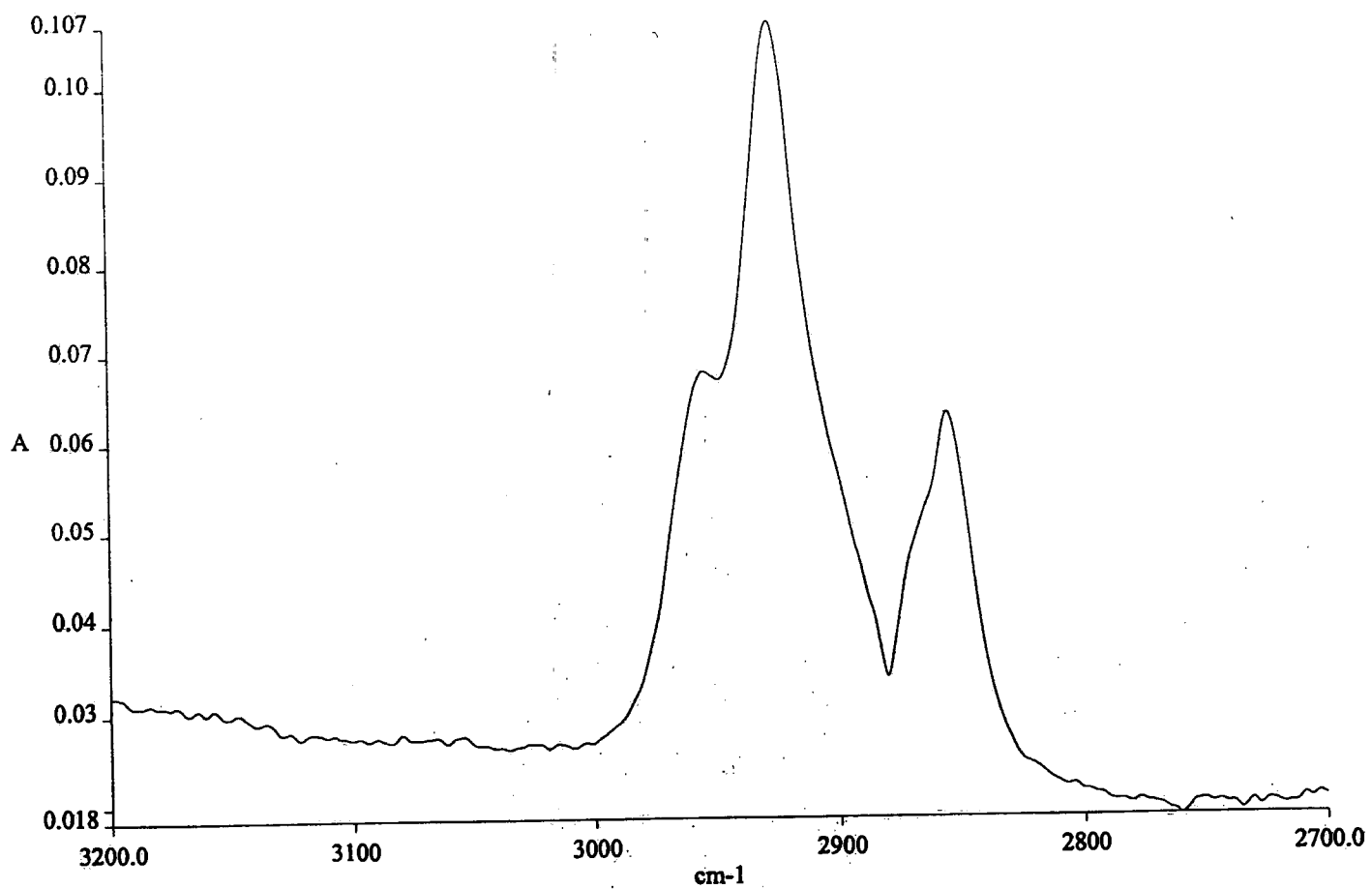

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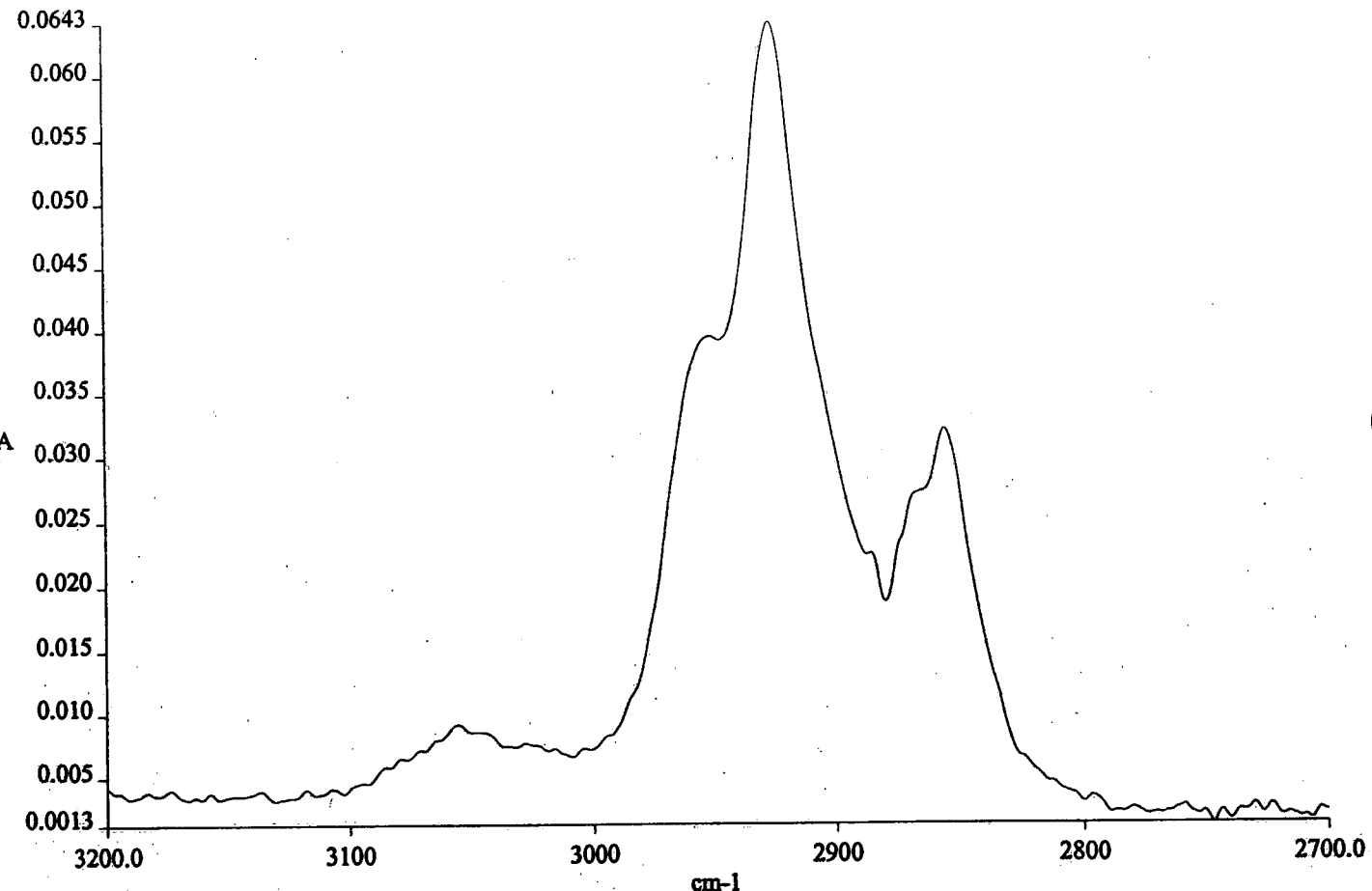

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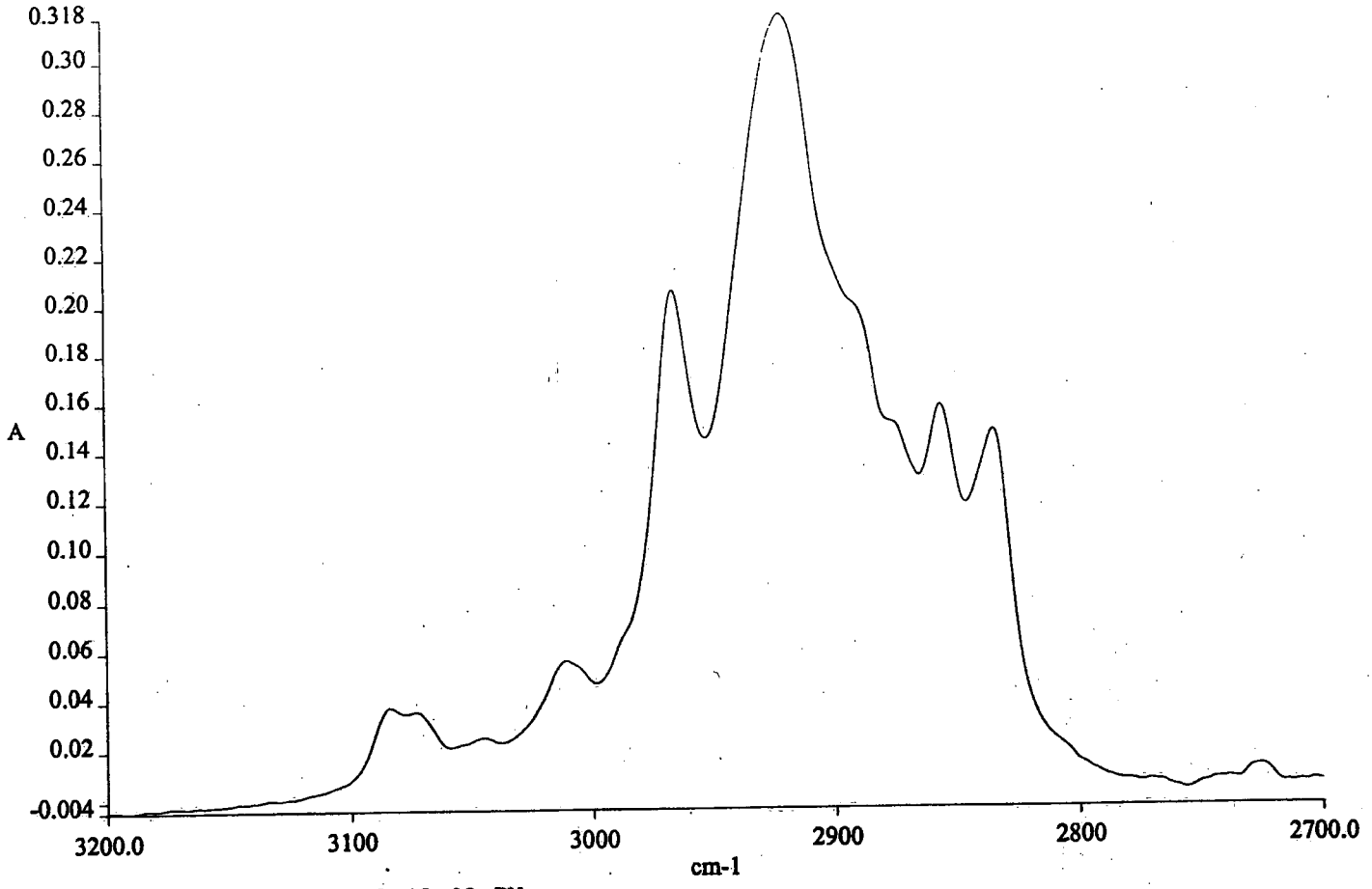

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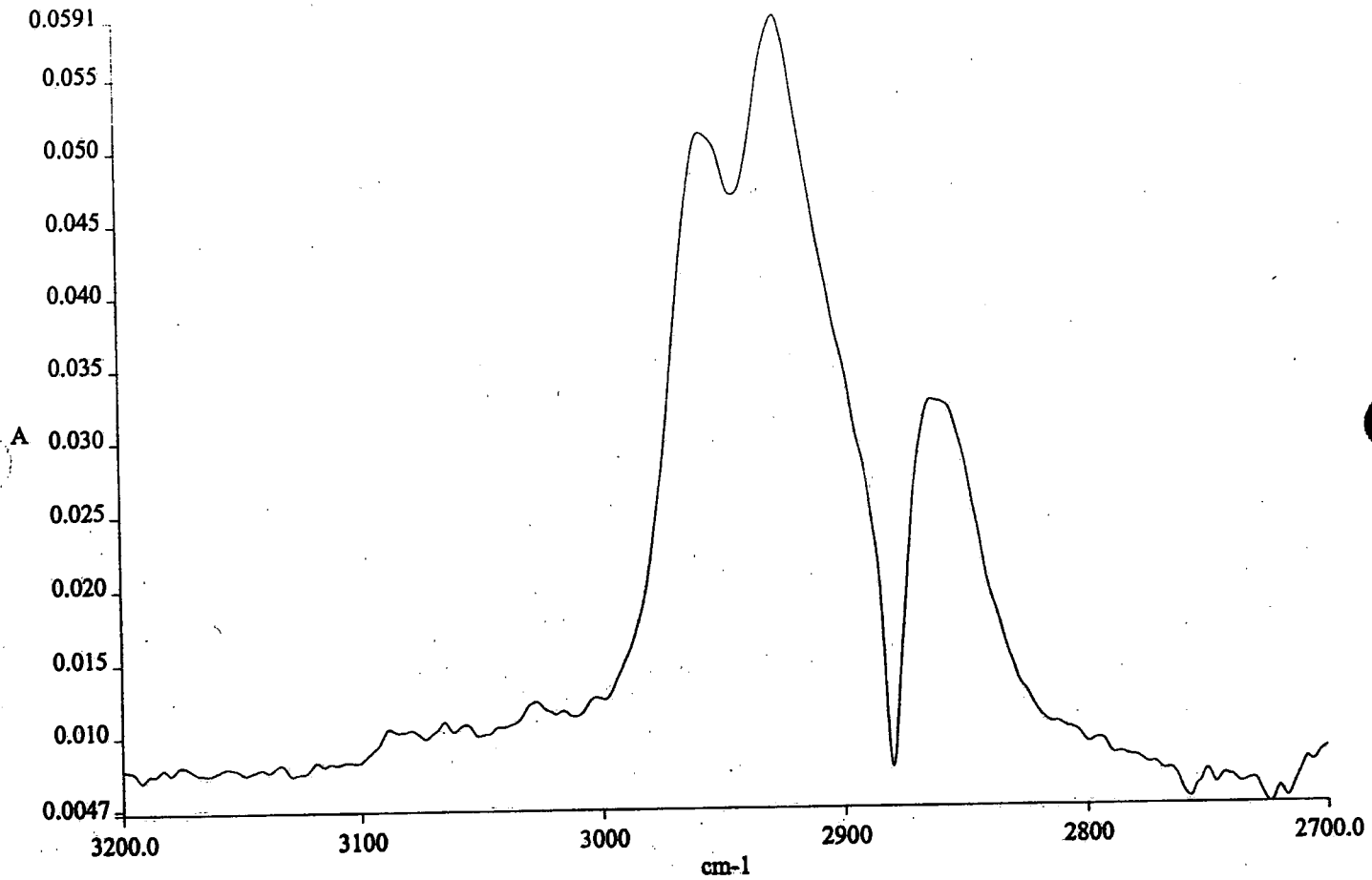

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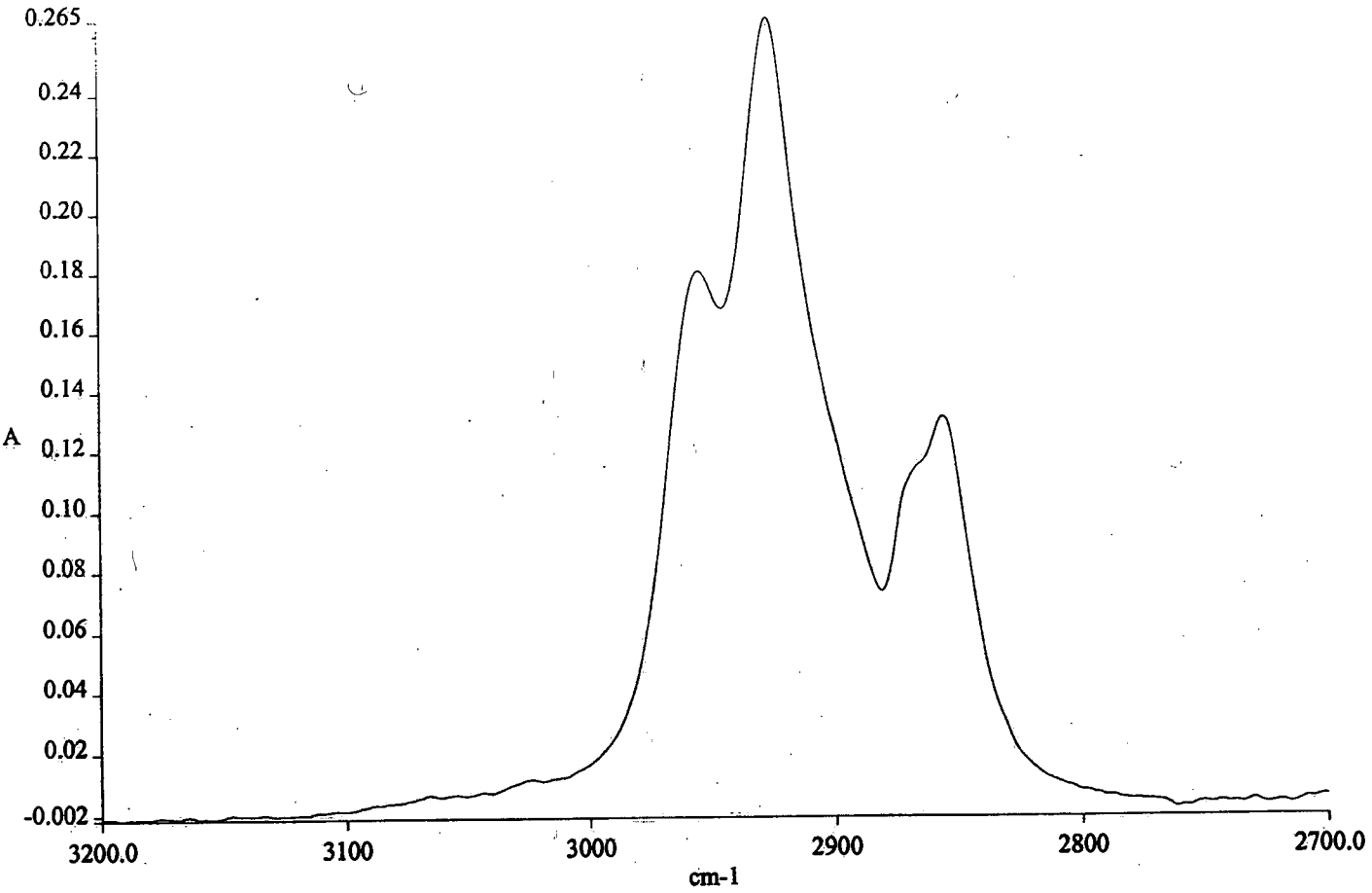

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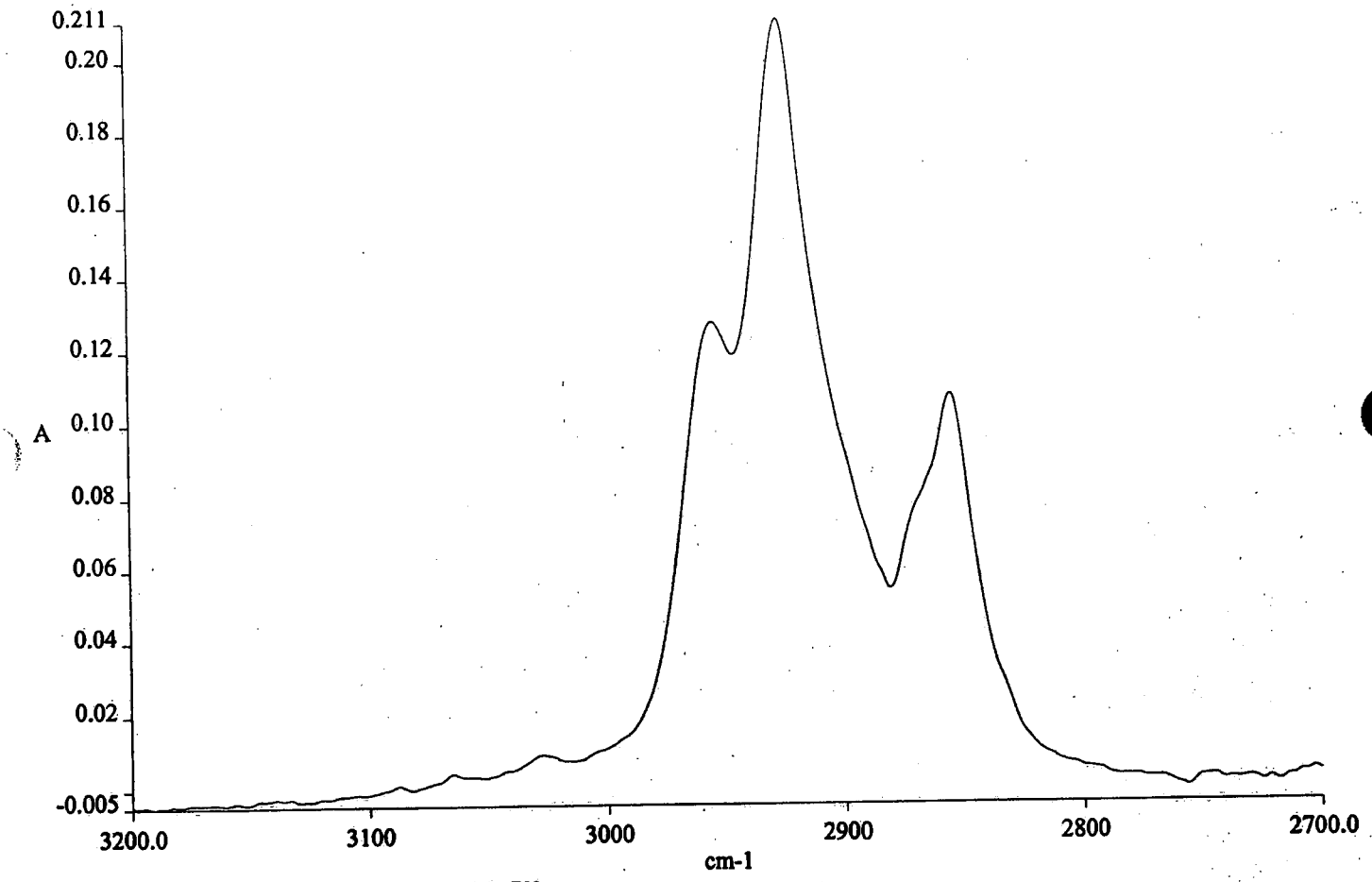

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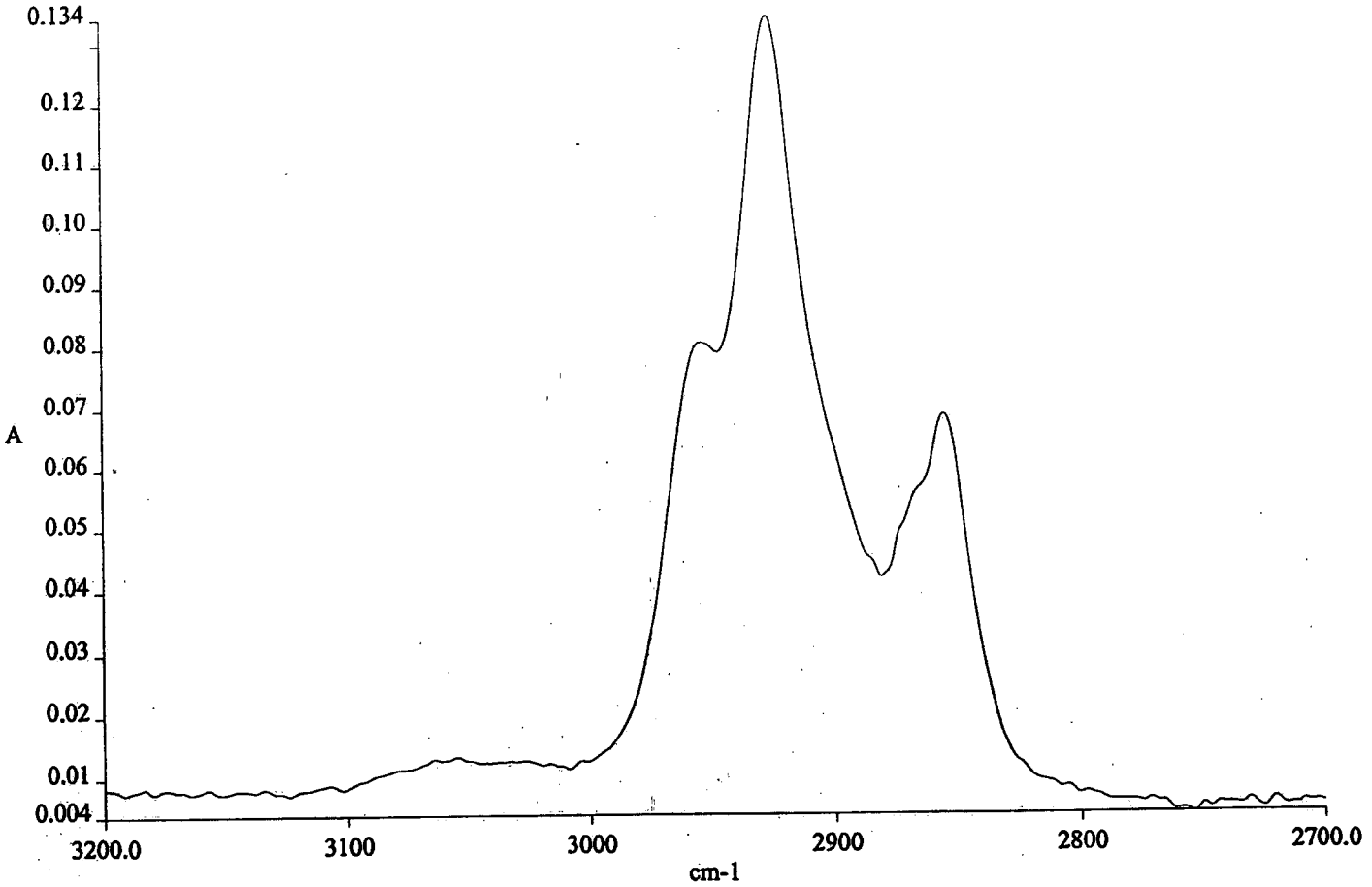

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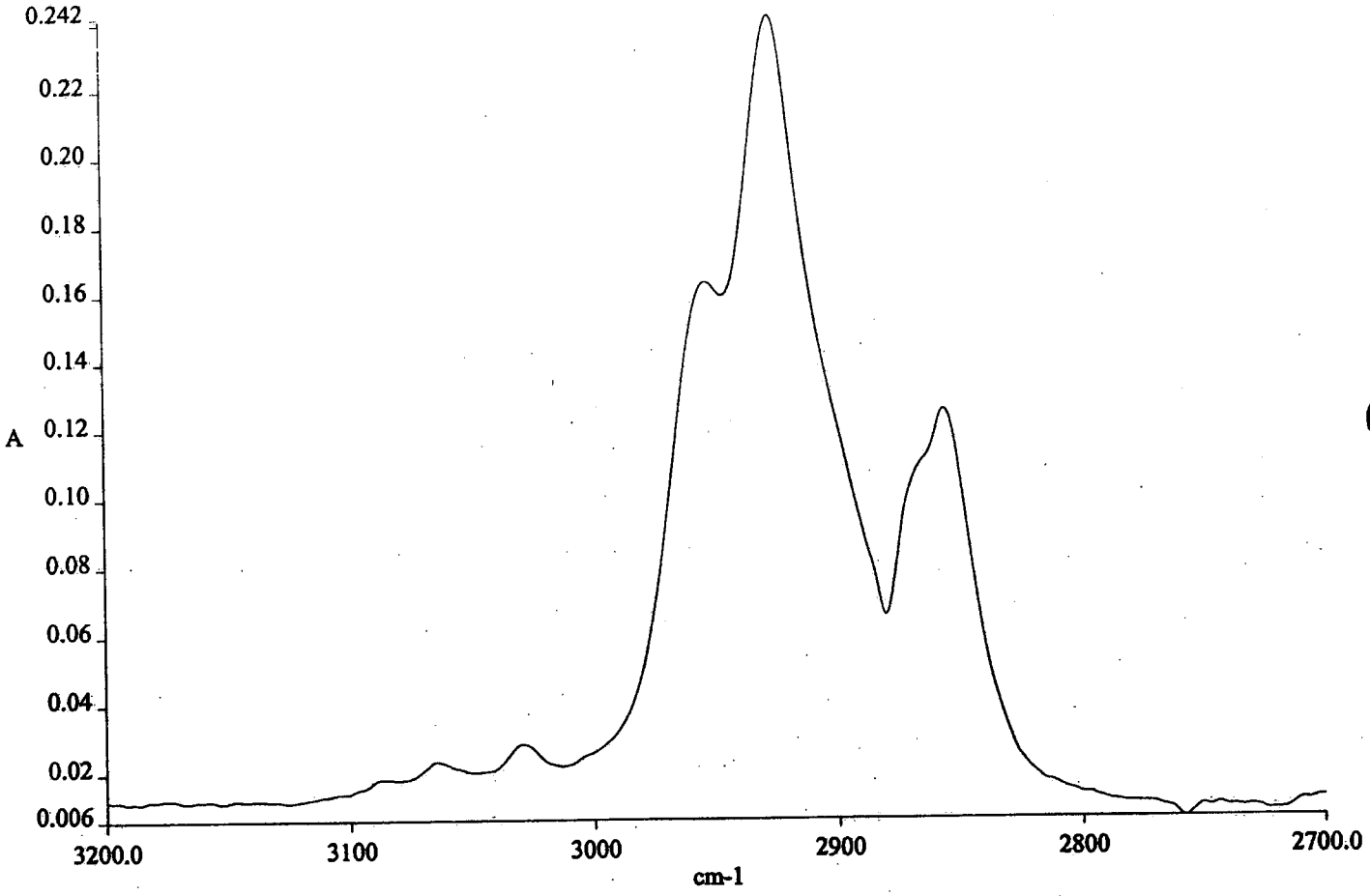

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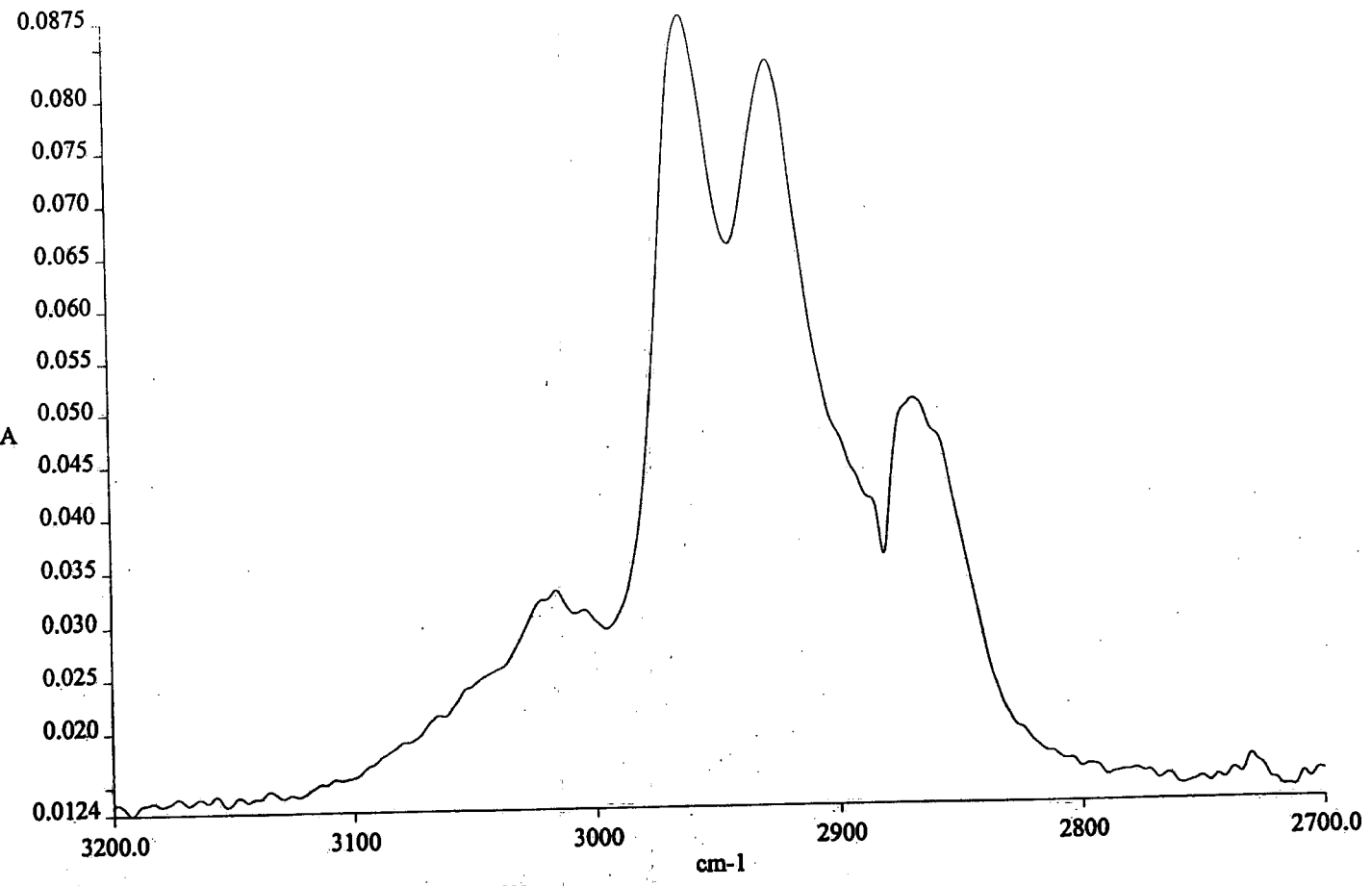

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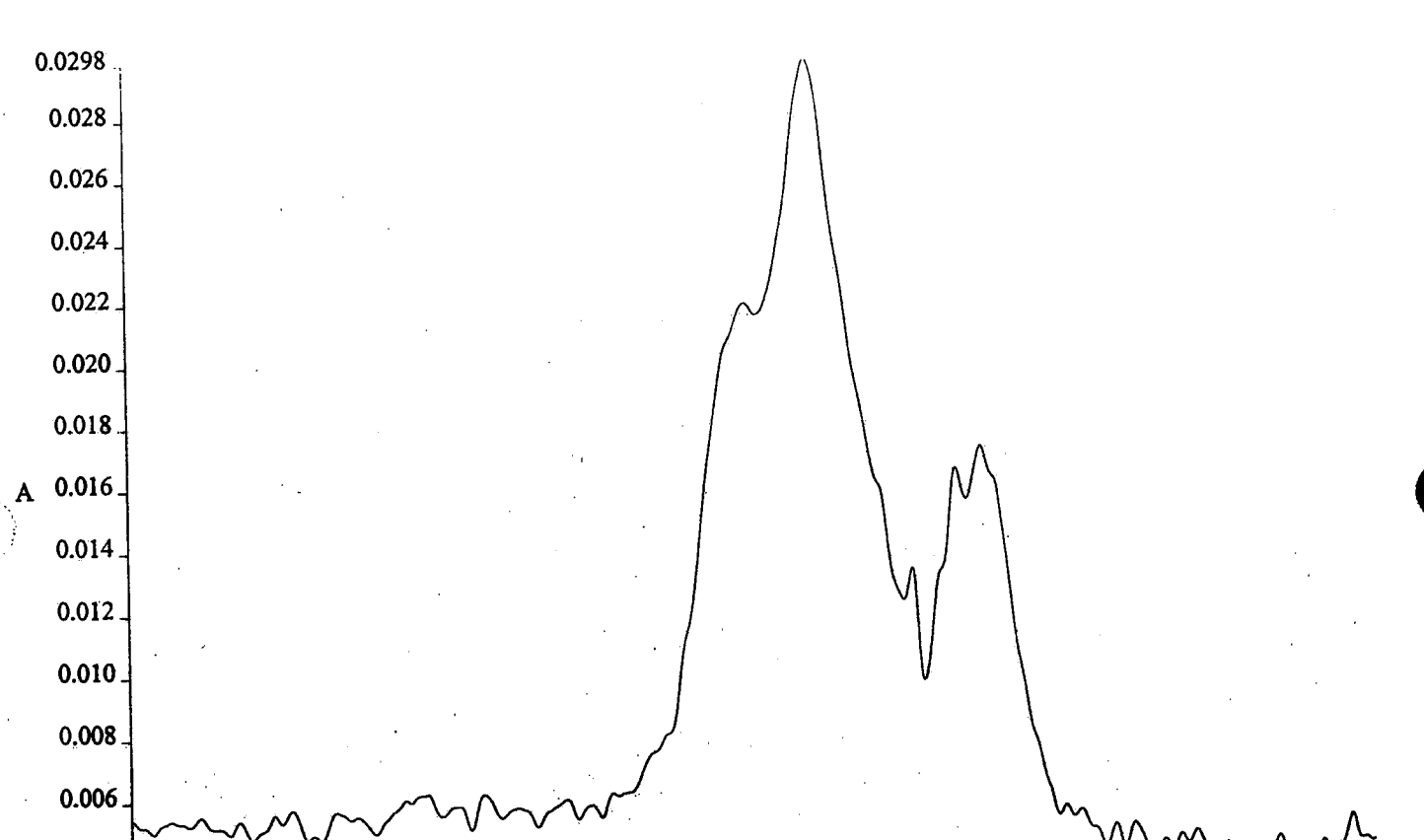

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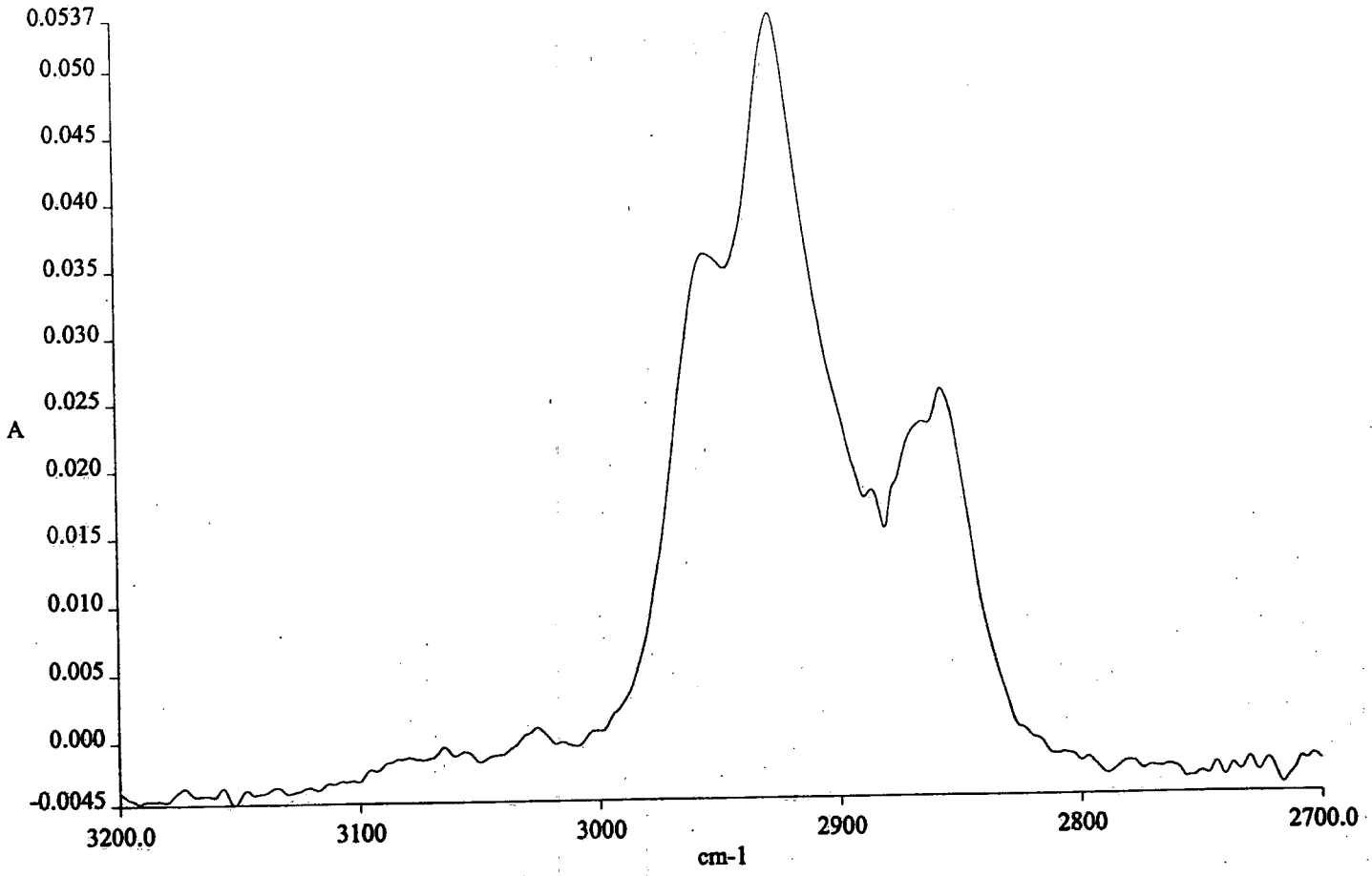

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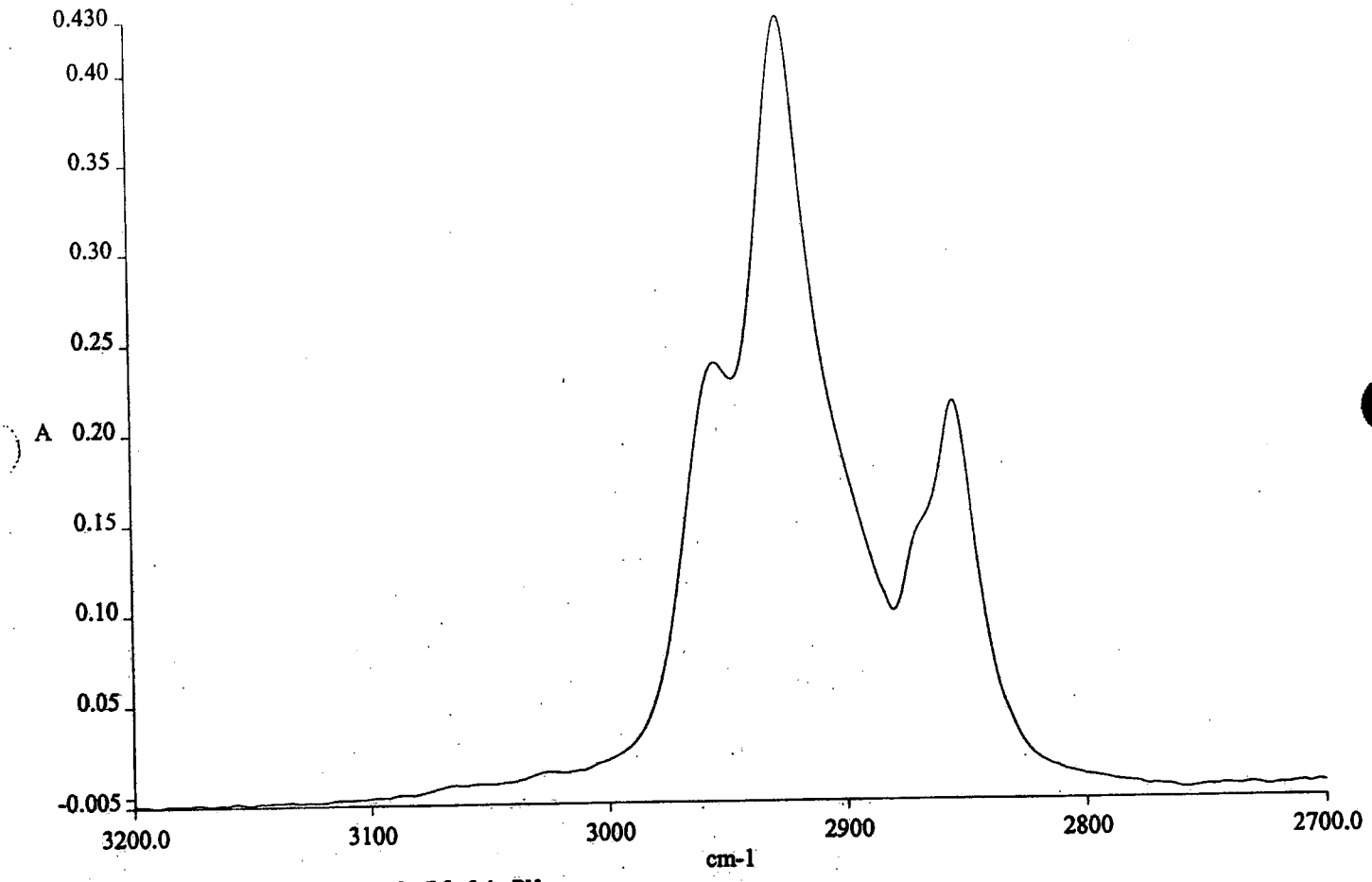

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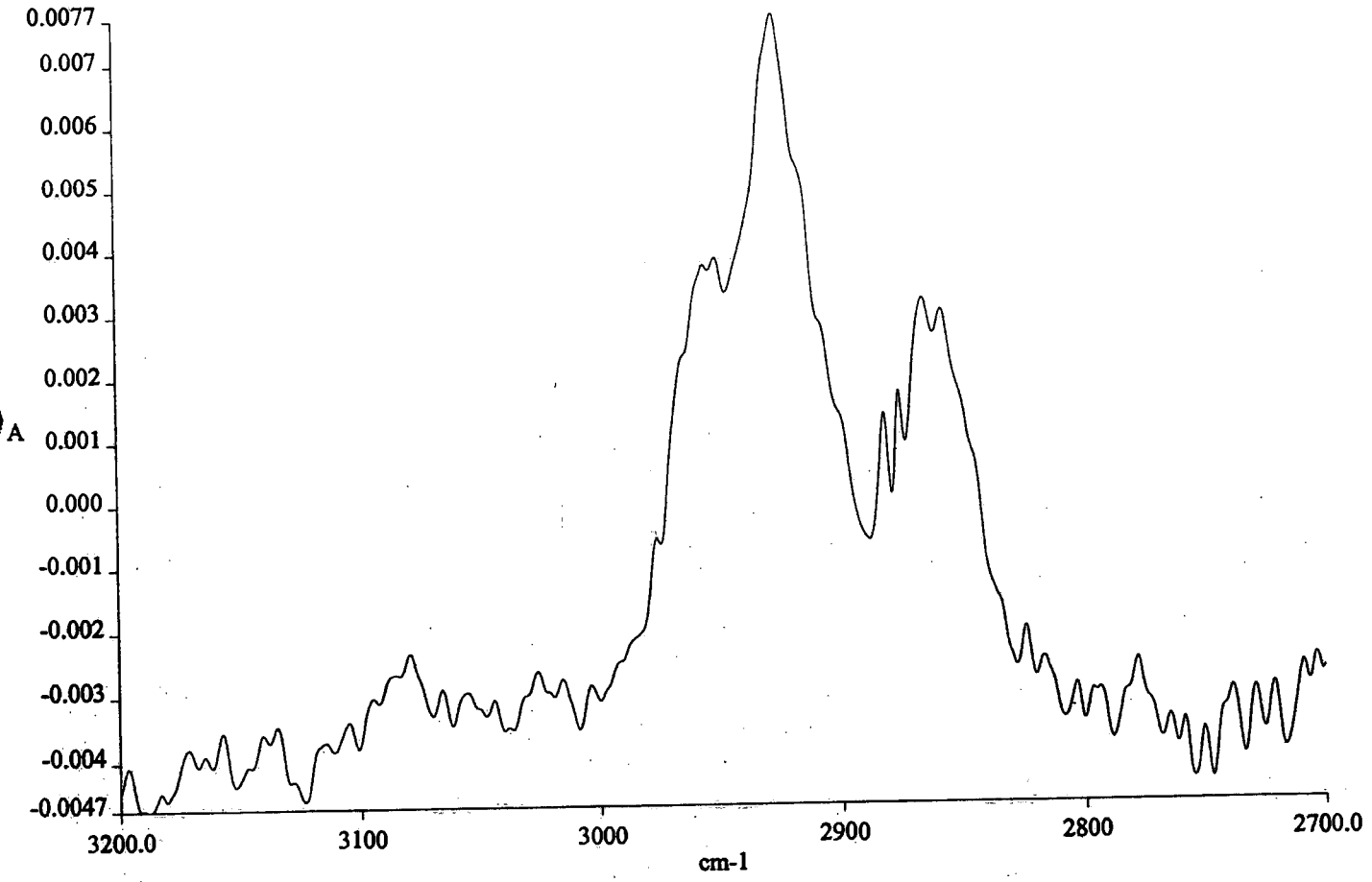

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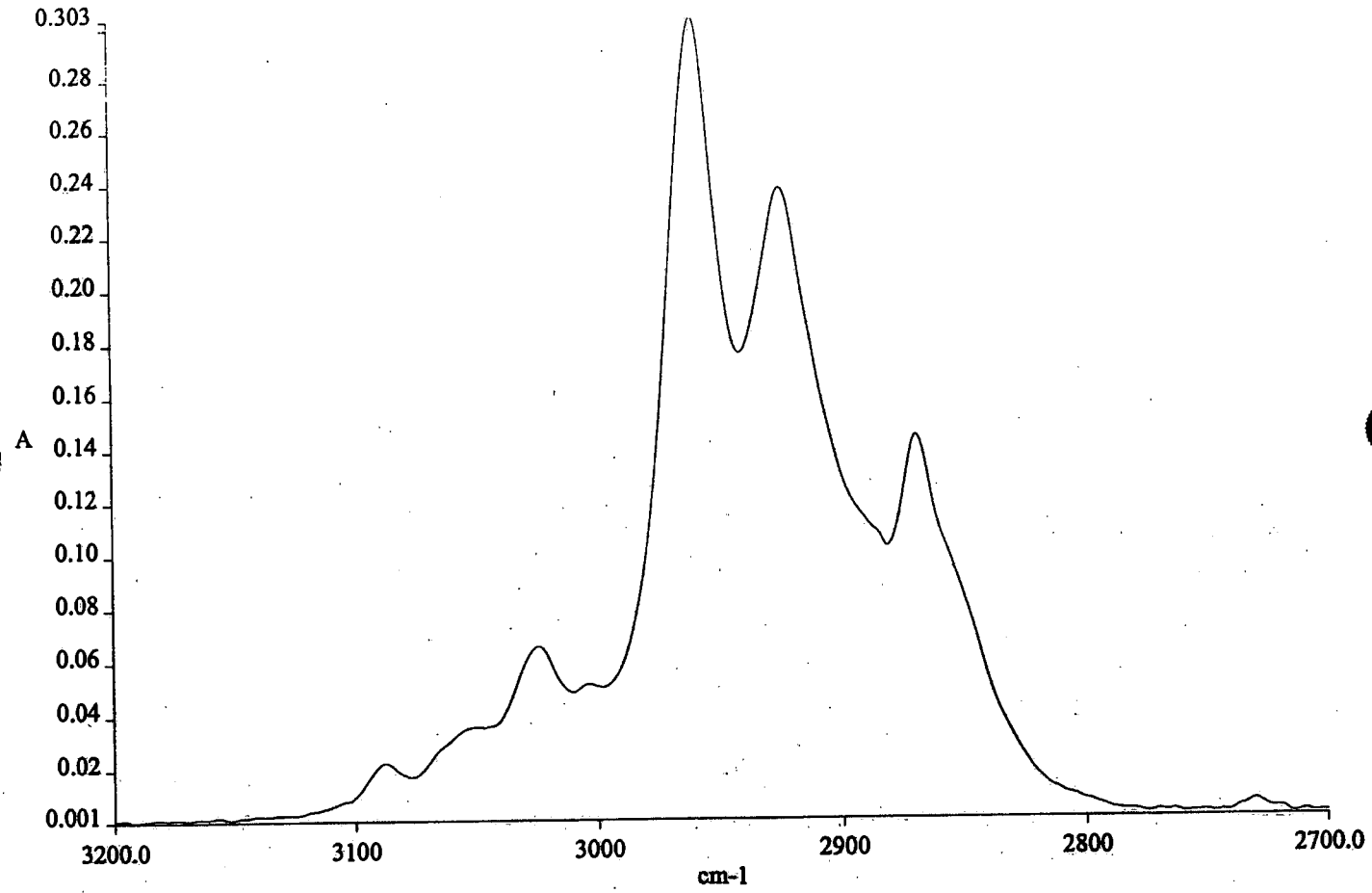
000790

1978



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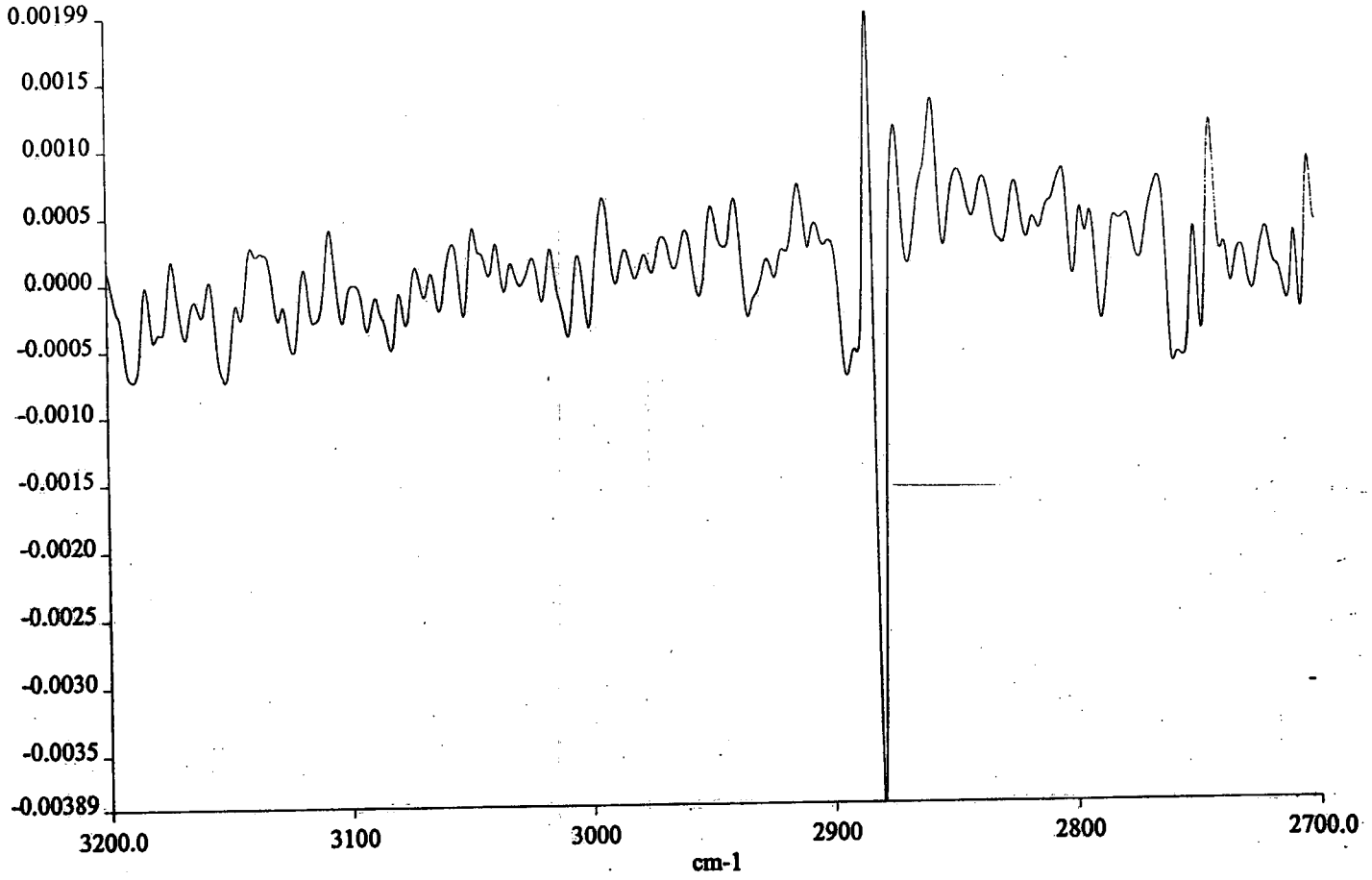
000791

1879



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Phone # (973) 361-42
Fax # (973) 989-5288

INTEGRATED ANALYT[illegible]L LABORATORIES
CHAIN OF [illegible]TODY

[illegible]ranklin Rd
[illegible]ph, NJ 07869

CLIENT & PROJECT

Company Name:	ENVIROTACTICS
Address:	2517 HWY 35
	BUILDING D STE 202
	MANASQUAN NJ 08736
Telephone #:	732-292-0100
Fax #:	732-292-2808
Project Name:	ORBIS
Project Manager:	CHRIS NEUFFER
Reference ID#:	444 PO#: -

REPORTING

Fax to:	
Fax #:	
Report to:	
Address:	
Invoice to:	
Address:	

Turnaround Time

Conditional / TPHC
24 hr* 48 hr 72 hr 1 wk NA Other:

Verbal/Fax
24 hr* 48 hr* 72 hr* 1 wk* 2 wk Other:

Hard Copy
72 hr* 1 wk* 2 wk* 3 wk Other:

*Prior to sample arrival, Lab notification is required.

Report Format

Results Only
Reduced
Regulatory
SRP Disk**: dbf or wk1
Other:

** Circle format required

ANALYTICAL PARAMETERS / PRESERVATIVES

SAMPLE MATRIX
W - Waste SL - Sludge A - Aqueous
O - Oil X - Other S - Soil
GW - Groundwater SOL - Solid

Preservatives
1. HCL 3: HNO_3
2. NaOH 4. H_2SO_4
5. MeOH 6. Other

COOLER TEMP 4 °C

SAMPLE INFORMATION

Sample ID	Sample Description	Sampling Date	Sampling Time	am	pm	Matrix	# of Containers	Lab ID	TPH (1 2 3 4 5 6)	PP+40 (1 2 3 4 5 6)									Comments
S-17		3/27/01	8:40			S	2	01											103313
S-18			9:50			S	2	2											308
S-19			10:15			S	2	3											307
S-20			11:00			S	2	4											316
S-21			3:10		✓	S	2	5											309
S-22			3:55		✓	S	2	6											315
S-23		3/28/01	8:25	X		S	2	7											298
S-24		3/28/01	9:50			S	2	8											462
S-25			10:40			S	2	9											470
S-26			11:45			S	2	10											457

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Concentrations Expected
LOW MED HIGH

Known Hazard yes no
Describe

CUSTODY LOG

	Signature	Date	Time		Signature
Relinquished by:	[signature]	3/28/01	4:05	Received by:	[signature]
Relinquished by:	[signature]	3/28/01	5:15	Received by:	Paul Cornista
Relinquished by:				Received by:	
Relinquished by:				Received by:	
Relinquished by:				Received by:	

Comments:

Lab Case #
1922

PAGE: 1 OF 2

LAB COPIES - W[illegible] YELLOW; CLIENT COPY - PINK

1831

Phone # (973) 361-[redacted]
Fax # (973) 989-5288

INTEGRATED ANALYT[redacted] LABORATORIES
CHAIN OF [redacted]TODY

[redacted]lin Rd
07869

CLIENT & PROJECT

Company Name:	ENVIROTACTICS
Address:	2517 HWY 35
	BUILDING STE. 202
	MANALAPAN NJ
	07726
Telephone #:	732-252-0100
Fax #:	732-252-2802
Project Name:	ORBIS
Project Manager:	
Reference ID#:	444 PO#:

REPORTING

Fax to:	
Fax #:	
Report to:	
Address:	
Invoice to:	
Address:	

Turnaround Time

Conditional / TPHC

24 hr* 48 hr 72 hr 1 wk NA Other:

Verbal/Fax

24 hr* 48 hr* 72 hr* 1 wk* 2 wk Other:

Hard Copy

72 hr* 1 wk* 2 wk* 3 wk Other:

*Prior to sample arrival, Lab notification is required.

Report Format

Results Only
Reduced
Regulatory
SRP Disk**: dbf or wkl
Other:

ANALYTICAL PARAMETERS / PRESERVATIVES

** Circle format required

123 456	123 456	123 456	123 456	123 456	123 456	123 456	123 456	123 456	123 456	Preservatives
TPH	BP×40	VOA's								1. HCL 3. HNO_3 2. NaOH 4. H_2SO_4 5. MeOH 6. Other

COOLER TEMP 4 °C

SAMPLE INFORMATION

SAMPLE MATRIX
W - Waste SL - Sludge A - Aqueous
O - Oil X - Other S - Soil
GW - Groundwater SOL - Solid

Sample ID	Sample Description	Sampling Date	Time	am	pm	Matrix	# of Containers	Lab ID	TPH	BP×40	VOA's								Comments
S-27		3/28/01	11:30		/	S	2	11	✓	✓									1034.0
S-28		3/28/01	11:55		/	S	2	12	✓	✓									459
S-29		3/28/01	2:40		/	S	2	13	✓	✓									467
TB	TRIP BLANK	3/27/01				X	1	14			✓								374
S-30		3/28/01	3:25	X		S	2	15	✓	✓									461

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Concentrations Expected
LOW MED HIGH

Known Hazard yes no
Describe

CUSTODY LOG

Signature	Date	Time	Signature
Relinquished by:	3/28/01	4:05	Received by:
Relinquished by:	3/28/01	5:15	Received by:
Relinquished by:			Received by:
Relinquished by:			Received by:
Relinquished by:			Received by:

Comments:

Lab Case # 1922

PAGE: 2 OF 2

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

REV01

CHAIN OF CUSTODY

Case No.: E01-1922
Project : ORBIS - 444
Client/Project: ENVTACT/ORBIS
Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736
Date Received: 03/28/01
Time Received: 17:15
Report Format: Reduced

P.O. #: _____

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736
Verbal Due: Apr 12
Report Due: Apr 19

# of Containers	2	2	2	2	2	2
IAL ID #	1922-001	1922-002	1922-003	1922-004	1922-005	1922-006
Client ID #	S-17	S-18	S-19	S-20	S-21	S-22
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Sample Date	03/27/01	03/27/01	03/27/01	03/27/01	03/27/01	03/27/01
Sample Time	08:40	09:50	10:15	11:00	15:10	15:55
Methanol Kit	√	√	√	√	√	√
Balance Rent	√					
VO+15, PP MP	√	√	√	√	√	√
Pesticides	√	√	√	√	√	√
PCB	√	√	√	√	√	√
BNA + 25	√	√	√	√	√	√
PP Metals-HIGH	√	√	√	√	√	√
Cyanide, Total	√	√	√	√	√	√
Phenols	√	√	√	√	√	√
% Solids	√	√	√	√	√	√
TPHC-72 Hour	√	√	√	√	√	√
Electronic Del.	√					

Comments: NOTE 1: AS PER CHRIS N., SAMPLE #10 ON HOLD PENDING CLIENT AUTHORIZATION.
REV 01: AS PER CHRIS N., CANCEL SAMPLE ON HOLD. MRF/cb 4/11/01

CHAIN OF CUSTODY

Case No.: E01-1922
Project : ORBIS - 444
Client/Project: ENVTACT/ORBIS
Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736
Date Received: 03/28/01
Time Received: 17:15
Report Format: Reduced

P.O. #: _____

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736
Verbal Due: Apr 12
Report Due: Apr 19

# of Containers	2	2	2	2	2	2
IAL ID #	1922-007	1922-008	1922-009	1922-010	1922-011	1922-012
Client ID #	S-23	S-24	S-25	S-26	S-27	S-28
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Sample Date	03/28/01	03/28/01	03/28/01	03/28/01	03/28/01	03/28/01
Sample Time	08:25	09:50	10:40	11:45	13:30	13:55
Methanol Kit	√	√	√	√	√	√
VO+15, PP MP	√	√	√	C	√	√
Pesticides	√	√	√	C	√	√
PCB	√	√	√	C	√	√
BNA + 25	√	√	√	C	√	√
PP Metals-HIGH	√	√	√	C	√	√
Cyanide, Total	√	√	√	C	√	√
Phenols	√	√	√	C	√	√
% Solids	√	√	√	C	√	√
TPHC-72 Hour	√	√	√	C	√	√

Comments: NOTE 1: AS PER CHRIS N., SAMPLE #10 ON HOLD PENDING CLIENT AUTHORIZATION.
REV 01: AS PER CHRIS N., CANCEL SAMPLE ON HOLD. MRF/cb 4/11/01

CHAIN OF CUSTODY

Case No.: E01-1922
Project : ORBIS - 444
Client/Project: ENVTACT/ORBIS
Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736
Date Received: 03/28/01
Time Received: 17:15
Report Format: Reduced

P.O. #: _____

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736
Verbal Due: Apr 12
Report Due: Apr 19

# of Containers	2	1	2
IAL ID #	1922-013	1922-014	1922-015
Client ID #	S-29	TB	S-30
Matrix	Soil	Soil	Soil
Sample Date	03/28/01	03/27/01	03/28/01
Sample Time	14:40	:	15:25
Methanol Kit	√	√	√
VO+15, PP MP	√		√
VO + 10, PP MP		√	
Pesticides	√		√
PCB	√		√
BNA + 25	√		√
PP Metals-HIGH	√		√
Cyanide, Total	√		√
Phenols	√		√
% Solids	√		√
TPHC-72 Hour	√		√

Comments: NOTE 1: AS PER CHRIS N., SAMPLE #10 ON HOLD PENDING CLIENT AUTHORIZATION.
REV 01: AS PER CHRIS N., CANCEL SAMPLE ON HOLD. MRF/cb 4/11/01

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: 1922 CLIENT: ENVIROTACTICS

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

CHAIN OF CUSTODY: COMPLETE / INCOMPLETE Comments:

		Comments:
Sample Bottles Intact:	✓	
Sample Labels Intact/ Correct:	✓	
Sufficient Sample Volume:	✓	
Correct bottles/ preservative:	✓	
Samples received in holding time/ prep time:	✓	
Headspace/ bubbles in voa samples:	⊘	
Samples to be subcontracted:	⊘	
Preserved Sample pH checked: (Excluding voa samples)	⊘	

KEY
✓ = YES
✗ = NO
⊘ = N/A

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL BP DATE 3/29

CORRECTIVE ACTION REQUIRED: YES [ ] (SEE BELOW) NO [✓]

CLIENT NOTIFIED: YES [ ] Date/ Time: _____ NO [ ]

PROJECT CONTACT: _____

SUBCONTRACTED LAB: _____

DATE SHIPPED: _____

ADDITIONAL COMMENTS: _____

VERIFIED/TAKEN BY: INITIAL BK DATE _____

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REV 10/00

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Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-1922
Client : Envirotactics Inc.
Project : ORBIS - 444

	GC/MS V		EXTRACT DATE	EXTRACT TIME	EXTRACT INITIAL	ANALYSIS DATE	ANALYSIS TIME	ANALYSIS INITIAL
Methanol Kit	1922-001	S				3/29		
	1922-002	S						
	1922-003	S						
	1922-004	S						
	1922-005	S						
	1922-006	S						
	1922-007	S						
	1922-008	S						
	1922-009	S						
	1922-010	S						
	1922-011	S						
	1922-012	S						
	1922-013	S						
	1922-014	S						
	1922-015	S						
Balance Rent	1922-001	S						
VO+15, PP MP	1922-001	S						
	1922-002	S						
	1922-003	S						
	1922-004	S						
	1922-005	S						
	1922-006	S						
	1922-007	S						
	1922-008	S						
	1922-009	S						
	1922	S						
	1922-011	S						
	1922-012	S						
	1922-013	S						
	1922-015	S						
VO + 10, PP MP	1922-014	S						

	GC EX		EXTRACT DATE	EXTRACT TIME	EXTRACT INITIAL	ANALYSIS DATE	ANALYSIS TIME	ANALYSIS INITIAL
Pesticides	1922-001	S	3/30	9:00	30ml2	4.2	6:00	LB
	1922-002	S						
	1922-003	S						
	1922-004	S						
	1922-005	S						
	1922-006	S				4.3	4:00	LB
	1922-007	S						
	1922-008	S						
	1922-009	S						
	1922	S						
	1922-011	S	3/30	9:00	30ml2	4.3	4:00	LB
	1922-012	S						
	1922-013	S						
	1922-015	S						

000799

1837

Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-1922
Client : Envirotactics Inc.
Project : ORBIS - 444

	GC EX		EXTRACT			ANALYSIS		
			DATE	TIME	INITIAL	DATE	TIME	INITIAL
PCB	1922-001	S	3/30	900	JDM2	4.2	800	JL
	1922-002	S				3.30	400	
	1922-003	S						
	1922-004	S						
	1922-005	S				4.2	800	
	1922-006	S						
	1922-007	S				3.30	400	
	1922-008	S						
	1922-009	S						
	1922	S						
	1922-011	S	3/30	900	JDM2	3.30	400	JL
	1922-012	S				4.2	800	
	1922-013	S						
	1922-015	S						
	GC/MS X							
BNA + 25	1922-001	S	3/30	700-300	DL	3/30		JC
	1922-002	S						
	1922-003	S						
	1922-004	S						
	1922-005	S						
	1922-006	S						
	1922-007	S						
	1922-008	S						
	1922-009	S						
	1922	S						
	1922-011	S				3/30		
	1922-012	S						
	1922-013	S						
	1922-015	S						
	METALS							
PP Metals-HIGH	1922-001	S	4/2	2pm	LC	4/3	1200	JL
	1922-002	S						
	1922-003	S						
	1922-004	S						
	1922-005	S						
	1922-006	S						
	1922-007	S						
	1922-008	S						
	1922-009	S						
	1922	S						
	1922-011	S	4/2	2pm	LC	4/3	1200	JL
	1922-012	S						
	1922-013	S	4/2	2pm	LC	4/3	1200	JL
	1922-015	S					— " —	
	WETCHEM							
Cyanide, Total	1922-001	S	3/30		JM	4/4		JM

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Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-1922
Client : Envirotactics Inc.
Project : ORBIS - 444

	WETCHEM		EXTRACT DATE	EXTRACT TIME	EXTRACT INITIAL	ANALYSIS DATE	ANALYSIS TIME	ANALYSIS INITIAL
Cyanide, Total	1922-002	S	3/30		SM	4/4		SM
	1922-003	S						
	1922-004	S						
	1922-005	S						
	1922-006	S						
	1922-007	S						
	1922-008	S						
	1922-009	S						
	1922	S						
	1922-011	S	4/12		SM			
	1922-012	S						
	1922-013	S						
	1922-015	S						
Phenols	1922-001	S	3/29	1200	DM	4/2	1200	DM
	1922-002	S						
	1922-003	S						
	1922-004	S						
	1922-005	S						
	1922-006	S						
	1922-007	S						
	1922-008	S						
	1922-009	S						
	1922-010	S						
	1922-011	S						
	1922-012	S						
	1922-013	S						
	1922-015	S						
% Solids	1922-001	S	3/29		LC			
	1922-002	S						
	1922-003	S						
	1922-004	S						
	1922-005	S						
	1922-006	S						
	1922-007	S						
	1922-008	S						
	1922-009	S						
	1922	S						
	1922-011	S						
	1922-012	S						
	1922-013	S						
	1922-015	S						
TPHC-72 Hour	1922-001	S	3/30	840	DM	3/30	1510	EE
	1922-002	S						
	1922-003	S						
	1922-004	S						
	1922-005	S						
	1922-006	S						

000801

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Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-1922
Client : Envirotactics Inc.
Project : ORBIS - 444

	WETCHEM		EXTRACT			ANALYSIS		
			DATE	TIME	INITIAL	DATE	TIME	INITIAL
TPHC-72 Hour	1922-007	S	3/30	840	DM	3/30	1540	ec
	1922-008	S						
	1922-009	S						
	1922	S						
	1922-011	S						
	1922-012	S						
	1922-013	S						
	1922-015	S						
	AIR							
Electronic Del.	1922-001	S	—			—		

REVIEW & APPROVAL: [signature]
REMARKS :

000803

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Integrated Analytical Labs

Integrated Analytical Laboratories, LLC.

273 Franklin Road
Randolph, N.J. 07869

Phone: 973 361-4252
Fax: 973 989-5288

ANALYTICAL DATA REPORT

for
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan,NJ 08736

Project: ORBIS - NEWARK - 444
Lab Case Number: E01-2006
Date Report Prepared: April 13, 2001

CLIENT SAMPLE ID	LABORATORY SAMPLE ID
S-31	2006-001
S-32	2006-002
S-33	2006-003
S-34	2006-004
S-35	2006-005
S-36	2006-006
S-37	2006-007
S-38	2006-008
S-39	2006-009
S-40	2006-010
S-41	2006-011
S-42	2006-012
S-43	2006-013
S-44	2006-014
T-5	2006-015
T-6	2006-016
TB	2006-017

All required protocols were followed during analyses. These data have been reviewed and accepted by

Michael H. Leftin, Ph.D.
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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Matrix Spike/Matrix Spike Duplicate Results Summary	
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Matrix Spike/Matrix Spike Duplicate Results Summary	
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Metals (Lead)	
Method Blank Results Summary	
Calibration Summary	
Spike Sample Results Summary	
Duplicate Sample Results Summary	

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

MATRIX QUALIFIERS

A - Indicates the sample is an Aqueous matrix.

O - Indicates the sample is an Oil matrix.

S - Indicates the sample is a Soil, Sludge or Sediment matrix.

X - Indicates the sample is an Other matrix as indicated by Client Chain of Custody.

DATA QUALIFIERS

B - Indicates the analyte was found in the Blank and in the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of the analyte.

C - Common Laboratory Contaminant.

D - The compound was reported from the Diluted analysis.

D.F. - Dilution Factor.

E - Estimated concentration, reported results are outside the calibrated range of the instrument.

J - Indicates an estimated value. The compound was detected at a value below the method detection limit but greater than zero. For GC/MS procedures, the mass spectral data meets the criteria required to identify the target compound.

MDL - Method Detection Limit.

MI - Indicates compound concentration could not be determined due to Matrix Interferences.

NA - Not Applicable.

ND - Indicates the compound was analyzed for but Not Detected at the MDL.

REPORT QUALIFIERS

All solid sample analyses are reported on a dry weight basis.

All solid sample values are corrected for original sample size and percent solids.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CONFORMANCE / NONCONFORMANCE SUMMARY

Integrated Analytical Laboratories, LLC. received seventeen (17) soil sample(s) from Envirotactics Inc. (Project: ORBIS - NEWARK - 444) on April 2, 2001 for the analysis of:

(8) Volatiles + 10
(5) Semivolatiles - BN + 15
(2) PCB's
(5) Metals (Lead)
(11) Total Petroleum Hydrocarbons

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

4/13/01
Date

000002

1845

INTEGRATED ANALYTICAL LABORATORIES, LLC.

LABORATORY DELIVERABLES CHECK LIST

Lab Case Number: E01-2006

		Check If Complete
1.	Cover Page, Title Page listing Lab Certification #, facility name & address and date of report preparation.	✓
2.	Table of Contents.	✓
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds.	✓
4.	Summary Table cross-referencing Field ID's vs. Lab ID's.	✓
5.	Document bound, paginated and legible.	✓
6.	Chain of Custody.	✓
7.	Methodology Summary.	✓
8.	Laboratory Chronicle and Holding Time Check.	✓
9.	Results submitted on a dry weight basis (if applicable).	✓
10.	Method Detection Limits.	✓
11.	Lab certified by NJDEP for parameters or appropriate category of parameters or a member of the USEPA CLP.	✓
12.	NonConformance Summary.	✓

[signature]
QC Reviewed by

4/13/01
Date

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC/MS VOLATILE ANALYSIS

Lab Case Number: E01 - 2006

	No	Yes
1. Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks).		✓
2. GC/MS Tuning Specifications: a. BFB Passed		✓
3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series, 12 hours for 8000 series and 8 hours for 500 series.		✓
4. GC/MS Calibration - Initial calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours before sample analysis for 600 series, 12 hours for 8000 series		✓
5. GC/MS Calibration Requirements: a. Calibration Check Compounds		✓
b. System Performance Check Compounds		✓
6. Blank Contamination - If yes, list compounds and concentrations in each blank:	✓	
7. Surrogate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range)		✓
If not met, were the calculations checked and the results qualified as "estimated"?		na
8. Matrix Spike/Matrix Spike Duplicate meet criteria (if not, list those compounds and their recoveries/% differences which fall outside the acceptable range)		✓
9. Internal Standard Area/Retention Time Shift meet criteria		✓
10. Extraction Holding Time Met If not met, list number of days exceeded for each sample:		NA
11. Analysis Holding Time Met If not met, list number of days exceeded for each sample:		✓
12. Sample Dilution Performed		✓

High Target Compounds	High Nontarget Compounds	Matrix Interference	Other
✓	✓		

13. Comments:

Organics Manager

4/8/01
Date

rev 01/01

000004

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INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC/MS SEMIVOLATILE ANALYSIS

Lab Case Number: E01 - 2006

	No	Yes
1. Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks).		✓
2. GC/MS Tuning Specifications: a. DFTPP Passed		✓
3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series, 12 hours for 8000 series.		✓
4. GC/MS Calibration - Initial calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours before sample analysis for 600 series.		✓
5. GC/MS Calibration Requirements: a. Calibration Check Compounds		✓
b. System Performance Check Compounds		✓
6. Blank Contamination - If yes, list compounds and concentrations in each blank: a. B/N Fraction b. Acid Fraction	✓	
7. Surrogate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range) a. B/N Fraction b. Acid Fraction		✓
If not met, were the calculations checked and the results qualified as "estimated"?		na
8. Matrix Spike/Matrix Spike Duplicate meet criteria (if not, list those compounds and their recoveries/% differences which fall outside the acceptable range) a. B/N Fraction b. Acid Fraction		✓
9. Internal Standard Area/Retention Time Shift meet criteria		✓
10. Extraction Holding Time Met If not met, list number of days exceeded for each sample:		✓
11. Analysis Holding Time Met If not met, list number of days exceeded for each sample:		✓
12. Sample Dilution Performed	✓	

High Target Compounds	High Nontarget Compounds	Matrix Interference	Other

13. Comments:

Organics Manager

4/05/01
Date

000005

rev 01/01

1848

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC ANALYSIS - PCB'S, PESTICIDES, HERBICIDES

Lab Case Number: E01 - 2006

		No	Yes
1.	Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks).		✓
2.	Standards Summary submitted.		✓
3.	Calibration - Initial calibration performed within 30 days before sample analysis and continuing calibration performed within 12 hrs of the sample analysis.		✓
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:	✓	
	a. PCB's		
	b. Pesticides		
	c. Herbicides		
5.	Surrogate Recoveries meet criteria (if applicable). If not met, list those compounds and their recoveries which fall outside the acceptable range:		✓
	a. PCB's		
	b. Pesticides		
	c. Herbicides		
6.	Matrix Spike/Matrix Spike Duplicate meet criteria (if not, list those compounds and their recoveries/% differences which fall outside the acceptable range) acceptable range:		✓
	a. PCB's		
	b. Pesticides		
	c. Herbicides		
7.	Retention Time Shift Meet Criteria (if applicable).		✓
8.	Extraction Holding Time Met. If not met, list number of days exceeded for each sample:		✓
9.	Analysis Holding Time Met. If not met, list number of days exceeded for each sample:		✓

Comments:

Organic Manager

06.03.2001
Date

rev 01/01

1849

000096

INTEGRATED ANALYTICAL LABORATORIES

METAL ANALYSIS CONFORMANCE/NONCONFORMANCE SUMMARY

Lab Case Number: E01 - 2006

	No	Yes
1. Calibration Summary Meet Criteria.		✓
2. ICP Interference Check Sample Results Meets Criteria (if applicable)		✓
3. Serial Dilution Summary Submitted (if applicable) / Meets Criteria		✓
4. Internal Standards Meet Criteria (if applicable)		✓
5. Laboratory Control Sample Summary Submitted (if applicable)/Meets Criteria		
6. Blank Contamination: If yes, list compounds and concentrations in each blank:	✓	
7. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria. (If not, list those compounds and their recoveries which fall outside the acceptable range). Sample # 1922-001: RPD 1st. dig. As, 34.7 Pb, 58.6 Zn, 58.9 2nd dig. " 36.5 " 21.1 " 58.4	✓	
8. Extraction Holding Time Met. If not, list number of days exceeded for each sample:		✓
9. Analysis Holding Time Met. If not, list number of days exceeded for each sample:		✓

Additional Comments:
QC sample was digested twice, both times RPD exceeded 20% which indicates a none homogenious sample. However the other 3 QC sets in same batch passed

H. Falk-Jorgensen
Inorganics Manager

04/04/01
Date

rev 01/01

1850

000007

INTEGRATED ANALYTICAL LABORATORIES

PHC ANALYSIS CONFORMANCE/NONCONFORMANCE SUMMARY

Lab Case Number: E01 - 2006

	No	Yes
1. Blank contamination If yes, list the sample and the concentration in each blank:	✓	
2. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list the samples and corresponding recovery which falls outside the acceptable range)		✓
3. IR spectra submitted for all standards, blanks & samples (as required).		✓
4. Chromatograms submitted for all standards, blanks & samples if GC fingerprinting was conducted.		NA
5. Extraction Holding Time Met If not met, list number of days exceeded for each sample:		✓
6. Analysis Holding Time Met If not met, list number of days exceeded for each sample:		✓

Additional Comments:

J del Carmista
Dept. Supervisor

4-3-01
Date

rev 01/01

1851

000008

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2006

Lab ID:	2006-001			2006-002			2006-003			2006-004		
Client ID:	S-31			S-32			S-33			S-34		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	3/29/2001			3/29/2001			3/29/2001			3/29/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (ppb)												
Methylene Chloride	1140	C	822	1150	C	861	1070	C	776	ND		3720
Benzene	7880		822	540	J	861	1690		776	82800		3720
Toluene	211	J	822	650	J	861	3120		776	42500		3720
Chlorobenzene	ND		822	ND		861	813		776	ND		3720
1,4-Dichlorobenzene	ND		822	ND		861	ND		776	970	J	3720
1,2-Dichlorobenzene	ND		822	ND		861	ND		776	17800		3720
TOTAL VO's:	9231	JC		2340	JC		6693	C		144070	J	
TOTAL TIC's:	ND			2460			83200			655000		
TOTAL VO's & TIC's:	9231	JC		4800	JC		89893	C		799070	J	
General Analytical												
Total Petroleum Hydrocarbons (ppm)	~		~	73.4		25.5	~		~	~		~

Lab ID:	2006-005			2006-006			2006-007			2006-008		
Client ID:	S-35			S-36			S-37			S-38		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	3/29/2001			3/29/2001			3/29/2001			3/29/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (ppb)												
Chloroethane	~		~	~		~	ND		940	518	J	863
Methylene Chloride	~		~	~		~	1170	C	940	ND		863
1,2-Dichloroethane(EDC)	~		~	~		~	ND		940	6970		863
Benzene	~		~	~		~	1740		940	1260		863
Trichloroethene	~		~	~		~	ND		940	1030		863
Toluene	~		~	~		~	13900		940	9880		863
Ethylbenzene	~		~	~		~	ND		940	784	J	863
Total Xylenes	~		~	~		~	ND		940	3870		863
1,3-Dichlorobenzene	~		~	~		~	ND		940	244	J	863
1,4-Dichlorobenzene	~		~	~		~	ND		940	856	J	863
1,2-Dichlorobenzene	~		~	~		~	ND		940	1350		863
TOTAL VO's:	~			~			16810	C		26762	J	
TOTAL TIC's:	~		~	~		~	9290			2535		
TOTAL VO's & TIC's:	~		~	~		~	26100	C		29297	J	
General Analytical												
Total Petroleum Hydrocarbons (ppm)	424		25.0	ND		25.0	ND		27.1	3030		105

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL
All qualifiers on individual Volatiles are carried down through summation.
C = Common Laboratory and/or Bottle Contaminant.

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2006

Lab ID:	2006-009			2006-010			2006-011			2006-012		
Client ID:	S-39			S-40			S-41			S-42		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	3/29/2001			3/29/2001			3/29/2001			3/29/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (ppb)												
Methylene Chloride	1270	C	1000	~		~	~		~	~		~
Benzene	550	J	1000	~		~	~		~	~		~
Toluene	689	J	1000	~		~	~		~	~		~
TOTAL VO's:	2509	JC		~			~			~		
TOTAL TIC's:	ND			~		~	~		~	~		~
TOTAL VO's & TIC's:	2509	JC		~		~	~		~	~		~
Semivolatiles - BN (ppb)												
Acenaphthene	~		~	116	J	119	ND		110	ND		121
Phenanthrene	~		~	ND		119	ND		110	74.1	J	121
Fluoranthene	~		~	ND		119	ND		110	82.3	J	121
Pyrene	~		~	ND		119	ND		110	74	J	121
bis(2-Ethylhexyl)phthalate	~		~	ND		119	ND		110	355		121
Di-n-octylphthalate	~		~	ND		119	ND		110	198		121
Indeno[1,2,3-cd]pyrene	~		~	ND		119	ND		110	73.4	J	121
TOTAL BN'S:	~			116	J		ND			856.8	J	
TOTAL TIC's:	~		~	ND			ND			5583		
TOTAL BN'S & TIC's:	~		~	116	J		ND			6439.8	J	
Metals (ppm)												
Lead	~		~	12.4		2.55	11.7		2.41	30.7		2.55
General Analytical												
Total Petroleum Hydrocarbons (ppm)	ND		27.2	ND		25.8	ND		25.0	ND		25.4

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
C = Common Laboratory and/or Bottle Contaminant.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2006

Lab ID:	2006-013			2006-014			2006-015			2006-016		
Client ID:	S-43			S-44			T-5			T-6		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	3/29/2001			3/29/2001			3/29/2001			3/29/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Semivolatiles - BN (ppb)												
Phenanthrene	75.9	J	115	126		118	~		~	~		~
Butylbenzylphthalate	ND		115	224		118	~		~	~		~
bis(2-Ethylhexyl)phthalate	130		115	1560		118	~		~	~		~
TOTAL BN'S:	205.9	J		1910			~			~		
TOTAL TIC's:	4143			5510			~		~	~		~
TOTAL BN'S & TIC's:	4348.9	J		7420			~		~	~		~
PCB's (ppb)												
Aroclor-1016	~		~	~		~	ND		107	ND		109
Aroclor-1221	~		~	~		~	ND		107	ND		109
Aroclor-1232	~		~	~		~	ND		107	ND		109
Aroclor-1242	~		~	~		~	ND		107	ND		109
Aroclor-1248	~		~	~		~	ND		107	ND		109
Aroclor-1254	~		~	~		~	2060		107	1370		109
Aroclor-1260	~		~	~		~	ND		107	ND		109
Metals (ppm)												
Lead	420		2.45	91.1		2.46	~		~	~		~
General Analytical												
Total Petroleum Hydrocarbons (ppm)	ND		25.0	30.9		25.0	~		~	~		~

Lab ID:	2006-017		
Client ID:	TB		
Matrix:	Soil		
Sampled Date:	3/28/2001		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (ppb)			
TOTAL VO's:	ND		625
TOTAL TIC's:	ND		
TOTAL VO's & TIC's:	ND		

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL
All qualifiers on individual Volatiles are carried down through summation.

000011

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-001
Client ID: S-31
Date Received: 04/02/2001
Date Analyzed: 04/03/2001
Data file: J8636.D

GC/MS Column: DB-624
Sample wt/vol: 0.037g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.8

Compound	Concentration	Q	MDL
Chloromethane	ND		822
Vinyl Chloride	ND		822
Bromomethane	ND		822
Chloroethane	ND		822
Trichlorofluoromethane	ND		822
Acrolein	ND		1640
1,1-Dichloroethene	ND		822
Methylene Chloride	1140	C	822
Acrylonitrile	ND		1640
trans-1,2-Dichloroethene	ND		822
1,1-Dichloroethane	ND		822
Chloroform	ND		822
1,1,1-Trichloroethane	ND		822
Carbon Tetrachloride	ND		822
1,2-Dichloroethane(EDC)	ND		822
Benzene	7880		822
Trichloroethene	ND		822
1,2-Dichloropropane	ND		822
Bromodichloromethane	ND		822
2-Chloroethylvinyl Ether	ND		822
cis-1,3-Dichloropropene	ND		822
Toluene	211	J	822
trans-1,3-Dichloropropene	ND		822
1,1,2-Trichloroethane	ND		822
Tetrachloroethene	ND		822
Dibromochloromethane	ND		822
Chlorobenzene	ND		822
Ethylbenzene	ND		822
Total Xylenes	ND		822
Bromoform	ND		822
1,1,2,2-Tetrachloroethane	ND		822
1,3-Dichlorobenzene	ND		822
1,4-Dichlorobenzene	ND		822
1,2-Dichlorobenzene	ND		822
Total Target Compounds:	9231	JC	

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-001
Client ID: S-31
Date Received: 04/02/2001
Date Analyzed: 04/03/2001
Date File: J8636.D

GC/MS Column: DB-624
Sample wt/vol: 0.037g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.8

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

1856

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-002
Client ID: S-32
Date Received: 04/02/2001
Date Analyzed: 04/03/2001
Data file: J8637.D

GC/MS Column: DB-624
Sample wt/vol: 0.037g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 21.5

Compound	Concentration	Q	MDL
Chloromethane	ND		861
Vinyl Chloride	ND		861
Bromomethane	ND		861
Chloroethane	ND		861
Trichlorofluoromethane	ND		861
Acrolein	ND		1720
1,1-Dichloroethene	ND		861
Methylene Chloride	1150	C	861
Acrylonitrile	ND		1720
trans-1,2-Dichloroethene	ND		861
1,1-Dichloroethane	ND		861
Chloroform	ND		861
1,1,1-Trichloroethane	ND		861
Carbon Tetrachloride	ND		861
1,2-Dichloroethane(EDC)	ND		861
Benzene	540	J	861
Trichloroethene	ND		861
1,2-Dichloropropane	ND		861
Bromodichloromethane	ND		861
2-Chloroethylvinyl Ether	ND		861
cis-1,3-Dichloropropene	ND		861
Toluene	650	J	861
trans-1,3-Dichloropropene	ND		861
1,1,2-Trichloroethane	ND		861
Tetrachloroethene	ND		861
Dibromochloromethane	ND		861
Chlorobenzene	ND		861
Ethylbenzene	ND		861
Total Xylenes	ND		861
Bromoform	ND		861
1,1,2,2-Tetrachloroethane	ND		861
1,3-Dichlorobenzene	ND		861
1,4-Dichlorobenzene	ND		861
1,2-Dichlorobenzene	ND		861
Total Target Compounds:	2340	JC	

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-002
Client ID: S-32
Date Received: 04/02/2001
Date Analyzed: 04/03/2001
Date File: J8637.D

GC/MS Column: DB-624
Sample wt/vol: 0.037g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 21.5

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	2460	13.35

Total TICs = 2460

1858

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-003
Client ID: S-33
Date Received: 04/02/2001
Date Analyzed: 04/03/2001
Data file: J8638.D

GC/MS Column: DB-624
Sample wt/vol: 0.039g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.4

Compound	Concentration	Q	MDL
Chloromethane	ND		776
Vinyl Chloride	ND		776
Bromomethane	ND		776
Chloroethane	ND		776
Trichlorofluoromethane	ND		776
Acrolein	ND		1550
1,1-Dichloroethene	ND		776
Methylene Chloride	1070	C	776
Acrylonitrile	ND		1550
trans-1,2-Dichloroethene	ND		776
1,1-Dichloroethane	ND		776
Chloroform	ND		776
1,1,1-Trichloroethane	ND		776
Carbon Tetrachloride	ND		776
1,2-Dichloroethane(EDC)	ND		776
Benzene	1690		776
Trichloroethene	ND		776
1,2-Dichloropropane	ND		776
Bromodichloromethane	ND		776
2-Chloroethylvinyl Ether	ND		776
cis-1,3-Dichloropropene	ND		776
Toluene	3120		776
trans-1,3-Dichloropropene	ND		776
1,1,2-Trichloroethane	ND		776
Tetrachloroethene	ND		776
Dibromochloromethane	ND		776
Chlorobenzene	813		776
Ethylbenzene	ND		776
Total Xylenes	ND		776
Bromoform	ND		776
1,1,2,2-Tetrachloroethane	ND		776
1,3-Dichlorobenzene	ND		776
1,4-Dichlorobenzene	ND		776
1,2-Dichlorobenzene	ND		776
Total Target Compounds:	6693	C	

1859

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-003
Client ID: S-33
Date Received: 04/02/2001
Date Analyzed: 04/03/2001
Date File: J8638.D

GC/MS Column: DB-624
Sample wt/vol: 0.039g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.4

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown	83200	13.30

Total TICs = 83200

000017

1866

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-004
Client ID: S-34
Date Received: 04/02/2001
Date Analyzed: 04/06/2001
Data file: J8726.D

GC/MS Column: DB-624
Sample wt/vol: 0.008g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 5
% Moisture: 15.9

Compound	Concentration	Q	MDL
Chloromethane	ND		3720
Vinyl Chloride	ND		3720
Bromomethane	ND		3720
Chloroethane	ND		3720
Trichlorofluoromethane	ND		3720
Acrolein	ND		7430
1,1-Dichloroethene	ND		3720
Methylene Chloride	ND		3720
Acrylonitrile	ND		7430
trans-1,2-Dichloroethene	ND		3720
1,1-Dichloroethane	ND		3720
Chloroform	ND		3720
1,1,1-Trichloroethane	ND		3720
Carbon Tetrachloride	ND		3720
1,2-Dichloroethane(EDC)	ND		3720
Benzene	82800		3720
Trichloroethene	ND		3720
1,2-Dichloropropane	ND		3720
Bromodichloromethane	ND		3720
2-Chloroethylvinyl Ether	ND		3720
cis-1,3-Dichloropropene	ND		3720
Toluene	42500		3720
trans-1,3-Dichloropropene	ND		3720
1,1,2-Trichloroethane	ND		3720
Tetrachloroethene	ND		3720
Dibromochloromethane	ND		3720
Chlorobenzene	ND		3720
Ethylbenzene	ND		3720
Total Xylenes	ND		3720
Bromoform	ND		3720
1,1,2,2-Tetrachloroethane	ND		3720
1,3-Dichlorobenzene	ND		3720
1,4-Dichlorobenzene	970	J	3720
1,2-Dichlorobenzene	17800		3720
Total Target Compounds:	144070	J	

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-004
Client ID: S-34
Date Received: 04/02/2001
Date Analyzed: 04/06/2001
Date File: J8726.D

GC/MS Column: DB-624
Sample wt/vol: 0.008g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 5
% Moisture: 15.9

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown	655000	13.31

Total TICs = 655000

1862

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-007
Client ID: S-37
Date Received: 04/02/2001
Date Analyzed: 04/03/2001
Data file: J8640.D

GC/MS Column: DB-624
Sample wt/vol: 0.036g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 26.1

Compound	Concentration	Q	MDL
Chloromethane	ND		940
Vinyl Chloride	ND		940
Bromomethane	ND		940
Chloroethane	ND		940
Trichlorofluoromethane	ND		940
Acrolein	ND		1880
1,1-Dichloroethene	ND		940
Methylene Chloride	1170	C	940
Acrylonitrile	ND		1880
trans-1,2-Dichloroethene	ND		940
1,1-Dichloroethane	ND		940
Chloroform	ND		940
1,1,1-Trichloroethane	ND		940
Carbon Tetrachloride	ND		940
1,2-Dichloroethane(EDC)	ND		940
Benzene	1740		940
Trichloroethene	ND		940
1,2-Dichloropropane	ND		940
Bromodichloromethane	ND		940
2-Chloroethylvinyl Ether	ND		940
cis-1,3-Dichloropropene	ND		940
Toluene	13900		940
trans-1,3-Dichloropropene	ND		940
1,1,2-Trichloroethane	ND		940
Tetrachloroethene	ND		940
Dibromochloromethane	ND		940
Chlorobenzene	ND		940
Ethylbenzene	ND		940
Total Xylenes	ND		940
Bromoform	ND		940
1,1,2,2-Tetrachloroethane	ND		940
1,3-Dichlorobenzene	ND		940
1,4-Dichlorobenzene	ND		940
1,2-Dichlorobenzene	ND		940
Total Target Compounds:	16810	C	

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-007
Client ID: S-37
Date Received: 04/02/2001
Date Analyzed: 04/03/2001
Date File: J8640.D

GC/MS Column: DB-624
Sample wt/vol: 0.036g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 26.1

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown	2860	13.30
	Substituted benzene	6430	13.35

Total TICs = 9290

1864

000021

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-008
Client ID: S-38
Date Received: 04/02/2001
Date Analyzed: 04/06/2001
Data file: J8727.D

GC/MS Column: DB-624
Sample wt/vol: 0.038g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 23.8

Compound	Concentration	Q	MDL
Chloromethane	ND		863
Vinyl Chloride	ND		863
Bromomethane	ND		863
Chloroethane	518	J	863
Trichlorofluoromethane	ND		863
Acrolein	ND		1730
1,1-Dichloroethene	ND		863
Methylene Chloride	ND		863
Acrylonitrile	ND		1730
trans-1,2-Dichloroethene	ND		863
1,1-Dichloroethane	ND		863
Chloroform	ND		863
1,1,1-Trichloroethane	ND		863
Carbon Tetrachloride	ND		863
1,2-Dichloroethane(EDC)	6970		863
Benzene	1260		863
Trichloroethene	1030		863
1,2-Dichloropropane	ND		863
Bromodichloromethane	ND		863
2-Chloroethylvinyl Ether	ND		863
cis-1,3-Dichloropropene	ND		863
Toluene	9880		863
trans-1,3-Dichloropropene	ND		863
1,1,2-Trichloroethane	ND		863
Tetrachloroethene	ND		863
Dibromochloromethane	ND		863
Chlorobenzene	ND		863
Ethylbenzene	784	J	863
Total Xylenes	3870		863
Bromoform	ND		863
1,1,2,2-Tetrachloroethane	ND		863
1,3-Dichlorobenzene	244	J	863
1,4-Dichlorobenzene	856	J	863
1,2-Dichlorobenzene	1350		863
Total Target Compounds:	26762	J	

000022

1865

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-008
Client ID: S-38
Date Received: 04/02/2001
Date Analyzed: 04/06/2001
Date File: J8727.D

GC/MS Column: DB-624
Sample wt/vol: 0.038g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 23.8

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown alkane	1620	12.51
	Unknown alkane	915	13.98

Total TICs = 2535

000023

1866

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-009
Client ID: S-39
Date Received: 04/02/2001
Date Analyzed: 04/03/2001
Data file: J8642.D

GC/MS Column: DB-624
Sample wt/vol: 0.034g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 26.5

Compound	Concentration	Q	MDL
Chloromethane	ND		1000
Vinyl Chloride	ND		1000
Bromomethane	ND		1000
Chloroethane	ND		1000
Trichlorofluoromethane	ND		1000
Acrolein	ND		2000
1,1-Dichloroethene	ND		1000
Methylene Chloride	1270	C	1000
Acrylonitrile	ND		2000
trans-1,2-Dichloroethene	ND		1000
1,1-Dichloroethane	ND		1000
Chloroform	ND		1000
1,1,1-Trichloroethane	ND		1000
Carbon Tetrachloride	ND		1000
1,2-Dichloroethane(EDC)	ND		1000
Benzene	550	J	1000
Trichloroethene	ND		1000
1,2-Dichloropropane	ND		1000
Bromodichloromethane	ND		1000
2-Chloroethylvinyl Ether	ND		1000
cis-1,3-Dichloropropene	ND		1000
Toluene	689	J	1000
trans-1,3-Dichloropropene	ND		1000
1,1,2-Trichloroethane	ND		1000
Tetrachloroethene	ND		1000
Dibromochloromethane	ND		1000
Chlorobenzene	ND		1000
Ethylbenzene	ND		1000
Total Xylenes	ND		1000
Bromoform	ND		1000
1,1,2,2-Tetrachloroethane	ND		1000
1,3-Dichlorobenzene	ND		1000
1,4-Dichlorobenzene	ND		1000
1,2-Dichlorobenzene	ND		1000
Total Target Compounds:	2509	JC	

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-009
Client ID: S-39
Date Received: 04/02/2001
Date Analyzed: 04/03/2001
Date File: J8642.D

GC/MS Column: DB-624
Sample wt/vol: 0.034g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 26.5

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

1868

000025

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-017
Client ID: TB
Date Received: 04/02/2001
Date Analyzed: 04/03/2001
Data file: J8643.D

GC/MS Column: DB-624
Sample wt/vol: 0.04g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0

Compound	Concentration	Q	MDL
Chloromethane	ND		625
Vinyl Chloride	ND		625
Bromomethane	ND		625
Chloroethane	ND		625
Trichlorofluoromethane	ND		625
Acrolein	ND		1250
1,1-Dichloroethene	ND		625
Methylene Chloride	ND		625
Acrylonitrile	ND		1250
trans-1,2-Dichloroethene	ND		625
1,1-Dichloroethane	ND		625
Chloroform	ND		625
1,1,1-Trichloroethane	ND		625
Carbon Tetrachloride	ND		625
1,2-Dichloroethane(EDC)	ND		625
Benzene	ND		625
Trichloroethene	ND		625
1,2-Dichloropropane	ND		625
Bromodichloromethane	ND		625
2-Chloroethylvinyl Ether	ND		625
cis-1,3-Dichloropropene	ND		625
Toluene	ND		625
trans-1,3-Dichloropropene	ND		625
1,1,2-Trichloroethane	ND		625
Tetrachloroethene	ND		625
Dibromochloromethane	ND		625
Chlorobenzene	ND		625
Ethylbenzene	ND		625
Total Xylenes	ND		625
Bromoform	ND		625
1,1,2,2-Tetrachloroethane	ND		625
1,3-Dichlorobenzene	ND		625
1,4-Dichlorobenzene	ND		625
1,2-Dichlorobenzene	ND		625

Total Target Compounds: 0

000026

1869

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-017
Client ID: TB
Date Received: 04/02/2001
Date Analyzed: 04/03/2001
Data file: J8643.D

GC/MS Column: DB-624
Sample wt/vol: 0.04g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

1870

000027

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-010
Client ID: S-40
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1725.D

GC/MS Column: DB-5
Sample wt/vol: 10.90g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 22.6

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		119
Aniline	ND		119
bis(2-Chloroethyl)ether	ND		119
1,3-Dichlorobenzene	ND		119
1,4-Dichlorobenzene	ND		119
Benzyl alcohol	ND		119
1,2-Dichlorobenzene	ND		119
bis(2-chloroisopropyl)ether	ND		119
N-Nitroso-di-n-propylamine	ND		119
Hexachloroethane	ND		119
Nitrobenzene	ND		119
Isophorone	ND		119
bis(2-Chloroethoxy)methane	ND		119
1,2,4-Trichlorobenzene	ND		119
Naphthalene	ND		119
4-Chloroaniline	ND		119
Hexachlorobutadiene	ND		119
2-Methylnaphthalene	ND		119
Hexachlorocyclopentadiene	ND		119
2-Chloronaphthalene	ND		119
2-Nitroaniline	ND		119
Dimethylphthalate	ND		119
2,6-Dinitrotoluene	ND		119
Acenaphthylene	ND		119

1871

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-010
Client ID: S-40
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1725.D

GC/MS Column: DB-5
Sample wt/vol: 10.90g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 22.6

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		119
Acenaphthene	116	J	119
2,4-Dinitrotoluene	ND		119
Dibenzofuran	ND		119
Diethylphthalate	ND		119
Fluorene	ND		119
4-Chlorophenyl-phenylether	ND		119
4-Nitroaniline	ND		119
N-Nitrosodiphenylamine	ND		119
1,2-Diphenylhydrazine/Azobenzene	ND		119
4-Bromophenyl-phenylether	ND		119
Hexachlorobenzene	ND		119
Phenanthrene	ND		119
Anthracene	ND		119
Carbazole	ND		119
Di-n-butylphthalate	ND		119
Fluoranthene	ND		119
Benzidine	ND		119
Pyrene	ND		119
3,3'-Dimethylbenzidine	ND		119
Butylbenzylphthalate	ND		119
3,3'-Dichlorobenzidine	ND		119
Benzo[a]anthracene	ND		119
Chrysene	ND		119
bis(2-Ethylhexyl)phthalate	ND		119
Di-n-octylphthalate	ND		119
Benzo[b]fluoranthene	ND		119
Benzo[k]fluoranthene	ND		119
Benzo[a]pyrene	ND		119
Indeno[1,2,3-cd]pyrene	ND		119
Dibenz[a,h]anthracene	ND		119
Benzo[g,h,i]perylene	ND		119
Total Target Compounds:	116	J	

000029

1872

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-010
Client ID: S-40
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1725.D

GC/MS Column: DB-5
Sample wt/vol: 10.90g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 22.6

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

000030

1873

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-011
Client ID: S-41
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1726.D

GC/MS Column: DB-5
Sample wt/vol: 10.95g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.3

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		110
Aniline	ND		110
bis(2-Chloroethyl)ether	ND		110
1,3-Dichlorobenzene	ND		110
1,4-Dichlorobenzene	ND		110
Benzyl alcohol	ND		110
1,2-Dichlorobenzene	ND		110
bis(2-chloroisopropyl)ether	ND		110
N-Nitroso-di-n-propylamine	ND		110
Hexachloroethane	ND		110
Nitrobenzene	ND		110
Isophorone	ND		110
bis(2-Chloroethoxy)methane	ND		110
1,2,4-Trichlorobenzene	ND		110
Naphthalene	ND		110
4-Chloroaniline	ND		110
Hexachlorobutadiene	ND		110
2-Methylnaphthalene	ND		110
Hexachlorocyclopentadiene	ND		110
2-Chloronaphthalene	ND		110
2-Nitroaniline	ND		110
Dimethylphthalate	ND		110
2,6-Dinitrotoluene	ND		110
Acenaphthylene	ND		110

000031

1874

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-011
Client ID: S-41
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1726.D

GC/MS Column: DB-5
Sample wt/vol: 10.95g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.3

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		110
Acenaphthene	ND		110
2,4-Dinitrotoluene	ND		110
Dibenzofuran	ND		110
Diethylphthalate	ND		110
Fluorene	ND		110
4-Chlorophenyl-phenylether	ND		110
4-Nitroaniline	ND		110
N-Nitrosodiphenylamine	ND		110
1,2-Diphenylhydrazine/Azobenzene	ND		110
4-Bromophenyl-phenylether	ND		110
Hexachlorobenzene	ND		110
Phenanthrene	ND		110
Anthracene	ND		110
Carbazole	ND		110
Di-n-butylphthalate	ND		110
Fluoranthene	ND		110
Benzidine	ND		110
Pyrene	ND		110
3,3'-Dimethylbenzidine	ND		110
Butylbenzylphthalate	ND		110
3,3'-Dichlorobenzidine	ND		110
Benzo[a]anthracene	ND		110
Chrysene	ND		110
bis(2-Ethylhexyl)phthalate	ND		110
Di-n-octylphthalate	ND		110
Benzo[b]fluoranthene	ND		110
Benzo[k]fluoranthene	ND		110
Benzo[a]pyrene	ND		110
Indeno[1,2,3-cd]pyrene	ND		110
Dibenz[a,h]anthracene	ND		110
Benzo[g,h,i]perylene	ND		110

Total Target Compounds: 0

000032

1875

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-011
Client ID: S-41
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Date File: B1726.D

GC/MS Column: DB-5
Sample wt/vol: 10.95g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.3

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

1876

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-012
Client ID: S-42
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1727.D

GC/MS Column: DB-5
Sample wt/vol: 10.52g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 21.3

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		121
Aniline	ND		121
bis(2-Chloroethyl)ether	ND		121
1,3-Dichlorobenzene	ND		121
1,4-Dichlorobenzene	ND		121
Benzyl alcohol	ND		121
1,2-Dichlorobenzene	ND		121
bis(2-chloroisopropyl)ether	ND		121
N-Nitroso-di-n-propylamine	ND		121
Hexachloroethane	ND		121
Nitrobenzene	ND		121
Isophorone	ND		121
bis(2-Chloroethoxy)methane	ND		121
1,2,4-Trichlorobenzene	ND		121
Naphthalene	ND		121
4-Chloroaniline	ND		121
Hexachlorobutadiene	ND		121
2-Methylnaphthalene	ND		121
Hexachlorocyclopentadiene	ND		121
2-Chloronaphthalene	ND		121
2-Nitroaniline	ND		121
Dimethylphthalate	ND		121
2,6-Dinitrotoluene	ND		121
Acenaphthylene	ND		121

1877

000034

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-012
Client ID: S-42
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1727.D

GC/MS Column: DB-5
Sample wt/vol: 10.52g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 21.3

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		121
Acenaphthene	ND		121
2,4-Dinitrotoluene	ND		121
Dibenzofuran	ND		121
Diethylphthalate	ND		121
Fluorene	ND		121
4-Chlorophenyl-phenylether	ND		121
4-Nitroaniline	ND		121
N-Nitrosodiphenylamine	ND		121
1,2-Diphenylhydrazine/Azobenzene	ND		121
4-Bromophenyl-phenylether	ND		121
Hexachlorobenzene	ND		121
Phenanthrene	74.1	J	121
Anthracene	ND		121
Carbazole	ND		121
Di-n-butylphthalate	ND		121
Fluoranthene	82.3	J	121
Benzidine	ND		121
Pyrene	74	J	121
3,3'-Dimethylbenzidine	ND		121
Butylbenzylphthalate	ND		121
3,3'-Dichlorobenzidine	ND		121
Benzo[a]anthracene	ND		121
Chrysene	ND		121
bis(2-Ethylhexyl)phthalate	355		121
Di-n-octylphthalate	198		121
Benzo[b]fluoranthene	ND		121
Benzo[k]fluoranthene	ND		121
Benzo[a]pyrene	ND		121
Indeno[1,2,3-cd]pyrene	73.4	J	121
Dibenz[a,h]anthracene	ND		121
Benzo[g,h,i]perylene	ND		121
Total Target Compounds:	856.8	J	

000035

1878

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-012
Client ID: S-42
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Date File: B1727.D

GC/MS Column: DB-5
Sample wt/vol: 10.52g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 21.3

CAS #	Compound	Estimated Concentration	Retention Time
000101-81-5	Diphenylmethane	1210	2.63
1000202-29-0	3-Chlorodiphenylmethane	531	3.06
	Unknown	556	3.56
	Unknown	580	3.65
	Unknown	556	4.20
	Substituted benzene	1050	4.80
	Substituted benzene	1100	5.60

Total TICs = 5583

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-013
Client ID: S-43
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1728.D

GC/MS Column: DB-5
Sample wt/vol: 10.64g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.4

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		115
Aniline	ND		115
bis(2-Chloroethyl)ether	ND		115
1,3-Dichlorobenzene	ND		115
1,4-Dichlorobenzene	ND		115
Benzyl alcohol	ND		115
1,2-Dichlorobenzene	ND		115
bis(2-chloroisopropyl)ether	ND		115
N-Nitroso-di-n-propylamine	ND		115
Hexachloroethane	ND		115
Nitrobenzene	ND		115
Isophorone	ND		115
bis(2-Chloroethoxy)methane	ND		115
1,2,4-Trichlorobenzene	ND		115
Naphthalene	ND		115
4-Chloroaniline	ND		115
Hexachlorobutadiene	ND		115
2-Methylnaphthalene	ND		115
Hexachlorocyclopentadiene	ND		115
2-Chloronaphthalene	ND		115
2-Nitroaniline	ND		115
Dimethylphthalate	ND		115
2,6-Dinitrotoluene	ND		115
Acenaphthylene	ND		115

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-013
Client ID: S-43
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1728.D

GC/MS Column: DB-5
Sample wt/vol: 10.64g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.4

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		115
Acenaphthene	ND		115
2,4-Dinitrotoluene	ND		115
Dibenzofuran	ND		115
Diethylphthalate	ND		115
Fluorene	ND		115
4-Chlorophenyl-phenylether	ND		115
4-Nitroaniline	ND		115
N-Nitrosodiphenylamine	ND		115
1,2-Diphenylhydrazine/Azobenzene	ND		115
4-Bromophenyl-phenylether	ND		115
Hexachlorobenzene	ND		115
Phenanthrene	75.9	J	115
Anthracene	ND		115
Carbazole	ND		115
Di-n-butylphthalate	ND		115
Fluoranthene	ND		115
Benzidine	ND		115
Pyrene	ND		115
3,3'-Dimethylbenzidine	ND		115
Butylbenzylphthalate	ND		115
3,3'-Dichlorobenzidine	ND		115
Benzo[a]anthracene	ND		115
Chrysene	ND		115
bis(2-Ethylhexyl)phthalate	130		115
Di-n-octylphthalate	ND		115
Benzo[b]fluoranthene	ND		115
Benzo[k]fluoranthene	ND		115
Benzo[a]pyrene	ND		115
Indeno[1,2,3-cd]pyrene	ND		115
Dibenz[a,h]anthracene	ND		115
Benzo[g,h,i]perylene	ND		115
Total Target Compounds:	205.9	J	

000038

1881

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-013
Client ID: S-43
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Date File: B1728.D

GC/MS Column: DB-5
Sample wt/vol: 10.64g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.4

CAS #	Compound	Estimated Concentration	Retention Time
000101-81-5	Diphenylmethane	1070	2.63
	Substituted benzene	633	4.80
	Substituted benzene	2440	5.60

Total TICs = 4143

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-014
Client ID: S-44
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1729.D

GC/MS Column: DB-5
Sample wt/vol: 10.55g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 19.4

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		118
Aniline	ND		118
bis(2-Chloroethyl)ether	ND		118
1,3-Dichlorobenzene	ND		118
1,4-Dichlorobenzene	ND		118
Benzyl alcohol	ND		118
1,2-Dichlorobenzene	ND		118
bis(2-chloroisopropyl)ether	ND		118
N-Nitroso-di-n-propylamine	ND		118
Hexachloroethane	ND		118
Nitrobenzene	ND		118
Isophorone	ND		118
bis(2-Chloroethoxy)methane	ND		118
1,2,4-Trichlorobenzene	ND		118
Naphthalene	ND		118
4-Chloroaniline	ND		118
Hexachlorobutadiene	ND		118
2-Methylnaphthalene	ND		118
Hexachlorocyclopentadiene	ND		118
2-Chloronaphthalene	ND		118
2-Nitroaniline	ND		118
Dimethylphthalate	ND		118
2,6-Dinitrotoluene	ND		118
Acenaphthylene	ND		118

000040

1883

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-014
Client ID: S-44
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1729.D

GC/MS Column: DB-5
Sample wt/vol: 10.55g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 19.4

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		118
Acenaphthene	ND		118
2,4-Dinitrotoluene	ND		118
Dibenzofuran	ND		118
Diethylphthalate	ND		118
Fluorene	ND		118
4-Chlorophenyl-phenylether	ND		118
4-Nitroaniline	ND		118
N-Nitrosodiphenylamine	ND		118
1,2-Diphenylhydrazine/Azobenzene	ND		118
4-Bromophenyl-phenylether	ND		118
Hexachlorobenzene	ND		118
Phenanthrene	126		118
Anthracene	ND		118
Carbazole	ND		118
Di-n-butylphthalate	ND		118
Fluoranthene	ND		118
Benzidine	ND		118
Pyrene	ND		118
3,3'-Dimethylbenzidine	ND		118
Butylbenzylphthalate	224		118
3,3'-Dichlorobenzidine	ND		118
Benzo[a]anthracene	ND		118
Chrysene	ND		118
bis(2-Ethylhexyl)phthalate	1560		118
Di-n-octylphthalate	ND		118
Benzo[b]fluoranthene	ND		118
Benzo[k]fluoranthene	ND		118
Benzo[a]pyrene	ND		118
Indeno[1,2,3-cd]pyrene	ND		118
Dibenz[a,h]anthracene	ND		118
Benzo[g,h,i]perylene	ND		118

Total Target Compounds: 1910

000041

1884

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS-NEWARK

Lab ID: 2006-014
Client ID: S-44
Date Received: 04/02/2001
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Date File: B1729.D

GC/MS Column: DB-5
Sample wt/vol: 10.55g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 19.4

CAS #	Compound	Estimated Concentration	Retention Time
000101-81-5	Diphenylmethane	1890	2.63
000119-61-9	Benzophenone	953	3.04
010544-50-0	Cyclic octaatomic sulfur	1420	3.81
	Substituted benzene	753	4.80
	Unknown	494	5.60

Total TICs = 5510

000042

1885

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-015
Client ID: T-5
Date Received: 04/02/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: R3827.D

GC Column: DB-5/DB1701P
Sample wt/vol: 20.8g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 100
% Moisture: 10.4

Compound	Concentration	Q	MDL
Aroclor-1016	ND		107
Aroclor-1221	ND		107
Aroclor-1232	ND		107
Aroclor-1242	ND		107
Aroclor-1248	ND		107
Aroclor-1254	2060		107
Aroclor-1260	ND		107

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2006-016
Client ID: T-6
Date Received: 04/02/2001
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: R3828.D

GC Column: DB-5/DB1701P
Sample wt/vol: 20.8g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 100
% Moisture: 11.6

Compound	Concentration	Q	MDL
Aroclor-1016	ND		109
Aroclor-1221	ND		109
Aroclor-1232	ND		109
Aroclor-1242	ND		109
Aroclor-1248	ND		109
Aroclor-1254	1370		109
Aroclor-1260	ND		109

1887

000044

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Lead

Client/Project: ENVTACT/ORBIS - NEWARK

Date Received: 4/2/01
Date Analyzed: 4/4/01

Lab ID	Client ID	Result	Q	D.F.	Matrix-Units	MDL	% Moist
2006-010	S-40	12.4		1	Soil -mg/Kg	2.55	22.6
2006-011	S-41	11.7		1	Soil -mg/Kg	2.41	17.3
2006-012	S-42	30.7		1	Soil -mg/Kg	2.55	21.3
2006-013	S-43	420		1	Soil -mg/Kg	2.45	18.4
2006-014	S-44	91.1		1	Soil -mg/Kg	2.46	19.4

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TOTAL PETROLEUM HYDROCARBONS

Client/Project: ENVTACT/ORBIS - NEWARK

Date Received: 4/2/01

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	% Moist	Date Analyzed
2006-002	S-32	73.4		1	Soil-mg/Kg	25.5	21.5	4/3/01
2006-005	S-35	424		1	Soil-mg/Kg	25.0	17.7	4/3/01
2006-006	S-36	ND		1	Soil-mg/Kg	25.0	12.3	4/3/01
2006-007	S-37	ND		1	Soil-mg/Kg	27.1	26.1	4/3/01
2006-008	S-38	3030		4	Soil-mg/Kg	105	23.8	4/3/01
2006-009	S-39	ND		1	Soil-mg/Kg	27.2	26.5	4/3/01
2006-010	S-40	ND		1	Soil-mg/Kg	25.8	22.6	4/3/01
2006-011	S-41	ND		1	Soil-mg/Kg	25.0	17.3	4/3/01
2006-012	S-42	ND		1	Soil-mg/Kg	25.4	21.3	4/3/01
2006-013	S-43	ND		1	Soil-mg/Kg	25.0	18.4	4/3/01
2006-014	S-44	30.9		1	Soil-mg/Kg	25.0	19.4	4/3/01

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METHODOLOGY SUMMARY

Analytical Parameter	Aqueous Samples Method #	Soil/Other Samples Method #
Volatiles + 10	NA	EPA 8260B
Semivolatiles - BN + 15	NA	EPA 8270C
PCB's	NA	EPA 8082
Metals (Lead)	NA	EPA 6020
Total Petroleum Hydrocarbons	NA	EPA 418.1 M

000047

1890

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J7978.D

BFB Injection Date: 03/12/2001

Inst ID: MSD_J

BFB Injection Time: 13:14

m/z	Ion Abudance Criteria	%Relative Abundance	
50	15 - 40.0% of mass 95	18.8	
75	30.0 - 60.0% of mass 95	48.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.1	(0.1)1
174	Great than 50.0% of mass 95	69.3	
175	5.0 - 9.0% of mass 174	5.2	(7.5)1
176	95.0 - 101.0% of mass 174	66.4	(95.8)1
177	5.0 - 9.0% of mass 176	4.4	(6.6)2
	1-Value is % mass 174	2-Value is % mass 176	

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
20PPB	STD-20PPB	J7979.D	03/12/2001	13:39
50PPB	STD-50PPB	J7980.D	03/12/2001	14:04
100PPB	STD-100PPB	J7981.D	03/12/2001	14:30
150PPB	STD-150PPB	J7982.D	03/12/2001	14:55
200PPB	STD-200PPB	J7983.D	03/12/2001	15:21
N/A	METHOD-BLK	J7986.D	03/12/2001	16:40
TB030901_METH.	1507-011	J7987.D	03/12/2001	17:17
CC-CF-LOTA	1507-001	J7988.D	03/12/2001	17:42
CC-CF-LOTB	1507-002	J7989.D	03/12/2001	18:08
CC-CF-LOTC	1507-003	J7990.D	03/12/2001	18:33
CC-CF-LOTD	1507-004	J7991.D	03/12/2001	18:59
CC-CF-LOTE	1507-005	J7992.D	03/12/2001	19:25
CC-CF-LOTF	1507-006	J7993.D	03/12/2001	19:50
CC-CF-LOTG	1507-007	J7994.D	03/12/2001	20:16
CC-CF-LOTH	1507-008	J7995.D	03/12/2001	20:41
CC-CF-LOTI	1507-009	J7996.D	03/12/2001	21:07
PX-7	1483-002	J7999.D	03/12/2001	22:23
PX-8	1483-003	J8000.D	03/12/2001	22:49
2679-DB__19'	1503-001	J8001.D	03/12/2001	23:15
MS	1507-004MS	J8002.D	03/12/2001	23:40

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J7978.D

BFB Injection Date : 03/12/200

Inst ID: MSD J

BFB Injection Time: 13:14

m/z	Ion Abudance Criteria	%Relative Abundance	
50	15 - 40.0% of mass 95	18.8	
75	30.0 - 60.0% of mass 95	48.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.1 (0.1)1	
174	Great than 50.0% of mass 95	69.3	
175	5.0 - 9.0% of mass 174	5.2 (7.5)1	
176	95.0 - 101.0% of mass 174	66.4 (95.8)1	
177	5.0 - 9.0% of mass 176	4.4 (6.6)2	
	1-Value is % mass 174	2-Value is % mass 176	

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
MSD	1507-004MSD	J8003.D	03/13/2001	0:05
TB	1382-006	J8004.D	03/13/2001	0:31
KR-1	1382-001	J8005.D	03/13/2001	0:57

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8627.D

BFB Injection Date: 04/03/2001

Inst ID: MSD_J

BFB Injection Time: 15:02

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.3			
75	30.0 - 60.0% of mass 95	48.8			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.1			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	66.4			
175	5.0 - 9.0% of mass 174	5.0	(	7.5	)1
176	95.0 - 101.0% of mass 174	63.5	(	95.7	)1
177	5.0 - 9.0% of mass 176	4.2	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
100PPB	STD-100PPB	J8628.D	04/03/2001	15:27
N/A	METHOD-BLK	J8630.D	04/03/2001	16:18
4052-B7	2014-007	J8631.D	04/03/2001	16:44
AX-6E	1994-010	J8632.D	04/03/2001	17:09
AX-9E	1994-011	J8633.D	04/03/2001	17:35
AX-48	1994-012	J8634.D	04/03/2001	18:00
SP-1	2026-001	J8635.D	04/03/2001	18:25
S-31	2006-001	J8636.D	04/03/2001	18:51
S-32	2006-002	J8637.D	04/03/2001	19:16
S-33	2006-003	J8638.D	04/03/2001	19:42
S-37	2006-007	J8640.D	04/03/2001	20:32
S-39	2006-009	J8642.D	04/03/2001	21:23
TB	2006-017	J8643.D	04/03/2001	21:48
03-04-B3A-4	1899-003	J8644.D	04/03/2001	22:13
03-04-B5-7	1899-005	J8645.D	04/03/2001	22:39
CONPILE	1957-001	J8648.D	04/03/2001	23:55
3133-DB2A	2013-002	J8649.D	04/04/2001	0:20
3133-DB4A	2013-004	J8650.D	04/04/2001	0:45
3133-DB2B	2013-012	J8651.D	04/04/2001	1:10
3133-DB4B	2013-014	J8652.D	04/04/2001	1:36

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8627.D

BFB Injection Date : 04/03/200

Inst ID: MSD J

BFB Injection Time: 15:02

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.3			
75	30.0 - 60.0% of mass 95	48.8			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.1			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	66.4			
175	5.0 - 9.0% of mass 174	5.0	(	7.5	)1
176	95.0 - 101.0% of mass 174	63.5	(	95.7	)1
177	5.0 - 9.0% of mass 176	4.2	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
WC-328	1996-001	J8653.D	04/04/2001	2:01
SB-COMP	1989-006	J8654.D	04/04/2001	2:27

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8713.D

BFB Injection Date: 04/06/2001

Inst ID: MSD_J

BFB Injection Time: 15:45

m/z	Ion Abudance Criteria	%Relative Abundance
50	15 - 40.0% of mass 95	18.3
75	30.0 - 60.0% of mass 95	46.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.3 (0.4)1
174	Great than 50.0% of mass 95	74.1
175	5.0 - 9.0% of mass 174	5.5 (7.4)1
176	95.0 - 101.0% of mass 174	71.0 (95.8)1
177	5.0 - 9.0% of mass 176	4.6 (6.5)2
	1-Value is % mass 174	2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
20PPB	STD-20PPB	J8714.D	04/06/2001	16:14
50PPB	STD-50PPB	J8715.D	04/06/2001	16:43
100PPB	STD-100PPB	J8716.D	04/06/2001	17:12
150PPB	STD-150PPB	J8717.D	04/06/2001	17:41
200PPB	STD-200PPB	J8718.D	04/06/2001	18:10
N/A	METHOD-BLK	J8721.D	04/06/2001	19:36
S-12A	1840-003	J8722.D	04/06/2001	20:05
AC-27__10.5-11'	2044-001	J8723.D	04/06/2001	20:34
TRIP	2044-002	J8724.D	04/06/2001	21:03
S-34	2006-004	J8726.D	04/06/2001	22:01
S-38	2006-008	J8727.D	04/06/2001	22:29
AOC_#4	2045-001	J8728.D	04/06/2001	22:59
AOC_#4-B	2045-002	J8729.D	04/06/2001	23:27
WC-328	1996-001DIL	J8730.D	04/06/2001	23:56
TRIP_BLANK	2095-006	J8731.D	04/07/2001	0:26
PR-4	2095-004	J8732.D	04/07/2001	0:54
MS	2044-001MS	J8733.D	04/07/2001	1:23
MSD	2044-001MSD	J8734.D	04/07/2001	1:52
MS	2045-002MS	J8736.D	04/07/2001	2:49
MSD	2045-002MSD	J8737.D	04/07/2001	3:18

VOLATILE METHOD BLANK SUMMARY

Lab File ID: J8630.D

Instrument ID: MSD J

Date Analyzed: 04/03/2001

Time Analyzed: 16:18

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
4052-B7	2014-007	04/03/2001	16:44
AX-6E	1994-010	04/03/2001	17:09
AX-9E	1994-011	04/03/2001	17:35
AX-48	1994-012	04/03/2001	18:00
SP-1	2026-001	04/03/2001	18:25
S-31	2006-001	04/03/2001	18:51
S-32	2006-002	04/03/2001	19:16
S-33	2006-003	04/03/2001	19:42
S-37	2006-007	04/03/2001	20:32
S-39	2006-009	04/03/2001	21:23
TB	2006-017	04/03/2001	21:48
03-04-B3A-4	1899-003	04/03/2001	22:13
03-04-B5-7	1899-005	04/03/2001	22:39
CONPILE	1957-001	04/03/2001	23:55
3133-DB2A	2013-002	04/04/2001	0:20
3133-DB4A	2013-004	04/04/2001	0:45
3133-DB2B	2013-012	04/04/2001	1:10
3133-DB4B	2013-014	04/04/2001	1:36
WC-328	1996-001	04/04/2001	2:01
SB-COMP	1989-006	04/04/2001	2:27

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/03/2001
Data file: J8630.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

Compound	Concentration	Q	MDL
Chloromethane	ND		250
Vinyl Chloride	ND		250
Bromomethane	ND		250
Chloroethane	ND		250
Trichlorofluoromethane	ND		250
Acrolein	ND		500
1,1-Dichloroethene	ND		250
Methylene Chloride	ND		250
Acrylonitrile	ND		500
trans-1,2-Dichloroethene	ND		250
1,1-Dichloroethane	ND		250
Chloroform	ND		250
1,1,1-Trichloroethane	ND		250
Carbon Tetrachloride	ND		250
1,2-Dichloroethane(EDC)	ND		250
Benzene	ND		250
Trichloroethene	ND		250
1,2-Dichloropropane	ND		250
Bromodichloromethane	ND		250
2-Chloroethylvinyl Ether	ND		250
cis-1,3-Dichloropropene	ND		250
Toluene	ND		250
trans-1,3-Dichloropropene	ND		250
1,1,2-Trichloroethane	ND		250
Tetrachloroethene	ND		250
Dibromochloromethane	ND		250
Chlorobenzene	ND		250
Ethylbenzene	ND		250
Total Xylenes	ND		250
Bromoform	ND		250
1,1,2,2-Tetrachloroethane	ND		250
1,3-Dichlorobenzene	ND		250
1,4-Dichlorobenzene	ND		250
1,2-Dichlorobenzene	ND		250

Total Target Compounds: 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/03/2001
Data file: J8630.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

VOLATILE METHOD BLANK SUMMARY

Lab File ID: J8721.D

Instrument ID: MSD_J

Date Analyzed: 04/06/2001

Time Analyzed: 19:36

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S-12A	1840-003	04/06/2001	20:05
AC-27__10.5-11'	2044-001	04/06/2001	20:34
TRIP	2044-002	04/06/2001	21:03
S-34	2006-004	04/06/2001	22:01
S-38	2006-008	04/06/2001	22:29
AOC_#4	2045-001	04/06/2001	22:59
AOC_#4-B	2045-002	04/06/2001	23:27
WC-328	1996-001DIL	04/06/2001	23:56
TRIP_BLANK	2095-006	04/07/2001	0:26
PR-4	2095-004	04/07/2001	0:54
MS	2044-001MS	04/07/2001	1:23
MSD	2044-001MSD	04/07/2001	1:52
MS	2045-002MS	04/07/2001	2:49
MSD	2045-002MSD	04/07/2001	3:18

FORM 4

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/06/2001
Data file: J8721.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

Compound	Concentration	Q	MDL
Chloromethane	ND		250
Vinyl Chloride	ND		250
Bromomethane	ND		250
Chloroethane	ND		250
Trichlorofluoromethane	ND		250
Acrolein	ND		500
1,1-Dichloroethene	ND		250
Methylene Chloride	ND		250
Acrylonitrile	ND		500
trans-1,2-Dichloroethene	ND		250
1,1-Dichloroethane	ND		250
Chloroform	ND		250
1,1,1-Trichloroethane	ND		250
Carbon Tetrachloride	ND		250
1,2-Dichloroethane(EDC)	ND		250
Benzene	ND		250
Trichloroethene	ND		250
1,2-Dichloropropane	ND		250
Bromodichloromethane	ND		250
2-Chloroethylvinyl Ether	ND		250
cis-1,3-Dichloropropene	ND		250
Toluene	ND		250
trans-1,3-Dichloropropene	ND		250
1,1,2-Trichloroethane	ND		250
Tetrachloroethene	ND		250
Dibromochloromethane	ND		250
Chlorobenzene	ND		250
Ethylbenzene	ND		250
Total Xylenes	ND		250
Bromoform	ND		250
1,1,2,2-Tetrachloroethane	ND		250
1,3-Dichlorobenzene	ND		250
1,4-Dichlorobenzene	ND		250
1,2-Dichlorobenzene	ND		250

Total Target Compounds: 0

1900

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/06/2001
Data file: J8721.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

000058

1901

Response Factor Report MSD_J

: ...SDCHEM\1\METHODS\JM[illegible].M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Mar 12 16:28:10 2001
[illegible] : Initial Calibration

Calibration Files
20 =J7979.D 100 =J7981.D 50 =J7980.D
150 =J7982.D 200 =J7983.D

		Compound	20	100	50	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	ISTD						
2)	T	Dichlorodifluoromet	0.316	0.336	0.333	0.323	0.348	0.331	3.66
3)	P	Chloromethane	0.376	0.411	0.386	0.410	0.423	0.401	4.86
4)	C	Vinyl Chloride	0.312	0.332	0.329	0.336	0.353	0.332	4.52
5)	T	Bromomethane	0.200	0.145	0.166	0.121	0.102	0.147	26.20
6)	T	Chloroethane	0.210	0.188	0.199	0.165	0.152	0.183	13.16
7)	T	Trichlorofluorometh	0.422	0.444	0.462	0.434	0.458	0.444	3.77
8)	T	Acrolein	0.048	0.047	0.050	0.048	0.050	0.049	2.52
9)	MC	1,1-Dichloroethene	0.239	0.245	0.249	0.248	0.256	0.248	2.50
10)	T	Acetone	0.134	0.120	0.123	0.122	0.124	0.125	4.36
11)	T	Carbon Disulfide	0.916	0.935	0.938	0.950	0.982	0.944	2.58
12)	T	Vinyl Acetate	1.749	1.605	1.753	1.606	1.569	1.656	5.29
13)	T	Methylene Chloride	0.340	0.310	0.317	0.316	0.317	0.320	3.62
14)	T	Acrylonitrile	0.150	0.150	0.153	0.151	0.160	0.153	2.65
15)	T	t-Butyl Alcohol(TBA	0.034	0.033	0.033	0.036	0.038	0.035	6.12
16)	T	trans-1,2-Dichloroe	0.439	0.403	0.419	0.392	0.389	0.408	5.06
17)	T	Methyl-t-Butyl Ethe	1.428	1.397	1.413	1.428	1.443	1.422	1.23
[illegible]	P	1,1-Dichloroethane	0.751	0.720	0.725	0.729	0.740	0.733	1.69
[illegible]	T	Diisopropyl Ether(D	1.500	1.472	1.466	1.486	1.502	1.485	1.11
[illegible]	T	cis-1,2-Dichloroeth	0.439	0.425	0.434	0.418	0.416	0.427	2.38
21)	T	2,2-Dichloropropane	0.548	0.531	0.554	0.527	0.543	0.540	2.08
22)	T	2-Butanone(MEK)	0.184	0.178	0.187	0.185	0.188	0.185	2.19
23)	T	Bromochloromethane	0.233	0.209	0.214	0.207	0.206	0.214	5.29
25)	C	Chloroform	0.748	0.705	0.713	0.703	0.708	0.715	2.60
26)	T	1,1,1-Trichloroetha	0.590	0.586	0.590	0.586	0.608	0.592	1.56
27)	T	Carbon Tetrachlorid	0.463	0.471	0.480	0.466	0.487	0.474	2.13
28)	T	1,1-Dichloropropene	0.461	0.468	0.479	0.459	0.473	0.468	1.80
29)	T	1,2-Dichloroethane(	0.598	0.562	0.571	0.565	0.568	0.573	2.55
30)	S	1,2-Dichloroethane-	0.535	0.541	0.536	0.554	0.564	0.546	2.34
31)	I	1,4-Difluorobenzene	ISTD						
32)	M	Benzene	1.220	1.093	1.154	1.054	1.033	1.111	6.90
33)	M	Trichloroethene	0.271	0.270	0.275	0.266	0.268	0.270	1.33
34)	C	1,2-Dichloropropane	0.303	0.278	0.290	0.272	0.269	0.283	4.95
35)	T	Dibromomethane	0.168	0.155	0.163	0.153	0.152	0.158	4.23
37)	T	Bromodichloromethan	0.377	0.363	0.368	0.364	0.366	0.368	1.48
38)	T	2-Chloroethylvinyl	0.144	0.168	0.164	0.174	0.176	0.165	7.74
39)	T	cis-1,3-Dichloropro	0.451	0.448	0.459	0.448	0.444	0.450	1.27
40)	T	4-Methyl-2-pentanon	0.215	0.239	0.238	0.252	0.256	0.240	6.54
41)	S	Toluene-d8	1.133	1.126	1.135	1.122	1.126	1.128	0.47
42)	MC	Toluene	0.751	0.686	0.718	0.668	0.657	0.696	5.52
43)	T	trans-1,3-Dichlorop	0.408	0.416	0.424	0.416	0.415	0.416	1.39
44)	T	1,1,2-Trichloroetha	0.207	0.192	0.201	0.190	0.187	0.196	4.46
[illegible]	T	Tetrachloroethene	0.266	0.244	0.263	0.231	0.227	0.246	7.32
[illegible]	T	1,3-Dichloropropane	0.441	0.403	0.428	0.393	0.384	0.410	5.87
[illegible]	T	2-Hexanone	0.146	0.172	0.170	0.181	0.185	0.171	8.72
48)	T	Dibromochloromethan	0.262	0.260	0.261	0.261	0.260	0.261	0.34
49)	T	1,2-Dibromoethane(E	0.246	0.235	0.244	0.236	0.235	0.239	2.27

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1902

			ISTD						
50)	I	Chlorobenzene-d5							
51)	MP	Chlorobenzene	1.038	0.909	0.961	0.881	0.867	0.931	7.47
		1,1,1,2-Tetrachloro	0.362	0.331	0.343	0.324	0.318	0.336	5.21
		Ethylbenzene	1.627	1.539	1.595	1.495	1.472	1.546	4.25
	T	m,p-Xylene	0.667	0.577	0.625	0.546	0.523	0.588	9.94
		o-Xylene	0.647	0.563	0.625	0.552	0.536	0.586	7.94
	T	Styrene	1.129	1.019	1.082	0.966	0.939	1.027	7.70
	P	Bromoform	0.183	0.187	0.187	0.191	0.191	0.188	1.72
58)	T	Isopropylbenzene	1.411	1.429	1.470	1.403	1.402	1.423	2.00
59)	S	Bromofluorobenzene	0.544	0.541	0.544	0.545	0.553	0.545	0.82
60)	P	1,1,2,2-Tetrachloro	0.369	0.324	0.351	0.320	0.314	0.336	6.95
61)	T	Bromobenzene	0.436	0.381	0.407	0.365	0.353	0.389	8.59
62)	T	1,2,3-Trichloroprop	0.348	0.316	0.339	0.316	0.312	0.326	4.98
63)	T	n-Propylbenzene	1.730	1.663	1.727	1.628	1.627	1.675	3.05
64)	T	2-Chlorotoluene	1.176	1.087	1.131	1.069	1.061	1.105	4.36
65)	T	1,3,5-Trimethylbenz	1.303	1.224	1.263	1.189	1.170	1.230	4.40
66)	T	4-Chlorotoluene	1.427	1.269	1.335	1.233	1.215	1.296	6.69
67)	T	tert-Butylbenzene	0.927	0.971	0.985	0.954	0.948	0.957	2.34
68)	T	1,2,4-Trimethylbenz	1.402	1.298	1.363	1.267	1.258	1.318	4.75
69)	T	sec-Butylbenzene	1.315	1.344	1.373	1.314	1.324	1.334	1.88
70)	T	1,3-Dichlorobenzene	0.806	0.700	0.747	0.672	0.654	0.716	8.57
71)	T	4-Isopropyltoluene	1.135	1.108	1.152	1.083	1.078	1.111	2.90
72)	T	1,4-Dichlorobenzene	0.844	0.724	0.777	0.701	0.688	0.746	8.57
73)	T	n-Butylbenzene	0.486	0.508	0.527	0.501	0.506	0.506	2.95
74)	T	1,2-Dichlorobenzene	0.804	0.672	0.731	0.644	0.626	0.695	10.45
75)	T	1,2-Dibromo-3-chlor	0.048	0.049	0.051	0.053	0.054	0.051	5.08
76)	T	1,2,4-Trichlorobenz	0.321	0.317	0.341	0.336	0.354	0.334	4.46
77)	T	Hexachlorobutadiene	0.114	0.104	0.114	0.110	0.116	0.112	4.14
78)	T	Naphthalene	0.713	0.756	0.809	0.807	0.852	0.787	6.83
79)	T	1,2,3-Trichlorobenz	0.245	0.230	0.255	0.251	0.268	0.250	5.62
80)	T	1,1,2-Trichloro-1,2	0.226	0.217	0.240	0.208	0.216	0.221	5.36
81)	T	Methyl acetate	0.219	0.208	0.213	0.217	0.223	0.216	2.63
82)	T	Cyclohexane	0.499	0.480	0.524	0.458	0.486	0.489	4.97
83)	T	Methyl cyclohexane	0.274	0.294	0.312	0.278	0.295	0.291	5.31

(#) = Out of Range

JME0312.M Mon Mar 12 16:28:23 2001 MSD_J

Instrument ID: MSD_J
Method ID: JME0312.M
Date: 03/12/2001

Average %RSD = 4.80

Refer to SW846 Method 8000B Section 7.5.1.

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8628.D
Acq On : 3 Apr 2001 15:27
Sample : 100PPB,STD-100PPB,W,5mL,100
Misc :
; Integration Params: LSCINT.P

Vial: 2
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 04 12:54:37 2001
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 35% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	0.331	0.371	-12.1	110	0.00
3	P	Chloromethane	0.401	0.438	-9.2	106	0.00
4	C	Vinyl Chloride	0.332	0.358	-7.8	108	0.00
5	T	Bromomethane	0.147	0.131	10.9	90	0.00
6	T	Chloroethane	0.183	0.187	-2.2	99	0.00
7	T	Trichlorofluoromethane	0.444	0.437	1.6	98	0.00
8	T	Acrolein	0.049	0.042	14.3	90	0.00
9	MC	1,1-Dichloroethene	0.248	0.251	-1.2	102	0.00
10	T	Acetone	0.125	0.139	-11.2	116	0.00
11	T	Carbon Disulfide	0.944	0.941	0.3	100	0.00
12	T	Vinyl Acetate	1.656	2.012	-21.5	125	0.00
13	T	Methylene Chloride	0.320	0.313	2.2	101	0.00
[illegible]	T	Acrylonitrile	0.153	0.164	-7.2	109	0.00
[illegible]	T	t-Butyl Alcohol(TBA)	0.035	0.041	-17.1	127	0.00
16	T	trans-1,2-Dichloroethene	0.408	0.409	-0.2	101	0.00
17	T	Methyl-t-Butyl Ether(MTBE)	1.422	1.500	-5.5	107	0.00
18	P	1,1-Dichloroethane	0.733	0.765	-4.4	106	0.00
19	T	Diisopropyl Ether(DIPE)	1.485	1.590	-7.1	108	0.00
20	T	cis-1,2-Dichloroethene	0.427	0.442	-3.5	104	0.00
21	T	2,2-Dichloropropane	0.540	0.599	-10.9	112	0.00
22	T	2-Butanone(MEK)	0.185	0.219	-18.4	123	0.00
23	T	Bromochloromethane	0.214	0.211	1.4	101	0.00
25	C	Chloroform	0.715	0.730	-2.1	103	0.00
26	T	1,1,1-Trichloroethane	0.592	0.608	-2.7	103	0.00
27	T	Carbon Tetrachloride	0.474	0.475	-0.2	100	0.00
28	T	1,1-Dichloropropene	0.468	0.502	-7.3	107	0.00
29	T	1,2-Dichloroethane(EDC)	0.573	0.597	-4.2	106	0.00
30	S	1,2-Dichloroethane-d4	0.546	0.599	-9.7	110	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
32	M	Benzene	1.111	1.153	-3.8	106	0.00
33	M	Trichloroethene	0.270	0.277	-2.6	103	0.00
34	C	1,2-Dichloropropane	0.283	0.301	-6.4	108	0.00
35	T	Dibromomethane	0.158	0.163	-3.2	106	0.00
37	T	Bromodichloromethane	0.368	0.371	-0.8	102	0.00
38	T	2-Chloroethylvinyl Ether	0.165	0.191	-15.8	114	0.00
39	T	cis-1,3-Dichloropropene	0.450	0.478	-6.2	107	0.00
40	T	4-Methyl-2-pentanone(MIBK)	0.240	0.289	-20.4	121	0.00
[illegible]	S	Toluene-d8	1.128	1.017	9.8	90	0.00
[illegible]	MC	Toluene	0.696	0.727	-4.5	106	0.00
43	T	trans-1,3-Dichloropropene	0.416	0.443	-6.5	107	0.00
44	T	1,1,2-Trichloroethane	0.196	0.207	-5.6	108	0.00
45	T	Tetrachloroethene	0.246	0.245	0.4	100	0.00
46	T	1,3-Dichloropropane	0.410	0.436	-6.3	108	0.00

47	T	2-Hexanone	0.171	0.214	-25.1	125	0.00
48	T	Dibromochloromethane	0.261	0.255	2.3	98	0.00
49	T	1,2-Dibromoethane(EDB)	0.239	0.251	-5.0	107	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	99	0.00
[redacted]	MP	Chlorobenzene	0.931	0.957	-2.8	104	0.00
	T	1,1,1,2-Tetrachloroethane	0.336	0.335	0.3	100	0.00
	C	Ethylbenzene	1.546	1.625	-5.1	104	0.00
54	T	m,p-Xylene	0.588	0.611	-3.9	104	0.00
55	T	o-Xylene	0.588	0.619	-5.3	105	0.00
56	T	Styrene	1.027	1.082	-5.4	105	0.00
57	P	Bromoform	0.188	0.184	2.1	97	0.00
58	T	Isopropylbenzene	1.423	1.479	-3.9	102	0.00
59	S	Bromofluorobenzene	0.545	0.631	-15.8	115	0.00
60	P	1,1,2,2-Tetrachloroethane	0.336	0.366	-8.9	112	0.00
61	T	Bromobenzene	0.389	0.388	0.3	101	0.00
62	T	1,2,3-Trichloropropane	0.326	0.351	-7.7	109	0.00
63	T	n-Propylbenzene	1.675	1.723	-2.9	102	0.00
64	T	2-Chlorotoluene	1.105	1.132	-2.4	103	0.00
65	T	1,3,5-Trimethylbenzene	1.230	1.257	-2.2	101	0.00
66	T	4-Chlorotoluene	1.296	1.312	-1.2	102	0.00
67	T	tert-Butylbenzene	0.957	0.977	-2.1	99	0.00
68	T	1,2,4-Trimethylbenzene	1.318	1.340	-1.7	102	0.00
69	T	sec-Butylbenzene	1.334	1.346	-0.9	99	0.00
70	T	1,3-Dichlorobenzene	0.716	0.701	2.1	99	0.00
71	T	4-Isopropyltoluene	1.111	1.108	0.3	99	0.00
72	T	1,4-Dichlorobenzene	0.746	0.738	1.1	101	0.00
73	T	n-Butylbenzene	0.506	0.516	-2.0	100	0.00
74	T	1,2-Dichlorobenzene	0.695	0.683	1.7	100	0.00
75	T	1,2-Dibromo-3-chloropropane	0.051	0.052	-2.0	105	0.00
76	T	1,2,4-Trichlorobenzene	0.334	0.337	-0.9	105	0.00
[redacted]	T	Hexachlorobutadiene	0.112	0.115	-2.7	109	0.00
	T	Naphthalene	0.787	0.793	-0.8	103	0.00
79	T	1,2,3-Trichlorobenzene	0.250	0.231	7.6	99	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.221	0.226	-2.3	103	0.00
81	T	Methyl acetate	0.216	0.216	0.0	103	0.00
82	T	Cyclohexane	0.489	0.535	-9.4	110	0.00
83	T	Methyl cyclohexane	0.291	0.318	-9.3	107	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

J8628.D JME0312.M Wed Apr 04 12:54:41 2001 MSD_J

000063

Response Factor Report MSD_J

[illegible]\MSDCHEM\1\METHODS\GM0406.M (RTE Integrator)
File : VOLATILE ORGANICS BY EPA METHOD 8260B
[illegible] : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration

Calibration Files
20 =J8714.D 100 =J8716.D 50 =J8715.D
150 =J8717.D 200 =J8718.D

		Compound	20	100	50	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	ISTD						
2)	T	Dichlorodifluoromet	0.231	0.345	0.351	0.327	0.336	0.318	15.65
3)	P	Chloromethane	0.341	0.456	0.446	0.459	0.474	0.435	12.35
4)	C	Vinyl Chloride	0.254	0.362	0.361	0.361	0.380	0.344	14.71
5)	T	Bromomethane	0.145	0.114	0.144	0.090	0.080	0.115	25.88
6)	T	Chloroethane	0.165	0.169	0.197	0.133	0.117	0.156	20.14
7)	T	Trichlorofluorometh	0.290	0.435	0.438	0.407	0.409	0.396	15.31
8)	T	Acrolein	0.046	0.042	0.045	0.042	0.042	0.043	4.72
9)	MC	1,1-Dichloroethene	0.184	0.257	0.258	0.250	0.256	0.241	13.28
10)	T	Acetone	0.140	0.150	0.162	0.149	0.146	0.149	5.32
11)	T	Carbon Disulfide	0.643	0.941	0.924	0.933	0.966	0.882	15.22
12)	T	Vinyl Acetate	1.244	1.484	1.612	1.443	1.356	1.428	9.68
13)	T	Methylene Chloride	0.262	0.326	0.333	0.326	0.326	0.314	9.42
14)	T	Acrylonitrile	0.144	0.131	0.141	0.132	0.136	0.137	4.22
15)	T	t-Butyl Alcohol(TBA	0.037	0.039	0.044	0.040	0.040	0.040	6.10
16)	T	trans-1,2-Dichloroe	0.222	0.284	0.292	0.278	0.281	0.272	10.28
17)	T	Methyl-t-Butyl Ethe	0.966	1.221	1.271	1.243	1.228	1.186	10.49
18)	P	1,1-Dichloroethane	0.459	0.590	0.598	0.586	0.592	0.565	10.55
[illegible]	T	Diisopropyl Ether(D	0.980	1.225	1.258	1.227	1.212	1.180	9.62
20)	T	cis-1,2-Dichloroeth	0.349	0.443	0.452	0.432	0.428	0.421	9.79
21)	T	2,2-Dichloropropane	0.396	0.540	0.546	0.521	0.527	0.506	12.33
22)	T	2-Butanone(MEK)	0.195	0.242	0.263	0.248	0.244	0.239	10.75
23)	T	Bromochloromethane	0.165	0.212	0.217	0.213	0.210	0.203	10.61
25)	C	Chloroform	0.563	0.730	0.735	0.727	0.725	0.696	10.69
26)	T	1,1,1-Trichloroetha	0.399	0.585	0.577	0.576	0.594	0.546	15.17
27)	T	Carbon Tetrachlorid	0.295	0.456	0.446	0.450	0.465	0.423	16.92
28)	T	1,1-Dichloropropene	0.344	0.493	0.495	0.478	0.487	0.460	14.19
29)	T	1,2-Dichloroethane(	0.488	0.608	0.628	0.609	0.597	0.586	9.56
30)	S	1,2-Dichloroethane-	0.617	0.612	0.622	0.620	0.620	0.618	0.64
31)	I	1,4-Difluorobenzene	ISTD						
32)	M	Benzene	0.912	1.148	1.184	1.114	1.094	1.090	9.67
33)	M	Trichloroethene	0.201	0.277	0.277	0.272	0.275	0.260	12.72
34)	C	1,2-Dichloropropane	0.236	0.299	0.303	0.295	0.289	0.284	9.66
35)	T	Dibromomethane	0.130	0.168	0.171	0.168	0.164	0.160	10.85
37)	T	Bromodichloromethan	0.258	0.371	0.363	0.375	0.372	0.348	14.51
38)	T	2-Chloroethylvinyl	0.131	0.205	0.207	0.210	0.207	0.192	17.88
39)	T	cis-1,3-Dichloropro	0.332	0.475	0.472	0.477	0.468	0.445	14.18
40)	T	4-Methyl-2-pentanon	0.211	0.310	0.326	0.320	0.318	0.297	16.22
41)	S	Toluene-d8	1.015	1.014	1.011	1.009	1.017	1.013	0.32
42)	MC	Toluene	0.547	0.706	0.718	0.688	0.677	0.667	10.31
43)	T	trans-1,3-Dichlorop	0.307	0.448	0.442	0.449	0.443	0.418	14.78
44)	T	1,1,2-Trichloroetha	0.166	0.211	0.218	0.212	0.206	0.203	10.29
[illegible]	T	Tetrachloroethene	0.178	0.237	0.244	0.227	0.224	0.222	11.55
[illegible]	T	1,3-Dichloropropane	0.352	0.449	0.469	0.443	0.428	0.428	10.55
47)	T	2-Hexanone	0.148	0.225	0.235	0.233	0.231	0.215	17.36
48)	T	Dibromochloromethan	0.165	0.260	0.251	0.265	0.264	0.241	17.69
49)	T	1,2-Dibromoethane(E	0.190	0.260	0.267	0.264	0.258	0.248	13.10

			ISTD					
50)	I	Chlorobenzene-d5						
51)	MP	Chlorobenzene	0.743	0.927	0.952	0.904	0.883	0.882	9.27
		[illegible]	0.238	0.322	0.321	0.323	0.333	0.305	12.11
53		Styrene	1.192	1.578	1.595	1.531	1.510	1.481	11.16
		[illegible]	0.479	0.590	0.623	0.565	0.542	0.560	9.71
[illegible]		[illegible]	0.472	0.601	0.625	0.575	0.554	0.566	10.57
	T	Styrene	0.828	1.065	1.102	1.030	0.978	1.000	10.68
	P	Bromoform	0.109	0.187	0.176	0.198	0.198	0.174	21.39
58)	T	Isopropylbenzene	1.003	1.422	1.421	1.394	1.386	1.325	13.65
59)	S	Bromofluorobenzene	0.641	0.643	0.639	0.638	0.641	0.640	0.30
60)	P	1,1,2,2-Tetrachloro	0.290	0.369	0.392	0.371	0.358	0.356	10.96
61)	T	Bromobenzene	0.302	0.378	0.389	0.367	0.356	0.359	9.47
62)	T	1,2,3-Trichloroprop	0.290	0.361	0.388	0.365	0.355	0.352	10.43
63)	T	n-Propylbenzene	1.199	1.666	1.663	1.621	1.617	1.553	12.83
64)	T	2-Chlorotoluene	0.857	1.100	1.114	1.078	1.061	1.042	10.13
65)	T	1,3,5-Trimethylbenz	0.915	1.200	1.226	1.166	1.151	1.132	11.01
66)	T	4-Chlorotoluene	1.028	1.280	1.316	1.243	1.221	1.218	9.18
67)	T	tert-Butylbenzene	0.642	0.930	0.921	0.903	0.907	0.861	14.23
68)	T	1,2,4-Trimethylbenz	0.996	1.282	1.306	1.258	1.235	1.215	10.32
69)	T	sec-Butylbenzene	0.872	1.274	1.274	1.243	1.257	1.184	14.76
70)	T	1,3-Dichlorobenzene	0.549	0.674	0.701	0.657	0.641	0.645	8.96
71)	T	4-Isopropyltoluene	0.761	1.052	1.062	1.029	1.023	0.985	12.83
72)	T	1,4-Dichlorobenzene	0.578	0.705	0.726	0.692	0.671	0.674	8.53
73)	T	n-Butylbenzene	0.340	0.497	0.495	0.487	0.486	0.461	14.70
74)	T	1,2-Dichlorobenzene	0.543	0.657	0.689	0.645	0.621	0.631	8.68
75)	T	1,2-Dibromo-3-chlor	0.035	0.052	0.055	0.057	0.057	0.051	18.31
76)	T	1,2,4-Trichlorobenz	0.201	0.256	0.281	0.270	0.265	0.255	12.18
77)	T	Hexachlorobutadiene	0.076	0.101	0.102	0.102	0.104	0.097	11.93
78)	T	Naphthalene	0.473	0.614	0.704	0.655	0.650	0.619	14.14
79)	T	1,2,3-Trichlorobenz	0.113	0.153	0.168	0.171	0.169	0.155	15.77
80)	T	1,1,2-Trichloro-1,2	0.147	0.216	0.222	0.202	0.204	0.198	15.08
[illegible]	T	Methyl acetate	0.203	0.263	0.279	0.278	0.281	0.261	12.75
	T	Cyclohexane	0.325	0.505	0.519	0.478	0.489	0.463	16.99
83)	T	Methyl cyclohexane	0.189	0.301	0.303	0.284	0.290	0.273	17.50

(#) = Out of Range

JME0406.M Sun Apr 08 10:18:10 2001 MSD_J

Instrument ID: MSD_J
Method ID: JME0406.M
Date: 04/08/2001

Average %RSD = 12.46

Refer to SW846 Method 8000B Section 7.5.1.

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/03/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD-BLK	SOIL	J8630.D	111	85	112
2014-007	MEOH	J8631.D	99	73	90
1994-010	MEOH	J8632.D	87	66	82
1994-011	MEOH	J8633.D	92	68	85
1994-012	MEOH	J8634.D	100	50	50
2026-001	MEOH	J8635.D	90	79	75
2006-001	MEOH	J8636.D	93	69	86
2006-002	MEOH	J8637.D	85	63	79
2006-003	MEOH	J8638.D	94	69	87
2006-007	MEOH	J8640.D	81	61	75
2006-009	MEOH	J8642.D	92	67	84
2006-017	MEOH	J8643.D	98	72	91
1899-003	MEOH	J8644.D	92	88	86
1899-005	MEOH	J8645.D	92	82	78
1957-001	SOIL	J8648.D	108	85	109
2013-002	SOIL	J8649.D	111	86	115
2013-004	SOIL	J8650.D	110	86	115
2013-012	SOIL	J8651.D	109	89	114
2013-014	SOIL	J8652.D	106	88	114
1996-001	SOIL	J8653.D	109	87	115
1989-006	SOIL	J8654.D	107	89	115

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	53-138	43-133
SMC2 = Toluene-d8	50 ppb	46-111	39-137
SMC3 = Bromofluorobenzene	50 ppb	38-147	23-145

Column to be used to flag recovery values

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/06/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD-BLK	SOIL	J8721.D	101	98	98
1840-003	MEOH	J8722.D	90	98	72
2044-001	MEOH	J8723.D	91	83	79
2044-002	MEOH	J8724.D	111	106	100
2006-004	MEOH	J8726.D	95	75	70
2006-008	MEOH	J8727.D	77	72	71
2045-001	MEOH	J8728.D	88	99	72
2045-002	MEOH	J8729.D	86	96	70
1996-001DIL	MEOH	J8730.D	97	100	85
2095-006	MEOH	J8731.D	98	107	80
2095-004	MEOH	J8732.D	85	90	70
2044-001MS	MEOH	J8733.D	90	85	74
2044-001MSD	MEOH	J8734.D	89	85	73
2045-002MS	MEOH	J8736.D	81	79	68
2045-002MSD	MEOH	J8737.D	92	90	77

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	53-138	43-133
SMC2 = Toluene-d8	50 ppb	46-111	39-137
SMC3 = Bromofluorobenzene	50 ppb	38-147	23-145

Column to be used to flag recovery values

FORM 2

MEOH VOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2045-002

Batch No.: JM0067

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0.0	33.2	66	56 - 120
Benzene	50.0	0.0	56.0	112	64 - 126
Trichloroethene	50.0	0.0	51.5	103	66 - 120
Toluene	50.0	0.0	55.6	111	65 - 122
Chlorobenzene	50.0	0.0	57.1	114	68 - 120

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	#	MSD % REC	% RPD	#	QC LIMITS RPD	REC.
1,1-Dichloroethene	0.0	36.7		73	10		11	56 - 120
Benzene	0.0	56.1		112	0		10	64 - 126
Trichloroethene	0.0	52.9		106	3		9	66 - 120
Toluene	0.0	56.0		112	1		9	65 - 122
Chlorobenzene	0.0	57.4		115	1		9	68 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __5__ outside limits

Spike Recovery: __0___ out of __10__ outside limits

[illegible] INTERNAL STANDARD AREA AND RT SUMMARY

[illegible] Date Analyzed: 03/12/2001

Instrument ID: MSD_J Time Analyzed: 14:30

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	481912	6.39	704002	7.21	576919	10.58
	UPPER LIMIT	963824	6.89	1408004	7.71	1153838	11.08
	LOWER LIMIT	240956	5.89	352001	6.71	288459.5	10.08
	LAB SAMPLE ID						
01	STD-20PPB	470967	6.39	672489	7.22	550242	10.58
02	STD-50PPB	480970	6.39	686647	7.22	565324	10.58
03	STD-150PPB	480294	6.39	712287	7.21	584939	10.58
04	STD-200PPB	478921	6.39	720276	7.21	590638	10.58
05	METHOD-BLK	463778	6.39	667178	7.22	532894	10.58
06	1507-011	457250	6.39	653686	7.21	529864	10.58
07	1507-001	456378	6.39	656211	7.21	533883	10.58
08	1507-002	456193	6.39	656412	7.21	531746	10.58
09	1507-003	459585	6.39	657391	7.21	536080	10.58
10	1507-004	459930	6.39	658270	7.21	539697	10.58
11	1507-005	465705	6.39	666493	7.21	545450	10.58
12	1507-006	466764	6.39	670568	7.21	549611	10.58
13	1507-007	462600	6.39	664490	7.21	545038	10.58
14	1507-008	467448	6.39	669570	7.21	559922	10.58
15	1507-009	467501	6.39	675561	7.21	557009	10.58
16	1483-002	475373	6.39	688540	7.21	572046	10.58
17	1483-003	476254	6.39	686668	7.21	573762	10.58
18	1503-001	494641	6.39	712380	7.22	607921	10.58
19	1507-004MS	476270	6.39	688159	7.21	575446	10.58
20	1507-004MSD	474181	6.39	689255	7.21	571381	10.58
21	1382-006	473150	6.39	684729	7.21	568980	10.58
22	1382-001	464426	6.39	690297	7.22	599186	10.58

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J8628.D

Date Analyzed: 04/03/2001

Instrument ID: MSD_J

Time Analyzed: 15:27

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	479956	6.39	705114	7.22	569018	10.58
	UPPER LIMIT	959912	6.89	1410228	7.72	1138036	11.08
	LOWER LIMIT	239978	5.89	352557	6.72	284509	10.08
	LAB SAMPLE ID						
01	METHOD-BLK	476111	6.39	694106	7.22	542130	10.58
02	2014-007	447113	6.39	647513	7.21	511468	10.58
03	1994-010	477428	6.39	684176	7.21	538886	10.58
04	1994-011	442340	6.39	644519	7.21	502027	10.58
05	1994-012	470076	6.39	685699	7.22	538664	10.58
06	2026-001	468933	6.39	675862	7.21	529927	10.58
07	2006-001	468042	6.39	683935	7.21	530225	10.58
08	2006-002	471904	6.39	684153	7.21	533993	10.58
09	2006-003	463656	6.39	677390	7.21	528195	10.58
10	2006-007	490907	6.39	702294	7.21	550568	10.58
11	2006-009	445602	6.39	654807	7.21	512295	10.58
12	2006-017	460476	6.39	671012	7.21	527060	10.58
13	1899-003	473787	6.39	679504	7.21	564108	10.58
14	1899-005	454521	6.39	661046	7.21	530301	10.58
15	1957-001	482911	6.38	698092	7.21	547003	10.58
16	2013-002	478291	6.39	708254	7.22	584062	10.58
17	2013-004	485966	6.39	714160	7.22	590384	10.58
18	2013-012	495402	6.39	726377	7.22	597323	10.58
19	2013-014	506073	6.39	737492	7.21	596318	10.58
20	1996-001	497830	6.39	725807	7.22	574883	10.58
21	1989-006	491855	6.38	712571	7.21	590637	10.58
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

1914

000071

INTERNAL STANDARD AREA AND RT SUMMARY

GC: _____ Data Acquired: 04/06/2001

Instrument ID: MSD_J Time Analyzed: 17:12

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	513567	6.39	751960	7.22	613907	10.58
	UPPER LIMIT	1027134	6.89	1503920	7.72	1227814	11.08
	LOWER LIMIT	256783.5	5.89	375980	6.72	306953.5	10.08
	LAB SAMPLE ID						
01	STD-20PPB	522866	6.39	756759	7.22	610060	10.58
02	STD-50PPB	517192	6.39	752725	7.22	614693	10.58
03	STD-150PPB	509011	6.39	755394	7.22	616821	10.58
04	STD-200PPB	506927	6.39	760721	7.22	622861	10.58
05	METHOD-BLK	510479	6.39	737984	7.22	588556	10.58
06	1840-003	486585	6.39	702070	7.22	557167	10.58
07	2044-001	491455	6.39	707328	7.22	565245	10.58
08	2044-002	513345	6.39	736573	7.21	586212	10.58
09	2006-004	459418	6.39	660979	7.22	528456	10.58
10	2006-008	518393	6.39	739418	7.22	595865	10.58
11	2045-001	488269	6.39	702508	7.22	576556	10.58
12	2045-002	520688	6.39	741407	7.22	600845	10.58
13	1996-001DIL	459882	6.39	662045	7.22	535600	10.58
14	2095-006	482463	6.39	696892	7.22	555834	10.58
15	2095-004	526939	6.39	754597	7.22	627206	10.58
16	2044-001MS	468887	6.39	677246	7.21	543419	10.58
17	2044-001MSD	487953	6.39	704532	7.21	562524	10.58
18	2045-002MS	493677	6.38	710013	7.21	571735	10.58
19	2045-002MSD	478138	6.39	686566	7.21	553458	10.58
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE METHANOL PRESERVATION CONTAINER SUMMARY

Sample ID	Client ID	Bottle ID	Date Prepared	Inital Wgt.(g)	Final Wgt.(g)	Sample Wgt.(g)	MeOH Lot #	Surrogate Lot #
2006-001	S-31	103472	3/27/01	105.5	114.9	9.4	CA591	LS169
2006-002	S-32	103458	3/27/01	105.8	115.1	9.4	CA591	LS169
2006-003	S-33	103471	3/27/01	105.7	115.5	9.8	CA591	LS169
2006-004	S-34	103464	3/27/01	106.2	115.8	9.6	CA591	LS169
2006-007	S-37	103450	3/28/01	105.7	114.6	8.9	CA706	LS157
2006-008	S-38	103445	3/28/01	105.6	115.1	9.5	CA706	LS157
2006-009	S-39	103511	3/28/01	105.0	113.6	8.6	CA706	LS169
2006-017	TB	103454	3/28/01	105.3	115.3	10.0	CA706	LS157

Limits : Sample Weight = 8 to 12 grams, * = Outside limits

Comments : _____

_____

_____

Sample weight is reported on a wet weight basis

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8636.D
Acq On : 3 Apr 2001 18:51
Sample : S-31,2006-001,M,0.037g,17.8
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Integration Params: LSCINT.P
Quant Time: Apr 03 19:10:08 2001

Vial: 10
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0312.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Mar 12 16:28:10 2001
Response via : Initial Calibration
DataAcq Meth : JME0312

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	468042	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	683935	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	530225	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	238567	46.68	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 93.36%			
41) Toluene-d8	8.89	98	533058	34.54	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 69.08%			
59) Bromofluorobenzene	11.97	95	247597	42.83	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 85.66%			
Target Compounds						Qvalue
13) Methylene Chloride	4.31	84	20751	6.93	UG	# 67
32) Benzene	6.80	78	728594	47.95	UG	# 100
42) Toluene	8.97	92	12215	1.28	UG	# 100

(#) = qualifier out of range (m) = manual integration

000074

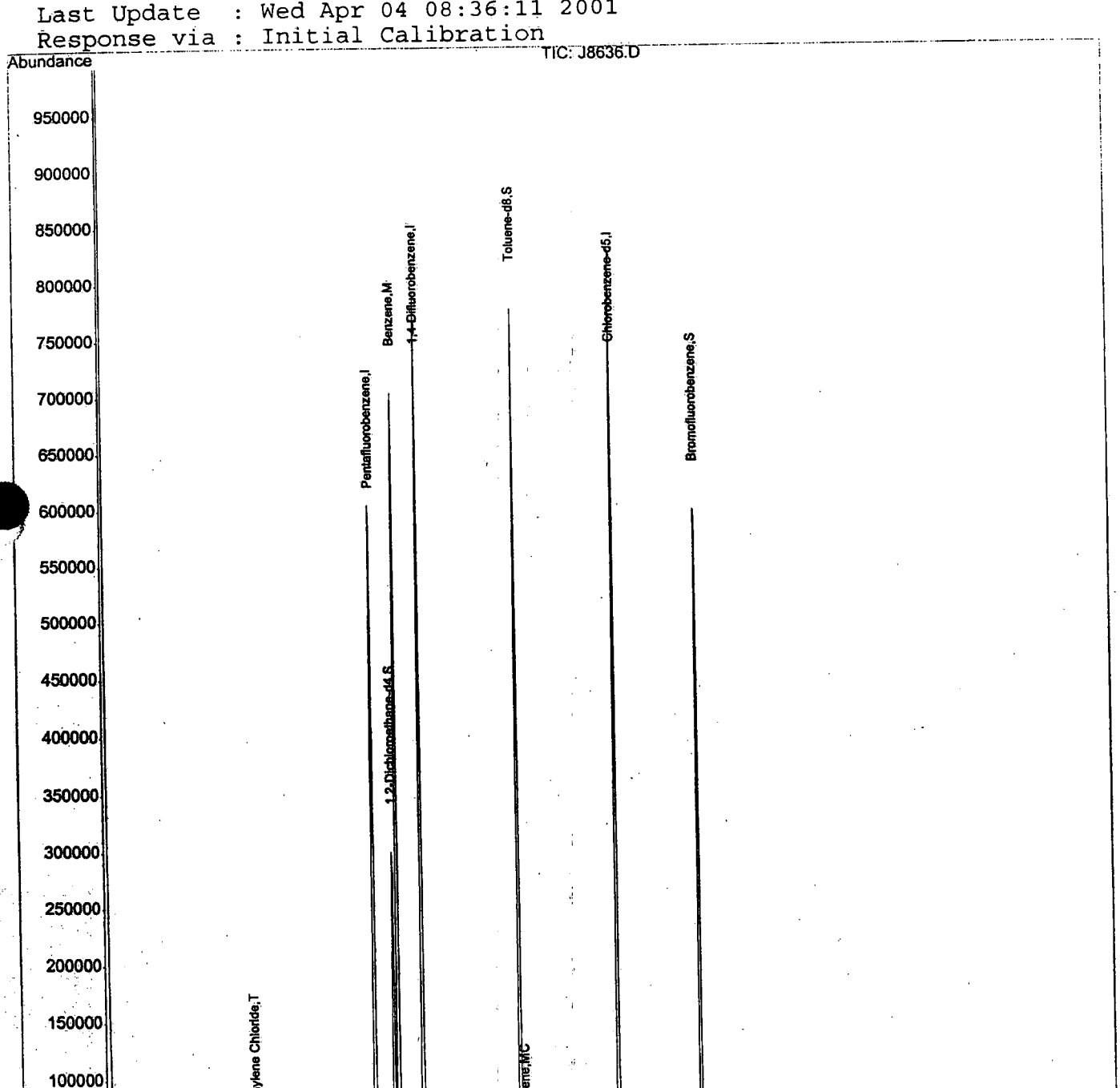
1917

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8636.D
Acq On : 3 Apr 2001 18:51
Sample : S-31,2006-001,M,0.037g,17.8
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 4 11:04 2001

Vial: 10
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0312.RES

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 04 08:36:11 2001
Response via : Initial Calibration



1918

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8636.D
Acq On : 3 Apr 2001 18:51
Sample : S-31,2006-001,M,0.037g,17.8
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Integration Params: Lscint.p

Vial: 10
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

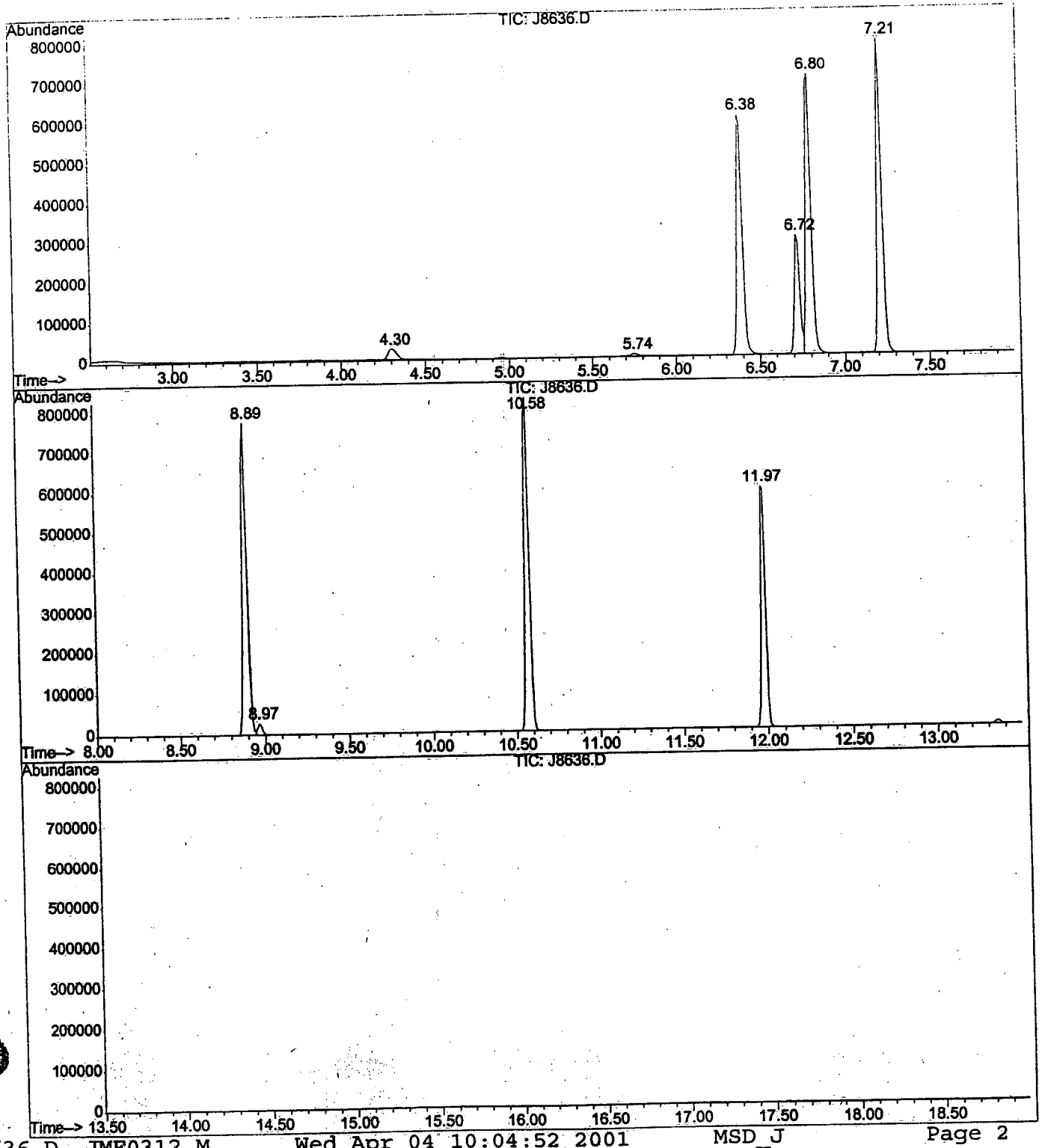
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.297	248	254	267	rVB	26737	98653	6.11%	1.023%
2	5.745	392	397	404	rBV	6396	18268	1.13%	0.189%
3	6.383	453	460	474	rBV	603735	1366118	84.63%	14.167%
4	6.717	483	493	497	rBV	298716	670937	41.57%	6.958%
5	6.798	497	501	517	rVB	702480	1588905	98.43%	16.477%
6	7.213	536	542	552	rBV	791554	1587510	98.35%	16.462%
7	8.894	701	708	713	rBV	776661	1515676	93.90%	15.718%
8	8.965	713	715	723	rVB	27550	50291	3.12%	0.522%
9	10.575	866	874	885	rBV	828459	1614181	100.00%	16.739%
10	11.973	1002	1012	1028	rBV	597695	1132697	70.17%	11.746%

Sum of corrected areas: 9643236

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-03-01\J8636.D
Operator : XINGFANG WANG
Acquired : 3 Apr 2001 18:51 using AcqMethod JME0312
Instrument : MSD_J
Sample Name: S-31,2006-001,M,0.037g,17.8
Misc Info : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Vial Number: 10
Quant File :JME0312.RES (RTE Integrator)



1920

000077

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8637.D
Acq On : 3 Apr 2001 19:16
Sample : S-32,2006-002,M,0.037g,21.5
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Integration Params: LSCINT.P
Quant Time: Apr 03 19:35:29 2001

Vial: 11
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0312.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Mar 12 16:28:10 2001
Response via : Initial Calibration
DataAcq Meth : JME0312

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	471904	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	684153	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	533993	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	219457	42.59	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 85.18%			
41) Toluene-d8	8.89	98	487489	31.58	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 63.16%			
59) Bromofluorobenzene	11.97	95	230301	39.56	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 79.12%			
Target Compounds						Qvalue
13) Methylene Chloride	4.31	84	20236	6.70	UG	# 99
32) Benzene	6.80	78	47694	3.14	UG	# 100
42) Toluene	8.97	92	35949	3.78	UG	# 100

(#) = qualifier out of range (m) = manual integration

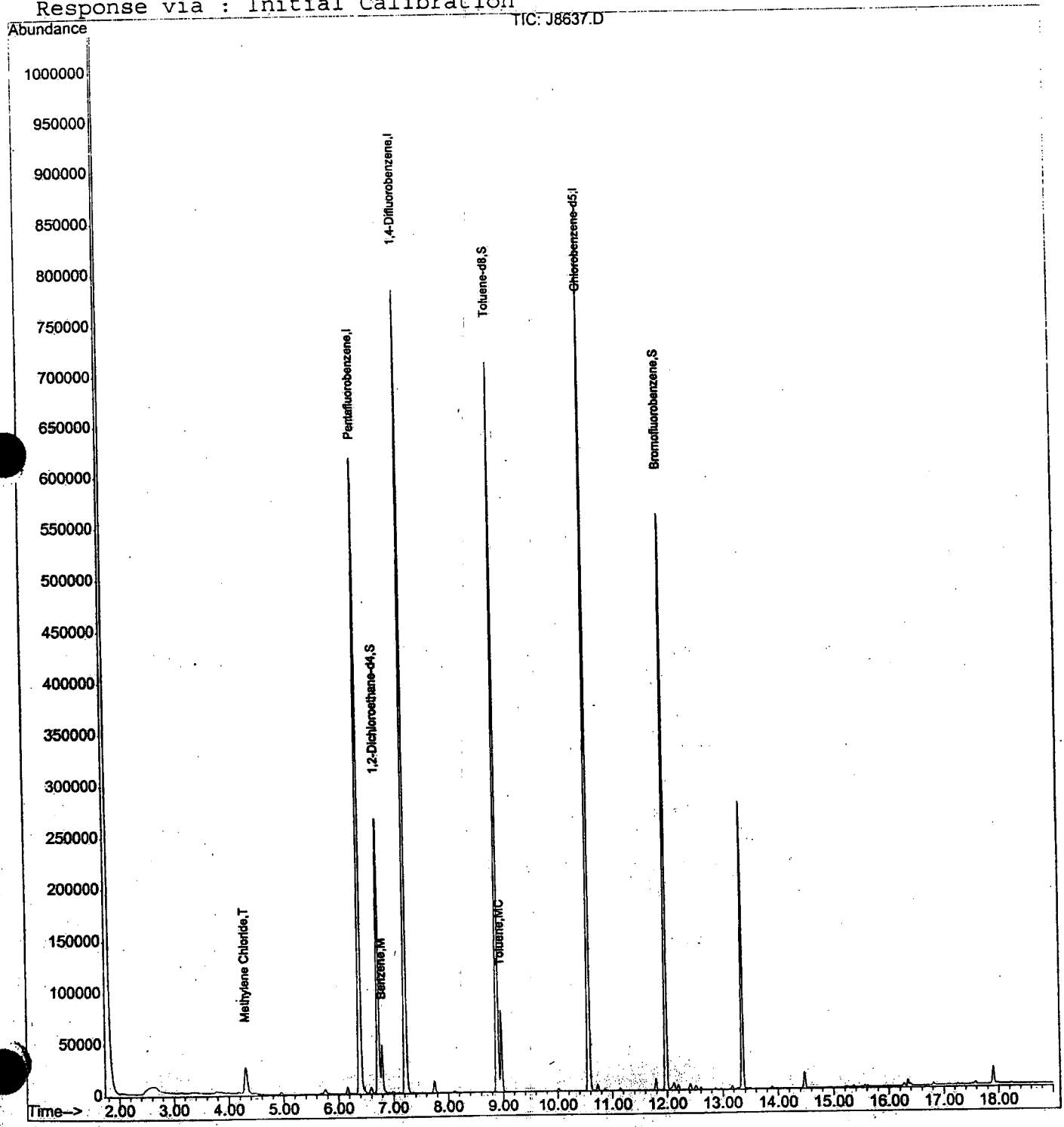
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8637.D
Acq On : 3 Apr 2001 19:16
Sample : S-32,2006-002,M,0.037g,21.5
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 4 11:05 2001

Vial: 11
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0312.RES

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 04 08:36:11 2001
Response via : Initial Calibration



000079

1922

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8637.D
Acq On : 3 Apr 2001 19:16
Sample : S-32,2006-002,M,0.037g,21.5
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Integration Params: Lscint.p

Vial: 11
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

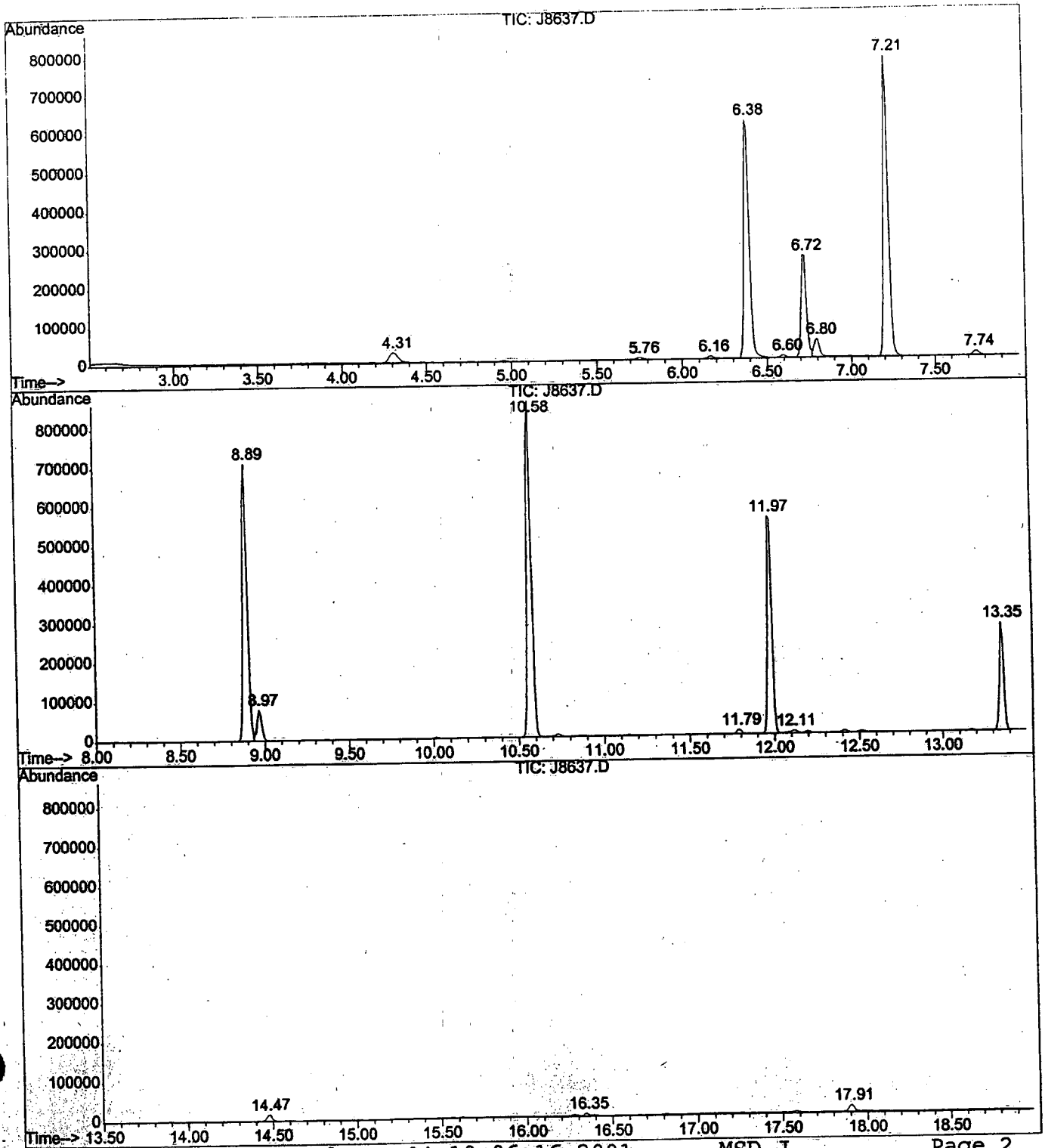
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.307	248	255	268	rVB	26024	96828	5.96%	1.113%
2	5.755	393	398	424	rVB	5091	21159	1.30%	0.243%
3	6.160	433	438	446	rBV	7130	17210	1.06%	0.198%
4	6.383	454	460	476	rBV	617570	1401464	86.21%	16.103%
5	6.596	476	481	486	rVV	6642	16651	1.02%	0.191%
6	6.717	486	493	498	rVV	265974	612226	37.66%	7.035%
7	6.798	498	501	510	rVB	47609	107590	6.62%	1.236%
8	7.213	535	542	554	rBV	782847	1590304	97.83%	18.273%
9	7.740	586	594	604	rVB	11844	30932	1.90%	0.355%
10	8.894	699	708	712	rBV	711308	1380484	84.92%	15.862%
11	8.965	712	715	722	rVB	79153	151990	9.35%	1.746%
12	10.575	867	874	883	rBV	864907	1625636	100.00%	18.679%
13	11.790	987	994	999	rBV	11521	22363	1.38%	0.257%
14	11.973	1006	1012	1020	rBV	558304	1052408	64.74%	12.092%
15	12.115	1020	1026	1030	rVB3	7028	20692	1.27%	0.238%
16	13.350	1135	1148	1154	rBV	278058	464027	28.54%	5.332%
17	14.474	1252	1259	1266	rBV	15594	35427	2.18%	0.407%
18	16.347	1441	1444	1454	rBV4	6454	17180	1.06%	0.197%
19	17.907	1592	1598	1603	rBV	17452	38528	2.37%	0.443%

Sum of corrected areas: 8703099

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-03-01\J8637.D
Operator : XINGFANG WANG
Acquired : 3 Apr 2001 19:16 using AcqMethod JME0312
Instrument : MSD_J
Sample Name: S-32,2006-002,M,0.037g,21.5
Misc Info : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Vial Number: 11
Quant File :JME0312.RES (RTE Integrator)



1924

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8637.D
Acq On : 3 Apr 2001 19:16
Sample : S-32,2006-002,M,0.037g,21.5
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Integration Params: Lscint.p

Vial: 11
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

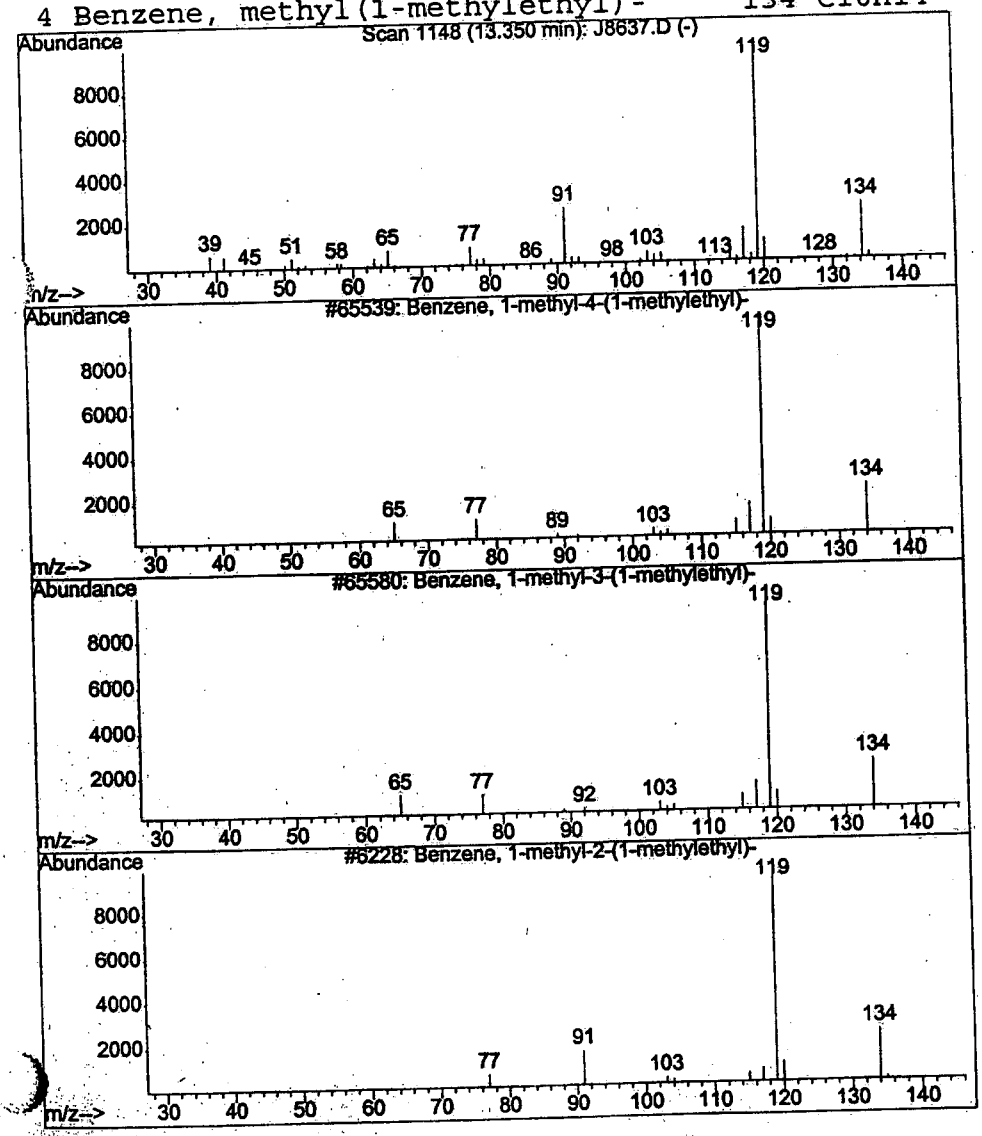
Quant Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

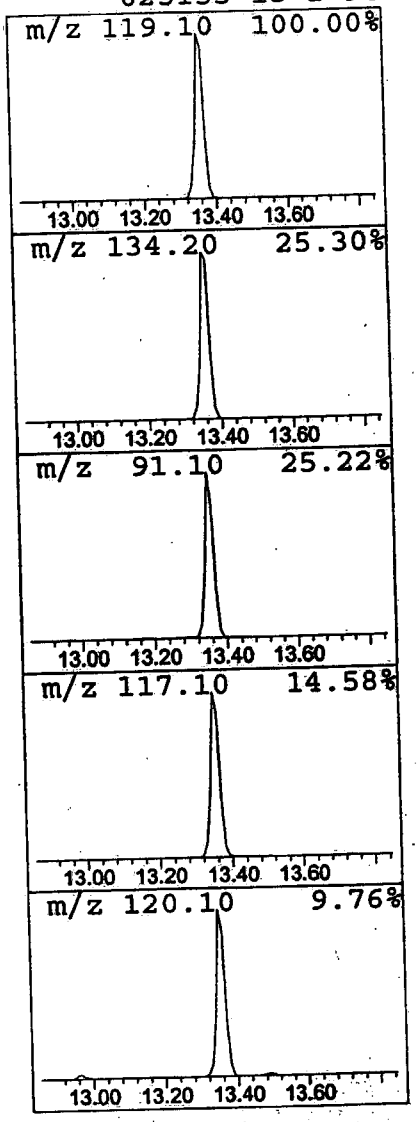
****

Peak Number 1 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.35	14.27 UG	464027	Chlorobenzene-d5	10.58

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	95
3	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	94
4	Benzene, methyl(1-methylethyl)-	134	C10H14	025155-15-1	94





000082

1925

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8638.D Vial: 12
Acq On : 3 Apr 2001 19:42 Operator: XINGFANG WANG
Sample : S-33,2006-003,M,0.039g,17.4 Inst : MSD_J
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1 Multiplr: 1.00
Integration Params: LSCINT.P
Quant Time: Apr 03 20:01:13 2001 Quant Results File: JME0312.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Mar 12 16:28:10 2001
Response via : Initial Calibration
DataAcq Meth : JME0312

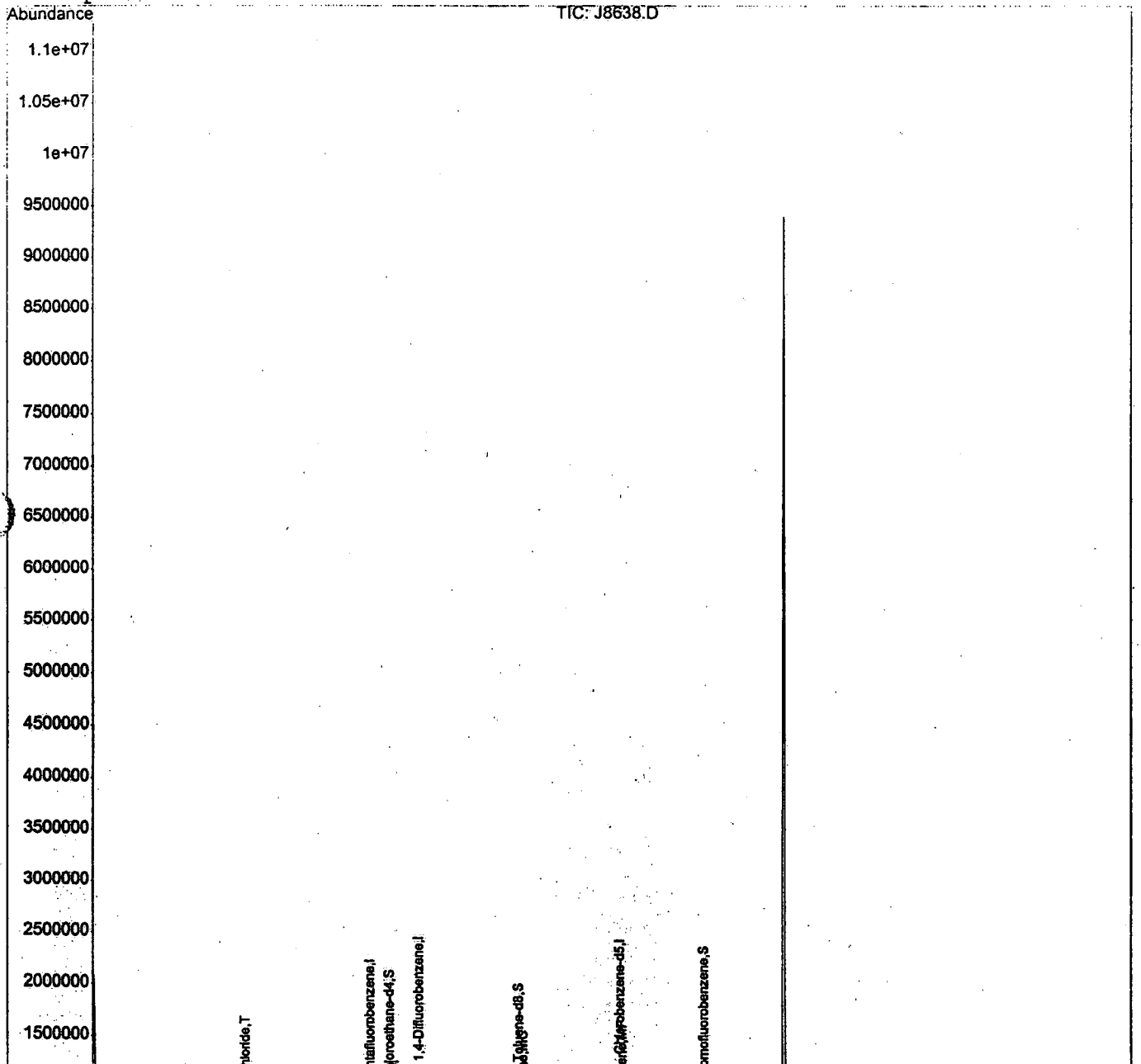
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	463656	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	677390	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	528195	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	237093	46.83	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 93.66%			
41) Toluene-d8	8.89	98	530750	34.72	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 69.44%			
59) Bromofluorobenzene	11.97	95	249589	43.34	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 86.68%			
Target Compounds						Qvalue
13) Methylene Chloride	4.31	84	20370	6.86	UG	# 99
32) Benzene	6.80	78	163967	10.90	UG	# 100
42) Toluene	8.97	92	189779	20.13	UG	# 100
51) Chlorobenzene	10.61	112	51523	5.24	UG	# 62

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8638.D Vial: 12
Acq On : 3 Apr 2001 19:42 Operator: XINGFANG WAN
Sample : S-33,2006-003,M,0.039g,17.4 Inst : MSD_J
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 11:06 2001 Quant Results File: JME0312.RES

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 04 08:36:11 2001
Response via : Initial Calibration



1927

000084

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8638.D
Acq On : 3 Apr 2001 19:42
Sample : S-33,2006-003,M,0.039g,17.4
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Integration Params: Lscint.p

Vial: 12
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

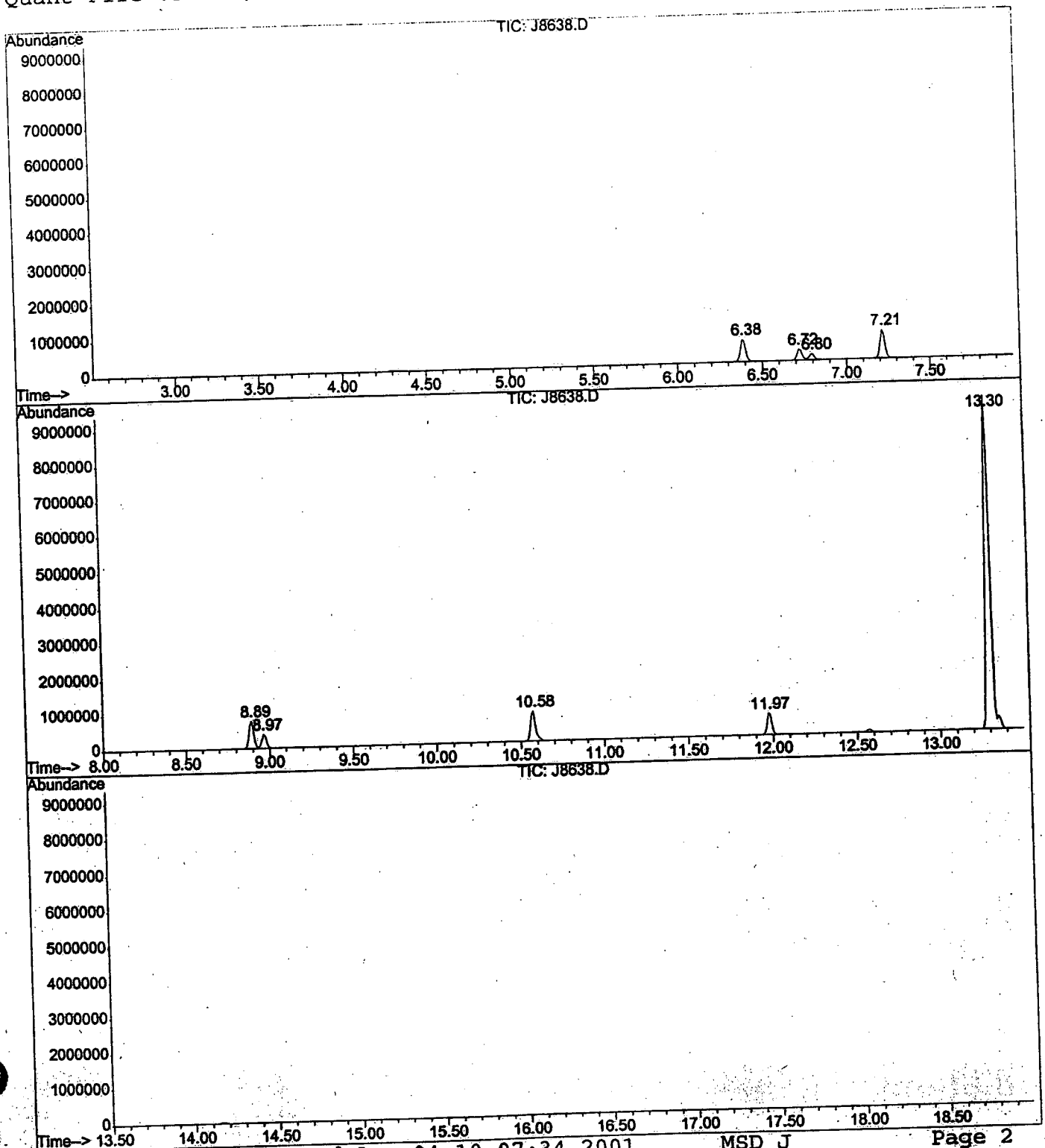
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.383	449	460	479	rBV	611976	1360843	7.18%	4.842%
2	6.717	484	493	497	rBV	300184	656617	3.46%	2.337%
3	6.798	497	501	516	rVB	160076	365459	1.93%	1.300%
4	7.213	535	542	556	rBV	786905	1574275	8.30%	5.602%
5	8.894	700	708	712	rBV	783054	1509411	7.96%	5.371%
6	8.965	712	715	729	rVB	399658	763751	4.03%	2.718%
7	10.575	867	874	886	rBV	858583	1769464	9.33%	6.297%
8	11.973	1004	1012	1020	rBV	608519	1137064	6.00%	4.046%
9	13.299	1134	1143	1156	rBV	9395584	18965326	100.00%	67.487%

Sum of corrected areas: 28102210

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-03-01\J8638.D
Operator : XINGFANG WANG
Acquired : 3 Apr 2001 19:42 using AcqMethod JME0312
Instrument : MSD_J
Sample Name: S-33,2006-003,M,0.039g,17.4
Misc Info : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Vial Number: 12
Quant File :JME0312.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8638.D
Acq On : 3 Apr 2001 19:42
Sample : S-33,2006-003,M,0.039g,17.4
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Integration Params: Lscint.p

Vial: 12
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

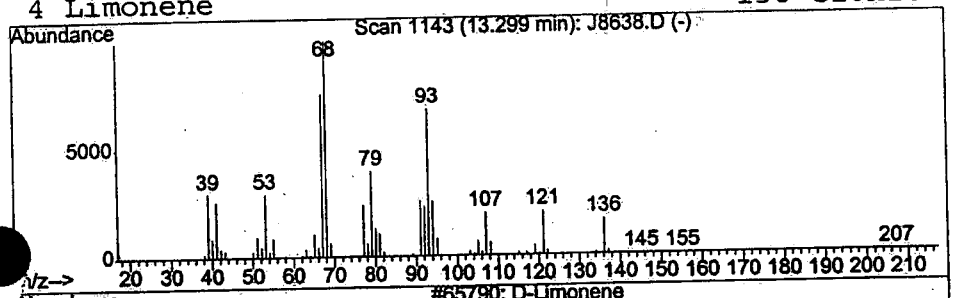
Quant Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

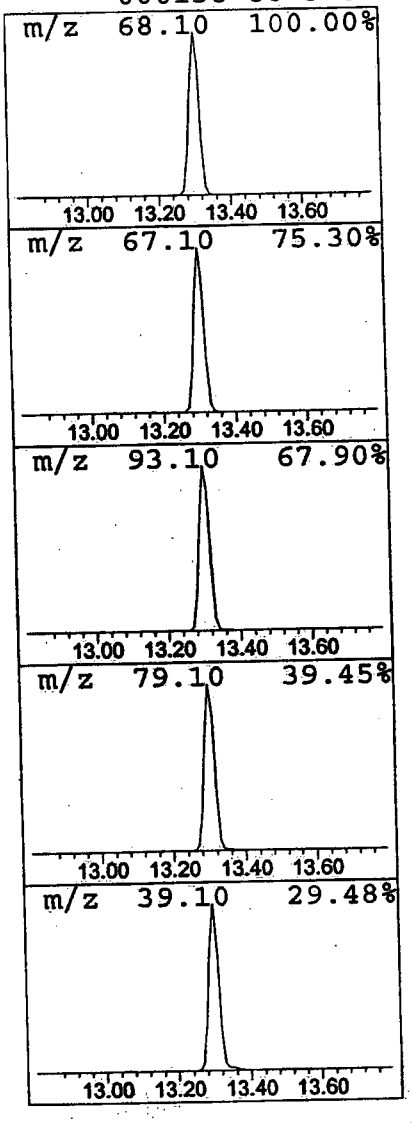
****

Peak Number 1 Unknown — Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.30	535.91 UG	18965300	Chlorobenzene-d5	10.58

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Limonene	136	C10H16	005989-27-5	94
2	Limonene	136	C10H16	000138-86-3	91
3	Limonene	136	C10H16	000138-86-3	86
4	Limonene	136	C10H16	000138-86-3	81





1930
000087

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\J8726.D
Acq On : 6 Apr 2001 22:01
Sample : S-34,2006-004,M,0.008g,15.9
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,5
Integration Params: LSCINT.P
Quant Time: Apr 08 10:33:03 2001

Vial: 14
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

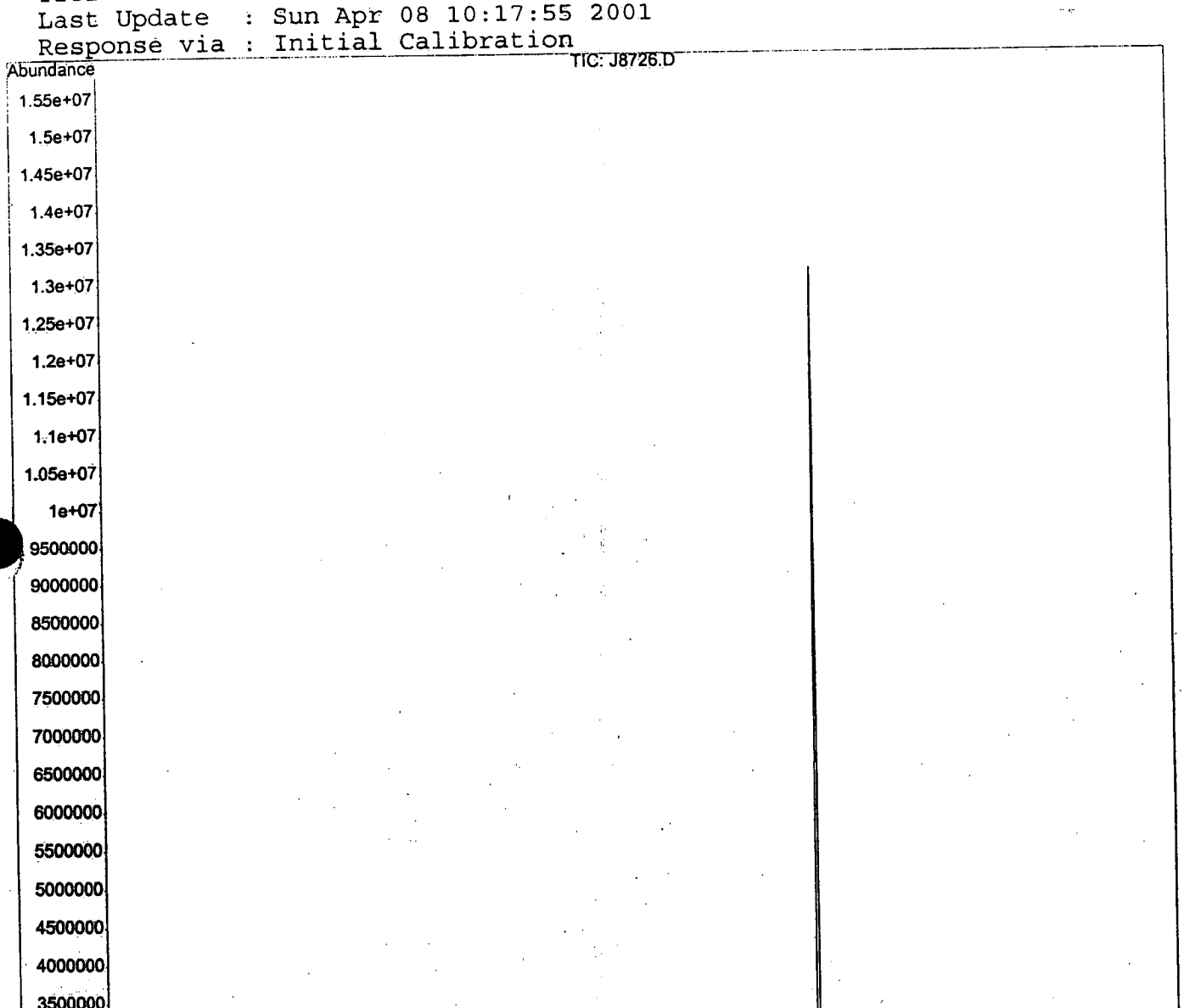
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	459418	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.22	114	660979	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	528456	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.73	65	52942	9.32	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery =	18.64%#		
41) Toluene-d8	8.89	98	99228	7.41	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery =	14.82%#		
59) Bromofluorobenzene	11.98	95	47038	6.95	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery =	13.90%#		
Target Compounds						Qvalue
32) Benzene	6.80	78	1605977	111.40	UG	# 100
42) Toluene	8.98	92	504565	57.21	UG	# 100
72) 1,4-Dichlorobenzene	13.43	146	9298	1.30	UG	# 90
74) 1,2-Dichlorobenzene	13.90	146	159352	23.89	UG	# 82

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\J8726.D Vial: 14
Acq On : 6 Apr 2001 22:01 Operator: XINGFANG WAN
Sample : S-34,2006-004,M,0.008g,15.9 Inst : MSD_J
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,5 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 8 10:33 2001 Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration



1932

000089

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\J8726.D
Acq On : 6 Apr 2001 22:01
Sample : S-34,2006-004,M,0.008g,15.9
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,5
Integration Params: Lscint.p

Vial: 14
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

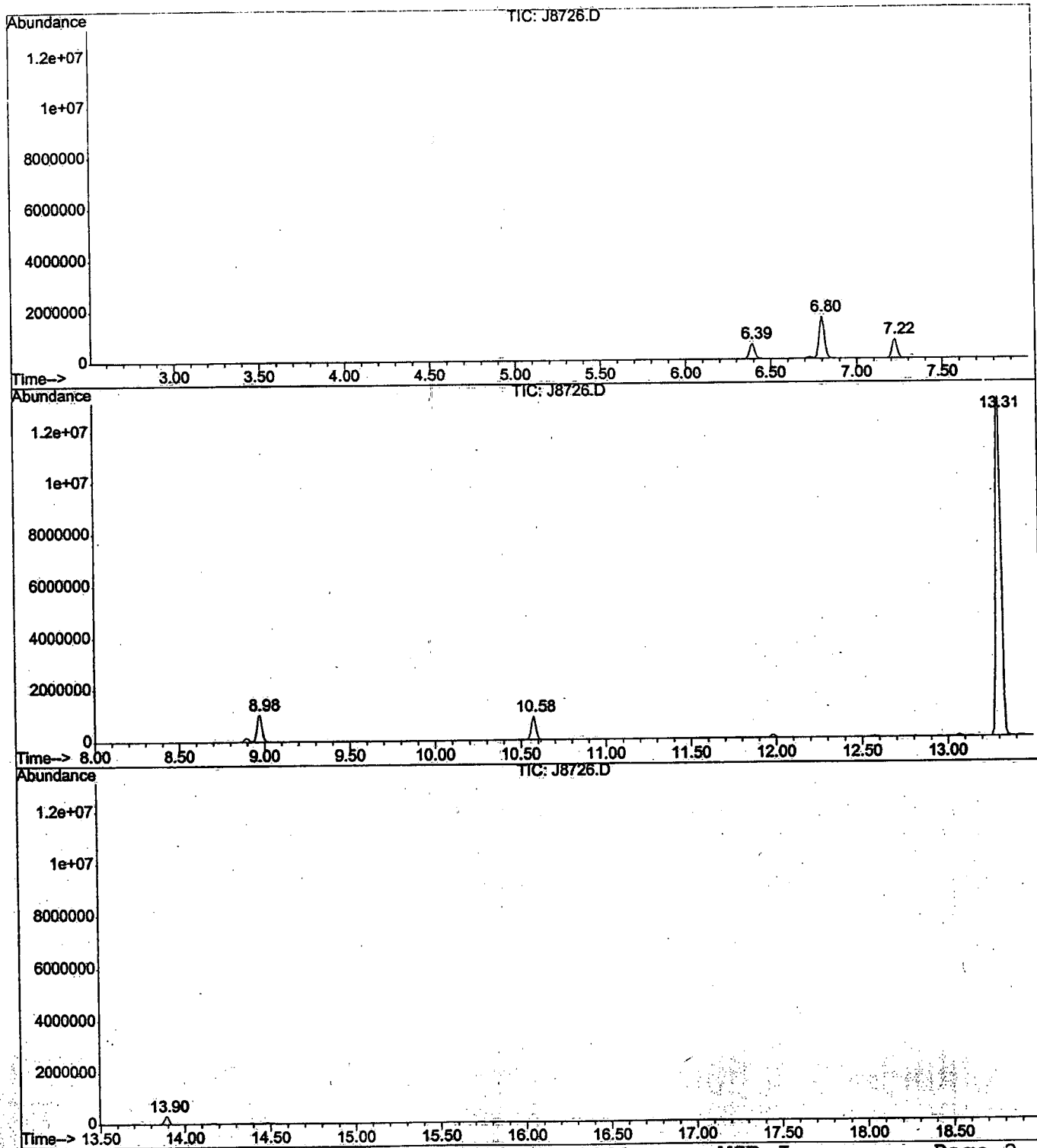
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.393	454	461	476	rBV	613197	1354878	4.70%	3.419%
2	6.798	496	501	516	rVB	1639565	3529332	12.24%	8.907%
3	7.223	535	543	554	rBV	753870	1552165	5.38%	3.917%
4	8.975	711	716	731	rVB	1012625	2057931	7.14%	5.194%
5	10.575	866	874	884	rBV	890846	1635717	5.67%	4.128%
6	13.309	1133	1144	1152	rBV	13167239	28833997	100.00%	72.772%
7	13.897	1195	1202	1220	rVB	322070	658454	2.28%	1.662%

Sum of corrected areas: 39622474

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-06-01\J8726.D
Operator : XINGFANG WANG
Acquired : 6 Apr 2001 22:01 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: S-34,2006-004,M,0.008g,15.9
Misc Info : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,5
Vial Number: 14
Quant File :JME0406.RES (RTE Integrator)



1934

000091

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\J8726.D
Acq On : 6 Apr 2001 22:01
Sample : S-34,2006-004,M,0.008g,15.9
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,5
'S Integration Params: Lscint.p

Vial: 14
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

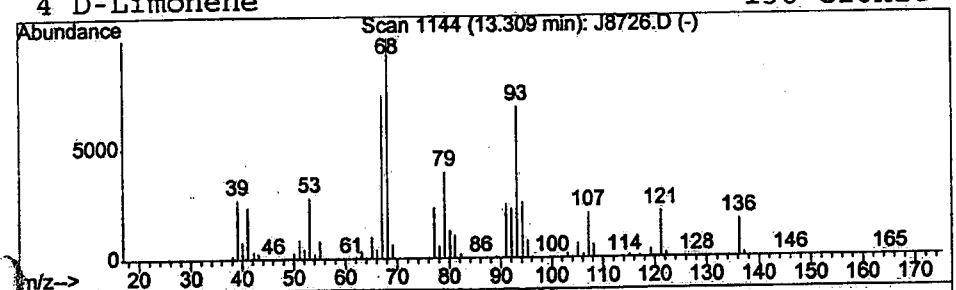
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

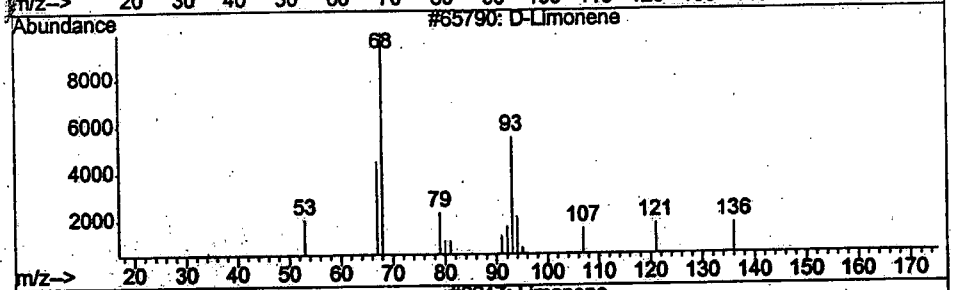
****

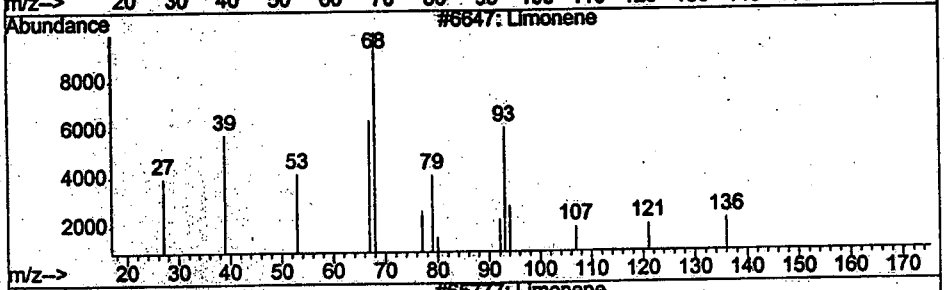
Peak Number 1 Unknown — Concentration Rank 1

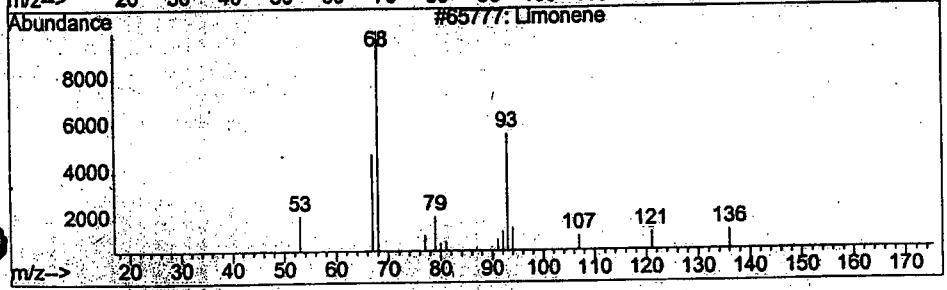
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.31	881.39 UG	28834000	Chlorobenzene-d5	10.58

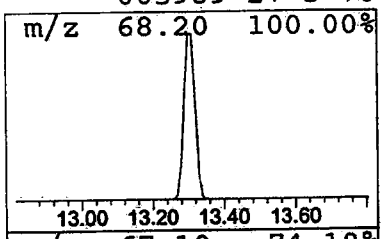
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Limonene	136	C10H16	005989-27-5	95
2	Limonene	136	C10H16	000138-86-3	87
3	Limonene	136	C10H16	000138-86-3	81
4	D-Limonene	136	C10H16	005989-27-5	76

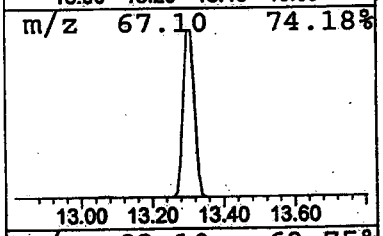


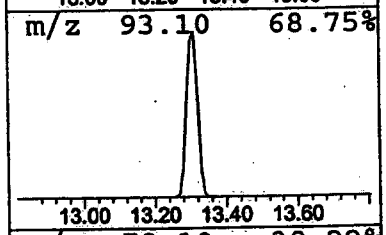


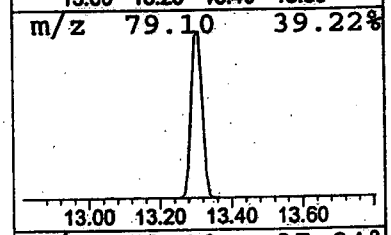


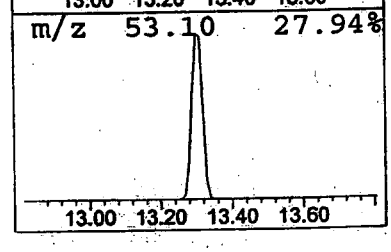












000092

1935

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8640.D Vial: 14
Acq On : 3 Apr 2001 20:32 Operator: XINGFANG WANG
Sample : S-37,2006-007,M,0.036g,26.1 Inst : MSD_J
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1 Multiplr: 1.00
RTE Integration Params: LSCINT.P
Quant Time: Apr 03 20:51:41 2001 Quant Results File: JME0312.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Mar 12 16:28:10 2001
Response via : Initial Calibration
DataAcq Meth : JME0312

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	490907	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	702294	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	550568	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	216236	40.34	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 80.68%			
41) Toluene-d8	8.89	98	486027	30.67	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 61.34%			
59) Bromofluorobenzene	11.97	95	225212	37.52	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 75.04%			
Target Compounds						Qvalue
13) Methylene Chloride	4.30	84	19646	6.25	UG	# 100
32) Benzene	6.80	78	144592	9.27	UG	# 100
42) Toluene	8.97	92	720863	73.75	UG	# 100

(#) = qualifier out of range (m) = manual integration

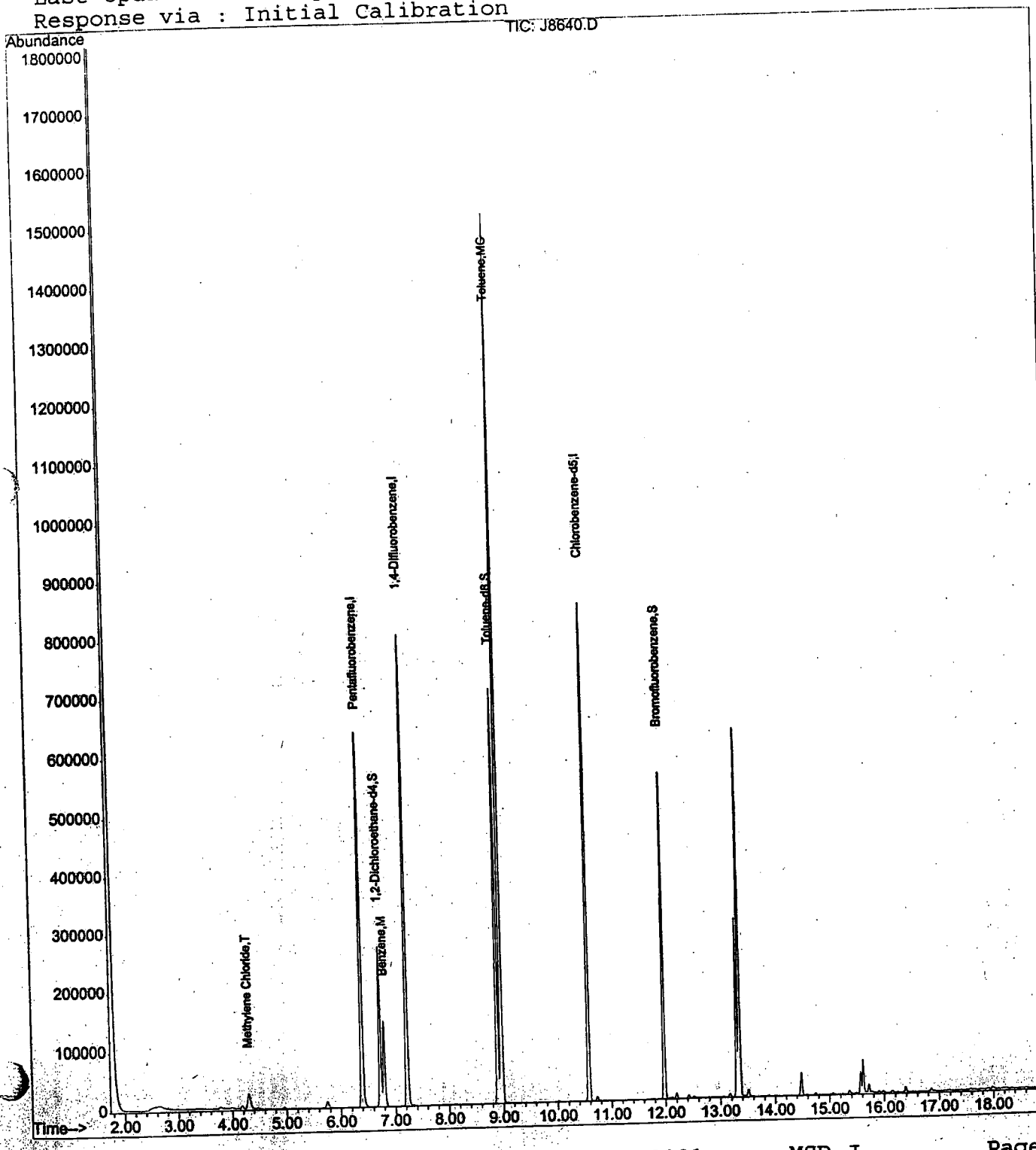
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8640.D
Acq On : 3 Apr 2001 20:32
Sample : S-37,2006-007,M,0.036g,26.1
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 4 11:08 2001

Vial: 14
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0312.RES

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 04 08:36:11 2001
Response via : Initial Calibration



1937

000093

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8640.D
Acq On : 3 Apr 2001 20:32
Sample : S-37,2006-007,M,0.036g,26.1
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
MS Integration Params: Lscint.p

Vial: 14
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Filtering: 5
Sampling : 1
Min Area: 1 % of largest Peak
Start Thrs: 0.2
Max Peaks: 100
Stop Thrs : 0
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

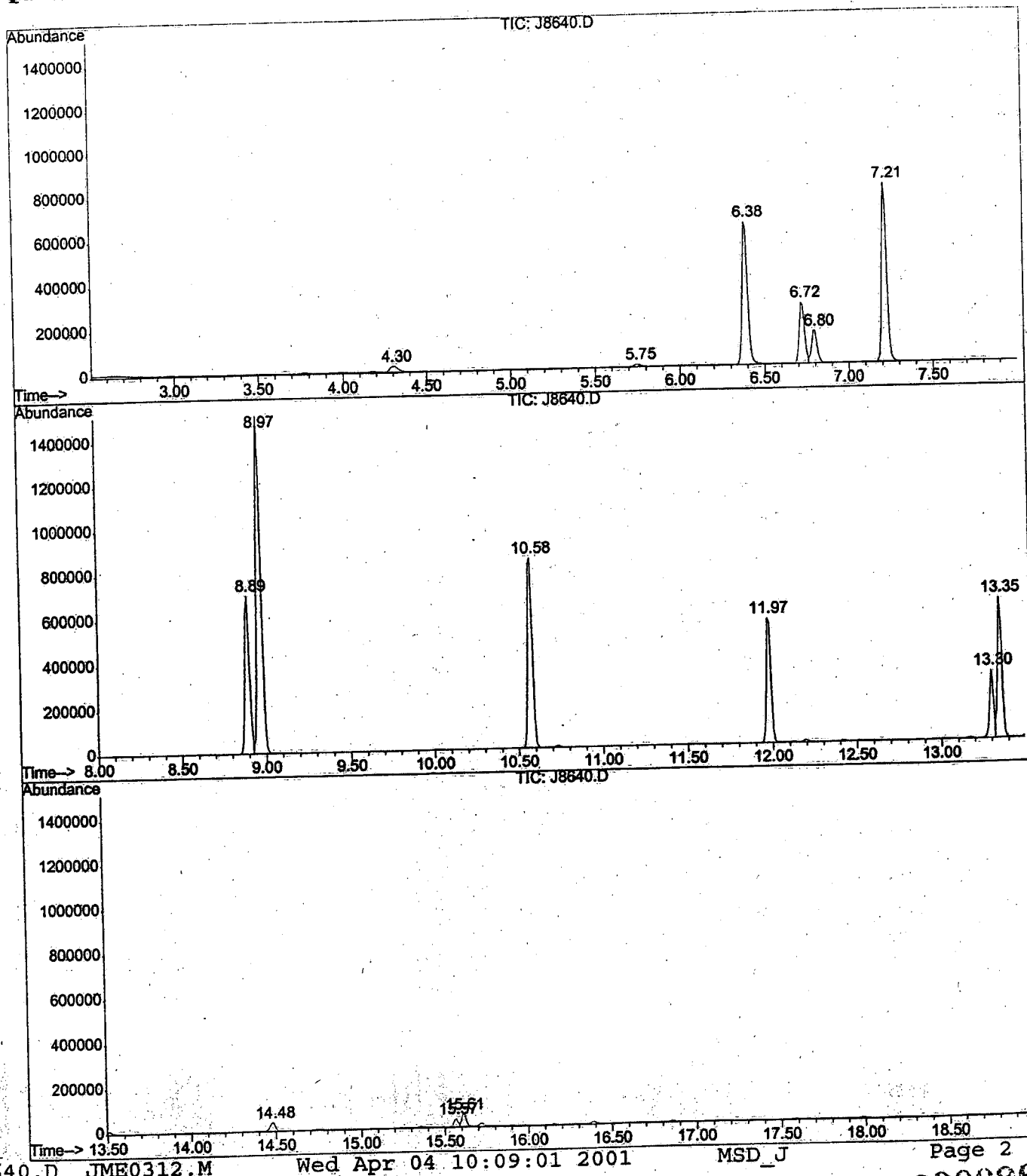
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.297	248	254	266	rVB	26054	94544	3.23%	0.725%
2	5.745	383	397	404	rBV	11234	37404	1.28%	0.287%
3	6.383	453	460	481	rBV	637868	1428281	48.82%	10.955%
4	6.717	485	493	497	rBV	271467	598290	20.45%	4.589%
5	6.798	497	501	517	rVB	144362	338838	11.58%	2.599%
6	7.213	536	542	551	rBV	803161	1627212	55.62%	12.481%
7	8.894	699	708	711	rBV	706064	1369475	46.81%	10.504%
8	8.965	711	715	726	rVB	1516057	2925409	100.00%	22.439%
9	10.575	866	874	884	rBV	849002	1669803	57.08%	12.808%
10	11.973	1003	1012	1020	rBV	556640	1034737	35.37%	7.937%
11	13.299	1135	1143	1145	rBV	304546	508411	17.38%	3.900%
12	13.350	1145	1148	1159	rVV	627799	1141184	39.01%	8.753%
13	14.484	1254	1260	1266	rBV	39657	84609	2.89%	0.649%
14	15.567	1363	1367	1369	rBV	37096	68140	2.33%	0.523%
15	15.608	1369	1371	1378	rVV	56421	111052	3.80%	0.852%

Sum of corrected areas: 13037389

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-03-01\J8640.D
Operator : XINGFANG WANG
Acquired : 3 Apr 2001 20:32 using AcqMethod JME0312
Instrument : MSD_J
Sample Name: S-37,2006-007,M,0.036g,26.1
Misc Info : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Vial Number: 14
Quant File :JME0312.RES (RTE Integrator)



1939

000096

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8640.D
Acq On : 3 Apr 2001 20:32
Sample : S-37,2006-007,M,0.036g,26.1
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Integration Params: Lscint.p

Vial: 14
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

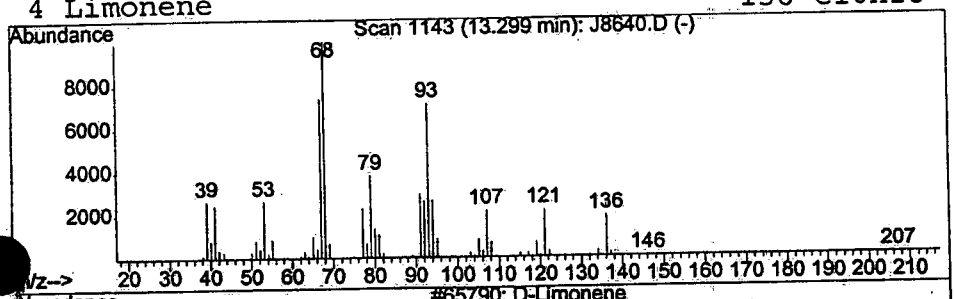
Quant Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

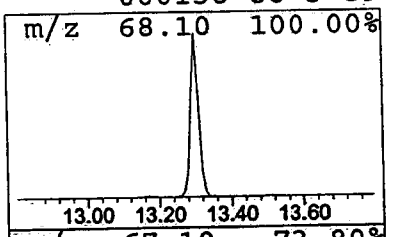
****

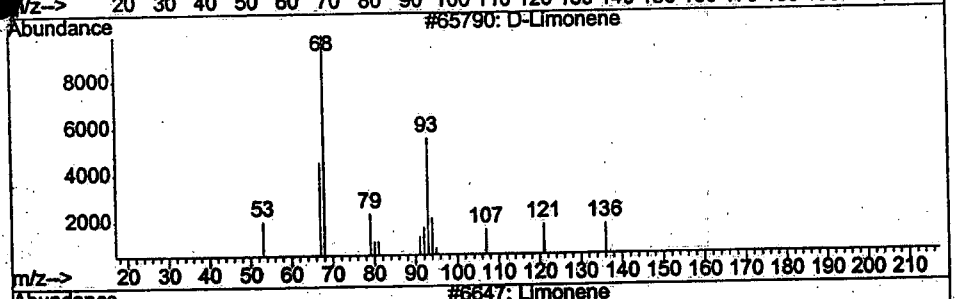
Peak Number 1 Unknown — Concentration Rank 2

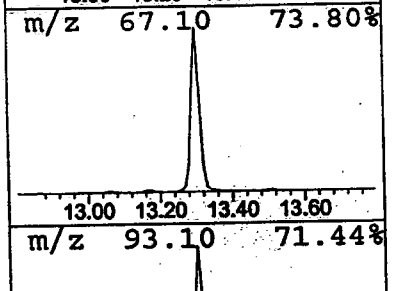
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.30	15.22 UG	508411	Chlorobenzene-d5	10.58

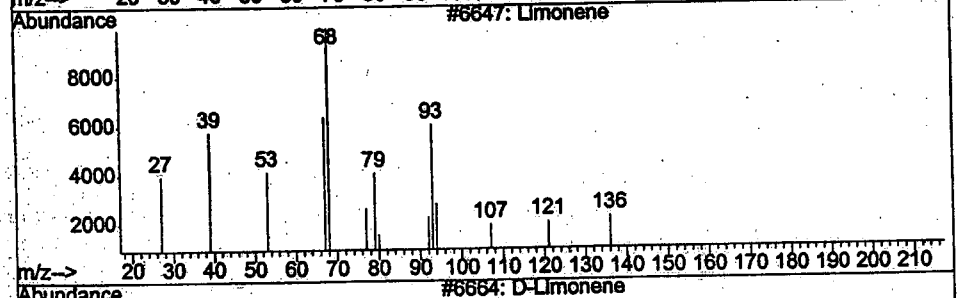
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Limonene	136	C10H16	005989-27-5	94
2	Limonene	136	C10H16	000138-86-3	94
3	D-Limonene	136	C10H16	005989-27-5	93
4	Limonene	136	C10H16	000138-86-3	89

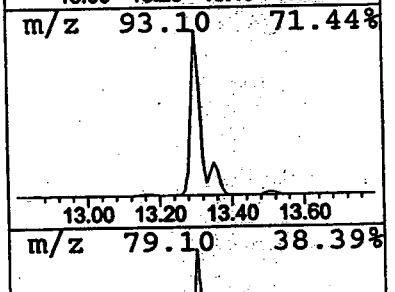


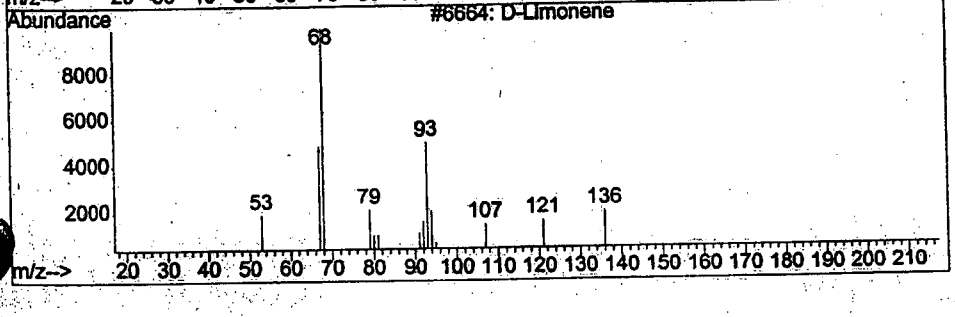


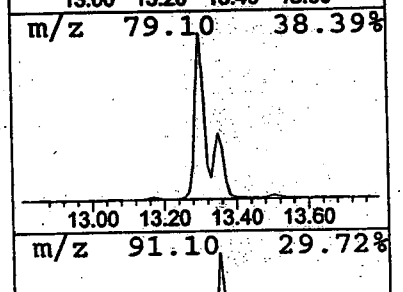


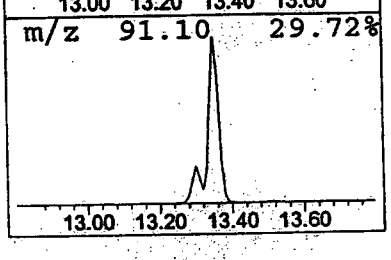












OR0037

1940

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8640.D
Acq On : 3 Apr 2001 20:32
Sample : S-37,2006-007,M,0.036g,26.1
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
S Integration Params: Lscint.p

Vial: 14
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

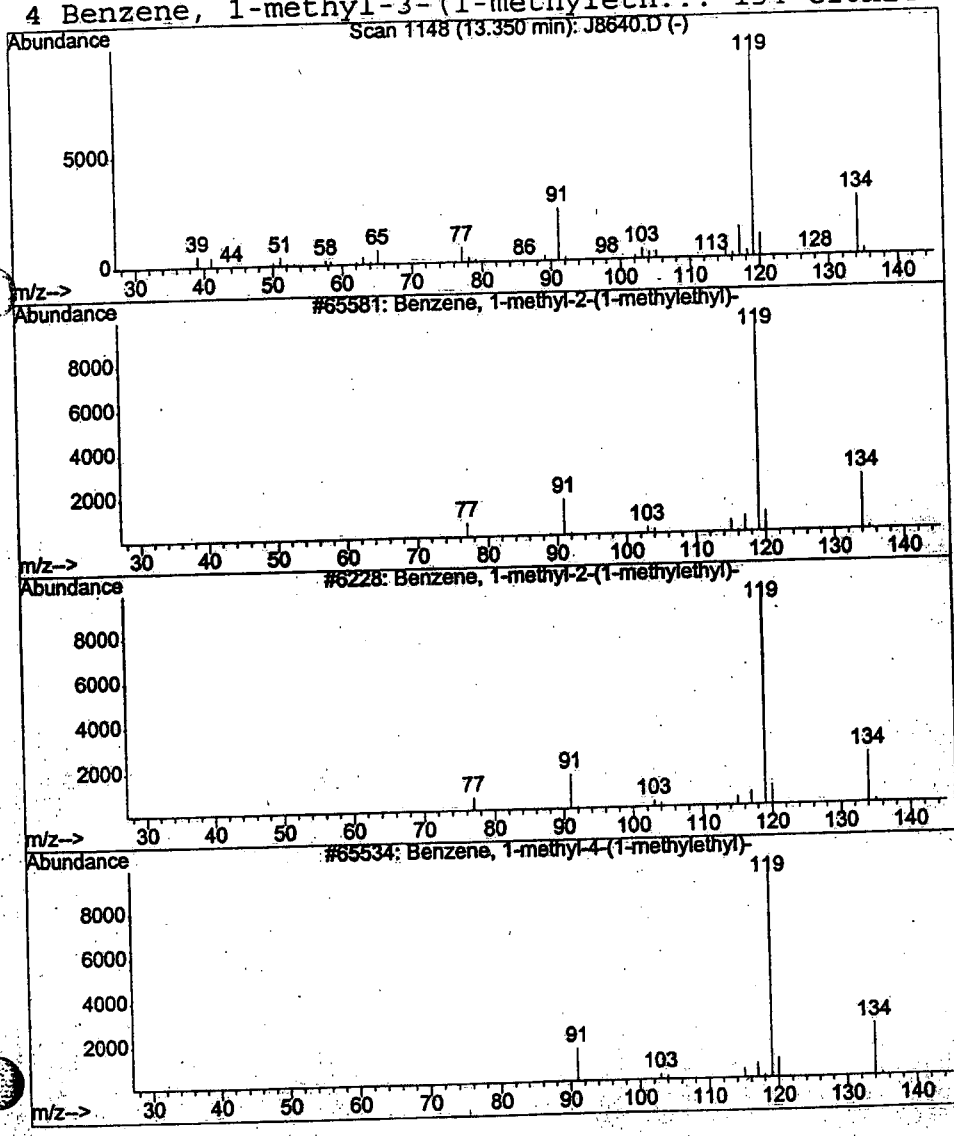
Quant Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

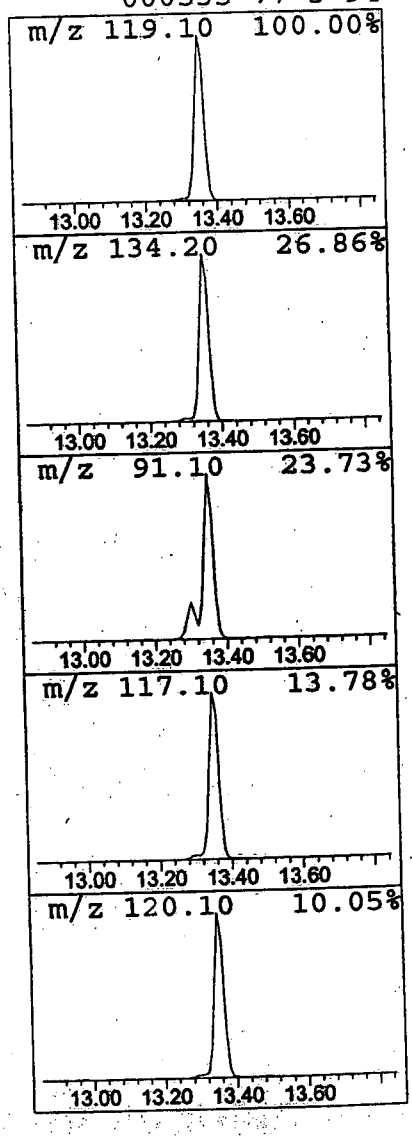
****

Peak Number 2 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.35	34.17 UG	1141180	Chlorobenzene-d5	10.58

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
2	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	94
4	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	94





1941

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\J8727.D
Acq On : 6 Apr 2001 22:29
Sample : S-38,2006-008,M,0.038g,23.8
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 08 10:34:18 2001

Vial: 15
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.39	168	518393	50.00	UG		0.00
31) 1,4-Difluorobenzene	7.22	114	739418	50.00	UG		0.00
50) Chlorobenzene-d5	10.58	117	595865	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.73	65	246527	38.45	UG		0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 76.90%				
41) Toluene-d8	8.89	98	542429	36.20	UG		0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 72.40%				
59) Bromofluorobenzene	11.98	95	269750	35.34	UG		0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 70.68%				
Target Compounds							Qvalue
6) Chloroethane	2.72	64	4861	3.00	UG		98
29) 1,2-Dichloroethane(EDC)	6.81	62	245397	40.39	UG	#	96
32) Benzene	6.80	78	118032	7.32	UG	#	100
33) Trichloroethene	7.52	95	22901	5.95	UG	#	84
42) Toluene	8.97	92	564399	57.21	UG	#	100
53) Ethylbenzene	10.73	91	80155	4.54	UG	#	84
54) m,p-Xylene	10.87	106	124833	18.72	UG	#	49
55) o-Xylene	11.34	106	24797	3.68	UG	#	47
70) 1,3-Dichlorobenzene	13.32	146	10850	1.41	UG	#	84
72) 1,4-Dichlorobenzene	13.43	146	39851	4.96	UG	#	90
74) 1,2-Dichlorobenzene	13.90	146	58704	7.81	UG	#	82

(#) = qualifier out of range (m) = manual integration

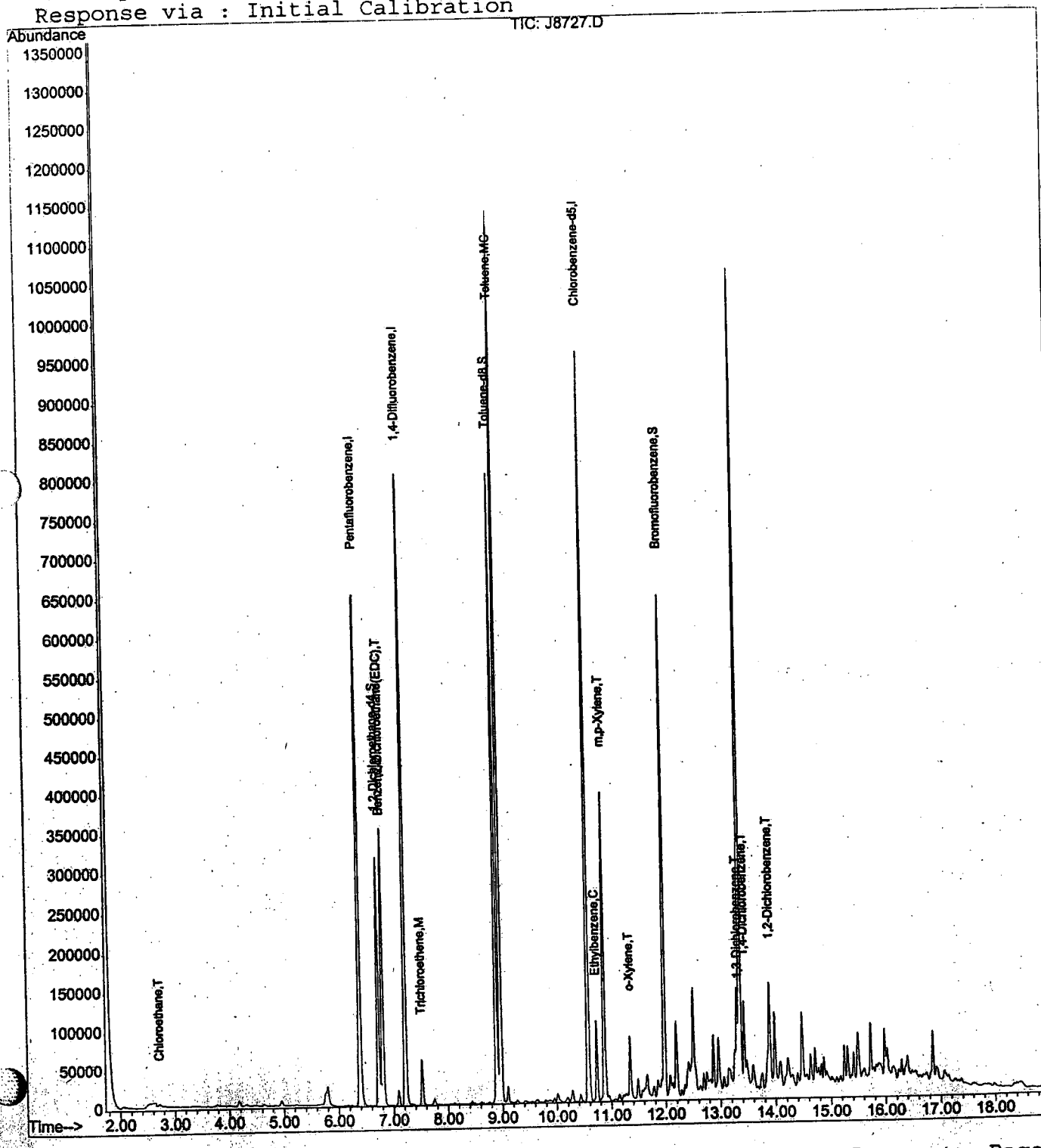
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\J8727.D
Acq On : 6 Apr 2001 22:29
Sample : S-38,2006-008,M,0.038g,23.8
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 8 10:35 2001

Vial: 15
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration



1943

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\J8727.D
Acq On : 6 Apr 2001 22:29
[redacted]mple : S-38,2006-008,M,0.038g,23.8
[redacted]sc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Integration Params: Lscint.p

Vial: 15
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.796	393	402	425	rVB3	26490	123886	5.44%	0.621%
2	6.393	453	461	476	rBV	652569	1519258	66.72%	7.610%
3	6.727	485	494	498	rBV	317826	697203	30.62%	3.492%
4	6.808	498	502	516	rVB2	353525	831690	36.52%	4.166%
5	7.092	524	530	537	rBV	20334	44238	1.94%	0.222%
6	7.213	537	542	552	rBV	805335	1721334	75.59%	8.622%
[redacted]	7.517	564	572	586	rBV	60327	132390	5.81%	0.663%
[redacted]	8.894	700	708	712	rBV	803805	1561738	68.58%	7.822%
[redacted]	8.965	712	715	723	rVV	1137230	2277224	100.00%	11.406%
10	9.097	723	728	732	rVB	21091	40467	1.78%	0.203%
11	10.008	815	818	829	rVB2	11883	34095	1.50%	0.171%
12	10.282	839	845	854	rVB2	15988	42198	1.85%	0.211%
13	10.423	854	859	868	rBV	10317	23133	1.02%	0.116%
14	10.575	868	874	883	rVV	956298	1861504	81.74%	9.324%
15	10.727	883	889	894	rVV	104799	208427	9.15%	1.044%
16	10.869	894	903	917	rVB	394256	842888	37.01%	4.222%
17	11.345	945	950	958	rVB	81501	175023	7.69%	0.877%
18	11.487	960	964	968	rBV	25748	51920	2.28%	0.260%
19	11.659	973	981	988	rVB2	28349	99489	4.37%	0.498%
20	11.780	988	993	996	rVB3	13816	34966	1.54%	0.175%
21	11.851	996	1000	1004	rBV3	22021	66391	2.92%	0.333%
22	11.983	1004	1013	1017	rVB	639331	1296892	56.95%	6.496%
23	12.074	1018	1022	1025	rBV	24028	56404	2.48%	0.283%
24	12.196	1029	1034	1040	rVB2	96924	234429	10.29%	1.174%
25	12.347	1046	1049	1051	rBV2	13641	28111	1.23%	0.141%
26	12.418	1051	1056	1059	rBV2	35267	111873	4.91%	0.560%
27	12.509	1060	1065	1073	rVB3	131955	351373	15.43%	1.760%
28	12.692	1080	1083	1086	rBV	23115	39580	1.74%	0.198%
29	12.752	1086	1089	1093	rBV3	23545	62923	2.76%	0.315%
[redacted]	12.874	1098	1101	1104	rVB	68769	122471	5.38%	0.613%
31	12.965	1105	1110	1116	rVB2	66904	156359	6.87%	0.783%

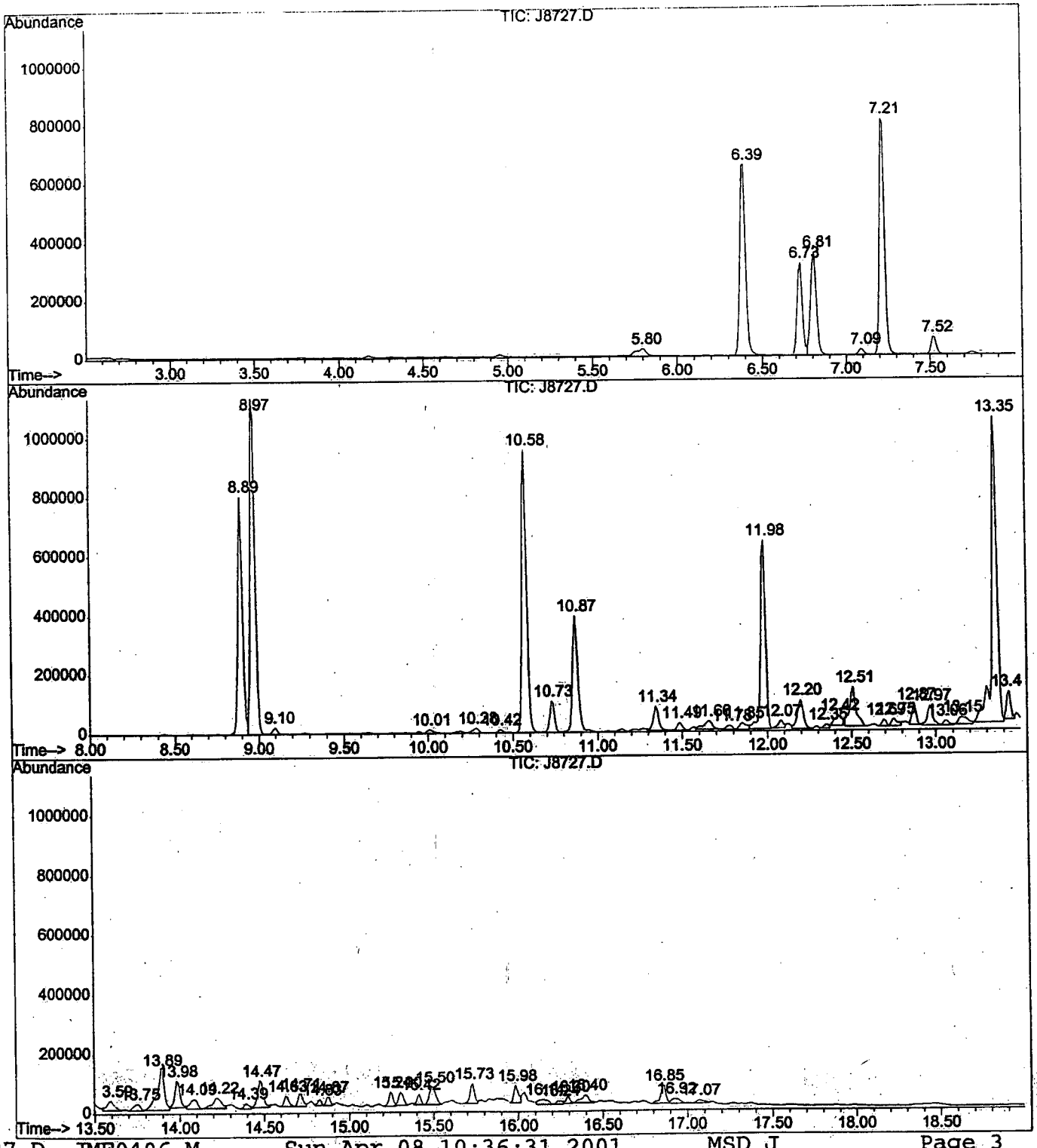
1944

32	13.056	1116	1119	1124	rBV2	15848	35596	1.56%	0.178%
33	13.147	1124	1128	1135	rBV5	24998	98388	4.32%	0.493%
34	13.350	1135	1148	1153	rBV	1036029	2255772	99.06%	11.299%
35	13.431	1153	1156	1159	rBV	93769	163396	7.18%	0.818%
36	13.593	1167	1172	1178	rVB4	31182	94483	4.15%	0.473%
	13.755	1182	1188	1191	rBV3	20965	57584	2.53%	0.288%
	13.887	1191	1201	1206	rBV	136328	417153	18.32%	2.089%
39	13.978	1206	1210	1216	rVV3	89975	198303	8.71%	0.993%
40	14.089	1216	1221	1225	rVB3	31636	96675	4.25%	0.484%
41	14.221	1226	1234	1239	rBV3	35401	134816	5.92%	0.675%
42	14.393	1248	1251	1254	rBV2	17350	38152	1.68%	0.191%
43	14.474	1254	1259	1265	rVV	89771	215734	9.47%	1.081%
44	14.626	1271	1274	1279	rVB4	35081	69187	3.04%	0.347%
45	14.707	1279	1282	1286	rBV3	42185	90930	3.99%	0.455%
46	14.828	1291	1294	1296	rVB2	19171	28859	1.27%	0.145%
47	14.869	1296	1298	1301	rBV2	28015	48743	2.14%	0.244%
48	15.244	1331	1335	1338	rBV2	47371	83000	3.64%	0.416%
49	15.304	1338	1341	1345	rVV2	44088	91200	4.00%	0.457%
50	15.416	1349	1352	1355	rVV	34798	54699	2.40%	0.274%
51	15.497	1355	1360	1365	rVV3	59097	154905	6.80%	0.776%
52	15.730	1378	1383	1386	rBV	68299	126251	5.54%	0.632%
53	15.983	1405	1408	1411	rBV	59084	115843	5.09%	0.580%
54	16.145	1420	1424	1430	rVB6	16477	63410	2.78%	0.318%
55	16.236	1430	1433	1436	rBV4	12203	30486	1.34%	0.153%
56	16.297	1436	1439	1442	rVV3	22099	37252	1.64%	0.187%
57	16.398	1442	1449	1454	rVV5	26200	87324	3.83%	0.437%
58	16.854	1488	1494	1498	rBV	61491	134777	5.92%	0.675%
	16.924	1498	1501	1511	rVB4	17320	57750	2.54%	0.289%
60	17.066	1512	1515	1521	rBV3	11089	34354	1.51%	0.172%

Sum of corrected areas: 19964899

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-06-01\J8727.D
Operator : XINGFANG WANG
Acquired : 6 Apr 2001 22:29 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: S-38,2006-008,M,0.038g,23.8
Misc Info : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Vial Number: 15
Quant File :JME0406.RES (RTE Integrator)



000103

1946

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\J8727.D
Acq On : 6 Apr 2001 22:29
Sample : S-38,2006-008,M,0.038g,23.8
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Integration Params: Lscint.p

Vial: 15
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

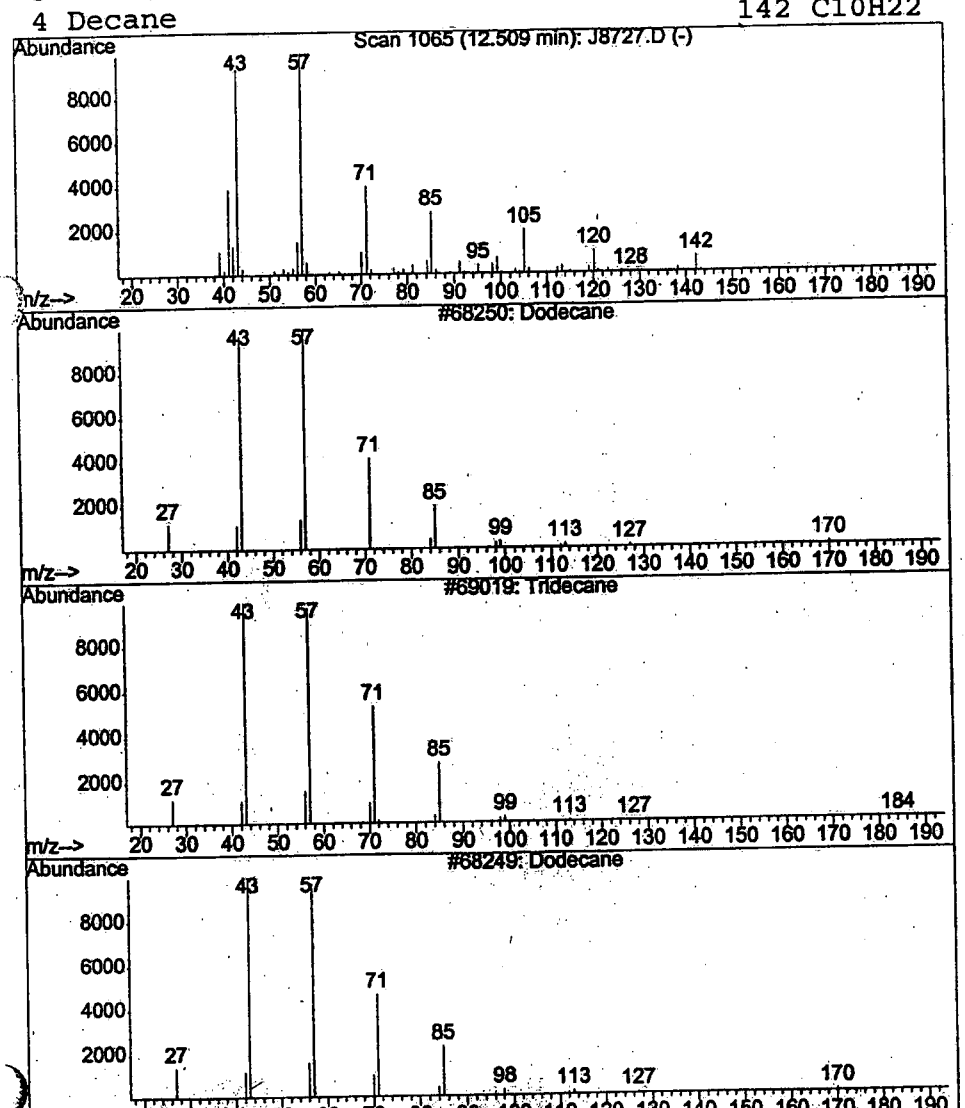
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

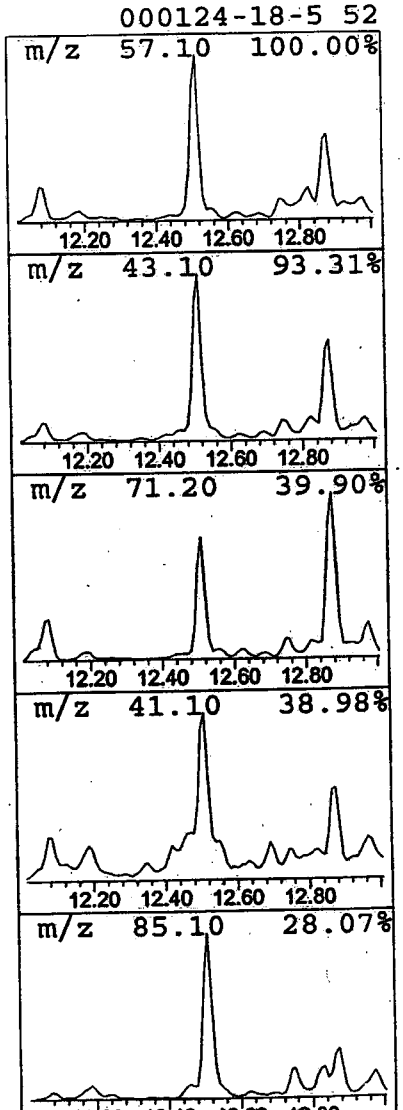
****

Peak Number 1 Unknown alkane — Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.51	9.44 UG	351373	Chlorobenzene-d5	10.58

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane	170	C12H26	000112-40-3	53
2	Tridecane	184	C13H28	000629-50-5	52
3	Dodecane	170	C12H26	000112-40-3	52
4	Decane	142	C10H22	000124-18-5	52





1947
000104

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\J8727.D
Acq On : 6 Apr 2001 22:29
Sample : S-38,2006-008,M,0.038g,23.8
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
IS Integration Params: Lscint.p

Vial: 15
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

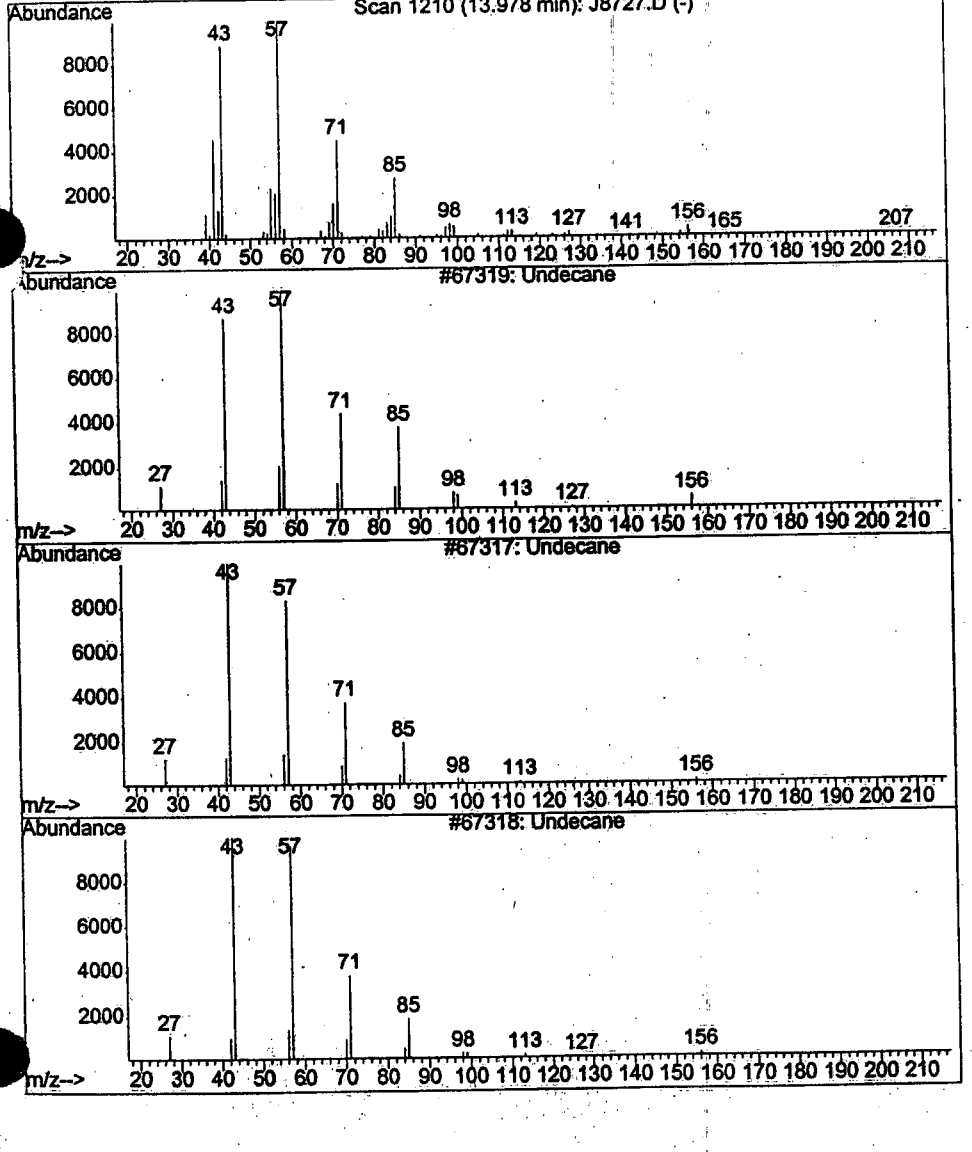
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

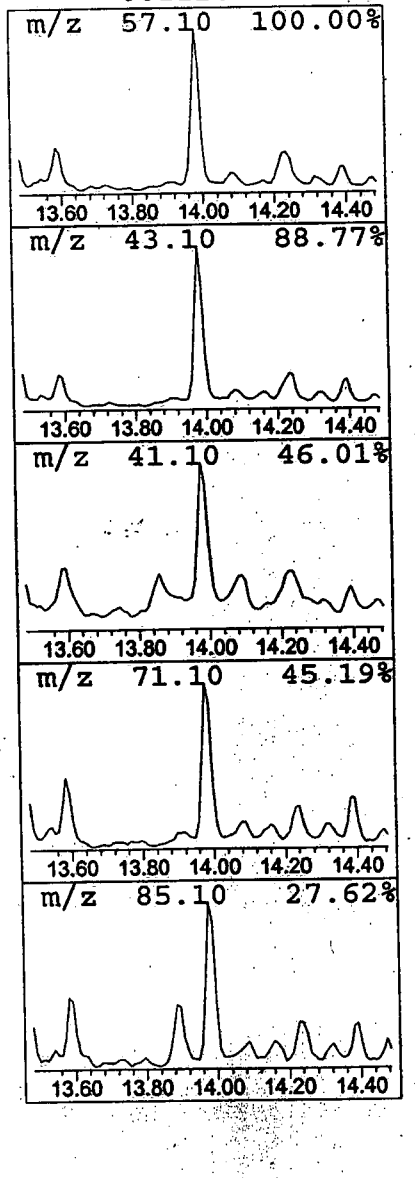
****

Peak Number 2 Unknown alkane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.98	5.33 UG	198303	Chlorobenzene-d5	10.58

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane	156	C11H24	001120-21-4	96
2	Undecane	156	C11H24	001120-21-4	91
3	Undecane	156	C11H24	001120-21-4	91
4	Undecane	156	C11H24	001120-21-4	91





1948

000405

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8642.D
Acq On : 3 Apr 2001 21:23
Sample : S-39,2006-009,M,0.034g,26.5
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 03 21:42:11 2001

Vial: 16
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0312.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Mar 12 16:28:10 2001
Response via : Initial Calibration
DataAcq Meth : JME0312

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	445602	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	654807	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	512295	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	224469	46.13	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 92.26%			
41) Toluene-d8	8.89	98	497257	33.65	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 67.30%			
59) Bromofluorobenzene	11.97	95	235743	42.21	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 84.42%			
Target Compounds						Qvalue
13) Methylene Chloride	4.30	84	18066	6.33	UG	# 99
32) Benzene	6.79	78	39965	2.75	UG	# 100
42) Toluene	8.97	92	31382	3.44	UG	# 100

(#) = qualifier out of range (m) = manual integration

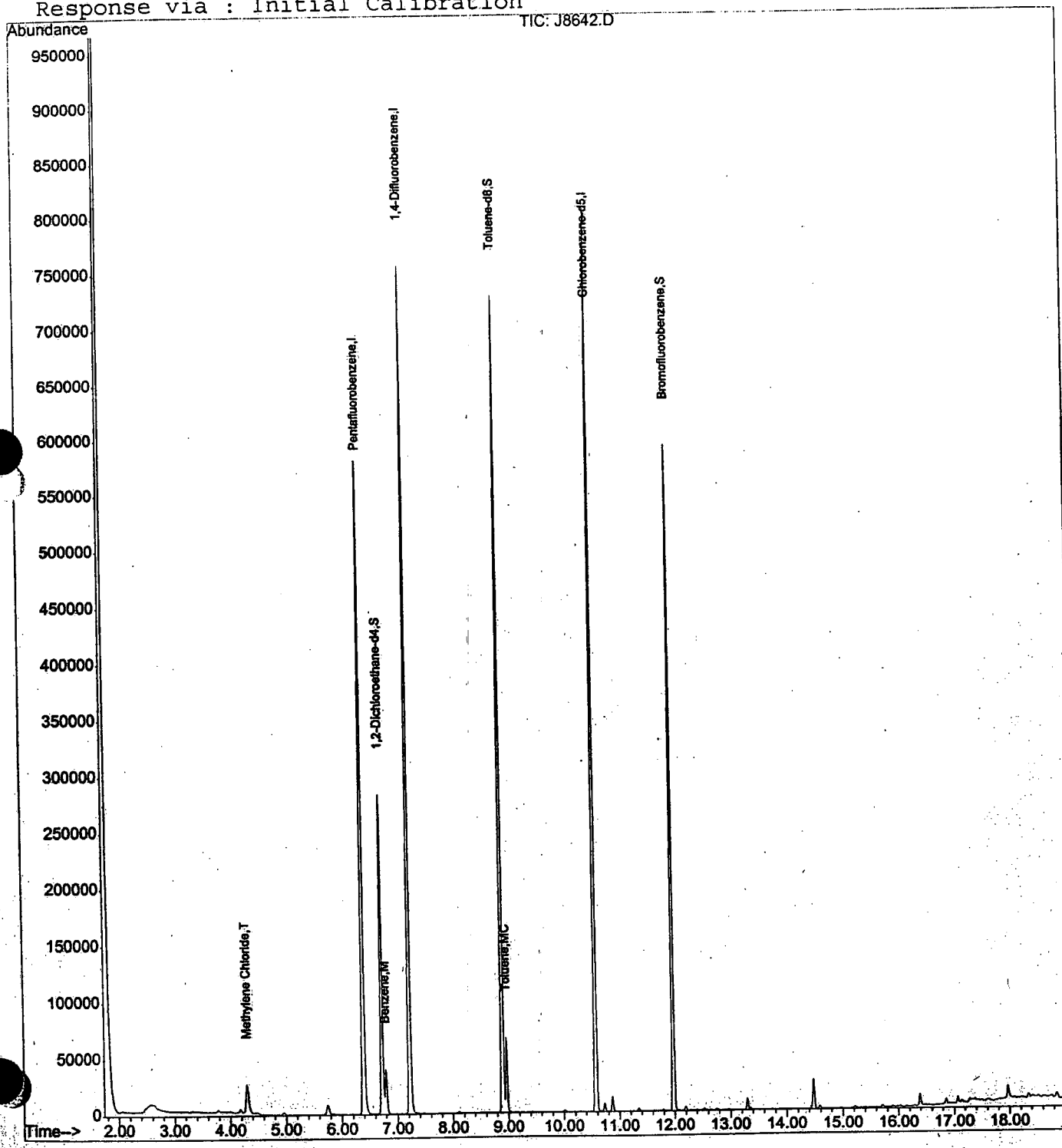
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8642.D
Acq On : 3 Apr 2001 21:23
Sample : S-39,2006-009,M,0.034g,26.5
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 4 11:09 2001

Vial: 16
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0312.RES

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 04 08:36:11 2001
Response via : Initial Calibration



000107

1950

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8642.D
Acq On : 3 Apr 2001 21:23
Sample : S-39,2006-009,M,0.034g,26.5
Misc : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Vial: 16
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
'S Integration Params: Lscint.p

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Filtering: 5
Sampling : 1
Min Area: 1 % of largest Peak
Start Thrs: 0.2
Max Peaks: 100
Stop Thrs : 0
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

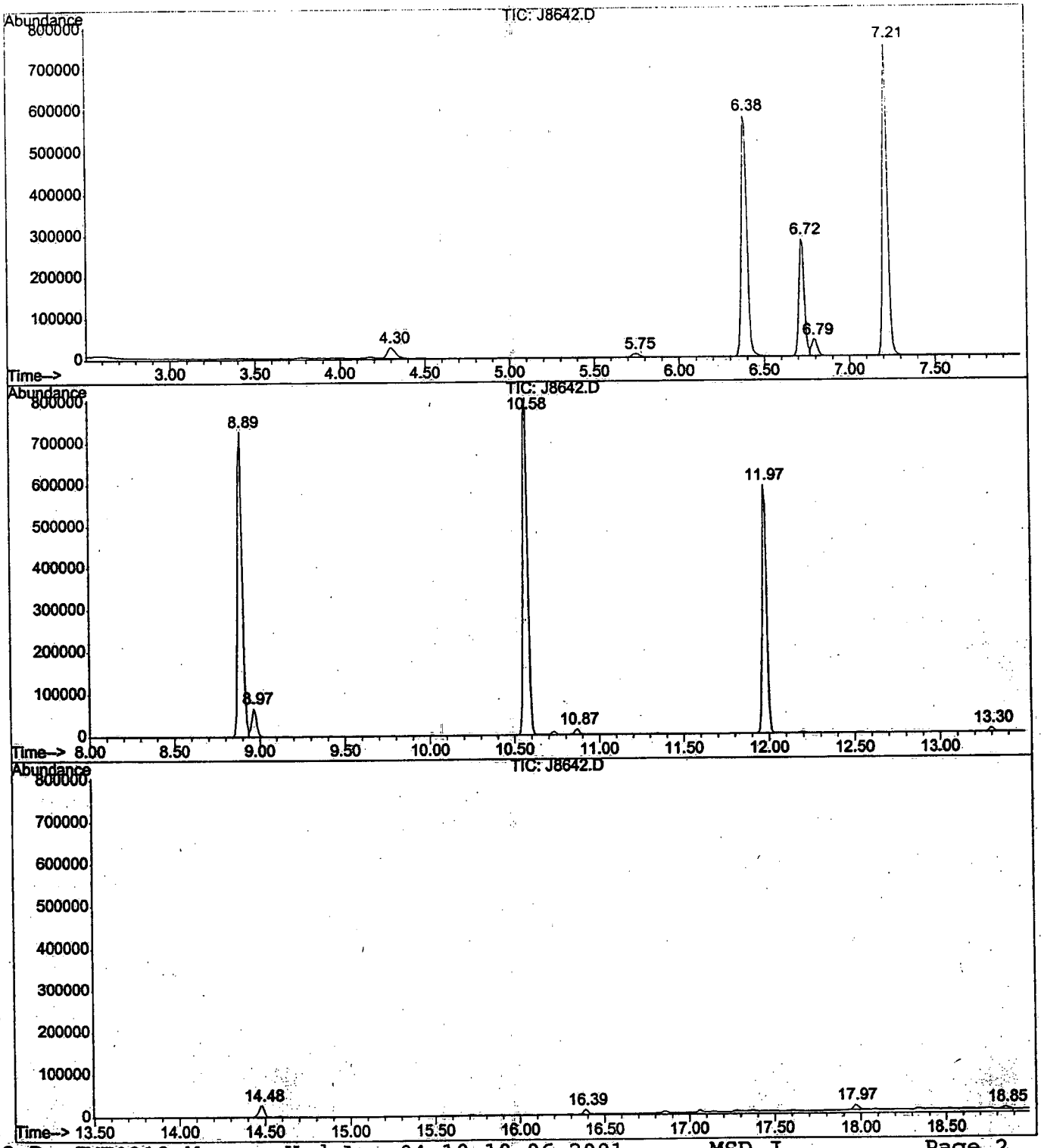
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.297	248	254	266	rVV	26317	91413	5.87%	1.141%
2	5.745	385	397	403	rBV	8745	26945	1.73%	0.336%
3	6.383	453	460	480	rBV	580536	1304716	83.83%	16.287%
4	6.717	485	493	498	rBV	282759	625466	40.18%	7.808%
5	6.788	498	500	510	rVB	39992	87863	5.65%	1.097%
6	7.213	536	542	561	rBV	756221	1523505	97.88%	19.018%
7	8.894	699	708	712	rBV	728893	1412111	90.73%	17.627%
8	8.965	712	715	725	rVB	66934	129960	8.35%	1.622%
9	10.575	866	874	885	rBV	806233	1556471	100.00%	19.430%
10	10.869	896	903	908	rBV	13361	25862	1.66%	0.323%
11	11.973	1003	1012	1025	rBV	592463	1075573	69.10%	13.426%
12	13.299	1134	1143	1146	rBV2	10214	20055	1.29%	0.250%
13	14.484	1252	1260	1267	rBV	26644	60409	3.88%	0.754%
14	16.388	1442	1448	1454	rBV	11354	26812	1.72%	0.335%
15	17.968	1600	1604	1613	rBV4	11839	27420	1.76%	0.342%
16	18.849	1687	1691	1697	rVB7	5749	16282	1.05%	0.203%

Sum of corrected areas: 8010863

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-03-01\J8642.D
Operator : XINGFANG WANG
Acquired : 3 Apr 2001 21:23 using AcqMethod JME0312
Instrument : MSD_J
Sample Name: S-39,2006-009,M,0.034g,26.5
Misc Info : ENVTACT/ORBIS_-_NEWARK,3/29/01,4/2/01,1
Vial Number: 16
Quant File :JME0312.RES (RTE Integrator)



1952

000109

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8643.D Vial: 17
Acq On : 3 Apr 2001 21:48 Operator: XINGFANG WANG
Sample : TB,2006-017,MB,0.04g,0 Inst : MSD_J
Misc : ENVTACT/ORBIS_-_NEWARK,3/28/01,4/2/01,1 Multiplr: 1.00
'S Integration Params: LSCINT.P
Quant Time: Apr 03 22:07:24 2001 Quant Results File: JME0312.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Mar 12 16:28:10 2001
Response via : Initial Calibration
DataAcq Meth : JME0312

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	460476	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	671012	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	527060	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	246309	48.98	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.96%			
41) Toluene-d8	8.89	98	547439	36.15	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 72.30%			
59) Bromofluorobenzene	11.97	95	260423	45.32	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 90.64%			

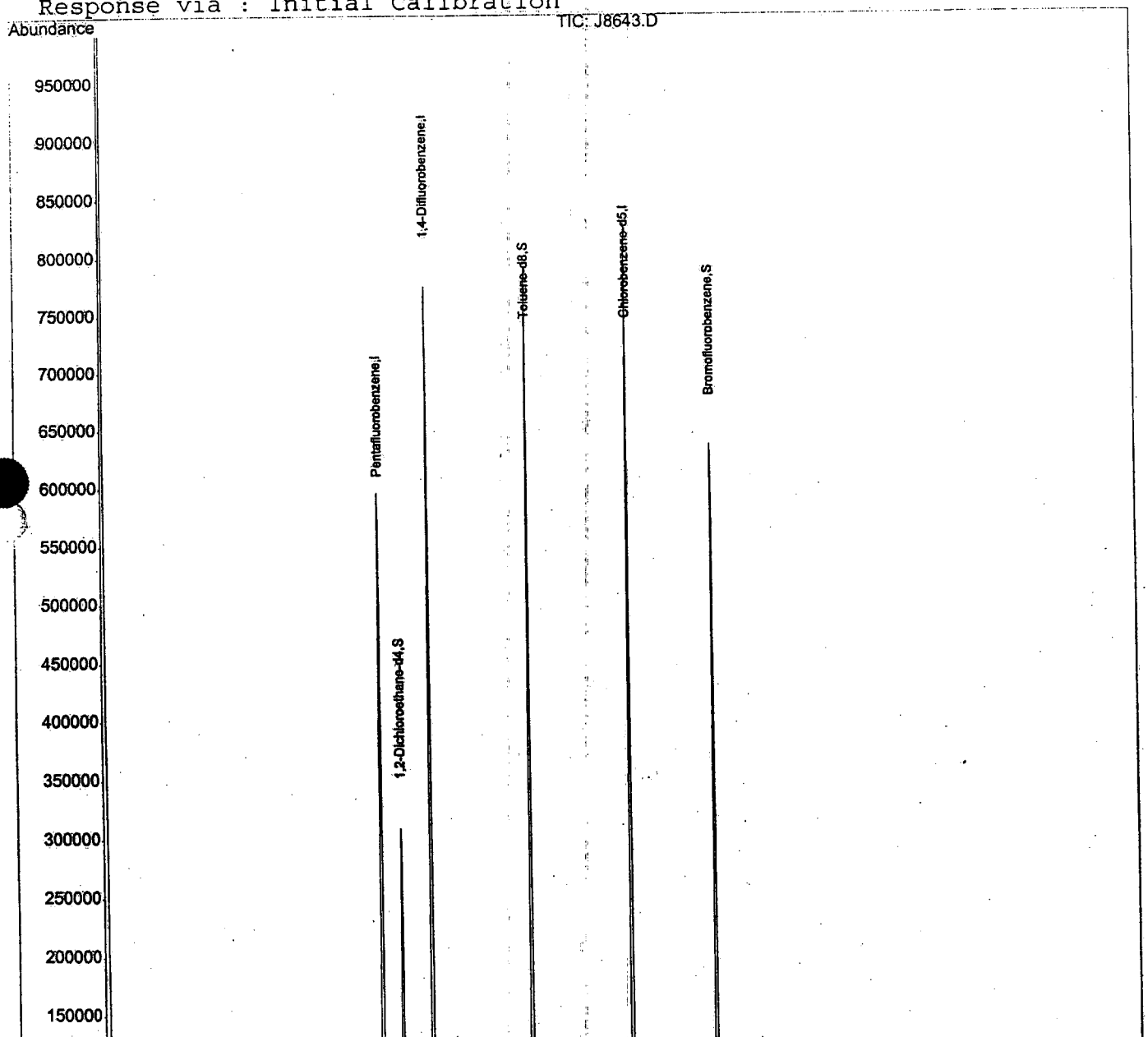
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8643.D Vial: 17
Acq On : 3 Apr 2001 21:48 Operator: XINGFANG WAN
Sample : TB,2006-017,MB,0.04g,0 Inst : MSD_J
Misc : ENVTACT/ORBIS_-_NEWARK,3/28/01,4/2/01,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 11:10 2001 Quant Results File: JME0312.RES

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 04 08:36:11 2001
Response via : Initial Calibration



1954

000111

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8643.D
Acq On : 3 Apr 2001 21:48
Sample : TB,2006-017,MB,0.04g,0
Misc : ENVTACT/ORBIS_-_NEWARK,3/28/01,4/2/01,1
MS Integration Params: Lscint.p

Vial: 17
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.383	453	460	481	rBV	595206	1348659	84.24%	16.762%
2	6.717	483	493	510	rVB	308493	690364	43.12%	8.580%
3	7.213	536	542	555	rBV	774421	1560877	97.49%	19.400%
4	8.894	701	708	724	rBV	798832	1560188	97.45%	19.391%
5	10.575	866	874	883	rBV	828133	1601044	100.00%	19.899%
6	11.973	1006	1012	1024	rBV	635852	1179440	73.67%	14.659%
7	14.484	1254	1260	1265	rBV	39742	84889	5.30%	1.055%
8	16.388	1443	1448	1453	rBV	9830	20310	1.27%	0.252%

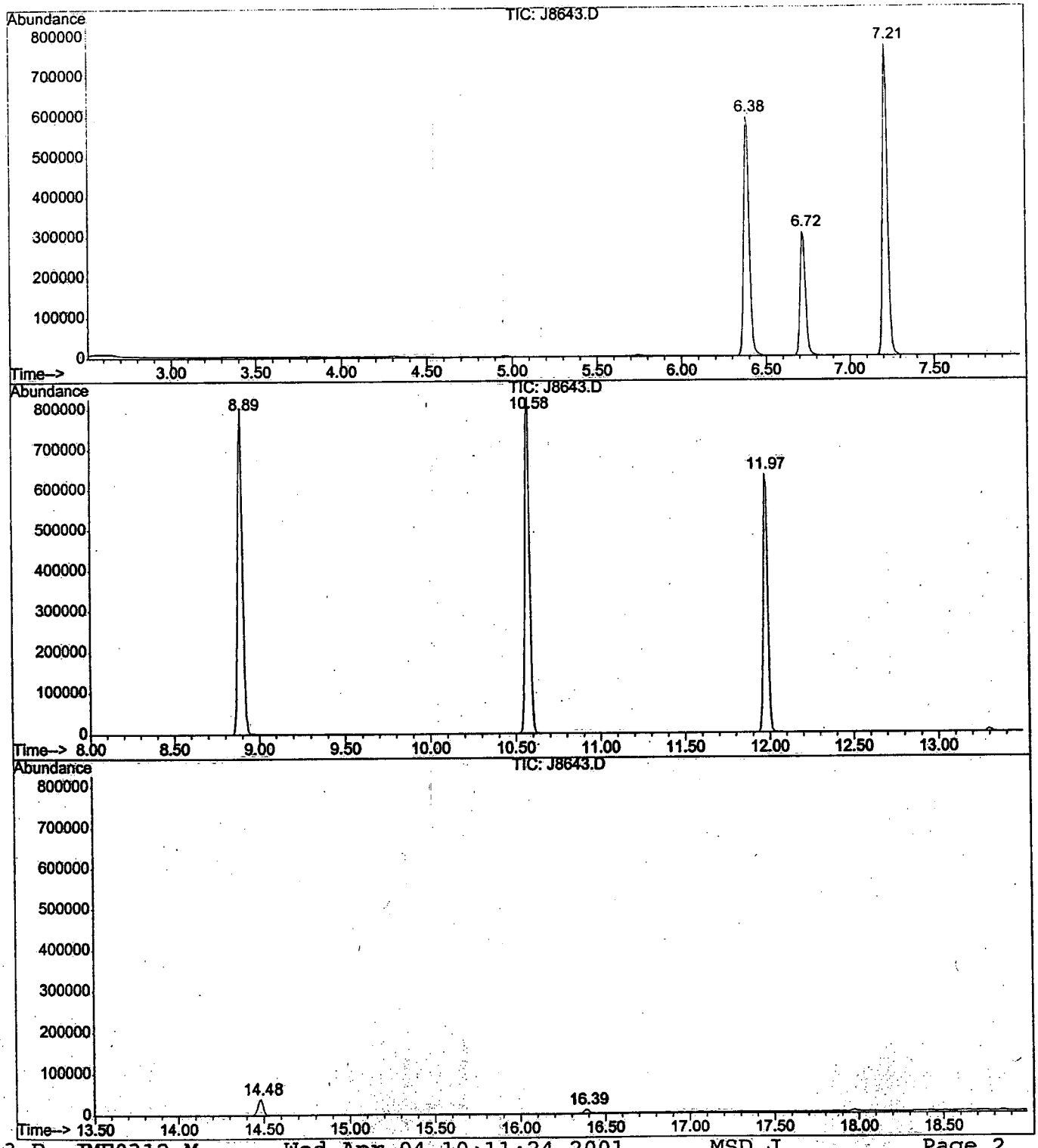
Sum of corrected areas: 8045771

000112

1955

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-03-01\J8643.D
Operator : XINGFANG WANG
Acquired : 3 Apr 2001 21:48 using AcqMethod JME0312
Instrument : MSD_J
Sample Name: TB,2006-017,MB,0.04g,0
Misc Info : ENVTACT/ORBIS_-_NEWARK,3/28/01,4/2/01,1
Vial Number: 17
Quant File :JME0312.RES (RTE Integrator)



1956

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8630.D
Acq On : 3 Apr 2001 16:18
Sample : N/A,METHOD-BLK,S,0.1g,0
Misc :
MS Integration Params: LSCINT.P
Quant Time: Apr 03 16:37:49 2001

Vial: 4
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0312.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Mar 12 16:28:10 2001
Response via : Initial Calibration
DataAcq Meth : JME0312

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	476111	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.22	114	694106	50.00	UG	0.01
50) Chlorobenzene-d5	10.58	117	542130	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.73	65	287353	55.27	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 110.54%			
41) Toluene-d8	8.89	98	669466	42.74	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 85.48%			
59) Bromofluorobenzene	11.97	95	329710	55.78	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 111.56%			

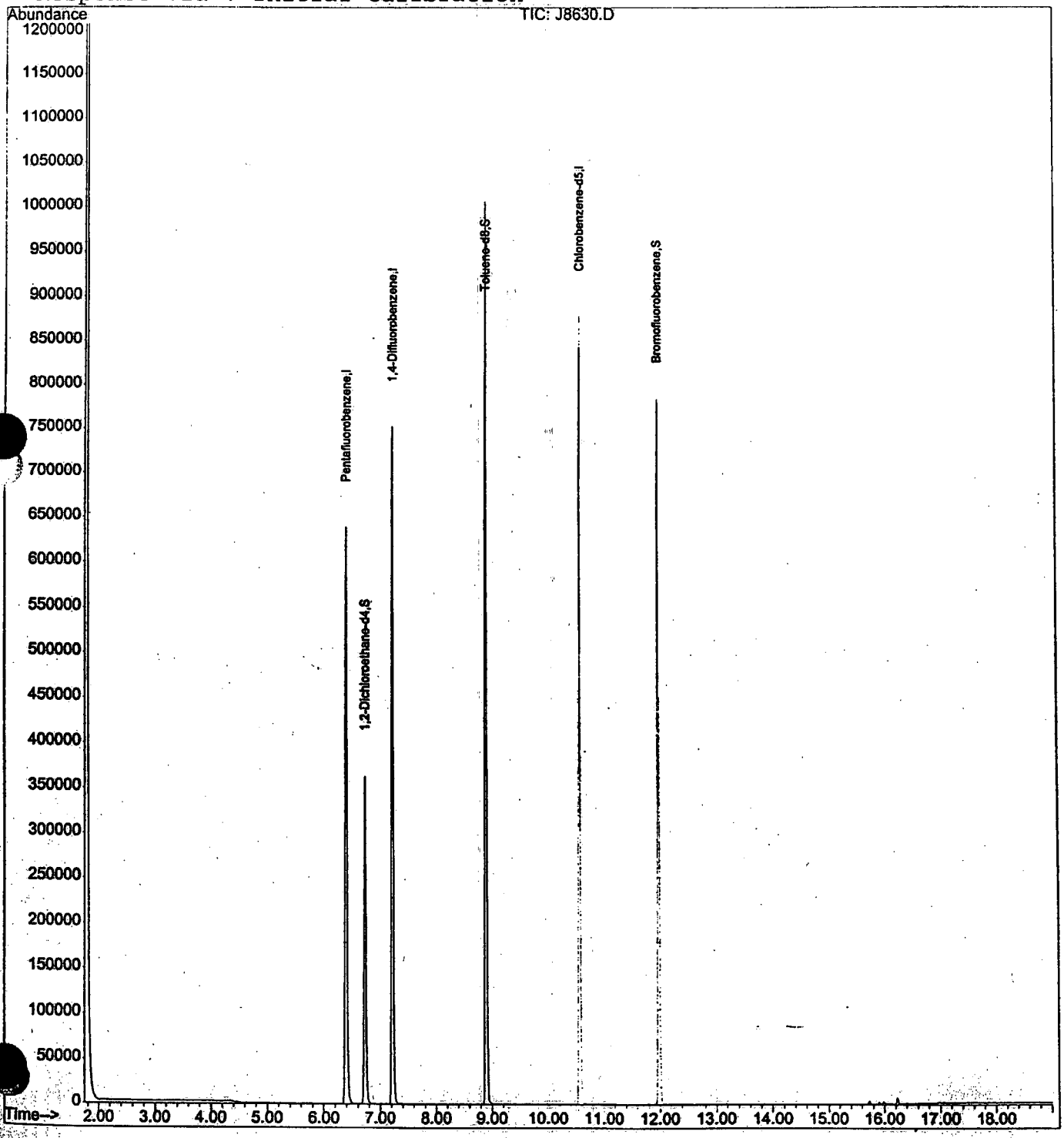
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8630.D Vial: 4
Acq On : 3 Apr 2001 16:18 Operator: XINGFANG WAN
Sample : N/A,METHOD-BLK,S,0.1g,0 Inst : MSD_J
Misc : Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 4 9:00 2001 Quant Results File: JME0312.RES

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue Apr 03 15:51:30 2001
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\J8630.D
Acq On : 3 Apr 2001 16:18
Sample : N/A,METHOD-BLK,S,0.1g,0
Misc :
MS Integration Params: Lscint.p

Vial: 4
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0312.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Filtering: 5
Sampling : 1
Min Area: 1 % of largest Peak
Start Thrs: 0.2
Max Peaks: 100
Stop Thrs : 0
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

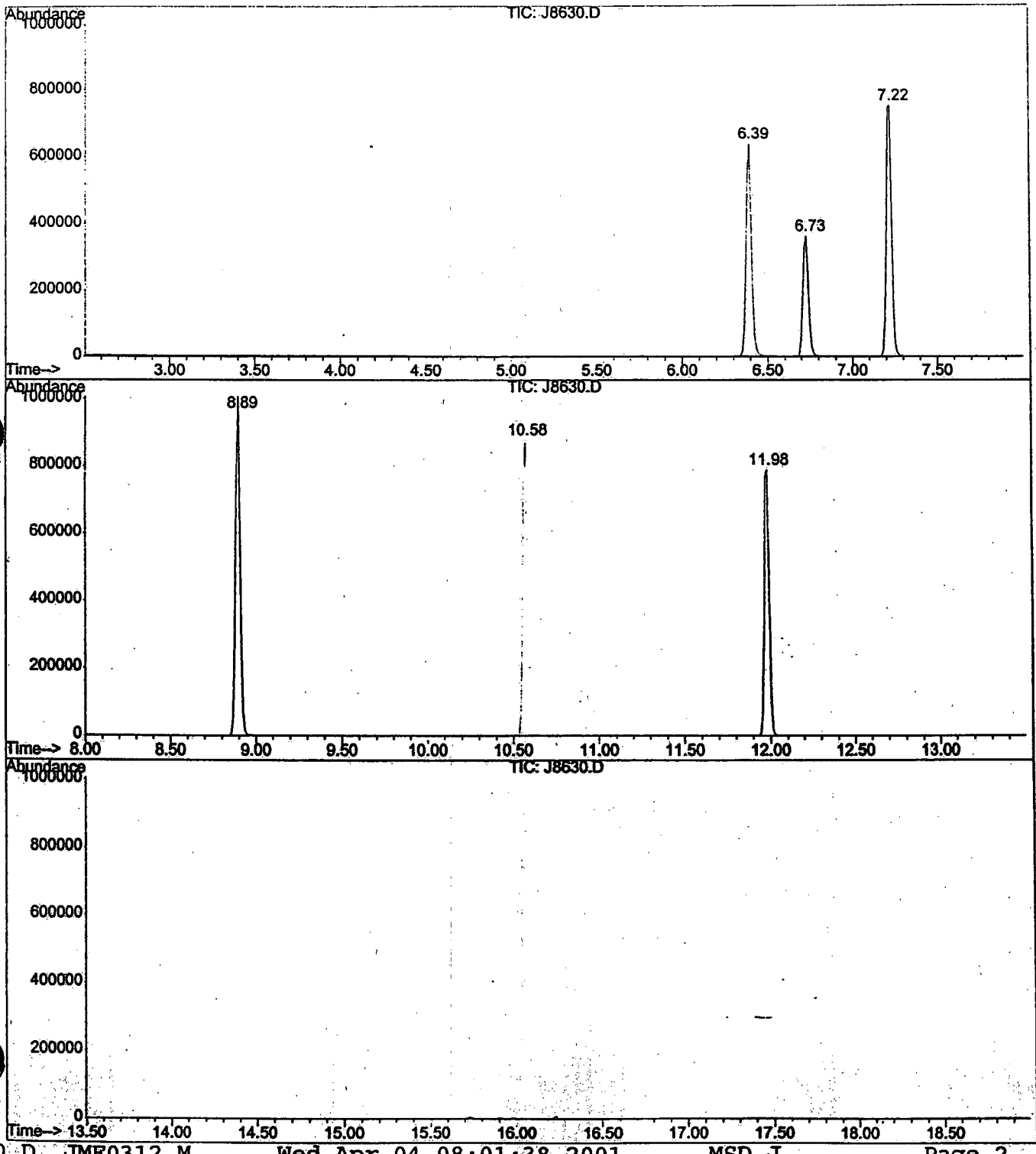
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.393	452	461	476	rBV	639343	1396477	73.50%	15.720%
2	6.727	485	494	505	rVB	363023	798401	42.02%	8.988%
3	7.224	535	543	554	rBV	753039	1619215	85.22%	18.228%
4	8.894	699	708	722	rBV	1006843	1900000	100.00%	21.389%
5	10.575	866	874	888	rBV	878512	1658140	87.27%	18.666%
6	11.983	1005	1013	1027	rVB	790121	1510963	79.52%	17.009%

Sum of corrected areas: 8883196

000116

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-03-01\J8630.D
Operator : XINGFANG WANG
Acquired : 3 Apr 2001 16:18 using AcqMethod JME0312
Instrument : MSD_J
Sample Name: N/A,METHOD-BLK,S,0.1g,0
Misc Info :
Vial Number: 4
Quant File :JME0312.RES (RTE Integrator)



1960

000117

Quantitation Report (QT Reviewed)

[illegible] \1\DATA\04-06-01\[illegible]
[illegible] Apr [illegible] 19:36
Sample [illegible] BLK,S,0.1g,0
Misc :

Vi[illegible] : [illegible]
Operator : XINGFANG WANG
Inst : MSD J
Multiplr: 1.00

'S Integration Params: LSCINT.P
Quant Time: Apr 06 19:55:45 2001 Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Thu Apr 05 13:14:23 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	510479	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.22	114	737984	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	588556	50.00	UG	0.00

System Monitoring Compounds

30) 1,2-Dichloroethane-d4	6.73	65	321281	50.33	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 100.66%			
41) Toluene-d8	8.89	98	741260	48.94	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.88%			
59) Bromofluorobenzene	11.98	95	368340	48.93	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 97.86%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

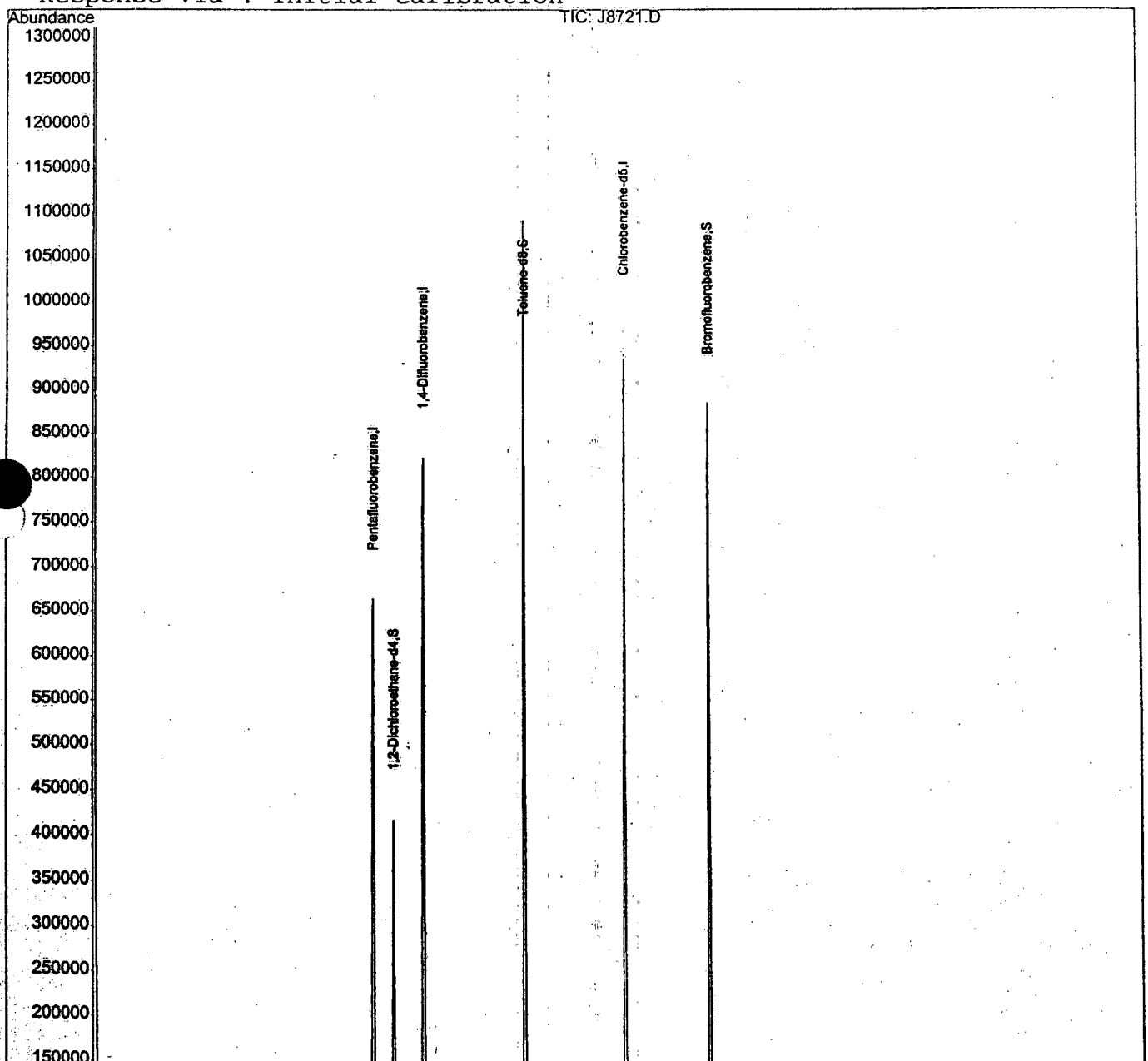
1961

Quantitation Report (QT Reviewed)

Data : C:\MSDCHEM\1\DATA\04-06-01\J8721.D Vial: 9
Acq On : 6 Apr 2001 19:36 Operator: XINGPANG WAN
Sample : N/A METHOD-BLK,S,0.1g,0 Inst : MSD J
Misc : Multiplr: 1.00

MS Integration Params: LSCINT.P
Quant Time: Apr 8 10:20 2001 Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration



1962

000119

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\04_06_01\J8721.D
Acq On : 6 Apr 2001 19:36
Sample : N/A,METHOD-BLK,S,0.0g,0
Misc :
Vial: 9
Operator: XINGFANG WANG
Inst : MSD J
Multiplr: 1.00

MS Integration Params: Lscint.p

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.745	392	397	409	rVB	14220	47433	2.26%	0.479%
2	6.393	453	461	474	rBV	663867	1500396	71.53%	15.148%
3	6.727	484	494	510	rBV	417224	896562	42.75%	9.052%
4	7.223	535	543	555	rBV	822767	1722474	82.12%	17.390%
5	8.894	701	708	722	rBV	1092715	2097448	100.00%	21.176%
6	10.575	866	874	882	rBV	975219	1807040	86.15%	18.244%
7	11.983	1007	1013	1028	rBV	885749	1677252	79.97%	16.933%
8	14.484	1254	1260	1265	rBV	16073	35311	1.68%	0.356%
9	16.388	1445	1448	1453	rBV	10098	22345	1.07%	0.226%
10	16.934	1496	1502	1510	rBV4	12432	50701	2.42%	0.512%
11	17.086	1511	1517	1528	rVB6	10133	48016	2.29%	0.485%

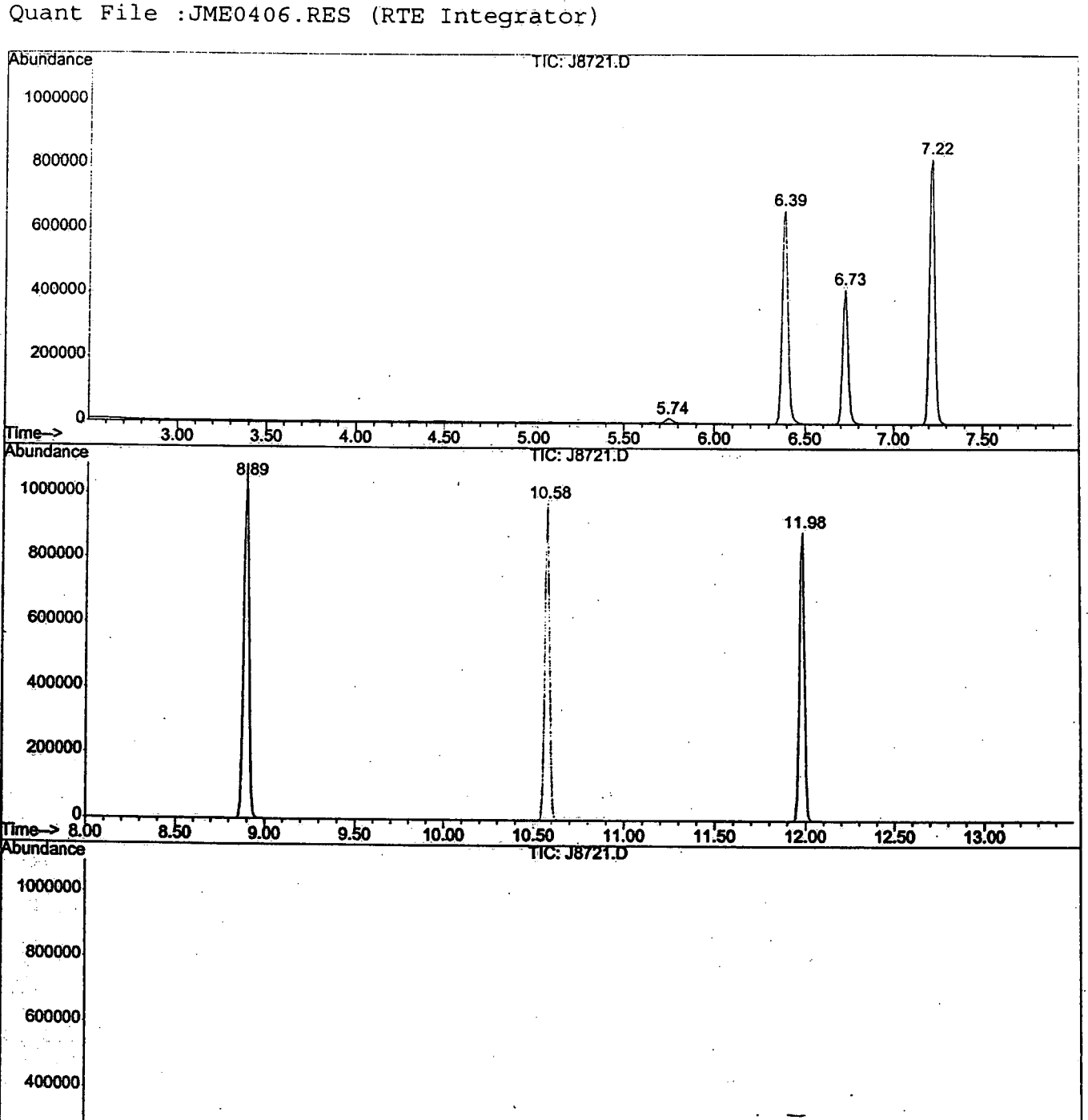
Sum of corrected areas: 9904978

1963

000120

LSC Report - Integrated Chromatogram

Data Path : P:\MSDCHEM\J\DATA\04-06-01\J8721.D
Operator : ZANG WANG
Acquired : 6 Apr 2001 19:36 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: N/A,METHOD-BLK,S,0.1g,0
Misc Info :
Vial Number: 9
Quant File :JME0406.RES (RTE Integrator)



1964

000121

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1645.D

DFTPP Injection Date : 04/02/2001

Inst ID: MSDB

DFTPP Injection Time: 06:13

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	33.1			
68	Less than 2.0% of mass 69	0.6	(	1.5	)1
69	Mass 69 relative abundance	39.5			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	53.3			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.2			
275	10.0 - 30.0% of mass 198	23.0			
365	Greater than 1.0% of mass 198	2.5			
441	Present, but less than mass 443	8.71	(	72.4	)3
442	40.0 - 100.0% of mass 198	62.0			
443	17.0 - 23.0% of mass 442	12.0	(	19.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
.	BNA-STD-INJ-FOR	B1646.D	04/02/2001	06:20
.	BNA-STD-INJ-FOR	B1647.D	04/02/2001	06:36
.	BNA-STD-INJ-FOR	B1648.D	04/02/2001	06:51
.	BNA-STD-INJ-FOR	B1649.D	04/02/2001	07:05
.	BNA-STD-INJ-FOR	B1650.D	04/02/2001	07:19
.	OLMO4-STD-INJ-F	B1651.D	04/02/2001	07:33
.	OLMO4-STD-INJ-F	B1652.D	04/02/2001	07:48
.	OLMO4-STD-INJ-F	B1653.D	04/02/2001	08:02
.	OLMO4-STD-INJ-F	B1654.D	04/02/2001	08:16
.	OLMO4-STD-INJ-F	B1655.D	04/02/2001	08:31
.	Method-Blank	B1656.D	04/02/2001	08:45
03-04-B6-1	1899-006	B1657.D	04/02/2001	09:00
03-04-B6-3.5	1899-010	B1658.D	04/02/2001	09:14
02-10-B1-1.5	1899-011	B1659.D	04/02/2001	09:28
02-10-B1-14	1899-012	B1660.D	04/02/2001	09:42
02-10-B1-16	1899-013	B1661.D	04/02/2001	09:57
02-10-B2-1.5	1899-014	B1662.D	04/02/2001	10:11
02-10-B2-15	1899-015	B1663.D	04/02/2001	10:26
03-02-B1-3.5	1899-007	B1664.D	04/02/2001	10:40
03-02-B1-4	1899-008	B1665.D	04/02/2001	10:54
03-02-B1-4.5	1899-009	B1666.D	04/02/2001	11:09
.	Method-Blank	B1667.D	04/02/2001	11:24
S-17	1922-001	B1668.D	04/02/2001	11:38

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1645.D

DFTPP Injection Date : 04/02/2001

Inst ID: MSDB

DFTPP Injection Time: 06:13

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	33.1			
68	Less than 2.0% of mass 69	0.6	(	1.5	)1
69	Mass 69 relative abundance	39.5			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	53.3			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.2			
275	10.0 - 30.0% of mass 198	23.0			
365	Greater than 1.0% of mass 198	2.5			
441	Present, but less than mass 443	8.7	(	72.4	)3
442	40.0 - 100.0% of mass 198	62.0			
443	17.0 - 23.0% of mass 442	12.0	(	19.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
S-18	1922-002	B1669.D	04/02/2001	11:52
S-19	1922-003	B1670.D	04/02/2001	12:07
S-20	1922-004	B1671.D	04/02/2001	12:21
S-21	1922-005	B1672.D	04/02/2001	12:36
S-22	1922-006	B1673.D	04/02/2001	12:50
S-23	1922-007	B1674.D	04/02/2001	13:05
S-24	1922-008	B1675.D	04/02/2001	13:19
S-25	1922-009	B1676.D	04/02/2001	13:34
S-27	1922-011	B1677.D	04/02/2001	13:48
S-28	1922-012	B1678.D	04/02/2001	14:08
S-29	1922-013	B1679.D	04/02/2001	14:22
S-30	1922-015	B1680.D	04/02/2001	14:37
TP-4	1820-004	B1681.D	04/02/2001	14:51
FDS-2_4.5-5'	1920-004	B1682.D	04/02/2001	15:06
FDS-2_4.5-5'	1920-004M	B1683.D	04/02/2001	15:20
FDS-2_4.5-5'	1920-004M	B1684.D	04/02/2001	15:34
	Method-Blank	B1685.D	04/02/2001	15:49
TP-2	1929-001	B1686.D	04/02/2001	16:03
TP-5	1929-002	B1687.D	04/02/2001	16:18
TP-6	1929-003	B1688.D	04/02/2001	16:32
TP-1	1929-004	B1689.D	04/02/2001	16:47
TP-7	1929-005	B1690.D	04/02/2001	17:01

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1645.D

DFTPP Injection Date : 04/02/2001

Inst ID: MSDB

DFTPP Injection Time: 06:13

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	33.1			
68	Less than 2.0% of mass 69	0.6	(	1.5	)1
69	Mass 69 relative abundance	39.5			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	53.3			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.2			
275	10.0 - 30.0% of mass 198	23.0			
365	Greater than 1.0% of mass 198	2.5			
441	Present, but less than mass 443	8.71	(	72.4	)3
442	40.0 - 100.0% of mass 198	62.0			
443	17.0 - 23.0% of mass 442	12.0	(	19.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
SB-1	1929-006	B1691.D	04/02/2001	17:16
SB-2	1929-007	B1692.D	04/02/2001	17:30
S1	1951-001	B1693.D	04/02/2001	17:44
PE-1_0.5-1	1925-001	B1694.D	04/02/2001	17:59
PE-3_0.5-1	1925-003	B1695.D	04/02/2001	18:14
PE-4_0.5-1	1925-005	B1696.D	04/02/2001	18:28
PE-44_1-1.5	1925-007	B1697.D	04/02/2001	18:42
T4/PE-3	1897-003	B1698.D	04/02/2001	18:57
SS-1A/1B_8'	1933-001	B1699.D	04/02/2001	19:11
SS-2A/2B_8'	1933-002	B1700.D	04/02/2001	19:25
SS-3A/3B_8'	1933-003	B1701.D	04/02/2001	19:40
1252-P16N(E)	1958-001	B1702.D	04/02/2001	19:54
1252-P16N(E)	1958-001M	B1703.D	04/02/2001	20:09
1252-P16N(E)	1958-001M	B1704.D	04/02/2001	20:23
SS-4A/4B_8'	1933-004	B1705.D	04/02/2001	20:38

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1696.D

DFTPP Injection Date : 04/03/2001

Inst ID: MSDB

DFTPP Injection Time: 05:56

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	30.0			
68	Less than 2.0% of mass 69	0.6	(	1.6	)1
69	Mass 69 relative abundance	38.2			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	49.8			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.4			
275	10.0 - 30.0% of mass 198	23.1			
365	Greater than 1.0% of mass 198	2.8			
441	Present, but less than mass 443	11.31	(	78.5	)3
442	40.0 - 100.0% of mass 198	78.3			
443	17.0 - 23.0% of mass 442	14.4	(	18.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
.	BNA-STD-INJ-FOR	B1697.D	04/03/2001	06:27
.	OLMO4-STD-INJ-F	B1698.D	04/03/2001	06:41
S-22	1922-006	B1699.D	04/03/2001	06:56
PE-3_0.5-1	1925-003	B1700.D	04/03/2001	07:10
PE-4_0.5-1	1925-005	B1701.D	04/03/2001	07:24
PE-44_1-1.5	1925-007	B1702.D	04/03/2001	07:38
T4/PE-3	1897-003	B1703.D	04/03/2001	07:52
T4/PE-3	1897-003	B1704.D	04/03/2001	08:07
SS-1A/1B_8'	1933-001	B1705.D	04/03/2001	08:21
SS-2A/2B_8'	1933-002	B1706.D	04/03/2001	08:35
SS-3A/3B_8'	1933-003	B1707.D	04/03/2001	08:49
1252-P16N(E)	1958-001	B1708.D	04/03/2001	09:06
PE-1_0.5-1	1925-001MSD	B1709.D	04/03/2001	09:20
PE-1_05-1	1925-001MSD	B1710.D	04/03/2001	09:34
SS-4A/4B_8'	1933-004	B1711.D	04/03/2001	09:49
.	Method-Blank	B1712.D	04/03/2001	10:03
4052-B2	2014-002	B1713.D	04/03/2001	10:36
4052-B3	2014-003	B1714.D	04/03/2001	10:50
4052-B1	2014-001	B1715.D	04/03/2001	11:05
4052-B4	2014-004	B1716.D	04/03/2001	11:19
4052-B7	2014-007	B1717.D	04/03/2001	11:59
4052-B5	2014-005	B1718.D	04/03/2001	12:13
4052-B9	2014-009	B1719.D	04/03/2001	12:28

000125

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1696.D

DFTPP Injection Date : 04/03/2001

Inst ID: MSDB

DFTPP Injection Time: 05:56

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	30.0			
68	Less than 2.0% of mass 69	0.6	(	1.6	)1
69	Mass 69 relative abundance	38.2			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	49.8			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.4			
275	10.0 - 30.0% of mass 198	23.1			
365	Greater than 1.0% of mass 198	2.8			
441	Present, but less than mass 443	11.3	(	78.5	)3
442	40.0 - 100.0% of mass 198	78.3			
443	17.0 - 23.0% of mass 442	14.4	(	18.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
4052-B6	2014-006	B1720.D	04/03/2001	12:42
4052-B8	2014-008	B1721.D	04/03/2001	12:56
4052-B10	2014-010	B1722.D	04/03/2001	13:11
4052-B11	2014-011	B1723.D	04/03/2001	13:25
4052-B12	2014-012	B1724.D	04/03/2001	13:40
S-40	2006-010	B1725.D	04/03/2001	13:55
S-41	2006-011	B1726.D	04/03/2001	14:09
S-42	2006-012	B1727.D	04/03/2001	14:24
S-43	2006-013	B1728.D	04/03/2001	14:38
S-44	2006-014	B1729.D	04/03/2001	14:53
ESA	2020-001	B1730.D	04/03/2001	15:07
4052-B1	2014-001MS	B1731.D	04/03/2001	15:22
4052-B1	2014-001MSD	B1732.D	04/03/2001	15:36
	Method-Blank	B1733.D	04/03/2001	15:51
B-6A	2028-001	B1734.D	04/03/2001	16:06
B-6B	2028-002	B1735.D	04/03/2001	16:20
B-6C	2028-003	B1736.D	04/03/2001	16:35
B-6D	2028-004	B1738.D	04/03/2001	16:49
B-6A	2028-001MS	B1739.D	04/03/2001	17:03
B-6A	2028-001MSD	B1740.D	04/03/2001	17:18
15-4	1994-001	B1741.D	04/03/2001	17:33
15-1	1994-002	B1742.D	04/03/2001	17:47

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: B1712.D

Instrument ID: MSDA

Date Extracted: 04/03/01

Matrix: SOIL

Date Analyzed: 04/03/2001

Time Analyzed: 10:03

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
4052-B2	2014-002	04/03/2001	10:36
4052-B3	2014-003	04/03/2001	10:50
4052-B1	2014-001	04/03/2001	11:05
4052-B4	2014-004	04/03/2001	11:19
4052-B7	2014-007	04/03/2001	11:59
4052-B5	2014-005	04/03/2001	12:13
4052-B9	2014-009	04/03/2001	12:28
4052-B6	2014-006	04/03/2001	12:42
4052-B8	2014-008	04/03/2001	12:56
4052-B10	2014-010	04/03/2001	13:11
4052-B11	2014-011	04/03/2001	13:25
4052-B12	2014-012	04/03/2001	13:40
S-40	2006-010	04/03/2001	13:55
S-41	2006-011	04/03/2001	14:09
S-42	2006-012	04/03/2001	14:24
S-43	2006-013	04/03/2001	14:38
S-44	2006-014	04/03/2001	14:53
ESA	2020-001	04/03/2001	15:07
4052-B1	2014-001MS	04/03/2001	15:22
4052-B1	2014-001MSD	04/03/2001	15:36

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1712.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		33.3
Benzaldehyde	ND		33.3
Phenol	ND		33.3
Aniline	ND		33.3
bis(2-Chloroethyl)ether	ND		33.3
2-Chlorophenol	ND		33.3
1,3-Dichlorobenzene	ND		33.3
1,4-Dichlorobenzene	ND		33.3
Benzyl alcohol	ND		33.3
1,2-Dichlorobenzene	ND		33.3
2-Methylphenol	ND		33.3
bis(2-chloroisopropyl)ether	ND		33.3
4-Methylphenol	ND		33.3
N-Nitroso-di-n-propylamine	ND		33.3
Acetophenone	ND		33.3
Hexachloroethane	ND		33.3
Nitrobenzene	ND		33.3
Isophorone	ND		33.3
2-Nitrophenol	ND		33.3
2,4-Dimethylphenol	ND		33.3
bis(2-Chloroethoxy)methane	ND		33.3
Benzoic acid	ND		33.3
2,4-Dichlorophenol	ND		33.3
1,2,4-Trichlorobenzene	ND		33.3
Naphthalene	ND		33.3
4-Chloroaniline	ND		33.3
Hexachlorobutadiene	ND		33.3
Caprolactam	ND		33.3
4-Chloro-3-methylphenol	ND		33.3
2-Methylnaphthalene	ND		33.3
Hexachlorocyclopentadiene	ND		33.3
2,4,6-Trichlorophenol	ND		33.3
2,4,5-Trichlorophenol	ND		33.3
1-1'-Biphenyl	ND		33.3
2-Chloronaphthalene	ND		33.3
2-Nitroaniline	ND		33.3
Dimethylphthalate	ND		33.3
2,6-Dinitrotoluene	ND		33.3
Acenaphthylene	ND		33.3

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1712.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		33.3
Acenaphthene	ND		33.3
2,4-Dinitrophenol	ND		33.3
4-Nitrophenol	ND		33.3
2,4-Dinitrotoluene	ND		33.3
Dibenzofuran	ND		33.3
Diethylphthalate	ND		33.3
Fluorene	ND		33.3
4-Chlorophenyl-phenylether	ND		33.3
4-Nitroaniline	ND		33.3
4,6-Dinitro-2-methylphenol	ND		33.3
N-Nitrosodiphenylamine	ND		33.3
1,2-Diphenylhydrazine/Azobenzene	ND		33.3
4-Bromophenyl-phenylether	ND		33.3
Hexachlorobenzene	ND		33.3
Atrazine	ND		33.3
Pentachlorophenol	ND		33.3
Phenanthrene	ND		33.3
Anthracene	ND		33.3
Carbazole	ND		33.3
Di-n-butylphthalate	ND		33.3
Fluoranthene	ND		33.3
Benzidine	ND		33.3
Pyrene	ND		33.3
3,3'-Dimethylbenzidine	ND		33.3
Butylbenzylphthalate	ND		33.3
3,3'-Dichlorobenzidine	ND		33.3
Benzo[a]anthracene	ND		33.3
Chrysene	ND		33.3
bis(2-Ethylhexyl)phthalate	ND		33.3
Di-n-octylphthalate	ND		33.3
Benzo[b]fluoranthene	ND		33.3
Benzo[k]fluoranthene	ND		33.3
Benzo[a]pyrene	ND		33.3
Indeno[1,2,3-cd]pyrene	ND		33.3
Dibenz[a,h]anthracene	ND		33.3
Benzo[g,h,i]perylene	ND		33.3

Total Target Compounds: 0

1972

000129

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/03/2001
Date Analyzed: 04/03/2001
Data file: B1712.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

Response Factor Report MSD_B

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 09:42:41 2001
Response via : Initial Calibration

Calibration Files
160 =B1650.D 80 =B1647.D 50 =B1646.D
20 =B1648.D 120 =B1649.D

		Compound	160	80	50	20	120	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD						
2)	T	N-Nitrosodimethylam	0.514	0.613	0.713	0.688	0.598	0.625	12.63
3)	T	Pyridine	0.579	0.665	0.663	0.661	0.624	0.638	5.84
4)	S	2-Fluorophenol	1.218	1.152	1.145	1.086	1.153	1.151	4.07
5)	T	Benzaldehyde	0.888	0.877	1.051	1.075	0.968	0.972	9.35
6)	S	Phenol-d5	1.419	1.402	1.410	1.433	1.380	1.409	1.42
7)	MC	Phenol	1.479	1.457	1.594	1.486	1.539	1.511	3.66
8)	T	Aniline	1.649	1.858	1.984	1.969	1.805	1.853	7.37
9)	T	bis(2-Chloroethyl)e	1.023	1.088	1.142	1.201	1.136	1.118	5.96
10)	M	2-Chlorophenol	1.062	1.227	1.296	1.335	1.279	1.240	8.60
11)	T	1,3-Dichlorobenzene	1.154	1.361	1.450	1.488	1.282	1.347	9.97
12)	MC	1,4-Dichlorobenzene	1.182	1.414	1.479	1.522	1.275	1.375	10.35
13)	T	Benzyl alcohol	0.724	0.795	0.908	0.855	0.797	0.816	8.50
14)	T	1,2-Dichlorobenzene	1.116	1.342	1.408	1.456	1.233	1.311	10.49
15)	T	2-Methylphenol	0.999	1.156	1.254	1.246	1.125	1.156	9.00
16)	T	bis(2-chloroisoprop	0.945	1.185	1.299	1.349	1.075	1.171	14.07
[illegible]	T	4-Methylphenol	1.069	1.398	1.408	1.804	1.282	1.392	19.22
[illegible]	MP	N-Nitroso-di-n-prop	0.566	0.768	0.664	0.919	0.704	0.724	18.16
[illegible]	T	Acetophenone	1.562	1.778	1.910	1.901	1.752	1.781	7.93
20)	T	2-Aminotoluene +4-A	2.501	2.856	3.699	3.862	2.721	3.128	19.56
21)	T	Hexachloroethane	0.386	0.506	0.521	0.536	0.471	0.484	12.36
22)	I	Naphthalene-d8	ISTD						
23)	S	Nitrobenzene-d5	0.292	0.286	0.317	0.272	0.284	0.290	5.66
24)	T	Nitrobenzene	0.227	0.317	0.284	0.295	0.279	0.280	11.89
25)	T	Isophorone	0.507	0.584	0.607	0.604	0.567	0.574	7.06
26)	TC	2-Nitrophenol	0.160	0.179	0.192	0.173	0.186	0.178	6.82
27)	T	2,4-Dimethylphenol	0.262	0.308	0.332	0.320	0.296	0.303	8.86
28)	T	bis(2-Chloroethoxy)	0.305	0.358	0.376	0.372	0.346	0.352	8.15
29)	T	Benzoic acid	0.139	0.187	0.171	0.123	0.122	0.148	19.80
30)	T	2,4-Dimethylaniline	0.424	0.508	0.544	0.584	0.488	0.510	11.82
31)	TC	2,4-Dichlorophenol	0.217	0.261	0.268	0.279	0.260	0.257	9.26
32)	M	1,2,4-Trichlorobenz	0.253	0.297	0.317	0.326	0.276	0.294	10.19
33)	T	Naphthalene	0.765	0.881	0.965	0.996	0.793	0.880	11.57
34)	T	4-Chloroaniline	0.336	0.418	0.469	0.437	0.390	0.410	12.32
35)	TC	Hexachlorobutadiene	0.139	0.173	0.185	0.189	0.164	0.170	11.67
36)	T	Caprolactam	0.107	0.128	0.142	0.132	0.124	0.127	10.16
37)	MC	4-Chloro-3-methylph	0.256	0.258	0.296	0.289	0.270	0.274	6.60
38)	T	2-Methylnaphthalene	0.538	0.659	0.724	0.702	0.569	0.638	12.80
39)	I	Acenaphthene-d10	ISTD						
40)	TP	Hexachlorocyclopent	0.563	0.593	0.648	0.654	0.592	0.610	6.46
41)	TC	2,4,6-Trichlorophen	0.285	0.337	0.335	0.373	0.314	0.329	9.84
[illegible]		2,4,5-Trichlorophen	0.285	0.353	0.388	0.361	0.347	0.347	10.96
43)	S	2-Fluorobiphenyl	1.121	1.093	1.113	1.073	1.096	1.099	1.67
44)	T	1-1'-Biphenyl	0.822	0.945	1.141	1.318	1.037	1.053	17.95
45)	T	2-Chloronaphthalene	0.679	0.835	0.897	1.028	0.749	0.837	16.08
46)	T	2-Nitroaniline	0.234	0.252	0.242	0.239	0.213	0.236	6.16
47)	T	Dimethylphthalate	0.999	1.109	1.234	1.289	1.116	1.149	9.89

48)	T	2,6-Dinitrotoluene	0.216	0.257	0.263	0.271	0.207	0.243	11.97
49)	T	Acenaphthylene	1.217	1.346	1.636	1.707	1.264	1.434	15.57
50)	T	3-Nitroaniline	0.272	0.314	0.347	0.329	0.255	0.303	12.74
51)	MC	Acenaphthene	0.707	0.920	0.937	1.071	0.873	0.902	14.55
52)	T	2,4-Dinitrophenol	0.102	0.113	0.098	0.077	0.130	0.104	18.92
53)	MP	4-Nitrophenol	0.169	0.167	0.184	0.184	0.175	0.176	4.49
	M	2,4-Dinitrotoluene	0.284	0.313	0.341	0.341	0.363	0.328	9.29
55)	T	Dibenzofuran	1.133	1.373	1.449	1.598	1.189	1.348	14.10
56)	T	Diethylphthalate	0.946	1.149	1.232	1.316	1.067	1.142	12.59
57)	T	Fluorene	0.822	0.998	1.124	1.289	0.902	1.027	17.97
58)	T	4-Chlorophenyl-phen	0.365	0.498	0.549	0.613	0.444	0.494	19.31
59)	T	4-Nitroaniline	0.285	0.307	0.313	0.320	0.329	0.311	5.35
60)	I	Phenanthrene-d10	----------ISTD----------						
61)	T	4,6-Dinitro-2-methy	0.078	0.095	0.091	0.073	0.093	0.086	11.15
62)	TC	N-Nitrosodiphenylam	0.356	0.429	0.442	0.469	0.368	0.413	11.77
63)	T	1,2-Diphenylhydrazi	0.477	0.605	0.605	0.651	0.521	0.572	12.35
64)	S	2,4,6-Tribromopheno	0.131	0.138	0.132	0.132	0.133	0.133	2.13
65)	T	4-Bromophenyl-pheny	0.156	0.181	0.192	0.202	0.173	0.181	9.76
66)	T	Hexachlorobenzene	0.182	0.220	0.233	0.251	0.210	0.219	11.75
67)	T	Atrazine	0.240	0.300	0.297	0.178	0.265	0.256	19.48
68)	MC	Pentachlorophenol	0.126	0.143	0.146	0.137	0.140	0.138	5.47
69)	T	Phenanthrene	0.645	0.805	0.911	0.955	0.800	0.823	14.59
70)	T	Anthracene	0.719	0.809	0.884	0.958	0.753	0.825	11.79
71)	T	Carbazole	0.666	0.733	0.804	0.892	0.699	0.759	11.90
72)	T	Di-n-butylphthalate	0.822	0.993	1.024	1.085	0.932	0.971	10.30
73)	TC	Fluoranthene	0.774	0.851	0.931	0.983	0.850	0.878	9.23
74)	T	Benzidine	0.476	0.549	0.553	0.388	0.540	0.501	14.10
75)	I	Chrysene-d12	----------ISTD----------						
76)	M	Pyrene	0.952	1.016	1.112	1.151	1.038	1.054	7.48
77)	S	Terphenyl-d14	1.031	0.957	0.928	0.890	0.963	0.954	5.43
78)	T	3,3'-Dimethylbenzid	0.503	0.551	0.489	0.435	0.520	0.499	8.56
79)	T	Butylbenzylphthalat	0.452	0.496	0.516	0.498	0.487	0.490	4.83
80)	T	3,3'-Dichlorobenzid	0.291	0.343	0.366	0.384	0.329	0.343	10.41
81)	T	Benzo[a]anthracene	0.849	0.967	1.024	0.994	0.968	0.961	6.92
82)	T	Chrysene	0.778	0.876	0.905	1.010	0.861	0.886	9.47
83)	T	bis(2-Ethylhexyl)ph	0.637	0.692	0.715	0.674	0.687	0.681	4.23
84)	I	Perylene-d12	----------ISTD----------						
85)	TC	Di-n-octylphthalate	0.964	1.074	0.921	0.823	0.989	0.954	9.67
86)	T	Benzo[b]fluoranthen	1.128	1.362	0.969	0.958	0.995	1.082	15.75
87)	T	Benzo[k]fluoranthen	0.719	0.996	0.966	0.991	0.942	0.923	12.58
88)	TC	Benzo[a]pyrene	0.724	0.869	0.893	0.873	0.816	0.835	8.18
89)	T	Indeno[1,2,3-cd]pyr	0.896	0.910	0.797	0.836	0.811	0.850	5.94
90)	T	Dibenz[a,h]anthrace	0.848	0.865	0.778	0.822	0.773	0.817	5.03
91)	T	Benzo[g,h,i]perylen	0.783	0.807	0.669	0.713	0.707	0.736	7.78

(#) = Out of Range

BS1201.M Mon Apr 02 09:42:54 2001 MSD_B

1979

Instrument ID: MSD_B
Method ID: BS1201.M
Date: 04/02/2001

Average %RSD = 10.91

Refer to SW846 Method 8000B Section 7.5.1.

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1697.D Vial: 2
Acq On : 3 Apr 2001 6:27 Operator: JC
Sample : .,BNA-STD-INJ-FOR-04/03/01 Inst : MSD_B
Misc : Multiplr: 1.00
3 Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Multiple Level Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	150	0.00
2	T	N-Nitrosodimethylamine	0.625	0.576	7.8	121	0.01
3	T	Pyridine	0.638	0.637	0.2	144	0.01
4	S	2-Fluorophenol	1.151	1.088	5.5	143	0.00
5	T	Benzaldehyde	0.972	1.191	-22.5	168	0.00
6	S	Phenol-d5	1.409	1.338	5.0	142	-0.01
7	MC	Phenol	1.511	1.479	2.1	139	-0.01
8	T	Aniline	1.853	1.881	-1.5	142	0.00
9	T	bis(2-Chloroethyl)ether	1.118	1.106	1.1	145	0.00
10	M	2-Chlorophenol	1.240	1.299	-4.8	150	0.00
11	T	1,3-Dichlorobenzene	1.347	1.414	-5.0	146	0.00
12	MC	1,4-Dichlorobenzene	1.375	1.436	-4.4	146	0.00
13	T	Benzyl alcohol	0.816	0.836	-2.5	138	0.00
14	T	1,2-Dichlorobenzene	1.311	1.351	-3.1	144	0.00
15	T	2-Methylphenol	1.156	1.136	1.7	136	-0.01
16	T	bis(2-chloroisopropyl)ether	1.171	1.205	-2.9	139	-0.01
17	T	4-Methylphenol	1.392	1.192	14.4	127	-0.02
18	MP	N-Nitroso-di-n-propylamine	0.724	0.591	18.4	134	-0.02
19	T	Acetophenone	1.781	1.706	4.2	134	-0.02
20	T	2-Aminotoluene +4-Aminotolu	3.128	3.112	0.5	126	-0.01
21	T	Hexachloroethane	0.484	0.544	-12.4	157	0.00
22	I	Naphthalene-d8	1.000	1.000	0.0	139	0.00
23	S	Nitrobenzene-d5	0.290	0.316	-9.0	138	-0.01
24	T	Nitrobenzene	0.280	0.272	2.9	133	-0.01
25	T	Isophorone	0.574	0.560	2.4	128	-0.01
26	TC	2-Nitrophenol	0.178	0.171	3.9	124	-0.01
27	T	2,4-Dimethylphenol	0.303	0.317	-4.6	132	-0.01
28	T	bis(2-Chloroethoxy)methane	0.352	0.357	-1.4	131	-0.01
29	T	Benzoic acid	0.148	0.148	0.0	120	-0.01
30	T	2,4-Dimethylaniline	0.510	0.506	0.8	129	-0.01
31	TC	2,4-Dichlorophenol	0.257	0.249	3.1	129	-0.02
32	M	1,2,4-Trichlorobenzene	0.294	0.320	-8.8	140	-0.01
33	T	Naphthalene	0.880	0.847	3.8	122	-0.01
34	T	4-Chloroaniline	0.410	0.378	7.8	112	-0.01
35	TC	Hexachlorobutadiene	0.170	0.194	-14.1	146	0.00
36	T	Caprolactam	0.127	0.086	32.3	84	-0.04
37	MC	4-Chloro-3-methylphenol	0.274	0.247	9.9	116	-0.02
38	T	2-Methylnaphthalene	0.638	0.637	0.2	122	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	113	0.00
40	P	Hexachlorocyclopentadiene	0.610	0.798	-30.8	139	-0.01
41	C	2,4,6-Trichlorophenol	0.329	0.364	-10.6	123	-0.01
42	T	2,4,5-Trichlorophenol	0.347	0.377	-8.6	110	0.00
43	S	2-Fluorobiphenyl	1.099	1.186	-7.9	121	0.00
44	T	1-1'-Biphenyl	1.053	1.144	-8.6	113	-0.01
45	T	2-Chloronaphthalene	0.837	0.994	-18.8	125	0.00

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46	T	2-Nitroaniline	0.236	0.228	3.4	106	-0.02
47	T	Dimethylphthalate	1.149	1.131	1.6	104	-0.01
48	T	2,6-Dinitrotoluene	0.243	0.212	12.8	91	-0.02
49	T	Acenaphthylene	1.434	1.586	-10.6	110	0.00
[redacted]	T	3-Nitroaniline	0.303	0.237	21.8	77	-0.02
[redacted]	MC	Acenaphthene	0.902	0.969	-7.4	117	-0.01
	T	2,4-Dinitrophenol	0.104	0.080	23.1	92	-0.01
-	MP	4-Nitrophenol	0.176	0.149	15.3	92	-0.02
54	M	2,4-Dinitrotoluene	0.328	0.268	18.3	89	-0.01
55	T	Dibenzofuran	1.348	1.516	-12.5	118	0.00
56	T	Diethylphthalate	1.142	1.106	3.2	101	0.00
57	T	Fluorene	1.027	1.077	-4.9	108	0.00
58	T	4-Chlorophenyl-phenylether	0.494	0.516	-4.5	106	-0.01
59	T	4-Nitroaniline	0.311	0.231	25.7	84	-0.02
60	I	Phenanthrene-d10	1.000	1.000	0.0	94	-0.01
61	T	4,6-Dinitro-2-methylphenol	0.086	0.067	22.1	69	-0.02
62	TC	N-Nitrosodiphenylamine	0.413	0.471	-14.0	99	-0.02
63	T	1,2-Diphenylhydrazine/Azobe	0.572	0.700	-22.4	108	-0.01
64	S	2,4,6-Tribromophenol	0.133	0.147	-10.5	104	0.00
65	T	4-Bromophenyl-phenylether	0.181	0.211	-16.6	103	-0.01
66	T	Hexachlorobenzene	0.219	0.244	-11.4	98	-0.01
67	T	Atrazine	0.256	0.222	13.3	70	-0.02
68	MC	Pentachlorophenol	0.138	0.152	-10.1	97	0.00
69	T	Phenanthrene	0.823	0.883	-7.3	91	-0.01
70	T	Anthracene	0.825	0.866	-5.0	92	-0.02
71	T	Carbazole	0.759	0.741	2.4	86	-0.01
72	T	Di-n-butylphthalate	0.971	1.010	-4.0	92	-0.01
73	TC	Fluoranthene	0.878	0.797	9.2	80	-0.02
74	T	Benzidine	0.501	0.396	21.0	67	-0.01
7[redacted]		Chrysene-d12	1.000	1.000	0.0	71	-0.02
7[redacted]		Pyrene	1.054	1.171	-11.1	75	-0.01
77	S	Terphenyl-d14	0.954	1.009	-5.8	77	0.00
78	T	3,3'-Dimethylbenzidine	0.499	0.522	-4.6	76	-0.02
79	T	Butylbenzylphthalate	0.490	0.519	-5.9	72	-0.02
80	T	3,3'-Dichlorobenzidine	0.343	0.374	-9.0	73	-0.02
81	T	Benzo[a]anthracene	0.961	0.979	-1.9	68	-0.02
82	T	Chrysene	0.886	0.906	-2.3	71	-0.02
83	T	bis(2-Ethylhexyl)phthalate	0.681	0.737	-8.2	73	-0.01
84	I	Perylene-d12	1.000	1.000	0.0	77	-0.01
85	TC	Di-n-octylphthalate	0.954	0.860	9.9	72	-0.02
86	T	Benzo[b]fluoranthene	1.082	1.149	-6.2	92	-0.02
87	T	Benzo[k]fluoranthene	0.923	0.971	-5.2	78	-0.02
88	TC	Benzo[a]pyrene	0.835	0.866	-3.7	75	-0.02
89	T	Indeno[1,2,3-cd]pyrene	0.850	1.030	-21.2	100	-0.03
90	T	Dibenz[a,h]anthracene	0.817	0.973	-19.1	97	-0.03
91	T	Benzo[g,h,i]perylene	0.736	0.896	-21.7	104	-0.02

(#) = Out of Range
B1646.D BS1201.M

SPCC's out = 0 CCC's out = 0
Tue Apr 03 06:42:37 2001 MSD_B

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SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/03/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
1922-006	SOIL	B1699.D	64	72	69	90	64	79
1925-003	SOIL	B1700.D	N/A	N/A	71	77	N/A	96
1925-005	SOIL	B1701.D	N/A	N/A	73	84	N/A	98
1925-007	SOIL	B1702.D	N/A	N/A	76	87	N/A	104
1897-003	SOIL	B1704.D	N/A	N/A	64	79	N/A	74
1933-001	SOIL	B1705.D	N/A	N/A	73	85	N/A	98
1933-002	SOIL	B1706.D	N/A	N/A	63	81	N/A	97
1933-003	SOIL	B1707.D	N/A	N/A	70	88	N/A	100
1958-001	SOIL	B1708.D	N/A	N/A	63	80	N/A	96
1925-001MSD	SOIL	B1709.D	56	63	67	76	91	91
1925-001MSD	SOIL	B1710.D	53	59	64	72	86	95
1933-004	SOIL	B1711.D	N/A	N/A	72	86	N/A	79
Method-Blank	SOIL	B1712.D	63	72	70	82	89	79
2014-002	SOIL	B1713.D	66	78	69	89	104	84
2014-003	SOIL	B1714.D	66	79	72	93	98	81
2014-001	SOIL	B1715.D	64	75	71	86	92	81
2014-004	SOIL	B1716.D	63	71	65	81	97	86
2014-007	SOIL	B1717.D	72	86	77	100	110	88
2014-005	SOIL	B1718.D	68	76	77	96	110	97
2014-009	SOIL	B1719.D	72	77	76	92	100	82
2014-006	SOIL	B1720.D	73	84	93	103	110	90
2014-008	SOIL	B1721.D	59	69	63	80	97	84
2014-010	SOIL	B1722.D	72	85	80	94	104	92

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	36-93	42-83
S2 (PHL) = Phenol-d5	40-101	63-101
S3 (NBZ) = Nitrobenzene-d5	45-98	47-120
S4 (FBP) = 2-Fluorobiphenyl	48-104	55-112
S5 (TBP) = 2,4,6-Tribromophenol	54-135	52-151
S6 (TPH) = Terphenyl-d14	58-147	63-132

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/03/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
2014-012	SOIL	B1724.D	63	73	72	83	96	81
2006-010	SOIL	B1725.D	N/A	N/A	75	87	N/A	88
2006-011	SOIL	B1726.D	N/A	N/A	68	87	N/A	90
2006-012	SOIL	B1727.D	N/A	N/A	68	87	N/A	88
2006-013	SOIL	B1728.D	N/A	N/A	73	86	N/A	90
2006-014	SOIL	B1729.D	N/A	N/A	75	93	N/A	91
2020-001	SOIL	B1730.D	N/A	N/A	69	86	N/A	86
2014-001MS	SOIL	B1731.D	59	63	68	75	85	79
2014-001MSD	SOIL	B1732.D	55	59	62	72	82	81
Method-Blank	SOIL	B1733.D	73	84	82	93	99	90
2028-001	SOIL	B1734.D	N/A	N/A	65	83	N/A	89
2028-002	SOIL	B1735.D	N/A	N/A	68	88	N/A	90
2028-003	SOIL	B1736.D	N/A	N/A	72	90	N/A	89
2028-004	SOIL	B1738.D	N/A	N/A	69	88	N/A	86
2028-001MS	SOIL	B1739.D	67	71	72	85	93	88
2028-001MSD	SOIL	B1740.D	68	74	76	87	97	91
1994-001	SOIL	B1741.D	N/A	N/A	80	94	N/A	84
1994-002	SOIL	B1742.D	N/A	N/A	75	92	N/A	84

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	36-93	42-95
S2 (PHL) = Phenol-d5	40-101	59-97
S3 (NBZ) = Nitrobenzene-d5	45-98	49-105
S4 (FBP) = 2-Fluorobiphenyl	48-104	54-110
S5 (TBP) = 2,4,6-Tribromophenol	54-135	48-126
S6 (TPH) = Terphenyl-d14	58-147	53-123

* Column to be used to flag recovery values

SOIL SEMIVOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2014-001 Batch No.: B040301S1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	100.0	0.0	52.8	53	26 - 90
2-Chlorophenol	100.0	0.0	55.8	56	25 - 102
1,4-Dichlorobenzene	50.0	0.0	29.5	59	28 - 104
N-Nitroso-di-n-propylamine	50.0	0.0	36.8	74	41 - 126
1,2,4-Trichlorobenzene	50.0	0.0	31.7	63	38 - 107
4-Chloro-3-methylphenol	100.0	0.0	64.3	64	26 - 103
Acenaphthene	50.0	0.0	39.0	78	31 - 137
4-Nitrophenol	100.0	0.0	58.7	59	11 - 114
2,4-Dinitrotoluene	50.0	0.0	25.0	50	28 - 89
Pentachlorophenol	100.0	0.0	79.0	79	17 - 109
Pyrene	50.0	0.0	38.0	76	35 - 142

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD #	MSD % REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	0.0	57.7		58	9	42	26 - 90
2-Chlorophenol	0.0	58.5		59	5	40	25 - 102
1,4-Dichlorobenzene	0.0	26.6		53	11	28	28 - 104
N-Nitroso-di-n-propylamine	0.0	34.2		68	8	38	41 - 126
1,2,4-Trichlorobenzene	0.0	28.3		57	10	28	38 - 107
4-Chloro-3-methylphenol	0.0	63.7		64	0	42	26 - 103
Acenaphthene	0.0	34.8		70	11	31	31 - 137
4-Nitrophenol	0.0	66.4		66	11	50	11 - 114
2,4-Dinitrotoluene	0.0	23.2		46	8	38	28 - 89
Pentachlorophenol	0.0	79.0		79	0	50	17 - 109
Pyrene	0.0	35.7		71	7	31	35 - 142

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __11__ outside limits

Spike Recovery: __0___ out of __22__ outside limits

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	40UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	36881		1.51		151207		2.04		96676		2.76	
	UPPER LIMIT	73762		2.01		302414		2.54		193352		3.26	
	LOWER LIMIT	18441		1.01		75604		1.54		48338		2.26	
	LAB SAMPLE ID												
01	BNA-STD-INJ-FOR-04	36743		1.51		151152		2.04		96310		2.76	
02	BNA-STD-INJ-FOR-04	33112		1.51		140132		2.04		87573		2.75	
03	BNA-STD-INJ-FOR-04	32726		1.52		136697		2.04		87875		2.76	
04	BNA-STD-INJ-FOR-04	34266		1.52		142297		2.04		88430		2.76	
05	OLMO4-STD-INJ-FOR	31064		1.51		128572		2.03		81325		2.75	
06	OLMO4-STD-INJ-FOR	31159		1.51		127308		2.03		79409		2.75	
07	OLMO4-STD-INJ-FOR	31513		1.51		127648		2.03		79178		2.75	
08	OLMO4-STD-INJ-FOR	32356		1.51		130005		2.03		78981		2.75	
09	OLMO4-STD-INJ-FOR	33341		1.51		130832		2.03		81762		2.75	
10	Method-Blank	28329		1.51		115940		2.03		71793		2.75	
11	1899-006	34055		1.51		137101		2.03		82341		2.75	
12	1899-010	30678		1.51		126095		2.03		76923		2.75	
13	1899-011	34754		1.51		140624		2.03		81681		2.75	
14	1899-012	30183		1.51		121174		2.03		75921		2.75	
15	1899-013	34254		1.51		140407		2.03		80349		2.75	
16	1899-014	29618		1.51		118162		2.03		73960		2.75	
17	1899-015	31099		1.51		126228		2.03		76487		2.75	
18	1899-007	30951		1.51		126898		2.03		76788		2.75	
19	1899-008	31661		1.51		126623		2.03		76638		2.75	
20	1899-009	31580		1.51		127776		2.03		76167		2.75	
21	Method-Blank	34412		1.51		136974		2.03		82557		2.75	
22	1922-001	32570		1.51		131387		2.03		80326		2.75	

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	36881	1.51	151207	2.04	96676	2.76
	UPPER LIMIT	73762	2.01	302414	2.54	193352	3.26
	LOWER LIMIT	18441	1.01	75604	1.54	48338	2.26
	LAB SAMPLE ID						
01	1922-002	36337	1.51	141176	2.03	83172	2.75
02	1922-003	34650	1.53	136527	2.04	77038	2.76
03	1922-004	39736	1.52	151714	2.03	84723	2.75
04	1922-005	35209	1.51	140210	2.03	79164	2.75
05	1922-006	35675	1.52	138723	2.03	77740	2.75
06	1922-007	38473	1.52	149270	2.04	79636	2.75
07	1922-008	37351	1.52	143251	2.03	83915	2.75
08	1922-009	34572	1.52	140033	2.04	81085	2.75
09	1922-011	33186	1.51	129524	2.03	77650	2.75
10	1922-012	37532	1.51	145757	2.03	83122	2.75
11	1922-013	34543	1.52	137747	2.03	78175	2.75
12	1922-015	33567	1.52	132055	2.03	77328	2.75
13	1820-004	35074	1.51	139139	2.03	79904	2.75
14	1920-004	32328	1.51	131674	2.03	78301	2.75
15	1920-004M	32095	1.51	126593	2.03	76365	2.75
16	1920-004M	34258	1.52	137293	2.04	78572	2.75
17	Method-Blank	31553	1.51	126485	2.03	78216	2.75
18	1929-001	33108	1.52	130006	2.03	78225	2.75
19	1929-002	36474	1.51	141042	2.03	80658	2.75
20	1929-003	38075	1.52	141386	2.03	78340	2.75
21	1929-004	32699	1.51	131831	2.03	80866	2.75
22	1929-005	34919	1.51	135265	2.03	81294	2.75

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	36881	1.51	151207	2.04	96676	2.76
	UPPER LIMIT	73762	2.01	302414	2.54	193352	3.26
	LOWER LIMIT	18441	1.01	75604	1.54	48338	2.26
	LAB SAMPLE ID						
01	1929-006	33756	1.51	131394	2.03	78645	2.75
02	1929-007	36181	1.51	138778	2.03	81951	2.75
03	1951-001	36532	1.51	143248	2.03	85029	2.75
04	1925-001	36095	1.51	139696	2.03	85719	2.75
05	1925-003	39239	1.52	141362	2.03	78662	2.75
06	1925-005	31964	1.51	130986	2.03	80391	2.75
07	1925-007	34982	1.51	133665	2.03	81677	2.75
08	1897-003	33347	1.51	128194	2.04	71254	2.76
09	1933-001	33183	1.51	133677	2.03	81259	2.75
10	1933-002	31872	1.51	128063	2.03	79531	2.75
11	1933-003	33032	1.51	131159	2.03	81708	2.75
12	1958-001	34244	1.52	135673	2.03	80715	2.75
13	1958-001M	32332	1.51	134257	2.03	81468	2.75
14	1958-001M	34058	1.51	136767	2.03	83974	2.75
15	1933-004	35277	1.51	140465	2.03	84935	2.75
16							
17							
18							
19							
20							
21							
22							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	40UG/L	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	184640		3.35		168344		4.51		215285		5.31	
	UPPER LIMIT	369280		3.85		336688		5.01		430570		5.81	
	LOWER LIMIT	92320		2.85		84172		4.01		107643		4.81	
	LAB SAMPLE ID												
01	BNA-STD-INJ-FOR-04	181134		3.35		161513		4.53		175110		5.31	
02	BNA-STD-INJ-FOR-04	171207		3.35		157638		4.50		200500		5.30	
03	BNA-STD-INJ-FOR-04	168453		3.35		146690		4.52		175671		5.31	
04	BNA-STD-INJ-FOR-04	172202		3.36		139992		4.51		150684		5.31	
05	OLMO4-STD-INJ-FOR	166561		3.34		153718		4.50		187282		5.30	
06	OLMO4-STD-INJ-FOR	161259		3.34		146543		4.50		176823		5.30	
07	OLMO4-STD-INJ-FOR	159401		3.34		142343		4.50		169699		5.29	
08	OLMO4-STD-INJ-FOR	161657		3.34		146386		4.50		154959		5.30	
09	OLMO4-STD-INJ-FOR	157496		3.34		146999		4.50		152247		5.30	
10	Method-Blank	146803		3.34		137417		4.50		147999		5.30	
11	1899-006	153364		3.35		125037		4.51		139066		5.31	
12	1899-010	149195		3.34		140879		4.49		139336		5.29	
13	1899-011	150404		3.35		115335		4.50		134275		5.30	
14	1899-012	144225		3.34		129000		4.50		126108		5.29	
15	1899-013	149656		3.34		125563		4.49		123412		5.29	
16	1899-014	138837		3.34		127531		4.49		124760		5.29	
17	1899-015	146299		3.34		131062		4.49		130422		5.29	
18	1899-007	145189		3.34		130603		4.49		127124		5.28	
19	1899-008	142288		3.34		126113		4.49		120739		5.29	
20	1899-009	142733		3.34		125140		4.50		126524		5.29	
21	Method-Blank	148580		3.34		126027		4.50		124487		5.29	
22	1922-001	152972		3.34		132933		4.50		134210		5.29	

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

000142

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	50UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	184640	3.35	168344	4.51	215285	5.31
	UPPER LIMIT	369280	3.85	336688	5.01	430570	5.81
	LOWER LIMIT	92320	2.85	84172	4.01	107643	4.81
	LAB SAMPLE ID						
01	1922-002	150145	3.34	114820	4.50	129614	5.3
02	1922-003	129883	3.35	103664	4.50	123339	5.3
03	1922-004	127015	3.34	106381	4.50	136907	5.31
04	1922-005	142865	3.34	111790	4.50	135384	5.29
05	1922-006	124927	3.35	96926	4.51	108800	5.32
06	1922-007	130223	3.34	108279	4.50	135978	5.29
07	1922-008	144059	3.34	112972	4.50	138504	5.29
08	1922-009	143760	3.34	111961	4.49	135307	5.29
09	1922-011	143139	3.34	112924	4.49	131066	5.29
10	1922-012	137906	3.35	113756	4.51	139246	5.31
11	1922-013	141804	3.34	109515	4.49	133249	5.29
12	1922-015	140298	3.34	113683	4.49	134674	5.29
13	1820-004	144263	3.34	111064	4.49	137554	5.29
14	1920-004	143439	3.34	113098	4.48	132655	5.28
15	1920-004M	137264	3.34	103579	4.48	123787	5.28
16	1920-004M	141869	3.34	106174	4.48	133332	5.28
17	Method-Blank	142023	3.34	112974	4.48	130808	5.28
18	1929-001	149350	3.34	110719	4.48	135834	5.28
19	1929-002	137891	3.34	108684	4.48	137226	5.28
20	1929-003	124410	3.34	107250	4.48	139297	5.28
21	1929-004	146268	3.34	112600	4.47	134345	5.28
22	1929-005	143465	3.34	107659	4.47	136470	5.28

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	184640	3.35	168344	4.51	215285	5.31
	UPPER LIMIT	369280	3.85	336688	5.01	430570	5.81
	LOWER LIMIT	92320	2.85	84172	4.01	107643	4.81
	LAB SAMPLE ID						
01	1929-006	145712	3.34	110440	4.47	135361	5.27
02	1929-007	143575	3.34	111226	4.48	137528	5.28
03	1951-001	152206	3.34	117261	4.47	143921	5.28
04	1925-001	153368	3.34	115006	4.47	139597	5.28
05	1925-003	124571	3.34	108675	4.47	140163	5.28
06	1925-005	152583	3.34	116872	4.48	138027	5.28
07	1925-007	142544	3.34	108641	4.48	132936	5.28
08	1897-003	130893	3.35	100261	4.49	120971	5.29
09	1933-001	148160	3.34	116711	4.48	144091	5.28
10	1933-002	141835	3.34	113489	4.48	138366	5.28
11	1933-003	144930	3.34	116941	4.48	140668	5.28
12	1958-001	144416	3.34	110988	4.47	140179	5.27
13	1958-001M	145873	3.34	117553	4.48	141018	5.28
14	1958-001M	153249	3.34	121522	4.47	143684	5.28
15	1933-004	150325	3.34	113310	4.48	145537	5.28
16							
17							
18							
19							
20							
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1697.D

Date Analyzed: 04/03/2001

Instrument ID: MSDB

Time Analyzed: 06:27

	40UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	55357		1.51		209609		2.04		109315		2.75	
	UPPER LIMIT	110714		2.01		419218		2.54		218630		3.25	
	LOWER LIMIT	27679		1.01		104805		1.54		54658		2.25	
	LAB SAMPLE ID												
01	OLMO4-STD-INJ-FOR	54743		1.51		211909		2.03		115041		2.75	
02	1922-006	45793		1.51		168992		2.03		81483		2.75	
03	1925-003	50226		1.51		195248		2.03		105533		2.75	
04	1925-005	49427		1.51		190273		2.03		99147		2.75	
05	1925-007	47951		1.51		185064		2.03		94817		2.75	
06	1897-003	40256		1.51		141220		2.03		66911		2.75	
07	1897-003	45888		1.51		166332		2.03		87873		2.75	
08	1933-001	45216		1.51		173761		2.03		93652		2.75	
09	1933-002	42417		1.51		167760		2.03		85914		2.75	
10	1933-003	44247		1.51		170920		2.03		87483		2.75	
11	1958-001	45706		1.51		176015		2.03		90374		2.75	
12	1925-001MSD	46154		1.51		172318		2.03		89933		2.75	
13	1925-001MSD	44837		1.51		171286		2.03		91986		2.75	
14	1933-004	42350		1.51		156296		2.03		75795		2.75	
15	Method-Blank	39333		1.51		150574		2.03		75510		2.75	
16	2014-002	35900		1.51		134336		2.03		67955		2.75	
17	2014-003	34788		1.51		132591		2.03		64003		2.75	
18	2014-001	35555		1.51		133226		2.03		67264		2.75	
19	2014-004	34329		1.51		135184		2.03		66872		2.75	
20	2014-007	34439		1.51		126557		2.03		60511		2.75	
21	2014-005	33555		1.51		125599		2.03		63012		2.75	
22	2014-009	39182		1.51		146891		2.03		73510		2.75	

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1697.D

Date Analyzed: 04/03/2001

Instrument ID: MSDB

Time Analyzed: 06:27

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	55357	1.51	209609	2.04	109315	2.75
	UPPER LIMIT	110714	2.01	419218	2.54	218630	3.25
	LOWER LIMIT	27679	1.01	104805	1.54	54658	2.25
	LAB SAMPLE ID						
01	2014-006	36196	1.51	125707	2.03	63264	2.75
02	2014-008	41989	1.51	155385	2.03	74078	2.75
03	2014-010	36405	1.51	134642	2.03	70632	2.75
04	2014-011	38415	1.51	143115	2.03	73731	2.75
05	2014-012	38718	1.51	141457	2.03	73216	2.75
06	2006-010	35469	1.51	135886	2.03	70991	2.75
07	2006-011	38178	1.51	144940	2.03	72568	2.75
08	2006-012	38366	1.51	144575	2.03	73351	2.75
09	2006-013	39014	1.51	147278	2.03	73677	2.75
10	2006-014	39329	1.51	145879	2.03	73093	2.75
11	2020-001	39932	1.51	150407	2.03	75644	2.75
12	2014-001MS	46125	1.51	170853	2.03	90870	2.75
13	2014-001MSD	44837	1.51	173347	2.03	92066	2.75
14	Method-Blank	38775	1.51	148609	2.03	77024	2.75
15	2028-001	39049	1.51	147528	2.03	74477	2.75
16	2028-002	39923	1.51	152690	2.03	77666	2.75
17	2028-003	39203	1.51	148879	2.03	76181	2.75
18	2028-004	39459	1.51	149593	2.03	76283	2.75
19	2028-001MS	36759	1.51	144437	2.03	73467	2.75
20	2028-001MSD	40059	1.51	156250	2.03	80397	2.75
21	1994-001	39121	1.51	147724	2.03	75214	2.75
22	1994-002	37615	1.51	142490	2.03	73374	2.75

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1697.D

Date Analyzed: 04/03/2001

Instrument ID: MSDB

Time Analyzed: 06:27

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	172639	3.34	119756	4.50	166811	5.29
	UPPER LIMIT	345278	3.84	239512	5.00	333622	5.79
	LOWER LIMIT	86320	2.84	59878	4.00	83406	4.79
	LAB SAMPLE ID						
01	OLMO4-STD-INJ-FOR	187486	3.34	117245	4.47	136569	5.27
02	1922-006	119671	3.34	101135	4.47	129606	5.28
03	1925-003	168522	3.34	115062	4.47	133579	5.27
04	1925-005	164455	3.34	112624	4.47	128140	5.27
05	1925-007	160116	3.34	107147	4.47	119856	5.27
06	1897-003	110802	3.34	99132	4.48	125571	5.28
07	1897-003	136577	3.34	114885	4.48	145435	5.28
08	1933-001	147689	3.34	105108	4.48	136167	5.28
09	1933-002	138810	3.34	99708	4.47	131031	5.27
10	1933-003	145606	3.34	98983	4.47	133244	5.27
11	1958-001	144672	3.34	99408	4.48	133381	5.27
12	1925-001MSD	137838	3.34	99953	4.48	129699	5.27
13	1925-001MSD	145911	3.34	105484	4.47	134185	5.27
14	1933-004	119892	3.34	110569	4.47	148296	5.27
15	Method-Blank	121084	3.34	104243	4.47	137664	5.27
16	2014-002	109706	3.34	93086	4.51	124885	5.29
17	2014-003	102069	3.34	95191	4.48	127370	5.28
18	2014-001	107877	3.34	93379	4.47	126937	5.27
19	2014-004	106844	3.34	92453	4.48	126118	5.27
20	2014-007	94507	3.34	91248	4.52	117724	5.31
21	2014-005	98757	3.34	88451	4.48	115823	5.28
22	2014-009	121514	3.34	115096	4.48	148460	5.28

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1697.D Date Analyzed: 04/03/2001

Instrument ID: MSDB Time Analyzed: 06:27

	50UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	172639	3.34	119756	4.50	166811	5.29
	UPPER LIMIT	345278	3.84	239512	5.00	333622	5.79
	LOWER LIMIT	86320	2.84	59878	4.00	83406	4.79
	LAB SAMPLE ID						
01	2014-006	103952	3.34	109283	4.48	136559	5.27
02	2014-008	114422	3.34	108084	4.48	140744	5.28
03	2014-010	125838	3.34	112830	4.48	142086	5.27
04	2014-011	114702	3.34	107321	4.48	137041	5.27
05	2014-012	123044	3.34	113002	4.47	146327	5.27
06	2006-010	119450	3.34	111152	4.47	140820	5.27
07	2006-011	124838	3.34	111975	4.47	142504	5.27
08	2006-012	118233	3.34	110859	4.47	141503	5.27
09	2006-013	126042	3.34	113871	4.47	144168	5.27
10	2006-014	118627	3.34	109866	4.47	143596	5.27
11	2020-001	124853	3.34	114400	4.47	148095	5.27
12	2014-001MS	147214	3.34	134936	4.47	175847	5.27
13	2014-001MSD	152261	3.34	140417	4.47	176489	5.27
14	Method-Blank	123119	3.34	111458	4.47	140549	5.27
15	2028-001	125816	3.34	113687	4.46	143951	5.27
16	2028-002	128368	3.34	118020	4.47	156476	5.27
17	2028-003	128901	3.34	118926	4.46	153552	5.26
18	2028-004	130052	3.34	121558	4.46	157628	5.27
19	2028-001MS	122789	3.34	113433	4.46	143763	5.26
20	2028-001MSD	130358	3.34	118451	4.46	149607	5.26
21	1994-001	120089	3.34	116678	4.47	146285	5.27
22	1994-002	120441	3.34	115566	4.47	145792	5.27

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1725.D Vial: 14
Acq On : 3 Apr 2001 13:55 Operator: JC
Sample : S-40,2006-010,S,10.90g,22.6,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
; Integration Params: rteint.p
Quant Time: Apr 03 14:04:06 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	35469	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	135886	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	70991	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	119450	40.00	UG	-0.02
75) Chrysene-d12	4.47	240	111152	40.00	UG	-0.04
84) Perylene-d12	5.27	264	140820	40.00	UG	-0.03

System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 36 - 93		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 40 - 101		Recovery = 0.00%#			
23) Nitrobenzene-d5	1.74	82	37036	37.56	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 75.12%			
43) 2-Fluorobiphenyl	2.48	172	84954	43.54	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 87.08%			
64) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 54 - 135		Recovery = 0.00%#			
77) Terphenyl-d14	4.01	244	117025	44.15	UG	-0.03
Spiked Amount 50.000	Range 58 - 147		Recovery = 88.30%			

Target Compounds						Qvalue
51) Acenaphthene	2.76	153	1570	0.98	UG	# 81

(#) = qualifier out of range (m) = manual integration

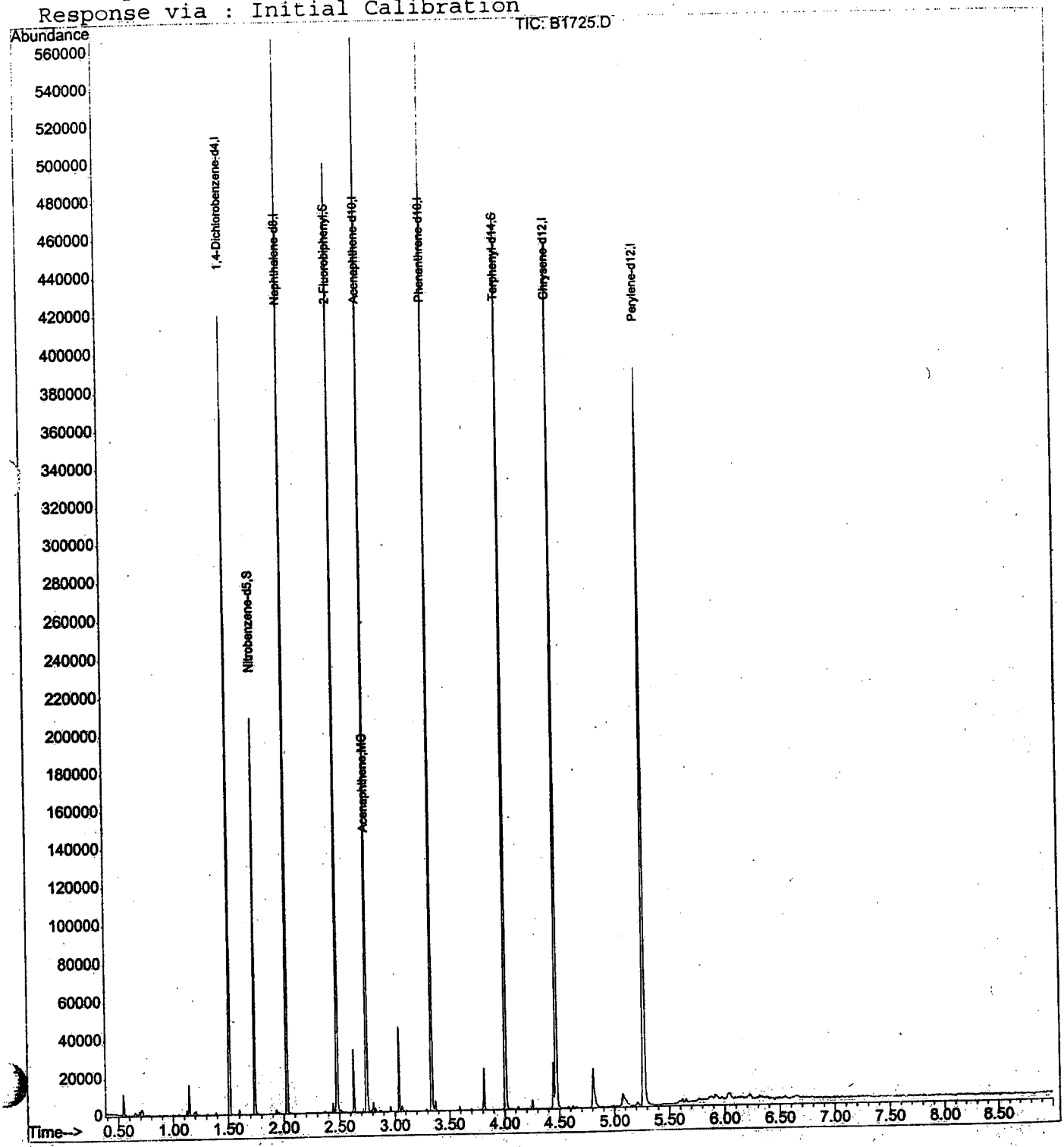
1992

000149

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1725.D Vial: 14
Acq On : 3 Apr 2001 13:55 Operator: JC
Sample : S-40,2006-010,S,10.90g,22.6,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 4 15:42 2001 Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



000150

1993

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1725.D Vial: 14
Acq On : 3 Apr 2001 13:55 Operator: JC
Sample : S-40,2006-010,S,10.90g,22.6,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

No Library Search Compounds Detected

****

B1725.D BS1201.M Wed Apr 04 14:42:14 2001 MSD_B

1994

000151

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1726.D Vial: 15
Acq On : 3 Apr 2001 14:09 Operator: JC
Sample : S-41,2006-011,S,10.95g,17.3,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
3 Integration Params: rteint.p
Quant Time: Apr 03 14:18:53 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	38178	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	144940	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	72568	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	124838	40.00	UG	-0.02
75) Chrysene-d12	4.47	240	111975	40.00	UG	-0.04
84) Perylene-d12	5.27	264	142504	40.00	UG	-0.03

System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 36 - 93		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 40 - 101		Recovery = 0.00%#			
23) Nitrobenzene-d5	1.74	82	35819	34.06	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 68.12%			
43) 2-Fluorobiphenyl	2.48	172	87233	43.74	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 87.48%			
64) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 54 - 135		Recovery = 0.00%#			
77) Terphenyl-d14	4.01	244	120096	44.98	UG	-0.03
Spiked Amount 50.000	Range 58 - 147		Recovery = 89.96%			

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration

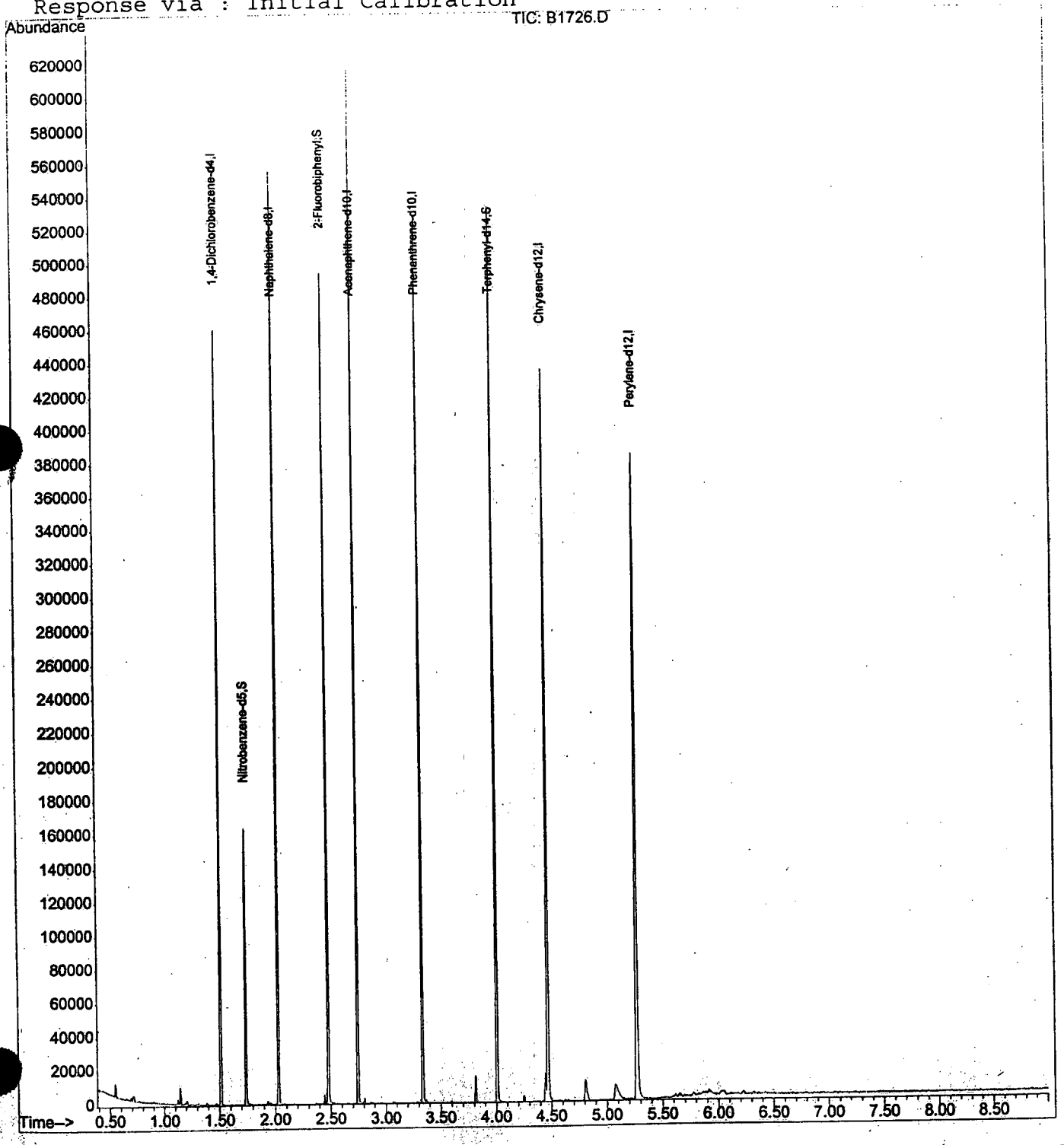
1995

000152

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1726.D Vial: 15
Acq On : 3 Apr 2001 14:09 Operator: JC
Sample : S-41,2006-011,S,10.95g,17.3,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 4 15:42 2001 Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



1996

000153

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1726.D
Acq On : 3 Apr 2001 14:09
Sample : S-41,2006-011,S,10.95g,17.3,04/03/01
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1
Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

Vial: 15
Operator: JC
Inst : MSD_B
Multiplr: 1.00

No Library Search Compounds Detected

****

B1726.D BS1201.M Wed Apr 04 14:42:53 2001 MSD_B

1997

000154

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1727.D Vial: 16
Acq On : 3 Apr 2001 14:24 Operator: JC
Sample : S-42,2006-012,S,10.52g,21.3,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
; Integration Params: rteint.p
Quant Time: Apr 03 14:33:15 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	38366	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	144575	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	73351	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	118233	40.00	UG	-0.02
75) Chrysene-d12	4.47	240	110859	40.00	UG	-0.04
84) Perylene-d12	5.27	264	141503	40.00	UG	-0.03

System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 36 - 93		Recovery =	0.00%#		
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 40 - 101		Recovery =	0.00%#		
23) Nitrobenzene-d5	1.74	82	35667	34.00	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery =	68.00%		
43) 2-Fluorobiphenyl	2.48	172	87766	43.54	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery =	87.08%		
64) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 54 - 135		Recovery =	0.00%#		
77) Terphenyl-d14	4.01	244	116482	44.06	UG	-0.03
Spiked Amount 50.000	Range 58 - 147		Recovery =	88.12%		

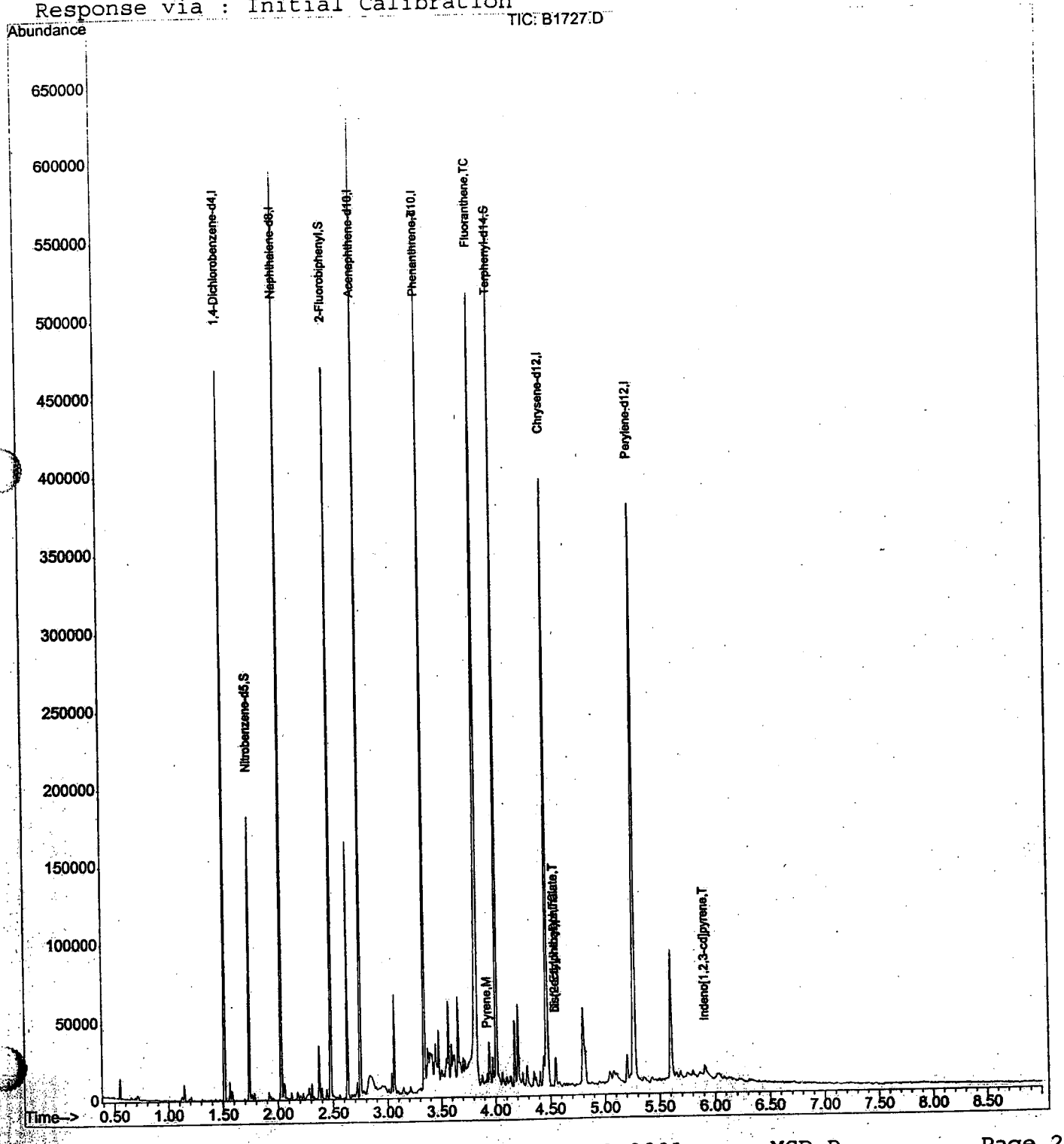
Target Compounds						Qvalue
69) Phenanthrene	3.34	178	1494	0.61	UG	# 90
73) Fluoranthene	3.84	202	1768m	0.68	UG	
76) Pyrene	3.93	202	1790	0.61	UG	# 87
83) bis(2-Ethylhexyl)phthalate	4.55	149	5542	2.94	UG	99
85) Di-n-octylphthalate	4.55	149	5542	1.64	UG	96
89) Indeno[1,2,3-cd]pyrene	5.91	276	1828	0.61	UG	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1727.D Vial: 16
Acq On : 3 Apr 2001 14:24 Operator: JC
Sample : S-42,2006-012,S,10.52g,21.3,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 6:28 2001 Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



1999

000156

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1727.D Vial: 16
Acq On : 3 Apr 2001 14:24 Operator: JC
[redacted]mple : S-42,2006-012,S,10.52g,21.3,04/03/01 Inst : MSD_B
[redacted]sc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
; Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.551	30	32	34	rVB	13386	8070	1.42%	0.209%
2	1.144	141	143	146	rVB	10803	6131	1.08%	0.159%
3	1.512	209	212	215	rVB	468980	217461	38.22%	5.630%
4	1.560	219	221	223	rBV	12302	6278	1.10%	0.163%
5	1.742	252	255	257	rBV	182355	102764	18.06%	2.661%
6	2.030	306	309	311	rBV	601458	280779	49.35%	7.270%
[redacted]	2.057	311	314	317	rVB2	10364	9910	1.74%	0.257%
[redacted]	2.372	371	373	376	rVB	34597	20463	3.60%	0.530%
[redacted]	2.479	391	393	396	rVB	468023	237154	41.69%	6.140%
10	2.629	419	421	424	rBV	163521	75139	13.21%	1.945%
11	2.720	434	438	440	rVB	10631	7329	1.29%	0.190%
12	2.746	440	443	446	rBV	628766	299674	52.68%	7.759%
13	2.837	453	460	462	rBV6	12926	26248	4.61%	0.680%
14	3.035	495	497	500	rBV	13777	9567	1.68%	0.248%
15	3.061	500	502	504	rBV	62729	32794	5.76%	0.849%
16	3.339	551	554	557	rBV	541042	295465	51.94%	7.650%
17	3.371	557	560	563	rVV3	24948	30373	5.34%	0.786%
18	3.393	563	564	567	rVV2	19880	23736	4.17%	0.615%
19	3.446	571	574	577	rVV	22915	23634	4.15%	0.612%
20	3.473	577	579	581	rVB	32462	17011	2.99%	0.440%
21	3.499	581	584	587	rBV3	6302	7553	1.33%	0.196%
22	3.548	590	593	594	rBV2	12183	9961	1.75%	0.258%
23	3.564	594	596	599	rVB	49507	34150	6.00%	0.884%
24	3.596	599	602	603	rBV	22028	16881	2.97%	0.437%
25	3.654	610	613	615	rBV	52317	35083	6.17%	0.908%
26	3.676	615	617	620	rVB4	7765	7870	1.38%	0.204%
27	3.831	630	646	648	rVV	501226	568908	100.00%	14.730%
28	3.879	651	655	659	rBV6	7000	6370	1.12%	0.165%
29	3.943	665	667	671	rVV	26844	20665	3.63%	0.535%
[redacted]	3.975	671	673	676	rVV3	17521	12406	2.18%	0.321%
31	4.007	676	679	682	rVV	562852	315654	55.48%	8.173%

32	4.028	682	683	687	rVB4	7534	6168	1.08%	0.160%
33	4.060	687	689	695	rVB4	8782	7672	1.35%	0.199%
34	4.141	701	704	708	rVB2	7153	6507	1.14%	0.168%
35	4.173	708	710	713	rBV	42940	32015	5.63%	0.829%
36	4.205	713	716	719	rVV	52332	37610	6.61%	0.974%
	4.247	722	724	728	rVB	9211	6242	1.10%	0.162%
38	4.290	728	732	739	rVB5	14380	15186	2.67%	0.393%
39	4.349	739	743	745	rBV2	10073	9419	1.66%	0.244%
40	4.408	752	754	757	rBV	9931	6064	1.07%	0.157%
41	4.445	757	761	762	rVV2	19969	20401	3.59%	0.528%
42	4.472	762	766	772	rVB	389911	324984	57.12%	8.414%
43	4.547	777	780	784	rBV	19092	16710	2.94%	0.433%
44	4.798	823	827	835	rVB3	49812	70377	12.37%	1.822%
45	5.043	869	873	877	rBV3	7031	9482	1.67%	0.245%
46	5.081	877	880	883	rBV3	5355	7264	1.28%	0.188%
47	5.204	899	903	906	rBV2	18110	18756	3.30%	0.486%
48	5.268	910	915	923	rVB	369740	385953	67.84%	9.993%
49	5.604	973	978	984	rBV	82678	87653	15.41%	2.269%
50	5.909	1032	1035	1050	rVB3	8986	19375	3.41%	0.502%
51	6.021	1054	1056	1066	rVB10	3783	9003	1.58%	0.233%

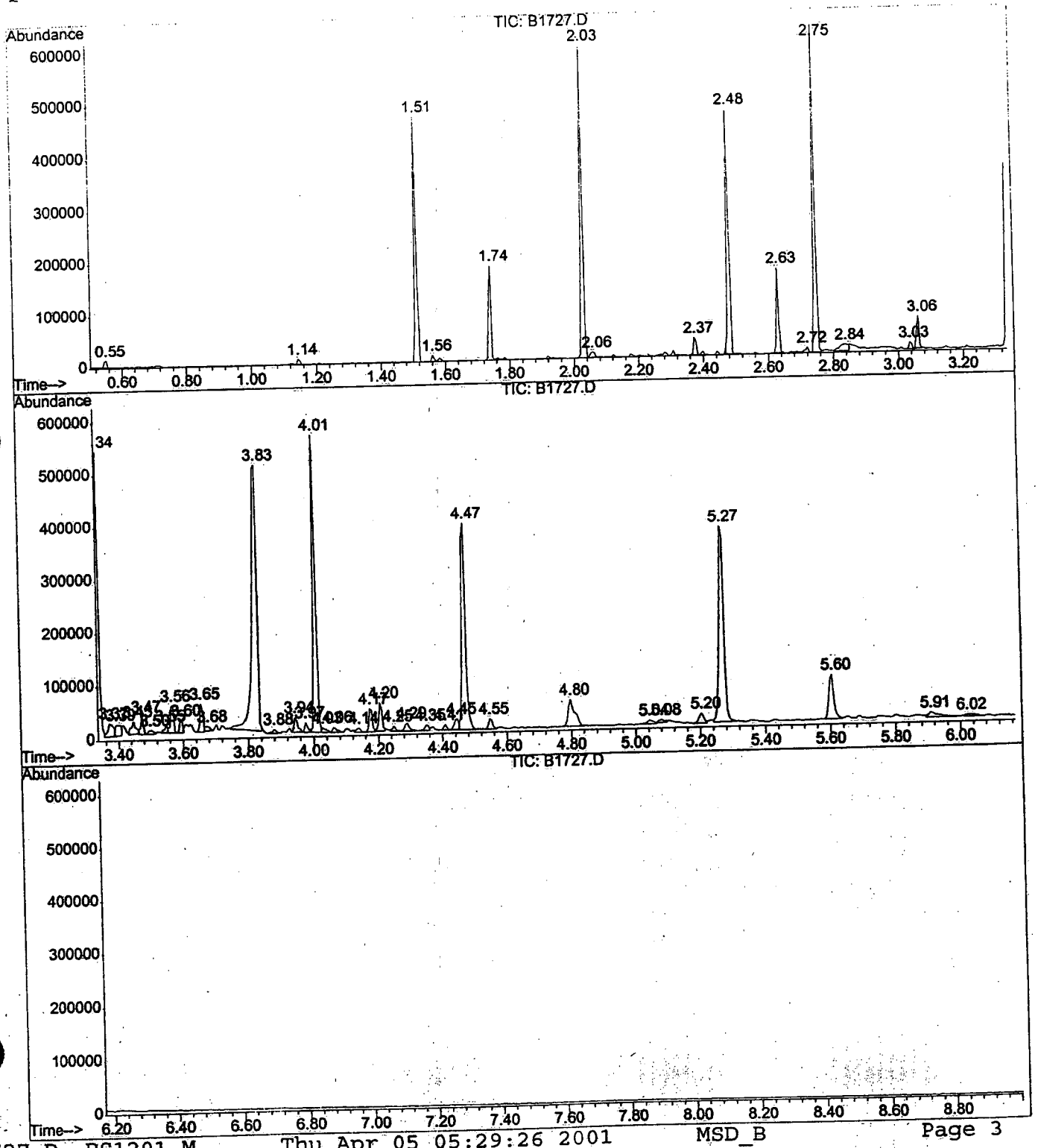
Sum of corrected areas: 3862322

000158

2001

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-03-01\B1727.D
Operator : JC
Acquired : 3 Apr 2001 14:24 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-42,2006-012,S,10.52g,21.3,04/03/01
Misc Info : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1
Vial Number: 16
Quant File :BS1201.RES (RTE Integrator)



2002

000159

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1727.D
Acq On : 3 Apr 2001 14:24
Sample : S-42,2006-012,S,10.52g,21.3,04/03/01
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1
; Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

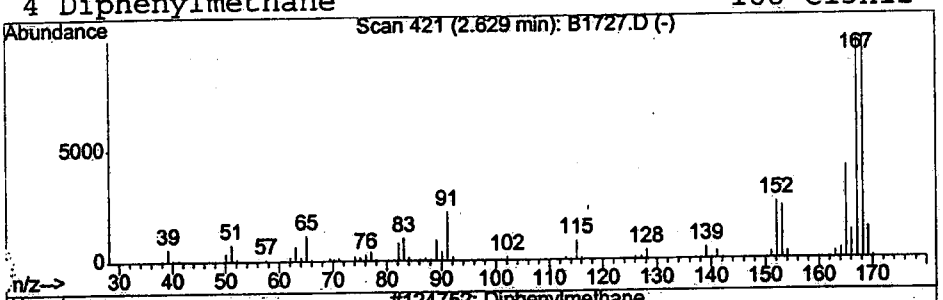
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

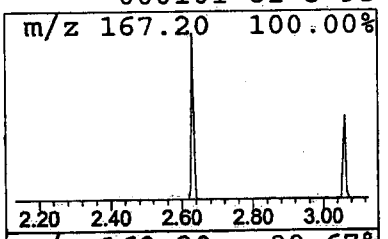
****

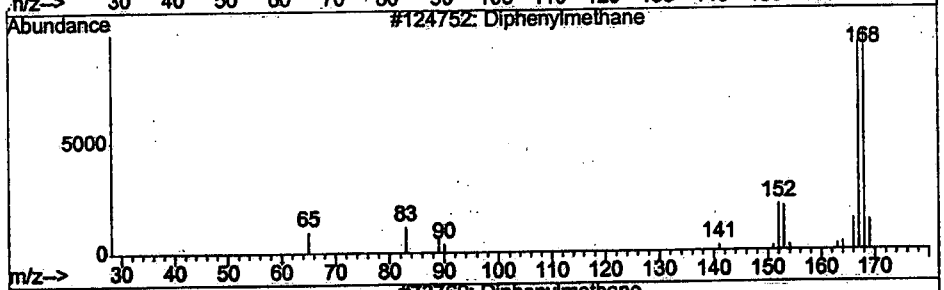
Peak Number 1 Diphenylmethane Concentration Rank 1

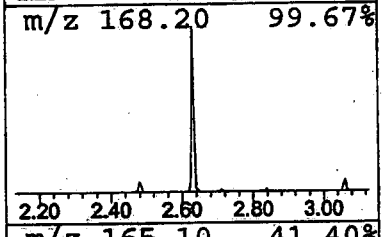
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.63	10.03 UG	75139	Acenaphthene-d10	2.75

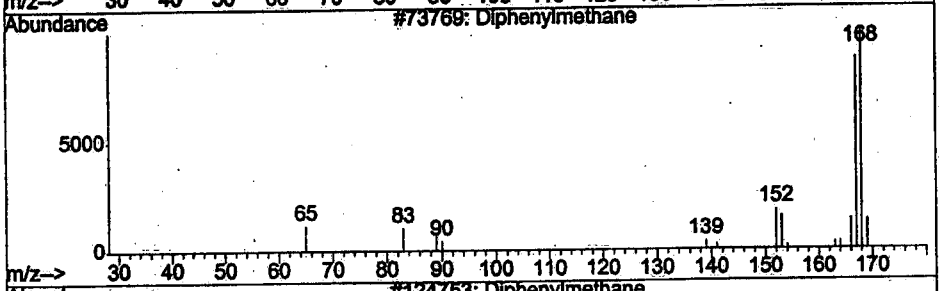
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diphenylmethane	168	C13H12	000101-81-5	97
2	Diphenylmethane	168	C13H12	000101-81-5	95
3	Diphenylmethane	168	C13H12	000101-81-5	95
4	Diphenylmethane	168	C13H12	000101-81-5	95

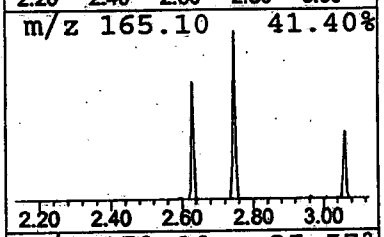


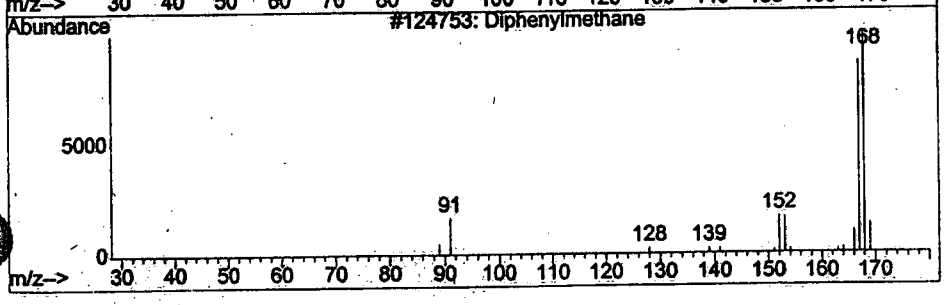


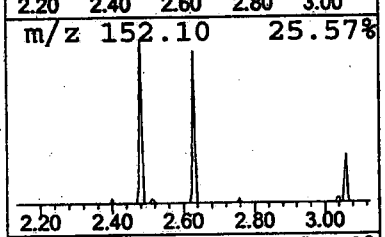


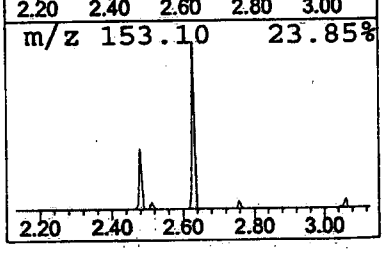












000160

2003

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1727.D Vial: 16
Acq On : 3 Apr 2001 14:24 Operator: JC
Sample : S-42,2006-012,S,10.52g,21.3,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
IS Integration Params: LSCINT.P

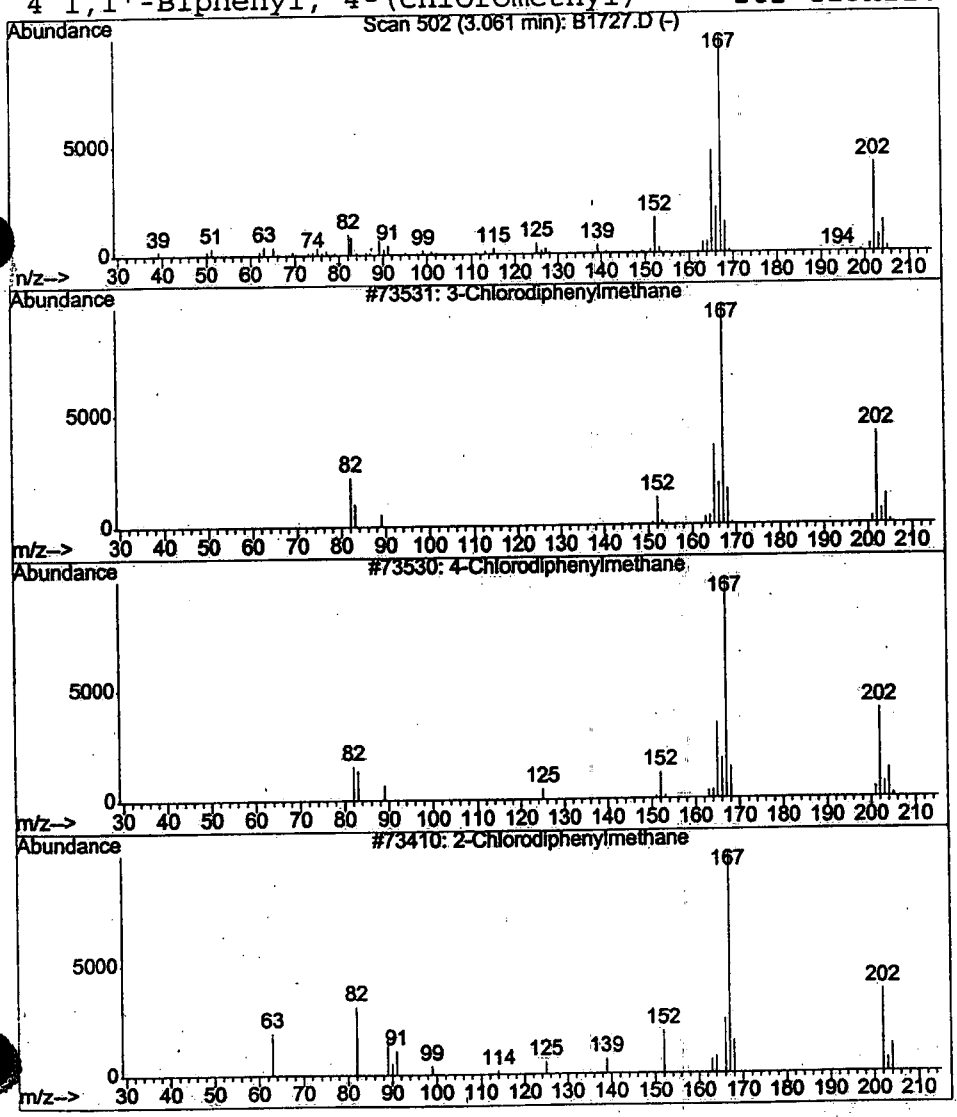
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

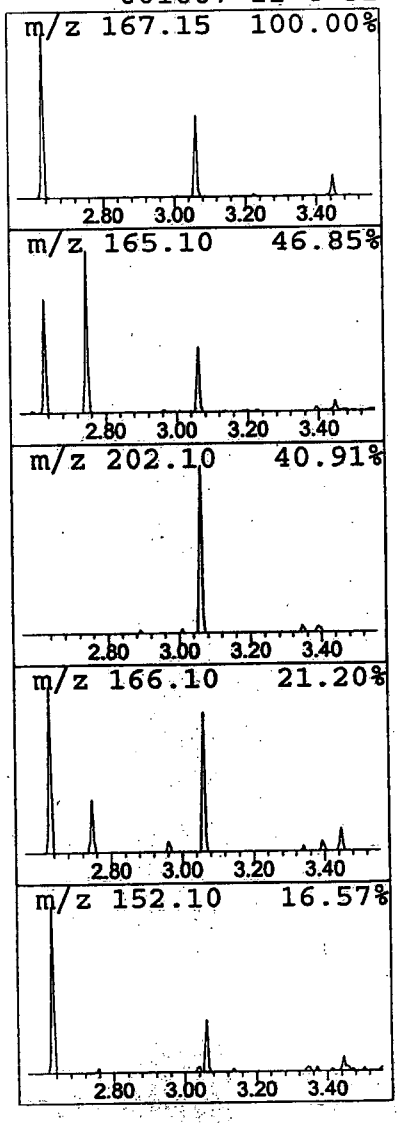
****

Peak Number 2 3-Chlorodiphenylmethane Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.06	4.44 UG	32794	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Chlorodiphenylmethane	202	C13H11Cl	1000202-29-0	97
2	4-Chlorodiphenylmethane	202	C13H11Cl	1000202-28-9	95
3	2-Chlorodiphenylmethane	202	C13H11Cl	029921-41-3	95
4	1,1'-Biphenyl, 4-(chloromethyl)-	202	C13H11Cl	001667-11-4	81





2004

000161

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1727.D Vial: 16
Acq On : 3 Apr 2001 14:24 Operator: JC
Sample : S-42,2006-012,S,10.52g,21.3,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
; Integration Params: LSCINT.P

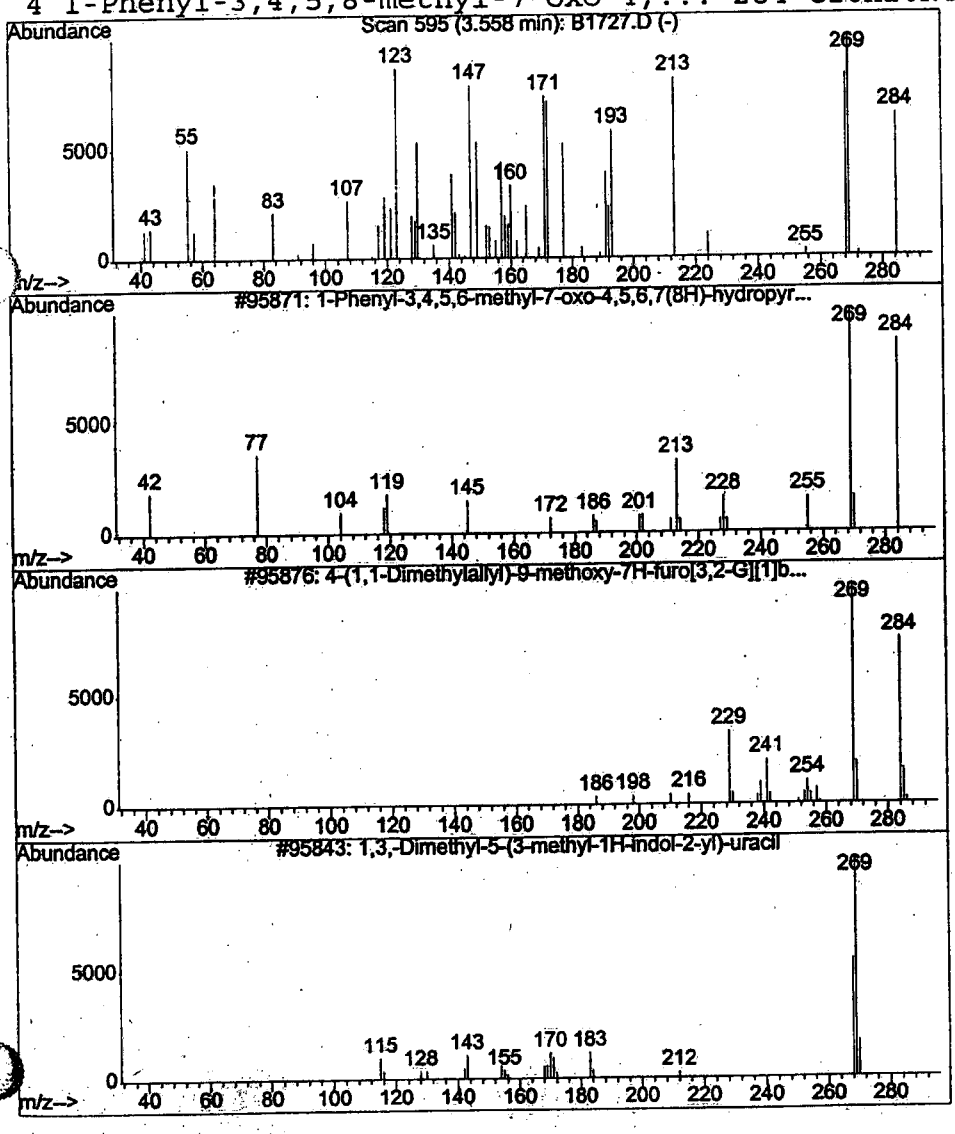
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

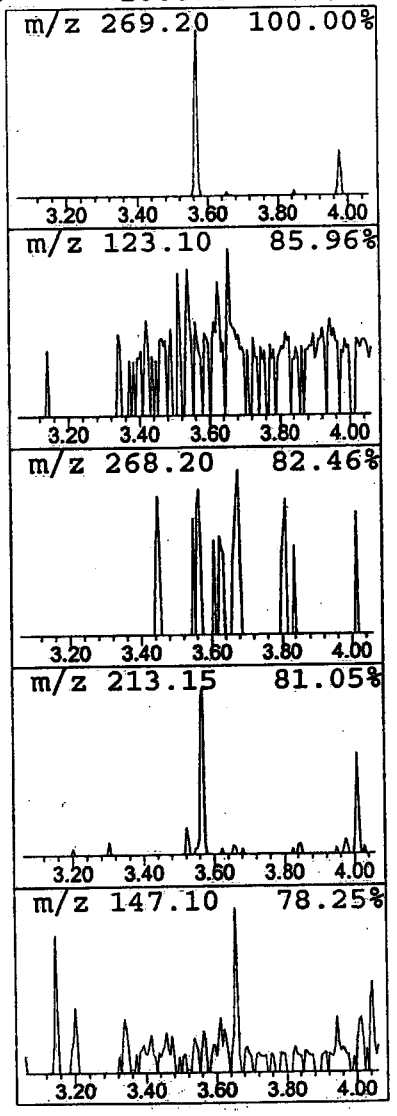
****

Peak Number 3 Unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.56	4.62 UG	34150	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Phenyl-3,4,5,6-methyl-7-oxo-4,...	284	C16H20N4O	1000148-42-4	43
2	4-(1,1-Dimethylallyl)-9-methoxy-...	284	C17H16O4	034155-80-1	42
3	1,3,-Dimethyl-5-(3-methyl-1H-ind...	269	C15H15N3O2	1000148-41-1	25
4	1-Phenyl-3,4,5,8-methyl-7-oxo-4,...	284	C16H20N4O	1000148-42-5	25





2005

000162

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1727.D Vial: 16
Acq On : 3 Apr 2001 14:24 Operator: JC
Sample : S-42,2006-012,S,10.52g,21.3,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
3 Integration Params: LSCINT.P

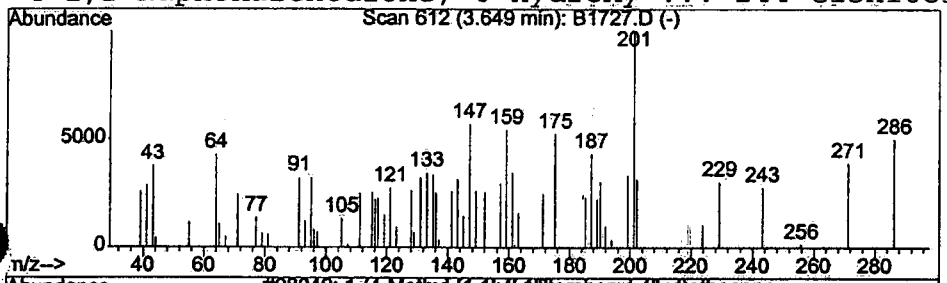
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

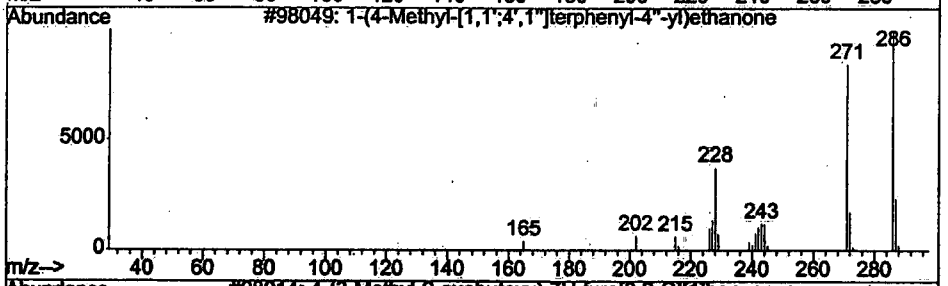
****

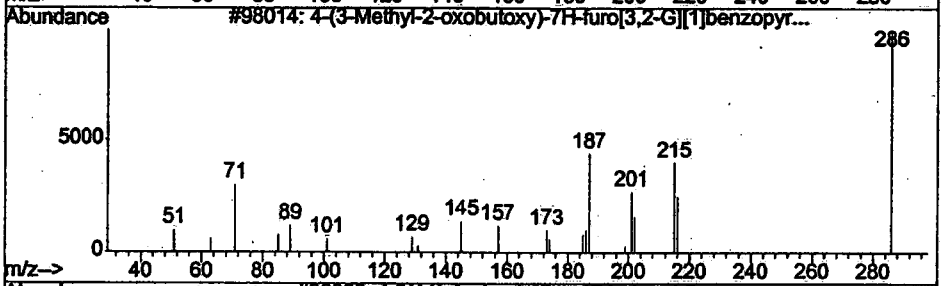
Peak Number 4 Unknown Concentration Rank 4

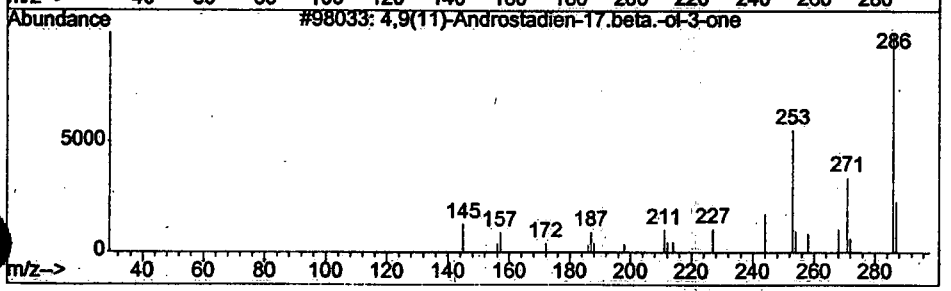
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.65	4.75 UG	35083	Phenanthrene-d10	3.34

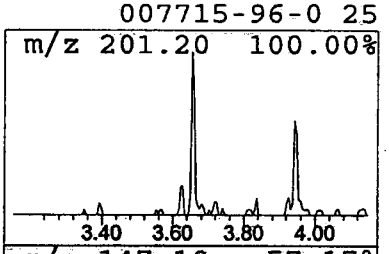
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-(4-Methyl-[1,1';4',1'']terphen...	286	C21H18O	1000202-10-2	35
2	4-(3-Methyl-2-oxobutoxy)-7H-furo...	286	C16H14O5	005058-15-1	30
3	4,9(11)-Androstadien-17.beta.-ol...	286	C19H26O2	1000126-88-0	25
4	1,2-Naphthalenedione, 6-hydroxy-...	244	C15H16O3	007715-96-0	25

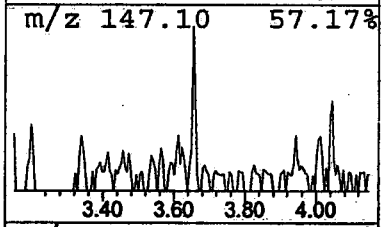


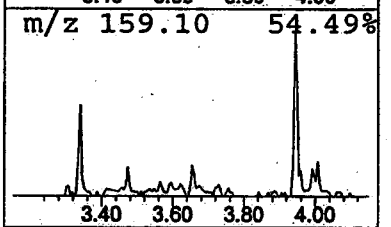


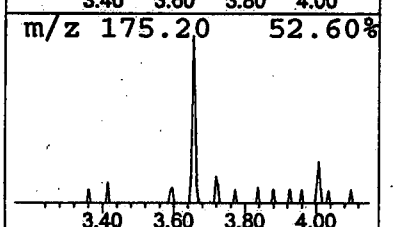


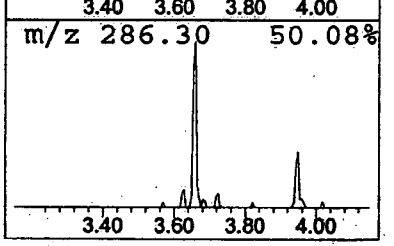












7006

000163

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1727.D Vial: 16
Acq On : 3 Apr 2001 14:24 Operator: JC
Sample : S-42,2006-012,S,10.52g,21.3,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
3 Integration Params: LSCINT.P

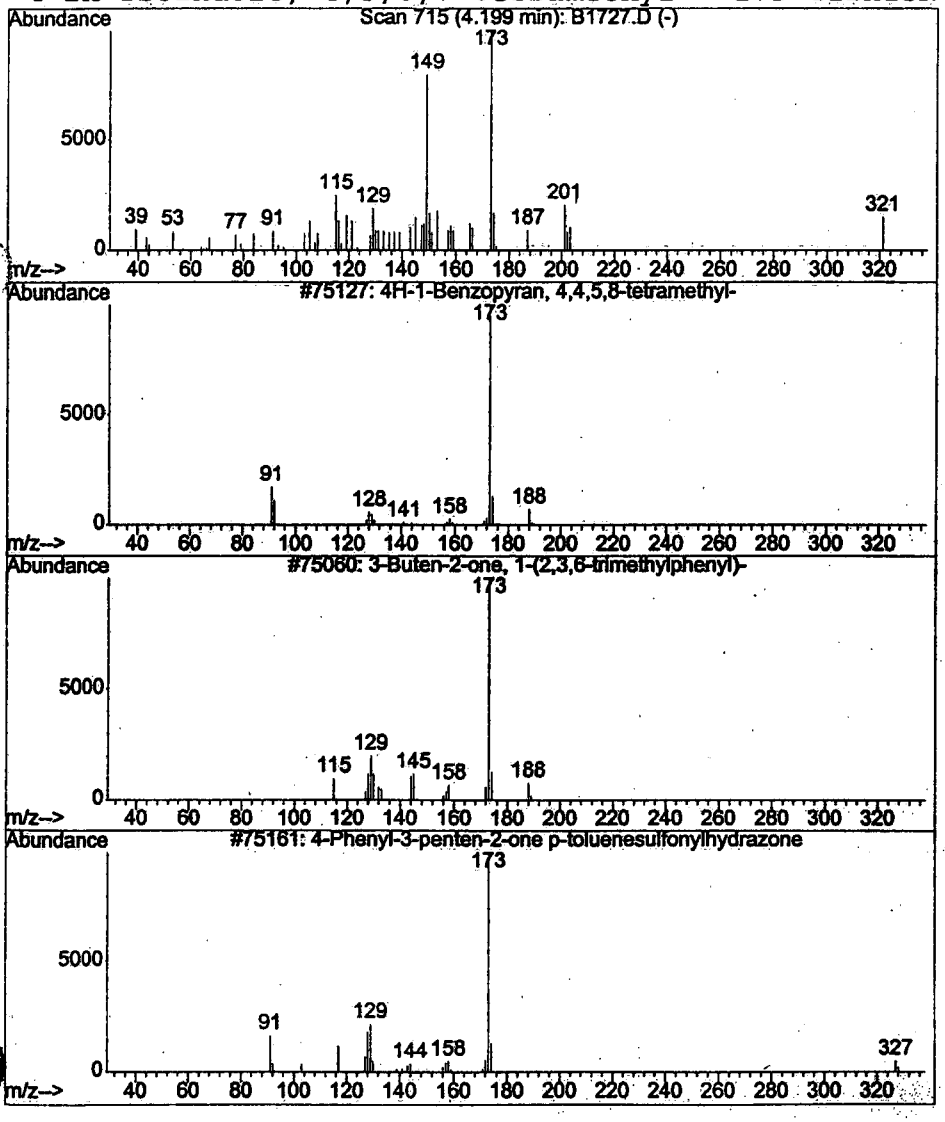
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

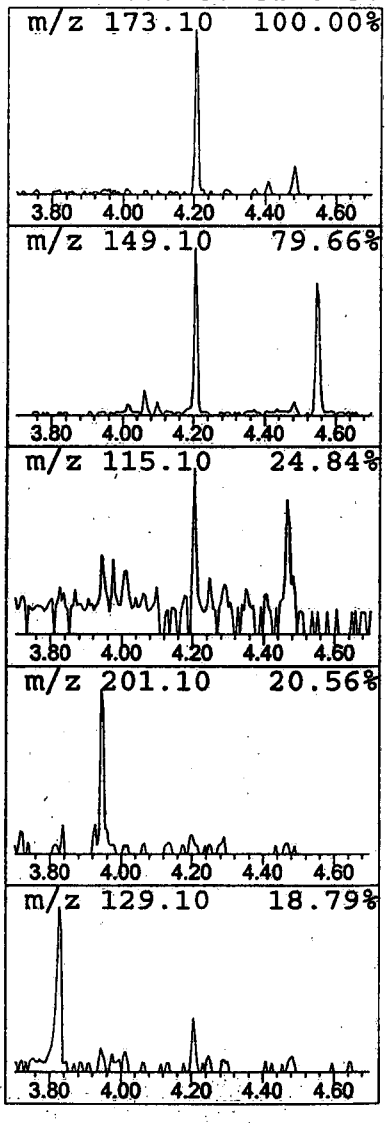
****

Peak Number 5 Unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.20	4.63 UG	37610	Chrysene-d12	4.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4H-1-Benzopyran, 4,4,5,8-tetrame...	188	C13H16O	082391-06-8	41
2	3-Buten-2-one, 1-(2,3,6-trimethy...	188	C13H16O	054789-45-6	38
3	4-Phenyl-3-penten-2-one p-toluen...	328	C18H20N2O2S	1000211-12-1	35
4	2H-Isoindole, 4,5,6,7-tetramethyl-	173	C12H15N	070187-61-0	30





0001164

2007

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1727.D Vial: 16
Acq On : 3 Apr 2001 14:24 Operator: JC
Sample : S-42,2006-012,S,10.52g,21.3,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
) Integration Params: LSCINT.P

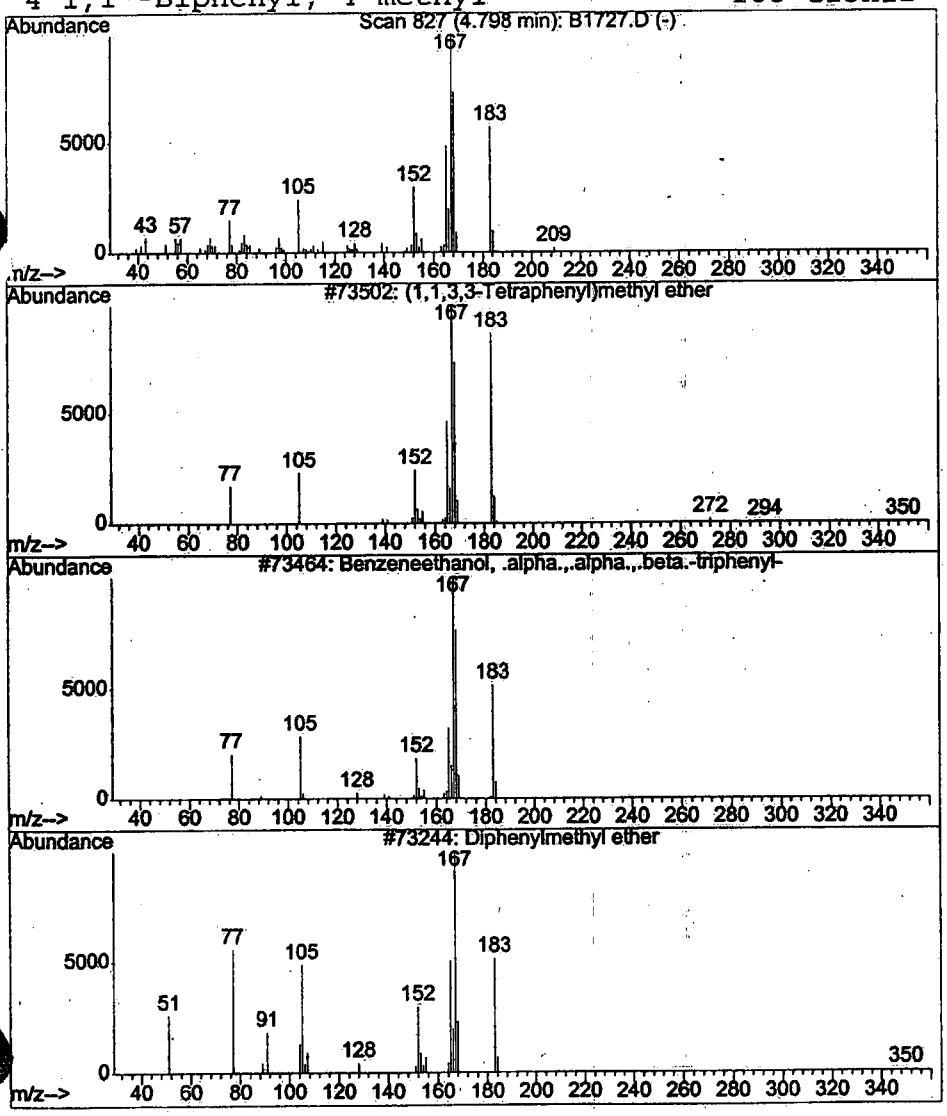
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

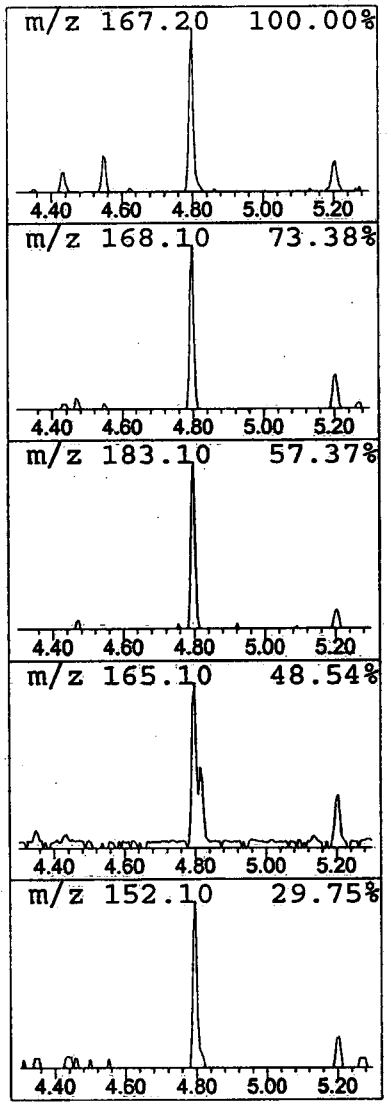
****

Peak Number 6 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.80	8.66 UG	70377	Chrysene-d12	4.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(1,1,3,3-Tetraphenyl)methyl ether	350	C26H22O	1000130-50-6	91
2	Benzeneethanol, .alpha.,.alpha.,...	350	C26H22O	000981-24-8	64
3	Diphenylmethyl ether	350	C26H22O	1000129-36-6	59
4	1,1'-Biphenyl, 4-methyl-	168	C13H12	000644-08-6	38





7008

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1727.D
Acq On : 3 Apr 2001 14:24
Sample : S-42,2006-012,S,10.52g,21.3,04/03/01
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1
Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00
3 Integration Params: LSCINT.P

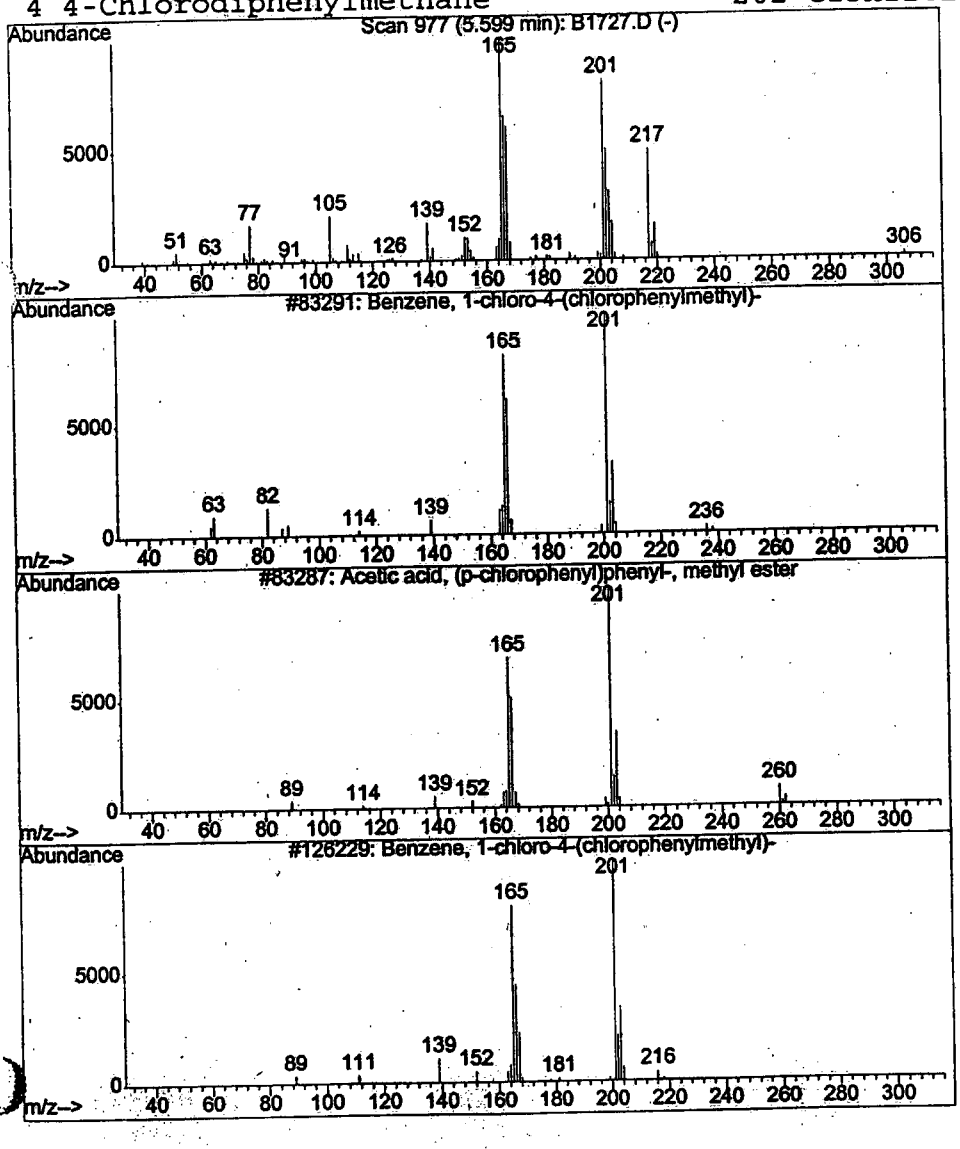
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

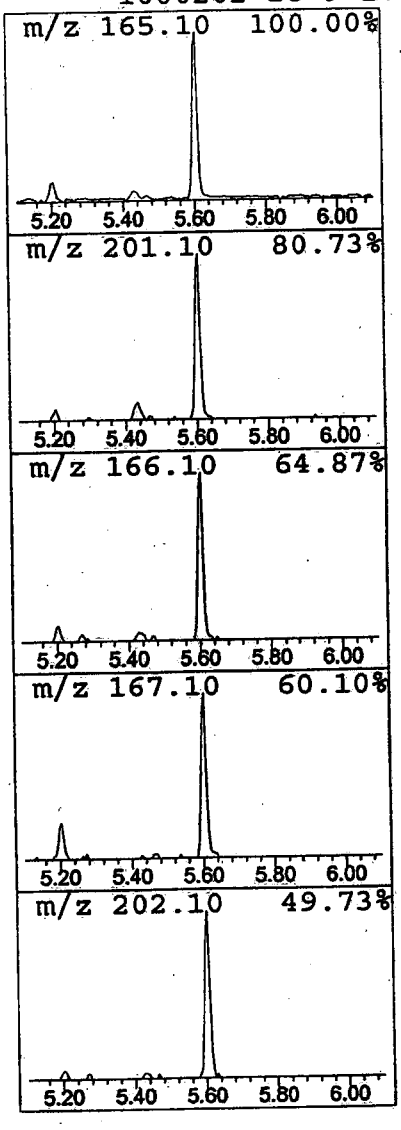
****

Peak Number 7 Substituted benzene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.60	9.08 UG	87653	Perylene-d12	5.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	38
2	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	38
3	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	35
4	4-Chlorodiphenylmethane	202	C13H11Cl	1000202-28-9	27





2009

000165

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1728.D Vial: 17
Acq On : 3 Apr 2001 14:38 Operator: JC
Sample : S-43,2006-013,S,10.64g,18.4,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 03 14:47:45 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	39014	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	147278	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	73677	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	126042	40.00	UG	-0.02
75) Chrysene-d12	4.47	240	113871	40.00	UG	-0.04
84) Perylene-d12	5.27	264	144168	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 36 - 93		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 40 - 101		Recovery = 0.00%#			
23) Nitrobenzene-d5	1.74	82	39068	36.56	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 73.12%			
43) 2-Fluorobiphenyl	2.48	172	87075	43.00	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 86.00%			
64) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 54 - 135		Recovery = 0.00%#			
77) Terphenyl-d14	4.01	244	122143	44.98	UG	-0.03
Spiked Amount 50.000	Range 58 - 147		Recovery = 89.96%			
Target Compounds						Qvalue
69) Phenanthrene	3.34	178	1709	0.66	UG	# 89
83) bis(2-Ethylhexyl)phthalate	4.55	149	2192	1.13	UG	97

(#) = qualifier out of range (m) = manual integration

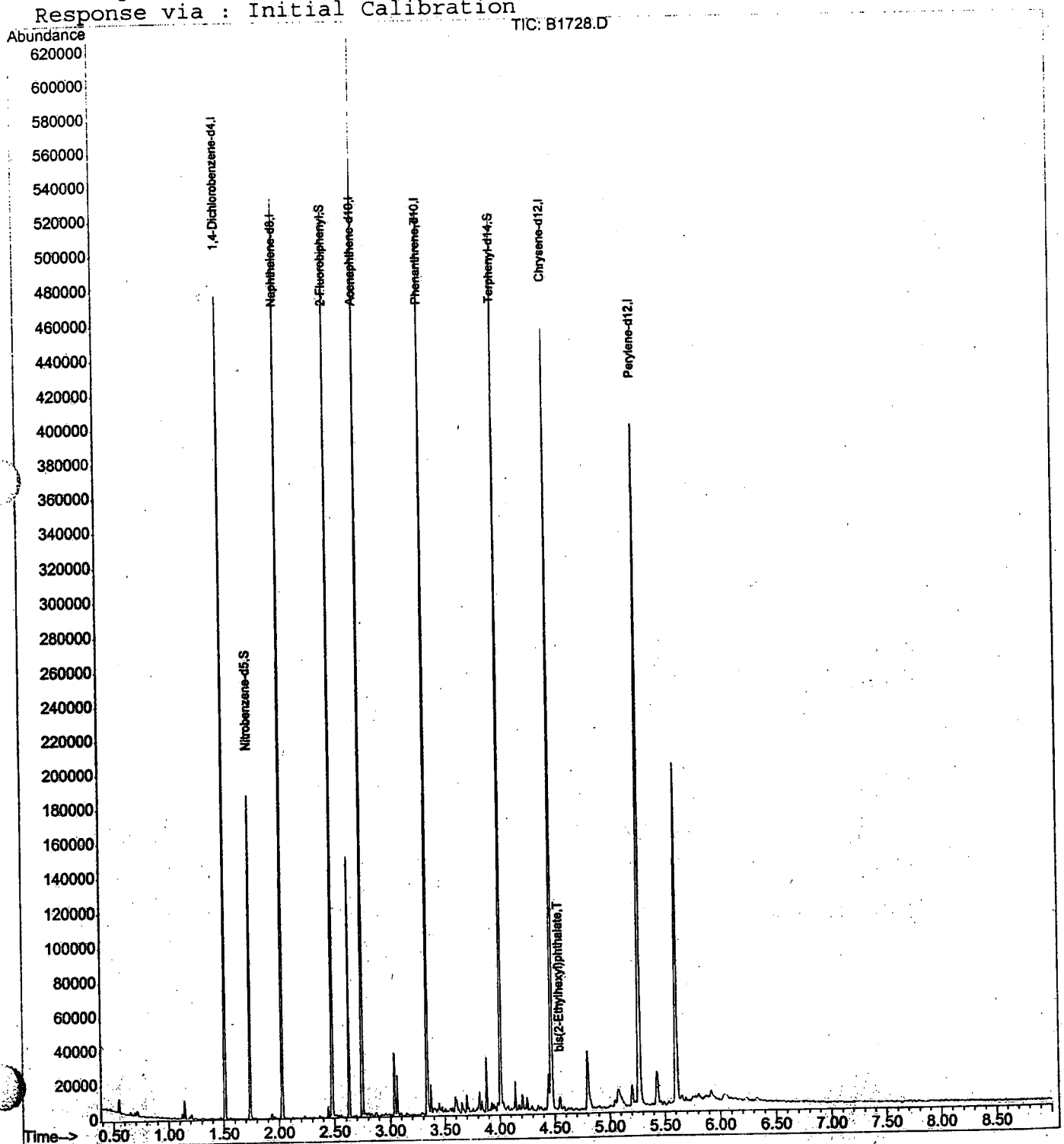
Zero

000167

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1728.D Vial: 17
Acq On : 3 Apr 2001 14:38 Operator: JC
Sample : S-43,2006-013,S,10.64g,18.4,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 4 15:48 2001 Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



000168

2011

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1728.D
Acq On : 3 Apr 2001 14:38
Sample : S-43,2006-013,S,10.64g,18.4,04/03/01
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1
Integration Params: LSCINT.P

Vial: 17
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.512	209	212	215	rVB	476250	218989	60.39%	7.458%
2	1.742	252	255	257	rBV	187430	111859	30.85%	3.809%
3	2.031	306	309	311	rBV	532819	283781	78.26%	9.664%
4	2.479	391	393	396	rVB	523216	238734	65.84%	8.130%
5	2.629	419	421	424	rBV	151066	70333	19.40%	2.395%
6	2.746	440	443	446	rBV	632192	302795	83.50%	10.312%
[redacted]	3.035	495	497	500	rBV	37183	23120	6.38%	0.787%
[redacted]	3.062	500	502	504	rVV	22525	10819	2.98%	0.368%
[redacted]	3.339	551	554	556	rBV	524124	296344	81.72%	10.092%
10	3.371	558	560	563	rVB	16701	8515	2.35%	0.290%
11	3.596	600	602	606	rBV3	8756	10501	2.90%	0.358%
12	3.655	611	613	619	rBV6	6658	6046	1.67%	0.206%
13	3.697	619	621	623	rBV	10794	7680	2.12%	0.262%
14	3.815	640	643	645	rVB	10831	6817	1.88%	0.232%
15	3.879	652	655	657	rBV	32732	17853	4.92%	0.608%
16	4.007	676	679	682	rBV	517205	303202	83.62%	10.326%
17	4.141	701	704	707	rVB	16958	9389	2.59%	0.320%
18	4.205	714	716	719	rBV2	9056	7271	2.01%	0.248%
19	4.445	757	761	763	rBV	20775	18970	5.23%	0.646%
20	4.472	763	766	769	rVB	446753	299074	82.48%	10.185%
21	4.547	776	780	784	rBV2	7577	6406	1.77%	0.218%
22	4.798	823	827	835	rBV2	33851	40967	11.30%	1.395%
23	5.076	876	879	893	rVB2	10343	25980	7.16%	0.885%
24	5.204	899	903	907	rBV3	12623	14569	4.02%	0.496%
25	5.268	910	915	922	rVB	394850	362612	100.00%	12.349%
26	5.428	941	945	949	rBV	19460	25246	6.96%	0.860%
27	5.604	973	978	984	rBV	197419	192244	53.02%	6.547%
28	5.914	1034	1036	1045	rVB5	5516	9401	2.59%	0.320%
[redacted]	6.032	1054	1058	1062	rBV6	3328	6910	1.91%	0.235%

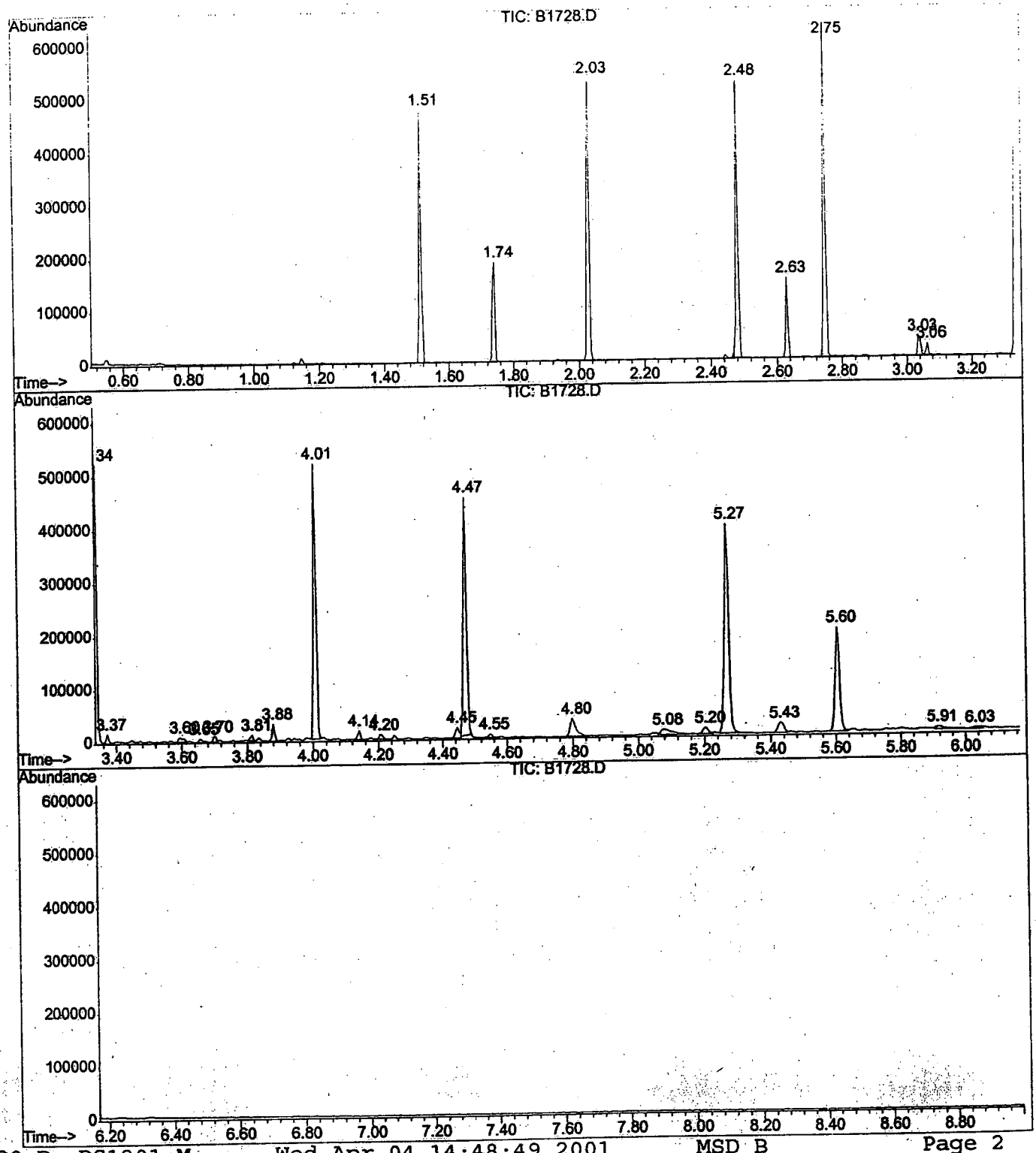
Sum of corrected areas: 2936427

000169

2012

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-03-01\B1728.D
Operator : JC
Acquired : 3 Apr 2001 14:38 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-43,2006-013,S,10.64g,18.4,04/03/01
Misc Info : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1
Vial Number: 17
Quant File :BS1201.RES (RTE Integrator)



2013

000170

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1728.D Vial: 17
Acq On : 3 Apr 2001 14:38 Operator: JC
Sample : S-43,2006-013,S,10.64g,18.4,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
LS Integration Params: LSCINT.P

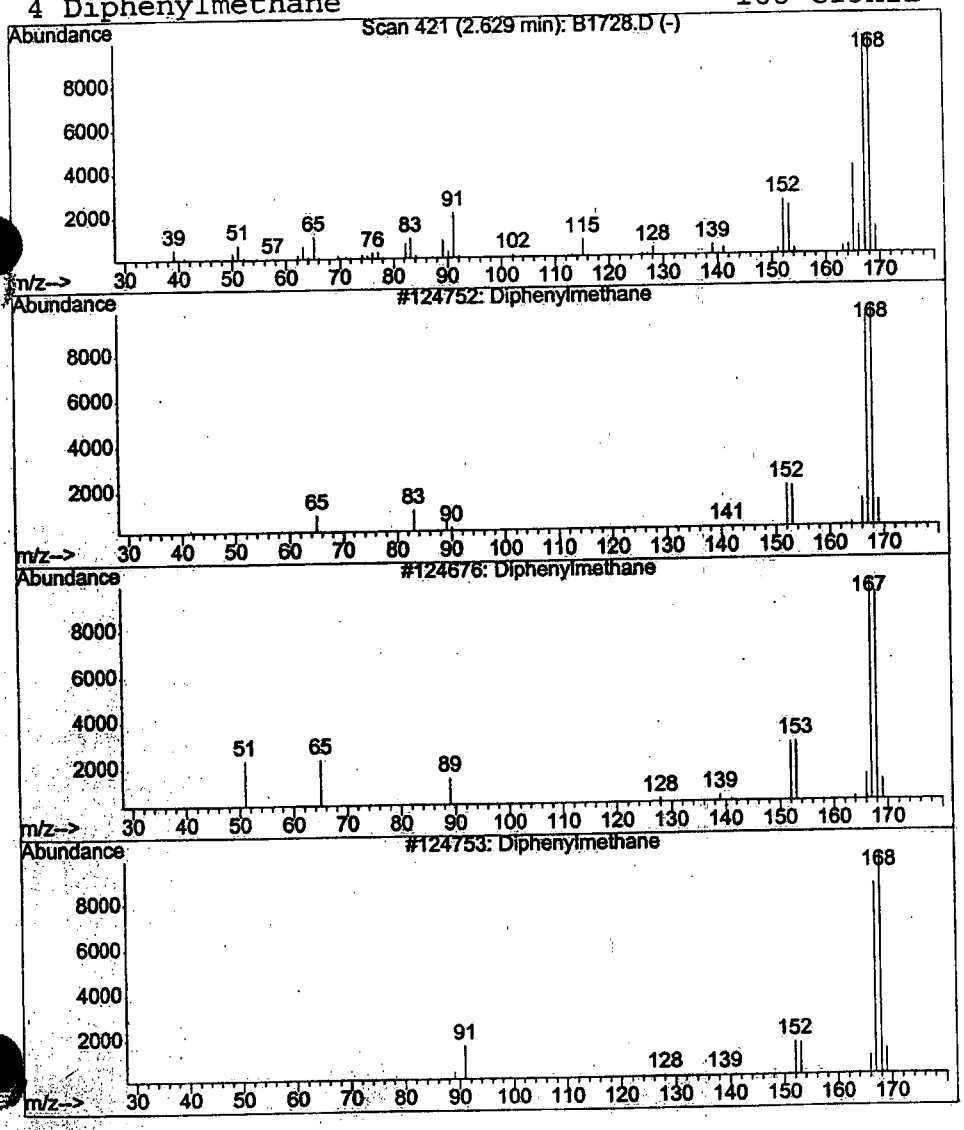
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

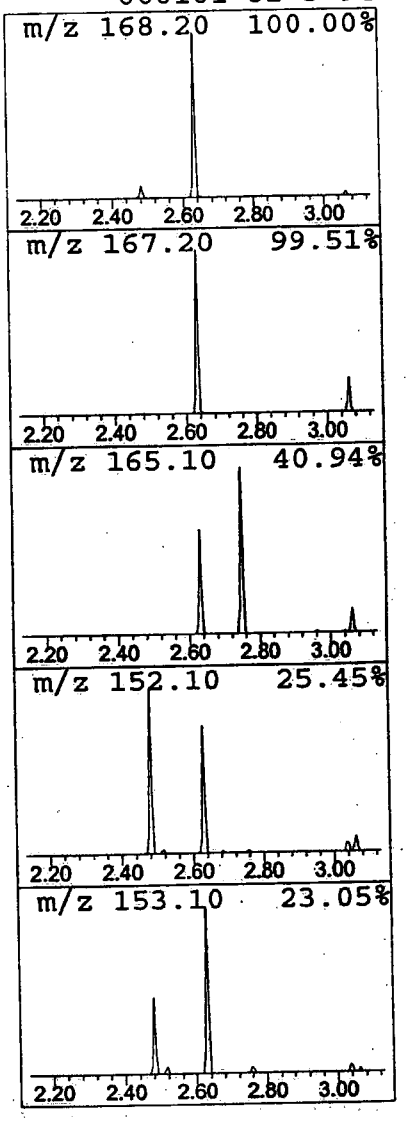
****

Peak Number 1 Diphenylmethane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.63	9.29 UG	70333	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diphenylmethane	168	C13H12	000101-81-5	97
2	Diphenylmethane	168	C13H12	000101-81-5	95
3	Diphenylmethane	168	C13H12	000101-81-5	95
4	Diphenylmethane	168	C13H12	000101-81-5	94





7014

000171

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1728.D
Acq On : 3 Apr 2001 14:38
Sample : S-43,2006-013,S,10.64g,18.4,04/03/01
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1
S Integration Params: LSCINT.P

Vial: 17
Operator: JC
Inst : MSD_B
Multiplr: 1.00

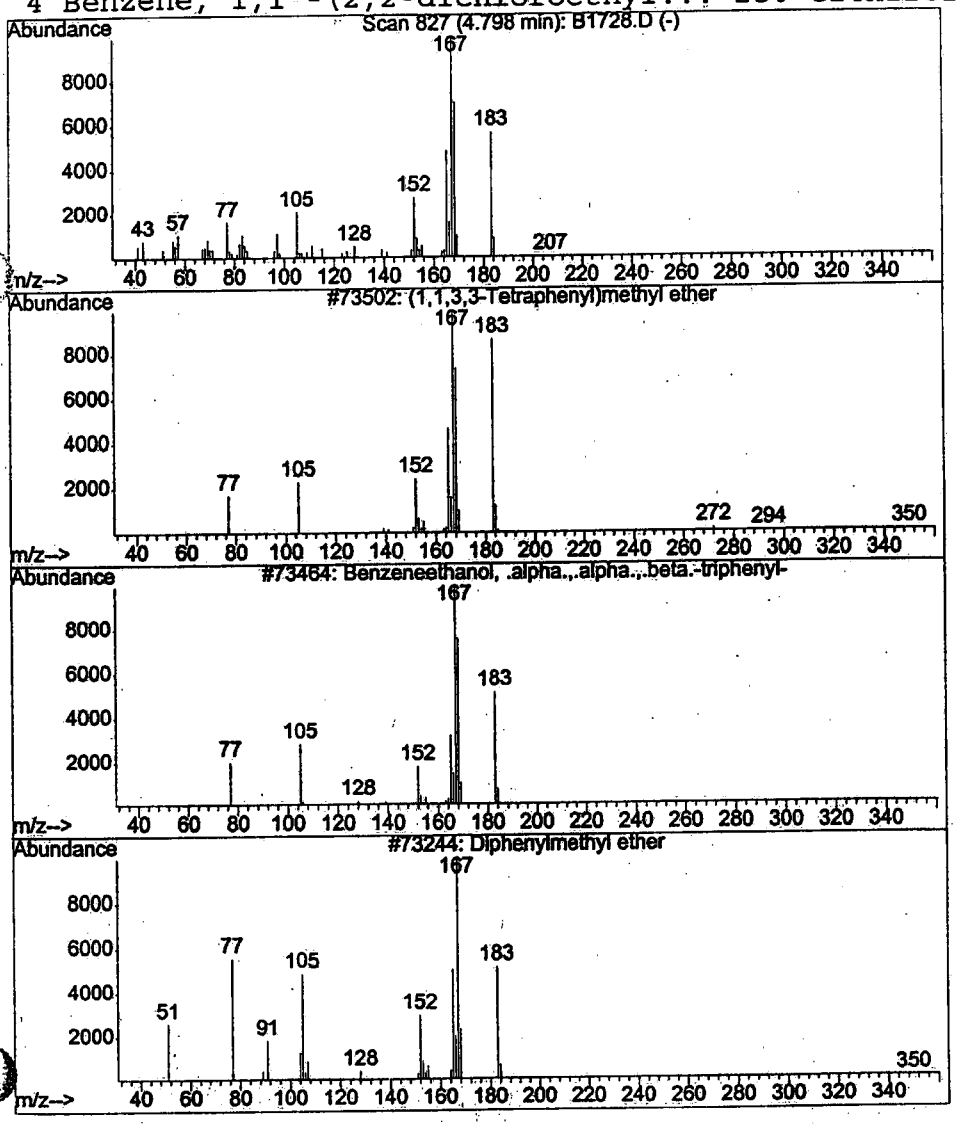
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

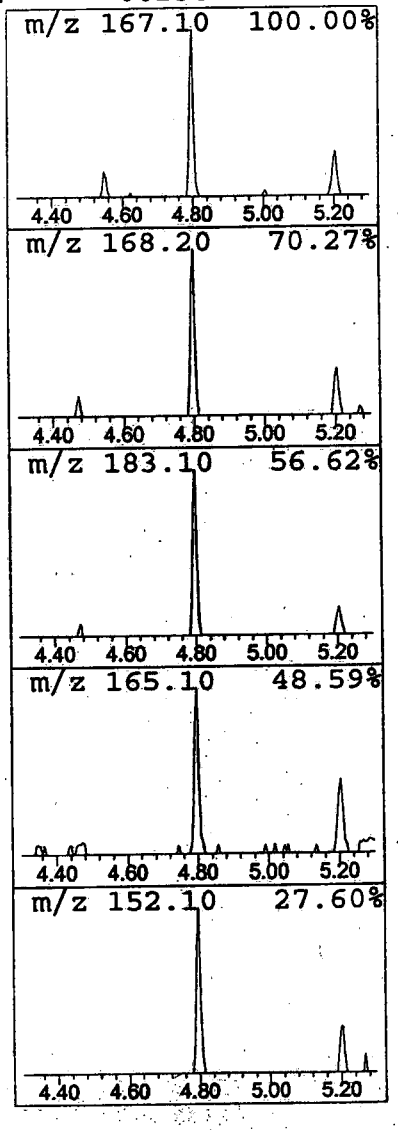
****

Peak Number 2 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.80	5.48 UG	40967	Chrysene-d12	4.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(1,1,3,3-Tetraphenyl)methyl ether	350	C26H22O	1000130-50-6	91
2	Benzeneethanol, .alpha.,.alpha.,...	350	C26H22O	000981-24-8	80
3	Diphenylmethyl ether	350	C26H22O	1000129-36-6	64
4	Benzene, 1,1'-(2,2-dichloroethyl...	250	C14H12Cl2	002387-16-8	47





2015

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1728.D Vial: 17
Acq On : 3 Apr 2001 14:38 Operator: JC
Sample : S-43,2006-013,S,10.64g,18.4,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
3 Integration Params: LSCINT.P

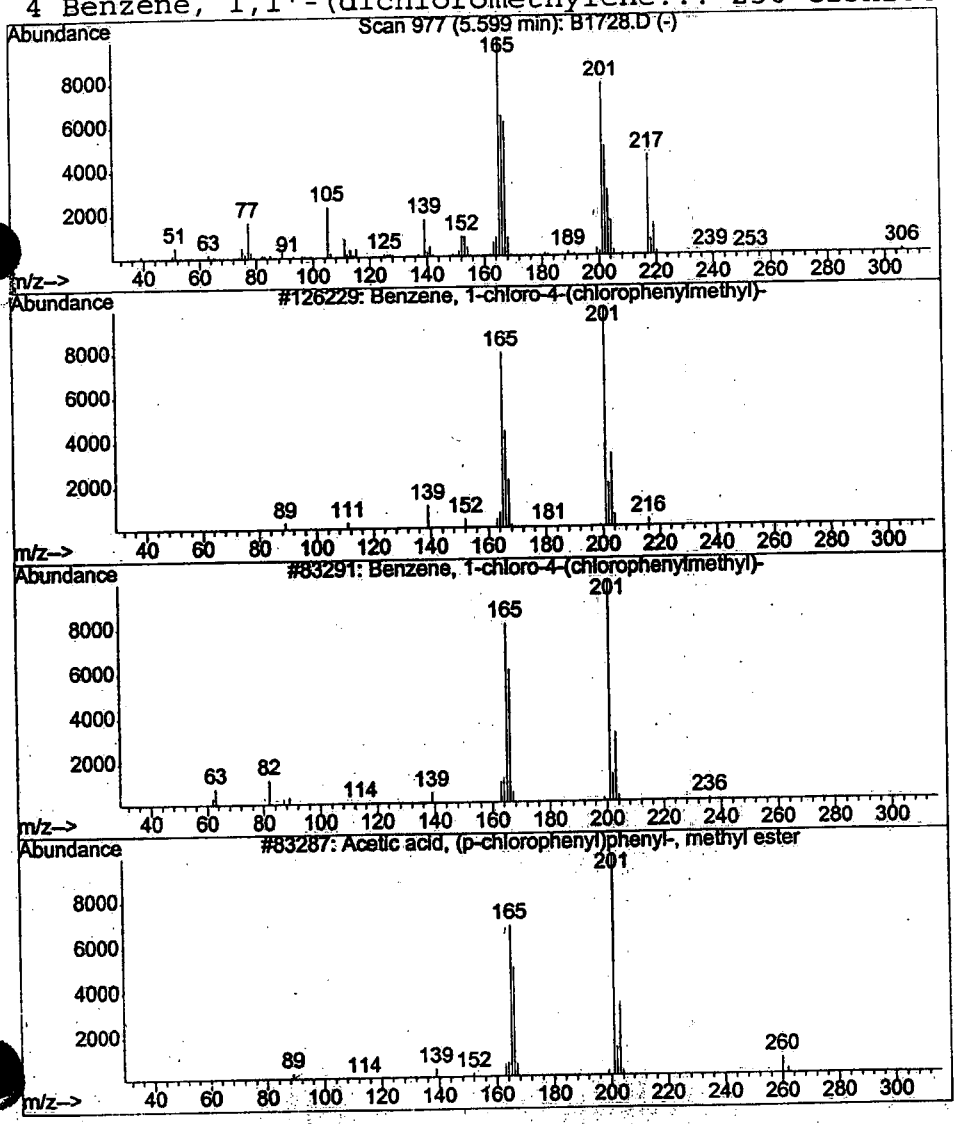
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

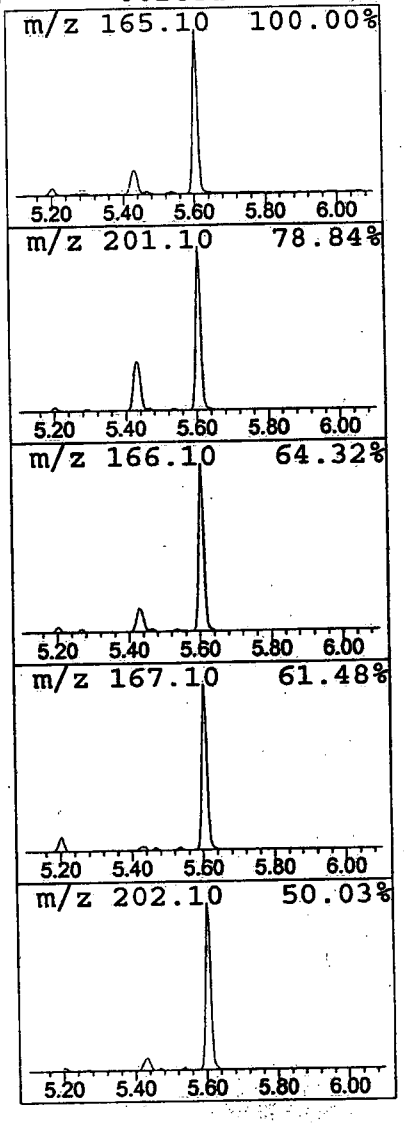
****

Peak Number 3 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.60	21.21 UG	192244	Perylene-d12	5.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	42
2	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	40
3	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	37
4	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	25





000173

2016

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1729.D Vial: 18
Acq On : 3 Apr 2001 14:53 Operator: JC
Sample : S-44,2006-014,S,10.55g,19.4,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: Apr 03 15:02:10 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	39329	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	145879	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	73093	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	118627	40.00	UG	-0.02
75) Chrysene-d12	4.47	240	109866	40.00	UG	-0.05
84) Perylene-d12	5.27	264	143596	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 36 - 93		Recovery =	0.00%#		
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 40 - 101		Recovery =	0.00%#		
23) Nitrobenzene-d5	1.74	82	39752	37.55	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery =	75.10%		
43) 2-Fluorobiphenyl	2.48	172	93402	46.50	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery =	93.00%		
64) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 54 - 135		Recovery =	0.00%#		
77) Terphenyl-d14	4.01	244	119072	45.45	UG	-0.03
Spiked Amount 50.000	Range 58 - 147		Recovery =	90.90%		
Target Compounds						Qvalue
69) Phenanthrene	3.33	178	2613	1.07	UG	# 84
79) Butylbenzylphthalate	4.20	149	2566	1.91	UG	# 40
83) bis(2-Ethylhexyl)phthalate	4.55	149	24892	13.31	UG	# 94

(#) = qualifier out of range (m) = manual integration

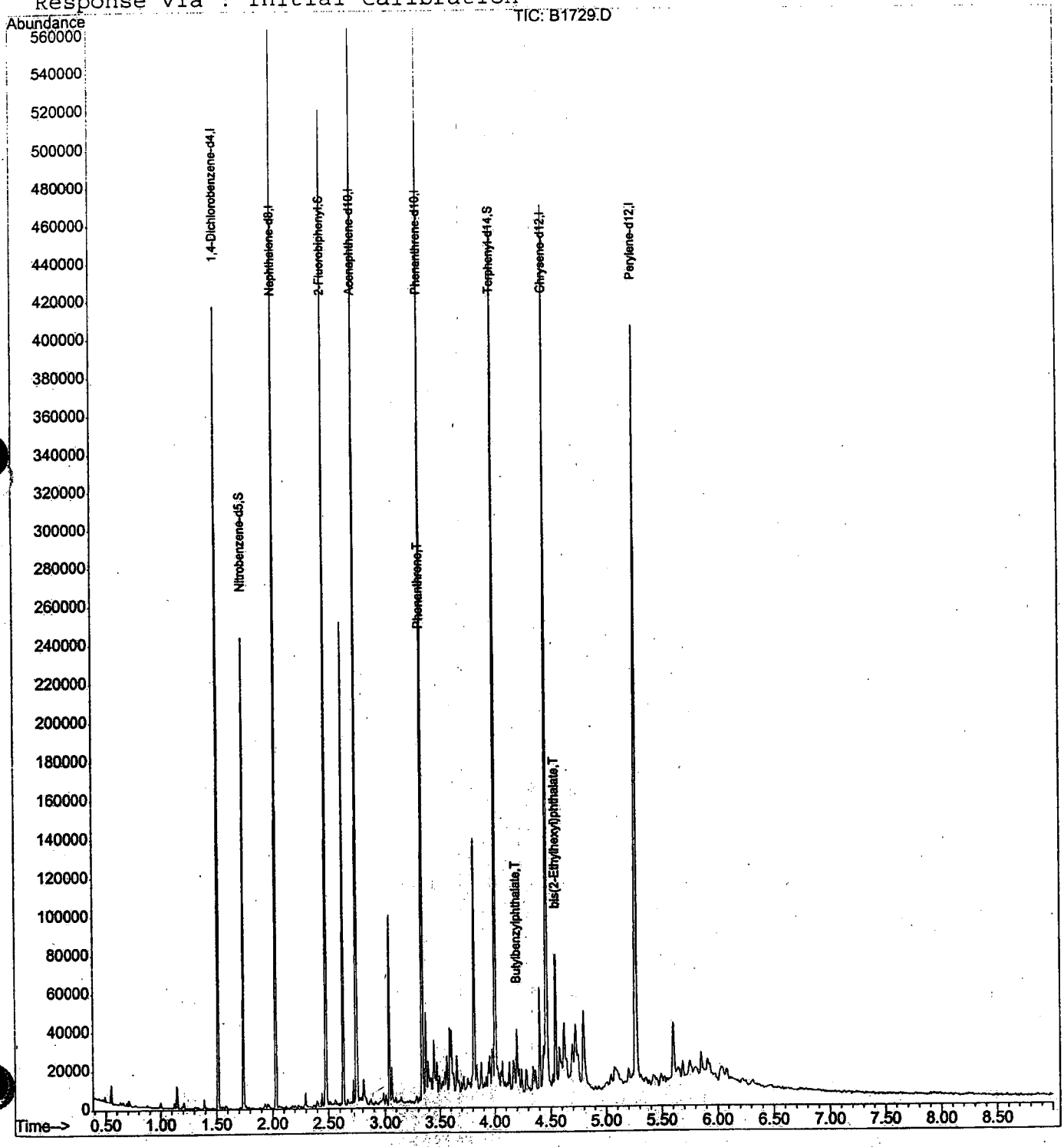
000174

2017

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1729.D Vial: 18
Acq On : 3 Apr 2001 14:53 Operator: JC
Sample : S-44,2006-014,S,10.55g,19.4,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 5 6:30 2001 Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



000175

2018

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1729.D
Acq On : 3 Apr 2001 14:53
Sample : S-44,2006-014,S,10.55g,19.4,04/03/01
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1
LS Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.144	141	143	146	rVB	11690	6798	1.89%	0.196%
2	1.512	210	212	215	rVB	417090	216472	60.18%	6.232%
3	1.742	252	255	257	rBV	243613	113795	31.63%	3.276%
4	2.030	306	309	311	rBV	634285	282005	78.39%	8.118%
5	2.479	391	393	396	rVB	517568	254539	70.76%	7.327%
6	2.629	419	421	424	rBV	249736	125293	34.83%	3.607%
7	2.746	440	443	447	rBV	647006	312170	86.78%	8.986%
8	2.810	453	455	457	rBV	11084	6719	1.87%	0.193%
9	3.040	495	498	500	rBV	99295	63449	17.64%	1.827%
10	3.062	500	502	506	rVB2	18787	12685	3.53%	0.365%
11	3.339	551	554	557	rBV	593511	303038	84.24%	8.724%
12	3.371	557	560	563	rVV	44593	29716	8.26%	0.855%
13	3.393	563	564	567	rVV3	17989	14949	4.16%	0.430%
14	3.446	571	574	577	rVV	27734	23519	6.54%	0.677%
15	3.473	577	579	581	rVB	15904	8908	2.48%	0.256%
16	3.494	581	583	586	rBV2	8928	7426	2.06%	0.214%
17	3.564	594	596	598	rVB3	18454	12120	3.37%	0.349%
18	3.590	598	601	603	rBV	32897	27294	7.59%	0.786%
19	3.606	603	604	606	rVV2	29832	17124	4.76%	0.493%
20	3.655	610	613	615	rBV	18650	12249	3.41%	0.353%
21	3.815	637	643	645	rBV	129614	91672	25.48%	2.639%
22	3.836	645	647	651	rVB4	12891	9985	2.78%	0.287%
23	3.879	652	655	658	rVB2	13591	9550	2.65%	0.275%
24	3.943	665	667	668	rBV2	13293	8930	2.48%	0.257%
25	3.954	668	669	671	rVV	15960	7835	2.18%	0.226%
26	3.975	671	673	676	rVV2	18726	19988	5.56%	0.575%
27	4.002	676	678	681	rVV	445979	313517	87.15%	9.025%
28	4.023	681	682	687	rVB4	10816	10172	2.83%	0.293%
29	4.061	687	689	690	rBV	8487	6809	1.89%	0.196%
30	4.135	700	703	705	rVB2	14821	11289	3.14%	0.325%
31	4.167	707	709	713	rVV2	15675	17402	4.84%	0.501%

7019

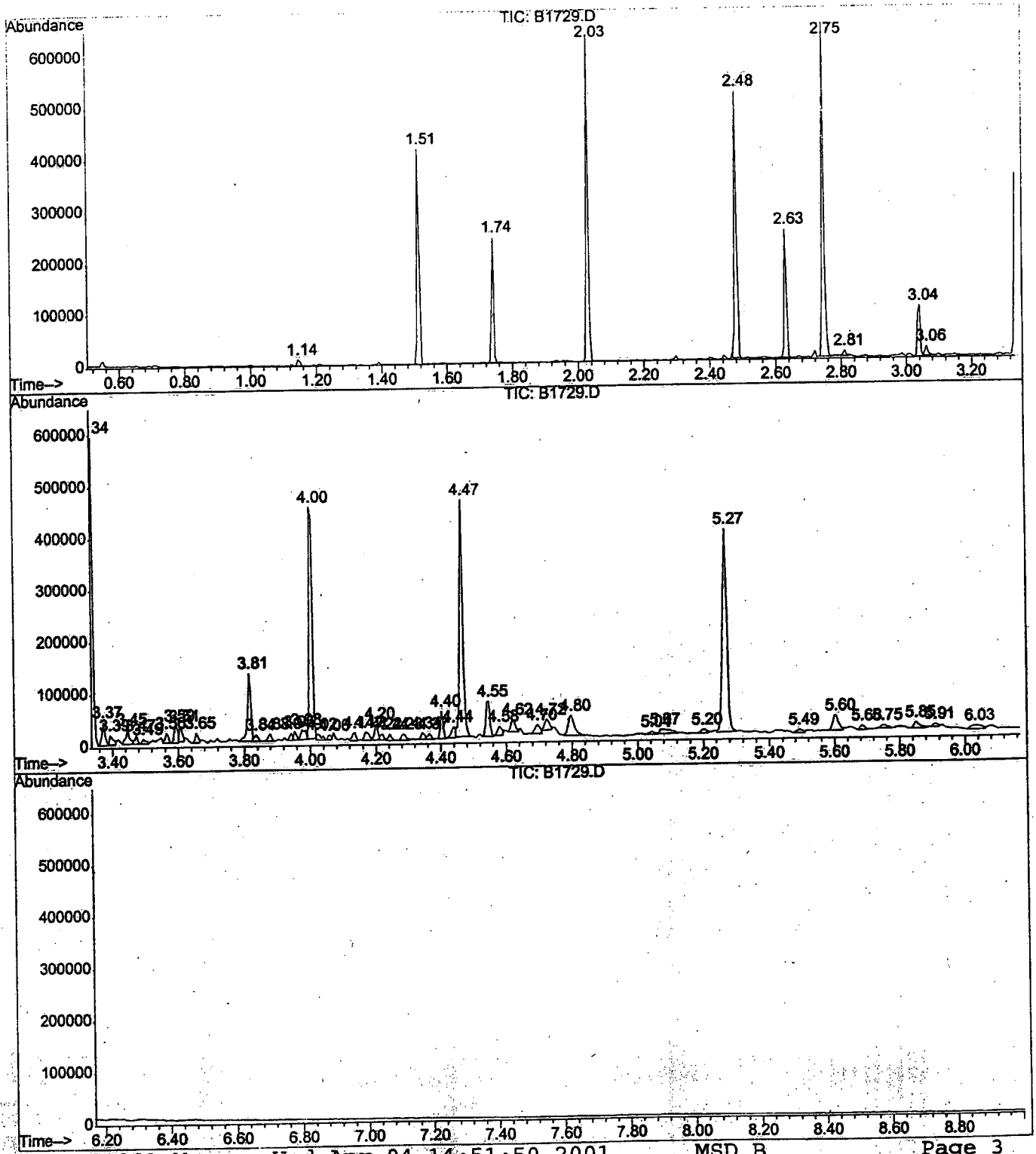
000176

32	4.199	713	715	717	rVV	31596	21553	5.99%	0.620%
33	4.221	717	719	721	rVV	11171	7775	2.16%	0.224%
34	4.242	721	723	726	rVB	12396	8214	2.28%	0.236%
	4.285	728	731	735	rBV3	11813	12312	3.42%	0.354%
	4.344	740	742	744	rBV2	12167	10037	2.79%	0.289%
	4.365	744	746	749	rVB2	10058	6962	1.94%	0.200%
38	4.402	751	753	756	rBV	52510	30701	8.53%	0.884%
39	4.440	756	760	761	rBV2	21536	20507	5.70%	0.590%
40	4.467	761	765	769	rVB	456386	312704	86.93%	9.002%
41	4.547	776	780	783	rBV	66849	56321	15.66%	1.621%
42	4.579	783	786	788	rBV	17394	16036	4.46%	0.462%
43	4.621	791	794	797	rBV	23919	23097	6.42%	0.665%
44	4.696	804	808	810	rBV	16932	18896	5.25%	0.544%
45	4.723	810	813	816	rVV	20540	22911	6.37%	0.660%
46	4.798	823	827	835	rVB2	38550	49862	13.86%	1.435%
47	5.043	869	873	876	rBV	5684	6404	1.78%	0.184%
48	5.070	876	878	888	rVV3	8213	19171	5.33%	0.552%
49	5.198	899	902	905	rBV3	7642	8733	2.43%	0.251%
50	5.268	910	915	921	rVB	391590	359726	100.00%	10.355%
51	5.492	953	957	960	rBV5	6812	9288	2.58%	0.267%
52	5.604	973	978	982	rBV2	29340	37367	10.39%	1.076%
53	5.685	990	993	996	rBV3	8981	8559	2.38%	0.246%
54	5.749	1002	1005	1010	rVB7	6410	8842	2.46%	0.255%
55	5.850	1021	1024	1030	rBV2	11891	14491	4.03%	0.417%
56	5.909	1032	1035	1037	rBV3	6484	6790	1.89%	0.195%
	6.032	1053	1058	1064	rBV9	7648	19115	5.31%	0.550%

Sum of corrected areas: 3473791

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-03-01\B1729.D
Operator : JC
Acquired : 3 Apr 2001 14:53 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-44,2006-014,S,10.55g,19.4,04/03/01
Misc Info : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1
Vial Number: 18
Quant File :BS1201.RES (RTE Integrator)



7021

000178

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1729.D Vial: 18
Acq On : 3 Apr 2001 14:53 Operator: JC
Sample : S-44,2006-014,S,10.55g,19.4,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

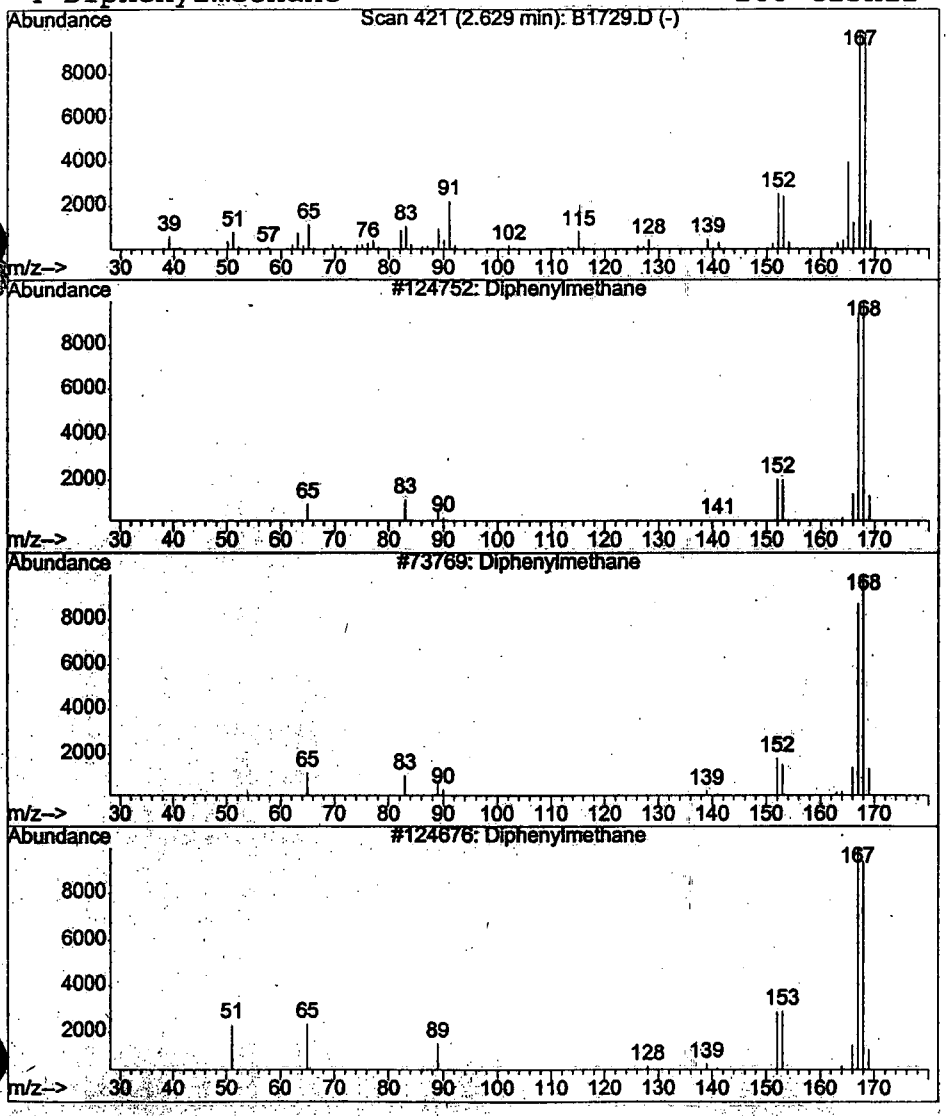
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

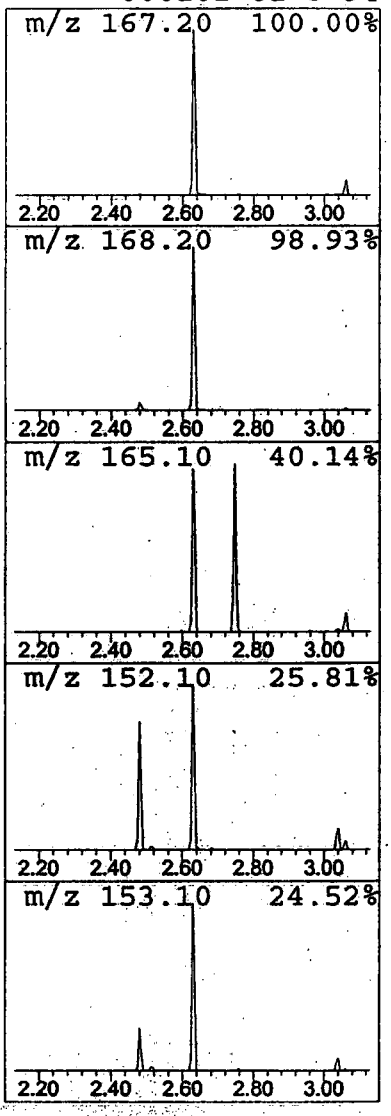
****

Peak Number 1 Diphenylmethane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.63	16.05 UG	125293	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diphenylmethane	168	C13H12	000101-81-5	97
2	Diphenylmethane	168	C13H12	000101-81-5	95
3	Diphenylmethane	168	C13H12	000101-81-5	95
4	Diphenylmethane	168	C13H12	000101-81-5	94





2022

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1729.D
Acq On : 3 Apr 2001 14:53
Sample : S-44,2006-014,S,10.55g,19.4,04/03/01
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1
IS Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

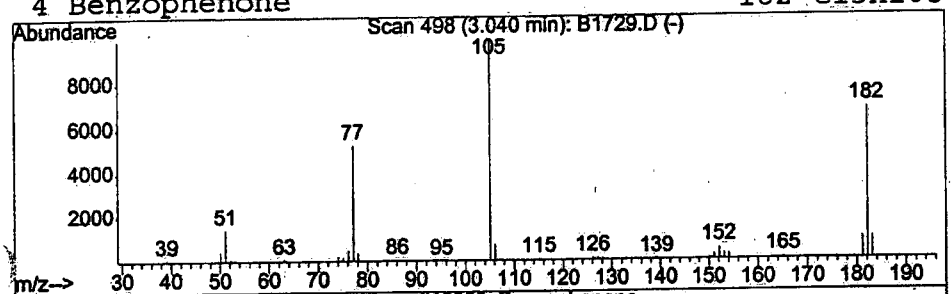
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

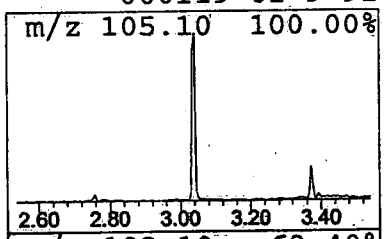
****

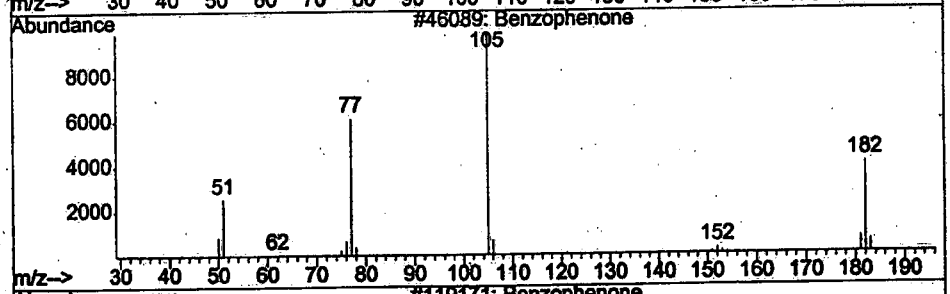
Peak Number 2 Benzophenone — Concentration Rank 3

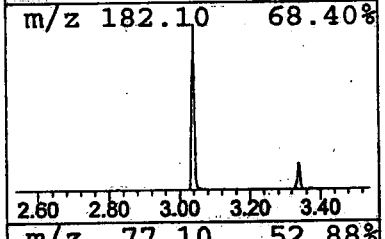
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.04	8.13 UG	63449	Acenaphthene-d10	2.75

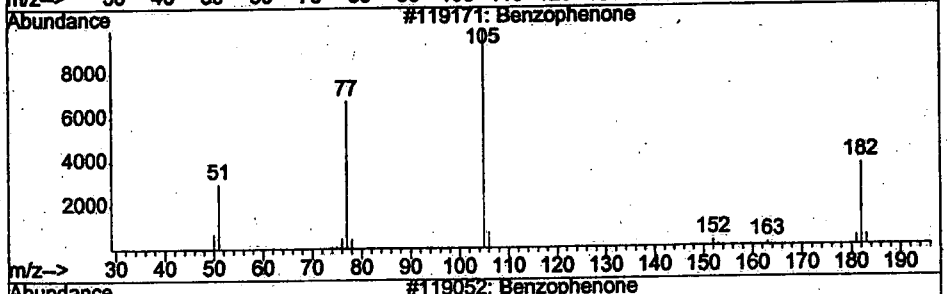
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	95
2	Benzophenone	182	C13H10O	000119-61-9	95
3	Benzophenone	182	C13H10O	000119-61-9	91
4	Benzophenone	182	C13H10O	000119-61-9	91

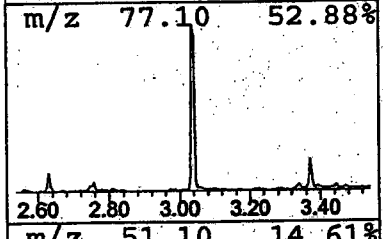


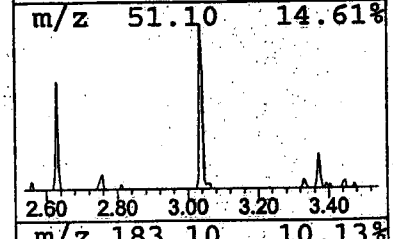


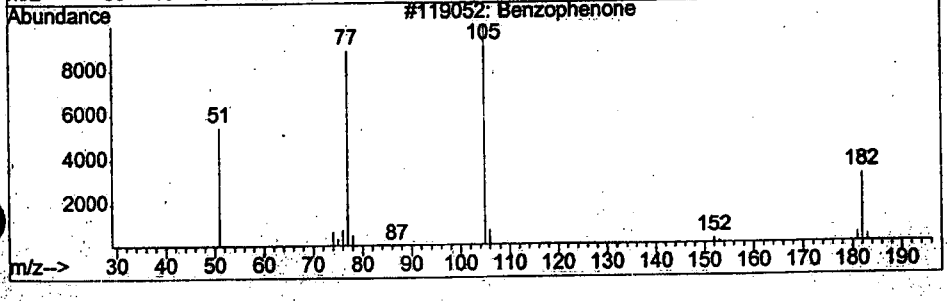


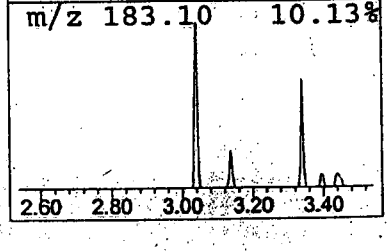












000130

7073

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1729.D
Acq On : 3 Apr 2001 14:53
Sample : S-44,2006-014,S,10.55g,19.4,04/03/01
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1
S Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

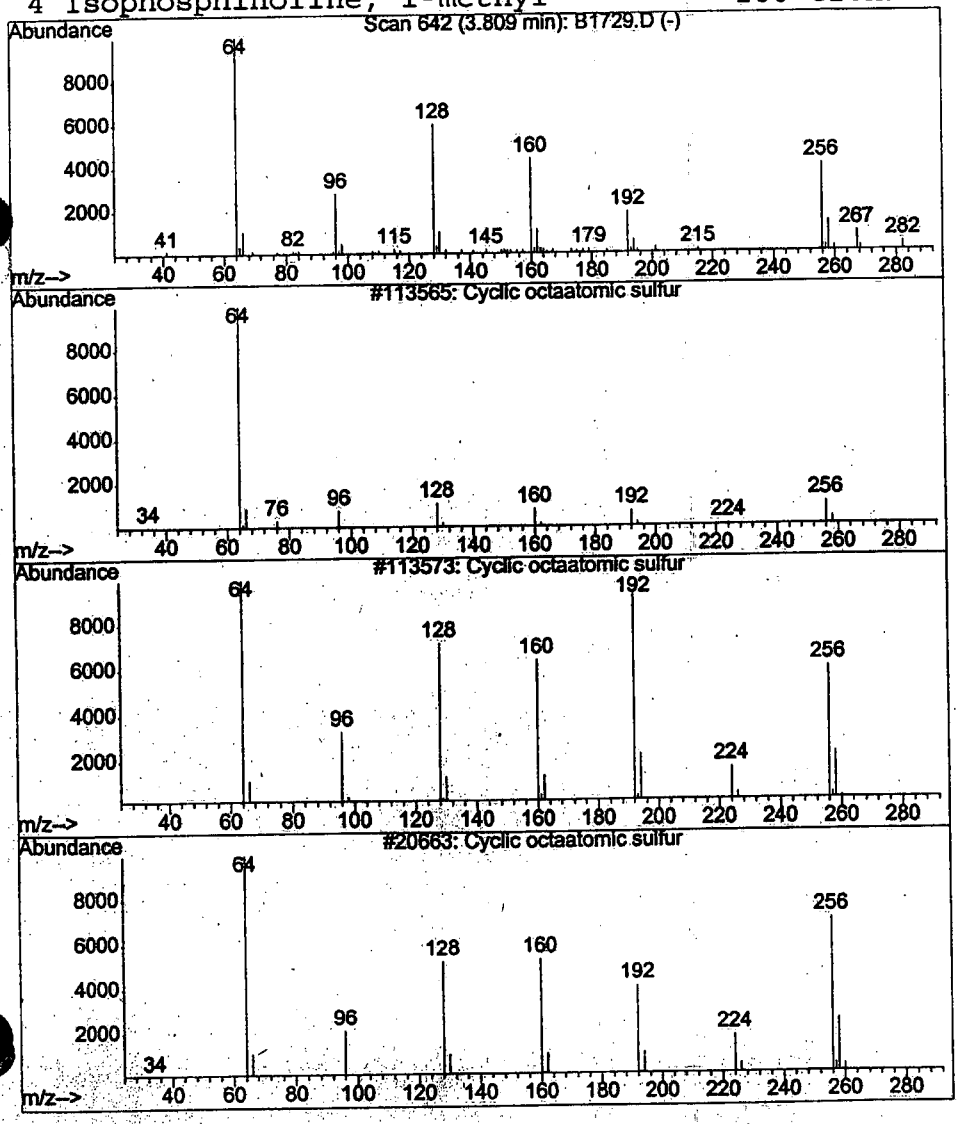
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

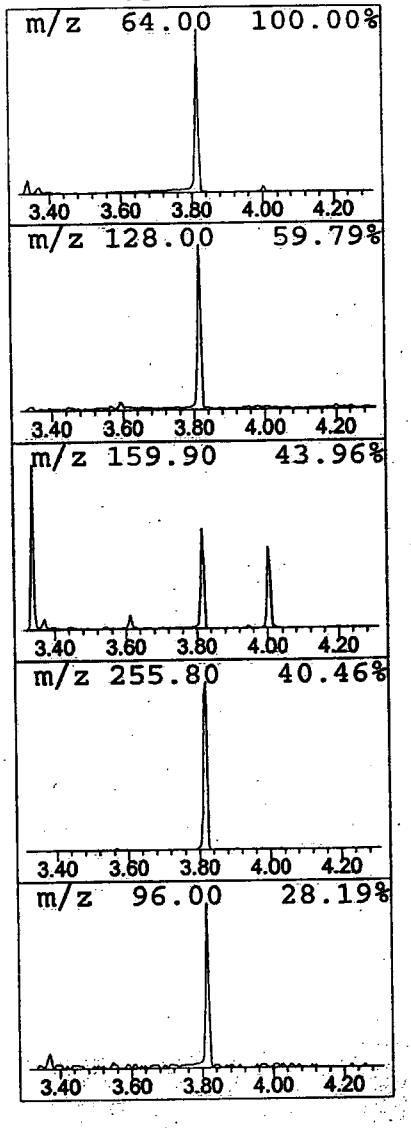
****

Peak Number 3 Cyclic octaatomic sulfur Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.81	12.10 UG	91672	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclic octaatomic sulfur	256	S8	010544-50-0	91
2	Cyclic octaatomic sulfur	256	S8	010544-50-0	87
3	Cyclic octaatomic sulfur	256	S8	010544-50-0	87
4	Isophosphinoline, 1-methyl-	160	C10H9P	057328-60-6	5





7074

00019

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1729.D Vial: 18
Acq On : 3 Apr 2001 14:53 Operator: JC
Sample : S-44,2006-014,S,10.55g,19.4,04/03/01 Inst : MSD_B
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1 Multiplr: 1.00
'S Integration Params: LSCINT.P

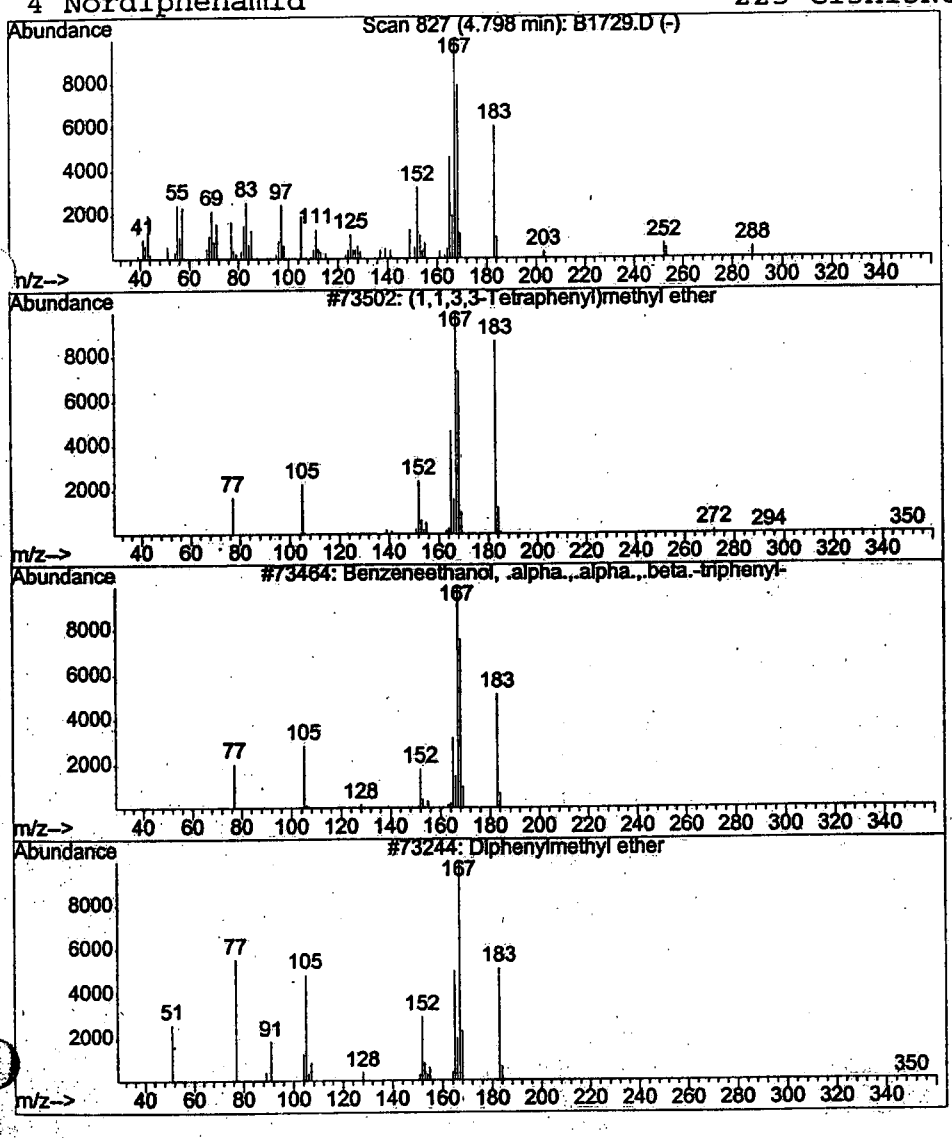
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

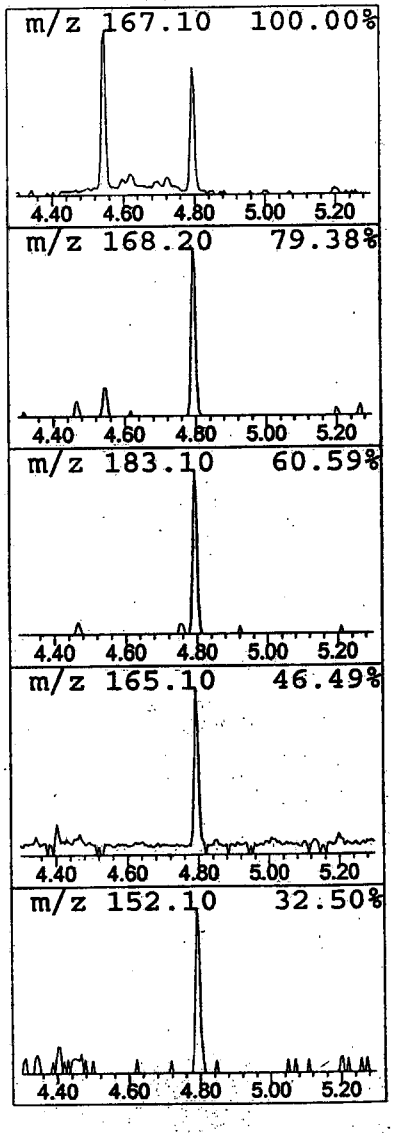
****

Peak Number 4 Substituted benzene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.80	6.38 UG	49862	Chrysene-d12	4.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(1,1,3,3-Tetraphenyl)methyl ether	350	C26H22O	1000130-50-6	86
2	Benzeneethanol, .alpha.,.alpha.,...	350	C26H22O	000981-24-8	64
3	Diphenylmethyl ether	350	C26H22O	1000129-36-6	58
4	Nordiphenamid	225	C15H15NO	000954-21-2	53





000182

2025

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1729.D
Acq On : 3 Apr 2001 14:53
Sample : S-44,2006-014,S,10.55g,19.4,04/03/01
Misc : ENVTACT/ORBIS-NEWARK,03/29/01,04/02/01,1
LS Integration Params: LSCINT.P

Vial: 18
Operator: JC
Inst : MSD_B
Multiplr: 1.00

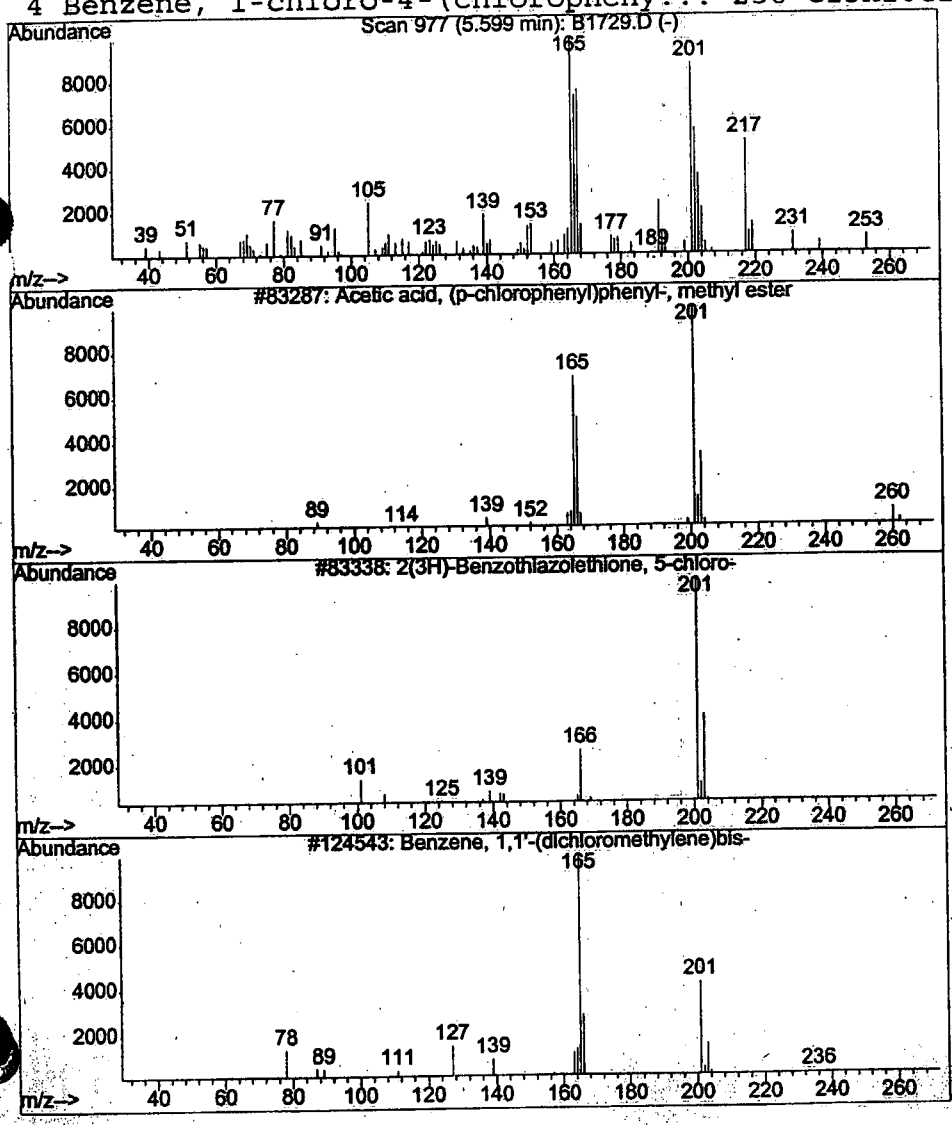
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

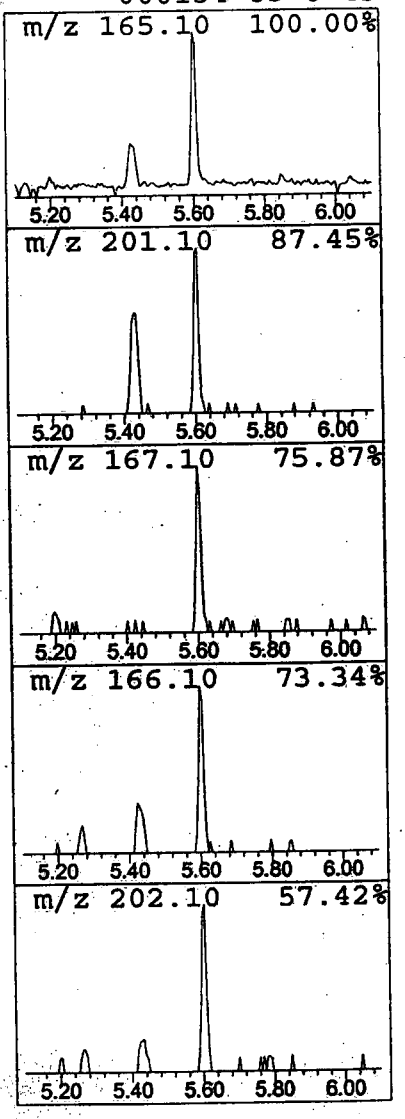
****

Peak Number 5 Unknown — Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.60	4.16 UG	37367	Perylene-d12	5.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	50
2	2(3H)-Benzothiazolethione, 5-chl...	201	C7H4ClNS2	005331-91-9	45
3	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	43
4	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	43





Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1712.D Vial: 1
Acq On : 3 Apr 2001 10:03 Operator: JC
Sample : .,Method-Blank,S,30.0g,0.0,04/03/01 Inst : MSD_B
Misc : N/A,N/A,N/A,1 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: Apr 03 10:12:47 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	39333	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	150574	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	75510	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	121084	40.00	UG	-0.02
75) Chrysene-d12	4.47	240	104243	40.00	UG	-0.04
84) Perylene-d12	5.27	264	137664	40.00	UG	-0.03
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	71264	62.98	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 62.98%			
6) Phenol-d5	1.39	99	99064	71.52	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 71.52%			
23) Nitrobenzene-d5	1.74	82	38120	34.89	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 69.78%			
43) 2-Fluorobiphenyl	2.48	172	85406	41.16	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 82.32%			
64) 2,4,6-Tribromophenol	3.07	330	35956	89.18	UG	-0.02
Spiked Amount 100.000	Range 54 - 135		Recovery = 89.18%			
77) Terphenyl-d14	4.01	244	98037	39.44	UG	-0.02
Spiked Amount 50.000	Range 58 - 147		Recovery = 78.88%			

Target Compounds **Qvalue**

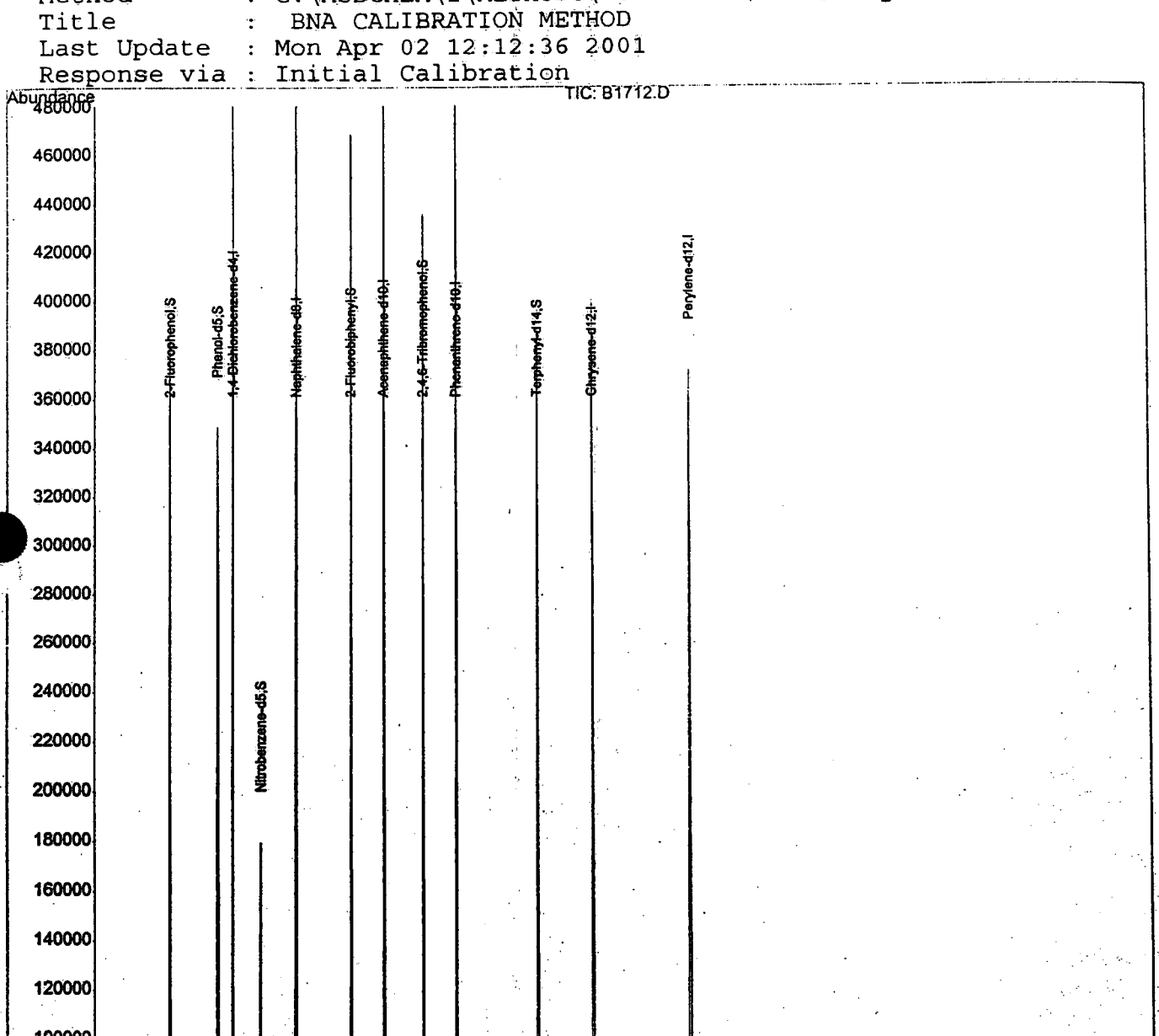
(#) = qualifier out of range (m) = manual integration

2027

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1712.D Vial: 1
Acq On : 3 Apr 2001 10:03 Operator: JC
Sample : .,Method-Blank,S,30.0g,0.0,04/03/01 Inst : MSD_B
Misc : N/A,N/A,N/A,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 3 12:52 2001 Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



8202

000185

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-03-01\B1712.D Vial: 1
Acq On : 3 Apr 2001 10:03 Operator: JC
Sample : .,Method-Blank,S,30.0g,0.0,04/03/01 Inst : MSD_B
Misc : N/A,N/A,N/A,1 Multiplr: 1.00
S Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

No Library Search Compounds Detected

****
B1712.D BS1201.M Tue Apr 03 12:01:20 2001 MSD_B

PCB METHOD BLANK SUMMARY

Lab File ID: R3810.D

Instrument ID: GC-R

Date Extracted: 03/30/2001

Matrix: SOIL

Date Analyzed: 04/02/2001

Time Analyzed: 14:17

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
4052-B1	2014-001	04/02/2001	14:43
4052-B2	2014-002	04/02/2001	15:09
4052-B3	2014-003	04/02/2001	15:36
4052-B4	2014-004	04/02/2001	16:02
4052-B5	2014-005	04/02/2001	16:28
4052-B6	2014-006	04/02/2001	16:54
4052-B7	2014-007	04/02/2001	17:21
4052-B8	2014-008	04/02/2001	17:47
4052-B9	2014-009	04/02/2001	18:13
4052-B10	2014-010	04/02/2001	18:39
4052-B11	2014-011	04/02/2001	19:05
4052-B12	2014-012	04/02/2001	19:32
S1	1951-001	04/02/2001	19:58
MILL/MIX_ROOM	1935-001	04/02/2001	20:24
CONPILE	1957-001	04/02/2001	20:50
T-5	2006-015	04/02/2001	21:43
T-6	2006-016	04/02/2001	22:09
PCB	2014-001-MS1	04/02/2001	22:35
PCB	2014-001-MSD1	04/02/2001	23:02
PCB	PBS0402-MS1	04/02/2001	23:28
1252-WC1	1959-001	04/03/2001	07:32

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0402-BLK1
Client ID: (1935..2014)
Date Received: NA
Date Extracted: 03/30/2001
Date Analyzed: 04/02/2001
Data file: R3810.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.668
Aroclor-1221	ND		0.668
Aroclor-1232	ND		0.668
Aroclor-1242	ND		0.668
Aroclor-1248	ND		0.668
Aroclor-1254	ND		0.668
Aroclor-1260	ND		0.668

7031

000188

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/07/2001

Instrument ID: GC-R

GC Column (1st): DB-5

Data File: R3330.D R3331.D R3332.D R3333.D R3334.D

Compound	RT OF STANDARDS 50	100	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	4.68	4.68	4.68	4.68	4.68	4.68	4.61	4.75
Aroclor-1016 {2}	5.61	5.61	5.61	5.61	5.61	5.61	5.54	5.68
Aroclor-1016 {3}	6.06	6.06	6.06	6.06	6.06	6.06	5.99	6.13
Aroclor-1016 {4}	7.82	7.82	7.82	7.81	7.81	7.81	7.74	7.88
Aroclor-1016 {5}	8.26	8.27	8.26	8.26	8.26	8.26	8.19	8.33
Aroclor-1221			2.97				2.90	3.04
Aroclor-1221 {2}			4.35				4.28	4.42
Aroclor-1221 {3}			4.55				4.48	4.62
Aroclor-1221 {4}			4.68				4.61	4.75
Aroclor-1221 {5}			5.65				5.58	5.72
Aroclor-1232			4.68				4.61	4.75
Aroclor-1232 {2}			6.06				5.99	6.13
Aroclor-1232 {3}			7.01				6.94	7.08
Aroclor-1232 {4}			7.81				7.74	7.88
Aroclor-1232 {5}			8.61				8.54	8.68
Aroclor-1242			6.06				5.99	6.13
Aroclor-1242 {2}			7.81				7.74	7.88
Aroclor-1242 {3}			8.35				8.28	8.42
Aroclor-1242 {4}			9.51				9.44	9.58
Aroclor-1242 {5}			10.01				9.94	10.08
Aroclor-1248			6.75				6.68	6.82
Aroclor-1248 {2}			7.81				7.74	7.88
Aroclor-1248 {3}			8.35				8.28	8.42
Aroclor-1248 {4}			9.52				9.45	9.59
Aroclor-1248 {5}			10.01				9.94	10.08
Aroclor-1254			10.25				10.18	10.32
Aroclor-1254 {2}			11.04				10.97	11.11
Aroclor-1254 {3}			11.35				11.28	11.42
Aroclor-1254 {4}			12.17				12.10	12.24
Aroclor-1254 {5}			12.91				12.84	12.98
Aroclor-1260	13.75	13.75	13.75	13.74	13.74	13.75	13.68	13.82
Aroclor-1260 {2}	14.31	14.30	14.30	14.30	14.30	14.30	14.23	14.37
Aroclor-1260 {3}	15.92	15.92	15.92	15.92	15.92	15.92	15.85	15.99
Aroclor-1260 {4}	16.83	16.83	16.83	16.83	16.83	16.83	16.76	16.90
Aroclor-1260 {5}	18.85	18.86	18.85	18.85	18.85	18.85	18.78	18.92

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/07/2001

Instrument ID: GC-R

GC Column (1st): DB-5

Data File: R3330.D R3331.D R3332.D R3333.D R3334.D

Compound	CALIBRATION FACTORS 50	100	500	1000	2000	MEAN	%RSD
Aroclor-1016	188357	180539	154060	160217	150043	166643	10.13
Aroclor-1016 {2}	193369	192604	149412	154111	143345	166568	14.66
Aroclor-1016 {3}	247365	243412	199574	209880	196956	219437	11.04
Aroclor-1016 {4}	160475	150814	129116	133205	125063	139734	10.87
Aroclor-1016 {5}	211571	195228	170276	175314	165523	183582	10.52
Aroclor-1221			94416				
Aroclor-1221 {2}			117591				
Aroclor-1221 {3}			105351				
Aroclor-1221 {4}			310766				
Aroclor-1221 {5}			72554				
Aroclor-1232			201496				
Aroclor-1232 {2}			114936				
Aroclor-1232 {3}			142945				
Aroclor-1232 {4}			74096				
Aroclor-1232 {5}			132663				
Aroclor-1242			208065				
Aroclor-1242 {2}			129887				
Aroclor-1242 {3}			165363				
Aroclor-1242 {4}			269569				
Aroclor-1242 {5}			247210				
Aroclor-1248			552070				
Aroclor-1248 {2}			194084				
Aroclor-1248 {3}			180859				
Aroclor-1248 {4}			474353				
Aroclor-1248 {5}			424555				
Aroclor-1254			508120				
Aroclor-1254 {2}			402048				
Aroclor-1254 {3}			739869				
Aroclor-1254 {4}			796355				
Aroclor-1254 {5}			350473				
Aroclor-1260	692164	666494	572127	614707	580096	625118	8.45
Aroclor-1260 {2}	419935	405873	336447	355071	329625	369390	11.13
Aroclor-1260 {3}	930041	936971	819559	915331	860926	892566	5.66
Aroclor-1260 {4}	433561	453976	385605	444499	422817	428092	6.18
Aroclor-1260 {5}	236224	244121	213201	241671	233740	233791	5.23
					Average %RSD		9.39

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/07/2001

Instrument ID: GC-R

GC Column (2nd): DB-1701P

Data File: R3330.C R3331.C R3332.C R3333.C R3334.C

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	50	100	500	1000	2000	RT	FROM	TO
Aroclor-1016	5.00	5.00	5.00	5.00	5.00	5.00	4.93	5.07
Aroclor-1016 {2}	5.97	5.97	5.97	5.97	5.97	5.97	5.90	6.04
Aroclor-1016 {3}	7.15	7.15	7.15	7.14	7.14	7.15	7.08	7.22
Aroclor-1016 {4}	7.53	7.53	7.53	7.53	7.53	7.53	7.46	7.60
Aroclor-1016 {5}	7.81	7.81	7.81	7.81	7.81	7.81	7.74	7.88
Aroclor-1221			3.12				3.05	3.19
Aroclor-1221 {2}			4.53				4.46	4.60
Aroclor-1221 {3}			4.87				4.80	4.94
Aroclor-1221 {4}			5.00				4.93	5.07
Aroclor-1221 {5}			6.24				6.17	6.31
Aroclor-1232			5.00				4.93	5.07
Aroclor-1232 {2}			6.59				6.52	6.66
Aroclor-1232 {3}			7.53				7.46	7.60
Aroclor-1232 {4}			7.81				7.74	7.88
Aroclor-1232 {5}			8.88				8.81	8.95
Aroclor-1242			6.47				6.40	6.54
Aroclor-1242 {2}			7.81				7.74	7.88
Aroclor-1242 {3}			8.88				8.81	8.95
Aroclor-1242 {4}			10.04				9.97	10.11
Aroclor-1242 {5}			10.73				10.66	10.80
Aroclor-1248			7.14				7.07	7.21
Aroclor-1248 {2}			8.19				8.12	8.26
Aroclor-1248 {3}			8.88				8.81	8.95
Aroclor-1248 {4}			9.17				9.10	9.24
Aroclor-1248 {5}			9.74				9.67	9.81
Aroclor-1254			10.76				10.69	10.83
Aroclor-1254 {2}			11.80				11.73	11.87
Aroclor-1254 {3}			12.84				12.77	12.91
Aroclor-1254 {4}			13.34				13.27	13.41
Aroclor-1254 {5}			14.42				14.35	14.49
Aroclor-1260	13.34	13.35	13.34	13.34	13.34	13.34	13.27	13.41
Aroclor-1260 {2}	14.42	14.42	14.41	14.41	14.41	14.41	14.34	14.48
Aroclor-1260 {3}	15.62	15.62	15.62	15.62	15.62	15.62	15.55	15.69
Aroclor-1260 {4}	16.53	16.54	16.54	16.53	16.53	16.53	16.46	16.60
Aroclor-1260 {5}	19.63	19.63	19.63	19.63	19.63	19.63	19.56	19.70

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/07/2001

Instrument ID: GC-R

GC Column (2nd): DB-1701P

Data File: R3330.C R3331.C R3332.C R3333.C R3334.C

Compound	CALIBRATION FACTORS 50	100	500	1000	2000	MEAN	%RSD
Aroclor-1016	273493	269889	216228	218743	201186	235908	14.15
Aroclor-1016 {2}	541234	524026	411495	417359	384724	455768	15.69
Aroclor-1016 {3}	1142940	1092386	882272	921975	871028	982120	12.87
Aroclor-1016 {4}	499332	487818	383902	392159	363947	425432	14.85
Aroclor-1016 {5}	290225	286499	229684	237330	222968	253341	12.79
Aroclor-1221			129791				
Aroclor-1221 {2}			165371				
Aroclor-1221 {3}			110260				
Aroclor-1221 {4}			409437				
Aroclor-1221 {5}			63243				
Aroclor-1232			268482				
Aroclor-1232 {2}			112119				
Aroclor-1232 {3}			207021				
Aroclor-1232 {4}			124280				
Aroclor-1232 {5}			230564				
Aroclor-1242			127469				
Aroclor-1242 {2}			236009				
Aroclor-1242 {3}			398732				
Aroclor-1242 {4}			280614				
Aroclor-1242 {5}			247760				
Aroclor-1248			732754				
Aroclor-1248 {2}			575069				
Aroclor-1248 {3}			575086				
Aroclor-1248 {4}			568653				
Aroclor-1248 {5}			346517				
Aroclor-1254			302889				
Aroclor-1254 {2}			218959				
Aroclor-1254 {3}			689024				
Aroclor-1254 {4}			484944				
Aroclor-1254 {5}			1066822				
Aroclor-1260	861580	799024	616564	632714	597266	701430	17.16
Aroclor-1260 {2}	1157595	1061140	840118	883219	846560	957726	14.98
Aroclor-1260 {3}	676235	630690	491848	508902	483935	558322	15.90
Aroclor-1260 {4}	1408998	1332394	1075476	1149397	1117322	1216717	11.96
Aroclor-1260 {5}	416730	400654	314553	327336	312186	354292	14.20
					Average %RSD		14.46

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/02/2001 Instrument ID: GC-R

Data File: R3809.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	4.68	4.61	4.75	166643	169023	1.43
Aroclor-1016 {2}	5.61	5.54	5.68	166568	170033	2.08
Aroclor-1016 {3}	6.06	5.99	6.13	219437	221281	0.84
Aroclor-1016 {4}	7.82	7.75	7.89	139734	149509	7.00
Aroclor-1016 {5}	8.26	8.19	8.33	183582	201182	9.59
Aroclor-1260	13.75	13.68	13.82	625118	644403	3.09
Aroclor-1260 {2}	14.30	14.23	14.37	369390	355593	3.74
Aroclor-1260 {3}	15.92	15.85	15.99	892566	865883	2.99
Aroclor-1260 {4}	16.83	16.76	16.90	428092	432429	1.01
Aroclor-1260 {5}	18.85	18.78	18.92	233791	205192	12.23
					Average %D	4.40

Data File: R3809.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	4.98	4.91	5.05	235908	244952	3.83
Aroclor-1016 {2}	5.95	5.88	6.02	455768	471996	3.56
Aroclor-1016 {3}	7.12	7.05	7.19	982120	1036186	5.51
Aroclor-1016 {4}	7.50	7.43	7.57	425432	450476	5.89
Aroclor-1016 {5}	7.78	7.71	7.85	253341	288730	13.97
Aroclor-1260	13.31	13.24	13.38	701430	750522	7.00
Aroclor-1260 {2}	14.38	14.31	14.45	957726	994803	3.87
Aroclor-1260 {3}	15.59	15.52	15.66	558322	601290	7.70
Aroclor-1260 {4}	16.50	16.43	16.57	1216717	1300479	6.88
Aroclor-1260 {5}	19.59	19.52	19.66	354292	365167	3.07
					Average %D	6.13

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/02/2001 Instrument ID: GC-R

Data File: R3832.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	4.68	4.61	4.75	166643	176667	6.02
Aroclor-1016 {2}	5.62	5.55	5.69	166568	175728	5.50
Aroclor-1016 {3}	6.06	5.99	6.13	219437	230862	5.21
Aroclor-1016 {4}	7.82	7.75	7.89	139734	154503	10.57
Aroclor-1016 {5}	8.27	8.20	8.34	183582	207405	12.98
Aroclor-1260	13.75	13.68	13.82	625118	667035	6.71
Aroclor-1260 {2}	14.31	14.24	14.38	369390	367639	0.47
Aroclor-1260 {3}	15.93	15.86	16.00	892566	902076	1.07
Aroclor-1260 {4}	16.83	16.76	16.90	428092	448826	4.84
Aroclor-1260 {5}	18.86	18.79	18.93	233791	209292	10.48
					Average %D	6.38

Data File: R3832.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	4.99	4.92	5.06	235908	250857	6.34
Aroclor-1016 {2}	5.95	5.88	6.02	455768	483475	6.08
Aroclor-1016 {3}	7.12	7.05	7.19	982120	1060101	7.94
Aroclor-1016 {4}	7.51	7.44	7.58	425432	461067	8.38
Aroclor-1016 {5}	7.78	7.71	7.85	253341	270130	6.63
Aroclor-1260	13.31	13.24	13.38	701430	766489	9.28
Aroclor-1260 {2}	14.38	14.31	14.45	957726	1046182	9.24
Aroclor-1260 {3}	15.59	15.52	15.66	558322	614999	10.15
Aroclor-1260 {4}	16.50	16.43	16.57	1216717	1343505	10.42
Aroclor-1260 {5}	19.59	19.52	19.66	354292	408912	15.42
					Average %D	8.99

7837

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/02/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(1935..2014)	0402-BLK1	SOIL	85		74		87		79	
4052-B1	2014-001	SOIL	70		80		80		90	
4052-B2	2014-002	SOIL	70		90		80		100	
4052-B3	2014-003	SOIL	70		80		80		90	
4052-B4	2014-004	SOIL	50	*	70		60		80	
4052-B5	2014-005	SOIL	60		70		70		90	
4052-B6	2014-006	SOIL	70		80		90		100	
4052-B7	2014-007	SOIL	70		90		80		110	
4052-B8	2014-008	SOIL	60		80		70		90	
4052-B9	2014-009	SOIL	70		80		80		90	
4052-B10	2014-010	SOIL	60		80		70		90	
4052-B11	2014-011	SOIL	60		80		80		90	
4052-B12	2014-012	SOIL	50	*	70		70		90	
S1	1951-001	SOIL	60		80		80		100	
MILL/MIX_ROOM	1935-001	SOIL	60		80		70		90	
CONPILE	1957-001	SOIL	50	*	70		70		90	
T-5	2006-015	SOIL	70		80		80		100	
T-6	2006-016	SOIL	70		100		80		110	
PCB	2014-001-MS1	SOIL	92		93		93		105	
PCB	2014-001-MSD1	SOIL	86		90		87		98	
PCB	PBS0402-MS1	SOIL	84		77		87		85	

Surrogate QC Limits	Soil	Aqueous
TCMX = Tetrachloro-m-xylene	59-147	59-151
DCB = Decachlorobiphenyl	63-179	60-150

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

SOIL PCB MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2014-001-MSD1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	10.0	0.0	11.6	116	77 - 168
Aroclor-1260	10.0	0.0	11.4	114	81 - 177

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	10.7	107	8	18	77 - 168
Aroclor-1260	0.0	10.6	106	7	19	81 - 177

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __2__ outside limits

Spike Recovery: __0___ out of __4__ outside limits

SOIL PCB BLANK SPIKE RECOVERY

Matrix spike Lab sample ID: PBS0402-MS1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	10.0	0.0	11.6	116	77 - 168
Aroclor-1260	10.0	0.0	11.4	114	81 - 177

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

Spike Recovery: __0___ out of __2__ outside limits

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 3.94 DCB 1 20.94 TCMX 2 3.79 DCB 2 20.94

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
(1935..2014)	0402-BLK1	04/02/2001	14:17	3.94		20.94		3.79		20.94	
4052-B1	2014-001	04/02/2001	14:43	3.94		20.94		3.79		20.94	
4052-B2	2014-002	04/02/2001	15:09	3.94		20.94		3.79		20.94	
4052-B3	2014-003	04/02/2001	15:36	3.94		20.94		3.79		20.94	
4052-B4	2014-004	04/02/2001	16:02	3.94		20.94		3.79		20.94	
4052-B5	2014-005	04/02/2001	16:28	3.94		20.94		3.79		20.94	
4052-B6	2014-006	04/02/2001	16:54	3.94		20.94		3.79		20.94	
4052-B7	2014-007	04/02/2001	17:21	3.94		20.94		3.79		20.94	
4052-B8	2014-008	04/02/2001	17:47	3.94		20.94		3.79		20.94	
4052-B9	2014-009	04/02/2001	18:13	3.94		20.94		3.79		20.94	
4052-B10	2014-010	04/02/2001	18:39	3.94		20.94		3.79		20.94	
4052-B11	2014-011	04/02/2001	19:05	3.94		20.94		3.79		20.94	
4052-B12	2014-012	04/02/2001	19:32	3.94		20.94		3.79		20.94	
S1	1951-001	04/02/2001	19:58	3.94		20.94		3.79		20.94	
MILL/MIX_ROOM	1935-001	04/02/2001	20:24	3.94		20.94		3.79		20.94	
CONPILE	1957-001	04/02/2001	20:50	3.94		20.94		3.79		20.94	
T-5	2006-015	04/02/2001	21:43	3.94		20.94		3.79		20.94	
T-6	2006-016	04/02/2001	22:09	3.94		20.94		3.79		20.94	
PCB	2014-001-MS1	04/02/2001	22:35	3.94		20.94		3.79		20.94	
PCB	2014-001-MSD1	04/02/2001	23:02	3.94		20.94		3.79		20.94	
PCB	PBS0402-MS1	04/02/2001	23:28	3.94		20.94		3.79		20.94	

Surrogate QC Limits
TCMX = Tetrachloro-m-xylene (± 0.05 Minutes)
DCB = Decachlorobiphenyl (_ 0.05 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-02-01\R3827.D\ECD1B.CH Vial: 25
Signal #2 : C:\MSDCHEM\1\DATA\04-02-01\R3827.D\ECD2A.CH
Acq On : 02 Apr 2001 21:43 Operator:
Sample : T-5,2006-015,S,20.8g,,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS_-_NEWARK,03/29/01,04/02/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 02 22:06:47 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.94	3.79	12641716	19809590	1.356	1.558
Spiked Amount	205.000	Range	75 - 125	Recovery	=	0.66%#	0.76%#
2) S DCB		20.94	20.94	13321421	24114909	1.614	2.111 #
Spiked Amount	205.000			Recovery	=	0.79%	1.03%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
28) L7 Aroclor-1254		10.25	10.74	32981050	30102443	64.908	99.385 #
29) L7 Aroclor-1254	{2}	11.04	11.81	25000209	67714636	62.182	309.257 #
30) L7 Aroclor-1254	{3}	11.35	12.81	66453714	82145927	89.818	119.221 #
31) L7 Aroclor-1254	{4}	12.17	13.31	58409576	51629653	73.346	106.465 #
32) L7 Aroclor-1254	{5}	12.91	14.37	32794166	208.6E6	93.571	195.517 #
Sum Aroclor-1254				215.6E6	440.2E6	383.826	829.844
Average Aroclor-1254						76.765	165.969
Sum Aroclor-1260				0	0	N.D.	N.D.
Average Aroclor-1260						0.000	0.000

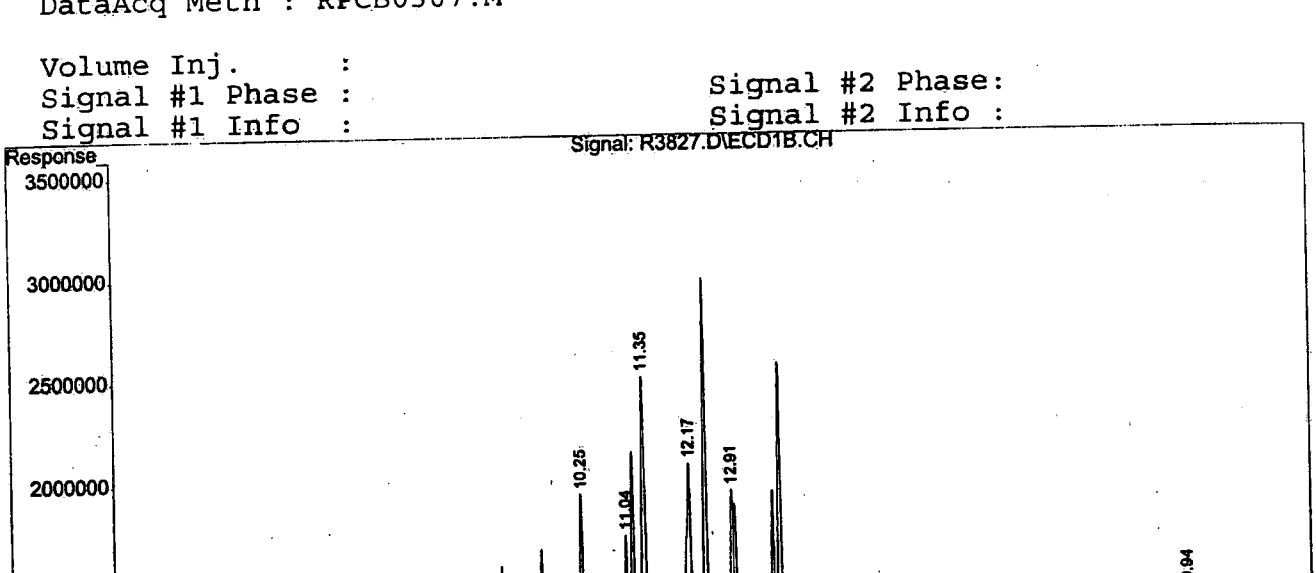
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

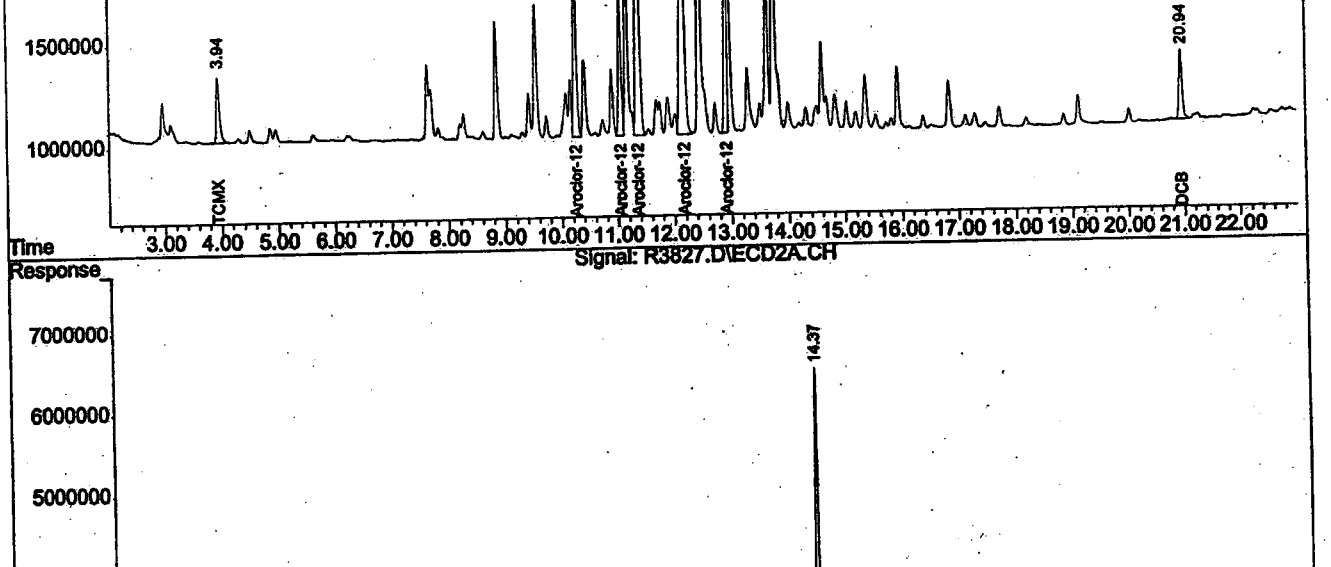
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-02-01\R3827.D\ECD1B.CH Vial: 25
Signal #2 : C:\MSDCHEM\1\DATA\04-02-01\R3827.D\ECD2A.CH
Acq On : 02 Apr 2001 21:43 Operator:
Sample : T-5,2006-015,S,20.8g,,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS_-_NEWARK,03/29/01,04/02/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 7:30 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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000200

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-02-01\R3828.D\ECD1B.CH Vial: 26
Signal #2 : C:\MSDCHEM\1\DATA\04-02-01\R3828.D\ECD2A.CH
Acq On : 02 Apr 2001 22:09 Operator:
Sample : T-6,2006-016,S,20.8g,,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS_-_NEWARK,03/29/01,04/02/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 02 22:32:59 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		3.94	3.79	12738111	21383714	1.367	1.682
Spiked Amount	205.000	Range	75 - 125	Recovery	=	0.67%#	0.82%#
2) S DCB		20.94	20.94	16210783	24606730	1.964	2.154
Spiked Amount	205.000			Recovery	=	0.96%	1.05%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
28) L7 Aroclor-1254		10.25	10.74	11580825	11538075	22.792	38.093 #
29) L7 Aroclor-1254	{2}	11.04	11.81	7903924	20528280	19.659	93.754 #
30) L7 Aroclor-1254	{3}	11.35	12.81	37042697	19484025	50.067	28.278 #
31) L7 Aroclor-1254	{4}	12.12	13.31	29237592	40256459	36.714	83.013 #
32) L7 Aroclor-1254	{5}	12.91	14.38	43191544	102.9E6	123.238	96.495
Sum Aroclor-1254				129.0E6	194.7E6	252.469	339.633
Average Aroclor-1254						50.494	67.927
Sum Aroclor-1260				0	0	N.D.	N.D.
Average Aroclor-1260						0.000	0.000

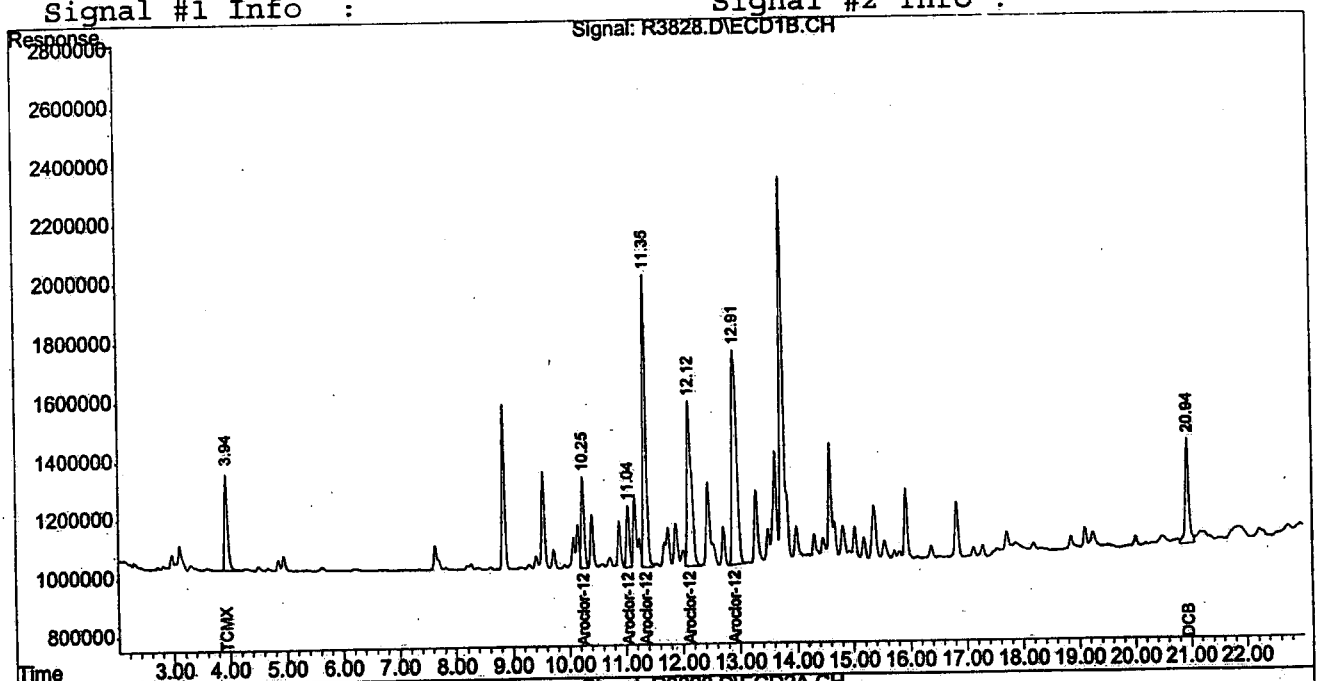
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

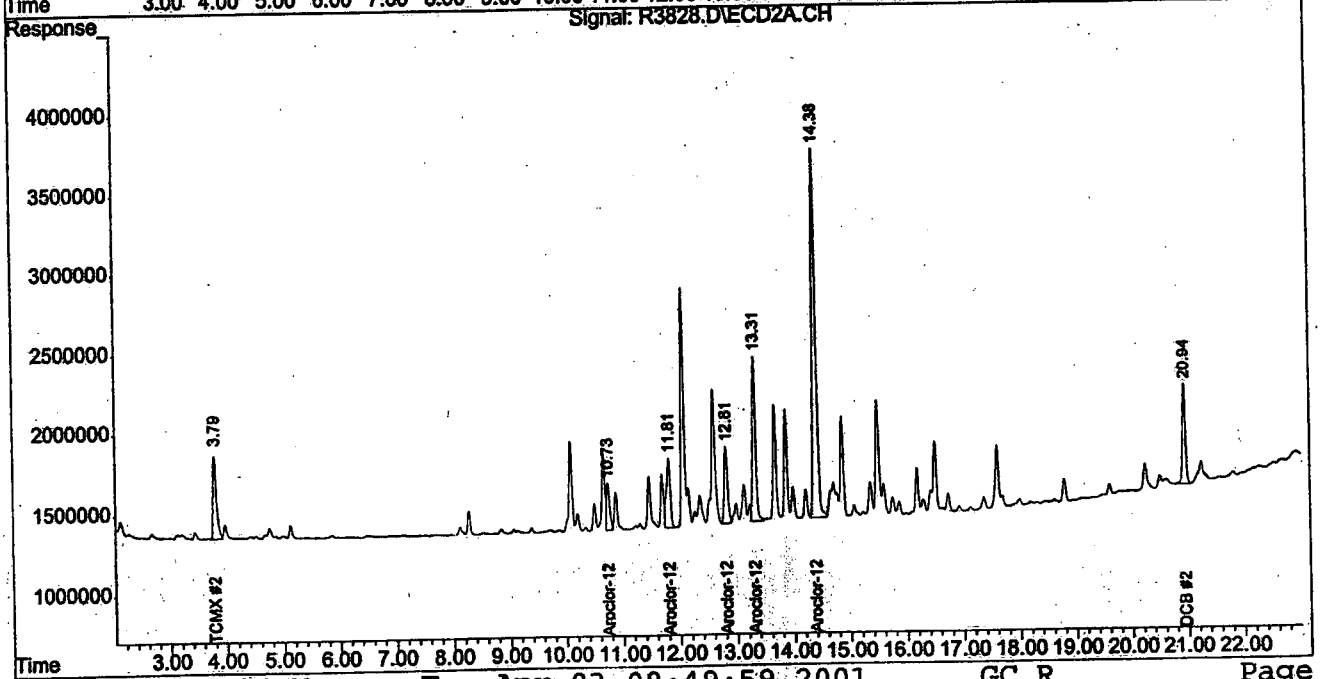
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-02-01\R3828.D\ECD1B.CH Vial: 26
Signal #2 : C:\MSDCHEM\1\DATA\04-02-01\R3828.D\ECD2A.CH
Acq On : 02 Apr 2001 22:09 Operator:
Sample : T-6,2006-016,S,20.8g,,03/30/01 Inst : GC_R
Misc : ENVTACT/ORBIS_-_NEWARK,03/29/01,04/02/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 7:33 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-02-01\R3810.D\ECD1B.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\04-02-01\R3810.D\ECD2A.CH
Acq On : 02 Apr 2001 14:17 Operator:
Sample : (1935..2014),0402-BLK1,S,30.0g,0,03/30/0 Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 02 14:40:43 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.94	3.79	1620.2E6	2254.9E6	173.844	177.323
Spiked Amount 205.000	Range 75 - 125		Recovery =		84.80%	86.50%
2) S DCB	20.94	20.94	1251.4E6	1841.5E6	151.636	161.183
Spiked Amount 205.000			Recovery =		73.97%	78.63%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000

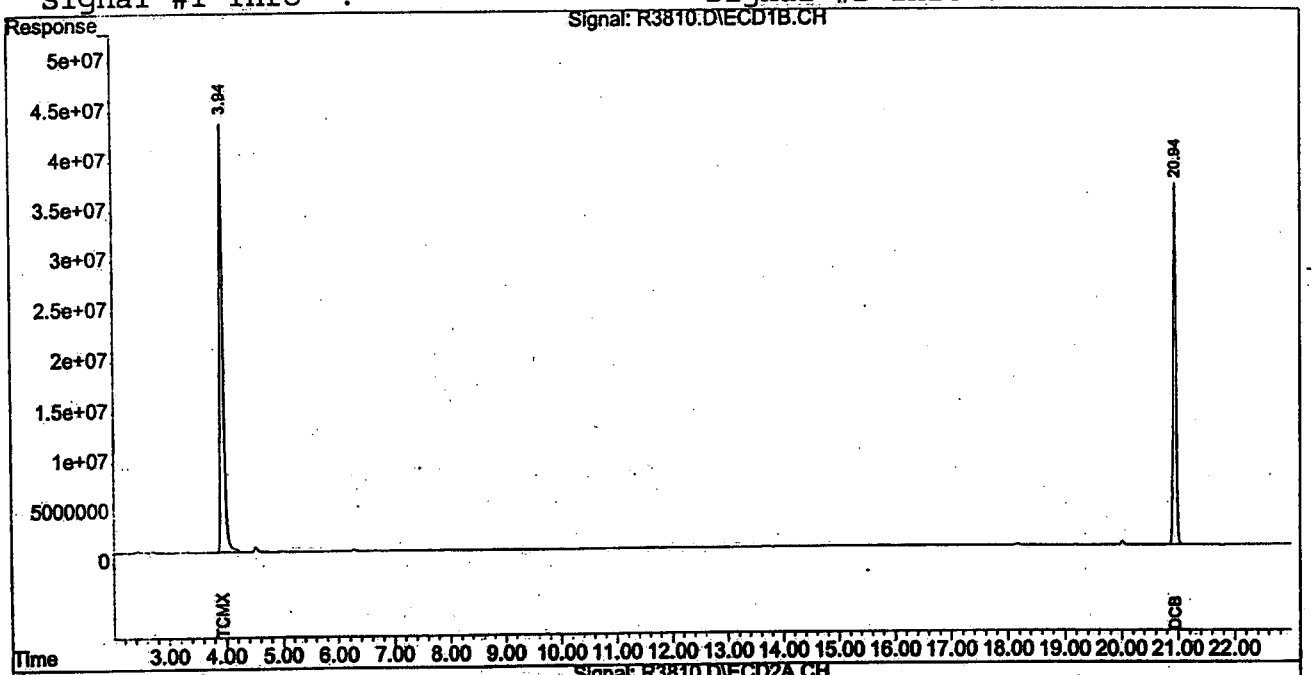
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
R3810.D RPCB0307.M Tue Apr 03 08:49:13 2001 GC_R
2046
000203

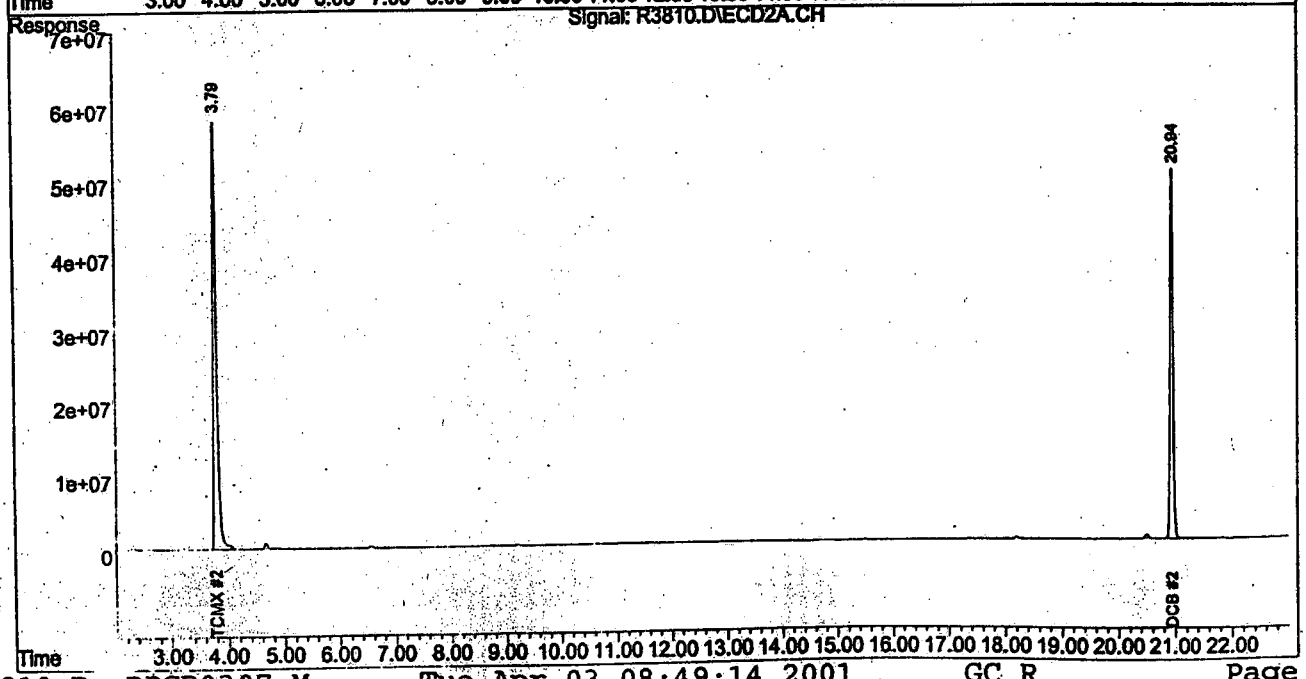
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-02-01\R3810.D\ECD1B.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\04-02-01\R3810.D\ECD2A.CH
Acq On : 02 Apr 2001 14:17 Operator:
Sample : (1935..2014),0402-BLK1,S,30.0g,0,03/30/0 Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 7:24 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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000204

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-02-01\R3809.D\ECD1B.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\04-02-01\R3809.D\ECD2A.CH
Acq On : 02 Apr 2001 13:51 Operator:
Sample : 8082_C_IAS1427,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 02 14:14:29 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.94	3.79	1014.4E6	1435.5E6	108.849	112.885
Spiked Amount 205.000	Range 75 - 125		Recovery =		53.10%#	55.07%#
2) S DCB	20.94	20.94	796.3E6	1176.2E6	96.488	102.950
Spiked Amount 205.000			Recovery =		47.07%	50.22%
Target Compounds						
3) L2 Aroclor-1016	4.68	4.98	84511413	122.5E6	513.093	524.460
4) L2 Aroclor-1016 {2}	5.61	5.95	85016451	236.0E6	513.487m	520.235
5) L2 Aroclor-1016 {3}	6.06	7.12	110.6E6	518.1E6	510.213	529.471
6) L2 Aroclor-1016 {4}	7.82	7.50	74754485	225.2E6	541.894	532.780
7) L2 Aroclor-1016 {5}	8.26	7.78	100.6E6	144.4E6	555.598	579.731
Sum Aroclor-1016			455.5E6	1246.2E6	2634.285	2686.677
Average Aroclor-1016					526.857	537.335
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	13.75	13.31	322.2E6	375.3E6	515.425	535.698
34) L8 Aroclor-1260 {2}	14.30	14.38	177.8E6	497.4E6	481.324	520.503
35) L8 Aroclor-1260 {3}	15.92	15.59	432.9E6	300.6E6	487.529	545.469
36) L8 Aroclor-1260 {4}	16.83	16.50	216.2E6	650.2E6	504.076	537.180
37) L8 Aroclor-1260 {5}	18.85	19.59	102.6E6	182.6E6	439.460m	519.635m
Sum Aroclor-1260			1251.7E6	2006.1E6	2427.814	2658.485
Average Aroclor-1260					485.563	531.697

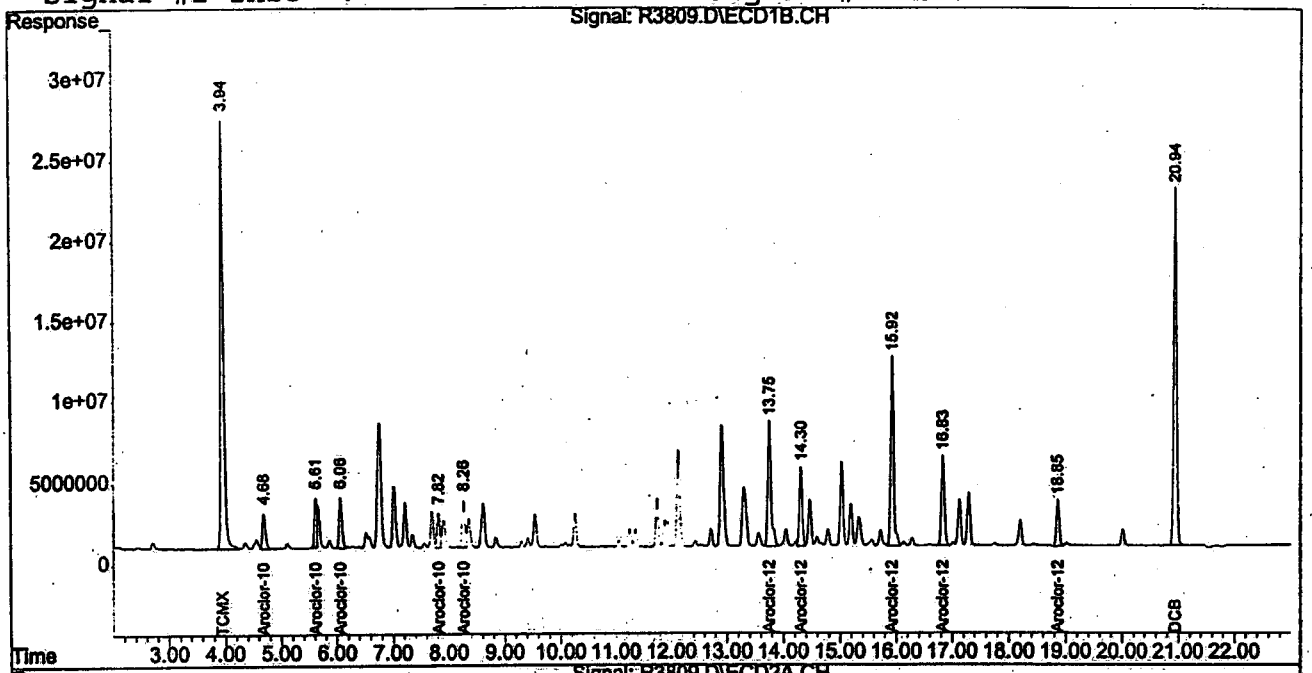
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

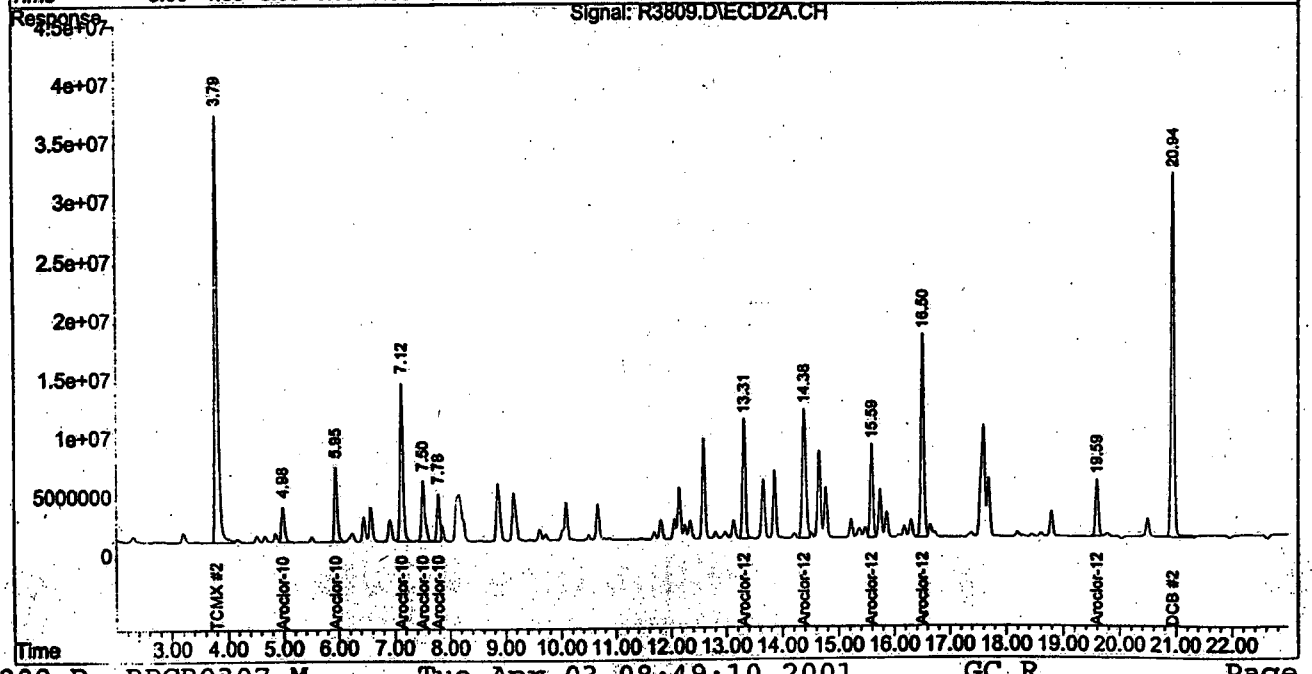
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-02-01\R3809.D\ECD1B.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\04-02-01\R3809.D\ECD2A.CH
Acq On : 02 Apr 2001 13:51 Operator:
Sample : 8082_C_IAS1427,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 15:16 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2049

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-02-01\R3832.D\ECD1B.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\04-02-01\R3832.D\ECD2A.CH
Acq On : 02 Apr 2001 23:54 Operator:
Sample : 8082_C_IAS1427,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 03 00:17:58 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.94	3.79	1056.4E6	1471.1E6	113.352	115.682
Spiked Amount 205.000	Range 75 - 125			Recovery =	55.29%#	56.43%#
2) S DCB	20.94	20.94	809.2E6	1184.7E6	98.053	103.697
Spiked Amount 205.000				Recovery =	47.83%	50.58%
Target Compounds						
) L2 Aroclor-1016	4.68	4.99	88333704	125.4E6	536.299	537.103
) L2 Aroclor-1016 {2}	5.62	5.95	87863815	241.7E6	530.685m	532.888
) L2 Aroclor-1016 {3}	6.06	7.12	115.4E6	530.1E6	532.303	541.691
6) L2 Aroclor-1016 {4}	7.82	7.51	77251617	230.5E6	559.995	545.305
7) L2 Aroclor-1016 {5}	8.27	7.78	103.7E6	135.1E6	572.784	542.384m
Sum Aroclor-1016			472.6E6	1262.8E6	2732.067	2699.372
Average Aroclor-1016					546.413	539.874
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	13.75	13.31	333.5E6	383.2E6	533.528	547.095
34) L8 Aroclor-1260 {2}	14.31	14.38	183.8E6	523.1E6	497.630	547.386
35) L8 Aroclor-1260 {3}	15.93	15.59	451.0E6	307.5E6	507.908	557.905
) L8 Aroclor-1260 {4}	16.83	16.50	224.4E6	671.8E6	523.189	554.952
) L8 Aroclor-1260 {5}	18.86	19.59	104.6E6	204.5E6	448.239	581.885 #
Sum Aroclor-1260			1297.4E6	2090.0E6	2510.494	2789.223
Average Aroclor-1260					502.099	557.845

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

2050

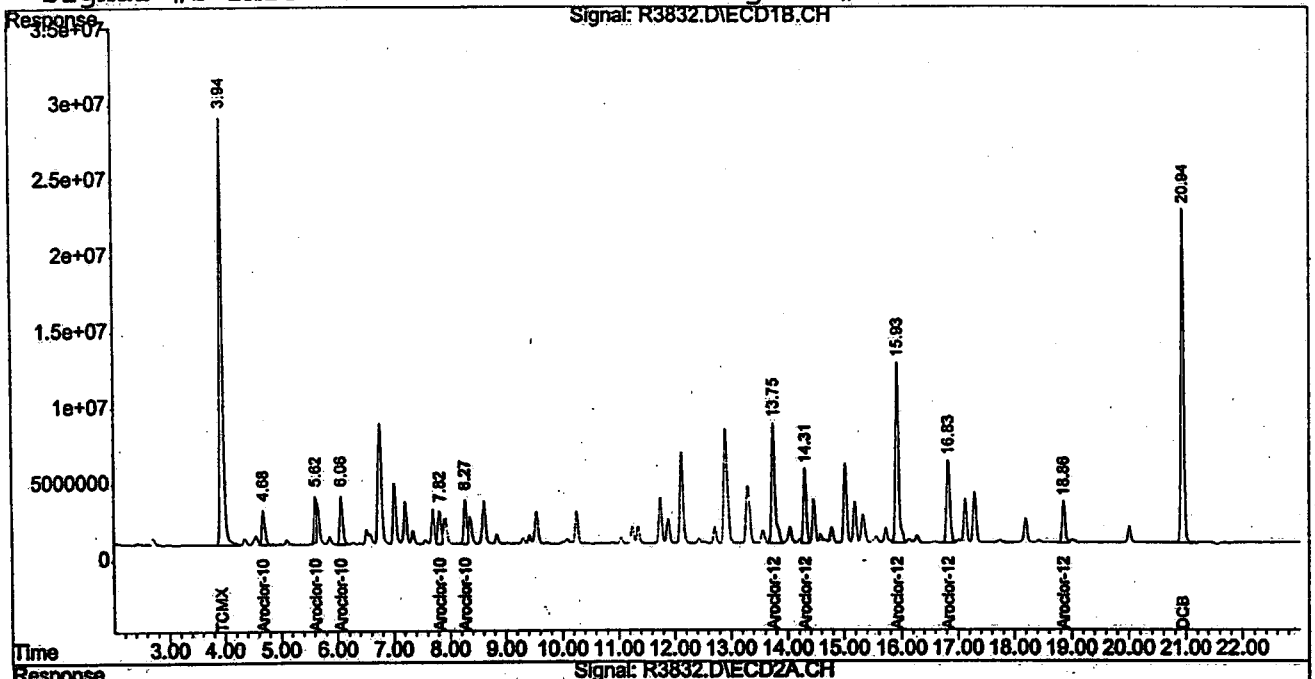
000207

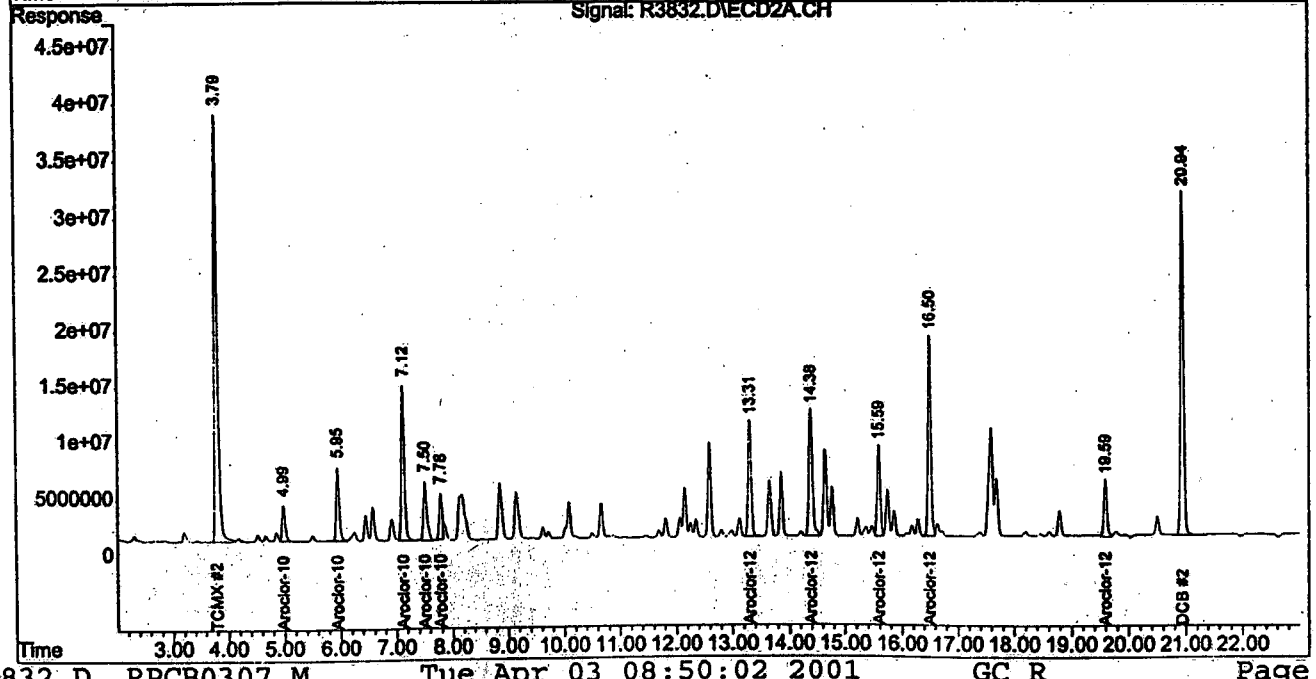
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-02-01\R3832.D\ECD1B.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\04-02-01\R3832.D\ECD2A.CH
Acq On : 02 Apr 2001 23:54 Operator:
Sample : 8082_C_IAS1427,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 3 7:34 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2051

000208

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-07-01\R3329.D\ECD1B.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\03-07-01\R3329.D\ECD2A.CH
Acq On : 07 Mar 2001 13:38 Operator:
Sample : 8082_1254_IAS1401,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 08 14:53:41 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Initial Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.94	3.80	1265.1E6	1642.2E6	135.740	129.138
Spiked Amount 205.000	Range 75 - 125		Recovery =		66.21%#	62.99%#
2) S DCB	20.94	20.98	1118.5E6	1494.0E6	135.526	130.770
Spiked Amount 205.000			Recovery =		66.11%	63.79%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
28) L7 Aroclor-1254	10.25	10.76	254.1E6	151.4E6	500.000	500.000
29) L7 Aroclor-1254 {2}	11.04	11.80	201.0E6	109.5E6	500.000	500.000
30) L7 Aroclor-1254 {3}	11.35	12.84	369.9E6	344.5E6	500.000	500.000
31) L7 Aroclor-1254 {4}	12.17	13.34	398.2E6	242.5E6	500.000	500.000
32) L7 Aroclor-1254 {5}	12.91	14.42	175.2E6	533.4E6	500.000	500.000
Sum Aroclor-1254			1398.4E6	1381.3E6	2500.000	2500.000
Average Aroclor-1254					500.000	500.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000

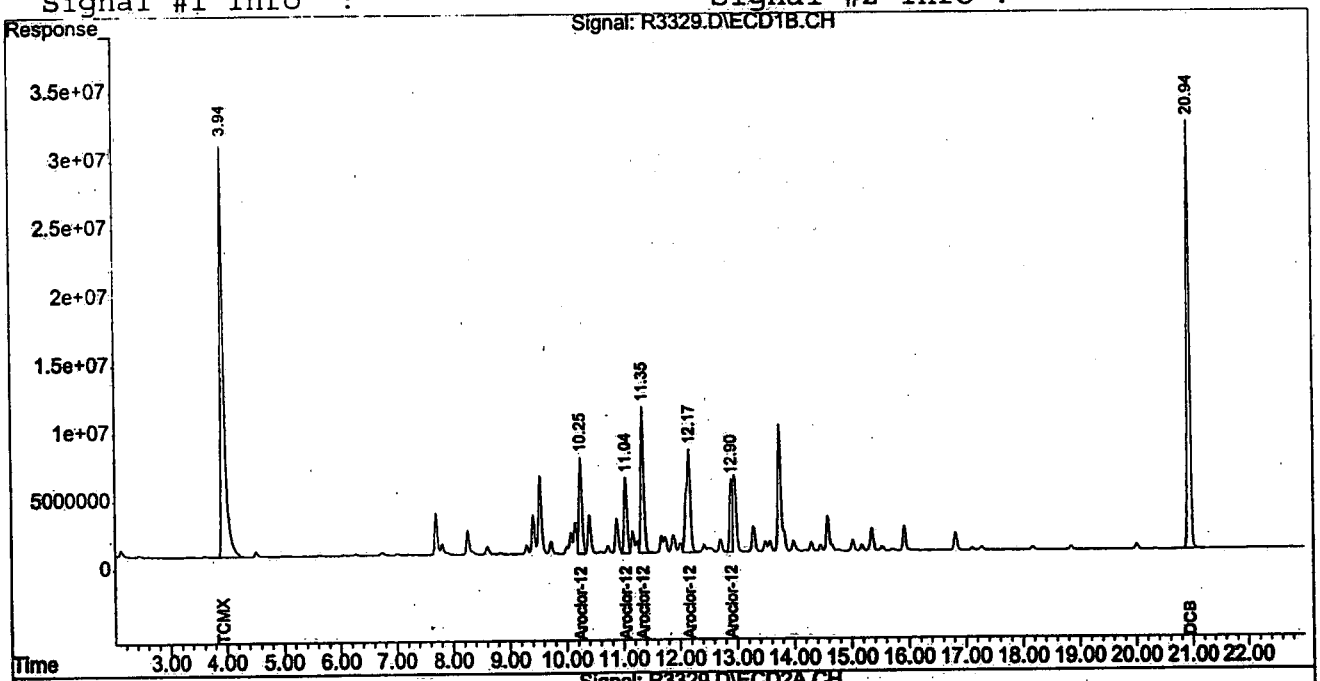
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

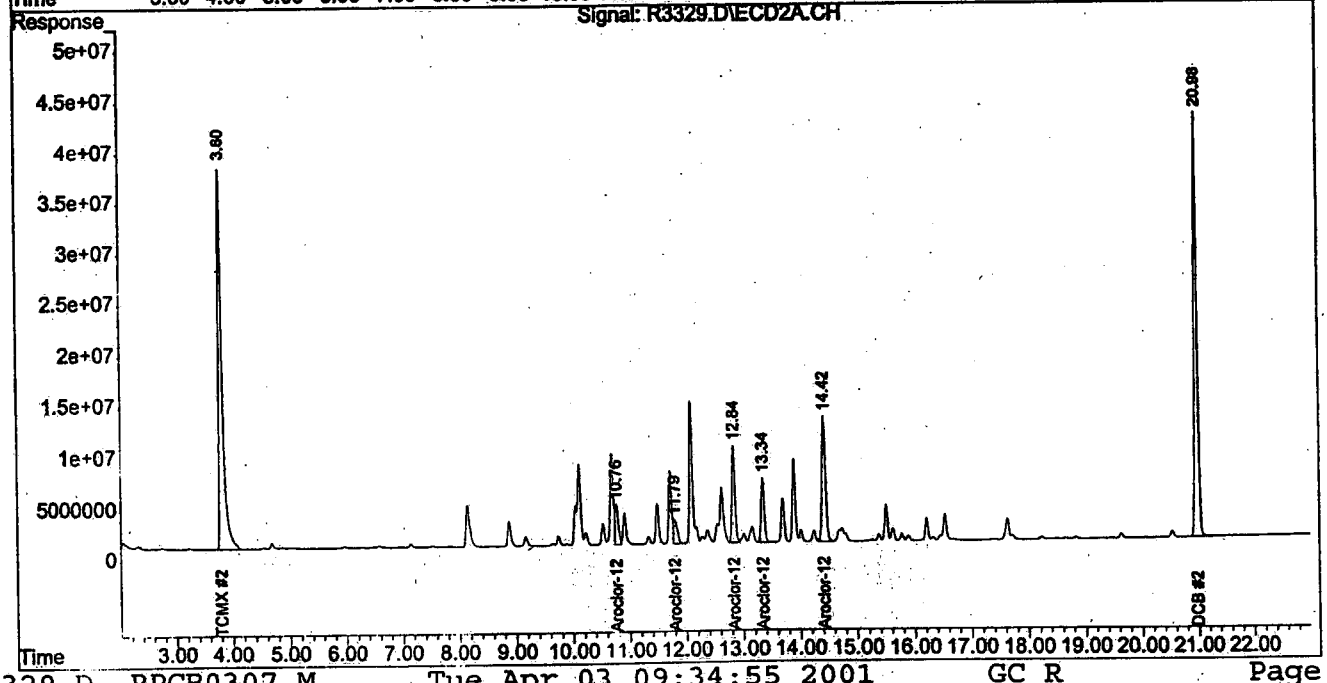
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-07-01\R3329.D\ECD1B.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\03-07-01\R3329.D\ECD2A.CH
Acq On : 07 Mar 2001 13:38 Operator:
Sample : 8082_1254_IAS1401,0.5_PPM Inst : GC_R
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 8 15:58 2001 Quant Results File: RPCB0307.RES

Quant Method : C:\MSDCHEM\1\METHODS\RPCB0307.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 08 07:28:43 2001
Response via : Multiple Level Calibration
DataAcq Meth : RPCB0307.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2053

000210

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

BLANK RESULTS SUMMARY

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	INITIAL CALIBRATION	CONTINUING CALIBRATION 1	CONTINUING CALIBRATION 2	INST. MDL	REAGENT BLANK	MDL	IDL
Aluminum	ND	ND	ND	0.100	ND	2.00	
Antimony	ND	ND	ND	0.100	ND	2.00	
Arsenic	ND	ND	ND	0.010	ND	0.200	
Barium	ND	ND	ND	0.250	ND	5.00	
Beryllium	ND	ND	ND	0.010	ND	0.200	
Cadmium	ND	ND	ND	0.010	ND	0.200	
Calcium	ND	ND	ND	1.00	ND	20.0	
Chromium	ND	ND	ND	0.030	ND	0.600	
Cobalt	ND	ND	ND	0.020	ND	0.400	
Copper	ND	ND	ND	0.020	ND	0.400	
Iron	ND	ND	ND	0.150	ND	3.00	
Lead	ND	ND	ND	0.100	ND	2.00	
Magnesium	ND	ND	ND	1.00	ND	20.0	
Manganese	ND	ND	ND	0.020	ND	0.400	
Mercury	ND	ND	ND	0.00025	ND	0.013	
Nickel	ND	ND	ND	0.030	ND	0.600	
Potassium	ND	ND	ND	1.00	ND	20.0	
Selenium	ND	ND	ND	0.100	ND	2.00	
Silver	ND	ND	ND	0.020	ND	0.500	
Sodium	ND	ND	ND	1.00	ND	20.0	
Thallium	ND	ND	ND	0.004	ND	0.080	
Vanadium	ND	ND	ND	0.015	ND	0.300	
Zinc	ND	ND	ND	0.050	ND	1.00	

This QC Blank applies to the following samples:

1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

2054

000214

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Concentration/Units: ppb (µg/L)

ANALYTE	INITIAL CALIBRATION			CONTINUING CALIBRATION					MDL	IDL
	TRUE	FOUND	%R (1)	TRUE	FOUND	%R (1)	FOUND	%R (1)		
Aluminum	400	409	102	400	440	110	422	106	100	
Antimony	120	129	108	120	122	102	124	103	100	
Arsenic	20.0	19.7	98.5	20.0	19.9	99.5	19.0	95.0	10.0	
Barium	400	414	104	400	418	105	411	103	250	
Beryllium	10.0	10.5	105	10.0	10.7	107	10.1	101	10.0	
Cadmium	10.0	9.92	99.2	10.0	10.6	106	9.91	99.1	10.0	
Calcium	10000	10200	102	10000	10300	103	10900	109	1000	
Chromium	20.0	21.0	105	20.0	21.6	108	21.3	107	30.0	
Cobalt	100	99.9	99.9	100	101	101	102	102	20.0	
Copper	50.0	49.8	99.6	50.0	51.2	102	52.3	105	20.0	
Iron	200	191	95.5	200	211	106	215	108	150	
Lead	10.0	10.5	105	10.0	10.6	106	10.6	106	100	
Magnesium	10000	9530	95.3	10000	10100	101	10100	101	1000	
Manganese	30.0	30.7	102	30.0	32.3	108	30.8	103	20.0	
Mercury	5.00	5.05	101	5.00	5.11	102	5.05	101	0.250	
Nickel	80.0	80.0	100	80.0	79.9	99.9	81.2	102	30.0	
Potassium	10000	10200	102	10000	10400	104	10800	108	1000	
Selenium	10.0	10.6	106	10.0	10.9	109	10.1	101	100	
Silver	500	463	92.6	500	464	92.8	467	93.4	20.0	
Sodium	10000	9750	97.5	10000	10200	102	10600	106	1000	
Thallium	20.0	21.3	107	20.0	21.6	108	21.4	107	4.00	
Vanadium	100	107	107	100	108	108	110	110	15.0	
Zinc	40.0	42.9	107	40.0	42.8	107	43.7	109	50.0	

(1) Control Limits: Mercury 80-120, Other Metals 90-110

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Aqueous Concentration/Units: ppb(ug/L)

ANALYTE / MASS	INITIAL			FINAL		
	SOL A	SOL AB	%R	SOL A	SOL AB	%R
Arsenic / 75	0.33	8.72	83.9	0.33	8.32	79.9
Cobalt / 59	0.28	9.29	90.1	0.28	9.34	90.7
Copper / 65	3.14	11.1	79.6	3.17	11.2	80.3
Manganese / 55	3.28	12.5	92.2	3.23	12.5	92.7
Nickel / 60	1.35	9.70	83.5	1.40	9.85	84.5
Zinc / 66	9.08	16.4	73.2	9.07	16.1	70.3

TRUE VALUE SOLN. B = 10 ppb

THERE ARE NO CONTROL LIMITS FOR SOLUTION AB

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SPIKE SAMPLE RECOVERY

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Soil

Concentration/Units: ppm (mg/kg)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	11000	10700	NC	222					70-130
Antimony	48.6	ND	109	44.4	56.1	ND	119	47.2	70-130
Arsenic	53.1	3.93	111	44.4	54.4	1.40	112	47.2	70-130
Barium	116	70.6	102	44.4					70-130
Beryllium	47.1	0.897	104	44.4	50.9	ND	108	47.2	70-130
Cadmium	49.9	0.394	112	44.4	54.6	0.573	114	47.2	70-130
Calcium	2090	1850	108	222					70-130
Chromium	70.7	19.9	114	44.4	69.7	13.4	119	47.2	70-130
Cobalt	54.3	7.77	105	44.4					70-130
Copper	63.3	17.8	102	44.4	113	63.3	105	47.2	70-130
Iron	13800	14500	NC	222					70-130
Lead	78.0	27.4	114	44.4	144	87.1	121	47.2	70-130
Magnesium	5700	5440	117	222					70-130
Manganese	761	729	72.1	44.4					70-130
Mercury	0.278	ND	100	0.278	0.414	0.125	98.0	0.295	75-125
Nickel	61.6	15.3	104	44.4	53.6	3.95	105	47.2	70-130
Potassium	3230	3030	90.1	222					70-130
Selenium	52.5	ND	118	44.4	56.7	ND	120	47.2	70-130
Silver	23.2	ND	83.5	27.8	26.3	ND	89.2	29.5	75-125
Sodium	559	386	77.9	222					70-130
Thallium	50.5	0.162	113	44.4	53.4	ND	113	47.2	70-130
Vanadium	82.7	33.2	111	44.4					70-130
Zinc	132	88.5	98.0	44.4	180	129	108	47.2	70-130

SSR = Spike Sample Result
SA = Spike Added

SR = Sample Result
%R = Percent Recovery

NC = Non-calculable % R; Sample concentration > 4 x Spike Concentration.

QC Sample 1 1899-012

QC Sample 1 for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

QC Sample 2 1922-001

QC Sample 2 for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SPIKE SAMPLE RECOVERY

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SSR3	SR3	%R3	SA3	SSR4	SR4	%R4	SA4	CONTROL LIMIT %R
Antimony	53.1	ND	113	47.2					70-130
Arsenic	57.7	5.36	111	47.2					70-130
Beryllium	50.0	0.656	105	47.2					70-130
Cadmium	53.3	0.287	112	47.2					70-130
Chromium	74.0	19.9	115	47.2					70-130
Copper	77.0	28.9	102	47.2					70-130
Lead	68.0	12.9	117	47.2	69.7	23.4	109	42.4	70-130
Mercury	0.317	0.026	98.6	0.295					75-125
Nickel	71.4	22.7	103	47.2					70-130
Selenium	55.2	ND	117	47.2					70-130
Silver	25.3	ND	85.8	29.5					75-125
Thallium	54.3	ND	115	47.2					70-130
Zinc	112	67.5	94.3	47.2					70-130

SSR = Spike Sample Result
SA = Spike Added

SR = Sample Result
%R = Percent Recovery

NC = Non-calculable % R; Sample concentration > 4 x Spike Concentration.

QC Sample 3 1970-001

QC Sample 3 for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

QC Sample 4 2007-007

QC Sample 4 for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

METALS QUALITY CONTROL

DUPLICATE SAMPLE RECOVERY

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Aluminum	20	10700	10200	4.78				
Antimony	NA	ND	ND	NC	NA	ND	ND	NC
Arsenic	20	3.93	3.72	5.49	20	1.40	0.986	34.7
Barium	20	70.6	66.9	5.38				
Beryllium	20	0.897	0.896	0.112	NA	ND	ND	NC
Cadmium	20	0.394	0.369	6.55	0.236	0.573	0.433	0.14
Calcium	20	1850	1730	6.70				
Chromium	20	19.9	18.6	6.75	20	13.4	14.2	5.80
Cobalt	20	7.77	7.58	2.48				
Copper	20	17.8	17.4	2.27	20	63.3	56.6	11.2
Iron	20	14500	12600	14.0				
Lead	20	27.4	26.4	3.72	20	87.1	47.6	58.6
Magnesium	20	5440	5320	2.23				
Manganese	20	729	714	2.08				
Mercury	NA	ND	ND	NC	20	0.125	0.125	0
Nickel	20	15.3	14.7	4.00	20	3.95	3.37	15.8
Potassium	20	3030	2880	5.08				
Selenium	NA	ND	ND	NC	NA	ND	ND	NC
Silver	NA	ND	ND	NC	NA	ND	ND	NC
Sodium	20	386	348	10.4				
Thallium	20	0.162	0.151	7.03	NA	ND	ND	NC
Vanadium	20	33.2	31.7	4.62				
Zinc	20	88.5	88.9	0.451	20	129	70.3	58.9

S1 = Sample 1
D1 = Duplicate 1

S2 = Sample 2
D2 = Duplicate 2

NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

QC Sample 1 1899-012

QC Sample 1 for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

QC Sample 2 1922-001

QC Sample 2 for following samples:
1866-06: 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9: 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

DUPLICATE SAMPLE RECOVERY

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 3	S3	D3	RPD3	CONTROL LIMIT 4	S4	D4	RPD4
Antimony	NA	ND	ND	NC				
Arsenic	20	5.36	4.95	7.95				
Beryllium	20	0.656	0.632	3.73				
Cadmium	0.236	0.287	0.163	0.124				
Chromium	20	19.9	18.4	7.83				
Copper	20	28.9	26.6	8.29				
Lead	20	12.9	12.2	5.58	20	23.4	22.8	2.60
Mercury	20	0.026	0.025	3.92				
Nickel	20	22.7	21.7	4.50				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				
Thallium	NA	ND	ND	NC				
Zinc	20	67.5	63.9	5.48				

S3 = Sample 3
D3 = Duplicate 3

S4 = Sample 4
D4 = Duplicate 4

NA = Not Applicable
NC = Non-calculable RPD due to result (s) less than the detection limit.

QC Sample 3 1970-001

QC Sample 3 for following samples:

1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

QC Sample 4 2007-007

QC Sample 4 for following samples:

1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

ANALYTE	AQUEOUS (ug/L)			SOLID (mg/kg)			
	TRUE	FOUND	%R(1)	TRUE	FOUND	LIMITS	%R(2)
Aluminum				5760	5490	3750-7760	95.3
Antimony				26.2	10.3	D.L.-53.1	39.3
Arsenic				36.2	38.4	26.9-45.4	106
Barium				117	119	90.2-144	102
Beryllium				59.4	73.7	60.4-93.7	124
Cadmium				35.6	32.1	27.4-43.8	90.2
Calcium				1320	1350	989-1660	102
Chromium				108	112	79.2-137	104
Cobalt				67.2	65.9	53.4-80.9	98.1
Copper				63.7	65.6	52.2-75.2	103
Iron				7540	8040	4290-10800	107
Lead				52.4	48.4	37.3-67.6	92.4
Magnesium				1190	1410	815-1570	118
Manganese				151	170	128-189	113
Mercury				1.00	0.902	.614-1.39	90.2
Nickel				49.8	49.5	39-60.6	99.4
Potassium				2130	2050	1660-2600	96.2
Selenium				56.8	47.7	41-72.6	84.0
Silver				34.1	34.5	25.4-42.9	101
Sodium				487	535	354-911	110
Thallium				68.2	68.2	39-97.3	100
Vanadium				80.0	82.0	54.6-105	103
Zinc				151	150	117-185	99.3

(1) Control Limits = 90-110%
(2)Manufacture's Recomended Limits

Aqueous LCS Source: MV Laboratories

Solid LCS Source: Environmental Resource Associates: PriorityPollutnT/CLP Inorganics Soils

000218

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METALS QUALITY CONTROL

SERIAL DILUTIONS & POST SPIKES

Lab Case Number: E01- 1866, 1899, 1908, 1909, 1921, 1922, 1929, 1935, 1951, 1959, 1960, 1970, 1987, 1989, 1994, 2006, 2007, 2014, 2017

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SERIAL DILUTION		%	POST SPIKE		%
	SR	SDR	Difference	SPR	SA	Recovery
Aluminum	10700	11000	2.76			
Antimony	ND			39.6	44.4	89.2
Arsenic	3.93	3.97	1.01			
Barium	70.6	67.8	4.05			
Beryllium	0.897	0.862	3.98			
Cadmium	0.394			49.7	44.4	111.0
Calcium	1850	1850	0			
Chromium	19.9	20.0	0.501			
Cobalt	7.77	7.56	2.74			
Copper	17.8	18.4	3.31			
Iron	14500	13900	4.23			
Lead	27.4	26.4	3.72			
Magnesium	5440	5520	1.46			
Manganese	729	743	1.90			
Mercury	ND			0.282	0.278	101
Nickel	15.3	15.0	1.98			
Potassium	3030	2940	3.02			
Selenium	ND			49.2	44.4	111
Silver	ND			29.2	27.8	105
Sodium	386	379	1.83			
Thallium	0.162			48.9	44.4	110.0
Vanadium	33.2	32.9	0.908			
Zinc	88.5	92.3	4.20			

SR = Sample Result
SDR = Sample Dilution Result

SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 85 - 115% Recovery

QC Sample : 1899-012

QC Sample for following samples:
1866-06; 1899-06~15; 1908-01; 1909-01~02; 1921-01
1922-01~09, 11~13, 15; 1929-01~07; 1935-01; 1951-01
1959-01; 1960-14; 1970-01; 1987-01, 03, 05, 07; 1989-06
1994-1~9; 2006-10~14; 2007-4~11; 2014-1~12; 2017-1

INTEGRATED ANALYTICAL LABORATORIES

General Chemistry Quality Control

Method Blank Results Summary

TPHC

Blank ID	Matrix-Unit	Blank Result	MDL
B-0402	S-mg/Kg	ND	25

The above blank result applies to the follow samples E01-

LCS1-001	2014-007
1855-001SQC	2014-008
1855-001SQCD	2014-009
1855-001SQCDS	2014-010
1855-001	2014-011
1855-002	2014-012
2014-001	2006-002
2014-002	2006-005
2014-003	2006-006
2014-004	2006-007
2014-005	2006-008
2014-006	2020-001

2063

000220

INTEGRATED ANALYTICAL LABORATORIES

General Chemistry Quality Control

Method Blank Results Summary

TPHC

Blank ID	Matrix-Unit	Blank Result	MDL
B-0403	S-mg/Kg	ND	25

The above blank result applies to the follow samples E01-

LCS1-001	2006-010
2000-005SQC	2006-009
2000-005SQCD	2006-011
2000-005SQCS	2006-012
2005-001	2006-013
2005-002	2006-014
2005-003	2018-001
2005-004	2018-002
2005-005	2018-003
2000-001	2018-004
2000-002	9999-001AQC
2000-003	9999-001AQCD
2000-004	9999-001AQCS
2000-005	9999-001SD

2064

000221

INTEGRATED ANALYTICAL LABORATORIES

General Chemistry Quality Control

Spike Sample Results Summary

TPHC

QC Sample	Spiked Result	Sample Result	% Recovery	Spike Added	Matrix-Units	Control Limit
1855-001SQC	649	ND	111.9 %	580.05	S-mg/Kg	75%-125%

NC - Non-Calculable, Sample Result > 4x Spike Added.

The above spike result applies to the following samples E01-

1855-001
1855-002
2014-001
2014-002
2014-003
2014-004
2014-005
2014-006
2014-007
2014-008
2014-009
2014-010
2014-011
2014-012
2006-002
2006-005
2006-006
2006-007
2006-008
2020-001
B-0403
LCS1-001

2065

000222

INTEGRATED ANALYTICAL LABORATORIES

General Chemistry Quality Control

Spike Sample Results Summary

TPHC

QC Sample	Spiked Result	Sample Result	% Recovery	Spike Added	Matrix-Units	Control Limit
2000-005SQC	496	ND	86.1 %	576.04	S-mg/Kg	75%-125%

NC - Non-Calculable, Sample Result > 4x Spike Added.

The above spike result applies to the following samples E01-

2005-001
2005-002
2005-003
2005-004
2005-005
2000-001
2000-002
2000-003
2000-004
2000-005
2006-010
2006-009
2006-011
2006-012
2006-013
2006-014
2018-001
2018-002
2018-003
2018-004
9999-001SD

2066

000223

INTEGRATED ANALYTICAL LABORATORIES

General Chemistry Quality Control

Duplicate Sample Results Summary

TPHC

QC Sample	Sample Result	Duplicate Result	Matrix-Units	RPD	Control Limit
1855-001SQC	ND	ND	S-mg/Kg	NC	20.0

The above duplicate results applies to the following samples E01-

1855-001	2014-010
1855-002	2014-011
2014-001	2014-012
2014-002	2006-002
2014-003	2006-005
2014-004	2006-006
2014-005	2006-007
2014-006	2006-008
2014-007	2020-001
2014-008	B-0403
2014-009	LCS1-001

2067

INTEGRATED ANALYTICAL LABORATORIES

General Chemistry Quality Control

Duplicate Sample Results Summary

TPHC

QC Sample	Sample Result	Duplicate Result	Matrix-Units	RPD	Control Limit
2000-005SQC	ND	ND	S-mg/Kg	NC	20.0

The above duplicate results applies to the following samples E01-

2005-001	2006-009
2005-002	2006-011
2005-003	2006-012
2005-004	2006-013
2005-005	2006-014
2000-001	2018-001
2000-002	2018-002
2000-003	2018-003
2000-004	2018-004
2000-005	9999-001SD
2006-010	

2068

000225

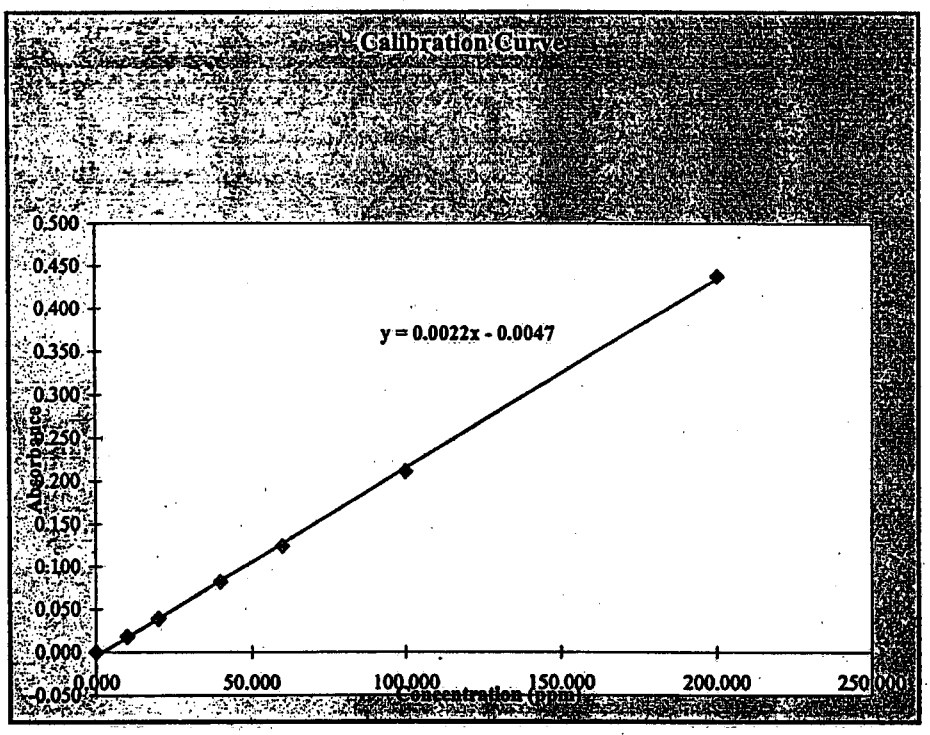
Integrated Analytical Laboratories

TPH

Date:	29-Jan-01
Method:	418.1
Matrix:	S/A
Analyst:	EDC

Conc.	Abs.
0.000	0.000
10.000	0.018
20.000	0.039
40.000	0.082
60.000	0.124
100.000	0.211
200.000	0.438

R^2=	0.999785534
Slope=	0.0022
Intercept=	-0.00471



Comments:

000226

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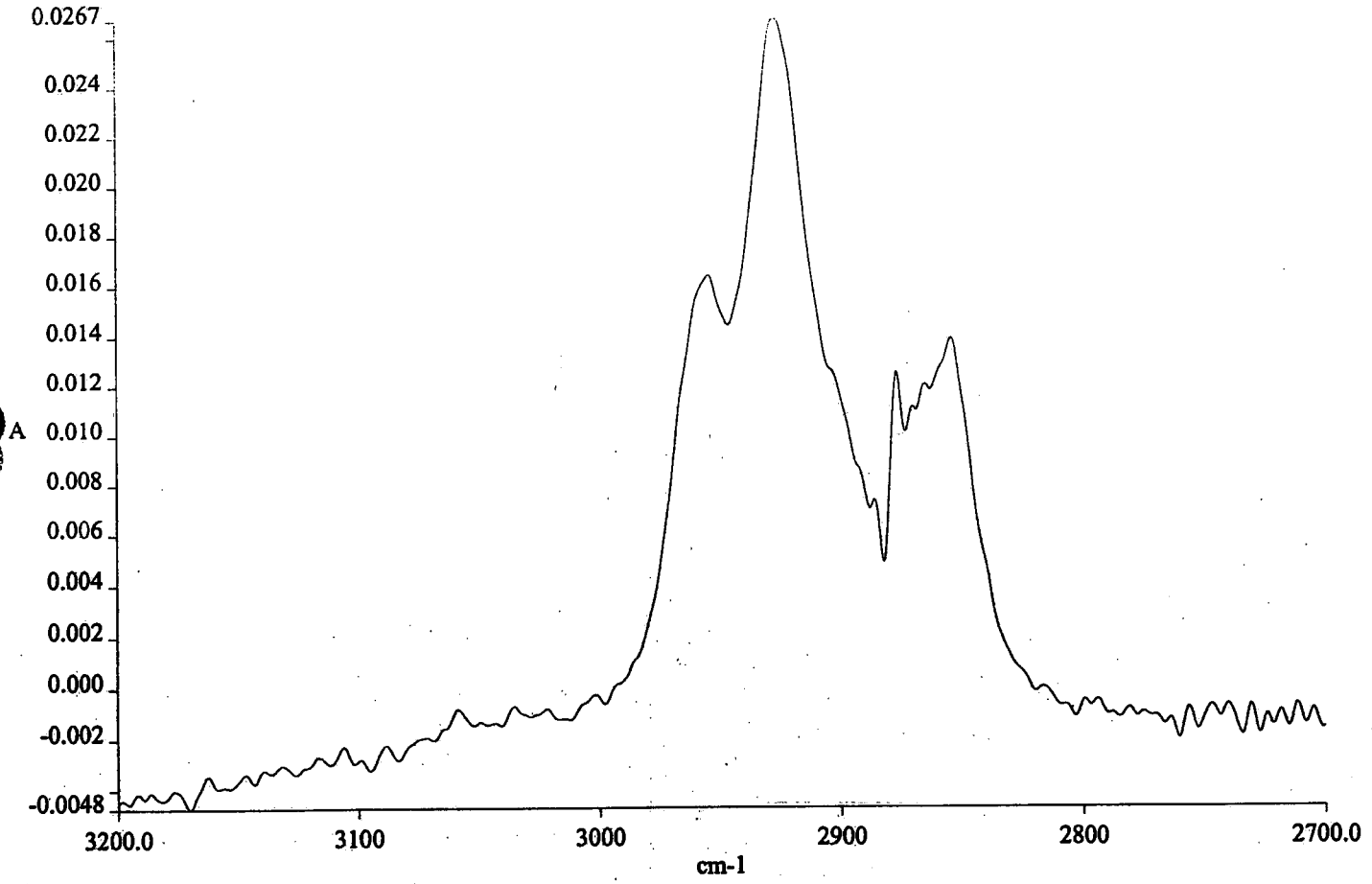

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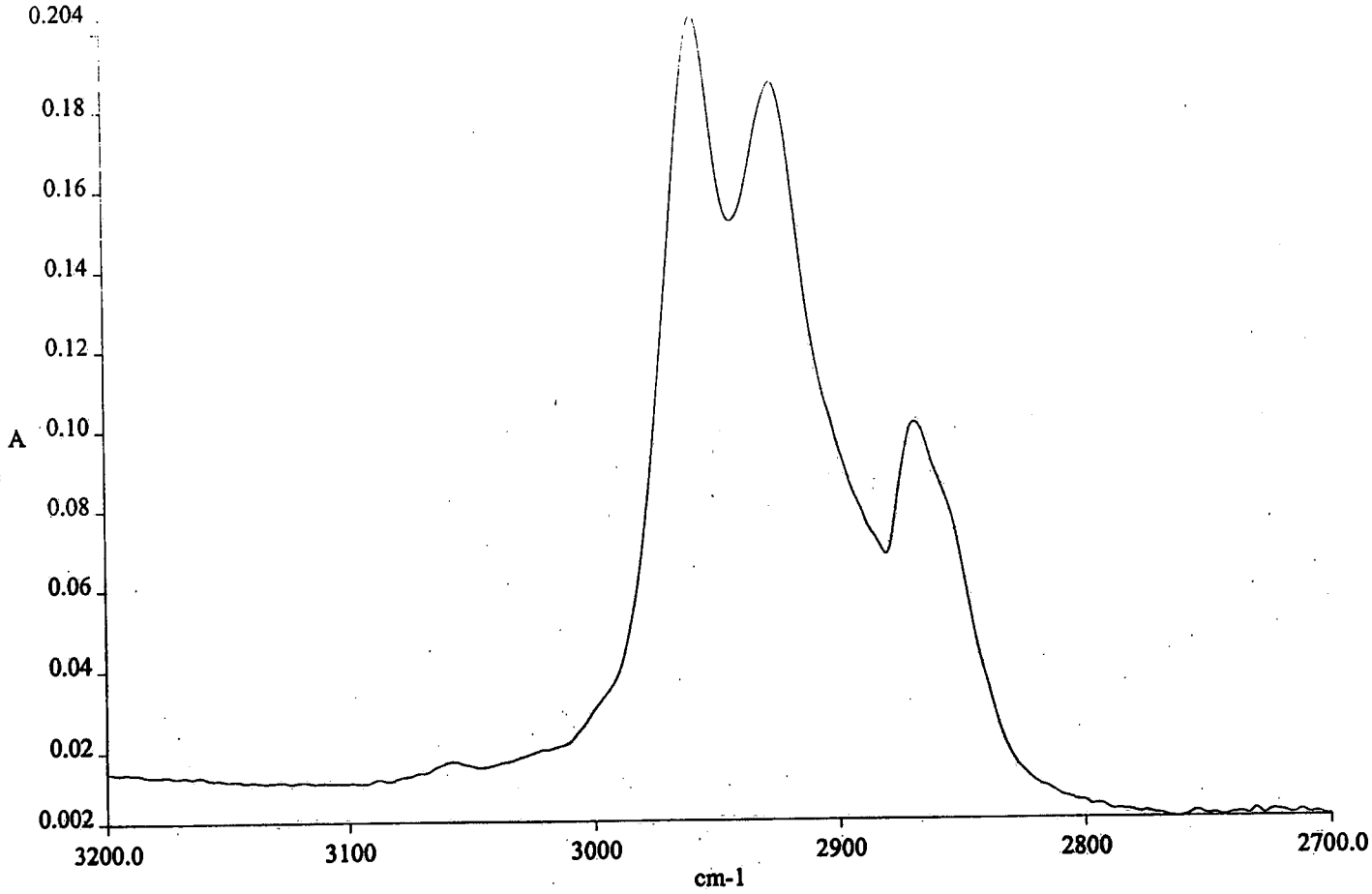

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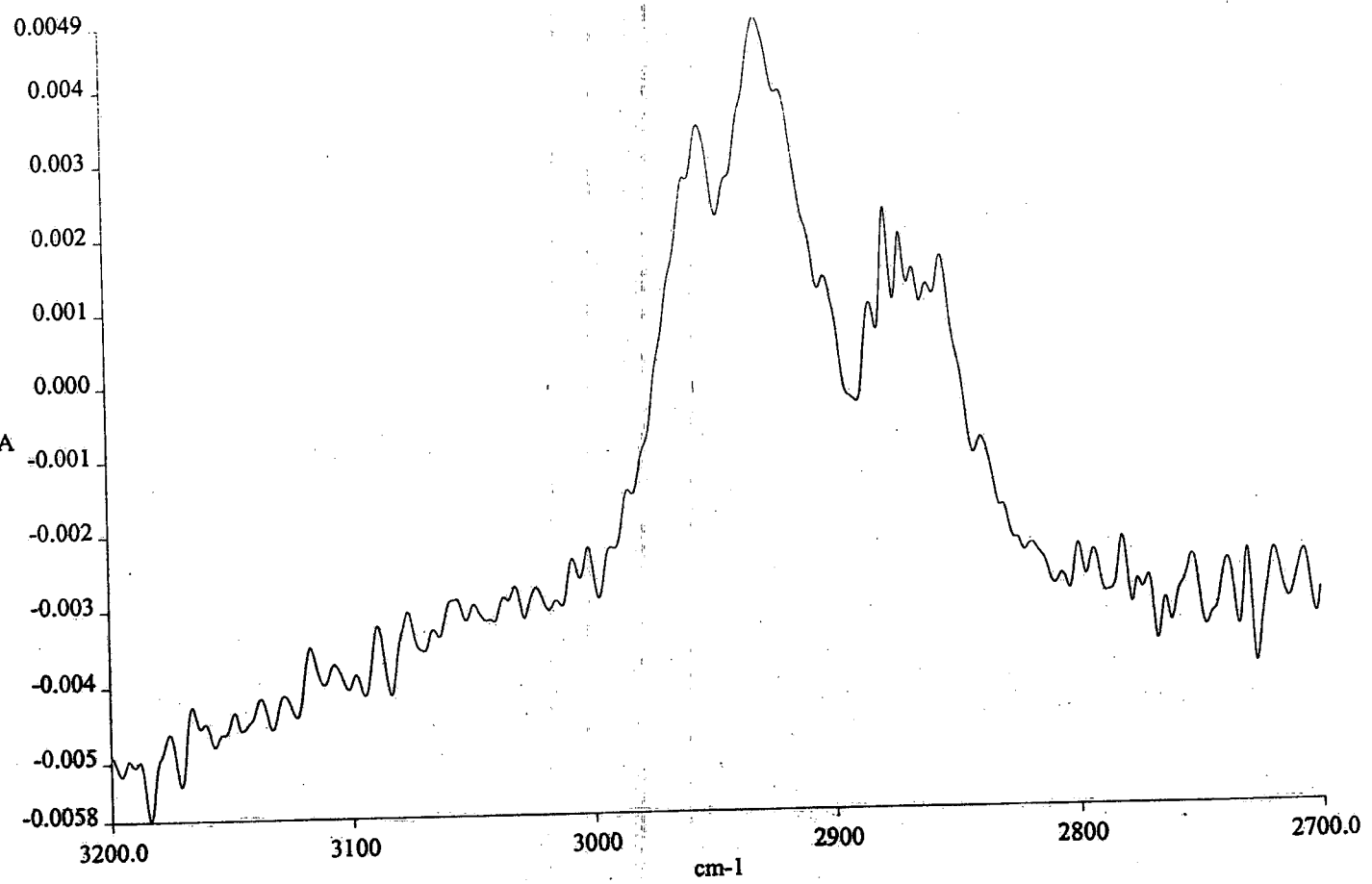

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2072

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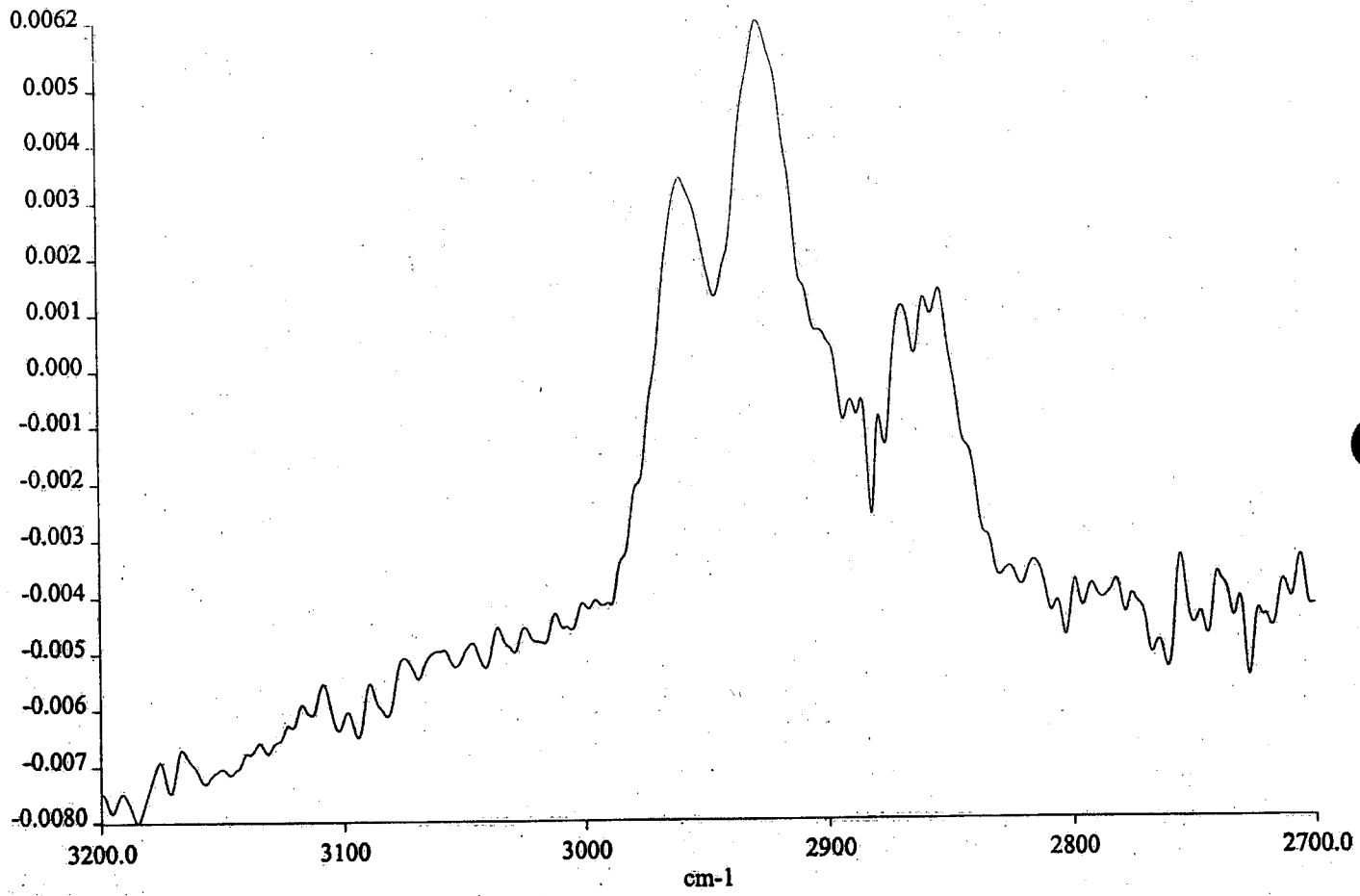

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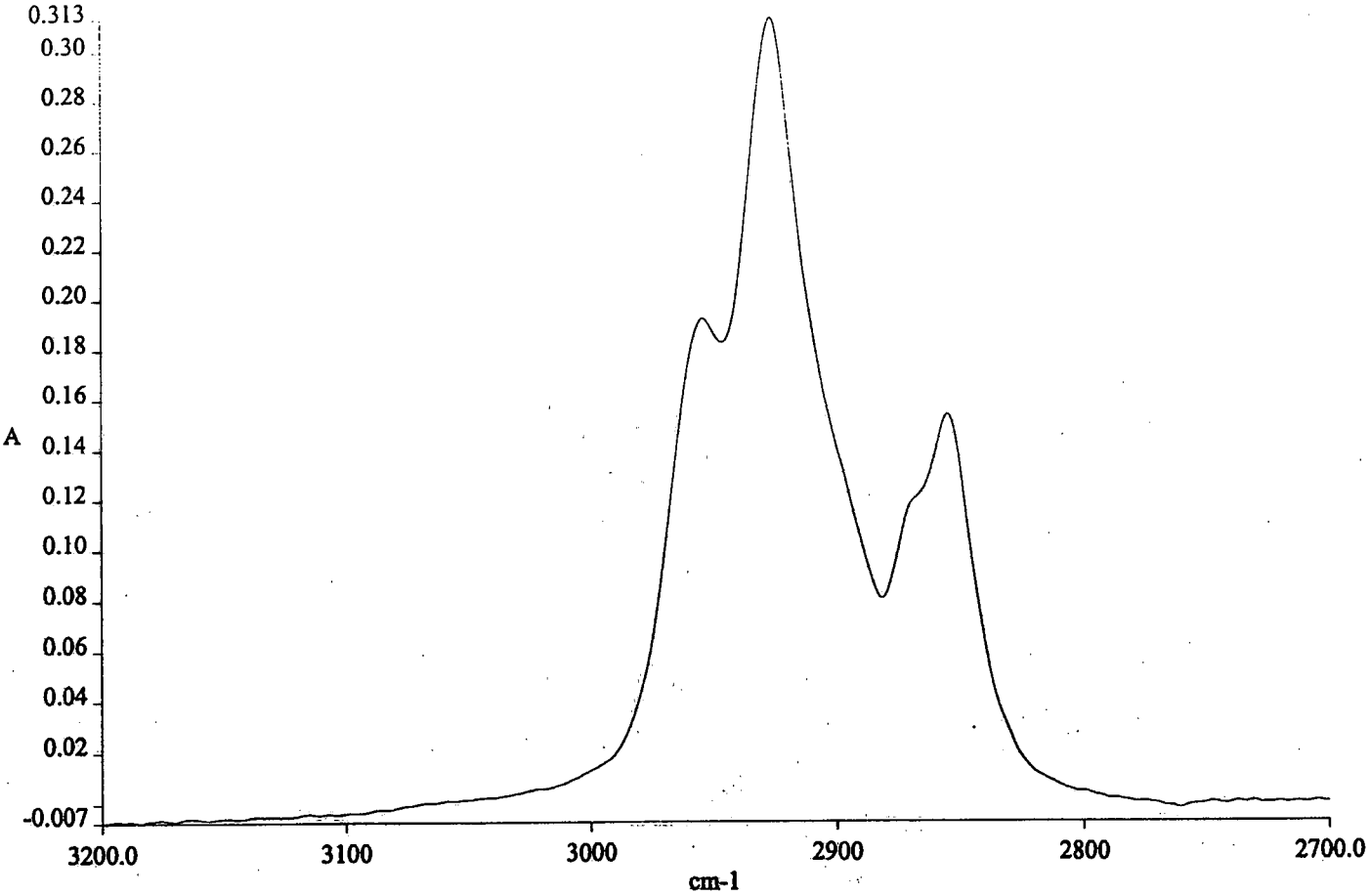

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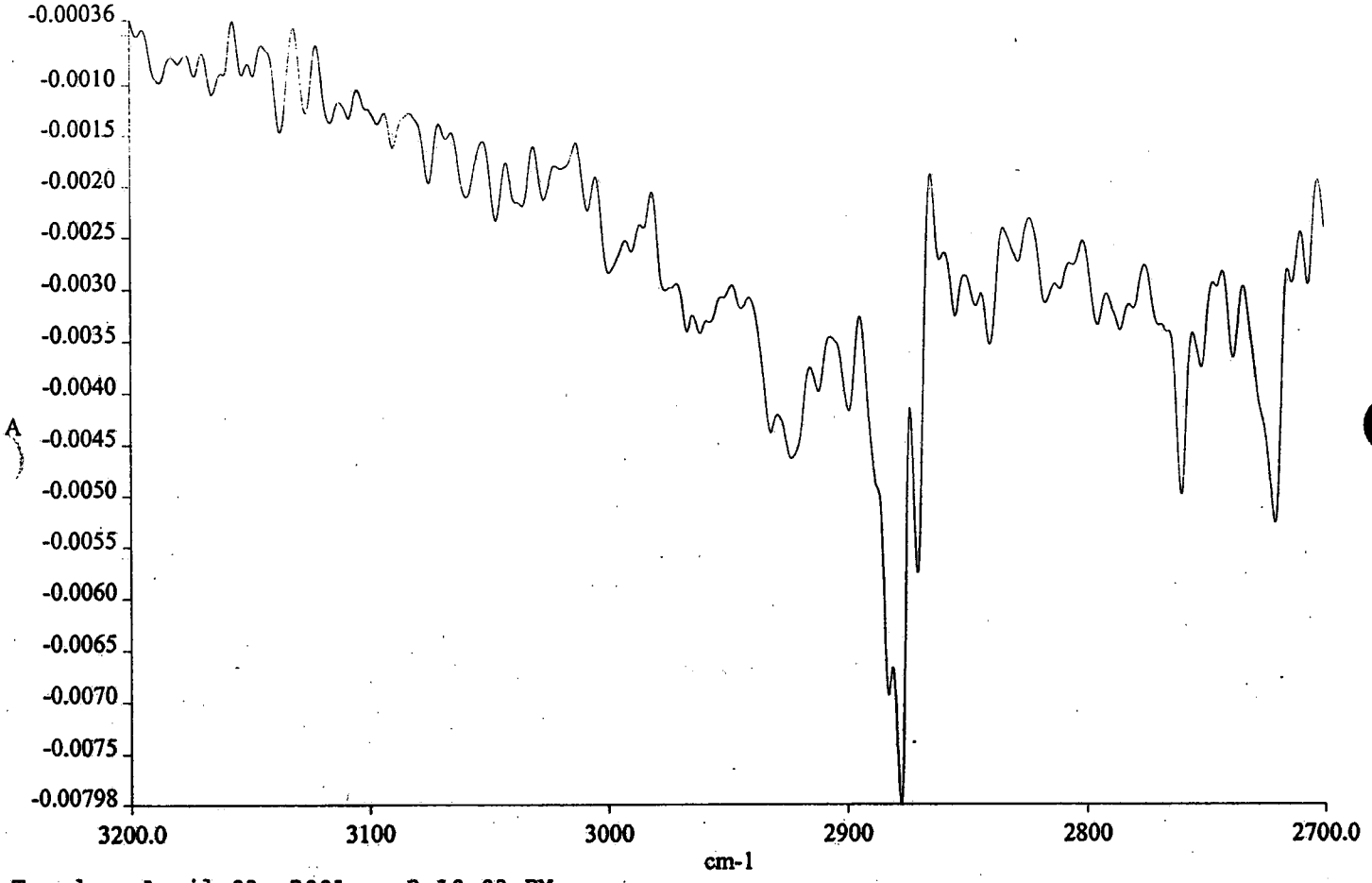

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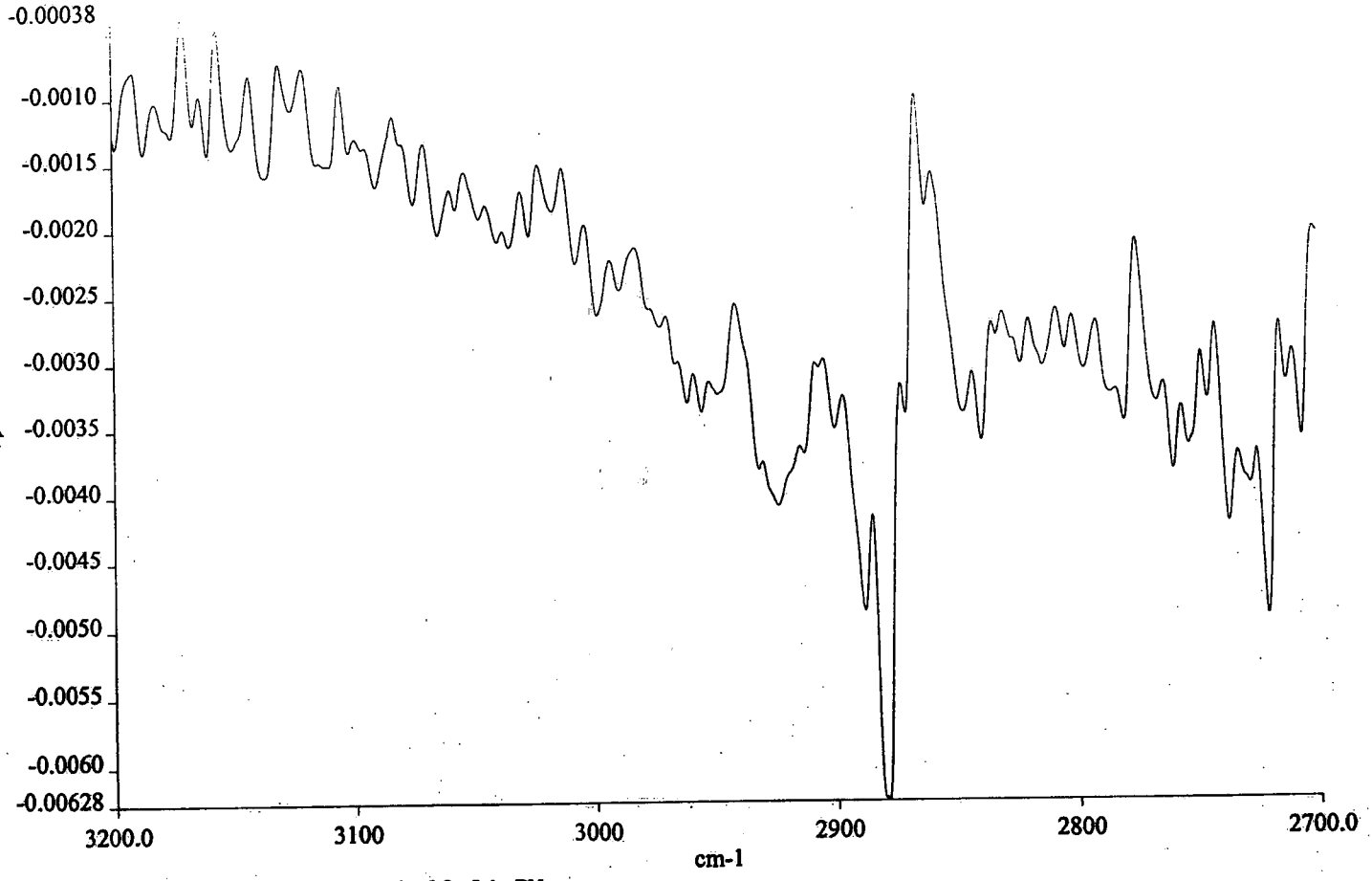

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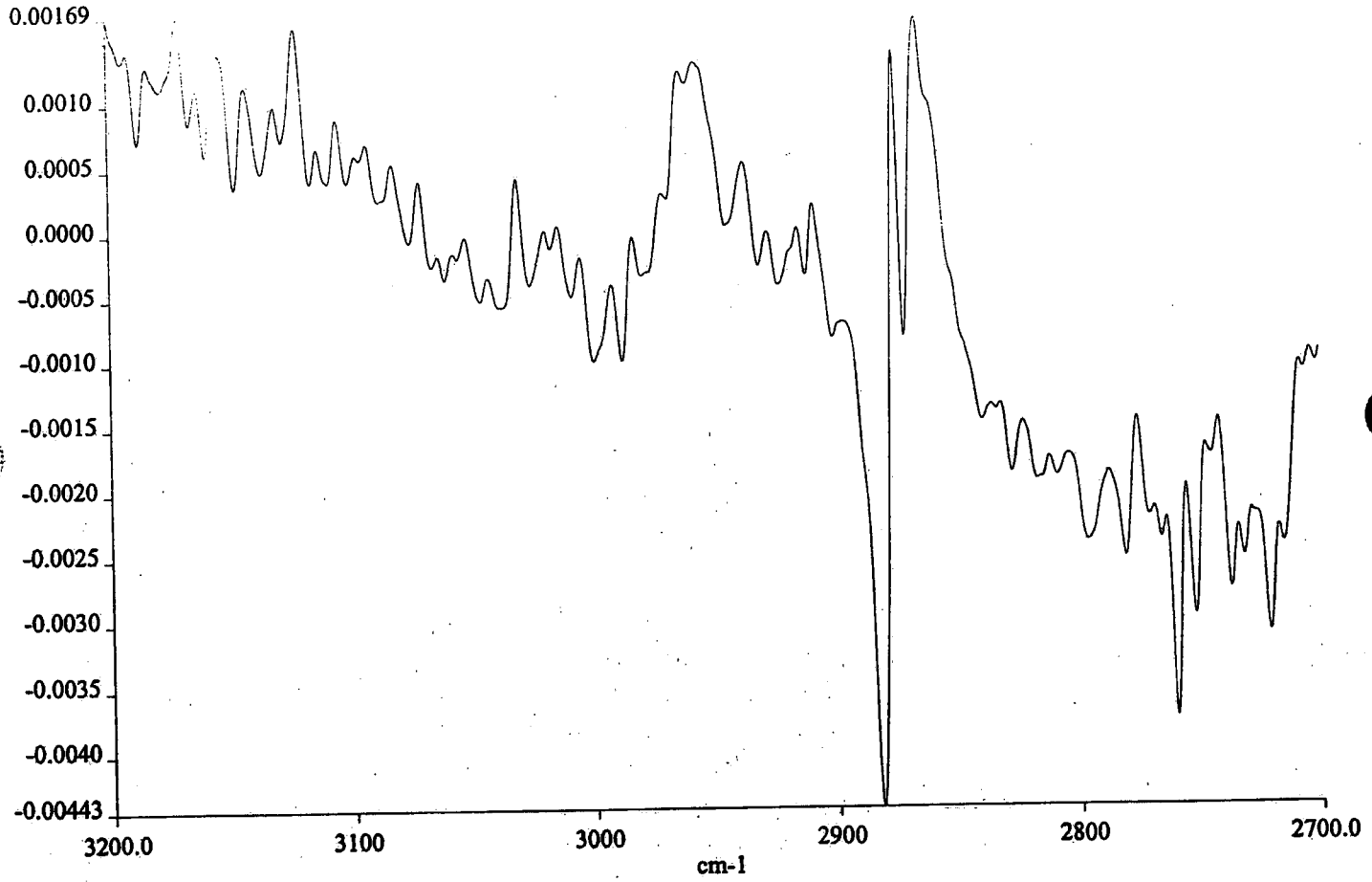
2006



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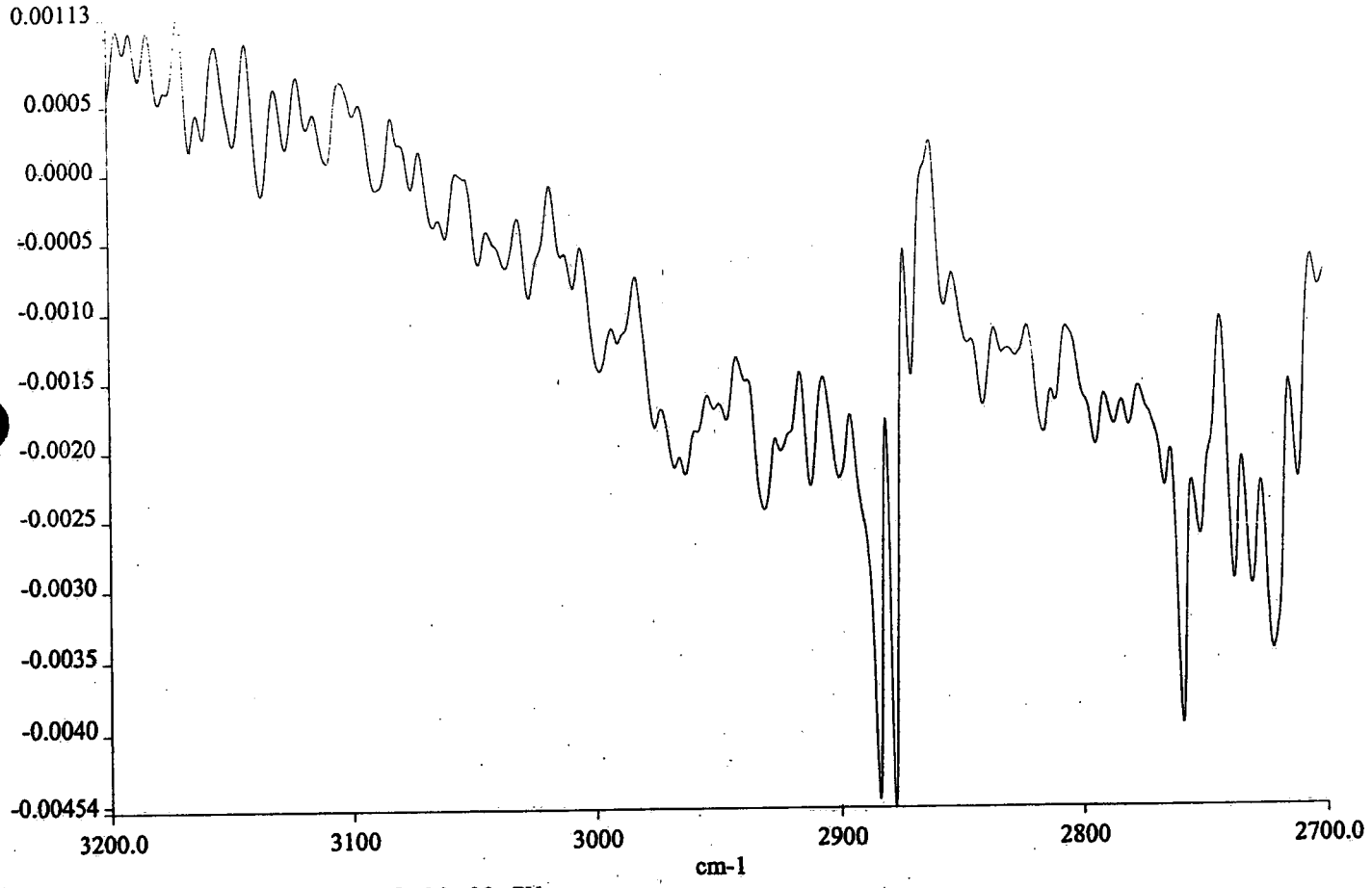

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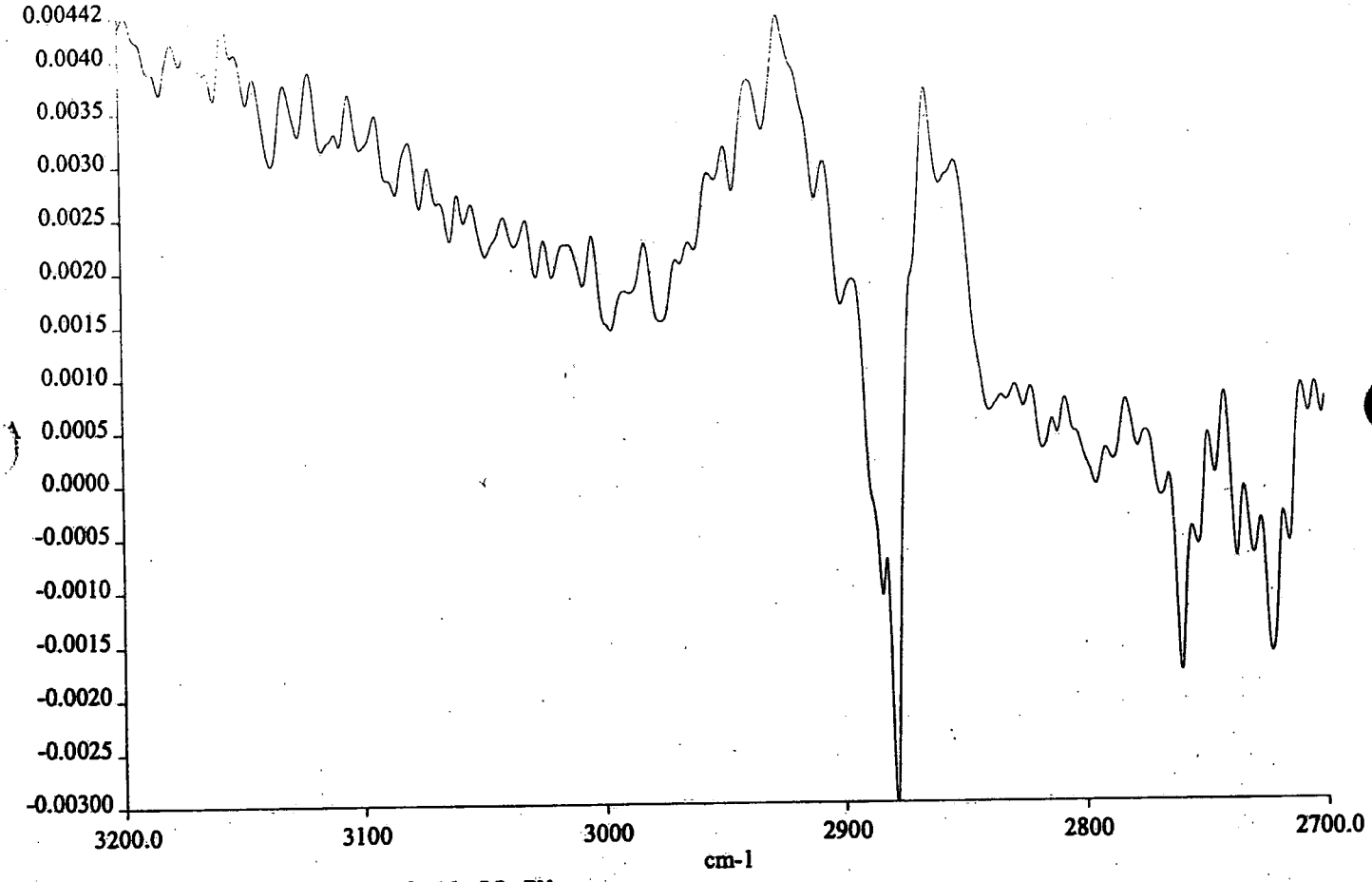

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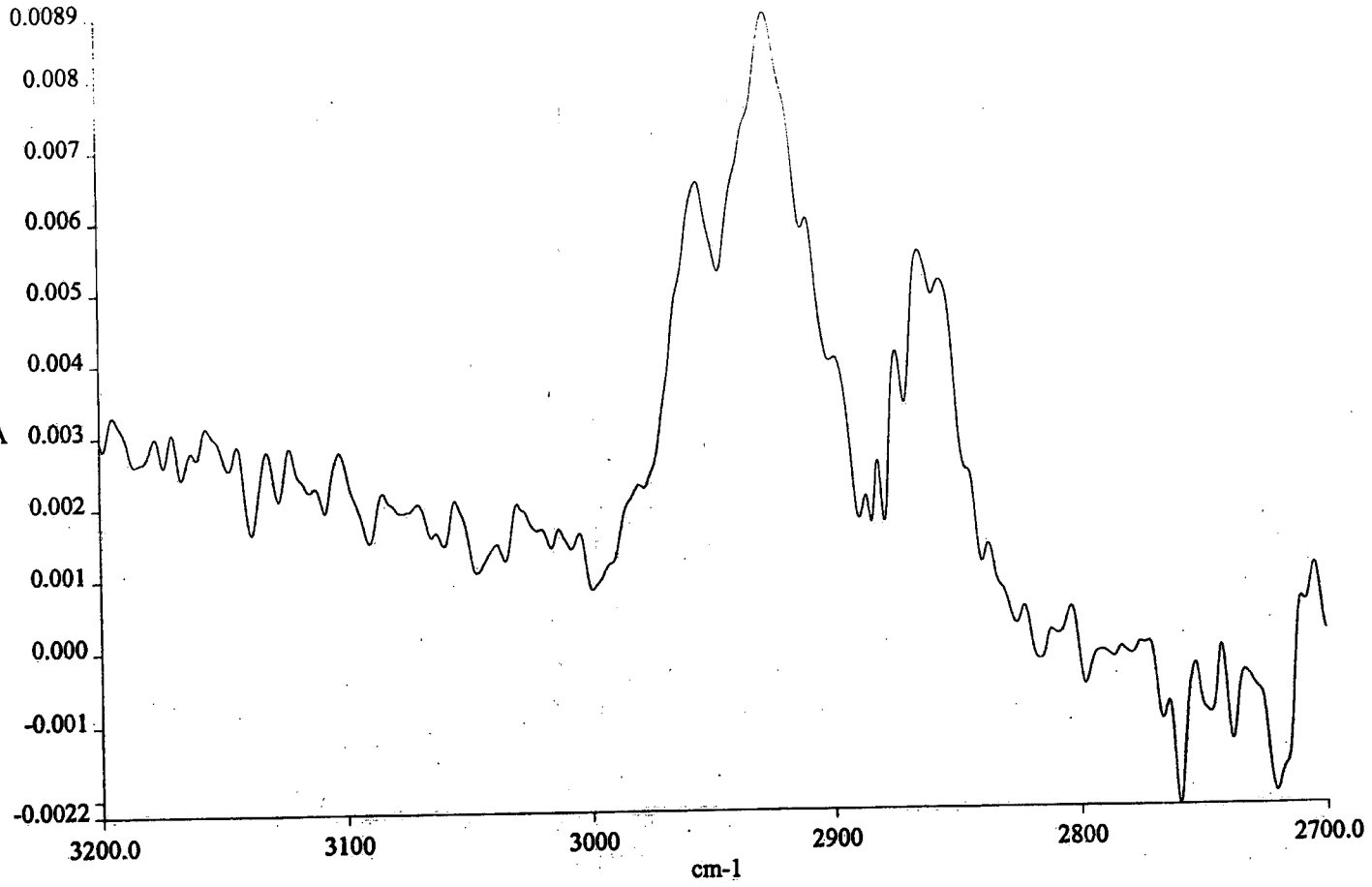

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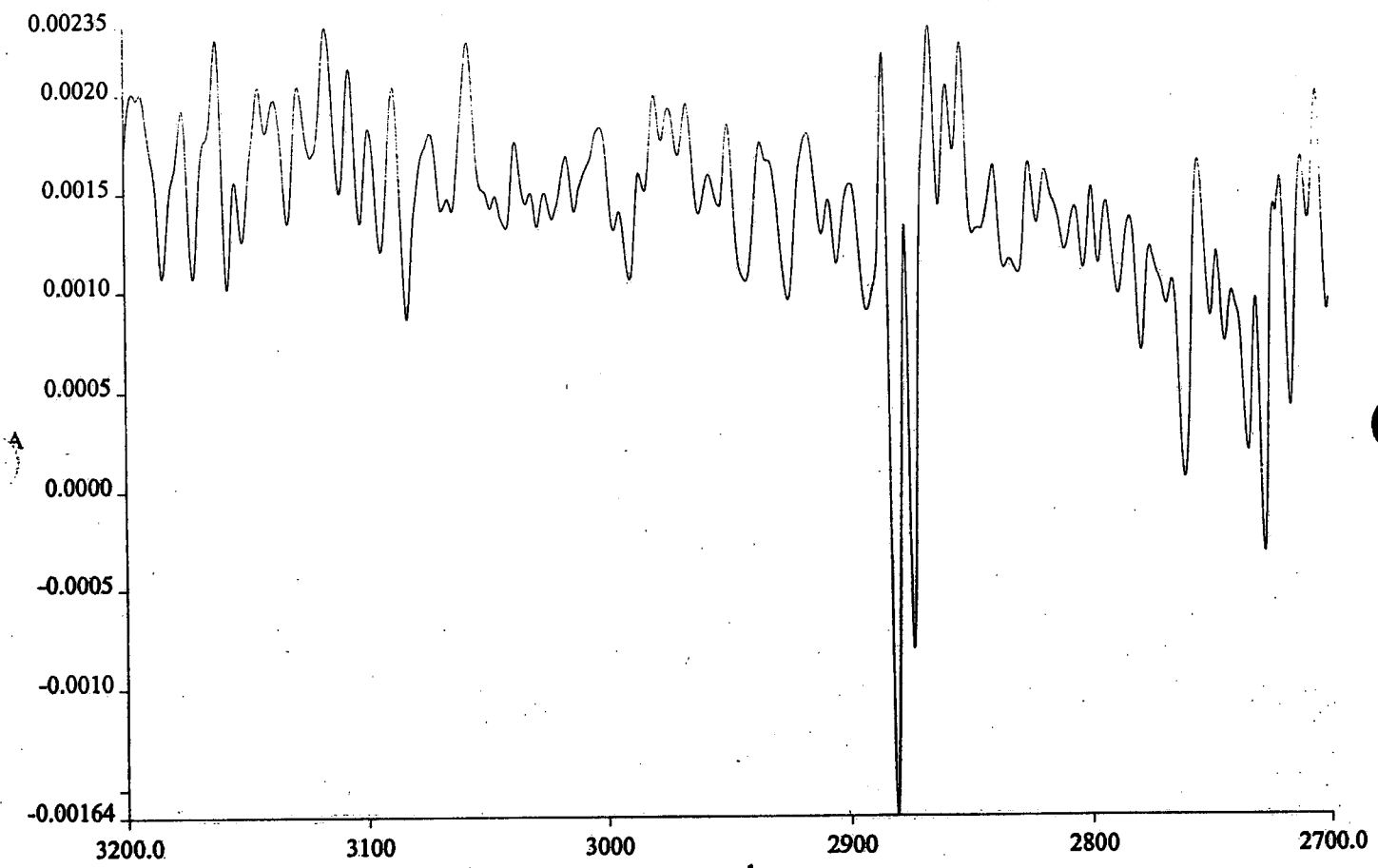

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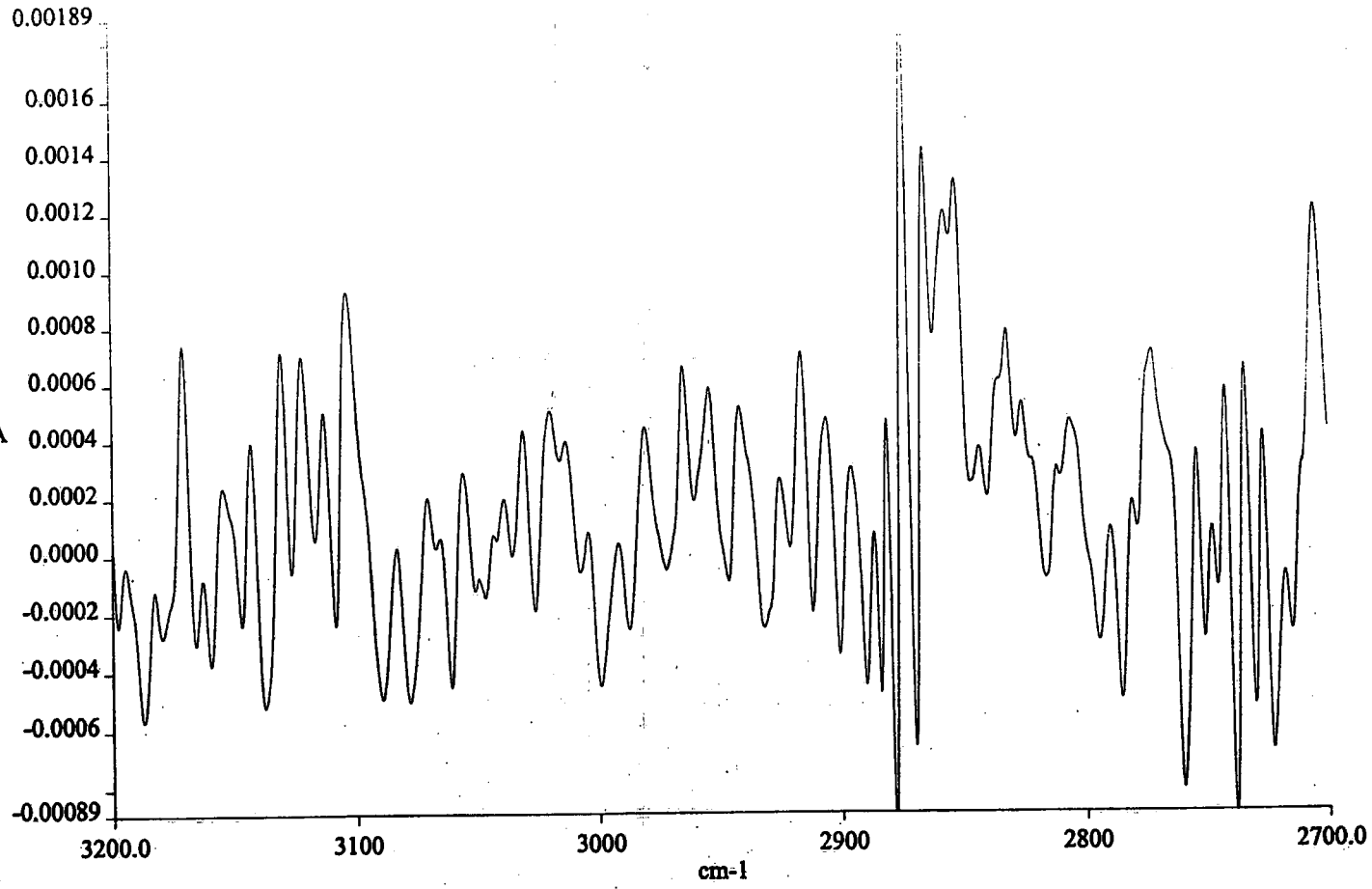

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Phone # (973) 361-425[illegible]
Fax # (973) 989-5288

INTEGRATED ANALYTI[illegible]L LABORATORIES
CHAIN OF C[illegible]TODY

[illegible]anklin Rd
R[illegible], NJ 07869

CLIENT & PROJECT

Company Name: Enviratechs	
Address: 2517 Highway 35	
Building D, Suite 202	
Manasquan, NJ 08736	
Telephone #: (732) 292-0100	
Fax #: (732) 292-2808	
Project Name: Orbis - Newark	
Project Manager: Chris Neuffer	
Reference ID#: 444 PO#: -	

REPORTING

Fax to:
Fax #:
Report to:
Address:
Invoice to:
Address:

Turnaround Time

Conditional / TPHC
24 hr* 48 hr (72 hr) 1 wk NA Other:

Verbal/Fax
24 hr* 48 hr* 72 hr* 1 wk* (2 wk) Other:

Hard Copy
72 hr* 1 wk* 2 wk* (3 wk) Other:

*Prior to sample arrival, Lab notification is required.

Report Format
Results Only
(Reduced)
Regulatory
(SRP Disk**: dbf or wkf)
Other:

ANALYTICAL PARAMETERS / PRESERVATIVES

** Circle format required

Preservatives
1. HCL 3. HNO_3
2. NaOH 4. H_2SO_4
5. MeOH 6. Other

COOLER TEMP 4 °C

SAMPLE INFORMATION

SAMPLE MATRIX
W - Waste SL - Sludge A - Aqueous
O - Oil X - Other S - Soil
GW - Groundwater SOL - Solid

Sample ID	Sample Description	Sampling Date	Sampling Time	am	pm	Matrix	# of Containers	Lab ID	VOA10	TPH	BN415	Lead	Comments
S-31		3-29-01	8:45	X		S	2	1	X				103472
S-32			9:20	X			2	2	X	X			458
S-33			9:42	X			2	3	X				471
S-34			10:00	X			2	4	X				464
S-35			10:25	X			2	5		X			466
S-36			10:30	X			2	6		X			463
S-37			13:55		X		2	7	X	X			450
S-38			14:20		X		2	8	X	X			445
S-39			14:40		X		2	9	X	X			511
S-40			14:55		X		1	10		X	X	X	

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Concentrations Expected
(LOW) MED HIGH

Known Hazard yes no
Describe

CUSTODY LOG

	Signature	Date	Time		Signature
Relinquished by:	[signature]	3/30/01	1320	Received by:	[signature]
Relinquished by:	[signature]	3/30/01	1900	Received by:	LAL Fridge
Relinquished by:	LAL Fridge	4/2/01	6:30	Received by:	[signature]
Relinquished by:				Received by:	
Relinquished by:				Received by:	

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Comments: SAMPLES S-35 & S-36 RUN TPH ONLY. HOLD FOR ADDITIONAL ANALYSIS.

Lab Case #
2006

PAGE: 1 OF 2

Phone # (973) 361-425[redacted]
Fax # (973) 989-5288

INTEGRATED ANALYTI[redacted]ABORATORIES
CHAIN OF C[redacted]DY

[redacted]anklin Rd
K [redacted]9

CLIENT & PROJECT

Company Name: Envirotactics	
Address: 2517 Highway 35	
Building D, Suite 202	
Manasquan, NJ 08736	
Telephone #: (732) 292-0100	
Fax #: (732) 292-2808	
Project Name: Orbis - Newark	
Project Manager: Chris Nauffer	
Reference ID#: 444 PO#:	

REPORTING

Fax to:	
Fax #:	
Report to:	
Address:	
Invoice to:	
Address:	

Turnaround Time

Conditional / TPHC
24 hr* 48 hr (72 hr) 1 wk NA Other:

Verbal/Fax
24 hr* 48 hr* 72 hr* 1 wk* (2 wk) Other:

Hard Copy
72 hr* 1 wk* 2 wk* (3 wk) Other:

*Prior to sample arrival, Lab notification is required.

Report Format

Results Only
(Reduced)
Regulatory
(SRP Disk**: dbf or wkl)
Other:

ANALYTICAL PARAMETERS / PRESERVATIVES

** Circle format required

Preservatives: 1. HCL 2. NaOH 3. HNO_3 4. H_2SO_4 5. MeOH 6. Other

COOLER TEMP 4 °C

SAMPLE INFORMATION

SAMPLE MATRIX: W - Waste, SL - Sludge, A - Aqueous, O - Oil, X - Other, S - Soil, GW - Groundwater, SOL - Solid

Sample ID	Sample Description	Sampling Date	Sampling Time	am	pm	Matrix	# of Containers	Lab ID	VOA+10	TPH	BN+15	Lead	PCB	Comments
S-41		3-29-01	15:10		X	S	1	11		X	X	X		
S-42			15:20		X	S	1	12		X	X	X		
S-43			15:37		X	S	1	13		X	X	X		
S-44			16:50		X	S	1	14		X	X	X		
T-5			9:50		X	S	1	15					X	
T-6		↓	9:55		X	S	1	16					X	
TB	Trip Blank	3-28-01				A	1	17	X					103454

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved.

Concentrations Expected: (LOW) MED HIGH

Known Hazard yes no

Describe

CUSTODY LOG

	Signature	Date	Time		Signature
Relinquished by:	[signature]	3/30/01	1320	Received by:	[signature]
Relinquished by:	[signature]	3/30/01	1900	Received by:	1Ac Fridge
Relinquished by:	1Ac Fridge	4/2/01	6:30	Received by:	[signature]
Relinquished by:				Received by:	
Relinquished by:				Received by:	

Comments:

Lab Case #: 2006

PAGE: 2 OF 2

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

REV 01

CHAIN OF CUSTODY

Case No.: E01-2006
Project : ORBIS - NEWARK - 444
Client/Project: ENVTACT/ORBIS - NEWARK
Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736
Date Received: 04/02/01
Time Received: 06:30
Report Format: Reduced

P.O. #: _____

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736
Verbal Due: Apr 16
Report Due: Apr 23

# of Containers	2	2	2	2	2	2
IAL ID #	2006-001	2006-002	2006-003	2006-004	2006-005	2006-006
Client ID #	S-31	S-32	S-33	S-34	S-35	S-36
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Sample Date	03/29/01	03/29/01	03/29/01	03/29/01	03/29/01	03/29/01
Sample Time	08:45	09:20	09:42	10:00	10:25	10:30
Methanol Kit	√	√	√	√	√	√
Balance Rent	√					
+ 10, PP MP	√	√	√	√	C	C
Solids	√	√	√	√	√	√
TPHC-48hr TAT		√			√	√
Electronic Del.	√					

nents: NOTE 1: VO DEPENDENT ON TPHC FOR SAMPLES #5 & #6.
NOTE 2: AS PER COC, LOW CONCENTRATIONS EXPECTED.
REV 01: AS PER C. NEUFFER 4/12/01, CANCEL VOAS ON HOLD. mrf

CHAIN OF CUSTODY

Case No.: E01-2006
Project : ORBIS - NEWARK - 444
Client/Project: ENVTACT/ORBIS - NEWARK
Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736
Date Received: 04/02/01
Time Received: 06:30
Report Format: Reduced

P.O. #: _____

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736
Verbal Due: Apr 16
Report Due: Apr 23

# of Containers	1	1	1	1	1
IAL ID #	2006-013	2006-014	2006-015	2006-016	2006-017
Client ID #	S-43	S-44	T-5	T-6	TB
Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	03/29/01	03/29/01	03/29/01	03/29/01	03/28/01
Sample Time	15:37	15:50	09:50	09:55	:
Methanol Kit					√
VO + 10, PP MP					√
PCB			√	√	
BN + 15	√	√			
Pb-Lead	√	√			
% Solids	√	√	√	√	
TPHC-48hr TAT	√	√			

Comments: NOTE 1: VO DEPENDENT ON TPHC FOR SAMPLES #5 & #6.
NOTE 2: AS PER COC, LOW CONCENTRATIONS EXPECTED.
REV 01: AS PER C. NEUFFER 4/12/01, CANCEL VOAS ON HOLD. mrf

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: 2006 CLIENT: ENVIROTACTICS

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

CHAIN OF CUSTODY: COMPLETE / INCOMPLETE Comments: _____

		Comments:
Sample Bottles Intact:	✓	
Sample Labels Intact/ Correct:	✓	
Sufficient Sample Volume:	✓	
Correct bottles/ preservative:	✓	
Samples received in holding time/ prep time:	✓	
Headspace/ bubbles in voa samples:	(✓)	
Samples to be subcontracted:	(✓)	
Preserved Sample pH checked: (Excluding voa samples)	(✓)	

KEY
✓ = YES
✕ = NO
(✓) = N/A

ADDITIONAL COMMENTS: _____

SAMPLE(S) VERIFIED BY: INITIAL BP DATE 4/2/01

CORRECTIVE ACTION REQUIRED: YES [ ] (SEE BELOW) NO [✓]

CLIENT NOTIFIED: YES [ ] Date/ Time: _____ NO [ ]

PROJECT CONTACT: _____

SUBCONTRACTED LAB: _____

DATE SHIPPED: _____

ADDITIONAL COMMENTS: _____

VERIFIED/TAKEN BY: INITIAL [illegible] DATE [ ]

REV 10/00

2057

Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-2006
Client : Envirotactics Inc.
Project : ORBIS - NEWARK - 444

	GC/MS V		EXTRACT DATE	EXTRACT TIME	EXTRACT INITIAL	ANALYSIS DATE	ANALYSIS TIME	ANALYSIS INITIAL
Methanol Kit	2006-001	S				4/2		GM
	2006-002	S						
	2006-003	S						
	2006-004	S						
	2006-005	S						
	2006-006	S						
	2006-007	S						
	2006-008	S						
	2006-009	S						
	2006-017	S						
Balance Rent	2006-001	S						
VO + 10, PP MP	2006-001	S						
	2006-002	S						
	2006-003	S						
	2006-004	S						
	2006	S						
	2006	S						
	2006-007	S						
	2006-008	S						
	2006-009	S						
	2006-017	S						
	GC EX							
PCB	2006-015	S	4/2	900	EDM2	4.2	400	[illegible]
	2006-016	S						
	GC/MS X							
BN + 15	2006-010	S	4/3	700-300	DL	4/3		JC
	2006-011	S						
	2006-012	S						
	2006-013	S						
	2006-014	S						
	METALS							
Pb-Lead	2006-010	S	4/2	2pm	L.C	4/3	1400	[illegible]
	2006-011	S						
	2006-012	S						
	2006-013	S						
	2006-014	S						
	WETCHEM							
% Solids	2006-001	S	4/2		KC			
	2006-002	S						
	2006-003	S						
	2006-004	S						
	2006-005	S						
	2006-006	S						

Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-2006
Client : Envirotactics Inc.
Project : ORBIS - NEWARK - 444

	WETCHEM		EXTRACT			ANALYSIS		
			DATE	TIME	INITIAL	DATE	TIME	INITIAL
% Solids	2006-007	S	4/2		KC			
	2006-008	S						
	2006-009	S						
	2006-010	S						
	2006-011	S						
	2006-012	S						
	2006-013	S						
	2006-014	S						
	2006-015	S						
	2006-016	S						
TPHC-48hr TAT	2006-002	S	4/2	1535	JK	4/3	915	EC
	2006-005	S						
	2006-006	S						
	2006-007	S						
	2006-008	S						
	2006-009	S						
	2006-010	S						
	2006-011	S						
	2006-012	S						
	2006-013	S						
	2006-014	S						
	AIR							
Electronic Del.	2006-001	S	—			—		

REVIEW & APPROVAL: [signature]
REMARKS :

000247

2049

PAR/SIR/RIW

Orbis Products Corporation
55 Virginia Street
Newark, Essex County, NJ
Case #86-11-17-0100 Ref 15
Attachment 10
Soil Laboratory Reports
(5 of 6)

Integrated Analytical Labs

Integrated Analytical Laboratories, LLC.

273 Franklin Road
Randolph, N.J. 07869

Phone: 973 361-4252
Fax: 973 989-5288

ANALYTICAL DATA REPORT

for

Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan,NJ 08736

Project: ORBIS - NEWARK - 444
Lab Case Number: E01-2092
Date Report Prepared: April 17, 2001

CLIENT SAMPLE ID	LABORATORY SAMPLE ID
S-45	2092-001
S-46	2092-002
S-47	2092-003
S-48	2092-004
S-49	2092-005
S-50	2092-006
S-51	2092-007
S-52	2092-008
S-53	2092-009
S-54	2092-010
S-55	2092-011
S-56	2092-012
S-57	2092-013
TB	2092-014

All required protocols were followed during analyses. These data have been reviewed and accepted by

Michael H. Leftin, Ph.D.
Laboratory Director

The liability of Integrated Analytical Laboratories, LLC. is limited to the actual cost of the analyses performed.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

MATRIX QUALIFIERS

A - Indicates the sample is an Aqueous matrix.

O - Indicates the sample is an Oil matrix.

S - Indicates the sample is a Soil, Sludge or Sediment matrix.

X - Indicates the sample is an Other matrix as indicated by Client Chain of Custody.

DATA QUALIFIERS

B - Indicates the analyte was found in the Blank and in the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of the analyte.

C - Common Laboratory Contaminant.

D - The compound was reported from the Diluted analysis.

D.F. - Dilution Factor.

E - Estimated concentration, reported results are outside the calibrated range of the instrument.

J - Indicates an estimated value. The compound was detected at a value below the method detection limit but greater than zero. For GC/MS procedures, the mass spectral data meets the criteria required to identify the target compound.

MDL - Method Detection Limit.

MI - Indicates compound concentration could not be determined due to Matrix Interferences.

NA - Not Applicable.

ND - Indicates the compound was analyzed for but Not Detected at the MDL.

REPORT QUALIFIERS

All solid sample analyses are reported on a dry weight basis.

All solid sample values are corrected for original sample size and percent solids.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CONFORMANCE / NONCONFORMANCE SUMMARY

Integrated Analytical Laboratories, LLC. received fourteen (14) soil sample(s) from Envirotactics Inc. (Project: ORBIS - NEWARK - 444) on April 4, 2001 for the analysis of:

(4) Volatiles + 10
(5) Volatiles + 15
(2) Semivolatiles - BN + 15
(5) Semivolatiles - BNA + 25
(1) Semivolatiles - PAH
(6) PCB's
(5) Pesticides
(1) Metals (Lead)
(6) PP Metals
(13) Total Petroleum Hydrocarbons
(5) Cyanide, Total
(5) Phenols

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

M Colatorci
Reviewed by

4/23/01
Date

7094

INTEGRATED ANALYTICAL LABORATORIES, LLC.

LABORATORY DELIVERABLES CHECK LIST

Lab Case Number: E01-2092

		Check If Complete
1.	Cover Page, Title Page listing Lab Certification #, facility name & address and date of report preparation.	✓
2.	Table of Contents.	✓
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds.	✓
4.	Summary Table cross-referencing Field ID's vs. Lab ID's.	✓
5.	Document bound, paginated and legible.	✓
6.	Chain of Custody.	✓
7.	Methodology Summary.	✓
8.	Laboratory Chronicle and Holding Time Check.	✓
9.	Results submitted on a dry weight basis (if applicable).	✓
10.	Method Detection Limits.	✓
11.	Lab certified by NJDEP for parameters or appropriate category of parameters or a member of the USEPA CLP.	✓
12.	NonConformance Summary.	✓

QC Reviewed by

4/25/01
Date

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC/MS VOLATILE ANALYSIS

Lab Case Number: E01 - 2092

	No	Yes
1. Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks).		✓
2. GC/MS Tuning Specifications: a. BFB Passed		✓
3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series, 12 hours for 8000 series and 8 hours for 500 series.		✓
4. GC/MS Calibration - Initial calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours before sample analysis for 600 series, 12 hours for 8000 series		✓
5. GC/MS Calibration Requirements: a. Calibration Check Compounds		✓
b. System Performance Check Compounds		✓
6. Blank Contamination - If yes, list compounds and concentrations in each blank:	✓	
7. Surrogate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range)		✓
If not met, were the calculations checked and the results qualified as "estimated"?		na
8. Matrix Spike/Matrix Spike Duplicate meet criteria (if not, list those compounds and their recoveries/% differences which fall outside the acceptable range)		✓
9. Internal Standard Area/Retention Time Shift meet criteria		✓
10. Extraction Holding Time Met If not met, list number of days exceeded for each sample:		NA
11. Analysis Holding Time Met If not met, list number of days exceeded for each sample:		✓
12. Sample Dilution Performed		✓

High Target Compounds	High Nontarget Compounds	Matrix Interference	Other
✓			

13. Comments:

Organics Manager

4/16/01
Date

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC/MS SEMIVOLATILE ANALYSIS

Lab Case Number: E01 - 2092

	No	Yes
1. Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks).		✓
2. GC/MS Tuning Specifications: a. DFTPP Passed		✓
3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series, 12 hours for 8000 series.		✓
4. GC/MS Calibration - Initial calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours before sample analysis for 600 series.		✓
5. GC/MS Calibration Requirements: a. Calibration Check Compounds		✓
b. System Performance Check Compounds		✓
6. Blank Contamination - If yes, list compounds and concentrations in each blank: a. B/N Fraction	✓	
b. Acid Fraction		
7. Surrogate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range) a. B/N Fraction		✓
b. Acid Fraction		
If not met, were the calculations checked and the results qualified as "estimated"?		na
8. Matrix Spike/Matrix Spike Duplicate meet criteria (if not, list those compounds and their recoveries/% differences which fall outside the acceptable range) a. B/N Fraction		✓
b. Acid Fraction		
9. Internal Standard Area/Retention Time Shift meet criteria		✓
10. Extraction Holding Time Met		✓
If not met, list number of days exceeded for each sample:		
11. Analysis Holding Time Met		✓
If not met, list number of days exceeded for each sample:		
12. Sample Dilution Performed		✓

High Target Compounds	High Nontarget Compounds	Matrix Interference	Other
✓	✓		

13. Comments:

Organics Manager

04/16/01
Date

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC ANALYSIS - PCB'S, PESTICIDES, HERBICIDES

Lab Case Number: E01 - 2098

		No	Yes
1.	Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks).		✓
2.	Standards Summary submitted.		✓
3.	Calibration - Initial calibration performed within 30 days before sample analysis and continuing calibration performed within 12 hrs of the sample analysis.		✓
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:	✓	
	a. PCB's _____		
	b. Pesticides _____		
	c. Herbicides _____		
5.	Surrogate Recoveries meet criteria (if applicable). If not met, list those compounds and their recoveries which fall outside the acceptable range:		✓
	a. PCB's _____		
	b. Pesticides _____		
	c. Herbicides _____		
6.	Matrix Spike/Matrix Spike Duplicate meet criteria (if not, list those compounds and their recoveries/% differences which fall outside the acceptable range) acceptable range:		✓
	a. PCB's _____		
	b. Pesticides _____		
	c. Herbicides _____		
7.	Retention Time Shift Meet Criteria (if applicable).		✓
8.	Extraction Holding Time Met. If not met, list number of days exceeded for each sample:		✓
	_____		
	_____		
9.	Analysis Holding Time Met. If not met, list number of days exceeded for each sample:		✓
	_____		
	_____		

Comments:

_____

_____

_____ Organic Manager

04.13.2001 Date

INTEGRATED ANALYTICAL LABORATORIES

PHC ANALYSIS CONFORMANCE/NONCONFORMANCE SUMMARY

Lab Case Number: E01 - 2092

	No	Yes
1. Blank contamination If yes, list the sample and the concentration in each blank:	✓	
2. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list the samples and corresponding recovery which falls outside the acceptable range)		✓
3. IR spectra submitted for all standards, blanks & samples (as required).		✓
4. Chromatograms submitted for all standards, blanks & samples if GC fingerprinting was conducted.		NA
5. Extraction Holding Time Met If not met, list number of days exceeded for each sample:		✓
6. Analysis Holding Time Met If not met, list number of days exceeded for each sample:		✓

Additional Comments: _____

Paul Canista
Dept. Supervisor

4-10-01
Date

INTEGRATED ANALYTICAL LABORATORIES

METAL ANALYSIS CONFORMANCE/NONCONFORMANCE SUMMARY

Lab Case Number: E01 - 2092

	No	Yes
1. Calibration Summary Meet Criteria.		✓
2. ICP Interference Check Sample Results Meets Criteria (if applicable)		✓
3. Serial Dilution Summary Submitted (if applicable) / Meets Criteria		✓
4. Internal Standards Meet Criteria (if applicable)		✓
5. Laboratory Control Sample Summary Submitted (if applicable)/Meets Criteria		
6. Blank Contamination: If yes, list compounds and concentrations in each blank:	✓	
7. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria. (If not, list those compounds and their recoveries which fall outside the acceptable range).		✓
8. Extraction Holding Time Met. If not, list number of days exceeded for each sample:		✓
9. Analysis Holding Time Met. If not, list number of days exceeded for each sample:		✓

Additional Comments:

H. Falk-Jeagerren
Inorganics Manager

4/13/01
Date

rev 01/01

2100

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2092

Lab ID:	2092-001			2092-002			2092-003			2092-004		
Client ID:	S-45			S-46			S-47			S-48		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	4/3/2001			4/3/2001			4/3/2001			4/3/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (ppb)												
Benzene	23000		770	581000		37900	19000		742	506	J	701
Toluene	1980		770	ND		37900	ND		742	ND		701
Chlorobenzene	4000		770	ND		37900	ND		742	ND		701
Ethylbenzene	274	J	770	ND		37900	ND		742	ND		701
Total Xylenes	269	J	770	ND		37900	ND		742	ND		701
TOTAL VO's:	29523	J		581000			19000			506	J	
TOTAL TIC's:	ND			ND			ND			ND		
TOTAL VO's & TIC's:	29523	J		581000			19000			506	J	
Semivolatiles - BN (ppb)												
Phenanthrene	155		81.5	~		~	~		~	~		~
Fluoranthene	339		81.5	~		~	~		~	~		~
Pyrene	494		81.5	~		~	~		~	~		~
Benzo[a]anthracene	238		81.5	~		~	~		~	~		~
Chrysene	274		81.5	~		~	~		~	~		~
bis(2-Ethylhexyl)phthalate	49.6	J	81.5	~		~	~		~	~		~
Benzo[b]fluoranthene	159		81.5	~		~	~		~	~		~
Benzo[k]fluoranthene	115		81.5	~		~	~		~	~		~
Benzo[a]pyrene	214		81.5	~		~	~		~	~		~
Indeno[1,2,3-cd]pyrene	130		81.5	~		~	~		~	~		~
Dibenz[a,h]anthracene	55.6	J	81.5	~		~	~		~	~		~
Benzo[g,h,i]perylene	164		81.5	~		~	~		~	~		~
TOTAL BN'S:	2387	J		~			~			~		
TOTAL TIC's:	2763			~			~			~		
TOTAL BN'S & TIC's:	5150	J		~			~			~		
Semivolatiles - BNA (ppb)												
TOTAL BNA'S:	~			ND		116	ND		110	ND		108
TOTAL TIC's:	~			5003			ND			477		
TOTAL BNA'S & TIC's:	~			5003			ND			477		
PCB's (ppb)	~		~	ND		159	ND		154	ND		152

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2092

Lab ID:	2092-001		2092-002		2092-003		2092-004	
Client ID:	S-45		S-46		S-47		S-48	
Matrix:	Soil		Soil		Soil		Soil	
Sampled Date:	4/3/2001		4/3/2001		4/3/2001		4/3/2001	
PARAMETER(Units)	Conc Q	MDL	Conc Q	MDL	Conc Q	MDL	Conc Q	MDL
Pesticides (ppb)								
alpha-BHC	~	~	ND	9.95	ND	9.61	ND	9.52
beta-BHC	~	~	ND	9.95	ND	9.61	ND	9.52
gamma-BHC	~	~	ND	9.95	ND	9.61	ND	9.52
delta-BHC	~	~	ND	9.95	ND	9.61	ND	9.52
Heptachlor	~	~	ND	9.95	ND	9.61	ND	9.52
Aldrin	~	~	ND	9.95	ND	9.61	ND	9.52
Heptachlor epoxide	~	~	ND	9.95	ND	9.61	ND	9.52
Endosulfan I	~	~	ND	9.95	ND	9.61	ND	9.52
4,4'-DDE	~	~	15.4	9.95	ND	9.61	ND	9.52
Dieldrin	~	~	ND	9.95	ND	9.61	ND	9.52
Endrin	~	~	ND	9.95	ND	9.61	ND	9.52
Endosulfan II	~	~	ND	9.95	ND	9.61	ND	9.52
4,4'-DDD	~	~	133	9.95	ND	9.61	37.8	9.52
Endrin aldehyde	~	~	ND	9.95	ND	9.61	ND	9.52
Endosulfan sulfate	~	~	ND	9.95	ND	9.61	ND	9.52
'-DDT	~	~	436	9.95	29.5	9.61	ND	9.52
lordane	~	~	ND	49.7	ND	48	ND	47.6
oxaphene	~	~	ND	49.7	ND	48	ND	47.6
Metals (ppm)								
Antimony	~	~	ND	2.39	ND	2.38	ND	2.31
Arsenic	~	~	1.61	0.239	1.65	0.238	200	0.231
Beryllium	~	~	0.747	0.239	0.665	0.238	81.2	0.231
Cadmium	~	~	ND	0.239	0.266	0.238	5.63	0.231
Chromium	~	~	20.8	0.717	18.3	0.714	2000	0.693
Copper	~	~	22.1	0.478	16.7	0.476	1660	0.462
Lead	58.4	2.46	14.5	2.39	8.64	2.38	936	2.31
Mercury	~	~	0.020	0.015	ND	0.0148	ND	0.0142
Nickel	~	~	22.5	0.717	22.4	0.714	2220	0.693
Selenium	~	~	ND	2.39	ND	2.38	ND	2.31
Silver	~	~	ND	0.602	ND	0.592	ND	0.569
Thallium	~	~	0.144	0.0957	0.134	0.0952	15.5	0.0924
Zinc	~	~	71.7	1.20	52.6	1.19	5520	1.15
General Analytical								
Cyanide, Total (ppm)	~	~	ND	1.21	ND	1.19	ND	1.15
Phenol (ppm)	~	~	ND	3.03	ND	2.97	17.1	2.87
Total Petroleum Hydrocarbons (ppm)	33	25	36.9	25	ND	25	ND	25

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2092

Lab ID:	2092-005			2092-006			2092-007			2092-008		
Client ID:	S-49			S-50			S-51			S-52		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	4/3/2001			4/3/2001			4/3/2001			4/3/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (ppb)												
Benzene	58500		1480	472	J	844	61100		17300	~		~
Toluene	1590		1480	6070		844	10800000	D	432000	~		~
Chlorobenzene	655	J	1480	ND		844	ND		17300	~		~
Ethylbenzene	ND		1480	ND		844	10900	J	17300	~		~
Total Xylenes	ND		1480	ND		844	58000		17300	~		~
TOTAL VO's:	60745	J		6542	J		10930000	J		~		
TOTAL TIC's:	ND			ND			1572800			~		~
TOTAL VO's & TIC's:	60745	J		6542	J		12502800	J		~		~
Semivolatiles - BN (ppb)												
1,2-Dichlorobenzene	~		~	~		~	3710		3130	~		~
Naphthalene	~		~	~		~	5030		3130	~		~
2-Methylnaphthalene	~		~	~		~	6860		3130	~		~
Fluorene	~		~	~		~	3280		3130	~		~
Phenanthrene	~		~	~		~	19600		3130	~		~
Anthracene	~		~	~		~	5880		3130	~		~
Carbazole	~		~	~		~	16000		3130	~		~
Fluoranthene	~		~	~		~	23000		3130	~		~
Benzidine	~		~	~		~	270000		3130	~		~
Pyrene	~		~	~		~	12800		3130	~		~
Benzo[a]anthracene	~		~	~		~	8180		3130	~		~
Chrysene	~		~	~		~	7620		3130	~		~
bis(2-Ethylhexyl)phthalate	~		~	~		~	77200		3130	~		~
Benzo[b]fluoranthene	~		~	~		~	3800		3130	~		~
Benzo[k]fluoranthene	~		~	~		~	5250		3130	~		~
Benzo[a]pyrene	~		~	~		~	3110	J	3130	~		~
Indeno[1,2,3-cd]pyrene	~		~	~		~	2000	J	3130	~		~
TOTAL BN'S:	~			~			473320	J		~		
TOTAL TIC's:	~			~		~	4783500			~		~
TOTAL BN'S & TIC's:	~			~		~	5256820	J		~		~
Semivolatiles - BNA (ppb)												
TOTAL BNA'S:	ND		114	~			~			~		
TOTAL TIC's:	1423			~		~	~			~		~
TOTAL BNA'S & TIC's:	1423			~		~	~			~		~

~ = Sample not analyzed for
= Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL
D = The compound was reported from the Diluted analysis
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2092

Lab ID:	2092-005			2092-006			2092-007			2092-008		
Client ID:	S-49			S-50			S-51			S-52		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	4/3/2001			4/3/2001			4/3/2001			4/3/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (ppb)												
Aroclor-1016	ND		154	~		~	ND		183	~		~
Aroclor-1221	ND		154	~		~	ND		183	~		~
Aroclor-1232	ND		154	~		~	ND		183	~		~
Aroclor-1242	ND		154	~		~	ND		183	~		~
Aroclor-1248	ND		154	~		~	ND		183	~		~
Aroclor-1254	ND		154	~		~	543		183	~		~
Aroclor-1260	ND		154	~		~	ND		183	~		~
Pesticides (ppb)	ND		9.63	~		~	~		~	~		~
Metals (ppm)												
Antimony	ND		2.36	~		~	ND		2.77	~		~
Arsenic	1.68		0.236	~		~	21.5		0.277	~		~
Beryllium	0.770		0.236	~		~	2.12		0.277	~		~
Cadmium	ND		0.236	~		~	1.03		0.277	~		~
Chromium	21.1		0.708	~		~	66.7		0.831	~		~
Copper	19.8		0.472	~		~	192		0.554	~		~
Lead	13.8		2.36	~		~	190		2.77	~		~
Mercury	ND		0.0149	~		~	0.138		0.0172	~		~
Nickel	24.0		0.708	~		~	92.7		0.831	~		~
Selenium	ND		2.36	~		~	ND		2.77	~		~
Silver	ND		0.592	~		~	ND		0.690	~		~
Thallium	0.168		0.0944	~		~	0.949		0.111	~		~
Zinc	85.3		1.18	~		~	478		1.39	~		~
General Analytical												
Cyanide, Total (ppm)	ND		1.19	~		~	~		~	~		~
Phenol (ppm)	4.72		2.97	~		~	~		~	~		~
Total Petroleum Hydrocarbons (ppm)	ND		25	ND		25.0	5750		277	28.2		25.0

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2092

Lab ID:	2092-009			2092-010			2092-011			2092-012		
Client ID:	S-53			S-54			S-55			S-56		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	4/3/2001			4/3/2001			4/3/2001			4/3/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (ppb)												
Toluene	~		~	~		~	333000		15700	~		~
TOTAL VO's:	~			~			333000			~		
TOTAL TIC's:	~		~	~		~	104000			~		~
TOTAL VO's & TIC's:	~		~	~		~	437000			~		~
Semivolatiles - BNA (ppb)												
Butylbenzylphthalate	~		~	~		~	7730		456	~		~
TOTAL BNA'S:	~			~			7730			~		
TOTAL TIC's:	~		~	~			512770			~		~
TOTAL BNA'S & TIC's:	~		~	~			520500			~		~
Semivolatiles - PAH (ppb)												
Naphthalene	~		~	ND		203	~		~	~		~
enaphthylene	~		~	ND		203	~		~	~		~
naphthene	~		~	ND		203	~		~	~		~
Fluorene	~		~	ND		203	~		~	~		~
Phenanthrene	~		~	283		203	~		~	~		~
Anthracene	~		~	139	J	203	~		~	~		~
Fluoranthene	~		~	213		203	~		~	~		~
Pyrene	~		~	185	J	203	~		~	~		~
Benzo[a]anthracene	~		~	ND		203	~		~	~		~
Chrysene	~		~	ND		203	~		~	~		~
Benzo[b]fluoranthene	~		~	ND		203	~		~	~		~
Benzo[k]fluoranthene	~		~	ND		203	~		~	~		~
Benzo[a]pyrene	~		~	ND		203	~		~	~		~
Indeno[1,2,3-cd]pyrene	~		~	ND		203	~		~	~		~
Dibenz[a,h]anthracene	~		~	ND		203	~		~	~		~
Benzo[g,h,i]perylene	~		~	ND		203	~		~	~		~
PCB's (ppb)	~		~	~		~	ND		166	~		~
Pesticides (ppb)	~		~	~		~	ND		10.4	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2092

Lab ID:	2092-009			2092-010			2092-011			2092-012		
Client ID:	S-53			S-54			S-55			S-56		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	4/3/2001			4/3/2001			4/3/2001			4/3/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Metals (ppm)												
Antimony	~		~	~		~	ND		2.50	~		~
Arsenic	~		~	~		~	3.02		0.250	~		~
Beryllium	~		~	~		~	0.513		0.250	~		~
Cadmium	~		~	~		~	ND		0.250	~		~
Chromium	~		~	~		~	22.8		0.750	~		~
Copper	~		~	~		~	15.5		0.500	~		~
Lead	~		~	~		~	14.6		2.50	~		~
Mercury	~		~	~		~	0.150		0.0158	~		~
Nickel	~		~	~		~	20.8		0.750	~		~
Selenium	~		~	~		~	ND		2.50	~		~
Silver	~		~	~		~	ND		0.627	~		~
Thallium	~		~	~		~	0.152		0.100	~		~
Zinc	~		~	~		~	63.4		1.25	~		~
General Analytical												
nide, Total (ppm)	~		~	~		~	ND		1.26	~		~
enol (ppm)	~		~	~		~	6.84		3.14	~		~
tal Petroleum Hydrocarbons (ppm)	52.8		25.0	207		25.0	248		25.1	81.5		25.0

Lab ID:	2092-013			2092-014		
Client ID:	S-57			TB		
Matrix:	Soil			Soil		
Sampled Date:	4/3/2001			4/3/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL
Volatiles (ppb)						
TOTAL VO's:	~			ND		625
TOTAL TIC's:	~		~	ND		
TOTAL VO's & TIC's:	~		~	ND		
General Analytical						
Total Petroleum Hydrocarbons (ppm)	58.3		25.0	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

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INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-001
Client ID: S-45
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Data file: J8847.D

GC/MS Column: DB-624
Sample wt/vol: 0.04g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.8

Compound	Concentration	Q	MDL
Chloromethane	ND		770
Vinyl Chloride	ND		770
Bromomethane	ND		770
Chloroethane	ND		770
Trichlorofluoromethane	ND		770
Acrolein	ND		1540
1,1-Dichloroethene	ND		770
Methylene Chloride	ND		770
Acrylonitrile	ND		1540
trans-1,2-Dichloroethene	ND		770
1,1-Dichloroethane	ND		770
Chloroform	ND		770
1,1,1-Trichloroethane	ND		770
Carbon Tetrachloride	ND		770
1,2-Dichloroethane(EDC)	ND		770
Benzene	23000		770
Trichloroethene	ND		770
1,2-Dichloropropane	ND		770
Bromodichloromethane	ND		770
2-Chloroethylvinyl Ether	ND		770
cis-1,3-Dichloropropene	ND		770
Toluene	1980		770
trans-1,3-Dichloropropene	ND		770
1,1,2-Trichloroethane	ND		770
Tetrachloroethene	ND		770
Dibromochloromethane	ND		770
Chlorobenzene	4000		770
Ethylbenzene	274	J	770
Total Xylenes	269	J	770
Bromoform	ND		770
1,1,2,2-Tetrachloroethane	ND		770
1,3-Dichlorobenzene	ND		770
1,4-Dichlorobenzene	ND		770
1,2-Dichlorobenzene	ND		770
Total Target Compounds:	29523	J	

Z107

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-001
Client ID: S-45
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Date File: J8847.D

GC/MS Column: DB-624
Sample wt/vol: 0.04g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.8

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-002
Client ID: S-46
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Data file: J8875.D

GC/MS Column: DB-624
Sample wt/vol: 0.0008g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 50
% Moisture: 17.6

Compound	Concentration	Q	MDL
Chloromethane	ND		37900
Vinyl Chloride	ND		37900
Bromomethane	ND		37900
Chloroethane	ND		37900
Trichlorofluoromethane	ND		37900
Acrolein	ND		75800
1,1-Dichloroethene	ND		37900
Methylene Chloride	ND		37900
Acrylonitrile	ND		75800
trans-1,2-Dichloroethene	ND		37900
1,1-Dichloroethane	ND		37900
Chloroform	ND		37900
1,1,1-Trichloroethane	ND		37900
Carbon Tetrachloride	ND		37900
1,2-Dichloroethane(EDC)	ND		37900
Benzene	581000		37900
Trichloroethene	ND		37900
1,2-Dichloropropane	ND		37900
Bromodichloromethane	ND		37900
2-Chloroethylvinyl Ether	ND		37900
cis-1,3-Dichloropropene	ND		37900
Toluene	ND		37900
trans-1,3-Dichloropropene	ND		37900
1,1,2-Trichloroethane	ND		37900
Tetrachloroethene	ND		37900
Dibromochloromethane	ND		37900
Chlorobenzene	ND		37900
Ethylbenzene	ND		37900
Total Xylenes	ND		37900
Bromoform	ND		37900
1,1,2,2-Tetrachloroethane	ND		37900
1,3-Dichlorobenzene	ND		37900
1,4-Dichlorobenzene	ND		37900
1,2-Dichlorobenzene	ND		37900

Total Target Compounds: 581000

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-002
Client ID: S-46
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Date File: J8875.D

GC/MS Column: DB-624
Sample wt/vol: 0.0008g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 50
% Moisture: 17.6

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

2110

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-003
Client ID: S-47
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Data file: J8849.D

GC/MS Column: DB-624
Sample wt/vol: 0.04g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.8

Compound	Concentration	Q	MDL
Chloromethane	ND		742
Vinyl Chloride	ND		742
Bromomethane	ND		742
Chloroethane	ND		742
Trichlorofluoromethane	ND		742
Acrolein	ND		1480
1,1-Dichloroethene	ND		742
Methylene Chloride	ND		742
Acrylonitrile	ND		1480
trans-1,2-Dichloroethene	ND		742
1,1-Dichloroethane	ND		742
Chloroform	ND		742
1,1,1-Trichloroethane	ND		742
Carbon Tetrachloride	ND		742
1,2-Dichloroethane(EDC)	ND		742
Benzene	19000		742
Trichloroethene	ND		742
1,2-Dichloropropane	ND		742
Bromodichloromethane	ND		742
2-Chloroethylvinyl Ether	ND		742
cis-1,3-Dichloropropene	ND		742
Toluene	ND		742
trans-1,3-Dichloropropene	ND		742
1,1,2-Trichloroethane	ND		742
Tetrachloroethene	ND		742
Dibromochloromethane	ND		742
Chlorobenzene	ND		742
Ethylbenzene	ND		742
Total Xylenes	ND		742
Bromoform	ND		742
1,1,2,2-Tetrachloroethane	ND		742
1,3-Dichlorobenzene	ND		742
1,4-Dichlorobenzene	ND		742
1,2-Dichlorobenzene	ND		742

Total Target Compounds: 19000

2111

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-003
Client ID: S-47
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Date File: J8849.D

GC/MS Column: DB-624
Sample wt/vol: 0.04g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.8

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

2/12

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-004
Client ID: S-48
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Data file: J8850.D

GC/MS Column: DB-624
Sample wt/vol: 0.041g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 13

Compound	Concentration	Q	MDL
Chloromethane	ND		701
Vinyl Chloride	ND		701
Bromomethane	ND		701
Chloroethane	ND		701
Trichlorofluoromethane	ND		701
Acrolein	ND		1400
1,1-Dichloroethene	ND		701
Methylene Chloride	ND		701
Acrylonitrile	ND		1400
trans-1,2-Dichloroethene	ND		701
1,1-Dichloroethane	ND		701
Chloroform	ND		701
1,1,1-Trichloroethane	ND		701
Carbon Tetrachloride	ND		701
1,2-Dichloroethane(EDC)	ND		701
Benzene	506	J	701
Trichloroethene	ND		701
1,2-Dichloropropane	ND		701
Bromodichloromethane	ND		701
2-Chloroethylvinyl Ether	ND		701
cis-1,3-Dichloropropene	ND		701
Toluene	ND		701
trans-1,3-Dichloropropene	ND		701
1,1,2-Trichloroethane	ND		701
Tetrachloroethene	ND		701
Dibromochloromethane	ND		701
Chlorobenzene	ND		701
Ethylbenzene	ND		701
Total Xylenes	ND		701
Bromoform	ND		701
1,1,2,2-Tetrachloroethane	ND		701
1,3-Dichlorobenzene	ND		701
1,4-Dichlorobenzene	ND		701
1,2-Dichlorobenzene	ND		701
Total Target Compounds:	506	J	

2113

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-004
Client ID: S-48
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Date File: J8850.D

GC/MS Column: DB-624
Sample wt/vol: 0.041g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 13

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

2114

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-005
Client ID: S-49
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Data file: J8851.D

GC/MS Column: DB-624
Sample wt/vol: 0.02g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 2
% Moisture: 15.7

Compound	Concentration	Q	MDL
Chloromethane	ND		1480
Vinyl Chloride	ND		1480
Bromomethane	ND		1480
Chloroethane	ND		1480
Trichlorofluoromethane	ND		1480
Acrolein	ND		2970
1,1-Dichloroethene	ND		1480
Methylene Chloride	ND		1480
Acrylonitrile	ND		2970
trans-1,2-Dichloroethene	ND		1480
1,1-Dichloroethane	ND		1480
Chloroform	ND		1480
1,1,1-Trichloroethane	ND		1480
Carbon Tetrachloride	ND		1480
1,2-Dichloroethane(EDC)	ND		1480
Benzene	58500		1480
Trichloroethene	ND		1480
1,2-Dichloropropane	ND		1480
Bromodichloromethane	ND		1480
2-Chloroethylvinyl Ether	ND		1480
cis-1,3-Dichloropropene	ND		1480
Toluene	1590		1480
trans-1,3-Dichloropropene	ND		1480
1,1,2-Trichloroethane	ND		1480
Tetrachloroethene	ND		1480
Dibromochloromethane	ND		1480
Chlorobenzene	655	J	1480
Ethylbenzene	ND		1480
Total Xylenes	ND		1480
Bromoform	ND		1480
1,1,2,2-Tetrachloroethane	ND		1480
1,3-Dichlorobenzene	ND		1480
1,4-Dichlorobenzene	ND		1480
1,2-Dichlorobenzene	ND		1480

Total Target Compounds: 60745 J

Z115

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-005
Client ID: S-49
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Date File: J8851.D

GC/MS Column: DB-624
Sample wt/vol: 0.02g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 2
% Moisture: 15.7

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-006
Client ID: S-50
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Data file: J8852.D

GC/MS Column: DB-624
Sample wt/vol: 0.035g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.4

Compound	Concentration	Q	MDL
Chloromethane	ND		844
Vinyl Chloride	ND		844
Bromomethane	ND		844
Chloroethane	ND		844
Trichlorofluoromethane	ND		844
Acrolein	ND		1690
1,1-Dichloroethene	ND		844
Methylene Chloride	ND		844
Acrylonitrile	ND		1690
trans-1,2-Dichloroethene	ND		844
1,1-Dichloroethane	ND		844
Chloroform	ND		844
1,1,1-Trichloroethane	ND		844
Carbon Tetrachloride	ND		844
1,2-Dichloroethane(EDC)	ND		844
Benzene	472	J	844
Trichloroethene	ND		844
1,2-Dichloropropane	ND		844
Bromodichloromethane	ND		844
2-Chloroethylvinyl Ether	ND		844
cis-1,3-Dichloropropene	ND		844
Toluene	6070		844
trans-1,3-Dichloropropene	ND		844
1,1,2-Trichloroethane	ND		844
Tetrachloroethene	ND		844
Dibromochloromethane	ND		844
Chlorobenzene	ND		844
Ethylbenzene	ND		844
Total Xylenes	ND		844
Bromoform	ND		844
1,1,2,2-Tetrachloroethane	ND		844
1,3-Dichlorobenzene	ND		844
1,4-Dichlorobenzene	ND		844
1,2-Dichlorobenzene	ND		844

Total Target Compounds: 6542 J

000025

2117

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-006
Client ID: S-50
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Date File: J8852.D

GC/MS Column: DB-624
Sample wt/vol: 0.035g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.4

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

7118

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-007
Client ID: S-51
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Data file: J8878.D

GC/MS Column: DB-624
Sample wt/vol: 0.002g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 27.7

Compound	Concentration	Q	MDL
Chloromethane	ND		17300
Vinyl Chloride	ND		17300
Bromomethane	ND		17300
Chloroethane	ND		17300
Trichlorofluoromethane	ND		17300
Acrolein	ND		34600
1,1-Dichloroethene	ND		17300
Methylene Chloride	ND		17300
Acrylonitrile	ND		34600
trans-1,2-Dichloroethene	ND		17300
1,1-Dichloroethane	ND		17300
Chloroform	ND		17300
1,1,1-Trichloroethane	ND		17300
Carbon Tetrachloride	ND		17300
1,2-Dichloroethane(EDC)	ND		17300
Benzene	61100		17300
Trichloroethene	ND		17300
1,2-Dichloropropane	ND		17300
Bromodichloromethane	ND		17300
2-Chloroethylvinyl Ether	ND		17300
cis-1,3-Dichloropropene	ND		17300
Toluene	3570000	E	17300
trans-1,3-Dichloropropene	ND		17300
1,1,2-Trichloroethane	ND		17300
Tetrachloroethene	ND		17300
Dibromochloromethane	ND		17300
Chlorobenzene	ND		17300
Ethylbenzene	10900	J	17300
Total Xylenes	58000		17300
Bromoform	ND		17300
1,1,2,2-Tetrachloroethane	ND		17300
1,3-Dichlorobenzene	ND		17300
1,4-Dichlorobenzene	ND		17300
1,2-Dichlorobenzene	ND		17300
Total Target Compounds:	3700000	JE	

Z119

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-007DIL
Client ID: S-51
Date Received: 04/04/2001
Date Analyzed: 04/14/2001
Data file: J8995.D

GC/MS Column: DB-624
Sample wt/vol: 0.00008g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 500
% Moisture: 27.7

Compound	Concentration	Q	MDL
Chloromethane	ND		432000
Vinyl Chloride	ND		432000
Bromomethane	ND		432000
Chloroethane	ND		432000
Trichlorofluoromethane	ND		432000
Acrolein	ND		864000
1,1-Dichloroethene	ND		432000
Methylene Chloride	ND		432000
Acrylonitrile	ND		864000
trans-1,2-Dichloroethene	ND		432000
1,1-Dichloroethane	ND		432000
Chloroform	ND		432000
1,1,1-Trichloroethane	ND		432000
Carbon Tetrachloride	ND		432000
1,2-Dichloroethane(EDC)	ND		432000
Benzene	ND		432000
Trichloroethene	ND		432000
1,2-Dichloropropane	ND		432000
Bromodichloromethane	ND		432000
2-Chloroethylvinyl Ether	ND		432000
cis-1,3-Dichloropropene	ND		432000
Toluene	10800000		432000
trans-1,3-Dichloropropene	ND		432000
1,1,2-Trichloroethane	ND		432000
Tetrachloroethene	ND		432000
Dibromochloromethane	ND		432000
Chlorobenzene	ND		432000
Ethylbenzene	ND		432000
Total Xylenes	ND		432000
Bromoform	ND		432000
1,1,2,2-Tetrachloroethane	ND		432000
1,3-Dichlorobenzene	ND		432000
1,4-Dichlorobenzene	ND		432000
1,2-Dichlorobenzene	ND		432000

Total Target Compounds: 10800000

Z/20

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-007
Client ID: S-51
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Date File: J8878.D

GC/MS Column: DB-624
Sample wt/vol: 0.002g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 27.7

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown	1020000	13.30
	Substituted benzene	136000	13.35
	Unknown hydrocarbon	377000	14.16
	Unknown	39800	16.13

Total TICs = 1572800

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-011
Client ID: S-55
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Data file: J8876.D

GC/MS Column: DB-624
Sample wt/vol: 0.002g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 20.4

Compound	Concentration	Q	MDL
Chloromethane	ND		15700
Vinyl Chloride	ND		15700
Bromomethane	ND		15700
Chloroethane	ND		15700
Trichlorofluoromethane	ND		15700
Acrolein	ND		31400
1,1-Dichloroethene	ND		15700
Methylene Chloride	ND		15700
Acrylonitrile	ND		31400
trans-1,2-Dichloroethene	ND		15700
1,1-Dichloroethane	ND		15700
Chloroform	ND		15700
1,1,1-Trichloroethane	ND		15700
Carbon Tetrachloride	ND		15700
1,2-Dichloroethane(EDC)	ND		15700
Benzene	ND		15700
Trichloroethene	ND		15700
1,2-Dichloropropane	ND		15700
Bromodichloromethane	ND		15700
2-Chloroethylvinyl Ether	ND		15700
cis-1,3-Dichloropropene	ND		15700
Toluene	333000		15700
trans-1,3-Dichloropropene	ND		15700
1,1,2-Trichloroethane	ND		15700
Tetrachloroethene	ND		15700
Dibromochloromethane	ND		15700
Chlorobenzene	ND		15700
Ethylbenzene	ND		15700
Total Xylenes	ND		15700
Bromoform	ND		15700
1,1,2,2-Tetrachloroethane	ND		15700
1,3-Dichlorobenzene	ND		15700
1,4-Dichlorobenzene	ND		15700
1,2-Dichlorobenzene	ND		15700

Total Target Compounds: 333000

2122

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-011
Client ID: S-55
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Date File: J8876.D

GC/MS Column: DB-624
Sample wt/vol: 0.002g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 20
% Moisture: 20.4

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	104000	13.35

Total TICs = 104000

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-014
Client ID: TB
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Data file: J8846.D

GC/MS Column: DB-624
Sample wt/vol: 0.04g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0

Compound	Concentration	Q	MDL
Chloromethane	ND		625
Vinyl Chloride	ND		625
Bromomethane	ND		625
Chloroethane	ND		625
Trichlorofluoromethane	ND		625
Acrolein	ND		1250
1,1-Dichloroethene	ND		625
Methylene Chloride	ND		625
Acrylonitrile	ND		1250
trans-1,2-Dichloroethene	ND		625
1,1-Dichloroethane	ND		625
Chloroform	ND		625
1,1,1-Trichloroethane	ND		625
Carbon Tetrachloride	ND		625
1,2-Dichloroethane(EDC)	ND		625
Benzene	ND		625
Trichloroethene	ND		625
1,2-Dichloropropane	ND		625
Bromodichloromethane	ND		625
2-Chloroethylvinyl Ether	ND		625
cis-1,3-Dichloropropene	ND		625
Toluene	ND		625
trans-1,3-Dichloropropene	ND		625
1,1,2-Trichloroethane	ND		625
Tetrachloroethene	ND		625
Dibromochloromethane	ND		625
Chlorobenzene	ND		625
Ethylbenzene	ND		625
Total Xylenes	ND		625
Bromoform	ND		625
1,1,2,2-Tetrachloroethane	ND		625
1,3-Dichlorobenzene	ND		625
1,4-Dichlorobenzene	ND		625
1,2-Dichlorobenzene	ND		625

Total Target Compounds: 0

2124

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-014
Client ID: TB
Date Received: 04/04/2001
Date Analyzed: 04/10/2001
Data file: J8846.D

GC/MS Column: DB-624
Sample wt/vol: 0.04g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-001
Client ID: S-45
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1829.D

GC/MS Column: DB-5
Sample wt/vol: 15.11g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.8

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		81.5
Aniline	ND		81.5
bis(2-Chloroethyl)ether	ND		81.5
1,3-Dichlorobenzene	ND		81.5
1,4-Dichlorobenzene	ND		81.5
Benzyl alcohol	ND		81.5
1,2-Dichlorobenzene	ND		81.5
bis(2-chloroisopropyl)ether	ND		81.5
N-Nitroso-di-n-propylamine	ND		81.5
Hexachloroethane	ND		81.5
Nitrobenzene	ND		81.5
Isophorone	ND		81.5
bis(2-Chloroethoxy)methane	ND		81.5
1,2,4-Trichlorobenzene	ND		81.5
Naphthalene	ND		81.5
4-Chloroaniline	ND		81.5
Hexachlorobutadiene	ND		81.5
2-Methylnaphthalene	ND		81.5
Hexachlorocyclopentadiene	ND		81.5
2-Chloronaphthalene	ND		81.5
2-Nitroaniline	ND		81.5
Dimethylphthalate	ND		81.5
2,6-Dinitrotoluene	ND		81.5
Acenaphthylene	ND		81.5

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-001
Client ID: S-45
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1829.D

GC/MS Column: DB-5
Sample wt/vol: 15.11g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.8

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		81.5
Acenaphthene	ND		81.5
2,4-Dinitrotoluene	ND		81.5
Dibenzofuran	ND		81.5
Diethylphthalate	ND		81.5
Fluorene	ND		81.5
4-Chlorophenyl-phenylether	ND		81.5
4-Nitroaniline	ND		81.5
N-Nitrosodiphenylamine	ND		81.5
1,2-Diphenylhydrazine/Azobenzene	ND		81.5
4-Bromophenyl-phenylether	ND		81.5
Hexachlorobenzene	ND		81.5
Phenanthrene	155		81.5
Anthracene	ND		81.5
Carbazole	ND		81.5
Di-n-butylphthalate	ND		81.5
Fluoranthene	339		81.5
Benzidine	ND		81.5
Pyrene	494		81.5
3,3'-Dimethylbenzidine	ND		81.5
Butylbenzylphthalate	ND		81.5
3,3'-Dichlorobenzidine	ND		81.5
Benzo[a]anthracene	238		81.5
Chrysene	274		81.5
bis(2-Ethylhexyl)phthalate	49.6	J	81.5
Di-n-octylphthalate	ND		81.5
Benzo[b]fluoranthene	159		81.5
Benzo[k]fluoranthene	115		81.5
Benzo[a]pyrene	214		81.5
Indeno[1,2,3-cd]pyrene	130		81.5
Dibenz[a,h]anthracene	55.6	J	81.5
Benzo[g,h,i]perylene	164		81.5
Total Target Compounds:	2387.2	J	

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-001
Client ID: S-45
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Date File: B1829.D

GC/MS Column: DB-5
Sample wt/vol: 15.11g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.8

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown	782	1.92
000101-81-5	Diphenylmethane	758	2.63
000119-61-9	Benzophenone	815	3.03
	Unknown aromatic	408	3.59

Total TICs = 2763

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-002
Client ID: S-46
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1830.D

GC/MS Column: DB-5
Sample wt/vol: 10.47g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.6

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		116
Phenol	ND		116
Aniline	ND		116
bis(2-Chloroethyl)ether	ND		116
2-Chlorophenol	ND		116
1,3-Dichlorobenzene	ND		116
1,4-Dichlorobenzene	ND		116
Benzyl alcohol	ND		116
1,2-Dichlorobenzene	ND		116
2-Methylphenol	ND		116
bis(2-chloroisopropyl)ether	ND		116
4-Methylphenol	ND		116
N-Nitroso-di-n-propylamine	ND		116
Hexachloroethane	ND		116
Nitrobenzene	ND		116
Isophorone	ND		116
2-Nitrophenol	ND		116
2,4-Dimethylphenol	ND		116
bis(2-Chloroethoxy)methane	ND		116
Benzoic acid	ND		116
2,4-Dichlorophenol	ND		116
1,2,4-Trichlorobenzene	ND		116
Naphthalene	ND		116
4-Chloroaniline	ND		116
Hexachlorobutadiene	ND		116
4-Chloro-3-methylphenol	ND		116
2-Methylnaphthalene	ND		116
Hexachlorocyclopentadiene	ND		116
2,4,6-Trichlorophenol	ND		116
2,4,5-Trichlorophenol	ND		116
2-Chloronaphthalene	ND		116
2-Nitroaniline	ND		116
Dimethylphthalate	ND		116
2,6-Dinitrotoluene	ND		116
Acenaphthylene	ND		116

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-002
Client ID: S-46
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1830.D

GC/MS Column: DB-5
Sample wt/vol: 10.47g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.6

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		116
Acenaphthene	ND		116
2,4-Dinitrophenol	ND		116
4-Nitrophenol	ND		116
2,4-Dinitrotoluene	ND		116
Dibenzofuran	ND		116
Diethylphthalate	ND		116
Fluorene	ND		116
4-Chlorophenyl-phenylether	ND		116
4-Nitroaniline	ND		116
4,6-Dinitro-2-methylphenol	ND		116
N-Nitrosodiphenylamine	ND		116
1,2-Diphenylhydrazine/Azobenzene	ND		116
4-Bromophenyl-phenylether	ND		116
Hexachlorobenzene	ND		116
Pentachlorophenol	ND		116
Phenanthrene	ND		116
Anthracene	ND		116
Carbazole	ND		116
Di-n-butylphthalate	ND		116
Fluoranthene	ND		116
Benzidine	ND		116
Pyrene	ND		116
3,3'-Dimethylbenzidine	ND		116
Butylbenzylphthalate	ND		116
3,3'-Dichlorobenzidine	ND		116
Benzo[a]anthracene	ND		116
Chrysene	ND		116
bis(2-Ethylhexyl)phthalate	ND		116
Di-n-octylphthalate	ND		116
Benzo[b]fluoranthene	ND		116
Benzo[k]fluoranthene	ND		116
Benzo[a]pyrene	ND		116
Indeno[1,2,3-cd]pyrene	ND		116
Dibenz[a,h]anthracene	ND		116
Benzo[g,h,i]perylene	ND		116

Total Target Compounds: 0

000038

Z130

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-002
Client ID: S-46
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Date File: B1830.D

GC/MS Column: DB-5
Sample wt/vol: 10.47g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.6

CAS #	Compound	Estimated Concentration	Retention Time
000060-12-8	Phenylethyl Alcohol	4400	1.82
	Unknown	603	4.14

Total TICs = 5003

2131

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-003
Client ID: S-47
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1831.D

GC/MS Column: DB-5
Sample wt/vol: 10.76g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.8

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		110
Phenol	ND		110
Aniline	ND		110
bis(2-Chloroethyl)ether	ND		110
2-Chlorophenol	ND		110
1,3-Dichlorobenzene	ND		110
1,4-Dichlorobenzene	ND		110
Benzyl alcohol	ND		110
1,2-Dichlorobenzene	ND		110
2-Methylphenol	ND		110
bis(2-chloroisopropyl)ether	ND		110
4-Methylphenol	ND		110
N-Nitroso-di-n-propylamine	ND		110
Hexachloroethane	ND		110
Nitrobenzene	ND		110
Isophorone	ND		110
2-Nitrophenol	ND		110
2,4-Dimethylphenol	ND		110
bis(2-Chloroethoxy)methane	ND		110
Benzoic acid	ND		110
2,4-Dichlorophenol	ND		110
1,2,4-Trichlorobenzene	ND		110
Naphthalene	ND		110
4-Chloroaniline	ND		110
Hexachlorobutadiene	ND		110
4-Chloro-3-methylphenol	ND		110
2-Methylnaphthalene	ND		110
Hexachlorocyclopentadiene	ND		110
2,4,6-Trichlorophenol	ND		110
2,4,5-Trichlorophenol	ND		110
2-Chloronaphthalene	ND		110
2-Nitroaniline	ND		110
Dimethylphthalate	ND		110
2,6-Dinitrotoluene	ND		110
Acenaphthylene	ND		110

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-003
Client ID: S-47
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1831.D

GC/MS Column: DB-5
Sample wt/vol: 10.76g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.8

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		110
Acenaphthene	ND		110
2,4-Dinitrophenol	ND		110
4-Nitrophenol	ND		110
2,4-Dinitrotoluene	ND		110
Dibenzofuran	ND		110
Diethylphthalate	ND		110
Fluorene	ND		110
4-Chlorophenyl-phenylether	ND		110
4-Nitroaniline	ND		110
4,6-Dinitro-2-methylphenol	ND		110
N-Nitrosodiphenylamine	ND		110
1,2-Diphenylhydrazine/Azobenzene	ND		110
4-Bromophenyl-phenylether	ND		110
Hexachlorobenzene	ND		110
Pentachlorophenol	ND		110
Phenanthrene	ND		110
Anthracene	ND		110
Carbazole	ND		110
Di-n-butylphthalate	ND		110
Fluoranthene	ND		110
Benzidine	ND		110
Pyrene	ND		110
3,3'-Dimethylbenzidine	ND		110
Butylbenzylphthalate	ND		110
3,3'-Dichlorobenzidine	ND		110
Benzo[a]anthracene	ND		110
Chrysene	ND		110
bis(2-Ethylhexyl)phthalate	ND		110
Di-n-octylphthalate	ND		110
Benzo[b]fluoranthene	ND		110
Benzo[k]fluoranthene	ND		110
Benzo[a]pyrene	ND		110
Indeno[1,2,3-cd]pyrene	ND		110
Dibenz[a,h]anthracene	ND		110
Benzo[g,h,i]perylene	ND		110

Total Target Compounds: 0

000041

2133

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-003
Client ID: S-47
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1831.D

GC/MS Column: DB-5
Sample wt/vol: 10.76g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.8

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

000042

Z134

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-004
Client ID: S-48
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1832.D

GC/MS Column: DB-5
Sample wt/vol: 10.60g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 13.0

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		108
Phenol	ND		108
Aniline	ND		108
bis(2-Chloroethyl)ether	ND		108
2-Chlorophenol	ND		108
1,3-Dichlorobenzene	ND		108
1,4-Dichlorobenzene	ND		108
Benzyl alcohol	ND		108
1,2-Dichlorobenzene	ND		108
2-Methylphenol	ND		108
bis(2-chloroisopropyl)ether	ND		108
4-Methylphenol	ND		108
N-Nitroso-di-n-propylamine	ND		108
Hexachloroethane	ND		108
Nitrobenzene	ND		108
Isophorone	ND		108
2-Nitrophenol	ND		108
2,4-Dimethylphenol	ND		108
bis(2-Chloroethoxy)methane	ND		108
Benzoic acid	ND		108
2,4-Dichlorophenol	ND		108
1,2,4-Trichlorobenzene	ND		108
Naphthalene	ND		108
4-Chloroaniline	ND		108
Hexachlorobutadiene	ND		108
4-Chloro-3-methylphenol	ND		108
2-Methylnaphthalene	ND		108
Hexachlorocyclopentadiene	ND		108
2,4,6-Trichlorophenol	ND		108
2,4,5-Trichlorophenol	ND		108
2-Chloronaphthalene	ND		108
2-Nitroaniline	ND		108
Dimethylphthalate	ND		108
2,6-Dinitrotoluene	ND		108
Acenaphthylene	ND		108

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-004
Client ID: S-48
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1832.D

GC/MS Column: DB-5
Sample wt/vol: 10.60g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 13.0

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		108
Acenaphthene	ND		108
2,4-Dinitrophenol	ND		108
4-Nitrophenol	ND		108
2,4-Dinitrotoluene	ND		108
Dibenzofuran	ND		108
Diethylphthalate	ND		108
Fluorene	ND		108
4-Chlorophenyl-phenylether	ND		108
4-Nitroaniline	ND		108
4,6-Dinitro-2-methylphenol	ND		108
N-Nitrosodiphenylamine	ND		108
1,2-Diphenylhydrazine/Azobenzene	ND		108
4-Bromophenyl-phenylether	ND		108
Hexachlorobenzene	ND		108
Pentachlorophenol	ND		108
Phenanthrene	ND		108
Anthracene	ND		108
Carbazole	ND		108
Di-n-butylphthalate	ND		108
Fluoranthene	ND		108
Benzidine	ND		108
Pyrene	ND		108
3,3'-Dimethylbenzidine	ND		108
Butylbenzylphthalate	ND		108
3,3'-Dichlorobenzidine	ND		108
Benzo[a]anthracene	ND		108
Chrysene	ND		108
bis(2-Ethylhexyl)phthalate	ND		108
Di-n-octylphthalate	ND		108
Benzo[b]fluoranthene	ND		108
Benzo[k]fluoranthene	ND		108
Benzo[a]pyrene	ND		108
Indeno[1,2,3-cd]pyrene	ND		108
Dibenz[a,h]anthracene	ND		108
Benzo[g,h,i]perylene	ND		108

Total Target Compounds: 0

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-004
Client ID: S-48
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Date File: B1832.D

GC/MS Column: DB-5
Sample wt/vol: 10.60g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 13.0

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown	477	4.79

Total TICs = 477

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-005
Client ID: S-49
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1833.D

GC/MS Column: DB-5
Sample wt/vol: 10.42g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.7

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		114
Phenol	ND		114
Aniline	ND		114
bis(2-Chloroethyl)ether	ND		114
2-Chlorophenol	ND		114
1,3-Dichlorobenzene	ND		114
1,4-Dichlorobenzene	ND		114
Benzyl alcohol	ND		114
1,2-Dichlorobenzene	ND		114
2-Methylphenol	ND		114
bis(2-chloroisopropyl)ether	ND		114
4-Methylphenol	ND		114
N-Nitroso-di-n-propylamine	ND		114
Hexachloroethane	ND		114
Nitrobenzene	ND		114
Isophorone	ND		114
2-Nitrophenol	ND		114
2,4-Dimethylphenol	ND		114
bis(2-Chloroethoxy)methane	ND		114
Benzoic acid	ND		114
2,4-Dichlorophenol	ND		114
1,2,4-Trichlorobenzene	ND		114
Naphthalene	ND		114
4-Chloroaniline	ND		114
Hexachlorobutadiene	ND		114
4-Chloro-3-methylphenol	ND		114
2-Methylnaphthalene	ND		114
Hexachlorocyclopentadiene	ND		114
2,4,6-Trichlorophenol	ND		114
2,4,5-Trichlorophenol	ND		114
2-Chloronaphthalene	ND		114
2-Nitroaniline	ND		114
Dimethylphthalate	ND		114
2,6-Dinitrotoluene	ND		114
Acenaphthylene	ND		114

2138

000046

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-005
Client ID: S-49
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1833.D

GC/MS Column: DB-5
Sample wt/vol: 10.42g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.7

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		114
Acenaphthene	ND		114
2,4-Dinitrophenol	ND		114
4-Nitrophenol	ND		114
2,4-Dinitrotoluene	ND		114
Dibenzofuran	ND		114
Diethylphthalate	ND		114
Fluorene	ND		114
4-Chlorophenyl-phenylether	ND		114
4-Nitroaniline	ND		114
4,6-Dinitro-2-methylphenol	ND		114
N-Nitrosodiphenylamine	ND		114
1,2-Diphenylhydrazine/Azobenzene	ND		114
4-Bromophenyl-phenylether	ND		114
Hexachlorobenzene	ND		114
Pentachlorophenol	ND		114
Phenanthrene	ND		114
Anthracene	ND		114
Carbazole	ND		114
Di-n-butylphthalate	ND		114
Fluoranthene	ND		114
Benzidine	ND		114
Pyrene	ND		114
3,3'-Dimethylbenzidine	ND		114
Butylbenzylphthalate	ND		114
3,3'-Dichlorobenzidine	ND		114
Benzo[a]anthracene	ND		114
Chrysene	ND		114
bis(2-Ethylhexyl)phthalate	ND		114
Di-n-octylphthalate	ND		114
Benzo[b]fluoranthene	ND		114
Benzo[k]fluoranthene	ND		114
Benzo[a]pyrene	ND		114
Indeno[1,2,3-cd]pyrene	ND		114
Dibenz[a,h]anthracene	ND		114
Benzo[g,h,i]perylene	ND		114

Total Target Compounds: 0

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-005
Client ID: S-49
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Date File: B1833.D

GC/MS Column: DB-5
Sample wt/vol: 10.42g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.7

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown	888	1.92
	Unknown	535	2.82

Total TICs = 1423

Z140

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-007
Client ID: S-51
Date Received: 04/04/2001
Date Extracted: 04/12/2001
Date Analyzed: 04/13/2001
Data file: B2052.D

GC/MS Column: DB-5
Sample wt/vol: 2.21g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 5
% Moisture: 27.7

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		3130
Aniline	ND		3130
bis(2-Chloroethyl)ether	ND		3130
1,3-Dichlorobenzene	ND		3130
1,4-Dichlorobenzene	ND		3130
Benzyl alcohol	ND		3130
1,2-Dichlorobenzene	3710		3130
bis(2-chloroisopropyl)ether	ND		3130
N-Nitroso-di-n-propylamine	ND		3130
Hexachloroethane	ND		3130
Nitrobenzene	ND		3130
Isophorone	ND		3130
bis(2-Chloroethoxy)methane	ND		3130
1,2,4-Trichlorobenzene	ND		3130
Naphthalene	5030		3130
4-Chloroaniline	ND		3130
Hexachlorobutadiene	ND		3130
2-Methylnaphthalene	6860		3130
Hexachlorocyclopentadiene	ND		3130
2-Chloronaphthalene	ND		3130
2-Nitroaniline	ND		3130
Dimethylphthalate	ND		3130
2,6-Dinitrotoluene	ND		3130
Acenaphthylene	ND		3130

000049

2141

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-007
Client ID: S-51
Date Received: 04/04/2001
Date Extracted: 04/12/2001
Date Analyzed: 04/13/2001
Data file: B2052.D

GC/MS Column: DB-5
Sample wt/vol: 2.21g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 5
% Moisture: 27.7

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		3130
Acenaphthene	ND		3130
2,4-Dinitrotoluene	ND		3130
Dibenzofuran	ND		3130
Diethylphthalate	ND		3130
Fluorene	3280		3130
4-Chlorophenyl-phenylether	ND		3130
4-Nitroaniline	ND		3130
N-Nitrosodiphenylamine	ND		3130
1,2-Diphenylhydrazine/Azobenzene	ND		3130
4-Bromophenyl-phenylether	ND		3130
Hexachlorobenzene	ND		3130
Phenanthrene	19600		3130
Anthracene	5880		3130
Carbazole	16000		3130
Di-n-butylphthalate	ND		3130
Fluoranthene	23000		3130
Benzidine	270000		3130
Pyrene	12800		3130
3,3'-Dimethylbenzidine	ND		3130
Butylbenzylphthalate	ND		3130
3,3'-Dichlorobenzidine	ND		3130
Benzo[a]anthracene	8180		3130
Chrysene	7620		3130
bis(2-Ethylhexyl)phthalate	77200		3130
Di-n-octylphthalate	ND		3130
Benzo[b]fluoranthene	3800		3130
Benzo[k]fluoranthene	5250		3130
Benzo[a]pyrene	3110	J	3130
Indeno[1,2,3-cd]pyrene	2000	J	3130
Dibenz[a,h]anthracene	ND		3130
Benzo[g,h,i]perylene	ND		3130
Total Target Compounds:	473320	J	

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-007
Client ID: S-51
Date Received: 04/04/2001
Date Extracted: 04/12/2001
Date Analyzed: 04/13/2001
Date File: B2052.D

GC/MS Column: DB-5
Sample wt/vol: 2.21g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 5
% Moisture: 27.7

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	556000	1.42
	Unknown	142000	3.43
000605-39-0	2,2'-Dimethylbiphenyl	217000	3.69
1000149-82-4	8.beta.H-Cedran-8-ol	105000	3.88
	Unknown aromatic	245000	4.56
	Unknown aromatic	254000	4.58
	Substituted phenol	421000	4.71
	Unknown aromatic	183000	5.20
	Substituted phenol	164000	5.23
	Substituted benzene	715000	5.28
	Substituted benzene	708000	5.36
	Substituted phenol	194000	5.39
	Unknown aromatic	469000	5.70
	Substituted phenol	78500	5.89
	Unknown aromatic	332000	6.23

Total TICs = 4783500

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-010
Client ID: S-54
Date Received: 04/04/2001
Date Extracted: 04/12/2001
Date Analyzed: 04/13/2001
Data file: B2035.D

GC/MS Column: DB-5
Sample wt/vol: 5.86g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 15.8

Compound	Concentration	Q	MDL
Naphthalene	ND		203
Acenaphthylene	ND		203
Acenaphthene	ND		203
Fluorene	ND		203
Phenanthrene	283		203
Anthracene	139	J	203
Fluoranthene	213		203
Pyrene	185	J	203
Benzo[a]anthracene	ND		203
Chrysene	ND		203
Benzo[b]fluoranthene	ND		203
Benzo[k]fluoranthene	ND		203
Benzo[a]pyrene	ND		203
Indeno[1,2,3-cd]pyrene	ND		203
Dibenz[a,h]anthracene	ND		203
Benzo[g,h,i]perylene	ND		203
Total Target Compounds:	820	J	

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-011
Client ID: S-55
Date Received: 04/04/2001
Date Extracted: 04/05/2001
Date Analyzed: 04/06/2001
Data file: B1820.D

GC/MS Column: DB-5
Sample wt/vol: 5.51g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 2
% Moisture: 20.4

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		456
Phenol	ND		456
Aniline	ND		456
bis(2-Chloroethyl)ether	ND		456
2-Chlorophenol	ND		456
1,3-Dichlorobenzene	ND		456
1,4-Dichlorobenzene	ND		456
Benzyl alcohol	ND		456
1,2-Dichlorobenzene	ND		456
2-Methylphenol	ND		456
bis(2-chloroisopropyl)ether	ND		456
4-Methylphenol	ND		456
N-Nitroso-di-n-propylamine	ND		456
Hexachloroethane	ND		456
Nitrobenzene	ND		456
Isophorone	ND		456
2-Nitrophenol	ND		456
2,4-Dimethylphenol	ND		456
bis(2-Chloroethoxy)methane	ND		456
Benzoic acid	ND		456
2,4-Dichlorophenol	ND		456
1,2,4-Trichlorobenzene	ND		456
Naphthalene	ND		456
4-Chloroaniline	ND		456
Hexachlorobutadiene	ND		456
4-Chloro-3-methylphenol	ND		456
2-Methylnaphthalene	ND		456
Hexachlorocyclopentadiene	ND		456
2,4,6-Trichlorophenol	ND		456
2,4,5-Trichlorophenol	ND		456
2-Chloronaphthalene	ND		456
2-Nitroaniline	ND		456
Dimethylphthalate	ND		456
2,6-Dinitrotoluene	ND		456
Acenaphthylene	ND		456

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-011
Client ID: S-55
Date Received: 04/04/2001
Date Extracted: 04/05/2001
Date Analyzed: 04/06/2001
Data file: B1820.D

GC/MS Column: DB-5
Sample wt/vol: 5.51g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 2
% Moisture: 20.4

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		456
Acenaphthene	ND		456
2,4-Dinitrophenol	ND		456
4-Nitrophenol	ND		456
2,4-Dinitrotoluene	ND		456
Dibenzofuran	ND		456
Diethylphthalate	ND		456
Fluorene	ND		456
4-Chlorophenyl-phenylether	ND		456
4-Nitroaniline	ND		456
4,6-Dinitro-2-methylphenol	ND		456
N-Nitrosodiphenylamine	ND		456
1,2-Diphenylhydrazine/Azobenzene	ND		456
4-Bromophenyl-phenylether	ND		456
Hexachlorobenzene	ND		456
Pentachlorophenol	ND		456
Phenanthrene	ND		456
Anthracene	ND		456
Carbazole	ND		456
Di-n-butylphthalate	ND		456
Fluoranthene	ND		456
Benzidine	ND		456
Pyrene	ND		456
3,3'-Dimethylbenzidine	ND		456
Butylbenzylphthalate	7730		456
3,3'-Dichlorobenzidine	ND		456
Benzo[a]anthracene	ND		456
Chrysene	ND		456
bis(2-Ethylhexyl)phthalate	ND		456
Di-n-octylphthalate	ND		456
Benzo[b]fluoranthene	ND		456
Benzo[k]fluoranthene	ND		456
Benzo[a]pyrene	ND		456
Indeno[1,2,3-cd]pyrene	ND		456
Dibenz[a,h]anthracene	ND		456
Benzo[g,h,i]perylene	ND		456

Total Target Compounds: 7730

000054

2146

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-011
Client ID: S-55
Date Received: 04/04/2001
Date Extracted: 04/05/2001
Date Analyzed: 04/06/2001
Date File: B1820.D

GC/MS Column: DB-5
Sample wt/vol: 5.51g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 2
% Moisture: 20.4

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	12600	0.53
	Unknown	30600	2.12
	Unknown	38000	2.18
	Unknown	42100	2.21
	Unknown alkane	14700	2.23
	Unknown alkane	14500	2.25
	Substituted benzene	72900	2.29
	Unknown	20400	2.40
	Unknown aromatic	9670	2.62
	Unknown	13500	2.82
	Substituted naphthalene	14800	2.83
	Substituted benzene	12600	2.90
	Unknown aromatic	23200	2.98
	Unknown alkane	12100	3.01
	Unknown	16400	3.40
	Unknown aromatic	10800	3.42
	Unknown alkane	36600	3.46
	Unknown	13500	3.53
	Unknown alkane	10700	3.55
	Unknown aromatic	21900	3.92
	Unknown aromatic	15400	3.95
	Unknown	12100	4.27
	Unknown aromatic	20400	4.29
000080-97-7	Cholestanol	13100	5.63
	Unknown	10200	5.70
	Total TICs =	512770	

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2092-002
Client ID: S-46
Date Received: 04/04/2001
Date Extracted: 04/09/2001
Date Analyzed: 04/09/2001
Data file: V5008.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.5g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 17.6

Compound	Concentration	Q	MDL
Aroclor-1016	ND		159
Aroclor-1221	ND		159
Aroclor-1232	ND		159
Aroclor-1242	ND		159
Aroclor-1248	ND		159
Aroclor-1254	ND		159
Aroclor-1260	ND		159

000056

2148

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2092-003
Client ID: S-47
Date Received: 04/04/2001
Date Extracted: 04/09/2001
Date Analyzed: 04/09/2001
Data file: V5009.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.9g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 15.8

Compound	Concentration	Q	MDL
Aroclor-1016	ND		154
Aroclor-1221	ND		154
Aroclor-1232	ND		154
Aroclor-1242	ND		154
Aroclor-1248	ND		154
Aroclor-1254	ND		154
Aroclor-1260	ND		154

2149

000057

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2092-004
Client ID: S-48
Date Received: 04/04/2001
Date Extracted: 04/09/2001
Date Analyzed: 04/09/2001
Data file: V5010.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.2g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 13.0

Compound	Concentration	Q	MDL
Aroclor-1016	ND		152
Aroclor-1221	ND		152
Aroclor-1232	ND		152
Aroclor-1242	ND		152
Aroclor-1248	ND		152
Aroclor-1254	ND		152
Aroclor-1260	ND		152

2150

000058

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2092-005
Client ID: S-49
Date Received: 04/04/2001
Date Extracted: 04/09/2001
Date Analyzed: 04/09/2001
Data file: V5011.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.8g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 15.7

Compound	Concentration	Q	MDL
Aroclor-1016	ND		154
Aroclor-1221	ND		154
Aroclor-1232	ND		154
Aroclor-1242	ND		154
Aroclor-1248	ND		154
Aroclor-1254	ND		154
Aroclor-1260	ND		154

2151

000059

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-007
Client ID: S-51
Date Received: 04/04/2001
Date Extracted: 04/11/2001
Date Analyzed: 04/12/2001
Data file: V5105.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.3g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 27.7

Compound	Concentration	Q	MDL
Aroclor-1016	ND		183
Aroclor-1221	ND		183
Aroclor-1232	ND		183
Aroclor-1242	ND		183
Aroclor-1248	ND		183
Aroclor-1254	543		183
Aroclor-1260	ND		183

2152

000060

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2092-011
Client ID: S-55
Date Received: 04/04/2001
Date Extracted: 04/05/2001
Date Analyzed: 04/06/2001
Data file: V4994.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.2g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 20.4

Compound	Concentration	Q	MDL
Aroclor-1016	ND		166
Aroclor-1221	ND		166
Aroclor-1232	ND		166
Aroclor-1242	ND		166
Aroclor-1248	ND		166
Aroclor-1254	ND		166
Aroclor-1260	ND		166

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-002
Client ID: S-46
Date Received: 04/04/2001
Date Extracted: 04/09/2001
Date Analyzed: 04/10/2001
Data file: W5852.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.5g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 17.6

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.95
beta-BHC	ND		9.95
gamma-BHC	ND		9.95
delta-BHC	ND		9.95
Heptachlor	ND		9.95
Aldrin	ND		9.95
Heptachlor epoxide	ND		9.95
Endosulfan I	ND		9.95
4,4'-DDE	15.4		9.95
Dieldrin	ND		9.95
Endrin	ND		9.95
Endosulfan II	ND		9.95
4,4'-DDD	133		9.95
Endrin aldehyde	ND		9.95
Endosulfan sulfate	ND		9.95
4,4'-DDT	436		9.95
Chlordane	ND		49.7
Toxaphene	ND		49.7

2154

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-003
Client ID: S-47
Date Received: 04/04/2001
Date Extracted: 04/09/2001
Date Analyzed: 04/10/2001
Data file: W5853.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.9g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 50
% Moisture: 15.8

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.61
beta-BHC	ND		9.61
gamma-BHC	ND		9.61
delta-BHC	ND		9.61
Heptachlor	ND		9.61
Aldrin	ND		9.61
Heptachlor epoxide	ND		9.61
Endosulfan I	ND		9.61
4,4'-DDE	ND		9.61
Dieldrin	ND		9.61
Endrin	ND		9.61
Endosulfan II	ND		9.61
4,4'-DDD	ND		9.61
Endrin aldehyde	ND		9.61
Endosulfan sulfate	ND		9.61
4,4'-DDT	29.5		9.61
Chlordane	ND		48
Toxaphene	ND		48

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-004
Client ID: S-48
Date Received: 04/04/2001
Date Extracted: 04/09/2001
Date Analyzed: 04/10/2001
Data file: W5854.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.2g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 50
% Moisture: 13.0

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.52
beta-BHC	ND		9.52
gamma-BHC	ND		9.52
delta-BHC	ND		9.52
Heptachlor	ND		9.52
Aldrin	ND		9.52
Heptachlor epoxide	ND		9.52
Endosulfan I	ND		9.52
4,4'-DDE	ND		9.52
Dieldrin	ND		9.52
Endrin	ND		9.52
Endosulfan II	ND		9.52
4,4'-DDD	37.8		9.52
Endrin aldehyde	ND		9.52
Endosulfan sulfate	ND		9.52
4,4'-DDT	ND		9.52
Chlordane	ND		47.6
Toxaphene	ND		47.6

2156

000064

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-005
Client ID: S-49
Date Received: 04/04/2001
Date Extracted: 04/09/2001
Date Analyzed: 04/10/2001
Data file: W5855.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.8g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 50
% Moisture: 15.7

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.63
beta-BHC	ND		9.63
gamma-BHC	ND		9.63
delta-BHC	ND		9.63
Heptachlor	ND		9.63
Aldrin	ND		9.63
Heptachlor epoxide	ND		9.63
Endosulfan I	ND		9.63
4,4'-DDE	ND		9.63
Dieldrin	ND		9.63
Endrin	ND		9.63
Endosulfan II	ND		9.63
4,4'-DDD	ND		9.63
Endrin aldehyde	ND		9.63
Endosulfan sulfate	ND		9.63
4,4'-DDT	ND		9.63
Chlordane	ND		48.1
Toxaphene	ND		48.1

2157

000065

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-011
Client ID: S-55
Date Received: 04/04/2001
Date Extracted: 04/05/2001
Date Analyzed: 04/06/2001
Data file: W5761.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.2g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 20.4

Compound	Concentration	Q	MDL
alpha-BHC	ND		10.4
beta-BHC	ND		10.4
gamma-BHC	ND		10.4
delta-BHC	ND		10.4
Heptachlor	ND		10.4
Aldrin	ND		10.4
Heptachlor epoxide	ND		10.4
Endosulfan I	ND		10.4
4,4'-DDE	ND		10.4
Dieldrin	ND		10.4
Endrin	ND		10.4
Endosulfan II	ND		10.4
4,4'-DDD	ND		10.4
Endrin aldehyde	ND		10.4
Endosulfan sulfate	ND		10.4
4,4'-DDT	ND		10.4
Chlordane	ND		52
Toxaphene	ND		52

000066

2158

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-001
Client ID: S-45
Date Received: 4/4/01
Date Analyzed: 4/5/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 18.8

Compound	Result	Q	DF	MDL
Lead	58.4		1	2.46

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-002
Client ID: S-46
Date Received: 4/4/01
Date Analyzed: 4/5/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 17.6

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.39
Arsenic	1.61		1	0.239
Beryllium	0.747		1	0.239
Cadmium	ND		1	0.239
Chromium	20.8		1	0.717
Copper	22.1		1	0.478
Lead	14.5		1	2.39
Mercury	0.020		1	0.015
Nickel	22.5		1	0.717
Selenium	ND		1	2.39
Silver	ND		1	0.602
Thallium	0.144		1	0.0957
Zinc	71.7		1	1.20

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-003
Client ID: S-47
Date Received: 4/4/01
Date Analyzed: 4/5/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 15.8

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.38
Arsenic	1.65		1	0.238
Beryllium	0.665		1	0.238
Cadmium	0.266		1	0.238
Chromium	18.3		1	0.714
Copper	16.7		1	0.476
Lead	8.64		1	2.38
Mercury	ND		1	0.0148
Nickel	22.4		1	0.714
Selenium	ND		1	2.38
Silver	ND		1	0.592
Thallium	0.134		1	0.0952
Zinc	52.6		1	1.19

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-004
Client ID: S-48
Date Received: 4/4/01
Date Analyzed: 4/5/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 13

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.31
Arsenic	200		1	0.231
Beryllium	81.2		1	0.231
Cadmium	5.63		1	0.231
Chromium	2000		1	0.693
Copper	1660		1	0.462
Lead	936		1	2.31
Mercury	ND		1	0.0142
Nickel	2220		1	0.693
Selenium	ND		1	2.31
Silver	ND		1	0.569
Thallium	15.5		1	0.0924
Zinc	5520		1	1.15

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-005
Client ID: S-49
Date Received: 4/4/01
Date Analyzed: 4/5/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 15.7

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.36
Arsenic	1.68		1	0.236
Beryllium	0.770		1	0.236
Cadmium	ND		1	0.236
Chromium	21.1		1	0.708
Copper	19.8		1	0.472
Lead	13.8		1	2.36
Mercury	ND		1	0.0149
Nickel	24.0		1	0.708
Selenium	ND		1	2.36
Silver	ND		1	0.592
Thallium	0.168		1	0.0944
Zinc	85.3		1	1.18

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-007
Client ID: S-51
Date Received: 4/4/01
Date Analyzed: 4/12/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 27.7

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.77
Arsenic	21.5		1	0.277
Beryllium	2.12		1	0.277
Cadmium	1.03		1	0.277
Chromium	66.7		1	0.831
Copper	192		1	0.554
Lead	190		1	2.77
Mercury	0.138		1	0.0172
Nickel	92.7		1	0.831
Selenium	ND		1	2.77
Silver	ND		1	0.690
Thallium	0.949		1	0.111
Zinc	478		1	1.39

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2092-011
Client ID: S-55
Date Received: 4/4/01
Date Analyzed: 4/5/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 20.4

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.50
Arsenic	3.02		1	0.250
Beryllium	0.513		1	0.250
Cadmium	ND		1	0.250
Chromium	22.8		1	0.750
Copper	15.5		1	0.500
Lead	14.6		1	2.50
Mercury	0.150		1	0.0158
Nickel	20.8		1	0.750
Selenium	ND		1	2.50
Silver	ND		1	0.627
Thallium	0.152		1	0.100
Zinc	63.4		1	1.25

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CYANIDE, TOTAL

Client/Project: ENVTACT/ORBIS

Date Received: 4/4/01

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	% Moist	Date Analyzed
2092-002	S-46	ND		1	Soil-mg/Kg	1.21	17.6	4/6/01
2092-003	S-47	ND		1	Soil-mg/Kg	1.19	15.8	4/6/01
2092-004	S-48	ND		1	Soil-mg/Kg	1.15	13.0	4/6/01
2092-005	S-49	ND		1	Soil-mg/Kg	1.19	15.7	4/6/01
2092-011	S-55	ND		1	Soil-mg/Kg	1.26	20.4	4/6/01

INTEGRATED ANALYTICAL LABORATORIES, LLC.

PHENOL

Client/Project: ENVTACT/ORBIS

Date Received: 4/4/01

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	% Moist	Date Analyzed
2092-002	S-46	ND		1	Soil-mg/Kg	3.03	17.6	4/10/01
2092-003	S-47	ND		1	Soil-mg/Kg	2.97	15.8	4/10/01
2092-004	S-48	17.1		1	Soil-mg/Kg	2.87	13.0	4/10/01
2092-005	S-49	4.72		1	Soil-mg/Kg	2.97	15.7	4/10/01
2092-011	S-55	6.84		1	Soil-mg/Kg	3.14	20.4	4/5/01

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TOTAL PETROLEUM HYDROCARBONS

Client/Project: ENVTACT/ORBIS

Date Received: 4/4/01

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	% Moist	Date Analyzed
2092-001	S-45	33		1	Soil-mg/Kg	25	18.8	4/6/01
2092-002	S-46	36.9		1	Soil-mg/Kg	25	17.6	4/6/01
2092-003	S-47	ND		1	Soil-mg/Kg	25	15.8	4/6/01
2092-004	S-48	ND		1	Soil-mg/Kg	25	13.0	4/6/01
2092-005	S-49	ND		1	Soil-mg/Kg	25	15.7	4/6/01
2092-006	S-50	ND		1	Soil-mg/Kg	25.0	15.4	4/5/01
2092-007	S-51	5750		10	Soil-mg/Kg	277	27.7	4/5/01
2092-008	S-52	28.2		1	Soil-mg/Kg	25.0	18.0	4/5/01
2092-009	S-53	52.8		1	Soil-mg/Kg	25.0	14.9	4/5/01
2092-010	S-54	207		1	Soil-mg/Kg	25.0	15.8	4/5/01
2092-011	S-55	248		1	Soil-mg/Kg	25.1	20.4	4/5/01
2092-012	S-56	81.5		1	Soil-mg/Kg	25.0	15.9	4/5/01
2092-013	S-57	58.3		1	Soil-mg/Kg	25.0	19.8	4/5/01

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METHODOLOGY SUMMARY

Analytical Parameter	Aqueous Samples Method #	Soil/Other Samples Method #
Volatiles	NA	EPA 8260B
Semivolatiles	NA	EPA 8270C
PCB's	NA	EPA 8082
Pesticides	NA	EPA 8081A
Metals	NA	EPA 6020
Metals (Mercury)	NA	EPA 7471A
Metals (Silver)	NA	EPA 7760A
Total Petroleum Hydrocarbons	NA	EPA 418.1 M
Cyanide, Total	NA	EPA 9012 A
Phenols	NA	EPA 9066

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8713.D

BFB Injection Date: 04/06/2001

Inst ID: MSD_J

BFB Injection Time: 15:45

m/z	Ion Abudance Criteria	%Relative Abundance	
50	15 - 40.0% of mass 95	18.3	
75	30.0 - 60.0% of mass 95	46.5	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	7.0	
173	Less than 2.0% of mass 174	0.3	(0.4)1
174	Great than 50.0% of mass 95	74.1	
175	5.0 - 9.0% of mass 174	5.5	(7.4)1
176	95.0 - 101.0% of mass 174	71.0	(95.8)1
177	5.0 - 9.0% of mass 176	4.6	(6.5)2
	1-Value is % mass 174	2-Value is % mass 176	

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
20PPB	STD-20PPB	J8714.D	04/06/2001	16:14
50PPB	STD-50PPB	J8715.D	04/06/2001	16:43
100PPB	STD-100PPB	J8716.D	04/06/2001	17:12
150PPB	STD-150PPB	J8717.D	04/06/2001	17:41
200PPB	STD-200PPB	J8718.D	04/06/2001	18:10
N/A	METHOD-BLK	J8721.D	04/06/2001	19:36
S-12A	1840-003	J8722.D	04/06/2001	20:05
AC-27__10.5-11'	2044-001	J8723.D	04/06/2001	20:34
TRIP	2044-002	J8724.D	04/06/2001	21:03
S-34	2006-004	J8726.D	04/06/2001	22:01
S-38	2006-008	J8727.D	04/06/2001	22:29
AOC_#4	2045-001	J8728.D	04/06/2001	22:59
AOC_#4-B	2045-002	J8729.D	04/06/2001	23:27
WC-328	1996-001DIL	J8730.D	04/06/2001	23:56
TRIP_BLANK	2095-006	J8731.D	04/07/2001	0:26
PR-4	2095-004	J8732.D	04/07/2001	0:54
MS	2044-001MS	J8733.D	04/07/2001	1:23
MSD	2044-001MSD	J8734.D	04/07/2001	1:52
MS	2045-002MS	J8736.D	04/07/2001	2:49
MSD	2045-002MSD	J8737.D	04/07/2001	3:18

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8841.D

BFB Injection Date: 04/10/2001

Inst ID: MSD J

BFB Injection Time: 0:55

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.9			
75	30.0 - 60.0% of mass 95	49.4			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.1			
173	Less than 2.0% of mass 174	0.6	(	0.8	)1
174	Great than 50.0% of mass 95	72.3			
175	5.0 - 9.0% of mass 174	5.4	(	7.5	)1
176	95.0 - 101.0% of mass 174	70.6	(	97.6	)1
177	5.0 - 9.0% of mass 176	4.4	(	6.3	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
100PPB	STD-100PPB	J8843.D	04/10/2001	1:52
N/A	METHOD-BLK	J8845.D	04/10/2001	2:50
TB	2092-014	J8846.D	04/10/2001	3:19
S-45	2092-001	J8847.D	04/10/2001	3:48
S-47	2092-003	J8849.D	04/10/2001	4:45
S-48	2092-004	J8850.D	04/10/2001	5:14
S-49	2092-005	J8851.D	04/10/2001	5:43
S-50	2092-006	J8852.D	04/10/2001	6:12
TRIP_BLANK	2154-021	J8854.D	04/10/2001	7:09
B-6B__8.5-11	2154-001	J8855.D	04/10/2001	7:37
AOC-8A__6-10	2154-002	J8856.D	04/10/2001	8:06
AOC-8E__7-7.5	2154-004	J8858.D	04/10/2001	9:03
AOC-8E__7.5-10	2154-005	J8859.D	04/10/2001	9:32
AOC-8C__7-10	2154-003	J8862.D	04/10/2001	10:58
AOC-8E__10-12	2154-006	J8863.D	04/10/2001	11:25
MS	2092-004MS	J8864.D	04/10/2001	11:53
MSD	2092-004MSD	J8865.D	04/10/2001	12:20

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8868.D

BFB Injection Date: 04/10/2001

Inst ID: MSD_J

BFB Injection Time: 13:59

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	18.6			
75	30.0 - 60.0% of mass 95	48.0			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	73.9			
175	5.0 - 9.0% of mass 174	5.4	(	7.3	)1
176	95.0 - 101.0% of mass 174	71.5	(	96.7	)1
177	5.0 - 9.0% of mass 176	4.7	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
100PPB	STD-100PPB	J8869.D	04/10/2001	14:27
N/A	METHOD-BLK	J8872.D	04/10/2001	15:51
SB-4	2112-005	J8873.D	04/10/2001	16:25
SB-3	2112-004	J8874.D	04/10/2001	16:53
S-46	2092-002	J8875.D	04/10/2001	17:20
S-55	2092-011	J8876.D	04/10/2001	17:48
AOC-2F__1-3.5	2154-013	J8877.D	04/10/2001	18:16
S-51	2092-007	J8878.D	04/10/2001	18:44
MS	2154-013MS	J8879.D	04/10/2001	19:11
MSD	2154-013MSD	J8880.D	04/10/2001	19:39
TRIP-1	2155-017	J8881.D	04/10/2001	20:07
SB-2A__11.5-12'	2155-005	J8882.D	04/10/2001	20:35
SB-2B__14.5-15'	2155-006	J8883.D	04/10/2001	21:02
SB-1__19.5-20'	2155-007	J8884.D	04/10/2001	21:30
SB-4__14-14.5'	2155-008	J8885.D	04/10/2001	21:58
SB-5__15.5-16'	2155-009	J8886.D	04/10/2001	22:26
GT-1__10-10.5'	2155-010	J8887.D	04/10/2001	22:53
GT-3__7-7.5'	2155-011	J8888.D	04/10/2001	23:21
DS-1__1-1.5'	2155-012	J8889.D	04/10/2001	23:49
SP-1__4-4.5'	2155-013	J8890.D	04/11/2001	0:17

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8868.D

Inst ID: MSD_J

BFB Injection Date : 04/10/200

BFB Injection Time: 13:59

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	18.6			
75	30.0 - 60.0% of mass 95	48.0			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	73.9			
175	5.0 - 9.0% of mass 174	5.4	(	7.3	)1
176	95.0 - 101.0% of mass 174	71.5	(	96.7	)1
177	5.0 - 9.0% of mass 176	4.7	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
WT-1__0-0.5'	2155-014	J8891.D	04/11/2001	0:44
WT-2__1.5-2'	2155-015	J8892.D	04/11/2001	1:12
SUMP-1__3-3.5'	2155-016	J8893.D	04/11/2001	1:40

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8974.D

Inst ID: MSD_J

BFB Injection Date: 04/13/2001

BFB Injection Time: 16:26

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	18.8			
75	30.0 - 60.0% of mass 95	48.5			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.4	(	0.5	)1
174	Great than 50.0% of mass 95	72.0			
175	5.0 - 9.0% of mass 174	5.4	(	7.5	)1
176	95.0 - 101.0% of mass 174	69.4	(	96.4	)1
177	5.0 - 9.0% of mass 176	4.4	(	6.3	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
100PPB	STD-100PPB	J8975.D	04/13/2001	16:54
N/A	METHOD-BLK	J8978.D	04/13/2001	18:24
TB	2292-003	J8979.D	04/13/2001	18:52
TP-1	2292-002	J8980.D	04/13/2001	19:20
AOC7-1	2293-001	J8981.D	04/13/2001	19:48
AOC7-2	2293-002	J8982.D	04/13/2001	20:16
AOC7-3	2293-003	J8983.D	04/13/2001	20:44
AOC7-4	2293-004	J8984.D	04/13/2001	21:12
AOC7-5	2293-005	J8985.D	04/13/2001	21:41
AOC7-6	2293-006	J8986.D	04/13/2001	22:09
AOC7-7	2293-007	J8987.D	04/13/2001	22:37
AOC7-8	2293-008	J8988.D	04/13/2001	23:04
TB	2293-012	J8989.D	04/13/2001	23:32
TB041201	2328-005	J8990.D	04/14/2001	0:00
E-4A-PES-W	2328-001	J8991.D	04/14/2001	0:28
E-4A-PES-S	2328-002	J8992.D	04/14/2001	0:56
E-4A-PES-N	2328-003	J8993.D	04/14/2001	1:24
E-4A-PEB-01	2328-004	J8994.D	04/14/2001	1:51
S-51	2092-007DIL	J8995.D	04/14/2001	2:19
T-4_S-1	2198-005	J8996.D	04/14/2001	2:47

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8974.D

BFB Injection Date : 04/13/200

Inst ID: MSD J

BFB Injection Time: 16:26

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	18.8			
75	30.0 - 60.0% of mass 95	48.5			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.4	(	0.5	)1
174	Great than 50.0% of mass 95	72.0			
175	5.0 - 9.0% of mass 174	5.4	(	7.5	)1
176	95.0 - 101.0% of mass 174	69.4	(	96.4	)1
177	5.0 - 9.0% of mass 176	4.4	(	6.3	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
T-5_S-2	2198-008	J8997.D	04/14/2001	3:15
MS	2292-002MS	J8998.D	04/14/2001	3:43
MSD	2292-002MSD	J8999.D	04/14/2001	4:11

VOLATILE METHOD BLANK SUMMARY

Lab File ID: J8845.D

Instrument ID: MSD_J

Date Analyzed: 04/10/2001

Time Analyzed: 02:50

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
TB	2092-014	04/10/2001	3:19
S-45	2092-001	04/10/2001	3:48
S-47	2092-003	04/10/2001	4:45
S-48	2092-004	04/10/2001	5:14
S-49	2092-005	04/10/2001	5:43
S-50	2092-006	04/10/2001	6:12
TRIP_BLANK	2154-021	04/10/2001	7:09
B-6B__8.5-11	2154-001	04/10/2001	7:37
AOC-8A__6-10	2154-002	04/10/2001	8:06
AOC-8E__7-7.5	2154-004	04/10/2001	9:03
AOC-8E__7.5-10	2154-005	04/10/2001	9:32
AOC-8C__7-10	2154-003	04/10/2001	10:58
AOC-8E__10-12	2154-006	04/10/2001	11:25
MS	2092-004MS	04/10/2001	11:53
MSD	2092-004MSD	04/10/2001	12:20

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/10/2001
Data file: J8845.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

Compound	Concentration	Q	MDL
Chloromethane	ND		250
Vinyl Chloride	ND		250
Bromomethane	ND		250
Chloroethane	ND		250
Trichlorofluoromethane	ND		250
Acrolein	ND		500
1,1-Dichloroethene	ND		250
Methylene Chloride	ND		250
Acrylonitrile	ND		500
trans-1,2-Dichloroethene	ND		250
1,1-Dichloroethane	ND		250
Chloroform	ND		250
1,1,1-Trichloroethane	ND		250
Carbon Tetrachloride	ND		250
1,2-Dichloroethane(EDC)	ND		250
Benzene	ND		250
Trichloroethene	ND		250
1,2-Dichloropropane	ND		250
Bromodichloromethane	ND		250
2-Chloroethylvinyl Ether	ND		250
cis-1,3-Dichloropropene	ND		250
Toluene	ND		250
trans-1,3-Dichloropropene	ND		250
1,1,2-Trichloroethane	ND		250
Tetrachloroethene	ND		250
Dibromochloromethane	ND		250
Chlorobenzene	ND		250
Ethylbenzene	ND		250
Total Xylenes	ND		250
Bromoform	ND		250
1,1,2,2-Tetrachloroethane	ND		250
1,3-Dichlorobenzene	ND		250
1,4-Dichlorobenzene	ND		250
1,2-Dichlorobenzene	ND		250

Total Target Compounds: 0

2177

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/10/2001
Data file: J8845.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

Compound	Concentration	Q	MDL
Tetrachloroethene	ND		250

Total Target Compounds: 0

000086

2178

VOLATILE METHOD BLANK SUMMARY

Lab File ID: J8872.D

Instrument ID: MSD J

Date Analyzed: 04/10/2001

Time Analyzed: 15:51

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
SB-4	2112-005	04/10/2001	16:25
SB-3	2112-004	04/10/2001	16:53
S-46	2092-002	04/10/2001	17:20
S-55	2092-011	04/10/2001	17:48
AOC-2F__1-3.5	2154-013	04/10/2001	18:16
S-51	2092-007	04/10/2001	18:44
MS	2154-013MS	04/10/2001	19:11
MSD	2154-013MSD	04/10/2001	19:39
TRIP-1	2155-017	04/10/2001	20:07
SB-2A__11.5-12'	2155-005	04/10/2001	20:35
SB-2B__14.5-15'	2155-006	04/10/2001	21:02
SB-1__19.5-20'	2155-007	04/10/2001	21:30
SB-4__14-14.5'	2155-008	04/10/2001	21:58
SB-5__15.5-16'	2155-009	04/10/2001	22:26
GT-1__10-10.5'	2155-010	04/10/2001	22:53
GT-3__7-7.5'	2155-011	04/10/2001	23:21
DS-1__1-1.5'	2155-012	04/10/2001	23:49
SP-1__4-4.5'	2155-013	04/11/2001	0:17
WT-1__0-0.5'	2155-014	04/11/2001	0:44
WT-2__1.5-2'	2155-015	04/11/2001	1:12
SUMP-1__3-3.5'	2155-016	04/11/2001	1:40

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/10/2001
Data file: J8872.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

Compound	Concentration	Q	MDL
Chloromethane	ND		250
Vinyl Chloride	ND		250
Bromomethane	ND		250
Chloroethane	ND		250
Trichlorofluoromethane	ND		250
Acrolein	ND		500
1,1-Dichloroethene	ND		250
Methylene Chloride	ND		250
Acrylonitrile	ND		500
trans-1,2-Dichloroethene	ND		250
1,1-Dichloroethane	ND		250
Chloroform	ND		250
1,1,1-Trichloroethane	ND		250
Carbon Tetrachloride	ND		250
1,2-Dichloroethane(EDC)	ND		250
Benzene	ND		250
Trichloroethene	ND		250
1,2-Dichloropropane	ND		250
Bromodichloromethane	ND		250
2-Chloroethylvinyl Ether	ND		250
cis-1,3-Dichloropropene	ND		250
Toluene	ND		250
trans-1,3-Dichloropropene	ND		250
1,1,2-Trichloroethane	ND		250
Tetrachloroethene	ND		250
Dibromochloromethane	ND		250
Chlorobenzene	ND		250
Ethylbenzene	ND		250
Total Xylenes	ND		250
Bromoform	ND		250
1,1,2,2-Tetrachloroethane	ND		250
1,3-Dichlorobenzene	ND		250
1,4-Dichlorobenzene	ND		250
1,2-Dichlorobenzene	ND		250

Total Target Compounds: 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/10/2001
Data file: J8872.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

000089

2181

VOLATILE METHOD BLANK SUMMARY

Lab File ID: J8978.D

Instrument ID: MSD_J

Date Analyzed: 04/13/2001

Time Analyzed: 18:24

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
TB	2292-003	04/13/2001	18:52
TP-1	2292-002	04/13/2001	19:20
AOC7-1	2293-001	04/13/2001	19:48
AOC7-2	2293-002	04/13/2001	20:16
AOC7-3	2293-003	04/13/2001	20:44
AOC7-4	2293-004	04/13/2001	21:12
AOC7-5	2293-005	04/13/2001	21:41
AOC7-6	2293-006	04/13/2001	22:09
AOC7-7	2293-007	04/13/2001	22:37
AOC7-8	2293-008	04/13/2001	23:04
TB	2293-012	04/13/2001	23:32
TB041201	2328-005	04/14/2001	0:00
E-4A-PES-W	2328-001	04/14/2001	0:28
E-4A-PES-S	2328-002	04/14/2001	0:56
E-4A-PES-N	2328-003	04/14/2001	1:24
E-4A-PEB-01	2328-004	04/14/2001	1:51
S-51	2092-007DIL	04/14/2001	2:19
T-4_S-1	2198-005	04/14/2001	2:47
T-5_S-2	2198-008	04/14/2001	3:15
MS	2292-002MS	04/14/2001	3:43
MSD	2292-002MSD	04/14/2001	4:11

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/13/2001
Data file: J8978.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

Compound	Concentration	Q	MDL
Chloromethane	ND		250
Vinyl Chloride	ND		250
Bromomethane	ND		250
Chloroethane	ND		250
Trichlorofluoromethane	ND		250
Acrolein	ND		500
1,1-Dichloroethene	ND		250
Methylene Chloride	ND		250
Acrylonitrile	ND		500
trans-1,2-Dichloroethene	ND		250
1,1-Dichloroethane	ND		250
Chloroform	ND		250
1,1,1-Trichloroethane	ND		250
Carbon Tetrachloride	ND		250
1,2-Dichloroethane(EDC)	ND		250
Benzene	ND		250
Trichloroethene	ND		250
1,2-Dichloropropane	ND		250
Bromodichloromethane	ND		250
2-Chloroethylvinyl Ether	ND		250
cis-1,3-Dichloropropene	ND		250
Toluene	ND		250
trans-1,3-Dichloropropene	ND		250
1,1,2-Trichloroethane	ND		250
Tetrachloroethene	ND		250
Dibromochloromethane	ND		250
Chlorobenzene	ND		250
Ethylbenzene	ND		250
Total Xylenes	ND		250
Bromoform	ND		250
1,1,2,2-Tetrachloroethane	ND		250
1,3-Dichlorobenzene	ND		250
1,4-Dichlorobenzene	ND		250
1,2-Dichlorobenzene	ND		250

Total Target Compounds: 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/13/2001
Data file: J8978.D

GC/MS Column: DB-624
Sample wt/vol: 0.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 0

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

2184

Response Factor Report MSD_J

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration

Calibration Files
20 =J8714.D 100 =J8716.D 50 =J8715.D
150 =J8717.D 200 =J8718.D

		Compound	20	100	50	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	ISTD						
2)	T	Dichlorodifluoromet	0.231	0.345	0.351	0.327	0.336	0.318	15.65
3)	P	Chloromethane	0.341	0.456	0.446	0.459	0.474	0.435	12.35
4)	C	Vinyl Chloride	0.254	0.362	0.361	0.361	0.380	0.344	14.71
5)	T	Bromomethane	0.145	0.114	0.144	0.090	0.080	0.115	25.88
6)	T	Chloroethane	0.165	0.169	0.197	0.133	0.117	0.156	20.14
7)	T	Trichlorofluorometh	0.290	0.435	0.438	0.407	0.409	0.396	15.31
8)	T	Acrolein	0.046	0.042	0.045	0.042	0.042	0.043	4.72
9)	MC	1,1-Dichloroethene	0.184	0.257	0.258	0.250	0.256	0.241	13.28
10)	T	Acetone	0.140	0.150	0.162	0.149	0.146	0.149	5.32
11)	T	Carbon Disulfide	0.643	0.941	0.924	0.933	0.966	0.882	15.22
12)	T	Vinyl Acetate	1.244	1.484	1.612	1.443	1.356	1.428	9.68
13)	T	Methylene Chloride	0.262	0.326	0.333	0.326	0.326	0.314	9.42
14)	T	Acrylonitrile	0.144	0.131	0.141	0.132	0.136	0.137	4.22
15)	T	t-Butyl Alcohol(TBA	0.037	0.039	0.044	0.040	0.040	0.040	6.10
16)	T	trans-1,2-Dichloroe	0.222	0.284	0.292	0.278	0.281	0.272	10.28
17)	T	Methyl-t-Butyl Ethe	0.966	1.221	1.271	1.243	1.228	1.186	10.49
18)	P	1,1-Dichloroethane	0.459	0.590	0.598	0.586	0.592	0.565	10.55
19)	T	Diisopropyl Ether(D	0.980	1.225	1.258	1.227	1.212	1.180	9.62
20)	T	cis-1,2-Dichloroeth	0.349	0.443	0.452	0.432	0.428	0.421	9.79
21)	T	2,2-Dichloropropane	0.396	0.540	0.546	0.521	0.527	0.506	12.33
22)	T	2-Butanone(MEK)	0.195	0.242	0.263	0.248	0.244	0.239	10.75
23)	T	Bromochloromethane	0.165	0.212	0.217	0.213	0.210	0.203	10.61
25)	C	Chloroform	0.563	0.730	0.735	0.727	0.725	0.696	10.69
26)	T	1,1,1-Trichloroetha	0.399	0.585	0.577	0.576	0.594	0.546	15.17
27)	T	Carbon Tetrachlorid	0.295	0.456	0.446	0.450	0.465	0.423	16.92
28)	T	1,1-Dichloropropene	0.344	0.493	0.495	0.478	0.487	0.460	14.19
29)	T	1,2-Dichloroethane(	0.488	0.608	0.628	0.609	0.597	0.586	9.56
30)	S	1,2-Dichloroethane-	0.617	0.612	0.622	0.620	0.620	0.618	0.64
31)	I	1,4-Difluorobenzene	ISTD						
32)	M	Benzene	0.912	1.148	1.184	1.114	1.094	1.090	9.67
33)	M	Trichloroethene	0.201	0.277	0.277	0.272	0.275	0.260	12.72
34)	C	1,2-Dichloropropane	0.236	0.299	0.303	0.295	0.289	0.284	9.66
35)	T	Dibromomethane	0.130	0.168	0.171	0.168	0.164	0.160	10.85
37)	T	Bromodichloromethan	0.258	0.371	0.363	0.375	0.372	0.348	14.51
38)	T	2-Chloroethylvinyl	0.131	0.205	0.207	0.210	0.207	0.192	17.88
39)	T	cis-1,3-Dichloropro	0.332	0.475	0.472	0.477	0.468	0.445	14.18
40)	T	4-Methyl-2-pentanon	0.211	0.310	0.326	0.320	0.318	0.297	16.22
41)	S	Toluene-d8	1.015	1.014	1.011	1.009	1.017	1.013	0.32
42)	MC	Toluene	0.547	0.706	0.718	0.688	0.677	0.667	10.31
43)	T	trans-1,3-Dichlorop	0.307	0.448	0.442	0.449	0.443	0.418	14.78
44)	T	1,1,2-Trichloroetha	0.166	0.211	0.218	0.212	0.206	0.203	10.29
45)	T	Tetrachloroethene	0.178	0.237	0.244	0.227	0.224	0.222	11.55
46)	T	1,3-Dichloropropane	0.352	0.449	0.469	0.443	0.428	0.428	10.55
47)	T	2-Hexanone	0.148	0.225	0.235	0.233	0.231	0.215	17.36
48)	T	Dibromochloromethan	0.165	0.260	0.251	0.265	0.264	0.241	17.69
49)	T	1,2-Dibromoethane(E	0.190	0.260	0.267	0.264	0.258	0.248	13.10

50)	I	Chlorobenzene-d5	----------ISTD----------						
51)	MP	Chlorobenzene	0.743	0.927	0.952	0.904	0.883	0.882	9.27
52)	T	1,1,1,2-Tetrachloro	0.238	0.322	0.322	0.321	0.313	0.303	12.11
53)	C	Ethylbenzene	1.192	1.578	1.595	1.531	1.510	1.481	11.16
54)	T	m,p-Xylene	0.479	0.590	0.623	0.565	0.542	0.560	9.71
[illegible]	T	o-Xylene	0.472	0.601	0.625	0.576	0.554	0.566	10.37
[illegible]	T	Styrene	0.828	1.065	1.102	1.030	0.978	1.000	10.68
)	P	Bromoform	0.109	0.187	0.176	0.198	0.198	0.174	21.39
58)	T	Isopropylbenzene	1.003	1.422	1.421	1.394	1.386	1.325	13.65
59)	S	Bromofluorobenzene	0.641	0.643	0.639	0.638	0.641	0.640	0.30
60)	P	1,1,2,2-Tetrachloro	0.290	0.369	0.392	0.371	0.358	0.356	10.96
61)	T	Bromobenzene	0.302	0.378	0.389	0.367	0.356	0.359	9.47
62)	T	1,2,3-Trichloroprop	0.290	0.361	0.388	0.365	0.355	0.352	10.43
63)	T	n-Propylbenzene	1.199	1.666	1.663	1.621	1.617	1.553	12.83
64)	T	2-Chlorotoluene	0.857	1.100	1.114	1.078	1.061	1.042	10.13
65)	T	1,3,5-Trimethylbenz	0.915	1.200	1.226	1.166	1.151	1.132	11.01
66)	T	4-Chlorotoluene	1.028	1.280	1.316	1.243	1.221	1.218	9.18
67)	T	tert-Butylbenzene	0.642	0.930	0.921	0.903	0.907	0.861	14.23
68)	T	1,2,4-Trimethylbenz	0.996	1.282	1.306	1.258	1.235	1.215	10.32
69)	T	sec-Butylbenzene	0.872	1.274	1.274	1.243	1.257	1.184	14.76
70)	T	1,3-Dichlorobenzene	0.549	0.674	0.701	0.657	0.641	0.645	8.96
71)	T	4-Isopropyltoluene	0.761	1.052	1.062	1.029	1.023	0.985	12.83
72)	T	1,4-Dichlorobenzene	0.578	0.705	0.726	0.692	0.671	0.674	8.53
73)	T	n-Butylbenzene	0.340	0.497	0.495	0.487	0.486	0.461	14.70
74)	T	1,2-Dichlorobenzene	0.543	0.657	0.689	0.645	0.621	0.631	8.68
75)	T	1,2-Dibromo-3-chlor	0.035	0.052	0.055	0.057	0.057	0.051	18.31
76)	T	1,2,4-Trichlorobenz	0.201	0.256	0.281	0.270	0.265	0.255	12.18
77)	T	Hexachlorobutadiene	0.076	0.101	0.102	0.102	0.104	0.097	11.93
78)	T	Naphthalene	0.473	0.614	0.704	0.655	0.650	0.619	14.14
79)	T	1,2,3-Trichlorobenz	0.113	0.153	0.168	0.171	0.169	0.155	15.77
80)	T	1,1,2-Trichloro-1,2	0.147	0.216	0.222	0.202	0.204	0.198	15.08
[illegible]	T	Methyl acetate	0.203	0.263	0.279	0.278	0.281	0.261	12.75
[illegible]	T	Cyclohexane	0.325	0.505	0.519	0.478	0.489	0.463	16.99
[illegible]	T	Methyl cyclohexane	0.189	0.301	0.303	0.284	0.290	0.273	17.50

(#) = Out of Range

JME0406.M Sun Apr 08 10:18:10 2001 MSD_J

Instrument ID: MSD_J
Method ID: JME0406.M
Date: 04/08/2001

Average %RSD = 12.46

Refer to SW846 Method 8000B Section 7.5.1.

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8843.D
Acq On : 10 Apr 2001 1:52
[redacted]mple : 100PPB,STD-100PPB,W,5mL,100
[redacted]sc :
S Integration Params: LSCINT.P

Vial: 29
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue Apr 10 09:02:08 2001
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 35% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	91	0.00
2	T	Dichlorodifluoromethane	0.318	0.288	9.4	75	0.00
3	P	Chloromethane	0.435	0.480	-10.3	95	0.00
4	C	Vinyl Chloride	0.344	0.380	-10.5	95	0.00
5	T	Bromomethane	0.115	0.128	-11.3	101	0.00
6	T	Chloroethane	0.156	0.170	-9.0	91	0.00
7	T	Trichlorofluoromethane	0.396	0.288	27.3	60	0.00
8	T	Acrolein	0.043	0.036	16.3	77	0.00
9	MC	1,1-Dichloroethene	0.241	0.256	-6.2	90	0.00
10	T	Acetone	0.149	0.147	1.3	89	0.00
11	T	Carbon Disulfide	0.882	0.968	-9.8	93	0.00
12	T	Vinyl Acetate	1.428	1.222	14.4	75	0.00
[redacted]	T	Methylene Chloride	0.314	0.340	-8.3	94	0.00
[redacted]	T	Acrylonitrile	0.137	0.149	-8.8	103	0.00
[redacted]	T	t-Butyl Alcohol(TBA)	0.040	0.042	-5.0	99	0.00
16	T	trans-1,2-Dichloroethene	0.272	0.298	-9.6	95	0.00
17	T	Methyl-t-Butyl Ether(MTBE)	1.186	1.270	-7.1	94	0.00
18	P	1,1-Dichloroethane	0.565	0.614	-8.7	94	0.00
19	T	Diisopropyl Ether(DIPE)	1.180	1.293	-9.6	96	0.00
20	T	cis-1,2-Dichloroethene	0.421	0.457	-8.6	93	0.00
21	T	2,2-Dichloropropane	0.506	0.397	21.5	67	0.00
22	T	2-Butanone(MEK)	0.239	0.249	-4.2	93	0.00
23	T	Bromochloromethane	0.203	0.217	-6.9	93	0.00
25	C	Chloroform	0.696	0.761	-9.3	94	0.00
26	T	1,1,1-Trichloroethane	0.546	0.602	-10.3	93	0.00
27	T	Carbon Tetrachloride	0.423	0.458	-8.3	91	0.00
28	T	1,1-Dichloropropene	0.460	0.490	-6.5	90	0.00
29	T	1,2-Dichloroethane(EDC)	0.586	0.648	-10.6	96	0.00
30	S	1,2-Dichloroethane-d4	0.618	0.670	-8.4	99	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	92	0.00
32	M	Benzene	1.090	1.170	-7.3	94	0.00
33	M	Trichloroethene	0.260	0.294	-13.1	98	0.00
34	C	1,2-Dichloropropane	0.284	0.304	-7.0	93	0.00
35	T	Dibromomethane	0.160	0.173	-8.1	94	0.00
37	T	Bromodichloromethane	0.348	0.377	-8.3	93	0.00
38	T	2-Chloroethylvinyl Ether	0.192	0.207	-7.8	93	0.00
39	T	cis-1,3-Dichloropropene	0.445	0.451	-1.3	87	0.00
40	T	4-Methyl-2-pentanone(MIBK)	0.297	0.328	-10.4	97	0.00
[redacted]	S	Toluene-d8	1.013	1.038	-2.5	94	0.00
[redacted]	MC	Toluene	0.667	0.719	-7.8	94	0.00
43	T	trans-1,3-Dichloropropene	0.418	0.428	-2.4	88	0.00
44	T	1,1,2-Trichloroethane	0.203	0.219	-7.9	95	0.00
45	T	Tetrachloroethene	0.222	0.233	-5.0	90	0.00
46	T	1,3-Dichloropropane	0.428	0.468	-9.3	96	0.00

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47	T	2-Hexanone	0.215	0.221	-2.8	90	0.00
48	T	Dibromochloromethane	0.241	0.265	-10.0	94	0.00
49	T	1,2-Dibromoethane(EDB)	0.248	0.262	-5.6	93	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00
51	MP	Chlorobenzene	0.882	0.934	-5.9	93	0.00
[illegible]	T	1,1,1,2-Tetrachloroethane	0.303	0.326	-7.6	93	0.00
[illegible]	C	Ethylbenzene	1.481	1.610	-8.7	94	0.00
54	T	m,p-Xylene	0.560	0.610	-8.9	95	0.00
55	T	o-Xylene	0.566	0.614	-8.5	94	0.00
56	T	Styrene	1.000	1.095	-9.5	94	0.00
57	P	Bromoform	0.174	0.195	-12.1	95	0.00
58	T	Isopropylbenzene	1.325	1.436	-8.4	93	0.00
59	S	Bromofluorobenzene	0.640	0.648	-1.3	93	0.00
60	P	1,1,2,2-Tetrachloroethane	0.356	0.362	-1.7	90	0.00
61	T	Bromobenzene	0.359	0.387	-7.8	94	0.00
62	T	1,2,3-Trichloropropane	0.352	0.388	-10.2	98	0.00
63	T	n-Propylbenzene	1.553	1.696	-9.2	93	0.00
64	T	2-Chlorotoluene	1.042	1.137	-9.1	95	0.00
65	T	1,3,5-Trimethylbenzene	1.132	1.241	-9.6	95	0.00
66	T	4-Chlorotoluene	1.218	1.335	-9.6	96	0.00
67	T	tert-Butylbenzene	0.861	0.933	-8.4	92	0.00
68	T	1,2,4-Trimethylbenzene	1.215	1.332	-9.6	95	0.00
69	T	sec-Butylbenzene	1.184	1.276	-7.8	92	0.00
70	T	1,3-Dichlorobenzene	0.645	0.707	-9.6	96	0.00
71	T	4-Isopropyltoluene	0.985	1.066	-8.2	93	0.00
72	T	1,4-Dichlorobenzene	0.674	0.734	-8.9	96	0.00
73	T	n-Butylbenzene	0.461	0.501	-8.7	93	0.00
74	T	1,2-Dichlorobenzene	0.631	0.692	-9.7	97	0.00
75	T	1,2-Dibromo-3-chloropropane	0.051	0.056	-9.8	99	0.00
76	T	1,2,4-Trichlorobenzene	0.255	0.259	-1.6	93	0.00
77	T	Hexachlorobutadiene	0.097	0.097	0.0	88	0.00
[illegible]	T	Naphthalene	0.619	0.630	-1.8	94	0.00
79	T	1,2,3-Trichlorobenzene	0.155	0.165	-6.5	99	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.198	0.171	13.6	72	0.00
81	T	Methyl acetate	0.261	0.311	-19.2	108	0.00
82	T	Cyclohexane	0.463	0.412	11.0	75	0.00
83	T	Methyl cyclohexane	0.273	0.232	15.0	71	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

J8843.D JME0406.M Tue Apr 10 09:02:12 2001 MSD_J

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8869.D
Acq On : 10 Apr 2001 14:27
Sample : 100PPB,STD-100PPB,W,5mL,100
Misc :
MS Integration Params: LSCINT.P

Vial: 2
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue Apr 10 14:54:01 2001
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 35% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	0.318	0.403	-26.7	116	0.00
3	P	Chloromethane	0.435	0.483	-11.0	105	0.00
4	C	Vinyl Chloride	0.344	0.401	-16.6	110	0.00
5	T	Bromomethane	0.115	0.134	-16.5	117	0.00
6	T	Chloroethane	0.156	0.189	-21.2	111	0.00
7	T	Trichlorofluoromethane	0.396	0.353	10.9	81	0.00
8	T	Acrolein	0.043	0.037	14.0	87	0.00
9	MC	1,1-Dichloroethene	0.241	0.271	-12.4	105	0.00
10	T	Acetone	0.149	0.105	29.5	70	0.00
11	T	Carbon Disulfide	0.882	1.009	-14.4	107	0.00
12	T	Vinyl Acetate	1.428	1.638	-14.7	110	0.00
13	T	Methylene Chloride	0.314	0.336	-7.0	103	0.00
[redacted]	T	Acrylonitrile	0.137	0.124	9.5	94	0.00
[redacted]	T	t-Butyl Alcohol(TBA)	0.040	0.034	15.0	87	0.00
16	T	trans-1,2-Dichloroethene	0.272	0.299	-9.9	105	0.00
17	T	Methyl-t-Butyl Ether(MTBE)	1.186	1.171	1.3	95	0.00
18	P	1,1-Dichloroethane	0.565	0.611	-8.1	103	0.00
19	T	Diisopropyl Ether(DIPE)	1.180	1.294	-9.7	105	0.00
20	T	cis-1,2-Dichloroethene	0.421	0.445	-5.7	100	0.00
21	T	2,2-Dichloropropane	0.506	0.576	-13.8	106	0.00
22	T	2-Butanone(MEK)	0.239	0.198	17.2	81	0.00
23	T	Bromochloromethane	0.203	0.207	-2.0	97	0.00
25	C	Chloroform	0.696	0.738	-6.0	101	0.00
26	T	1,1,1-Trichloroethane	0.546	0.604	-10.6	103	0.00
27	T	Carbon Tetrachloride	0.423	0.472	-11.6	103	0.00
28	T	1,1-Dichloropropene	0.460	0.507	-10.2	102	0.00
29	T	1,2-Dichloroethane(EDC)	0.586	0.600	-2.4	98	0.00
30	S	1,2-Dichloroethane-d4	0.618	0.621	-0.5	101	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	101	0.00
32	M	Benzene	1.090	1.145	-5.0	100	0.00
33	M	Trichloroethene	0.260	0.273	-5.0	99	0.00
34	C	1,2-Dichloropropane	0.284	0.296	-4.2	100	0.00
35	T	Dibromomethane	0.160	0.158	1.3	95	0.00
37	T	Bromodichloromethane	0.348	0.362	-4.0	98	0.00
38	T	2-Chloroethylvinyl Ether	0.192	0.190	1.0	93	0.00
39	T	cis-1,3-Dichloropropene	0.445	0.466	-4.7	98	0.00
40	T	4-Methyl-2-pentanone(MIBK)	0.297	0.274	7.7	89	0.00
[redacted]	S	Toluene-d8	1.013	1.009	0.4	100	0.00
[redacted]	MC	Toluene	0.667	0.701	-5.1	100	0.00
43	T	trans-1,3-Dichloropropene	0.418	0.429	-2.6	96	0.00
44	T	1,1,2-Trichloroethane	0.203	0.200	1.5	95	0.00
45	T	Tetrachloroethene	0.222	0.236	-6.3	100	0.00
46	T	1,3-Dichloropropane	0.428	0.427	0.2	96	0.00

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47	T	2-Hexanone	0.215	0.183	14.9	82	0.00
48	T	Dibromochloromethane	0.241	0.245	-1.7	95	0.00
49	T	1,2-Dibromoethane(EDB)	0.248	0.241	2.8	94	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
51	MP	Chlorobenzene	0.882	0.920	-4.3	99	0.00
?	T	1,1,1,2-Tetrachloroethane	0.303	0.318	-5.0	99	0.00
?	C	Ethylbenzene	1.481	1.583	-6.9	100	0.00
54	T	m,p-Xylene	0.560	0.597	-6.6	101	0.00
55	T	o-Xylene	0.566	0.601	-6.2	100	0.00
56	T	Styrene	1.000	1.067	-6.7	100	0.00
57	P	Bromoform	0.174	0.169	2.9	90	0.00
58	T	Isopropylbenzene	1.325	1.422	-7.3	100	0.00
59	S	Bromofluorobenzene	0.640	0.629	1.7	98	0.00
60	P	1,1,2,2-Tetrachloroethane	0.356	0.341	4.2	93	0.00
61	T	Bromobenzene	0.359	0.375	-4.5	99	0.00
62	T	1,2,3-Trichloropropane	0.352	0.334	5.1	92	0.00
63	T	n-Propylbenzene	1.553	1.664	-7.1	100	0.00
64	T	2-Chlorotoluene	1.042	1.102	-5.8	100	0.00
65	T	1,3,5-Trimethylbenzene	1.132	1.183	-4.5	99	0.00
66	T	4-Chlorotoluene	1.218	1.292	-6.1	101	0.00
67	T	tert-Butylbenzene	0.861	0.922	-7.1	99	0.00
68	T	1,2,4-Trimethylbenzene	1.215	1.281	-5.4	100	0.00
69	T	sec-Butylbenzene	1.184	1.265	-6.8	99	0.00
70	T	1,3-Dichlorobenzene	0.645	0.677	-5.0	100	0.00
71	T	4-Isopropyltoluene	0.985	1.036	-5.2	99	0.00
72	T	1,4-Dichlorobenzene	0.674	0.698	-3.6	99	0.00
73	T	n-Butylbenzene	0.461	0.501	-8.7	101	0.00
74	T	1,2-Dichlorobenzene	0.631	0.644	-2.1	98	0.00
75	T	1,2-Dibromo-3-chloropropane	0.051	0.043	15.7	82	0.00
76	T	1,2,4-Trichlorobenzene	0.255	0.185	27.5	72	0.00
77	T	Hexachlorobutadiene	0.097	0.094	3.1	93	0.00
?	T	Naphthalene	0.619	0.393	36.5	64	0.00
79	T	1,2,3-Trichlorobenzene	0.155	0.085	45.2	56	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.198	0.239	-20.7	111	0.00
81	T	Methyl acetate	0.261	0.241	7.7	92	0.00
82	T	Cyclohexane	0.463	0.542	-17.1	107	0.00
83	T	Methyl cyclohexane	0.273	0.316	-15.8	105	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

J8869.D JME0406.M Tue Apr 10 14:54:05 2001 MSD_J

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\J8975.D
Acq On : 13 Apr 2001 16:54
[redacted]mple : 100PPB,STD-100PPB,W,5mL,100
[redacted]sc :
'S Integration Params: LSCINT.P

Vial: 2
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 15 09:34:22 2001
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 35% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	96	0.00
2	T	Dichlorodifluoromethane	0.318	0.367	-15.4	102	0.00
3	P	Chloromethane	0.435	0.479	-10.1	101	0.00
4	C	Vinyl Chloride	0.344	0.387	-12.5	103	0.00
5	T	Bromomethane	0.115	0.115	0.0	97	0.00
6	T	Chloroethane	0.156	0.163	-4.5	93	0.00
7	T	Trichlorofluoromethane	0.396	0.336	15.2	74	0.00
8	T	Acrolein	0.043	0.037	14.0	86	0.00
9	MC	1,1-Dichloroethene	0.241	0.271	-12.4	101	0.00
10	T	Acetone	0.149	0.133	10.7	86	0.00
11	T	Carbon Disulfide	0.882	0.961	-9.0	98	0.00
12	T	Vinyl Acetate	1.428	1.514	-6.0	98	0.00
[redacted]	T	Methylene Chloride	0.314	0.328	-4.5	97	0.00
[redacted]	T	Acrylonitrile	0.137	0.154	-12.4	113	0.00
[redacted]	T	t-Butyl Alcohol(TBA)	0.040	0.045	-12.5	111	0.00
16	T	trans-1,2-Dichloroethene	0.272	0.292	-7.4	99	0.00
17	T	Methyl-t-Butyl Ether(MTBE)	1.186	1.235	-4.1	97	0.00
18	P	1,1-Dichloroethane	0.565	0.598	-5.8	97	0.00
19	T	Diisopropyl Ether(DIPE)	1.180	1.262	-6.9	99	0.00
20	T	cis-1,2-Dichloroethene	0.421	0.435	-3.3	94	0.00
21	T	2,2-Dichloropropane	0.506	0.529	-4.5	94	0.00
22	T	2-Butanone(MEK)	0.239	0.245	-2.5	97	0.00
23	T	Bromochloromethane	0.203	0.205	-1.0	93	0.00
25	C	Chloroform	0.696	0.716	-2.9	94	0.00
26	T	1,1,1-Trichloroethane	0.546	0.577	-5.7	95	0.00
27	T	Carbon Tetrachloride	0.423	0.435	-2.8	92	0.00
28	T	1,1-Dichloropropene	0.460	0.489	-6.3	95	0.00
29	T	1,2-Dichloroethane(EDC)	0.586	0.608	-3.8	96	0.00
30	S	1,2-Dichloroethane-d4	0.618	0.659	-6.6	104	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	97	0.00
32	M	Benzene	1.090	1.167	-7.1	99	0.00
33	M	Trichloroethene	0.260	0.279	-7.3	98	0.00
34	C	1,2-Dichloropropane	0.284	0.287	-1.1	94	0.00
35	T	Dibromomethane	0.160	0.163	-1.9	95	0.00
37	T	Bromodichloromethane	0.348	0.342	1.7	90	0.00
38	T	2-Chloroethylvinyl Ether	0.192	0.203	-5.7	96	0.00
39	T	cis-1,3-Dichloropropene	0.445	0.440	1.1	90	0.00
40	T	4-Methyl-2-pentanone(MIBK)	0.297	0.327	-10.1	103	0.00
[redacted]	S	Toluene-d8	1.013	1.039	-2.6	100	0.00
[redacted]	MC	Toluene	0.667	0.718	-7.6	99	0.00
43	T	trans-1,3-Dichloropropene	0.418	0.423	-1.2	92	0.00
44	T	1,1,2-Trichloroethane	0.203	0.207	-2.0	96	0.00
45	T	Tetrachloroethene	0.222	0.234	-5.4	96	0.00
46	T	1,3-Dichloropropane	0.428	0.444	-3.7	96	0.00

2192

47	T	2-Hexanone	0.215	0.220	-2.3	95	0.00
48	T	Dibromochloromethane	0.241	0.237	1.7	89	0.00
49	T	1,2-Dibromoethane(EDB)	0.248	0.252	-1.6	95	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	99	0.00
51	MP	Chlorobenzene	0.882	0.914	-3.6	98	0.00
	T	1,1,1,2-Tetrachloroethane	0.303	0.296	2.3	91	0.00
53	C	Ethylbenzene	1.481	1.506	-1.7	95	0.00
54	T	m,p-Xylene	0.560	0.579	-3.4	97	0.00
55	T	o-Xylene	0.566	0.586	-3.5	97	0.00
56	T	Styrene	1.000	1.036	-3.6	96	0.00
57	P	Bromoform	0.174	0.163	6.3	86	0.00
58	T	Isopropylbenzene	1.325	1.358	-2.5	95	0.00
59	S	Bromofluorobenzene	0.640	0.650	-1.6	100	0.00
60	P	1,1,2,2-Tetrachloroethane	0.356	0.370	-3.9	99	0.00
61	T	Bromobenzene	0.359	0.364	-1.4	95	0.00
62	T	1,2,3-Trichloropropane	0.352	0.369	-4.8	101	0.00
63	T	n-Propylbenzene	1.553	1.598	-2.9	95	0.00
64	T	2-Chlorotoluene	1.042	1.069	-2.6	96	0.00
65	T	1,3,5-Trimethylbenzene	1.132	1.164	-2.8	96	0.00
66	T	4-Chlorotoluene	1.218	1.261	-3.5	97	0.00
67	T	tert-Butylbenzene	0.861	0.877	-1.9	93	0.00
68	T	1,2,4-Trimethylbenzene	1.215	1.245	-2.5	96	0.00
69	T	sec-Butylbenzene	1.184	1.222	-3.2	95	0.00
70	T	1,3-Dichlorobenzene	0.645	0.666	-3.3	98	0.00
71	T	4-Isopropyltoluene	0.985	1.022	-3.8	96	0.00
72	T	1,4-Dichlorobenzene	0.674	0.694	-3.0	98	0.00
73	T	n-Butylbenzene	0.461	0.483	-4.8	96	0.00
74	T	1,2-Dichlorobenzene	0.631	0.657	-4.1	99	0.00
75	T	1,2-Dibromo-3-chloropropane	0.051	0.050	2.0	95	0.00
76	T	1,2,4-Trichlorobenzene	0.255	0.228	10.6	88	0.00
77	T	Hexachlorobutadiene	0.097	0.096	1.0	94	0.00
78	T	Naphthalene	0.619	0.542	12.4	87	0.00
79	T	1,2,3-Trichlorobenzene	0.155	0.122	21.3	79	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.198	0.220	-11.1	101	0.00
81	T	Methyl acetate	0.261	0.294	-12.6	110	0.00
82	T	Cyclohexane	0.463	0.496	-7.1	97	0.00
83	T	Methyl cyclohexane	0.273	0.292	-7.0	96	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

J8975.D JME0406.M Sun Apr 15 09:34:45 2001 MSD_J

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/10/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD-BLK	SOIL	J8845.D	107	97	96
2092-014	MEOH	J8846.D	106	105	75
2092-001	MEOH	J8847.D	96	81	77
2092-003	MEOH	J8849.D	93	77	72
2092-004	MEOH	J8850.D	88	73	69
2092-005	MEOH	J8851.D	90	66	58
2092-006	MEOH	J8852.D	90	74	69
2154-021	MEOH	J8854.D	113	92	84
2154-001	MEOH	J8855.D	94	74	71
2154-002	MEOH	J8856.D	105	86	81
2154-004	MEOH	J8858.D	100	55	75
2154-005	MEOH	J8859.D	100	60	75
2154-003	MEOH	J8862.D	95	85	90
2154-006	MEOH	J8863.D	97	93	93
2092-004MS	MEOH	J8864.D	93	79	81
2092-004MSD	MEOH	J8865.D	88	78	76

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	53-138	43-133
SMC2 = Toluene-d8	50 ppb	46-111	39-137
SMC3 = Bromofluorobenzene	50 ppb	38-147	23-145

Column to be used to flag recovery values

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/10/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD-BLK	SOIL	J8872.D	103	101	101
2112-005	MEOH	J8873.D	82	91	68
2112-004	MEOH	J8874.D	80	90	70
2092-002	MEOH	J8875.D	100	50	50
2092-011	MEOH	J8876.D	60	60	60
2154-013	MEOH	J8877.D	84	74	58
2092-007	MEOH	J8878.D	60	60	60
2154-013MS	MEOH	J8879.D	85	75	73
2154-013MSD	MEOH	J8880.D	90	80	79
2155-017	MEOH	J8881.D	97	88	83
2155-005	MEOH	J8882.D	84	74	81
2155-006	MEOH	J8883.D	80	75	80
2155-007	MEOH	J8884.D	83	73	71
2155-008	MEOH	J8885.D	90	60	100
2155-009	MEOH	J8886.D	82	71	71
2155-010	MEOH	J8887.D	79	82	61
2155-011	MEOH	J8888.D	82	71	68
2155-012	MEOH	J8889.D	95	82	78
2155-013	MEOH	J8890.D	87	75	72
2155-014	MEOH	J8891.D	86	88	64
2155-015	MEOH	J8892.D	81	69	66
2155-016	MEOH	J8893.D	89	76	73

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	53-138	43-133
SMC2 = Toluene-d8	50 ppb	46-111	39-137
SMC3 = Bromofluorobenzene	50 ppb	38-147	23-145

Column to be used to flag recovery values

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/13/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD-BLK	SOIL	J8978.D	106	98	96
2292-003	MEOH	J8979.D	103	90	81
2292-002	MEOH	J8980.D	98	79	74
2293-001	MEOH	J8981.D	95	76	72
2293-002	MEOH	J8982.D	88	69	66
2293-003	MEOH	J8983.D	95	76	71
2293-004	MEOH	J8984.D	90	73	70
2293-005	MEOH	J8985.D	103	81	76
2293-006	MEOH	J8986.D	94	75	70
2293-007	MEOH	J8987.D	98	78	73
2293-008	MEOH	J8988.D	102	81	76
2293-012	MEOH	J8989.D	103	86	78
2328-005	MEOH	J8990.D	114	95	85
2328-001	MEOH	J8991.D	99	96	64
2328-002	MEOH	J8992.D	93	75	66
2328-003	MEOH	J8993.D	91	74	69
2328-004	MEOH	J8994.D	92	76	67
2092-007DIL	MEOH	J8995.D	0	0	0
2198-005	MEOH	J8996.D	108	86	87
2198-008	MEOH	J8997.D	110	90	91
2292-002MS	MEOH	J8998.D	91	74	71
2292-002MSD	MEOH	J8999.D	93	75	74

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	53-138	43-133
SMC2 = Toluene-d8	50 ppb	46-111	39-137
SMC3 = Bromofluorobenzene	50 ppb	38-147	23-145

Column to be used to flag recovery values

MEOH VOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2092-004

Batch No.: JM0071

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0.0	52.5	105	56 - 120
Benzene	50.0	3.6	57.0	107	64 - 126
Trichloroethene	50.0	0.0	53.2	106	66 - 120
Toluene	50.0	0.0	56.0	112	65 - 122
Chlorobenzene	50.0	0.0	56.0	112	68 - 120

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	0.0	47.2	94	11	11	56 - 120
Benzene	3.6	52.4	98	9	10	64 - 126
Trichloroethene	0.0	48.7	97	9	9	66 - 120
Toluene	0.0	51.2	102	9	9	65 - 122
Chlorobenzene	0.0	51.2	102	9	9	68 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __5__ outside limits

Spike Recovery: __0___ out of __10__ outside limits

MEOH VOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2154-013

Batch No.: JM0072

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0.0	44.4	89	56 - 120
Benzene	50.0	0.0	51.9	104	64 - 126
Trichloroethene	50.0	0.0	48.9	98	66 - 120
Toluene	50.0	0.0	51.8	104	65 - 122
Chlorobenzene	50.0	0.0	50.9	102	68 - 120

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD #	% REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	0.0	43.1		86	3	11	56 - 120
Benzene	0.0	50.3		101	3	10	64 - 126
Trichloroethene	0.0	47.3		95	3	9	66 - 120
Toluene	0.0	49.6		99	5	9	65 - 122
Chlorobenzene	0.0	49.5		99	3	9	68 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __5__ outside limits

Spike Recovery: __0___ out of __10__ outside limits

000106

2198

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J8716.D

Date Analyzed: 04/06/2001

Instrument ID: MSD_J

Time Analyzed: 17:12

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	513567		6.39		751960		7.22		613907		10.58	
	UPPER LIMIT	1027134		6.89		1503920		7.72		1227814		11.08	
	LOWER LIMIT	256783.5		5.89		375980		6.72		306953.5		10.08	
	LAB SAMPLE ID												
01	STD-20PPB	522866		6.39		756759		7.22		610060		10.58	
02	STD-50PPB	517192		6.39		752725		7.22		614693		10.58	
03	STD-150PPB	509011		6.39		755394		7.22		616821		10.58	
04	STD-200PPB	506927		6.39		760721		7.22		622861		10.58	
05	METHOD-BLK	510479		6.39		737984		7.22		588556		10.58	
06	1840-003	486585		6.39		702070		7.22		557167		10.58	
07	2044-001	491455		6.39		707328		7.22		565245		10.58	
08	2044-002	513345		6.39		736573		7.21		586212		10.58	
09	2006-004	459418		6.39		660979		7.22		528456		10.58	
10	2006-008	518393		6.39		739418		7.22		595865		10.58	
11	2045-001	488269		6.39		702508		7.22		576556		10.58	
12	2045-002	520688		6.39		741407		7.22		600845		10.58	
13	1996-001DIL	459882		6.39		662045		7.22		535600		10.58	
14	2095-006	482463		6.39		696892		7.22		555834		10.58	
15	2095-004	526939		6.39		754597		7.22		627206		10.58	
16	2044-001MS	468887		6.39		677246		7.21		543419		10.58	
17	2044-001MSD	487953		6.39		704532		7.21		562524		10.58	
18	2045-002MS	493677		6.38		710013		7.21		571735		10.58	
19	2045-002MSD	478138		6.39		686566		7.21		553458		10.58	
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J8843.D

Date Analyzed: 04/10/2001

Instrument ID: MSD_J

Time Analyzed: 1:52

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	464912		6.39		691410		7.22		563619		10.58	
	UPPER LIMIT	929824		6.89		1382820		7.72		1127238		11.08	
	LOWER LIMIT	232456		5.89		345705		6.72		281809.5		10.08	
	LAB SAMPLE ID												
01	METHOD-BLK	462165		6.39		675328		7.22		525896		10.58	
02	2092-014	422042		6.38		619693		7.21		495356		10.58	
03	2092-001	418185		6.38		621544		7.21		493445		10.58	
04	2092-003	426581		6.38		636274		7.21		501299		10.58	
05	2092-004	447518		6.38		651982		7.21		518664		10.58	
06	2092-005	429690		6.39		643941		7.21		512590		10.58	
07	2092-006	439212		6.38		645031		7.21		513731		10.58	
08	2154-021	400716		6.38		590323		7.21		473844		10.58	
09	2154-001	436077		6.39		644605		7.21		511832		10.58	
10	2154-002	408815		6.38		604254		7.21		484762		10.58	
11	2154-004	410104		6.39		609810		7.22		499415		10.58	
12	2154-005	429961		6.39		631198		7.21		532741		10.58	
13	2154-003	434658		6.39		641048		7.22		553287		10.58	
14	2154-006	452964		6.38		668519		7.21		576420		10.58	
15	2092-004MS	465916		6.38		681654		7.21		552047		10.58	
16	2092-004MSD	498393		6.38		713704		7.21		582533		10.58	
17													
18													
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J8869.D

Date Analyzed: 04/10/2001

Instrument ID: MSD_J

Time Analyzed: 14:27

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	511552	6.39	756431	7.21	614158	10.58
	UPPER LIMIT	1023104	6.89	1512862	7.71	1228316	11.08
	LOWER LIMIT	255776	5.89	378215.5	6.71	307079	10.08
	LAB SAMPLE ID						
01	METHOD-BLK	519028	6.38	743559	7.21	595390	10.58
02	2112-005	492553	6.38	715014	7.21	581884	10.58
03	2112-004	489312	6.39	713537	7.21	596928	10.58
04	2092-002	478126	6.39	695670	7.22	569455	10.58
05	2092-011	499070	6.39	720963	7.21	591483	10.58
06	2154-013	503347	6.38	722441	7.21	588201	10.58
07	2092-007	516100	6.39	752398	7.22	619106	10.58
08	2154-013MS	512125	6.38	735430	7.21	598329	10.58
09	2154-013MSD	509696	6.38	734048	7.21	595091	10.58
10	2155-017	510383	6.38	737581	7.21	594262	10.58
11	2155-005	508847	6.38	725998	7.21	617893	10.58
12	2155-006	527213	6.39	758806	7.21	639793	10.58
13	2155-007	509270	6.38	732941	7.21	596064	10.58
14	2155-008	478898	6.39	697181	7.21	593964	10.58
15	2155-009	516046	6.38	741924	7.21	598481	10.58
16	2155-010	518727	6.38	739940	7.21	594911	10.58
17	2155-011	508304	6.38	727489	7.21	587122	10.58
18	2155-012	475950	6.38	697562	7.21	561810	10.58
19	2155-013	501433	6.38	727538	7.21	584483	10.58
20	2155-014	494918	6.38	716353	7.21	580231	10.58
21	2155-015	513316	6.38	738070	7.21	588596	10.58
22	2155-016	499524	6.38	722295	7.21	581772	10.58

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of Internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of Internal standard RT
RT LOWER LIMIT = -0.50 minutes of Internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J8975.D

Date Analyzed: 04/13/2001

Instrument ID: MSD_J

Time Analyzed: 16:54

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	493922		6.39		732092		7.22		607850		10.58	
	UPPER LIMIT	987844		6.89		1464184		7.72		1215700		11.08	
	LOWER LIMIT	246961		5.89		366046		6.72		303925		10.08	
	LAB SAMPLE ID												
01	METHOD-BLK	488150		6.39		706677		7.21		566391		10.58	
02	2292-003	450141		6.38		651855		7.21		531236		10.58	
03	2292-002	446913		6.38		650957		7.21		527558		10.58	
04	2293-001	463992		6.38		674114		7.21		542541		10.58	
05	2293-002	463610		6.39		674567		7.21		543660		10.58	
06	2293-003	441797		6.38		643852		7.21		521416		10.58	
07	2293-004	467810		6.38		680743		7.21		544918		10.58	
08	2293-005	412510		6.39		603184		7.21		486886		10.58	
09	2293-006	447930		6.38		657584		7.21		530673		10.58	
10	2293-007	442381		6.39		648515		7.21		530573		10.58	
11	2293-008	408763		6.38		603835		7.21		490843		10.58	
12	2293-012	441626		6.39		650051		7.21		525329		10.58	
13	2328-005	406060		6.38		600807		7.21		489278		10.58	
14	2328-001	392840		6.38		585940		7.21		475421		10.58	
15	2328-002	412185		6.39		617146		7.21		499868		10.58	
16	2328-003	434243		6.38		640733		7.21		513772		10.58	
17	2328-004	420462		6.39		624751		7.21		506614		10.58	
18	2092-007DIL	357246		6.39		540907		7.22		443302		10.58	
19	2198-005	388612		6.38		583354		7.21		487344		10.58	
20	2198-008	405686		6.38		601096		7.21		523711		10.58	
21	2292-002MS	472620		6.38		688782		7.21		564968		10.58	
22	2292-002MSD	498038		6.38		721986		7.21		588024		10.58	

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE METHANOL PRESERVATION CONTAINER SUMMARY

Sample ID	Client ID	Bottle ID	Date Prepared	Inital Wgt.(g)	Final Wgt.(g)	Sample Wgt.(g)	MeOH Lot #	Surrogate Lot #
2092-001	S-45	103465	3/27/01	105.6	115.5	10.0	CA591	LS169
2092-002	S-46	103451	3/28/01	105.6	114.9	9.3	CA706	LS157
2092-003	S-47	103505	3/28/01	105.5	115.5	10.0	CA706	LS169
2092-004	S-48	103447	3/28/01	105.6	115.8	10.2	CA706	LS157
2092-005	S-49	103512	3/28/01	104.8	114.4	9.6	CA706	LS169
2092-006	S-50	103446	3/28/01	105.4	114.3	8.8	CA706	LS157
2092-007	S-51	103506	3/28/01	105.1	114.5	9.4	CA706	LS169
2092-011	S-55	103448	3/28/01	105.4	114.1	8.6	CA706	LS157
2092-014	TB	103621	3/28/01	104.9	114.9	10.0	CA706	LS169

Limits : Sample Weight = 8 to 12 grams, * = Outside limits

Comments : _____

_____

_____

Sample weight is reported on a wet weight basis

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8847.D
Acq On : 10 Apr 2001 3:48
Sample : S-45,2092-001,M,0.04g,18.8
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,
IS Integration Params: LSCINT.P
Quant Time: Apr 10 04:07:09 2001

Vial: 33
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	418185	50.00	UG	-0.01
31) 1,4-Difluorobenzene	7.21	114	621544	50.00	UG	-0.01
50) Chlorobenzene-d5	10.58	117	493445	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	248680	48.09	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 96.18%			
41) Toluene-d8	8.89	98	509844	40.48	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 80.96%			
59) Bromofluorobenzene	11.98	95	242421	38.35	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 76.70%			
Target Compounds						Qvalue
32) Benzene	6.80	78	2023816	149.29	UG	# 100
42) Toluene	8.98	92	106564	12.85	UG	# 100
51) Chlorobenzene	10.61	112	226415	26.01	UG	# 62
53) Ethylbenzene	10.74	91	26041	1.78	UG	# 84
54) m,p-Xylene	10.87	106	9664	1.75	UG	# 49

(#) = qualifier out of range (m) = manual integration

000112

2204

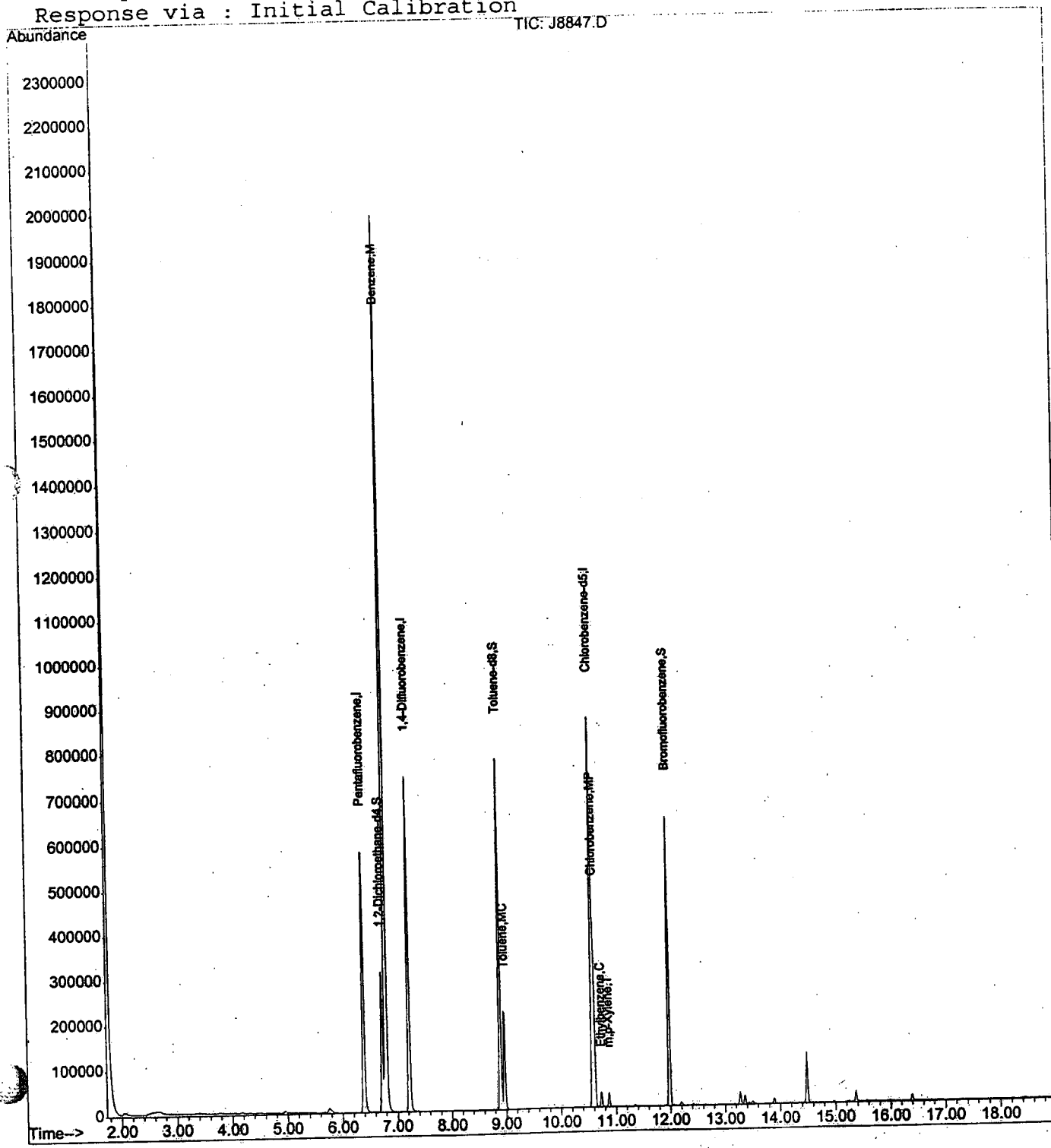
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8847.D
Acq On : 10 Apr 2001 3:48
Sample : S-45,2092-001,M,0.04g,18.8
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,
MS Integration Params: LSCINT.P
Quant Time: Apr 10 11:20 2001

Vial: 33
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue Apr 10 09:02:08 2001
Response via : Initial Calibration



000113

2205

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8847.D
Acq On : 10 Apr 2001 3:48
Sample : S-45,2092-001,M,0.04g,18.8
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,
Integration Params: Lscint.p

Vial: 33
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

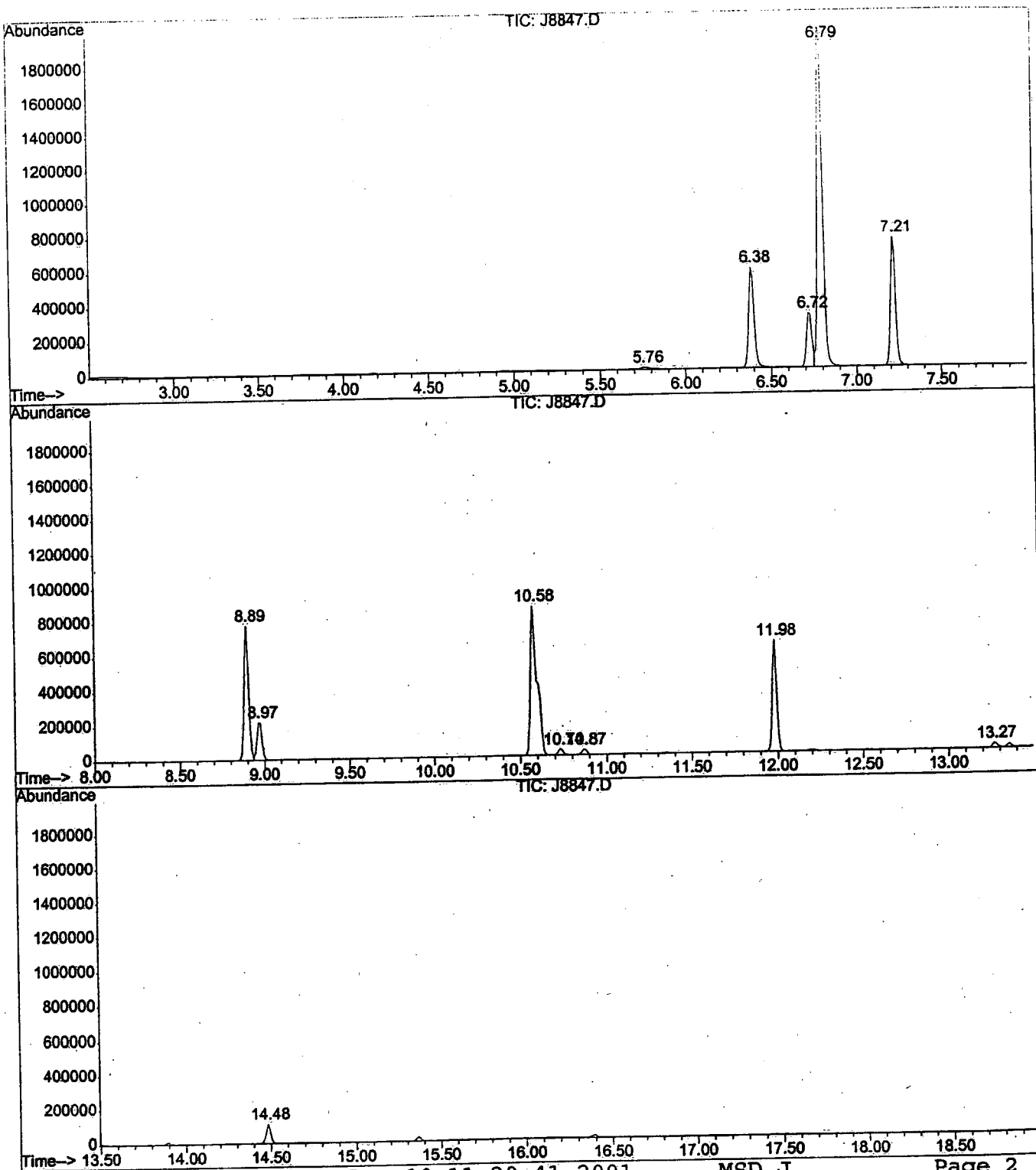
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.755	394	398	418	rVB	11203	49957	1.11%	0.365%
2	6.383	452	460	475	rBV	581253	1274130	28.29%	9.318%
3	6.717	484	493	496	rBV	311612	675299	14.99%	4.938%
4	6.788	496	500	526	rVB	1993016	4503881	100.00%	32.936%
5	7.213	535	542	556	rBV	743663	1486935	33.01%	10.874%
6	8.894	699	708	712	rBV	779535	1459198	32.40%	10.671%
7	8.965	712	715	726	rVB	218540	446996	9.92%	3.269%
8	10.575	868	874	885	rBV2	867445	2272668	50.46%	16.620%
9	10.737	885	890	895	rVB	32709	66487	1.48%	0.486%
10	10.869	896	903	911	rVB	31343	59489	1.32%	0.435%
11	11.983	1007	1013	1020	rBV	644103	1115533	24.77%	8.158%
12	13.269	1133	1140	1145	rBV	27775	57367	1.27%	0.420%
13	14.484	1253	1260	1267	rBV	111870	206566	4.59%	1.511%

Sum of corrected areas: 13674506

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-09-01\J8847.D
Operator : XINGFANG WANG
Acquired : 10 Apr 2001 3:48 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: S-45,2092-001,M,0.04g,18.8
Misc Info : ENVTACT/ORBIS,4/3/01,4/4/01,
Vial Number: 33
Quant File :JME0406.RES (RTE Integrator)



2207

000115

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8875.D
Acq On : 10 Apr 2001 17:20
Sample : S-46,2092-002,M,0.0008g,17.6
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,50
LS Integration Params: LSCINT.P
Quant Time: Apr 10 17:39:49 2001

Vial: 8
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	478126	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.22	114	695670	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	569455	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.73	65	4443m	0.75	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 1.50%#			
41) Toluene-d8	8.89	98	7240	0.51	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 1.02%#			
59) Bromofluorobenzene	11.98	95	3575	0.49	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 0.98%#			
Target Compounds						Qvalue
32) Benzene	6.80	78	1162844	76.64	UG	# 100

(#) = qualifier out of range (m) = manual integration

2208

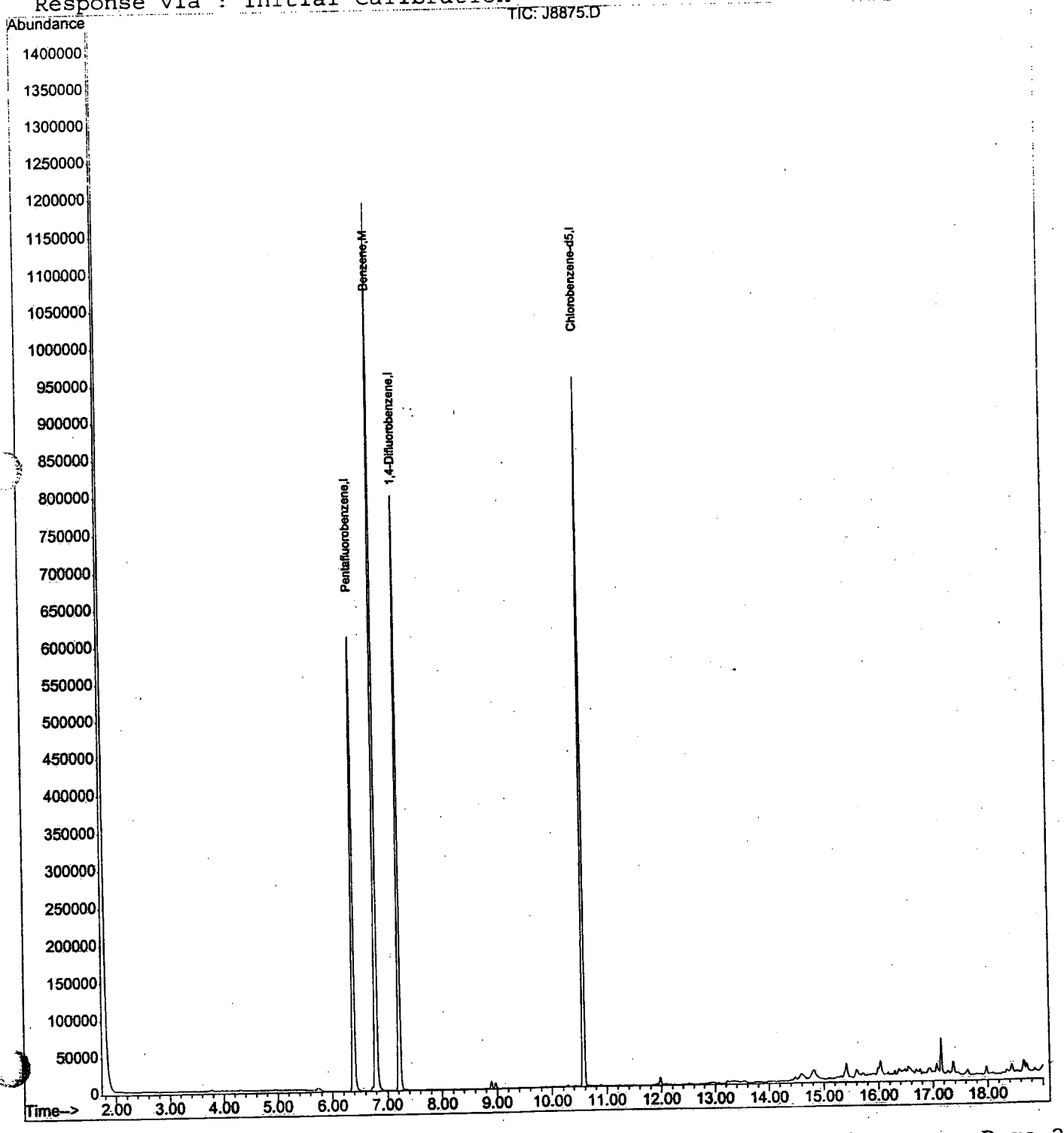
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8875.D
Acq On : 10 Apr 2001 17:20
Sample : S-46,2092-002,M,0.0008g,17.6
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,50
MS Integration Params: LSCINT.P
Quant Time: Apr 11 9:48 2001

Vial: 8
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 11 09:09:26 2001
Response via : Initial Calibration



2209

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8875.D
Acq On : 10 Apr 2001 17:20
Sample : S-46,2092-002,M,0.0008g,17.6
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,50
MS Integration Params: Lscint.p

Vial: 8
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

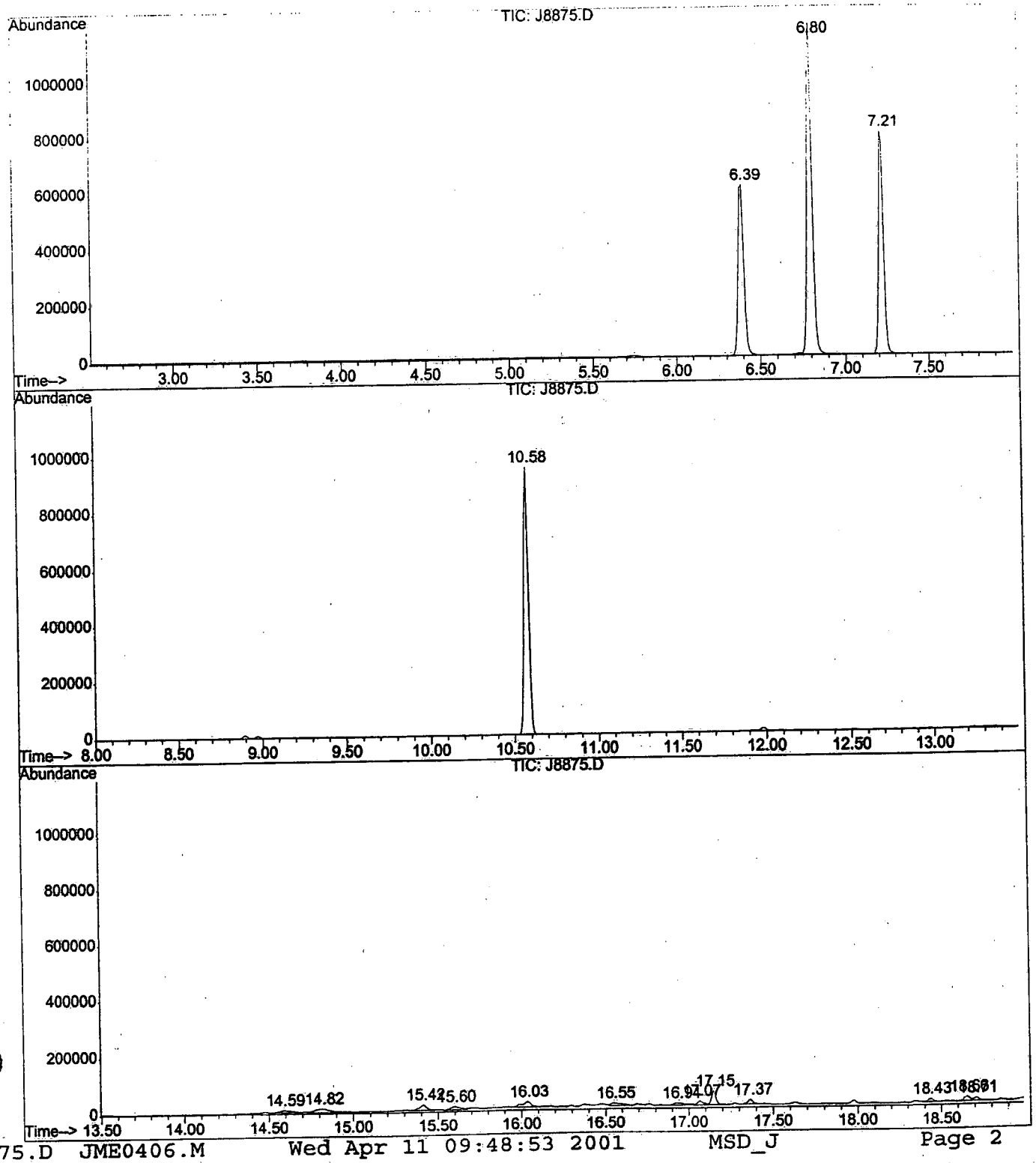
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.393	453	461	477	rBV	610622	1416665	54.72%	17.600%
2	6.798	490	501	524	rVB	1192228	2588984	100.00%	32.165%
3	7.213	535	542	556	rBV	798475	1652159	63.81%	20.526%
4	10.575	867	874	883	rBV	953468	1772340	68.46%	22.019%
5	14.585	1264	1270	1280	rVV5	7299	36634	1.41%	0.455%
6	14.818	1284	1293	1312	rVB4	12996	86770	3.35%	1.078%
7	15.416	1344	1352	1358	rBV	19368	59380	2.29%	0.738%
8	15.598	1364	1370	1377	rBV4	11235	47622	1.84%	0.592%
9	16.033	1405	1413	1420	rBV3	19238	70502	2.72%	0.876%
10	16.550	1461	1464	1475	rVB6	9554	41637	1.61%	0.517%
11	16.945	1497	1503	1507	rBV6	7297	28065	1.08%	0.349%
12	17.066	1511	1515	1520	rVV3	13945	34151	1.32%	0.424%
13	17.147	1520	1523	1531	rVB	48220	87361	3.37%	1.085%
14	17.370	1540	1545	1550	rVB	15478	33290	1.29%	0.414%
15	18.433	1646	1650	1656	rVB2	10549	27341	1.06%	0.340%
16	18.656	1667	1672	1675	rBV	15824	39651	1.53%	0.493%
17	18.707	1675	1677	1687	rVB	11048	26485	1.02%	0.329%

Sum of corrected areas: 8049037

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-10-01\J8875.D
Operator : XINGFANG WANG
Acquired : 10 Apr 2001 17:20 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: S-46,2092-002,M,0.0008g,17.6
Misc Info : ENVTACT/ORBIS,4/3/01,4/4/01,50
Vial Number: 8
Quant File :JME0406.RES (RTE Integrator)



000119

2211

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8849.D
Acq On : 10 Apr 2001 4:45
Sample : S-47,2092-003,M,0.04g,15.8
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,
; Integration Params: LSCINT.P
Quant Time: Apr 10 05:04:57 2001

Vial: 35
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	426581	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	636274	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	501299	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	245538	46.54	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 93.08%			
41) Toluene-d8	8.89	98	497321	38.57	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 77.14%			
59) Bromofluorobenzene	11.98	95	231196	36.01	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 72.02%			
Target Compounds						Qvalue
32) Benzene	6.79	78	1772563	127.73	UG	# 100

(#) = qualifier out of range (m) = manual integration

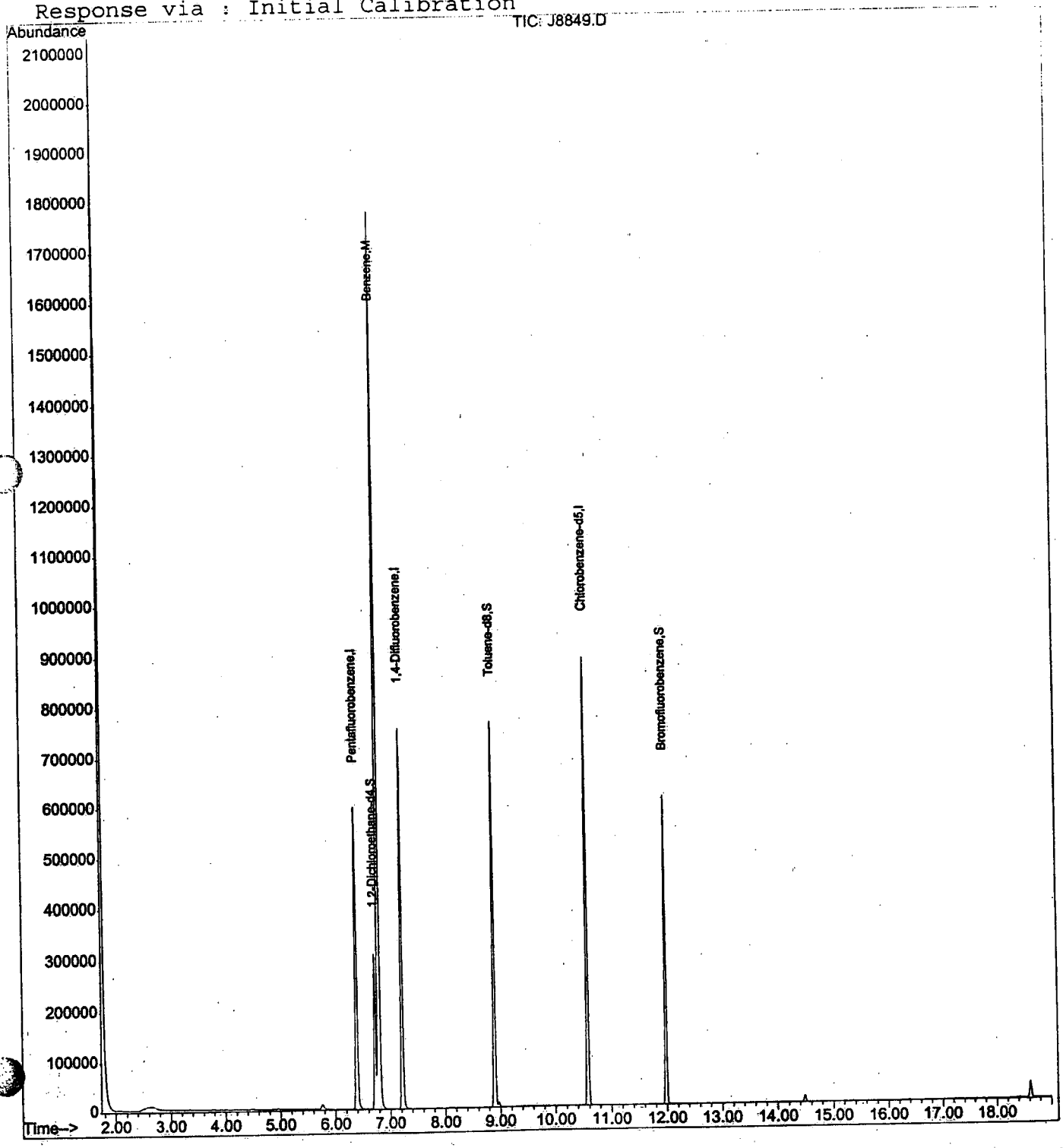
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8849.D
Acq On : 10 Apr 2001 4:45
Sample : S-47,2092-003,M,0.04g,15.8
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,
MS Integration Params: LSCINT.P
Quant Time: Apr 10 11:21 2001

Vial: 35
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue Apr 10 09:02:08 2001
Response via : Initial Calibration



000121

2213

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8849.D
Acq On : 10 Apr 2001 4:45
Sample : S-47,2092-003,M,0.04g,15.8
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,
Integration Params: Lscint.p

Vial: 35
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

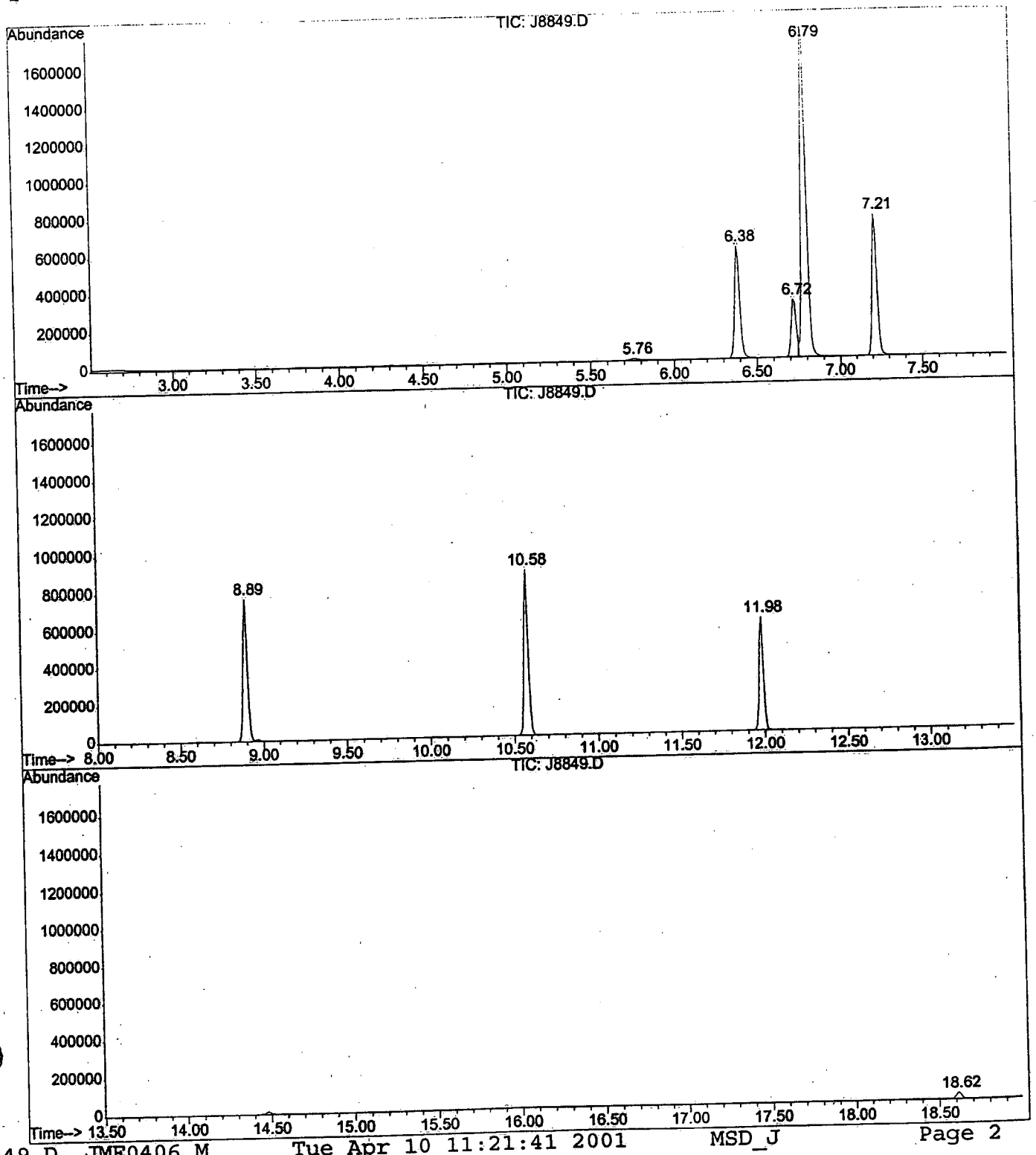
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.755	393	398	420	rVB	10812	44717	1.13%	0.385%
2	6.383	454	460	482	rBV	598578	1297273	32.92%	11.170%
3	6.717	484	493	496	rVV	308120	663669	16.84%	5.715%
4	6.788	496	500	521	rVB	1777198	3941207	100.00%	33.937%
5	7.213	536	542	555	rBV	755701	1523245	38.65%	13.116%
6	8.894	701	708	713	rBV	766773	1417872	35.98%	12.209%
	10.575	865	874	884	rBV	889972	1576786	40.01%	13.577%
	11.983	1006	1013	1027	rBV	612066	1073829	27.25%	9.246%
	18.616	1662	1668	1675	rBV	33542	74793	1.90%	0.644%

Sum of corrected areas: 11613391

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-09-01\J8849.D
Operator : XINGFANG WANG
Acquired : 10 Apr 2001 4:45 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: S-47,2092-003,M,0.04g,15.8
Misc Info : ENVTACT/ORBIS,4/3/01,4/4/01,
Vial Number: 35
Quant File :JME0406.RES (RTE Integrator)



000123

2215

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8850.D
Acq On : 10 Apr 2001 5:14
Sample : S-48,2092-004,M,0.041g,13
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,
3 Integration Params: LSCINT.P
Quant Time: Apr 10 05:33:46 2001

Vial: 36
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

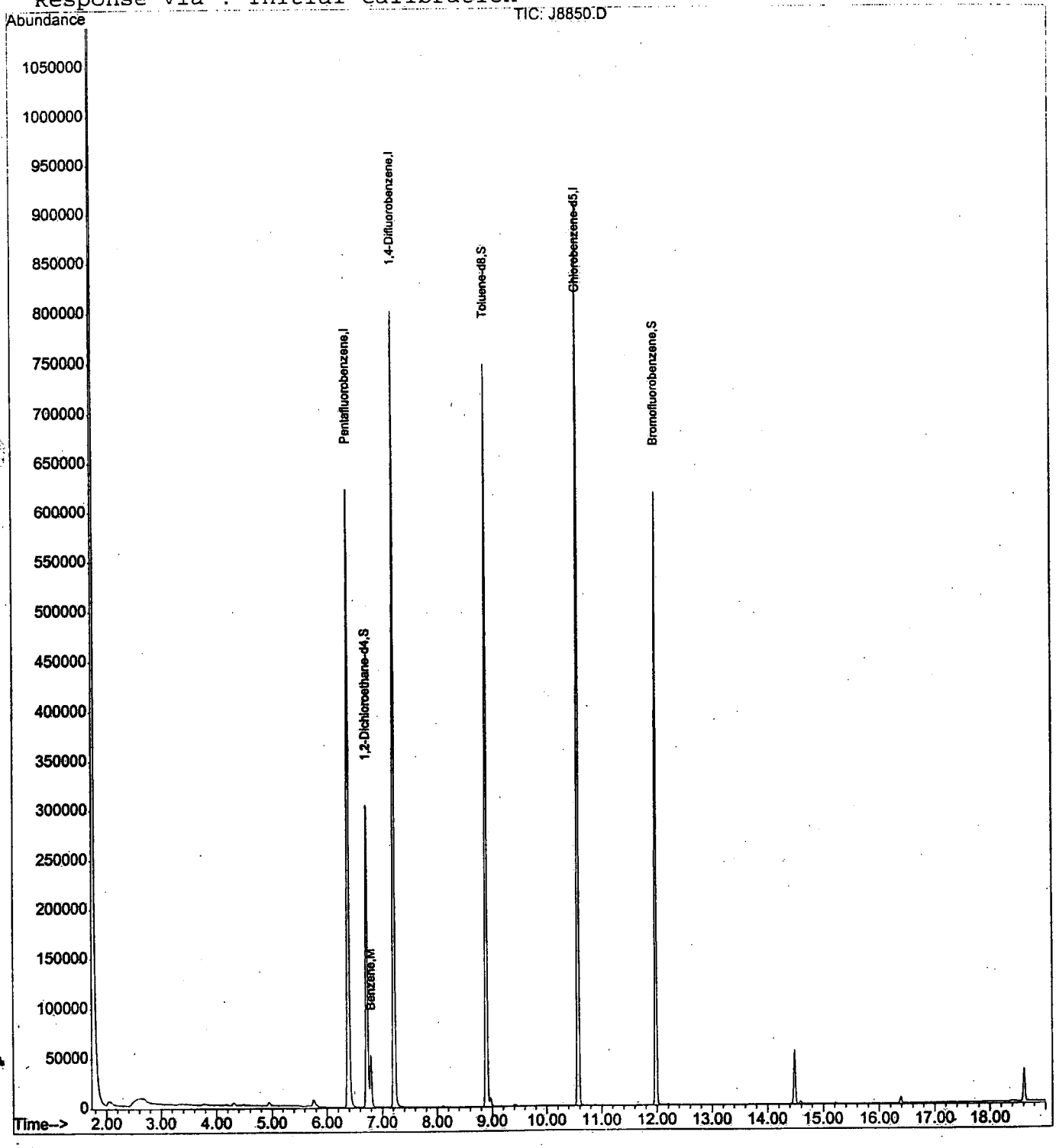
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	447518	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	651982	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	518664	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	242384	43.80	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 87.60%			
41) Toluene-d8	8.89	98	485160	36.72	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 73.44%			
59) Bromofluorobenzene	11.98	95	229354	34.52	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 69.04%			
Target Compounds						Qvalue
32) Benzene	6.80	78	51308	3.61	UG	# 100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8850.D Vial: 36
Acq On : 10 Apr 2001 5:14 Operator: XINGFANG WAN
Sample : S-48,2092-004,M,0.041g,13 Inst : MSD_J
Misc : ENVTACT/ORBIS,4/3/01,4/4/01, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 10 11:22 2001 Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue Apr 10 09:02:08 2001
Response via : Initial Calibration



2217

000125

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8850.D Vial: 36
Acq On : 10 Apr 2001 5:14 Operator: XINGFANG WANG
Sample : S-48,2092-004,M,0.041g,13 Inst : MSD_J
Misc : ENVTACT/ORBIS,4/3/01,4/4/01, Multiplr: 1.00
Integration Params: Lscint.p

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

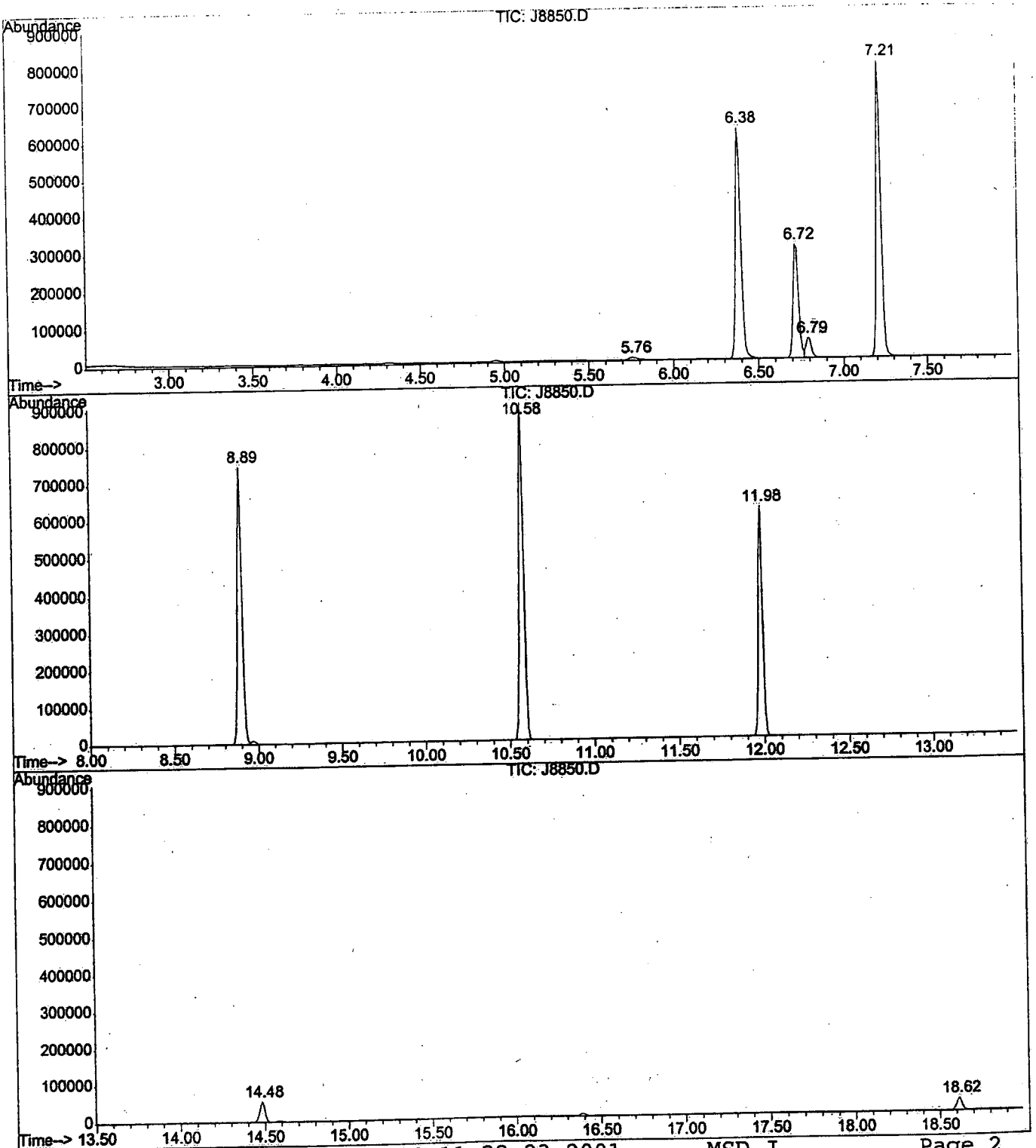
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.755	393	398	420	rVB3	7783	33961	2.09%	0.424%
2	6.383	454	460	483	rBV	622767	1354117	83.18%	16.907%
3	6.717	487	493	498	rVV	304182	675539	41.50%	8.435%
4	6.788	498	500	511	rVB	53016	113972	7.00%	1.423%
5	7.213	535	542	554	rBV	801315	1566839	96.24%	19.563%
6	8.894	701	708	713	rBV	747365	1390467	85.41%	17.361%
7	10.575	867	874	887	rBV	908732	1627980	100.00%	20.327%
8	11.983	1004	1013	1028	rBV	618585	1059113	65.06%	13.224%
9	14.484	1253	1260	1266	rBV	54585	112926	6.94%	1.410%
10	18.616	1663	1668	1679	rBV	33720	74087	4.55%	0.925%

Sum of corrected areas: 8009001

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-09-01\J8850.D
Operator : XINGFANG WANG
Acquired : 10 Apr 2001 5:14 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: S-48,2092-004,M,0.041g,13
Misc Info : ENVTACT/ORBIS,4/3/01,4/4/01,
Vial Number: 36
Quant File :JME0406.RES (RTE Integrator)



000127

2219

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8851.D
Acq On : 10 Apr 2001 5:43
Sample : S-49,2092-005,M,0.02g,15.7
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,2
RTE Integration Params: LSCINT.P
Quant Time: Apr 10 06:02:27 2001

Vial: 37
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	429690	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	643941	50.00	UG	-0.01
50) Chlorobenzene-d5	10.58	117	512590	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.73	65	119214	22.43	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 44.86%			
41) Toluene-d8	8.89	98	217010	16.63	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 33.26%#			
59) Bromofluorobenzene	11.98	95	95408	14.53	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 29.06%			
Target Compounds						Qvalue
32) Benzene	6.80	78	2769247m	197.18	UG	
42) Toluene	8.97	92	46111	5.37	UG	# 100
51) Chlorobenzene	10.61	112	19976	2.21	UG	# 62

(#) = qualifier out of range (m) = manual integration

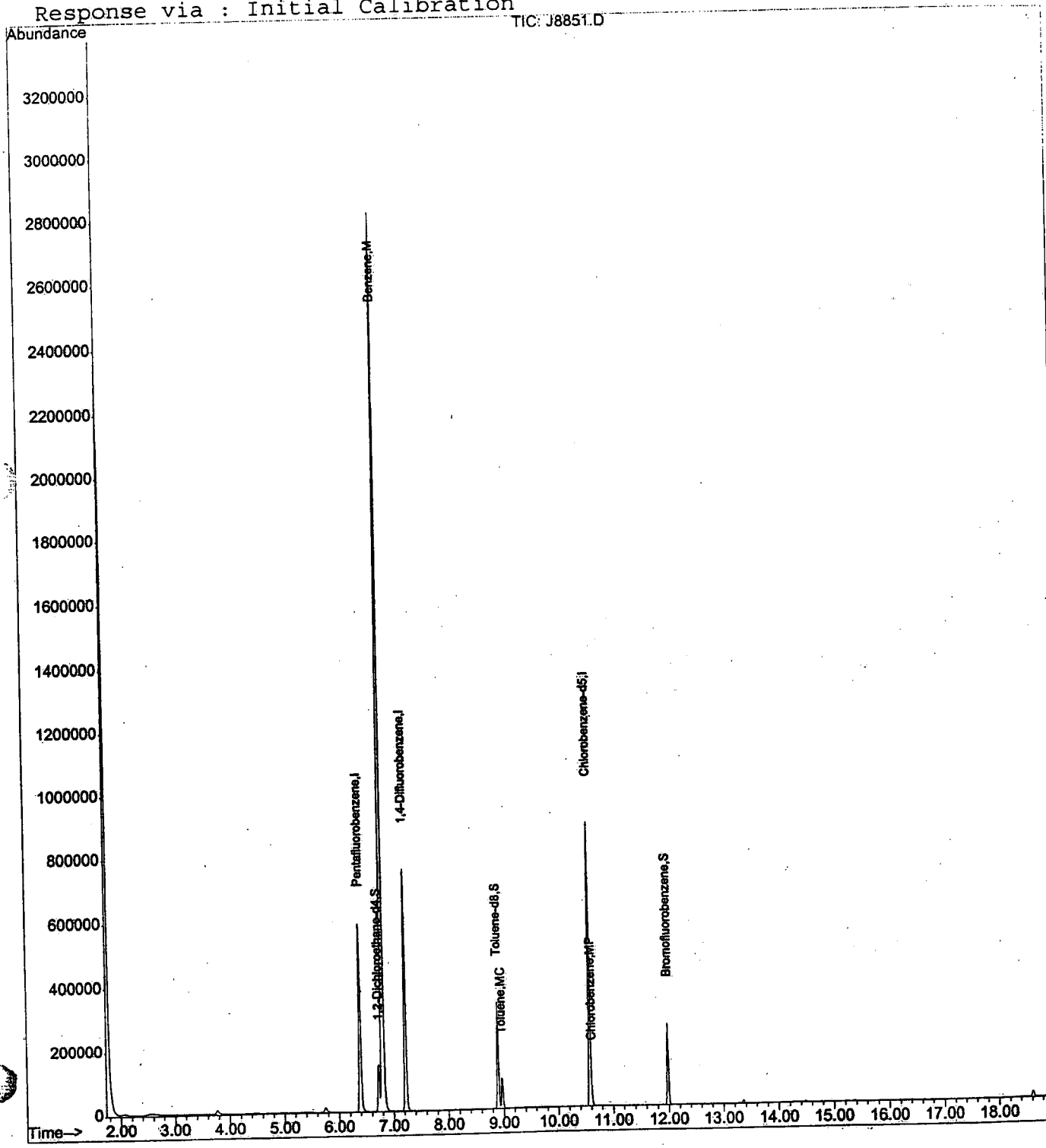
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8851.D
Acq On : 10 Apr 2001 5:43
Sample : S-49,2092-005,M,0.02g,15.7
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,2
MS Integration Params: LSCINT.P
Quant Time: Apr 10 11:23 2001

Vial: 37
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue Apr 10 09:02:08 2001
Response via : Initial Calibration



000129

2221

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8851.D
Acq On : 10 Apr 2001 5:43
Sample : S-49,2092-005,M,0.02g,15.7
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,2
Integration Params: Lscint.p

Vial: 37
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

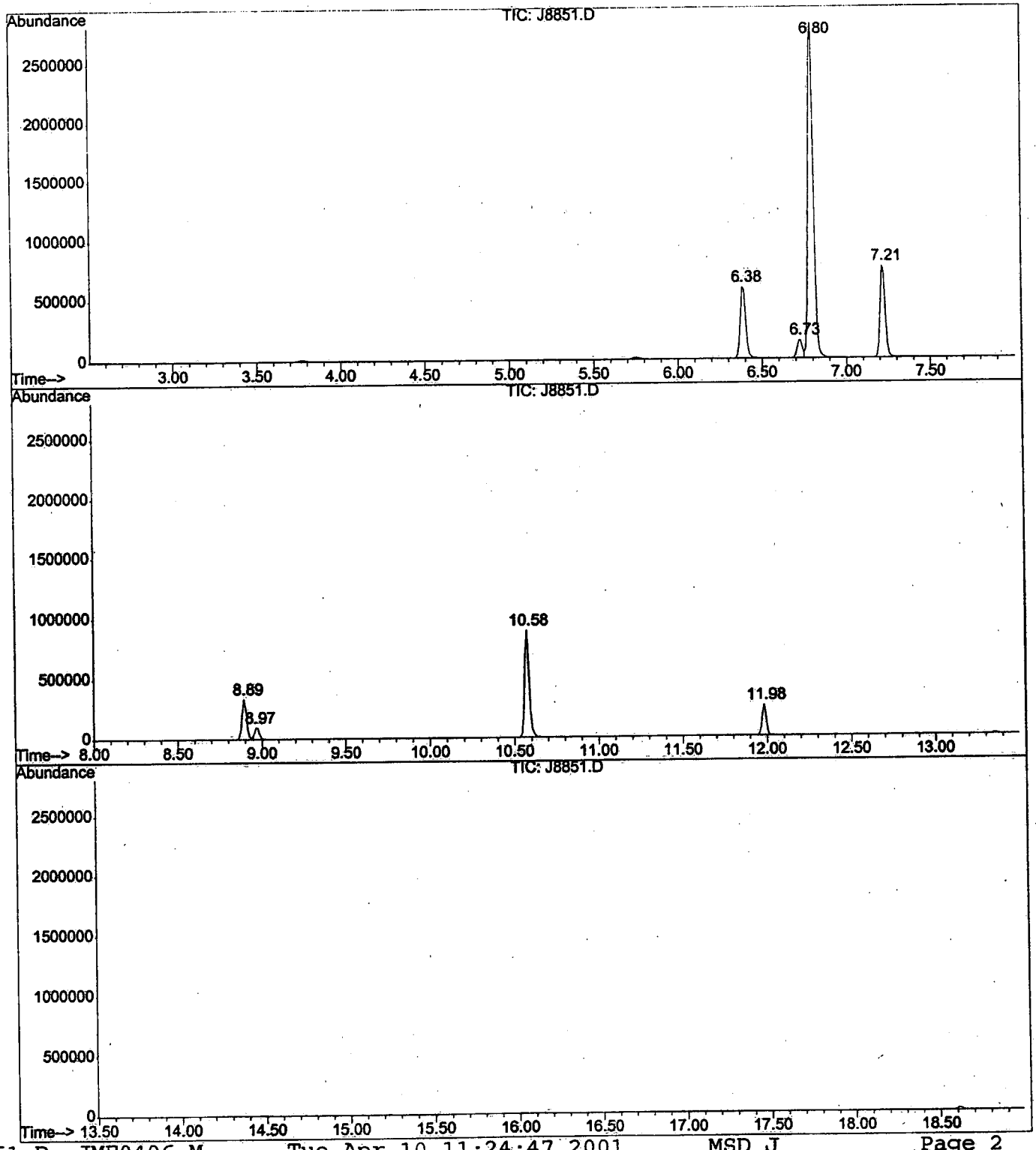
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.383	452	460	482	rBV	590194	1313820	21.05%	10.625%
2	6.727	485	494	496	rVV	147922	323888	5.19%	2.619%
3	6.798	496	501	522	rVB	2819438	6241917	100.00%	50.479%
4	7.213	535	542	561	rVB	758971	1548519	24.81%	12.523%
5	8.894	702	708	712	rBV	338474	621842	9.96%	5.029%
6	8.965	712	715	723	rVB	97355	195559	3.13%	1.582%
[redacted]	10.575	866	874	887	rBV	894334	1671211	26.77%	13.515%
[redacted]	11.983	1005	1013	1029	rBV	260518	448620	7.19%	3.628%

Sum of corrected areas: 12365376

7722

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-09-01\J8851.D
Operator : XINGFANG WANG
Acquired : 10 Apr 2001 5:43 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: S-49,2092-005,M,0.02g,15.7
Misc Info : ENVTACT/ORBIS,4/3/01,4/4/01,2
Vial Number: 37
Quant File :JME0406.RES (RTE Integrator)



000131

2223

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8852.D
Acq On : 10 Apr 2001 6:12
Sample : S-50,2092-006,M,0.035g,15.4
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,
Integration Params: LSCINT.P
Quant Time: Apr 10 06:31:07 2001

Vial: 38
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

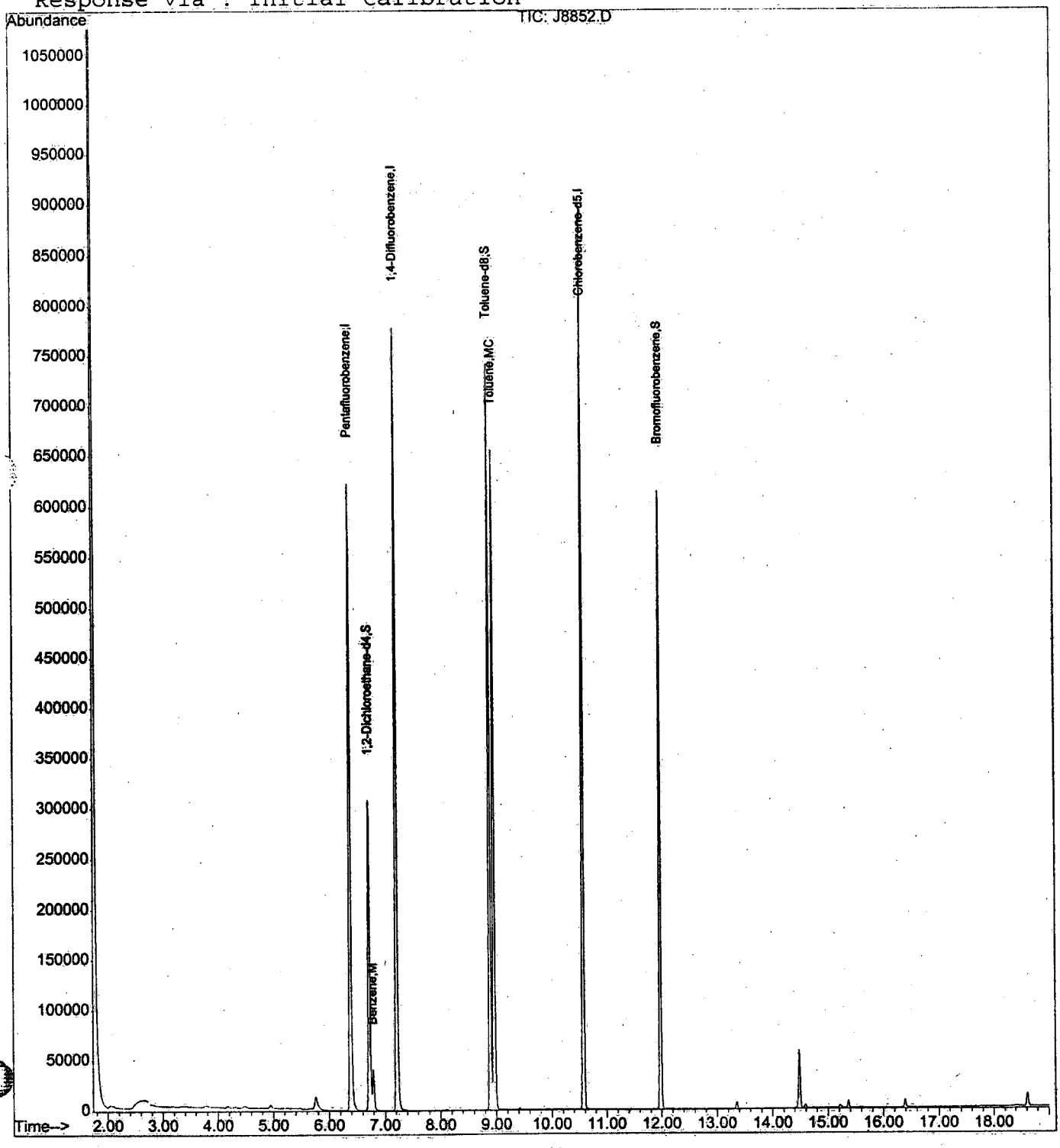
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	439212	50.00	UG	-0.01
31) 1,4-Difluorobenzene	7.21	114	645031	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	513731	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	244077	44.94	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 89.88%			
41) Toluene-d8	8.89	98	482318	36.90	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 73.80%			
59) Bromofluorobenzene	11.98	95	226212	34.38	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 68.76%			
Target Compounds						Qvalue
32) Benzene	6.79	78	39353	2.80	UG	# 100
42) Toluene	8.97	92	309400	35.95	UG	# 100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8852.D Vial: 38
Acq On : 10 Apr 2001 6:12 Operator: XINGFANG WAN
Sample : S-50,2092-006,M,0.035g,15.4 Inst : MSD_J
Misc : ENVTACT/ORBIS,4/3/01,4/4/01, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 10 11:24 2001 Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue Apr 10 09:02:08 2001
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8852.D
Acq On : 10 Apr 2001 6:12
Sample : S-50,2092-006,M,0.035g,15.4
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,
3 Integration Params: Lscint.p

Vial: 38
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

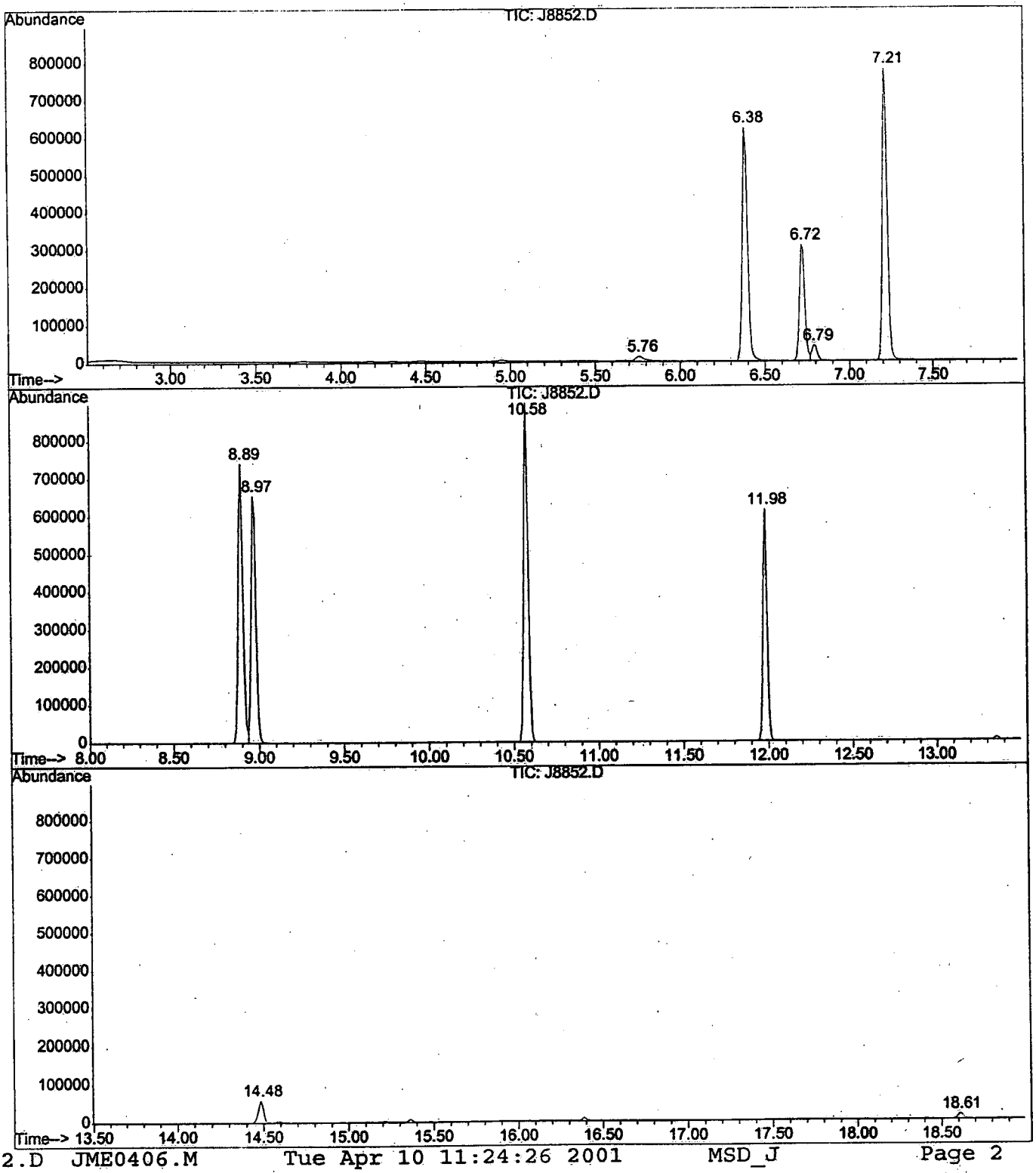
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.755	393	398	415	rVB	13392	50849	3.17%	0.555%
2	6.383	454	460	479	rVV	622638	1335218	83.20%	14.566%
3	6.717	483	493	498	rBV	307933	676367	42.15%	7.379%
4	6.788	498	500	514	rVB	40877	89640	5.59%	0.978%
5	7.213	536	542	563	rVB	778349	1551705	96.70%	16.928%
6	8.894	701	708	712	rBV	741643	1388345	86.52%	15.146%
[redacted]	8.965	712	715	729	rVB	655123	1273369	79.35%	13.892%
[redacted]	10.575	867	874	887	rBV	898456	1604733	100.00%	17.507%
[redacted]	11.983	1006	1013	1022	rBV	614754	1044037	65.06%	11.390%
10	14.484	1248	1260	1266	rBV	58338	121585	7.58%	1.326%
11	18.605	1663	1667	1676	rBV2	13046	30624	1.91%	0.334%

Sum of corrected areas: 9166472

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-09-01\J8852.D
Operator : XINGFANG WANG
Acquired : 10 Apr 2001 6:12 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: S-50,2092-006,M,0.035g,15.4
Misc Info : ENVTACT/ORBIS,4/3/01,4/4/01,
Vial Number: 38
Quant File :JME0406.RES (RTE Integrator)



2227

000135

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8878.D
Acq On : 10 Apr 2001 18:44
Sample : S-51,2092-007,M,0.002g,27.7
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,20
RTE Integration Params: LSCINT.P
Quant Time: Apr 10 19:03:12 2001

Vial: 11
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

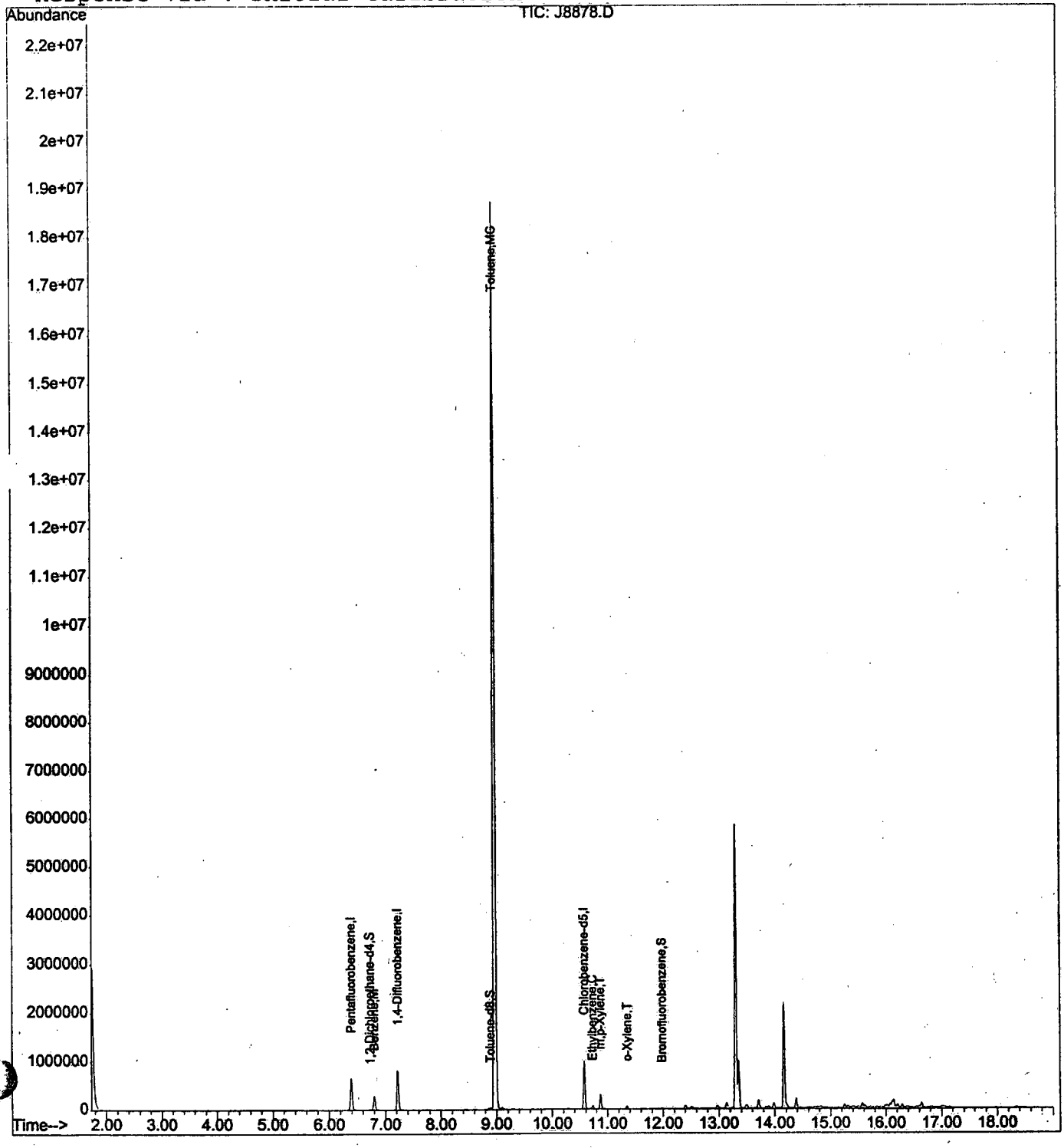
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	516100	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.22	114	752398	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	619106	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.73	65	10958	1.72	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 3.44%#			
41) Toluene-d8	8.89	98	24046	1.58	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 3.16%#			
59) Bromofluorobenzene	11.98	95	10954	1.38	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 2.76%#			
Target Compounds						Qvalue
32) Benzene	6.80	78	289966	17.67	UG	# 100
42) Toluene	8.98	92	10354312	1031.40	UG	# 100
53) Ethylbenzene	10.73	91	57700	3.15	UG	# 84
54) m,p-Xylene	10.87	106	95775	13.82	UG	# 49
55) o-Xylene	11.36	106	20647	2.95	UG	# 46

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8878.D Vial: 11
Acq On : 10 Apr 2001 18:44 Operator: XINGFANG WAN
Sample : S-51,2092-007,M,0.002g,27.7 Inst : MSD_J
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,20 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 11 9:53 2001 Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 11 09:09:26 2001
Response via : Initial Calibration



2229

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-13-01\J8995.D Vial: 22
Acq On : 14 Apr 2001 2:19 Operator: XINGFANG WANG
Sample : S-51,2092-007DIL,M,0.00008g,27.7 Inst : MSD_J
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,500 Multiplr: 1.00
IS Integration Params: LSCINT.P
Quant Time: Apr 14 02:38:59 2001 Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Apr 13 10:46:44 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

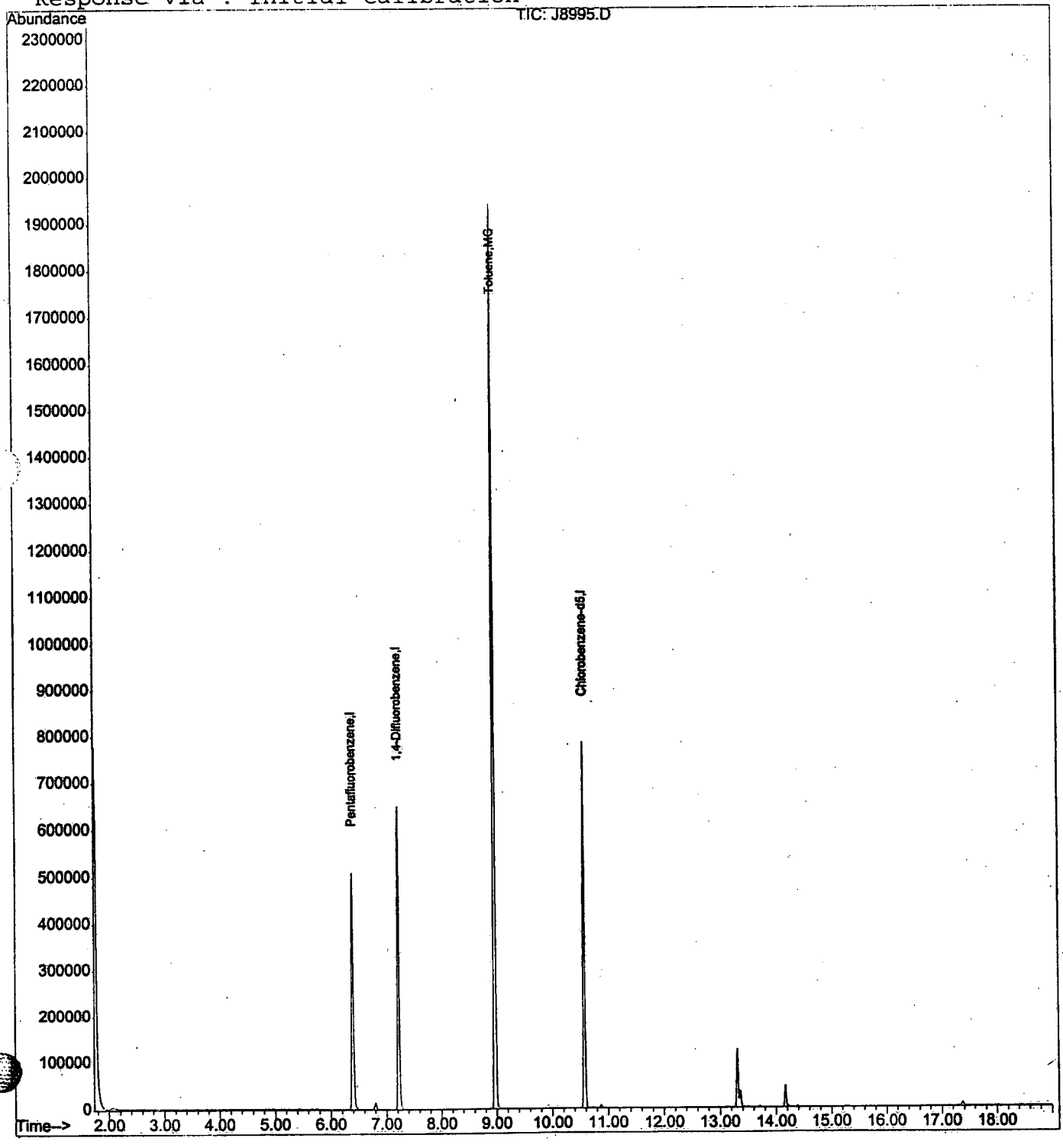
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	357246	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.22	114	540907	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	443302	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	642	0.15	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 0.30%#			
41) Toluene-d8	8.89	98	845	0.08	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 0.16%#			
59) Bromofluorobenzene	11.97	95	399	0.07	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 0.14%#			
Target Compounds						Qvalue
42) Toluene	8.98	92	898984	124.56	UG	# 100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-13-01\J8995.D Vial: 22
Acq On : 14 Apr 2001 2:19 Operator: XINGFANG WAN
Sample : S-51,2092-007DIL,M,0.00008g,27.7 Inst : MSD_J
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,500 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 15 10:28 2001 Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 15 09:39:45 2001
Response via : Initial Calibration



2231

000139

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8878.D
Acq On : 10 Apr 2001 18:44
Sample : S-51,2092-007,M,0.002g,27.7
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,20
ALS Integration Params: Lscint.p

Vial: 11
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Filtering: 5
Sampling : 1
Min Area: 1 % of largest Peak
Start Thrs: 0.2
Max Peaks: 100
Stop Thrs : 0
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.393	454	461	477	rVB	662837	1540421	3.54%	2.279%
2	6.798	496	501	517	rVB	296894	644655	1.48%	0.954%
3	7.213	536	542	554	rBV	831886	1773916	4.08%	2.625%
4	8.975	710	716	725	rBV	18721160	43505605	100.00%	64.371%
5	10.575	868	874	882	rBV	1014752	1933652	4.44%	2.861%
6	10.869	895	903	917	rVB	307759	601318	1.38%	0.890%
7	13.299	1136	1143	1147	rVV	5862127	11406329	26.22%	16.877%
8	13.350	1147	1148	1154	rVV	1007361	1522282	3.50%	2.252%
9	14.160	1224	1228	1240	rBV	2195764	4212914	9.68%	6.233%
10	16.135	1418	1423	1427	rVB2	153800	445145	1.02%	0.659%

Sum of corrected areas: 67586237

2232

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8878.D
Acq On : 10 Apr 2001 18:44
Sample : S-51,2092-007,M,0.002g,27.7
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,20
Integration Params: Lscint.p

Vial: 11
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

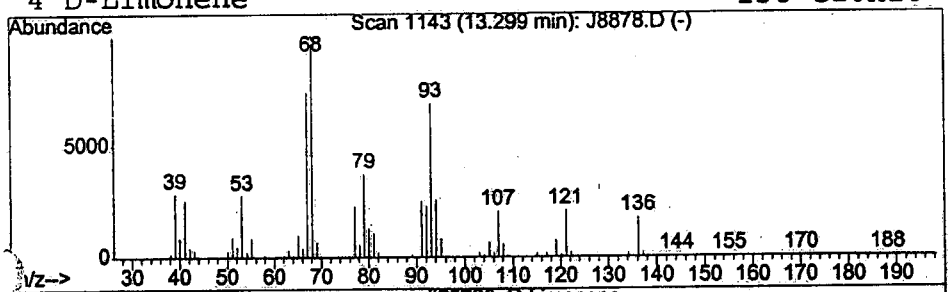
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

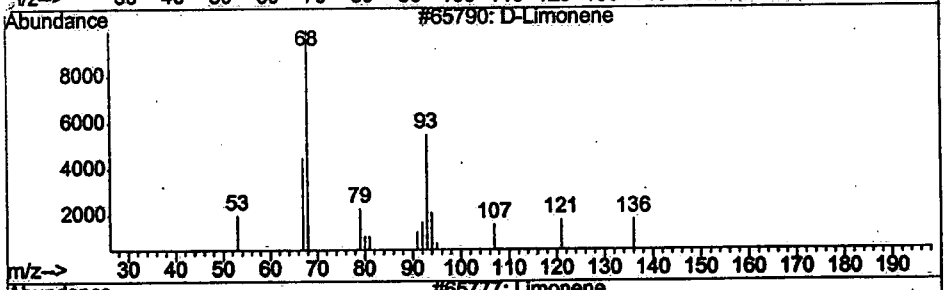
****

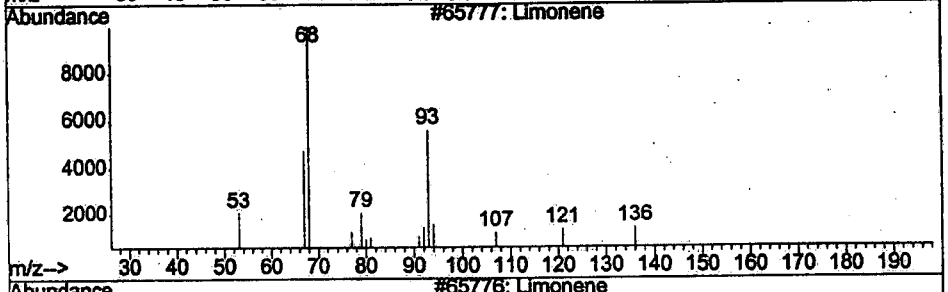
Peak Number 1 Unknown Concentration Rank 1

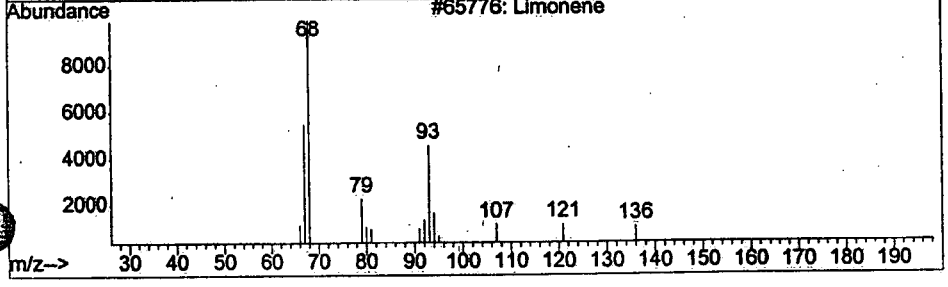
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.30	294.94 UG	11406300	Chlorobenzene-d5	10.58

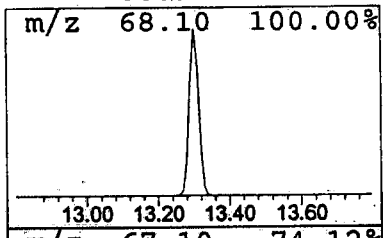
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Limonene	136	C10H16	005989-27-5	95
2	Limonene	136	C10H16	000138-86-3	89
3	Limonene	136	C10H16	000138-86-3	83
4	D-Limonene	136	C10H16	005989-27-5	81

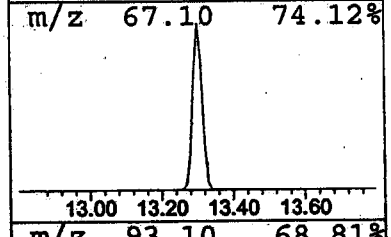


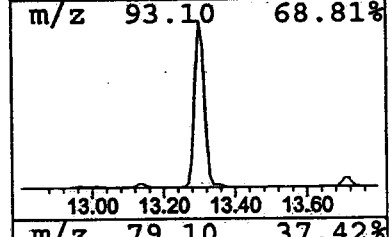


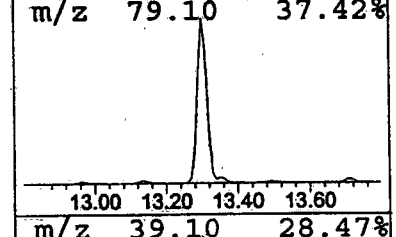


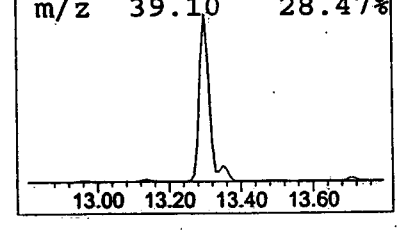












2233

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8878.D
Acq On : 10 Apr 2001 18:44
mple : S-51,2092-007,M,0.002g,27.7
sc : ENVTACT/ORBIS,4/3/01,4/4/01,20
S Integration Params: Lscint.p

Vial: 11
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

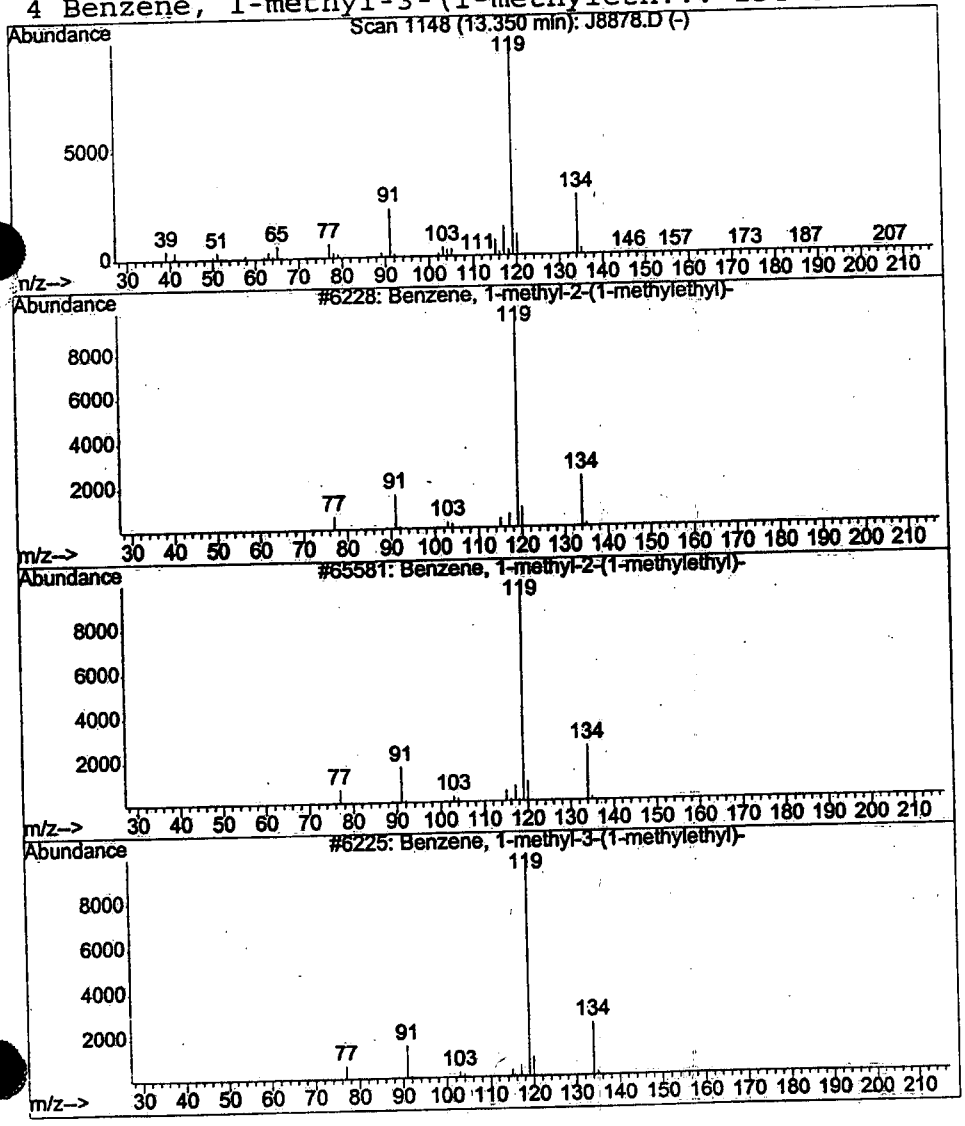
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

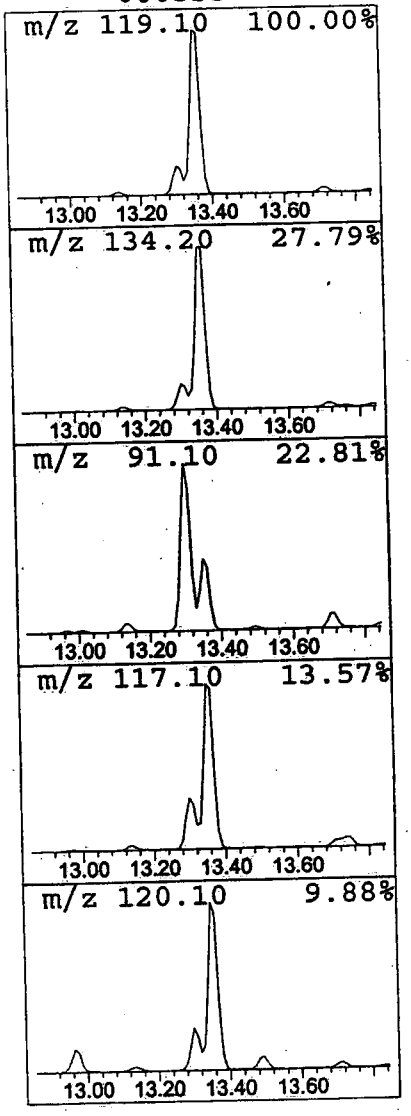
****

Peak Number 2 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.35	39.36 UG	1522280	Chlorobenzene-d5	10.58

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
2	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	94
3	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	94
4	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	94





2234

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8878.D
Acq On : 10 Apr 2001 18:44
Sample : S-51,2092-007,M,0.002g,27.7
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,20
S Integration Params: Lscint.p

Vial: 11
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

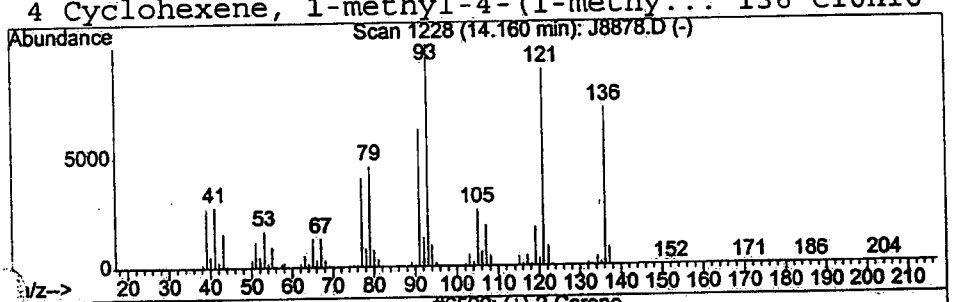
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

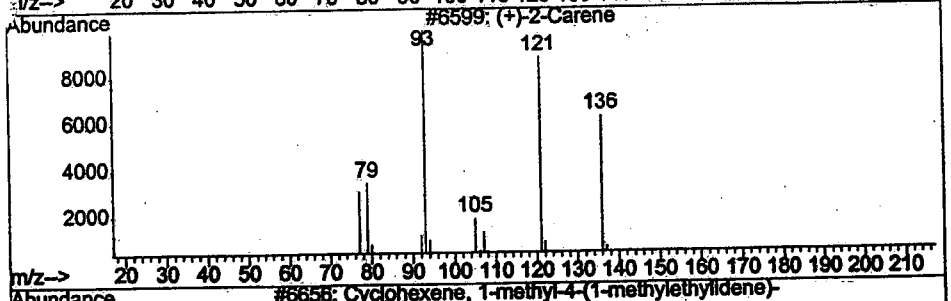
****

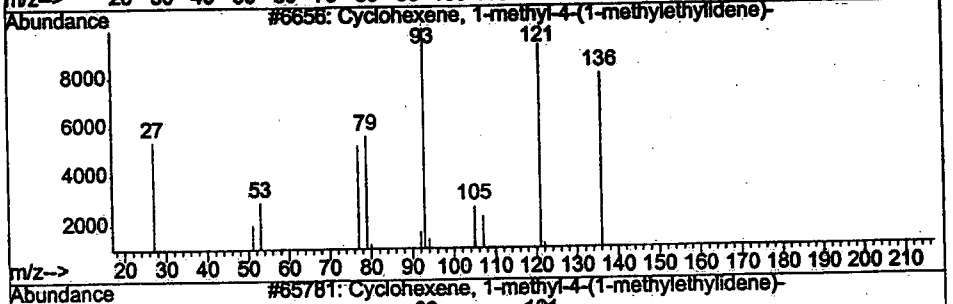
Peak Number 3 Unknown hydrocarbon Concentration Rank 2

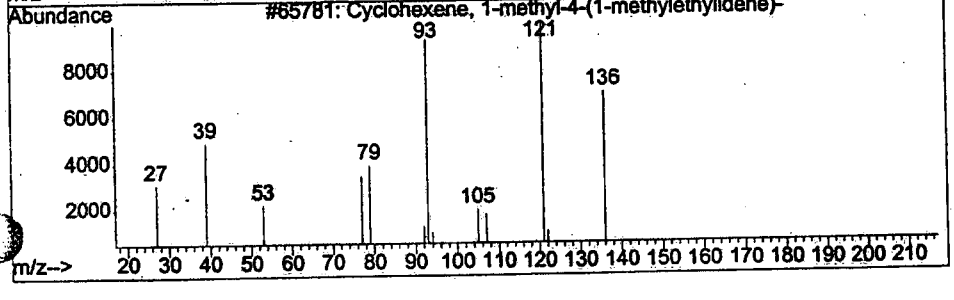
R.T.	EstConc	Area	Relative to ISTD	R.T.
14.16	108.94 UG	4212910	Chlorobenzene-d5	10.58

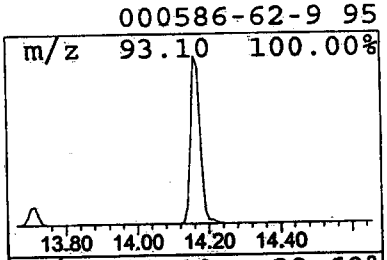
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(+)-2-Carene	136	C10H16	000000-00-0	97
2	Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	000586-62-9	96
3	Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	000586-62-9	95
4	Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	000586-62-9	95

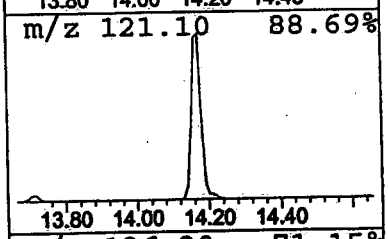


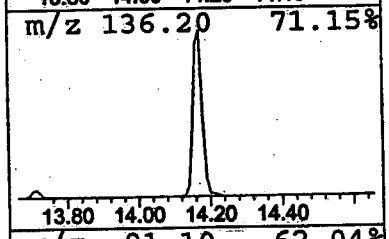


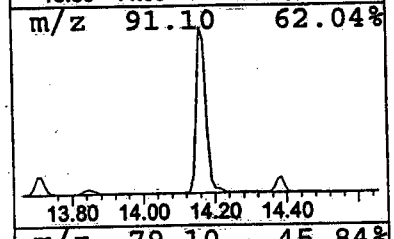


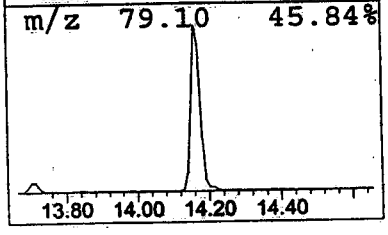












2235

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8878.D
Acq On : 10 Apr 2001 18:44
Sample : S-51,2092-007,M,0.002g,27.7
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,20
ALS Integration Params: Lscint.p

Vial: 11
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

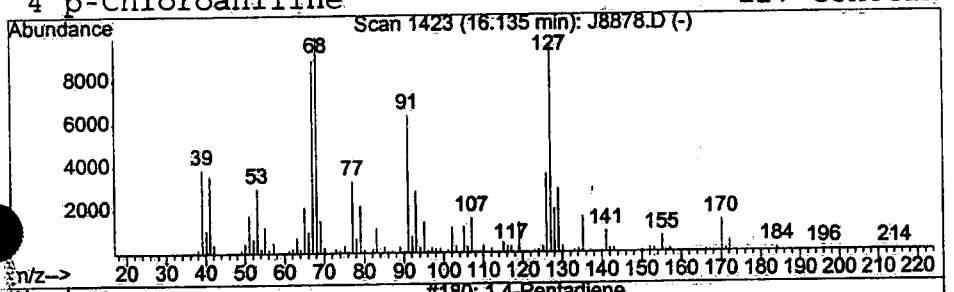
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

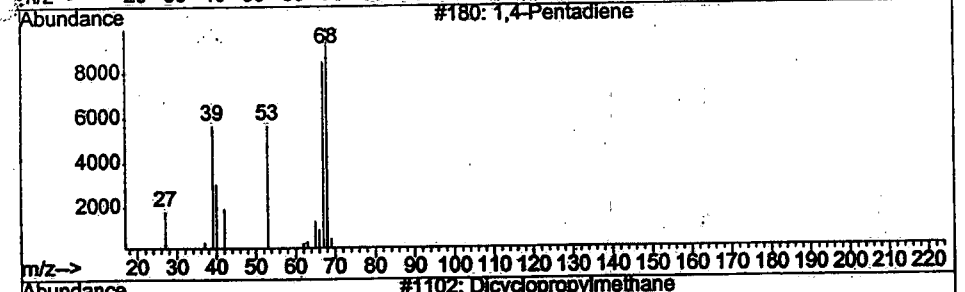
****

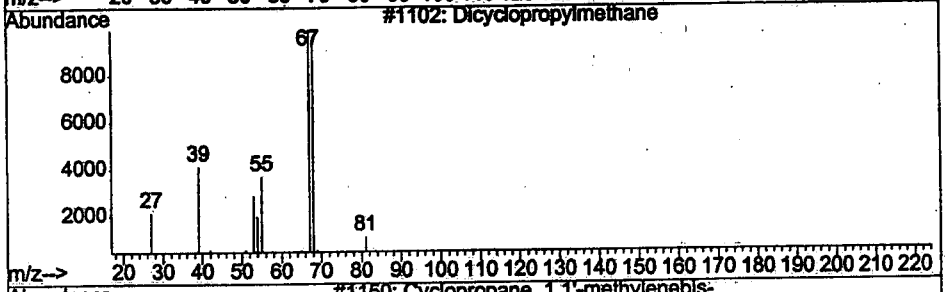
Peak Number 4 Unknown — Concentration Rank 4

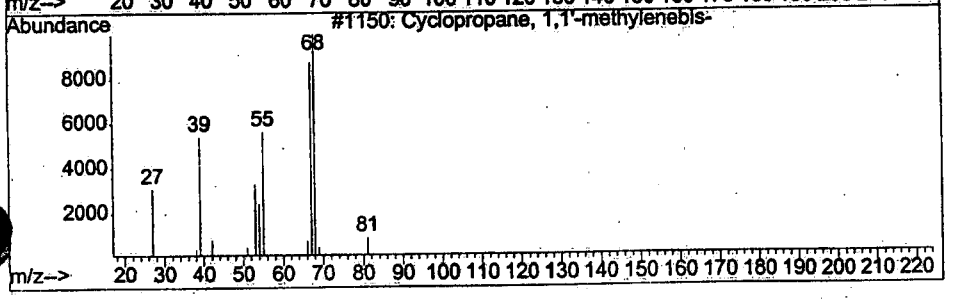
R.T.	EstConc	Area	Relative to ISTD	R.T.
16.13	11.51 UG	445145	Chlorobenzene-d5	10.58

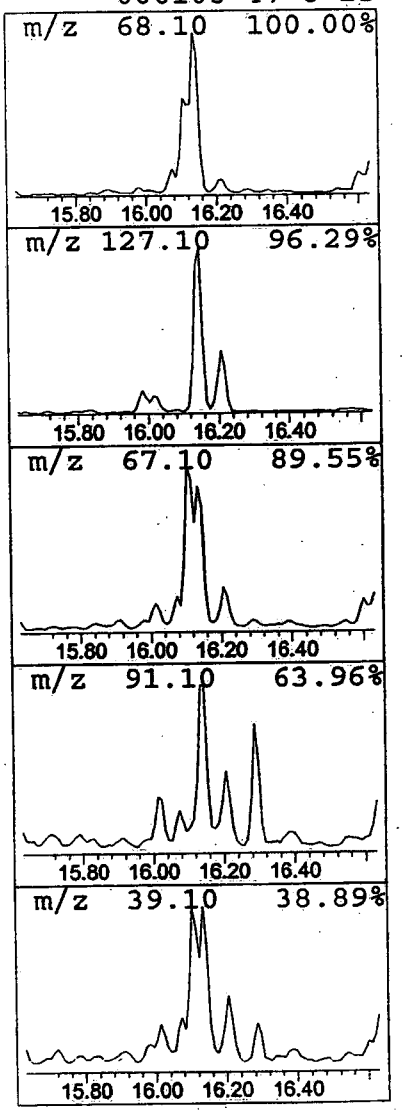
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Pentadiene	68	C5H8	000591-93-5	35
2	Dicyclopropylmethane	96	C7H12	000000-00-0	25
3	Cyclopropane, 1,1'-methylenebis-	96	C7H12	005685-47-2	25
4	p-Chloroaniline	127	C6H6ClN	000106-47-8	25











7236

000144

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8876.D
Acq On : 10 Apr 2001 17:48
Sample : S-55,2092-011,M,0.002g,20.4
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,20
Integration Params: LSCINT.P
Quant Time: Apr 10 18:07:39 2001

Vial: 9
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	499070	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	720963	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	591483	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.73	65	10572	1.71	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 3.42%#			
41) Toluene-d8	8.89	98	18239m	1.25	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 2.50%#			
59) Bromofluorobenzene	11.98	95	9805m	1.29	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 2.58%#			
Target Compounds						Qvalue
42) Toluene	8.98	92	1019085	105.94	UG	# 100

(#) = qualifier out of range (m) = manual integration

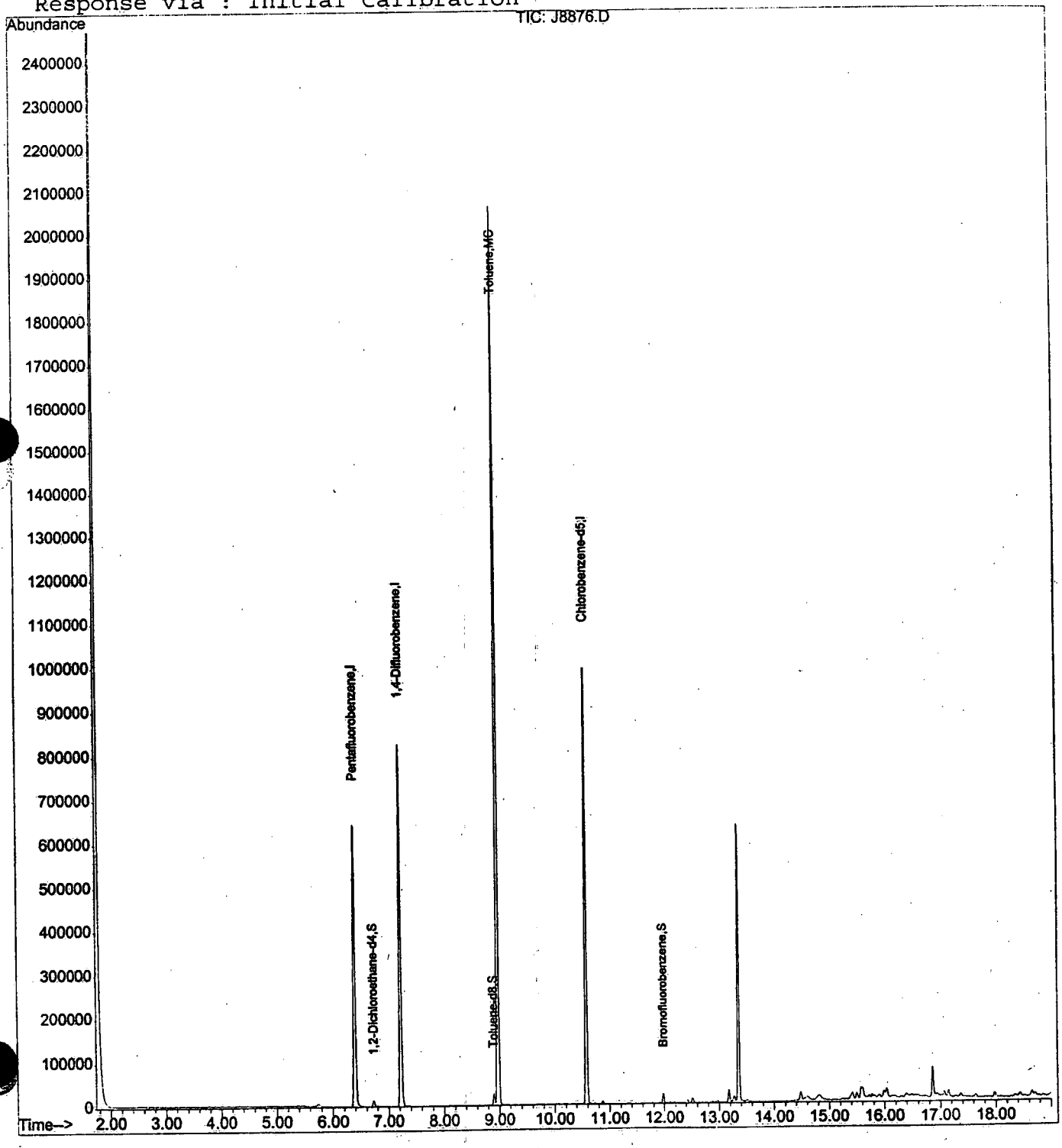
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8876.D
Acq On : 10 Apr 2001 17:48
Sample : S-55,2092-011,M,0.002g,20.4
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,20
MS Integration Params: LSCINT.P
Quant Time: Apr 11 9:50 2001

Vial: 9
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 11 09:09:26 2001
Response via : Initial Calibration



000146

2238

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8876.D
Acq On : 10 Apr 2001 17:48
Sample : S-55,2092-011,M,0.002g,20.4
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,20
'S Integration Params: Lscint.p

Vial: 9
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

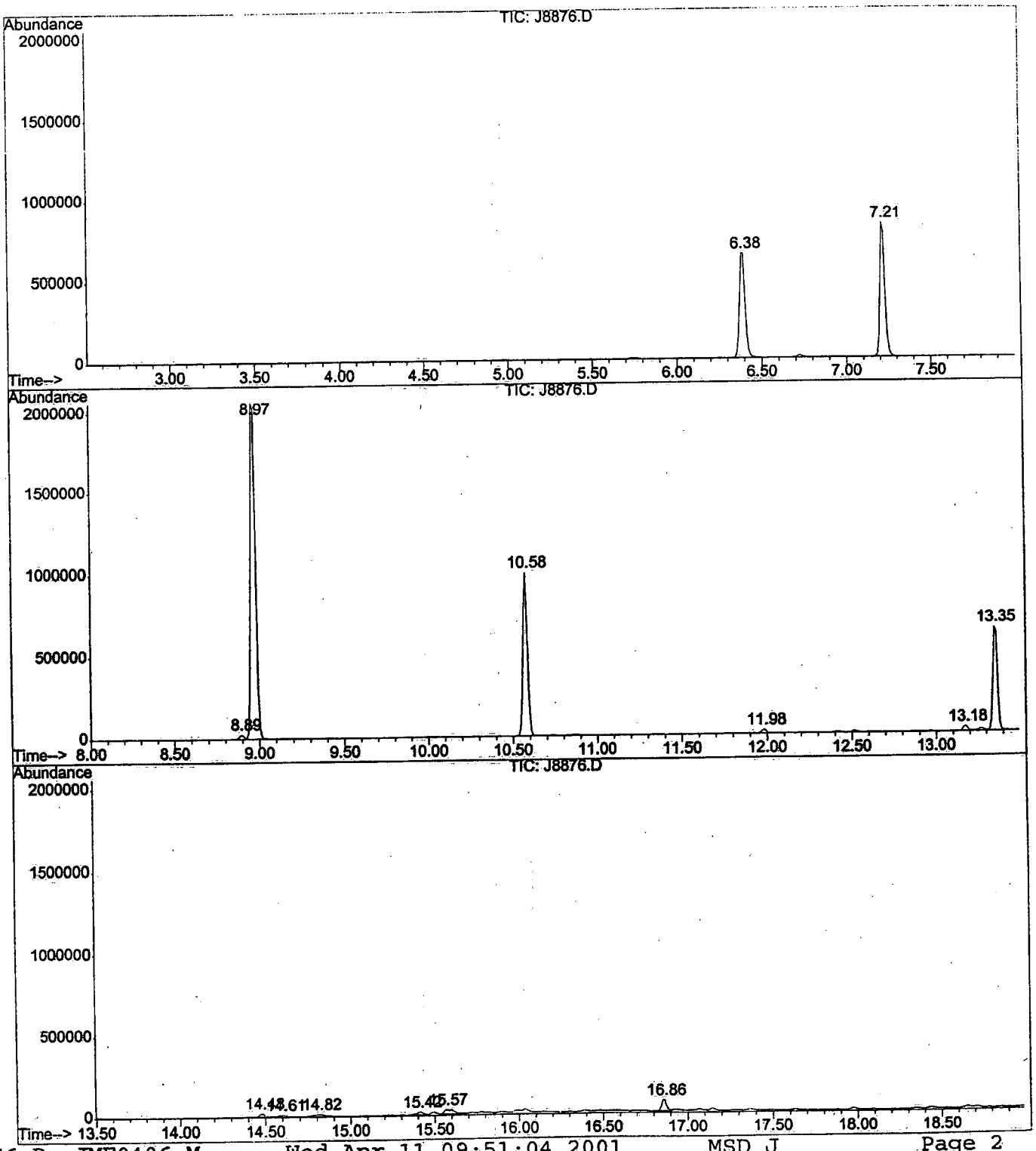
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.383	454	460	477	rBV	642404	1482764	35.47%	13.399%
2	7.213	535	542	555	rBV	825976	1707689	40.85%	15.431%
3	8.894	702	708	711	rBV	26964	53327	1.28%	0.482%
4	8.965	711	715	731	rVB	2063099	4180664	100.00%	37.778%
5	10.575	867	874	885	rBV	994587	1834075	43.87%	16.573%
6	11.983	1008	1013	1018	rVB	22898	42929	1.03%	0.388%
7	13.178	1124	1131	1136	rBV	29210	64181	1.54%	0.580%
8	13.350	1143	1148	1159	rVV	635516	1212193	29.00%	10.954%
9	14.484	1253	1260	1264	rBV	19646	47683	1.14%	0.431%
10	14.606	1264	1272	1281	rVV5	8687	51124	1.22%	0.462%
11	14.818	1284	1293	1309	rVB3	11892	73761	1.76%	0.667%
12	15.416	1344	1352	1356	rBV3	16617	54018	1.29%	0.488%
13	15.568	1364	1367	1378	rBV5	26088	108948	2.61%	0.984%
14	16.864	1488	1495	1499	rBV	69978	153027	3.66%	1.383%

Sum of corrected areas: 11066383

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-10-01\J8876.D
Operator : XINGFANG WANG
Acquired : 10 Apr 2001 17:48 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: S-55,2092-011,M,0.002g,20.4
Misc Info : ENVTACT/ORBIS,4/3/01,4/4/01,20
Vial Number: 9
Quant File :JME0406.RES (RTE Integrator)



2240

000148

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8876.D
Acq On : 10 Apr 2001 17:48
Sample : S-55,2092-011,M,0.002g,20.4
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,20
'S Integration Params: Lscint.p

Vial: 9
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

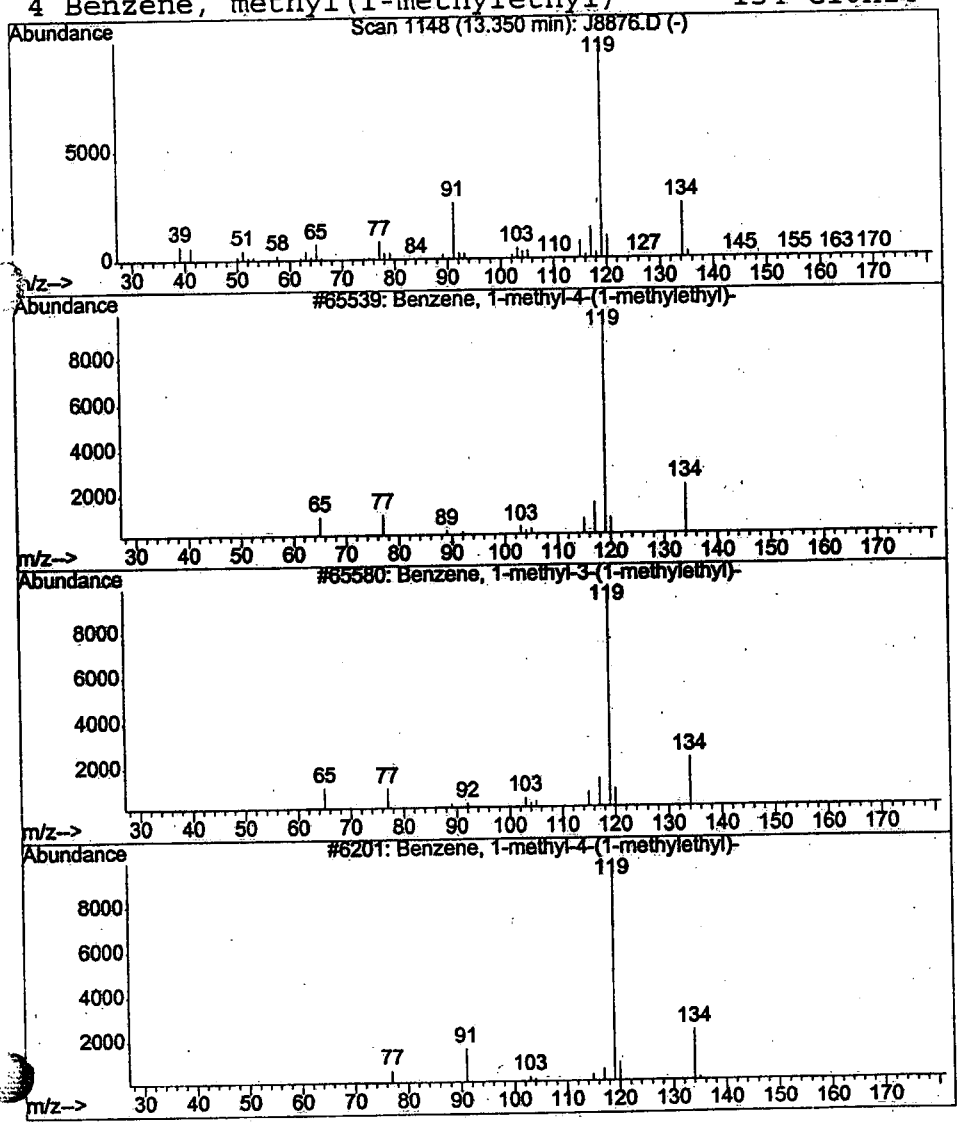
Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

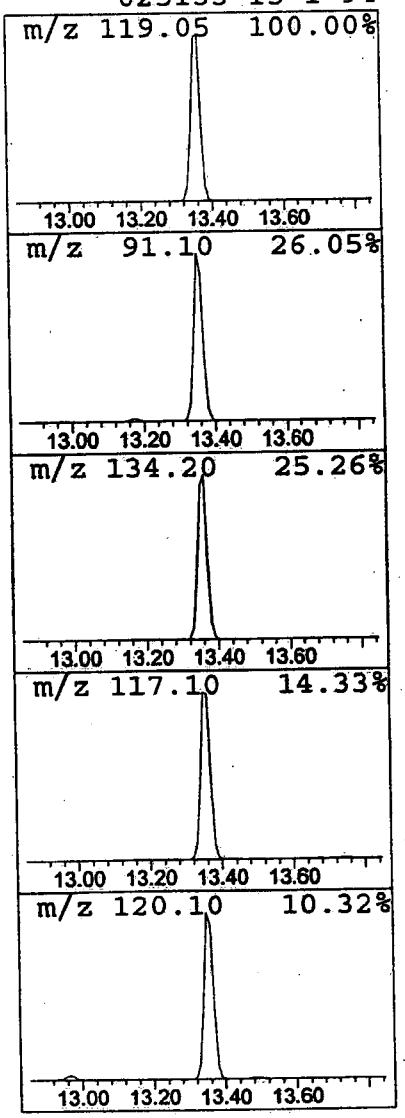
****

Peak Number 1 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.35	33.05 UG	1212190	Chlorobenzene-d5	10.58

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	95
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	94
4	Benzene, methyl(1-methylethyl)-	134	C10H14	025155-15-1	94





000149
2241

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8846.D
Acq On : 10 Apr 2001 3:19
Sample : TB,2092-014,MB,0.04g,0
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,
S Integration Params: LSCINT.P
Quant Time: Apr 10 03:38:27 2001

Vial: 32
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	422042	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	619693	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	495356	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	276418	52.96	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 105.92%			
41) Toluene-d8	8.89	98	661008	52.64	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 105.28%			
59) Bromofluorobenzene	11.98	95	238175	37.54	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 75.08%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

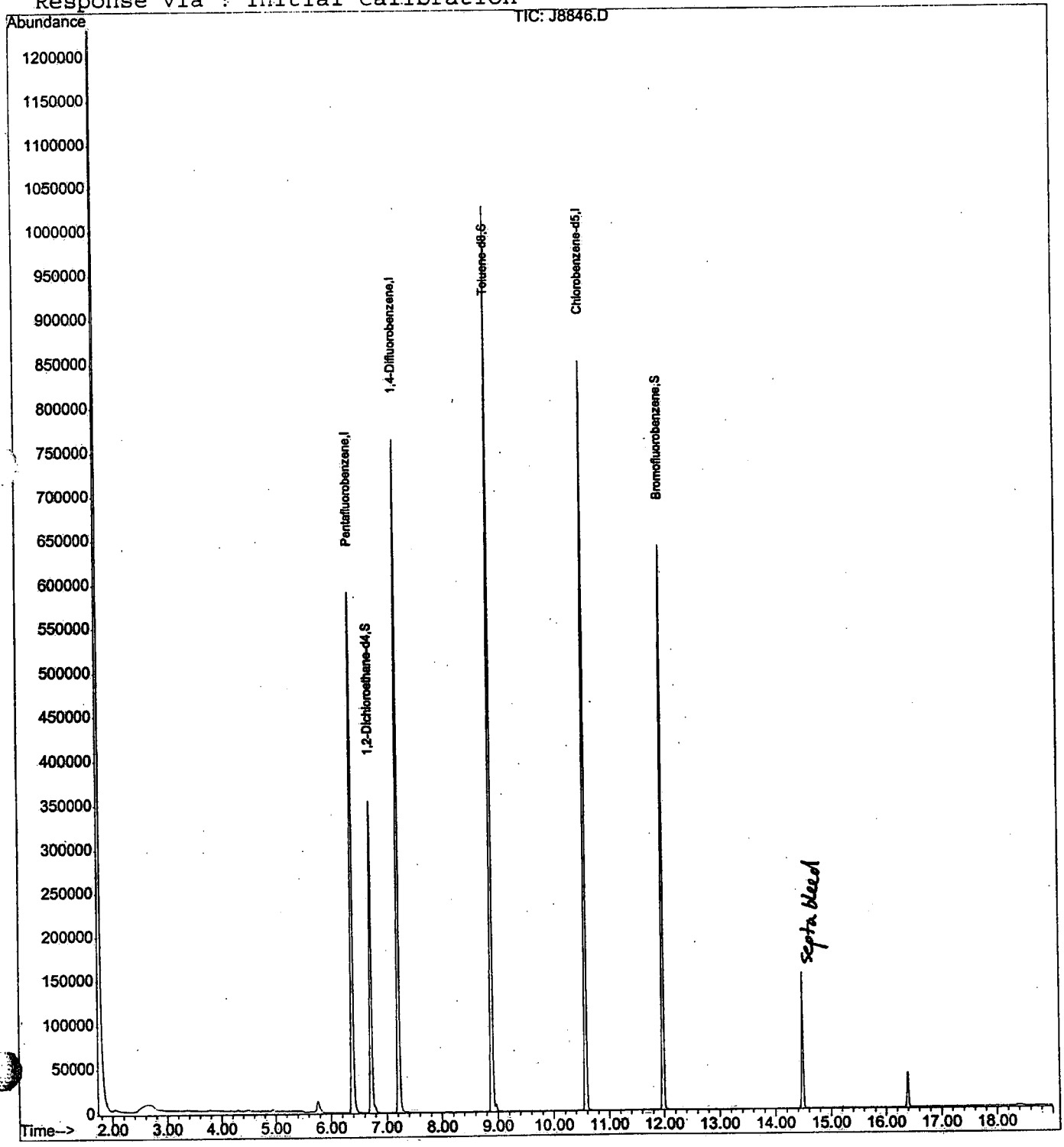
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8846.D
Acq On : 10 Apr 2001 3:19
Sample : TB,2092-014,MB,0.04g,0
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,
MS Integration Params: LSCINT.P
Quant Time: Apr 10 11:19 2001

Vial: 32
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue Apr 10 09:02:08 2001
Response via : Initial Calibration



2243

000151

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8846.D
Acq On : 10 Apr 2001 3:19
Sample : TB,2092-014,MB,0.04g,0
Misc : ENVTACT/ORBIS,4/3/01,4/4/01,
LS Integration Params: Lscint.p

Vial: 32
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

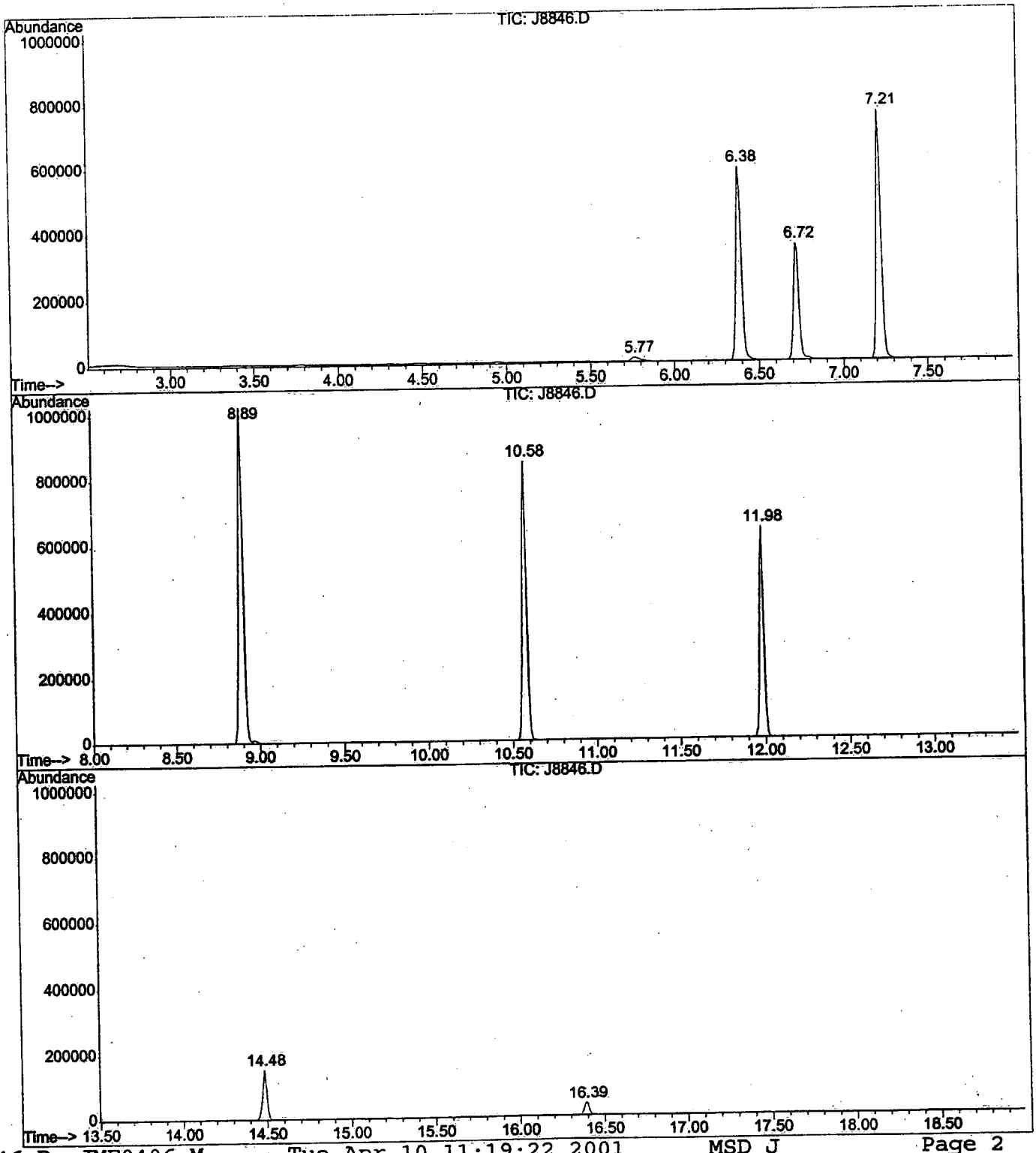
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.765	394	399	415	rVB	13021	50387	2.66%	0.594%
2	6.383	454	460	477	rBV	590331	1279001	67.51%	15.066%
3	6.717	487	493	513	rVB	354014	783721	41.37%	9.232%
4	7.213	535	542	555	rBV	763497	1486039	78.44%	17.505%
5	8.894	701	708	714	rBV	1026852	1894448	100.00%	22.316%
6	10.575	866	874	884	rBV	850813	1545111	81.56%	18.201%
7	11.983	1007	1013	1021	rBV	640861	1102047	58.17%	12.982%
8	14.484	1253	1260	1273	rBV	153863	270195	14.26%	3.183%
9	16.388	1443	1448	1458	rBV	38992	78157	4.13%	0.921%

Sum of corrected areas: 8489106

2244

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-09-01\J8846.D
Operator : XINGFANG WANG
Acquired : 10 Apr 2001 3:19 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: TB,2092-014,MB,0.04g,0
Misc Info : ENVTACT/ORBIS,4/3/01,4/4/01,
Vial Number: 32
Quant File :JME0406.RES (RTE Integrator)



2245

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8845.D Vial: 31
Acq On : 10 Apr 2001 2:50 Operator: XINGFANG WANG
Sample : N/A,METHOD-BLK,S,0.1g,0 Inst : MSD_J
Misc : Multiplr: 1.00
IS Integration Params: LSCINT.P
Quant Time: Apr 10 03:09:44 2001 Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	462165	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.22	114	675328	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	525896	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.73	65	306127	53.56	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 107.12%			
41) Toluene-d8	8.89	98	661275	48.32	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 96.64%			
59) Bromofluorobenzene	11.98	95	323528	48.03	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 96.06%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

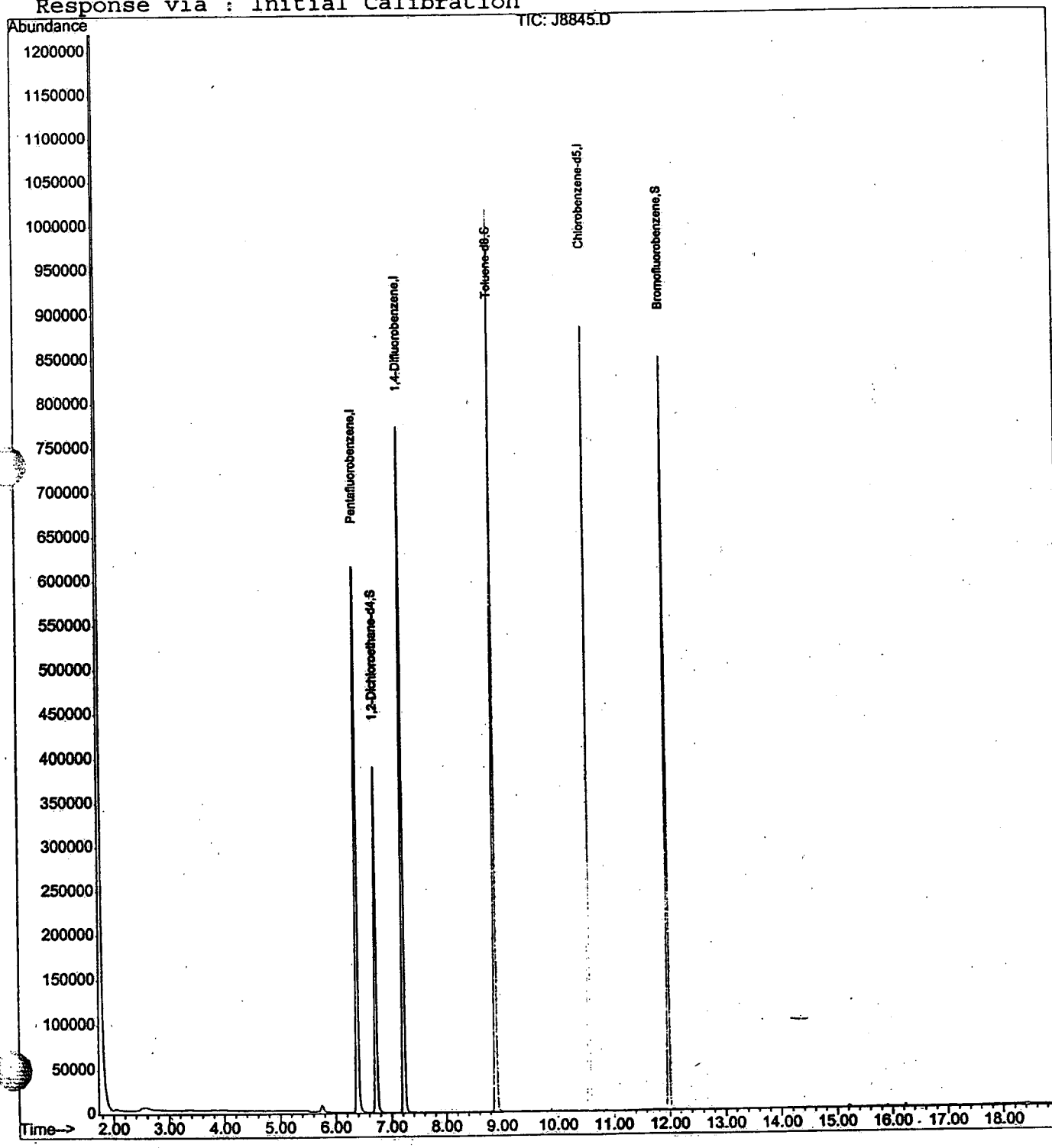
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8845.D
Acq On : 10 Apr 2001 2:50
Sample : N/A,METHOD-BLK,S,0.1g,0
Misc :
MS Integration Params: LSCINT.P
Quant Time: Apr 10 9:03 2001

Vial: 31
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue Apr 10 09:02:08 2001
Response via : Initial Calibration



2747

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-09-01\J8845.D Vial: 31
Acq On : 10 Apr 2001 2:50 Operator: XINGFANG WANG
Sample : N/A,METHOD-BLK,S,0.1g,0 Inst : MSD_J
Misc : Multiplr: 1.00
.S Integration Params: Lscint.p

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

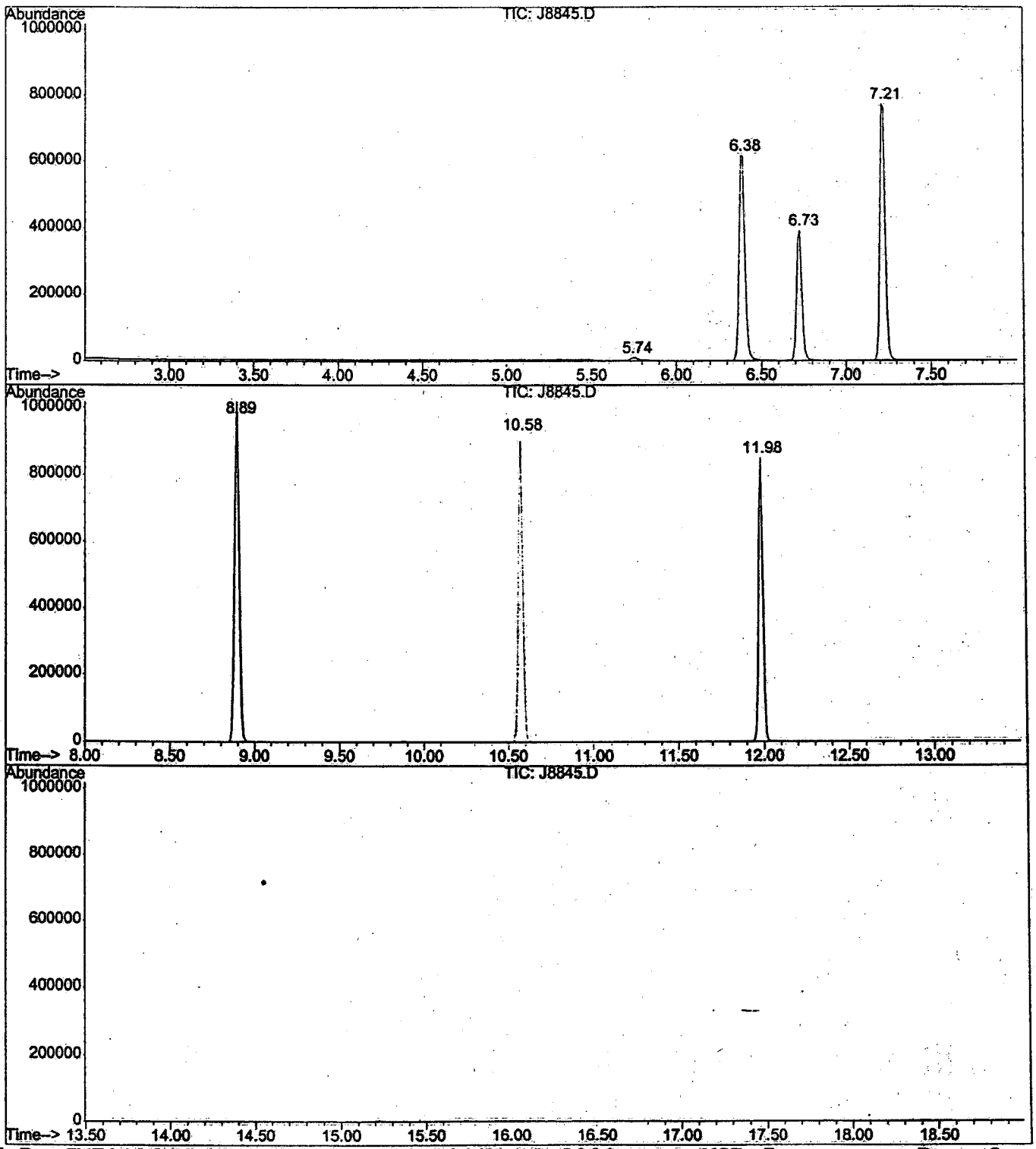
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.745	392	397	408	rVB	8359	30906	1.63%	0.346%
2	6.383	454	460	483	rVB	615715	1405973	74.26%	15.736%
3	6.727	483	494	512	rVB	390452	854834	45.15%	9.568%
4	7.213	536	542	554	rBV	773297	1617643	85.44%	18.105%
5	8.894	702	708	724	rBV	1017177	1893360	100.00%	21.191%
6	10.575	863	874	887	rBV	919520	1643280	86.79%	18.392%
7	11.983	1000	1013	1030	rBV	850059	1488699	78.63%	16.662%

Sum of corrected areas: 8934695

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-09-01\J8845.D
Operator : XINGFANG WANG
Acquired : 10 Apr 2001 2:50 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: N/A,METHOD-BLK,S,0.1g,0
Misc Info :
Vial Number: 31
Quant File :JME0406.RES (RTE Integrator)



2249

000157

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8872.D Vial: 5
Acq On : 10 Apr 2001 15:51 Operator: XINGFANG WANG
Sample : N/A,METHOD-BLK,S,0.1g,0 Inst : MSD_J
Misc : Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 10 16:10:26 2001 Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 08 10:17:55 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	519028	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	743559	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	595390	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	329183	51.29	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 102.58%			
41) Toluene-d8	8.89	98	761882	50.56	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 101.12%			
59) Bromofluorobenzene	11.98	95	385713	50.58	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 101.16%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

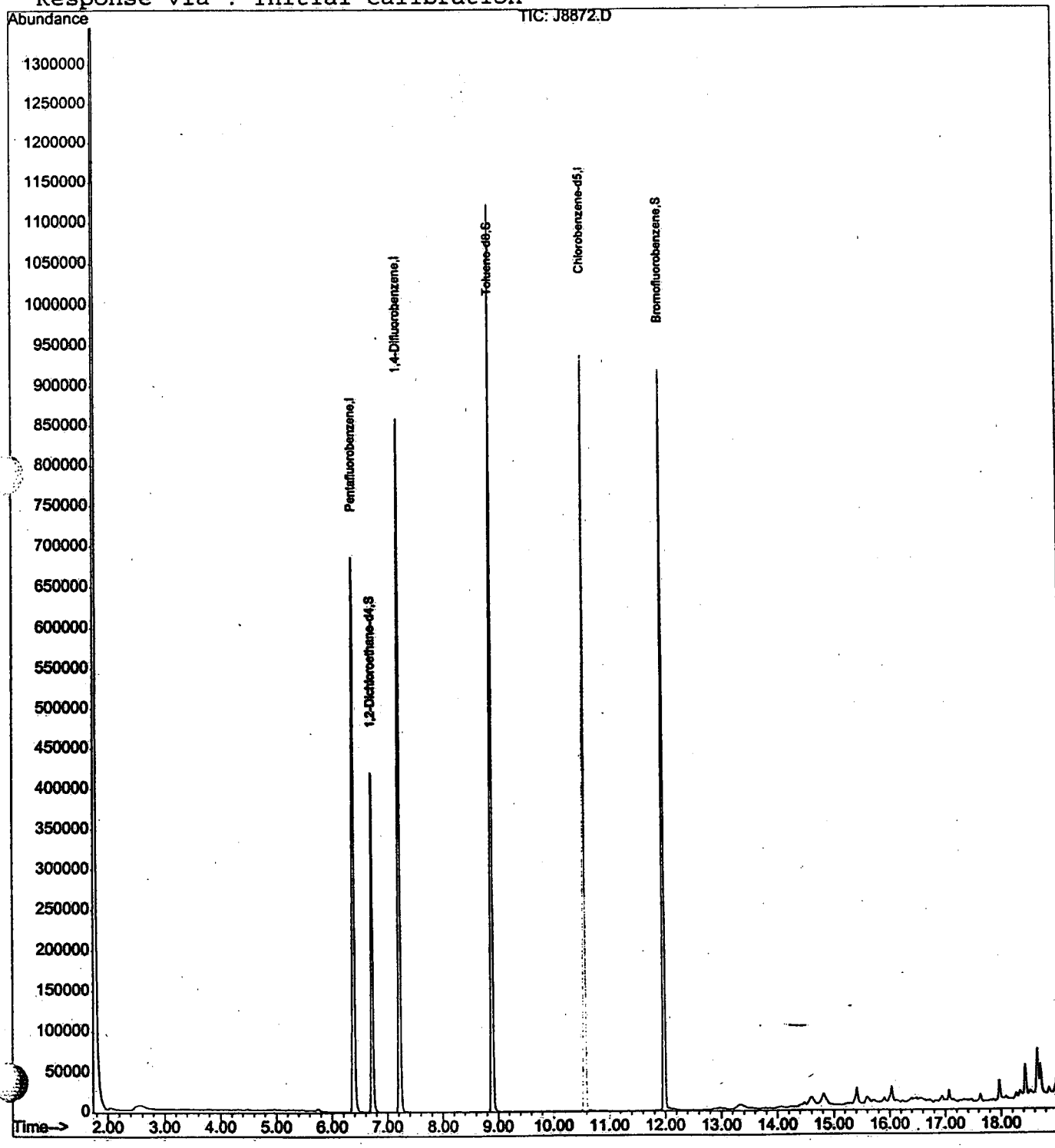
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8872.D
Acq On : 10 Apr 2001 15:51
Sample : N/A,METHOD-BLK,S,0.1g,0
Misc :
MS Integration Params: LSCINT.P
Quant Time: Apr 10 16:10 2001

Vial: 5
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue Apr 10 14:54:01 2001
Response via : Initial Calibration



2251

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-10-01\J8872.D
Acq On : 10 Apr 2001 15:51
Sample : N/A,METHOD-BLK,S,0.1g,0
Misc :
MS Integration Params: Lscint.p

Vial: 5
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.383	453	460	482	rVB	686220	1537176	70.79%	14.253%
2	6.717	484	493	510	rBB	419875	920838	42.40%	8.538%
3	7.213	535	542	555	rBV	859290	1756806	80.90%	16.289%
4	8.894	701	708	723	rBV	1122191	2171612	100.00%	20.135%
5	10.575	867	874	883	rBV	980021	1843385	84.89%	17.092%
6	11.983	998	1013	1029	rBV	918805	1776057	81.79%	16.467%
[redacted]	13.330	1135	1146	1154	rBV6	5519	40598	1.87%	0.376%
[redacted]	14.595	1263	1271	1280	rBV4	9535	53116	2.45%	0.492%
[redacted]	14.818	1285	1293	1311	rVB3	13939	81668	3.76%	0.757%
10	15.416	1344	1352	1360	rBV	20434	62641	2.88%	0.581%
11	15.598	1364	1370	1377	rBV3	8542	35763	1.65%	0.332%
12	16.033	1406	1413	1419	rBV4	19961	57381	2.64%	0.532%
13	17.066	1511	1515	1521	rVB	13620	26248	1.21%	0.243%
14	17.633	1567	1571	1577	rVB4	10000	24890	1.15%	0.231%
15	17.978	1601	1605	1611	rBV2	25281	56987	2.62%	0.528%
16	18.342	1637	1641	1646	rVV5	8657	27858	1.28%	0.258%
17	18.433	1646	1650	1655	rVV	39218	88922	4.09%	0.824%
18	18.656	1666	1672	1675	rBV	56392	140480	6.47%	1.303%
19	18.707	1675	1677	1688	rVB	38747	82840	3.81%	0.768%

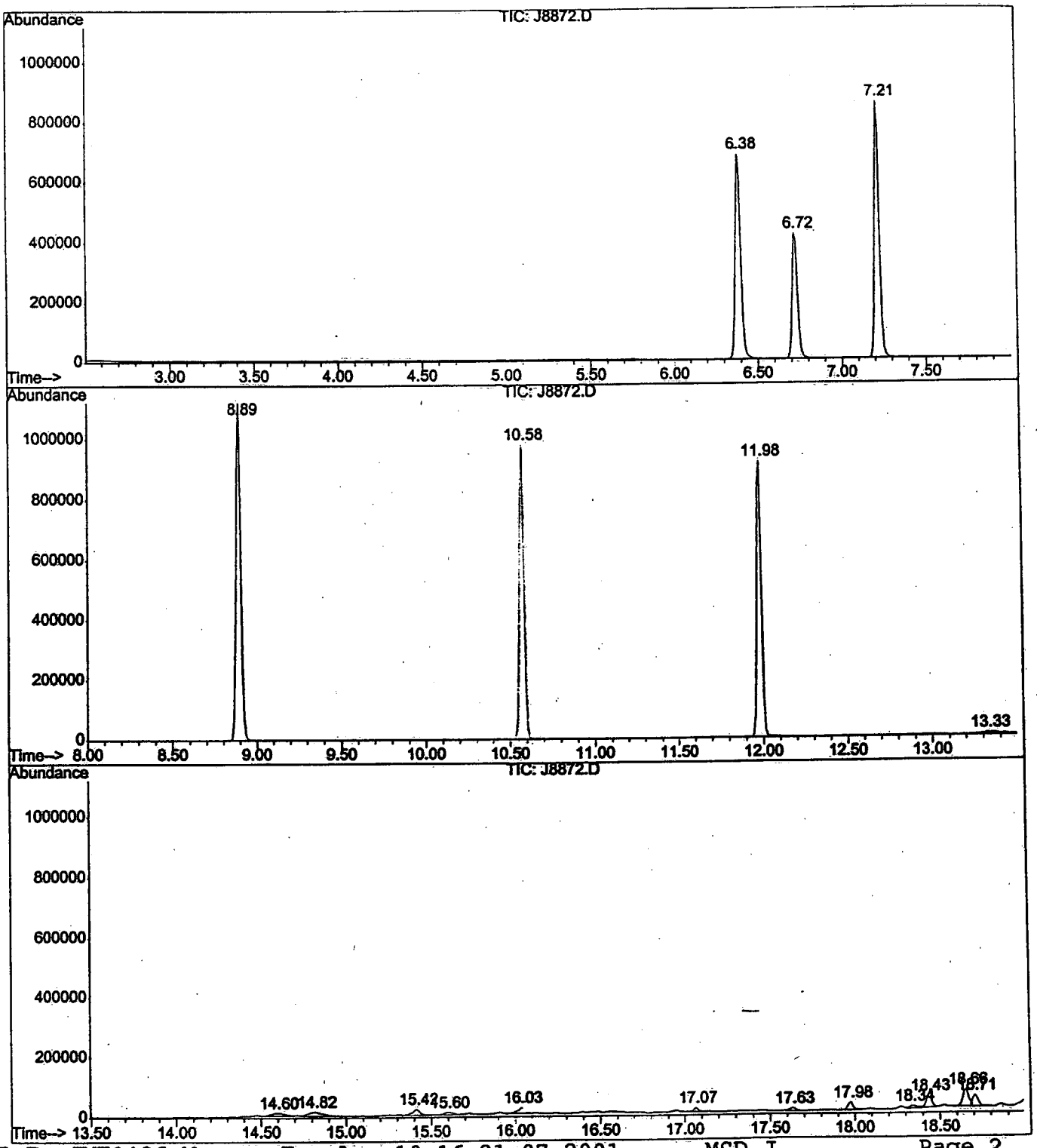
Sum of corrected areas: 10785266

7252

000460

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-10-01\J8872.D
Operator : XINGFANG WANG
Acquired : 10 Apr 2001 15:51 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: N/A,METHOD-BLK,S,0.1g,0
Misc Info :
Vial Number: 5
Quant File :JME0406.RES (RTE Integrator)



2253

000161

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-13-01\J8978.D Vial: 5
Acq On : 13 Apr 2001 18:24 Operator: XINGFANG WANG
Sample : N/A,METHOD-BLK,S,0.1g,0 Inst : MSD_J
Misc : Multiplr: 1.00
IS Integration Params: LSCINT.P
Quant Time: Apr 13 18:43:22 2001 Quant Results File: JME0406.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Fri Apr 13 10:46:44 2001
Response via : Initial Calibration
DataAcq Meth : JME0406

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.39	168	488150	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	706677	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	566391	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.73	65	320591	53.11	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 106.22%			
41) Toluene-d8	8.89	98	704611	49.20	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.40%			
59) Bromofluorobenzene	11.98	95	348073	47.98	UG	0.01
Spiked Amount 50.000	Range 23 - 145		Recovery = 95.96%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

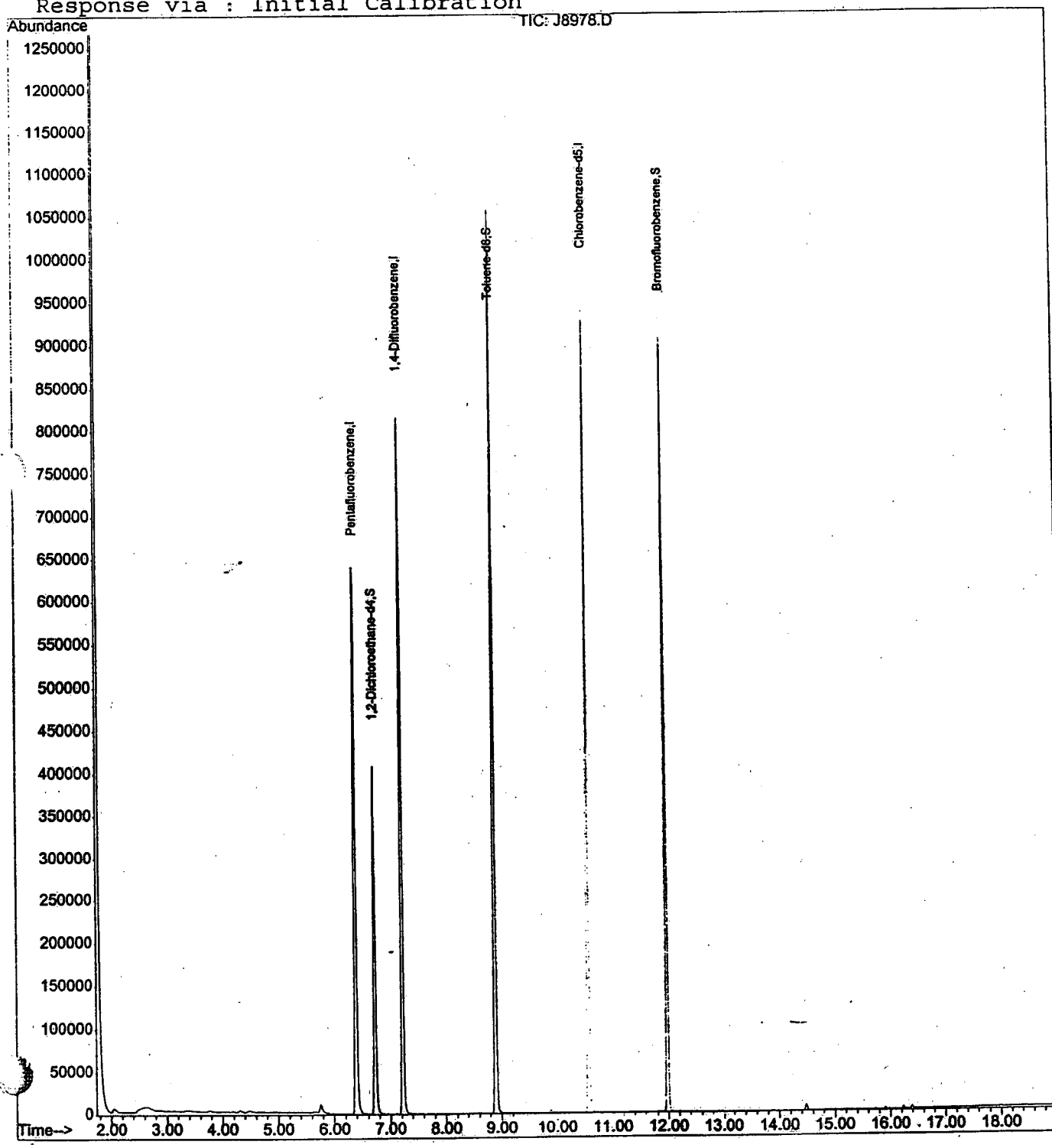
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-13-01\J8978.D
Acq On : 13 Apr 2001 18:24
Sample : N/A,METHOD-BLK,S,0.1g,0
Misc :
MS Integration Params: LSCINT.P
Quant Time: Apr 15 9:36 2001

Vial: 5
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0406.RES

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sun Apr 15 09:34:22 2001
Response via : Initial Calibration



2255

000163

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\J8978.D Vial: 5
Acq On : 13 Apr 2001 18:24 Operator: XINGFANG WANG
Sample : N/A,METHOD-BLK,S,0.1g,0 Inst : MSD_J
Misc : Multiplr: 1.00
'S Integration Params: Lscint.p

Method : C:\MSDCHEM\1\METHODS\JME0406.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

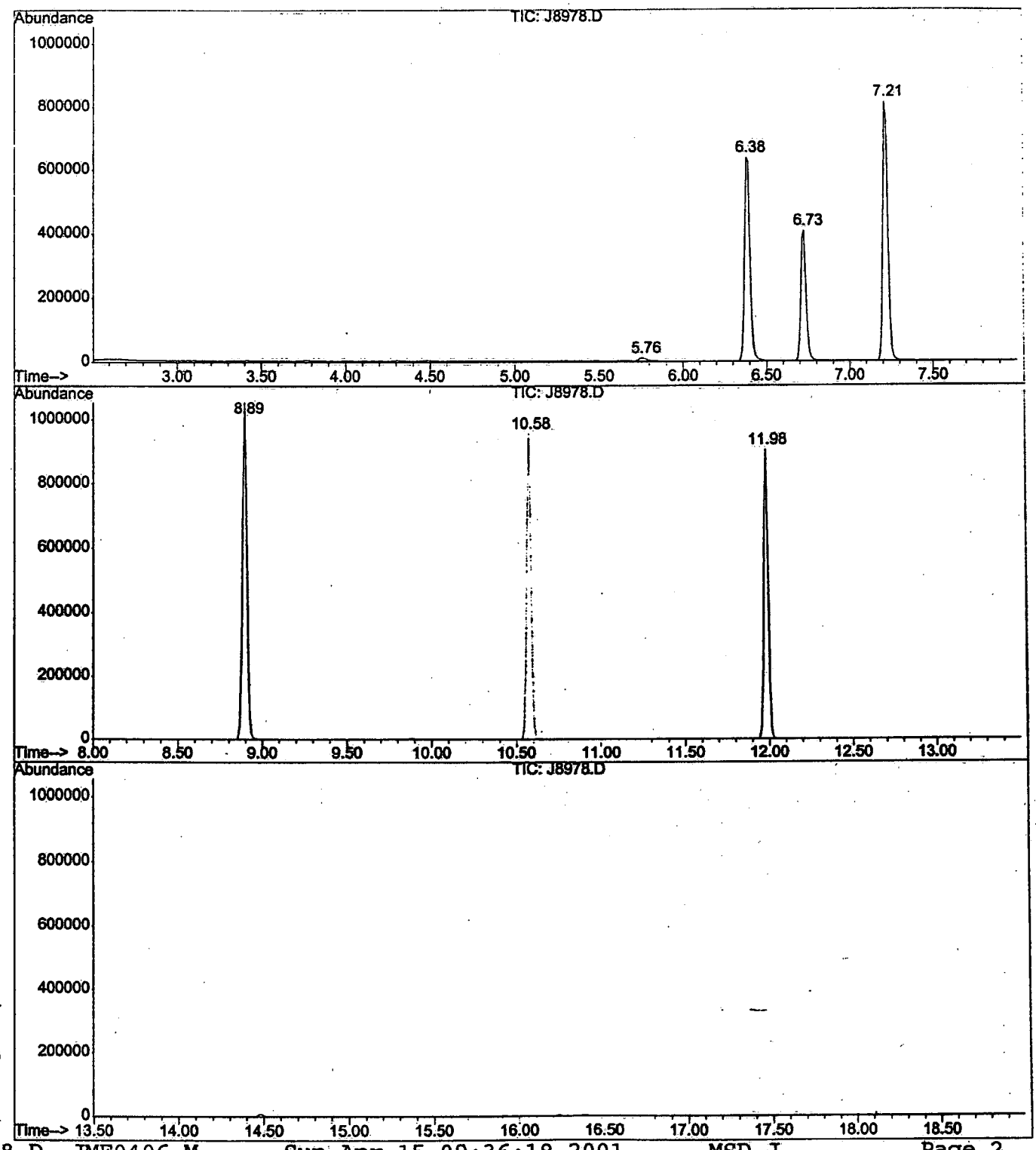
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.755	393	398	410	rVB	10822	37008	1.85%	0.392%
2	6.383	453	460	485	rVV	639603	1466649	73.19%	15.550%
3	6.727	485	494	514	rVB	408271	893997	44.61%	9.479%
4	7.214	536	542	555	rBV	815077	1676048	83.64%	17.770%
5	8.894	702	708	723	rBV	1056717	2003957	100.00%	21.247%
6	10.575	867	874	887	rBV	957569	1754552	87.55%	18.603%
	11.983	1003	1013	1026	rBV	906616	1599552	79.82%	16.959%

Sum of corrected areas: 9431763

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-13-01\J8978.D
Operator : XINGFANG WANG
Acquired : 13 Apr 2001 18:24 using AcqMethod JME0406
Instrument : MSD_J
Sample Name: N/A,METHOD-BLK,S,0.1g,0
Misc Info :
Vial Number: 5
Quant File :JME0406.RES (RTE Integrator)



2257

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1645.D DFTPP Injection Date : 04/02/2001

Inst ID: MSDB DFTPP Injection Time: 06:13

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	33.1			
68	Less than 2.0% of mass 69	0.6	(	1.5	)1
69	Mass 69 relative abundance	39.5			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	53.3			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.2			
275	10.0 - 30.0% of mass 198	23.0			
365	Greater than 1.0% of mass 198	2.5			
441	Present, but less than mass 443	8.71	(	72.4	)3
442	40.0 - 100.0% of mass 198	62.0			
443	17.0 - 23.0% of mass 442	12.0	(	19.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
.	BNA-STD-INJ-FOR	B1646.D	04/02/2001	06:20
.	BNA-STD-INJ-FOR	B1647.D	04/02/2001	06:36
.	BNA-STD-INJ-FOR	B1648.D	04/02/2001	06:51
.	BNA-STD-INJ-FOR	B1649.D	04/02/2001	07:05
.	BNA-STD-INJ-FOR	B1650.D	04/02/2001	07:19
.	OLMO4-STD-INJ-F	B1651.D	04/02/2001	07:33
.	OLMO4-STD-INJ-F	B1652.D	04/02/2001	07:48
.	OLMO4-STD-INJ-F	B1653.D	04/02/2001	08:02
.	OLMO4-STD-INJ-F	B1654.D	04/02/2001	08:16
.	OLMO4-STD-INJ-F	B1655.D	04/02/2001	08:31
.	Method-Blank	B1656.D	04/02/2001	08:45
03-04-B6-1	1899-006	B1657.D	04/02/2001	09:00
03-04-B6-3.5	1899-010	B1658.D	04/02/2001	09:14
02-10-B1-1.5	1899-011	B1659.D	04/02/2001	09:28
02-10-B1-14	1899-012	B1660.D	04/02/2001	09:42
02-10-B1-16	1899-013	B1661.D	04/02/2001	09:57
02-10-B2-1.5	1899-014	B1662.D	04/02/2001	10:11
02-10-B2-15	1899-015	B1663.D	04/02/2001	10:26
03-02-B1-3.5	1899-007	B1664.D	04/02/2001	10:40
03-02-B1-4	1899-008	B1665.D	04/02/2001	10:54
03-02-B1-4.5	1899-009	B1666.D	04/02/2001	11:09
.	Method-Blank	B1667.D	04/02/2001	11:24
S-17	1922-001	B1668.D	04/02/2001	11:38

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1645.D DFTPP Injection Date : 04/02/2001

Inst ID: MSDB DFTPP Injection Time: 06:13

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	33.1			
68	Less than 2.0% of mass 69	0.6	(	1.5	)1
69	Mass 69 relative abundance	39.5			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	53.3			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.2			
275	10.0 - 30.0% of mass 198	23.0			
365	Greater than 1.0% of mass 198	2.5			
441	Present, but less than mass 443	8.7	(	72.4	)3
442	40.0 - 100.0% of mass 198	62.0			
443	17.0 - 23.0% of mass 442	12.0	(	19.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
S-18	1922-002	B1669.D	04/02/2001	11:52
S-19	1922-003	B1670.D	04/02/2001	12:07
S-20	1922-004	B1671.D	04/02/2001	12:21
S-21	1922-005	B1672.D	04/02/2001	12:36
S-22	1922-006	B1673.D	04/02/2001	12:50
S-23	1922-007	B1674.D	04/02/2001	13:05
S-24	1922-008	B1675.D	04/02/2001	13:19
S-25	1922-009	B1676.D	04/02/2001	13:34
S-27	1922-011	B1677.D	04/02/2001	13:48
S-28	1922-012	B1678.D	04/02/2001	14:08
S-29	1922-013	B1679.D	04/02/2001	14:22
S-30	1922-015	B1680.D	04/02/2001	14:37
TP-4	1820-004	B1681.D	04/02/2001	14:51
FDS-2_4.5-5'	1920-004	B1682.D	04/02/2001	15:06
FDS-2_4.5-5'	1920-004M	B1683.D	04/02/2001	15:20
FDS-2_4.5-5'	1920-004M	B1684.D	04/02/2001	15:34
	Method-Blank	B1685.D	04/02/2001	15:49
TP-2	1929-001	B1686.D	04/02/2001	16:03
TP-5	1929-002	B1687.D	04/02/2001	16:18
TP-6	1929-003	B1688.D	04/02/2001	16:32
TP-1	1929-004	B1689.D	04/02/2001	16:47
TP-7	1929-005	B1690.D	04/02/2001	17:01

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1645.D — DFTPP Injection Date : 04/02/2001

Inst ID: MSDB DFTPP Injection Time: 06:13

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	33.1			
68	Less than 2.0% of mass 69	0.6	(	1.5	)1
69	Mass 69 relative abundance	39.5			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	53.3			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.2			
275	10.0 - 30.0% of mass 198	23.0			
365	Greater than 1.0% of mass 198	2.5			
441	Present, but less than mass 443	8.71	(	72.4	)3
442	40.0 - 100.0% of mass 198	62.0			
443	17.0 - 23.0% of mass 442	12.0	(	19.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
SB-1	1929-006	B1691.D	04/02/2001	17:16
SB-2	1929-007	B1692.D	04/02/2001	17:30
S1	1951-001	B1693.D	04/02/2001	17:44
PE-1_0.5-1	1925-001	B1694.D	04/02/2001	17:59
PE-3_0.5-1	1925-003	B1695.D	04/02/2001	18:14
PE-4_0.5-1	1925-005	B1696.D	04/02/2001	18:28
PE-44_1-1.5	1925-007	B1697.D	04/02/2001	18:42
T4/PE-3	1897-003	B1698.D	04/02/2001	18:57
SS-1A/1B_8'	1933-001	B1699.D	04/02/2001	19:11
SS-2A/2B_8'	1933-002	B1700.D	04/02/2001	19:25
SS-3A/3B_8'	1933-003	B1701.D	04/02/2001	19:40
1252-P16N(E)	1958-001	B1702.D	04/02/2001	19:54
1252-P16N(E)	1958-001M	B1703.D	04/02/2001	20:09
1252-P16N(E)	1958-001M	B1704.D	04/02/2001	20:23
SS-4A/4B_8'	1933-004	B1705.D	04/02/2001	20:38

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1747.D

DFTPP Injection Date : 04/04/2001

Inst ID: MSDB

DFTPP Injection Time: 10:56

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	37.7			
68	Less than 2.0% of mass 69	1.0	(	2.0	)1
69	Mass 69 relative abundance	47.7			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	57.9			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.3			
275	10.0 - 30.0% of mass 198	22.3			
365	Greater than 1.0% of mass 198	1.9			
441	Present, but less than mass 443	7.70	(	74.9	)3
442	40.0 - 100.0% of mass 198	52.2			
443	17.0 - 23.0% of mass 442	10.3	(	19.7	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
.	BNA-STD-INJ-FOR	B1748.D	04/04/2001	11:03
.	OLMO4-STD-INJ-F	B1749.D	04/04/2001	11:18
15-5	1994-003	B1750.D	04/04/2001	11:32
15-3	1994-004	B1751.D	04/04/2001	11:47
15-2	1994-005	B1752.D	04/04/2001	12:01
S-4	1866-006	B1753.D	04/04/2001	12:15
.	Method-Blank	B1754.D	04/04/2001	12:29
CC-C1-GS-3_3-7'	2057-003	B1755.D	04/04/2001	12:44
CC-C1-GS-1_3-7'	2057-004	B1756.D	04/04/2001	12:58
CC-C1-GS-2_3-7'	2057-005	B1757.D	04/04/2001	13:13
CC-C1-GS-3_3-7'	2057-006	B1758.D	04/04/2001	13:27
.	Method-Blank	B1759.D	04/04/2001	13:42
SP-1	1921-001	B1760.D	04/04/2001	13:56
SP-1	2026-001	B1761.D	04/04/2001	14:11
PS4-4-3S	2049-002	B1762.D	04/04/2001	14:25
PS4-4-3S	2049-002	B1763.D	04/04/2001	14:40
AC-27_10.5-11'	2044-001	B1764.D	04/04/2001	14:54
3133-DB2A	2013-002	B1765.D	04/04/2001	15:09
3133-DB4A	2013-004	B1766.D	04/04/2001	15:23
3133-DB2B	2013-012	B1767.D	04/04/2001	15:38
3133-DB4B	2013-014	B1768.D	04/04/2001	15:52
SP-1	2026-001MS	B1769.D	04/04/2001	16:06
SP-1	2026-001MSD	B1770.D	04/04/2001	16:20

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1747.D DFTPP Injection Date : 04/04/2001

Inst ID: MSDB DFTPP Injection Time: 10:56

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	37.7			
68	Less than 2.0% of mass 69	1.0	(	2.0	)1
69	Mass 69 relative abundance	47.7			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	57.9			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.3			
275	10.0 - 30.0% of mass 198	22.3			
365	Greater than 1.0% of mass 198	1.9			
441	Present, but less than mass 443	7.7	(	74.9	)3
442	40.0 - 100.0% of mass 198	52.2			
443	17.0 - 23.0% of mass 442	10.3	(	19.7	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
S15	2032-004	B1771.D	04/04/2001	16:34
S16	2032-005	B1772.D	04/04/2001	16:49
S12	2032-001	B1773.D	04/04/2001	17:03
S13	2032-002	B1774.D	04/04/2001	17:17
S14	2032-003	B1775.D	04/04/2001	17:32
S17	2032-006	B1776.D	04/04/2001	17:46
1R	1966-001	B1777.D	04/04/2001	18:00
3R	1966-003	B1778.D	04/04/2001	18:14
D1	1967-001	B1779.D	04/04/2001	18:29
D3	1967-003	B1780.D	04/04/2001	18:43
CC-C1-GS-1_3-7'	2057-004	B1781.D	04/04/2001	18:57
CC-C1-GS-2_3-7'	2057-005	B1782.D	04/04/2001	19:12
CC-C1-GS-3_3-7'	2057-006	B1783.D	04/04/2001	19:26

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1784.D

DFTPP Injection Date : 04/05/2001

Inst ID: MSDB

DFTPP Injection Time: 11:11

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	32.2			
68	Less than 2.0% of mass 69	0.7	(	1.7	)1
69	Mass 69 relative abundance	41.1			
70	Less than 2.0% of mass 69	0.5	(	1.1	)1
127	40.0 - 60.0% of mass 198	55.0			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.0			
275	10.0 - 30.0% of mass 198	22.7			
365	Greater than 1.0% of mass 198	2.8			
441	Present, but less than mass 443	9.91	(	69.4	)3
442	40.0 - 100.0% of mass 198	66.7			
443	17.0 - 23.0% of mass 442	14.3	(	21.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
.	BNA-STD-INJ-FOR	B1785.D	04/05/2001	11:18
.	OLMO4-STD-INJ-F	B1786.D	04/05/2001	11:32
.	Method-Blank	B1787.D	04/05/2001	11:47
PS4-4-3S	2049-002	B1788.D	04/05/2001	12:01
S14	2032-003	B1789.D	04/05/2001	12:16
1R	1966-001	B1790.D	04/05/2001	12:30
.	Method-Blank	B1791.D	04/05/2001	12:45
CC-C2-GS-3_3-7'	2120-026	B1792.D	04/05/2001	12:59
CC-C2-CS-1_3-7'	2120-027	B1793.D	04/05/2001	13:13
CC-C2-CS-2_3-7'	2120-028	B1794.D	04/05/2001	13:28
CC-C2-CS-3_3-7'	2120-029	B1795.D	04/05/2001	13:42
CCSP1-3-GS24	2120-003	B1796.D	04/05/2001	13:56
CCSP1-3-GS28	2120-007	B1797.D	04/05/2001	14:10
CCSP1-3-GS32	2120-011	B1798.D	04/05/2001	14:25
CCSP1-3-CS22	2120-012	B1799.D	04/05/2001	14:39
CCSP1-3-CS23	2120-013	B1800.D	04/05/2001	14:53
CCSP1-3-CS24	2120-014	B1801.D	04/05/2001	15:07
CCSP1-3-CS25	2120-015	B1802.D	04/05/2001	15:22
CCSP1-3-CS26	2120-016	B1803.D	04/05/2001	15:36
CCSP1-3-CS27	2120-017	B1804.D	04/05/2001	15:50
CCSP1-3-CS27D	2120-018	B1805.D	04/05/2001	16:05
CCSP1-3-CS28	2120-019	B1806.D	04/05/2001	16:19
CCSP1-3-CS29	2120-020	B1807.D	04/05/2001	16:33

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1784.D

DFTPP Injection Date : 04/05/2001

Inst ID: MSDB

DFTPP Injection Time: 11:11

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	32.2			
68	Less than 2.0% of mass 69	0.7	(	1.7	)1
69	Mass 69 relative abundance	41.1			
70	Less than 2.0% of mass 69	0.5	(	1.1	)1
127	40.0 - 60.0% of mass 198	55.0			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.0			
275	10.0 - 30.0% of mass 198	22.7			
365	Greater than 1.0% of mass 198	2.8			
441	Present, but less than mass 443	9.9	(	69.4	)3
442	40.0 - 100.0% of mass 198	66.7			
443	17.0 - 23.0% of mass 442	14.3	(	21.4	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCSP1-3-CS30	2120-021	B1808.D	04/05/2001	16:48
CCSP1-3-CS31	2120-022	B1809.D	04/05/2001	17:02
CCSP1-3-CS32	2120-023	B1810.D	04/05/2001	17:17
S12A	1840-003	B1811.D	04/05/2001	17:31
S12-A	1840-003MS	B1812.D	04/05/2001	17:46
S-12A	1840-003MS	B1813.D	04/05/2001	18:00
.	Method-Blank	B1814.D	04/05/2001	18:14
S-55	2092-011	B1815.D	04/05/2001	18:29
WC-COMP	2111-001	B1816.D	04/05/2001	18:43

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B1817.D

DFTPP Injection Date : 04/06/2001

Inst ID: MSDB

DFTPP Injection Time: 11:05

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	36.7			
68	Less than 2.0% of mass 69	0.8	(	1.8	)1
69	Mass 69 relative abundance	44.5			
70	Less than 2.0% of mass 69	0.8	(	1.8	)1
127	40.0 - 60.0% of mass 198	58.6			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	6.7			
275	10.0 - 30.0% of mass 198	22.4			
365	Greater than 1.0% of mass 198	2.5			
441	Present, but less than mass 443	9.51	(	68.5	)3
442	40.0 - 100.0% of mass 198	64.0			
443	17.0 - 23.0% of mass 442	13.9	(	21.7	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
.	BNA-STD-INJ-FOR	B1818.D	04/06/2001	11:12
.	OLMO4-STD-INJ-F	B1819.D	04/06/2001	11:30
S-55	2092-011	B1820.D	04/06/2001	11:44
.	Method-Blank	B1821.D	04/06/2001	11:58
STR-1	2117-001	B1822.D	04/06/2001	12:16
STR-2	2117-002	B1823.D	04/06/2001	12:30
STR-3	2117-003	B1824.D	04/06/2001	12:45
STR-5	2117-005	B1825.D	04/06/2001	13:00
STR-6	2117-006	B1826.D	04/06/2001	13:14
STR-7	2117-007	B1827.D	04/06/2001	13:29
B-6F	2028-006	B1828.D	04/06/2001	13:43
S-45	2092-001	B1829.D	04/06/2001	13:57
S-46	2092-002	B1830.D	04/06/2001	14:12
S-47	2092-003	B1831.D	04/06/2001	14:26
S-48	2092-004	B1832.D	04/06/2001	14:40
S-49	2092-005	B1833.D	04/06/2001	14:55
S-46	2092-002MS	B1834.D	04/06/2001	15:09
S-46	2092-002MSD	B1835.D	04/06/2001	15:24
STR-4	2117-004	B1836.D	04/06/2001	15:38

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B2000.D DFTPP Injection Date : 04/13/2001

Inst ID: MSDB DFTPP Injection Time: 06:54

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	30.6			
68	Less than 2.0% of mass 69	0.0	(	0.0	)1
69	Mass 69 relative abundance	34.4			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	49.3			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.1			
275	10.0 - 30.0% of mass 198	24.9			
365	Greater than 1.0% of mass 198	3.4			
441	Present, but less than mass 443	12.85	(	75.2	)3
442	40.0 - 100.0% of mass 198	86.3			
443	17.0 - 23.0% of mass 442	17.1	(	19.8	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
.	BNA-STD-INJ-FOR	B2001.D	04/13/2001	07:40
.	BNA-STD-INJ-FOR	B2002.D	04/13/2001	07:56
.	BNA-STD-INJ-FOR	B2003.D	04/13/2001	08:12
.	BNA-STD-INJ-FOR	B2004.D	04/13/2001	08:27
.	BNA-STD-INJ-FOR	B2005.D	04/13/2001	08:42
.	OLMO4-STD-INJ-F	B2006.D	04/13/2001	08:58
.	OLMO4-STD-INJ-F	B2007.D	04/13/2001	09:13
.	OLMO4-STD-INJ-F	B2008.D	04/13/2001	09:29
.	OLMO4-STD-INJ-F	B2009.D	04/13/2001	09:44
.	OLMO4-STD-INJ-F	B2010.D	04/13/2001	10:00

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B2019.D

DFTPP Injection Date : 04/13/2001

Inst ID: MSDB

DFTPP Injection Time: 12:17

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	46.3			
68	Less than 2.0% of mass 69	0.0	(	0.0	)1
69	Mass 69 relative abundance	48.0			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	58.9			
197	Less than 1.0% of mass 198	0.0			
198	Base peak, 100% relative abundance	100.0			
199	5.0 - 9.0% of mass 198	7.3			
275	10.0 - 30.0% of mass 198	20.5			
365	Greater than 1.0% of mass 198	2.9			
441	Present, but less than mass 443	7.3	(	74.7	)3
442	40.0 - 100.0% of mass 198	49.3			
443	17.0 - 23.0% of mass 442	9.7	(	19.7	)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
SB2	2287-009	B2043.D	04/13/2001	18:58
SB2MS	2287-010	B2044.D	04/13/2001	19:14
SB2MD	2287-011	B2045.D	04/13/2001	19:29
SB2DP	2287-012	B2046.D	04/13/2001	19:45
SB3	2287-013	B2047.D	04/13/2001	20:01
SB4	2287-014	B2048.D	04/13/2001	20:16
SB6	2287-016	B2049.D	04/13/2001	20:32
SB7	2287-017	B2050.D	04/13/2001	20:48
SB5	2287-015	B2051.D	04/13/2001	21:03
S-51	2092-007	B2052.D	04/13/2001	21:19

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: B1759.D

Instrument ID: MSDA

Date Extracted: 04/04/01

Matrix: SOIL

Date Analyzed: 04/04/2001

Time Analyzed: 13:42

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
SP-1	1921-001	04/04/2001	13:56
SP-1	2026-001	04/04/2001	14:11
PS4-4-3S	2049-002	04/04/2001	14:25
PS4-4-3S	2049-002	04/04/2001	14:40
AC-27_10.5-11'	2044-001	04/04/2001	14:54
3133-DB2A	2013-002	04/04/2001	15:09
3133-DB4A	2013-004	04/04/2001	15:23
3133-DB2B	2013-012	04/04/2001	15:38
3133-DB4B	2013-014	04/04/2001	15:52
SP-1	2026-001MS	04/04/2001	16:06
SP-1	2026-001MSD	04/04/2001	16:20
S15	2032-004	04/04/2001	16:34
S16	2032-005	04/04/2001	16:49
S12	2032-001	04/04/2001	17:03
S13	2032-002	04/04/2001	17:17
S14	2032-003	04/04/2001	17:32
S17	2032-006	04/04/2001	17:46
1R	1966-001	04/04/2001	18:00
3R	1966-003	04/04/2001	18:14
D1	1967-001	04/04/2001	18:29
D3	1967-003	04/04/2001	18:43
S14	2032-003	04/05/2001	12:16
1R	1966-001	04/05/2001	12:30

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/04/2001
Date Analyzed: 04/04/2001
Data file: B1759.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		33.3
Phenol	ND		33.3
Aniline	ND		33.3
bis(2-Chloroethyl)ether	ND		33.3
2-Chlorophenol	ND		33.3
1,3-Dichlorobenzene	ND		33.3
1,4-Dichlorobenzene	ND		33.3
Benzyl alcohol	ND		33.3
1,2-Dichlorobenzene	ND		33.3
2-Methylphenol	ND		33.3
bis(2-chloroisopropyl)ether	ND		33.3
4-Methylphenol	ND		33.3
N-Nitroso-di-n-propylamine	ND		33.3
Hexachloroethane	ND		33.3
Nitrobenzene	ND		33.3
Isophorone	ND		33.3
2-Nitrophenol	ND		33.3
2,4-Dimethylphenol	ND		33.3
bis(2-Chloroethoxy)methane	ND		33.3
Benzoic acid	ND		33.3
2,4-Dichlorophenol	ND		33.3
1,2,4-Trichlorobenzene	ND		33.3
Naphthalene	ND		33.3
4-Chloroaniline	ND		33.3
Hexachlorobutadiene	ND		33.3
4-Chloro-3-methylphenol	ND		33.3
2-Methylnaphthalene	ND		33.3
Hexachlorocyclopentadiene	ND		33.3
2,4,6-Trichlorophenol	ND		33.3
2,4,5-Trichlorophenol	ND		33.3
2-Chloronaphthalene	ND		33.3
2-Nitroaniline	ND		33.3
Dimethylphthalate	ND		33.3
2,6-Dinitrotoluene	ND		33.3
Acenaphthylene	ND		33.3

000178

2269

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/04/2001
Date Analyzed: 04/04/2001
Data file: B1759.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		33.3
Acenaphthene	ND		33.3
2,4-Dinitrophenol	ND		33.3
4-Nitrophenol	ND		33.3
2,4-Dinitrotoluene	ND		33.3
Dibenzofuran	ND		33.3
Diethylphthalate	ND		33.3
Fluorene	ND		33.3
4-Chlorophenyl-phenylether	ND		33.3
4-Nitroaniline	ND		33.3
4,6-Dinitro-2-methylphenol	ND		33.3
N-Nitrosodiphenylamine	ND		33.3
1,2-Diphenylhydrazine/Azobenzene	ND		33.3
4-Bromophenyl-phenylether	ND		33.3
Hexachlorobenzene	ND		33.3
Pentachlorophenol	ND		33.3
Phenanthrene	ND		33.3
Anthracene	ND		33.3
Carbazole	ND		33.3
Di-n-butylphthalate	ND		33.3
Fluoranthene	ND		33.3
Benzidine	ND		33.3
Pyrene	ND		33.3
3,3'-Dimethylbenzidine	ND		33.3
Butylbenzylphthalate	ND		33.3
3,3'-Dichlorobenzidine	ND		33.3
Benzo[a]anthracene	ND		33.3
Chrysene	ND		33.3
bis(2-Ethylhexyl)phthalate	ND		33.3
Di-n-octylphthalate	ND		33.3
Benzo[b]fluoranthene	ND		33.3
Benzo[k]fluoranthene	ND		33.3
Benzo[a]pyrene	ND		33.3
Indeno[1,2,3-cd]pyrene	ND		33.3
Dibenz[a,h]anthracene	ND		33.3
Benzo[g,h,i]perylene	ND		33.3

Total Target Compounds: 0

000179

2270

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/04/2001
Date Analyzed: 04/04/2001
Data file: B1759.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

000180

2271

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: B1815.D

Instrument ID: MSDA

Date Extracted: 04/05/01

Matrix: SOIL

Date Analyzed: 04/05/2001

Time Analyzed: 18:29

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S-55	2092-011	04/05/2001	18:29
WC-COMP	2111-001	04/05/2001	18:43
S-55	2092-011	04/06/2001	11:44

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/05/2001
Date Analyzed: 04/05/2001
Data file: B1814.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		33.3
Phenol	ND		33.3
Aniline	ND		33.3
bis(2-Chloroethyl)ether	ND		33.3
2-Chlorophenol	ND		33.3
1,3-Dichlorobenzene	ND		33.3
1,4-Dichlorobenzene	ND		33.3
Benzyl alcohol	ND		33.3
1,2-Dichlorobenzene	ND		33.3
2-Methylphenol	ND		33.3
bis(2-chloroisopropyl)ether	ND		33.3
4-Methylphenol	ND		33.3
N-Nitroso-di-n-propylamine	ND		33.3
Hexachloroethane	ND		33.3
Nitrobenzene	ND		33.3
Isophorone	ND		33.3
2-Nitrophenol	ND		33.3
2,4-Dimethylphenol	ND		33.3
bis(2-Chloroethoxy)methane	ND		33.3
Benzoic acid	ND		33.3
2,4-Dichlorophenol	ND		33.3
1,2,4-Trichlorobenzene	ND		33.3
Naphthalene	ND		33.3
4-Chloroaniline	ND		33.3
Hexachlorobutadiene	ND		33.3
4-Chloro-3-methylphenol	ND		33.3
2-Methylnaphthalene	ND		33.3
Hexachlorocyclopentadiene	ND		33.3
2,4,6-Trichlorophenol	ND		33.3
2,4,5-Trichlorophenol	ND		33.3
2-Chloronaphthalene	ND		33.3
2-Nitroaniline	ND		33.3
Dimethylphthalate	ND		33.3
2,6-Dinitrotoluene	ND		33.3
Acenaphthylene	ND		33.3

000182

2273

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/05/2001
Date Analyzed: 04/05/2001
Data file: B1814.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		33.3
Acenaphthene	ND		33.3
2,4-Dinitrophenol	ND		33.3
4-Nitrophenol	ND		33.3
2,4-Dinitrotoluene	ND		33.3
Dibenzofuran	ND		33.3
Diethylphthalate	ND		33.3
Fluorene	ND		33.3
4-Chlorophenyl-phenylether	ND		33.3
4-Nitroaniline	ND		33.3
4,6-Dinitro-2-methylphenol	ND		33.3
N-Nitrosodiphenylamine	ND		33.3
1,2-Diphenylhydrazine/Azobenzene	ND		33.3
4-Bromophenyl-phenylether	ND		33.3
Hexachlorobenzene	ND		33.3
Pentachlorophenol	ND		33.3
Phenanthrene	ND		33.3
Anthracene	ND		33.3
Carbazole	ND		33.3
Di-n-butylphthalate	ND		33.3
Fluoranthene	ND		33.3
Benzidine	ND		33.3
Pyrene	ND		33.3
3,3'-Dimethylbenzidine	ND		33.3
Butylbenzylphthalate	ND		33.3
3,3'-Dichlorobenzidine	ND		33.3
Benzo[a]anthracene	ND		33.3
Chrysene	ND		33.3
bis(2-Ethylhexyl)phthalate	ND		33.3
Di-n-octylphthalate	ND		33.3
Benzo[b]fluoranthene	ND		33.3
Benzo[k]fluoranthene	ND		33.3
Benzo[a]pyrene	ND		33.3
Indeno[1,2,3-cd]pyrene	ND		33.3
Dibenz[a,h]anthracene	ND		33.3
Benzo[g,h,i]perylene	ND		33.3

Total Target Compounds: 0

2274

000183

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/05/2001
Date Analyzed: 04/05/2001
Date File: B1814.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

000184

2275

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: B1821.D

Instrument ID: MSDA

Date Extracted: 04/06/01

Matrix: SOIL

Date Analyzed: 04/06/2001

Time Analyzed: 11:58

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
STR-1	2117-001	04/06/2001	12:16
STR-2	2117-002	04/06/2001	12:30
STR-3	2117-003	04/06/2001	12:45
STR-5	2117-005	04/06/2001	13:00
STR-6	2117-006	04/06/2001	13:14
STR-7	2117-007	04/06/2001	13:29
B-6F	2028-006	04/06/2001	13:43
S-45	2092-001	04/06/2001	13:57
S-46	2092-002	04/06/2001	14:12
S-47	2092-003	04/06/2001	14:26
S-48	2092-004	04/06/2001	14:40
S-49	2092-005	04/06/2001	14:55
S-46	2092-002MS	04/06/2001	15:09
S-46	2092-002MSD	04/06/2001	15:24
STR-4	2117-004	04/06/2001	15:38

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1821.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		33.3
Phenol	ND		33.3
Aniline	ND		33.3
bis(2-Chloroethyl)ether	ND		33.3
2-Chlorophenol	ND		33.3
1,3-Dichlorobenzene	ND		33.3
1,4-Dichlorobenzene	ND		33.3
Benzyl alcohol	ND		33.3
1,2-Dichlorobenzene	ND		33.3
2-Methylphenol	ND		33.3
bis(2-chloroisopropyl)ether	ND		33.3
4-Methylphenol	ND		33.3
N-Nitroso-di-n-propylamine	ND		33.3
Hexachloroethane	ND		33.3
Nitrobenzene	ND		33.3
Isophorone	ND		33.3
2-Nitrophenol	ND		33.3
2,4-Dimethylphenol	ND		33.3
bis(2-Chloroethoxy)methane	ND		33.3
Benzoic acid	ND		33.3
2,4-Dichlorophenol	ND		33.3
1,2,4-Trichlorobenzene	ND		33.3
Naphthalene	ND		33.3
4-Chloroaniline	ND		33.3
Hexachlorobutadiene	ND		33.3
4-Chloro-3-methylphenol	ND		33.3
2-Methylnaphthalene	ND		33.3
Hexachlorocyclopentadiene	ND		33.3
2,4,6-Trichlorophenol	ND		33.3
2,4,5-Trichlorophenol	ND		33.3
2-Chloronaphthalene	ND		33.3
2-Nitroaniline	ND		33.3
Dimethylphthalate	ND		33.3
2,6-Dinitrotoluene	ND		33.3
Acenaphthylene	ND		33.3

000186

2277

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1821.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		33.3
Acenaphthene	ND		33.3
2,4-Dinitrophenol	ND		33.3
4-Nitrophenol	ND		33.3
2,4-Dinitrotoluene	ND		33.3
Dibenzofuran	ND		33.3
Diethylphthalate	ND		33.3
Fluorene	ND		33.3
4-Chlorophenyl-phenylether	ND		33.3
4-Nitroaniline	ND		33.3
4,6-Dinitro-2-methylphenol	ND		33.3
N-Nitrosodiphenylamine	ND		33.3
1,2-Diphenylhydrazine/Azobenzene	ND		33.3
4-Bromophenyl-phenylether	ND		33.3
Hexachlorobenzene	ND		33.3
Pentachlorophenol	ND		33.3
Phenanthrene	ND		33.3
Anthracene	ND		33.3
Carbazole	ND		33.3
Di-n-butylphthalate	ND		33.3
Fluoranthene	ND		33.3
Benzidine	ND		33.3
Pyrene	ND		33.3
3,3'-Dimethylbenzidine	ND		33.3
Butylbenzylphthalate	ND		33.3
3,3'-Dichlorobenzidine	ND		33.3
Benzo[a]anthracene	ND		33.3
Chrysene	ND		33.3
bis(2-Ethylhexyl)phthalate	ND		33.3
Di-n-octylphthalate	ND		33.3
Benzo[b]fluoranthene	ND		33.3
Benzo[k]fluoranthene	ND		33.3
Benzo[a]pyrene	ND		33.3
Indeno[1,2,3-cd]pyrene	ND		33.3
Dibenz[a,h]anthracene	ND		33.3
Benzo[g,h,i]perylene	ND		33.3

Total Target Compounds: 0

000187

2278

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: B1821.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

2279

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: B2021.D

Instrument ID: MSDA

Date Extracted: 04/12/01

Matrix: SOIL

Date Analyzed: 04/13/2001

Time Analyzed: 13:14

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
TP-1	2292-002	04/13/2001	13:30
CCC5-CS1_3-7'	2303-001	04/13/2001	13:45
CCC5-CS2_3-7'	2303-002	04/13/2001	14:01
CCC5-CS3_3-7'	2303-003	04/13/2001	14:17
CCC5-GS3_3-7'	2303-006	04/13/2001	14:32
AOC-S1	2293-009	04/13/2001	14:48
AOC-S2	2293-010	04/13/2001	15:04
AOC-S3	2293-011	04/13/2001	15:20
5-7A_1.5-2'	2294-017	04/13/2001	15:35
5-7A1_1.5-2'	2294-018	04/13/2001	15:51
5-7B_3.5-4'	2294-019	04/13/2001	16:06
5-7C_5.5-6'	2294-020	04/13/2001	16:22
S-51	2092-007	04/13/2001	16:38
S-54	2092-010	04/13/2001	16:53
S-4B	2254-001	04/13/2001	17:09
T-1	2254-002	04/13/2001	17:25
T-2	2254-003	04/13/2001	17:40
TP-1	2292-002MS	04/13/2001	17:56
TP-1	2292-002MSD	04/13/2001	18:11
S-51	2092-007	04/13/2001	21:19

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/12/2001
Date Analyzed: 04/13/2001
Data file: B2021.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		33.3
Phenol	ND		33.3
Aniline	ND		33.3
bis(2-Chloroethyl)ether	ND		33.3
2-Chlorophenol	ND		33.3
1,3-Dichlorobenzene	ND		33.3
1,4-Dichlorobenzene	ND		33.3
Benzyl alcohol	ND		33.3
1,2-Dichlorobenzene	ND		33.3
2-Methylphenol	ND		33.3
bis(2-chloroisopropyl)ether	ND		33.3
4-Methylphenol	ND		33.3
N-Nitroso-di-n-propylamine	ND		33.3
Hexachloroethane	ND		33.3
Nitrobenzene	ND		33.3
Isophorone	ND		33.3
2-Nitrophenol	ND		33.3
2,4-Dimethylphenol	ND		33.3
bis(2-Chloroethoxy)methane	ND		33.3
Benzoic acid	ND		33.3
2,4-Dichlorophenol	ND		33.3
1,2,4-Trichlorobenzene	ND		33.3
Naphthalene	ND		33.3
4-Chloroaniline	ND		33.3
Hexachlorobutadiene	ND		33.3
4-Chloro-3-methylphenol	ND		33.3
2-Methylnaphthalene	ND		33.3
Hexachlorocyclopentadiene	ND		33.3
2,4,6-Trichlorophenol	ND		33.3
2,4,5-Trichlorophenol	ND		33.3
2-Chloronaphthalene	ND		33.3
2-Nitroaniline	ND		33.3
Dimethylphthalate	ND		33.3
2,6-Dinitrotoluene	ND		33.3
Acenaphthylene	ND		33.3

2281

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/12/2001
Date Analyzed: 04/13/2001
Data file: B2021.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		33.3
Acenaphthene	ND		33.3
2,4-Dinitrophenol	ND		33.3
4-Nitrophenol	ND		33.3
2,4-Dinitrotoluene	ND		33.3
Dibenzofuran	ND		33.3
Diethylphthalate	ND		33.3
Fluorene	ND		33.3
4-Chlorophenyl-phenylether	ND		33.3
4-Nitroaniline	ND		33.3
4,6-Dinitro-2-methylphenol	ND		33.3
N-Nitrosodiphenylamine	ND		33.3
1,2-Diphenylhydrazine/Azobenzene	ND		33.3
4-Bromophenyl-phenylether	ND		33.3
Hexachlorobenzene	ND		33.3
Pentachlorophenol	ND		33.3
Phenanthrene	ND		33.3
Anthracene	ND		33.3
Carbazole	ND		33.3
Di-n-butylphthalate	ND		33.3
Fluoranthene	ND		33.3
Benzidine	ND		33.3
Pyrene	ND		33.3
3,3'-Dimethylbenzidine	ND		33.3
Butylbenzylphthalate	ND		33.3
3,3'-Dichlorobenzidine	ND		33.3
Benzo[a]anthracene	ND		33.3
Chrysene	ND		33.3
bis(2-Ethylhexyl)phthalate	ND		33.3
Di-n-octylphthalate	ND		33.3
Benzo[b]fluoranthene	ND		33.3
Benzo[k]fluoranthene	ND		33.3
Benzo[a]pyrene	ND		33.3
Indeno[1,2,3-cd]pyrene	ND		33.3
Dibenz[a,h]anthracene	ND		33.3
Benzo[g,h,i]perylene	ND		33.3

Total Target Compounds: 0

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/12/2001
Date Analyzed: 04/13/2001
Data file: B2021.D

GC/MS Column: DB-5
Sample wt/vol: 30.0g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 0.0

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

Z283

Response Factor Report MSD_B

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 09:42:41 2001
Response via : Initial Calibration

Calibration Files
160 =B1650.D 80 =B1647.D 50 =B1646.D
20 =B1648.D 120 =B1649.D

		Compound	160	80	50	20	120	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD						
2)	T	N-Nitrosodimethylam	0.514	0.613	0.713	0.688	0.598	0.625	12.63
3)	T	Pyridine	0.579	0.665	0.663	0.661	0.624	0.638	5.84
4)	S	2-Fluorophenol	1.218	1.152	1.145	1.086	1.153	1.151	4.07
5)	T	Benzaldehyde	0.888	0.877	1.051	1.075	0.968	0.972	9.35
6)	S	Phenol-d5	1.419	1.402	1.410	1.433	1.380	1.409	1.42
7)	MC	Phenol	1.479	1.457	1.594	1.486	1.539	1.511	3.66
8)	T	Aniline	1.649	1.858	1.984	1.969	1.805	1.853	7.37
9)	T	bis(2-Chloroethyl)e	1.023	1.088	1.142	1.201	1.136	1.118	5.96
10)	M	2-Chlorophenol	1.062	1.227	1.296	1.335	1.279	1.240	8.60
11)	T	1,3-Dichlorobenzene	1.154	1.361	1.450	1.488	1.282	1.347	9.97
12)	MC	1,4-Dichlorobenzene	1.182	1.414	1.479	1.522	1.275	1.375	10.35
13)	T	Benzyl alcohol	0.724	0.795	0.908	0.855	0.797	0.816	8.50
14)	T	1,2-Dichlorobenzene	1.116	1.342	1.408	1.456	1.233	1.311	10.49
15)	T	2-Methylphenol	0.999	1.156	1.254	1.246	1.125	1.156	9.00
16)	T	bis(2-chloroisoprop	0.945	1.185	1.299	1.349	1.075	1.171	14.07
17)	T	4-Methylphenol	1.069	1.398	1.408	1.804	1.282	1.392	19.22
[illegible]	MP	N-Nitroso-di-n-prop	0.566	0.768	0.664	0.919	0.704	0.724	18.16
[illegible]	T	Acetophenone	1.562	1.778	1.910	1.901	1.752	1.781	7.93
20)	T	2-Aminotoluene +4-A	2.501	2.856	3.699	3.862	2.721	3.128	19.56
21)	T	Hexachloroethane	0.386	0.506	0.521	0.536	0.471	0.484	12.36
22)	I	Naphthalene-d8	ISTD						
23)	S	Nitrobenzene-d5	0.292	0.286	0.317	0.272	0.284	0.290	5.66
24)	T	Nitrobenzene	0.227	0.317	0.284	0.295	0.279	0.280	11.89
25)	T	Isophorone	0.507	0.584	0.607	0.604	0.567	0.574	7.06
26)	TC	2-Nitrophenol	0.160	0.179	0.192	0.173	0.186	0.178	6.82
27)	T	2,4-Dimethylphenol	0.262	0.308	0.332	0.320	0.296	0.303	8.86
28)	T	bis(2-Chloroethoxy)	0.305	0.358	0.376	0.372	0.346	0.352	8.15
29)	T	Benzoic acid	0.139	0.187	0.171	0.123	0.122	0.148	19.80
30)	T	2,4-Dimethylaniline	0.424	0.508	0.544	0.584	0.488	0.510	11.82
31)	TC	2,4-Dichlorophenol	0.217	0.261	0.268	0.279	0.260	0.257	9.26
32)	M	1,2,4-Trichlorobenz	0.253	0.297	0.317	0.326	0.276	0.294	10.19
33)	T	Naphthalene	0.765	0.881	0.965	0.996	0.793	0.880	11.57
34)	T	4-Chloroaniline	0.336	0.418	0.469	0.437	0.390	0.410	12.32
35)	TC	Hexachlorobutadiene	0.139	0.173	0.185	0.189	0.164	0.170	11.67
36)	T	Caprolactam	0.107	0.128	0.142	0.132	0.124	0.127	10.16
37)	MC	4-Chloro-3-methylph	0.256	0.258	0.296	0.289	0.270	0.274	6.60
38)	T	2-Methylnaphthalene	0.538	0.659	0.724	0.702	0.569	0.638	12.80
39)	I	Acenaphthene-d10	ISTD						
40)	TP	Hexachlorocyclopent	0.563	0.593	0.648	0.654	0.592	0.610	6.46
41)	TC	2,4,6-Trichlorophen	0.285	0.337	0.335	0.373	0.314	0.329	9.84
[illegible]	T	2,4,5-Trichlorophen	0.285	0.353	0.388	0.361	0.347	0.347	10.96
[illegible]	S	2-Fluorobiphenyl	1.121	1.093	1.113	1.073	1.096	1.099	1.67
44)	T	1-1'-Biphenyl	0.822	0.945	1.141	1.318	1.037	1.053	17.95
45)	T	2-Chloronaphthalene	0.679	0.835	0.897	1.028	0.749	0.837	16.08
46)	T	2-Nitroaniline	0.234	0.252	0.242	0.239	0.213	0.236	6.16
47)	T	Dimethylphthalate	0.999	1.109	1.234	1.289	1.116	1.149	9.89

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48)	T	2,6-Dinitrotoluene	0.216	0.257	0.263	0.271	0.207	0.243	11.97
49)	T	Acenaphthylene	1.217	1.346	1.636	1.707	1.264	1.434	15.57
50)	T	3-Nitroaniline	0.272	0.314	0.347	0.329	0.255	0.303	12.74
51)	MC	Acenaphthene	0.707	0.920	0.937	1.071	0.873	0.902	14.55
52)	T	2,4-Dinitrophenol	0.102	0.113	0.098	0.077	0.130	0.104	18.92
53)	MP	4-Nitrophenol	0.169	0.167	0.184	0.184	0.175	0.176	4.49
54)	M	2,4-Dinitrotoluene	0.284	0.313	0.341	0.341	0.363	0.328	9.29
,	T	Dibenzofuran	1.133	1.373	1.449	1.598	1.189	1.348	14.10
56)	T	Diethylphthalate	0.946	1.149	1.232	1.316	1.067	1.142	12.59
57)	T	Fluorene	0.822	0.998	1.124	1.289	0.902	1.027	17.97
58)	T	4-Chlorophenyl-phen	0.365	0.498	0.549	0.613	0.444	0.494	19.31
59)	T	4-Nitroaniline	0.285	0.307	0.313	0.320	0.329	0.311	5.35
60)	I	Phenanthrene-d10	----------ISTD----------						
61)	T	4,6-Dinitro-2-methy	0.078	0.095	0.091	0.073	0.093	0.086	11.15
62)	TC	N-Nitrosodiphenylam	0.356	0.429	0.442	0.469	0.368	0.413	11.77
63)	T	1,2-Diphenylhydrazi	0.477	0.605	0.605	0.651	0.521	0.572	12.35
64)	S	2,4,6-Tribromopheno	0.131	0.138	0.132	0.132	0.133	0.133	2.13
65)	T	4-Bromophenyl-pheny	0.156	0.181	0.192	0.202	0.173	0.181	9.76
66)	T	Hexachlorobenzene	0.182	0.220	0.233	0.251	0.210	0.219	11.75
67)	T	Atrazine	0.240	0.300	0.297	0.178	0.265	0.256	19.48
68)	MC	Pentachlorophenol	0.126	0.143	0.146	0.137	0.140	0.138	5.47
69)	T	Phenanthrene	0.645	0.805	0.911	0.955	0.800	0.823	14.59
70)	T	Anthracene	0.719	0.809	0.884	0.958	0.753	0.825	11.79
71)	T	Carbazole	0.666	0.733	0.804	0.892	0.699	0.759	11.90
72)	T	Di-n-butylphthalate	0.822	0.993	1.024	1.085	0.932	0.971	10.30
73)	TC	Fluoranthene	0.774	0.851	0.931	0.983	0.850	0.878	9.23
74)	T	Benzidine	0.476	0.549	0.553	0.388	0.540	0.501	14.10
75)	I	Chrysene-d12	----------ISTD----------						
76)	M	Pyrene	0.952	1.016	1.112	1.151	1.038	1.054	7.48
77)	S	Terphenyl-d14	1.031	0.957	0.928	0.890	0.963	0.954	5.43
78)	T	3,3'-Dimethylbenzid	0.503	0.551	0.489	0.435	0.520	0.499	8.56
79)	T	Butylbenzylphthalat	0.452	0.496	0.516	0.498	0.487	0.490	4.83
80)	T	3,3'-Dichlorobenzid	0.291	0.343	0.366	0.384	0.329	0.343	10.41
81)	T	Benzo[a]anthracene	0.849	0.967	1.024	0.994	0.968	0.961	6.92
82)	T	Chrysene	0.778	0.876	0.905	1.010	0.861	0.886	9.47
83)	T	bis(2-Ethylhexyl)ph	0.637	0.692	0.715	0.674	0.687	0.681	4.23
84)	I	Perylene-d12	----------ISTD----------						
85)	TC	Di-n-octylphthalate	0.964	1.074	0.921	0.823	0.989	0.954	9.67
86)	T	Benzo[b]fluoranthen	1.128	1.362	0.969	0.958	0.995	1.082	15.75
87)	T	Benzo[k]fluoranthen	0.719	0.996	0.966	0.991	0.942	0.923	12.58
88)	TC	Benzo[a]pyrene	0.724	0.869	0.893	0.873	0.816	0.835	8.18
89)	T	Indeno[1,2,3-cd]pyr	0.896	0.910	0.797	0.836	0.811	0.850	5.94
90)	T	Dibenz[a,h]anthrace	0.848	0.865	0.778	0.822	0.773	0.817	5.03
91)	T	Benzo[g,h,i]perylen	0.783	0.807	0.669	0.713	0.707	0.736	7.78

(#) = Out of Range

BS1201.M Mon Apr 02 09:42:54 2001 MSD_B

Instrument ID: MSD_B
Method ID: BS1201.M
Date: 04/02/2001

Average %RSD = 10.91

Refer to SW846 Method 8000B Section 7.5.1.

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Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-04-01\B1748.D
Acq On : 4 Apr 2001 11:03
Sample : .,BNA-STD-INJ-FOR-04/04/01
Misc :
MS Integration Params: rteint.p

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Multiple Level Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	152	0.00
2	T	N-Nitrosodimethylamine	0.625	0.740	-18.4	158	0.01
3	T	Pyridine	0.638	0.700	-9.7	160	0.01
4	S	2-Fluorophenol	1.151	1.161	-0.9	154	0.00
6	S	Phenol-d5	1.409	1.344	4.6	145	0.00
7	MC	Phenol	1.511	1.735	-14.8	165	0.00
8	T	Aniline	1.853	1.919	-3.6	147	0.00
9	T	bis(2-Chloroethyl)ether	1.118	1.168	-4.5	155	0.00
10	M	2-Chlorophenol	1.240	1.317	-6.2	154	0.00
11	T	1,3-Dichlorobenzene	1.347	1.477	-9.7	155	0.00
12	MC	1,4-Dichlorobenzene	1.375	1.465	-6.5	151	0.00
13	T	Benzyl alcohol	0.816	0.800	2.0	134	0.00
14	T	1,2-Dichlorobenzene	1.311	1.383	-5.5	149	0.00
15	T	2-Methylphenol	1.156	1.119	3.2	135	-0.02
16	T	bis(2-chloroisopropyl)ether	1.171	1.238	-5.7	145	0.00
17	T	4-Methylphenol	1.392	1.163	16.5	126	-0.02
18	MP	N-Nitroso-di-n-propylamine	0.724	0.607	16.2	139	-0.02
20	T	2-Aminotoluene +4-Aminotolu	3.128	2.924	6.5	120	-0.01
21	T	Hexachloroethane	0.484	0.544	-12.4	159	0.00
22	I	Naphthalene-d8	1.000	1.000	0.0	139	0.00
23	S	Nitrobenzene-d5	0.290	0.335	-15.5	146	-0.01
24	T	Nitrobenzene	0.280	0.282	-0.7	138	-0.01
25	T	Isophorone	0.574	0.570	0.7	130	-0.01
26	TC	2-Nitrophenol	0.178	0.191	-7.3	138	0.00
27	T	2,4-Dimethylphenol	0.303	0.328	-8.3	137	-0.01
28	T	bis(2-Chloroethoxy)methane	0.352	0.361	-2.6	133	-0.01
29	T	Benzoic acid	0.148	0.159	-7.4	129	-0.01
30	T	2,4-Dimethylaniline	0.510	0.503	1.4	128	-0.01
31	TC	2,4-Dichlorophenol	0.257	0.255	0.8	132	-0.02
32	M	1,2,4-Trichlorobenzene	0.294	0.321	-9.2	141	-0.01
33	T	Naphthalene	0.880	0.887	-0.8	128	-0.01
34	T	4-Chloroaniline	0.410	0.383	6.6	113	-0.01
35	TC	Hexachlorobutadiene	0.170	0.193	-13.5	145	0.00
37	MC	4-Chloro-3-methylphenol	0.274	0.272	0.7	127	-0.02
38	T	2-Methylnaphthalene	0.638	0.638	0.0	122	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	118	0.00
40	TP	Hexachlorocyclopentadiene	0.610	0.557	8.7	102	0.00
41	TC	2,4,6-Trichlorophenol	0.329	0.364	-10.6	128	-0.01
42	T	2,4,5-Trichlorophenol	0.347	0.364	-4.9	111	-0.01
43	S	2-Fluorobiphenyl	1.099	1.201	-9.3	128	0.00
45		2-Chloronaphthalene	0.837	0.992	-18.5	131	-0.01
46	T	2-Nitroaniline	0.236	0.221	6.4	108	-0.02
47	T	Dimethylphthalate	1.149	1.186	-3.2	114	-0.01
48	T	2,6-Dinitrotoluene	0.243	0.204	16.0	92	-0.02
49	T	Acenaphthylene	1.434	1.687	-17.6	122	0.00

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50	T	3-Nitroaniline	0.303	0.263	13.2	90	-0.02
51	MC	Acenaphthene	0.902	0.928	-2.9	117	-0.01
52	T	2,4-Dinitrophenol	0.104	0.089	14.4	107	-0.01
53	MP	4-Nitrophenol	0.176	0.166	5.7	107	-0.02
54	M	2,4-Dinitrotoluene	0.328	0.270	17.7	94	-0.01
[redacted]	T	Dibenzofuran	1.348	1.432	-6.2	117	-0.01
[redacted]	T	Diethylphthalate	1.142	1.130	1.1	108	-0.01
[redacted]	T	Fluorene	1.027	1.087	-5.8	114	-0.01
58	T	4-Chlorophenyl-phenylether	0.494	0.501	-1.4	108	-0.01
59	T	4-Nitroaniline	0.311	0.269	13.5	102	-0.02
60	I	Phenanthrene-d10	1.000	1.000	0.0	100	-0.01
61	T	4,6-Dinitro-2-methylphenol	0.086	0.067	22.1	74	-0.02
62	TC	N-Nitrosodiphenylamine	0.413	0.466	-12.8	105	-0.02
63	T	1,2-Diphenylhydrazine/Azobe	0.572	0.629	-10.0	104	-0.01
64	S	2,4,6-Tribromophenol	0.133	0.127	4.5	96	-0.01
65	T	4-Bromophenyl-phenylether	0.181	0.218	-20.4	114	-0.01
66	T	Hexachlorobenzene	0.219	0.252	-15.1	108	-0.01
68	MC	Pentachlorophenol	0.138	0.153	-10.9	105	-0.01
69	T	Phenanthrene	0.823	0.897	-9.0	98	-0.01
70	T	Anthracene	0.825	0.941	-14.1	106	-0.02
71	T	Carbazole	0.759	0.788	-3.8	98	-0.01
72	T	Di-n-butylphthalate	0.971	1.026	-5.7	100	-0.02
73	TC	Fluoranthene	0.878	0.850	3.2	91	-0.02
74	T	Benzidine	0.501	0.518	-3.4	94	-0.02
75	I	Chrysene-d12	1.000	1.000	0.0	77	-0.03
76	M	Pyrene	1.054	1.199	-13.8	83	-0.02
77	S	Terphenyl-d14	0.954	1.075	-12.7	89	-0.01
78	T	3,3'-Dimethylbenzidine	0.499	0.668	-33.9	105	-0.03
79	T	Butylbenzylphthalate	0.490	0.539	-10.0	80	-0.02
[redacted]	T	3,3'-Dichlorobenzidine	0.343	0.401	-16.9	84	-0.03
[redacted]		Benzo[a]anthracene	0.961	1.061	-10.4	80	-0.02
82	T	Chrysene	0.886	0.921	-4.0	78	-0.03
83	T	bis(2-Ethylhexyl)phthalate	0.681	0.763	-12.0	82	-0.02
84	I	Perylene-d12	1.000	1.000	0.0	81	-0.02
85	TC	Di-n-octylphthalate	0.954	0.931	2.4	82	-0.02
86	T	Benzo[b]fluoranthene	1.082	0.958	11.5	81	-0.03
87	T	Benzo[k]fluoranthene	0.923	1.050	-13.8	89	-0.03
88	TC	Benzo[a]pyrene	0.835	0.940	-12.6	86	-0.03
89	T	Indeno[1,2,3-cd]pyrene	0.850	1.028	-20.9	105	-0.03
90	T	Dibenz[a,h]anthracene	0.817	0.777	4.9	81	-0.03
91	T	Benzo[g,h,i]perylene	0.736	0.885	-20.2	108	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

B1646.D BS1201.M Thu Apr 05 07:34:36 2001 MSD_B

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-05-01\B1785.D
Acq On : 5 Apr 2001 11:18
Sample : .,BNA-STD-INJ-FOR-04/05/01
Misc :
Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

S Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Multiple Level Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	168	0.00
2	T	N-Nitrosodimethylamine	0.625	0.597	4.5	140	0.01
3	T	Pyridine	0.638	0.656	-2.8	166	0.01
4	S	2-Fluorophenol	1.151	1.157	-0.5	169	0.00
5	T	Benzaldehyde	0.972	1.205	-24.0	189	0.00
6	S	Phenol-d5	1.409	1.261	10.5	150	0.00
7	MC	Phenol	1.511	1.593	-5.4	167	0.00
8	T	Aniline	1.853	1.844	0.5	156	0.00
9	T	bis(2-Chloroethyl)ether	1.118	1.184	-5.9	174	0.00
10	M	2-Chlorophenol	1.240	1.267	-2.2	164	0.00
11	T	1,3-Dichlorobenzene	1.347	1.483	-10.1	171	0.00
12	MC	1,4-Dichlorobenzene	1.375	1.438	-4.6	163	0.00
13	T	Benzyl alcohol	0.816	0.753	7.7	139	0.00
14	T	1,2-Dichlorobenzene	1.311	1.369	-4.4	163	0.00
15	T	2-Methylphenol	1.156	1.093	5.4	146	-0.01
16	T	bis(2-chloroisopropyl)ether	1.171	1.229	-5.0	159	0.00
17	T	4-Methylphenol	1.392	1.182	15.1	141	-0.02
18	MP	N-Nitroso-di-n-propylamine	0.724	0.533	26.4	135	-0.01
19	T	Acetophenone	1.781	1.630	8.5	143	-0.01
20	T	2-Aminotoluene +4-Aminotolu	3.128	3.043	2.7	138	0.00
21	T	Hexachloroethane	0.484	0.534	-10.3	172	0.00
22	I	Naphthalene-d8	1.000	1.000	0.0	146	0.00
23	S	Nitrobenzene-d5	0.290	0.321	-10.7	148	-0.01
24	T	Nitrobenzene	0.280	0.289	-3.2	149	-0.01
25	T	Isophorone	0.574	0.555	3.3	134	-0.01
26	TC	2-Nitrophenol	0.178	0.181	-1.7	137	-0.01
27	T	2,4-Dimethylphenol	0.303	0.319	-5.3	140	-0.01
28	T	bis(2-Chloroethoxy)methane	0.352	0.360	-2.3	140	-0.01
29	T	Benzoic acid	0.148	0.144	2.7	123	-0.01
30	T	2,4-Dimethylaniline	0.510	0.500	2.0	134	-0.01
31	TC	2,4-Dichlorophenol	0.257	0.248	3.5	135	-0.02
32	M	1,2,4-Trichlorobenzene	0.294	0.317	-7.8	147	-0.01
33	T	Naphthalene	0.880	0.851	3.3	129	-0.01
34	T	4-Chloroaniline	0.410	0.386	5.9	120	-0.01
35	TC	Hexachlorobutadiene	0.170	0.192	-12.9	152	0.00
36	T	Caprolactam	0.127	0.086	32.3	88	-0.04
37	MC	4-Chloro-3-methylphenol	0.274	0.235	14.2	116	-0.02
38	T	2-Methylnaphthalene	0.638	0.619	3.0	125	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	118	0.00
40	TP	Hexachlorocyclopentadiene	0.610	0.738	-21.0	134	-0.01
41	TC	2,4,6-Trichlorophenol	0.329	0.360	-9.4	126	-0.01
42	T	2,4,5-Trichlorophenol	0.347	0.379	-9.2	115	0.01
43	S	2-Fluorobiphenyl	1.099	1.215	-10.6	128	0.00
44	T	1-1'-Biphenyl	1.053	1.151	-9.3	119	-0.01
45	T	2-Chloronaphthalene	0.837	0.989	-18.2	130	0.00

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46	T	2-Nitroaniline	0.236	0.214	9.3	104	-0.02
47	T	Dimethylphthalate	1.149	1.115	3.0	106	-0.01
48	T	2,6-Dinitrotoluene	0.243	0.199	18.1	89	-0.02
49	T	Acenaphthylene	1.434	1.622	-13.1	116	0.00
50	T	3-Nitroaniline	0.303	0.267	11.9	90	-0.02
[illegible]	MC	Acenaphthene	0.902	0.903	-0.1	113	-0.01
[illegible]	T	2,4-Dinitrophenol	0.104	0.080	23.1	96	-0.01
53	MP	4-Nitrophenol	0.176	0.151	14.2	96	-0.02
54	M	2,4-Dinitrotoluene	0.328	0.243	25.9	84	-0.02
55	T	Dibenzofuran	1.348	1.387	-2.9	113	-0.01
56	T	Diethylphthalate	1.142	1.072	6.1	102	-0.01
57	T	Fluorene	1.027	1.023	0.4	107	-0.01
58	T	4-Chlorophenyl-phenylether	0.494	0.479	3.0	102	-0.01
59	T	4-Nitroaniline	0.311	0.264	15.1	99	-0.02
60	I	Phenanthrene-d10	1.000	1.000	0.0	95	-0.01
61	T	4,6-Dinitro-2-methylphenol	0.086	0.063	26.7	66	-0.02
62	TC	N-Nitrosodiphenylamine	0.413	0.473	-14.5	101	-0.02
63	T	1,2-Diphenylhydrazine/Azobe	0.572	0.691	-20.8	108	-0.01
64	S	2,4,6-Tribromophenol	0.133	0.132	0.8	95	-0.01
65	T	4-Bromophenyl-phenylether	0.181	0.212	-17.1	105	-0.01
66	T	Hexachlorobenzene	0.219	0.245	-11.9	99	-0.01
67	T	Atrazine	0.256	0.279	-9.0	89	-0.02
68	MC	Pentachlorophenol	0.138	0.141	-2.2	91	-0.01
69	T	Phenanthrene	0.823	0.872	-6.0	91	-0.01
70	T	Anthracene	0.825	0.878	-6.4	94	-0.02
71	T	Carbazole	0.759	0.730	3.8	86	-0.01
72	T	Di-n-butylphthalate	0.971	0.993	-2.3	92	-0.01
73	TC	Fluoranthene	0.878	0.815	7.2	83	-0.01
74	T	Benzidine	0.501	0.482	3.8	83	-0.02
[illegible]	I	Chrysene-d12	1.000	1.000	0.0	79	-0.01
[illegible]	M	Pyrene	1.054	1.081	-2.6	77	-0.01
77	S	Terphenyl-d14	0.954	0.901	5.6	77	0.00
78	T	3,3'-Dimethylbenzidine	0.499	0.561	-12.4	91	-0.01
79	T	Butylbenzylphthalate	0.490	0.503	-2.7	77	-0.01
80	T	3,3'-Dichlorobenzidine	0.343	0.391	-14.0	85	-0.01
81	T	Benzo[a]anthracene	0.961	0.981	-2.1	76	-0.01
82	T	Chrysene	0.886	0.911	-2.8	80	-0.02
83	T	bis(2-Ethylhexyl)phthalate	0.681	0.706	-3.7	78	0.00
84	I	Perylene-d12	1.000	1.000	0.0	88	-0.01
85	TC	Di-n-octylphthalate	0.954	0.857	10.2	82	-0.01
86	T	Benzo[b]fluoranthene	1.082	1.005	7.1	91	-0.02
87	T	Benzo[k]fluoranthene	0.923	0.848	8.1	77	-0.02
88	TC	Benzo[a]pyrene	0.835	0.881	-5.5	87	-0.02
89	T	Indeno[1,2,3-cd]pyrene	0.850	1.045	-22.9	115	-0.02
90	T	Dibenz[a,h]anthracene	0.817	0.973	-19.1	110	-0.02
91	T	Benzo[g,h,i]perylene	0.736	0.906	-23.1	119	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

B1646.D BS1201.M Fri Apr 06 06:15:27 2001 MSD_B

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1818.D
Acq On : 6 Apr 2001 11:12
Sample : .,BNA-STD-INJ-FOR-04/06/01
Misc :
S Integration Params: rteint.p

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Multiple Level Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	162	0.00
2	T	N-Nitrosodimethylamine	0.625	0.641	-2.6	145	0.00
3	T	Pyridine	0.638	0.687	-7.7	167	0.00
4	S	2-Fluorophenol	1.151	1.177	-2.3	166	0.00
5	T	Benzaldehyde	0.972	1.219	-25.4	168	0.00
6	S	Phenol-d5	1.409	1.309	7.1	150	0.00
7	MC	Phenol	1.511	1.693	-12.0	172	0.00
8	T	Aniline	1.853	1.928	-4.0	157	0.00
9	T	bis(2-Chloroethyl)ether	1.118	1.157	-3.5	164	0.00
10	M	2-Chlorophenol	1.240	1.231	0.7	153	0.00
11	T	1,3-Dichlorobenzene	1.347	1.394	-3.5	155	0.00
12	MC	1,4-Dichlorobenzene	1.375	1.471	-7.0	161	0.00
13	T	Benzyl alcohol	0.816	0.832	-2.0	148	0.00
14	T	1,2-Dichlorobenzene	1.311	1.329	-1.4	153	0.00
15	T	2-Methylphenol	1.156	1.151	0.4	148	-0.01
16	T	bis(2-chloroisopropyl)ether	1.171	1.233	-5.3	153	-0.01
[illegible]	T	4-Methylphenol	1.392	1.200	13.8	138	-0.02
[illegible]	MP	N-Nitroso-di-n-propylamine	0.724	0.613	15.3	149	-0.02
19	T	Acetophenone	1.781	1.737	2.5	147	-0.02
20	T	2-Aminotoluene +4-Aminotolu	3.128	2.981	4.7	130	-0.01
21	T	Hexachloroethane	0.484	0.527	-8.9	164	0.00
22	I	Naphthalene-d8	1.000	1.000	0.0	147	0.00
23	S	Nitrobenzene-d5	0.290	0.293	-1.0	136	-0.01
24	T	Nitrobenzene	0.280	0.268	4.3	139	-0.01
25	T	Isophorone	0.574	0.580	-1.0	141	-0.01
26	TC	2-Nitrophenol	0.178	0.175	1.7	134	-0.01
27	T	2,4-Dimethylphenol	0.303	0.320	-5.6	142	-0.01
28	T	bis(2-Chloroethoxy)methane	0.352	0.372	-5.7	146	-0.01
29	T	Benzoic acid	0.148	0.160	-8.1	138	-0.01
30	T	2,4-Dimethylaniline	0.510	0.517	-1.4	140	-0.01
31	TC	2,4-Dichlorophenol	0.257	0.257	0.0	141	-0.02
32	M	1,2,4-Trichlorobenzene	0.294	0.313	-6.5	146	-0.01
33	T	Naphthalene	0.880	0.892	-1.4	136	-0.01
34	T	4-Chloroaniline	0.410	0.391	4.6	123	-0.01
35	TC	Hexachlorobutadiene	0.170	0.190	-11.8	152	0.00
36	T	Caprolactam	0.127	0.098	22.8	102	-0.04
37	MC	4-Chloro-3-methylphenol	0.274	0.256	6.6	128	-0.02
38	T	2-Methylnaphthalene	0.638	0.679	-6.4	138	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	125	0.00
[illegible]	TP	Hexachlorocyclopentadiene	0.610	0.628	-3.0	121	-0.01
[illegible]	TC	2,4,6-Trichlorophenol	0.329	0.373	-13.4	139	-0.01
42	T	2,4,5-Trichlorophenol	0.347	0.365	-5.2	117	0.00
43	S	2-Fluorobiphenyl	1.099	1.200	-9.2	134	0.00
44	T	1-1'-Biphenyl	1.053	1.115	-5.9	122	-0.01
45	T	2-Chloronaphthalene	0.837	0.965	-15.3	134	-0.01
46	T	2-Nitroaniline	0.236	0.215	8.9	110	-0.02

47	T	Dimethylphthalate	1.149	1.161	-1.0	117	-0.01
48	T	2,6-Dinitrotoluene	0.243	0.203	16.5	96	-0.02
49	T	Acenaphthylene	1.434	1.649	-15.0	126	0.00
50	T	3-Nitroaniline	0.303	0.278	8.3	100	-0.02
51	MC	Acenaphthene	0.902	0.927	-2.8	123	-0.01
	T	2,4-Dinitrophenol	0.104	0.070	32.7	89	-0.02
	MP	4-Nitrophenol	0.176	0.145	17.6	99	-0.02
	M	2,4-Dinitrotoluene	0.328	0.239	27.1	87	-0.02
55	T	Dibenzofuran	1.348	1.420	-5.3	122	-0.01
56	T	Diethylphthalate	1.142	1.112	2.6	112	-0.01
57	T	Fluorene	1.027	1.015	1.2	113	-0.01
58	T	4-Chlorophenyl-phenylether	0.494	0.507	-2.6	115	-0.01
59	T	4-Nitroaniline	0.311	0.268	13.8	107	-0.02
60	I	Phenanthrene-d10	1.000	1.000	0.0	102	-0.01
61	T	4,6-Dinitro-2-methylphenol	0.086	0.061	29.1	68	-0.02
62	TC	N-Nitrosodiphenylamine	0.413	0.465	-12.6	107	-0.02
63	T	1,2-Diphenylhydrazine/Azobe	0.572	0.640	-11.9	108	-0.01
64	S	2,4,6-Tribromophenol	0.133	0.131	1.5	101	-0.01
65	T	4-Bromophenyl-phenylether	0.181	0.213	-17.7	113	-0.01
66	T	Hexachlorobenzene	0.219	0.251	-14.6	110	-0.01
67	T	Atrazine	0.256	0.306	-19.5	105	-0.02
68	MC	Pentachlorophenol	0.138	0.138	0.0	96	-0.01
69	T	Phenanthrene	0.823	0.858	-4.3	96	-0.02
70	T	Anthracene	0.825	0.884	-7.2	102	-0.02
71	T	Carbazole	0.759	0.738	2.8	94	-0.01
72	T	Di-n-butylphthalate	0.971	0.991	-2.1	99	-0.01
73	TC	Fluoranthene	0.878	0.772	12.1	84	-0.02
74	T	Benzidine	0.501	0.453	9.6	83	-0.02
75	I	Chrysene-d12	1.000	1.000	0.0	77	-0.02
	M	Pyrene	1.054	1.160	-10.1	80	-0.01
	S	Terphenyl-d14	0.954	0.973	-2.0	81	0.00
78	T	3,3'-Dimethylbenzidine	0.499	0.555	-11.2	87	-0.02
79	T	Butylbenzylphthalate	0.490	0.512	-4.5	76	-0.01
80	T	3,3'-Dichlorobenzidine	0.343	0.398	-16.0	84	-0.02
81	T	Benzo[a]anthracene	0.961	1.057	-10.0	79	-0.01
82	T	Chrysene	0.886	0.884	0.2	75	-0.02
83	T	bis(2-Ethylhexyl)phthalate	0.681	0.708	-4.0	76	-0.01
84	I	Perylene-d12	1.000	1.000	0.0	92	-0.01
85	TC	Di-n-octylphthalate	0.954	0.844	11.5	84	-0.02
86	T	Benzo[b]fluoranthene	1.082	1.091	-0.8	103	-0.02
87	T	Benzo[k]fluoranthene	0.923	0.763	17.3	73	-0.02
88	TC	Benzo[a]pyrene	0.835	0.875	-4.8	90	-0.02
89	T	Indeno[1,2,3-cd]pyrene	0.850	1.016	-19.5	117	-0.03
90	T	Dibenz[a,h]anthracene	0.817	0.975	-19.3	115	-0.03
91	T	Benzo[g,h,i]perylene	0.736	0.859	-16.7	118	-0.03

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

B1646.D BS1201.M Fri Apr 06 11:55:42 2001 MSD_B

Response Factor Report MSD_B

Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Fri Apr 13 10:13:08 2001
Response via : Initial Calibration

Calibration Files
160 =B2005.D 80 =B2003.D 50 =B2001.D
20 =B2002.D 120 =B2004.D

		Compound	160	80	50	20	120	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------						
2)	T	N-Nitrosodimethylam	0.612	0.583	0.580	0.562	0.613	0.590	3.76
3)	T	Pyridine	0.578	0.620	0.654	0.548	0.642	0.608	7.29
4)	S	2-Fluorophenol	0.992	0.960	0.994	1.085	0.966	0.999	5.02
5)	T	Benzaldehyde	0.962	1.088	1.091	0.998	1.051	1.038	5.46
6)	S	Phenol-d5	1.276	1.247	1.282	1.201	1.260	1.253	2.56
7)	MC	Phenol	1.403	1.594	1.291	1.437	1.431	1.431	7.58
8)	T	Aniline	2.054	1.646	2.035	1.467	1.568	1.754	15.55
9)	T	bis(2-Chloroethyl)e	1.304	0.977	0.738	1.039	1.102	1.032	19.87
10)	M	2-Chlorophenol	1.178	1.292	0.974	1.207	1.330	1.196	11.58
11)	T	1,3-Dichlorobenzene	1.326	1.312	1.450	1.113	1.282	1.297	9.34
12)	MC	1,4-Dichlorobenzene	1.376	1.536	1.445	1.363	1.523	1.449	5.54
13)	T	Benzyl alcohol	0.644	0.674	0.654	0.580	0.677	0.646	6.08
14)	T	1,2-Dichlorobenzene	1.284	1.254	1.415	1.139	1.306	1.279	7.77
15)	T	2-Methylphenol	0.982	1.021	1.147	0.957	1.072	1.036	7.33
16)	T	bis(2-chloroisoprop	0.927	1.035	1.075	1.053	1.014	1.021	5.58
17)	T	4-Methylphenol	0.993	1.018	1.026	0.949	1.058	1.009	4.04
18)	MP	N-Nitroso-di-n-prop	0.502	0.664	0.695	0.634	0.699	0.639	12.69
19)	T	Acetophenone	1.414	1.451	1.580	1.358	1.454	1.451	5.64
20)	T	2-Aminotoluene +4-A	1.739	2.060	2.327	2.103	1.916	2.029	10.82
21)	T	Hexachloroethane	0.492	0.454	0.495	0.424	0.474	0.468	6.28
22)	I	Naphthalene-d8	----------ISTD----------						
23)	S	Nitrobenzene-d5	0.327	0.281	0.269	0.238	0.315	0.286	12.53
24)	T	Nitrobenzene	0.266	0.271	0.243	0.244	0.239	0.252	5.95
25)	T	Isophorone	0.494	0.472	0.514	0.448	0.493	0.484	5.18
26)	TC	2-Nitrophenol	0.159	0.181	0.128	0.148	0.191	0.161	15.61
27)	T	2,4-Dimethylphenol	0.306	0.318	0.265	0.313	0.316	0.304	7.23
28)	T	bis(2-Chloroethoxy)	0.308	0.321	0.328	0.294	0.346	0.319	6.19
29)	T	Benzoic acid	0.102	0.097	0.088	0.067	0.107	0.092	17.08
30)	T	2,4-Dimethylaniline	0.379	0.381	0.425	0.376	0.393	0.391	5.19
31)	TC	2,4-Dichlorophenol	0.275	0.278	0.256	0.272	0.315	0.279	7.86
32)	M	1,2,4-Trichlorobenz	0.291	0.303	0.323	0.257	0.305	0.296	8.34
33)	T	Naphthalene	0.887	0.952	1.058	0.873	0.889	0.932	8.23
34)	T	4-Chloroaniline	0.502	0.463	0.542	0.436	0.481	0.485	8.22
35)	TC	Hexachlorobutadiene	0.200	0.169	0.175	0.160	0.193	0.179	9.41
36)	T	Caprolactam	0.067	0.061	0.087	0.074	0.064	0.071	14.57
37)	MC	4-Chloro-3-methylph	0.222	0.242	0.207	0.224	0.262	0.231	9.13
38)	T	2-Methylnaphthalene	0.539	0.648	0.680	0.561	0.589	0.603	9.80
39)	I	Acenaphthene-d10	----------ISTD----------						
40)	TP	Hexachlorocyclopent	0.485	0.363	0.350	0.282	0.441	0.384	20.72
41)	TC	2,4,6-Trichlorophen	0.402	0.362	0.298	0.338	0.409	0.362	12.68
42)	T	2,4,5-Trichlorophen	0.405	0.366	0.386	0.321	0.383	0.372	8.58
43)	S	2-Fluorobiphenyl	1.366	1.296	1.284	1.151	1.400	1.299	7.37
44)	T	1-1'-Biphenyl	1.459	1.327	1.584	1.229	1.401	1.400	9.58
45)	T	2-Chloronaphthalene	1.168	0.977	1.076	0.909	1.085	1.043	9.67
46)	T	2-Nitroaniline	0.202	0.166	0.181	0.143	0.205	0.179	14.41
47)	T	Dimethylphthalate	1.083	0.984	1.062	0.971	1.103	1.040	5.70

48)	T	2,6-Dinitrotoluene	0.253	0.199	0.182	0.148	0.202	0.197	19.47
49)	T	Acenaphthylene	1.668	1.516	1.626	1.564	1.749	1.625	5.58
50)	T	3-Nitroaniline	0.311	0.253	0.262	0.214	0.317	0.271	15.88
51)	MC	Acenaphthene	1.078	0.969	1.141	0.929	1.004	1.024	8.29
52)	T	2,4-Dinitrophenol	0.098	0.069	0.048	0.042	0.084	0.068	34.07
[illegible])	MP	4-Nitrophenol	0.130	0.125	0.107	0.113	0.135	0.122	9.52
[illegible])	M	2,4-Dinitrotoluene	0.269	0.204	0.221	0.159	0.253	0.221	19.56
55)	T	Dibenzofuran	1.416	1.356	1.419	1.319	1.483	1.399	4.52
56)	T	Diethylphthalate	1.016	0.965	1.035	0.923	1.024	0.993	4.76
57)	T	Fluorene	1.062	1.159	1.188	1.047	1.070	1.105	5.77
58)	T	4-Chlorophenyl-phen	0.605	0.572	0.615	0.482	0.559	0.567	9.26
59)	T	4-Nitroaniline	0.238	0.222	0.240	0.188	0.235	0.225	9.58
60)	I	Phenanthrene-d10	----------ISTD----------						
61)	T	4,6-Dinitro-2-methy	0.094	0.065	0.043	0.037	0.080	0.064	37.80
62)	TC	N-Nitrosodiphenylam	0.493	0.438	0.509	0.394	0.530	0.473	11.81
63)	T	1,2-Diphenylhydrazi	0.662	0.566	0.639	0.534	0.627	0.606	8.86
64)	S	2,4,6-Tribromopheno	0.119	0.109	0.120	0.111	0.128	0.117	6.52
65)	T	4-Bromophenyl-pheny	0.232	0.205	0.229	0.176	0.246	0.218	12.63
66)	T	Hexachlorobenzene	0.300	0.246	0.264	0.215	0.288	0.263	12.98
67)	T	Atrazine	0.168	0.176	0.170	0.146	0.189	0.170	9.25
68)	MC	Pentachlorophenol	0.145	0.127	0.094	0.098	0.148	0.122	20.59
69)	T	Phenanthrene	0.972	0.871	0.984	0.833	0.966	0.925	7.40
70)	T	Anthracene	0.864	0.880	0.961	0.798	0.926	0.886	7.04
71)	T	Carbazole	0.799	0.749	0.796	0.680	0.798	0.764	6.76
72)	T	Di-n-butylphthalate	1.028	0.909	0.960	0.777	0.981	0.931	10.32
73)	TC	Fluoranthene	0.872	0.810	0.841	0.692	0.866	0.816	9.03
74)	T	Benzidine	0.265	0.256	0.253	0.236	0.266	0.255	4.73
75)	I	Chrysene-d12	----------ISTD----------						
76)	M	Pyrene	1.323	1.321	1.586	1.290	1.329	1.370	8.89
[illegible])	S	Terphenyl-d14	1.033	1.126	1.301	1.208	1.106	1.155	8.89
[illegible])	T	3,3'-Dimethylbenzid	0.227	0.284	0.311	0.347	0.238	0.281	17.80
79)	T	Butylbenzylphthalat	0.539	0.534	0.605	0.487	0.527	0.539	7.85
80)	T	3,3'-Dichlorobenzid	0.300	0.271	0.289	0.267	0.280	0.281	4.79
81)	T	Benzo[a]anthracene	1.030	0.950	1.015	0.862	0.988	0.969	6.88
82)	T	Chrysene	1.010	0.939	0.997	0.869	0.989	0.961	6.02
83)	T	bis(2-Ethylhexyl)ph	0.705	0.638	0.662	0.569	0.663	0.647	7.74
84)	I	Perylene-d12	----------ISTD----------						
85)	TC	Di-n-octylphthalate	1.018	1.009	1.067	0.949	1.024	1.014	4.18
86)	T	Benzo[b]fluoranthen	1.431	0.937	1.003	0.911	1.181	1.092	19.85
87)	T	Benzo[k]fluoranthen	0.651	1.016	1.066	0.892	0.847	0.895	18.15
88)	TC	Benzo[a]pyrene	0.958	0.884	0.954	0.796	0.936	0.906	7.51
89)	T	Indeno[1,2,3-cd]pyr	1.263	1.193	1.220	1.017	1.261	1.191	8.53
90)	T	Dibenz[a,h]anthrace	1.015	0.974	1.008	0.834	1.025	0.971	8.15
91)	T	Benzo[g,h,i]perylen	1.012	0.988	1.061	0.884	1.029	0.995	6.78

(#) = Out of Range

BS1301.M Fri Apr 13 10:13:26 2001 MSD_B

Instrument ID: MSD_B
Method ID: BS1301.M
Date: 04/13/2001

Average %RSD = 10.29

Refer to SW846 Method 8000B Section 7.5.1.

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2020.D
Acq On : 13 Apr 2001 12:58
Sample : .,BNA-STD-INJ-FOR-04/13/01
Misc :
MS Integration Params: rteint.p

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Fri Apr 13 10:13:08 2001
Response via : Multiple Level Calibration

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	95	-0.01
2	T	N-Nitrosodimethylamine	0.590	0.685	-16.1	112	-0.02
3	T	Pyridine	0.608	0.655	-7.7	95	-0.02
4	S	2-Fluorophenol	0.999	1.127	-12.8	107	0.00
6	S	Phenol-d5	1.253	1.348	-7.6	99	-0.01
7	MC	Phenol	1.431	1.340	6.4	98	-0.01
8	T	Aniline	1.754	1.547	11.8	72	-0.01
9	T	bis(2-Chloroethyl)ether	1.032	1.220	-18.2	156	-0.01
10	M	2-Chlorophenol	1.196	1.040	13.0	101	-0.01
11	T	1,3-Dichlorobenzene	1.297	1.461	-12.6	95	0.00
12	MC	1,4-Dichlorobenzene	1.449	1.444	0.3	94	0.00
13	T	Benzyl alcohol	0.646	0.635	1.7	92	-0.02
14	T	1,2-Dichlorobenzene	1.279	1.406	-9.9	94	0.00
15	T	2-Methylphenol	1.036	1.226	-18.3	101	-0.01
16	T	bis(2-chloroisopropyl)ether	1.021	1.173	-14.9	103	0.00
[illegible]	T	4-Methylphenol	1.009	1.063	-5.4	98	-0.02
[illegible]	MP	N-Nitroso-di-n-propylamine	0.639	0.715	-11.9	97	-0.02
19	T	Acetophenone	1.451	1.636	-12.7	98	-0.01
20	T	2-Aminotoluene +4-Aminotolu	2.029	2.345	-15.6	95	0.00
21	T	Hexachloroethane	0.468	0.487	-4.1	93	0.00
22	I	Naphthalene-d8	1.000	1.000	0.0	92	0.00
23	S	Nitrobenzene-d5	0.286	0.292	-2.1	100	-0.01
24	T	Nitrobenzene	0.252	0.285	-13.1	108	0.00
25	T	Isophorone	0.484	0.550	-13.6	98	-0.01
26	TC	2-Nitrophenol	0.161	0.143	11.2	103	0.00
27	T	2,4-Dimethylphenol	0.304	0.261	14.1	90	-0.01
28	T	bis(2-Chloroethoxy)methane	0.319	0.369	-15.7	103	0.00
29	T	Benzoic acid	0.092	0.082	10.9	85	-0.02
30	T	2,4-Dimethylaniline	0.391	0.419	-7.2	90	-0.01
31	TC	2,4-Dichlorophenol	0.279	0.244	12.5	88	-0.01
32	M	1,2,4-Trichlorobenzene	0.296	0.318	-7.4	90	0.00
33	T	Naphthalene	0.932	1.030	-10.5	89	0.00
34	T	4-Chloroaniline	0.485	0.510	-5.2	86	0.00
35	TC	Hexachlorobutadiene	0.179	0.199	-11.2	104	0.00
36	T	Caprolactam	0.071	0.085	-19.7	90	-0.02
37	MC	4-Chloro-3-methylphenol	0.231	0.205	11.3	91	0.00
38	T	2-Methylnaphthalene	0.603	0.678	-12.4	92	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	93	0.00
40	TP	Hexachlorocyclopentadiene	0.384	0.389	-1.3	103	0.00
[illegible]	TC	2,4,6-Trichlorophenol	0.362	0.351	3.0	109	0.00
[illegible]	T	2,4,5-Trichlorophenol	0.372	0.376	-1.1	90	0.00
43	S	2-Fluorobiphenyl	1.299	1.204	7.3	87	0.00
44	T	1-1'-Biphenyl	1.400	1.470	-5.0	86	0.00
45	T	2-Chloronaphthalene	1.043	1.151	-10.4	99	0.00
46	T	2-Nitroaniline	0.179	0.220	-22.9	113	0.00

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47	T	Dimethylphthalate	1.040	1.107	-6.4	97	0.00
48	T	2,6-Dinitrotoluene	0.197	0.213	-8.1	108	0.00
49	T	Acenaphthylene	1.625	1.717	-5.7	98	0.00
50	T	3-Nitroaniline	0.271	0.320	-18.1	113	0.00
51	MC	Acenaphthene	1.024	1.140	-11.3	93	0.00
52	T	2,4-Dinitrophenol	0.068	0.057	16.2	108	0.00
53	MP	4-Nitrophenol	0.122	0.123	-0.8	107	0.00
54	M	2,4-Dinitrotoluene	0.221	0.251	-13.6	105	0.00
55	T	Dibenzofuran	1.399	1.524	-8.9	99	0.00
56	T	Diethylphthalate	0.993	1.153	-16.1	103	0.00
57	T	Fluorene	1.105	1.206	-9.1	94	0.00
58	T	4-Chlorophenyl-phenylether	0.567	0.571	-0.7	86	0.00
59	T	4-Nitroaniline	0.225	0.265	-17.8	102	-0.01
60	I	Phenanthrene-d10	1.000	1.000	0.0	94	0.01
61	T	4,6-Dinitro-2-methylphenol	0.064	0.053	17.2	116	0.00
62	TC	N-Nitrosodiphenylamine	0.473	0.504	-6.6	93	0.00
63	T	1,2-Diphenylhydrazine/Azobe	0.606	0.683	-12.7	100	0.00
64	S	2,4,6-Tribromophenol	0.117	0.120	-2.6	94	0.00
65	T	4-Bromophenyl-phenylether	0.218	0.215	1.4	88	0.00
66	T	Hexachlorobenzene	0.263	0.275	-4.6	98	0.00
67	T	Atrazine	0.170	0.186	-9.4	102	0.00
68	MC	Pentachlorophenol	0.122	0.105	13.9	104	0.00
69	T	Phenanthrene	0.925	0.970	-4.9	92	0.00
70	T	Anthracene	0.886	1.025	-15.7	100	0.01
71	T	Carbazole	0.764	0.797	-4.3	94	0.00
72	T	Di-n-butylphthalate	0.931	0.982	-5.5	96	0.01
73	TC	Fluoranthene	0.816	0.888	-8.8	99	0.00
74	T	Benzidine	0.255	0.192	24.7	71	0.01
75	I	Chrysene-d12	1.000	1.000	0.0	100	0.01
76	M	Pyrene	1.370	1.504	-9.8	94	0.00
77	S	Terphenyl-d14	1.155	1.208	-4.6	92	0.00
78	T	3,3'-Dimethylbenzidine	0.281	0.334	-18.9	107	0.00
79	T	Butylbenzylphthalate	0.539	0.595	-10.4	98	0.00
80	T	3,3'-Dichlorobenzidine	0.281	0.334	-18.9	115	0.00
81	T	Benzo[a]anthracene	0.969	1.016	-4.9	100	0.00
82	T	Chrysene	0.961	0.971	-1.0	97	0.01
83	T	bis(2-Ethylhexyl)phthalate	0.647	0.703	-8.7	106	0.00
84	I	Perylene-d12	1.000	1.000	0.0	97	0.00
85	TC	Di-n-octylphthalate	1.014	1.100	-8.5	100	0.00
86	T	Benzo[b]fluoranthene	1.092	1.106	-1.3	107	-0.01
87	T	Benzo[k]fluoranthene	0.895	0.987	-10.3	90	0.00
88	TC	Benzo[a]pyrene	0.906	0.974	-7.5	99	-0.01
89	T	Indeno[1,2,3-cd]pyrene	1.191	1.306	-9.7	104	-0.03
90	T	Dibenz[a,h]anthracene	0.971	1.062	-9.4	102	-0.01
91	T	Benzo[g,h,i]perylene	0.995	1.098	-10.4	101	-0.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0

B2001.D BS1301.M Fri Apr 13 13:14:05 2001 MSD_B

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/04/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
1994-003	SOIL	B1750.D	N/A	N/A	80	92	N/A	109
1994-004	SOIL	B1751.D	N/A	N/A	79	86	N/A	84
1994-005	SOIL	B1752.D	N/A	N/A	72	83	N/A	88
1866-006	SOIL	B1753.D	N/A	N/A	73	85	N/A	88
Method-Blank	SOIL	B1754.D	72	79	87	94	101	98
2057-003	SOIL	B1755.D	N/A	N/A	79	89	N/A	93
Method-Blank	SOIL	B1759.D	61	72	71	77	90	85
1921-001	SOIL	B1760.D	63	74	66	80	95	78
2026-001	SOIL	B1761.D	61	70	67	75	86	82
2044-001	SOIL	B1764.D	65	73	69	79	88	81
2013-002	SOIL	B1765.D	N/A	N/A	76	82	N/A	81
2013-004	SOIL	B1766.D	N/A	N/A	74	84	N/A	84
2013-012	SOIL	B1767.D	N/A	N/A	74	85	N/A	83
2013-014	SOIL	B1768.D	N/A	N/A	65	78	N/A	81
2026-001MS	SOIL	B1769.D	60	64	68	80	86	87
2026-001MSD	SOIL	B1770.D	60	64	67	80	88	85
2032-004	SOIL	B1771.D	N/A	N/A	69	87	N/A	82
2032-005	SOIL	B1772.D	N/A	N/A	75	87	N/A	86
2032-001	SOIL	B1773.D	N/A	N/A	69	83	N/A	81
2032-002	SOIL	B1774.D	N/A	N/A	71	86	N/A	77
2032-003	SOIL	B1775.D	N/A	N/A	74	88	N/A	83
2032-006	SOIL	B1776.D	N/A	N/A	70	84	N/A	73
1966-003	SOIL	B1778.D	N/A	N/A	76	88	N/A	79

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	36-93	42-83
S2 (PHL) = Phenol-d5	40-101	63-101
S3 (NBZ) = Nitrobenzene-d5	45-98	47-120
S4 (FBP) = 2-Fluorobiphenyl	48-104	55-112
S5 (TBP) = 2,4,6-Tribromophenol	54-135	52-151
S6 (TPH) = Terphenyl-d14	58-147	63-132

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/04/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
1967-001	SOIL	B1779.D	N/A	N/A	75	91	N/A	78
1967-003	SOIL	B1780.D	N/A	N/A	77	93	N/A	85
2057-004	SOIL	B1781.D	N/A	N/A	89	86	N/A	78
2057-005	SOIL	B1782.D	N/A	N/A	97	94	N/A	82
2057-006	SOIL	B1783.D	N/A	N/A	80	84	N/A	78

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	36-93	42-83
S2 (PHL) = Phenol-d5	40-101	63-101
S3 (NBZ) = Nitrobenzene-d5	45-98	47-120
S4 (FBP) = 2-Fluorobiphenyl	48-104	55-112
S5 (TBP) = 2,4,6-Tribromophenol	54-135	52-151
S6 (TPH) = Terphenyl-d14	58-147	63-132

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/05/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
Method-Blank	SOIL	B1787.D	71	81	86	95	110	107
2049-002	SOIL	B1788.D	62	72	70	94	101	88
2032-003	SOIL	B1789.D	N/A	N/A	73	93	N/A	84
1966-001	SOIL	B1790.D	N/A	N/A	52	69	N/A	61
Method-Blank	SOIL	B1791.D	64	72	79	92	97	92
2120-026	SOIL	B1792.D	N/A	N/A	76	89	N/A	90
2120-027	SOIL	B1793.D	N/A	N/A	69	84	N/A	90
2120-028	SOIL	B1794.D	N/A	N/A	65	82	N/A	89
2120-029	SOIL	B1795.D	N/A	N/A	66	82	N/A	90
2120-003	SOIL	B1796.D	N/A	N/A	71	88	N/A	93
2120-007	SOIL	B1797.D	N/A	N/A	71	87	N/A	88
2120-011	SOIL	B1798.D	N/A	N/A	72	86	N/A	88
2120-012	SOIL	B1799.D	N/A	N/A	74	93	N/A	81
2120-013	SOIL	B1800.D	N/A	N/A	76	93	N/A	80
2120-014	SOIL	B1801.D	N/A	N/A	74	91	N/A	85
2120-015	SOIL	B1802.D	N/A	N/A	68	86	N/A	85
2120-016	SOIL	B1803.D	N/A	N/A	69	83	N/A	79
2120-017	SOIL	B1804.D	N/A	N/A	69	89	N/A	81
2120-018	SOIL	B1805.D	N/A	N/A	67	84	N/A	76
2120-019	SOIL	B1806.D	N/A	N/A	70	88	N/A	78
2120-020	SOIL	B1807.D	N/A	N/A	71	87	N/A	83
2120-021	SOIL	B1808.D	N/A	N/A	69	85	N/A	80
2120-022	SOIL	B1809.D	N/A	N/A	70	86	N/A	78

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	36-93	42-83
S2 (PHL) = Phenol-d5	40-101	63-101
S3 (NBZ) = Nitrobenzene-d5	45-98	47-120
S4 (FBP) = 2-Fluorobiphenyl	48-104	55-112
S5 (TBP) = 2,4,6-Tribromophenol	54-135	52-151
S6 (TPH) = Terphenyl-d14	58-147	63-132

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/05/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
2120-023	SOIL	B1810.D	N/A	N/A	66	85	N/A	81
1840-003	SOIL	B1811.D	63	73	66	77	94	79
1840-003MS	SOIL	B1812.D	61	64	68	82	84	79
1840-003MS	SOIL	B1813.D	63	66	68	80	89	83
Method-Blank	SOIL	B1814.D	72	85	84	96	97	93
2092-011	SOIL	B1815.D	68	81	82	95	120	73
2111-001	SOIL	B1816.D	66	76	73	92	93	75

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	36-93	42-83
S2 (PHL) = Phenol-d5	40-101	63-101
S3 (NBZ) = Nitrobenzene-d5	45-98	47-120
S4 (FBP) = 2-Fluorobiphenyl	48-104	55-112
S5 (TBP) = 2,4,6-Tribromophenol	54-135	52-151
S6 (TPH) = Terphenyl-d14	58-147	63-132

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/06/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
2092-011	SOIL	B1820.D	65	79	75	89	117	98
Method-Blank	SOIL	B1821.D	71	86	81	93	94	106
2117-001	SOIL	B1822.D	N/A	N/A	80	91	N/A	102
2117-002	SOIL	B1823.D	N/A	N/A	74	90	N/A	99
2117-003	SOIL	B1824.D	N/A	N/A	70	86	N/A	98
2117-005	SOIL	B1825.D	N/A	N/A	73	91	N/A	96
2117-006	SOIL	B1826.D	N/A	N/A	74	89	N/A	107
2117-007	SOIL	B1827.D	N/A	N/A	70	85	N/A	93
2028-006	SOIL	B1828.D	N/A	N/A	74	92	N/A	89
2092-001	SOIL	B1829.D	N/A	N/A	75	87	N/A	92
2092-002	SOIL	B1830.D	70	82	78	86	94	97
2092-003	SOIL	B1831.D	72	83	81	90	91	102
2092-004	SOIL	B1832.D	65	74	71	84	92	113
2092-005	SOIL	B1833.D	59	65	62	78	88	95
2092-002MS	SOIL	B1834.D	67	73	73	87	98	97
2092-002MSD	SOIL	B1835.D	66	72	70	82	93	91
2117-004	SOIL	B1836.D	N/A	N/A	77	92	N/A	110

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	36-93	42-83
S2 (PHL) = Phenol-d5	40-101	63-101
S3 (NBZ) = Nitrobenzene-d5	45-98	47-120
S4 (FBP) = 2-Fluorobiphenyl	48-104	55-112
S5 (TBP) = 2,4,6-Tribromophenol	54-135	52-151
S6 (TPH) = Terphenyl-d14	58-147	63-132

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/13/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
Method-Blank	SOIL	B2021.D	74	78	58	68	88	104
2292-002	SOIL	B2022.D	67	74	56	73	89	106
2303-001	SOIL	B2023.D	N/A	N/A	91	88	N/A	104
2303-002	SOIL	B2024.D	N/A	N/A	67	76	N/A	105
2303-003	SOIL	B2025.D	N/A	N/A	57	70	N/A	105
2303-006	SOIL	B2026.D	N/A	N/A	54	71	N/A	115
2293-009	SOIL	B2027.D	N/A	N/A	54	69	N/A	108
2293-010	SOIL	B2028.D	N/A	N/A	61	80	N/A	102
2293-011	SOIL	B2029.D	N/A	N/A	53	71	N/A	91
2294-017	SOIL	B2030.D	N/A	N/A	56	73	N/A	96
2294-018	SOIL	B2031.D	N/A	N/A	60	77	N/A	97
2294-019	SOIL	B2032.D	N/A	N/A	57	72	N/A	92
2294-020	SOIL	B2033.D	N/A	N/A	60	71	N/A	99
2092-010	SOIL	B2035.D	N/A	N/A	59	74	N/A	78
2254-001	SOIL	B2036.D	N/A	N/A	56	63	N/A	83
2254-002	SOIL	B2037.D	N/A	N/A	58	72	N/A	86
2254-003	SOIL	B2038.D	N/A	N/A	53	66	N/A	80
2292-002MS	SOIL	B2039.D	59	67	54	67	87	86
2292-002MSD	SOIL	B2040.D	60	70	57	74	91	91
Method-Blank	SOIL	B2041.D	68	79	64	71	84	93
2287-008	SOIL	B2042.D	N/A	N/A	58	71	N/A	87
2287-009	SOIL	B2043.D	N/A	N/A	62	69	N/A	91
2287-010	SOIL	B2044.D	77	82	59	69	79	91

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	36-93	42-95
S2 (PHL) = Phenol-d5	40-101	59-97
S3 (NBZ) = Nitrobenzene-d5	45-98	49-105
S4 (FBP) = 2-Fluorobiphenyl	48-104	54-110
S5 (TBP) = 2,4,6-Tribromophenol	54-135	48-126
S6 (TPH) = Terphenyl-d14	58-147	53-123

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/13/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
2287-011	SOIL	B2045.D	73	80	61	70	79	82
2287-012	SOIL	B2046.D	N/A	N/A	68	81	N/A	94
2287-013	SOIL	B2047.D	N/A	N/A	65	71	N/A	90
2287-014	SOIL	B2048.D	N/A	N/A	66	73	N/A	90
2287-016	SOIL	B2049.D	N/A	N/A	67	74	N/A	91
2287-017	SOIL	B2050.D	N/A	N/A	70	80	N/A	87
2287-015	SOIL	B2051.D	N/A	N/A	76	79	N/A	78
2092-007	SOIL	B2052.D	N/A	N/A	54	81	N/A	82

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	36-93	42-95
S2 (PHL) = Phenol-d5	40-101	59-97
S3 (NBZ) = Nitrobenzene-d5	45-98	49-105
S4 (FBP) = 2-Fluorobiphenyl	48-104	54-110
S5 (TBP) = 2,4,6-Tribromophenol	54-135	48-126
S6 (TPH) = Terphenyl-d14	58-147	53-123

* Column to be used to flag recovery values

SOIL SEMIVOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2026-001 Batch No.: B040401S

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	100.0	0.0	61.9	62	26 - 90
2-Chlorophenol	100.0	0.0	64.2	64	25 - 102
1,4-Dichlorobenzene	50.0	0.0	31.5	63	28 - 104
N-Nitroso-di-n-propylamine	50.0	0.0	41.1	82	41 - 126
1,2,4-Trichlorobenzene	50.0	0.0	32.5	65	38 - 107
4-Chloro-3-methylphenol	100.0	0.0	64.6	65	26 - 103
Acenaphthene	50.0	0.0	40.4	81	31 - 137
4-Nitrophenol	100.0	0.0	62.0	62	11 - 114
2,4-Dinitrotoluene	50.0	0.0	27.1	54	28 - 89
Pentachlorophenol	100.0	0.0	79.8	80	17 - 109
Pyrene	50.0	0.0	41.2	82	35 - 142

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	0.0	59.1	59	5	42	26 - 90
2-Chlorophenol	0.0	63.3	63	2	40	25 - 102
1,4-Dichlorobenzene	0.0	30.9	62	2	28	28 - 104
N-Nitroso-di-n-propylamine	0.0	40.6	81	1	38	41 - 126
1,2,4-Trichlorobenzene	0.0	32.4	65	0	28	38 - 107
4-Chloro-3-methylphenol	0.0	66.7	67	3	42	26 - 103
Acenaphthene	0.0	40.7	81	0	31	31 - 137
4-Nitrophenol	0.0	60.1	60	3	50	11 - 114
2,4-Dinitrotoluene	0.0	27.9	56	4	38	28 - 89
Pentachlorophenol	0.0	79.3	79	1	50	17 - 109
Pyrene	0.0	41.1	82	0	31	35 - 142

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __11__ outside limits

Spike Recovery: __0___ out of __22__ outside limits

SOIL SEMIVOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 1840-003 Batch No.: B040501S

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	100.0	0.0	63.3	63	26 - 90
2-Chlorophenol	100.0	0.0	64.8	65	25 - 102
1,4-Dichlorobenzene	50.0	0.0	29.1	58	28 - 104
N-Nitroso-di-n-propylamine	50.0	0.0	35.0	70	41 - 126
1,2,4-Trichlorobenzene	50.0	0.0	30.5	61	38 - 107
4-Chloro-3-methylphenol	100.0	0.0	64.6	65	26 - 103
Acenaphthene	50.0	0.0	36.5	73	31 - 137
4-Nitrophenol	100.0	0.0	70.1	70	11 - 114
2,4-Dinitrotoluene	50.0	0.0	24.4	49	28 - 89
Pentachlorophenol	100.0	0.0	80.2	80	17 - 109
Pyrene	50.0	0.0	36.9	74	35 - 142

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	#	MSD % REC	% RPD	#	QC LIMITS RPD	REC.
Phenol	0.0	61.7		62	2		42	26 - 90
2-Chlorophenol	0.0	65.0		65	0		40	25 - 102
1,4-Dichlorobenzene	0.0	31.3		63	8		28	28 - 104
N-Nitroso-di-n-propylamine	0.0	38.7		77	10		38	41 - 126
1,2,4-Trichlorobenzene	0.0	32.9		66	8		28	38 - 107
4-Chloro-3-methylphenol	0.0	65.4		65	0		42	26 - 103
Acenaphthene	0.0	40.7		81	10		31	31 - 137
4-Nitrophenol	0.0	69.6		70	0		50	11 - 114
2,4-Dinitrotoluene	0.0	27.6		55	12		38	28 - 89
Pentachlorophenol	0.0	81.5		82	2		50	17 - 109
Pyrene	0.0	41.4		83	11		31	35 - 142

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __11__ outside limits

Spike Recovery: __0___ out of __22__ outside limits

SOIL SEMIVOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2092-002 Batch No.: B040601S

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	100.0	0.0	65.6	66	26 - 90
2-Chlorophenol	100.0	0.0	68.1	68	25 - 102
1,4-Dichlorobenzene	50.0	0.0	33.9	68	28 - 104
N-Nitroso-di-n-propylamine	50.0	0.0	44.2	88	41 - 126
1,2,4-Trichlorobenzene	50.0	0.0	34.7	69	38 - 107
4-Chloro-3-methylphenol	100.0	0.0	68.7	69	26 - 103
Acenaphthene	50.0	0.0	43.3	87	31 - 137
4-Nitrophenol	100.0	0.0	71.4	71	11 - 114
2,4-Dinitrotoluene	50.0	0.0	29.8	60	28 - 89
Pentachlorophenol	100.0	0.0	82.6	83	17 - 109
Pyrene	50.0	0.0	48.7	97	35 - 142

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD #	MSD % REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	0.0	66.1		66	0	42	26 - 90
2-Chlorophenol	0.0	65.7		66	3	40	25 - 102
1,4-Dichlorobenzene	0.0	31.6		63	8	28	28 - 104
N-Nitroso-di-n-propylamine	0.0	40.3		81	8	38	41 - 126
1,2,4-Trichlorobenzene	0.0	32.7		65	6	28	38 - 107
4-Chloro-3-methylphenol	0.0	63.9		64	8	42	26 - 103
Acenaphthene	0.0	39.4		79	10	31	31 - 137
4-Nitrophenol	0.0	69.1		69	3	50	11 - 114
2,4-Dinitrotoluene	0.0	27.0		54	11	38	28 - 89
Pentachlorophenol	0.0	78.8		79	5	50	17 - 109
Pyrene	0.0	44.0		88	10	31	35 - 142

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __11__ outside limits

Spike Recovery: __0___ out of __22__ outside limits

SOIL SEMIVOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: Method-B Batch No.: B041201S1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	100.0	0.0	55.1	55	26 - 90
2-Chlorophenol	100.0	0.0	59.0	59	25 - 102
1,4-Dichlorobenzene	50.0	0.0	27.3	55	28 - 104
N-Nitroso-di-n-propylamine	50.0	0.0	35.8	72	41 - 126
1,2,4-Trichlorobenzene	50.0	0.0	29.5	59	38 - 107
4-Chloro-3-methylphenol	100.0	0.0	74.5	75	26 - 103
Acenaphthene	50.0	0.0	40.3	81	31 - 137
4-Nitrophenol	100.0	0.0	83.3	83	11 - 114
2,4-Dinitrotoluene	50.0	0.0	39.5	79	28 - 89
Pentachlorophenol	100.0	0.0	76.3	76	17 - 109
Pyrene	50.0	0.0	41.0	82	35 - 142

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	#	MSD % REC	% RPD #	QC LIMITS RPD	REC.
Phenol	0.0	56.3		56	2	42	26 - 90
2-Chlorophenol	0.0	60.5		61	3	40	25 - 102
1,4-Dichlorobenzene	0.0	26.0		52	6	28	28 - 104
N-Nitroso-di-n-propylamine	0.0	34.7		69	4	38	41 - 126
1,2,4-Trichlorobenzene	0.0	27.9		56	5	28	38 - 107
4-Chloro-3-methylphenol	0.0	73.6		74	1	42	26 - 103
Acenaphthene	0.0	38.8		78	4	31	31 - 137
4-Nitrophenol	0.0	81.0		81	2	50	11 - 114
2,4-Dinitrotoluene	0.0	38.1		76	4	38	28 - 89
Pentachlorophenol	0.0	74.7		75	1	50	17 - 109
Pyrene	0.0	37.9		76	8	31	35 - 142

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

NC Non calculable

RPD: __0___ out of __11__ outside limits

Spike Recovery: __0___ out of __22__ outside limits

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	40UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	36881		1.51		151207		2.04		96676		2.76	
	UPPER LIMIT	73762		2.01		302414		2.54		193352		3.26	
	LOWER LIMIT	18441		1.01		75604		1.54		48338		2.26	
	LAB SAMPLE ID												
01	BNA-STD-INJ-FOR-04	36743		1.51		151152		2.04		96310		2.76	
02	BNA-STD-INJ-FOR-04	33112		1.51		140132		2.04		87573		2.75	
03	BNA-STD-INJ-FOR-04	32726		1.52		136697		2.04		87875		2.76	
04	BNA-STD-INJ-FOR-04	34266		1.52		142297		2.04		88430		2.76	
05	OLMO4-STD-INJ-FOR	31064		1.51		128572		2.03		81325		2.75	
06	OLMO4-STD-INJ-FOR	31159		1.51		127308		2.03		79409		2.75	
07	OLMO4-STD-INJ-FOR	31513		1.51		127648		2.03		79178		2.75	
08	OLMO4-STD-INJ-FOR	32356		1.51		130005		2.03		78981		2.75	
09	OLMO4-STD-INJ-FOR	33341		1.51		130832		2.03		81762		2.75	
10	Method-Blank	28329		1.51		115940		2.03		71793		2.75	
11	1899-006	34055		1.51		137101		2.03		82341		2.75	
12	1899-010	30678		1.51		126095		2.03		76923		2.75	
13	1899-011	34754		1.51		140624		2.03		81681		2.75	
14	1899-012	30183		1.51		121174		2.03		75921		2.75	
15	1899-013	34254		1.51		140407		2.03		80349		2.75	
16	1899-014	29618		1.51		118162		2.03		73960		2.75	
17	1899-015	31099		1.51		126228		2.03		76487		2.75	
18	1899-007	30951		1.51		126898		2.03		76788		2.75	
19	1899-008	31661		1.51		126623		2.03		76638		2.75	
20	1899-009	31580		1.51		127776		2.03		76167		2.75	
21	Method-Blank	34412		1.51		136974		2.03		82557		2.75	
22	1922-001	32570		1.51		131387		2.03		80326		2.75	

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	36881	1.51	151207	2.04	96676	2.76
	UPPER LIMIT	73762	2.01	302414	2.54	193352	3.26
	LOWER LIMIT	18441	1.01	75604	1.54	48338	2.26
	LAB SAMPLE ID						
01	1922-002	36337	1.51	141176	2.03	83172	2.75
02	1922-003	34650	1.53	136527	2.04	77038	2.76
03	1922-004	39736	1.52	151714	2.03	84723	2.75
04	1922-005	35209	1.51	140210	2.03	79164	2.75
05	1922-006	35675	1.52	138723	2.03	77740	2.75
06	1922-007	38473	1.52	149270	2.04	79636	2.75
07	1922-008	37351	1.52	143251	2.03	83915	2.75
08	1922-009	34572	1.52	140033	2.04	81085	2.75
09	1922-011	33186	1.51	129524	2.03	77650	2.75
10	1922-012	37532	1.51	145757	2.03	83122	2.75
11	1922-013	34543	1.52	137747	2.03	78175	2.75
12	1922-015	33567	1.52	132055	2.03	77328	2.75
13	1820-004	35074	1.51	139139	2.03	79904	2.75
14	1920-004	32328	1.51	131674	2.03	78301	2.75
15	1920-004M	32095	1.51	126593	2.03	76365	2.75
16	1920-004M	34258	1.52	137293	2.04	78572	2.75
17	Method-Blank	31553	1.51	126485	2.03	78216	2.75
18	1929-001	33108	1.52	130006	2.03	78225	2.75
19	1929-002	36474	1.51	141042	2.03	80658	2.75
20	1929-003	38075	1.52	141386	2.03	78340	2.75
21	1929-004	32699	1.51	131831	2.03	80866	2.75
22	1929-005	34919	1.51	135265	2.03	81294	2.75

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	36881	1.51	151207	2.04	96676	2.76
	UPPER LIMIT	73762	2.01	302414	2.54	193352	3.26
	LOWER LIMIT	18441	1.01	75604	1.54	48338	2.26
	LAB SAMPLE ID						
01	1929-006	33756	1.51	131394	2.03	78645	2.75
02	1929-007	36181	1.51	138778	2.03	81951	2.75
03	1951-001	36532	1.51	143248	2.03	85029	2.75
04	1925-001	36095	1.51	139696	2.03	85719	2.75
05	1925-003	39239	1.52	141362	2.03	78662	2.75
06	1925-005	31964	1.51	130986	2.03	80391	2.75
07	1925-007	34982	1.51	133665	2.03	81677	2.75
08	1897-003	33347	1.51	128194	2.04	71254	2.76
09	1933-001	33183	1.51	133677	2.03	81259	2.75
10	1933-002	31872	1.51	128063	2.03	79531	2.75
11	1933-003	33032	1.51	131159	2.03	81708	2.75
12	1958-001	34244	1.52	135673	2.03	80715	2.75
13	1958-001M	32332	1.51	134257	2.03	81468	2.75
14	1958-001M	34058	1.51	136767	2.03	83974	2.75
15	1933-004	35277	1.51	140465	2.03	84935	2.75
16							
17							
18							
19							
20							
21							
22							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	40UG/L	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	184640		3.35		168344		4.51		215285		5.31	
	UPPER LIMIT	369280		3.85		336688		5.01		430570		5.81	
	LOWER LIMIT	92320		2.85		84172		4.01		107643		4.81	
	LAB SAMPLE ID												
01	BNA-STD-INJ-FOR-04	181134		3.35		161513		4.53		175110		5.31	
02	BNA-STD-INJ-FOR-04	171207		3.35		157638		4.50		200500		5.30	
03	BNA-STD-INJ-FOR-04	168453		3.35		146690		4.52		175671		5.31	
04	BNA-STD-INJ-FOR-04	172202		3.36		139992		4.51		150684		5.31	
05	OLMO4-STD-INJ-FOR	166561		3.34		153718		4.50		187282		5.30	
06	OLMO4-STD-INJ-FOR	161259		3.34		146543		4.50		176823		5.30	
07	OLMO4-STD-INJ-FOR	159401		3.34		142343		4.50		169699		5.29	
08	OLMO4-STD-INJ-FOR	161657		3.34		146386		4.50		154959		5.30	
09	OLMO4-STD-INJ-FOR	157496		3.34		146999		4.50		152247		5.30	
10	Method-Blank	146803		3.34		137417		4.50		147999		5.30	
11	1899-006	153364		3.35		125037		4.51		139066		5.31	
12	1899-010	149195		3.34		140879		4.49		139336		5.29	
13	1899-011	150404		3.35		115335		4.50		134275		5.30	
14	1899-012	144225		3.34		129000		4.50		126108		5.29	
15	1899-013	149656		3.34		125563		4.49		123412		5.29	
16	1899-014	138837		3.34		127531		4.49		124760		5.29	
17	1899-015	146299		3.34		131062		4.49		130422		5.29	
18	1899-007	145189		3.34		130603		4.49		127124		5.28	
19	1899-008	142288		3.34		126113		4.49		120739		5.29	
20	1899-009	142733		3.34		125140		4.50		126524		5.29	
21	Method-Blank	148580		3.34		126027		4.50		124487		5.29	
22	1922-001	152972		3.34		132933		4.50		134210		5.29	

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	50UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	184640	3.35	168344	4.51	215285	5.31
	UPPER LIMIT	369280	3.85	336688	5.01	430570	5.81
	LOWER LIMIT	92320	2.85	84172	4.01	107643	4.81
	LAB SAMPLE ID						
01	1922-002	150145	3.34	114820	4.50	129614	5.3
02	1922-003	129883	3.35	103664	4.50	123339	5.3
03	1922-004	127015	3.34	106381	4.50	136907	5.31
04	1922-005	142865	3.34	111790	4.50	135384	5.29
05	1922-006	124927	3.35	96926	4.51	108800	5.32
06	1922-007	130223	3.34	108279	4.50	135978	5.29
07	1922-008	144059	3.34	112972	4.50	138504	5.29
08	1922-009	143760	3.34	111961	4.49	135307	5.29
09	1922-011	143139	3.34	112924	4.49	131066	5.29
10	1922-012	137906	3.35	113756	4.51	139246	5.31
11	1922-013	141804	3.34	109515	4.49	133249	5.29
12	1922-015	140298	3.34	113683	4.49	134674	5.29
13	1820-004	144263	3.34	111064	4.49	137554	5.29
14	1920-004	143439	3.34	113098	4.48	132655	5.28
15	1920-004M	137264	3.34	103579	4.48	123787	5.28
16	1920-004M	141869	3.34	106174	4.48	133332	5.28
17	Method-Blank	142023	3.34	112974	4.48	130808	5.28
18	1929-001	149350	3.34	110719	4.48	135834	5.28
19	1929-002	137891	3.34	108684	4.48	137226	5.28
20	1929-003	124410	3.34	107250	4.48	139297	5.28
21	1929-004	146268	3.34	112600	4.47	134345	5.28
22	1929-005	143465	3.34	107659	4.47	136470	5.28

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1646.D

Date Analyzed: 04/02/2001

Instrument ID: MSDB

Time Analyzed: 06:20

	40UG/L	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	184640		3.35		168344		4.51		215285		5.31	
	UPPER LIMIT	369280		3.85		336688		5.01		430570		5.81	
	LOWER LIMIT	92320		2.85		84172		4.01		107643		4.81	
	LAB SAMPLE ID												
01	1929-006	145712		3.34		110440		4.47		135361		5.27	
02	1929-007	143575		3.34		111226		4.48		137528		5.28	
03	1951-001	152206		3.34		117261		4.47		143921		5.28	
04	1925-001	153368		3.34		115006		4.47		139597		5.28	
05	1925-003	124571		3.34		108675		4.47		140163		5.28	
06	1925-005	152583		3.34		116872		4.48		138027		5.28	
07	1925-007	142544		3.34		108641		4.48		132936		5.28	
08	1897-003	130893		3.35		100261		4.49		120971		5.29	
09	1933-001	148160		3.34		116711		4.48		144091		5.28	
10	1933-002	141835		3.34		113489		4.48		138366		5.28	
11	1933-003	144930		3.34		116941		4.48		140668		5.28	
12	1958-001	144416		3.34		110988		4.47		140179		5.27	
13	1958-001M	145873		3.34		117553		4.48		141018		5.28	
14	1958-001M	153249		3.34		121522		4.47		143684		5.28	
15	1933-004	150325		3.34		113310		4.48		145537		5.28	
16													
17													
18													
19													
20													
21													
22													

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1748.D

Date Analyzed: 04/04/2001

Instrument ID: MSDB

Time Analyzed: 11:03

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	56025	1.51	209773	2.04	114278	2.75
	UPPER LIMIT	112050	2.01	419546	2.54	228556	3.25
	LOWER LIMIT	28013	1.01	104887	1.54	57139	2.25
	LAB SAMPLE ID						
01	OLMO4-STD-INJ-FOR	52794	1.51	204532	2.03	116747	2.75
02	1994-003	46450	1.51	178975	2.03	95907	2.75
03	1994-004	51511	1.51	197240	2.03	106527	2.75
04	1994-005	51685	1.51	190157	2.03	103172	2.75
05	1866-006	44631	1.51	167590	2.03	89312	2.75
06	Method-Blank	43207	1.51	161483	2.03	86613	2.75
07	2057-003	37951	1.51	144686	2.03	76923	2.75
08	2057-004	44503	1.51	153633	2.03	86659	2.75
09	2057-005	44738	1.52	130121	2.04	71968	2.76
10	2057-006	43972	1.51	149922	2.03	82626	2.75
11	Method-Blank	44704	1.51	166934	2.03	89247	2.75
12	1921-001	40433	1.51	155708	2.03	80374	2.75
13	2026-001	44075	1.51	168076	2.03	88410	2.75
14	2049-002	42802	1.51	162190	2.03	80813	2.75
15	2049-002	44226	1.51	164853	2.03	83673	2.75
16	2044-001	41311	1.51	161195	2.03	83203	2.75
17	2013-002	38582	1.51	140866	2.03	76988	2.75
18	2013-004	42028	1.51	158836	2.03	81684	2.75
19	2013-012	43866	1.51	158410	2.03	86616	2.75
20	2013-014	41842	1.51	161431	2.03	82444	2.75
21	2026-001MS	43251	1.51	168045	2.03	87115	2.75
22	2026-001MSD	44931	1.51	173301	2.03	87673	2.75

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1748.D

Date Analyzed: 04/04/2001

Instrument ID: MSDB

Time Analyzed: 11:03

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	56025	1.51	209773	2.04	114278	2.75
	UPPER LIMIT	112050	2.01	419546	2.54	228556	3.25
	LOWER LIMIT	28013	1.01	104887	1.54	57139	2.25
	LAB SAMPLE ID						
01	2032-004	43556	1.51	164558	2.03	82471	2.75
02	2032-005	45946	1.51	176068	2.03	89054	2.75
03	2032-001	46939	1.51	180588	2.03	89784	2.75
04	2032-002	44765	1.51	172400	2.03	85204	2.75
05	2032-003	42216	1.51	157201	2.03	79470	2.75
06	2032-006	42578	1.51	161719	2.03	79960	2.75
07	1966-001	39637	1.51	149991	2.03	77860	2.75
08	1966-003	39873	1.51	151468	2.03	78130	2.75
09	1967-001	40042	1.51	149639	2.03	75186	2.75
10	1967-003	39199	1.51	149008	2.03	74854	2.75
11	2057-004	37371	1.51	133907	2.03	72859	2.75
12	2057-005	37001	1.51	132244	2.03	72242	2.75
13	2057-006	38678	1.51	141107	2.03	73142	2.75
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20							
21							
22							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1748.D

Date Analyzed: 04/04/2001

Instrument ID: MSDB

Time Analyzed: 11:03

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	184643	3.34	129328	4.49	175335	5.29
	UPPER LIMIT	369286	3.84	258656	4.99	350670	5.79
	LOWER LIMIT	92322	2.84	64664	3.99	87668	4.79
	LAB SAMPLE ID						
01	OLMO4-STD-INJ-FOR	197237	3.34	138050	4.48	165893	5.28
02	1994-003	154880	3.34	114397	4.47	151782	5.27
03	1994-004	164922	3.34	130830	4.47	180156	5.27
04	1994-005	159238	3.34	126050	4.47	173730	5.27
05	1866-006	151758	3.34	123770	4.47	164023	5.27
06	Method-Blank	145894	3.34	113863	4.47	148271	5.27
07	2057-003	130181	3.34	105243	4.47	134717	5.27
08	2057-004	146027	3.34	115676	4.47	154026	5.27
09	2057-005	138516	3.34	123132	4.48	168179	5.28
10	2057-006	140480	3.34	123994	4.47	162740	5.27
11	Method-Blank	149168	3.34	123735	4.47	158490	5.27
12	1921-001	135544	3.34	121367	4.47	153577	5.27
13	2026-001	144457	3.34	117866	4.47	153286	5.27
14	2049-002	123659	3.34	104727	4.50	149404	5.30
15	2049-002	135440	3.34	117010	4.48	159575	5.28
16	2044-001	137993	3.34	120164	4.47	156560	5.27
17	2013-002	128653	3.34	119164	4.47	155622	5.27
18	2013-004	137182	3.34	117829	4.47	152368	5.27
19	2013-012	139978	3.34	121758	4.46	161500	5.27
20	2013-014	137801	3.34	118673	4.46	153918	5.27
21	2026-001MS	138168	3.34	120733	4.46	157176	5.27
22	2026-001MSD	138487	3.34	117424	4.46	154010	5.27

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

000226

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1748.D

Date Analyzed: 04/04/2001

Instrument ID: MSDB

Time Analyzed: 11:03

	50UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	184643	3.34	129328	4.49	175335	5.29
	UPPER LIMIT	369286	3.84	258656	4.99	350670	5.79
	LOWER LIMIT	92322	2.84	64664	3.99	87668	4.79
	LAB SAMPLE ID						
01	2032-004	139901	3.34	119821	4.46	159390	5.27
02	2032-005	140771	3.34	118930	4.46	159944	5.27
03	2032-001	144598	3.34	124025	4.47	165458	5.27
04	2032-002	138238	3.34	125139	4.47	165163	5.27
05	2032-003	130934	3.34	123510	4.47	167943	5.28
06	2032-006	133648	3.34	128005	4.47	169939	5.27
07	1966-001	125575	3.34	117834	4.48	164380	5.28
08	1966-003	129635	3.34	130054	4.47	162298	5.27
09	1967-001	126811	3.34	125693	4.47	160918	5.27
10	1967-003	127604	3.34	122013	4.47	158729	5.28
11	2057-004	128579	3.34	131888	4.47	165569	5.27
12	2057-005	134514	3.34	136749	4.47	173048	5.27
13	2057-006	132154	3.34	129445	4.46	166266	5.27
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1785.D

Date Analyzed: 04/05/2001

Instrument ID: MSDB

Time Analyzed: 11:18

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	61788	1.51	220995	2.04	113622	2.75
	UPPER LIMIT	123576	2.01	441990	2.54	227244	3.25
	LOWER LIMIT	30894	1.01	110498	1.54	56811	2.25
	LAB SAMPLE ID						
01	OLMO4-STD-INJ-FOR	60648	1.51	231735	2.03	117913	2.75
02	Method-Blank	54843	1.51	217248	2.03	110214	2.75
03	2049-002	53384	1.51	202553	2.03	99161	2.75
04	2032-003	48727	1.51	184797	2.03	89524	2.75
05	1966-001	50323	1.51	187966	2.03	90215	2.75
06	Method-Blank	49938	1.51	190290	2.03	94631	2.75
07	2120-026	48083	1.51	185475	2.03	90363	2.75
08	2120-027	50614	1.51	188079	2.03	88419	2.75
09	2120-028	53087	1.51	195902	2.03	91254	2.75
10	2120-029	51113	1.51	192878	2.03	92269	2.75
11	2120-003	52616	1.51	194192	2.03	92477	2.75
12	2120-007	49262	1.51	185806	2.03	89665	2.75
13	2120-011	51772	1.51	190915	2.03	90718	2.75
14	2120-012	48250	1.51	173010	2.03	80239	2.75
15	2120-013	46281	1.51	170846	2.03	80676	2.75
16	2120-014	50997	1.51	188689	2.03	88863	2.75
17	2120-015	46206	1.51	167467	2.03	80418	2.75
18	2120-016	49618	1.51	184012	2.03	86637	2.75
19	2120-017	48347	1.51	178953	2.03	82069	2.75
20	2120-018	47777	1.51	182178	2.03	86731	2.75
21	2120-019	50535	1.51	189377	2.03	86125	2.75
22	2120-020	47478	1.51	178716	2.03	84565	2.75

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1785.D

Date Analyzed: 04/05/2001

Instrument ID: MSDB

Time Analyzed: 11:18

	40UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	61788		1.51		220995		2.04		113622		2.75	
	UPPER LIMIT	123576		2.01		441990		2.54		227244		3.25	
	LOWER LIMIT	30894		1.01		110498		1.54		56811		2.25	
	LAB SAMPLE ID												
01	2120-021	51475		1.51		189288		2.03		89062		2.75	
02	2120-022	49324		1.51		186194		2.03		86949		2.75	
03	2120-023	50590		1.51		191298		2.03		90994		2.75	
04	1840-003	51101		1.51		198633		2.03		92806		2.75	
05	1840-003MS	51050		1.51		189435		2.03		89270		2.75	
06	1840-003MS	48901		1.51		184010		2.03		87630		2.75	
07	Method-Blank	50251		1.51		191222		2.03		92503		2.75	
08	2092-011	47375		1.51		164176		2.03		74878		2.75	
09	2111-001	48765		1.51		179691		2.03		82514		2.75	
10													
11													
12													
13													
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15													
16													
17													
18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1785.D

Date Analyzed: 04/05/2001

Instrument ID: MSDB

Time Analyzed: 11:18

	40UG/L	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	174979		3.34		133624		4.50		189367		5.29	
	UPPER LIMIT	349958		3.84		267248		5.00		378734		5.79	
	LOWER LIMIT	87490		2.84		66812		4.00		94684		4.79	
	LAB SAMPLE ID												
01	OLMO4-STD-INJ-FOR	179901		3.34		119239		4.48		160730		5.28	
02	Method-Blank	172954		3.34		111992		4.49		134377		5.28	
03	2049-002	154862		3.34		121600		4.49		171341		5.29	
04	2032-003	137919		3.34		113384		4.48		162047		5.28	
05	1966-001	135693		3.34		111532		4.48		161674		5.28	
06	Method-Blank	142858		3.34		108120		4.47		146823		5.27	
07	2120-026	137886		3.34		108563		4.48		146163		5.28	
08	2120-027	133680		3.34		104284		4.48		141968		5.27	
09	2120-028	140342		3.34		107648		4.48		146320		5.28	
10	2120-029	139707		3.34		105817		4.47		145779		5.27	
11	2120-003	139016		3.34		107625		4.47		144923		5.27	
12	2120-007	134061		3.34		110505		4.47		151935		5.27	
13	2120-011	139826		3.34		115061		4.47		157976		5.27	
14	2120-012	123444		3.34		114671		4.47		158235		5.27	
15	2120-013	125047		3.34		114908		4.47		156724		5.27	
16	2120-014	132015		3.34		112348		4.47		154802		5.27	
17	2120-015	123536		3.34		108687		4.47		150856		5.27	
18	2120-016	128837		3.34		116118		4.47		157542		5.27	
19	2120-017	124840		3.34		111428		4.47		152439		5.27	
20	2120-018	131724		3.34		113131		4.47		154810		5.27	
21	2120-019	131731		3.34		115308		4.47		158821		5.27	
22	2120-020	131975		3.34		111912		4.47		153068		5.27	

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1785.D

Date Analyzed: 04/05/2001

Instrument ID: MSDB

Time Analyzed: 11:18

	50UG/L	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	174979		3.34		133624		4.50		189367		5.29	
	UPPER LIMIT	349958		3.84		267248		5.00		378734		5.79	
	LOWER LIMIT	87490		2.84		66812		4.00		94684		4.79	
	LAB SAMPLE ID												
01	2120-021	136091		3.34		117540		4.47		160215		5.27	
02	2120-022	136965		3.34		119697		4.46		160347		5.27	
03	2120-023	136300		3.34		115015		4.47		156768		5.27	
04	1840-003	137791		3.34		116972		4.47		157339		5.27	
05	1840-003MS	135967		3.34		116978		4.46		158844		5.27	
06	1840-003MS	132367		3.34		113432		4.46		152755		5.27	
07	Method-Blank	142690		3.34		114285		4.46		154420		5.27	
08	2092-011	103557		3.34		117846		4.47		164589		5.28	
09	2111-001	131344		3.34		122042		4.47		167122		5.27	
10													
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IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1818.D

Date Analyzed: 04/06/2001

Instrument ID: MSDB

Time Analyzed: 11:12

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	59610	1.51	222802	2.04	120422	2.75
	UPPER LIMIT	119220	2.01	445604	2.54	240844	3.25
	LOWER LIMIT	29805	1.01	111401	1.54	60211	2.25
	LAB SAMPLE ID						
01	OLMO4-STD-INJ-FOR	53272	1.51	199125	2.03	107092	2.75
02	2092-011	42439	1.51	173515	2.03	97476	2.75
03	Method-Blank	53239	1.51	212597	2.03	107651	2.75
04	2117-001	42228	1.51	160381	2.03	85688	2.75
05	2117-002	43411	1.51	165537	2.03	88200	2.75
06	2117-003	45230	1.51	177904	2.03	91400	2.75
07	2117-005	45243	1.51	168959	2.03	87126	2.75
08	2117-006	43827	1.51	170276	2.03	92086	2.75
09	2117-007	45872	1.51	172890	2.03	88670	2.75
10	2028-006	46432	1.51	174497	2.03	85458	2.75
11	2092-001	42243	1.51	166495	2.03	84622	2.75
12	2092-002	45817	1.51	186014	2.03	98023	2.75
13	2092-003	45621	1.51	182690	2.03	95501	2.75
14	2092-004	45158	1.51	185556	2.03	100797	2.75
15	2092-005	45899	1.51	178173	2.03	90684	2.75
16	2092-002MS	44911	1.51	176966	2.03	88513	2.75
17	2092-002MSD	45162	1.51	176750	2.03	88576	2.75
18	2117-004	42582	1.51	168897	2.03	94359	2.75
19							
20							
21							
22							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B1818.D

Date Analyzed: 04/06/2001

Instrument ID: MSDB

Time Analyzed: 11:12

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	188068	3.34	129482	4.50	197651	5.29
	UPPER LIMIT	376136	3.84	258964	5.00	395302	5.79
	LOWER LIMIT	94034	2.84	64741	4.00	98826	4.79
	LAB SAMPLE ID						
01	OLMO4-STD-INJ-FOR	173305	3.34	110086	4.48	147018	5.28
02	2092-011	159631	3.34	142066	4.48	155897	5.28
03	Method-Blank	180115	3.34	120919	4.48	150752	5.27
04	2117-001	136327	3.34	101686	4.48	132736	5.28
05	2117-002	136688	3.34	94771	4.47	132587	5.27
06	2117-003	142244	3.34	97894	4.47	139030	5.27
07	2117-005	139101	3.34	100485	4.47	141573	5.27
08	2117-006	148379	3.34	95851	4.47	133383	5.27
09	2117-007	135697	3.34	104781	4.47	143321	5.27
10	2028-006	131217	3.34	107493	4.47	150801	5.27
11	2092-001	132654	3.34	104511	4.47	142933	5.27
12	2092-002	158148	3.34	105566	4.47	143393	5.27
13	2092-003	162400	3.34	106096	4.47	141789	5.27
14	2092-004	176219	3.34	118767	4.47	148982	5.27
15	2092-005	141893	3.34	103806	4.47	143006	5.27
16	2092-002MS	134780	3.34	100979	4.46	140659	5.26
17	2092-002MSD	140846	3.34	104472	4.46	142467	5.27
18	2117-004	163962	3.34	115041	4.47	145147	5.27
19							
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21							
22							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B2001.D

Date Analyzed: 04/13/2001

Instrument ID: MSDB

Time Analyzed: 07:40

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	55981	2.31	205241	2.85	109934	3.60
	UPPER LIMIT	111962	2.81	410482	3.35	219868	4.10
	LOWER LIMIT	27991	1.81	102621	2.35	54967	3.10
	LAB SAMPLE ID						
01	BNA-STD-INJ-FOR-04	59585	2.31	217978	2.85	115736	3.60
02	BNA-STD-INJ-FOR-04	61615	2.31	222155	2.85	114287	3.60
03	BNA-STD-INJ-FOR-04	59745	2.32	210108	2.85	105879	3.60
04	BNA-STD-INJ-FOR-04	58890	2.32	205511	2.85	100944	3.60
05	OLMO4-STD-INJ-FOR	72469	2.31	244730	2.84	147945	3.60
06	OLMO4-STD-INJ-FOR	70668	2.31	242484	2.84	149190	3.60
07	OLMO4-STD-INJ-FOR	68851	2.31	240732	2.84	143068	3.60
08	OLMO4-STD-INJ-FOR	68318	2.31	238729	2.84	143781	3.60
09	OLMO4-STD-INJ-FOR	66608	2.31	235738	2.84	133419	3.60
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IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B2001.D

Date Analyzed: 04/13/2001

Instrument ID: MSDB

Time Analyzed: 07:40

	40UG/L	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	174197		4.25		99513		6.00		104961		7.25	
	UPPER LIMIT	348394		4.75		199026		6.50		209922		7.75	
	LOWER LIMIT	87099		3.75		49757		5.50		52481		6.75	
	LAB SAMPLE ID												
01	BNA-STD-INJ-FOR-04	190119		4.25		106299		6.00		107269		7.26	
02	BNA-STD-INJ-FOR-04	174663		4.25		109818		6.01		114062		7.26	
03	BNA-STD-INJ-FOR-04	161564		4.25		110349		6.00		117149		7.28	
04	BNA-STD-INJ-FOR-04	159222		4.25		111463		6.01		125259		7.28	
05	OLMO4-STD-INJ-FOR	217778		4.25		120330		5.99		115001		7.25	
06	OLMO4-STD-INJ-FOR	238937		4.26		118667		6.00		114006		7.25	
07	OLMO4-STD-INJ-FOR	231380		4.26		118924		6.00		116781		7.26	
08	OLMO4-STD-INJ-FOR	211866		4.26		113654		6.00		111456		7.25	
09	OLMO4-STD-INJ-FOR	213831		4.26		108777		6.00		109813		7.25	
10													
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IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B2020.D

Date Analyzed: 04/13/2001

Instrument ID: MSDB

Time Analyzed: 12:58

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	52966	2.31	188388	2.85	101815	3.60
	UPPER LIMIT	105932	2.81	376776	3.35	203630	4.10
	LOWER LIMIT	26483	1.81	94194	2.35	50908	3.10
	LAB SAMPLE ID						
01	Method-Blank	47378	2.31	190360	2.84	102613	3.59
02	2292-002	50844	2.31	195037	2.84	98859	3.59
03	2303-001	51933	2.31	190527	2.85	101020	3.60
04	2303-002	50976	2.31	198200	2.84	105970	3.60
05	2303-003	48597	2.31	186185	2.84	98475	3.60
06	2303-006	50051	2.31	193681	2.84	99939	3.59
07	2293-009	49863	2.31	191655	2.84	97011	3.59
08	2293-010	49632	2.31	188044	2.84	93585	3.59
09	2293-011	50486	2.31	192794	2.84	93171	3.59
10	2294-017	52023	2.31	196479	2.84	96127	3.59
11	2294-018	53149	2.31	200157	2.84	97178	3.59
12	2294-019	49752	2.31	190849	2.84	92663	3.59
13	2294-020	46631	2.31	175925	2.84	90095	3.59
14	2092-007	45644	2.31	444248*	2.84	86232	3.60
15	2092-010	48962	2.31	183315	2.84	90946	3.59
16	2254-001	48037	2.31	175352	2.84	89296	3.59
17	2254-002	51221	2.31	186175	2.84	91250	3.59
18	2254-003	50442	2.31	188931	2.84	92413	3.59
19	2292-002MS	50055	2.31	184331	2.84	90553	3.59
20	2292-002MSD	48415	2.31	183970	2.84	88472	3.59
21	Method-Blank	42509	2.31	165876	2.84	83415	3.59
22	2287-008	47134	2.31	173340	2.84	86662	3.59

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B2020.D

Date Analyzed: 04/13/2001

Instrument ID: MSDB

Time Analyzed: 12:58

	40UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	52966		2.31		188388		2.85		101815		3.60	
	UPPER LIMIT	105932		2.81		376776		3.35		203630		4.10	
	LOWER LIMIT	26483		1.81		94194		2.35		50908		3.10	
	LAB SAMPLE ID												
01	2287-009	46140		2.31		170265		2.84		85292		3.59	
02	2287-010	40793		2.31		156736		2.84		76877		3.59	
03	2287-011	42812		2.31		156960		2.84		77835		3.59	
04	2287-012	45985		2.31		172033		2.84		83584		3.59	
05	2287-013	46377		2.31		169348		2.84		86707		3.59	
06	2287-014	41903		2.31		164348		2.84		83766		3.59	
07	2287-016	44431		2.31		164497		2.84		85207		3.59	
08	2287-017	42822		2.31		163366		2.84		85733		3.6	
09	2287-015	41458		2.31		156920		2.84		79524		3.59	
10	2092-007	46083		2.31		294515		2.84		83636		3.59	
11													
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18													
19													
20													
21													
22													

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B2020.D

Date Analyzed: 04/13/2001

Instrument ID: MSDB

Time Analyzed: 12:58

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	163254	4.26	99039	6.01	102128	7.28
	UPPER LIMIT	326508	4.76	198078	6.51	204256	7.78
	LOWER LIMIT	81627	3.76	49520	5.51	51064	6.78
	LAB SAMPLE ID						
01	Method-Blank	181786	4.25	100409	5.99	93835	7.25
02	2292-002	172620	4.25	92755	6.01	95536	7.24
03	2303-001	162347	4.25	96432	5.99	95922	7.25
04	2303-002	174129	4.25	97473	5.99	107851	7.25
05	2303-003	168259	4.25	91300	6.00	97145	7.24
06	2303-006	169493	4.25	89491	5.99	92593	7.25
07	2293-009	162946	4.25	92295	5.99	104010	7.25
08	2293-010	154497	4.25	89393	5.99	107133	7.25
09	2293-011	160981	4.25	91827	5.99	112270	7.25
10	2294-017	166103	4.24	90594	5.98	108721	7.25
11	2294-018	164406	4.24	91477	5.98	107999	7.25
12	2294-019	154877	4.24	86314	5.99	104433	7.24
13	2294-020	152562	4.24	82433	5.99	99440	7.24
14	2092-007	102840	4.25	129795	6.08	159657	7.36
15	2092-010	162680	4.24	107740	5.99	128318	7.26
16	2254-001	149061	4.24	101996	5.98	121928	7.25
17	2254-002	151041	4.24	99931	5.98	118997	7.25
18	2254-003	152420	4.24	96728	5.98	114999	7.25
19	2292-002MS	148640	4.24	95885	5.98	114129	7.25
20	2292-002MSD	146632	4.24	91791	5.99	111081	7.24
21	Method-Blank	142637	4.24	89826	5.98	107890	7.25
22	2287-008	141047	4.24	88239	5.98	106103	7.25

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B2020.D

Date Analyzed: 04/13/2001

Instrument ID: MSDB

Time Analyzed: 12:58

	50UG/L	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	163254		4.26		99039		6.01		102128		7.28	
	UPPER LIMIT	326508		4.76		198078		6.51		204256		7.78	
	LOWER LIMIT	81627		3.76		49520		5.51		51064		6.78	
	LAB SAMPLE ID												
01	2287-009	141834		4.24		84583		6.01		106525		7.24	
02	2287-010	126249		4.24		78300		5.99		95036		7.24	
03	2287-011	128793		4.24		79820		5.99		97304		7.24	
04	2287-012	138013		4.24		82787		6.00		102242		7.24	
05	2287-013	138860		4.24		86076		5.98		103438		7.25	
06	2287-014	137558		4.24		83412		5.98		98873		7.25	
07	2287-016	137639		4.24		81023		5.99		99149		7.24	
08	2287-017	135961		4.24		91405		5.98		109457		7.24	
09	2287-015	132216		4.24		105212		5.98		130935		7.26	
10	2092-007	143088		4.24		116151		6.01		145111		7.28	
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1829.D Vial: 13
Acq On : 6 Apr 2001 13:57 Operator: JC
Sample : S-45,2092-001,S,15.11g,18.8,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
'S Integration Params: rteint.p
Quant Time: Apr 06 14:06:54 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	42243	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	166495	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	84622	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	132654	40.00	UG	-0.02
75) Chrysene-d12	4.47	240	104511m	40.00	UG	-0.04
84) Perylene-d12	5.27	264	142933	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 36 - 93		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 40 - 101		Recovery = 0.00%#			
23) Nitrobenzene-d5	1.74	82	45197	37.41	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 74.82%			
43) 2-Fluorobiphenyl	2.48	172	101374	43.59	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 87.18%			
64) 2,4,6-Tribromophenol	3.07	330	100	0.23	UG	-0.02
Spiked Amount 100.000	Range 54 - 135		Recovery = 0.23%#			
77) Terphenyl-d14	4.01	244	115064	46.17	UG	-0.03
Spiked Amount 50.000	Range 58 - 147		Recovery = 92.34%			
Target Compounds						Qvalue
69) Phenanthrene	3.34	178	5184m	1.90	UG	
73) Fluoranthene	3.84	202	12099	4.16	UG	98
76) Pyrene	3.92	202	16686	6.06	UG #	96
81) Benzo[a]anthracene	4.46	228	7320m	2.92	UG	
82) Chrysene	4.48	228	7794	3.37	UG	99
83) bis(2-Ethylhexyl)phthalate	4.55	149	1082	0.61	UG #	91
86) Benzo[b]fluoranthene	5.05	252	7522m	1.95	UG	
87) Benzo[k]fluoranthene	5.05	252	4655m	1.41	UG	
88) Benzo[a]pyrene	5.23	252	7836m	2.63	UG	
89) Indeno[1,2,3-cd]pyrene	5.81	276	4845	1.60	UG #	73
90) Dibenz[a,h]anthracene	5.81	278	1992	0.68	UG #	72
91) Benzo[g,h,i]perylene	5.91	276	5288	2.01	UG #	71

(#) = qualifier out of range (m) = manual integration
B1829.D BS1201.M Mon Apr 23 10:27:51 2001 MSD_B Page 1

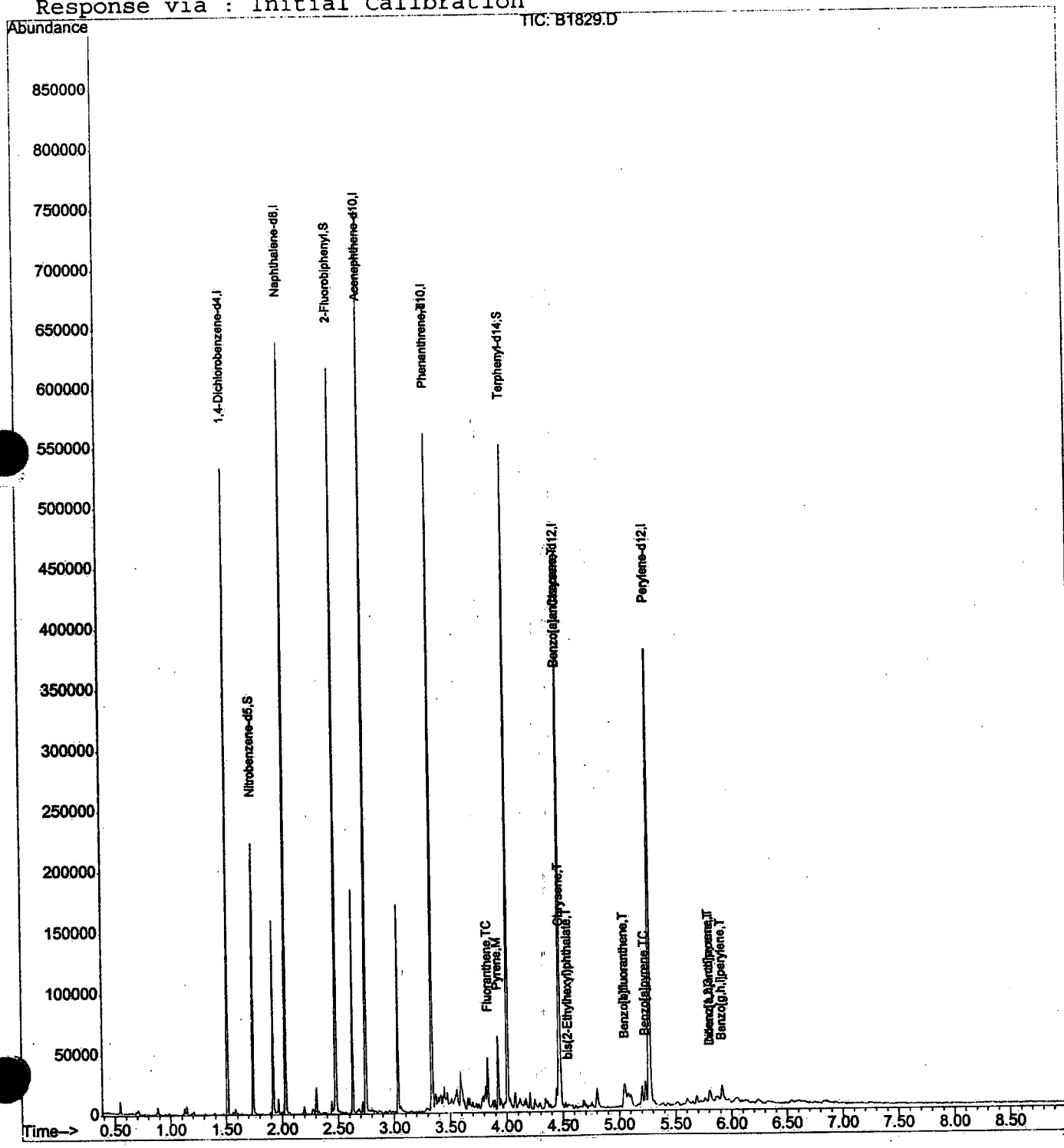
000240

2331

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1829.D Vial: 13
Acq On : 6 Apr 2001 13:57 Operator: JC
Sample : S-45,2092-001,S,15.11g,18.8,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 23 10:27 2001 Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



000241

2332

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1829.D
Acq On : 6 Apr 2001 13:57
Sample : S-45,2092-001,S,15.11g,18.8,04/06/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 13
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

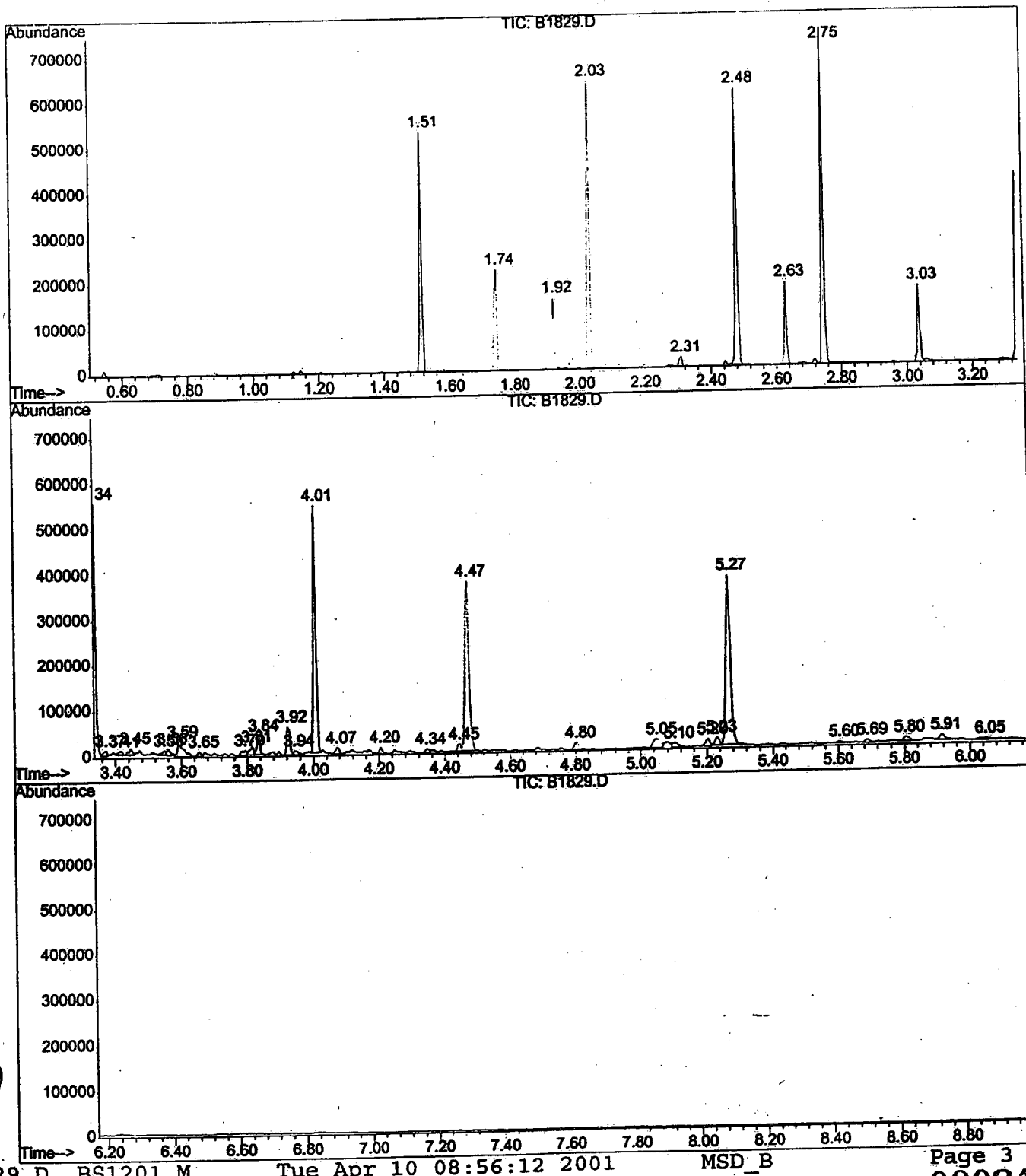
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.512	209	212	215	rBV	533450	240494	68.03%	7.379%
2	1.742	252	255	257	rBV	224170	128618	36.39%	3.946%
3	1.918	286	288	291	rBV	160064	77217	21.84%	2.369%
4	2.031	306	309	311	rBV	639605	322558	91.25%	9.896%
5	2.308	359	361	363	rVB	21862	12916	3.65%	0.396%
6	2.479	390	393	396	rVB	614698	283649	80.24%	8.703%
7	2.629	418	421	424	rBV	184058	80187	22.68%	2.460%
8	2.746	440	443	446	rBV	747403	344724	97.52%	10.576%
9	3.035	495	497	500	rBV	172182	86211	24.39%	2.645%
10	3.339	551	554	557	rBV	558396	327998	92.79%	10.063%
11	3.372	557	560	561	rBV2	11434	9738	2.75%	0.299%
12	3.414	565	568	570	rVB3	7999	7404	2.09%	0.227%
13	3.446	570	574	576	rBV	14532	11839	3.35%	0.363%
14	3.548	589	593	594	rBV3	9027	8709	2.46%	0.267%
15	3.558	594	595	599	rVB2	14577	9710	2.75%	0.298%
16	3.591	599	601	610	rVB5	32442	40770	11.53%	1.251%
17	3.655	610	613	615	rBV2	10080	7319	2.07%	0.225%
18	3.794	634	639	640	rBV3	11295	12739	3.60%	0.391%
19	3.815	640	643	644	rVV2	18039	14727	4.17%	0.452%
20	3.836	644	647	649	rVB	41298	30299	8.57%	0.930%
21	3.922	661	663	666	rBV	61320	42035	11.89%	1.290%
22	3.943	666	667	672	rVB3	8808	8066	2.28%	0.247%
23	4.007	676	679	682	rVV	544283	290991	82.32%	8.928%
24	4.071	688	691	694	rVB	13324	11344	3.21%	0.348%
25	4.205	714	716	720	rVB	14549	9076	2.57%	0.278%
26	4.344	739	742	744	rBV2	8740	7885	2.23%	0.242%
27	4.445	758	761	762	rBV	15733	13272	3.75%	0.407%
28	4.472	762	766	771	rVB	373732	318672	90.15%	9.777%
29	4.803	824	828	834	rBV3	16134	17027	4.82%	0.522%
30	5.049	869	874	877	rBV	19984	31765	8.99%	0.975%
31	5.102	882	884	891	rVB2	10178	11949	3.38%	0.367%

32	5.204	898	903	905	rBV	16236	15139	4.28%	0.464%
33	5.231	905	908	911	rVV	19198	17110	4.84%	0.525%
34	5.268	911	915	921	rVB	374024	353486	100.00%	10.845%
35	5.605	973	978	984	rBV6	4844	7326	2.07%	0.225%
	5.690	991	994	998	rBV	7295	7663	2.17%	0.235%
	5.802	1012	1015	1022	rBV2	9770	14181	4.01%	0.435%
38	5.914	1032	1036	1042	rVB	12630	15622	4.42%	0.479%
39	6.048	1055	1061	1067	rVB9	4014	8914	2.52%	0.273%

Sum of corrected areas: 3259349

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-06-01\B1829.D
Operator : JC
Acquired : 6 Apr 2001 13:57 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-45,2092-001,S,15.11g,18.8,04/06/01
Misc Info : ENVTACT/ORBIS,04/03/01,04/04/01,1
Vial Number: 13
Quant File :BS1201.RES (RTE Integrator)



2335

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1829.D
Acq On : 6 Apr 2001 13:57
Sample : S-45,2092-001,S,15.11g,18.8,04/06/01
[redacted]sc : ENVTACT/ORBIS,04/03/01,04/04/01,1
[redacted]s Integration Params: LSCINT.P

Vial: 13
Operator: JC
Inst : MSD_B
Multiplr: 1.00

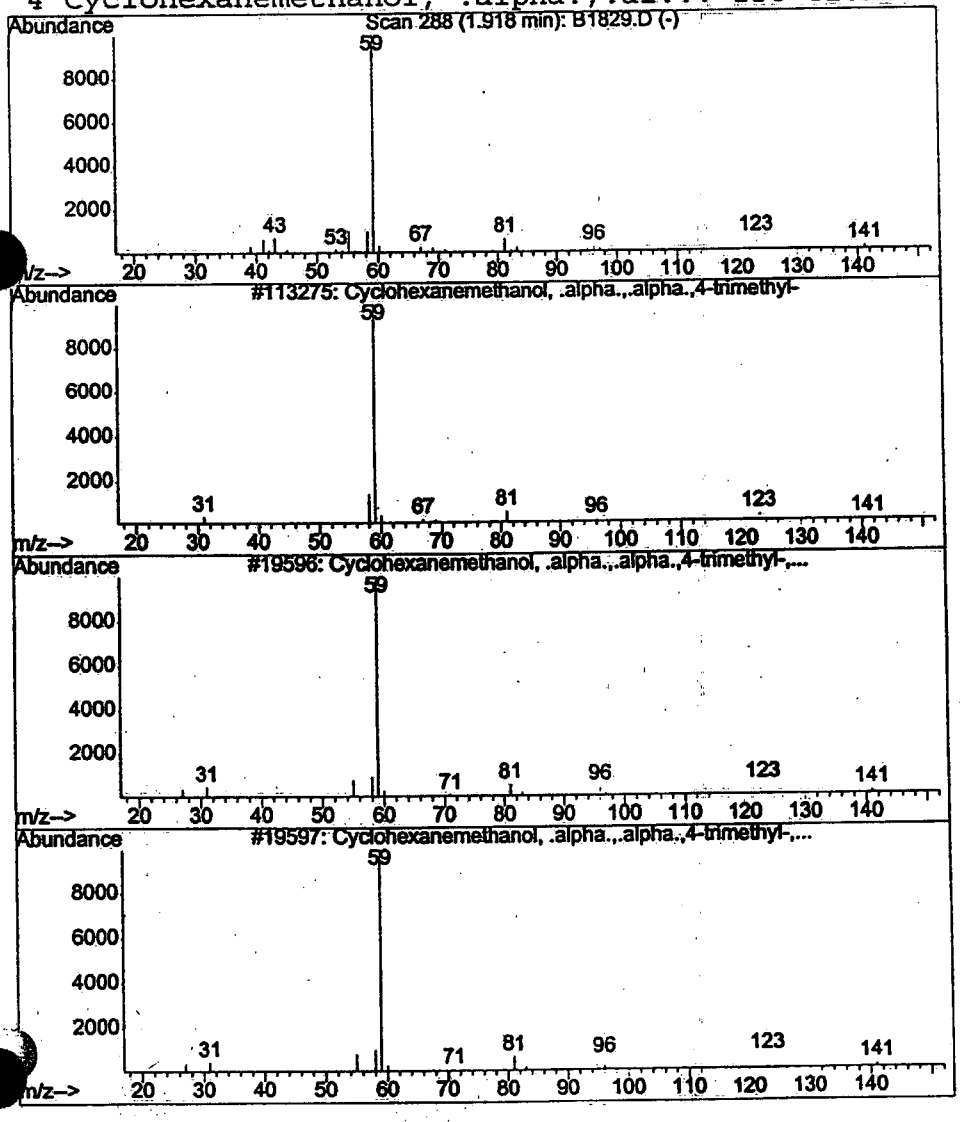
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

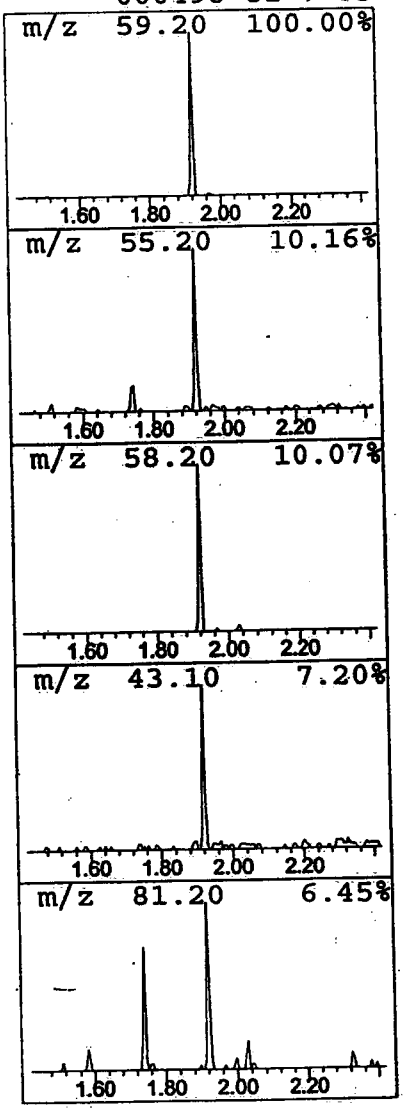
****

Peak Number 1 Unknown — Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.92	9.58 UG	77217	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	000498-81-7	83
2	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	007322-63-6	83
3	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	005114-00-1	83
4	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	000498-81-7	83





000245

2336

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1829.D
Acq On : 6 Apr 2001 13:57
Sample : S-45,2092-001,S,15.11g,18.8,04/06/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1
1S Integration Params: LSCINT.P

Vial: 13
Operator: JC
Inst : MSD_B
Multiplr: 1.00

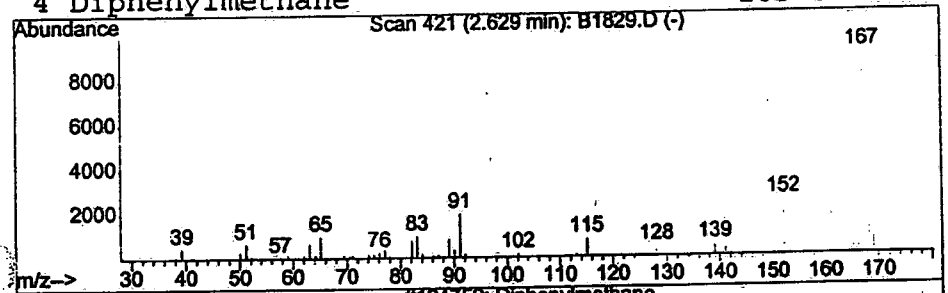
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

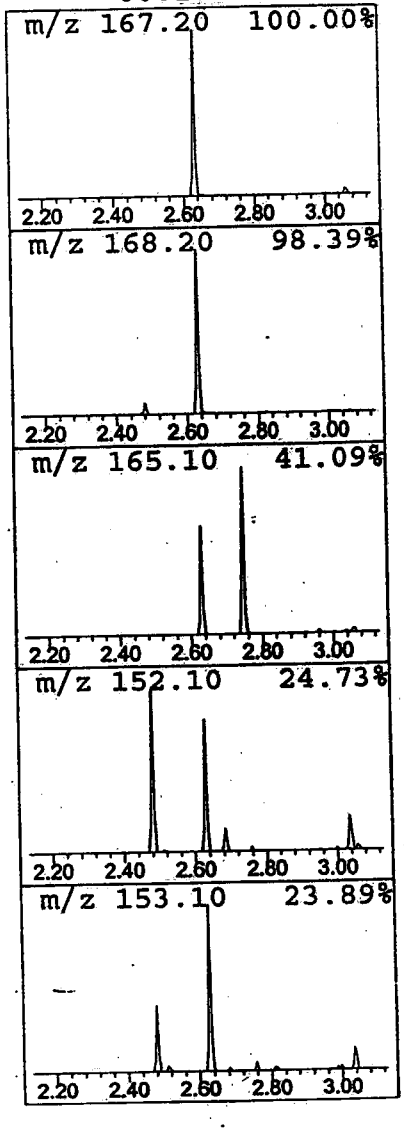
****

Peak Number 2 Diphenylmethane — Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.63	9.30 UG	80187	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diphenylmethane	168	C13H12	000101-81-5	97
2	Diphenylmethane	168	C13H12	000101-81-5	95
3	Diphenylmethane	168	C13H12	000101-81-5	94
4	Diphenylmethane	168	C13H12	000101-81-5	94





000246

2337

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1829.D
Acq On : 6 Apr 2001 13:57
Sample : S-45,2092-001,S,15.11g,18.8,04/06/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1
LS Integration Params: LSCINT.P

Vial: 13
Operator: JC
Inst : MSD_B
Multiplr: 1.00

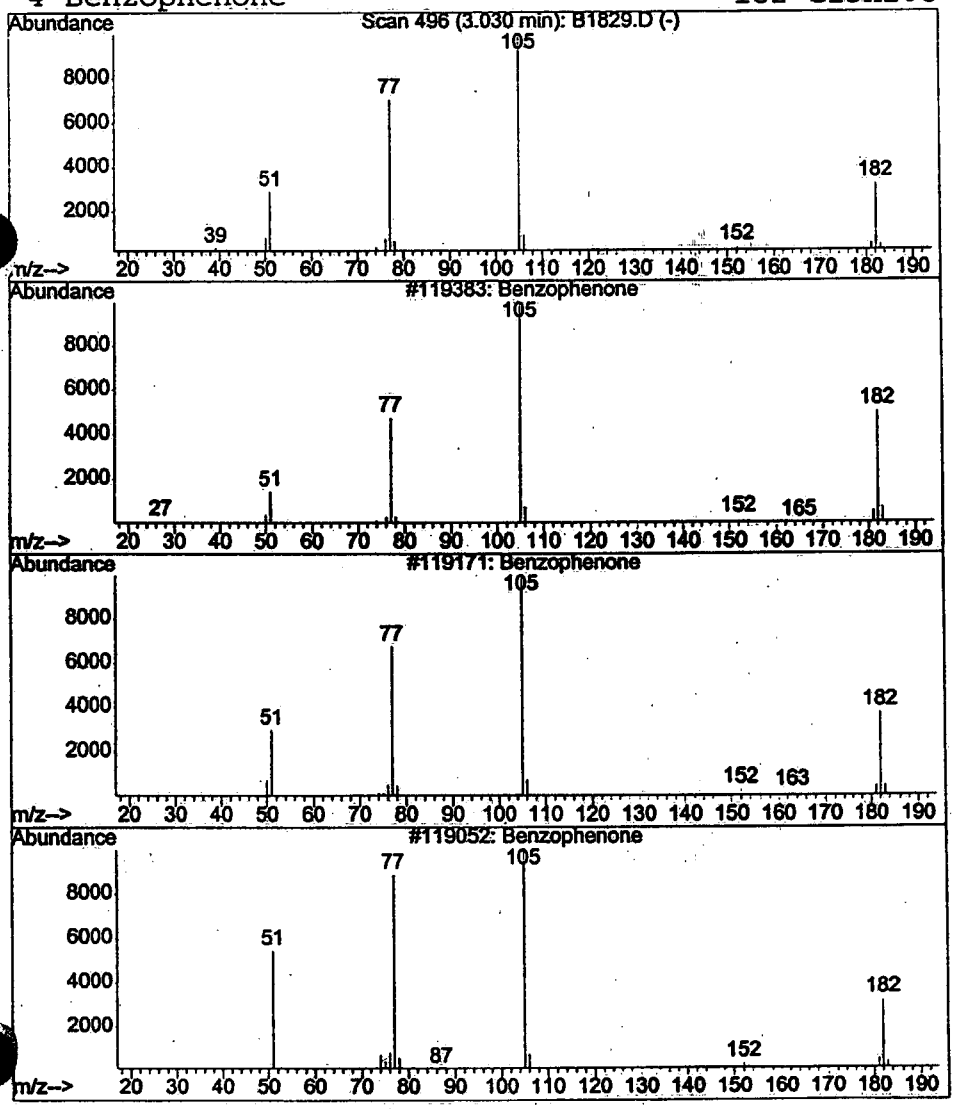
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

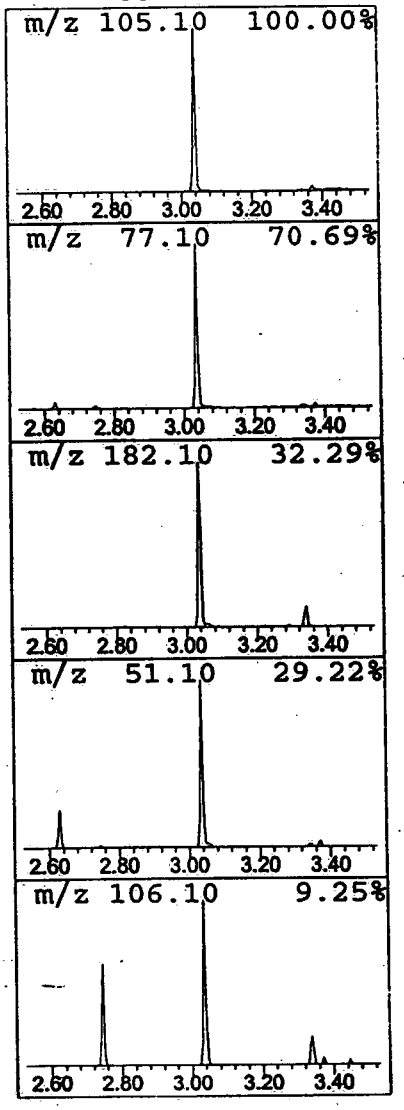
****

Peak Number 3 Benzophenone Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.03	10.00 UG	86211	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	95
2	Benzophenone	182	C13H10O	000119-61-9	95
3	Benzophenone	182	C13H10O	000119-61-9	91
4	Benzophenone	182	C13H10O	000119-61-9	91





000247

2336

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1829.D
Acq On : 6 Apr 2001 13:57
Sample : S-45,2092-001,S,15.11g,18.8,04/06/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 13
Operator: JC
Inst : MSD_B
Multiplr: 1.00

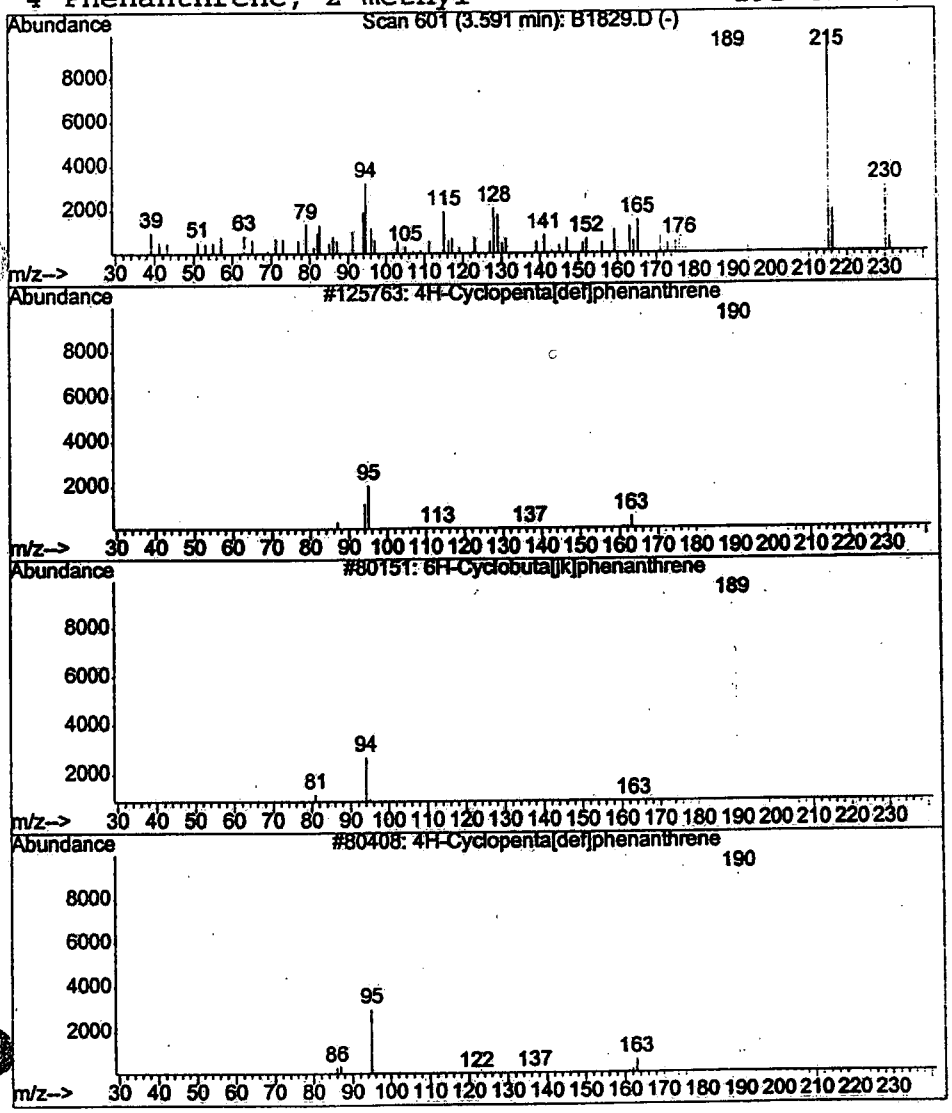
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

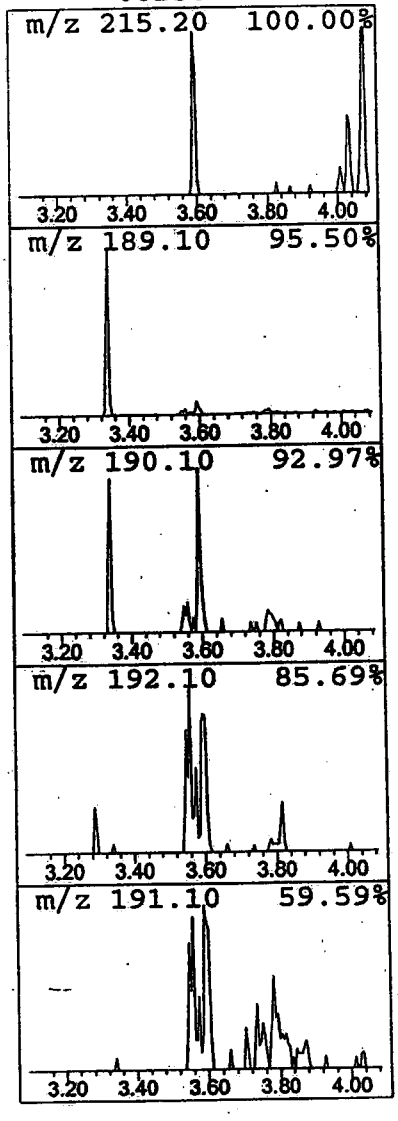
****

Peak Number 4 Unknown aromatic Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.59	4.97 UG	40770	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	30
2	6H-Cyclobuta[jk]phenanthrene	190	C15H10	083469-43-6	27
3	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	25
4	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	15





000248

2339

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1830.D Vial: 14
Acq On : 6 Apr 2001 14:12 Operator: JC
Sample : S-46,2092-002,S,10.47g,17.6,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 06 14:21:07 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	45817	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	186014	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	98023	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	158148	40.00	UG	-0.02
75) Chrysene-d12	4.47	240	105566	40.00	UG	-0.04
84) Perylene-d12	5.27	264	143393	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	92378	70.08	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 70.08%			
6) Phenol-d5	1.39	99	132970	82.41	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 82.41%			
23) Nitrobenzene-d5	1.74	82	52422	38.84	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 77.68%			
43) 2-Fluorobiphenyl	2.48	172	116213	43.14	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 86.28%			
64) 2,4,6-Tribromophenol	3.07	330	49485	93.97	UG	-0.02
Spiked Amount 100.000	Range 54 - 135		Recovery = 93.97%			
77) Terphenyl-d14	4.01	244	121641	48.32	UG	-0.03
Spiked Amount 50.000	Range 58 - 147		Recovery = 96.64%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

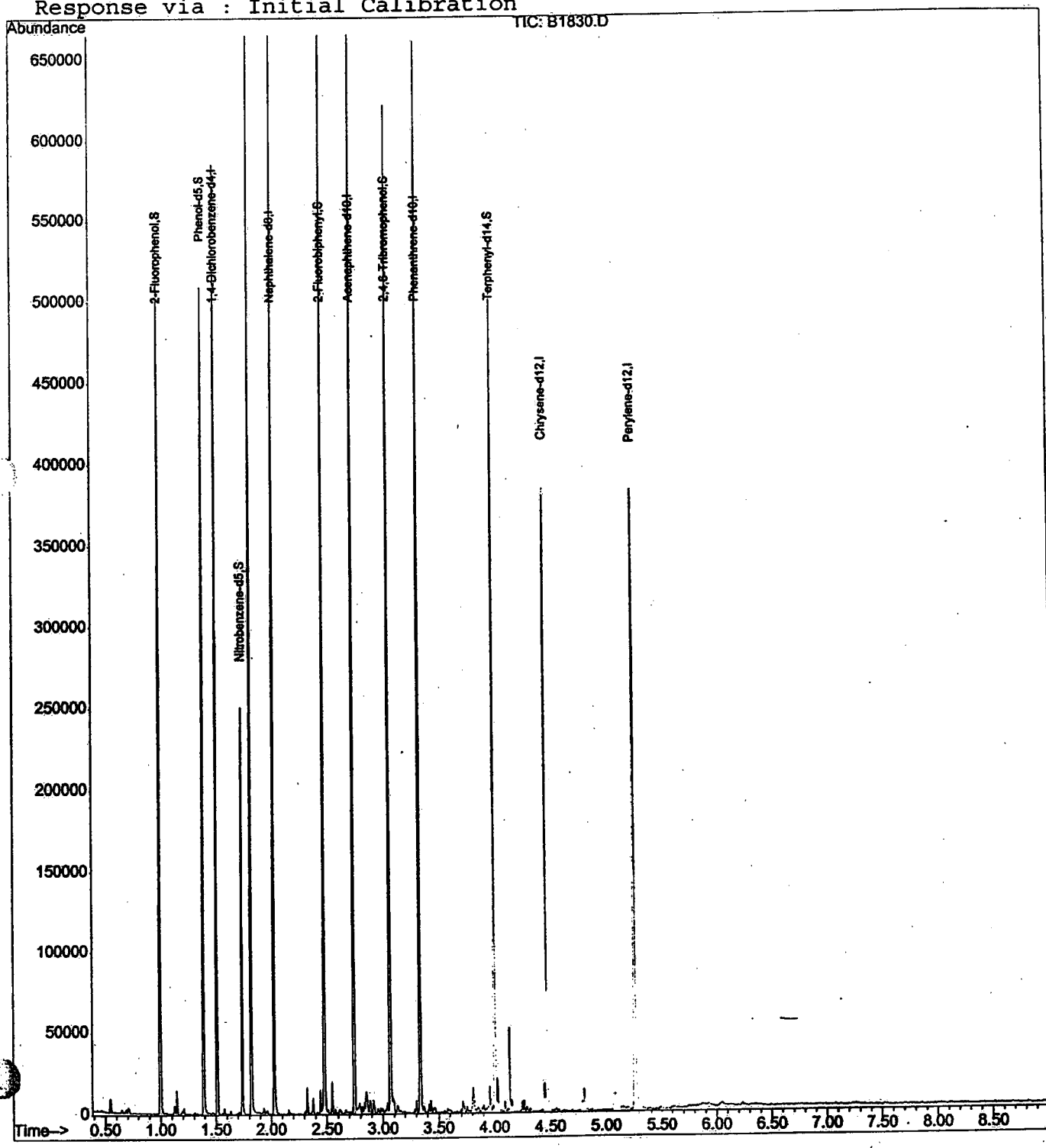
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1830.D
Acq On : 6 Apr 2001 14:12
Sample : S-46,2092-002,S,10.47g,17.6,04/06/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1
MS Integration Params: rteint.p
Quant Time: Apr 9 11:31 2001

Vial: 14
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



2341

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1830.D Vial: 14
Acq On : 6 Apr 2001 14:12 Operator: JC
Sample : S-46,2092-002,S,10.47g,17.6,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
'S Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.000	113	116	119	rBV	540422	277231	69.09%	6.570%
2	1.395	186	190	192	rBV	508948	317452	79.11%	7.523%
3	1.512	209	212	215	rBV	585596	260791	64.99%	6.180%
4	1.742	252	255	257	rBV	250634	148486	37.00%	3.519%
5	1.822	267	270	272	rBV	713385	341652	85.14%	8.096%
6	2.031	306	309	311	rBV	680128	359661	89.63%	8.523%
7	2.442	384	386	388	rBV2	14655	8620	2.15%	0.204%
8	2.479	390	393	396	rVB	718956	332823	82.94%	7.887%
9	2.549	403	406	408	rVB	19450	10123	2.52%	0.240%
10	2.746	440	443	445	rBV	851779	401288	100.00%	9.509%
11	2.794	445	452	455	rVB4	6163	8937	2.23%	0.212%
12	2.853	461	463	467	rVB2	12529	11320	2.82%	0.268%
13	3.067	500	503	506	rBV	620159	317185	79.04%	7.516%
14	3.339	551	554	556	rBV	658955	363072	90.48%	8.604%
15	3.810	638	642	645	rBV2	14673	13735	3.42%	0.325%
16	3.959	667	670	673	rVB2	15272	10759	2.68%	0.255%
17	4.007	676	679	682	rVV	553350	307876	76.72%	7.296%
18	4.029	682	683	686	rVB	19790	9777	2.44%	0.232%
19	4.141	701	704	706	rBV	51181	35970	8.96%	0.852%
20	4.440	758	760	762	rBV	17003	14617	3.64%	0.346%
21	4.472	762	766	769	rVB	381907	275773	68.72%	6.535%
22	4.803	826	828	837	rVB	14686	14818	3.69%	0.351%
23	5.081	875	880	890	rBV2	10751	25536	6.36%	0.605%
24	5.268	910	915	926	rBV	382275	352390	87.81%	8.351%

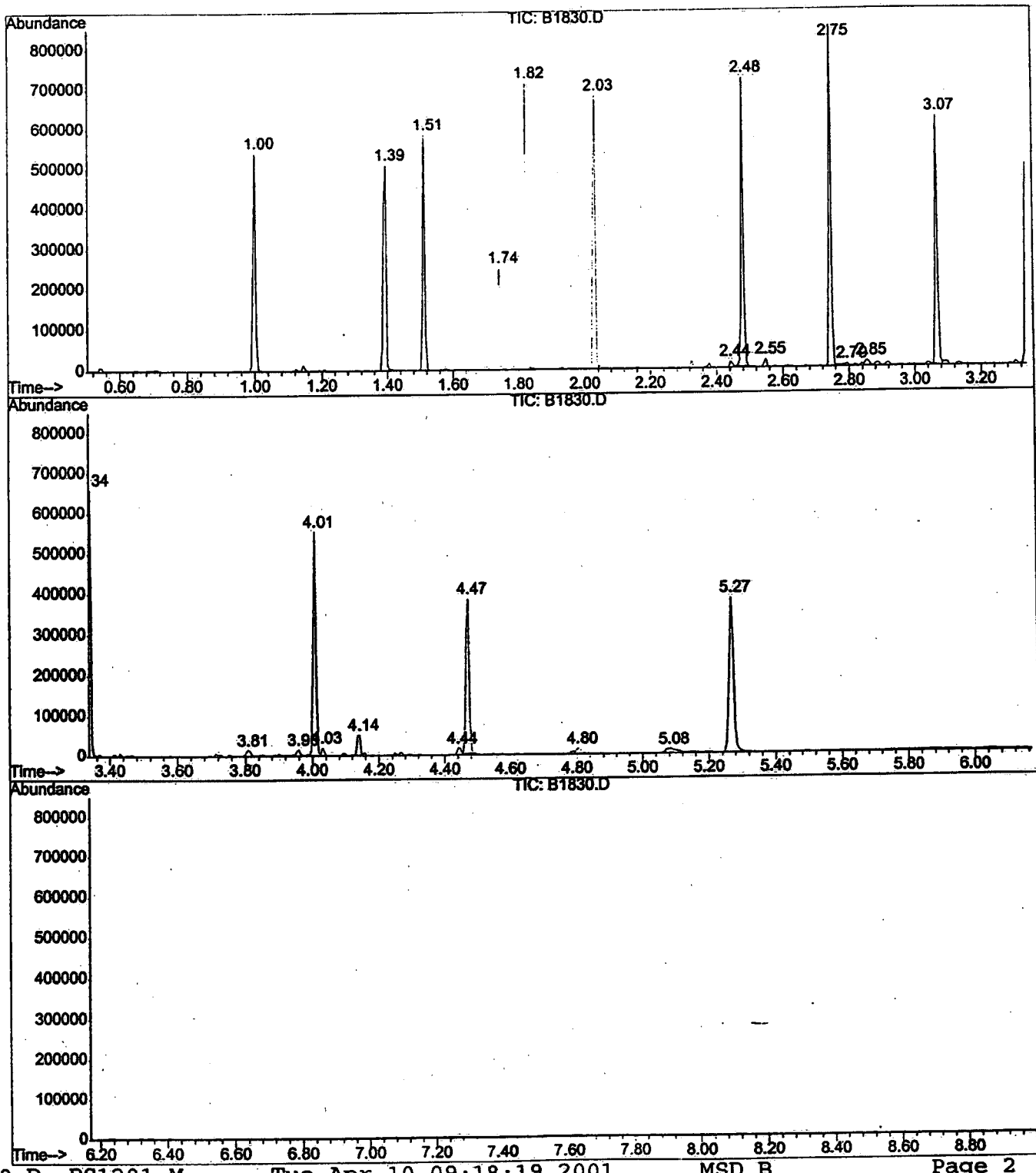
Sum of corrected areas: 4219892

2342

000251

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-06-01\B1830.D
Operator : JC
Acquired : 6 Apr 2001 14:12 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-46,2092-002,S,10.47g,17.6,04/06/01
Misc Info : ENVTACT/ORBIS,04/03/01,04/04/01,1
Vial Number: 14
Quant File :BS1201.RES (RTE Integrator)



2343

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1830.D Vial: 14
Acq On : 6 Apr 2001 14:12 Operator: JC
Sample : S-46,2092-002,S,10.47g,17.6,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
TS Integration Params: LSCINT.P

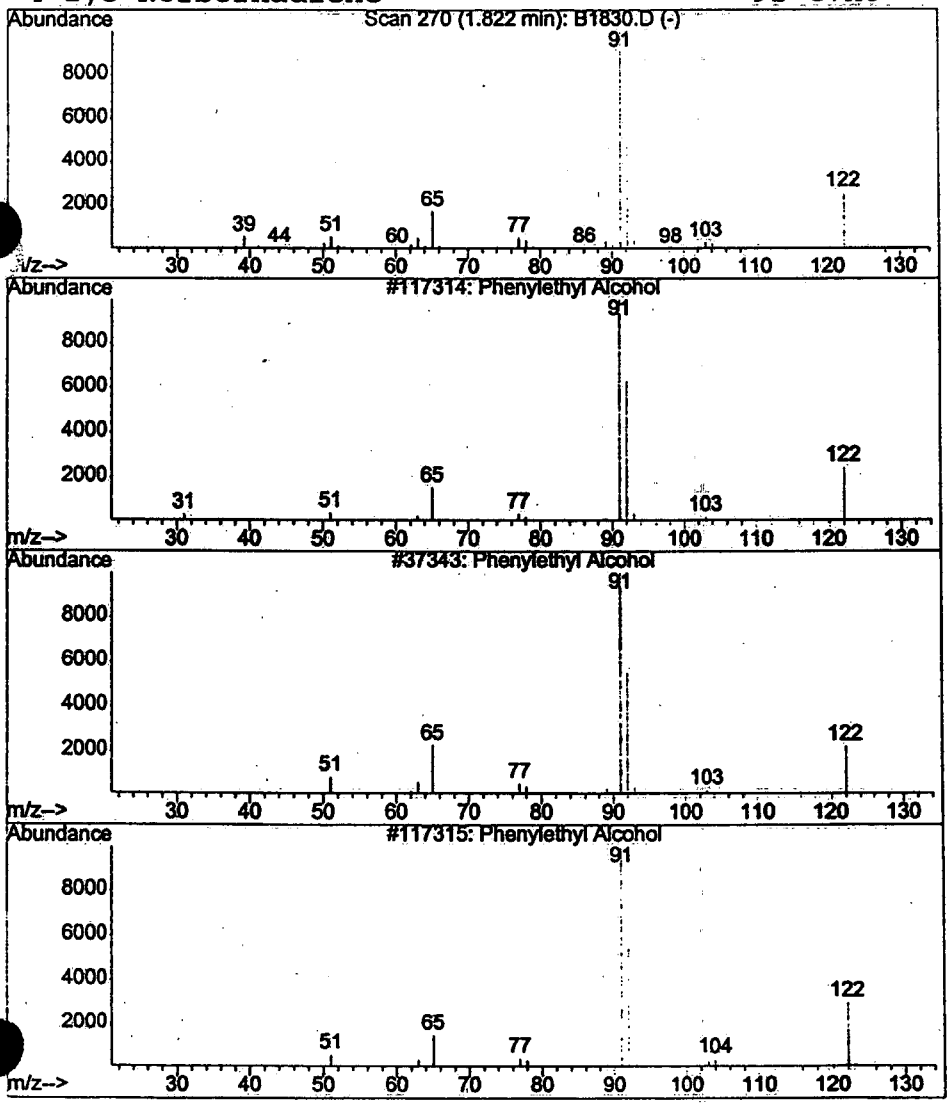
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

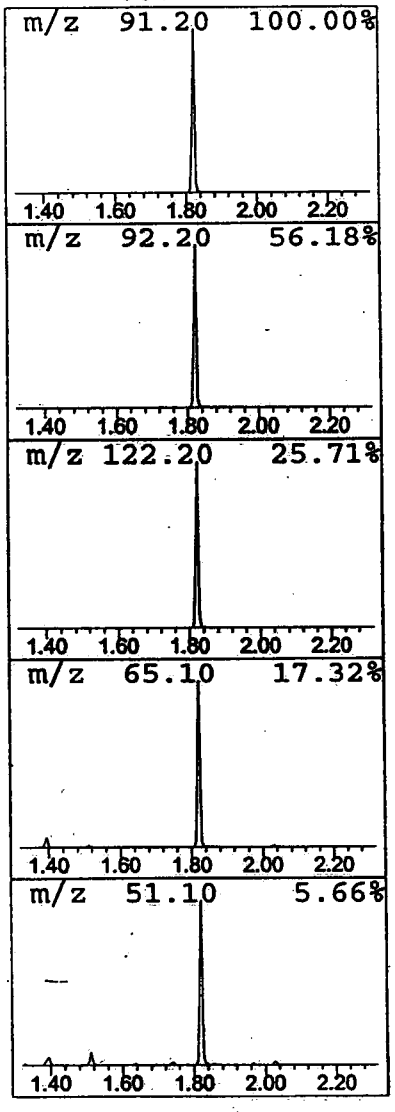
****

Peak Number 1 Phenylethyl Alcohol Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.82	38.00 UG	341652	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenylethyl Alcohol	122	C8H10O	000060-12-8	91
2	Phenylethyl Alcohol	122	C8H10O	000060-12-8	91
3	Phenylethyl Alcohol	122	C8H10O	000060-12-8	62
4	2,5-Norbornadiene	92	C7H8	000121-46-0	58





000253

3244

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1830.D Vial: 14
Acq On : 6 Apr 2001 14:12 Operator: JC
Sample : S-46,2092-002,S,10.47g,17.6,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

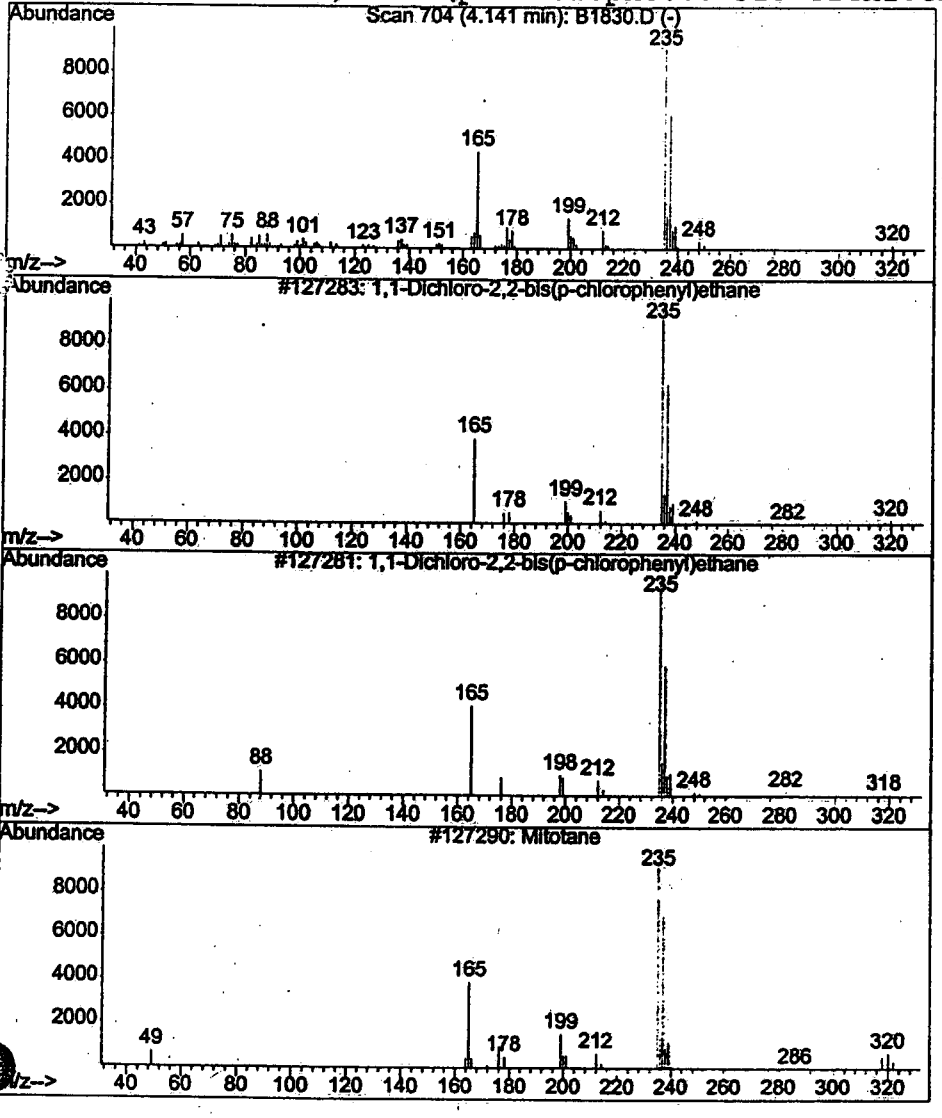
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

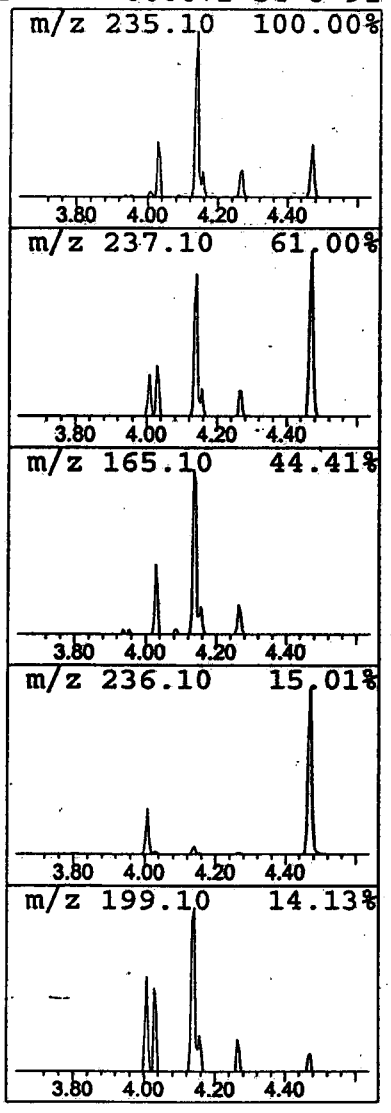
****

Peak Number 2 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.14	5.22 UG	35970	Chrysene-d12	4.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1-Dichloro-2,2-bis(p-chlorophe...	318	C14H10Cl4	000072-54-8	95
2	1,1-Dichloro-2,2-bis(p-chlorophe...	318	C14H10Cl4	000072-54-8	94
3	Mitotane	318	C14H10Cl4	000053-19-0	91
4	1,1-Dichloro-2,2-bis(p-chlorophe...	318	C14H10Cl4	000072-54-8	91





2345

000254

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1831.D Vial: 15
Acq On : 6 Apr 2001 14:26 Operator: JC
Sample : S-47,2092-003,S,10.76g,15.8,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 06 14:35:48 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	45621	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	182690	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	95501	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	162400	40.00	UG	-0.02
75) Chrysene-d12	4.47	240	106096	40.00	UG	-0.04
84) Perylene-d12	5.27	264	141789	40.00	UG	-0.03
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	94772	72.21	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 72.21%			
6) Phenol-d5	1.39	99	133962	83.38	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 83.38%			
23) Nitrobenzene-d5	1.74	82	53532	40.38	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 80.76%			
43) 2-Fluorobiphenyl	2.48	172	118484	45.14	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 90.28%			
64) 2,4,6-Tribromophenol	3.07	330	49416	91.38	UG	-0.02
Spiked Amount 100.000	Range 54 - 135		Recovery = 91.38%			
77) Terphenyl-d14	4.01	244	129252	51.09	UG	-0.03
Spiked Amount 50.000	Range 58 - 147		Recovery = 102.18%			

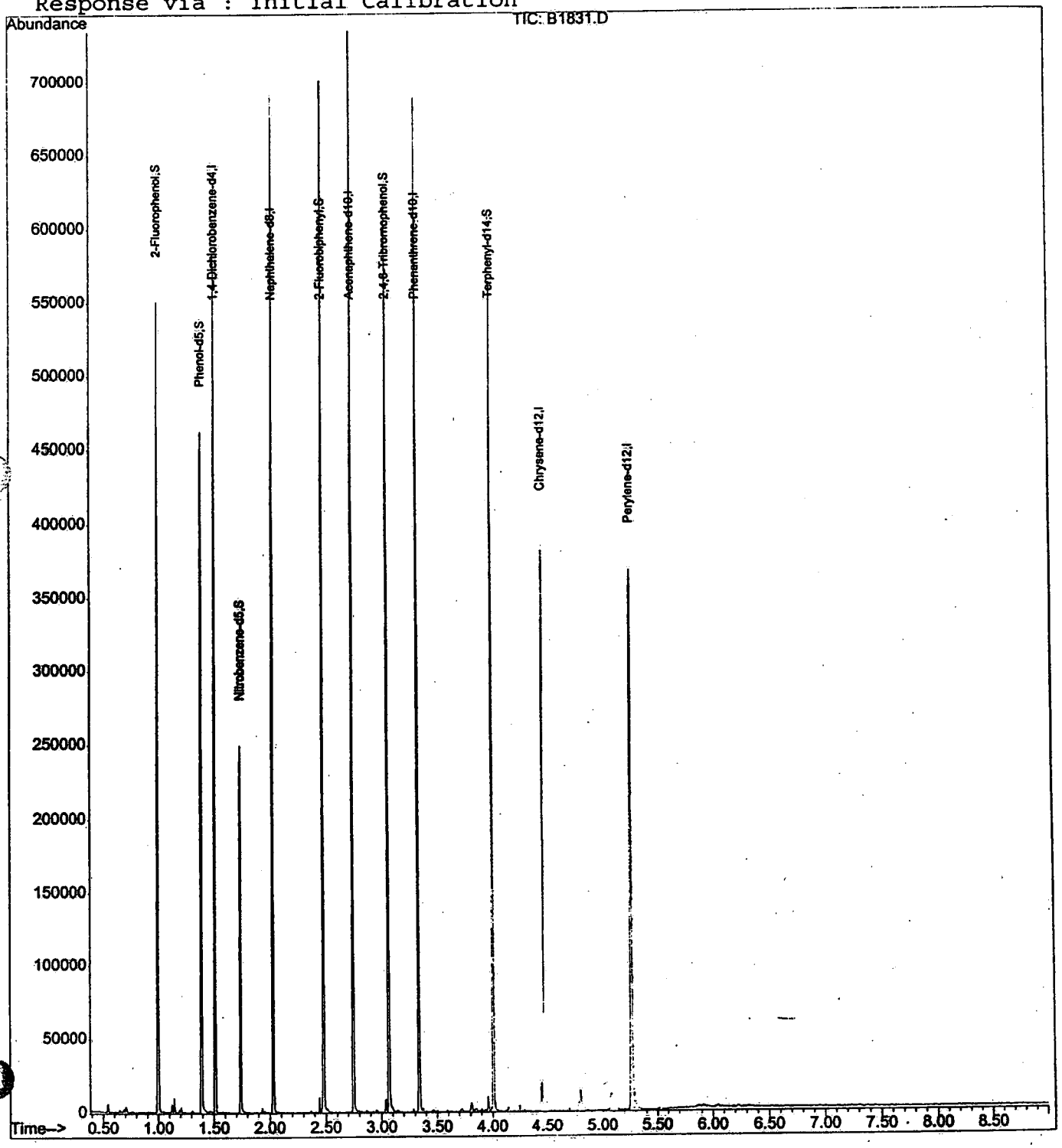
Target Compounds **Qvalue**

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1831.D Vial: 15
Acq On : 6 Apr 2001 14:26 Operator: JC
Sample : S-47,2092-003,S,10.76g,15.8,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 9 11:32 2001 Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



2347

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1831.D Vial: 15
Acq On : 6 Apr 2001 14:26 Operator: JC
Sample : S-47,2092-003,S,10.76g,15.8,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

No Library Search Compounds Detected

****
B1831.D BS1201.M Tue Apr 10 09:18:30 2001 MSD_B

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1832.D Vial: 16
Acq On : 6 Apr 2001 14:40 Operator: JC
Sample : S-48,2092-004,S,10.60g,13.0,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 06 14:49:54 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	45158	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	185556	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	100797	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	176219	40.00	UG	-0.02
75) Chrysene-d12	4.47	240	118767	40.00	UG	-0.04
84) Perylene-d12	5.27	264	148982	40.00	UG	-0.03
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	85055	65.47	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 65.47%			
6) Phenol-d5	1.39	99	117362	73.80	UG	-0.02
Spiked Amount 100.000	Range 40 - 101		Recovery = 73.80%			
23) Nitrobenzene-d5	1.74	82	47845	35.53	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 71.06%			
43) 2-Fluorobiphenyl	2.48	172	116978	42.23	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 84.46%			
64) 2,4,6-Tribromophenol	3.07	330	53879	91.82	UG	-0.02
Spiked Amount 100.000	Range 54 - 135		Recovery = 91.82%			
77) Terphenyl-d14	4.01	244	159501	56.32	UG	-0.03
Spiked Amount 50.000	Range 58 - 147		Recovery = 112.64%			

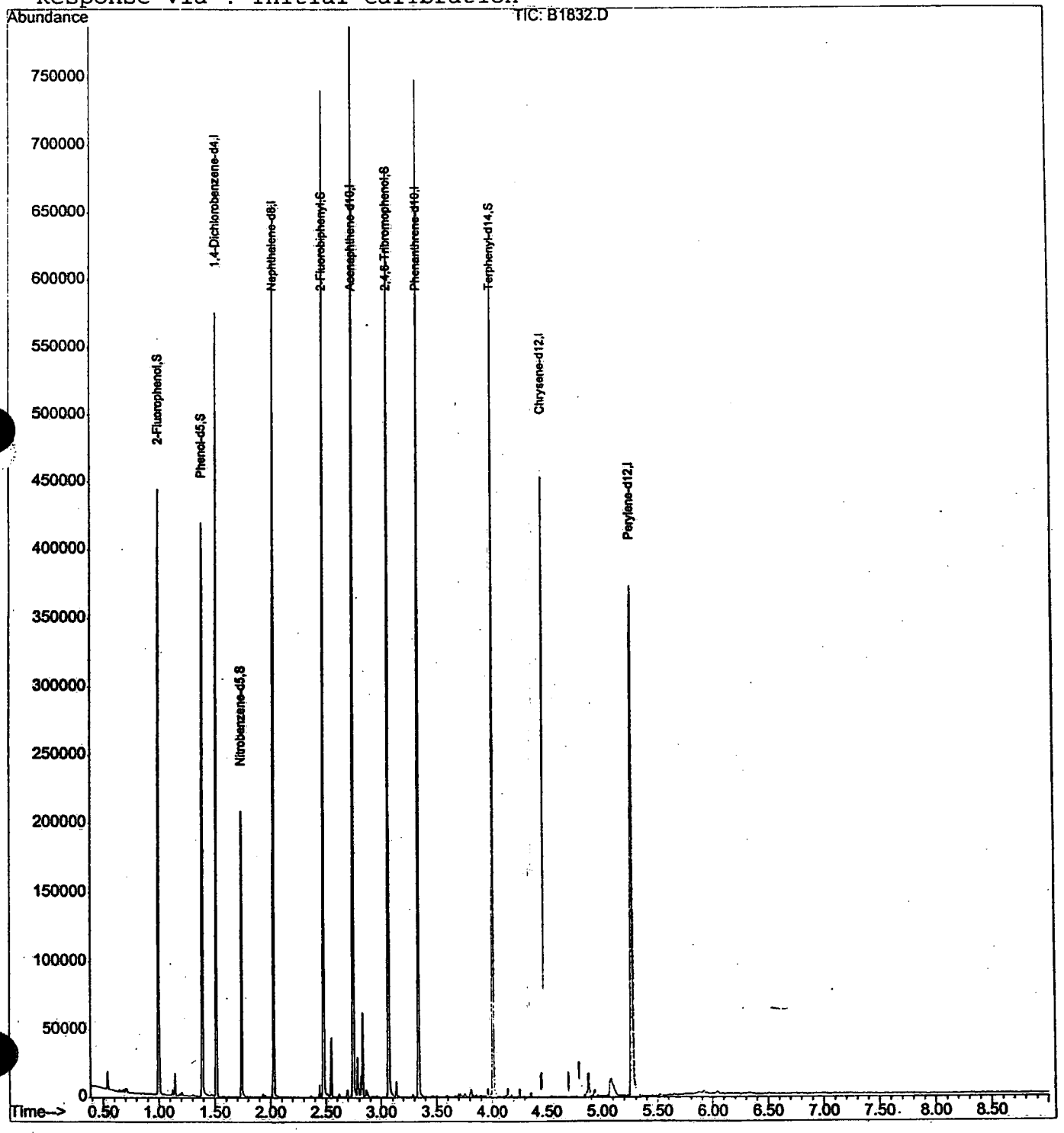
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1832.D Vial: 16
Acq On : 6 Apr 2001 14:40 Operator: JC
Sample : S-48,2092-004,S,10.60g,13.0,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 9 11:32 2001 Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



000259

2350

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1832.D Vial: 16
Acq On : 6 Apr 2001 14:40 Operator: JC
Sample : S-48,2092-004,S,10.60g,13.0,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
1S Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

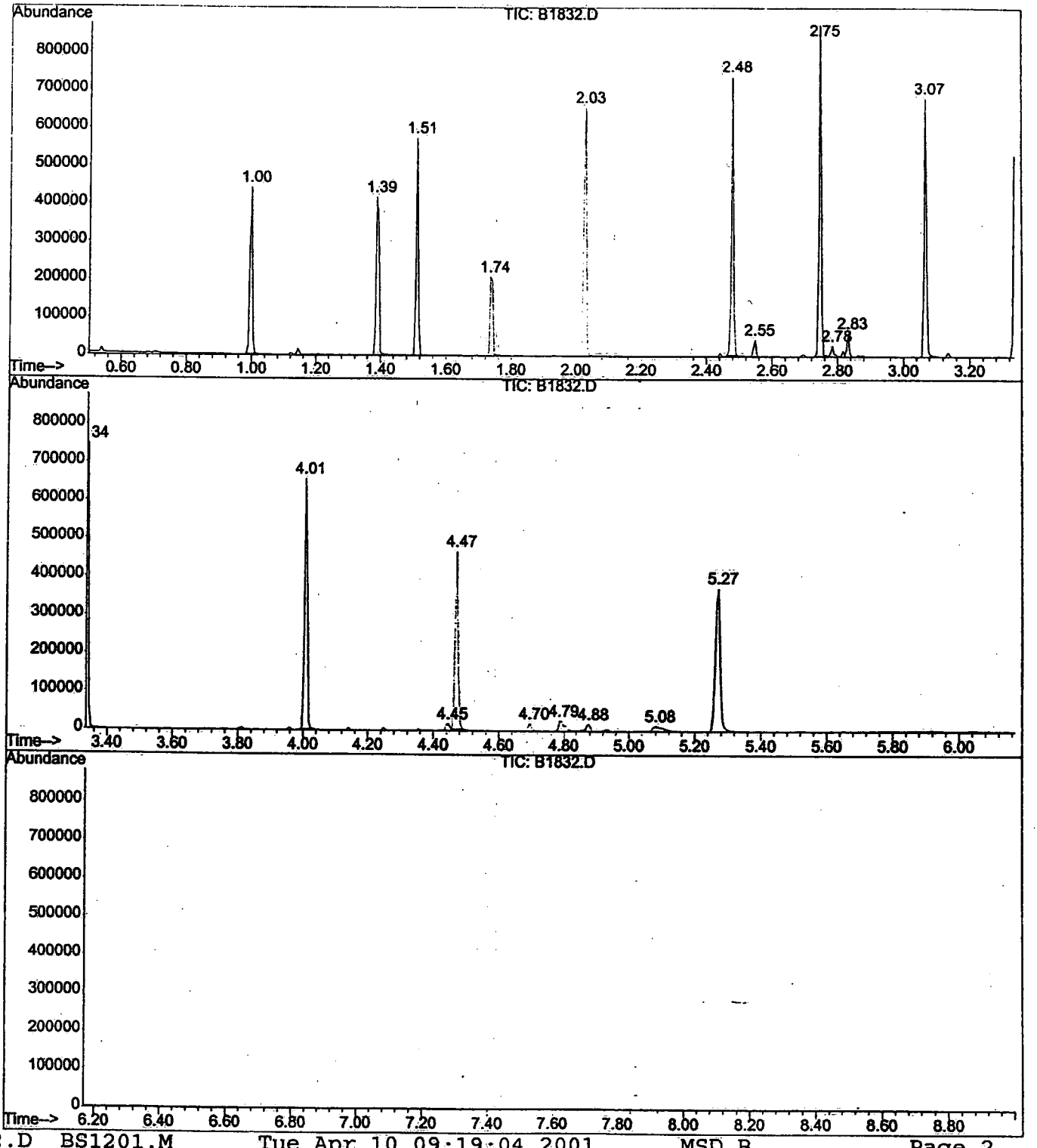
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.999	113	116	118	rBV	442013	251410	61.73%	6.278%
2	1.389	187	189	192	rBV	418896	270710	66.47%	6.759%
3	1.512	209	212	215	rVB	575300	259195	63.64%	6.472%
4	1.737	252	254	257	rBV	208820	136470	33.51%	3.408%
5	2.030	306	309	311	rBV	655627	356861	87.62%	8.911%
6	2.479	390	393	396	rVB	737363	322781	79.26%	8.060%
7	2.549	404	406	408	rVB	44414	23233	5.70%	0.580%
8	2.746	440	443	446	rBV	878013	406140	99.72%	10.141%
9	2.784	448	450	454	rVV	28642	16433	4.03%	0.410%
10	2.832	457	459	461	rVB	62721	29244	7.18%	0.730%
11	3.067	500	503	506	rBV	681594	341385	83.82%	8.524%
12	3.339	551	554	556	rBV	748355	407262	100.00%	10.169%
13	4.007	676	679	682	rBV	655286	394631	96.90%	9.854%
14	4.445	757	761	763	rBV	17824	15018	3.69%	0.375%
15	4.472	763	766	769	rVV	462512	308295	75.70%	7.698%
16	4.696	805	808	812	rVB	19074	13909	3.42%	0.347%
17	4.787	822	825	834	rBV2	25947	33935	8.33%	0.847%
18	4.878	834	842	845	rVB	17414	17917	4.40%	0.447%
19	5.081	876	880	894	rVB2	12945	30457	7.48%	0.760%
20	5.273	910	916	927	rVB	372760	369634	90.76%	9.229%

Sum of corrected areas: 4004920

2351

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-06-01\B1832.D
Operator : JC
Acquired : 6 Apr 2001 14:40 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-48,2092-004,S,10.60g,13.0,04/06/01
Misc Info : ENVTACT/ORBIS,04/03/01,04/04/01,1
Vial Number: 16
Quant File:BS1201.RES (RTE Integrator)



2352

000261

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1832.D
Acq On : 6 Apr 2001 14:40
Sample : S-48,2092-004,S,10.60g,13.0,04/06/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

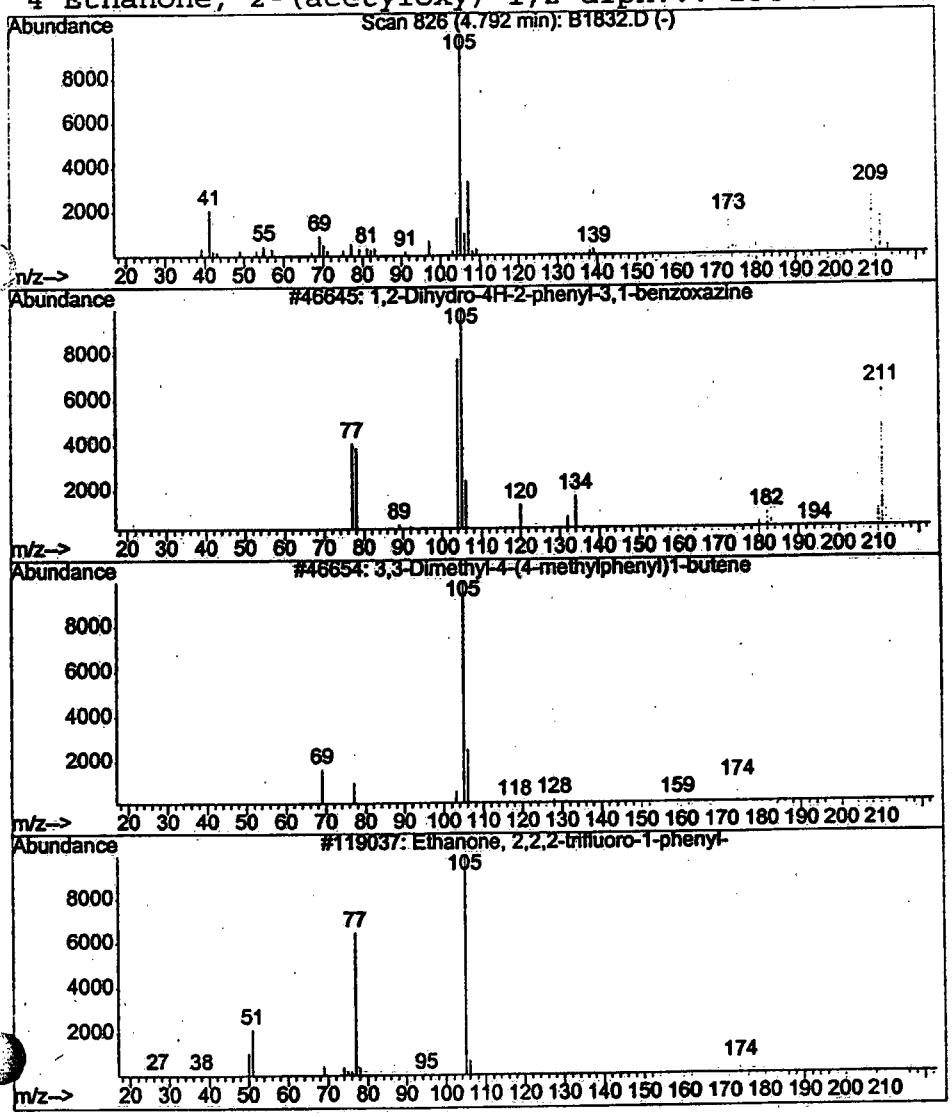
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

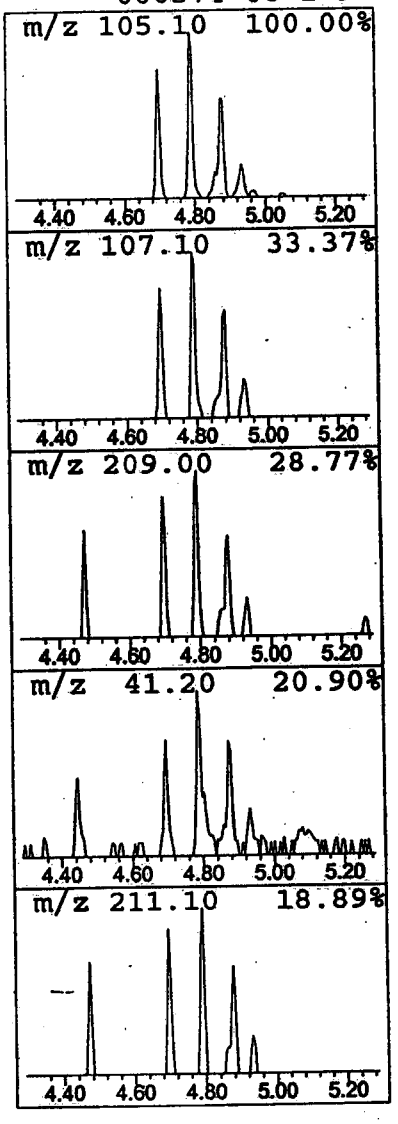
****

Peak Number 1 Unknown — Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.79	4.40 UG	33935	Chrysene-d12	4.47

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2-Dihydro-4H-2-phenyl-3,1-benz...	211	C14H13NO	082085-86-7	9
2	3,3-Dimethyl-4-(4-methylphenyl)1...	174	C13H18	1000114-53-4	9
3	Ethanone, 2,2,2-trifluoro-1-phenyl-	174	C8H5F3O	000434-45-7	9
4	Ethanone, 2-(acetyloxy)-1,2-diph...	254	C16H14O3	000574-06-1	9





2353

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1833.D Vial: 17
Acq On : 6 Apr 2001 14:55 Operator: JC
Sample : S-49,2092-005,S,10.42g,15.7,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 06 15:04:32 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	45899	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	178173	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	90684	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	141893	40.00	UG	-0.02
75) Chrysene-d12	4.47	240	103806	40.00	UG	-0.05
84) Perylene-d12	5.27	264	143006	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	77671	58.82	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 58.82%			
6) Phenol-d5	1.39	99	105162	65.06	UG	-0.02
Spiked Amount 100.000	Range 40 - 101		Recovery = 65.06%			
23) Nitrobenzene-d5	1.74	82	40057	30.98	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 61.96%			
43) 2-Fluorobiphenyl	2.48	172	96881	38.87	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 77.74%			
64) 2,4,6-Tribromophenol	3.07	330	41744	88.35	UG	-0.02
Spiked Amount 100.000	Range 54 - 135		Recovery = 88.35%			
77) Terphenyl-d14	4.01	244	117013	47.27	UG	-0.03
Spiked Amount 50.000	Range 58 - 147		Recovery = 94.54%			

Target Compounds **Qvalue**

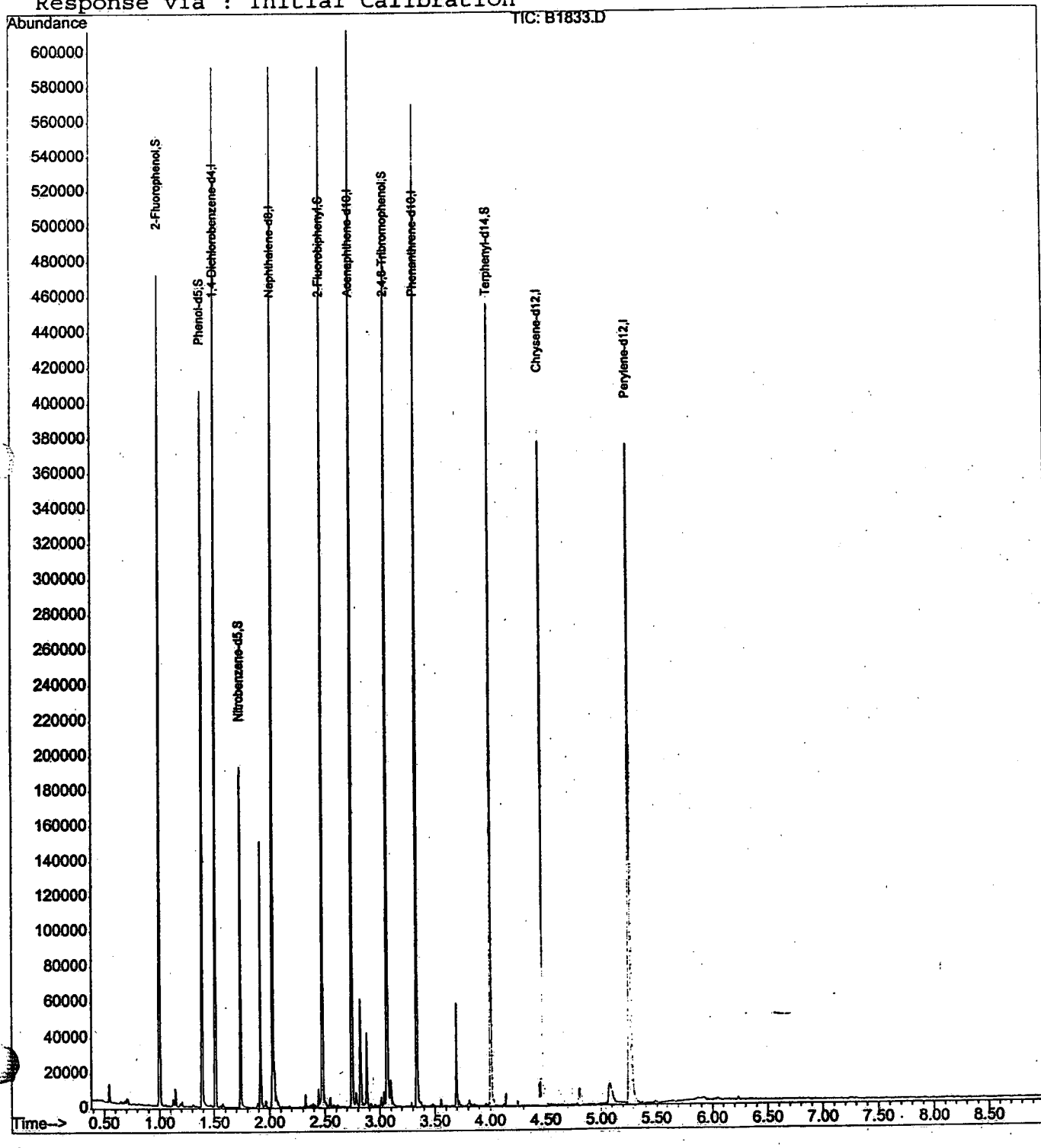
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1833.D
Acq On : 6 Apr 2001 14:55
Sample : S-49,2092-005,S,10.42g,15.7,04/06/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1
MS Integration Params: rteint.p
Quant Time: Apr 9 11:33 2001

Vial: 17
Operator: JC
Inst : MSD_B
Multiplr: 1.00
Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



2355

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1833.D Vial: 17
Acq On : 6 Apr 2001 14:55 Operator: JC
Sample : S-49,2092-005,S,10.42g,15.7,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
'S Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

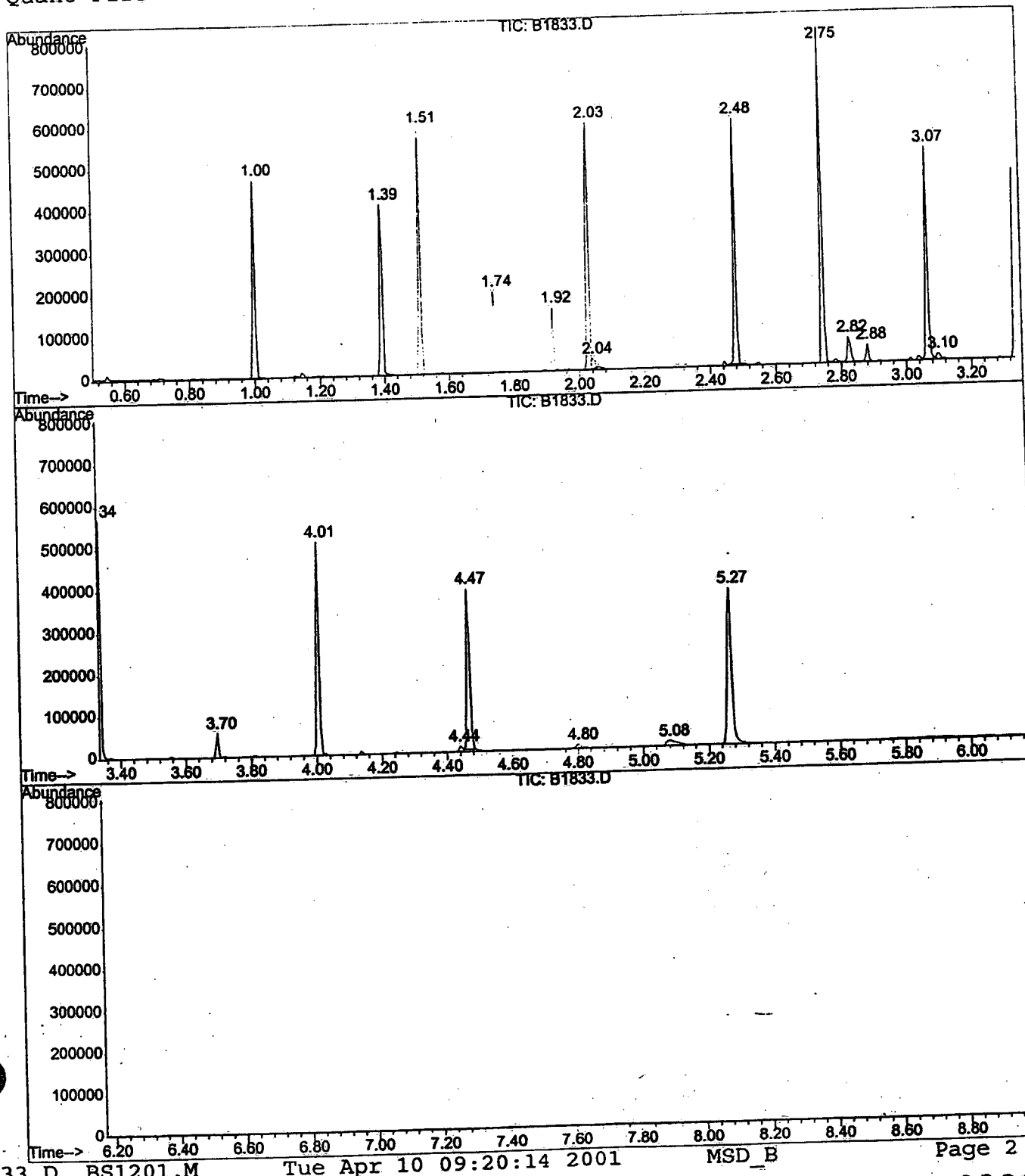
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.999	113	116	119	rBV	471015	232708	63.70%	6.532%
2	1.389	187	189	192	rBV	406794	244559	66.94%	6.865%
3	1.512	209	212	215	rBV	591007	261502	71.58%	7.340%
4	1.737	252	254	257	rBV	193597	113282	31.01%	3.180%
5	1.918	285	288	290	rBV	151097	66360	18.16%	1.863%
6	2.030	306	309	310	rBV	591898	339308	92.88%	9.524%
[illegible]	2.041	310	311	313	rVB	23519	13578	3.72%	0.381%
[illegible]	2.479	390	393	396	rVB	588997	266948	73.07%	7.493%
[illegible]	2.746	440	443	445	rBV	807484	365330	100.00%	10.255%
10	2.821	455	457	461	rBV2	60754	43060	11.79%	1.209%
11	2.880	466	468	471	rVB2	42441	21144	5.79%	0.594%
12	3.067	500	503	506	rBV	508199	266404	72.92%	7.478%
13	3.099	507	509	511	rVB	14430	10881	2.98%	0.305%
14	3.339	551	554	556	rBV	569147	325779	89.17%	9.144%
15	3.697	618	621	623	rVB	58277	29949	8.20%	0.841%
16	4.007	676	679	681	rBV	509638	285013	78.02%	8.000%
17	4.440	757	760	762	rBV	13406	10547	2.89%	0.296%
18	4.467	762	765	768	rVV	386172	266283	72.89%	7.474%
19	4.803	825	828	834	rVB	9605	10563	2.89%	0.296%
20	5.081	875	880	893	rBV2	11918	27876	7.63%	0.782%
21	5.268	909	915	931	rBV	374796	361514	98.96%	10.148%

Sum of corrected areas: 3562588

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-06-01\B1833.D
Operator : JC
Acquired : 6 Apr 2001 14:55 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-49,2092-005,S,10.42g,15.7,04/06/01
Misc Info : ENVTACT/ORBIS,04/03/01,04/04/01,1
Vial Number: 17
Quant File :BS1201.RES (RTE Integrator)



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7357

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1833.D Vial: 17
Acq On : 6 Apr 2001 14:55 Operator: JC
Sample : S-49,2092-005,S,10.42g,15.7,04/06/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
S Integration Params: LSCINT.P

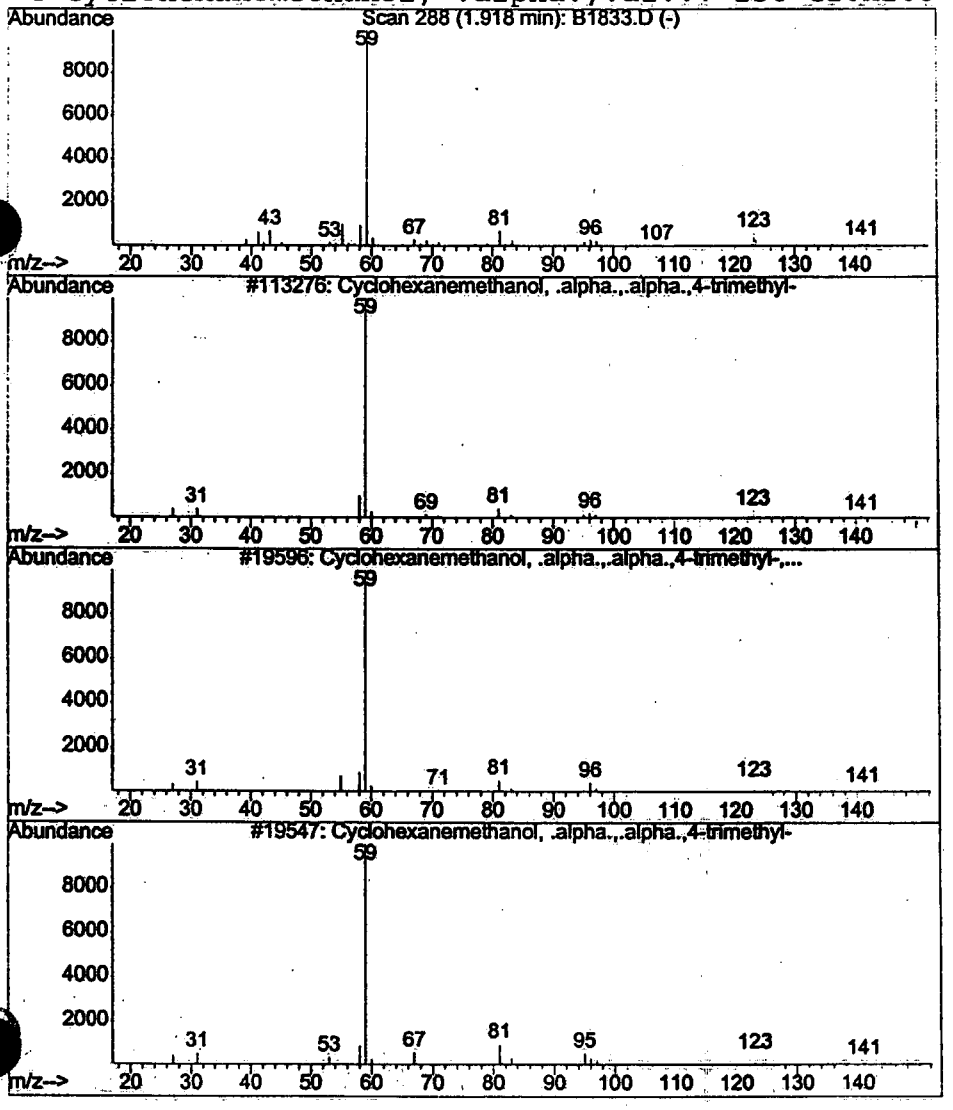
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

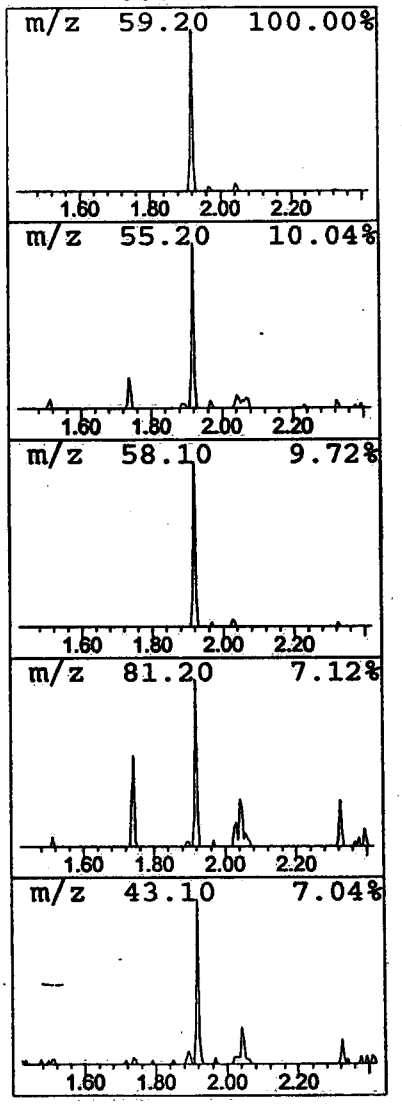
****

Peak Number 1 Unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.92	7.82 UG	66360	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	000498-81-7	83
2	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	007322-63-6	74
3	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	000498-81-7	64
4	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	005114-00-1	64





2358

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1833.D
Acq On : 6 Apr 2001 14:55
Sample : S-49,2092-005,S,10.42g,15.7,04/06/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1
S Integration Params: LSCINT.P

Vial: 17
Operator: JC
Inst : MSD_B
Multiplr: 1.00

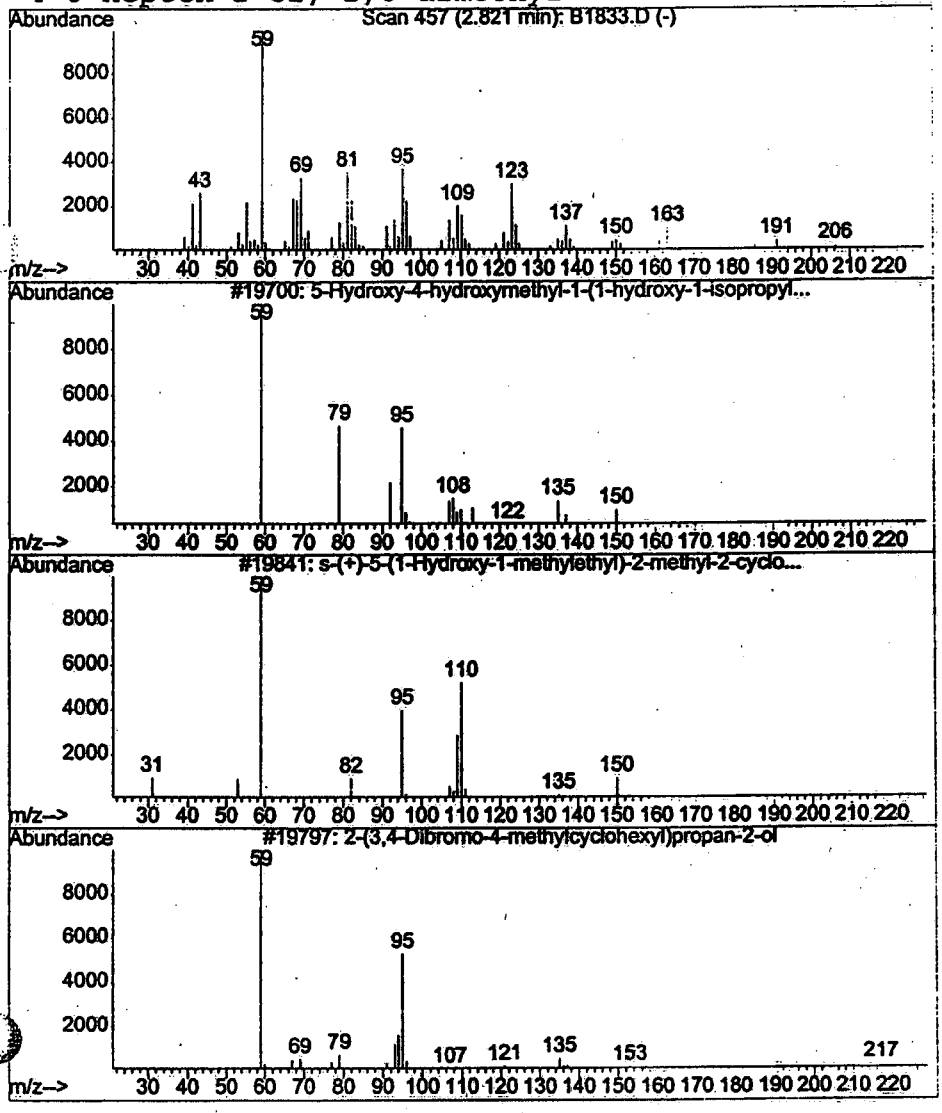
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

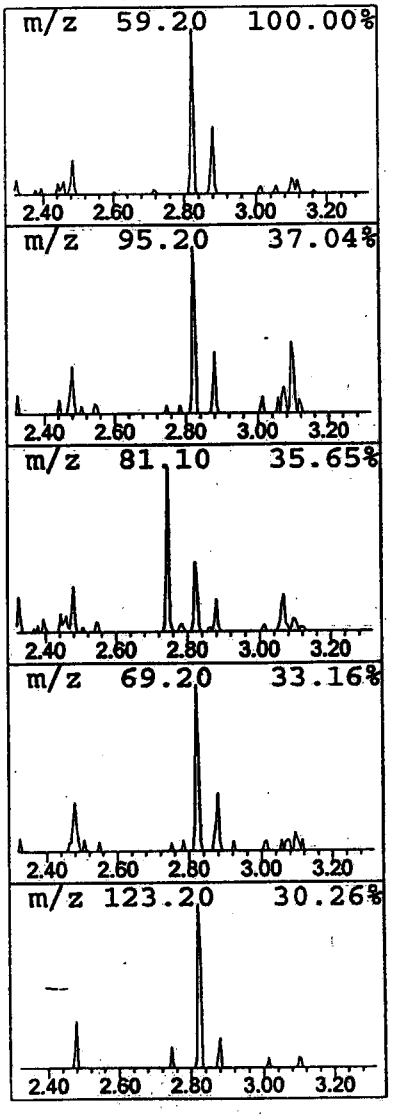
****

Peak Number 2 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.82	4.71 UG	43060	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Hydroxy-4-hydroxymethyl-1-(1-h...	186	C10H18O3	087096-72-8	40
2	s-(+)-5-(1-Hydroxy-1-methylethyl...	168	C10H16O2	060593-11-5	38
3	2-(3,4-Dibromo-4-methylcyclohexy...	312	C10H18Br2O	110202-13-6	32
4	6-Hepten-2-ol, 2,6-dimethyl-	142	C9H18O	032779-58-1	23





2359

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00
; Integration Params: rteint.p
Quant Time: Apr 13 21:29:19 2001
Quant Results File: BS1301.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Fri Apr 13 10:13:08 2001
Response via : Initial Calibration
DataAcq Meth : BS1301

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.31	152	46083	40.00	UG	-0.01
22) Naphthalene-d8	2.84	136	294515	40.00	UG	0.00
39) Acenaphthene-d10	3.59	164	83636	40.00	UG	0.00
60) Phenanthrene-d10	4.24	188	143088	40.00	UG	-0.01
75) Chrysene-d12	6.01	240	116151	40.00	UG	0.00
84) Perylene-d12	7.28	264	145111	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 36 - 93		Recovery = 0.00%#			
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 40 - 101		Recovery = 0.00%#			
23) Nitrobenzene-d5	2.53	82	11103m	5.27	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 10.54%#			
43) 2-Fluorobiphenyl	3.29	172	22090	8.13	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 16.26%#			
64) 2,4,6-Tribromophenol	0.00	330	0	0.00	UG	
Spiked Amount 100.000	Range 54 - 135		Recovery = 0.00%#			
77) Terphenyl-d14	5.12	244	27619	8.24	UG	-0.01
Spiked Amount 50.000	Range 58 - 147		Recovery = 16.48%#			
Target Compounds						Qvalue
14) 1,2-Dichlorobenzene	2.39	146	1749	1.19	UG	# 92
33) Naphthalene	2.85	128	11028	1.61	UG	# 89
38) 2-Methylnaphthalene	3.14	142	9744	2.19	UG	# 100
57) Fluorene	3.82	166	2419	1.05	UG	# 86
69) Phenanthrene	4.25	178	20772	6.28	UG	# 94
70) Anthracene	4.27	178	5953m	1.88	UG	
71) Carbazole	4.33	167	13974	5.11	UG	# 30
73) Fluoranthene	4.91	202	21443	7.34	UG	96
74) Benzidine	4.82	184	78653	86.17	UG	# 44
76) Pyrene	5.05	202	16311	4.10	UG	98
81) Benzo[a]anthracene	5.99	228	7351	2.61	UG	# 76
82) Chrysene	6.03	228	6789	2.43	UG	96
83) bis(2-Ethylhexyl)phthalate	5.97	149	46392	24.67	UG	# 91
86) Benzo[b]fluoranthene	6.88	252	4813m	1.21	UG	
87) Benzo[k]fluoranthene	6.90	252	5447m	1.68	UG	
88) Benzo[a]pyrene	7.15	252	3264m	0.99	UG	
89) Indeno[1,2,3-cd]pyrene	8.67	276	2760	0.64	UG	# 41

(#) = qualifier out of range (m) = manual integration

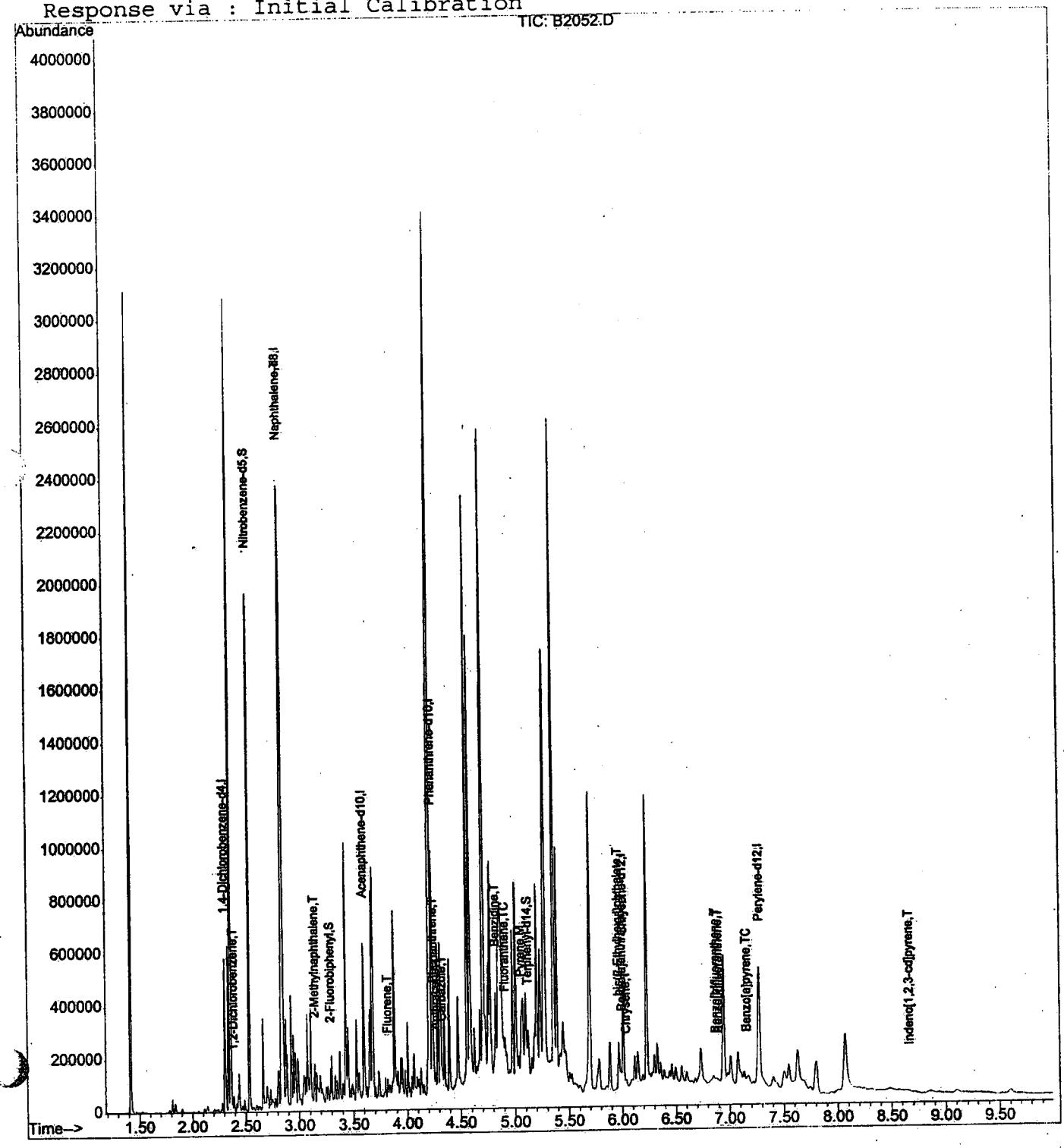
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
MS Integration Params: rteint.p
Quant Time: Apr 16 7:17 2001

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1301.RES

Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Fri Apr 13 10:13:08 2001
Response via : Initial Calibration



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2361

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
[illegible] Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.420	42	45	47	rBV	3113457	1595389	50.02%	4.026%
2	2.307	209	211	215	rBV2	580590	359275	11.26%	0.907%
3	2.339	215	217	219	rVV	625863	279700	8.77%	0.706%
4	2.360	219	221	223	rVV	3079539	1535502	48.14%	3.875%
5	2.387	223	226	229	rVB3	59479	51062	1.60%	0.129%
6	2.441	232	236	239	rVB3	137996	99380	3.12%	0.251%
7	2.537	251	254	256	rBV	1959353	884082	27.72%	2.231%
[illegible]	2.665	275	278	280	rBV	343451	174131	5.46%	0.439%
[illegible]	2.702	283	285	288	rVB2	85628	72539	2.27%	0.183%
10	2.734	288	291	292	rBV2	73052	46893	1.47%	0.118%
11	2.809	302	305	307	rBV2	138348	105918	3.32%	0.267%
12	2.841	307	311	316	rBV2	2346418	2671440	83.75%	6.741%
13	2.879	316	318	319	rBV	296682	177939	5.58%	0.449%
14	2.927	325	327	329	rBV	414635	209739	6.58%	0.529%
15	2.948	329	331	332	rVV	262352	117879	3.70%	0.297%
16	2.964	332	334	337	rVB2	195164	153427	4.81%	0.387%
17	2.991	337	339	342	rBV2	170492	118824	3.73%	0.300%
18	3.044	345	349	351	rBV3	113665	124189	3.89%	0.313%
19	3.076	354	355	358	rVV	318094	157851	4.95%	0.398%
20	3.108	358	361	364	rVB	349643	201543	6.32%	0.509%
21	3.146	364	368	369	rVB2	143863	102076	3.20%	0.258%
22	3.162	369	371	375	rBV3	110512	95420	2.99%	0.241%
23	3.290	393	395	396	rVV	125732	63159	1.98%	0.159%
24	3.301	396	397	399	rVV	174437	64601	2.03%	0.163%
25	3.333	401	403	405	rVV	96624	55566	1.74%	0.140%
26	3.349	405	406	409	rVV2	76407	50365	1.58%	0.127%
27	3.375	409	411	414	rVV	186008	98013	3.07%	0.247%
28	3.402	414	416	419	rVV3	64004	51669	1.62%	0.130%
[illegible]	3.429	419	421	423	rVV	975680	503043	15.77%	1.269%
[illegible]	3.450	423	425	428	rVV2	273419	202853	6.36%	0.512%
31	3.530	437	440	442	rBV2	307794	194560	6.10%	0.491%

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2362

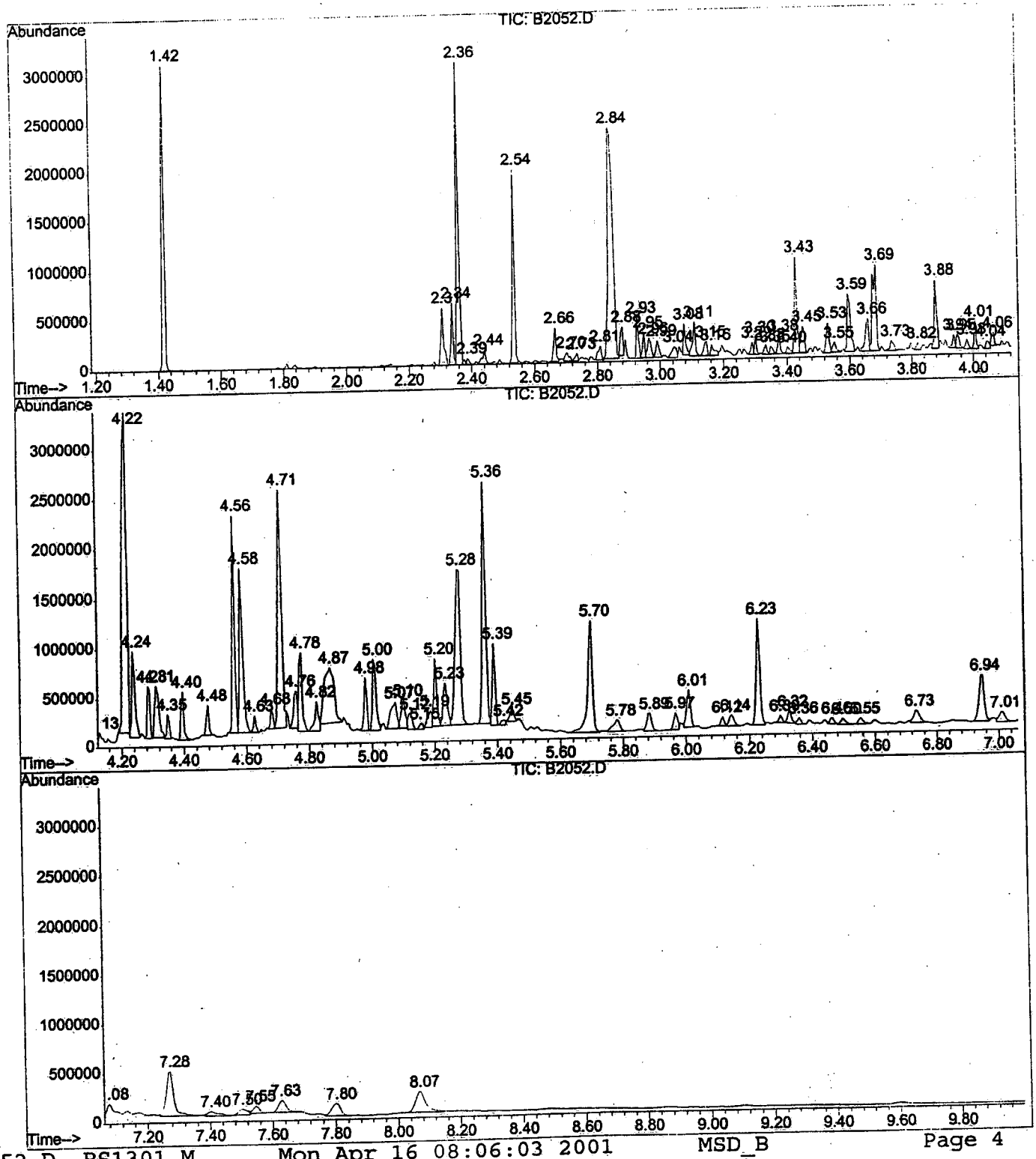
32	3.552	442	444	448	rVV2	98706	70238	2.20%	0.177%
33	3.594	450	452	456	rVV	587430	444213	13.93%	1.121%
34	3.659	459	464	465	rVV2	333092	264477	8.29%	0.667%
35	3.685	465	469	471	rVB2	875480	771743	24.19%	1.947%
36	3.733	474	478	481	rBV3	102627	88646	2.78%	0.224%
	3.819	492	494	496	rBV3	69868	47225	1.48%	0.119%
38	3.878	503	505	507	rVV2	699313	374705	11.75%	0.945%
39	3.936	513	516	517	rBV	134936	68805	2.16%	0.174%
40	3.947	517	518	522	rVB	139027	91692	2.87%	0.231%
41	3.979	522	524	527	rVB	102821	61078	1.91%	0.154%
42	4.006	527	529	531	rBV	285055	124456	3.90%	0.314%
43	4.043	534	536	538	rBV	79608	61845	1.94%	0.156%
44	4.065	538	540	542	rBV	135959	85766	2.69%	0.216%
45	4.129	550	552	555	rBV2	102004	68814	2.16%	0.174%
46	4.219	564	569	570	rVB	3252222	3189808	100.00%	8.049%
47	4.236	570	572	576	rVB2	880052	627945	19.69%	1.585%
48	4.284	579	581	584	rBV	537033	352047	11.04%	0.888%
49	4.310	584	586	591	rBV3	531740	505833	15.86%	1.276%
50	4.348	591	593	595	rVB	251097	141562	4.44%	0.357%
51	4.396	599	602	608	rBV	499449	327391	10.26%	0.826%
52	4.476	614	617	619	rBV	310190	174419	5.47%	0.440%
53	4.561	630	633	635	rBV	2199352	1228887	38.53%	3.101%
54	4.583	635	637	643	rVV2	1666080	1273775	39.93%	3.214%
55	4.625	643	645	648	rVB	175468	94611	2.97%	0.239%
56	4.679	653	655	657	rVV2	209273	128517	4.03%	0.324%
57	4.711	657	661	664	rVV	2405804	2109201	66.12%	5.322%
[illegible]	4.759	666	670	671	rBV2	386058	345933	10.84%	0.873%
[illegible]	4.775	671	673	677	rVB2	807812	566642	17.76%	1.430%
60	4.823	677	682	684	rBV	307428	259453	8.13%	0.655%
61	4.866	684	690	697	rVB3	559459	1266549	39.71%	3.196%
62	4.978	708	711	714	rVB2	547251	343416	10.77%	0.867%
63	5.005	714	716	720	rBV	730008	593111	18.59%	1.497%
64	5.074	723	729	731	rVV5	274346	387808	12.16%	0.979%
65	5.101	731	734	736	rVV3	290164	272244	8.53%	0.687%
66	5.122	736	738	741	rVB2	165547	148763	4.66%	0.375%
67	5.154	741	744	746	rBV2	62160	57288	1.80%	0.145%
68	5.186	746	750	751	rBV2	172540	180493	5.66%	0.455%
69	5.202	751	753	756	rVV	690222	471303	14.78%	1.189%
70	5.235	756	759	762	rVV2	437061	422369	13.24%	1.066%
71	5.277	762	767	773	rVB	1566824	1845383	57.85%	4.656%
72	5.363	779	783	786	rBV	2438976	1827123	57.28%	4.610%
73	5.389	786	788	791	rVB	834459	501315	15.72%	1.265%
74	5.421	791	794	795	rBV3	50171	53471	1.68%	0.135%
75	5.448	795	799	801	rBV2	132624	121315	3.80%	0.306%
76	5.699	833	846	851	rBV	1140265	1211456	37.98%	3.057%
77	5.779	855	861	866	rVB2	118548	179539	5.63%	0.453%
78	5.886	877	881	887	rVB	184019	202277	6.34%	0.510%
[illegible]	5.966	892	896	898	rBV	177482	157036	4.92%	0.396%
[illegible]	6.009	901	904	908	rVB	379963	323019	10.13%	0.815%
81	6.116	921	924	926	rBV	92893	64794	2.03%	0.163%

82	6.143	926	929	934	rVB2	112455	125146	3.92%	0.316%
83	6.228	941	945	949	rBV	1082909	856023	26.84%	2.160%
84	6.298	956	958	961	rBV2	72270	51003	1.60%	0.129%
85	6.324	961	963	967	rVV	125290	104494	3.28%	0.264%
8	6.356	967	969	973	rVB	65704	49869	1.56%	0.126%
	6.463	986	989	992	rVB	61467	52681	1.65%	0.133%
88	6.495	992	995	1001	rVB	59785	65154	2.04%	0.164%
89	6.554	1003	1006	1011	rVV	60549	58325	1.83%	0.147%
90	6.730	1036	1039	1046	rVB	123270	158954	4.98%	0.401%
91	6.944	1074	1079	1084	rBV	474216	565665	17.73%	1.427%
92	7.008	1088	1091	1099	rVB	106206	141683	4.44%	0.358%
93	7.078	1100	1104	1112	rBV2	118316	197280	6.18%	0.498%
94	7.275	1134	1141	1156	rVB2	455109	772126	24.21%	1.948%
95	7.403	1161	1165	1176	rVB4	41932	100684	3.16%	0.254%
96	7.505	1178	1184	1188	rBV2	59616	118472	3.71%	0.299%
97	7.548	1188	1192	1197	rVB	70074	94680	2.97%	0.239%
98	7.628	1202	1207	1216	rVV	119986	202806	6.36%	0.512%
99	7.804	1233	1240	1247	rVB	122338	241552	7.57%	0.610%
L00	8.071	1282	1290	1304	rBV	209697	476042	14.92%	1.201%

Sum of corrected areas: 39630465

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Operator : JC
Acquired : 13 Apr 2001 21:19 using AcqMethod BS1301
Instrument : MSD_B
Sample Name: S-51,2092-007,S,2.21g,27.7,04/12/01
Misc Info : ENVTACT/ORBIS,04/03/01,04/04/01,5
Vial Number: 16
Quant File :BS1301.RES (RTE Integrator)



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2305

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

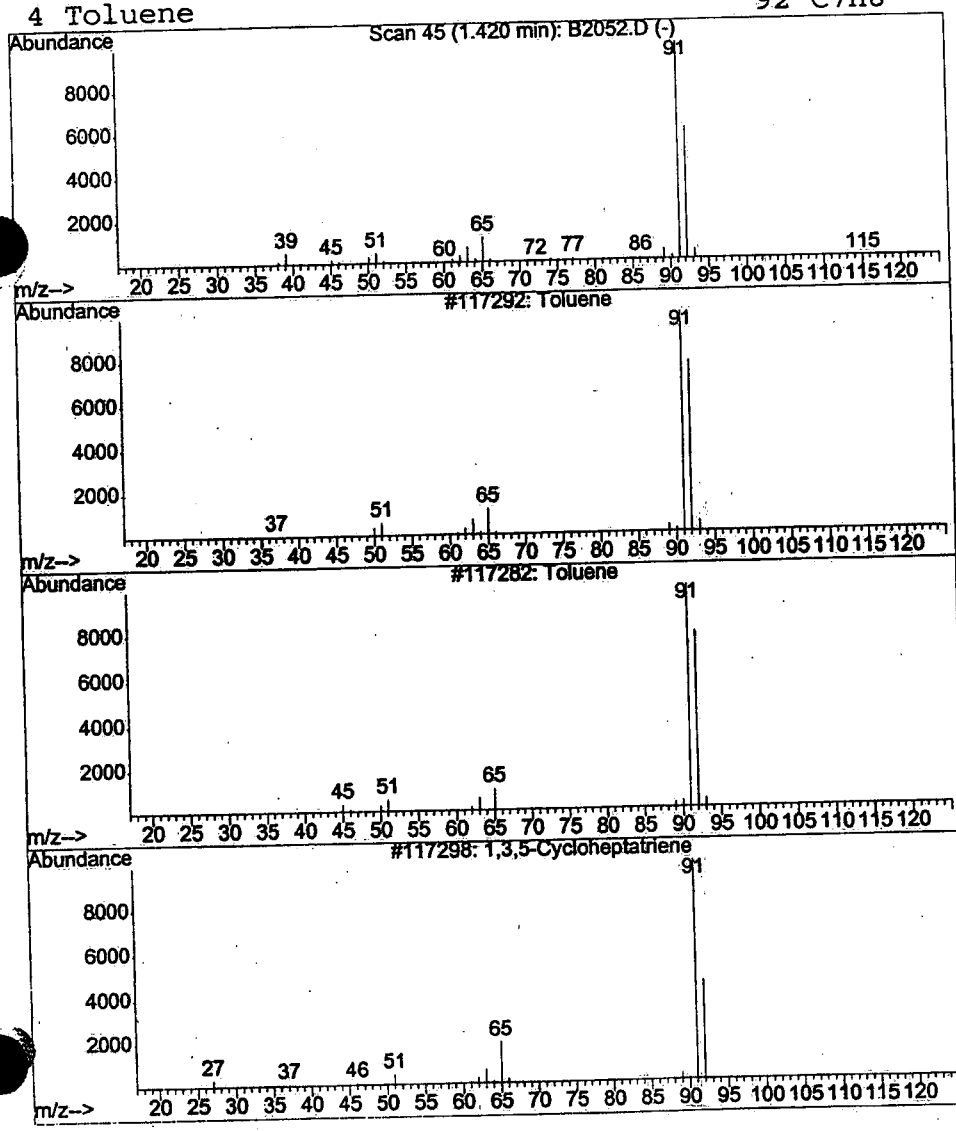
Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

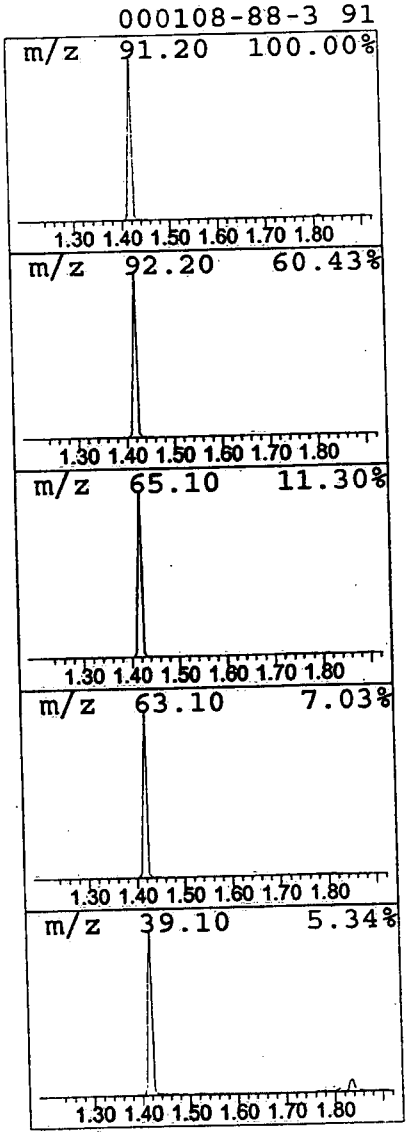
****

Peak Number 1 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.42	177.62 UG	1595390	1,4-Dichlorobenzene-d4	2.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Toluene	92	C7H8	000108-88-3	91
2	Toluene	92	C7H8	000108-88-3	91
3	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	91
4	Toluene	92	C7H8	000108-88-3	91





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7356

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
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Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

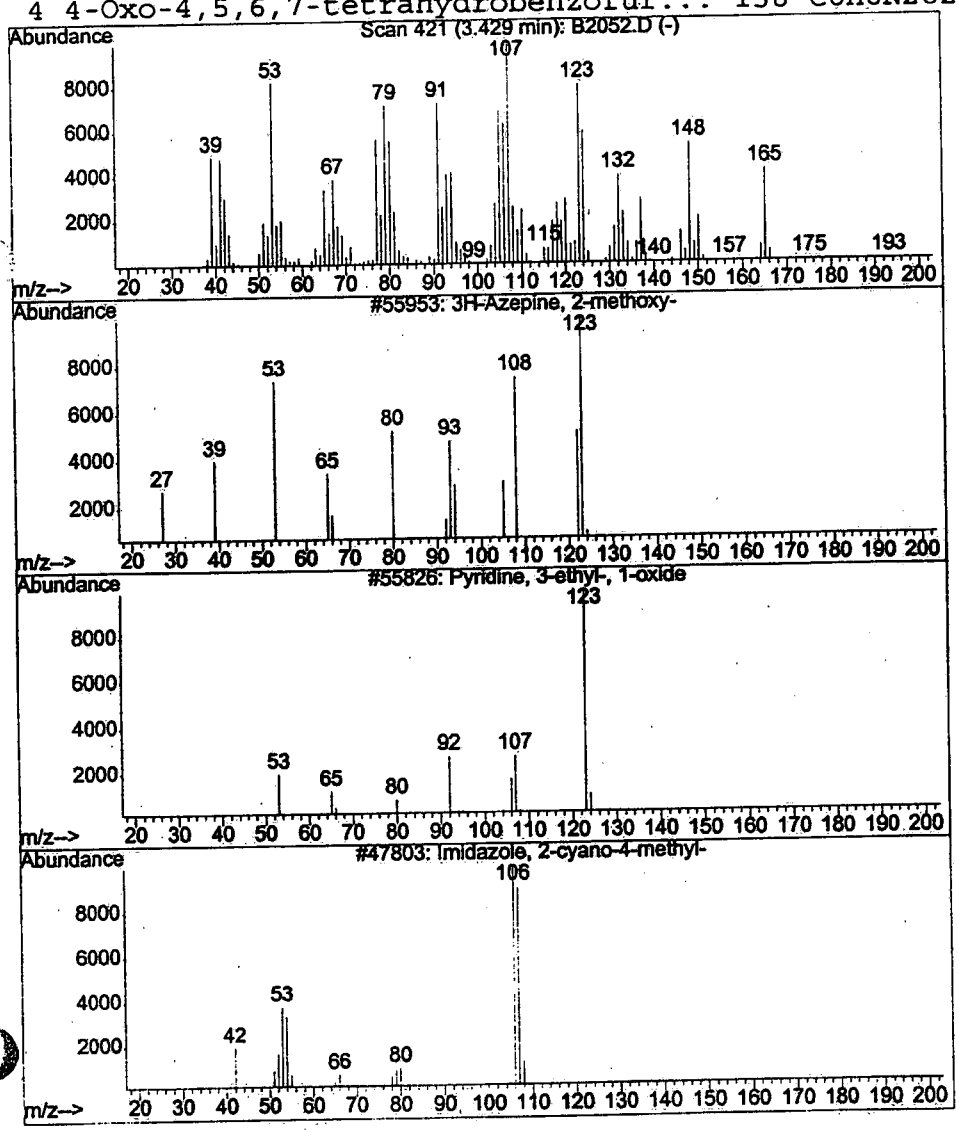
Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

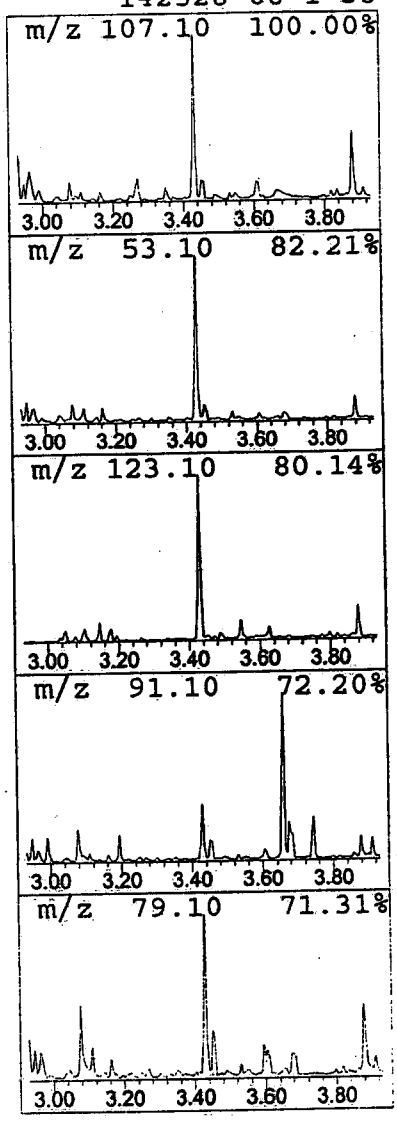
****

Peak Number 2 Unknown — Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.43	45.30 UG	503043	Acenaphthene-d10	3.59

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3H-Azepine, 2-methoxy-	123	C7H9NO	1000161-33-4	49
2	Pyridine, 3-ethyl-, 1-oxide	123	C7H9NO	014906-62-8	47
3	Imidazole, 2-cyano-4-methyl-	107	C5H5N3	1000128-90-0	43
4	4-Oxo-4,5,6,7-tetrahydrobenzofur...	138	C6H6N2O2	142328-06-1	38





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2367

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
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Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

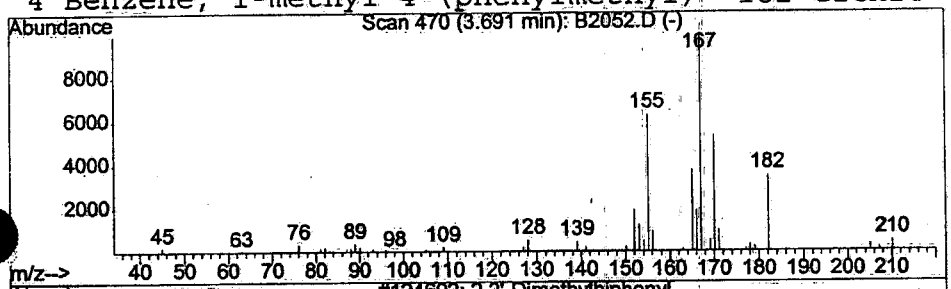
Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

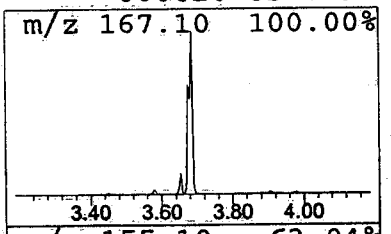
****

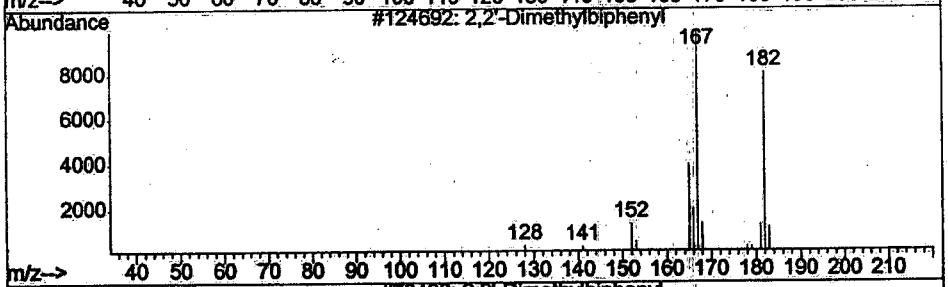
Peak Number 3 2,2'-Dimethylbiphenyl Concentration Rank 9

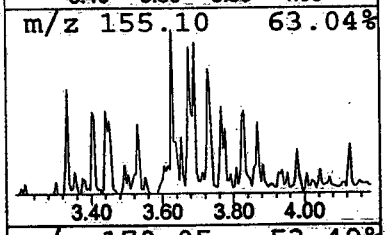
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.69	69.49 UG	771743	Acenaphthene-d10	3.59

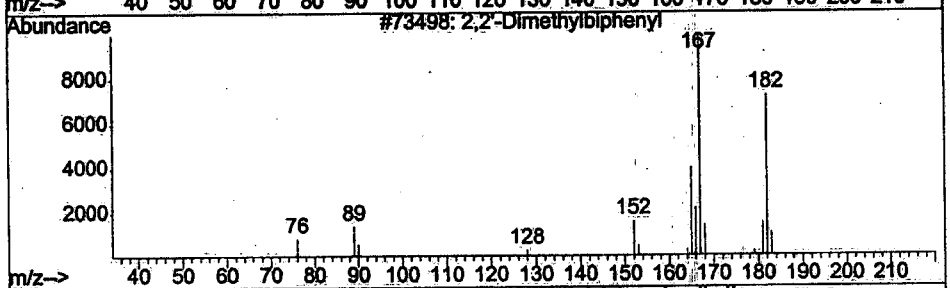
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,2'-Dimethylbiphenyl	182	C14H14	000605-39-0	96
2	2,2'-Dimethylbiphenyl	182	C14H14	000605-39-0	94
3	Benzene, 1-methyl-4-(phenylmethyl)-	182	C14H14	000620-83-7	94
4	Benzene, 1-methyl-4-(phenylmethyl)-	182	C14H14	000620-83-7	91

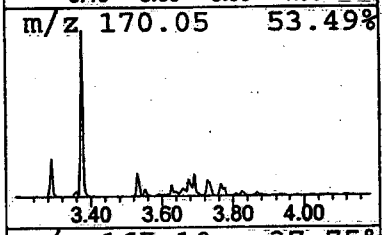


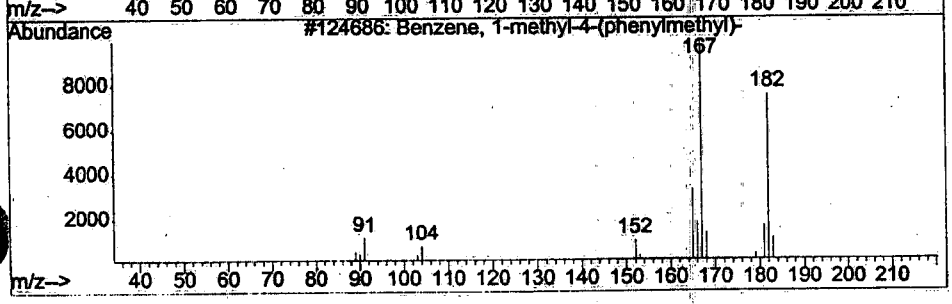


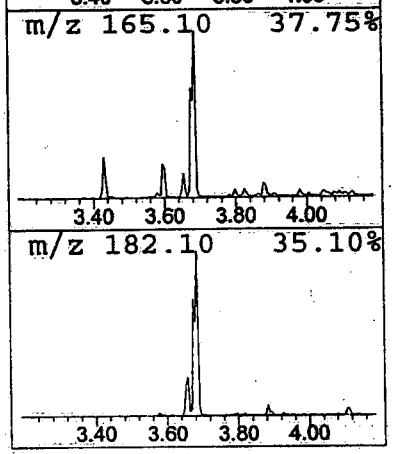












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23646

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
S Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

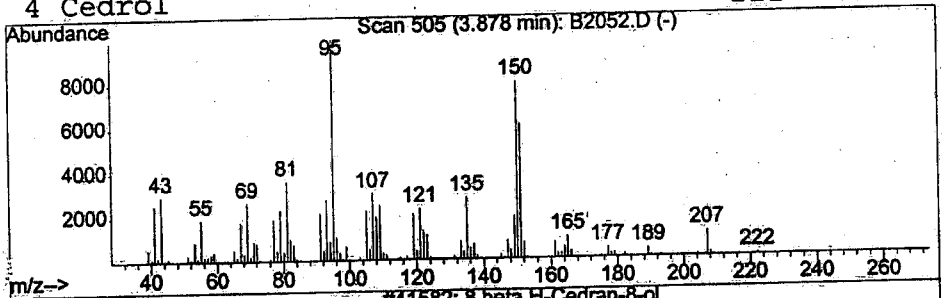
Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

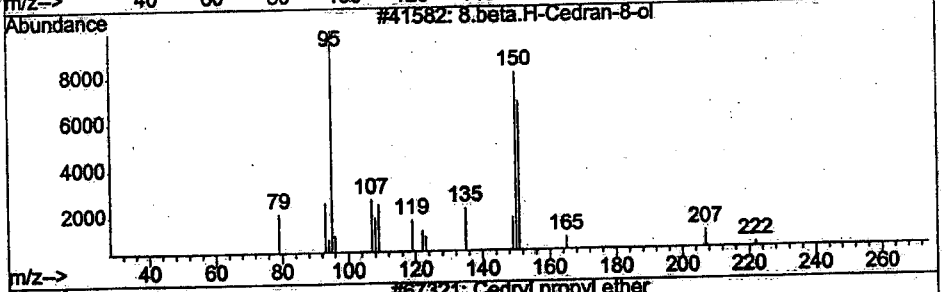
****

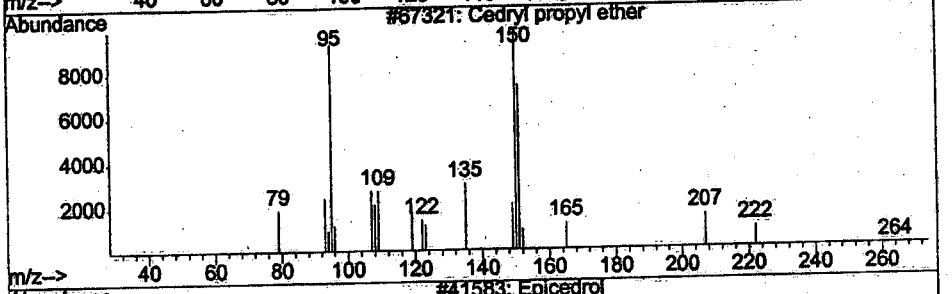
Peak Number 4 8.beta.H-Cedran-8-ol Concentration Rank 14

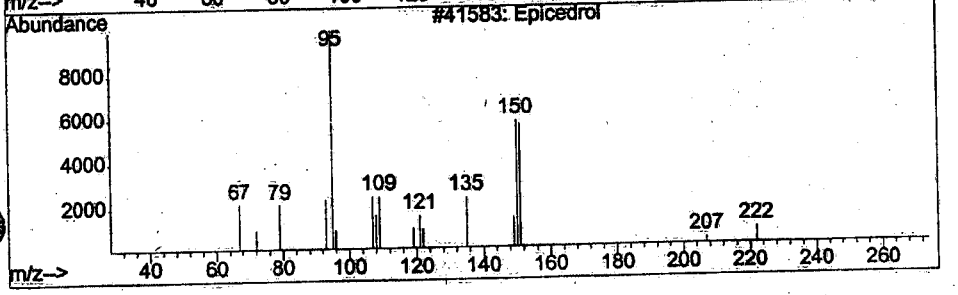
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.88	33.74 UG	374705	Acenaphthene-d10	3.59

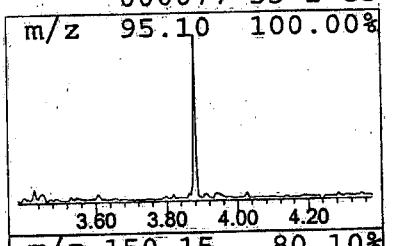
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	8.beta.H-Cedran-8-ol	222	C15H26O	1000149-82-4	94
2	Cedryl propyl ether	264	C18H32O	1000131-90-6	91
3	Epicedrol	222	C15H26O	1000156-22-8	91
4	Cedrol	222	C15H26O	000077-53-2	83

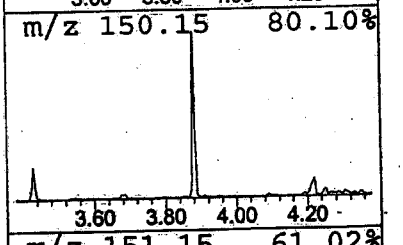


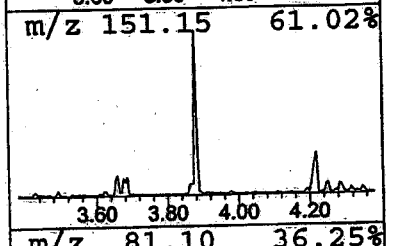


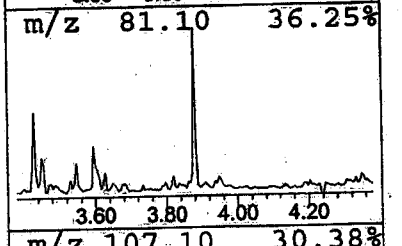


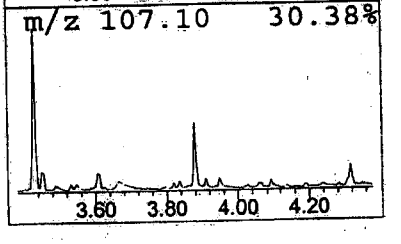












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2369

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

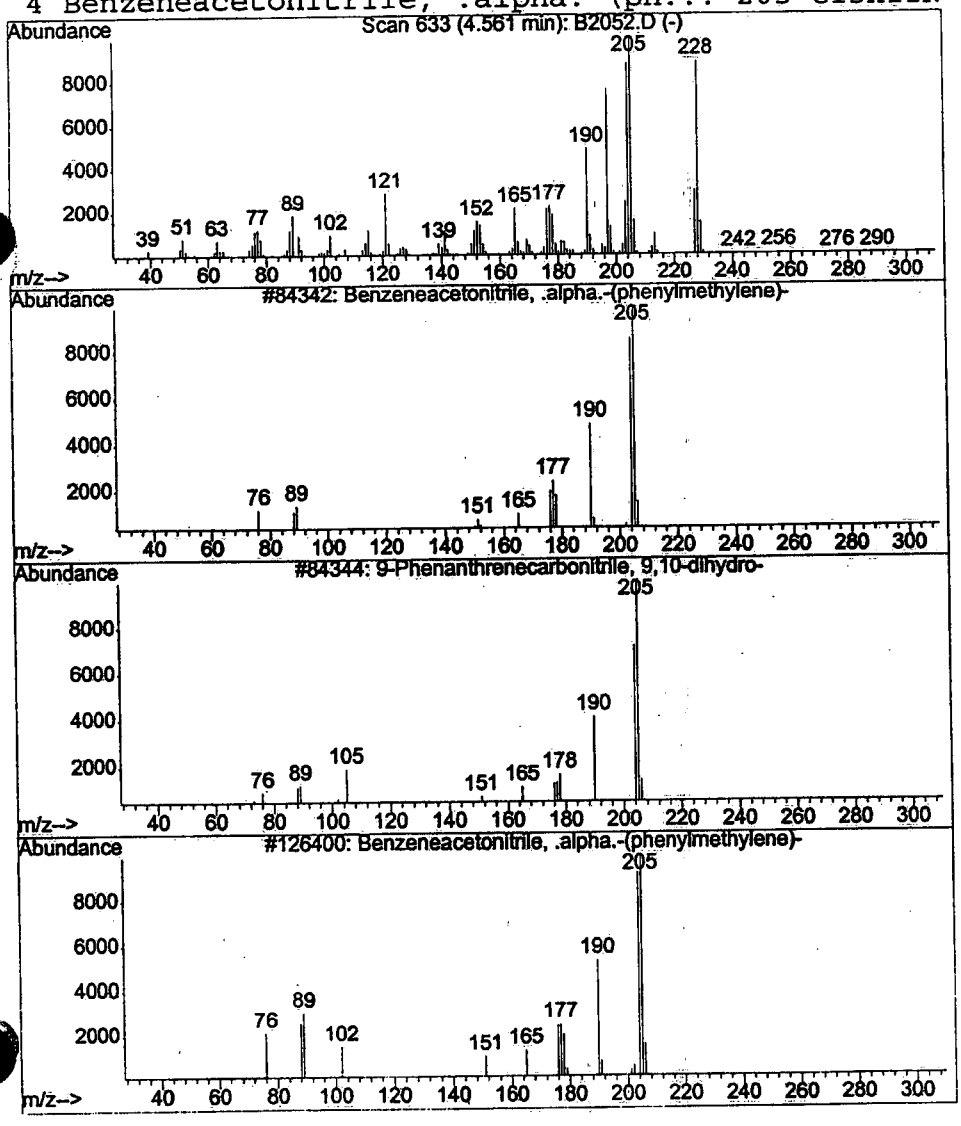
Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

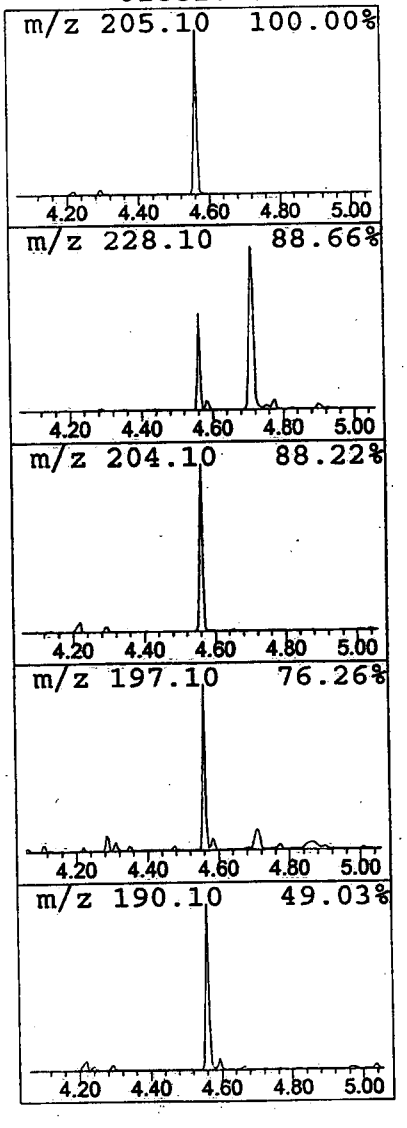
****

Peak Number 5 Unknown aromatic — Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.56	78.28 UG	1228890	Phenanthrene-d10	4.24

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneacetonitrile, .alpha.-(ph...	205	C15H11N	002510-95-4	97
2	9-Phenanthrenecarbonitrile, 9,10...	205	C15H11N	056666-55-8	89
3	Benzeneacetonitrile, .alpha.-(ph...	205	C15H11N	002510-95-4	87
4	Benzeneacetonitrile, .alpha.-(ph...	205	C15H11N	016610-80-3	86





7320

Library Search Compound Report

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Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
S Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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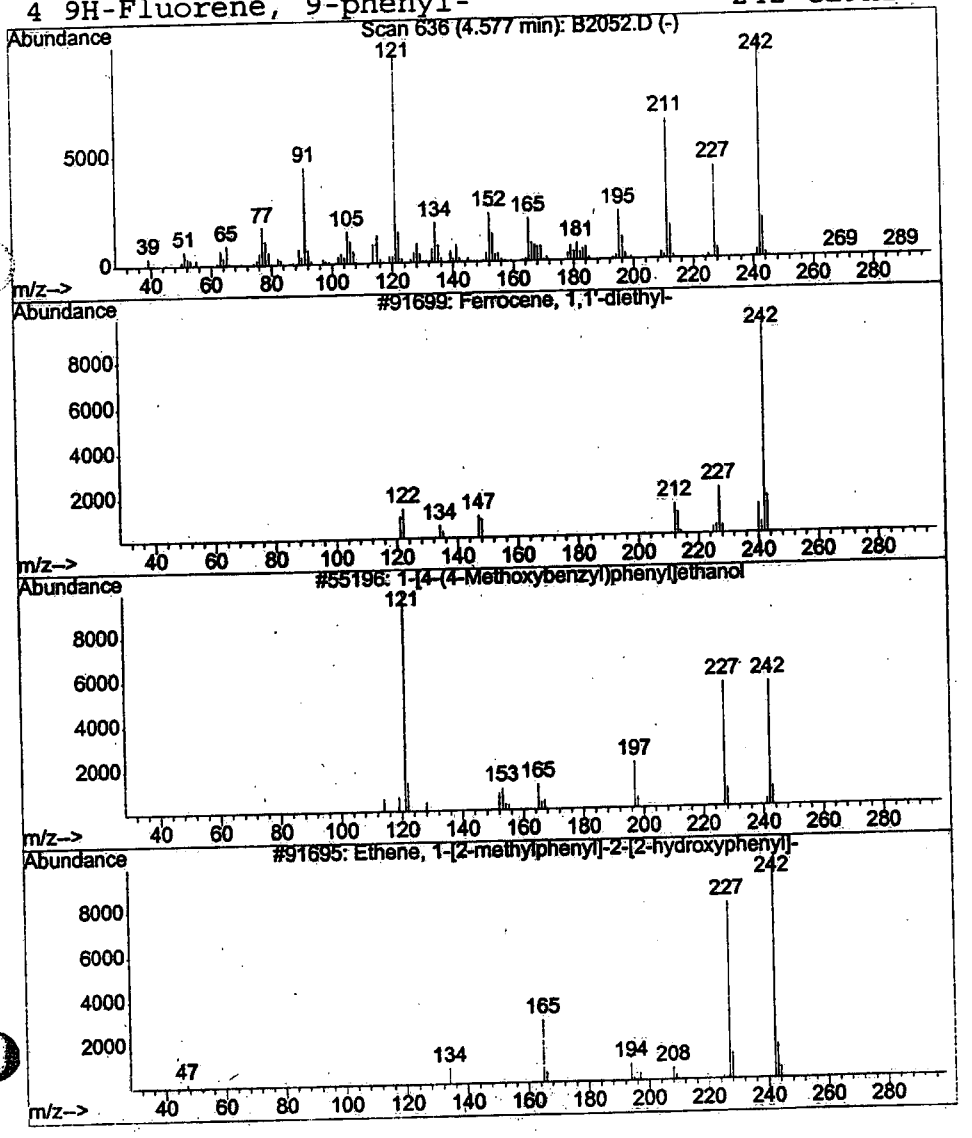
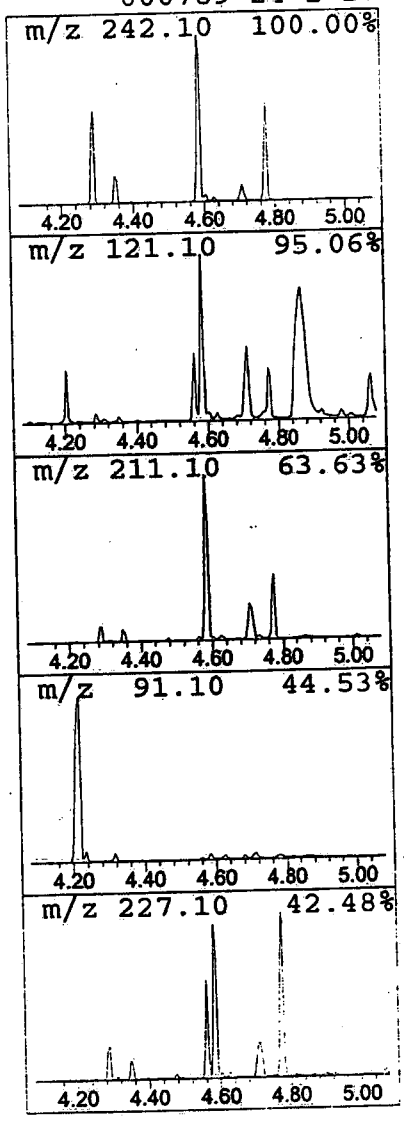
Peak Number 6 Unknown aromatic — Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.58	81.14 UG	1273780	Phenanthrene-d10	4.24

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ferrocene, 1,1'-diethyl-	242	C14H18Fe	001273-97-8	38
2	1-[4-(4-Methoxybenzyl)phenyl]eth...	242	C16H18O2	122909-93-7	35
3	Ethene, 1-[2-methylphenyl]-2-[2-...	242	C15H14OS	1000132-66-7	30
4	9H-Fluorene, 9-phenyl-	242	C19H14	000789-24-2	27





2371

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
3 Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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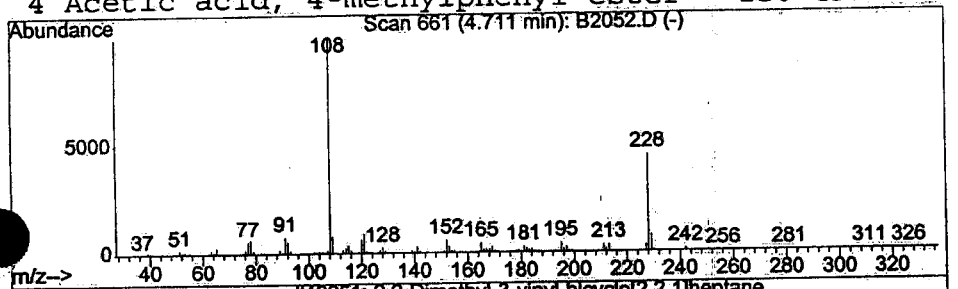
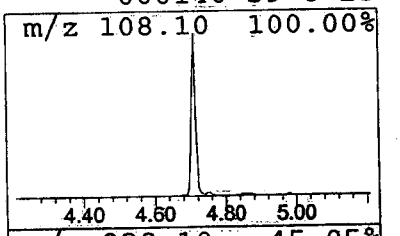
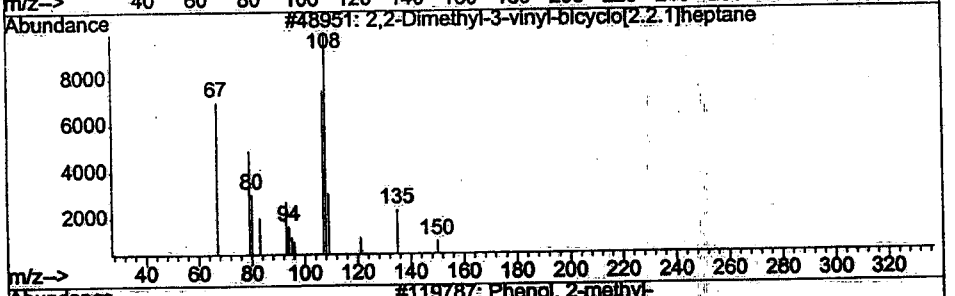
Peak Number 7 Substituted phenol Concentration Rank 5

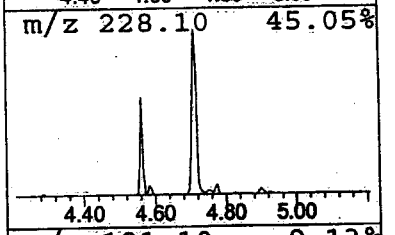
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.71	134.36 UG	2109200	Phenanthrene-d10	4.24

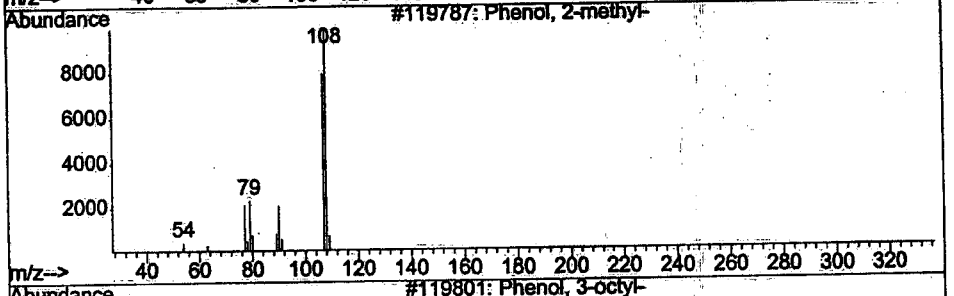
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,2-Dimethyl-3-vinyl-bicyclo[2.2...	150	C11H18	115948-98-6	43
2	Phenol, 2-methyl-	108	C7H8O	000095-48-7	32
3	Phenol, 3-octyl-	206	C14H22O	020056-69-3	25
4	Acetic acid, 4-methylphenyl ester	150	C9H10O2	000140-39-6	23

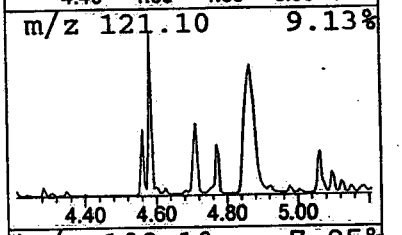


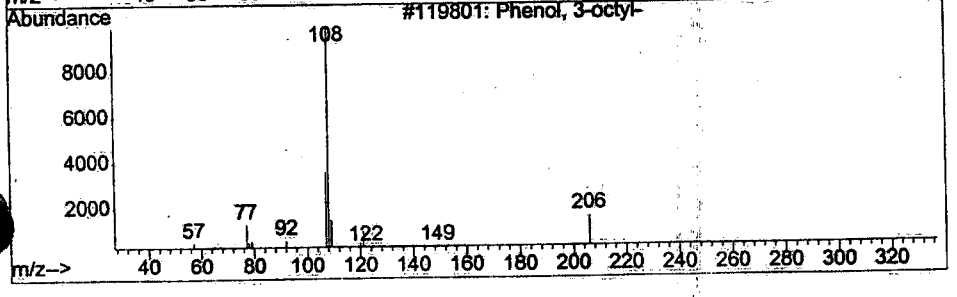


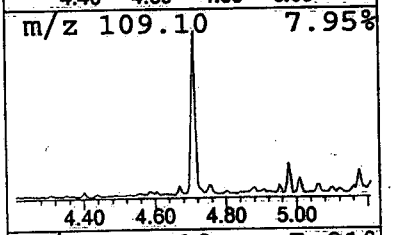


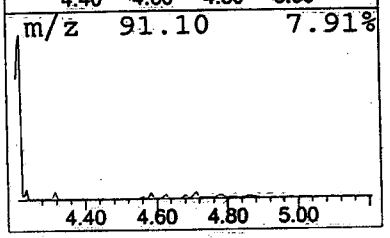












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000281

Library Search Compound Report

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Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
S Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

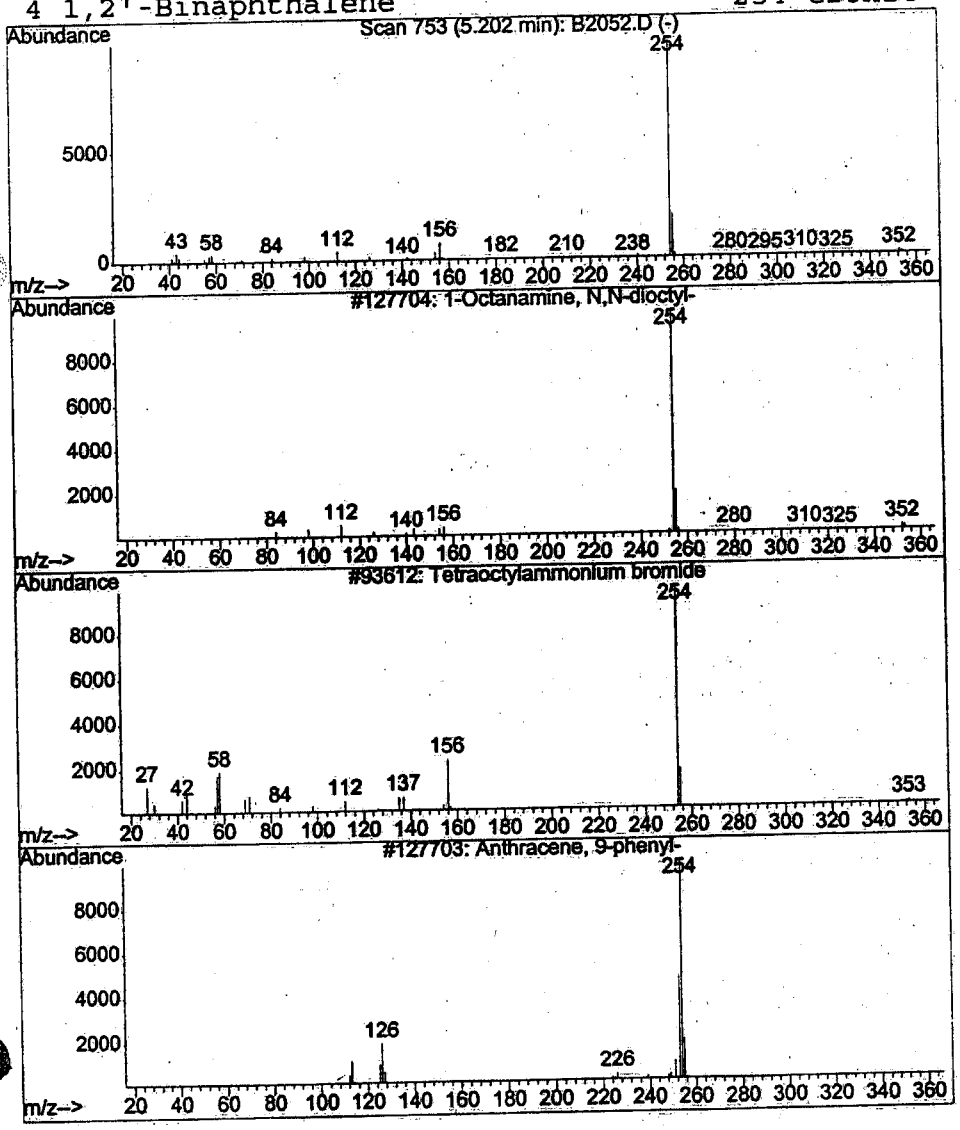
Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

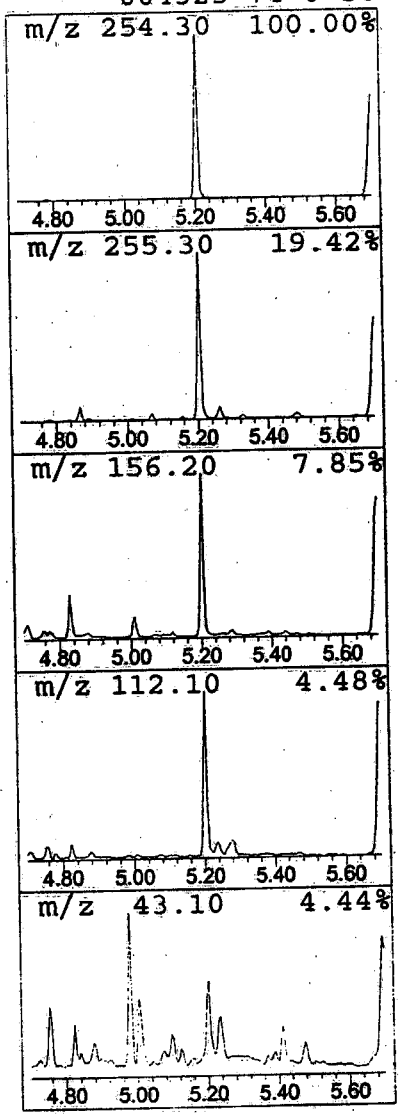
****

Peak Number 8 Unknown aromatic — Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.20	58.36 UG	471303	Chrysene-d12	6.01

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Octanamine, N,N-dioctyl-	353	C24H51N	001116-76-3	70
2	Tetraoctylammonium bromide	545	C32H68BrN	014866-33-2	56
3	Anthracene, 9-phenyl-	254	C20H14	000602-55-1	50
4	1,2'-Binaphthalene	254	C20H14	004325-74-0	50





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2373

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
LS Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

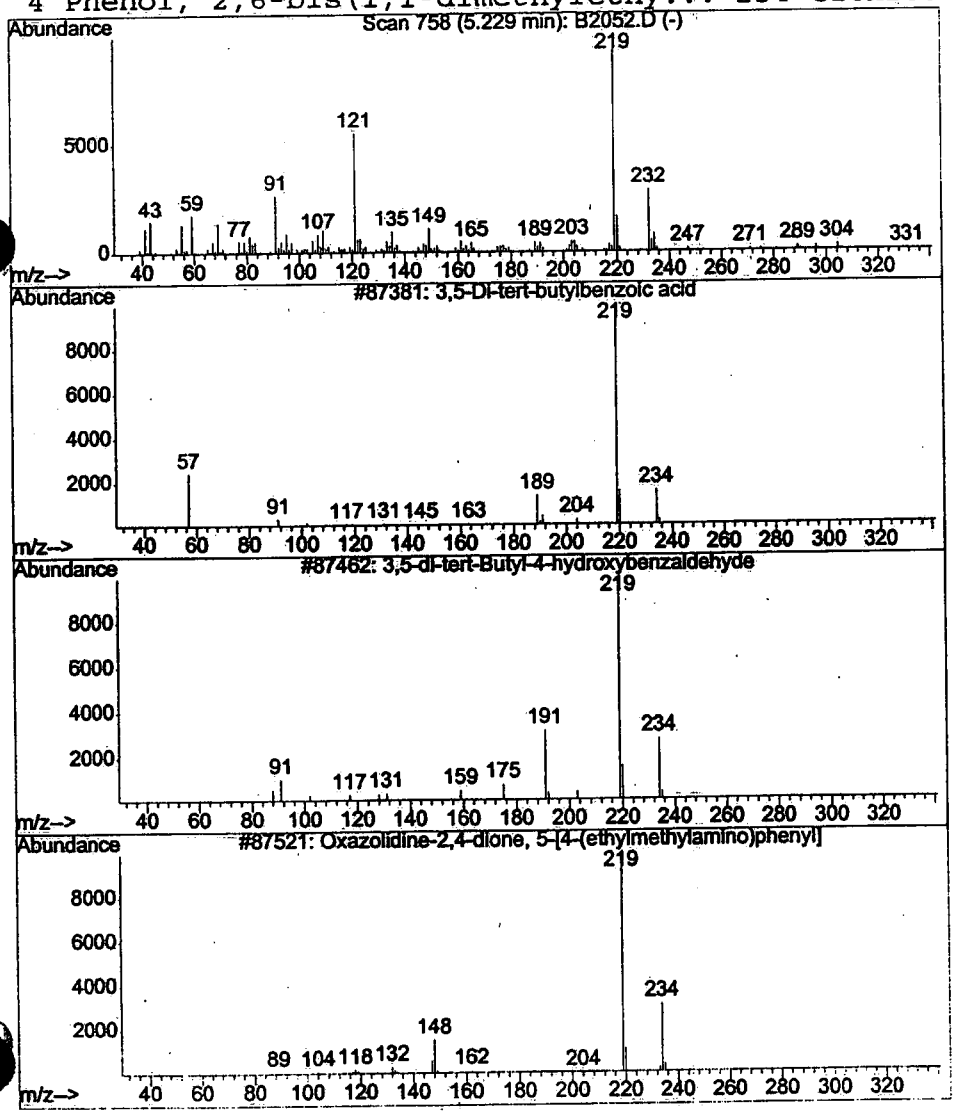
Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

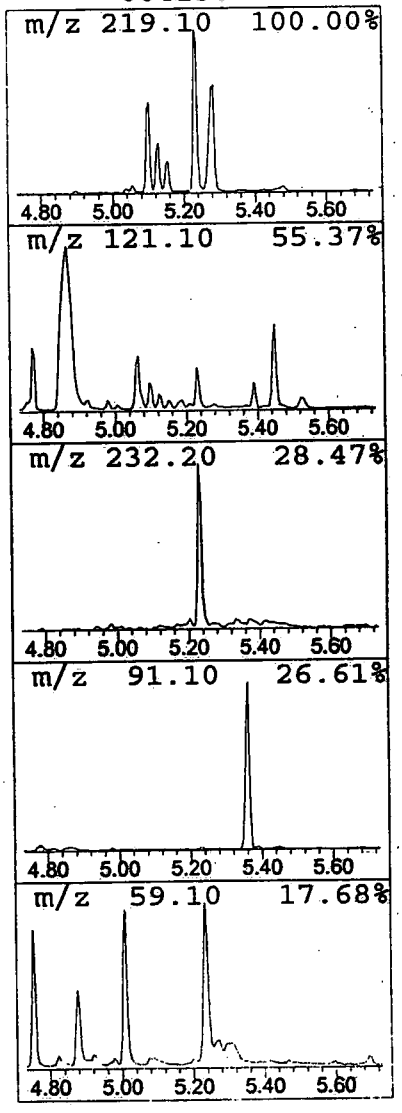
****

Peak Number 9 Substituted phenol Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.23	52.30 UG	422369	Chrysene-d12	6.01

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3,5-Di-tert-butylbenzoic acid	234	C15H22O2	016225-26-6	43
2	3,5-di-tert-Butyl-4-hydroxybenza...	234	C15H22O2	001620-98-0	43
3	Oxazolidine-2,4-dione, 5-[4-(eth...	234	C12H14N2O3	1000158-67-0	43
4	Phenol, 2,6-bis(1,1-dimethylethy...	234	C16H26O	004130-42-1	38





2374

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Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
3 Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

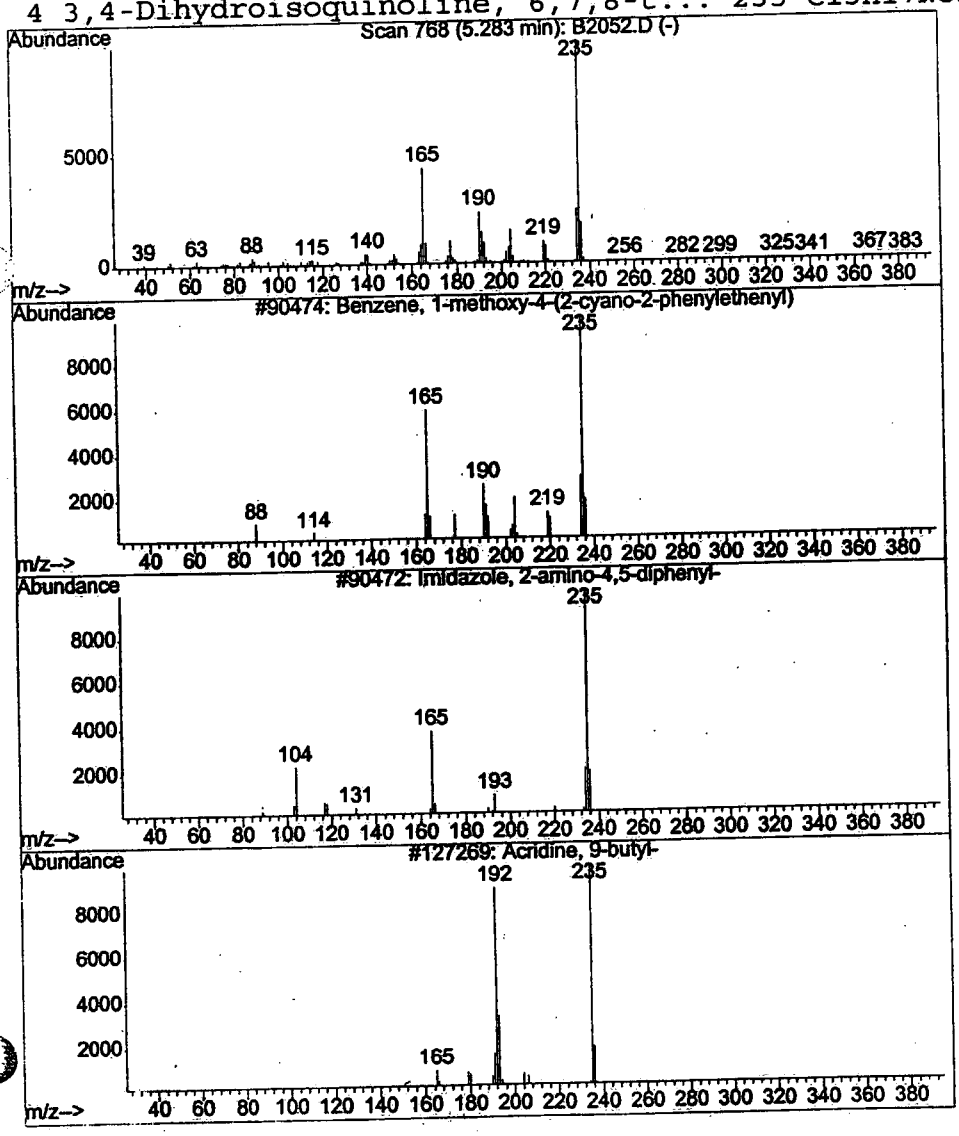
Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

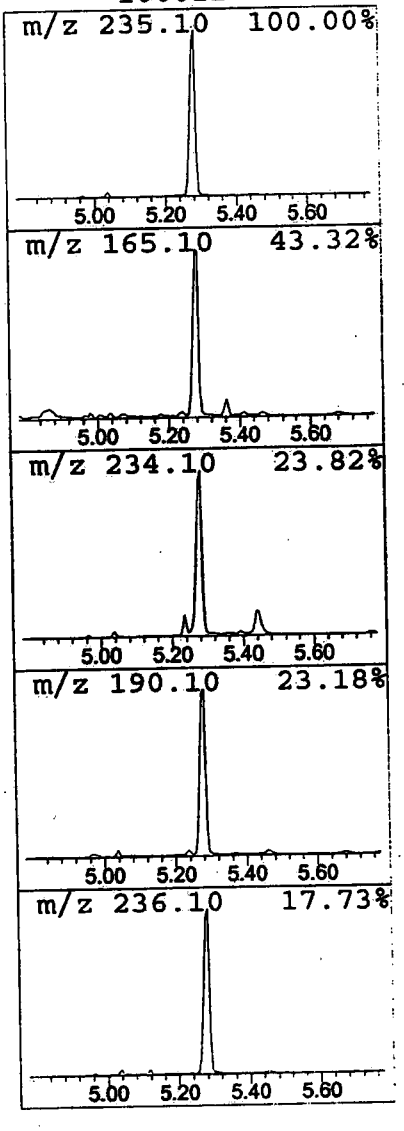
****

Peak Number 10 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.28	228.52 UG	1845380	Chrysene-d12	6.01

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methoxy-4-(2-cyano-2-...	235	C16H13NO	005432-07-5	98
2	Imidazole, 2-amino-4,5-diphenyl-	235	C15H13N3	037980-29-3	58
3	Acridine, 9-butyl-	235	C17H17N	015539-30-7	47
4	3,4-Dihydroisoquinoline, 6,7,8-t...	235	C13H17NO3	1000127-91-7	43





2375

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
IS Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

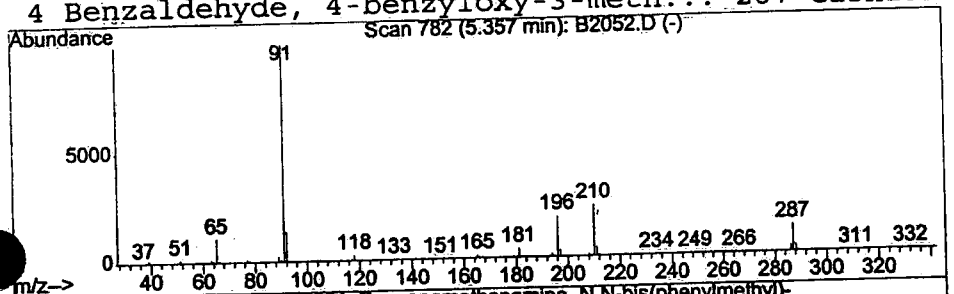
Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

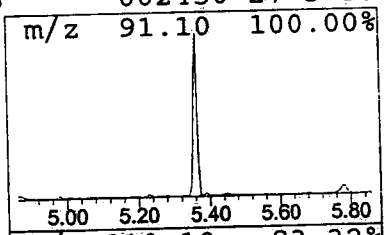
****

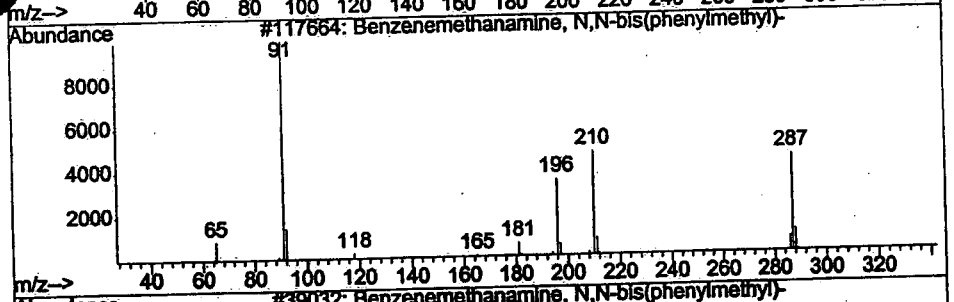
Peak Number 11 Substituted benzene Concentration Rank 2

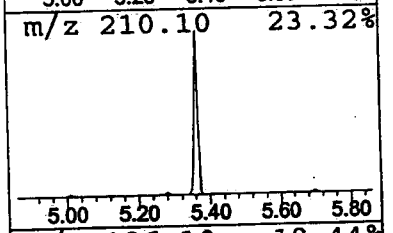
R.T.	EstConc	Area	Relative to ISTD	R.T.
5.36	226.26 UG	1827120	Chrysene-d12	6.01

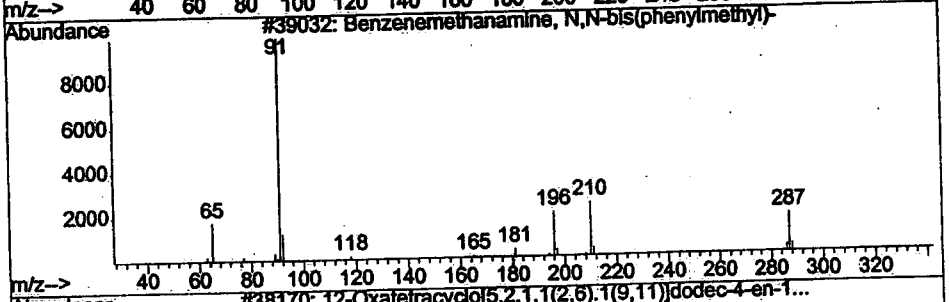
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	98
2	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	95
3	12-Oxatetracyclo[5.2.1.1(2,6).1(...	210	C11H11ClO2	1000191-06-4	70
4	Benzaldehyde, 4-benzyloxy-3-meth...	287	C15H13NO5	002450-27-3	35

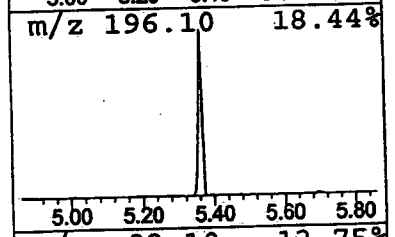


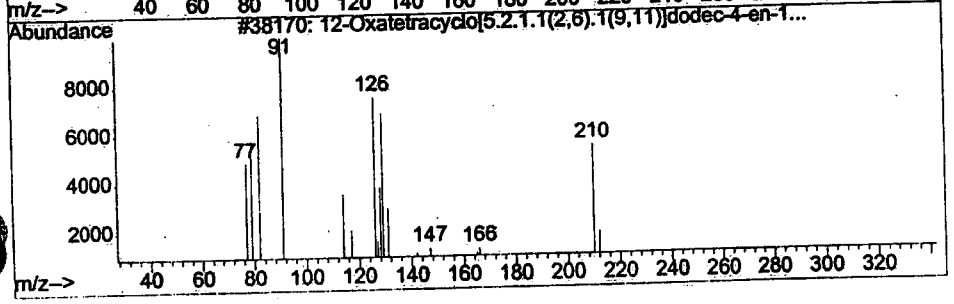


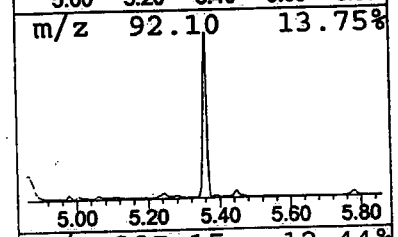


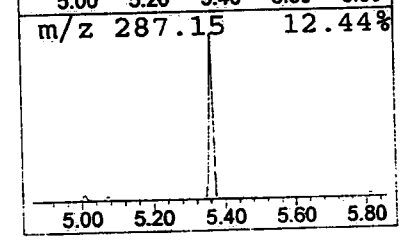












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2376

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
S Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

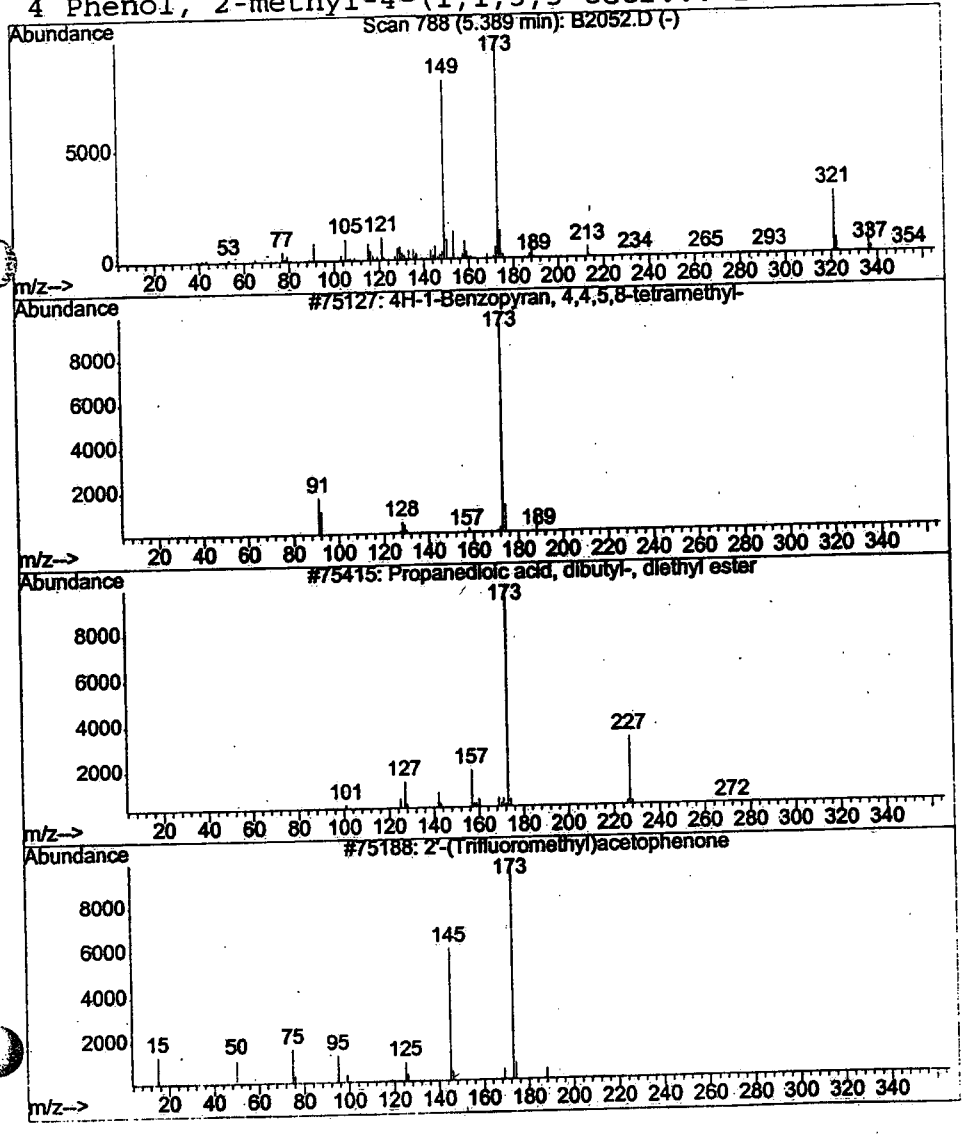
Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

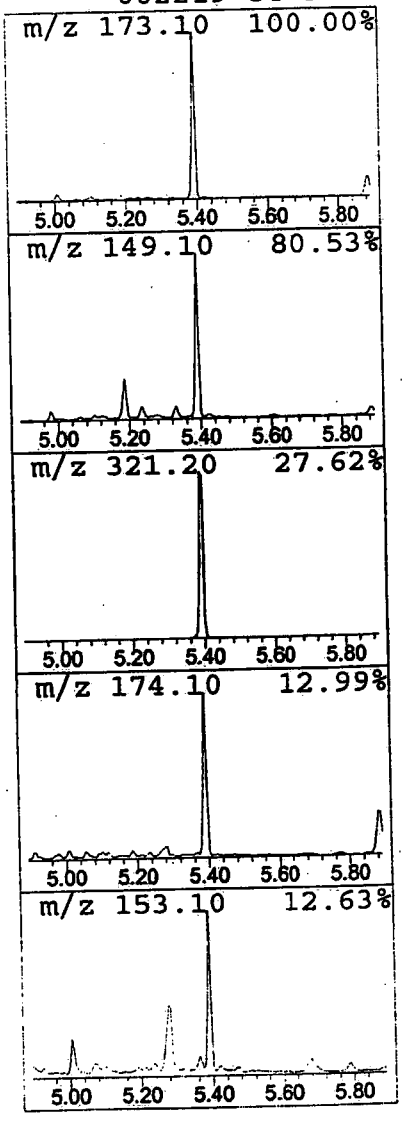
****

Peak Number 12 Substituted phenol Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.39	62.08 UG	501315	Chrysene-d12	6.01

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4H-1-Benzopyran, 4,4,5,8-tetrame...	188	C13H16O	082391-06-8	38
2	Propanedioic acid, dibutyl-, die...	272	C15H28O4	000596-75-8	27
3	2'-(Trifluoromethyl)acetophenone	188	C9H7F3O	017408-14-9	27
4	Phenol, 2-methyl-4-(1,1,3,3-tetr...	220	C15H24O	002219-84-3	22





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
mple : S-51,2092-007,S,2.21g,27.7,04/12/01
sc : ENVTACT/ORBIS,04/03/01,04/04/01,5
3 Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

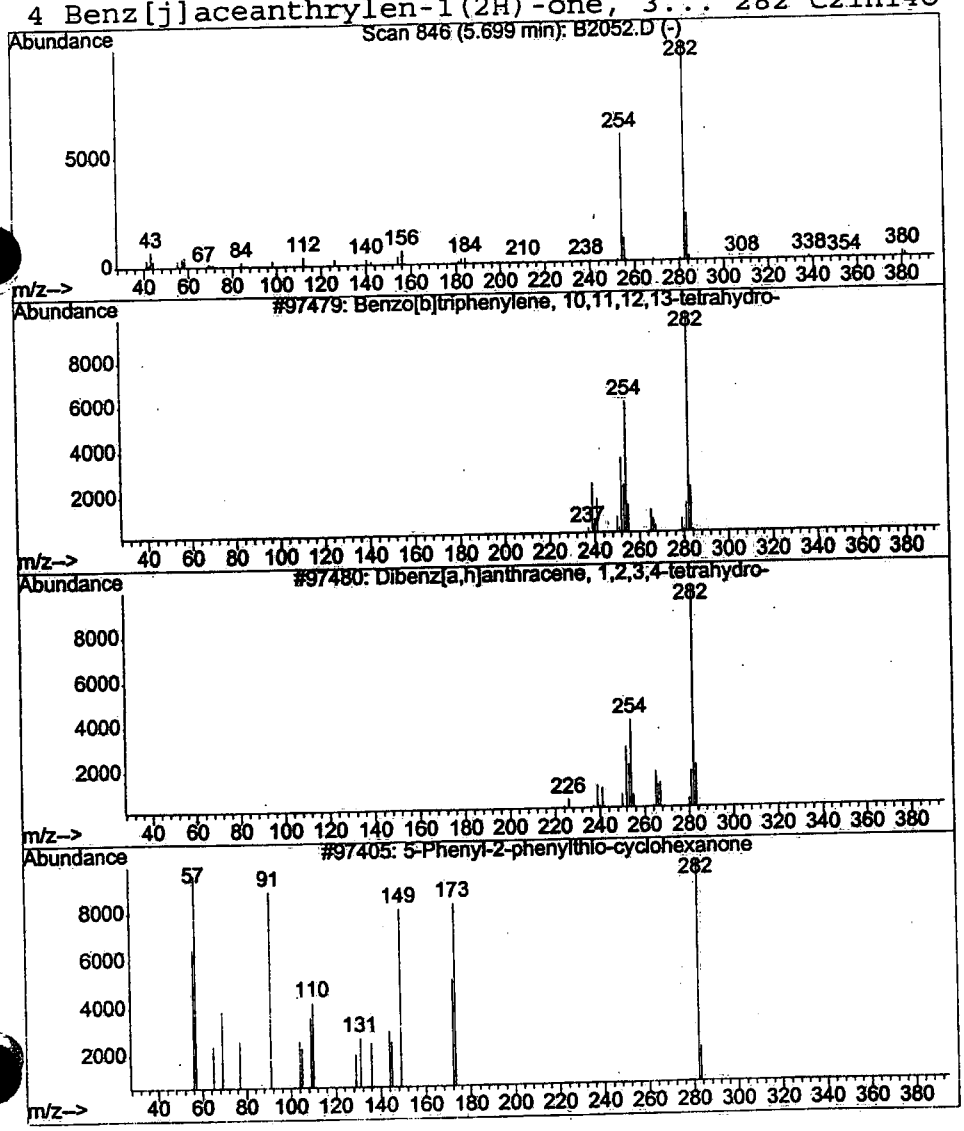
Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

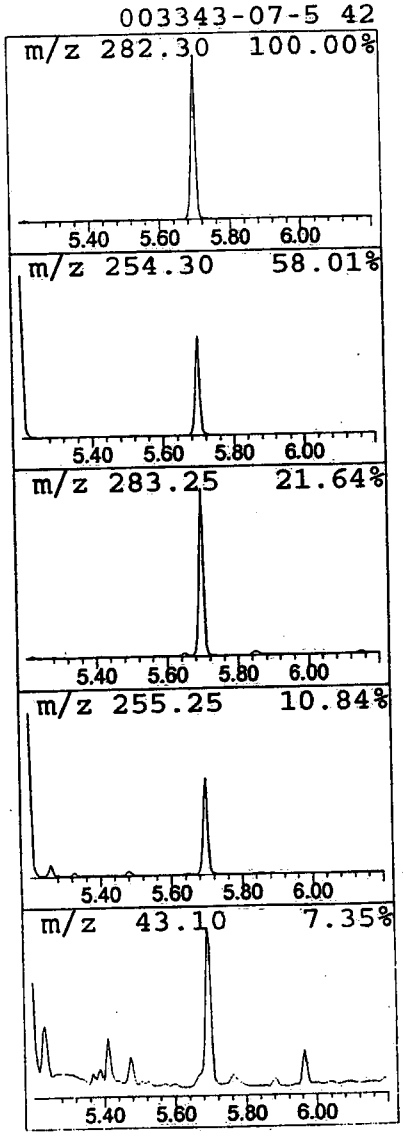
****

Peak Number 13 Unknown aromatic — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.70	150.02 UG	1211460	Chrysene-d12	6.01

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]triphenylene, 10,11,12,1...	282	C22H18	025486-89-9	78
2	Dibenz[a,h]anthracene, 1,2,3,4-t...	282	C22H18	000153-39-9	78
3	5-Phenyl-2-phenylthio-cyclohexanone	282	C18H18OS	1000055-81-8	60
4	Benz[j]aceanthrylen-1(2H)-one, 3...	282	C21H14O	003343-07-5	42





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2378

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
} Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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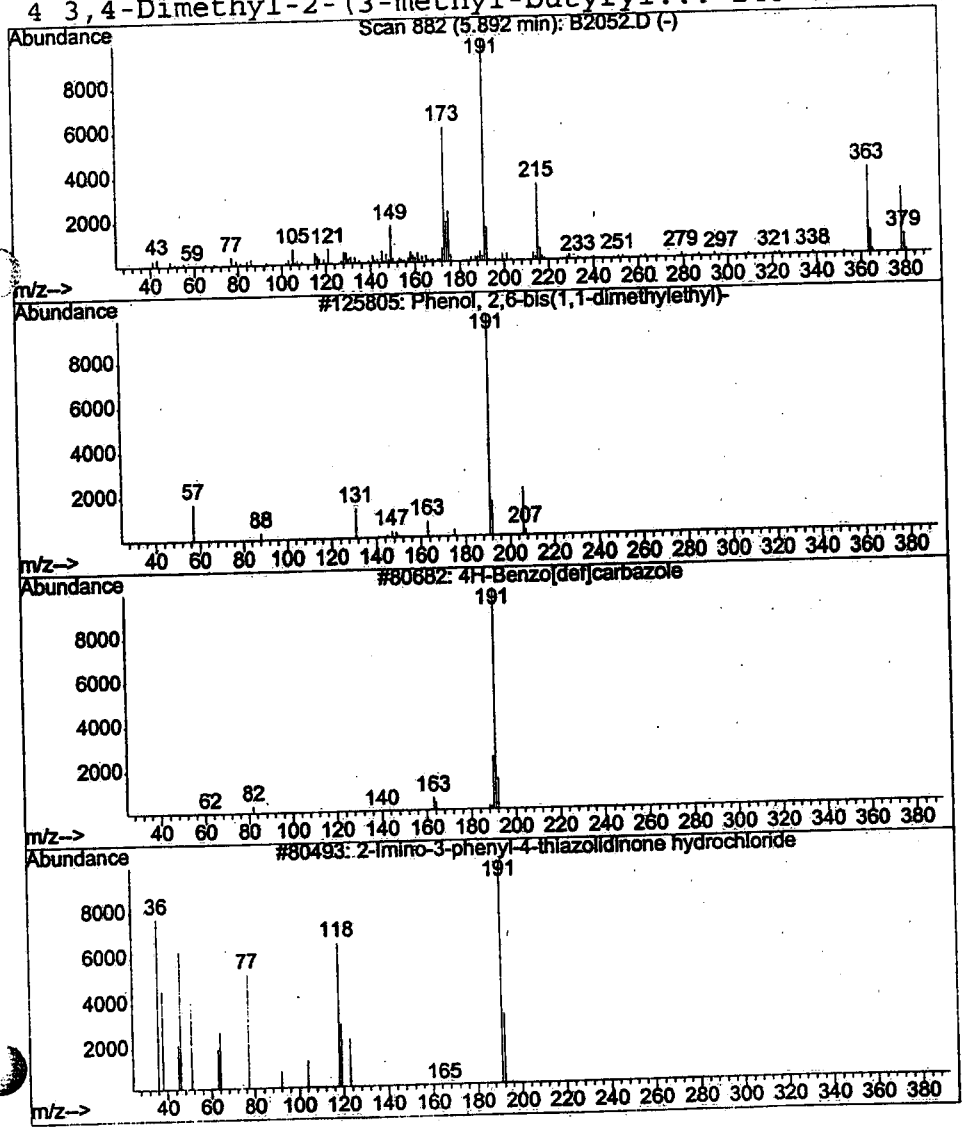
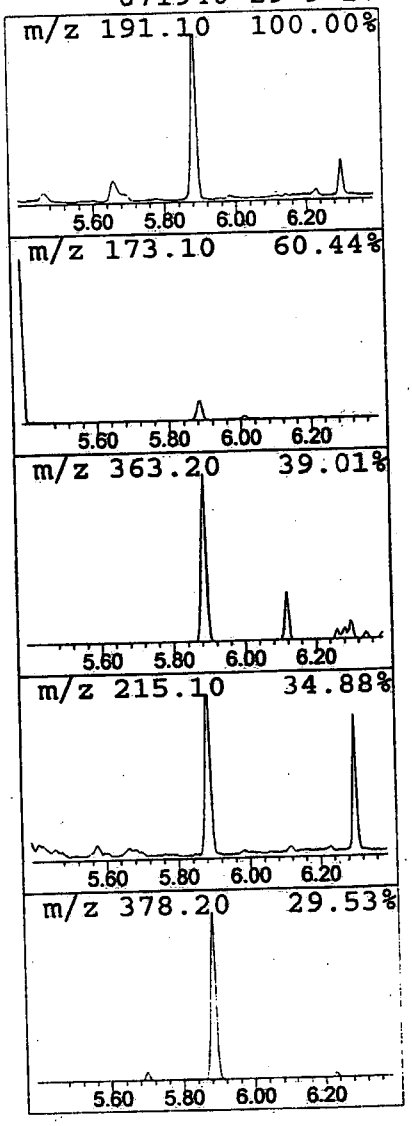
Peak Number 14 Substituted phenol Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.89	25.05 UG	202277	Chrysene-d12	6.01

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 2,6-bis(1,1-dimethylethyl)-	206	C14H22O	000128-39-2	27
2	4H-Benzo[def]carbazole	191	C14H9N	000203-65-6	27
3	2-Imino-3-phenyl-4-thiazolidinon...	192	C9H8N2OS	1000224-55-8	27
4	3,4-Dimethyl-2-(3-methyl-butyryl...	248	C15H20O3	071940-29-9	27





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2379

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2052.D
Acq On : 13 Apr 2001 21:19
Sample : S-51,2092-007,S,2.21g,27.7,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,5
ALS Integration Params: LSCINT.P

Vial: 16
Operator: JC
Inst : MSD_B
Multiplr: 1.00

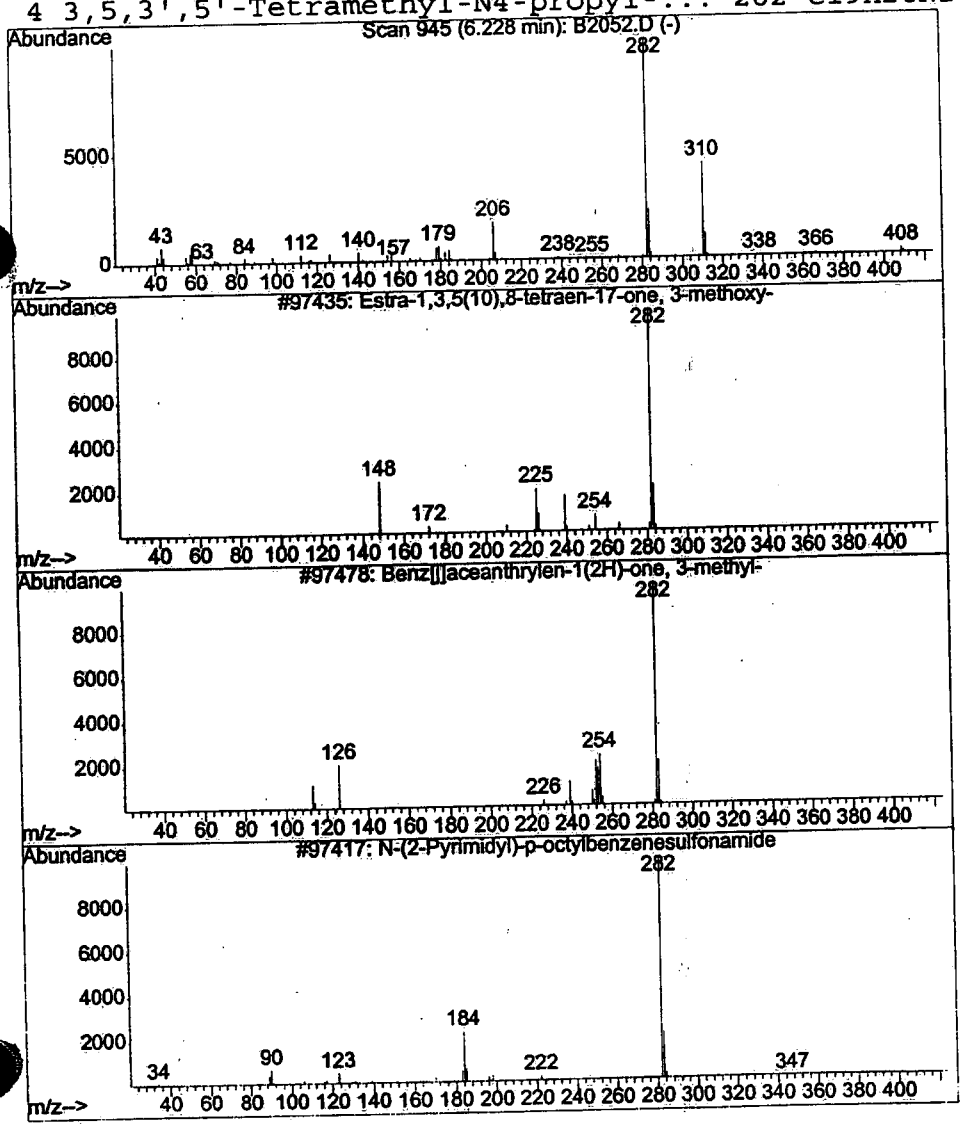
Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

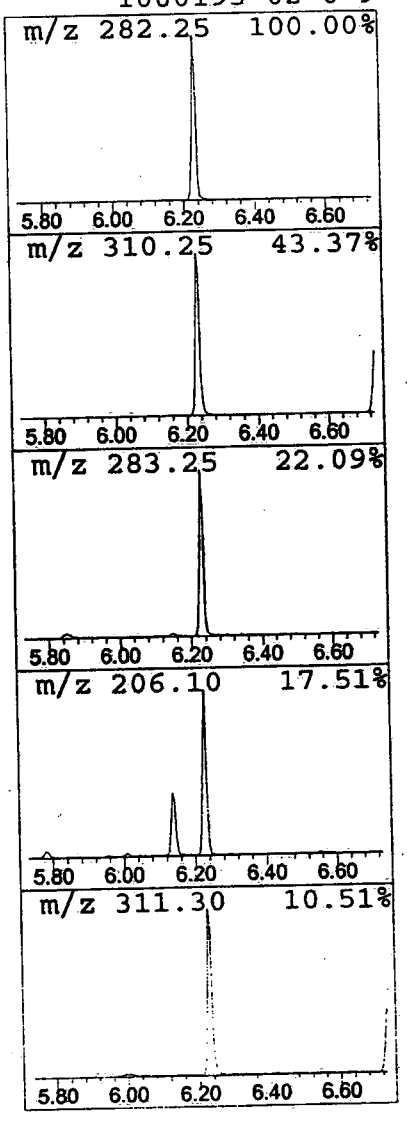
****

Peak Number 15 Unknown aromatic — Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.23	106.00 UG	856023	Chrysene-d12	6.01

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Estra-1,3,5(10),8-tetraen-17-one...	282	C19H22O2	006885-44-5	43
2	Benz[j]aceanthrylen-1(2H)-one, 3...	282	C21H14O	003343-07-5	25
3	N-(2-Pyrimidyl)-p-octylbenzenesu...	347	C18H25N3O2S	1000195-89-8	25
4	3,5,3',5'-Tetramethyl-N4-propyl-...	282	C19H26N2	1000193-02-0	9





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2380

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2035.D Vial: 17
Acq On : 13 Apr 2001 16:53 Operator: JC
Sample : S-54,2092-010,S,5.86g,15.8,04/12/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: Apr 13 17:03:45 2001 Quant Results File: BS1301.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Fri Apr 13 10:13:08 2001
Response via : Initial Calibration
DataAcq Meth : BS1301

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.31	152	48962	40.00	UG	-0.01
22) Naphthalene-d8	2.84	136	183315	40.00	UG	0.00
39) Acenaphthene-d10	3.59	164	90946	40.00	UG	0.00
60) Phenanthrene-d10	4.24	188	162680	40.00	UG	-0.01
75) Chrysene-d12	5.99	240	107740	40.00	UG	-0.01
84) Perylene-d12	7.26	264	128318	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0	0.00	UG	
Spiked Amount 100.000	Range 36 - 93		Recovery =	0.00%#		
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 40 - 101		Recovery =	0.00%#		
23) Nitrobenzene-d5	2.53	82	38649	29.48	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery =	58.96%		
43) 2-Fluorobiphenyl	3.29	172	108587	36.75	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery =	73.50%		
64) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 54 - 135		Recovery =	0.00%#		
77) Terphenyl-d14	5.12	244	120586	38.76	UG	-0.01
Spiked Amount 50.000	Range 58 - 147		Recovery =	77.52%		
Target Compounds						Qvalue
69) Phenanthrene	4.25	178	5261	1.40	UG	# 46
70) Anthracene	4.27	178	2466	0.68	UG	# 61
73) Fluoranthene	4.91	202	3496	1.05	UG	97
76) Pyrene	5.05	202	3374	0.91	UG	96

(#) = qualifier out of range (m) = manual integration

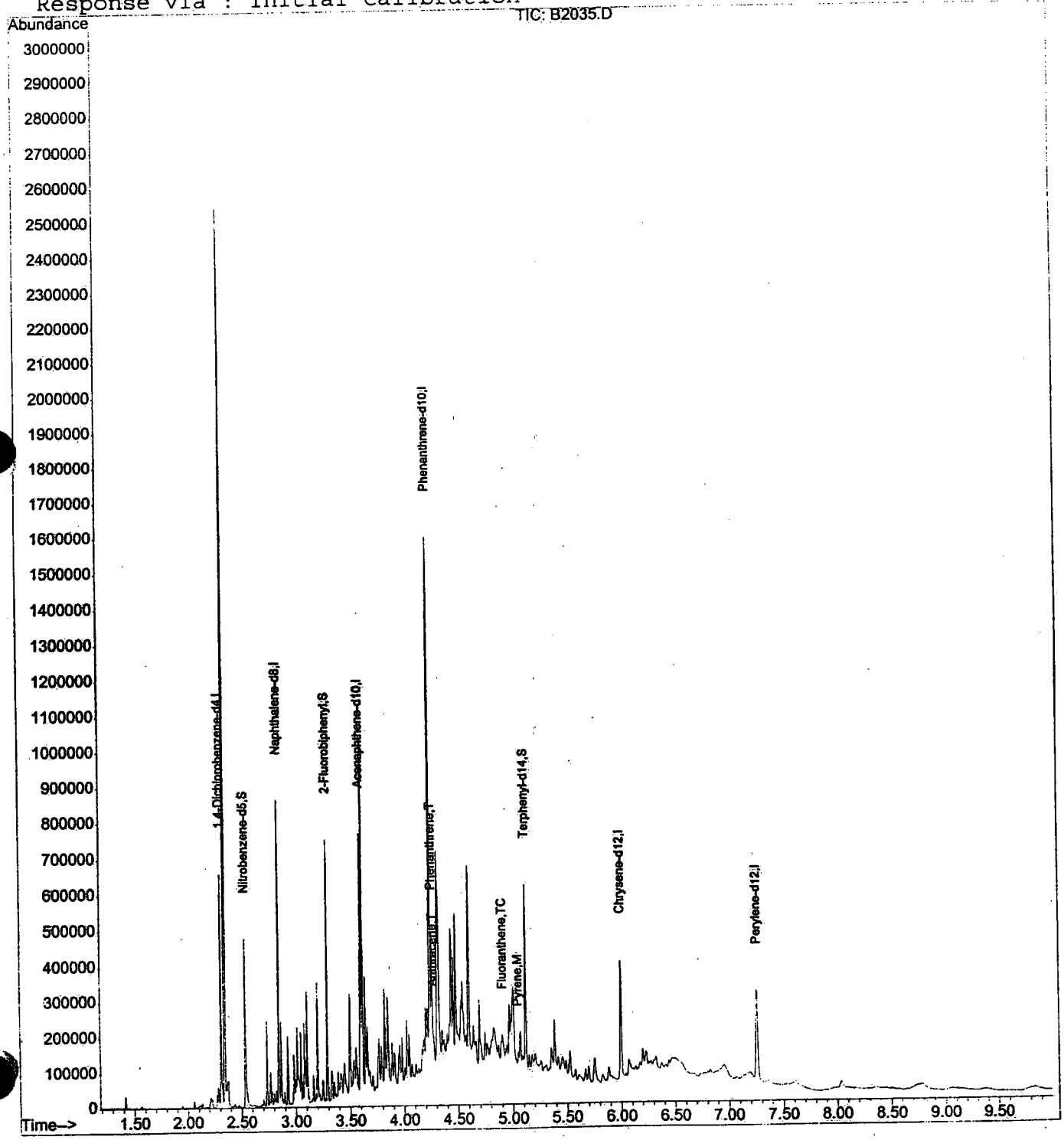
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2035.D
Acq On : 13 Apr 2001 16:53
Sample : S-54,2092-010,S,5.86g,15.8,04/12/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,1
MS Integration Params: rteint.p
Quant Time: Apr 16 6:58 2001

Vial: 17
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1301.RES

Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Fri Apr 13 10:13:08 2001
Response via : Initial Calibration



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2382

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D Vial: 34
Acq On : 6 Apr 2001 11:44 Operator: JC
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2 Multiplr: 1.00
IS Integration Params: rteint.p
Quant Time: Apr 06 11:53:22 2001 Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	42439	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	173515m	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	97476	40.00	UG	0.00
60) Phenanthrene-d10	3.34	188	159631	40.00	UG	-0.02
75) Chrysene-d12	4.48	240	142066	40.00	UG	-0.03
84) Perylene-d12	5.28	264	155897	40.00	UG	-0.03
System Monitoring Compounds						
4) 2-Fluorophenol	0.99	112	39445	32.31	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 32.31%#			
6) Phenol-d5	1.39	99	58864	39.39	UG	-0.02
Spiked Amount 100.000	Range 40 - 101		Recovery = 39.39%#			
23) Nitrobenzene-d5	1.74	82	23455	18.63	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 37.26%#			
43) 2-Fluorobiphenyl	2.48	172	59917	22.37	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 44.74%#			
64) 2,4,6-Tribromophenol	3.07	330	31027	58.37	UG	-0.02
Spiked Amount 100.000	Range 54 - 135		Recovery = 58.37%			
77) Terphenyl-d14	4.01	244	83266	24.58	UG	-0.02
Spiked Amount 50.000	Range 58 - 147		Recovery = 49.16%#			
Target Compounds						Qvalue
79) Butylbenzylphthalate	**4.22**	**149**	**29464**	**16.94**	**UG**	**# 33**

(#) = qualifier out of range (m) = manual integration

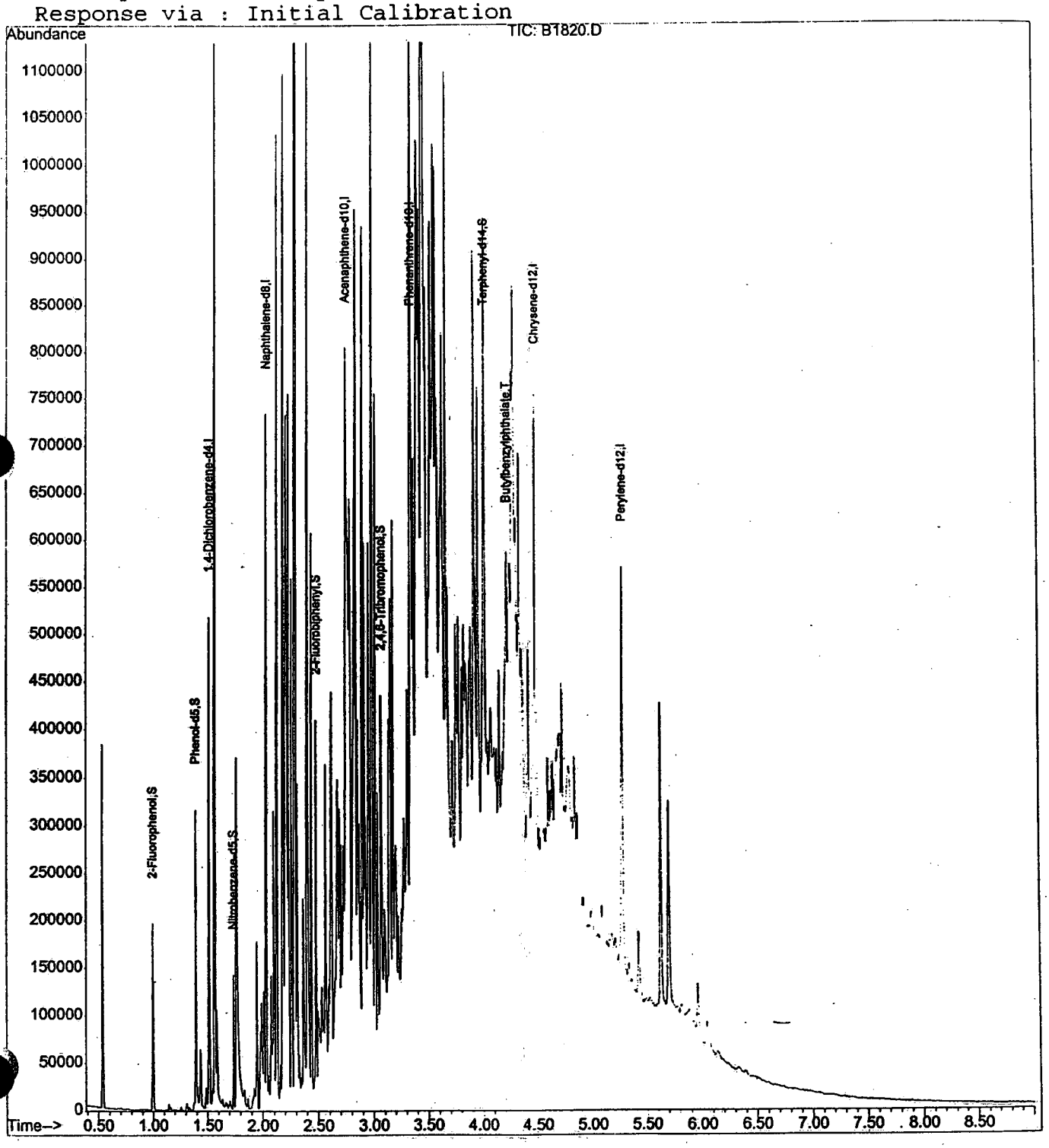
000292

2383

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D Vial: 34
Acq On : 6 Apr 2001 11:44 Operator: JC
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 6 13:05 2001 Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



000293

23984

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
S Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

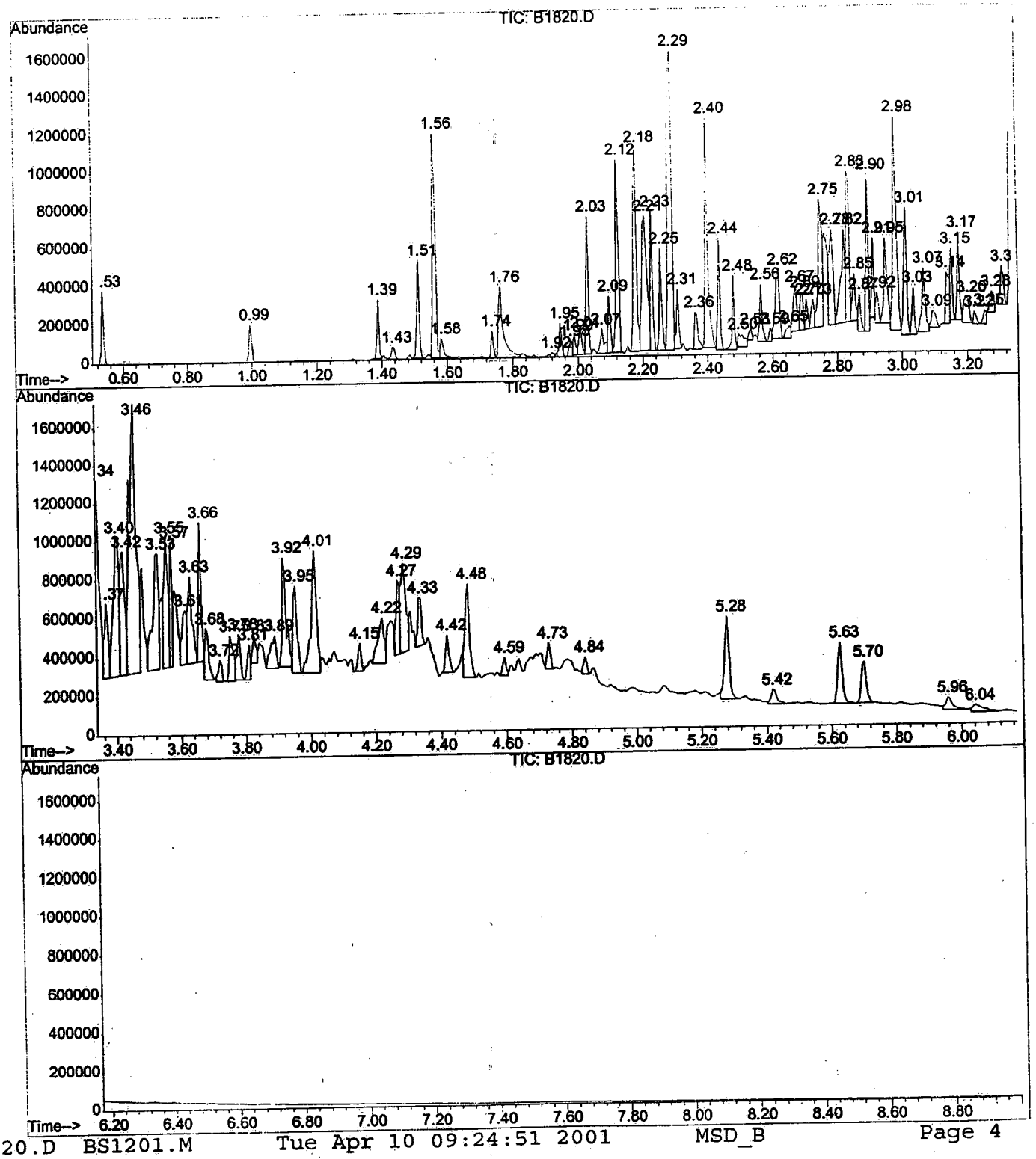
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	0.535	26	29	32	rBV	381415	173255	8.24%	0.578%
2	0.994	112	115	118	rBV	196573	116735	5.55%	0.389%
3	1.390	187	189	191	rBV	309052	137336	6.53%	0.458%
4	1.432	194	197	201	rVB	60190	46046	2.19%	0.154%
5	1.512	209	212	215	rVB	511242	250545	11.92%	0.835%
6	1.561	219	221	224	rVV	1179728	754186	35.87%	2.515%
7	1.582	224	225	234	rVB2	99204	63357	3.01%	0.211%
8	1.737	252	254	256	rBV	141827	66175	3.15%	0.221%
9	1.764	256	259	270	rBV	367164	388748	18.49%	1.296%
10	1.918	284	288	290	rBV3	21344	23255	1.11%	0.078%
11	1.945	291	293	296	rVB	176407	91592	4.36%	0.305%
12	1.977	296	299	300	rBV	81583	61713	2.94%	0.206%
13	1.988	300	301	303	rVV2	104801	56906	2.71%	0.190%
14	2.009	303	305	307	rVV2	115712	82589	3.93%	0.275%
15	2.031	307	309	311	rVV	722005	364300	17.33%	1.215%
16	2.073	314	317	320	rVV2	127177	114406	5.44%	0.381%
17	2.095	320	321	323	rVV	298624	148534	7.06%	0.495%
18	2.121	323	326	329	rVB	1015089	610526	29.04%	2.036%
19	2.180	333	337	339	rVV	1075510	758767	36.09%	2.530%
20	2.207	339	342	345	rVV3	706607	841629	40.03%	2.806%
21	2.228	345	346	349	rVB	730341	294010	13.98%	0.980%
22	2.255	349	351	354	rBV	534457	290330	13.81%	0.968%
23	2.292	354	358	359	rBV2	1578121	1455860	69.25%	4.854%
24	2.308	359	361	363	rVB	310149	154978	7.37%	0.517%
25	2.362	369	371	375	rBV	195936	151406	7.20%	0.505%
26	2.399	375	378	383	rVB	1207826	698422	33.22%	2.329%
27	2.437	383	385	388	rVB	585393	279004	13.27%	0.930%
28	2.479	388	393	395	rBV	387752	184050	8.75%	0.614%
29	2.495	395	396	401	rBV3	69552	97763	4.65%	0.326%
30	2.533	401	403	404	rBV2	59853	36150	1.72%	0.121%
31	2.565	407	409	412	rVB2	302277	158895	7.56%	0.530%

32	2.592	412	414	415	rBV	70001	42127	2.00%	0.140%
33	2.618	415	419	421	rVB2	364233	331212	15.75%	1.104%
34	2.650	421	425	426	rBV3	64720	74248	3.53%	0.248%
35	2.672	426	429	431	rVV4	236571	212751	10.12%	0.709%
[redacted]	2.688	431	432	434	rVV2	199689	124158	5.91%	0.414%
	2.704	434	435	437	rVV2	157885	86053	4.09%	0.287%
	2.725	437	439	440	rVV2	152722	102641	4.88%	0.342%
39	2.746	440	443	445	rVV2	672776	625211	29.74%	2.084%
40	2.784	448	450	452	rVV2	500476	379407	18.05%	1.265%
41	2.821	452	457	458	rVV2	494207	464688	22.10%	1.549%
42	2.832	458	459	461	rVV	794931	508537	24.19%	1.695%
43	2.853	461	463	465	rVV2	248028	160038	7.61%	0.534%
44	2.869	465	466	469	rVB2	195827	88518	4.21%	0.295%
45	2.896	469	471	472	rBV	827994	431108	20.50%	1.437%
46	2.912	472	474	475	rVV	418642	184970	8.80%	0.617%
47	2.923	475	476	478	rVB	159926	88288	4.20%	0.294%
48	2.949	478	481	484	rBV	447907	322268	15.33%	1.074%
49	2.982	484	487	490	rVB2	1121913	794048	37.77%	2.647%
50	3.014	490	493	495	rVB	670044	414530	19.72%	1.382%
51	3.035	495	497	499	rBV	249421	130722	6.22%	0.436%
52	3.067	499	503	506	rBV3	334670	246560	11.73%	0.822%
53	3.094	506	508	512	rVB5	88363	82761	3.94%	0.276%
54	3.136	515	516	518	rBV	269152	240069	11.42%	0.800%
55	3.152	518	519	521	rVB	378463	136474	6.49%	0.455%
56	3.174	521	523	525	rBV	461684	226096	10.75%	0.754%
57	3.201	525	528	531	rVB5	134738	148051	7.04%	0.494%
[redacted]	3.222	531	532	535	rVB3	67551	39197	1.86%	0.131%
	3.254	535	538	539	rBV2	74965	55005	2.62%	0.183%
60	3.275	539	542	544	rBV3	109803	101629	4.83%	0.339%
61	3.307	546	548	551	rVB	204086	130697	6.22%	0.436%
62	3.339	551	554	557	rBV2	1091087	1048682	49.88%	3.496%
63	3.366	557	559	561	rVV2	382709	304329	14.47%	1.015%
64	3.398	561	565	567	rVV4	715289	945245	44.96%	3.152%
65	3.420	567	569	571	rVV2	634767	621699	29.57%	2.073%
66	3.457	571	576	579	rVV	1405954	2102467	100.00%	7.010%
67	3.526	583	589	590	rVV3	594692	777348	36.97%	2.592%
68	3.553	592	594	596	rVV	667695	612163	29.12%	2.041%
69	3.569	596	597	598	rVV	640705	308526	14.67%	1.029%
70	3.612	602	605	606	rVV2	276297	301007	14.32%	1.004%
71	3.628	606	608	612	rVV3	442502	411824	19.59%	1.373%
72	3.660	612	614	616	rVV	715554	410192	19.51%	1.368%
73	3.676	616	617	622	rVB5	263123	205807	9.79%	0.686%
74	3.719	623	625	627	rVB2	111058	78043	3.71%	0.260%
75	3.751	629	631	634	rBV3	233437	231575	11.01%	0.772%
76	3.778	634	636	639	rVB3	235442	165624	7.88%	0.552%
77	3.810	639	642	643	rBV2	181783	123879	5.89%	0.413%
78	3.826	643	645	647	rBV2	140735	114440	5.44%	0.382%
79	3.890	652	657	659	rVV3	167897	208778	9.93%	0.696%
[redacted]	3.916	659	662	667	rBV2	560879	533015	25.35%	1.777%
81	3.954	667	669	673	rVB3	449323	374630	17.82%	1.249%

82	4.013	673	680	683	rBV4	630207	730849	34.76%	2.437%
83	4.151	703	706	708	rVB	142835	93894	4.47%	0.313%
84	4.221	713	719	721	rBV4	235116	333944	15.88%	1.113%
85	4.269	726	728	729	rVV	381001	295787	14.07%	0.986%
86	4.285	729	731	734	rVV2	454960	496297	23.61%	1.655%
	4.333	738	740	744	rVB2	239789	199068	9.47%	0.664%
88	4.419	753	756	760	rBV2	193327	149991	7.13%	0.500%
89	4.483	765	768	772	rVB	483883	444014	21.12%	1.480%
90	4.595	786	789	791	rBV	95436	71495	3.40%	0.238%
91	4.728	812	814	817	rVB	135045	94297	4.49%	0.314%
92	4.841	833	835	837	rVB2	89892	61697	2.93%	0.206%
93	5.279	913	917	924	rVB	429610	418149	19.89%	1.394%
94	5.418	940	943	951	rVB2	75298	91538	4.35%	0.305%
95	5.626	978	982	991	rVB	317070	300437	14.29%	1.002%
96	5.701	992	996	1001	rBV	214459	233418	11.10%	0.778%
97	5.957	1041	1044	1055	rVB4	64442	93120	4.43%	0.310%
98	6.043	1057	1060	1073	rVB4	36705	82574	3.93%	0.275%

Sum of corrected areas: 29993372

File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Operator : JC
Acquired : 6 Apr 2001 11:44 using AcqMethod BS1201
Instrument : MSD_B
Sample Name: S-55,2092-011,S,5.51g,20.4,04/05/01
Misc Info : ENVTACT/ORBIS,04/03/01,04/04/01,2
Vial Number: 34
Quant File :BS1201.RES (RTE Integrator)



2388

000297

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
S Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

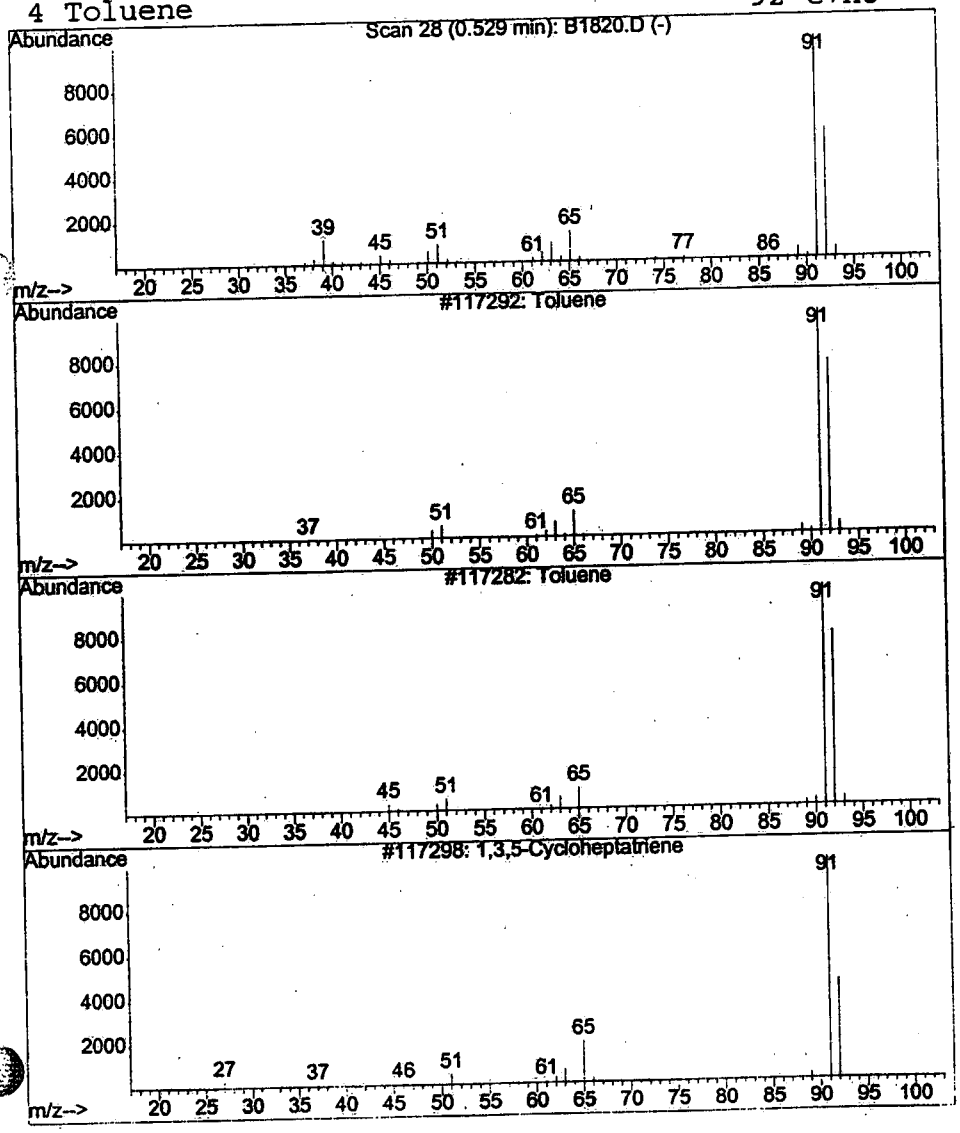
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

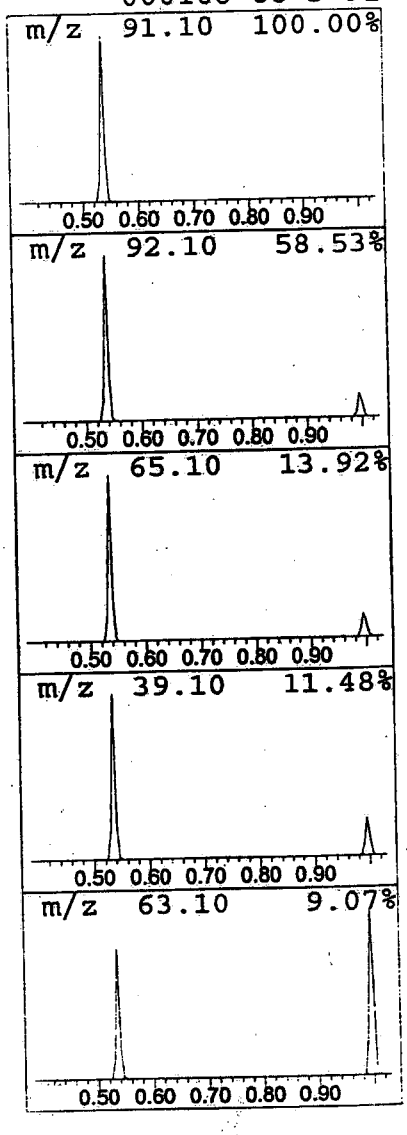
****

Peak Number 1 Substituted benzene Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
0.53	27.66 UG	173255	1,4-Dichlorobenzene-d4	1.51

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Toluene	92	C7H8	000108-88-3	95
2	Toluene	92	C7H8	000108-88-3	91
3	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	91
4	Toluene	92	C7H8	000108-88-3	91





2389
000298

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
S Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

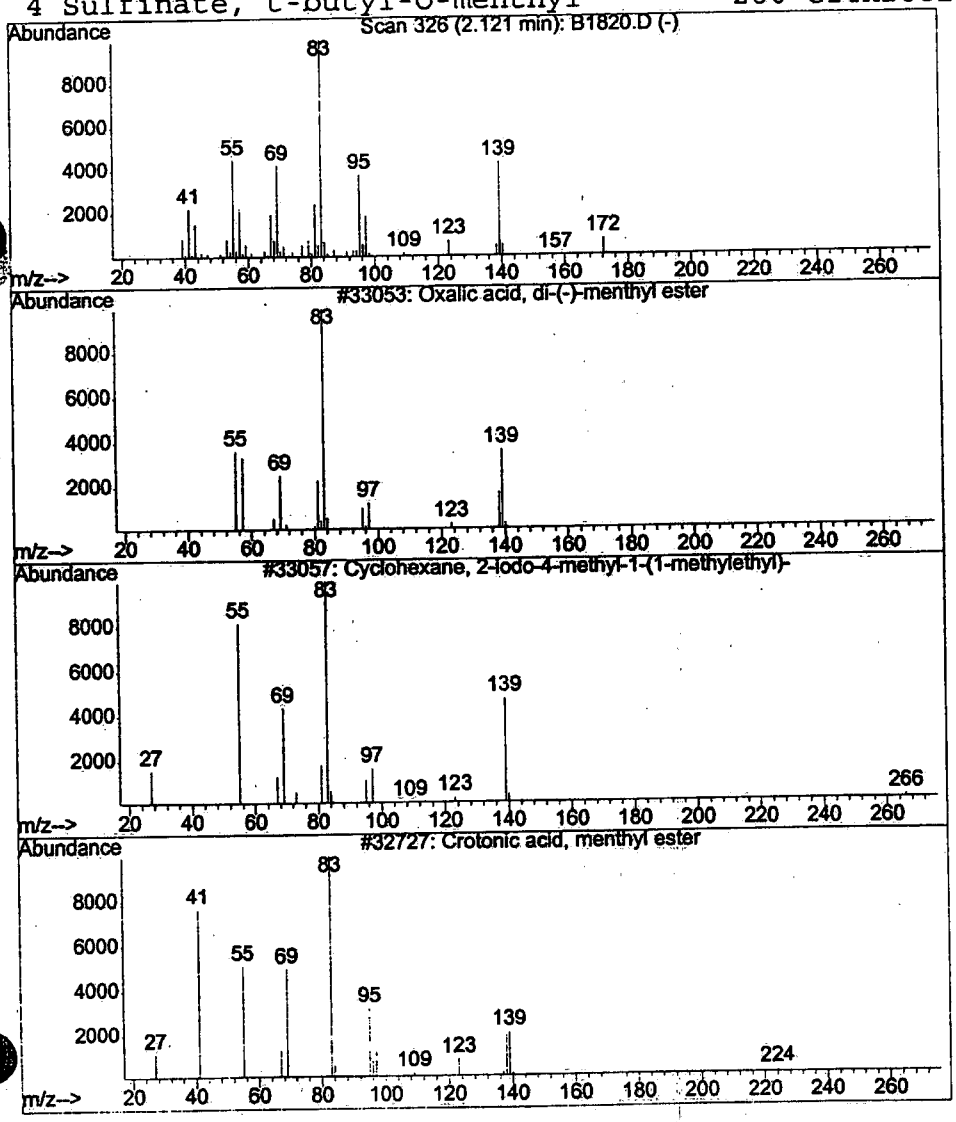
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

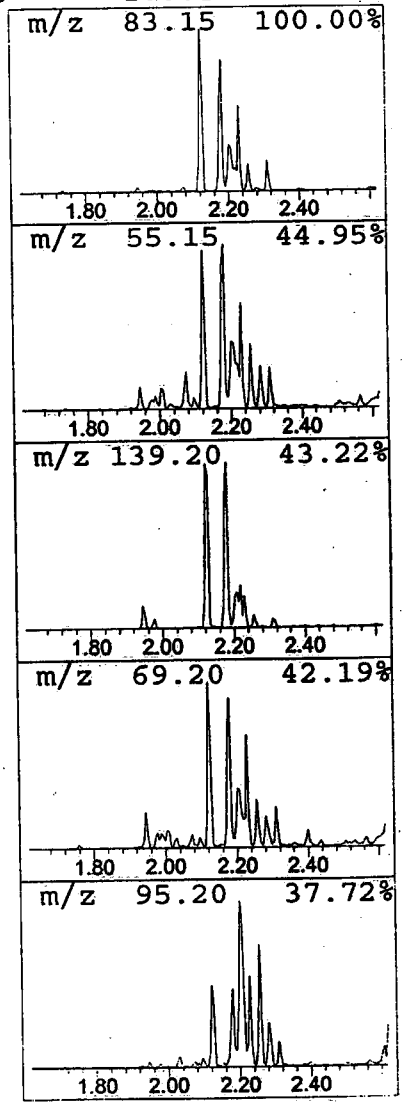
****

Peak Number 2 Unknown — Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.12	67.04 UG	610526	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxalic acid, di-(-)-menthyl ester	366	C22H38O4	1000158-45-3	64
2	Cyclohexane, 2-iodo-4-methyl-1-(...	266	C10H19I	064240-81-9	64
3	Crotonic acid, menthyl ester	224	C14H24O2	114761-14-7	59
4	Sulfinate, t-butyl-O-menthyl-	260	C14H28O2S	1000151-39-9	59





2350

000299

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
S Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

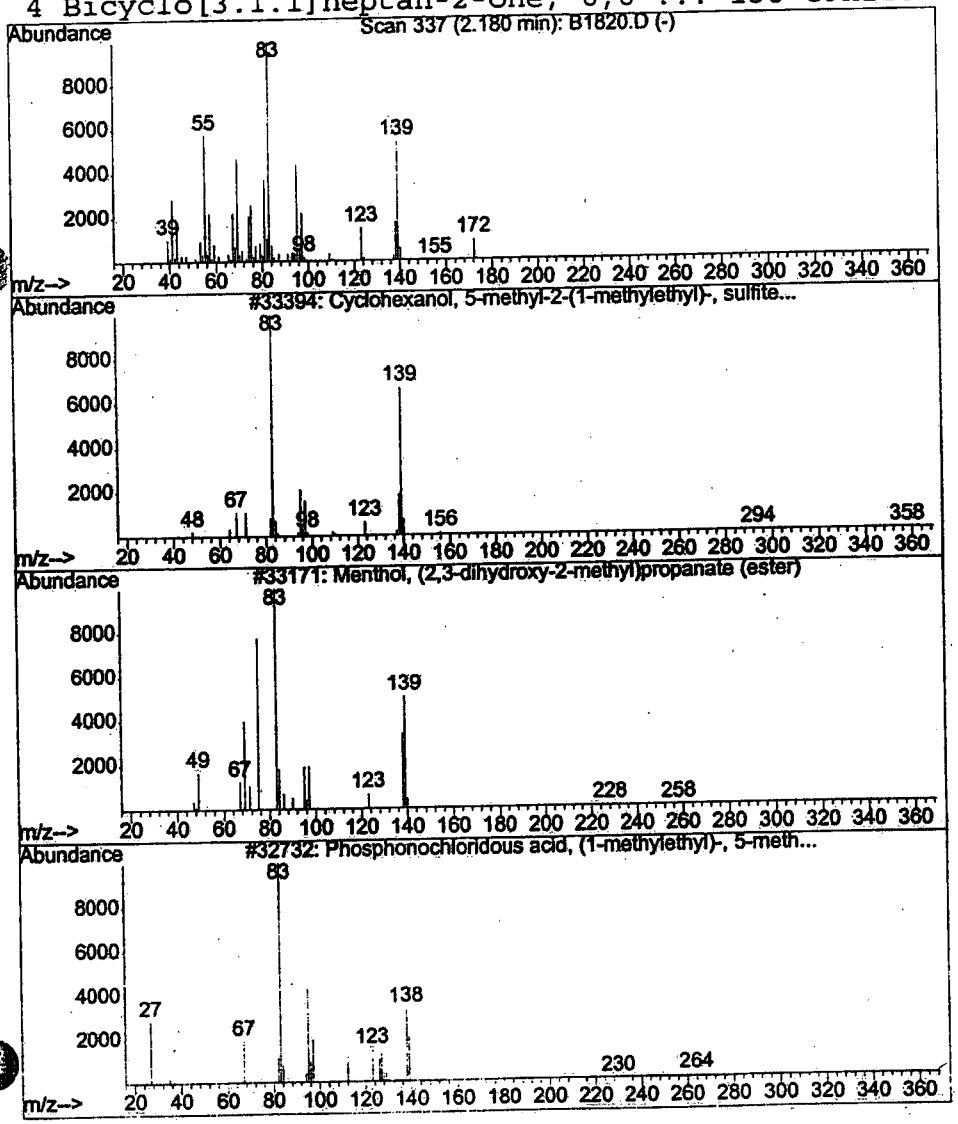
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

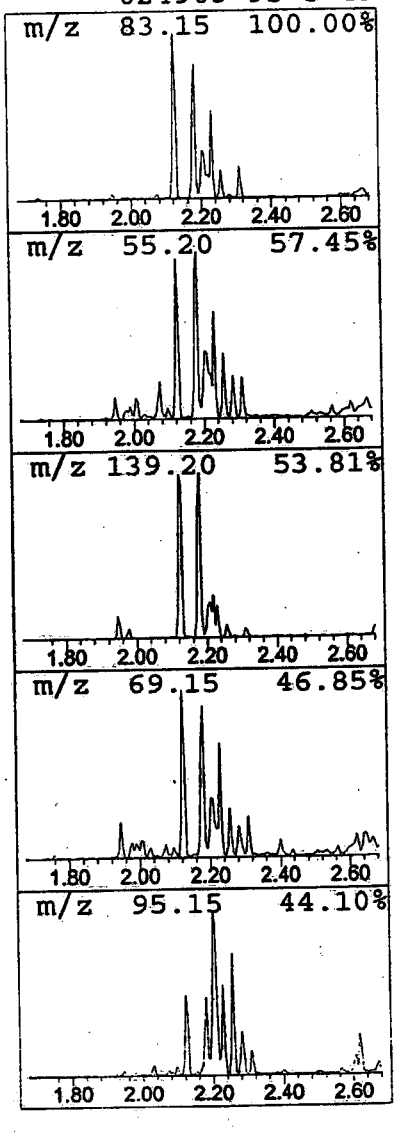
****

Peak Number 3 Unknown — Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.18	83.31 UG	758767	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanol, 5-methyl-2-(1-meth...	358	C20H38O3S	026510-92-9	50
2	Menthol, (2,3-dihydroxy-2-methyl...	258	C14H26O4	1000127-79-6	50
3	Phosphonochloridous acid, (1-met...	264	C13H26ClOP	074630-89-0	50
4	Bicyclo[3.1.1]heptan-2-one, 6,6-...	138	C9H14O	024903-95-5	49





000300

2391

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
S Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

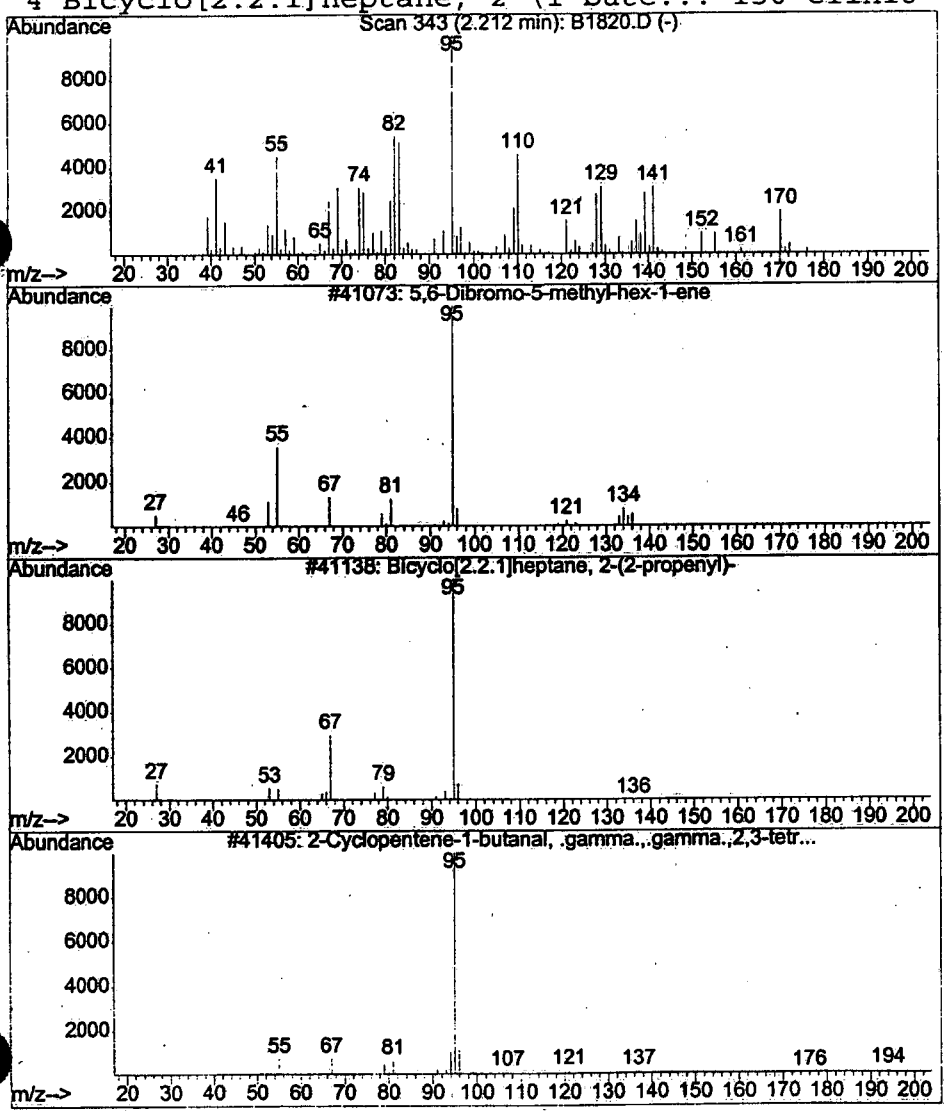
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

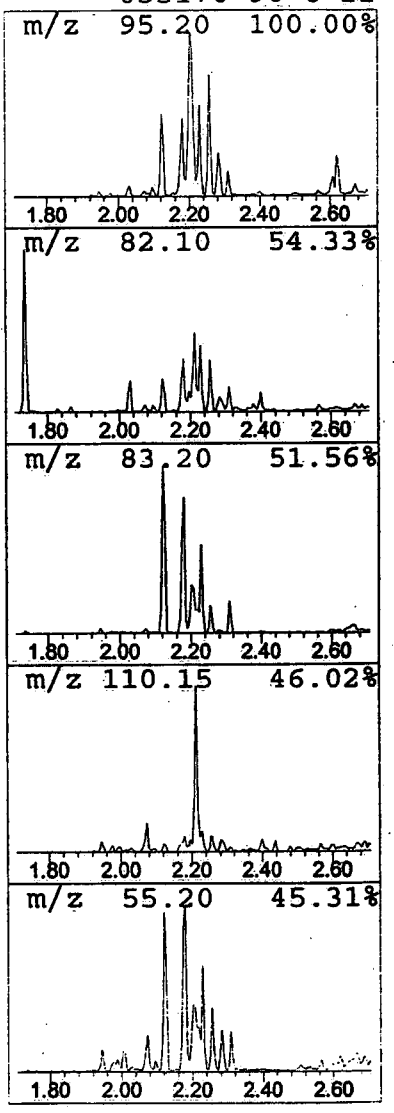
****

Peak Number 4 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.21	92.41 UG	841629	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5,6-Dibromo-5-methyl-hex-1-ene	254	C7H12Br2	1000192-24-6	27
2	Bicyclo[2.2.1]heptane, 2-(2-prop...	136	C10H16	002633-80-9	25
3	2-Cyclopentene-1-butanal, .gamma...	194	C13H22O	060714-25-2	22
4	Bicyclo[2.2.1]heptane, 2-(1-bute...	150	C11H18	055170-90-6	22





2392

000301

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
} Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

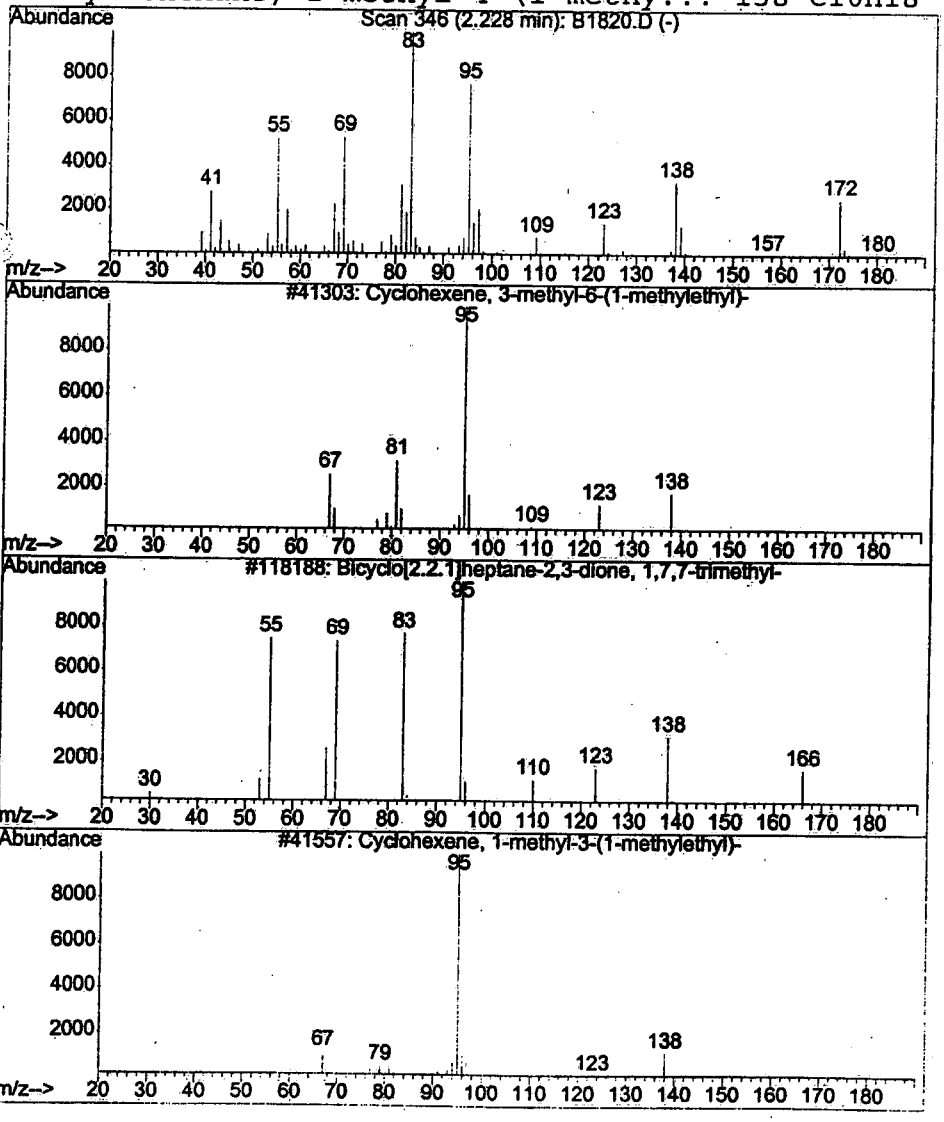
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

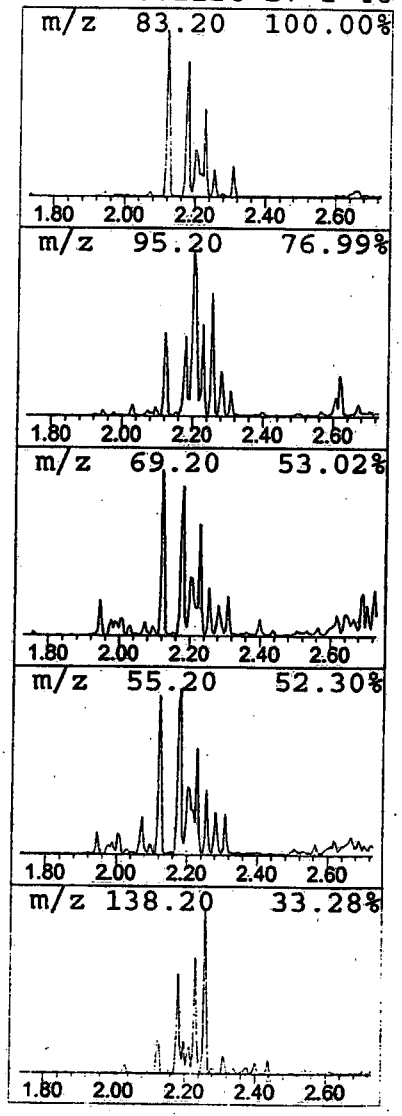
****

Peak Number 5 Unknown alkane Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.23	32.28 UG	294010	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 3-methyl-6-(1-methy...	138	C10H18	005256-65-5	50
2	Bicyclo[2.2.1]heptane-2,3-dione,...	166	C10H14O2	000465-29-2	50
3	Cyclohexene, 1-methyl-3-(1-methy...	138	C10H18	013828-31-4	50
4	Cyclohexane, 1-methyl-4-(1-methy...	138	C10H18	001124-27-2	46





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
isc : ENVTACT/ORBIS,04/03/01,04/04/01,2
S Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

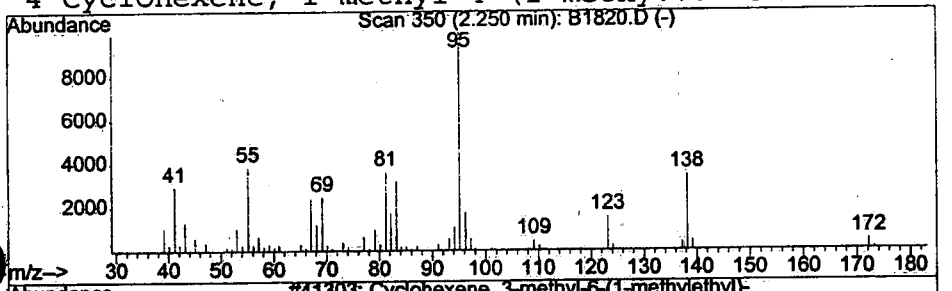
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

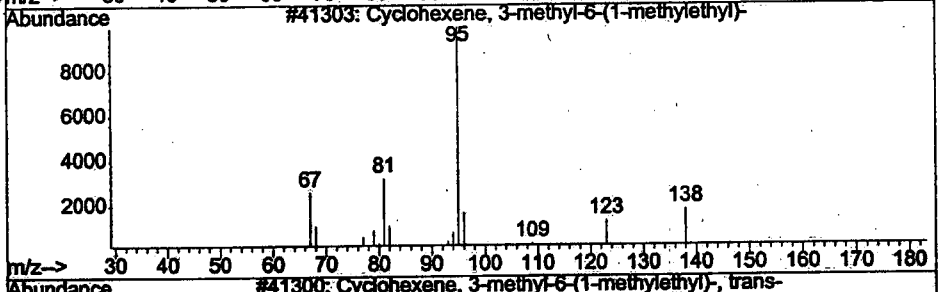
****

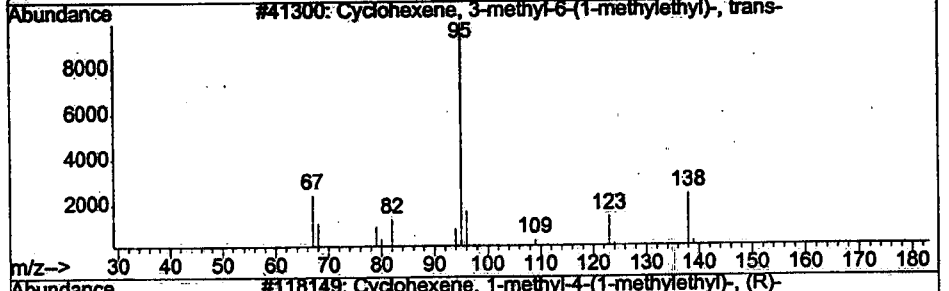
Peak Number 6 Unknown alkane Concentration Rank 14

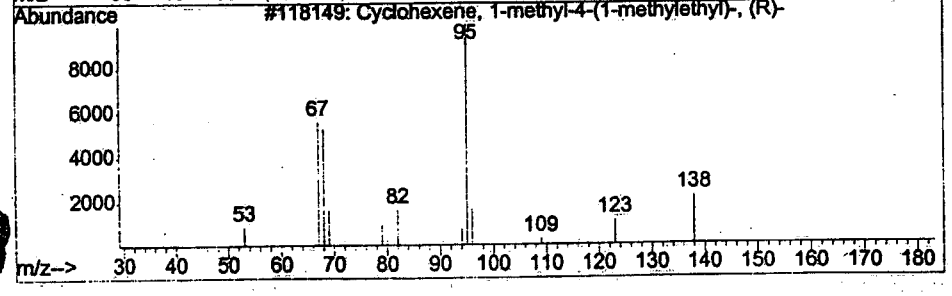
R.T.	EstConc	Area	Relative to ISTD	R.T.
2.25	31.88 UG	290330	Naphthalene-d8	2.03

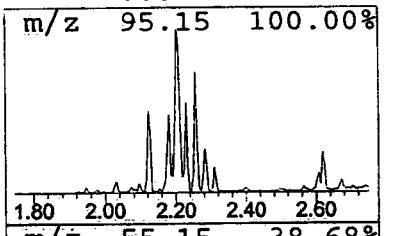
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 3-methyl-6-(1-methy...	138	C10H18	005256-65-5	94
2	Cyclohexene, 3-methyl-6-(1-methy...	138	C10H18	001124-26-1	91
3	Cyclohexene, 1-methyl-4-(1-methy...	138	C10H18	001195-31-9	87
4	Cyclohexene, 1-methyl-4-(1-methy...	138	C10H18	005502-88-5	87

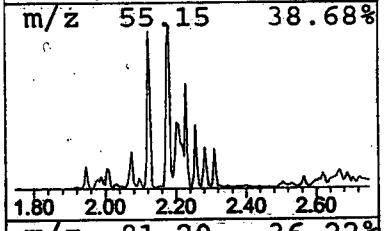


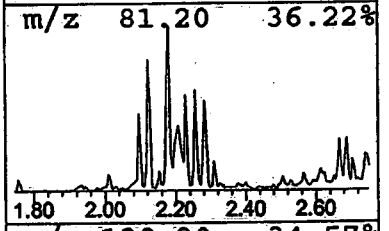


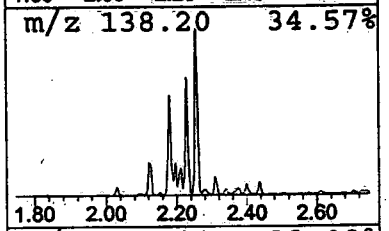


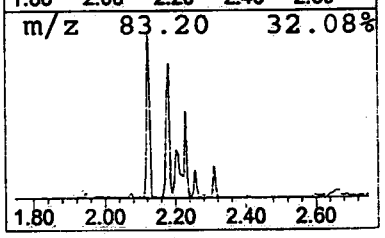












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2394

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
S Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

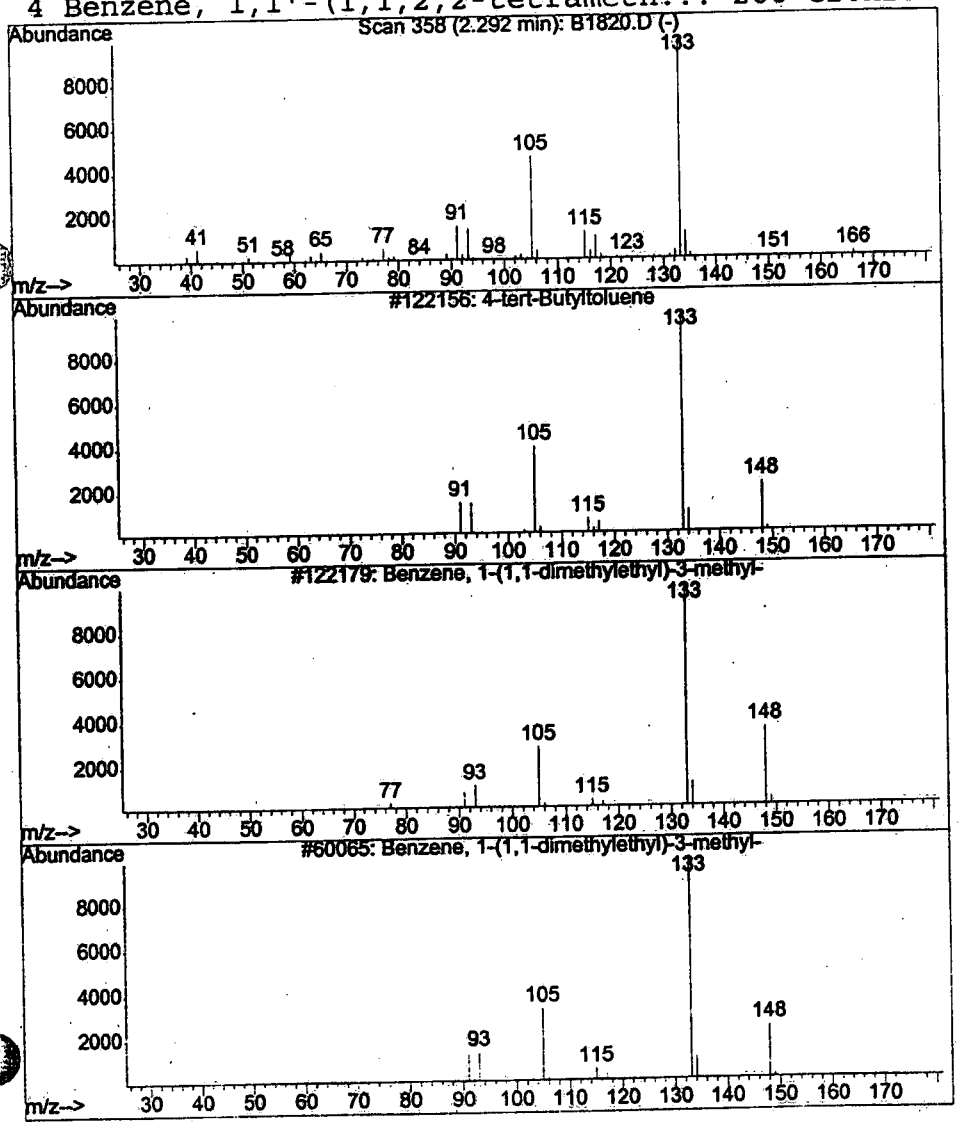
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

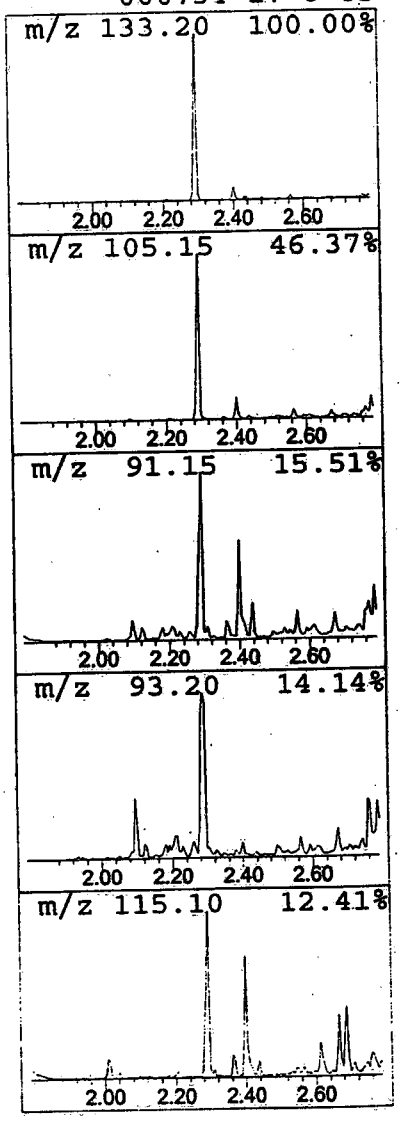
****

Peak Number 7 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.29	159.85 UG	1455860	Naphthalene-d8	2.03

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-tert-Butyltoluene	148	C11H16	000098-51-1	90
2	Benzene, 1-(1,1-dimethylethyl)-3...	148	C11H16	001075-38-3	86
3	Benzene, 1-(1,1-dimethylethyl)-3...	148	C11H16	001075-38-3	86
4	Benzene, 1,1'-(1,1,2,2-tetrameth...	266	C20H26	000734-17-8	83





Library Search Compound Report

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Acq On : 6 Apr 2001 11:44
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Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
MS Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

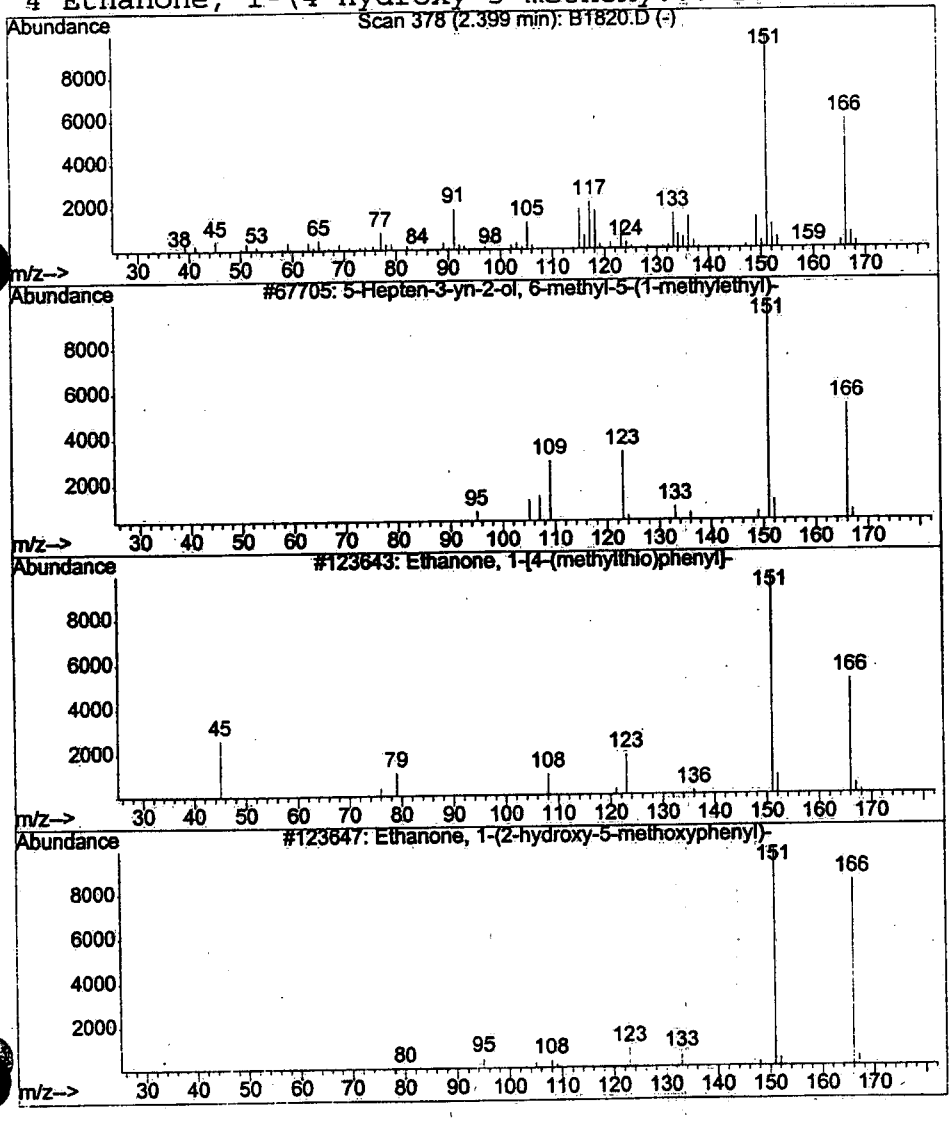
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

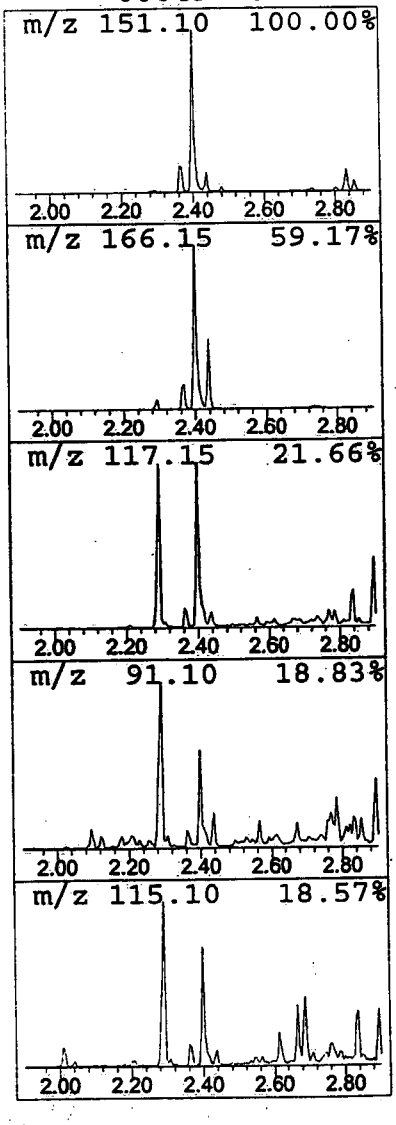
****

Peak Number 8 Unknown — Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.40	44.68 UG	698422	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Hepten-3-yn-2-ol, 6-methyl-5-(...	166	C11H18O	063922-41-8	64
2	Ethanone, 1-[4-(methylthio)phenyl]-	166	C9H10OS	001778-09-2	62
3	Ethanone, 1-(2-hydroxy-5-methoxy...	166	C9H10O3	000705-15-7	59
4	Ethanone, 1-(4-hydroxy-3-methoxy...	166	C9H10O3	000498-02-2	53





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
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Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
S Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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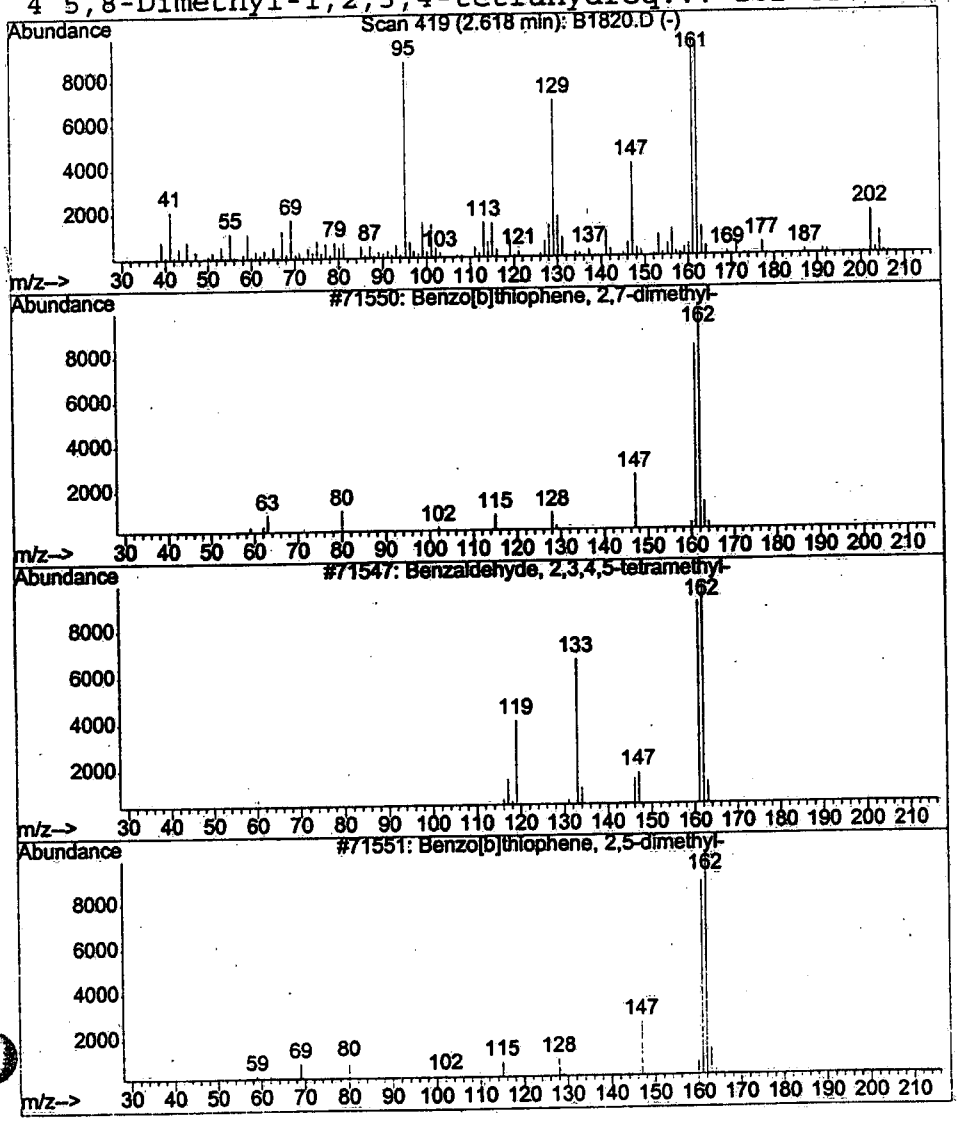
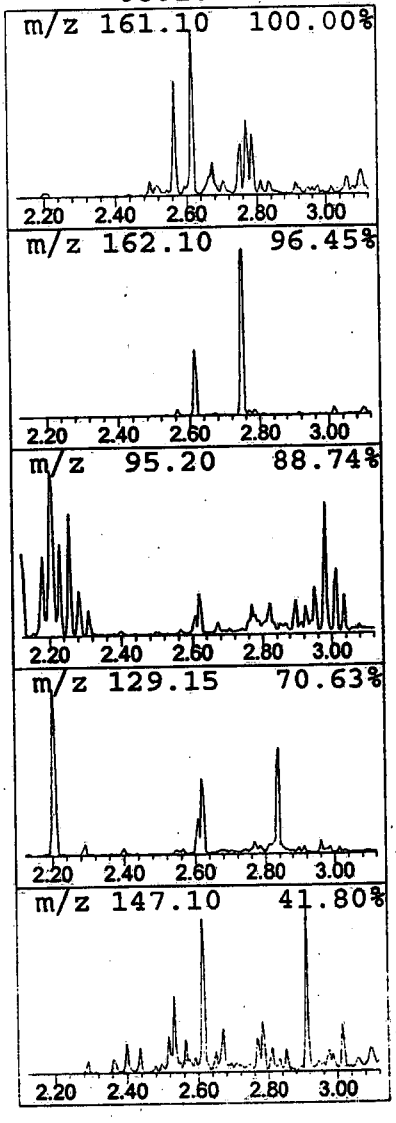
Peak Number 9 Unknown aromatic Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.62	21.19 UG	331212	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]thiophene, 2,7-dimethyl-	162	C10H10S	016587-40-9	43
2	Benzaldehyde, 2,3,4,5-tetramethyl-	162	C11H14O	029344-95-4	38
3	Benzo[b]thiophene, 2,5-dimethyl-	162	C10H10S	016587-48-7	38
4	5,8-Dimethyl-1,2,3,4-tetrahydroq...	162	C10H14N2	066102-39-4	35





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2397

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
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Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
MS Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

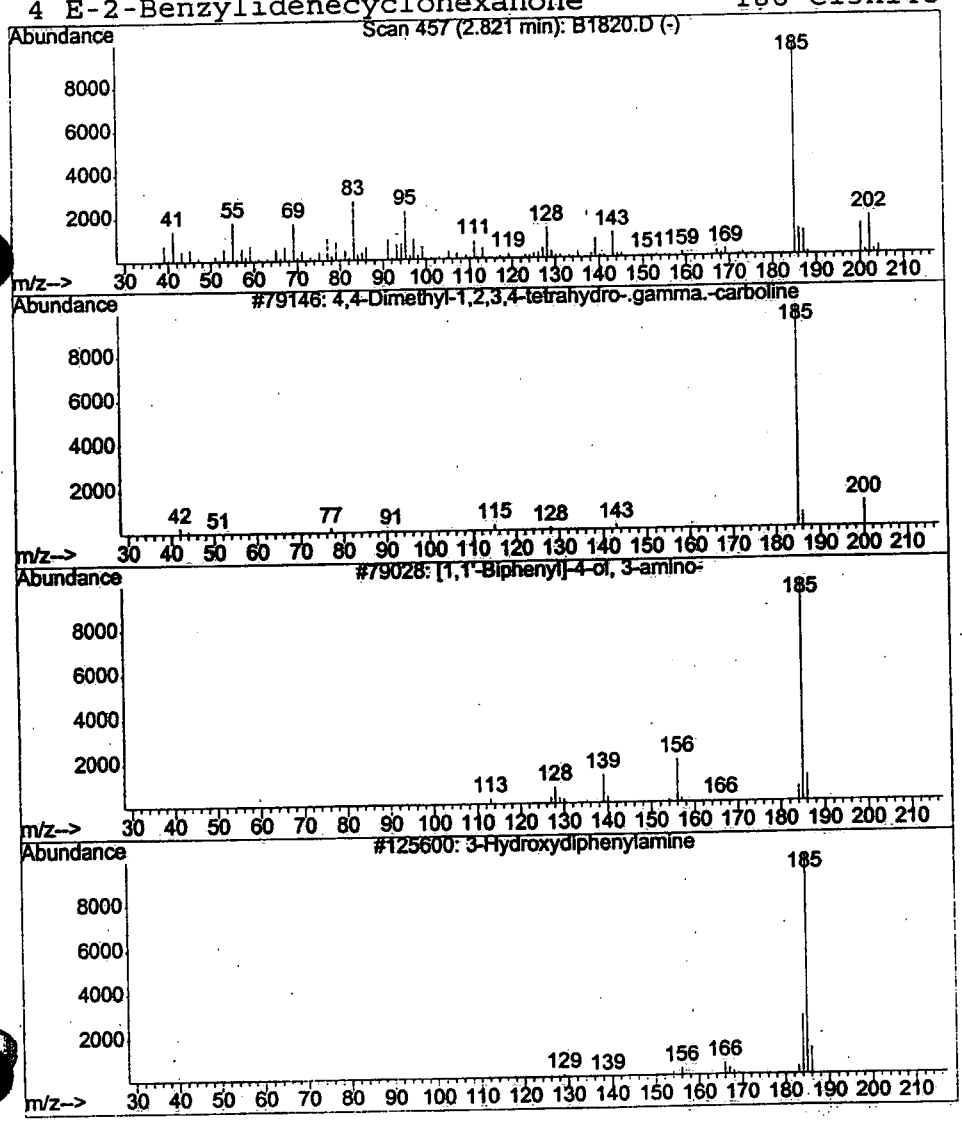
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

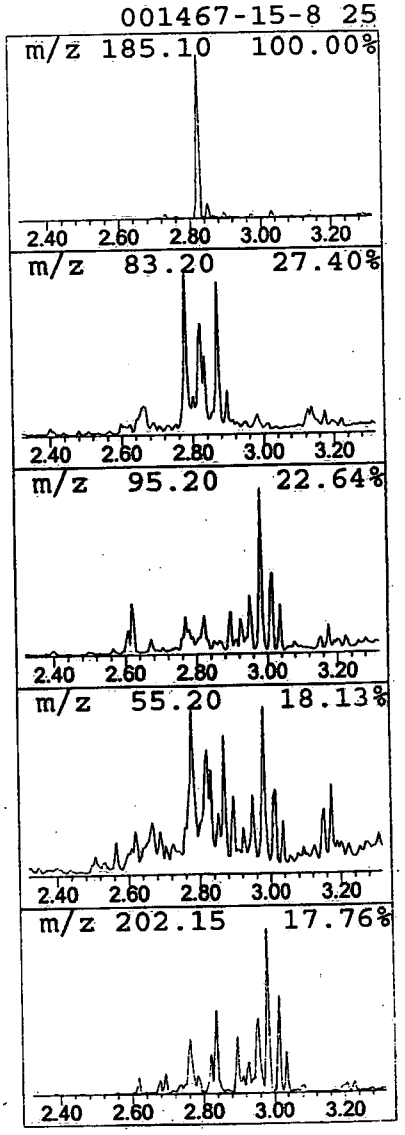
****

Peak Number 10 Unknown — Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.82	29.73 UG	464688	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4,4-Dimethyl-1,2,3,4-tetrahydro-...	200	C13H16N2	022315-87-3	46
2	[1,1'-Biphenyl]-4-ol, 3-amino-	185	C12H11NO	001134-36-7	38
3	3-Hydroxydiphenylamine	185	C12H11NO	000101-18-8	35
4	E-2-Benzylidenecyclohexanone	186	C13H14O	001467-15-8	25





2398

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
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Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
S Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

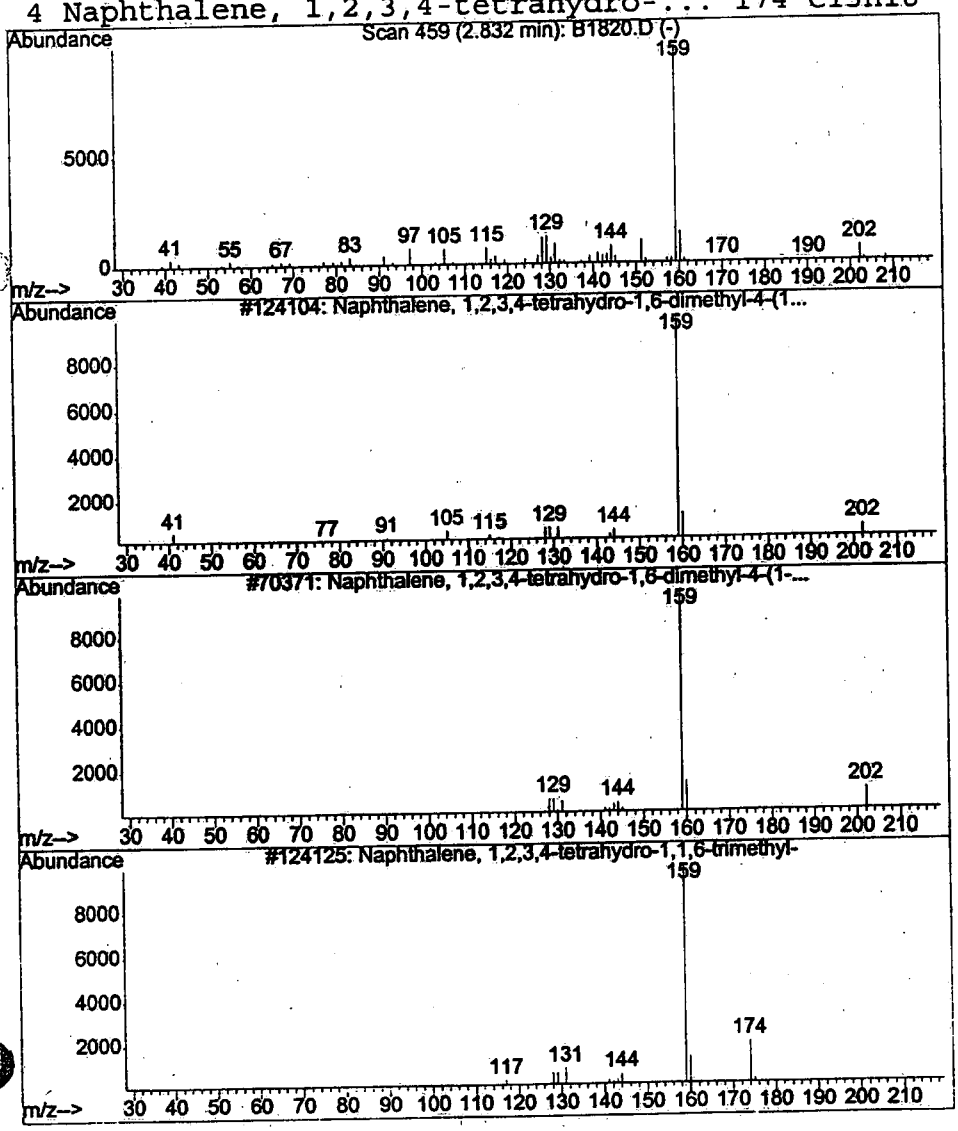
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

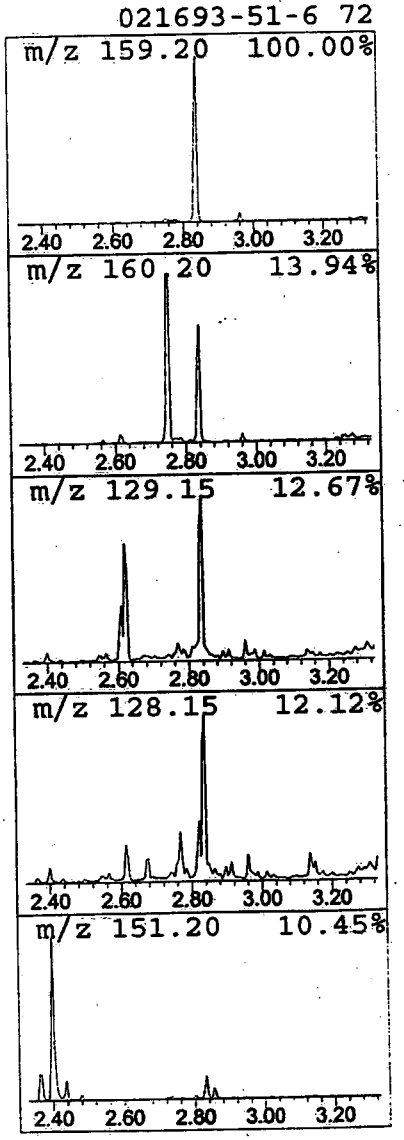
****

Peak Number 11 Substituted naphthalene Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.83	32.54 UG	508537	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-...	202	C15H22	000483-77-2	95
2	Naphthalene, 1,2,3,4-tetrahydro-...	202	C15H22	000483-77-2	94
3	Naphthalene, 1,2,3,4-tetrahydro-...	174	C13H18	000475-03-6	80
4	Naphthalene, 1,2,3,4-tetrahydro-...	174	C13H18	021693-51-6	72





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2399

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
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Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
MS Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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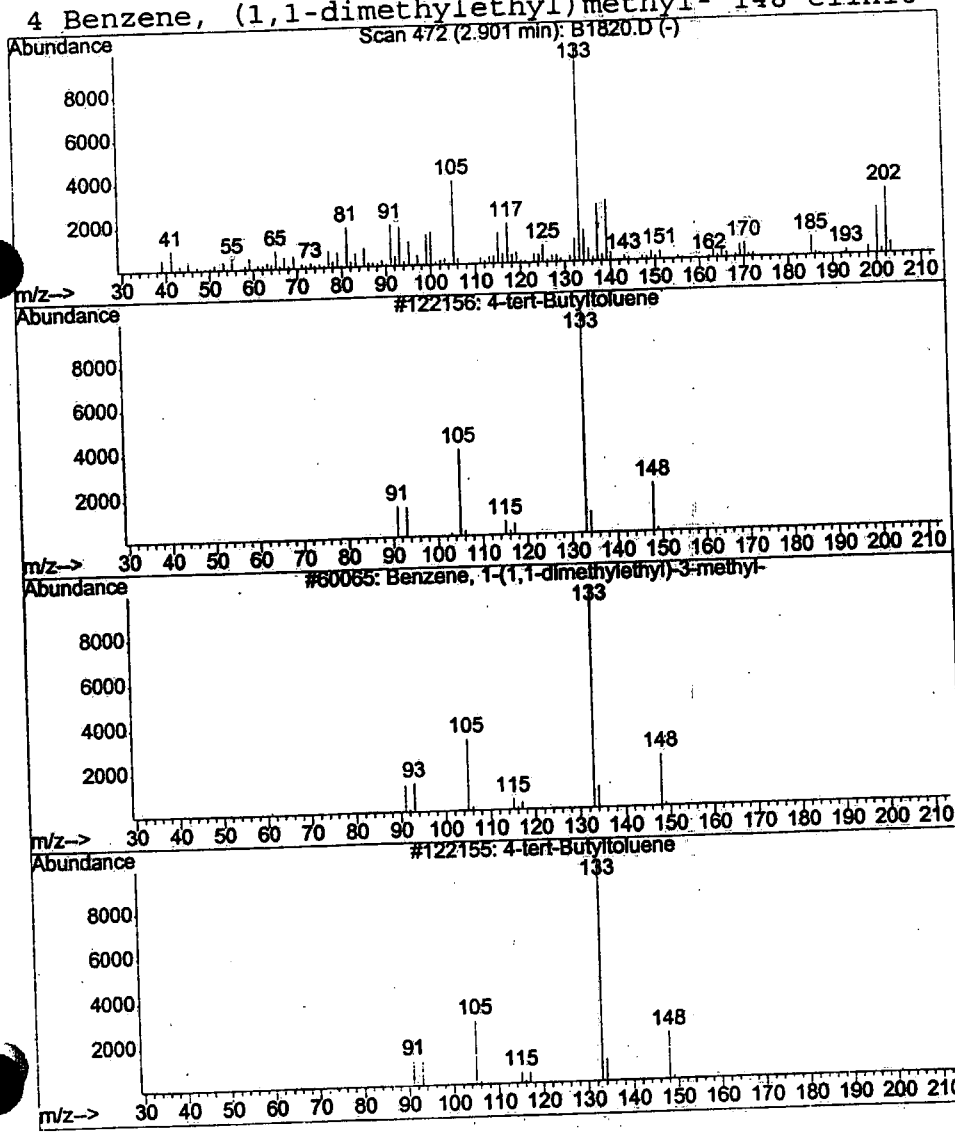
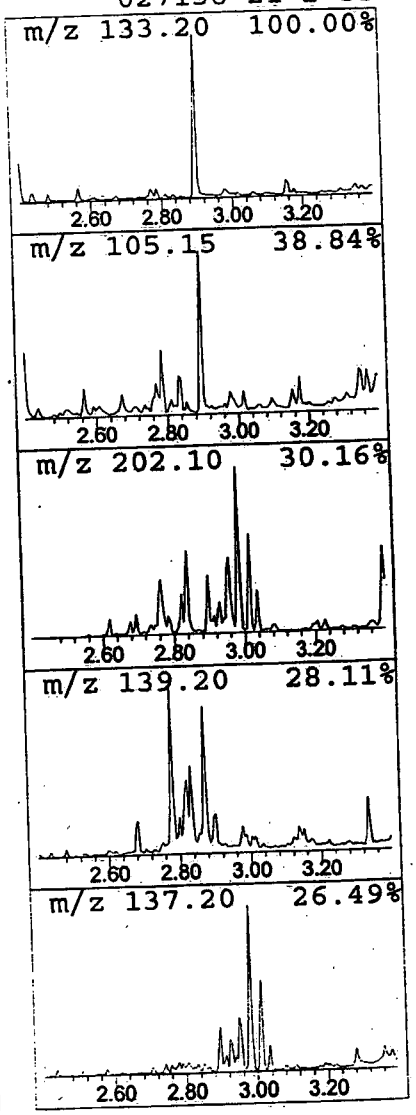
Peak Number 12 Substituted benzene — Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.90	27.58 UG	431108	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-tert-Butyltoluene	148	C11H16	000098-51-1	58
2	Benzene, 1-(1,1-dimethylethyl)-3...	148	C11H16	001075-38-3	58
3	4-tert-Butyltoluene	148	C11H16	000098-51-1	53
4	Benzene, (1,1-dimethylethyl)methyl-	148	C11H16	027138-21-2	53





000309
2400

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
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Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
S Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

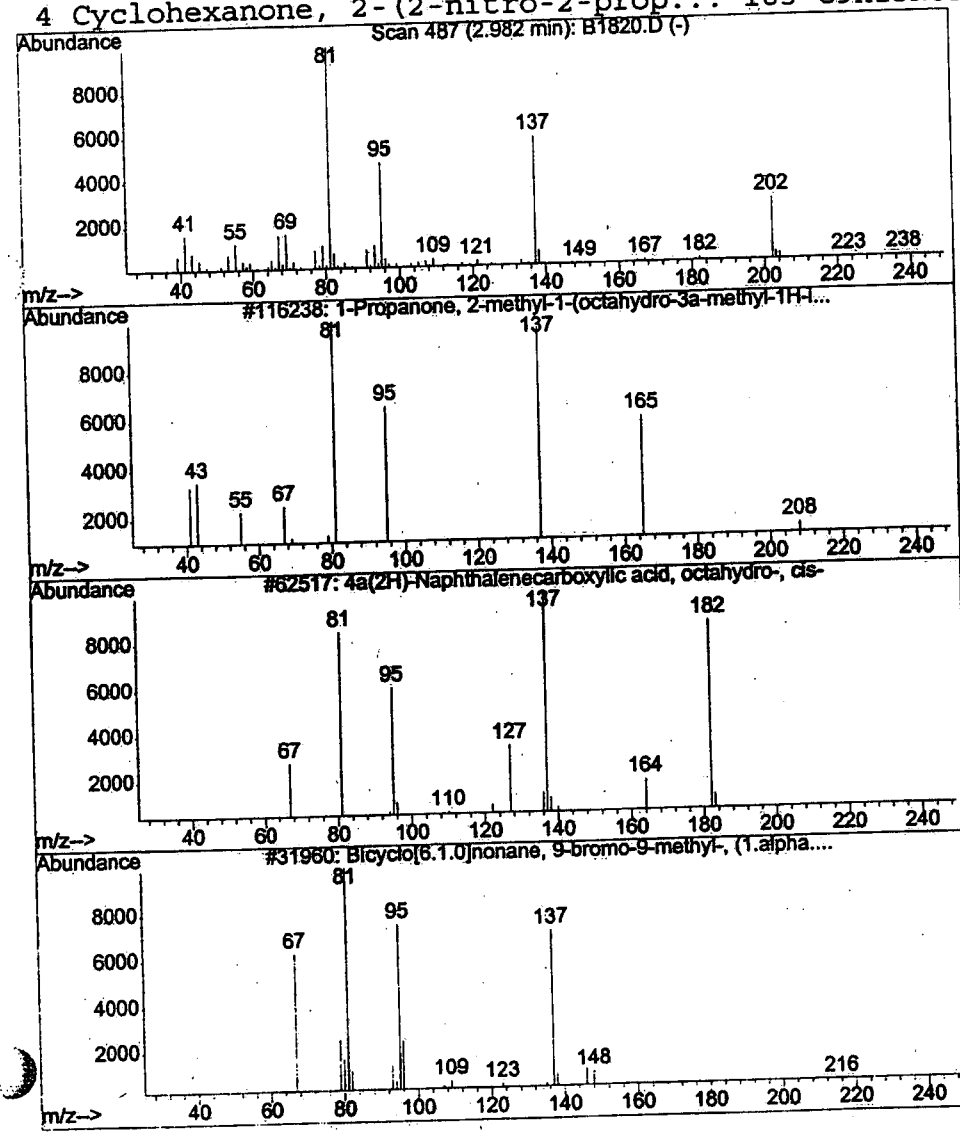
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

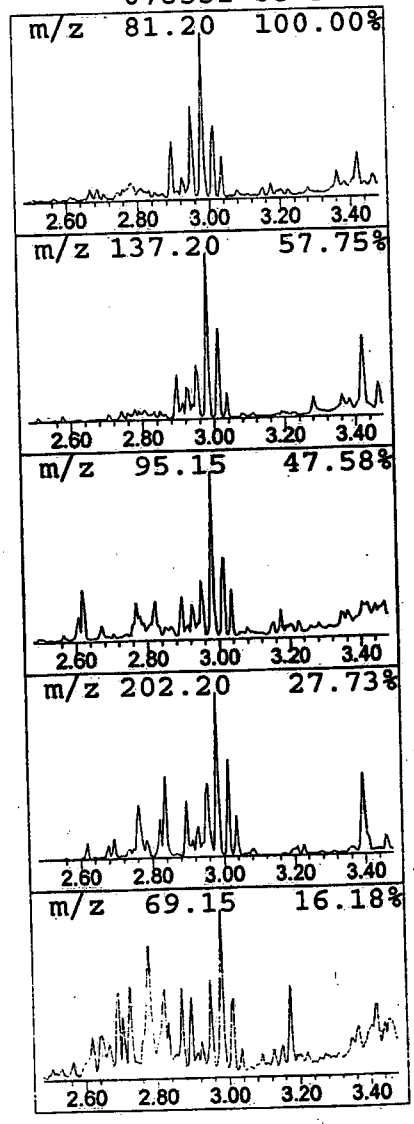
****

Peak Number 13 Unknown aromatic — Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.98	50.80 UG	794048	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propanone, 2-methyl-1-(octahyd...	208	C14H24O	066708-25-6	59
2	4a(2H)-Naphthalenecarboxylic aci...	182	C11H18O2	003021-73-6	45
3	Bicyclo[6.1.0]nonane, 9-bromo-9-...	216	C10H17Br	059474-03-2	32
4	Cyclohexanone, 2-(2-nitro-2-prop...	183	C9H13NO3	078551-08-3	30





2401

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
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Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

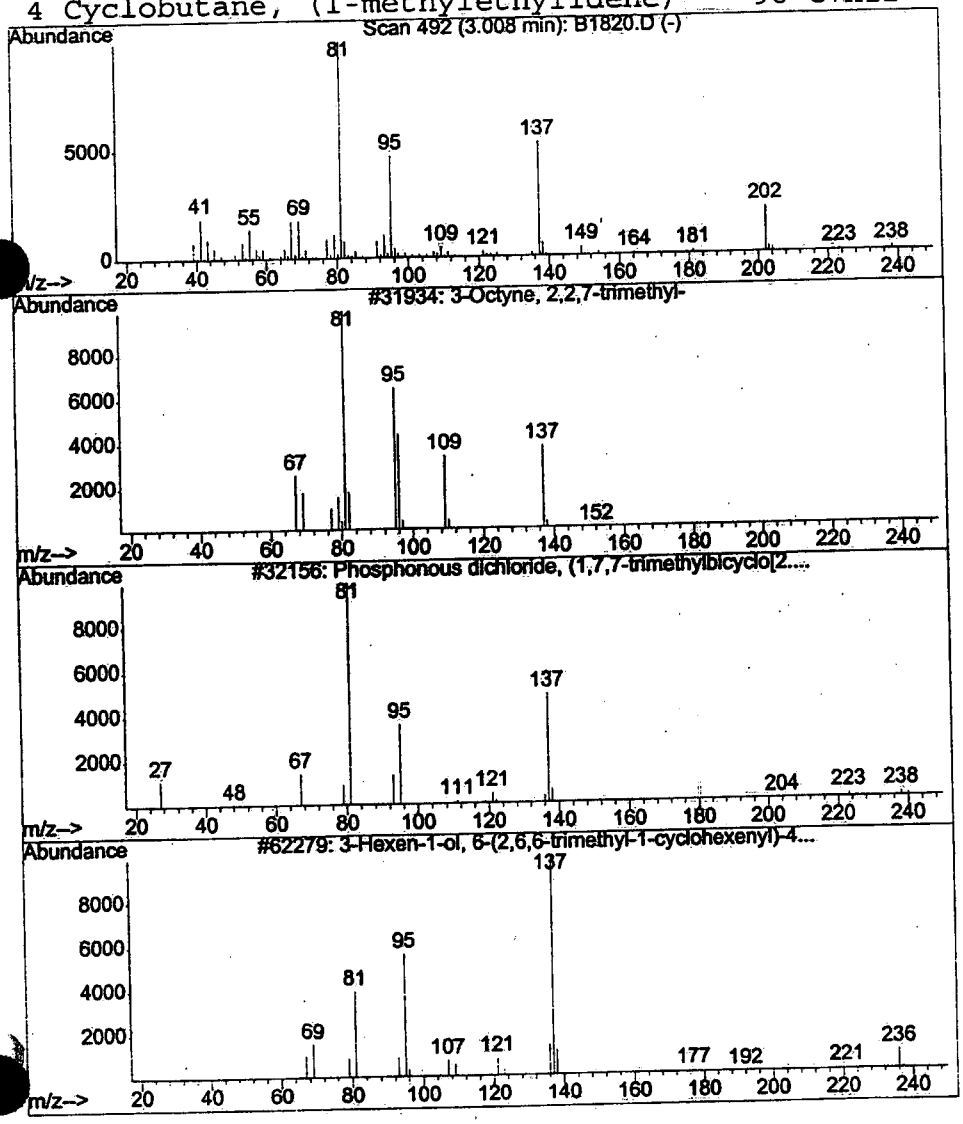
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

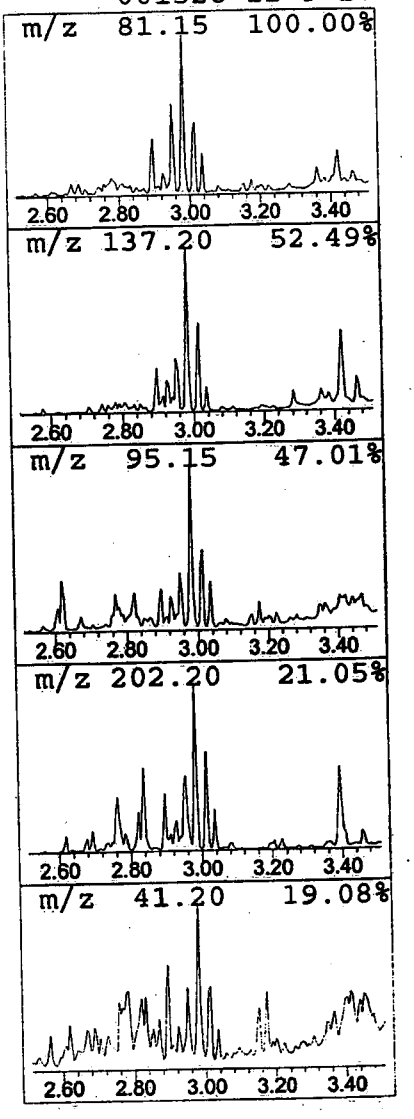
****

Peak Number 14 Unknown alkane — Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.01	26.52 UG	414530	Acenaphthene-d10	2.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Octyne, 2,2,7-trimethyl-	152	C11H20	055402-13-6	53
2	Phosphonous dichloride, (1,7,7-t...	238	C10H17Cl2P	074630-16-3	53
3	3-Hexen-1-ol, 6-(2,6,6-trimethyl...	236	C16H28O	110202-07-8	42
4	Cyclobutane, (1-methylethylidene)-	96	C7H12	001528-22-9	27





2402

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
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Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
5 Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

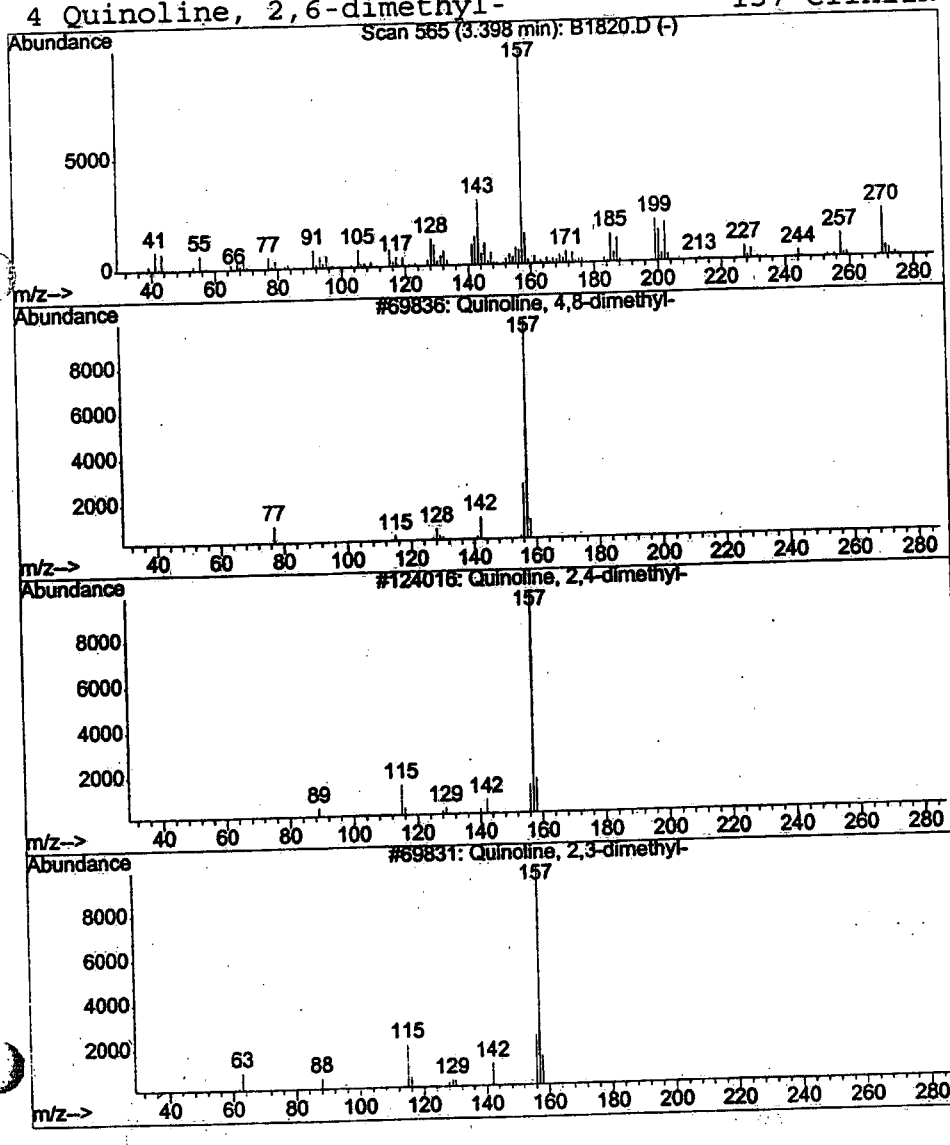
****

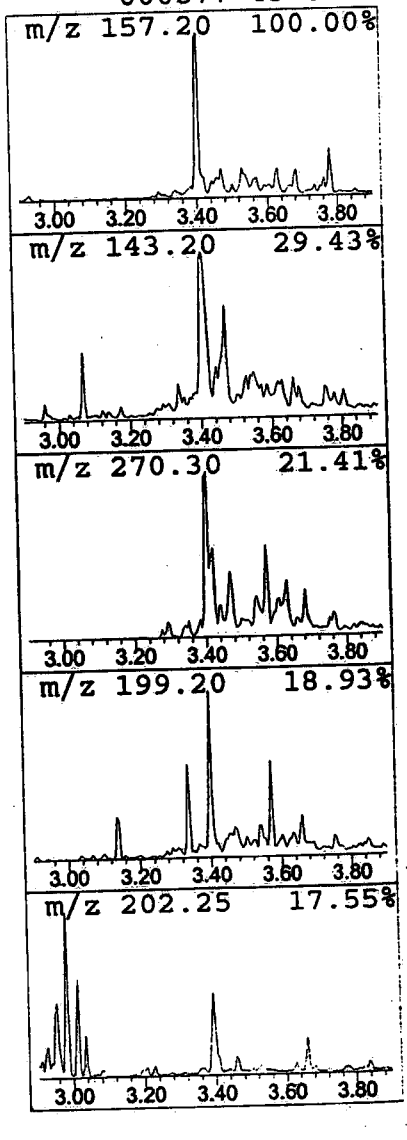
Peak Number 15 Unknown

Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.40	36.05 UG	945245	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Quinoline, 4,8-dimethyl-	157	C11H11N	013362-80-6	38
2	Quinoline, 2,4-dimethyl-	157	C11H11N	001198-37-4	38
3	Quinoline, 2,3-dimethyl-	157	C11H11N	001721-89-7	35
4	Quinoline, 2,6-dimethyl-	157	C11H11N	000877-43-0	35





Library Search Compound Report

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Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
MS Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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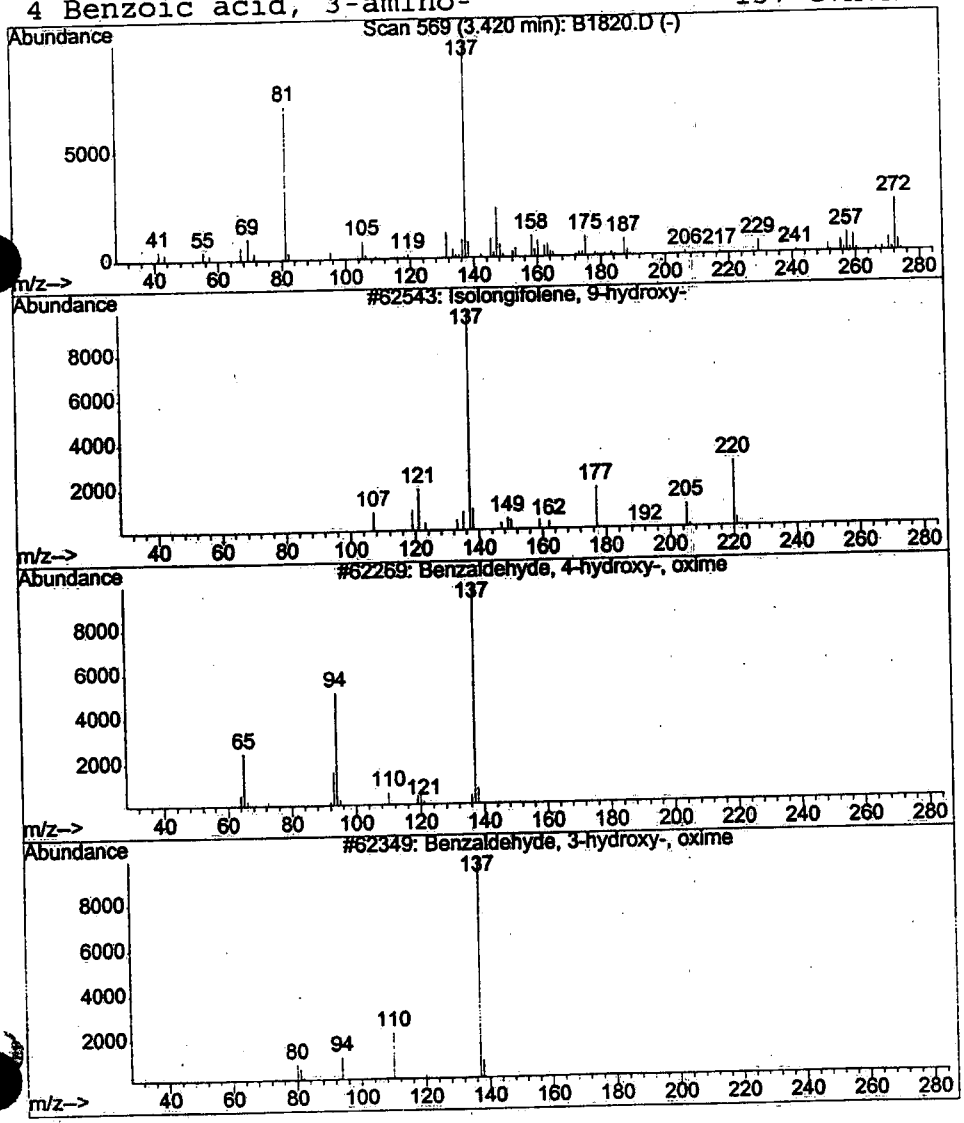
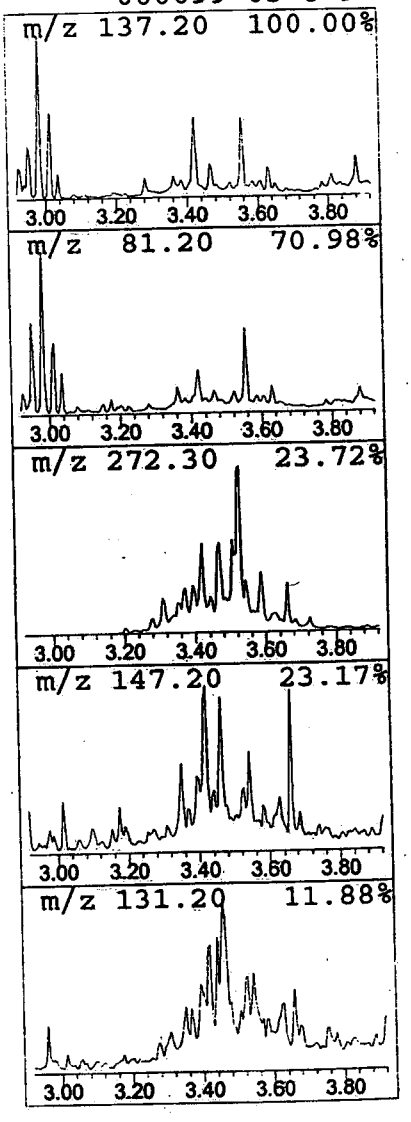
Peak Number 16 Unknown aromatic — Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.42	23.71 UG	621699	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Isolongifolene, 9-hydroxy-	220	C15H24O	1000163-46-6	23
2	Benzaldehyde, 4-hydroxy-, oxime	137	C7H7NO2	000699-06-9	9
3	Benzaldehyde, 3-hydroxy-, oxime	137	C7H7NO2	022241-18-5	9
4	Benzoic acid, 3-amino-	137	C7H7NO2	000099-05-8	9





000313

2404

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

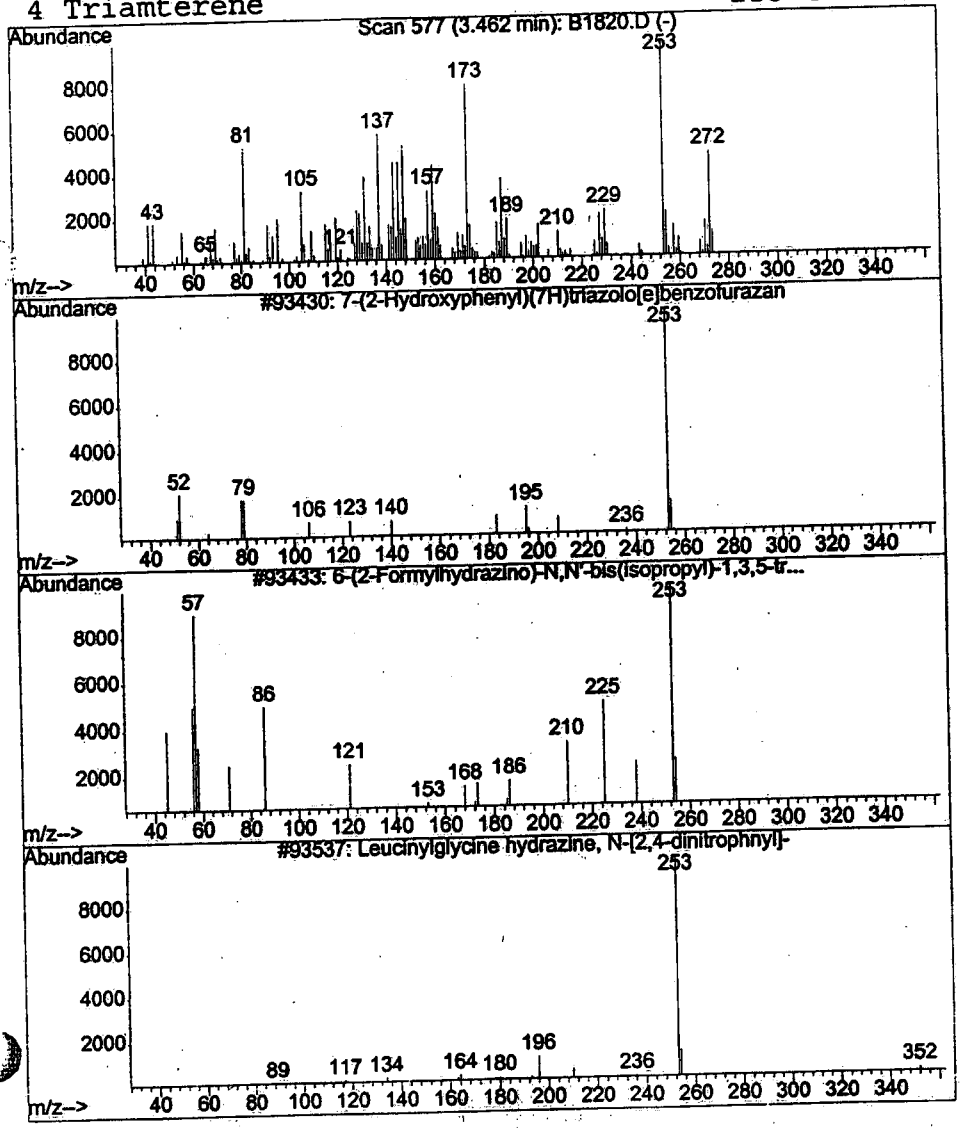
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

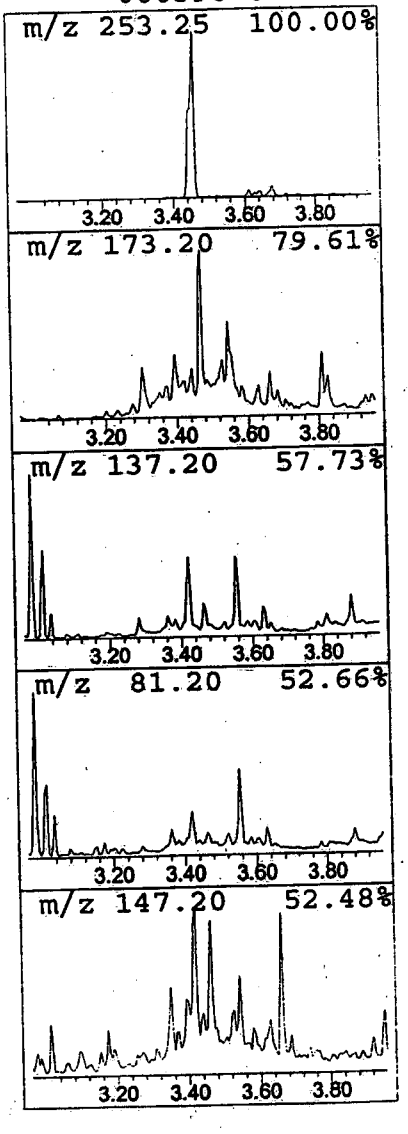
****

Peak Number 17 Unknown alkane — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.46	80.19 UG	2102470	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	7-(2-Hydroxyphenyl)(7H)triazolo[...	253	C12H7N5O2	1000110-70-2	50
2	6-(2-Formylhydrazino)-N,N'-bis(i...	253	C10H19N7O	084305-82-8	49
3	Leucinylglycine hydrazine, N-[2,...	368	C14H20N6O6	1000131-15-6	28
4	Triamterene	253	C12H11N7	000396-01-0	9





2405

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
IS Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

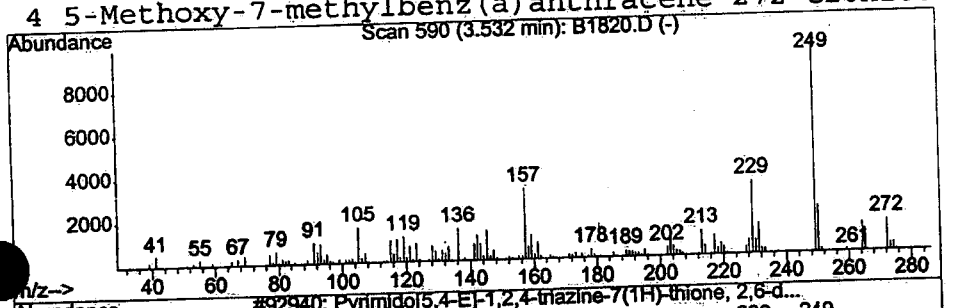
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

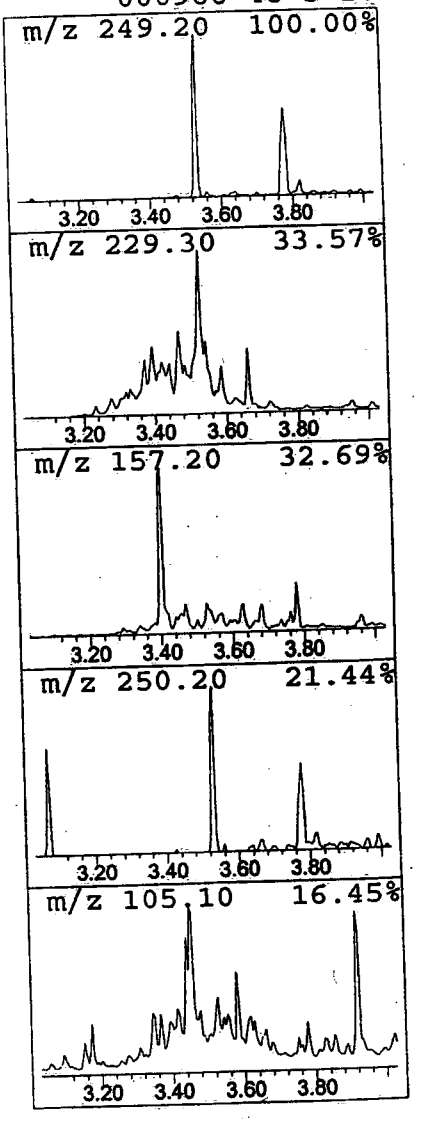
****

Peak Number 18 Unknown — Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.53	29.65 UG	777348	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrimido[5,4-E]-1,2,4-triazine-7...	249	C7H6F3N5S	032709-35-6	38
2	10H-Phenothiazin-3-ol, 8-chloro-	249	C12H8ClNOS	002002-32-6	25
3	Estradiol	272	C18H24O2	000050-28-2	25
4	5-Methoxy-7-methylbenz(a)anthracene	272	C20H16O	000966-48-3	20





2406

000315

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
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Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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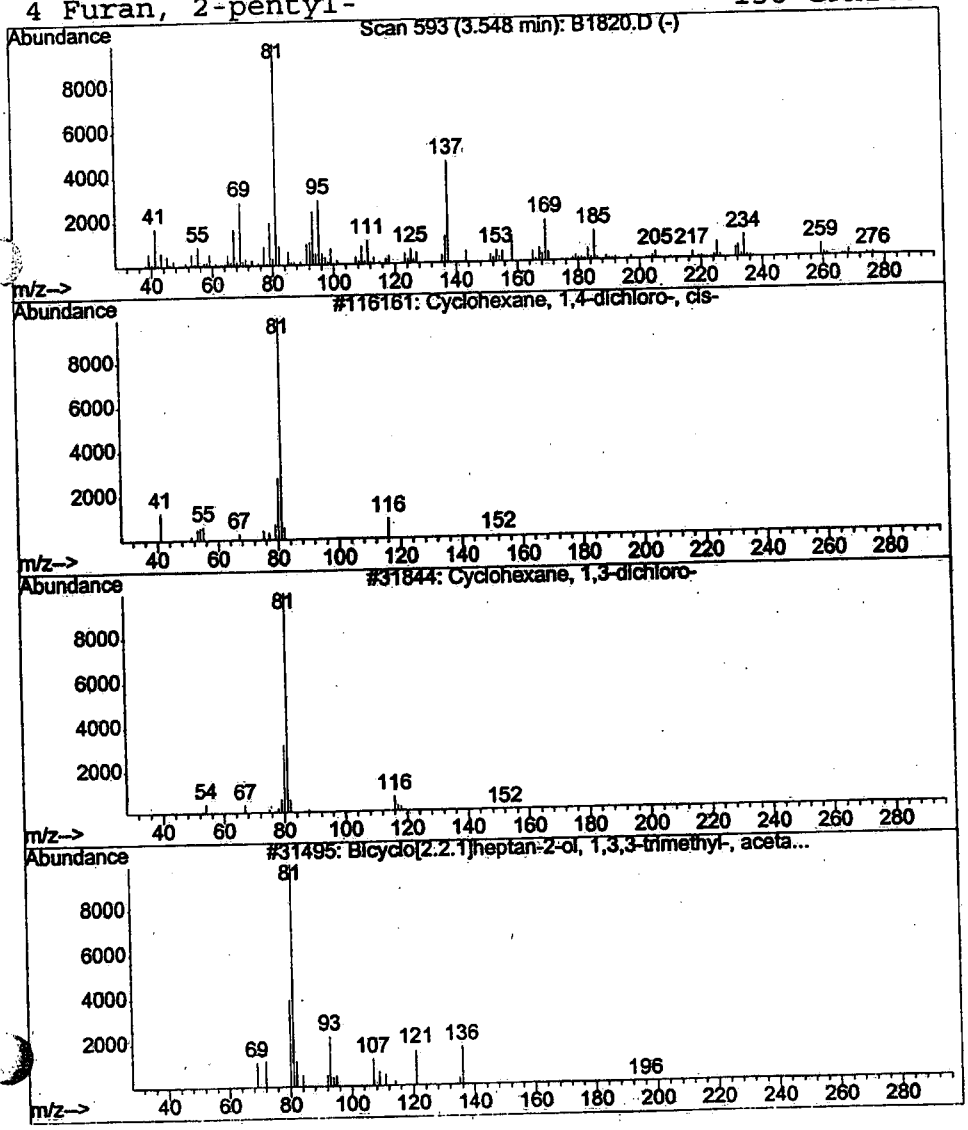
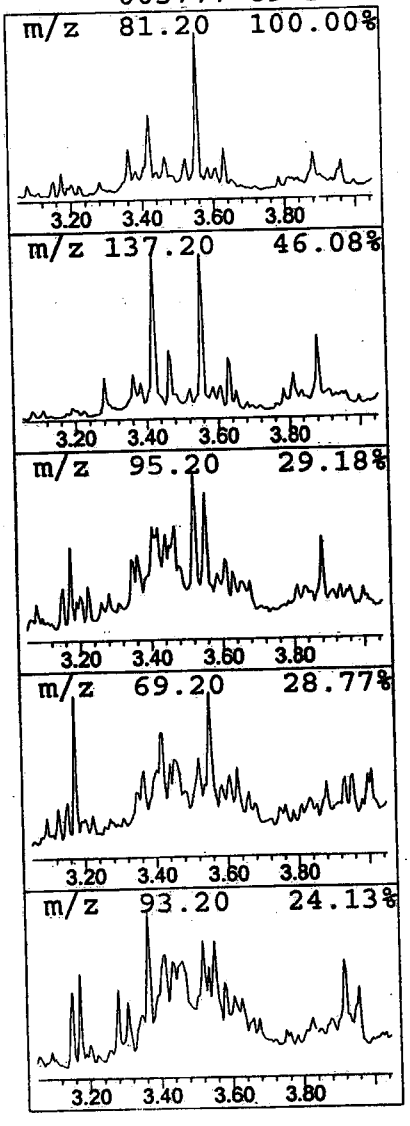
Peak Number 19 Unknown alkane — Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.55	23.35 UG	612163	Phenanthrene-d10	3.34

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, 1,4-dichloro-, cis-	152	C6H10Cl2	016749-11-4	35
2	Cyclohexane, 1,3-dichloro-	152	C6H10Cl2	055887-78-0	35
3	Bicyclo[2.2.1]heptan-2-ol, 1,3,3...	196	C12H20O2	076109-40-5	25
4	Furan, 2-pentyl-	138	C9H14O	003777-69-3	25





000316
2407

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
ALS Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

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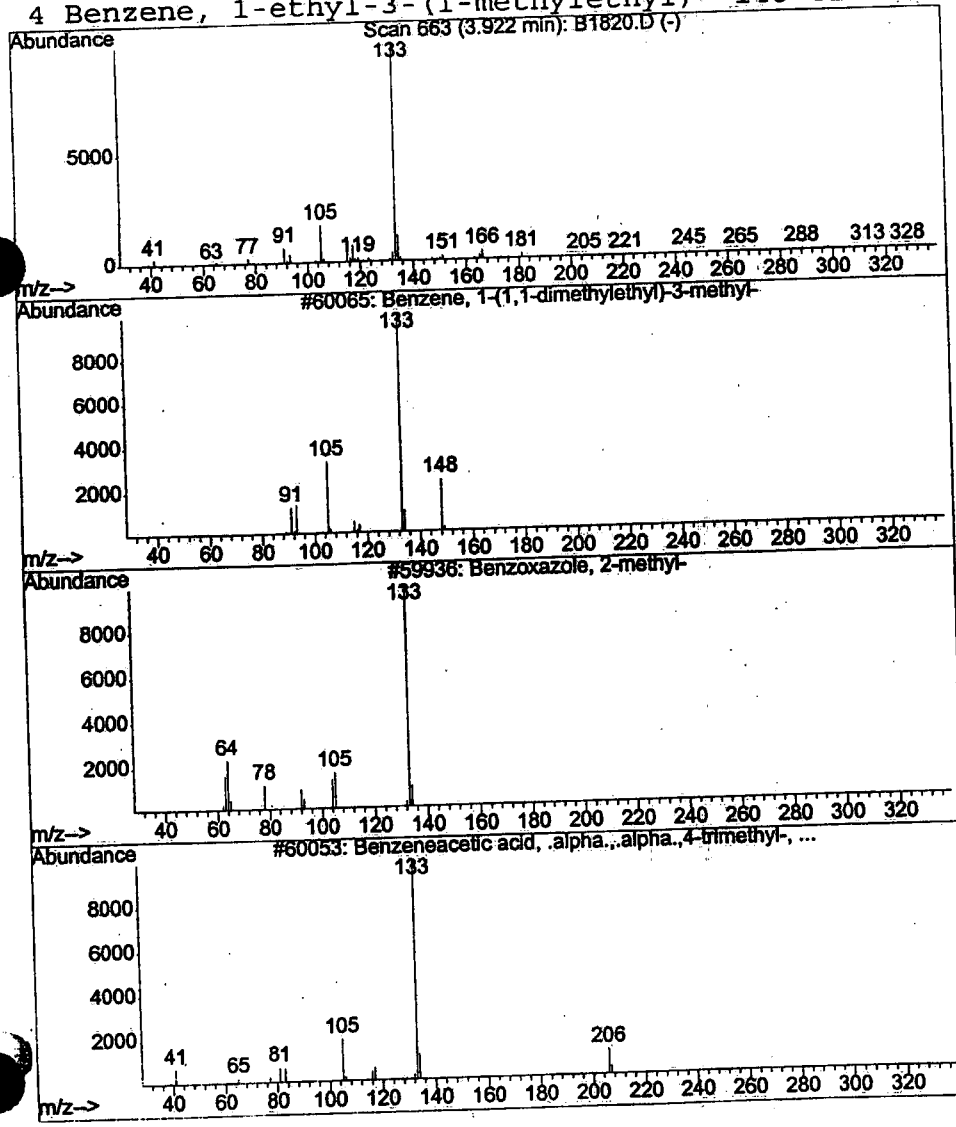
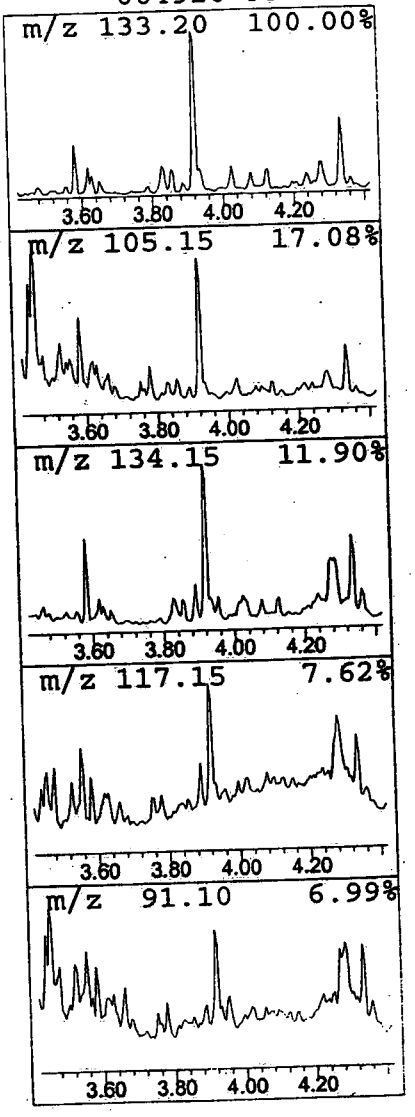
Peak Number 20 Unknown aromatic Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.92	48.02 UG	533015	Chrysene-d12	4.48

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-(1,1-dimethylethyl)-3...	148	C11H16	001075-38-3	72
2	Benzoxazole, 2-methyl-	133	C8H7NO	000095-21-6	72
3	Benzeneacetic acid, .alpha.,.alp...	206	C13H18O2	032454-24-3	72
4	Benzene, 1-ethyl-3-(1-methylethyl)-	148	C11H16	004920-99-4	56





000317
2408

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
) Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

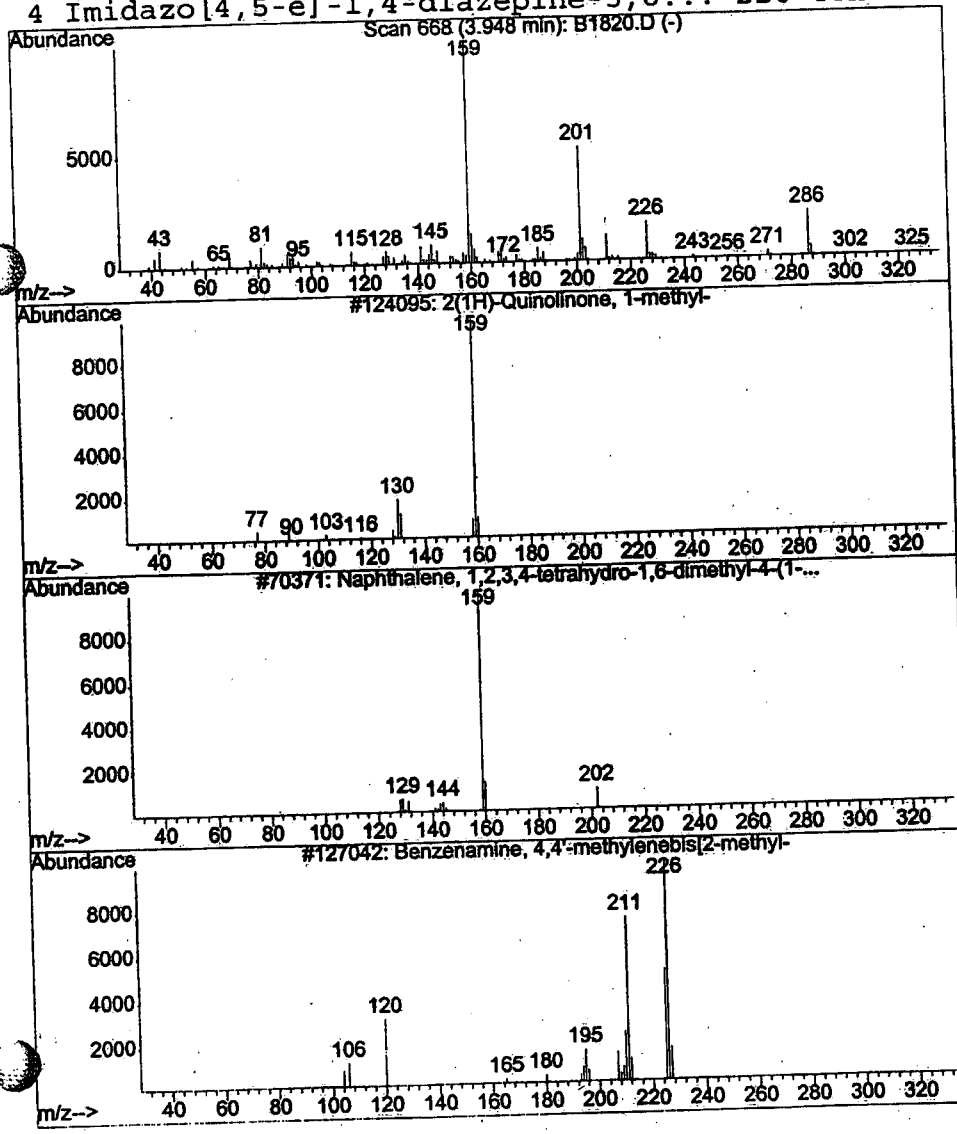
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

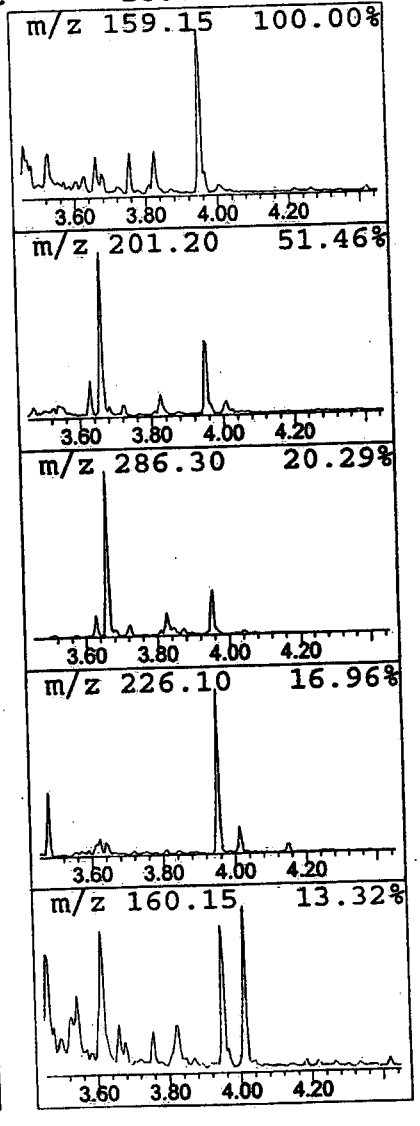
****

Peak Number 21 Unknown aromatic — Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.95	33.75 UG	374630	Chrysene-d12	4.48

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2(1H)-Quinolinone, 1-methyl-	159	C10H9NO	000606-43-9	15
2	Naphthalene, 1,2,3,4-tetrahydro-...	202	C15H22	000483-77-2	14
3	Benzenamine, 4,4'-methylenebis[2...	226	C15H18N2	000838-88-0	14
4	Imidazo[4,5-e]-1,4-diazepine-5,8...	226	C8H10N4S2	1000142-24-1	11





2409

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
S Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

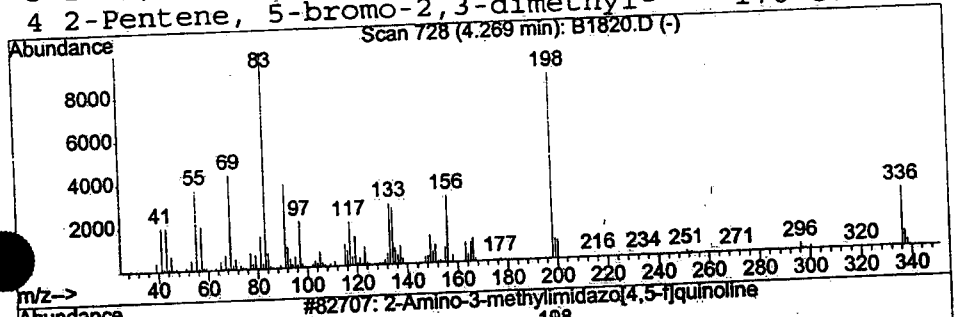
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

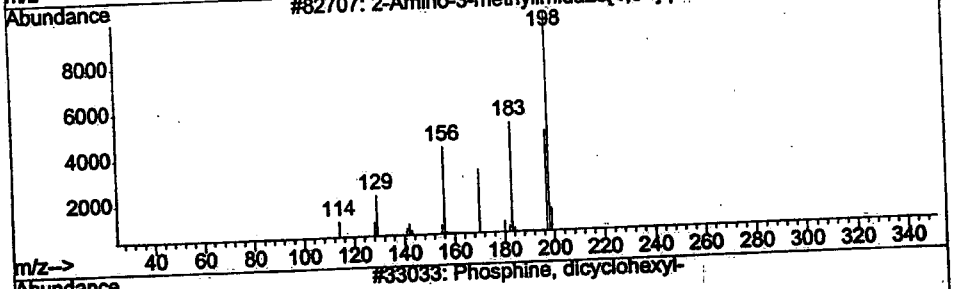
****

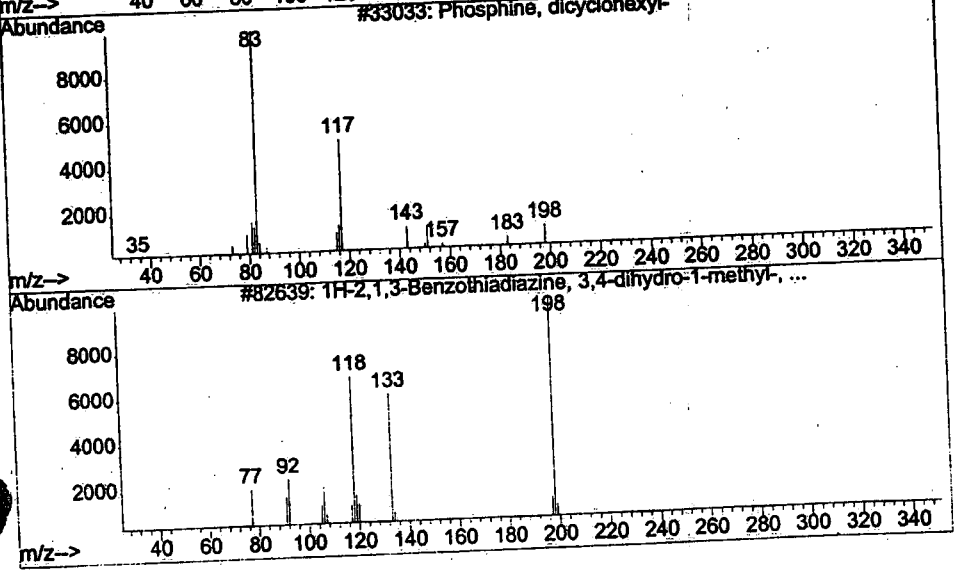
Peak Number 22 Unknown Concentration Rank 20

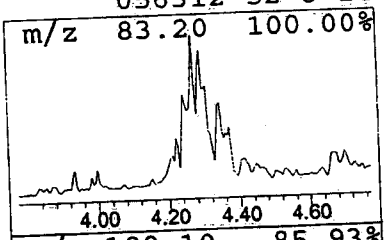
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.27	26.65 UG	295787	Chrysene-d12	4.48

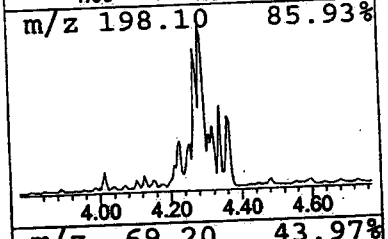
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Amino-3-methylimidazo[4,5-f]qu...	198	C11H10N4	1000138-96-3	43
2	Phosphine, dicyclohexyl-	198	C12H23P	000829-84-5	38
3	1H-2,1,3-Benzothiadiazine, 3,4-d...	198	C8H10N2O2S	040467-18-3	16
4	2-Pentene, 5-bromo-2,3-dimethyl-	176	C7H13Br	056312-52-8	14

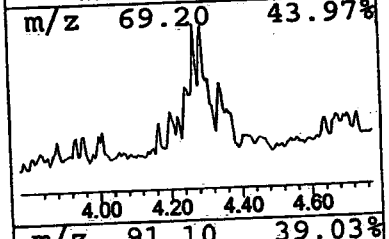


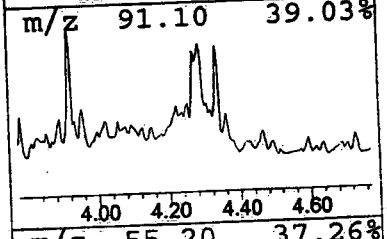


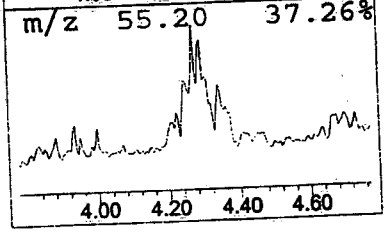












2410

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

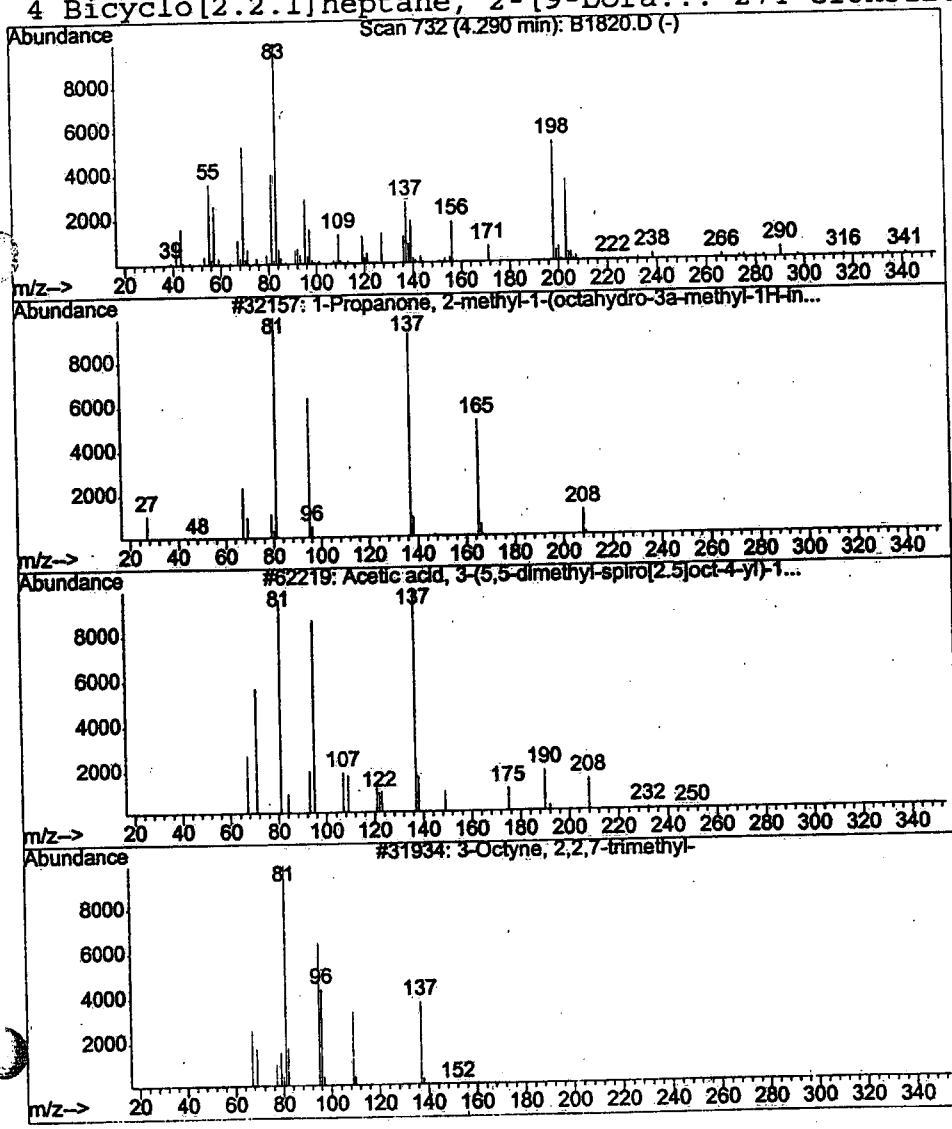
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

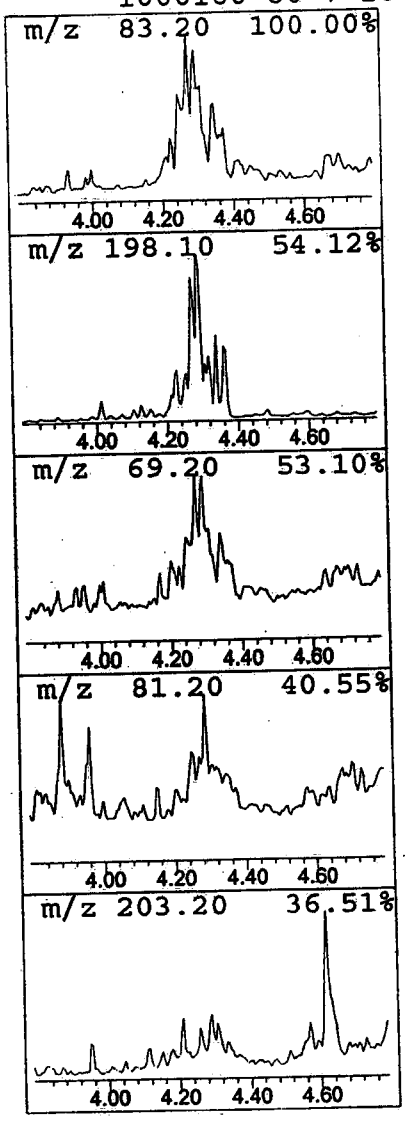
****

Peak Number 23 Unknown aromatic — Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.29	44.71 UG	496297	Chrysene-d12	4.48

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propanone, 2-methyl-1-(octahyd...	208	C14H24O	066708-25-6	38
2	Acetic acid, 3-(5,5-dimethyl-spi...	250	C16H26O2	077143-33-0	25
3	3-Octyne, 2,2,7-trimethyl-	152	C11H20	055402-13-6	18
4	Bicyclo[2.2.1]heptane, 2-[9-bora...	274	C18H31BO	1000160-80-7	16





2411

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1820.D
Acq On : 6 Apr 2001 11:44
Sample : S-55,2092-011,S,5.51g,20.4,04/05/01
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

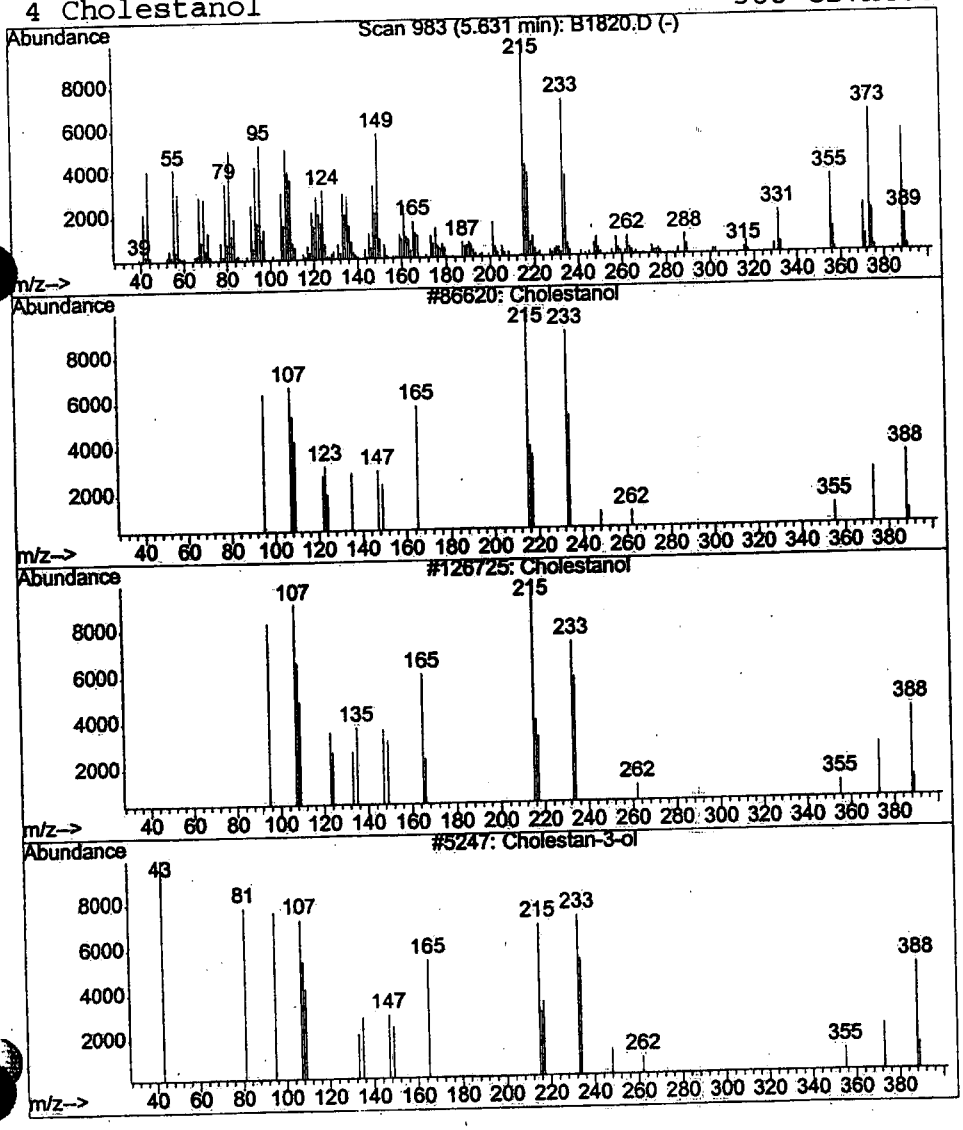
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

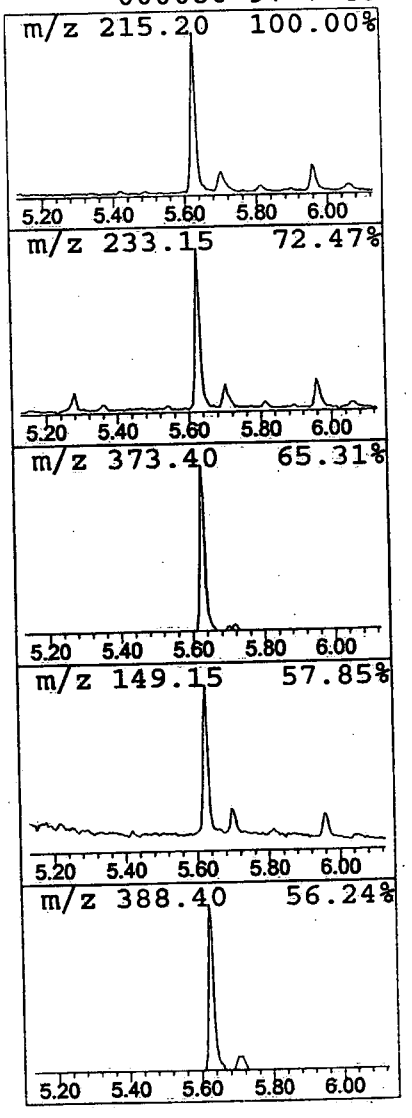
****

Peak Number 24 Cholestanol — Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.63	28.74 UG	300437	Perylene-d12	5.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cholestanol	388	C27H48O	000080-97-7	91
2	Cholestanol	388	C27H48O	000080-97-7	62
3	Cholestan-3-ol	388	C27H48O	027409-41-2	60
4	Cholestanol	388	C27H48O	000080-97-7	46





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2412

Library Search Compound Report

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Misc : ENVTACT/ORBIS,04/03/01,04/04/01,2
Integration Params: LSCINT.P

Vial: 34
Operator: JC
Inst : MSD_B
Multiplr: 1.00

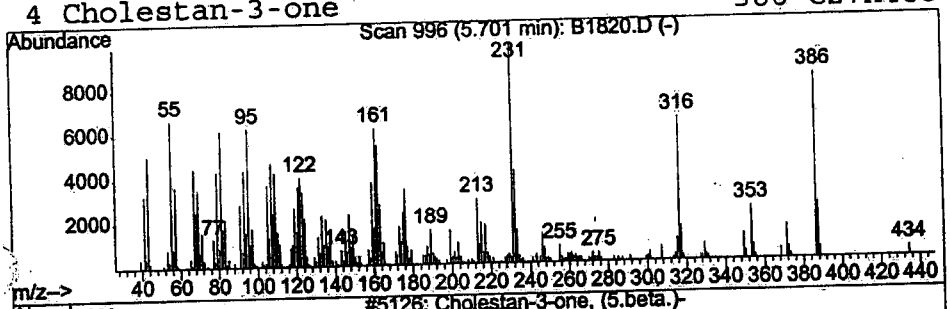
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

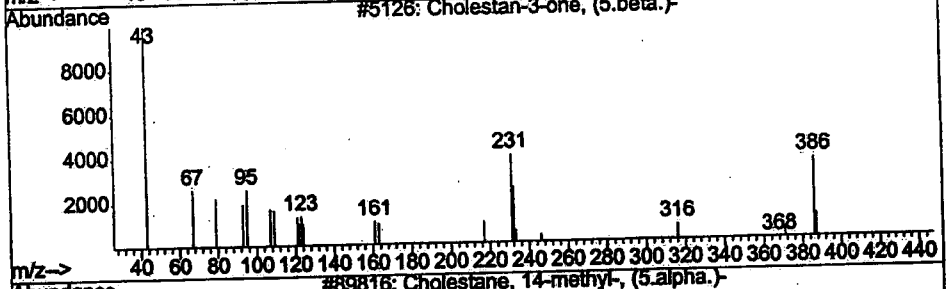
****

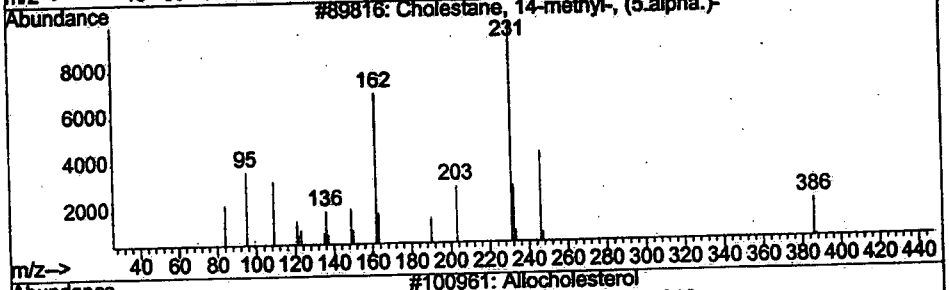
Peak Number 25 Unknown — Concentration Rank 24

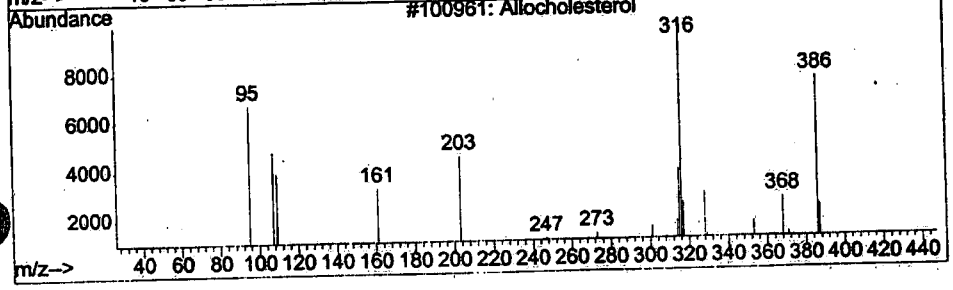
R.T.	EstConc	Area	Relative to ISTD	R.T.
5.70	22.33 UG	233418	Perylene-d12	5.28

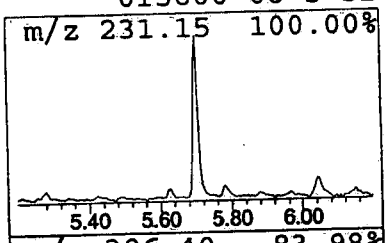
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cholestan-3-one, (5.beta.)-	386	C27H46O	000601-53-6	90
2	Cholestane, 14-methyl-, (5.alpha.)-	386	C28H50	054482-34-7	60
3	Allocholesterol	386	C27H46O	000517-10-2	58
4	Cholestan-3-one	386	C27H46O	015600-08-5	52

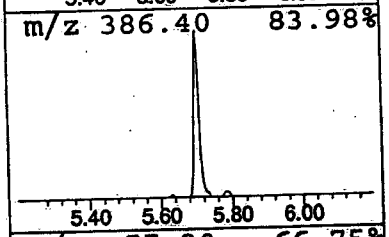


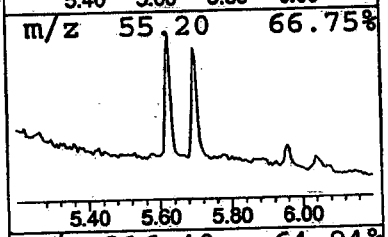


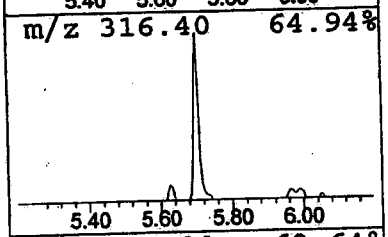


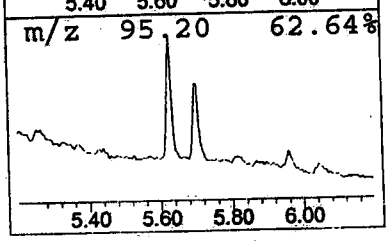












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2413

Tentatively Identified Compound (LSC) summary

Operator ID: JC Date Acquired: 6 Apr 2001 11:44
Data File: C:\MSDCHEM\1\DATA\04-06-01\B1820.D
[redacted] S-55,2092-011,S,5.51g,20.4,04/05/01
[redacted] ENVTACT/ORBIS,04/03/01,04/04/01,2
Method: C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title: BNA CALIBRATION METHOD
Library Searched: C:\DATABASE\NIST98.L

TIC Top Hit name		RT	EstConc	Units	Response	#	RT	Resp	Conc
							0.53	27.7	
Substituted benzene									
173255	1	1.51	250545	40.0			2.12	67.0	
Unknown									
610526	2	2.03	364300	40.0			2.18	83.3	
Unknown									
758767	2	2.03	364300	40.0			2.21	92.4	
Unknown									
841629	2	2.03	364300	40.0			2.23	32.3	
Unknown alkane									
294010	2	2.03	364300	40.0			2.25	31.9	
Unknown alkane									
290330	2	2.03	364300	40.0			2.29	159.8	
Substituted benzene									
1455860	2	2.03	364300	40.0			2.40	44.7	
Unknown									
698422	3	2.75	625211	40.0			2.62	21.2	
Unknown aromatic									
[redacted]1212	3	2.75	625211	40.0			2.82	29.7	
Unknown									
464688	3	2.75	625211	40.0			2.83	32.5	
Substituted naphthalene									
508537	3	2.75	625211	40.0			2.90	27.6	
Substituted benzene									
431108	3	2.75	625211	40.0			2.98	50.8	
Unknown aromatic									
794048	3	2.75	625211	40.0			3.01	26.5	
Unknown alkane									
414530	3	2.75	625211	40.0			3.40	36.0	
Unknown									
945245	4	3.34	1048680	40.0			3.42	23.7	
Unknown aromatic									
621699	4	3.34	1048680	40.0			3.46	80.2	
Unknown alkane									
2102470	4	3.34	1048680	40.0			3.53	29.6	
Unknown									
777348	4	3.34	1048680	40.0			3.55	23.4	
Unknown alkane									
612163	4	3.34	1048680	40.0			3.92	48.0	
Unknown aromatic									
533015	5	4.48	444014	40.0			3.95	33.8	
Unknown aromatic									
374630	5	4.48	444014	40.0			4.27	26.6	
[redacted]known									
[redacted]295787	5	4.48	444014	40.0			4.29	44.7	
[redacted]nknown aromatic									
496297	5	4.48	444014	40.0					

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olestanol					5.63	28.7	000080-97-7
300437	6	5.28	418149	40.0	5.70	22.3	
known							
233418	6	5.28	418149	40.0			

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2021.D
Acq On : 13 Apr 2001 13:14
Sample : .,Method-Blank,S,30.0g,0.0,04/12/01
Misc : N/A,N/A,N/A,1
IS Integration Params: rteint.p
Quant Time: Apr 13 13:24:40 2001

Vial: 3
Operator: JC
Inst : MSD_B
Multiplr: 1.00
Quant Results File: BS1301.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Fri Apr 13 10:13:08 2001
Response via : Initial Calibration
DataAcq Meth : BS1301

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.31	152	47378	40.00	UG	-0.01
22) Naphthalene-d8	2.84	136	190360	40.00	UG	0.00
39) Acenaphthene-d10	3.59	164	102613	40.00	UG	0.00
60) Phenanthrene-d10	4.25	188	181786	40.00	UG	0.00
75) Chrysene-d12	5.99	240	100409	40.00	UG	-0.01
84) Perylene-d12	7.25	264	93835	40.00	UG	-0.03

System Monitoring Compounds						
4) 2-Fluorophenol	1.80	112	87589	74.01	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 74.01%			
6) Phenol-d5	2.14	99	115121	77.55	UG	-0.02
Spiked Amount 100.000	Range 40 - 101		Recovery = 77.55%			
23) Nitrobenzene-d5	2.53	82	39817	29.25	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 58.50%			
43) 2-Fluorobiphenyl	3.29	172	113506	34.05	UG	0.00
Spiked Amount 50.000	Range 48 - 104		Recovery = 68.10%			
64) 2,4,6-Tribromophenol	3.94	330	47110	88.48	UG	0.00
Spiked Amount 100.000	Range 54 - 135		Recovery = 88.48%			
77) Terphenyl-d14	5.12	244	151090	52.11	UG	0.00
Spiked Amount 50.000	Range 58 - 147		Recovery = 104.22%			

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration

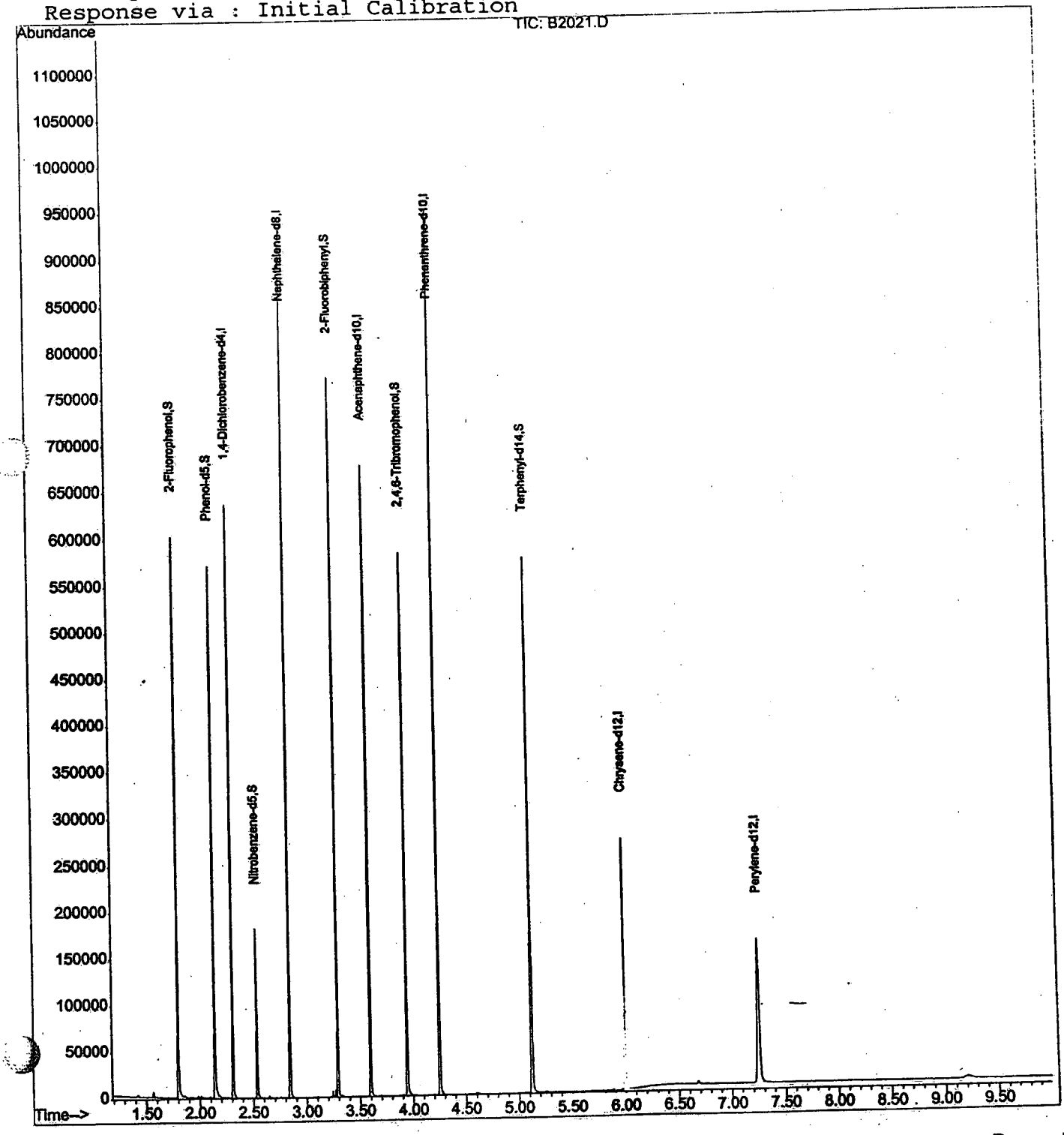
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2021.D
Acq On : 13 Apr 2001 13:14
Sample : .,Method-Blank,S,30.0g,0.0,04/12/01
Misc : N/A,N/A,N/A,1
MS Integration Params: rteint.p
Quant Time: Apr 13 13:29 2001

Vial: 3
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1301.RES

Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Fri Apr 13 10:13:08 2001
Response via : Initial Calibration



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Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-13-01\B2021.D
Acq On : 13 Apr 2001 13:14
Sample : .,Method-Blank,S,30.0g,0.0,04/12/01
Misc : N/A,N/A,N/A,1
IS Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1301.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

Vial: 3
Operator: JC
Inst : MSD_B
Multiplr: 1.00

No Library Search Compounds Detected

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B2021.D BS1301.M Fri Apr 13 13:30:12 2001 MSD_B

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-05-01\B1814.D
Acq On : 5 Apr 2001 18:14
Sample : .,Method-Blank,S,30.0g,0.0,04/05/01
Misc : N/A,N/A,N/A,1
Integration Params: rteint.p
Quant Time: Apr 05 18:23:56 2001

Vial: 33
Operator: JC
Inst : MSD_B
Multiplr: 1.00
Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	50251	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	191222	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	92503	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	142690	40.00	UG	-0.02
75) Chrysene-d12	4.46	240	114285	40.00	UG	-0.05
84) Perylene-d12	5.27	264	154420	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	104051	71.97	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 71.97%			
6) Phenol-d5	1.39	99	150096	84.82	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 84.82%			
23) Nitrobenzene-d5	1.74	82	58493	42.15	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 84.30%			
43) 2-Fluorobiphenyl	2.48	172	122206	48.07	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 96.14%			
64) 2,4,6-Tribromophenol	3.07	330	46126	97.08	UG	-0.02
Spiked Amount 100.000	Range 54 - 135		Recovery = 97.08%			
77) Terphenyl-d14	4.00	244	126809	46.53	UG	-0.03
Spiked Amount 50.000	Range 58 - 147		Recovery = 93.06%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

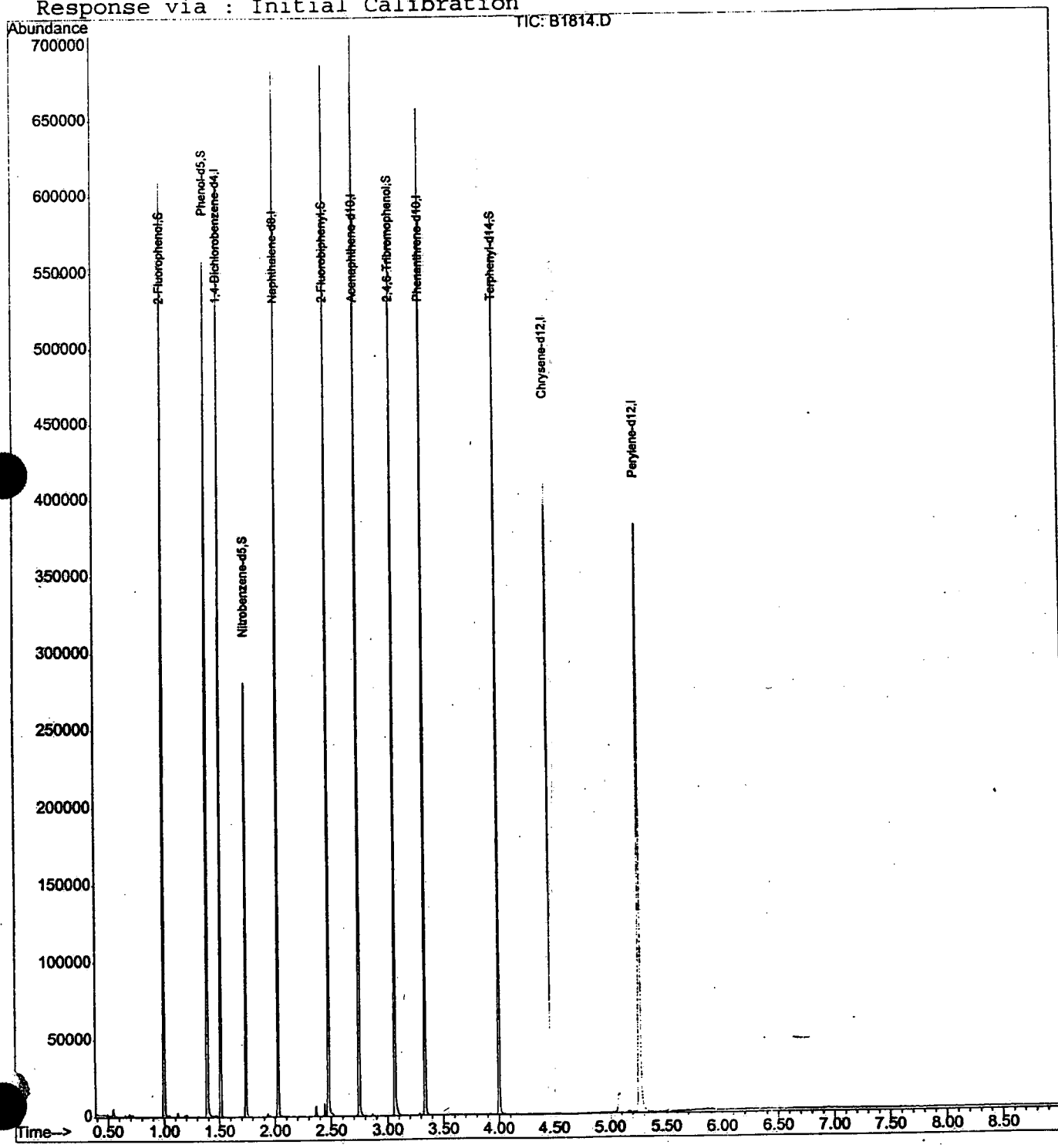
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-05-01\B1814.D
Acq On : 5 Apr 2001 18:14
Sample : .,Method-Blank,S,30.0g,0.0,04/05/01
Misc : N/A,N/A,N/A,1
MS Integration Params: rteint.p
Quant Time: Apr 6 7:46 2001

Vial: 33
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



2420

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-05-01\B1814.D
Acq On : 5 Apr 2001 18:14
Sample : .,Method-Blank,S,30.0g,0.0,04/05/01
Misc : N/A,N/A,N/A,1
Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

Vial: 33
Operator: JC
Inst : MSD_B
Multiplr: 1.00

No Library Search Compounds Detected

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B1814.D BS1201.M Mon Apr 09 11:02:35 2001 MSD_B

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-04-01\B1759.D
Acq On : 4 Apr 2001 13:42
Sample : .,Method-Blank,S,30.0g,0.0,04/04/01
Misc : N/A,N/A,N/A,1
Integration Params: rteint.p
Quant Time: Apr 04 13:51:13 2001

Vial: 6
Operator: JC
Inst : MSD_B
Multiplr: 1.00
Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	44704	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	166934	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	89247	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	149168	40.00	UG	-0.02
75) Chrysene-d12	4.47	240	123735	40.00	UG	-0.04
84) Perylene-d12	5.27	264	158490	40.00	UG	-0.03
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	78145	60.76	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 60.76%			
6) Phenol-d5	1.39	99	113525	72.11	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 72.11%			
23) Nitrobenzene-d5	1.74	82	42953	35.46	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 70.92%			
43) 2-Fluorobiphenyl	2.48	172	94506	38.53	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 77.06%			
64) 2,4,6-Tribromophenol	3.07	330	44831	90.25	UG	-0.02
Spiked Amount 100.000	Range 54 - 135		Recovery = 90.25%			
77) Terphenyl-d14	4.01	244	125270	42.46	UG	-0.03
Spiked Amount 50.000	Range 58 - 147		Recovery = 84.92%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

2422

000334

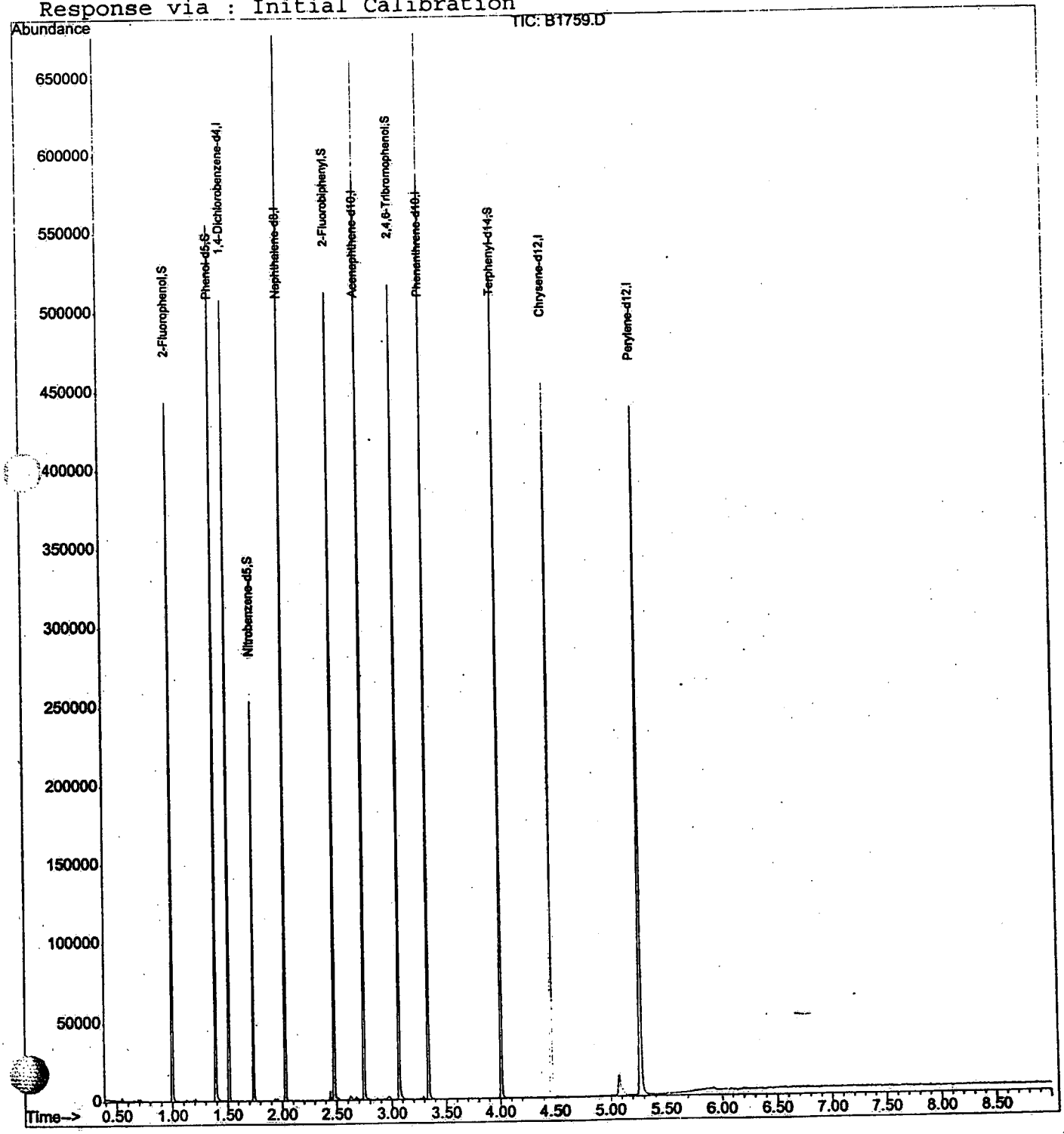
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-04-01\B1759.D
Acq On : 4 Apr 2001 13:42
Sample : .,Method-Blank,S,30.0g,0.0,04/04/01
Misc : N/A,N/A,N/A,1
MS Integration Params: rteint.p
Quant Time: Apr 4 17:04 2001

Vial: 6
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



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2423

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-04-01\B1759.D
Acq On : 4 Apr 2001 13:42
Sample : .,Method-Blank,S,30.0g,0.0,04/04/01
Misc : N/A,N/A,N/A,1
Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

Vial: 6
Operator: JC
Inst : MSD_B
Multiplr: 1.00

No Library Search Compounds Detected

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B1759.D BS1201.M Wed Apr 04 16:05:02 2001 MSD_B

000333

2424

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1821.D
Acq On : 6 Apr 2001 11:58
Sample : .,Method-Blank,S,30.0g,0.0,04/06/01
Misc : N/A,N/A,N/A,1
; Integration Params: rteint.p
Quant Time: Apr 06 12:07:55 2001

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration
DataAcq Meth : BS1201

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	1.51	152	53239	40.00	UG	0.00
22) Naphthalene-d8	2.03	136	212597	40.00	UG	-0.01
39) Acenaphthene-d10	2.75	164	107651	40.00	UG	-0.01
60) Phenanthrene-d10	3.34	188	180115	40.00	UG	-0.02
75) Chrysene-d12	4.48	240	120919	40.00	UG	-0.04
84) Perylene-d12	5.27	264	150752	40.00	UG	-0.03
System Monitoring Compounds						
4) 2-Fluorophenol	1.00	112	108531	70.86	UG	0.00
Spiked Amount 100.000	Range 36 - 93		Recovery = 70.86%			
6) Phenol-d5	1.39	99	161185	85.97	UG	-0.01
Spiked Amount 100.000	Range 40 - 101		Recovery = 85.97%			
23) Nitrobenzene-d5	1.74	82	62591	40.57	UG	-0.02
Spiked Amount 50.000	Range 45 - 98		Recovery = 81.14%			
43) 2-Fluorobiphenyl	2.48	172	137848	46.59	UG	-0.01
Spiked Amount 50.000	Range 48 - 104		Recovery = 93.18%			
64) 2,4,6-Tribromophenol	3.07	330	56588	94.35	UG	-0.02
Spiked Amount 100.000	Range 54 - 135		Recovery = 94.35%			
77) Terphenyl-d14	4.01	244	152963	53.05	UG	-0.02
Spiked Amount 50.000	Range 58 - 147		Recovery = 106.10%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

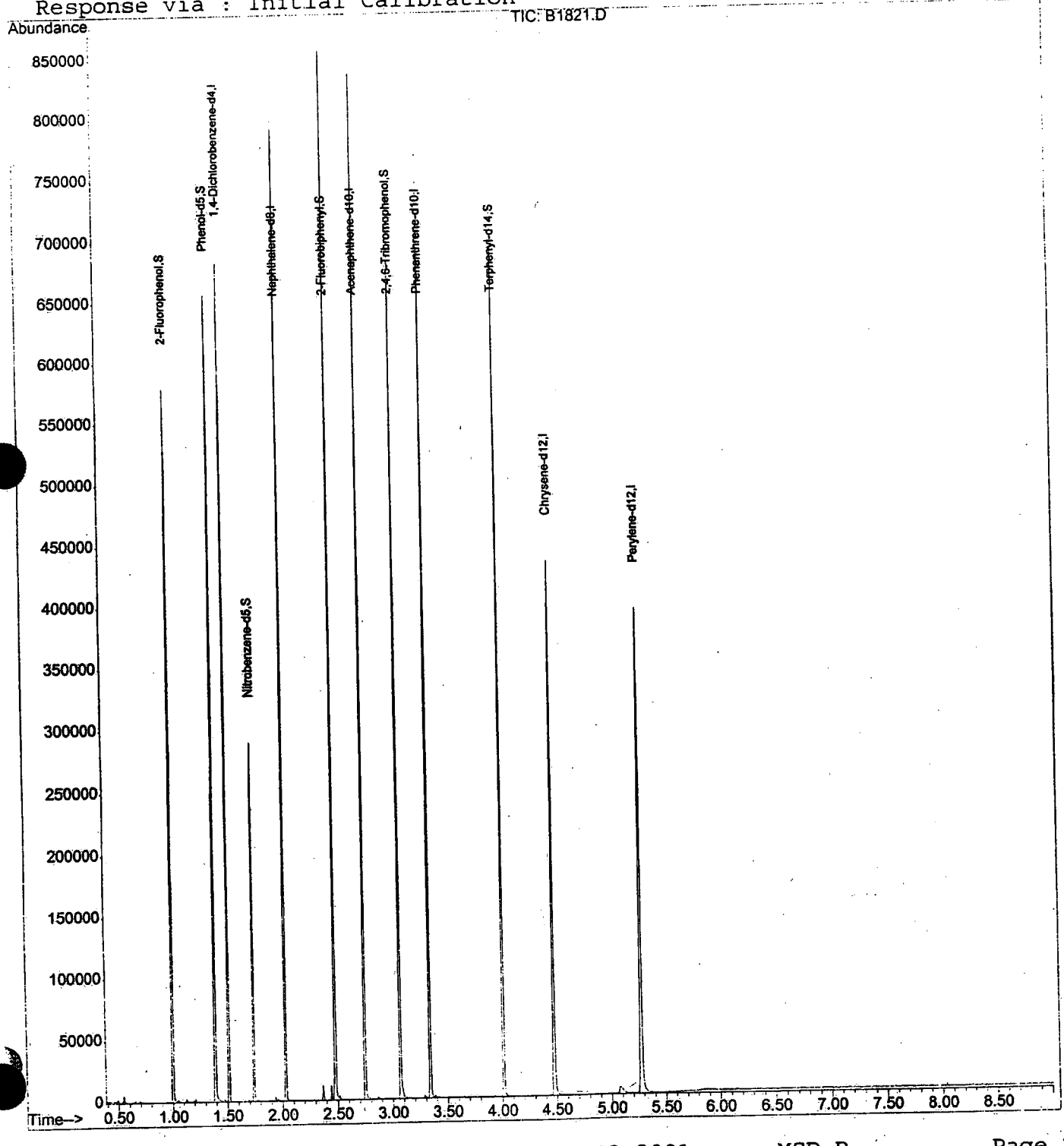
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1821.D
Acq On : 6 Apr 2001 11:58
Sample : .,Method-Blank,S,30.0g,0.0,04/06/01
Misc : N/A,N/A,N/A,1
MS Integration Params: rteint.p
Quant Time: Apr 6 13:50 2001

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1201.RES

Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 02 12:12:36 2001
Response via : Initial Calibration



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000335

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-06-01\B1821.D
Acq On : 6 Apr 2001 11:58
Sample : .,Method-Blank,S,30.0g,0.0,04/06/01
Misc : N/A,N/A,N/A,1
Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1201.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

No Library Search Compounds Detected

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B1821.D BS1201.M Mon Apr 09 13:12:34 2001 MSD_B

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2427