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

CERCLIS ID No.: NJD010910099

VOLUME VII OF VIII

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by:
Region II Site Assessment Team
Weston Solutions, Inc.
Edison, New Jersey 08837

253174

REFERENCE 15 (continued)

PCB METHOD BLANK SUMMARY

Lab File ID: V4930.D

Instrument ID: GC-V

Date Extracted: 04/04/2001

Matrix: SOIL

Date Analyzed: 04/04/2001

Time Analyzed: 14:51

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
AC-27_10.5-11'	2044-001	04/04/2001	15:52
4201	2034-001	04/04/2001	16:23
T18	1861-010	04/04/2001	16:54
T19	1861-011	04/04/2001	17:25
T20	1861-012	04/04/2001	17:56
PCB	2061-006-MS1	04/04/2001	18:26
PCB	2061-006-MSD1	04/04/2001	18:57
PCB	PBS0404-MS1	04/04/2001	19:28
PS4-4-3S	2049-002	04/05/2001	09:34

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0404-BLK1
Client ID: (1861..2049)
Date Received: NA
Date Extracted: 04/04/2001
Date Analyzed: 04/04/2001
Data file: V4930.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		6.68
Aroclor-1221	ND		6.68
Aroclor-1232	ND		6.68
Aroclor-1242	ND		6.68
Aroclor-1248	ND		6.68
Aroclor-1254	ND		6.68
Aroclor-1260	ND		6.68

Z429

000338

PCB METHOD BLANK SUMMARY

Lab File ID: V4973.D

Instrument ID: GC-V

Date Extracted: 04/05/2001

Matrix: SOIL

Date Analyzed: 04/05/2001

Time Analyzed: 23:33

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
WC-COMP	2111-001	04/06/2001	00:35
WC-7	2070-008	04/06/2001	01:05
BORING	2102-001	04/06/2001	01:36
STR-1	2117-001	04/06/2001	02:38
STR-2	2117-002	04/06/2001	03:08
STR-3	2117-003	04/06/2001	03:39
STR-4	2117-004	04/06/2001	04:10
STR-5	2117-005	04/06/2001	04:40
STR-6	2117-006	04/06/2001	05:11
STR-7	2117-007	04/06/2001	05:42
PCB	PBS0405-MS1	04/06/2001	06:13
S-55	2092-011	04/06/2001	10:19

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0405-BLK1
Client ID: (2070..2117)
Date Received: NA
Date Extracted: 04/05/2001
Date Analyzed: 04/05/2001
Data file: V4973.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		6.68
Aroclor-1221	ND		6.68
Aroclor-1232	ND		6.68
Aroclor-1242	ND		6.68
Aroclor-1248	ND		6.68
Aroclor-1254	ND		6.68
Aroclor-1260	ND		6.68

000340

2431

PCB METHOD BLANK SUMMARY

Lab File ID: V5007.D

Instrument ID: GC-V

Date Extracted: 04/09/2001

Matrix: SOIL

Date Analyzed: 04/09/2001

Time Analyzed: 16:13

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S-46	2092-002	04/09/2001	16:44
S-47	2092-003	04/09/2001	17:15
S-48	2092-004	04/09/2001	17:46
S-49	2092-005	04/09/2001	18:16
DS-1_1-1.5'	2155-012	04/09/2001	18:47
S-6	2158-006	04/09/2001	19:18
S-7	2158-007	04/09/2001	19:49
MT._HOPE_WC	2147-001	04/09/2001	20:20
BA-3_0-1	2154-015	04/09/2001	20:50
BA-3_2-2.5	2154-016	04/09/2001	21:21
BA-3_3-5	2154-017	04/09/2001	21:52
BA-4_0-0.5	2154-018	04/09/2001	22:23
BA-4_2-2.5	2154-019	04/09/2001	22:53
BA-4_3-5	2154-020	04/09/2001	23:24
WT-1_0-0.5'	2155-014	04/10/2001	00:26
WT-2_1.5-2'	2155-015	04/10/2001	00:56
SUMP-1_3-3.5'	2155-016	04/10/2001	01:27
SD-1	2158-008	04/10/2001	01:58
T21	1861-013	04/10/2001	02:29
PCB	2158-006-MS1	04/10/2001	04:01
PCB	2158-006-MSD1	04/10/2001	04:32
PCB	PBS0409-MS1	04/10/2001	05:02
SP-1_4-4.5'	2155-013	04/10/2001	09:46

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0409-BLK1
Client ID: (2093..2158)
Date Received: NA
Date Extracted: 04/09/2001
Date Analyzed: 04/09/2001
Data file: V5007.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		6.68
Aroclor-1221	ND		6.68
Aroclor-1232	ND		6.68
Aroclor-1242	ND		6.68
Aroclor-1248	ND		6.68
Aroclor-1254	ND		6.68
Aroclor-1260	ND		6.68

PCB METHOD BLANK SUMMARY

Lab File ID: V5101.D

Instrument ID: GC-V

Date Extracted: 04/11/2001

Matrix: SOIL

Date Analyzed: 04/12/2001

Time Analyzed: 10:01

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
COMP_1-3	1937-004	04/12/2001	10:32
STOCKPILE	2227-001	04/12/2001	11:02
WASTE_CLASS	2238-001	04/12/2001	11:33
S-51	2092-007	04/12/2001	12:04
WC-0B-COMPOSIT	2260-006	04/12/2001	12:35
PCB	2238-001-MS1	04/12/2001	13:06
PCB	2238-001-MSD1	04/12/2001	13:37
PCB	PBS0411-MS1	04/12/2001	14:08

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0411-BLK1
Client ID: (1937..2260)
Date Received: NA
Date Extracted: 04/11/2001
Date Analyzed: 04/12/2001
Data file: V5101.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		6.68
Aroclor-1221	ND		6.68
Aroclor-1232	ND		6.68
Aroclor-1242	ND		6.68
Aroclor-1248	ND		6.68
Aroclor-1254	ND		6.68
Aroclor-1260	ND		6.68

000344

2435

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/29/2001

Instrument ID: Varian 3400

GC Column (1st): DB-5

Data File: V4879.D V4880.D V4881.D V4882.D V4883.D

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	200	500	1000	2000	4000	RT	FROM	TO
Aroclor-1016	5.80	5.80	5.80	5.80	5.80	5.80	5.73	5.87
Aroclor-1016 {2}	6.89	6.89	6.89	6.89	6.89	6.89	6.82	6.96
Aroclor-1016 {3}	7.33	7.33	7.33	7.33	7.33	7.33	7.26	7.40
Aroclor-1016 {4}	9.20	9.20	9.20	9.20	9.20	9.20	9.13	9.27
Aroclor-1016 {5}	9.68	9.68	9.68	9.68	9.68	9.68	9.61	9.75
Aroclor-1221			3.83				3.76	3.90
Aroclor-1221 {2}			5.44				5.37	5.51
Aroclor-1221 {3}			5.67				5.60	5.74
Aroclor-1221 {4}			5.80				5.73	5.87
Aroclor-1221 {5}			6.90				6.83	6.97
Aroclor-1232			5.80				5.73	5.87
Aroclor-1232 {2}			6.83				6.76	6.90
Aroclor-1232 {3}			8.35				8.28	8.42
Aroclor-1232 {4}			9.20				9.13	9.27
Aroclor-1232 {5}			10.05				9.98	10.12
Aroclor-1242			7.33				7.26	7.40
Aroclor-1242 {2}			9.20				9.13	9.27
Aroclor-1242 {3}			9.78				9.71	9.85
Aroclor-1242 {4}			10.99				10.92	11.06
Aroclor-1242 {5}			11.51				11.44	11.58
Aroclor-1248			8.07				8.00	8.14
Aroclor-1248 {2}			9.19				9.12	9.26
Aroclor-1248 {3}			9.77				9.70	9.84
Aroclor-1248 {4}			10.98				10.91	11.05
Aroclor-1248 {5}			11.49				11.42	11.56
Aroclor-1254			11.74				11.67	11.81
Aroclor-1254 {2}			12.56				12.49	12.63
Aroclor-1254 {3}			13.72				13.65	13.79
Aroclor-1254 {4}			14.46				14.39	14.53
Aroclor-1254 {5}			15.33				15.26	15.40
Aroclor-1260	15.33	15.33	15.33	15.33	15.33	15.33	15.26	15.40
Aroclor-1260 {2}	15.89	15.89	15.89	15.89	15.89	15.89	15.82	15.96
Aroclor-1260 {3}	17.54	17.53	17.54	17.54	17.53	17.53	17.46	17.60
Aroclor-1260 {4}	18.46	18.46	18.46	18.46	18.46	18.46	18.39	18.53
Aroclor-1260 {5}	20.51	20.51	20.51	20.51	20.51	20.51	20.44	20.58

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/29/2001 **Instrument ID:** Varian 3400

GC Column (1st): DB-5

Data File: V4879.D V4880.D V4881.D V4882.D V4883.D

Compound	CALIBRATION FACTORS 200	500	1000	2000	4000	MEAN	%RSD
Aroclor-1016	6227	6407	6117	6380	5357	6098	7.06
Aroclor-1016 {2}	4874	5091	4819	5117	4301	4840	6.79
Aroclor-1016 {3}	8659	8707	8314	8610	7218	8302	7.52
Aroclor-1016 {4}	5050	5220	5024	5286	4392	4994	7.10
Aroclor-1016 {5}	7280	7405	7017	7300	6087	7018	7.69
Aroclor-1221			2100				
Aroclor-1221 {2}			3561				
Aroclor-1221 {3}			3370				
Aroclor-1221 {4}			8799				
Aroclor-1221 {5}			1175				
Aroclor-1232			5822				
Aroclor-1232 {2}			2891				
Aroclor-1232 {3}			4281				
Aroclor-1232 {4}			2035				
Aroclor-1232 {5}			4343				
Aroclor-1242			5779				
Aroclor-1242 {2}			3374				
Aroclor-1242 {3}			4066				
Aroclor-1242 {4}			7465				
Aroclor-1242 {5}			7715				
Aroclor-1248			11196				
Aroclor-1248 {2}			5874				
Aroclor-1248 {3}			5151				
Aroclor-1248 {4}			15157				
Aroclor-1248 {5}			15014				
Aroclor-1254			14779				
Aroclor-1254 {2}			13098				
Aroclor-1254 {3}			20763				
Aroclor-1254 {4}			13828				
Aroclor-1254 {5}			23989				
Aroclor-1260	26817	26595	24956	26238	22357	25393	7.26
Aroclor-1260 {2}	23479	23313	22286	23486	19993	22511	6.63
Aroclor-1260 {3}	53488	53166	50012	55452	51067	52637	4.06
Aroclor-1260 {4}	24143	24378	23286	24540	21175	23504	5.91
Aroclor-1260 {5}	13746	13823	13823	14518	12773	13737	4.54
					Average %RSD		6.46

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/29/2001

Instrument ID: Varian 3400

GC Column (2nd): DB-1701P

Data File: V4879.C V4880.C V4881.C V4882.C V4883.C

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	200	500	1000	2000	4000	RT	FROM	TO
Aroclor-1016	6.37	6.37	6.37	6.37	6.37	6.37	6.30	6.44
Aroclor-1016 {2}	7.44	7.44	7.44	7.44	7.44	7.44	7.37	7.51
Aroclor-1016 {3}	8.80	8.80	8.80	8.80	8.80	8.80	8.73	8.87
Aroclor-1016 {4}	9.19	9.19	9.19	9.19	9.19	9.19	9.12	9.26
Aroclor-1016 {5}	9.51	9.51	9.51	9.51	9.51	9.51	9.44	9.58
Aroclor-1221			4.11				4.04	4.18
Aroclor-1221 {2}			5.81				5.74	5.88
Aroclor-1221 {3}			6.23				6.16	6.30
Aroclor-1221 {4}			6.39				6.32	6.46
Aroclor-1221 {5}			7.46				7.39	7.53
Aroclor-1232			6.37				6.30	6.44
Aroclor-1232 {2}			7.44				7.37	7.51
Aroclor-1232 {3}			8.80				8.73	8.87
Aroclor-1232 {4}			9.51				9.44	9.58
Aroclor-1232 {5}			10.62				10.55	10.69
Aroclor-1242			8.14				8.07	8.21
Aroclor-1242 {2}			9.51				9.44	9.58
Aroclor-1242 {3}			10.96				10.89	11.03
Aroclor-1242 {4}			11.95				11.88	12.02
Aroclor-1242 {5}			12.69				12.62	12.76
Aroclor-1248			8.79				8.72	8.86
Aroclor-1248 {2}			9.89				9.82	9.96
Aroclor-1248 {3}			10.61				10.54	10.68
Aroclor-1248 {4}			10.90				10.83	10.97
Aroclor-1248 {5}			11.55				11.48	11.62
Aroclor-1254			12.49				12.42	12.56
Aroclor-1254 {2}			13.60				13.53	13.67
Aroclor-1254 {3}			14.77				14.70	14.84
Aroclor-1254 {4}			15.21				15.14	15.28
Aroclor-1254 {5}			16.34				16.27	16.41
Aroclor-1260	15.21	15.21	15.21	15.21	15.21	15.21	15.14	15.28
Aroclor-1260 {2}	16.47	16.47	16.47	16.47	16.47	16.47	16.40	16.54
Aroclor-1260 {3}	17.48	17.48	17.48	17.48	17.48	17.48	17.41	17.55
Aroclor-1260 {4}	18.45	18.45	18.45	18.45	18.45	18.45	18.38	18.52
Aroclor-1260 {5}	20.74	20.74	20.73	20.74	20.73	20.74	20.67	20.81

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/29/2001 **Instrument ID:** Varian 3400
GC Column (2nd): DB-1701P

Data File: V4879.C V4880.C V4881.C V4882.C V4883.C

Compound	CALIBRATION FACTORS 200	500	1000	2000	4000	MEAN	%RSD
Aroclor-1016	7118	7192	6869	7111	5969	6852	7.42
Aroclor-1016 {2}	13249	13189	12403	12915	10800	12511	8.10
Aroclor-1016 {3}	31360	30917	29095	30687	26753	29762	6.34
Aroclor-1016 {4}	10575	10712	10190	10632	8893	10200	7.43
Aroclor-1016 {5}	10858	10867	10407	10885	9077	10419	7.45
Aroclor-1221			2407				
Aroclor-1221 {2}			4276				
Aroclor-1221 {3}			2616				
Aroclor-1221 {4}			9610				
Aroclor-1221 {5}			814				
Aroclor-1232			6285				
Aroclor-1232 {2}			4891				
Aroclor-1232 {3}			11395				
Aroclor-1232 {4}			4013				
Aroclor-1232 {5}			5432				
Aroclor-1242			3856				
Aroclor-1242 {2}			7021				
Aroclor-1242 {3}			1402				
Aroclor-1242 {4}			7636				
Aroclor-1242 {5}			5413				
Aroclor-1248			18813				
Aroclor-1248 {2}			12765				
Aroclor-1248 {3}			14673				
Aroclor-1248 {4}			14201				
Aroclor-1248 {5}			8924				
Aroclor-1254			15038				
Aroclor-1254 {2}			13092				
Aroclor-1254 {3}			18915				
Aroclor-1254 {4}			11076				
Aroclor-1254 {5}			23553				
Aroclor-1260	22062	21873	20369	21104	17700	20621	8.56
Aroclor-1260 {2}	17535	17596	16506	17108	14273	16603	8.27
Aroclor-1260 {3}	19980	19847	18510	19225	16217	18756	8.18
Aroclor-1260 {4}	47968	48199	45069	48097	42661	46399	5.31
Aroclor-1260 {5}	5472	5619	5418	5793	5071	5475	4.90
					Average %RSD		7.20

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/05/2001 Instrument ID: Varian 3400

Data File: V4972.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.80	5.73	5.87	6098	5467	10.34
Aroclor-1016 {2}	6.89	6.82	6.96	4840	4255	12.09
Aroclor-1016 {3}	7.33	7.26	7.40	8302	7441	10.37
Aroclor-1016 {4}	9.20	9.13	9.27	4994	4495	9.99
Aroclor-1016 {5}	9.68	9.61	9.75	7018	6290	10.37
Aroclor-1260	15.33	15.26	15.40	25393	23345	8.06
Aroclor-1260 {2}	15.89	15.82	15.96	22511	20704	8.03
Aroclor-1260 {3}	17.53	17.46	17.60	52637	47888	9.02
Aroclor-1260 {4}	18.46	18.39	18.53	23504	21901	6.82
Aroclor-1260 {5}	20.51	20.44	20.58	13737	13079	4.79
					Average %D	8.99

Data File: V4972.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.36	6.29	6.43	6852	6162	10.07
Aroclor-1016 {2}	7.43	7.36	7.50	12511	11294	9.73
Aroclor-1016 {3}	8.79	8.72	8.86	29762	26340	11.50
Aroclor-1016 {4}	9.18	9.11	9.25	10200	9320	8.63
Aroclor-1016 {5}	9.50	9.43	9.57	10419	9469	9.12
Aroclor-1260	15.19	15.12	15.26	20621	18910	8.30
Aroclor-1260 {2}	16.45	16.38	16.52	16603	15476	6.79
Aroclor-1260 {3}	17.46	17.39	17.53	18756	17490	6.75
Aroclor-1260 {4}	18.43	18.36	18.50	46399	42778	7.80
Aroclor-1260 {5}	20.72	20.65	20.79	5475	5311	2.98
					Average %D	8.17

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/06/2001 Instrument ID: Varian 3400

Data File: V4987.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.80	5.73	5.87	6098	5482	10.10
Aroclor-1016 {2}	6.89	6.82	6.96	4840	4278	11.63
Aroclor-1016 {3}	7.33	7.26	7.40	8302	7427	10.53
Aroclor-1016 {4}	9.20	9.13	9.27	4994	4500	9.90
Aroclor-1016 {5}	9.68	9.61	9.75	7018	6334	9.75
Aroclor-1260	15.33	15.26	15.40	25393	24130	4.97
Aroclor-1260 {2}	15.89	15.82	15.96	22511	21206	5.80
Aroclor-1260 {3}	17.53	17.46	17.60	52637	49530	5.90
Aroclor-1260 {4}	18.46	18.39	18.53	23504	22936	2.42
Aroclor-1260 {5}	20.50	20.43	20.57	13737	13672	0.47
					Average %D	7.15

Data File: V4987.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.36	6.29	6.43	6852	5899	13.91
Aroclor-1016 {2}	7.43	7.36	7.50	12511	10924	12.69
Aroclor-1016 {3}	8.79	8.72	8.86	29762	25283	15.05
Aroclor-1016 {4}	9.18	9.11	9.25	10200	8952	12.24
Aroclor-1016 {5}	9.50	9.43	9.57	10419	9108	12.58
Aroclor-1260	15.19	15.12	15.26	20621	18694	9.35
Aroclor-1260 {2}	16.45	16.38	16.52	16603	15298	7.86
Aroclor-1260 {3}	17.46	17.39	17.53	18756	17410	7.17
Aroclor-1260 {4}	18.43	18.36	18.50	46399	42722	7.92
Aroclor-1260 {5}	20.72	20.65	20.79	5475	5382	1.69
					Average %D	10.05

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/06/2001 Instrument ID: Varian 3400

Data File: V4990.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.80	5.73	5.87	6098	5644	7.44
Aroclor-1016 {2}	6.89	6.82	6.96	4840	4477	7.50
Aroclor-1016 {3}	7.33	7.26	7.40	8302	7643	7.93
Aroclor-1016 {4}	9.20	9.13	9.27	4994	4672	6.46
Aroclor-1016 {5}	9.68	9.61	9.75	7018	6540	6.80
Aroclor-1260	15.32	15.25	15.39	25393	23945	5.70
Aroclor-1260 {2}	15.89	15.82	15.96	22511	21238	5.66
Aroclor-1260 {3}	17.53	17.46	17.60	52637	48768	7.35
Aroclor-1260 {4}	18.46	18.39	18.53	23504	22335	4.97
Aroclor-1260 {5}	20.50	20.43	20.57	13737	13412	2.36
					Average %D	6.22

Data File: V4990.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.36	6.29	6.43	6852	6093	11.08
Aroclor-1016 {2}	7.43	7.36	7.50	12511	11131	11.03
Aroclor-1016 {3}	8.79	8.72	8.86	29762	25914	12.93
Aroclor-1016 {4}	9.17	9.10	9.24	10200	9185	9.96
Aroclor-1016 {5}	9.50	9.43	9.57	10419	9333	10.42
Aroclor-1260	15.19	15.12	15.26	20621	18669	9.47
Aroclor-1260 {2}	16.45	16.38	16.52	16603	15270	8.03
Aroclor-1260 {3}	17.46	17.39	17.53	18756	17110	8.77
Aroclor-1260 {4}	18.42	18.35	18.49	46399	41217	11.17
Aroclor-1260 {5}	20.71	20.64	20.78	5475	5178	5.41
					Average %D	9.83

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/06/2001 Instrument ID: Varian 3400

Data File: V4995.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.80	5.73	5.87	6098	5900	3.24
Aroclor-1016 {2}	6.89	6.82	6.96	4840	4718	2.52
Aroclor-1016 {3}	7.33	7.26	7.40	8302	7887	5.00
Aroclor-1016 {4}	9.21	9.14	9.28	4994	4822	3.46
Aroclor-1016 {5}	9.68	9.61	9.75	7018	6793	3.21
Aroclor-1260	15.33	15.26	15.40	25393	25958	2.23
Aroclor-1260 {2}	15.90	15.83	15.97	22511	21992	2.31
Aroclor-1260 {3}	17.54	17.47	17.61	52637	50988	3.13
Aroclor-1260 {4}	18.47	18.40	18.54	23504	23312	0.82
Aroclor-1260 {5}	20.51	20.44	20.58	13737	13858	0.89
					Average %D	2.68

Data File: V4995.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.37	6.30	6.44	6852	6645	3.02
Aroclor-1016 {2}	7.43	7.36	7.50	12511	12049	3.69
Aroclor-1016 {3}	8.79	8.72	8.86	29762	28031	5.82
Aroclor-1016 {4}	9.18	9.11	9.25	10200	9920	2.75
Aroclor-1016 {5}	9.50	9.43	9.57	10419	10125	2.82
Aroclor-1260	15.19	15.12	15.26	20621	20108	2.49
Aroclor-1260 {2}	16.46	16.39	16.53	16603	16425	1.08
Aroclor-1260 {3}	17.47	17.40	17.54	18756	18441	1.68
Aroclor-1260 {4}	18.43	18.36	18.50	46399	44168	4.81
Aroclor-1260 {5}	20.72	20.65	20.79	5475	5613	2.53
					Average %D	3.07

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/09/2001 Instrument ID: Varian 3400

Data File: V5006.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	5.81	5.74	5.88	6098	6796	11.45
Aroclor-1016 {2}	6.91	6.84	6.98	4840	5382	11.19
Aroclor-1016 {3}	7.35	7.28	7.42	8302	9226	11.14
Aroclor-1016 {4}	9.22	9.15	9.29	4994	5579	11.71
Aroclor-1016 {5}	9.70	9.63	9.77	7018	7862	12.03
Aroclor-1260	15.35	15.28	15.42	25393	28292	11.42
Aroclor-1260 {2}	15.91	15.84	15.98	22511	25312	12.44
Aroclor-1260 {3}	17.56	17.49	17.63	52637	57262	8.79
Aroclor-1260 {4}	18.48	18.41	18.55	23504	26218	11.55
Aroclor-1260 {5}	20.53	20.46	20.60	13737	15556	13.25
					Average %D	11.50

Data File: V5006.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	6.37	6.30	6.44	6852	6942	1.33
Aroclor-1016 {2}	7.44	7.37	7.51	12511	12682	1.37
Aroclor-1016 {3}	8.81	8.74	8.88	29762	29659	0.35
Aroclor-1016 {4}	9.19	9.12	9.26	10200	10482	2.76
Aroclor-1016 {5}	9.51	9.44	9.58	10419	10651	2.23
Aroclor-1260	15.21	15.14	15.28	20621	21040	2.03
Aroclor-1260 {2}	16.47	16.40	16.54	16603	17085	2.90
Aroclor-1260 {3}	17.48	17.41	17.55	18756	19296	2.88
Aroclor-1260 {4}	18.45	18.38	18.52	46399	46523	0.27
Aroclor-1260 {5}	20.74	20.67	20.81	5475	5796	5.87
					Average %D	2.20

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/10/2001 **Instrument ID:** Varian 3400

Data File: V5028.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.81	5.74	5.88	6098	6008	1.47
Aroclor-1016 {2}	6.90	6.83	6.97	4840	4810	0.64
Aroclor-1016 {3}	7.34	7.27	7.41	8302	8201	1.21
Aroclor-1016 {4}	9.22	9.15	9.29	4994	4922	1.45
Aroclor-1016 {5}	9.69	9.62	9.76	7018	6911	1.51
Aroclor-1260	15.35	15.28	15.42	25393	25324	0.27
Aroclor-1260 {2}	15.91	15.84	15.98	22511	22580	0.31
Aroclor-1260 {3}	17.55	17.48	17.62	52637	51263	2.61
Aroclor-1260 {4}	18.48	18.41	18.55	23504	23409	0.41
Aroclor-1260 {5}	20.52	20.45	20.59	13737	13941	1.49
					Average %D	1.14

Data File: V5028.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.37	6.30	6.44	6852	6373	6.98
Aroclor-1016 {2}	7.44	7.37	7.51	12511	11609	7.21
Aroclor-1016 {3}	8.80	8.73	8.87	29762	26988	9.32
Aroclor-1016 {4}	9.19	9.12	9.26	10200	9561	6.26
Aroclor-1016 {5}	9.51	9.44	9.58	10419	9697	6.93
Aroclor-1260	15.20	15.13	15.27	20621	19104	7.36
Aroclor-1260 {2}	16.46	16.39	16.53	16603	15497	6.67
Aroclor-1260 {3}	17.47	17.40	17.54	18756	17545	6.46
Aroclor-1260 {4}	18.44	18.37	18.51	46399	42329	8.77
Aroclor-1260 {5}	20.73	20.66	20.80	5475	5300	3.19
					Average %D	6.91

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/10/2001 Instrument ID: Varian 3400

Data File: V5033.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.81	5.74	5.88	6098	6331	3.82
Aroclor-1016 {2}	6.90	6.83	6.97	4840	5024	3.79
Aroclor-1016 {3}	7.34	7.27	7.41	8302	8665	4.38
Aroclor-1016 {4}	9.22	9.15	9.29	4994	5215	4.41
Aroclor-1016 {5}	9.69	9.62	9.76	7018	7337	4.56
Aroclor-1260	15.34	15.27	15.41	25393	27484	8.24
Aroclor-1260 {2}	15.91	15.84	15.98	22511	24377	8.29
Aroclor-1260 {3}	17.55	17.48	17.62	52637	56012	6.41
Aroclor-1260 {4}	18.48	18.41	18.55	23504	25778	9.67
Aroclor-1260 {5}	20.52	20.45	20.59	13737	15198	10.64
					Average %D	6.42

Data File: V5033.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.37	6.30	6.44	6852	6795	0.82
Aroclor-1016 {2}	7.44	7.37	7.51	12511	12402	0.87
Aroclor-1016 {3}	8.80	8.73	8.87	29762	28854	3.05
Aroclor-1016 {4}	9.18	9.11	9.25	10200	10235	0.34
Aroclor-1016 {5}	9.51	9.44	9.58	10419	10404	0.14
Aroclor-1260	15.20	15.13	15.27	20621	20779	0.76
Aroclor-1260 {2}	16.46	16.39	16.53	16603	16882	1.68
Aroclor-1260 {3}	17.47	17.40	17.54	18756	19227	2.51
Aroclor-1260 {4}	18.44	18.37	18.51	46399	46534	0.29
Aroclor-1260 {5}	20.72	20.65	20.79	5475	5881	7.42
					Average %D	1.79

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/12/2001 **Instrument ID:** Varian 3400

Data File: V5099.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.80	5.73	5.87	6098	5376	11.83
Aroclor-1016 {2}	6.89	6.82	6.96	4840	4215	12.92
Aroclor-1016 {3}	7.33	7.26	7.40	8302	7312	11.92
Aroclor-1016 {4}	9.20	9.13	9.27	4994	4447	10.96
Aroclor-1016 {5}	9.68	9.61	9.75	7018	6264	10.74
Aroclor-1260	15.33	15.26	15.40	25393	23408	7.82
Aroclor-1260 {2}	15.89	15.82	15.96	22511	20932	7.02
Aroclor-1260 {3}	17.53	17.46	17.60	52637	47447	9.86
Aroclor-1260 {4}	18.46	18.39	18.53	23504	21697	7.69
Aroclor-1260 {5}	20.50	20.43	20.57	13737	12841	6.52
					Average %D	9.73

Data File: V5099.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.38	6.31	6.45	6852	6607	3.57
Aroclor-1016 {2}	7.45	7.38	7.52	12511	12043	3.74
Aroclor-1016 {3}	8.80	8.73	8.87	29762	28276	4.99
Aroclor-1016 {4}	9.19	9.12	9.26	10200	10035	1.63
Aroclor-1016 {5}	9.51	9.44	9.58	10419	10217	1.94
Aroclor-1260	15.18	15.11	15.25	20621	20345	1.34
Aroclor-1260 {2}	16.44	16.37	16.51	16603	16404	1.20
Aroclor-1260 {3}	17.45	17.38	17.52	18756	18673	0.44
Aroclor-1260 {4}	18.42	18.35	18.49	46399	45408	2.13
Aroclor-1260 {5}	20.70	20.63	20.77	5475	5664	3.45
					Average %D	2.44

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/12/2001 Instrument ID: Varian 3400

Data File: V5110.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	5.81	5.74	5.88	6098	6072	0.42
Aroclor-1016 {2}	6.90	6.83	6.97	4840	4782	1.21
Aroclor-1016 {3}	7.34	7.27	7.41	8302	8193	1.31
Aroclor-1016 {4}	9.21	9.14	9.28	4994	5001	0.13
Aroclor-1016 {5}	9.69	9.62	9.76	7018	6982	0.50
Aroclor-1260	15.34	15.27	15.41	25393	25500	0.42
Aroclor-1260 {2}	15.90	15.83	15.97	22511	22680	0.75
Aroclor-1260 {3}	17.55	17.48	17.62	52637	51607	1.96
Aroclor-1260 {4}	18.47	18.40	18.54	23504	23586	0.35
Aroclor-1260 {5}	20.52	20.45	20.59	13737	14061	2.36
					Average %D	0.94

Data File: V5110.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	6.36	6.29	6.43	6852	7333	7.02
Aroclor-1016 {2}	7.43	7.36	7.50	12511	13257	5.96
Aroclor-1016 {3}	8.79	8.72	8.86	29762	31210	4.86
Aroclor-1016 {4}	9.17	9.10	9.24	10200	11057	8.40
Aroclor-1016 {5}	9.49	9.42	9.56	10419	11210	7.59
Aroclor-1260	15.19	15.12	15.26	20621	21917	6.28
Aroclor-1260 {2}	16.45	16.38	16.52	16603	17607	6.05
Aroclor-1260 {3}	17.46	17.39	17.53	18756	20117	7.26
Aroclor-1260 {4}	18.42	18.35	18.49	46399	48869	5.32
Aroclor-1260 {5}	20.71	20.64	20.78	5475	6201	13.27
					Average %D	7.20

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/05/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(2070..2117)	0405-BLK1	SOIL	92		80		96		84	
WC-COMP	2111-001	SOIL	90		82		98		94	
WC-7	2070-008	SOIL	86		86		92		86	
BORING	2102-001	SOIL	78		80		82		90	
STR-1	2117-001	SOIL	94		88		98		98	
STR-2	2117-002	SOIL	90		78		94		86	
STR-3	2117-003	SOIL	94		84		98		94	
STR-4	2117-004	SOIL	90		82		94		90	
STR-5	2117-005	SOIL	94		94		98		104	
STR-6	2117-006	SOIL	96		84		98		92	
STR-7	2117-007	SOIL	94		84		98		92	
PCB	PBS0405-MS1	SOIL	97		73		95		75	

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: 04/05/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
MW-4	2093-001	AQUEOUS	94		91		98		95	
S-55	2092-011	SOIL	96		128		106		154	

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: 04/09/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(2093..2158)	0409-BLK1	SOIL	107		88		99		83	
S-46	2092-002	SOIL	98		140		96		140	
S-47	2092-003	SOIL	100		108		98		110	
S-48	2092-004	SOIL	106		106		100		108	
S-49	2092-005	SOIL	98		106		94		106	
DS-1_1-1.5'	2155-012	SOIL	94		104		92		106	
S-6	2158-006	SOIL	96		94		94		96	
S-7	2158-007	SOIL	94		100		92		102	
MT._HOPE_WC	2147-001	SOIL	100		98		102		102	
BA-3_0-1	2154-015	SOIL	128		116		122		114	
BA-3_2-2.5	2154-016	SOIL	120		106		112		108	
BA-3_3-5	2154-017	SOIL	108		82		96		88	
BA-4_0-0.5	2154-018	SOIL	104		130		106		140	
BA-4_2-2.5	2154-019	SOIL	116		148		112		154	
BA-4_3-5	2154-020	SOIL	134		98		108		114	
WT-1_0-0.5'	2155-014	SOIL	94		100		94		102	
WT-2_1.5-2'	2155-015	SOIL	98		92		98		96	
SUMP-1_3-3.5'	2155-016	SOIL	98		100		96		104	
SD-1	2158-008	SOIL	106		98		106		100	
T21	1861-013	SOIL	102		86		102		90	
PCB	2158-006-MS1	SOIL	105		94		99		92	
PCB	2158-006-MSD1	SOIL	104		88		99		87	
PCB	PBS0409-MS1	SOIL	106		73		101		72	

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: 04/12/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(1937..2260)	0411-BLK1	SOIL	85		71		98		81	
COMP_1-3	1937-004	SOIL	90		110		106		134	
STOCKPILE	2227-001	SOIL	92		82		110		102	
WASTE_CLASS	2238-001	SOIL	80		78		122		96	
S-51	2092-007	SOIL	90		112		96		98	
WC-0B-COMPOSIT	2260-006	SOIL	82		76		96		92	
PCB	2238-001-MS1	SOIL	68		85		76		98	
PCB	2238-001-MSD1	SOIL	67		81		75		94	
PCB	PBS0411-MS1	SOIL	85		72		98		83	

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: 2061-006-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	12.2	122	77 - 168
Aroclor-1260	10.0	0.0	11.9	119	81 - 177

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	11.6	116	5	18	77 - 168
Aroclor-1260	0.0	11.7	117	2	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: PBS0405-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	11.8	118	77 - 168
Aroclor-1260	10.0	0.0	10.0	100	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

SOIL PCB MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2158-006-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	12.8	128	58 - 140
Aroclor-1260	10.0	0.0	11.9	119	56 - 161

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	12.2	122	5	14	58 - 140
Aroclor-1260	0.0	10.8	108	10	18	56 - 161

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: PBS0409-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	12.5	125	58 - 140
Aroclor-1260	10.0	0.0	10.4	104	56 - 161

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

SOIL PCB MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2238-001-MSD1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	5.0	0.0	5.9	118	58 - 140
Aroclor-1260	5.0	0.0	5.3	106	56 - 161

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	6.1	122	3	14	58 - 140
Aroclor-1260	0.0	5.4	108	2	18	56 - 161

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: PBS0411-MS1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	5.0	0.0	5.5	110	58 - 140
Aroclor-1260	5.0	0.0	5.0	100	56 - 161

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-V **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 4.97 DCB 1 22.62 TCMX 2 4.84 DCB 2 22.81

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
(2070..2117)	0405-BLK1	04/05/2001	23:33	4.97		22.62		4.84		22.81	
WC-COMP	2111-001	04/06/2001	00:35	4.96		22.61		4.84		22.81	
WC-7	2070-008	04/06/2001	01:05	4.97		22.63		4.85		22.82	
BORING	2102-001	04/06/2001	01:36	4.97		22.63		4.85		22.82	
STR-1	2117-001	04/06/2001	02:38	4.97		22.63		4.85		22.82	
STR-2	2117-002	04/06/2001	03:08	4.97		22.63		4.84		22.82	
STR-3	2117-003	04/06/2001	03:39	4.96		22.62		4.84		22.81	
STR-4	2117-004	04/06/2001	04:10	4.97		22.63		4.85		22.82	
STR-5	2117-005	04/06/2001	04:40	4.97		22.62		4.85		22.82	
STR-6	2117-006	04/06/2001	05:11	4.97		22.63		4.85		22.82	
STR-7	2117-007	04/06/2001	05:42	4.96		22.61		4.84		22.81	
PCB	PBS0405-MS1	04/06/2001	06:13	4.97		22.63		4.85		22.82	

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-V **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 4.97 DCB 1 22.62 TCMX 2 4.84 DCB 2 22.81

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
MW-4	2093-001	04/06/2001	09:48	4.97		22.62		4.84		22.82	
S-55	2092-011	04/06/2001	10:19	4.97		22.64		4.85		22.83	

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-V **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 4.98 DCB 1 22.65 TCMX 2 4.86 DCB 2 22.84

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
(2093..2158)	0409-BLK1	04/09/2001	16:13	4.98		22.65		4.86		22.84	
S-46	2092-002	04/09/2001	16:44	4.98		22.65		4.86		22.84	
S-47	2092-003	04/09/2001	17:15	4.98		22.66		4.86		22.85	
S-48	2092-004	04/09/2001	17:46	4.98		22.65		4.86		22.84	
S-49	2092-005	04/09/2001	18:16	4.98		22.65		4.86		22.84	
DS-1_1-1.5'	2155-012	04/09/2001	18:47	4.98		22.65		4.86		22.84	
S-6	2158-006	04/09/2001	19:18	4.98		22.65		4.86		22.84	
S-7	2158-007	04/09/2001	19:49	4.98		22.64		4.86		22.83	
MT._HOPE_WC	2147-001	04/09/2001	20:20	4.98		22.66		4.86		22.84	
BA-3_0-1	2154-015	04/09/2001	20:50	4.98		22.64		4.85		22.83	
BA-3_2-2.5	2154-016	04/09/2001	21:21	4.98		22.65		4.86		22.84	
BA-3_3-5	2154-017	04/09/2001	21:52	4.98		22.65		4.86		22.84	
BA-4_0-0.5	2154-018	04/09/2001	22:23	4.98		22.65		4.86		22.84	
BA-4_2-2.5	2154-019	04/09/2001	22:53	4.98		22.65		4.86		22.84	
BA-4_3-5	2154-020	04/09/2001	23:24	4.98		22.64		4.85		22.83	
WT-1_0-0.5'	2155-014	04/10/2001	00:26	4.98		22.64		4.85		22.83	
WT-2_1.5-2'	2155-015	04/10/2001	00:56	4.98		22.65		4.86		22.84	
SUMP-1_3-3.5'	2155-016	04/10/2001	01:27	4.98		22.64		4.85		22.82	
SD-1	2158-008	04/10/2001	01:58	4.98		22.65		4.86		22.84	
T21	1861-013	04/10/2001	02:29	4.98		22.65		4.85		22.83	
PCB	2158-006-MS1	04/10/2001	04:01	4.98		22.65		4.85		22.83	
PCB	2158-006-MSD1	04/10/2001	04:32	4.98		22.65		4.86		22.83	
PCB	PBS0409-MS1	04/10/2001	05:02	4.97		22.64		4.85		22.82	

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-V **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 4.97 DCB 1 22.64 TCMX 2 4.85 DCB 2 22.81

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
(1937..2260)	0411-BLK1	04/12/2001	10:01	4.97		22.64		4.85		22.81	
COMP_1-3	1937-004	04/12/2001	10:32	4.97		22.64		4.85		22.81	
STOCKPILE	2227-001	04/12/2001	11:02	4.97		22.64		4.85		22.81	
WASTE_CLASS	2238-001	04/12/2001	11:33	4.97		22.63		4.84		22.80	
S-51	2092-007	04/12/2001	12:04	4.97		22.63		4.84		22.80	
WC-0B-COMPOSIT	2260-006	04/12/2001	12:35	4.97		22.63		4.84		22.81	
PCB	2238-001-MS1	04/12/2001	13:06	4.97		22.63		4.84		22.81	
PCB	2238-001-MSD1	04/12/2001	13:37	4.97		22.63		4.85		22.81	
PCB	PBS0411-MS1	04/12/2001	14:08	4.98		22.64		4.85		22.82	

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

2462

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5008.D\ADC1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5008.D\ADC1B.CH
Acq On : 9 Apr 2001 16:44 Operator:
Sample : S-46,2092-002,S,30.5g,17.6,04/09/01 Inst : V_3400
Misc : ENVTACT/ORBIS_-_NEWARK,04/03/01,04/04/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 07:34:22 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.98	4.86	4252284	4360590	4.912	4.752
Spiked Amount 100.000			Recovery =		4.91%	4.75%
2) S DCB	22.65	22.84	6141136	5923880	6.981	6.981
Spiked Amount 100.000			Recovery =		6.98%	6.98%
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
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.
V5008.D VPCB0329.M Wed Apr 11 07:46:54 2001 V3400 Page 1

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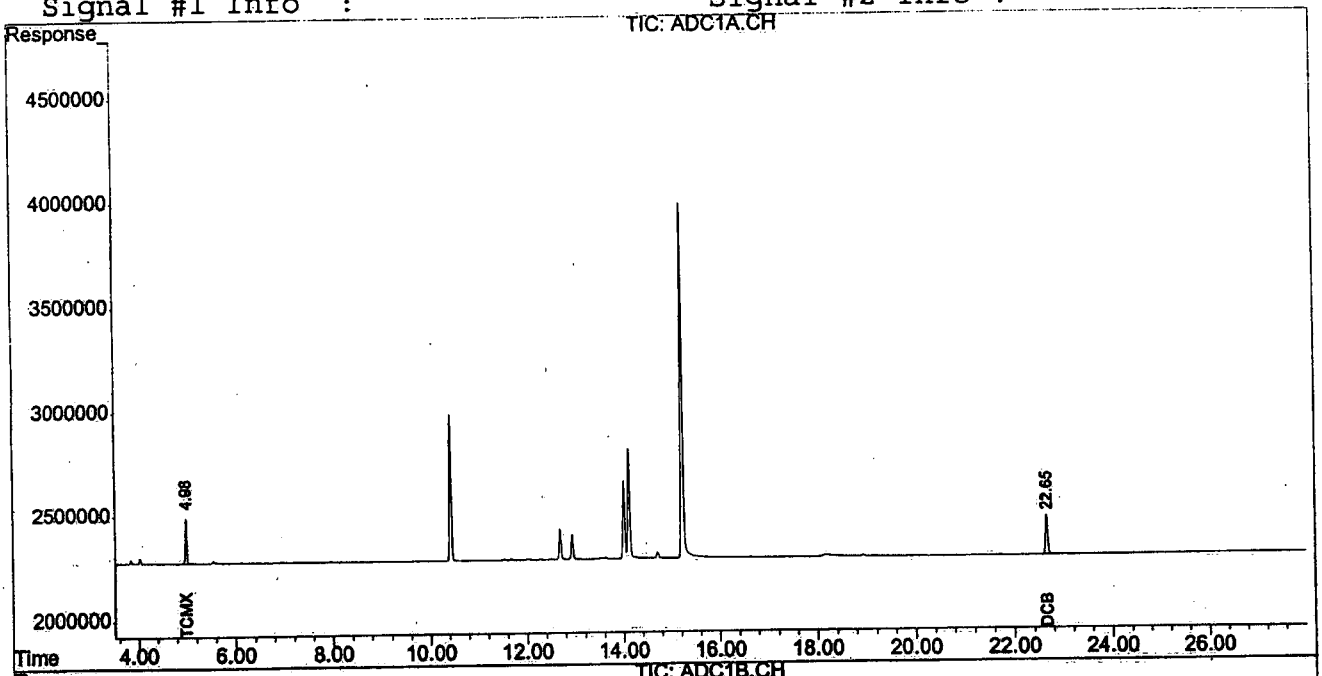
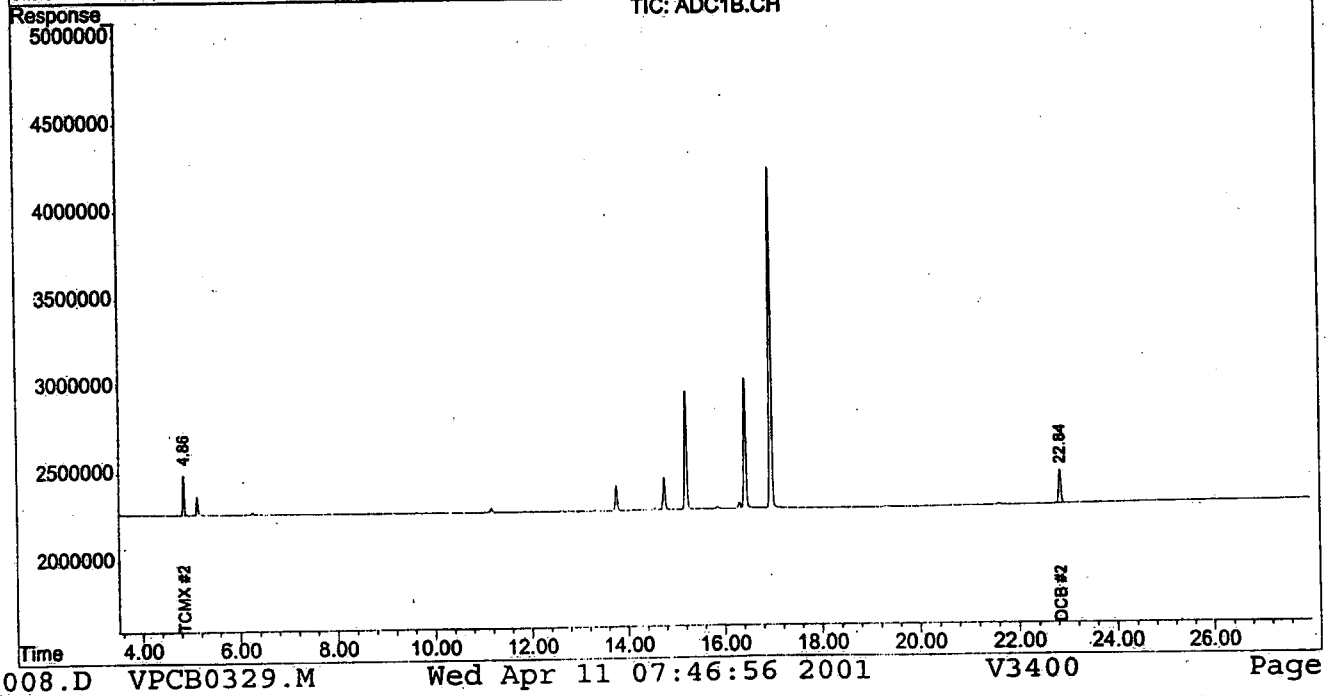
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5008.D\ADC1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5008.D\ADC1B.CH
Acq On : 9 Apr 2001 16:44 Operator:
Sample : S-46,2092-002,S,30.5g,17.6,04/09/01 Inst : V_3400
Misc : ENVTACT/ORBIS_-_NEWARK,04/03/01,04/04/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 7:45 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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2464

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5009.D\ADC1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5009.D\ADC1B.CH
Acq On : 9 Apr 2001 17:15 Operator:
Sample : S-47,2092-003,S,30.9g,15.8,04/09/01 Inst : V_3400
Misc : ENVTACT/ORBIS_-_NEWARK,04/03/01,04/04/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 07:34:27 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.98	4.86	4327599	4503392	4.999	4.908
Spiked Amount 100.000			Recovery =		5.00%	4.91%
2) S DCB	22.66	22.85	4710244	4675296	5.354	5.509
Spiked Amount 100.000			Recovery =		5.35%	5.51%
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.
V5009.D VPCB0329.M Wed Apr 11 07:47:01 2001 V3400 Page 1

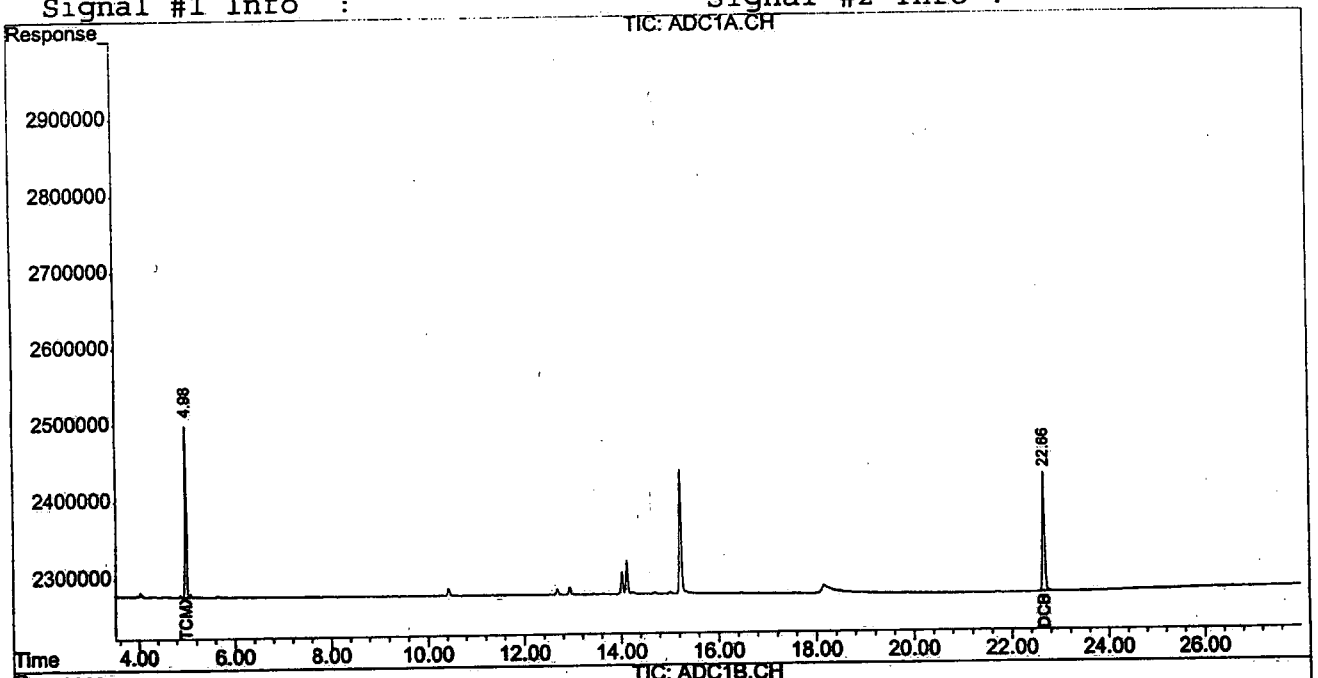
2465

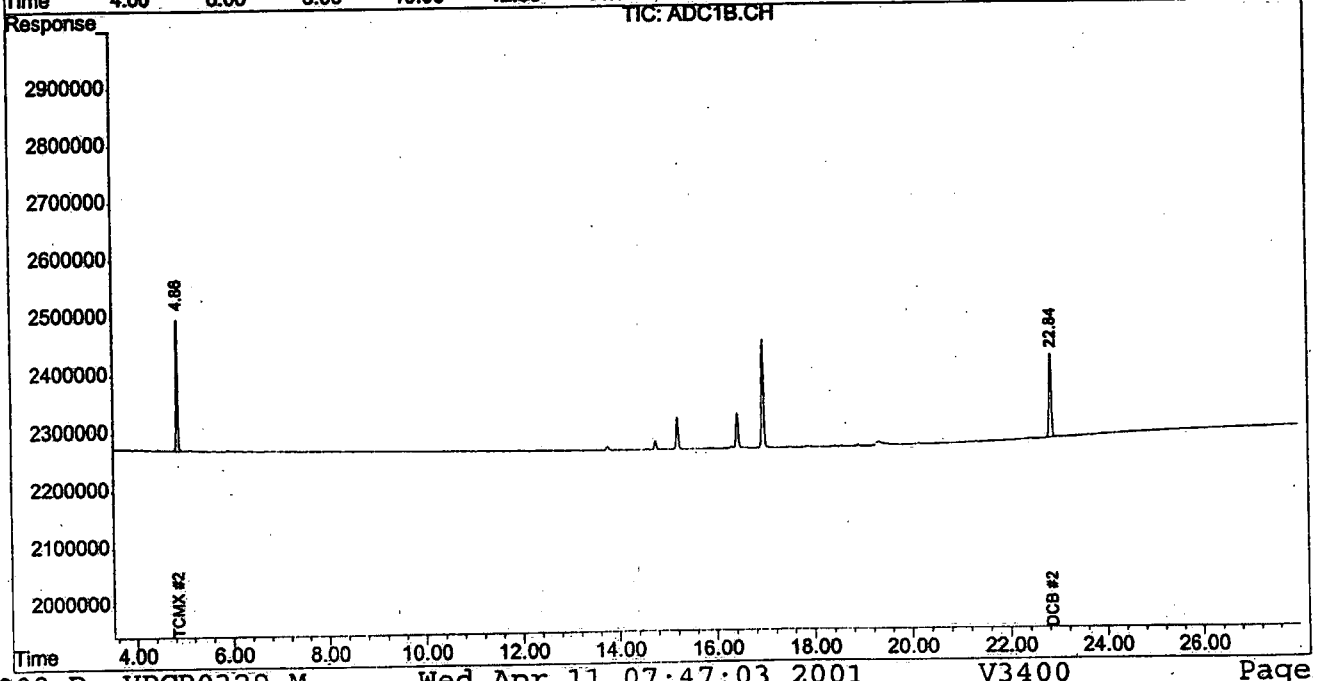
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5009.D\ADC1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5009.D\ADC1B.CH
Acq On : 9 Apr 2001 17:15 Operator:
Sample : S-47,2092-003,S,30.9g,15.8,04/09/01 Inst : V_3400
Misc : ENVTACT/ORBIS_-_NEWARK,04/03/01,04/04/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 7:45 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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2466

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5010.D\ADC1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5010.D\ADC1B.CH
Acq On : 9 Apr 2001 17:46 Operator:
Sample : S-48,2092-004,S,30.2g,13.0,04/09/01 Inst : V_3400
Misc : ENVTACT/ORBIS_-_NEWARK,04/03/01,04/04/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 07:34:34 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.98	4.86	4562828	4623435	5.271	5.039
Spiked Amount 100.000			Recovery =		5.27%	5.04%
2) S DCB	22.65	22.84	4700664	4561158	5.344	5.375
Spiked Amount 100.000			Recovery =		5.34%	5.38%
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.
V5010.D VPCB0329.M Wed Apr 11 07:47:07 2001 V3400 Page 1

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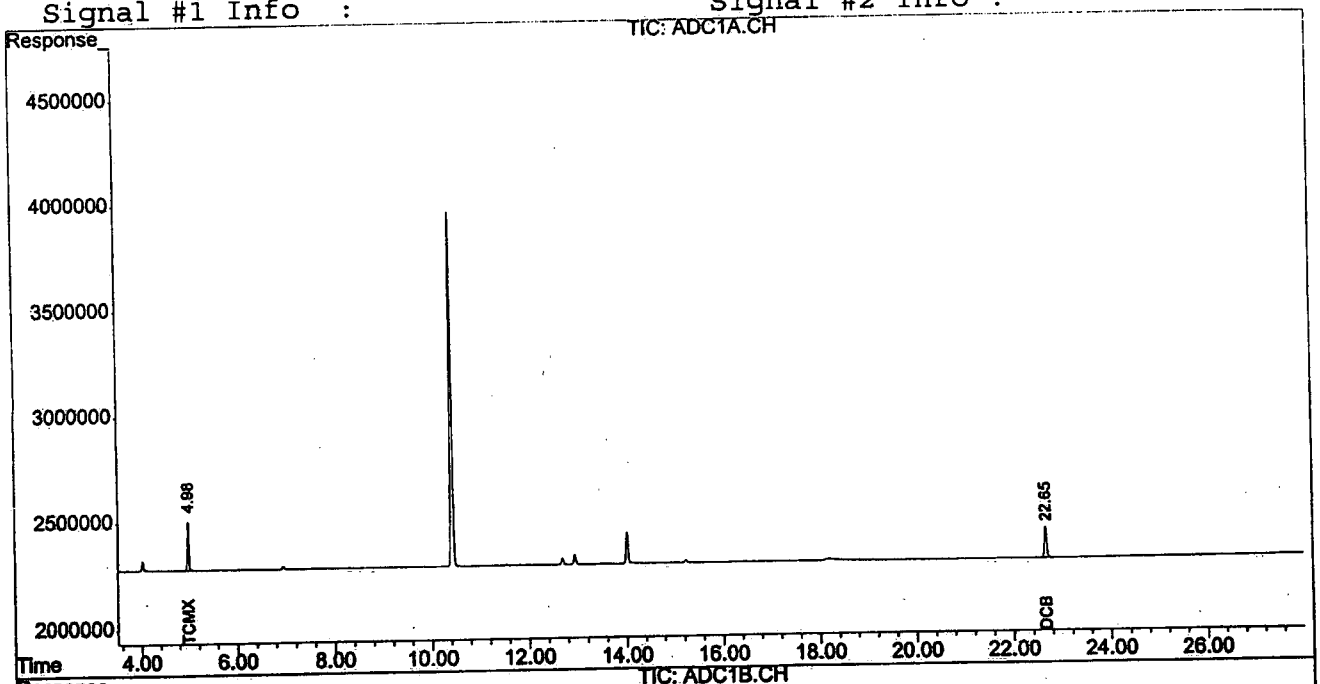
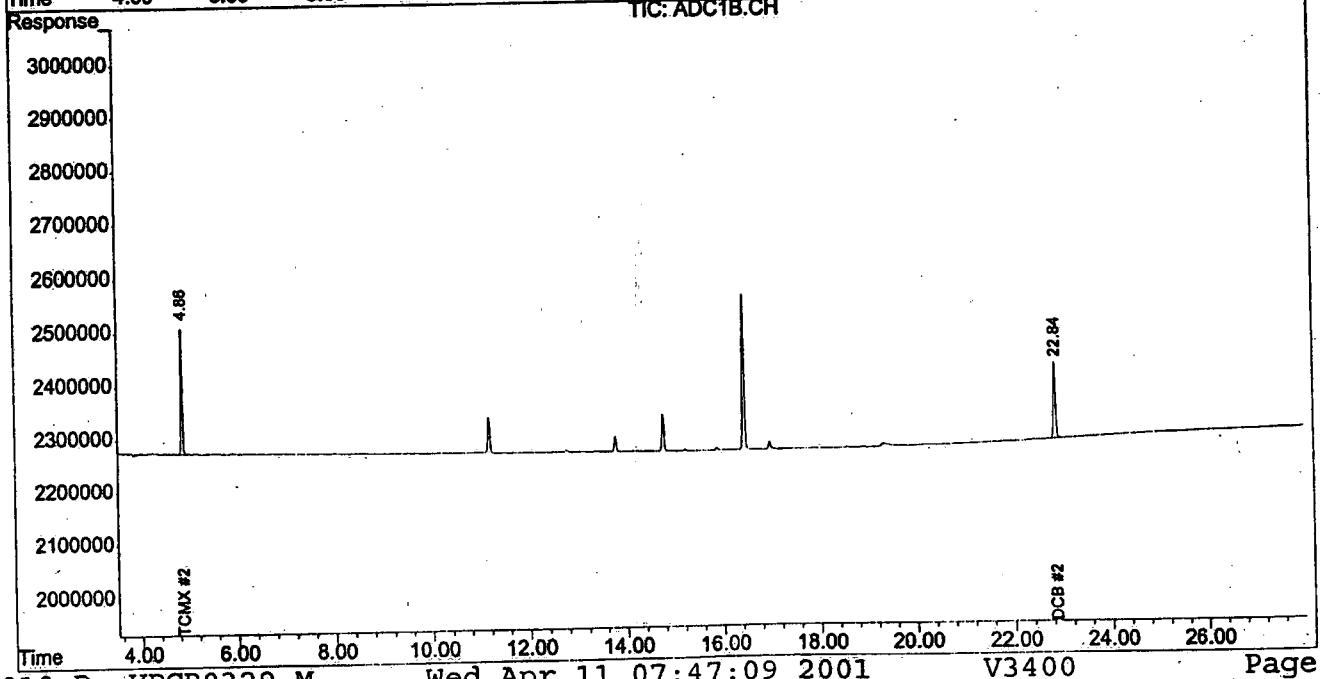
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5010.D\ADC1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5010.D\ADC1B.CH
Acq On : 9 Apr 2001 17:46 Operator:
Sample : S-48,2092-004,S,30.2g,13.0,04/09/01 Inst : V_3400
Misc : ENVTACT/ORBIS_-_NEWARK,04/03/01,04/04/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 7:46 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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2468

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5011.D\ADC1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5011.D\ADC1B.CH
Acq On : 9 Apr 2001 18:16 Operator:
Sample : S-49,2092-005,S,30.8g,15.7,04/09/01 Inst : V_3400
Misc : ENVTACT/ORBIS_-_NEWARK,04/03/01,04/04/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 07:34:40 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.98	4.86	4263286	4357942	4.925	4.749
Spiked Amount 100.000			Recovery =		4.92%	4.75%
2) S DCB	22.65	22.84	4622788	4483803	5.255	5.284
Spiked Amount 100.000			Recovery =		5.25%	5.28%
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.
V5011.D VPCB0329.M Wed Apr 11 07:47:13 2001 V3400 Page 1 of 8

000378

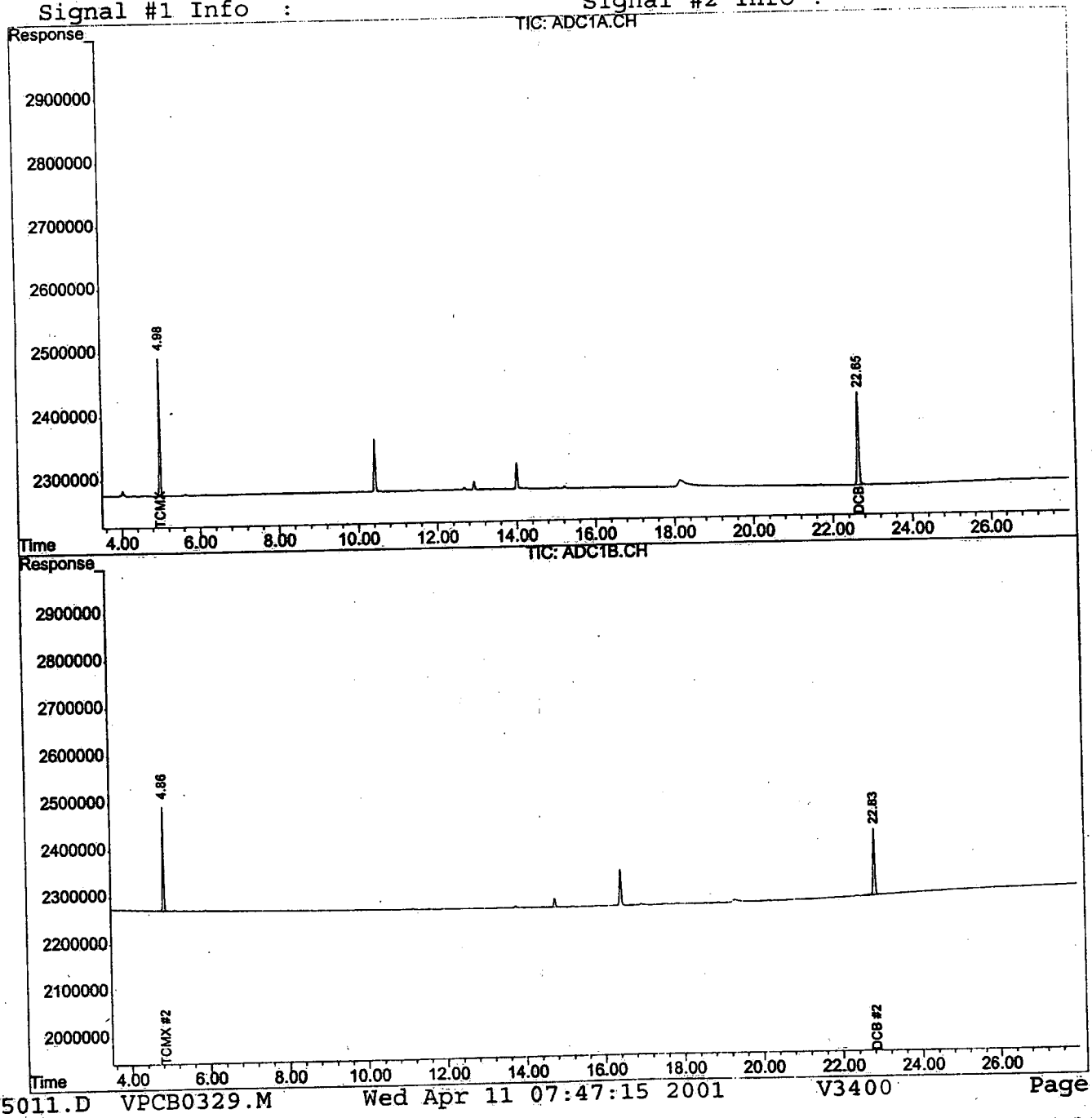
2469

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5011.D\ADC1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5011.D\ADC1B.CH
Acq On : 9 Apr 2001 18:16 Operator:
Sample : S-49,2092-005,S,30.8g,15.7,04/09/01 Inst : V_3400
Misc : ENVTACT/ORBIS_-_NEWARK,04/03/01,04/04/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 7:46 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



000379

2470

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-12-01\V5105.D\ADC1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\04-12-01\V5105.D\ADC1B.CH
Acq On : 12 Apr 2001 12:04 Operator:
Sample : S-51,2092-007,S,30.3g,27.7,04/11/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 12 12:59:25 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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		4.97	4.84	3888067	4374967	4.491	4.768m
Spiked Amount 100.000				Recovery =		4.49%	4.77%
2) S DCB		22.63	22.80	4912644	4142382	5.585	4.881
Spiked Amount 100.000				Recovery =		5.59%	4.88%
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		11.74	12.46	1882328	1319579	127.363	87.751m#
29) L7 Aroclor-1254	{2}	12.57	13.57	1790309	1553540	136.690	118.659m
30) L7 Aroclor-1254	{3}	13.72	14.73	1870389	3010377	90.083m	159.151m#
31) L7 Aroclor-1254	{4}	14.46	15.18	1760815	3886447	127.337	350.902m#
32) L7 Aroclor-1254	{5}	15.33	16.31	2707925	4055396	112.881	172.185m#
Sum Aroclor-1254				10011765	13825339	594.353	888.648
Average Aroclor-1254						118.871	177.730
Sum Aroclor-1260				0	0	N.D.	N.D.
Average Aroclor-1260						0.000	0.000

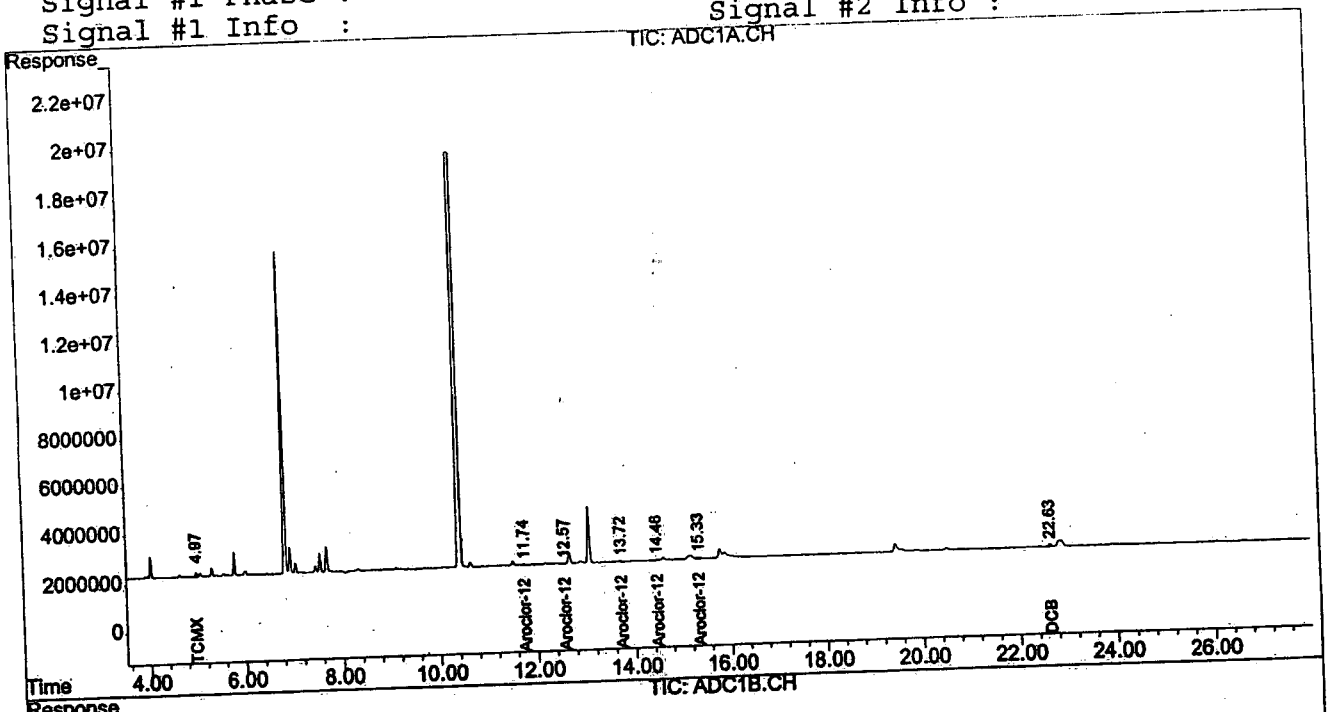
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
V5105.D VPCB0329.M Fri Apr 13 06:19:45 2001 V3400

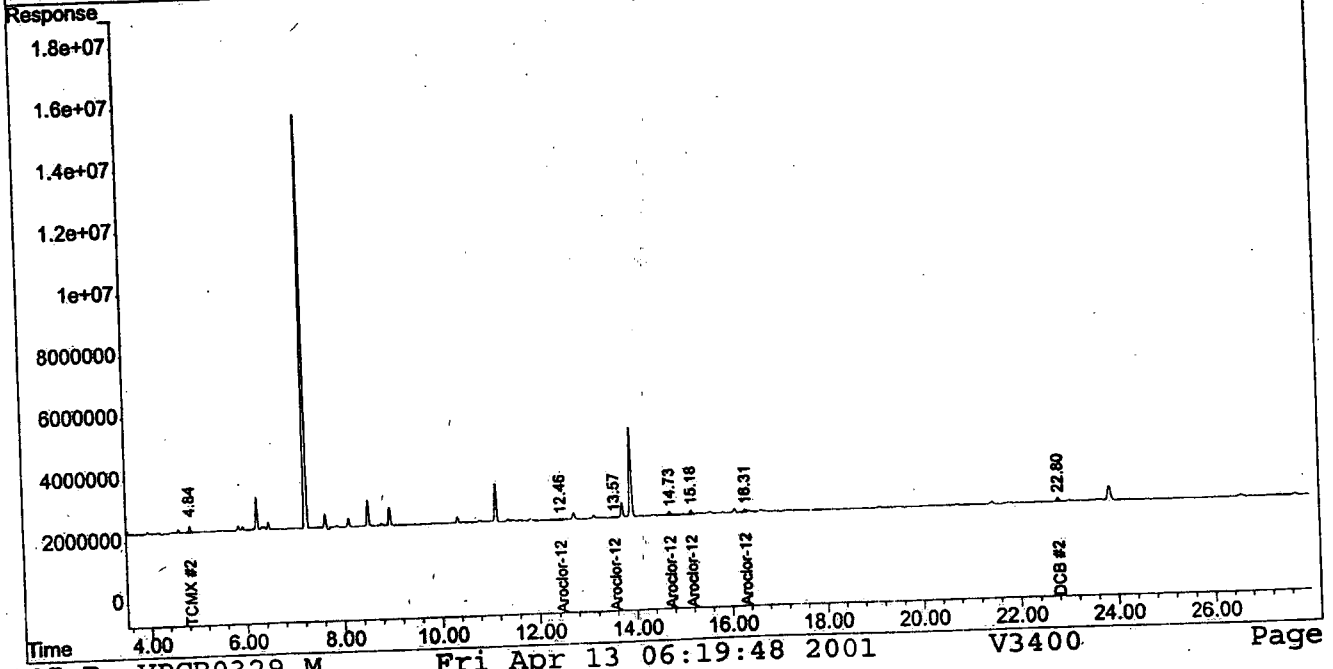
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-12-01\V5105.D\ADC1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\04-12-01\V5105.D\ADC1B.CH
Acq On : 12 Apr 2001 12:04 Operator:
Sample : S-51,2092-007,S,30.3g,27.7,04/11/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 12 13:09 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





000381

2472

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4994.D\ADC1A.CH Vial: 20
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4994.D\ADC1B.CH
Acq On : 6 Apr 2001 10:19 Operator:
Sample : S-55,2092-011,S,30.2g,,04/05/01 Inst : V_3400
Misc : ENVTACT/ORBIS_-_NEWARK,04/03/01,04/04/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 06 09:52:47 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.97	4.85	4173520	4855548	4.821	5.292
Spiked Amount 100.000			Recovery =		4.82%	5.29%
2) S DCB	22.64	22.83	5663334	6550564	6.438	7.719
Spiked Amount 100.000			Recovery =		6.44%	7.72%
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.
V4994.D VPCB0329.M Fri Apr 06 10:14:05 2001 V3400 Page 1

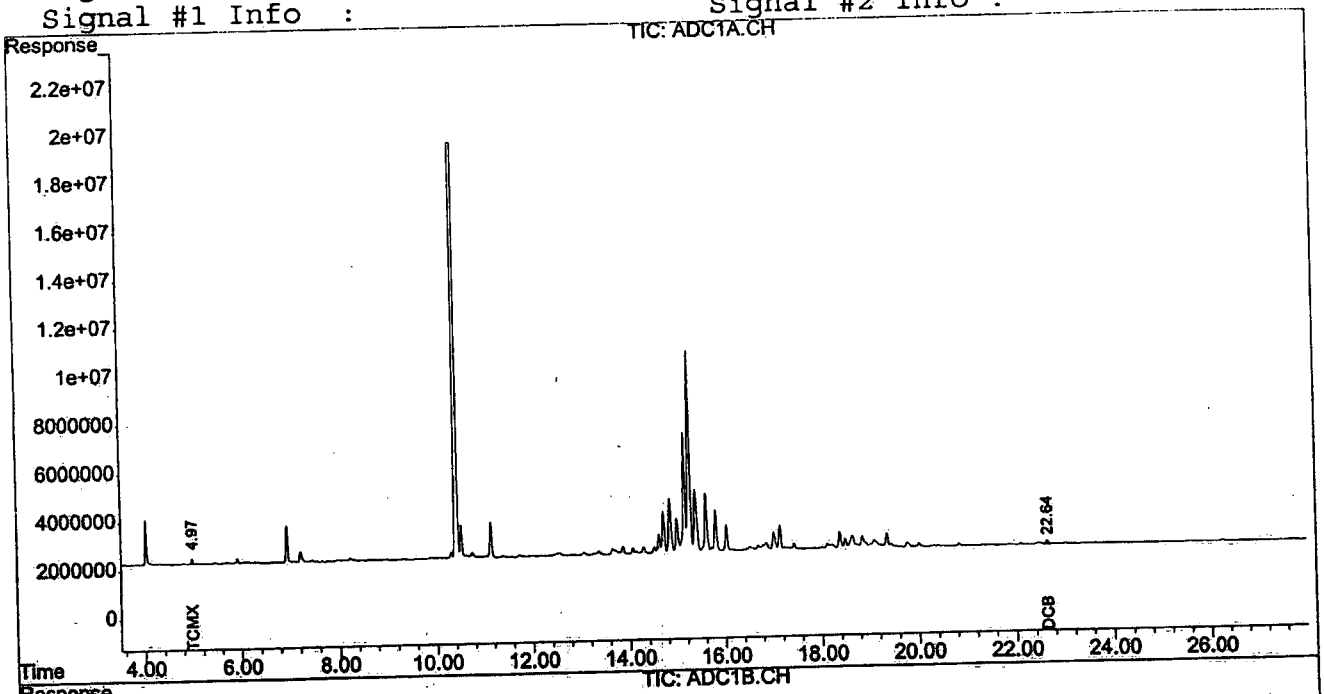
2473

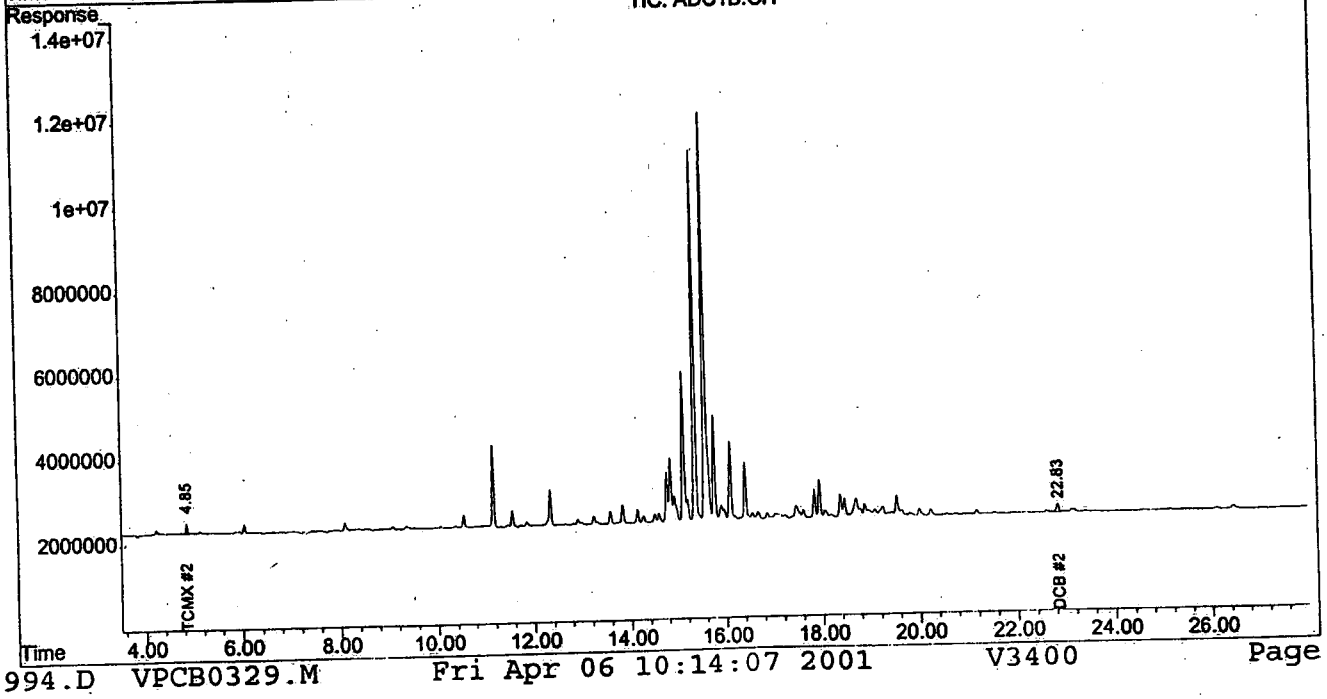
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4994.D\ADC1A.CH Vial: 20
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4994.D\ADC1B.CH
Acq On : 6 Apr 2001 10:19 Operator:
Sample : S-55,2092-011,S,30.2g,,04/05/01 Inst : V_3400
Misc : ENVTACT/ORBIS_-_NEWARK,04/03/01,04/04/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 10:54 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





2474

000383

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4973.D\ADC1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4973.D\ADC1B.CH
Acq On : 5 Apr 2001 23:33 Operator:
Sample : (3070..2117),0405-BLK1,S,30.0g,0,04/05/0 Inst : V_5400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 06 05:59:29 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.97	4.84	79878026	88083690	92.270	95.993
Spiked Amount 100.000			Recovery	=	92.27%	95.99%
2) S DCB	22.62	22.81	70248077	71365773	79.856	84.096
Spiked Amount 100.000			Recovery	=	79.86%	84.10%
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.
V4973.D VPCB0329.M Fri Apr 06 10:12:30 2001 V3400 Page 1

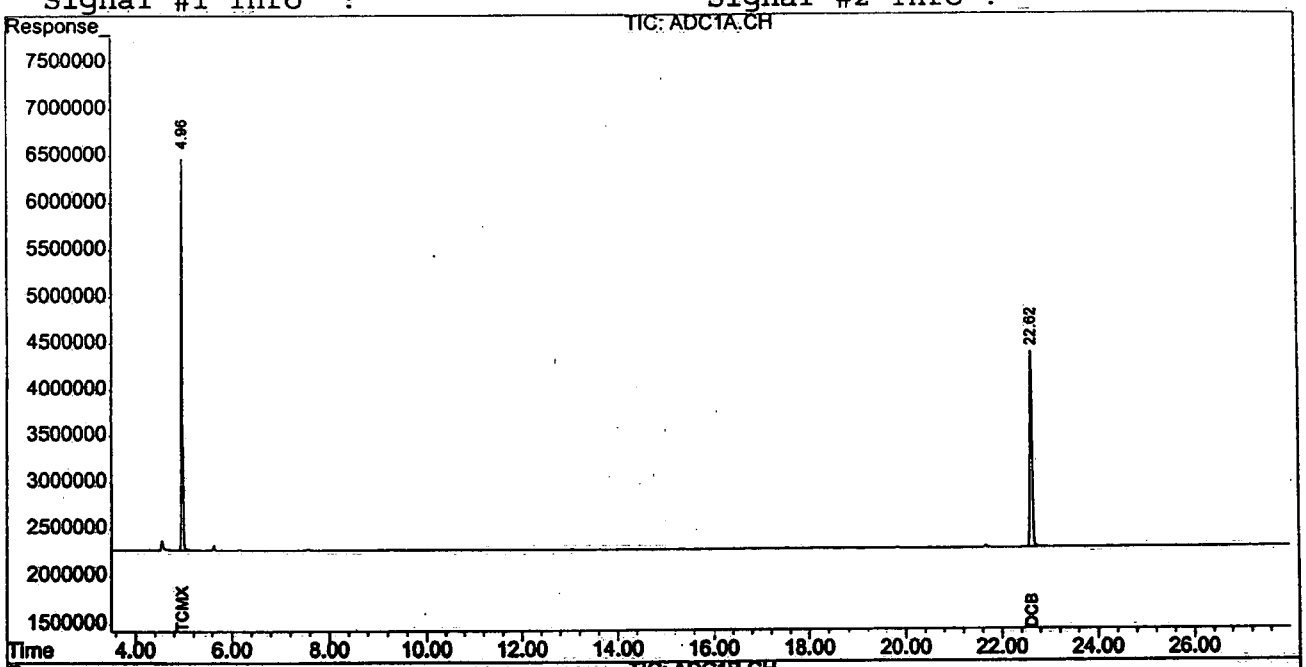
2475

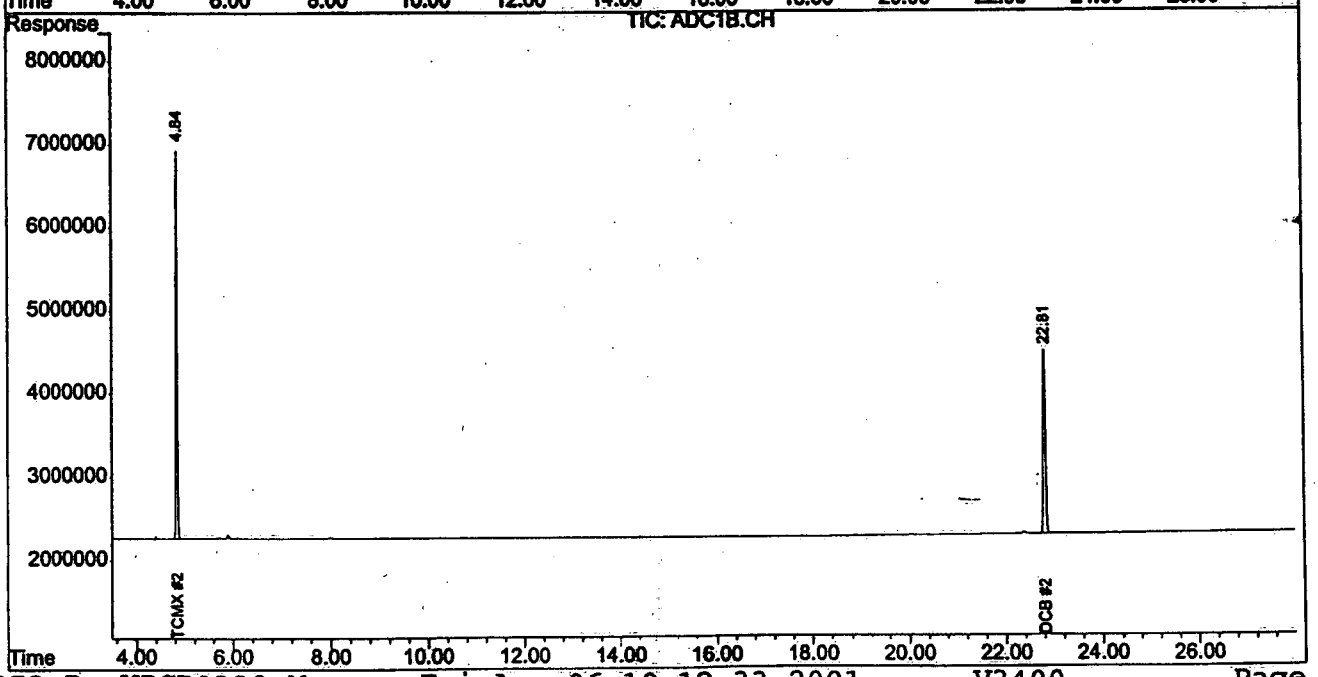
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4973.D\ADC1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4973.D\ADC1B.CH
Acq On : 5 Apr 2001 23:33 Operator:
Sample : (2070..2117),0405-BLK1,S,30.0g,0,04/05/0 Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 7:14 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000385

2476

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5007.D\ADC1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5007.D\ADC1B.CH
Acq On : 9 Apr 2001 16:13 Operator:
Sample : (2093..2158),0409-BLK1,S,30.0g,0,04/09/0 Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 07:34:17 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.98	4.86	92608334	90571107	106.975	98.704
Spiked Amount 100.000			Recovery	=	106.97%	98.70%
2) S DCB	22.65	22.84	77360142	70136932	87.940	82.648
Spiked Amount 100.000			Recovery	=	87.94%	82.65%
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
V5007.D VPCB0329.M Wed Apr 11 07:46:47 2001 V3400 Page 1

000386

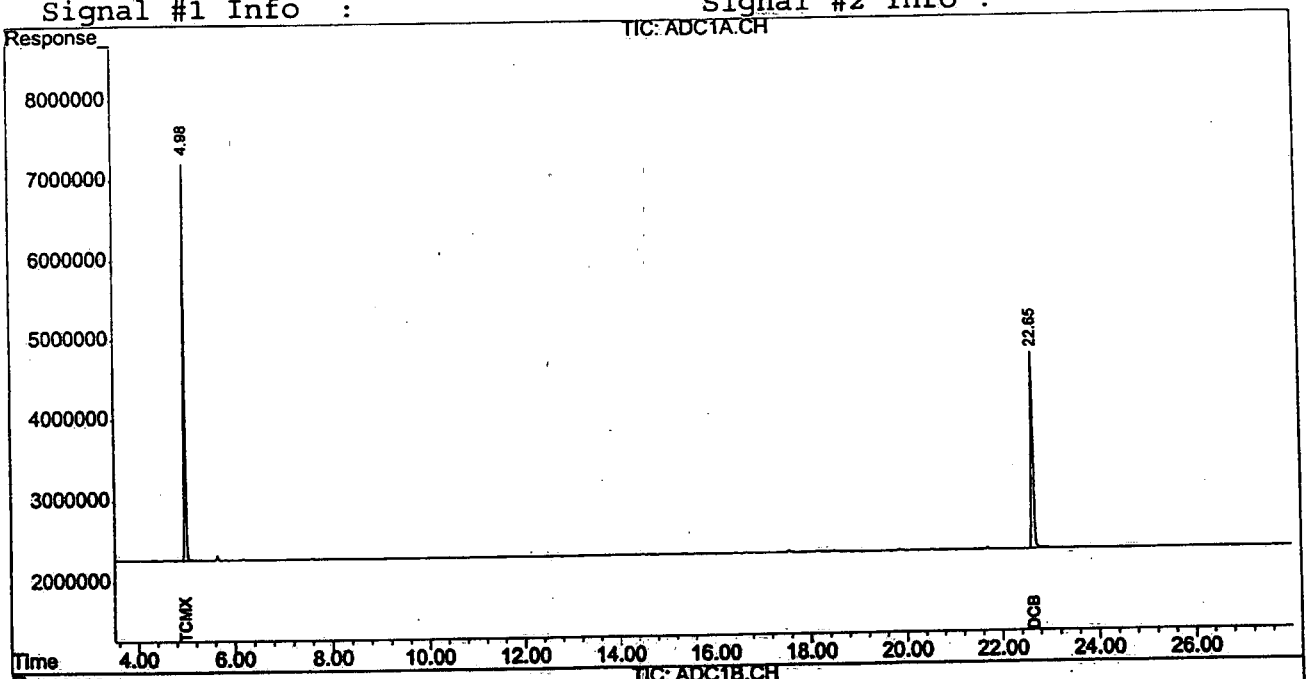
2477

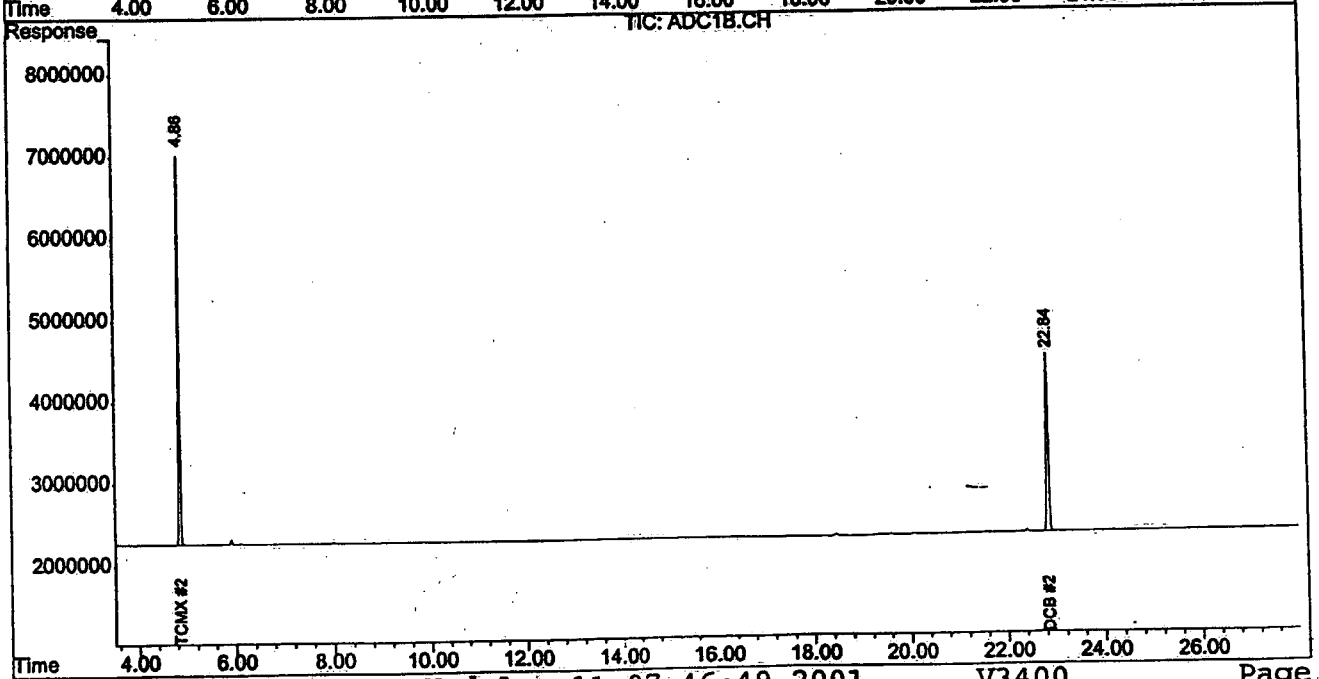
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5007.D\ADC1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5007.D\ADC1B.CH
Acq On : 9 Apr 2001 16:13 Operator:
Sample : (2093..2158),0409-BLK1,S,30.0g,0,04/09/0 Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 7:45 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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2478

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-12-01\V5101.D\ADC1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\04-12-01\V5101.D\ADC1B.CH
Acq On : 12 Apr 2001 10:01 Operator:
Sample : (1937..2260),0411-BLK1,S,30.0g,0,04/11/0 Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 12 10:42:56 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.97	4.85	73117120	90152184	84.460	98.248
Spiked Amount 100.000			Recovery	=	84.46%	98.25%
2) S DCB	22.64	22.81	62120869	69038220	70.617	81.353
Spiked Amount 100.000			Recovery	=	70.62%	81.35%
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.
V5101.D VPCB0329.M Fri Apr 13 06:19:14 2001 V3400 Page 1

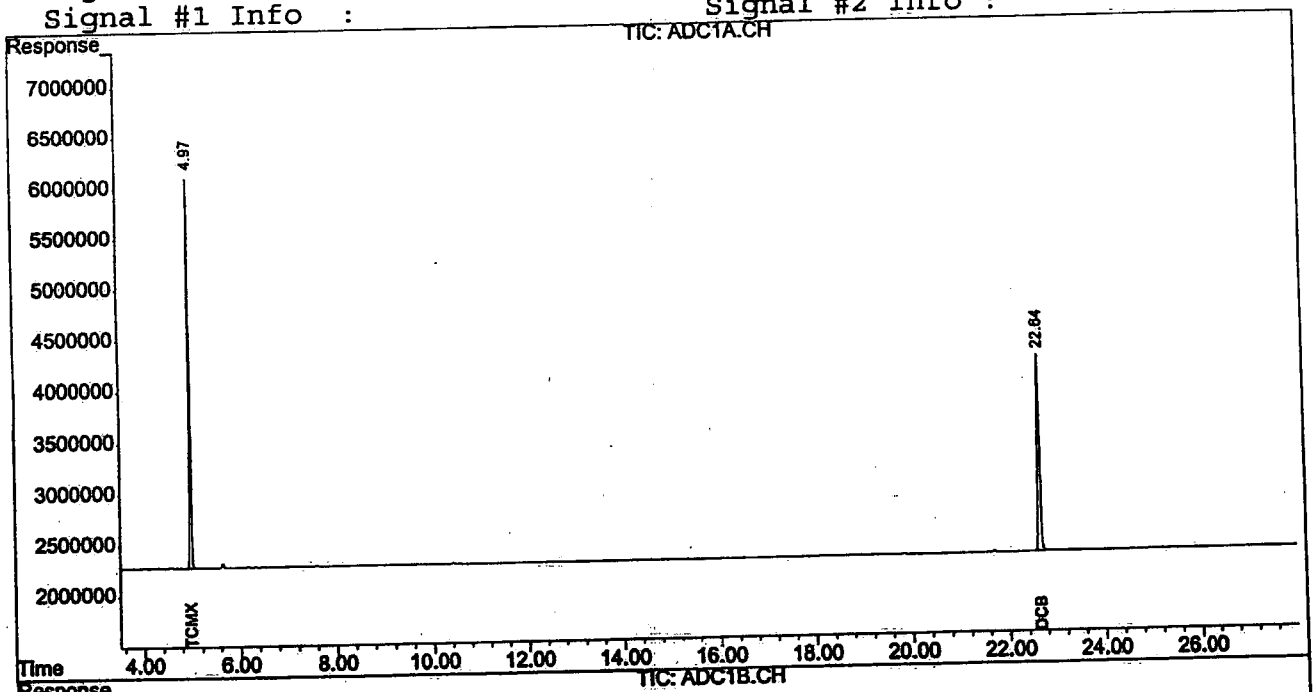
2479

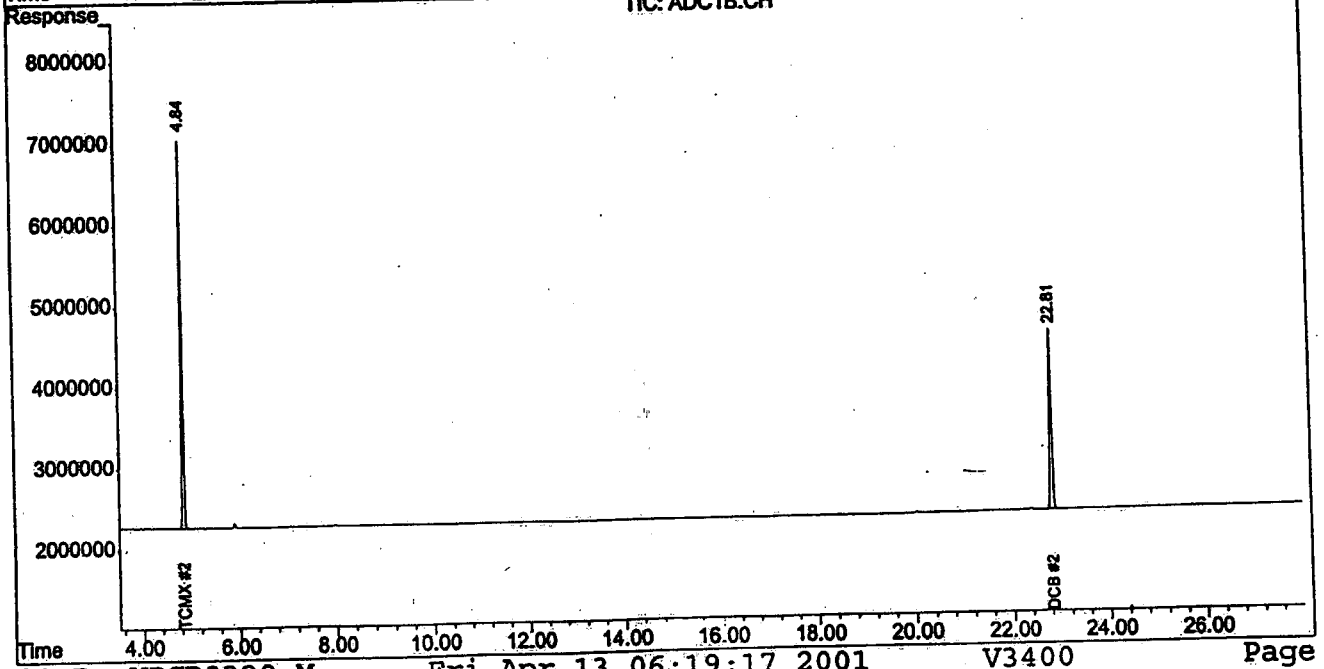
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-12-01\V5101.D\ADC1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\04-12-01\V5101.D\ADC1B.CH
Acq On : 12 Apr 2001 10:01 Operator:
Sample : (1937..2260),0411-BLK1,S,30.0g,0,04/11/0 Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 12 10:43 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000389

2480

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4972.D\ADC1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4972.D\ADC1B.CH
Acq On : 5 Apr 2001 23:02 Operator:
Sample : [illegible] Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 06 05:59:22 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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		4.97	4.85	72269868	79751062	83.481	86.913
Spiked Amount 100.000				Recovery	=	83.48%	86.91%
2) S DCB		22.63	22.82	76814673	78109458	87.320	92.042
Spiked Amount 100.000				Recovery	=	87.32%	92.04%
Target Compounds							
3) L2 Aroclor-1016		5.80	6.36	5467466	6161996	896.641	899.350
4) L2 Aroclor-1016	(2)	6.89	7.43	4255364	11294233	879.142	902.733
5) L2 Aroclor-1016	(3)	7.33	8.79	7441245	26340334	896.347	885.019
6) L2 Aroclor-1016	(4)	9.20	9.18	4495263	9319982	900.053	913.695
7) L2 Aroclor-1016	(5)	9.68	9.50	6289980	9468973	896.308	908.837
Sum Aroclor-1016				27949319	62585518	4468.492	4509.633
Average Aroclor-1016						893.698	901.927
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		15.33	15.19	23345197	18909761	919.370	916.999
34) L8 Aroclor-1260	(2)	15.89	16.45	20703998	15476268	919.715	932.113
35) L8 Aroclor-1260	(3)	17.53	17.46	47888217	17489705	909.785	932.496
36) L8 Aroclor-1260	(4)	18.46	18.43	21900552	42778271	931.768	921.972
37) L8 Aroclor-1260	(5)	20.50	20.72	13078743	5311439	952.113	970.176
Sum Aroclor-1260				126.9E6	99965444	4632.751	4673.756
Average Aroclor-1260						926.550	934.751

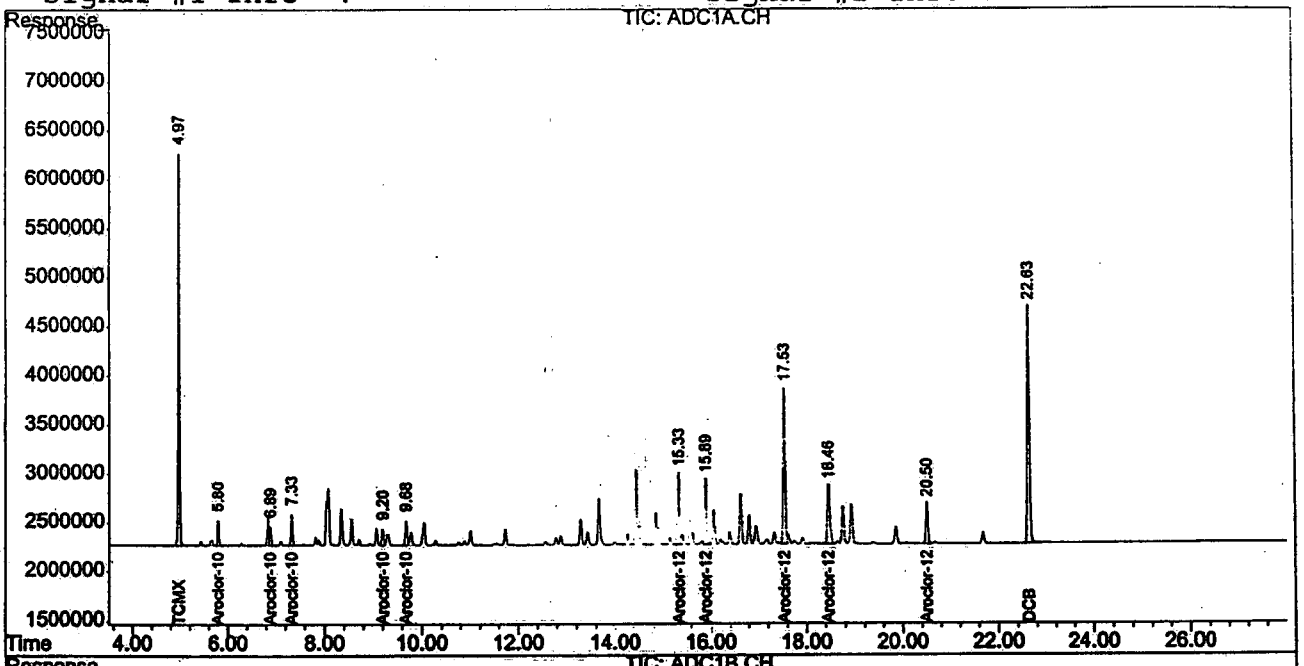
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

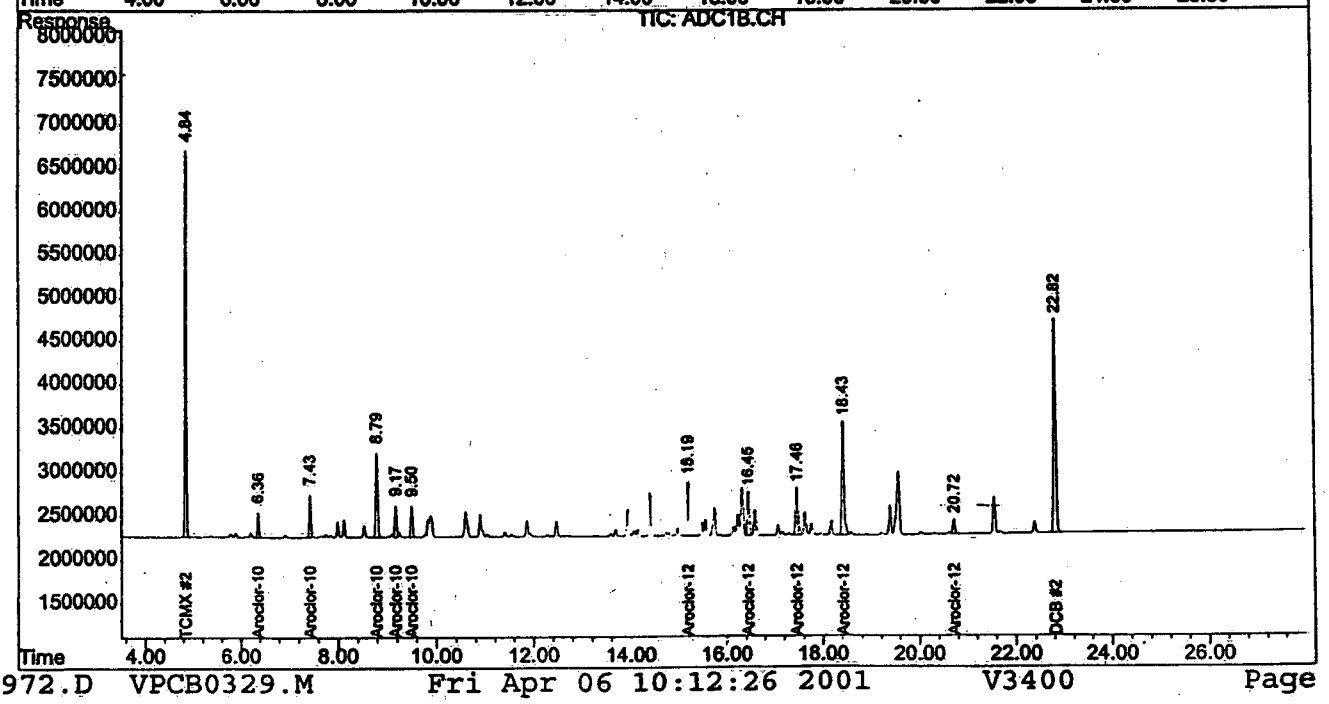
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4972.D\ADC1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4972.D\ADC1B.CH
Acq On : 5 Apr 2001 23:02 Operator:
Sample : 8082_C_IAS1432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 7:13 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2482

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-05-01\V4987.D\ADC1A.CH Vial: 33
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4987.D\ADC1B.CH
Acq On : 6 Apr 2001 6:43 Operator:
Sample : 5002_0_IA01432,1_PPM Inst : V_____
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 06 07:54:33 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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		4.97	4.84	71761726	75762161	82.894	82.565
Spiked Amount 100.000				Recovery	=	82.89%	82.56%
2) S DCB		22.63	22.82	78677715	77053006	89.438	90.797
Spiked Amount 100.000				Recovery	=	89.44%	90.80%
Target Compounds							
3) L2 Aroclor-1016		5.80	6.36	5481706	5898717	898.976	860.924
4) L2 Aroclor-1016	(2)	6.89	7.43	4277619	10923740	883.740	873.120
5) L2 Aroclor-1016	(3)	7.33	8.79	7427239	25283483	894.660	849.509
6) L2 Aroclor-1016	(4)	9.20	9.18	4500057	8951961	901.013	877.616
7) L2 Aroclor-1016	(5)	9.68	9.50	6333503	9108174	902.510	874.207
Sum Aroclor-1016				28020123	60166074	4480.899	4335.376
Average Aroclor-1016						896.180	867.075
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		15.33	15.19	24130208	18694255	950.284	906.548
34) L8 Aroclor-1260	(2)	15.89	16.45	21206421	15298045	942.033	921.379
35) L8 Aroclor-1260	(3)	17.53	17.46	49529503	17410343	940.966	928.265
36) L8 Aroclor-1260	(4)	18.46	18.43	22935943	42721755	975.819	920.754
37) L8 Aroclor-1260	(5)	20.50	20.72	13672389	5382410	995.330	983.139
Sum Aroclor-1260				131.5E6	99506809	4804.433	4660.085
Average Aroclor-1260						960.887	932.017

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

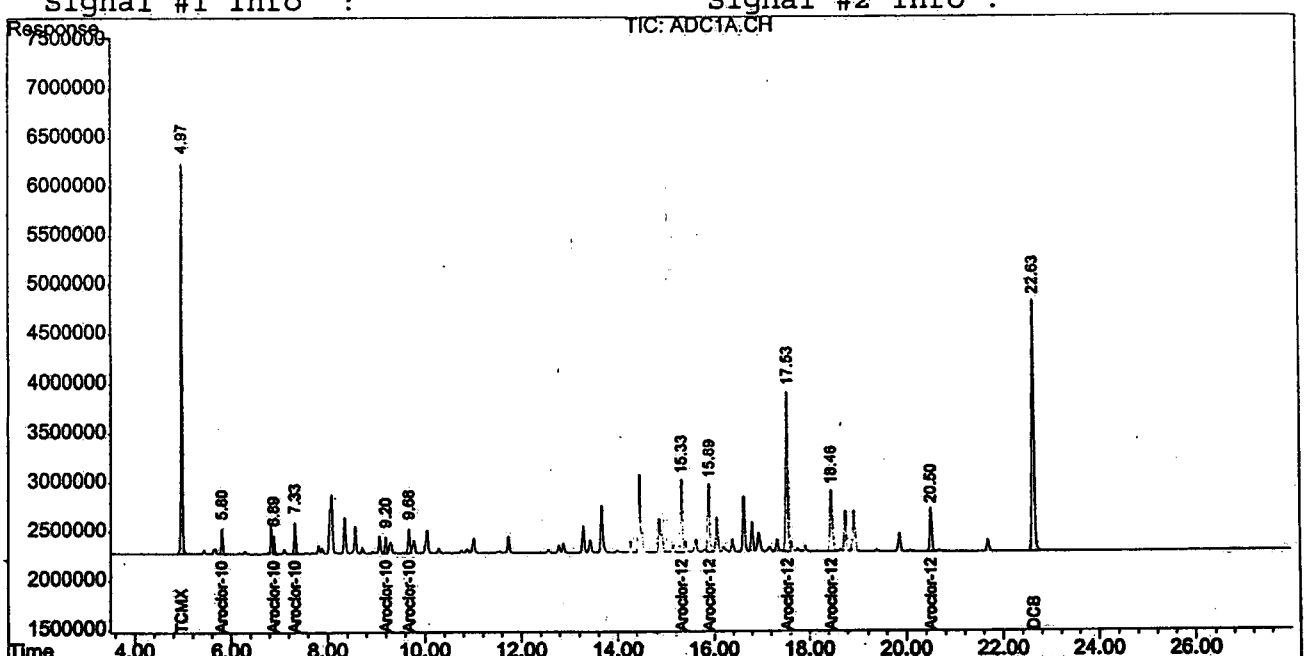
24/83

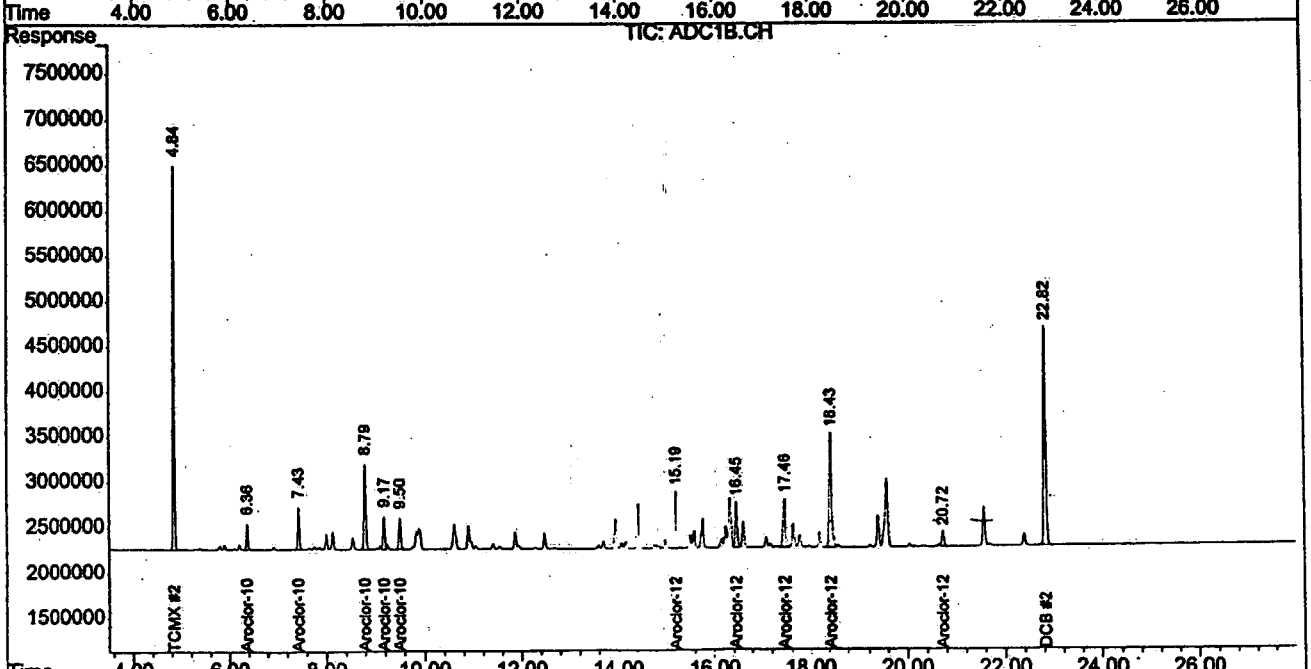
Quantitation Report (QT Reviewed)

[illegible] :\MSDCHEM\1\DATA\04-05-01\V4987.D\ADC1A.CH Vial: 33
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4987.D\ADC1B.CH
Acq On : 6 Apr 2001 6:43 Operator:
[illegible] 1082_C_IAS1432,1_[illegible] Inst : V_[illegible]
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 10:17 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2484

Quantitation Report (Not Reviewed)

Sig[illegible] : C:\MSDCHEM\1\DATA\04-05-01\V4990.D\ADC1A.CH Vial: 36
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4990.D\ADC1B.CH
Acq On : 6 Apr 2001 8:16 Operator:
Sample : [illegible] Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 06 07:54:52 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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		4.97	4.85	74853722	78288088	86.466	85.318
Spiked Amount 100.000				Recovery	=	86.47%	85.32%
2) S DCB		22.62	22.82	79046063	76483966	89.857	90.127
Spiked Amount 100.000				Recovery	=	89.86%	90.13%
Target Compounds							
3) L2 Aroclor-1016		5.80	6.36	5643873	6092792	925.571	889.249
4) L2 Aroclor-1016	{2}	6.89	7.43	4477347	11131021	925.003	889.688
[illegible] L2 Aroclor-1016	{3}	7.33	8.79	7643029	25914165	920.654	870.700
[illegible] L2 Aroclor-1016	{4}	9.20	9.17	4671589	9184682	935.357	900.431
7) L2 Aroclor-1016	{5}	9.68	9.50	6540369	9333404	931.988	895.825
Sum Aroclor-1016				28976207	61656064	4638.573	4445.892
Average Aroclor-1016						927.715	889.178
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		15.32	15.19	23944728	18669150	942.980	905.331
34) L8 Aroclor-1260	{2}	15.89	16.45	21237513	15269877	943.415	919.682
35) L8 Aroclor-1260	{3}	17.53	17.46	48768042	17110455	926.500	912.276
36) L8 Aroclor-1260	{4}	18.46	18.42	22335010	41217059	950.252	888.324
37) L8 Aroclor-1260	{5}	20.50	20.71	13412211	5178417	976.389	945.879
Sum Aroclor-1260				129.7E6	97444959	4739.536	4571.492
Average Aroclor-1260						947.907	914.298

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

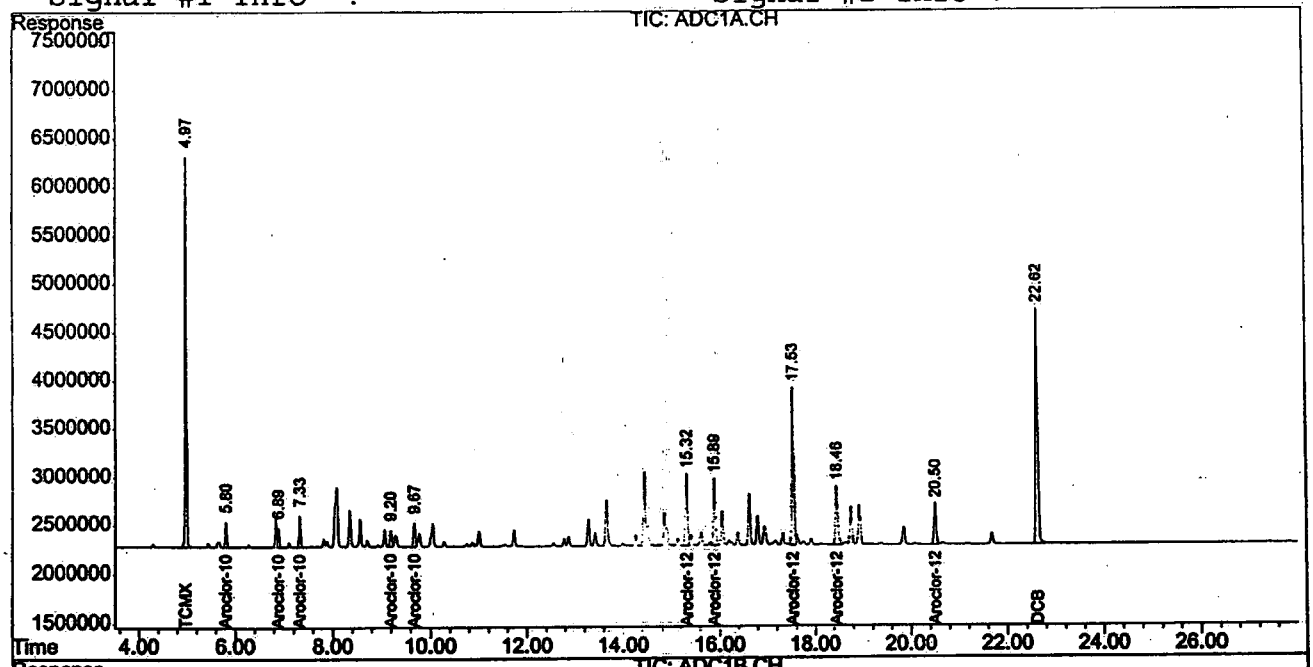
2485

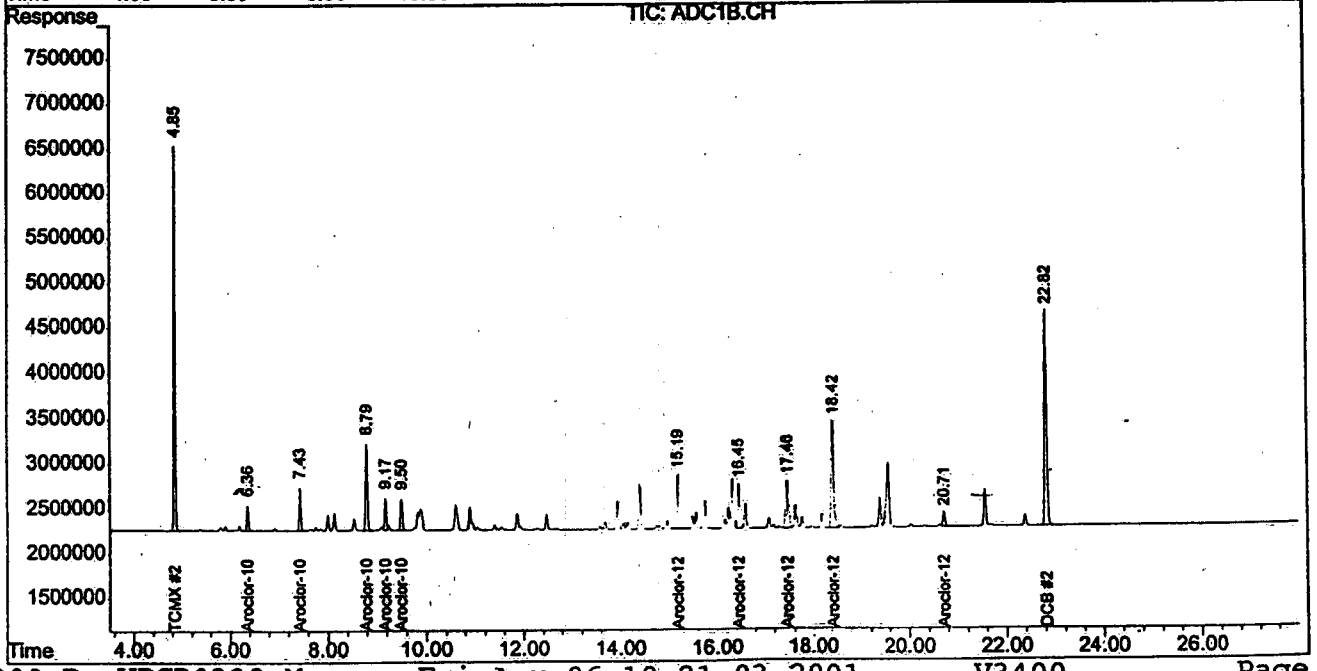
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4990.D\ADC1A.CH Vial: 36
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4990.D\ADC1B.CH
Acq On : 6 Apr 2001 8:16 Operator:
Sample : 8082_C_17.51432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 10:19 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000395

2486

Quantitation Report (QT Reviewed)

```
[illegible]  : C:\MSDCHEM\1\DATA\04-05-01\V4995.D\ADC1A.CH  Vial: 36
Signal #2  : C:\MSDCHEM\1\DATA\04-05-01\V4995.D\ADC1B.CH
Acq On     :  6 Apr 2001  10:50                          Operator:
[illegible]  : 1082_C_1AS1432,1_PPM                      [illegible]
Misc       : NA,NA,NA,1                                  Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e
Quant Time: Apr 06 10:12:17 2001  Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title        :
Last Update  : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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		4.97	4.85	78961105	86153031	91.211	93.889
Spiked Amount 100.000				Recovery	=	91.21%	93.89%
2) S DCB		22.64	22.83	81238879	81800950	92.350	96.392
Spiked Amount 100.000				Recovery	=	92.35%	96.39%
Target Compounds							
3) L2 Aroclor-1016		5.80	6.37	5900002	6644725	967.575	969.804
4) L2 Aroclor-1016	{2}	6.89	7.43	4718434	12049292	974.810	963.084
L2 Aroclor-1016	{3}	7.33	8.79	7886567	28030597	949.989	941.810
6) L2 Aroclor-1016	{4}	9.21	9.18	4821884	9920177	965.450	972.536
7) L2 Aroclor-1016	{5}	9.68	9.50	6792734	10125110	967.950	971.813
Sum Aroclor-1016				30119620	66769902	4825.774	4819.048
Average Aroclor-1016						965.155	963.810
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		15.33	15.19	25958195	20107935	1022.273	975.103
34) L8 Aroclor-1260	{2}	15.90	16.46	21991994	16424688	976.930	989.235
35) L8 Aroclor-1260	{3}	17.54	17.47	50987744	18441096	968.670	983.221
36) L8 Aroclor-1260	{4}	18.47	18.43	23312302	44168403	991.831	951.933
3[illegible] L8 Aroclor-1260	{5}	20.51	20.72	13858330	5613061	1008.866	1025.270
Sum Aroclor-1260				136.1E6	104.8E6	4968.571	4924.761
Average Aroclor-1260						993.714	984.952

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

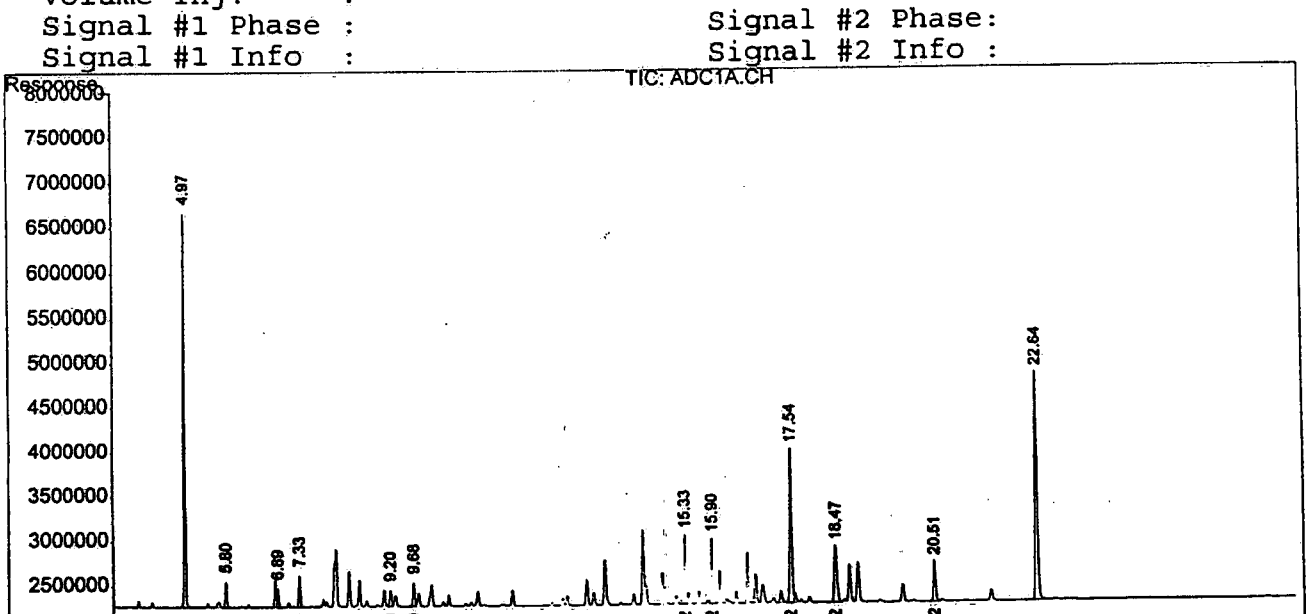
2487

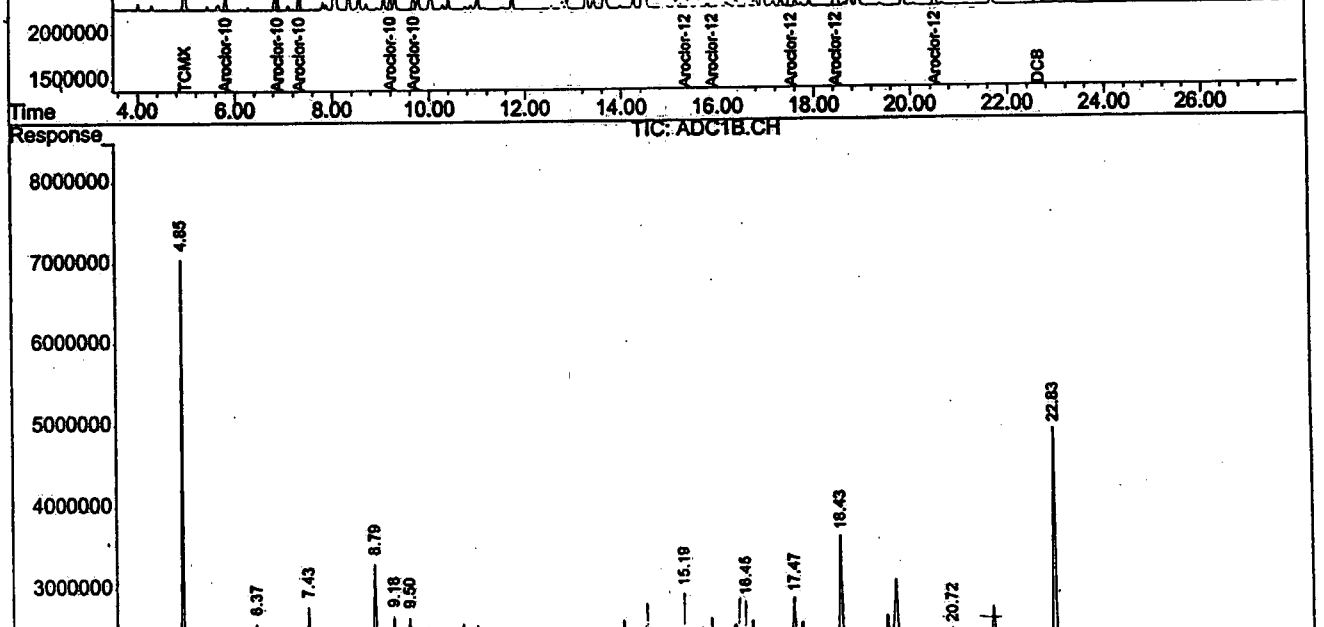
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\04-05-01\V4995.D\ADC1A.CH Vial: 36
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4995.D\ADC1B.CH
Acq On : 6 Apr 2001 10:50 Operator:
Sample : [illegible] Inst :
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 11:12 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





24/88

000397

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5006.D\ADC1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5006.D\ADC1B.CH
Acq On : 9 Apr 2001 15:42 Operator:
Sample : 8082_C_IAS1432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 07:34:11 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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		4.98	4.86	94193494	90970419	108.806	99.139
Spiked Amount 100.000				Recovery	=	108.81%	99.14%
2) S DCB		22.65	22.84	93120243	83964491	105.856	98.942
Spiked Amount 100.000				Recovery	=	105.86%	98.94%
Target Compounds							
3) L2 Aroclor-1016		5.81	6.37	6796170	6942403	1114.543	1013.251
4) L2 Aroclor-1016	(2)	6.91	7.44	5381990	12682289	1111.899	1013.679
5) L2 Aroclor-1016	(3)	7.35	8.81	9226496	29659444	1111.393	996.539
6) L2 Aroclor-1016	(4)	9.22	9.19	5579420	10482359	1117.126	1027.650
7) L2 Aroclor-1016	(5)	9.70	9.51	7861866	10651222	1120.299	1022.310
Sum Aroclor-1016				34845943	70417717	5575.258	5073.428
Average Aroclor-1016						1115.052	1014.686
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		15.35	15.21	28291850	21039815	1114.176	1020.293
34) L8 Aroclor-1260	(2)	15.91	16.47	25312279	17084946	1124.424	1029.001
35) L8 Aroclor-1260	(3)	17.56	17.48	57262029	19296325	1087.870	1028.819
36) L8 Aroclor-1260	(4)	18.48	18.45	26218406	46522733	1115.473	1002.674
37) L8 Aroclor-1260	(5)	20.53	20.74	15556093	5796292	1132.461	1058.738
Sum Aroclor-1260				152.6E6	109.7E6	5574.404	5139.525
Average Aroclor-1260						1114.881	1027.905

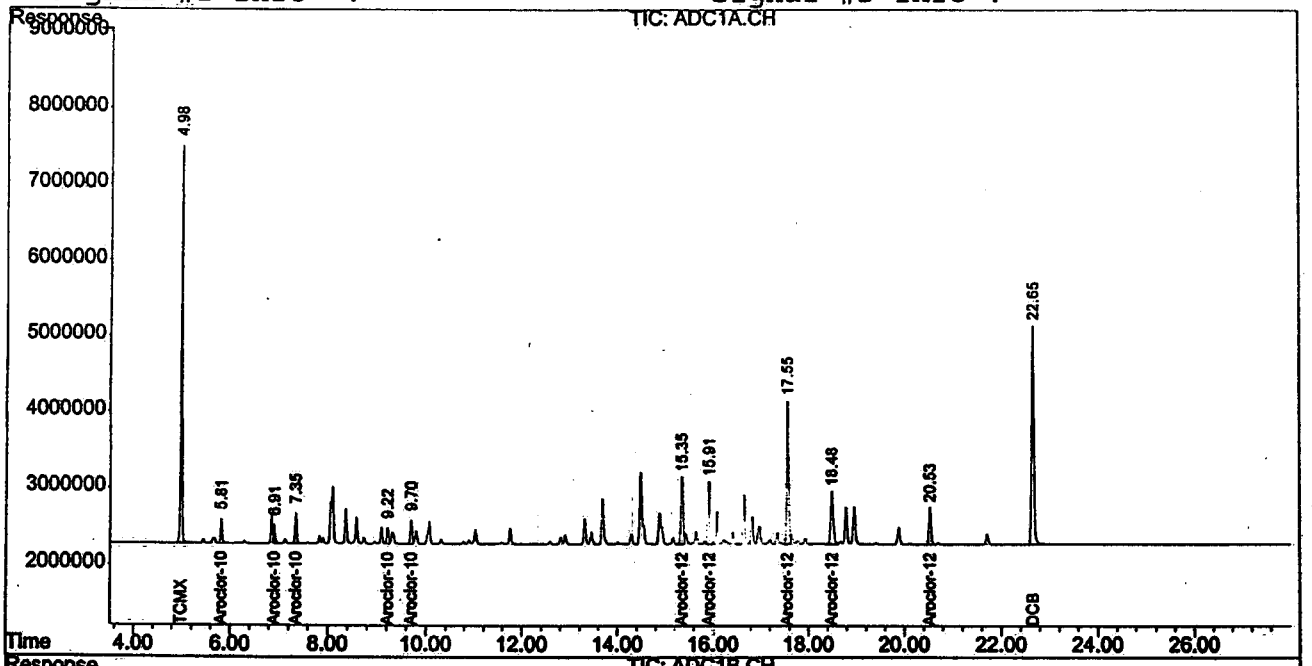
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

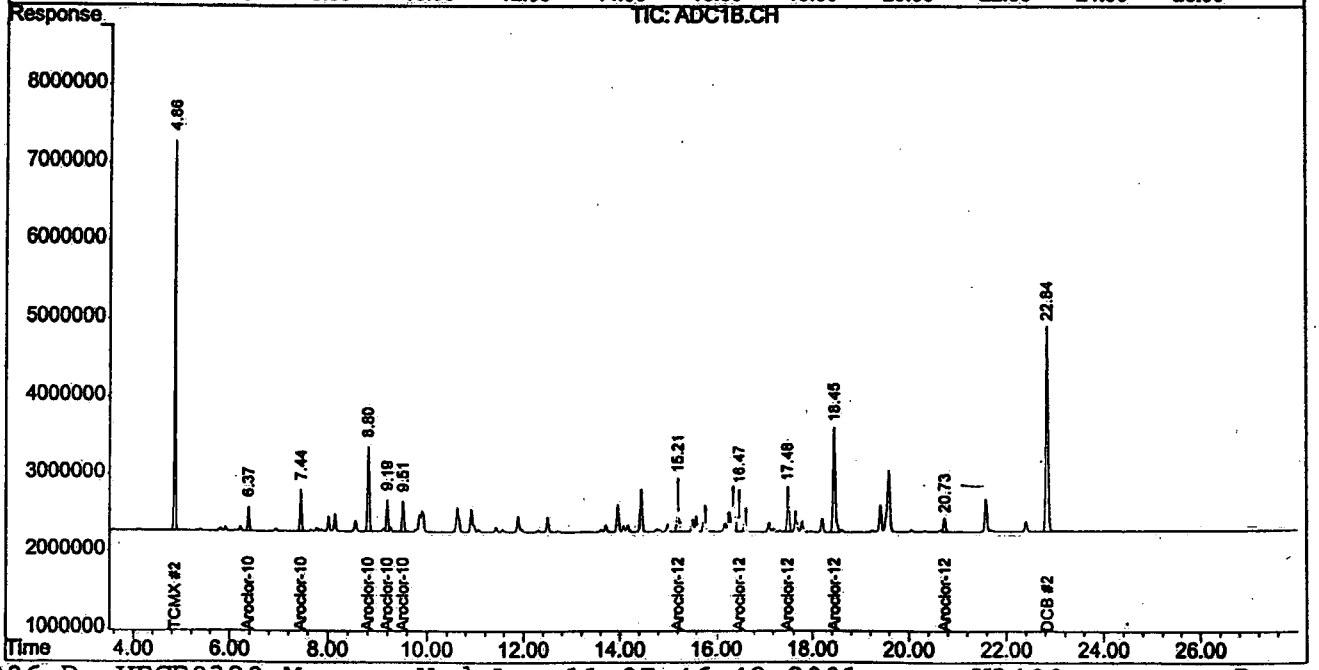
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5006.D\ADC1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5006.D\ADC1B.CH
Acq On : 9 Apr 2001 15:42 Operator:
Sample : 8082_C_IAS1432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 7:44 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2490

000399

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5028.D\ADC1A.CH Vial: 31
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5028.D\ADC1B.CH
Acq On : 10 Apr 2001 2:59 Operator:
Sample : 8082_C_IAS1432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 07:36:17 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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		4.98	4.85	81834712	82495566	94.530	89.903
Spiked Amount 100.000				Recovery =		94.53%	89.90%
2) S DCB		22.65	22.83	83190064	77248477	94.568	91.028
Spiked Amount 100.000				Recovery =		94.57%	91.03%
Target Compounds							
3) L2 Aroclor-1016		5.81	6.37	6007880	6373198	985.267	930.175
4) L2 Aroclor-1016	(2)	6.90	7.44	4809564	11609120	993.638	927.902
5) L2 Aroclor-1016	(3)	7.34	8.80	8201069	26987945	987.873	906.778
6) L2 Aroclor-1016	(4)	9.22	9.19	4922197	9561301	985.535	937.353
7) L2 Aroclor-1016	(5)	9.69	9.51	6911484	9697156	984.871	930.738
Sum Aroclor-1016				30852193	64228720	4937.183	4632.945
Average Aroclor-1016						987.437	926.589
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		15.35	15.20	25323830	19104261	997.291	926.431
34) L8 Aroclor-1260	(2)	15.91	16.46	22580138	15496575	1003.057	933.336
35) L8 Aroclor-1260	(3)	17.55	17.47	51262577	17544941	973.892	935.441
36) L8 Aroclor-1260	(4)	18.48	18.44	23408749	42329482	995.935	912.300
L8 Aroclor-1260	(5)	20.52	20.73	13940958	5299875	1014.881	968.064
Sum Aroclor-1260				136.5E6	99775134	4985.056	4675.571
Average Aroclor-1260						997.011	935.114

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

000100

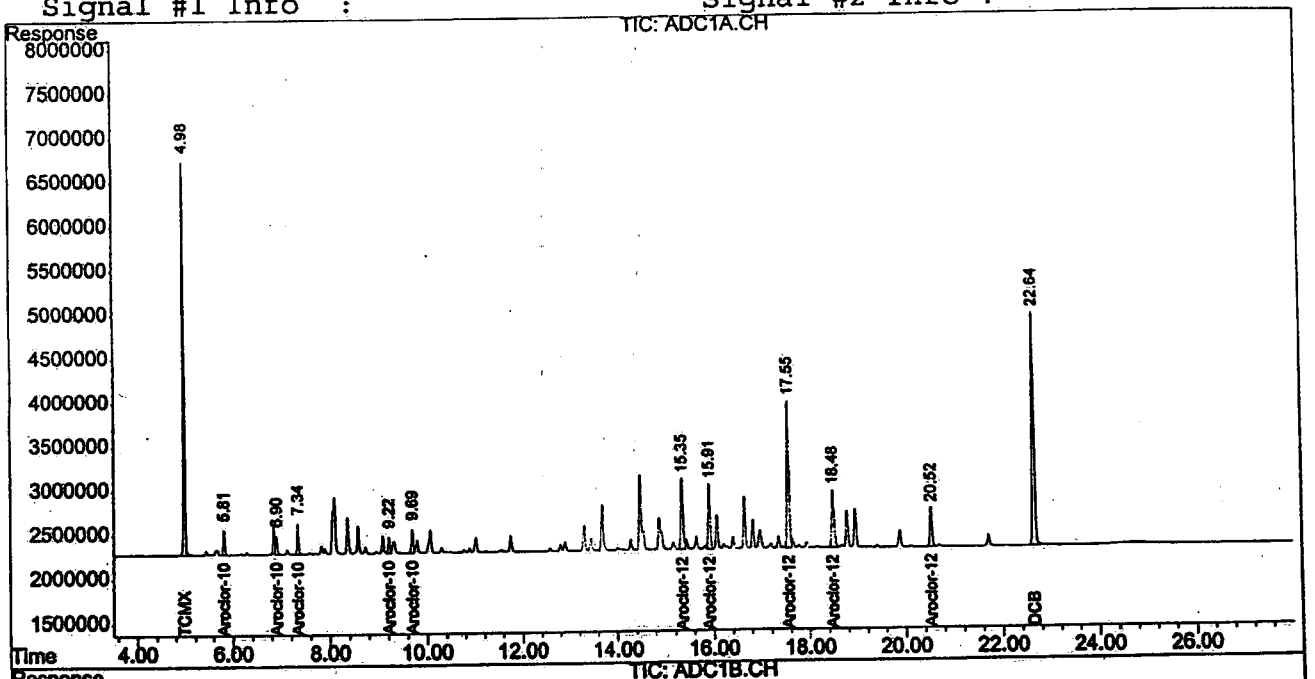
2491

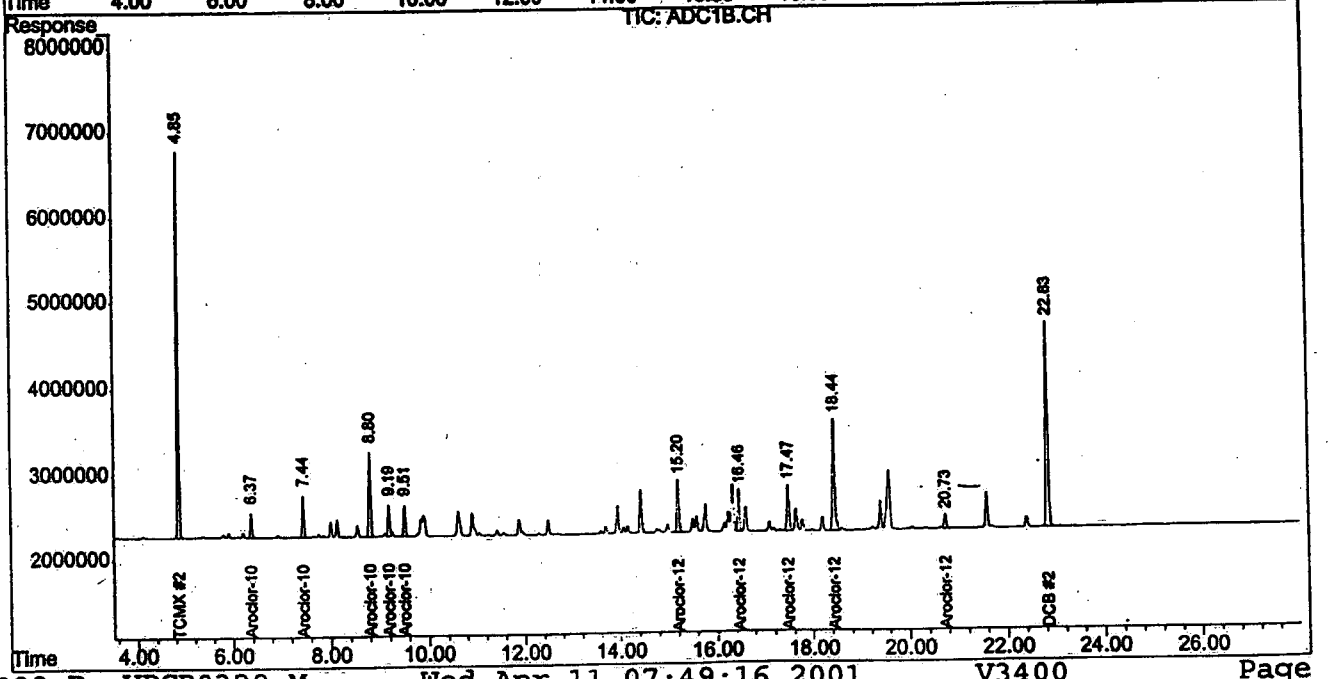
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5028.D\ADC1A.CH Vial: 31
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5028.D\ADC1B.CH
Acq On : 10 Apr 2001 2:59 Operator:
Sample : 8082_C_IAS1432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 7:54 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000101

2492

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5033.D\ADC1A.CH Vial: 36
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5033.D\ADC1B.CH
Acq On : 10 Apr 2001 5:33 Operator:
Sample : 8082_C_IAS1432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 07:36:46 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.98	4.85	86336843	88029201	99.731	95.934
Spiked Amount 100.000			Recovery =		99.73%	95.93%
2) S DCB	22.64	22.83	87535798	82649590	99.508	97.392
Spiked Amount 100.000			Recovery =		99.51%	97.39%
Target Compounds						
3) L2 Aroclor-1016	5.81	6.37	6330929	6795287	1038.245	991.779
4) L2 Aroclor-1016 {2}	6.90	7.44	5023726	12402388	1037.883	991.307
L2 Aroclor-1016 {3}	7.34	8.80	8665410	28854033	1043.806	969.477
6) L2 Aroclor-1016 {4}	9.22	9.18	5214780	10235428	1044.116	1003.442
7) L2 Aroclor-1016 {5}	9.69	9.51	7337464	10404441	1045.573	998.623
Sum Aroclor-1016			32572310	68691577	5209.623	4954.628
Average Aroclor-1016					1041.925	990.926
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	15.34	15.20	27484015	20778811	1082.363	1007.636
34) L8 Aroclor-1260 {2}	15.91	16.46	24376784	16881857	1082.867	1016.769
35) L8 Aroclor-1260 {3}	17.55	17.47	56012273	19226916	1064.127	1025.119
36) L8 Aroclor-1260 {4}	18.48	18.44	25778131	46534061	1096.741	1002.918
L8 Aroclor-1260 {5}	20.52	20.72	15197613	5880982	1106.364	1074.208
Sum Aroclor-1260			148.8E6	109.3E6	5432.462	5126.649
Average Aroclor-1260					1086.492	1025.330

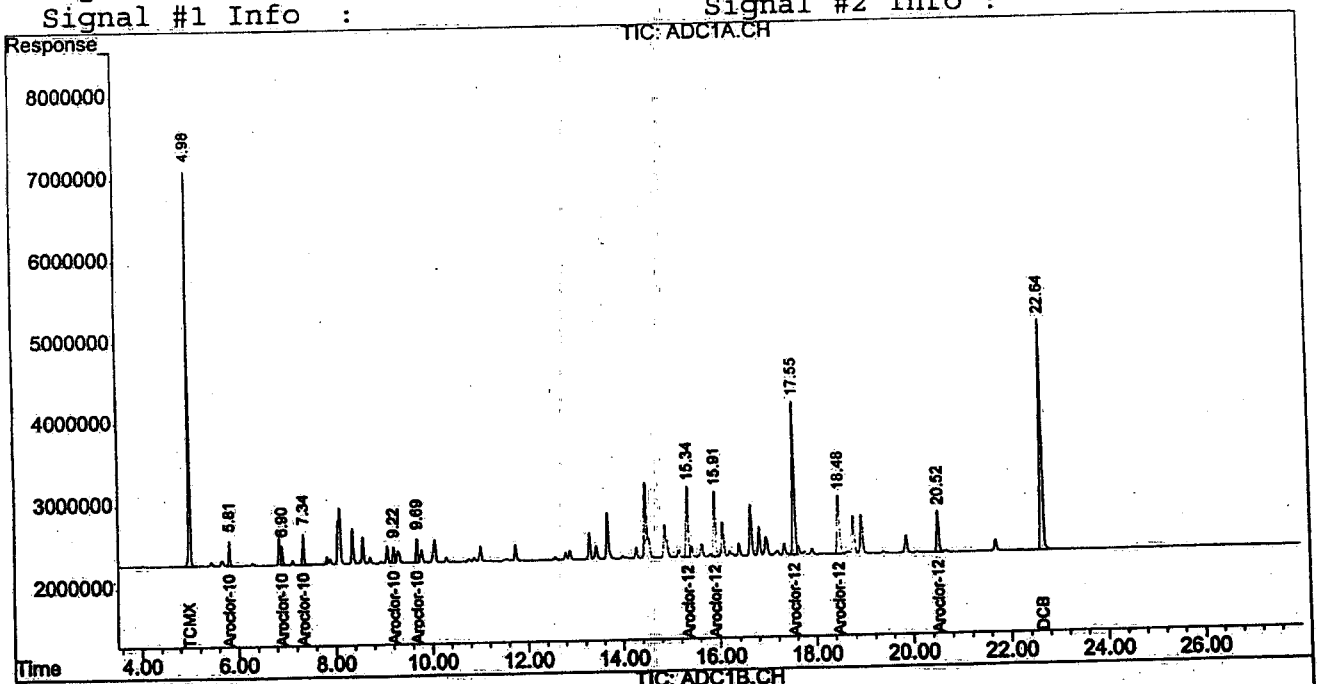
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

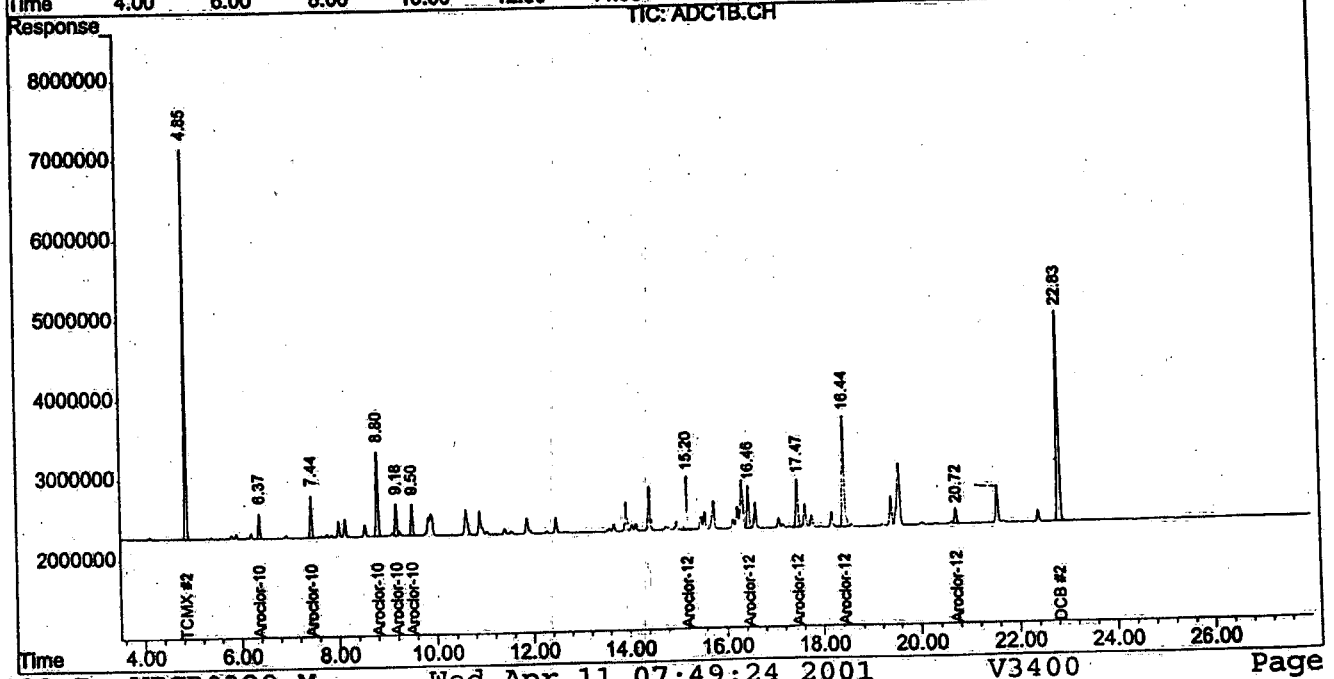
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-09-01\V5033.D\ADC1A.CH Vial: 36
Signal #2 : C:\MSDCHEM\1\DATA\04-09-01\V5033.D\ADC1B.CH
Acq On : 10 Apr 2001 5:33 Operator:
Sample : 8082_C_IAS1432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 10 7:56 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





000103

2494

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-12-01\V5099.D\ADC1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\04-12-01\V5099.D\ADC1B.CH
Acq On : 12 Apr 2001 9:00 Operator:
Sample : 8082_C_IAS1432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 12 09:16:35 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.97	4.87	69492173	85726848	80.273	93.425
Spiked Amount 100.000			Recovery =		80.27%	93.42%
2) S DCB	22.63	22.80	73996305	82496794	84.116	97.212
Spiked Amount 100.000			Recovery =		84.12%	97.21%
Target Compounds						
3) L2 Aroclor-1016	5.80	6.38	5376273	6607116	881.686	964.315
4) L2 Aroclor-1016 (2)	6.89	7.45	4215154	12042957	870.835	962.578
5) L2 Aroclor-1016 (3)	7.33	8.80	7312165	28276027	880.799	950.057
6) L2 Aroclor-1016 (4)	9.20	9.19	4447262	10034520	890.442	983.745
7) L2 Aroclor-1016 (5)	9.68	9.51	6264084	10216725	892.618	980.606
Sum Aroclor-1016			27614938	67177345	4416.380	4841.302
Average Aroclor-1016					883.276	968.260
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	15.33	15.18	23407679	20345073	921.830	986.602
34) L8 Aroclor-1260 (2)	15.89	16.44	20931835	16403571	929.836	987.963
35) L8 Aroclor-1260 (3)	17.53	17.45	47446582	18672798	901.395	995.575
36) L8 Aroclor-1260 (4)	18.46	18.42	21697133	45408444	923.113	978.659
37) L8 Aroclor-1260 (5)	20.50	20.70	12840970	5663578	934.804	1034.497
Sum Aroclor-1260			126.3E6	106.5E6	4610.978	4983.295
Average Aroclor-1260					922.196	996.659

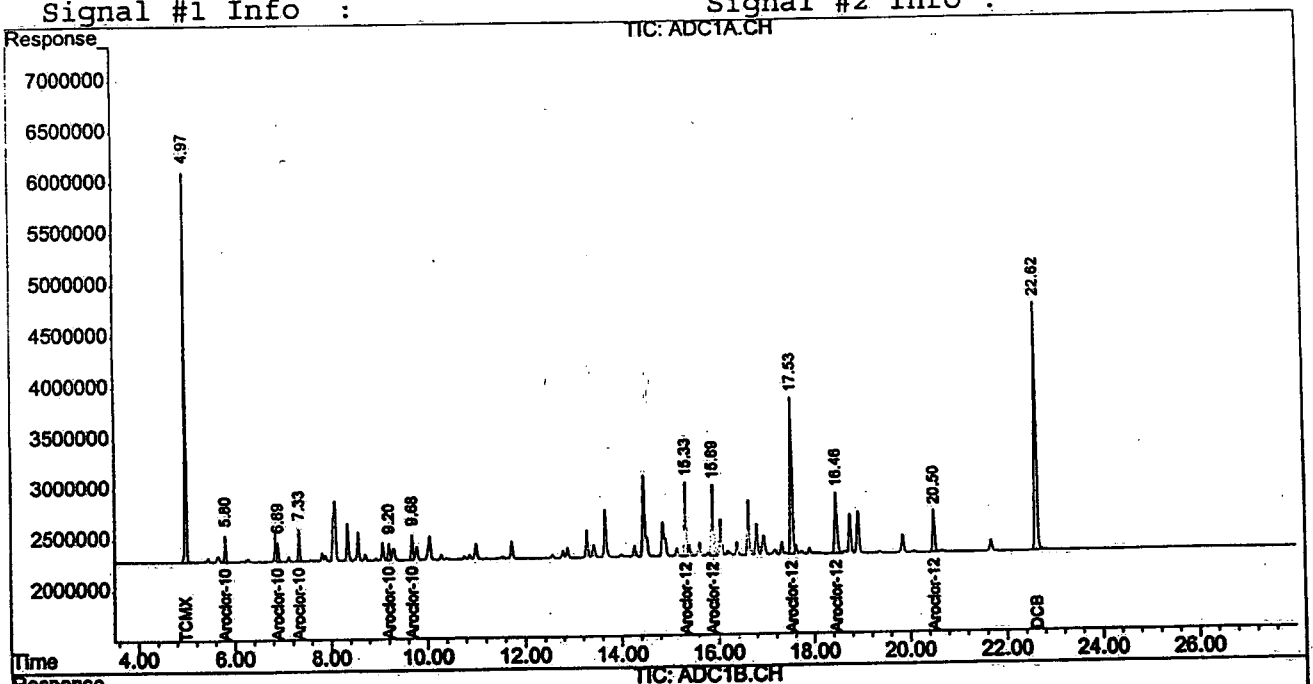
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

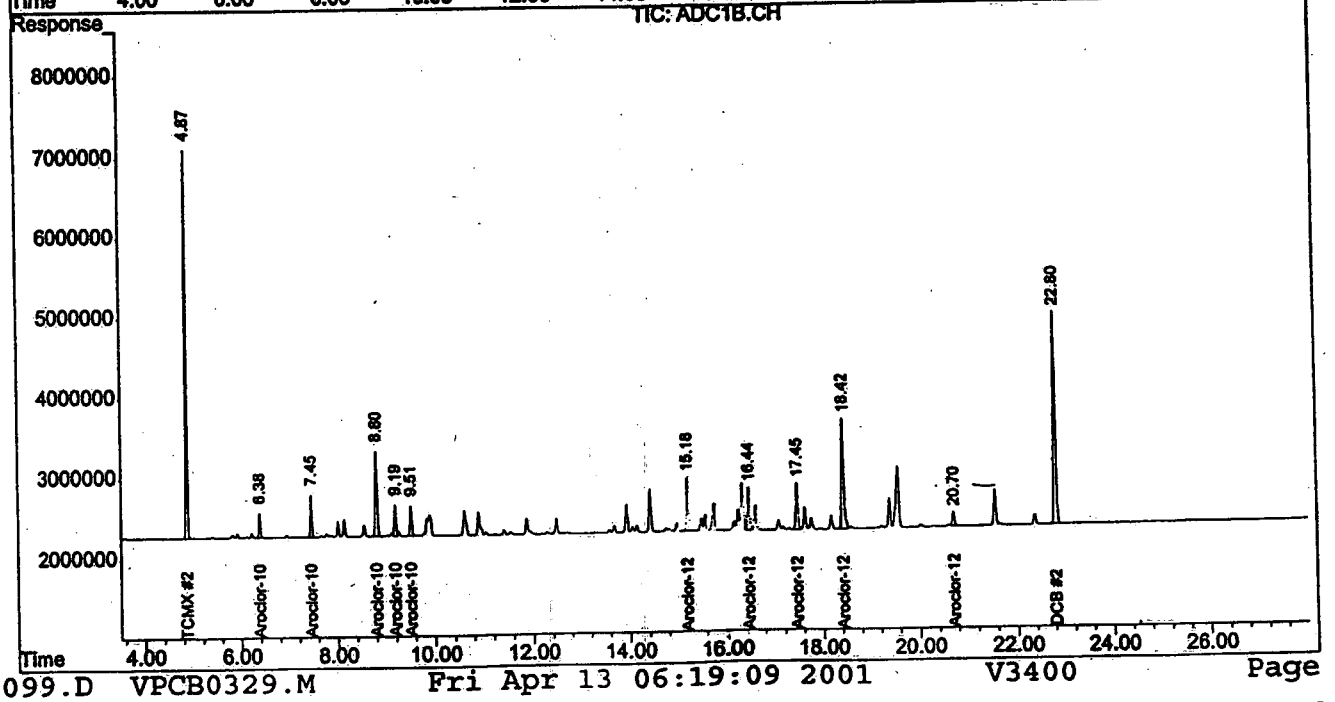
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-12-01\V5099.D\ADC1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\04-12-01\V5099.D\ADC1B.CH
Acq On : 12 Apr 2001 9:00 Operator:
Sample : 8082_C_IAS1432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 12 9:17 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000405

2496

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-12-01\V5110.D\ADC1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\04-12-01\V5110.D\ADC1B.CH
Acq On : 12 Apr 2001 14:38 Operator:
Sample : 8082_C_IAS1432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 13 06:09:23 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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		4.98	4.85	79667290	96197491	92.026	104.836
Spiked Amount 100.000				Recovery	=	92.03%	104.84%
2) S DCB		22.64	22.82	81859919	90024321	93.056	106.082
Spiked Amount 100.000				Recovery	=	93.06%	106.08%
Target Compounds							
3) L2 Aroclor-1016		5.81	6.36	6072045	7332834	995.789	1070.235
4) L2 Aroclor-1016	(2)	6.90	7.43	4781724	13256636	987.886	1059.586
5) L2 Aroclor-1016	(3)	7.34	8.79	8193231	31210298	986.929	1048.646
6) L2 Aroclor-1016	(4)	9.21	9.17	5001162	11057313	1001.345	1084.016
7) L2 Aroclor-1016	(5)	9.69	9.49	6982421	11209604	994.980	1075.903
Sum Aroclor-1016				31030582	74066684	4966.929	5338.386
Average Aroclor-1016						993.386	1067.677
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		15.34	15.19	25500089	21916566	1004.233	1062.809
34) L8 Aroclor-1260	(2)	15.90	16.45	22679899	17607473	1007.488	1060.472
35) L8 Aroclor-1260	(3)	17.55	17.46	51607370	20116726	-980.442	1072.561
36) L8 Aroclor-1260	(4)	18.47	18.42	23586378	48869314	1003.492	1053.248
37) L8 Aroclor-1260	(5)	20.52	20.71	14061110	6200994	1023.628	1132.660
Sum Aroclor-1260				137.4E6	114.7E6	5019.283	5381.750
Average Aroclor-1260						1003.857	1076.350

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

000106

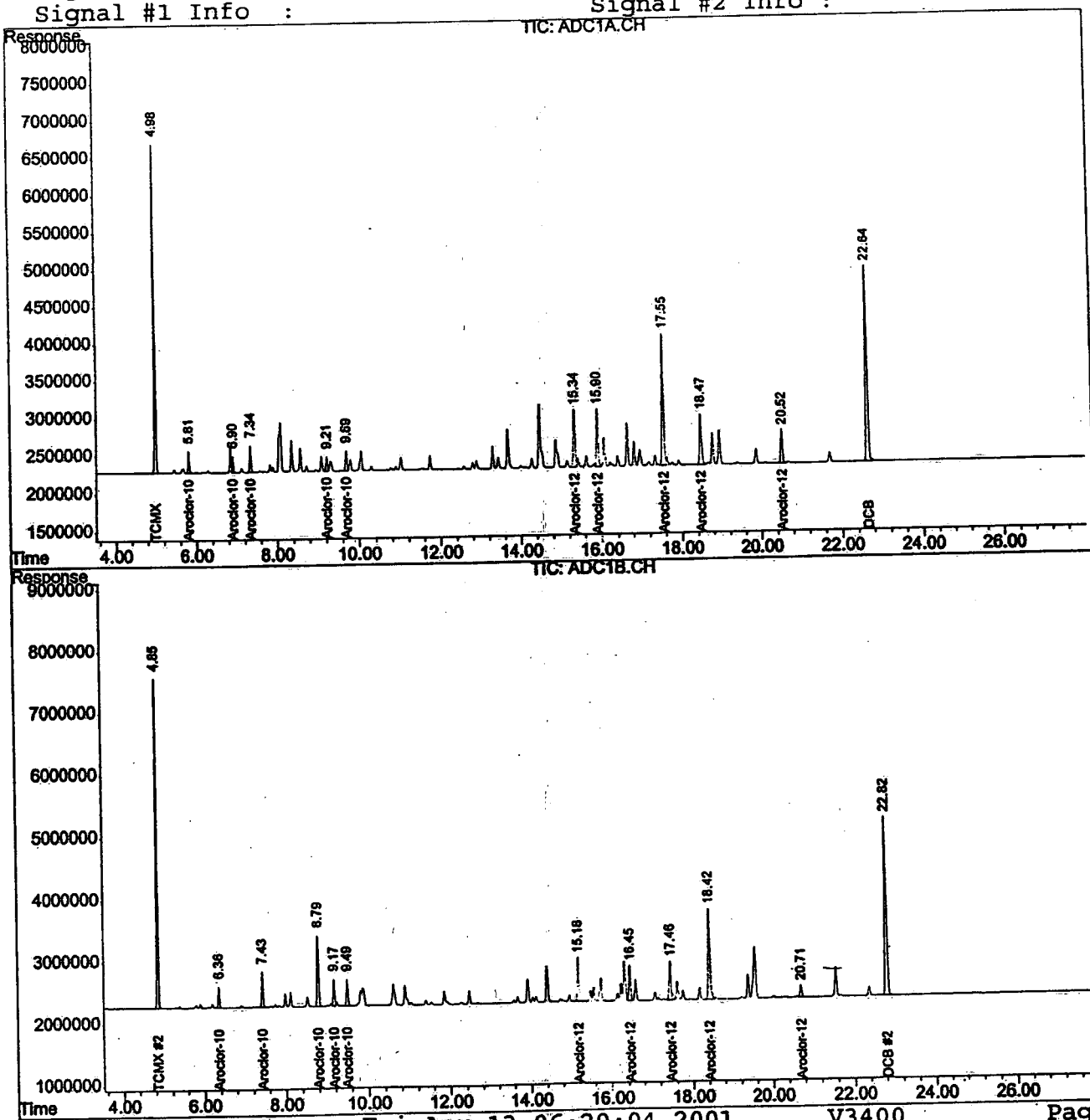
2497

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-12-01\V5110.D\ADC1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\04-12-01\V5110.D\ADC1B.CH
Acq On : 12 Apr 2001 14:38 Operator:
Sample : 8082_C_IAS1432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 13 6:09 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



000107

2498

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-29-01\V4878.D\ADC1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\03-29-01\V4878.D\ADC1B.CH
Acq On : 29 Mar 2001 12:57 Operator:
Sample : 8082_1254_IAS1382,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 02 10:46:34 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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		4.97	4.85	83060129	91103455	95.946	99.284
Spiked Amount 100.000				Recovery	=	95.95%	99.28%
2) S DCB		22.63	22.84	86946363	84624214	98.838	99.719
Spiked Amount 100.000				Recovery	=	98.84%	99.72%
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		11.74	12.49	14779280	15037751	1000.000	1000.000
29) L7 Aroclor-1254	{2}	12.56	13.60	13097631	13092462	1000.000	1000.000
30) L7 Aroclor-1254	{3}	13.72	14.77	20762873	18915279	1000.000	1000.000
31) L7 Aroclor-1254	{4}	14.46	15.21	13827997	11075598	1000.000	1000.000
32) L7 Aroclor-1254	{5}	15.33	16.34	23989255	23552509	1000.000	1000.000
				86457036	81673600	5000.000	5000.000
Sum Aroclor-1254						1000.000	1000.000
Average Aroclor-1254							
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.
V4878.D VPCB0329.M Fri Apr 13 07:40:28 2001 V3400 Page 1

000408

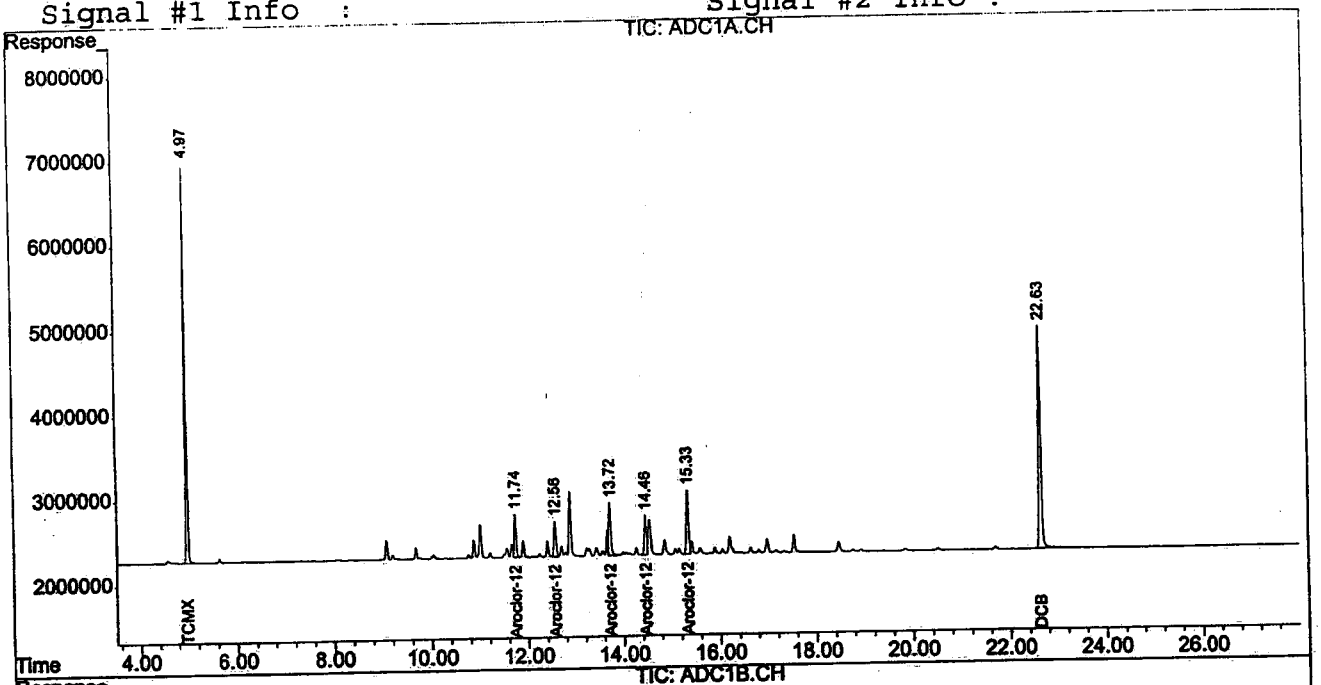
2999

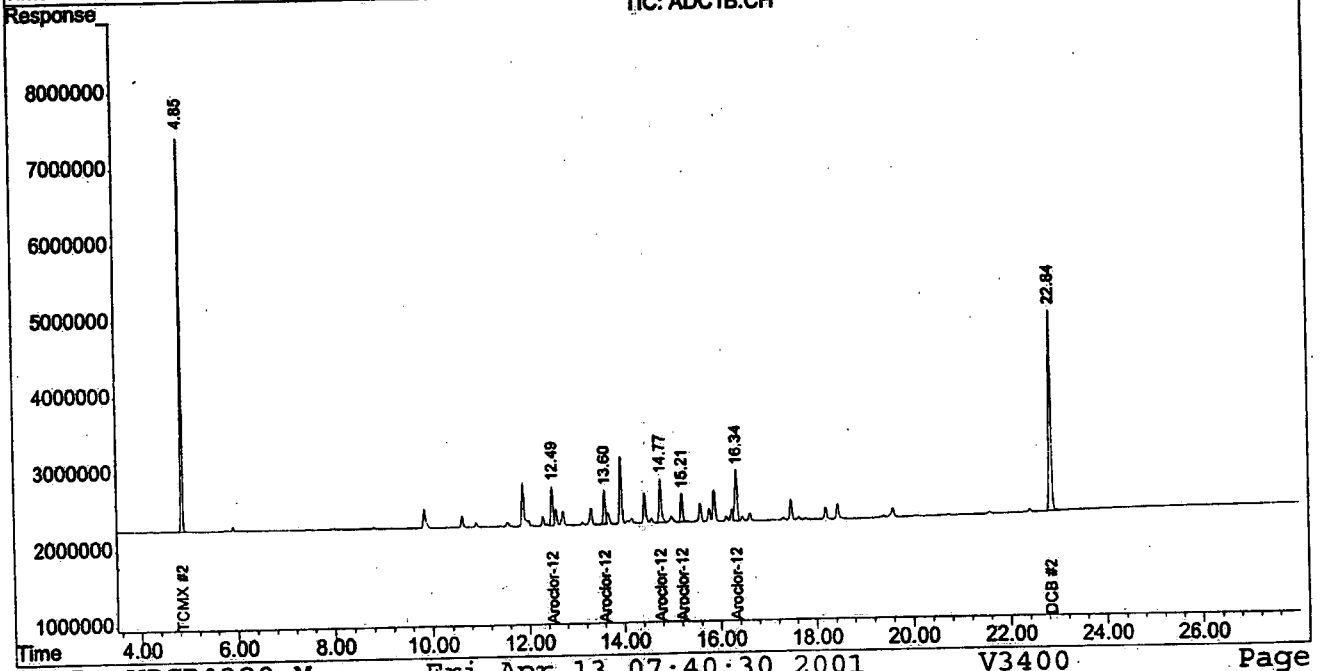
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\03-29-01\V4878.D\ADC1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\03-29-01\V4878.D\ADC1B.CH
Acq On : 29 Mar 2001 12:57 Operator:
Sample : 8082_1254_IAS1382,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 2 12:10 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2500

000409

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: W5707.D

Instrument ID: GC-W

Date Extracted: 04/04/2001

Matrix: SOIL

Date Analyzed: 04/05/2001

Time Analyzed: 00:51

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PS4-4-3S	2049-002	04/05/2001	01:15
PEST	2061-007-MS1	04/05/2001	05:00
PEST	2061-007-MSD1	04/05/2001	05:25
PEST	PBS0404-MS1	04/05/2001	05:49

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: NA

Lab ID: 0404-BK1
Client ID: (2044.2061)
Date Received: NA
Date Extracted: 04/04/2001
Date Analyzed: 04/05/2001
Data file: W5707.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
Endrin ketone	ND		0.167
Methoxychlor	ND		0.167
alpha-Chlordane	ND		0.167
gamma-Chlordane	ND		0.167
Toxaphene	ND		0.835

2502

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: W5760.D

Instrument ID: GC-W

Date Extracted: 04/05/2001

Matrix: SOIL

Date Analyzed: 04/06/2001

Time Analyzed: 15:56

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S-55	2092-011	04/06/2001	16:25
WC-COMP	2111-001	04/06/2001	17:15
PEST	PBS0405-MS1	04/06/2001	17:40

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: NA

Lab ID: 0405-BK1
Client ID: (2092.2111)
Date Received: NA
Date Extracted: 04/05/2001
Date Analyzed: 04/06/2001
Data file: W5760.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

2504

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: W5851.D

Instrument ID: GC-W

Date Extracted: 04/09/2001

Matrix: SOIL

Date Analyzed: 04/10/2001

Time Analyzed: 14:27

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S-46	2092-002	04/10/2001	14:52
S-47	2092-003	04/10/2001	15:17
S-48	2092-004	04/10/2001	15:42
S-49	2092-005	04/10/2001	16:07
DS-1_1-1.5'	2155-012	04/10/2001	17:06
S-6	2158-006	04/10/2001	17:31
S-7	2158-007	04/10/2001	17:56
PEST	2158-007-MS1	04/10/2001	18:21
PEST	2158-007-MSD1	04/10/2001	18:46
PEST	PBS0409-MS1	04/10/2001	19:11

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: NA

Lab ID: 0409-BK1
Client ID: (2092.2158)
Date Received: NA
Date Extracted: 04/09/2001
Date Analyzed: 04/10/2001
Data file: W5851.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

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/04/2001

Instrument ID: GC-W

GC Column (1st): DB-5

Data File: W5678.D W5677.D W5676.D W5675.D W5674.D

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	100	200	300	RT	FROM	TO
alpha-BHC	4.54	4.55	4.55	4.54	4.54	4.54	4.47	4.61
beta-BHC	5.03	5.04	5.04	5.04	5.03	5.03	4.96	5.10
gamma-BHC	5.16	5.17	5.17	5.17	5.16	5.17	5.10	5.24
delta-BHC	5.63	5.64	5.64	5.64	5.64	5.64	5.57	5.71
Heptachlor	6.74	6.74	6.74	6.74	6.74	6.74	6.67	6.81
Aldrin	7.55	7.56	7.55	7.55	7.55	7.55	7.48	7.62
Heptachlor epoxide	8.56	8.56	8.56	8.56	8.56	8.56	8.49	8.63
Endosulfan I	9.48	9.48	9.48	9.48	9.48	9.48	9.41	9.55
4,4'-DDE	10.24	10.24	10.24	10.24	10.24	10.24	10.17	10.31
Dieldrin	10.17	10.17	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	10.98	10.98	10.98	10.97	10.98	10.91	11.05
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	9.18	9.17	9.18	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}			9.73				9.66	9.80
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

2507

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/04/2001

Instrument ID: GC-W

GC Column (1st): DB-5

Data File: W5678.D W5677.D W5676.D W5675.D W5674.D

Compound	CALIBRATION FACTORS 10	50	100	200	300	MEAN	%RSD
alpha-BHC	43496018	51170957	49291118	47524273	47662802	47829033	5.93
beta-BHC	18379609	19277612	18501314	17677343	17555823	18278340	3.81
gamma-BHC	40045540	45325231	43082664	40199962	39527082	41636096	5.97
delta-BHC	40914451	48513538	47243350	45719049	45763654	45630808	6.31
Heptachlor	34644486	39338425	38059323	36218756	35623323	36776863	5.16
Aldrin	38758408	44513217	42707366	40124672	39339496	41088632	5.93
Heptachlor epoxide	36135554	40003569	37832970	35121001	34216539	36661926	6.27
Endosulfan I	34135461	37496038	35435124	32853490	32002469	34384516	6.32
4,4'-DDE	34724674	39844061	38069279	35332573	34323622	36458842	6.56
Dieldrin	35895317	40429747	38456802	35942974	35003112	37145590	6.04
Endrin	30458379	34225195	33620271	32100741	31808532	32442624	4.63
Endosulfan II	32609352	34728562	32929131	30749858	30017892	32206959	5.80
4,4'-DDD	29633107	33219385	31721240	29744902	28793473	30622422	5.90
Endrin aldehyde	26777455	25431810	22822188	20072796	18946470	22810144	14.71
Endosulfan sulfate	30412382	31815282	30166743	28239588	27760800	29678959	5.61
4,4'-DDT	22004160	25643431	25690156	25182990	25266456	24757439	6.28
Endrin ketone	38876117	39251084	36105496	33001829	31789758	35804857	9.41
Methoxychlor	12205036	12527666	12023670	11346612	11057470	11832091	5.17
alpha-Chlordane	36258643	39925308	38229893	35913807	35107802	37087090	5.28
gamma-Chlordane	36790210	41895938	40307468	37944294	37106290	38808840	5.69
Chlordane 500 ppb			4097171				
Chlordane {2}			749336				
Chlordane {3}			3905814				
Chlordane {4}			1816015				
Chlordane {5}			1251816				
Toxaphene 500 ppb			743270				
Toxaphene {2}			582289				
Toxaphene {3}			434018				
Toxaphene {4}			509494				
Toxaphene {5}			747359				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/04/2001

Instrument ID: GC-W

GC Column (2nd): DB-1701P

Data File: W5678.C W5677.C W5676.C W5675.C W5674.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	100	200	300	RT	FROM	TO
alpha-BHC	5.59	5.60	5.59	5.59	5.60	5.60	5.53	5.67
beta-BHC	8.65	8.65	8.65	8.65	8.66	8.65	8.58	8.72
gamma-BHC	6.54	6.55	6.55	6.55	6.56	6.55	6.48	6.62
delta-BHC	9.21	9.22	9.21	9.22	9.22	9.22	9.15	9.29
Heptachlor	7.02	7.03	7.03	7.03	7.04	7.03	6.96	7.10
Aldrin	7.69	7.70	7.70	7.70	7.71	7.70	7.63	7.77
Heptachlor epoxide	9.54	9.54	9.54	9.54	9.55	9.54	9.47	9.61
Endosulfan I	10.22	10.22	10.22	10.23	10.23	10.23	10.16	10.30
4,4'-DDE	10.99	11.00	11.00	11.00	11.00	11.00	10.93	11.07
Dieldrin	11.26	11.26	11.26	11.26	11.27	11.26	11.19	11.33
Endrin	11.78	11.79	11.78	11.79	11.79	11.79	11.72	11.86
Endosulfan II	13.23	13.23	13.23	13.23	13.24	13.23	13.16	13.30
4,4'-DDD	13.23	13.23	13.23	13.23	13.24	13.23	13.16	13.30
Endrin aldehyde	14.37	14.37	14.37	14.37	14.38	14.37	14.30	14.44
Endosulfan sulfate	15.27	15.27	15.27	15.27	15.28	15.27	15.20	15.34
4,4'-DDT	13.68	13.68	13.68	13.68	13.69	13.68	13.61	13.75
Endrin ketone	16.30	16.30	16.30	16.30	16.30	16.30	16.23	16.37
Methoxychlor	15.54	15.54	15.55	15.54	15.55	15.55	15.48	15.62
alpha-Chlordane	10.61	10.62	10.62	10.62	10.62	10.62	10.55	10.69
gamma-Chlordane	10.46	10.46	10.46	10.46	10.47	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}			14.74				14.67	14.81
Toxaphene {3}			15.01				14.94	15.08
Toxaphene {4}			15.21				15.14	15.28
Toxaphene {5}			15.65				15.58	15.72

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/04/2001

Instrument ID: GC-W

GC Column (2nd): DB-1701P

Data File: W5678.C W5677.C W5676.C W5675.C W5674.C

Compound	CALIBRATION FACTORS 10	50	100	200	300	MEAN	%RSD
alpha-BHC	16266826	19149062	18605696	17564240	17287592	17774683	6.37
beta-BHC	7942657	7943298	7481243	7090968	6987221	7489077	6.05
gamma-BHC	15127810	17497955	16945614	16091904	15851957	16303048	5.71
delta-BHC	15165845	17371079	16750362	15788933	15524212	16120086	5.67
Heptachlor	12357525	13909417	13588439	13014982	12871445	13148362	4.65
Aldrin	14391927	16085789	15479618	14526297	14189048	14934536	5.44
Heptachlor epoxide	13725987	14718751	14083021	13211469	12913067	13730459	5.20
Endosulfan I	12951743	13873605	13269538	12431470	12108840	12927039	5.37
4,4'-DDE	12883890	14586842	14144720	13369646	13079023	13612824	5.33
Dieldrin	13589397	14989333	14500314	13704447	13406520	14038002	4.82
Endrin	11722912	12941585	12894910	12428421	12325063	12462578	3.98
Endosulfan II	24292009	25559807	24109684	22199289	21560826	23544323	6.94
4,4'-DDD	24292009	25559807	24109684	22199289	21560826	23544323	6.94
Endrin aldehyde	10606465	10053544	9325317	8654912	8451933	9418434	9.70
Endosulfan sulfate	11463120	11771686	11324902	10775192	10588835	11184747	4.39
4,4'-DDT	6489752	8524503	8881304	9006263	9224500	8425265	13.19
Endrin ketone	13781060	14056856	13201403	12347065	11963048	13069887	6.89
Methoxychlor	4378096	4723661	4666903	4601910	4626684	4599451	2.87
alpha-Chlordane	13792467	14746277	14184308	13334259	13009350	13813332	4.97
gamma-Chlordane	13785876	15099925	14592419	13785917	13490456	14150919	4.74
Chlordane 500 ppb			293988				
Chlordane {2}			337784				
Chlordane {3}			1484430				
Chlordane {4}			1348231				
Chlordane {5}			653044				
Toxaphene 500 ppb			280637				
Toxaphene {2}			243713				
Toxaphene {3}			193089				
Toxaphene {4}			149865				
Toxaphene {5}			217517				

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/06/2001 Instrument ID: GC-W

Data File: W5749.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	47829033	44099403	7.80
beta-BHC	5.02	4.95	5.09	18278340	16158801	11.60
gamma-BHC	5.16	5.09	5.23	41636096	38037912	8.64
delta-BHC	5.63	5.56	5.70	45630808	41192188	9.73
Heptachlor	6.73	6.66	6.80	36776863	33401331	9.18
Aldrin	7.55	7.48	7.62	41088632	37527555	8.67
Heptachlor epoxide	8.56	8.49	8.63	36661926	33310587	9.14
Endosulfan I	9.48	9.41	9.55	34384516	30943152	10.01
4,4'-DDE	10.24	10.17	10.31	36458842	32784802	10.08
Dieldrin	10.17	10.10	10.24	37145590	33996264	8.48
Endrin	10.72	10.65	10.79	32442624	31084176	4.19
Endosulfan II	10.98	10.91	11.05	32206959	28687718	10.93
4,4'-DDD	11.36	11.29	11.43	30622422	27828135	9.12
Endrin aldehyde	11.50	11.43	11.57	22810144	19836955	13.03
Endosulfan sulfate	12.15	12.08	12.22	29678959	25957740	12.54
4,4'-DDT	12.38	12.31	12.45	24757439	21867264	11.67
Endrin ketone	13.36	13.29	13.43	35804857	30886637	13.74
Methoxychlor	14.06	13.99	14.13	11832091	10080052	14.81
alpha-Chlordane	9.58	9.51	9.65	37087090	33520521	9.62
gamma-Chlordane	9.17	9.10	9.24	38808840	35241513	9.19
					Average %D	10.11
Chlordane 500 ppb	9.17	9.10	9.24	4097171	3744003	8.62
Chlordane {2}	9.37	9.30	9.44	749336	701259	6.42
Chlordane {3}	9.58	9.51	9.65	3905814	3480708	10.88
Chlordane {4}	9.72	9.65	9.79	1816015	1655256	8.85
Chlordane {5}	11.58	11.51	11.65	1251816	1125887	10.06
Toxaphene 500 ppb	13.18	13.11	13.25	743270	661159	11.05
Toxaphene {2}	13.30	13.23	13.37	582289	527418	9.42
Toxaphene {3}	13.58	13.51	13.65	434018	388474	10.49
Toxaphene {4}	14.04	13.97	14.11	509494	463433	9.04
Toxaphene {5}	14.55	14.48	14.62	747359	684883	8.36
					Average %D	9.32

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/06/2001 Instrument ID: GC-W

Data File: W5749.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	5.59	5.52	5.66	17774683	17756668	0.10
beta-BHC	8.65	8.58	8.72	7489077	7205621	3.78
gamma-BHC	6.54	6.47	6.61	16303048	16221286	0.50
delta-BHC	9.22	9.15	9.29	16120086	15898530	1.37
Heptachlor	7.02	6.95	7.09	13148362	13083718	0.49
Aldrin	7.69	7.62	7.76	14934536	14802002	0.89
Heptachlor epoxide	9.54	9.47	9.61	13730459	13542785	1.37
Endosulfan I	10.23	10.16	10.30	12927039	12726057	1.55
4,4'-DDE	11.00	10.93	11.07	13612824	13344551	1.97
Dieldrin	11.26	11.19	11.33	14038002	13899571	0.99
Endrin	11.79	11.72	11.86	12462578	13066299	4.84
Endosulfan II	13.23	13.16	13.30	23544323	23030236	2.18
4,4'-DDD	13.23	13.16	13.30	23544323	23030236	2.18
Endrin aldehyde	14.38	14.31	14.45	9418434	8091295	14.09
Endosulfan sulfate	15.28	15.21	15.35	11184747	10571240	5.49
4,4'-DDT	13.68	13.61	13.75	8425265	8002741	5.01
Endrin ketone	16.30	16.23	16.37	13069887	12120002	7.27
Methoxychlor	15.55	15.48	15.62	4599451	4291184	6.70
alpha-Chlordane	10.62	10.55	10.69	13813332	13516529	2.15
gamma-Chlordane	10.46	10.39	10.53	14150919	13911052	1.70
					Average %D	3.23
Chlordane 500 ppb	8.38	8.31	8.45	293988	308285	4.86
Chlordane {2}	10.06	9.99	10.13	337784	326966	3.20
Chlordane {3}	10.46	10.39	10.53	1484430	1457195	1.83
Chlordane {4}	10.62	10.55	10.69	1348231	1334900	0.99
Chlordane {5}	10.68	10.61	10.75	653044	623798	4.48
Toxaphene 500 ppb	14.03	13.96	14.10	280637	264650	5.70
Toxaphene {2}	14.75	14.68	14.82	243713	216577	11.13
Toxaphene {3}	15.02	14.95	15.09	193089	183369	5.03
Toxaphene {4}	15.22	15.15	15.29	149865	133250	11.09
Toxaphene {5}	15.66	15.59	15.73	217517	200065	8.02
					Average %D	5.63

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/06/2001 Instrument ID: GC-W

Data File: W5772.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	4.54	4.47	4.61	47829033	48659007	1.74
beta-BHC	5.03	4.96	5.10	18278340	18156592	0.67
gamma-BHC	5.16	5.09	5.23	41636096	42096268	1.11
delta-BHC	5.63	5.56	5.70	45630808	46148773	1.14
Heptachlor	6.74	6.67	6.81	36776863	37358227	1.58
Aldrin	7.55	7.48	7.62	41088632	41876245	1.92
Heptachlor epoxide	8.56	8.49	8.63	36661926	37079843	1.14
Endosulfan I	9.48	9.41	9.55	34384516	34729616	1.00
4,4'-DDE	10.24	10.17	10.31	36458842	37447815	2.71
Dieldrin	10.17	10.10	10.24	37145590	38059471	2.46
Endrin	10.72	10.65	10.79	32442624	34767094	7.16
Endosulfan II	10.98	10.91	11.05	32206959	32531055	1.01
4,4'-DDD	11.36	11.29	11.43	30622422	32382801	5.75
Endrin aldehyde	11.50	11.43	11.57	22810144	22876037	0.29
Endosulfan sulfate	12.16	12.09	12.23	29678959	29938592	0.87
4,4'-DDT	12.39	12.32	12.46	24757439	25311230	2.24
Endrin ketone	13.36	13.29	13.43	35804857	35980555	0.49
Methoxychlor	14.06	13.99	14.13	11832091	11822470	0.08
alpha-Chlordane	9.58	9.51	9.65	37087090	37917608	2.24
gamma-Chlordane	9.17	9.10	9.24	38808840	39897688	2.81
					Average %D	1.92

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/06/2001 Instrument ID: GC-W

Data File: W5772.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	5.59	5.52	5.66	17774683	17908809	0.75
beta-BHC	8.65	8.58	8.72	7489077	7158599	4.41
gamma-BHC	6.54	6.47	6.61	16303048	16313151	0.06
delta-BHC	9.21	9.14	9.28	16120086	16082239	0.23
Heptachlor	7.02	6.95	7.09	13148362	13142877	0.04
Aldrin	7.69	7.62	7.76	14934536	14841462	0.62
Heptachlor epoxide	9.54	9.47	9.61	13730459	13494674	1.72
Endosulfan I	10.23	10.16	10.30	12927039	12676831	1.94
4,4'-DDE	11.00	10.93	11.07	13612824	13551162	0.45
Dieldrin	11.26	11.19	11.33	14038002	13915320	0.87
Endrin	11.79	11.72	11.86	12462578	12981133	4.16
Endosulfan II	13.23	13.16	13.30	23544323	23561618	0.07
4,4'-DDD	13.23	13.16	13.30	23544323	23561618	0.07
Endrin aldehyde	14.38	14.31	14.45	9418434	8934021	5.14
Endosulfan sulfate	15.28	15.21	15.35	11184747	10802101	3.42
4,4'-DDT	13.68	13.61	13.75	8425265	8119250	3.63
Endrin ketone	16.30	16.23	16.37	13069887	12598959	3.60
Methoxychlor	15.55	15.48	15.62	4599451	4365017	5.10
alpha-Chlordane	10.62	10.55	10.69	13813332	13597877	1.56
gamma-Chlordane	10.46	10.39	10.53	14150919	14019258	0.93
					Average %D	1.94

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/10/2001 Instrument ID: GC-W

Data File: W5848.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	4.54	4.47	4.61	47829033	49258170	2.99
beta-BHC	5.03	4.96	5.10	18278340	18283988	0.03
gamma-BHC	5.16	5.09	5.23	41636096	42312332	1.62
delta-BHC	5.63	5.56	5.70	45630808	39650666	13.11
Heptachlor	6.73	6.66	6.80	36776863	40071622	8.96
Aldrin	7.55	7.48	7.62	41088632	41862705	1.88
Heptachlor epoxide	8.56	8.49	8.63	36661926	37433623	2.10
Endosulfan I	9.48	9.41	9.55	34384516	34822504	1.27
4,4'-DDE	10.24	10.17	10.31	36458842	37161948	1.93
Dieldrin	10.17	10.10	10.24	37145590	38337466	3.21
Endrin	10.72	10.65	10.79	32442624	36534494	12.61
Endosulfan II	10.98	10.91	11.05	32206959	32221831	0.05
4,4'-DDD	11.36	11.29	11.43	30622422	31789628	3.81
Endrin aldehyde	11.50	11.43	11.57	22810144	22847757	0.16
Endosulfan sulfate	12.15	12.08	12.22	29678959	27220902	8.28
4,4'-DDT	12.39	12.32	12.46	24757439	26429587	6.75
Endrin ketone	13.36	13.29	13.43	35804857	34493886	3.66
Methoxychlor	14.06	13.99	14.13	11832091	13221400	11.74
alpha-Chlordane	9.58	9.51	9.65	37087090	38050563	2.60
gamma-Chlordane	9.17	9.10	9.24	38808840	40242474	3.69
					Average %D	4.52
Chlordane 500 ppb	9.17	9.10	9.24	4097171	3924186	4.22
Chlordane {2}	9.37	9.30	9.44	749336	732546	2.24
Chlordane {3}	9.58	9.51	9.65	3905814	3736168	4.34
Chlordane {4}	9.73	9.66	9.80	1816015	1726612	4.92
Chlordane {5}	11.57	11.50	11.64	1251816	1184396	5.39
Toxaphene 500 ppb	13.17	13.10	13.24	743270	709830	4.50
Toxaphene {2}	13.30	13.23	13.37	582289	549058	5.71
Toxaphene {3}	13.58	13.51	13.65	434018	455687	4.99
Toxaphene {4}	14.04	13.97	14.11	509494	500331	1.80
Toxaphene {5}	14.55	14.48	14.62	747359	718626	3.84
					Average %D	4.20

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/10/2001 Instrument ID: GC-W

Data File: W5848.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	5.59	5.52	5.66	17774683	16921346	4.80
beta-BHC	8.65	8.58	8.72	7489077	6795391	9.26
gamma-BHC	6.54	6.47	6.61	16303048	15385454	5.63
delta-BHC	9.21	9.14	9.28	16120086	12971913	19.53
Heptachlor	7.02	6.95	7.09	13148362	12853804	2.24
Aldrin	7.69	7.62	7.76	14934536	14138258	5.33
Heptachlor epoxide	9.54	9.47	9.61	13730459	12920175	5.90
Endosulfan I	10.22	10.15	10.29	12927039	12142643	6.07
4,4'-DDE	11.00	10.93	11.07	13612824	12871163	5.45
Dieldrin	11.26	11.19	11.33	14038002	13269359	5.48
Endrin	11.78	11.71	11.85	12462578	12748079	2.29
Endosulfan II	13.23	13.16	13.30	23544323	22038698	6.39
4,4'-DDD	13.23	13.16	13.30	23544323	22038698	6.39
Endrin aldehyde	14.37	14.30	14.44	9418434	8348575	11.36
Endosulfan sulfate	15.27	15.20	15.34	11184747	9533807	14.76
4,4'-DDT	13.68	13.61	13.75	8425265	7958411	5.54
Endrin ketone	16.30	16.23	16.37	13069887	11584320	11.37
Methoxychlor	15.54	15.47	15.61	4599451	4306526	6.37
alpha-Chlordane	10.61	10.54	10.68	13813332	12978348	6.04
gamma-Chlordane	10.46	10.39	10.53	14150919	13381288	5.44
					Average %D	7.28
Chlordane 500 ppb	8.38	8.31	8.45	293988	289720	1.45
Chlordane {2}	10.06	9.99	10.13	337784	318807	5.62
Chlordane {3}	10.46	10.39	10.53	1484430	1356354	8.63
Chlordane {4}	10.62	10.55	10.69	1348231	1233050	8.54
Chlordane {5}	10.68	10.61	10.75	653044	592152	9.32
Toxaphene 500 ppb	14.03	13.96	14.10	280637	300236	6.98
Toxaphene {2}	14.75	14.68	14.82	243713	220816	9.40
Toxaphene {3}	15.02	14.95	15.09	193089	172635	10.59
Toxaphene {4}	15.21	15.14	15.28	149865	130427	12.97
Toxaphene {5}	15.66	15.59	15.73	217517	197266	9.31
					Average %D	8.28

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/10/2001 Instrument ID: GC-W

Data File: W5863.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	47829033	49666039	3.84
beta-BHC	5.02	4.95	5.09	18278340	18269329	0.05
gamma-BHC	5.15	5.08	5.22	41636096	42443715	1.94
delta-BHC	5.63	5.56	5.70	45630808	43175886	5.38
Heptachlor	6.73	6.66	6.80	36776863	39734504	8.04
Aldrin	7.54	7.47	7.61	41088632	42196178	2.70
Heptachlor epoxide	8.56	8.49	8.63	36661926	37228167	1.54
Endosulfan I	9.47	9.40	9.54	34384516	34697259	0.91
4,4'-DDE	10.24	10.17	10.31	36458842	37706022	3.42
Dieldrin	10.17	10.10	10.24	37145590	37909128	2.06
Endrin	10.72	10.65	10.79	32442624	35693724	10.02
Endosulfan II	10.97	10.90	11.04	32206959	32047252	0.50
4,4'-DDD	11.36	11.29	11.43	30622422	31929335	4.27
Endrin aldehyde	11.50	11.43	11.57	22810144	22359960	1.97
Endosulfan sulfate	12.15	12.08	12.22	29678959	27866922	6.11
4,4'-DDT	12.38	12.31	12.45	24757439	25637176	3.55
Endrin ketone	13.36	13.29	13.43	35804857	34630954	3.28
Methoxychlor	14.06	13.99	14.13	11832091	12421356	4.98
alpha-Chlordane	9.58	9.51	9.65	37087090	38200088	3.00
gamma-Chlordane	9.17	9.10	9.24	38808840	40343151	3.95
					Average %D	3.58

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/10/2001 Instrument ID: GC-W

Data File: W5863.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	17774683	16922235	4.80
beta-BHC	8.64	8.57	8.71	7489077	6871886	8.24
gamma-BHC	6.54	6.47	6.61	16303048	15433836	5.33
delta-BHC	9.21	9.14	9.28	16120086	14115654	12.43
Heptachlor	7.01	6.94	7.08	13148362	12815115	2.53
Aldrin	7.69	7.62	7.76	14934536	14157369	5.20
Heptachlor epoxide	9.53	9.46	9.60	13730459	12875336	6.23
Endosulfan I	10.22	10.15	10.29	12927039	12084934	6.51
4,4'-DDE	10.99	10.92	11.06	13612824	12857992	5.55
Dieldrin	11.26	11.19	11.33	14038002	13242449	5.67
Endrin	11.78	11.71	11.85	12462578	12487470	0.20
Endosulfan II	13.23	13.16	13.30	23544323	22003699	6.54
4,4'-DDD	13.23	13.16	13.30	23544323	22003699	6.54
Endrin aldehyde	14.37	14.30	14.44	9418434	8314074	11.73
Endosulfan sulfate	15.27	15.20	15.34	11184747	9639156	13.82
4,4'-DDT	13.68	13.61	13.75	8425265	7755524	7.95
Endrin ketone	16.30	16.23	16.37	13069887	11719104	10.34
Methoxychlor	15.54	15.47	15.61	4599451	4174011	9.25
alpha-Chlordane	10.61	10.54	10.68	13813332	12986213	5.99
gamma-Chlordane	10.46	10.39	10.53	14150919	13374190	5.49
					Average %D	7.02

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/06/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
S-2	2061-002	SOIL	70		95		75		110	
S-3	2061-003	SOIL	65		90		70		105	
S-4	2061-004	SOIL	70		90		75		110	
S-5	2061-005	SOIL	55	*	85		65		100	
S-6	2061-006	SOIL	60		80		65		95	
S-7	2061-007	SOIL	60		85		70		100	
S-1	2061-001	SOIL	70		95		80		110	
(2092.2111)	0405-BK1	SOIL	87		83		85		87	
S-55	2092-011	SOIL	55	*	130		110		170	
WC-COMP	2111-001	SOIL	60		80		70		95	
PEST	PBS0405-MS1	SOIL	85		81		82		82	
(2107)	0406-BK1	SOIL	88		85		84		84	
1A	2107-001	SOIL	70		90		70		100	
1B	2107-002	SOIL	65		85		65		95	
1C	2107-003	SOIL	65		85		65		90	
1D	2107-004	SOIL	65		85		65		90	
1E	2107-005	SOIL	70		90		70		95	
2A	2107-006	SOIL	65		95		70		100	
2B	2107-007	SOIL	65		85		70		90	

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: 04/10/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(2092.2158)	0409-BK1	SOIL	93		87		67		116	
S-46	2092-002	SOIL	60		85		60		90	
S-47	2092-003	SOIL	65		85		70		95	
S-48	2092-004	SOIL	70		90		75		100	
S-49	2092-005	SOIL	70		95		70		100	
DS-1_1-1.5'	2155-012	SOIL	70		95		65		100	
S-6	2158-006	SOIL	70		85		70		90	
S-7	2158-007	SOIL	75		100		70		100	
PEST	2158-007-MS1	SOIL	88		95		79		92	
PEST	2158-007-MSD1	SOIL	88		94		79		93	
PEST	PBS0409-MS1	SOIL	92		87		81		83	

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

2520

SOIL PESTICIDES MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2061-007-MSD1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC	100.0	0.0	95.1	95	44 - 149
Heptachlor	100.0	0.0	90.2	90	50 - 157
Aldrin	100.0	0.0	88.8	89	40 - 150
Dieldrin	100.0	0.0	90.6	91	56 - 134
Endrin	100.0	0.0	96.3	96	65 - 148
4,4'-DDT	100.0	0.0	73.5	74	42 - 175

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC	0.0	97.3	97	2	18	44 - 149
Heptachlor	0.0	93.9	94	4	18	50 - 157
Aldrin	0.0	90.6	91	2	18	40 - 150
Dieldrin	0.0	92.1	92	1	13	56 - 134
Endrin	0.0	98.1	98	2	14	65 - 148
4,4'-DDT	0.0	78.7	79	7	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: PBS0405-MS1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC	100.0	0.0	100.6	101	44 - 149
Heptachlor	100.0	0.0	92.7	93	50 - 157
Aldrin	100.0	0.0	94.2	94	40 - 150
Dieldrin	100.0	0.0	92.3	92	56 - 134
Endrin	100.0	0.0	96.5	97	65 - 148
4,4'-DDT	100.0	0.0	90.8	91	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

SOIL PESTICIDES MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2158-007-MSD1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC	100.0	0.0	117.8	118	44 - 149
Heptachlor	100.0	0.0	115.2	115	50 - 157
Aldrin	100.0	0.0	108.6	109	40 - 150
Dieldrin	100.0	0.0	108.8	109	56 - 134
Endrin	100.0	0.0	119.5	120	65 - 148
4,4'-DDT	100.0	0.0	123.3	123	42 - 175

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD #	% REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC	0.0	115.1		115	3	18	44 - 149
Heptachlor	0.0	113.1		113	2	18	50 - 157
Aldrin	0.0	105.3		105	4	18	40 - 150
Dieldrin	0.0	106.6		107	2	13	56 - 134
Endrin	0.0	117.3		117	3	14	65 - 148
4,4'-DDT	0.0	121.4		121	2	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: PBS0409-MS1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC	100.0	0.0	113.9	114	44 - 149
Heptachlor	100.0	0.0	111.4	111	50 - 157
Aldrin	100.0	0.0	106.8	107	40 - 150
Dieldrin	100.0	0.0	104.2	104	56 - 134
Endrin	100.0	0.0	112.1	112	65 - 148
4,4'-DDT	100.0	0.0	107.8	108	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 3.70 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	#
S-2	2061-002	04/06/2001	12:27	3.85		18.68		3.70		18.65	
S-3	2061-003	04/06/2001	12:52	3.86		18.69		3.70		18.65	
S-4	2061-004	04/06/2001	13:17	3.86		18.69		3.69		18.65	
S-5	2061-005	04/06/2001	13:42	3.85		18.69		3.69		18.64	
S-6	2061-006	04/06/2001	14:07	3.86		18.69		3.70		18.64	
S-7	2061-007	04/06/2001	14:32	3.86		18.69		3.70		18.65	
S-1	2061-001	04/06/2001	14:57	3.85		18.68		3.69		18.64	
(2092.2111)	0405-BK1	04/06/2001	15:56	3.85		18.69		3.70		18.65	
S-55	2092-011	04/06/2001	16:25	3.85		18.70		3.70		18.64	
WC-COMP	2111-001	04/06/2001	17:15	3.85		18.69		3.69		18.65	
PEST	PBS0405-MS1	04/06/2001	17:40	3.85		18.69		3.69		18.65	
(2107)	0406-BK1	04/06/2001	18:05	3.85		18.69		3.69		18.65	
1A	2107-001	04/06/2001	18:29	3.85		18.68		3.69		18.65	
1B	2107-002	04/06/2001	18:54	3.85		18.69		3.69		18.65	
1C	2107-003	04/06/2001	19:19	3.85		18.69		3.69		18.65	
1D	2107-004	04/06/2001	19:44	3.85		18.69		3.69		18.65	
1E	2107-005	04/06/2001	20:09	3.85		18.69		3.69		18.65	
2A	2107-006	04/06/2001	20:34	3.85		18.69		3.69		18.65	
2B	2107-007	04/06/2001	20:59	3.85		18.69		3.68		18.65	

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 18.69 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	#
(2092.2158)	0409-BK1	04/10/2001	14:27	3.85		18.69		3.69		18.64	
S-46	2092-002	04/10/2001	14:52	3.85		18.69		3.69		18.64	
S-47	2092-003	04/10/2001	15:17	3.85		18.68		3.68		18.64	
S-48	2092-004	04/10/2001	15:42	3.85		18.68		3.69		18.64	
S-49	2092-005	04/10/2001	16:07	3.85		18.68		3.69		18.64	
DS-1_1-1.5'	2155-012	04/10/2001	17:06	3.85		18.69		3.69		18.65	
S-6	2158-006	04/10/2001	17:31	3.85		18.68		3.69		18.64	
S-7	2158-007	04/10/2001	17:56	3.85		18.69		3.68		18.64	
PEST	2158-007-MS1	04/10/2001	18:21	3.85		18.68		3.69		18.64	
PEST	2158-007-MSD1	04/10/2001	18:46	3.85		18.68		3.69		18.64	
PEST	PBS0409-MS1	04/10/2001	19:11	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\04-10-01\W5852.D\ECD1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5852.D\ECD2A.CH
Acq On : 4-10-01 14:52:19 Operator:
Sample : S-46,2092-002,S,30.5g,17.6,04/09/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 11 9:58 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	3.85	3.69	56264530	22991464	1.196	1.202
Spiked Amount 100.000			Recovery	=	1.20%	1.20%
2) S DCB	18.69	18.64	76400156	28439413	1.707	1.798
Spiked Amount 100.000			Recovery	=	1.71%	1.80%
Target Compounds						
11) T 4,4'-DDE	10.24	10.99	56397528	19999824	1.547	1.469
15) T 4,4'-DDD	11.36	13.25	410.7E6	146.6E6	13.411	12.454
T 4,4'-DDT	12.38	13.68	1086.1E6	311.0E6	43.869	36.916
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.
W5852.D WPTC0404.M Wed Apr 11 10:03:26 2001 GC_W Page 1

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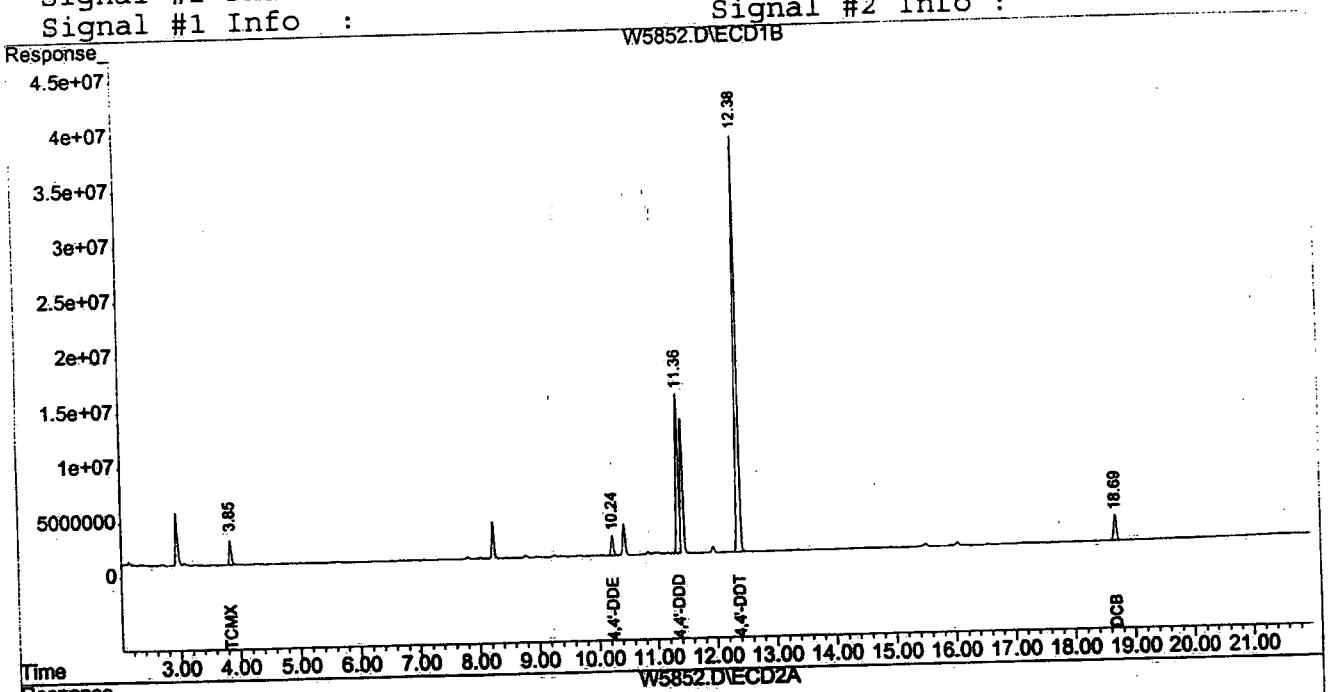
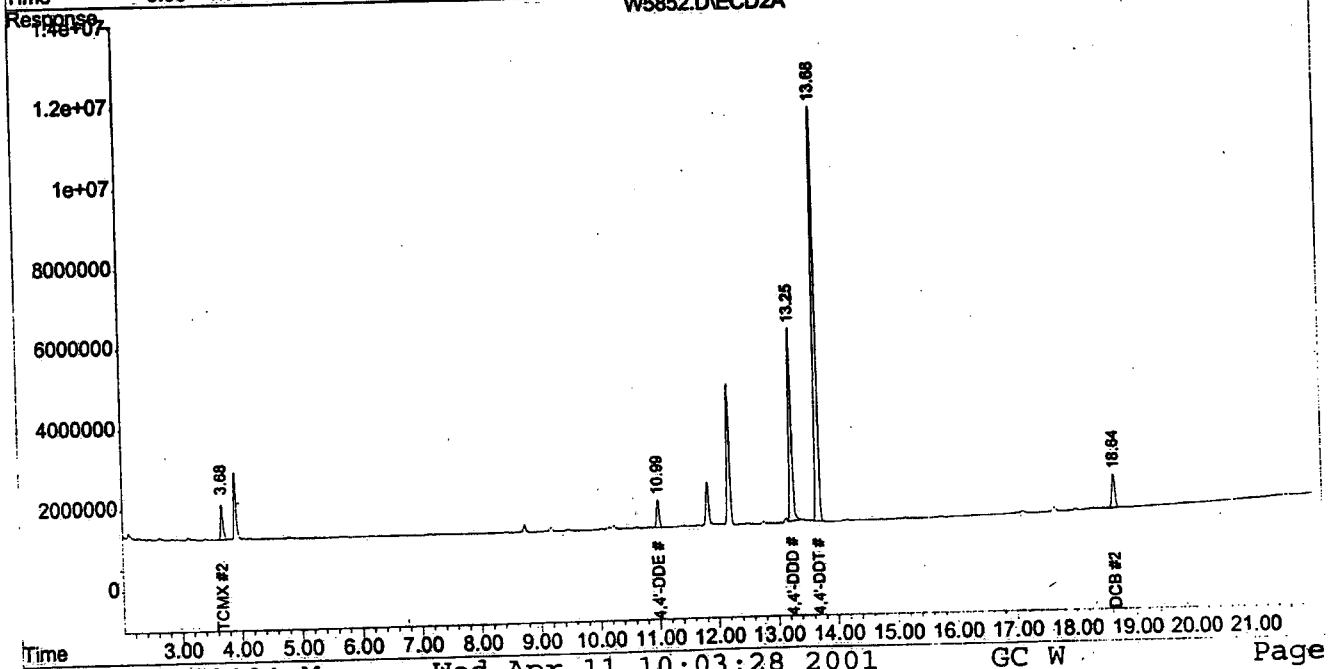
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5852.D\ECD1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5852.D\ECD2A.CH
Acq On : 4-10-01 14:52:19 Operator:
Sample : S-46,2092-002,S,30.5g,17.6,04/09/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 11 9:58 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





000137

2528

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5853.D\ECD1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5853.D\ECD2A.CH
Acq On : 4-10-01 15:17:16 Operator:
Sample : S-47,2092-003,S,30.9g,15.8,04/09/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 11 9:58 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	62215090	26354054	1.323	1.378m
Spiked Amount 100.000			Recovery =		1.32%	1.38%
2) S DCB	18.68	18.64	78149552	29309136	1.746	1.853
Spiked Amount 100.000			Recovery =		1.75%	1.85%
Target Compounds						
18) T 4,4'-DDT	12.38	13.68	75951656	19774291	3.068	2.347m
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

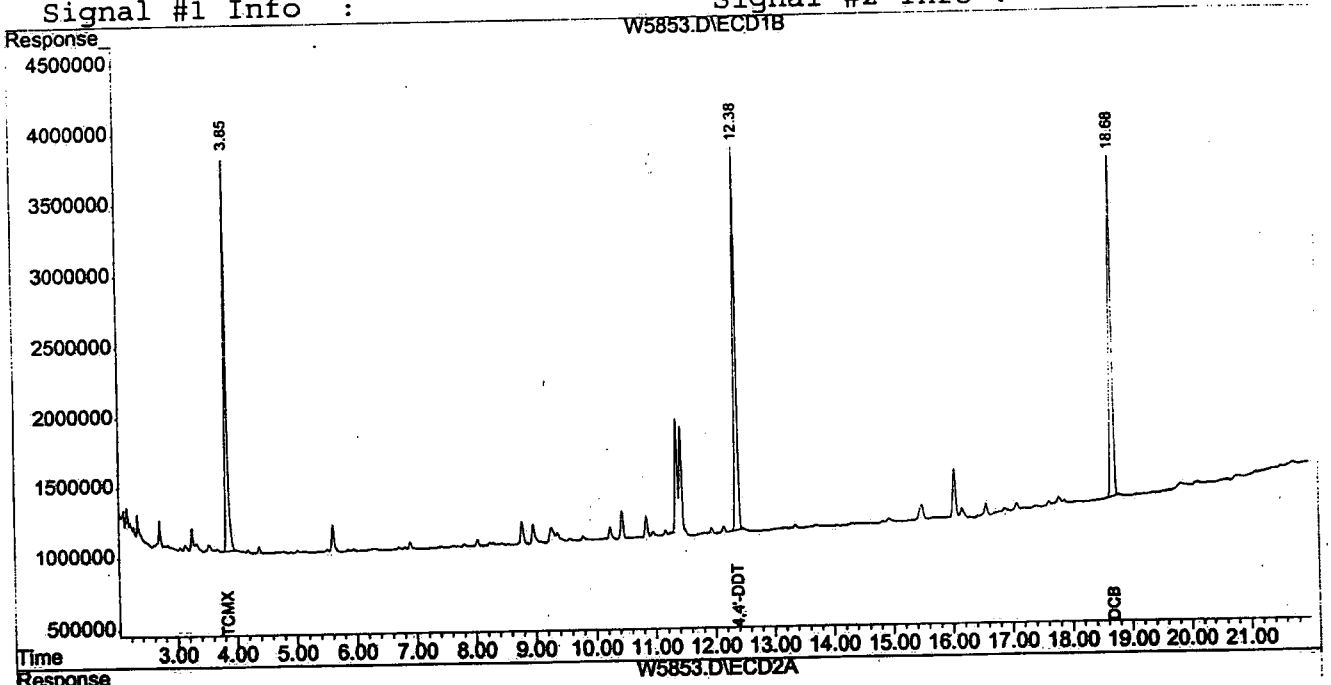
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

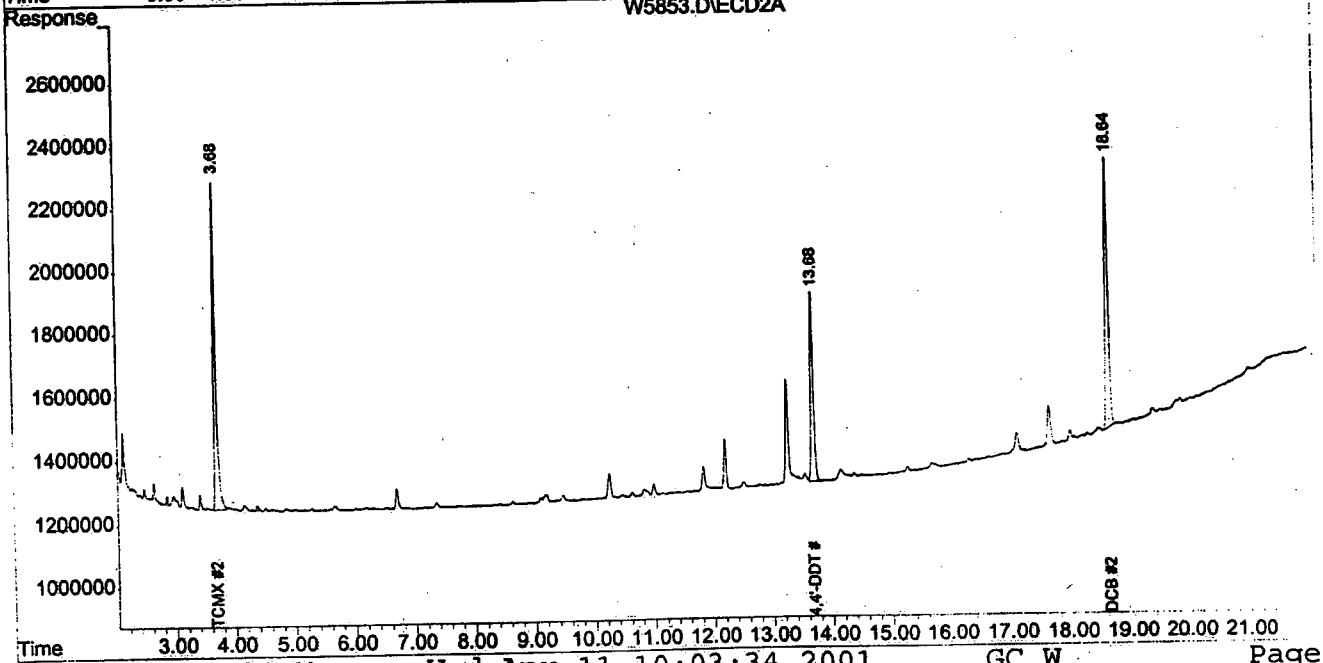
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5853.D\ECD1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5853.D\ECD2A.CH
Acq On : 4-10-01 15:17:16 Operator:
Sample : S-47,2092-003,S,30.9g,15.8,04/09/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 11 9:58 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





000439

2530

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5854.D\ECD1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5854.D\ECD2A.CH
Acq On : 4-10-01 15:42:14 Operator:
Sample : S-48,2092-004,S,30.2g,13.0,04/09/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 11 9:59 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	65634899	28284770	1.396m	1.479m
Spiked Amount 100.000			Recovery	=	1.40%	1.48%
2) S DCB	18.68	18.64	81668516	32402629	1.824	2.048m
Spiked Amount 100.000			Recovery	=	1.82%	2.05%
Target Compounds						
15) T 4,4'-DDD	11.36	13.25	121.7E6	43829725	3.973	3.723
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

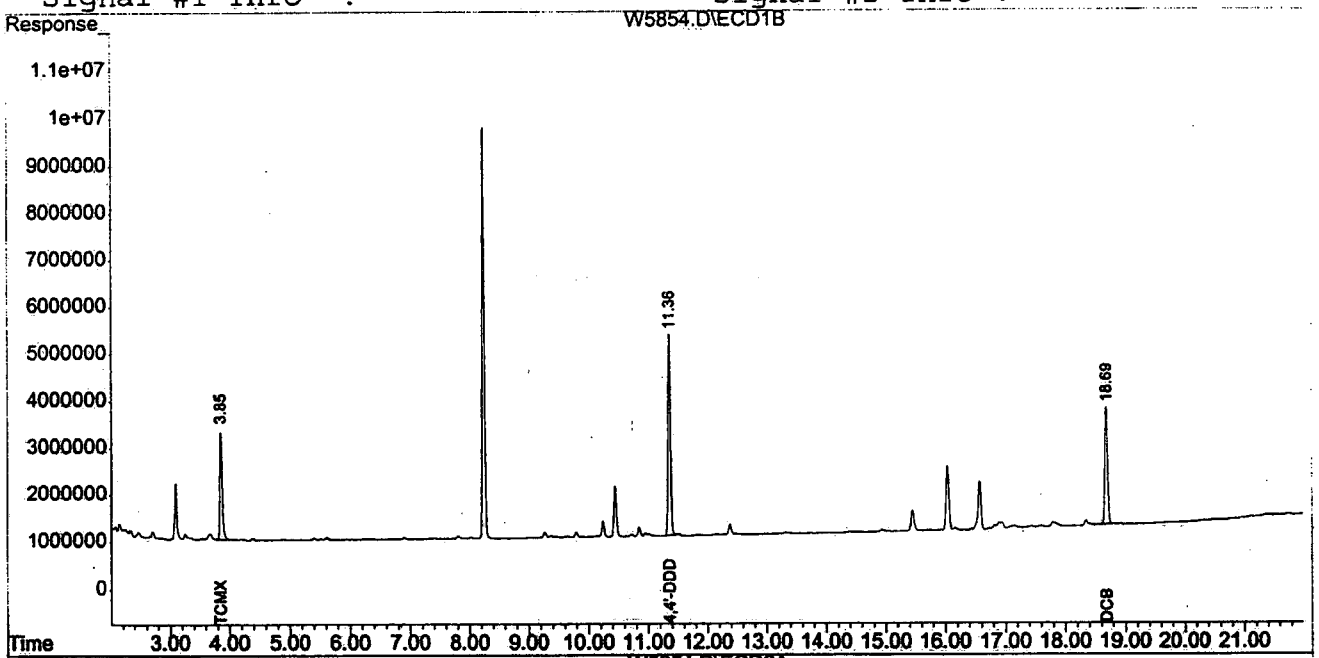
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

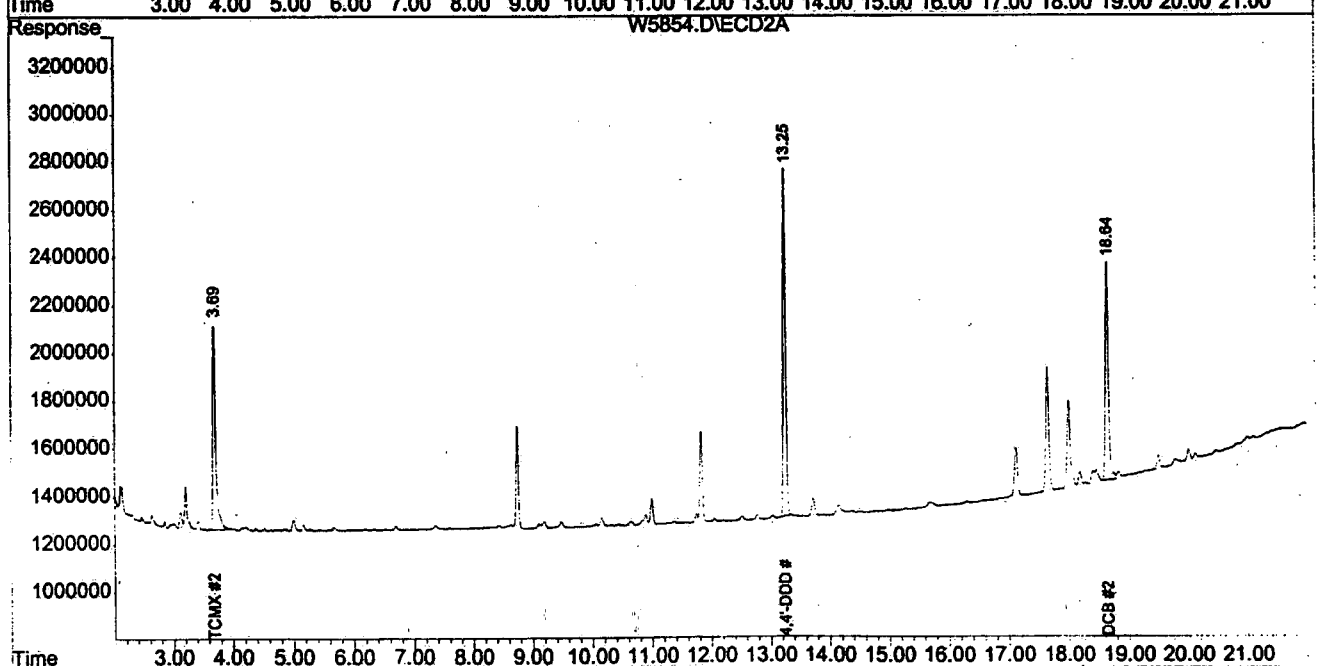
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5854.D\ECD1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5854.D\ECD2A.CH
Acq On : 4-10-01 15:42:14 Operator:
Sample : S-48,2092-004,S,30.2g,13.0,04/09/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 11 9:59 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2532

000141

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5855.D\ECD1B.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5855.D\ECD2A.CH
Acq On : 4-10-01 16:07:18 Operator:
Sample : S-49,2092-005,S,30.8g,15.7,04/09/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 11 10:00 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	3.85	3.69	64093166	27012828	1.363	1.412
Spiked Amount 100.000			Recovery	=	1.36%	1.41%
2) S DCB	18.68	18.64	83737900	30959832	1.871	1.957
Spiked Amount 100.000			Recovery	=	1.87%	1.96%
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.
W5855.D WPTC0404.M Wed Apr 11 10:03:45 2001 GC_W Page 1

2533

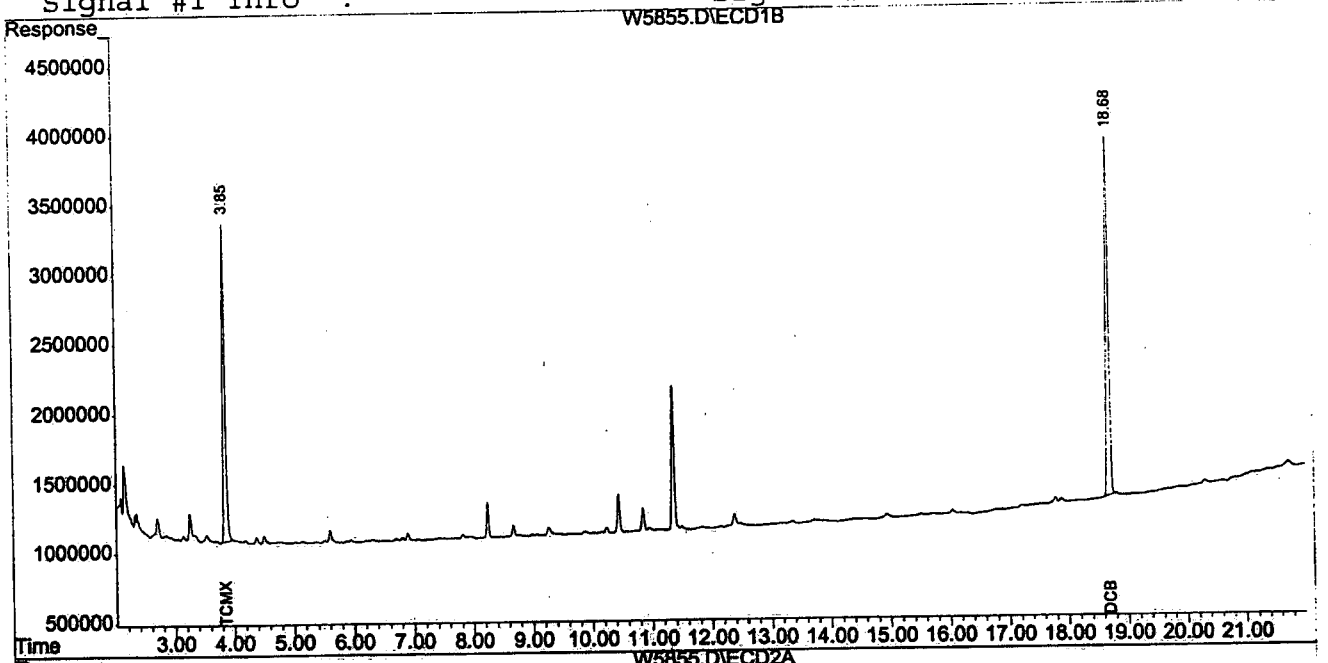
000142

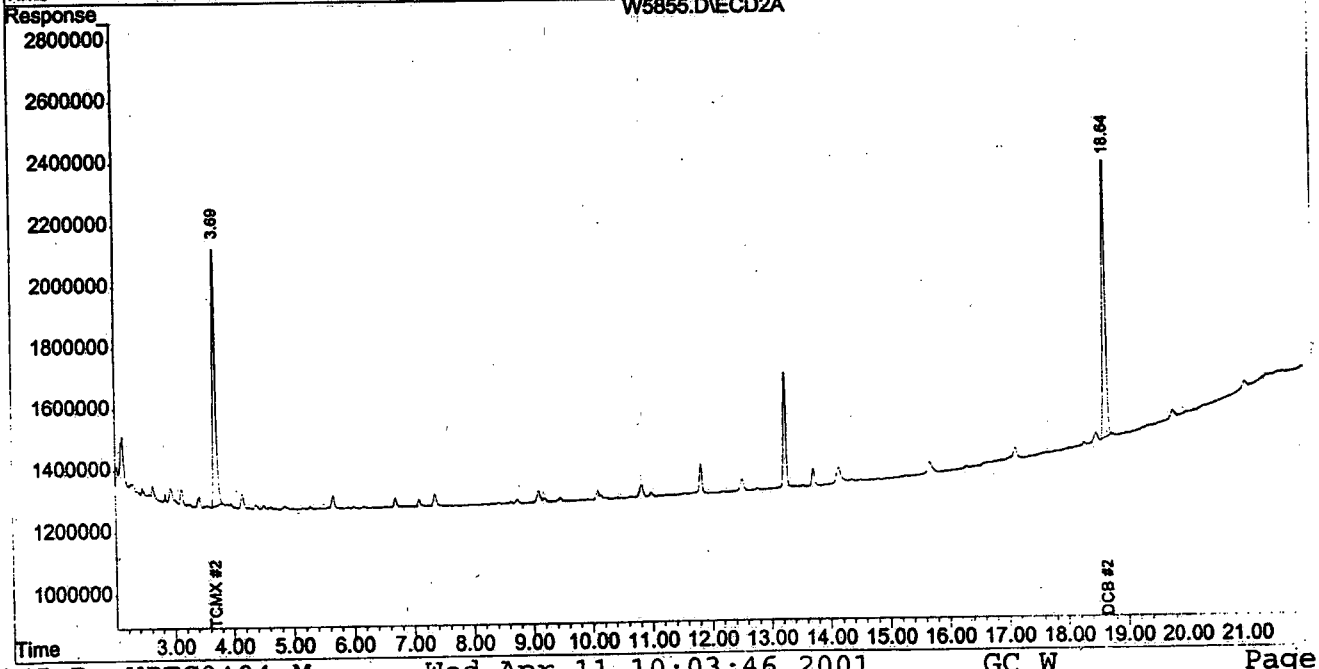
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5855.D\ECD1B.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5855.D\ECD2A.CH
Acq On : 4-10-01 16:07:18 Operator:
Sample : S-49,2092-005,S,30.8g,15.7,04/09/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 11 10:00 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2534

000143

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-06-01\W5761.D\ECD1B.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\04-06-01\W5761.D\ECD2A.CH
Acq On : 4-6-01 16:25:04 Operator:
Sample : S-55,2092-011,S,30.2g,20.4,04/05/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 9 10:35 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	3.85	3.70	53126723	42326945	1.130m	2.213m#
Spiked Amount 100.000			Recovery =		1.13%	2.21%
2) S DCB	18.70	18.64	114.3E6	53406315	2.554m	3.376m#
Spiked Amount 100.000			Recovery =		2.55%	3.38%
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

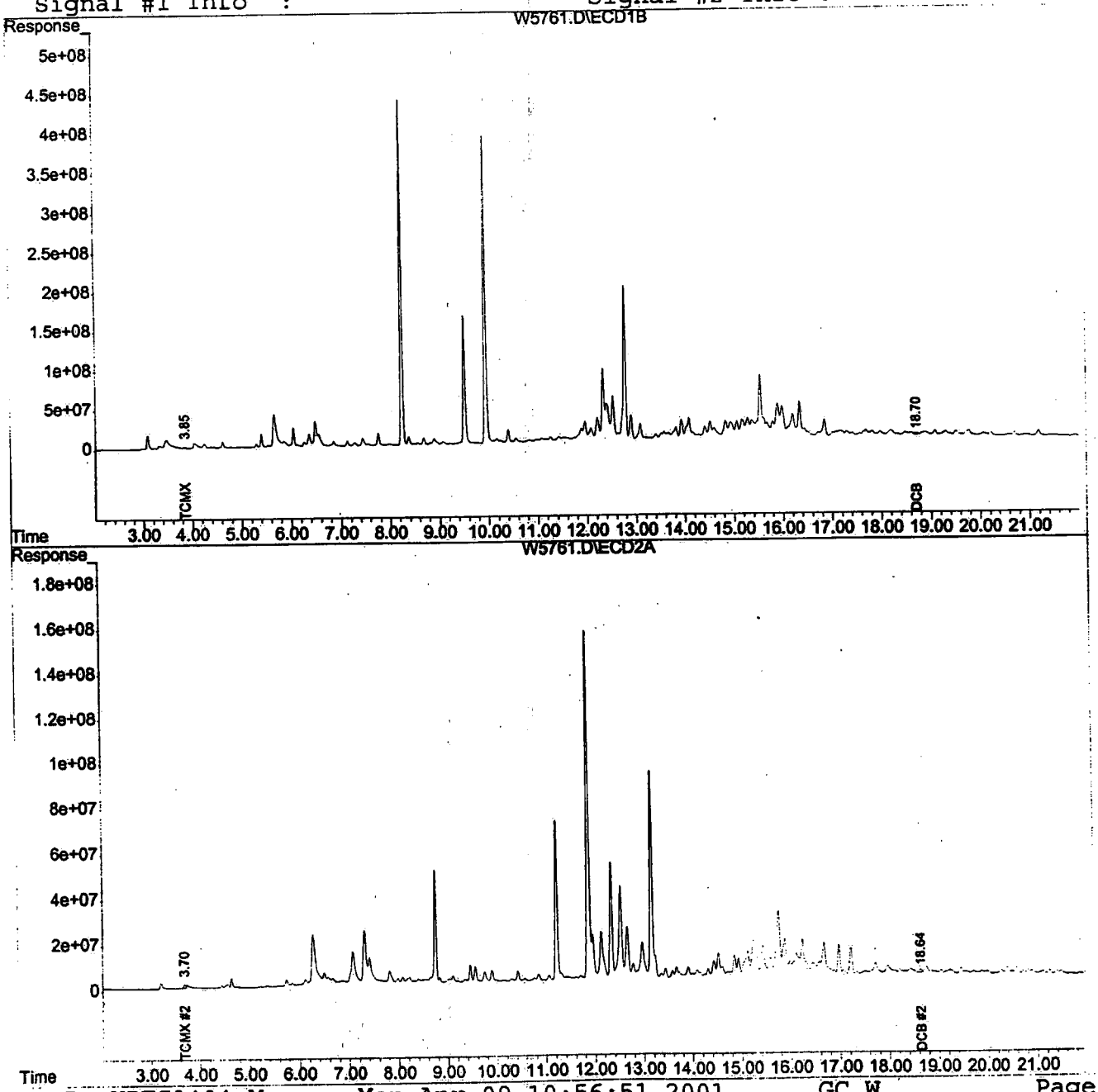
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-06-01\W5761.D\ECD1B.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\04-06-01\W5761.D\ECD2A.CH
Acq On : 4-6-01 16:25:04 Operator:
Sample : S-55,2092-011,S,30.2g,20.4,04/05/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/03/01,04/04/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 9 10:35 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



2536

000115

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-06-01\W5760.D\ECD1B.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\04-06-01\W5760.D\ECD2A.CH
Acq On : 4-6-01 15:56:00 Operator:
Sample : (2092.2111),0405-BK1,S,30.0g,0.0,04/05/0 Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 9 10:29 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	3.70	4078.1E6	1623.7E6	86.712	84.887
Spiked Amount 100.000			Recovery	=	86.71%	84.89%
2) S DCB	18.69	18.65	3699.3E6	1370.9E6	82.637	86.658
Spiked Amount 100.000			Recovery	=	82.64%	86.66%
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.
W5760.D WPTC0404.M Mon Apr 09 10:56:43 2001 GC_W Page 1

000446

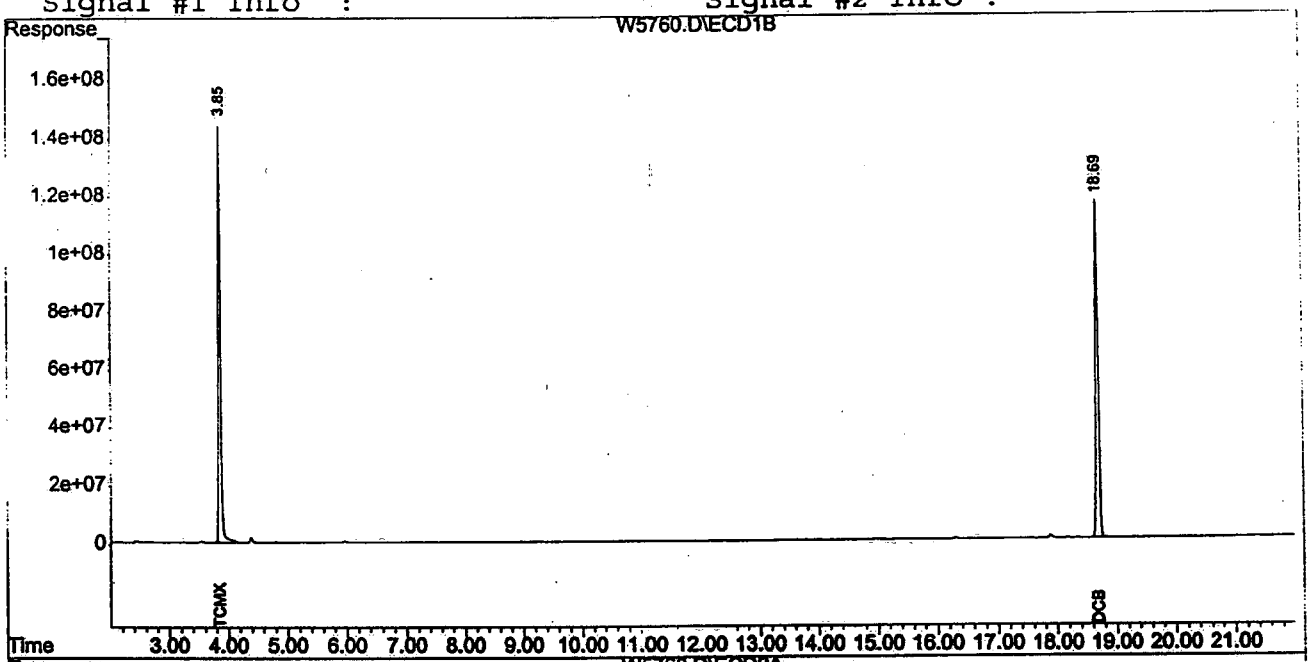
2537

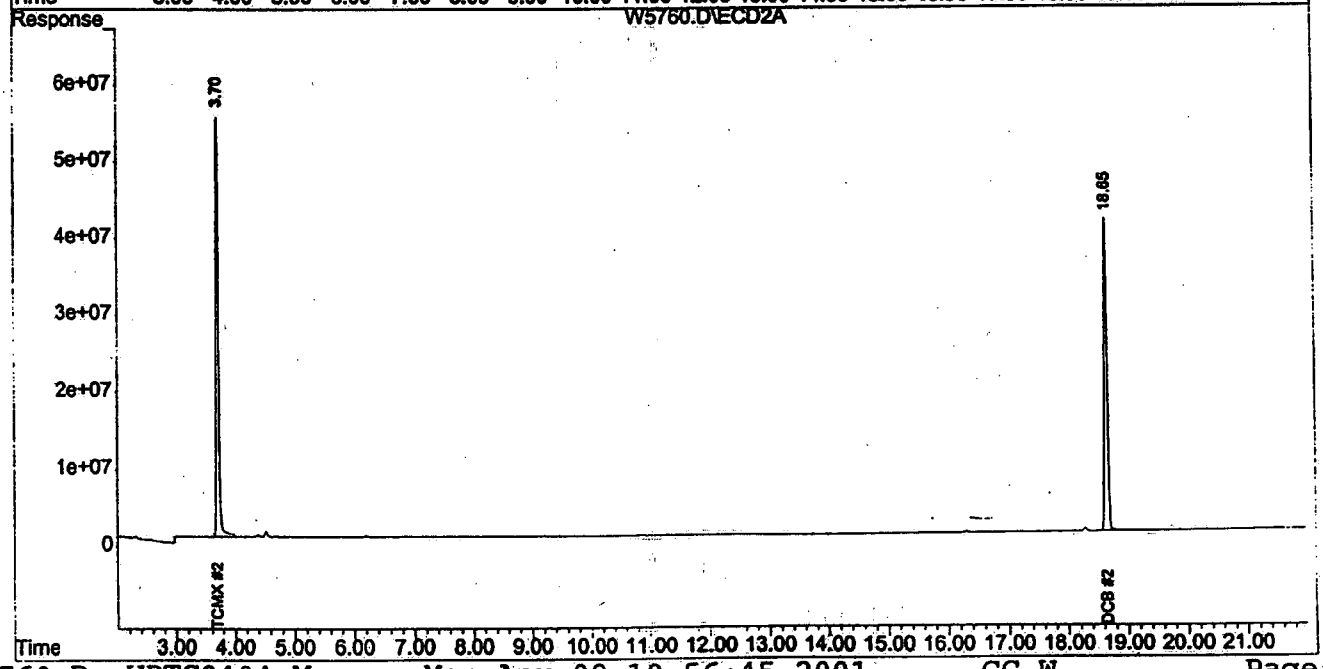
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-06-01\W5760.D\ECD1B.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\04-06-01\W5760.D\ECD2A.CH
Acq On : 4-6-01 15:56:00 Operator:
Sample : (2092.2111),0405-BK1,S,30.0g,0.0,04/05/0 Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 9 10:29 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





25356

00042

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5851.D\ECD1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5851.D\ECD2A.CH
Acq On : 4-10-01 14:27:13 Operator:
Sample : (2092.2158),0409-BK1,S,30.0g,0.0,04/09/0 Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 11 9:57 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	4353.9E6	1275.6E6	92.575	66.690 #
Spiked Amount 100.000			Recovery	=	92.58%	66.69%
2) S DCB	18.69	18.64	3890.8E6	1829.9E6	86.916	115.674 #
Spiked Amount 100.000			Recovery	=	86.92%	115.67%
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

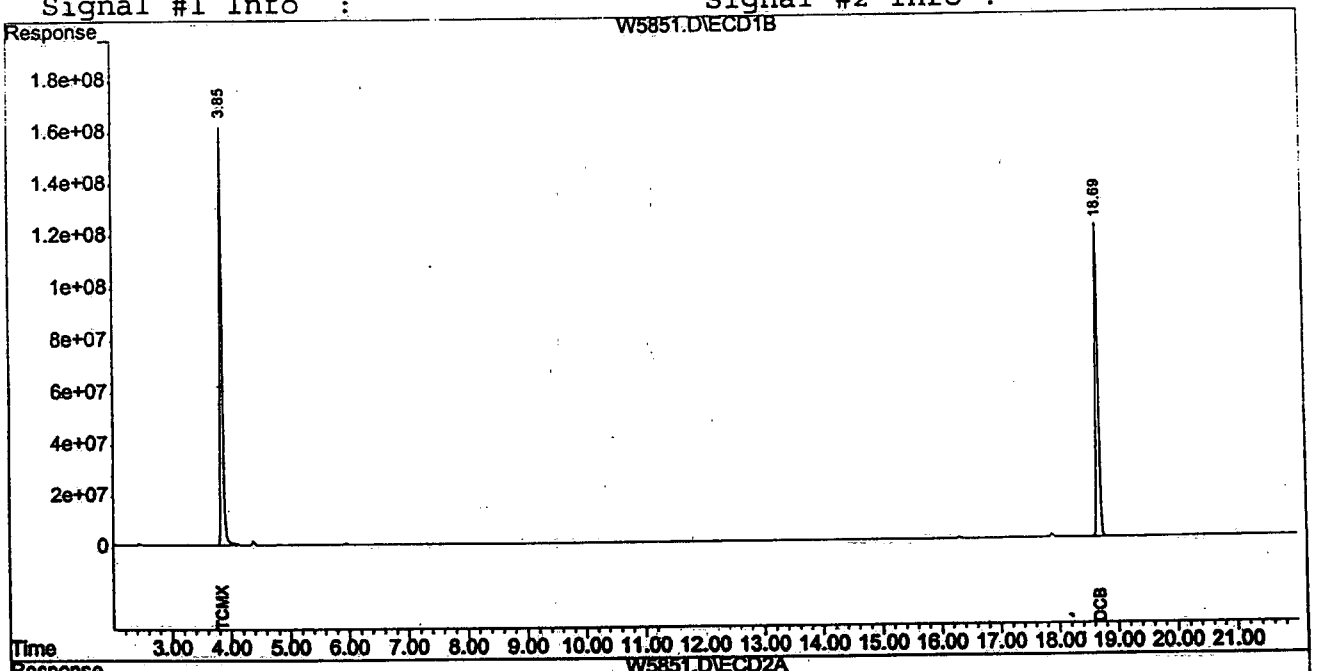
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

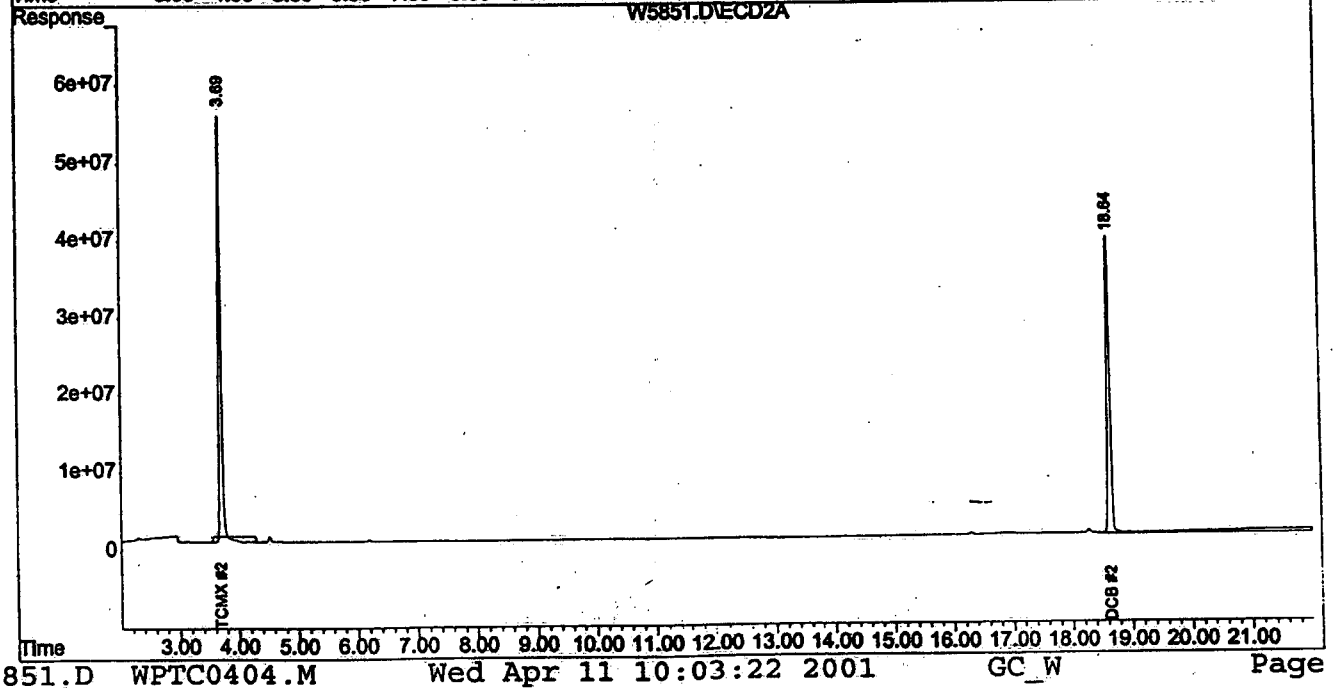
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5851.D\ECD1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5851.D\ECD2A.CH
Acq On : 4-10-01 14:27:13 Operator:
Sample : (2092.2158),0409-BK1,S,30.0g,0.0,04/09/0 Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 11 9:57 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000449

2540

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\04-06-01\W5749.D\ECD1B.CH Vial: 2
Acq On : 4-6-01 10:31:07 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\04-06-01\W5749.D\ECD2A.CH Vial: 2
Acq On : 4-6-01 10:31:08 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 6 10:53 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	4174.9E6	1728.2E6	88.770	90.352	
Spiked Amount	100.000			Recovery	=	88.77%	90.35%	
2) S	DCB	18.68	18.65	3599.3E6	1495.6E6	80.403	94.538	
Spiked Amount	100.000			Recovery	=	80.40%	94.54%	
	Target Compounds							
3) T	alpha-BHC	4.53	5.59	4409.9E6	1775.7E6	92.202	99.899	
4) T	beta-BHC	5.02	8.65	1615.9E6	720.6E6	88.404	96.215	
5) T	gamma-BHC	5.16	6.54	3803.8E6	1622.1E6	91.358	99.498	
6) T	delta-BHC	5.63	9.22	4119.2E6	1589.9E6	90.273	98.626	
7) T	Heptachlor	6.73	7.02	3340.1E6	1308.4E6	90.822	99.508	
8) T	Aldrin	7.55	7.69	3752.8E6	1480.2E6	91.333	99.113	
9) T	Heptachlor epoxi	8.56	9.54	3331.1E6	1354.3E6	90.859	98.633	
10) T	Endosulfan I	9.48	10.23	3094.3E6	1272.6E6	89.992	98.445	
11) T	4,4'-DDE	10.24	11.00	3278.5E6	1334.5E6	89.923	98.029	
12) T	Dieldrin	10.17	11.26	3399.6E6	1390.0E6	91.522	99.014	
13) T	Endrin	10.72	11.79	3108.4E6	1306.6E6	95.813	104.844	
14) T	Endosulfan II	10.98	13.23	2868.8E6	2303.0E6	89.073	195.633	#
15) T	4,4'-DDD	11.36	13.23	2782.8E6	2303.0E6	90.875	195.633	#
16) T	Endrin aldehyde	11.50	14.38	1983.7E6	809.1E6	86.965	85.909	
17) T	Endosulfan sulfa	12.15	15.28	2595.8E6	1057.1E6	87.462	94.515	
18) T	4,4'-DDT	12.38	13.68	2186.7E6	800.3E6	88.326	94.985	
19) T	Endrin ketone	13.36	16.30	3088.7E6	1212.0E6	86.264	92.732	
20) T	Methoxychlor	14.06	15.55	1008.0E6	429.1E6	85.192	93.298	
21) T	alpha-Chlordane	9.58	10.62	3352.1E6	1351.7E6	90.383	97.851	
22) T	gamma-Chlordane	9.17	10.46	3524.2E6	1391.1E6	90.808	98.305	
	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\04-06-01\W5749.D\ECD1B.CH Vial: 2
Acq On : 4-6-01 10:31:07 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\04-06-01\W5749.D\ECD2A.CH Vial: 2
Acq On : 4-6-01 10:31:08 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 6 10:53 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

000451

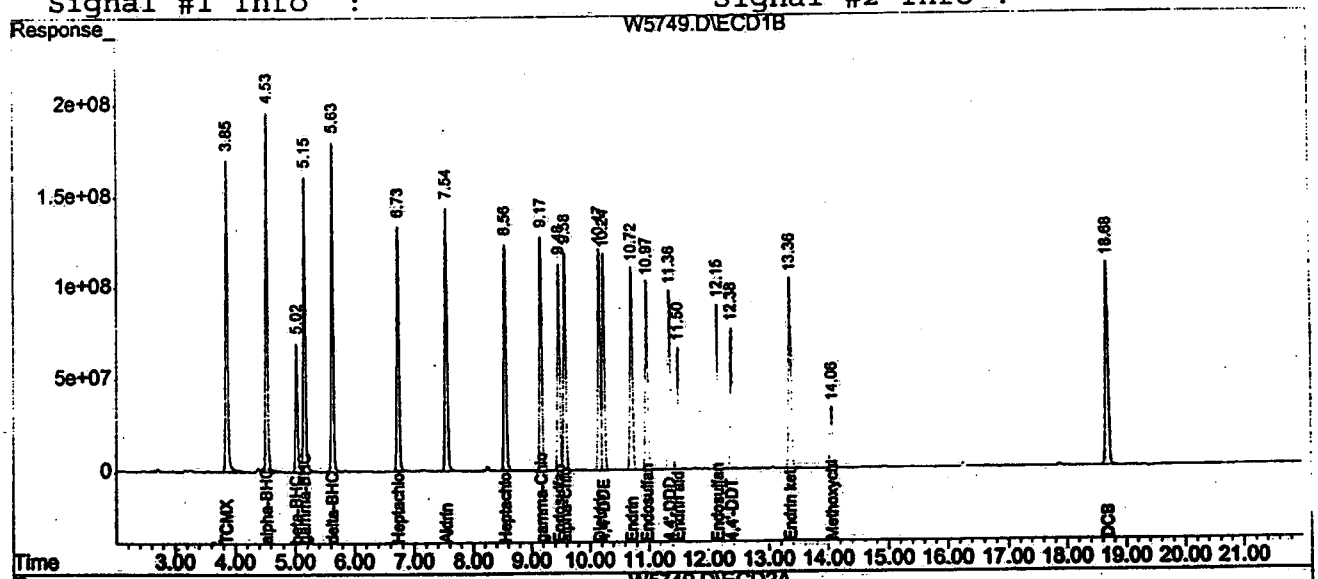
2542

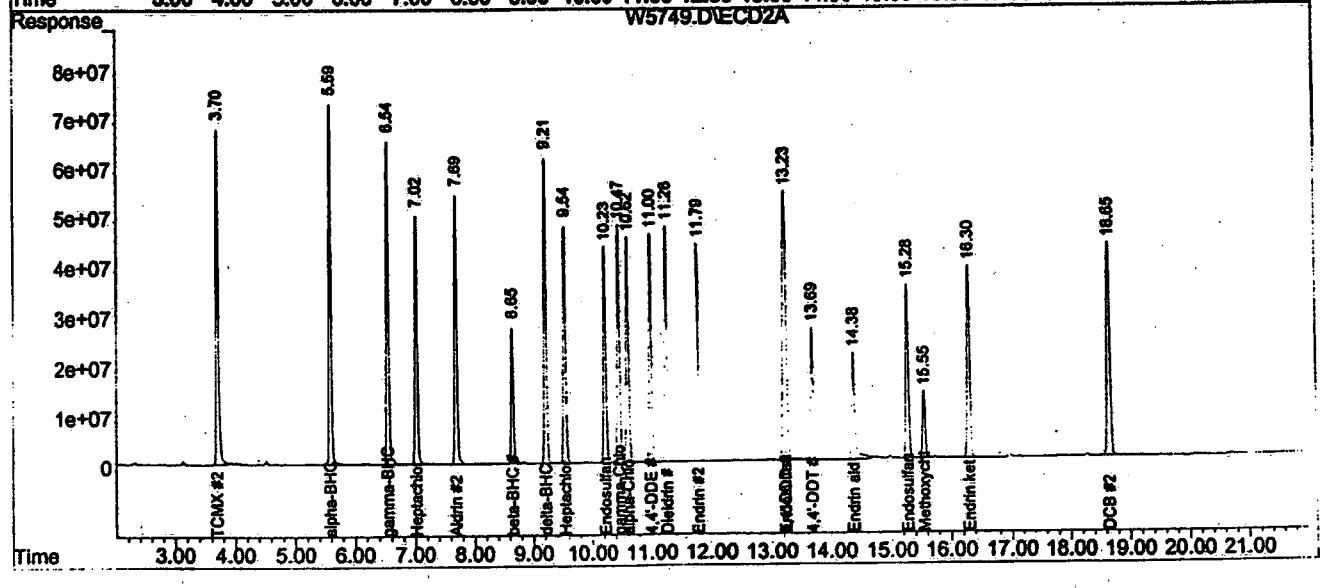
Data File : C:\HPCHEM\1\DATA\04-06-01\W5749.D\ECD1B.CH Vial: 2
Acq On : 4-6-01 10:31:07 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\04-06-01\W5749.D\ECD2A.CH Vial: 2
Acq On : 4-6-01 10:31:08 Operator:
Sample : PEST_C_IAS_1441,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 6 10:53 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000452

2543

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-06-01\W5772.D\ECD1B.CH Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\04-06-01\W5772.D\ECD2A.CH
Acq On : 4-6-01 21:24:32 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 9 9:12 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	4692.5E6	1793.8E6	99.776	93.782	
Spiked Amount	100.000			Recovery	=	99.78%	93.78%	
2) S	DCB	18.69	18.65	4609.1E6	1562.2E6	102.961	98.751	
Spiked Amount	100.000			Recovery	=	102.96%	98.75%	
	Target Compounds							
3) T	alpha-BHC	4.54	5.59	4865.9E6	1790.9E6	101.735	100.755	
T	beta-BHC	5.03	8.65	1815.7E6	715.9E6	99.334	95.587	
T	gamma-BHC	5.16	6.54	4209.6E6	1631.3E6	101.105	100.062	
T	delta-BHC	5.63	9.21	4614.9E6	1608.2E6	101.135	99.765	
7) T	Heptachlor	6.74	7.02	3735.8E6	1314.3E6	101.581	99.958	
8) T	Aldrin	7.55	7.69	4187.6E6	1484.1E6	101.917	99.377	
9) T	Heptachlor epoxi	8.56	9.54	3708.0E6	1349.5E6	101.140	98.283	
10) T	Endosulfan I	9.48	10.23	3473.0E6	1267.7E6	101.004	98.064	
11) T	4,4'-DDE	10.24	11.00	3744.8E6	1355.1E6	102.713	99.547	
12) T	Dieldrin	10.17	11.26	3805.9E6	1391.5E6	102.460	99.126	
13) T	Endrin	10.72	11.79	3476.7E6	1298.1E6	107.165	104.161	
14) T	Endosulfan II	10.98	13.23	3253.1E6	2356.2E6	101.006	200.147	#
15) T	4,4'-DDD	11.36	13.23	3238.3E6	2356.2E6	105.749	200.147	#
16) T	Endrin aldehyde	11.50	14.38	2287.6E6	893.4E6	100.289	94.857	
17) T	Endosulfan sulfa	12.16	15.28	2993.9E6	1080.2E6	100.875	96.579	
18) T	4,4'-DDT	12.39	13.68	2531.1E6	811.9E6	102.237	96.368	
19) T	Endrin ketone	13.36	16.30	3598.1E6	1259.9E6	100.491	96.397	
20) T	Methoxychlor	14.06	15.55	1182.2E6	436.5E6	99.919	94.903	
21) T	alpha-Chlordane	9.58	10.62	3791.8E6	1359.8E6	102.239	98.440	
22) T	gamma-Chlordane	9.17	10.46	3989.8E6	1401.9E6	102.806	99.070	
	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.
W5772.D WPTC0404.M Mon Apr 09 10:14:57 2001 GC_W Page 1

2544

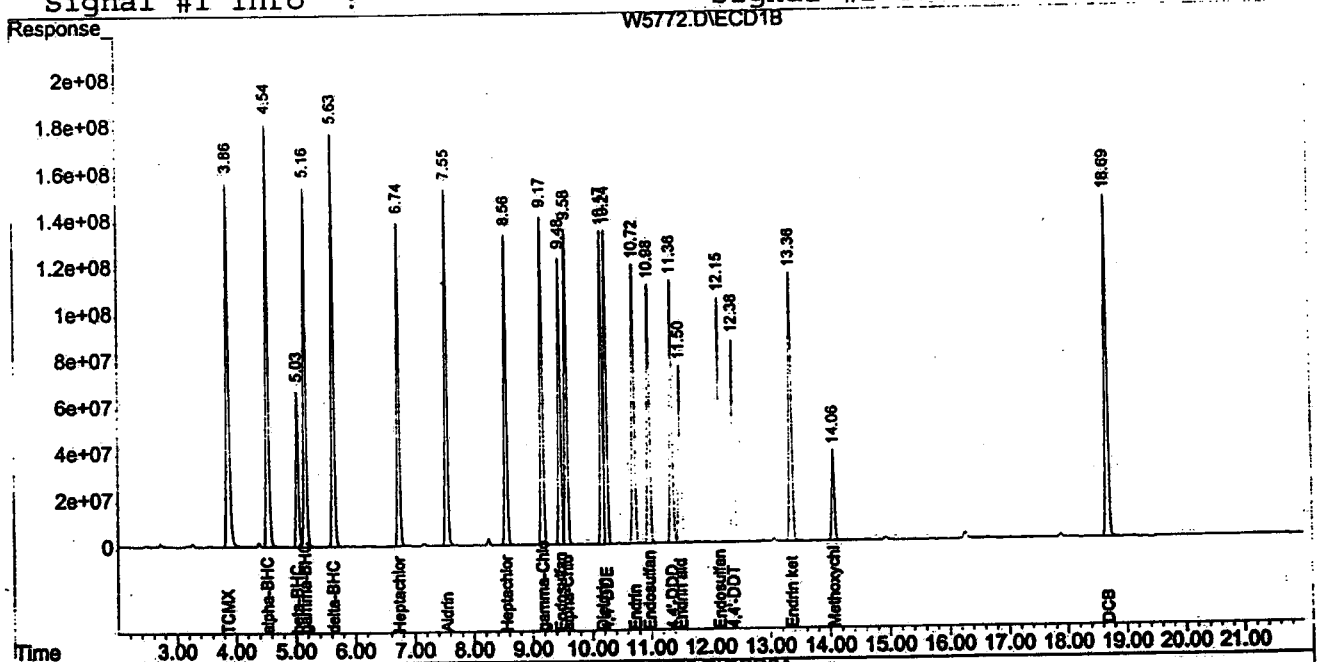
000453

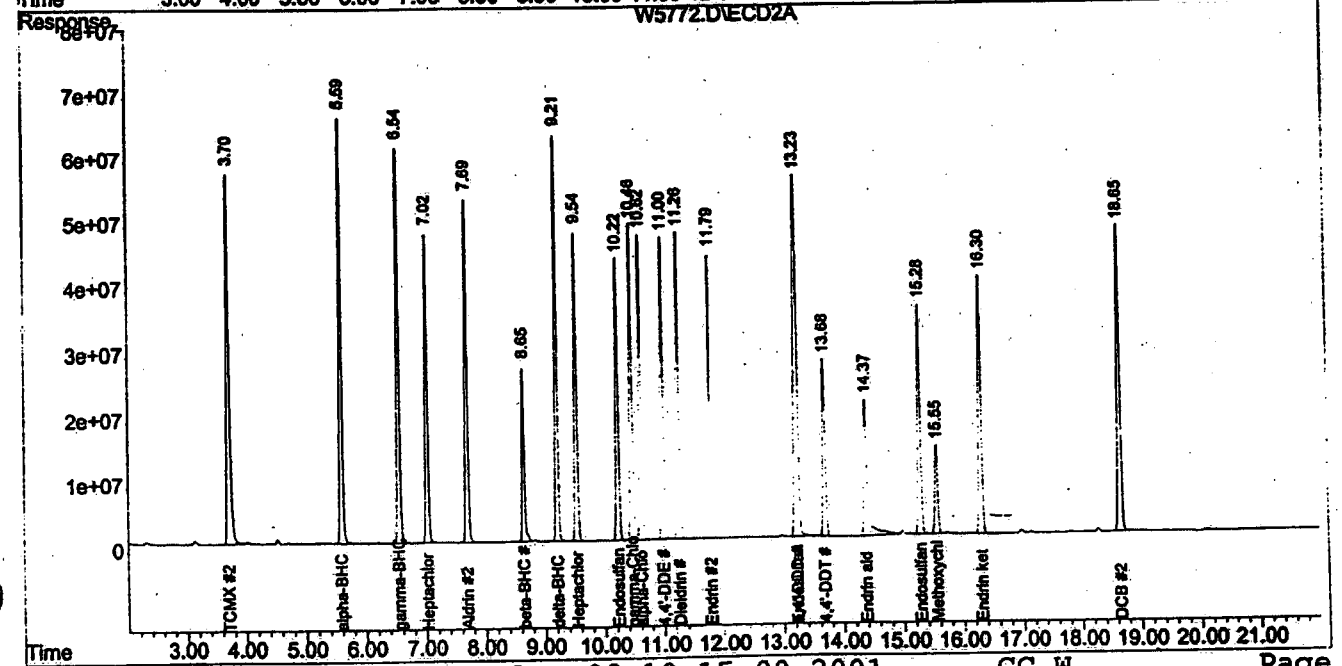
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-06-01\W5772.D\ECD1B.CH Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\04-06-01\W5772.D\ECD2A.CH
Acq On : 4-6-01 21:24:32 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 9 9:12 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000454

2545

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-06-01\W5750.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\04-06-01\W5750.D\ECD2A.CH
Acq On : 4-6-01 11:30:58 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 6 11:54 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	3.71	4704.4E6	1890.1E6	100.028	98.815
Spiked Amount 100.000			Recovery	=	100.03%	98.81%
2) S DCB	18.68	18.65	4139.5E6	1589.2E6	92.471	100.455
Spiked Amount 100.000			Recovery	=	92.47%	100.46%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
28) L2 Toxaphene	13.18	14.03	330.6E6	132.3E6	444.764	471.517
29) L2 Toxaphene {2}	13.30	14.75	263.7E6	108.3E6	452.883	444.327
30) L2 Toxaphene {3}	13.58	15.02	194.2E6	91684424	447.532	474.831
31) L2 Toxaphene {4}	14.04	15.22	231.7E6	66624962	454.797	436.472m
32) L2 Toxaphene {5}	14.55	15.66	342.4E6	100.0E6	458.202	459.883
Sum Toxaphene			1362.7E6	499.0E6	2258.178	2287.030
Average Toxaphene					451.636	457.406

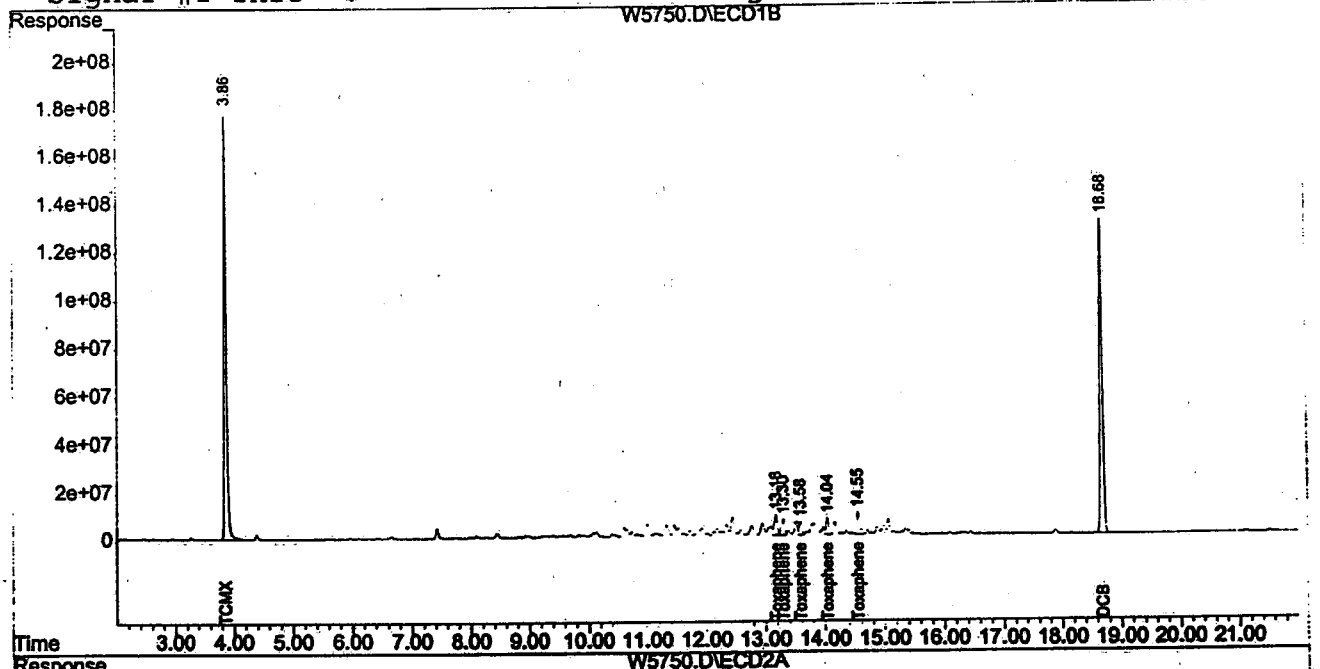
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

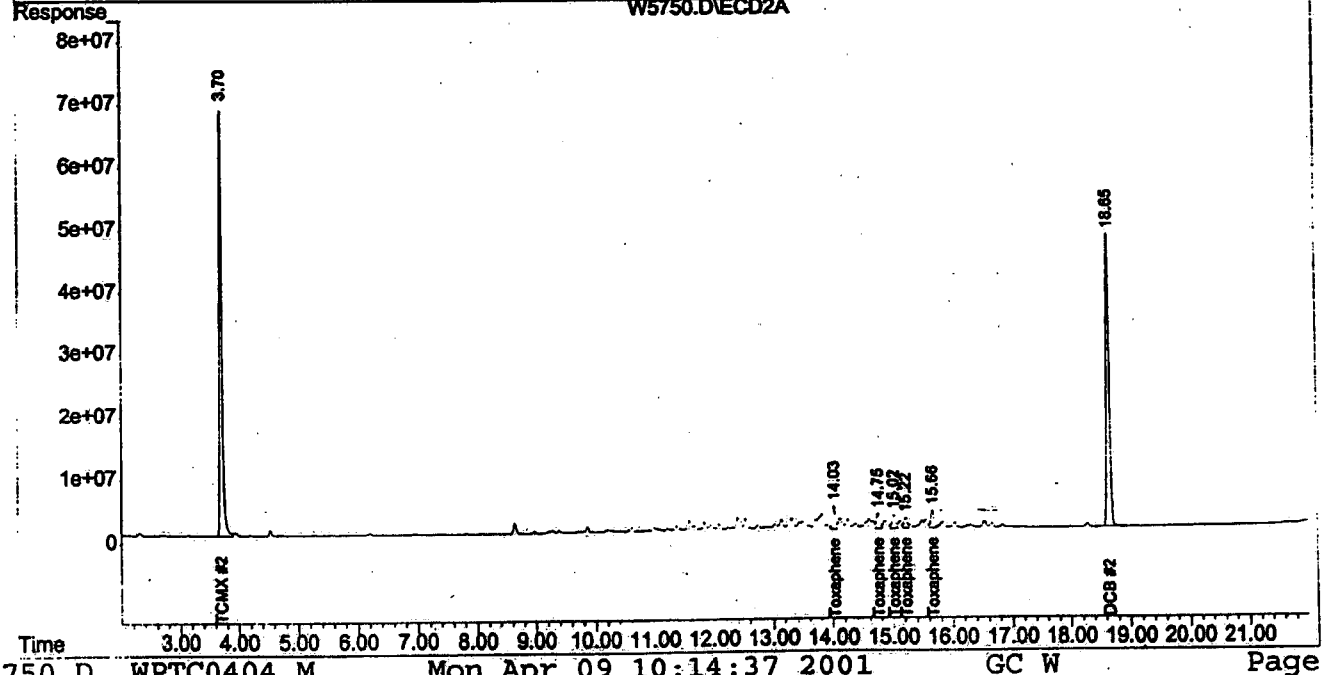
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-06-01\W5750.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\04-06-01\W5750.D\ECD2A.CH
Acq On : 4-6-01 11:30:58 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 6 11:54 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000456

2547

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\04-06-01\W5751.D\ECD1B.CH Vial: 4
Acq On : 4-6-01 11:56:00 Operator:
Sample : CHLOR_C_IAS_1437,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\04-06-01\W5751.D\ECD2A.CH Vial: 4
Acq On : 4-6-01 11:56:01 Operator:
Sample : CHLOR_C_IAS_1437,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 6 12:22 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	4114.9E6	1691.9E6	87.495	88.454
Spiked Amount 100.000			Recovery	=	87.50%	88.45%
S DCB	18.68	18.65	3886.7E6	1440.7E6	86.824	91.072
Spiked Amount 100.000			Recovery	=	86.82%	91.07%
Target Compounds						
23) L1 Chlordane	9.17	8.38	1872.0E6	154.1E6	456.901	524.315
24) L1 Chlordane {2}	9.37	10.06	350.6E6	163.5E6	467.920	483.987
25) L1 Chlordane {3}	9.58	10.46	1740.4E6	728.6E6	445.580	490.826
26) L1 Chlordane {4}	9.72	10.62	827.6E6	667.4E6	455.739	495.056
27) L1 Chlordane {5}	11.58	10.68	562.9E6	311.9E6	449.701	477.608
Sum Chlordane			5353.6E6	2025.6E6	2275.842	2471.792
Average Chlordane					455.168	494.358
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.

000457

25456

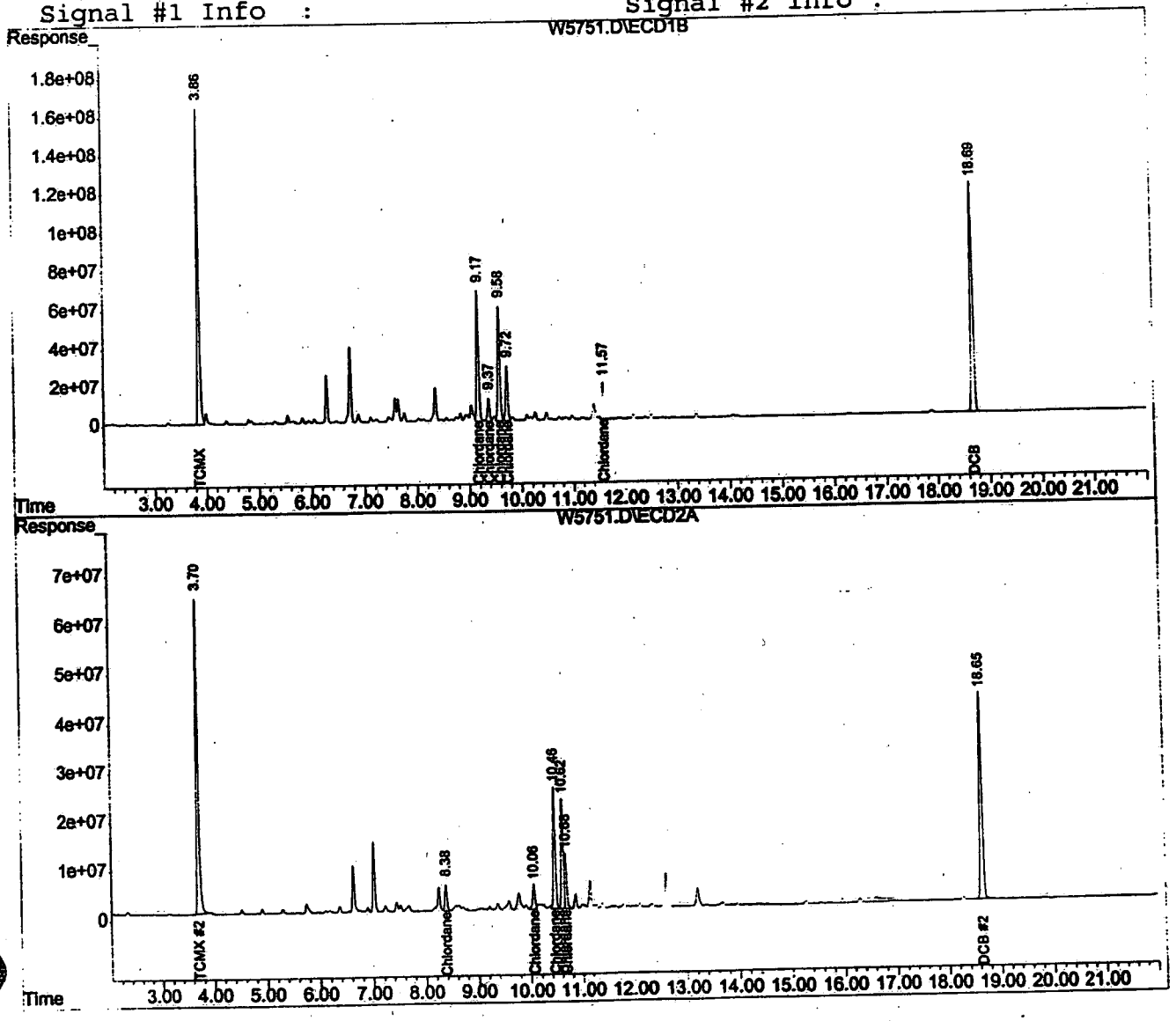
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\04-06-01\W5751.D\ECD1B.CH Vial: 4
Acq On : 4-6-01 11:56:00 Operator:
Sample : CHLOR_C_IAS_1437,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\04-06-01\W5751.D\ECD2A.CH Vial: 4
Acq On : 4-6-01 11:56:01 Operator:
Sample : CHLOR_C_IAS_1437,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 6 12:22 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :



000458

2549

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5848.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5848.D\ECD2A.CH
Acq On : 4-10-01 12:54:15 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 11 10:12 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	4789.6E6	1733.8E6	101.840	90.648
Spiked Amount	100.000			Recovery	=	101.84%	90.65%
2) S	DCB	18.69	18.64	4441.7E6	1469.1E6	99.221	92.866
Spiked Amount	100.000			Recovery	=	99.22%	92.87%
	Target Compounds						
3) T	alpha-BHC	4.54	5.59	4925.8E6	1692.1E6	102.988	95.199
4) T	beta-BHC	5.03	8.65	1828.4E6	679.5E6	100.031	90.737
5) T	gamma-BHC	5.16	6.54	4231.2E6	1538.5E6	101.624	94.372
6) T	delta-BHC	5.63	9.21	3965.1E6	1297.2E6	86.895	80.470
7) T	Heptachlor	6.73	7.02	4007.2E6	1285.4E6	108.959	97.760
8) T	Aldrin	7.55	7.69	4186.3E6	1413.8E6	101.884	94.668
9) T	Heptachlor epoxi	8.56	9.54	3743.4E6	1292.0E6	102.105	94.099
10) T	Endosulfan I	9.48	10.22	3482.3E6	1214.3E6	101.274	93.932
11) T	4,4'-DDE	10.24	11.00	3716.2E6	1287.1E6	101.928	94.552
12) T	Dieldrin	10.17	11.26	3833.7E6	1326.9E6	103.209	94.525
13) T	Endrin	10.72	11.78	3653.4E6	1274.8E6	112.613	102.291
14) T	Endosulfan II	10.98	13.23	3222.2E6	2203.9E6	100.046	187.210 #
15) T	4,4'-DDD	11.36	13.23	3179.0E6	2203.9E6	103.812	187.210 #
16) T	Endrin aldehyde	11.50	14.37	2284.8E6	834.9E6	100.165	88.641
17) T	Endosulfan sulfa	12.15	15.27	2722.1E6	953.4E6	91.718	85.239m
18) T	4,4'-DDT	12.39	13.68	2643.0E6	795.8E6	106.754	94.459
19) T	Endrin ketone	13.36	16.30	3449.4E6	1158.4E6	96.339	88.634
20) T	Methoxychlor	14.06	15.54	1322.1E6	430.7E6	111.742	93.631
21) T	alpha-Chlordane	9.58	10.61	3805.1E6	1297.8E6	102.598	93.955
22) T	gamma-Chlordane	9.17	10.46	4024.2E6	1338.1E6	103.694	94.561
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

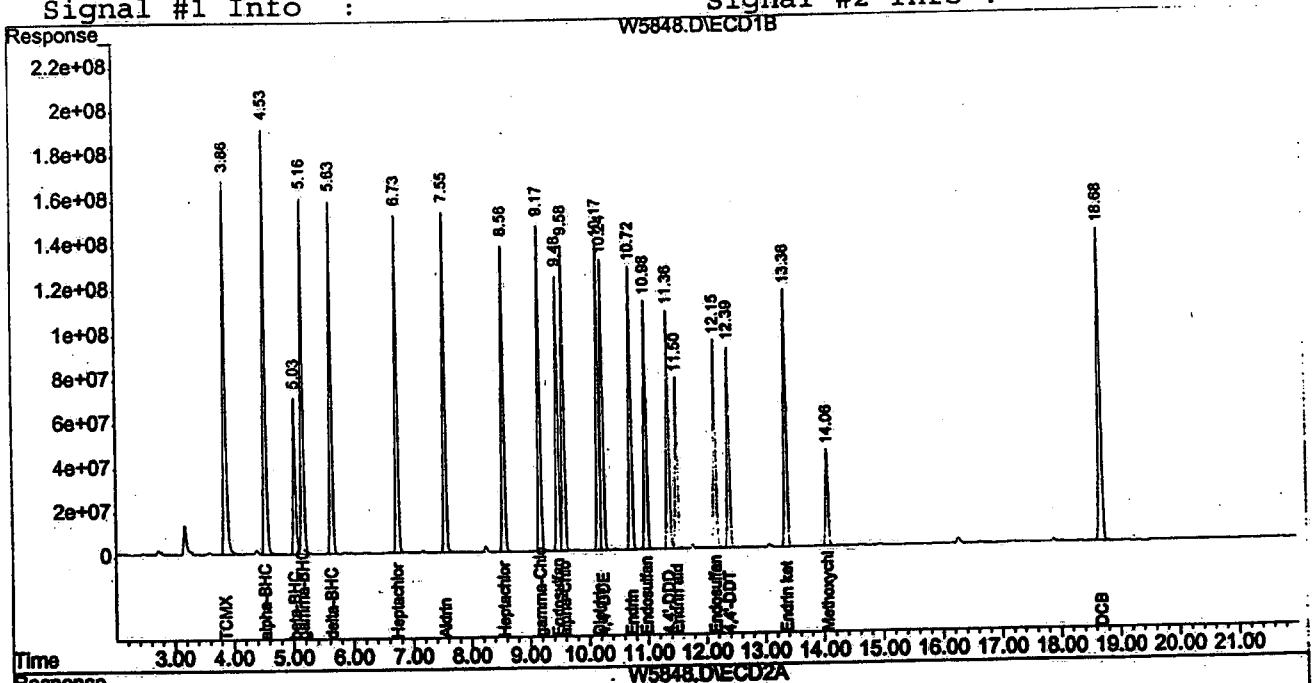
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

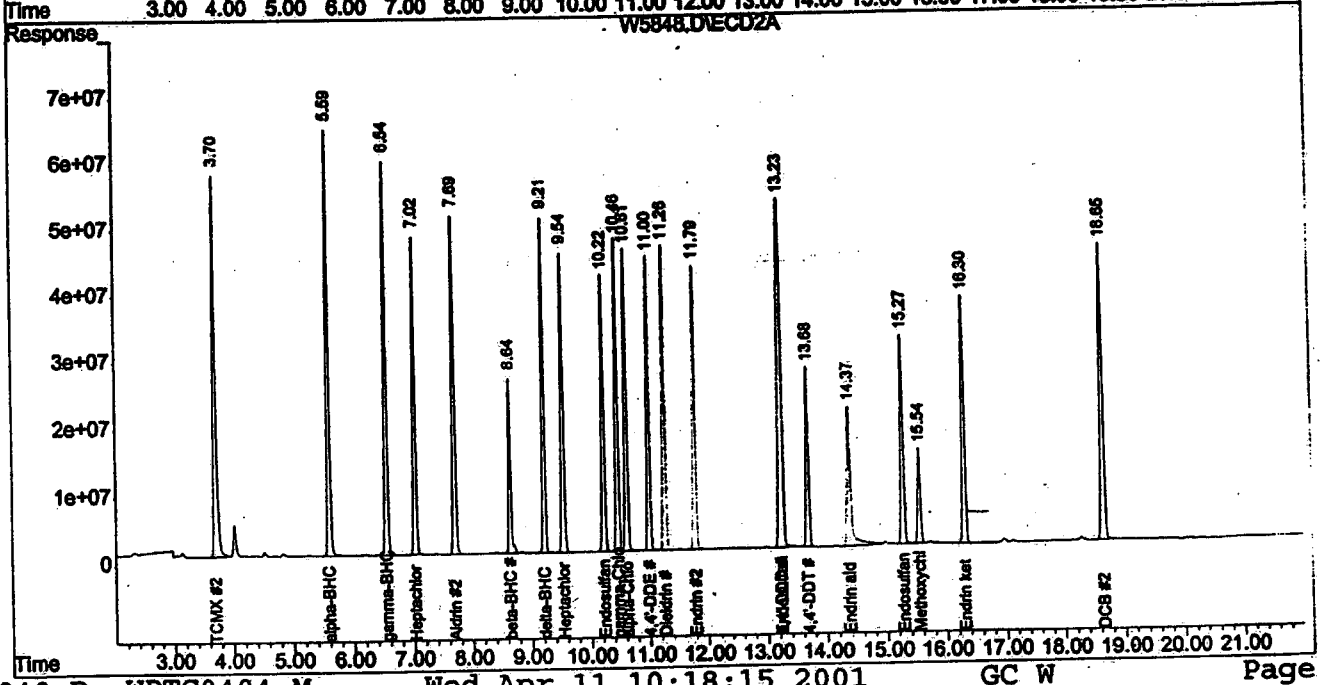
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5848.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5848.D\ECD2A.CH
Acq On : 4-10-01 12:54:15 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 11 10:12 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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2551

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5863.D\ECD1B.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5863.D\ECD2A.CH
Acq On : 4-10-01 19:36:39 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 11 10:16 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	4772.8E6	1706.9E6	101.484	89.240
Spiked Amount	100.000			Recovery	=	101.48%	89.24%
2) S	DCB	18.68	18.64	4399.9E6	1480.3E6	98.287	93.575
Spiked Amount	100.000			Recovery	=	98.29%	93.58%
	Target Compounds						
3) T	alpha-BHC	4.53	5.58	4966.6E6	1692.2E6	103.841	95.204
4) T	beta-BHC	5.02	8.64	1826.9E6	687.2E6	99.951	91.759
5) T	gamma-BHC	5.15	6.54	4244.4E6	1543.4E6	101.940	94.668
6) T	delta-BHC	5.63	9.21	4317.6E6	1411.6E6	94.620	87.566
7) T	Heptachlor	6.73	7.01	3973.5E6	1281.5E6	108.042	97.465
8) T	Aldrin	7.54	7.69	4219.6E6	1415.7E6	102.696	94.796
9) T	Heptachlor epoxi	8.56	9.53	3722.8E6	1287.5E6	101.544	93.772
10) T	Endosulfan I	9.47	10.22	3469.7E6	1208.5E6	100.910	93.486
11) T	4,4'-DDE	10.24	10.99	3770.6E6	1285.8E6	103.421	94.455
12) T	Dieldrin	10.17	11.26	3790.9E6	1324.2E6	102.056	94.333
13) T	Endrin	10.72	11.78	3569.4E6	1248.7E6	110.021	100.200
14) T	Endosulfan II	10.97	13.23	3204.7E6	2200.4E6	99.504	186.913 #
15) T	4,4'-DDD	11.36	13.23	3192.9E6	2200.4E6	104.268	186.913 #
16) T	Endrin aldehyde	11.50	14.37	2236.0E6	831.4E6	98.026	88.274m
17) T	Endosulfan sulfa	12.15	15.27	2786.7E6	963.9E6	93.895	86.181
18) T	4,4'-DDT	12.38	13.68	2563.7E6	775.6E6	103.553	92.051
19) T	Endrin ketone	13.36	16.30	3463.1E6	1171.9E6	96.721	89.665
20) T	Methoxychlor	14.06	15.54	1242.1E6	417.4E6	104.980	90.750
21) T	alpha-Chlordane	9.58	10.61	3820.0E6	1298.6E6	103.001	94.012
22) T	gamma-Chlordane	9.17	10.46	4034.3E6	1337.4E6	103.954	94.511
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

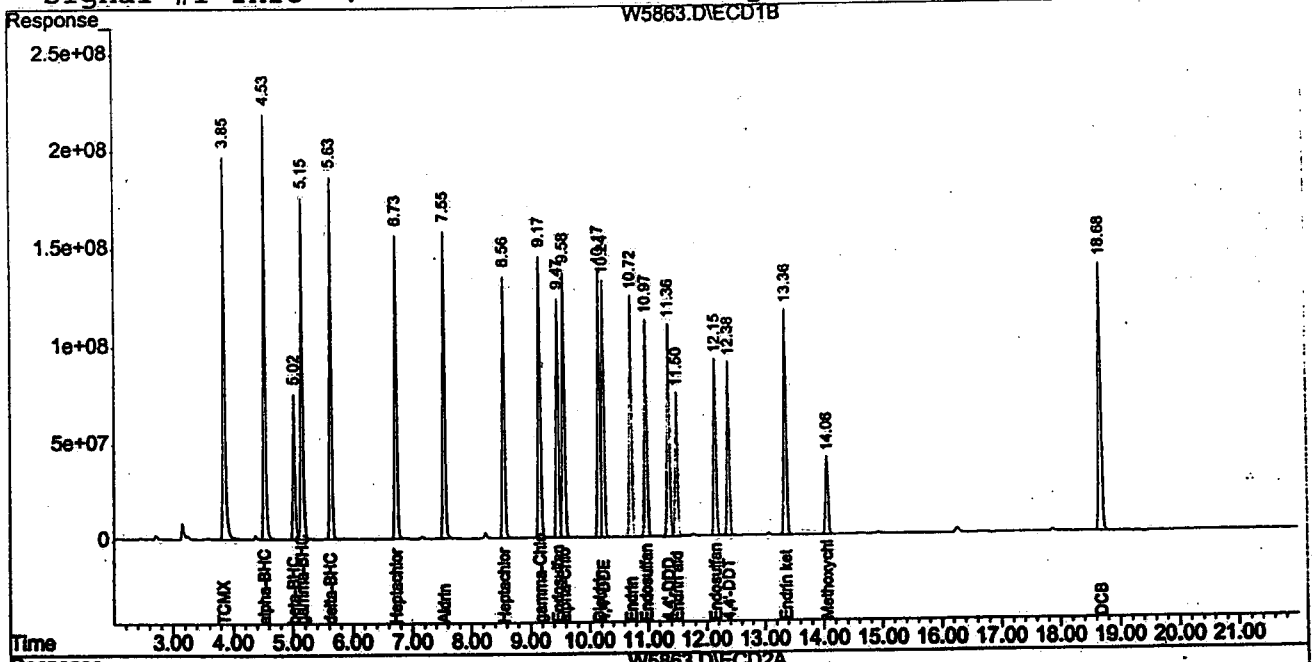
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

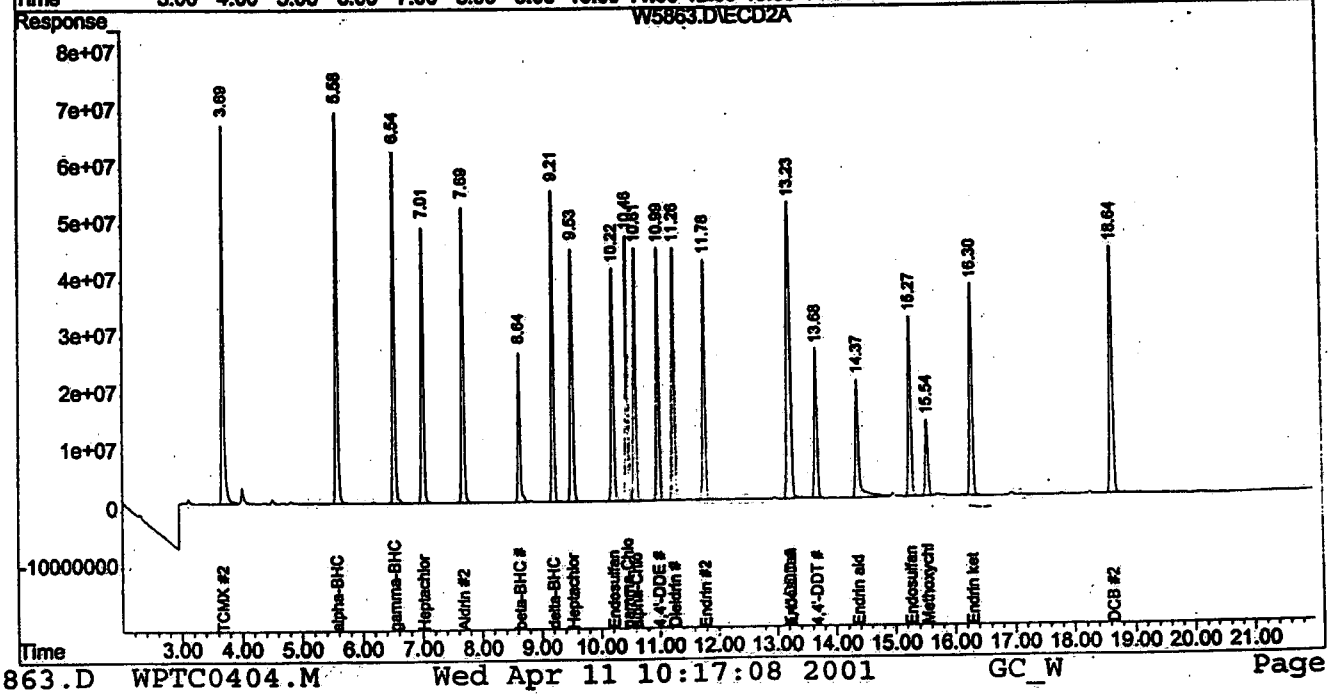
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5863.D\ECD1B.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5863.D\ECD2A.CH
Acq On : 4-10-01 19:36:39 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 11 10:16 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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2553

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5849.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5849.D\ECD2A.CH
Acq On : 4-10-01 13:36:32 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 11 9:48 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	3.71	5024.2E6	1789.5E6	106.828	93.558
Spiked Amount 100.000			Recovery	=	106.83%	93.56%
2) S DCB	18.68	18.65	4316.9E6	1477.6E6	96.433	93.405m
Spiked Amount 100.000			Recovery	=	96.43%	93.41%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
28) L2 Toxaphene	13.17	14.03	354.9E6	150.1E6	477.504	534.918
29) L2 Toxaphene {2}	13.30	14.75	274.5E6	110.4E6	471.465	453.024
30) L2 Toxaphene {3}	13.58	15.02	227.8E6	86317471	524.963	447.035
31) L2 Toxaphene {4}	14.04	15.21	250.2E6	65213599	491.008	427.226m
32) L2 Toxaphene {5}	14.55	15.66	359.3E6	98632957	480.777	453.450
Sum Toxaphene			1466.8E6	510.7E6	2445.718	2315.652
Average Toxaphene					489.144	463.130

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

000463

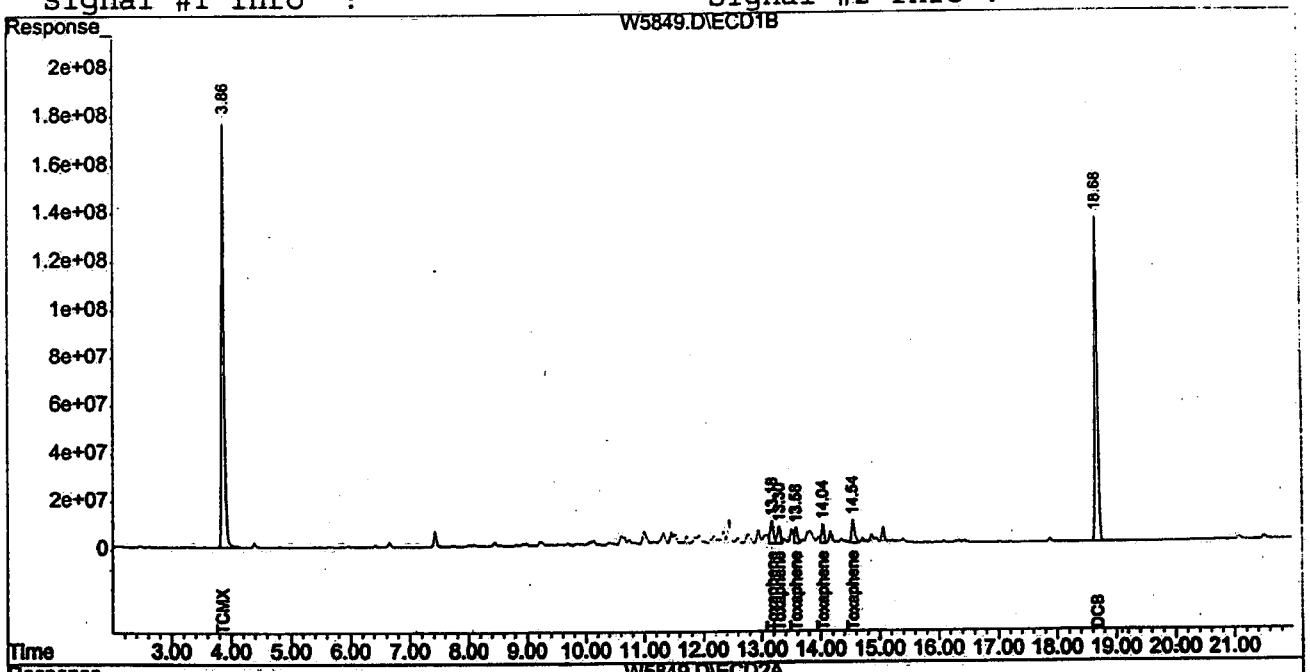
2554

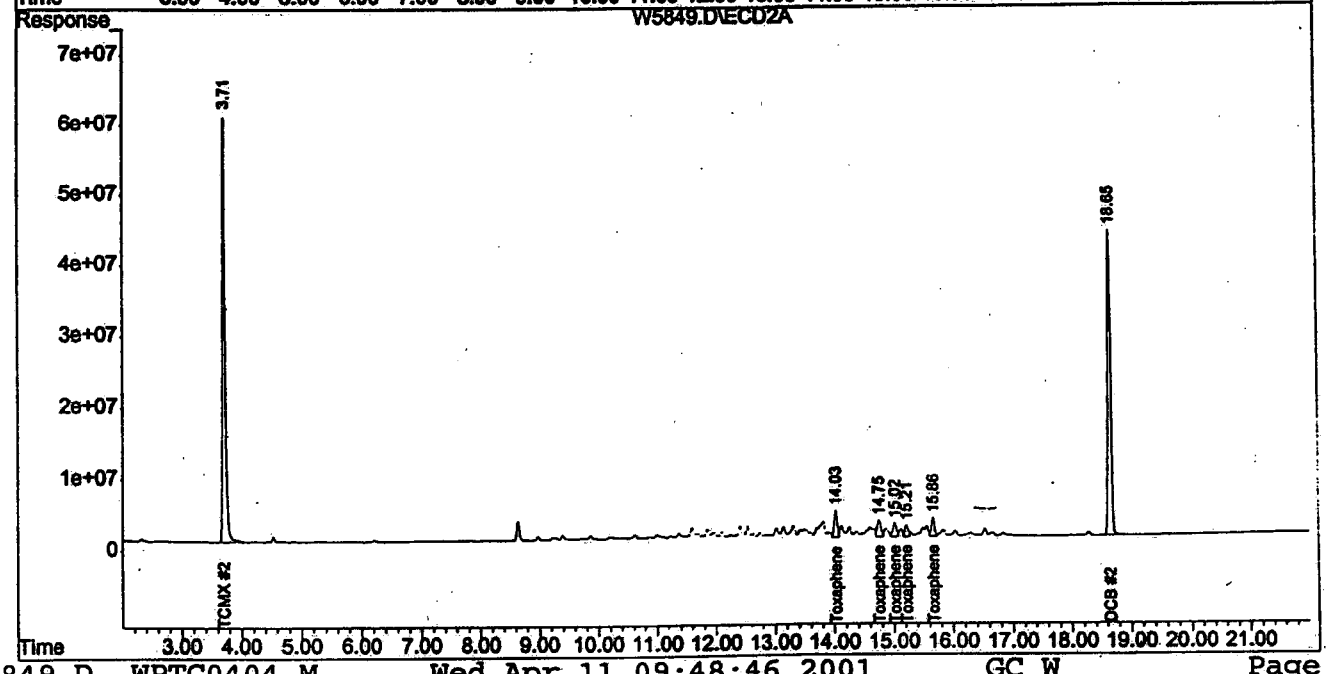
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5849.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5849.D\ECD2A.CH
Acq On : 4-10-01 13:36:32 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 11 9:48 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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2555

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5850.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5850.D\ECD2A.CH
Acq On : 4-10-01 14:01:49 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 11 9:48 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	4463.8E6	1656.6E6	94.912	86.608
Spiked Amount 100.000			Recovery =		94.91%	86.61%
2) S DCB	18.69	18.65	3937.0E6	1338.3E6	87.947	84.600
Spiked Amount 100.000			Recovery =		87.95%	84.60%
Target Compounds						
23) L1 Chlordane	9.17	8.38	1962.1E6	144.9E6	478.890	492.741
24) L1 Chlordane {2}	9.37	10.06	366.3E6	159.4E6	488.797	471.909
25) L1 Chlordane {3}	9.58	10.46	1868.1E6	678.2E6	478.283	456.860
26) L1 Chlordane {4}	9.73	10.62	863.3E6	616.5E6	475.385	457.284
27) L1 Chlordane {5}	11.57	10.68	592.2E6	296.1E6	473.071	453.378
Sum Chlordane			5652.0E6	1895.0E6	2394.426	2332.172
Average Chlordane					478.885	466.434
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.

000165

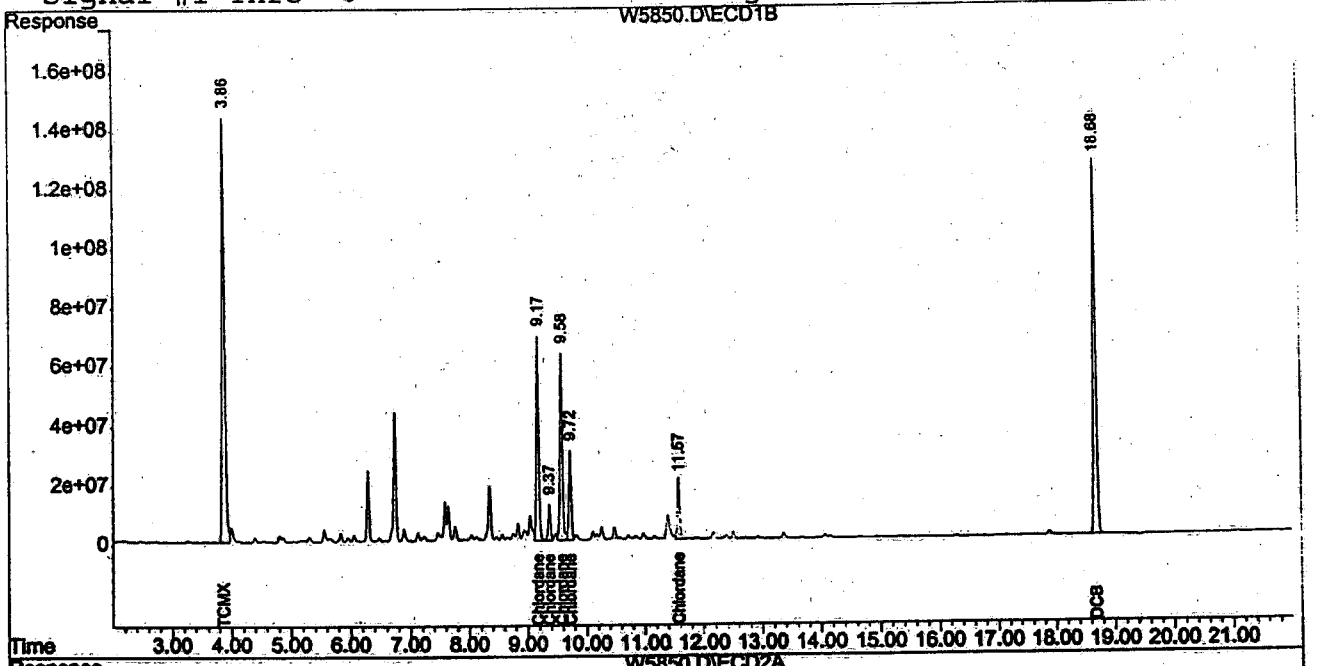
2556

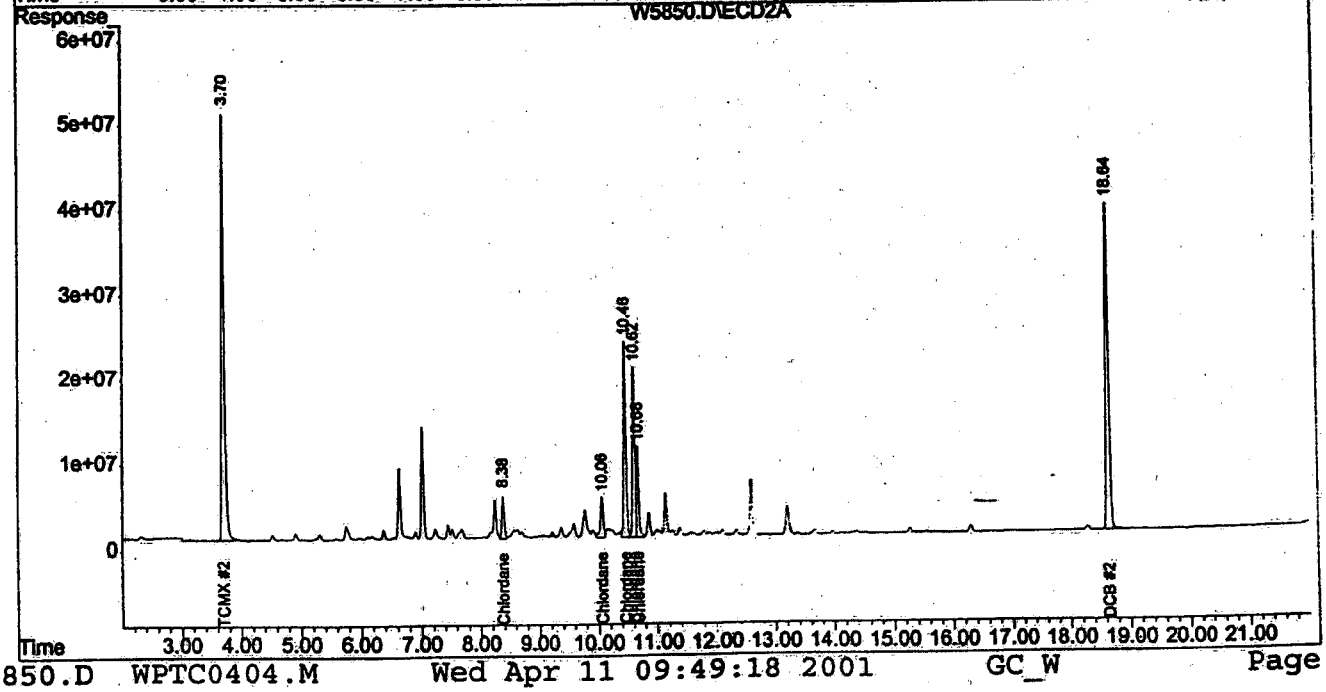
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-10-01\W5850.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\04-10-01\W5850.D\ECD2A.CH
Acq On : 4-10-01 14:01:49 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 11 9:48 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000466

2557

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

BLANK RESULTS SUMMARY

Lab Case Number: E01- 2026, 2032, 2034, 2044, 2049, 2055, 2056, 2059, 2061, 2092, 2102, 2111

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:

2026-01; 2032-01~06; 2034-01; 2044-01; 2049-02; 2055-01; 2056-01; 2059-01~09; 2061-01~07; 2092-01~05,011; 2102-01; 2111-01

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

BLANK RESULTS SUMMARY

Lab Case Number: E01- 2092, 2158, 2199, 2204, 2212, 2216, 2222, 2224, 2238, 2257, 2292

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	INITIAL CALIBRATION	CONTINUING CALIBRATION 1	CONTINUING CALIBRATION 2	INST. MDL	REAGENT BLANK	MDL	IDL
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	
Chromium	ND	ND	ND	0.030	ND	0.600	
Copper	ND	ND	ND	0.020	ND	0.400	
Lead	ND	ND	ND	0.100	ND	2.00	
Mercury	ND	ND	ND	0.00025	ND	0.013	
Nickel	ND	ND	ND	0.030	ND	0.600	
Selenium	ND	ND	ND	0.100	ND	2.00	
Silver	ND	ND	ND	0.020	ND	0.500	
Thallium	ND	ND	ND	0.004	ND	0.080	
Zinc	ND	ND	ND	0.050	ND	1.00	

This QC Blank applies to the following samples:

2092-007; 2158-001; 2199-001~004, 006~011
2204-001~009; 2212-001~005; 2216-005~008
2222-001~010; 2224-001~007; 2238-001
2257-001~005; 2292-001

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Lab Case Number: E01- 2026, 2032, 2034, 2044, 2049, 2055, 2056, 2059, 2061, 2092, 2102, 2111

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	375	93.8	400	392	98.0	433	108	100	
Antimony	120	122	102	120	122	102	117	97.5	100	
Arsenic	20.0	19.1	95.5	20.0	19.6	98.0	18.5	92.5	10.0	
Barium	400	403	101	400	404	101	411	103	250	
Beryllium	10.0	9.04	90.4	10.0	9.97	99.7	10.4	104	10.0	
Cadmium	10.0	9.67	96.7	10.0	10.0	100	10.8	108	10.0	
Calcium	10000	10100	101	10000	10000	100	10400	104	1000	
Chromium	20.0	19.8	99.0	20.0	20.7	104	21.3	107	30.0	
Cobalt	100	98.0	98.0	100	100	100	108	108	20.0	
Copper	50.0	49.8	99.6	50.0	50.5	101	51.4	103	20.0	
Iron	200	193	96.5	200	200	100	215	108	150	
Lead	10.0	10.3	103	10.0	10.3	103	10.6	106	100	
Magnesium	10000	9830	98.3	10000	9680	96.8	10400	104	1000	
Manganese	30.0	29.8	99.3	30.0	30.4	101	33.0	110	20.0	
Mercury	5.00	5.05	101	5.00	5.18	104	5.29	106	0.250	
Nickel	80.0	77.2	96.5	80.0	79.3	99.1	85.7	107	30.0	
Potassium	10000	10100	101	10000	9880	98.8	10600	106	1000	
Selenium	10.0	10.8	108	10.0	10.3	103	9.77	97.7	100	
Silver	500	478	95.6	500	476	95.2	469	93.8	20.0	
Sodium	10000	10100	101	10000	9790	97.9	10500	105	1000	
Thallium	20.0	20.7	104	20.0	20.7	104	20.4	102	4.00	
Vanadium	100	102	102	100	107	107	107	107	15.0	
Zinc	40.0	41.9	105	40.0	43.0	108	43.6	109	50.0	

(1) Control Limits: Mercury 80-120, Other Metals 90-110

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Lab Case Number: E01- 2092, 2158, 2199, 2204, 2212, 2216, 2222, 2224, 2238, 2257, 2292

Concentration/Units: ppb (µg/L)

ANALYTE	INITIAL CALIBRATION			CONTINUING CALIBRATION					MDL	IDL
	TRUE	FOUND	%R (1)	TRUE	FOUND	%R (1)	FOUND	%R (1)		
Antimony	120	123	103	120	115	95.8	111	92.5	100	
Arsenic	20.0	19.4	97.0	20.0	19.5	97.5	19.1	95.5	10.0	
Barium	400	400	100	400	405	101	400	100	250	
Beryllium	10.0	9.20	92.0	10.0	9.76	97.6	10.3	103	10.0	
Cadmium	10.0	9.90	99.0	10.0	11.0	110	9.58	95.8	10.0	
Chromium	20.0	20.9	105	20.0	20.7	104	19.8	99.0	30.0	
Copper	50.0	49.0	98.0	50.0	49.8	99.6	49.5	99.0	20.0	
Lead	10.0	10.1	101	10.0	9.91	99.1	10.0	100	100	
Mercury	5.00	4.97	99.4	5.00	5.01	100	4.88	97.6	0.250	
Nickel	80.0	78.0	97.5	80.0	81.9	102	79.3	99.1	30.0	
Selenium	10.0	10.4	104	10.0	10.7	107	10.6	106	100	
Silver	500	480	96.0	500	477	95.4	477	95.4	20.0	
Thallium	20.0	20.5	103	20.0	20.9	105	19.7	98.5	4.00	
Zinc	40.0	40.0	100	40.0	41.2	103	40.5	101	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- 2026, 2032, 2034, 2044, 2049, 2055, 2056, 2059, 2061, 2092, 2102, 2111

Matrix: Aqueous Concentration/Units: ppb(ug/L)

ANALYTE / MASS	INITIAL			FINAL		
	SOL A	SOL AB	%R	SOL A	SOL AB	%R
Arsenic / 75	0.18	8.91	87.3	0.00	8.47	84.7
Cobalt / 59	0.27	9.39	91.3	0.30	10.6	103.1
Copper / 65	3.12	11.2	80.8	3.39	11.7	83.1
Manganese / 55	3.26	12.6	93.4	3.66	14.1	104.4
Nickel / 60	1.22	9.37	81.5	1.34	10.8	94.6
Zinc / 66	9.24	16.8	75.6	9.49	17.1	76.1

TRUE VALUE SOLN. B = 10 ppb

THERE ARE NO CONTROL LIMITS FOR SOLUTION AB

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

ICP-MS ICSAB RESULTS SUMMARY

Lab Case Number: E01- 2092, 2158, 2199, 2204, 2212, 2216, 2222, 2224, 2238, 2257, 2292

Matrix: Aqueous Concentration/Units: ppb(ug/L)

ANALYTE / MASS	INITIAL			FINAL		
	SOL A	SOL AB	%R	SOL A	SOL AB	%R
Arsenic / 75	0.14	9.15	90.1	0.11	8.82	87.1
Copper / 65	3.04	11.4	83.6	2.98	11.1	81.2
Nickel / 60	1.39	10.1	87.1	1.35	10.0	86.5
Zinc / 66	8.98	16.7	77.2	8.85	16.4	75.5

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- 2026, 2032, 2034, 2044, 2049, 2055, 2056, 2059, 2061, 2092, 2102, 2111

Matrix: Soil

Concentration/Units: ppm (mg/kg)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	10100	9490	NC	236					75-125
Antimony	50.4	ND	107	47.2					75-125
Arsenic	48.4	0.979	100	47.2	49.3	3.06	98.8	46.8	75-125
Barium	90.6	41.5	104	47.2					75-125
Beryllium	48.7	0.455	102	47.2	48.2	0.613	102	46.8	75-125
Cadmium	46.7	ND	98.9	47.2	48.2	ND	103	46.8	75-125
Calcium	330	89.8	102	236					75-125
Chromium	56.6	8.34	102	47.2	73.8	23.9	107	46.8	75-125
Cobalt	50.1	2.70	100	47.2					75-125
Copper	52.4	3.08	104	47.2	60.5	13.4	101	46.8	75-125
Iron	9550	8870	NC	236					75-125
Lead	59.3	8.15	108	47.2	62.7	10.8	111	46.8	75-125
Magnesium	1390	1170	93.2	236					75-125
Manganese	127	82.4	94.5	47.2					75-125
Mercury	0.309	0.017	99.0	0.295					75-125
Nickel	54.8	6.24	103	47.2	69.6	19.3	107	46.8	75-125
Potassium	681	431	106	236					75-125
Selenium	47.3	ND	100	47.2	47.3	ND	101	46.8	75-125
Silver	27.1	ND	91.9	29.5					75-125
Sodium	402	152	106	236					75-125
Thallium	49.6	0.115	105	47.2	50.2	0.124	107	46.8	75-125
Vanadium	61.5	14.2	100	47.2					75-125
Zinc	65.3	18.7	98.7	47.2	81.0	33.3	102	46.8	75-125

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 2032-004

QC Sample 1 for following samples:
2026-01; 2032-01~06; 2034-01; 2044-01; 2049-02;
2055-01; 2056-01; 2059-01~09; 2061-01~07;
2092-01~05,011; 2102-01; 2111-01

QC Sample 2 2056-001

QC Sample 2 for following samples:
2026-01; 2032-01~06; 2034-01; 2044-01; 2049-02;
2055-01; 2056-01; 2059-01~09; 2061-01~07;
2092-01~05,011; 2102-01; 2111-01

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SPIKE SAMPLE RECOVERY

Lab Case Number: E01- 2092, 2158, 2199, 2204, 2212, 2216, 2222, 2224, 2238, 2257, 2292

Matrix: Soil

Concentration/Units: ppm (mg/kg)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Antimony	51.2	ND	111	46.0	53.7	ND	118	45.6	75-125
Arsenic	52.6	3.22	107	46.0	50.8	4.22	102	45.6	75-125
Barium	129	77.5	112	46.0					75-125
Beryllium	47.5	0.663	102	46.0	45.0	ND	98.7	45.6	75-125
Cadmium	52.9	0.339	114	46.0	49.9	ND	109	45.6	75-125
Chromium	119	61.6	125	46.0	58.5	7.14	113	45.6	75-125
Copper	126	73.4	114	46.0	53.9	7.15	103	45.6	75-125
Lead	95.2	41.0	118	46.0	53.0	ND	116	45.6	75-125
Mercury	0.364	0.086	96.9	0.287	0.292	ND	102	0.285	75-125
Nickel	60.8	10.4	110	46.0	55.1	7.38	105	45.6	75-125
Selenium	52.4	ND	114	46.0	48.5	ND	106	45.6	75-125
Silver	26.4	ND	91.7	28.8	25.1	ND	88.1	28.5	75-125
Thallium	51.0	0.221	110	46.0	48.7	ND	107	45.6	75-125
Zinc	111	61.6	107	46.0	63.0	18.0	98.7	45.6	75-125

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 2158-001

QC Sample 1 for following samples:
2092-007; 2158-001; 2199-001~004, 006~011
2204-001~009; 2212-001~005; 2216-005~008
2222-001~010; 2224-001~007; 2238-001
2257-001~005; 2292-001

QC Sample 2 2222-010

QC Sample 2 for following samples:
2092-007; 2158-001; 2199-001~004, 006~011
2204-001~009; 2212-001~005; 2216-005~008
2222-001~010; 2224-001~007; 2238-001
2257-001~005; 2292-001

METALS QUALITY CONTROL

SPIKE SAMPLE RECOVERY

Lab Case Number: E01- 2092, 2158, 2199, 2204, 2212, 2216, 2222, 2224, 2238, 2257, 2292

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SSR3	SR3	%R3	SA3	SSR4	SR4	%R4	SA4	CONTROL LIMIT %R
Arsenic	45.2	3.54	95.6	43.6					75-125
Lead	59.6	13.0	107	43.6					75-125

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 2212-004

QC Sample 3 for following samples:
2092-007; 2158-001; 2199-001~004, 006~011
2204-001~009; 2212-001~005; 2216-005~008
2222-001~010; 2224-001~007; 2238-001
2257-001~005; 2292-001

QC Sample 4 _____

QC Sample 4 for following samples:

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

DUPLICATE SAMPLE RECOVERY

Lab Case Number: E01- 2026, 2032, 2034. 2044, 2049, 2055, 2056, 2059, 2061. 2092, 2102. 2111

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Aluminum	20	9490	9650	1.67				
Antimony	NA	ND	ND	NC				
Arsenic	20	0.979	1.05	7.00	20	3.06	3.30	7.55
Barium	20	41.5	41.9	0.959				
Beryllium	20	0.455	0.406	11.4	20	0.613	0.724	16.6
Cadmium	NA	ND	ND	NC	NA	ND	ND	NC
Calcium	20	89.8	89.1	0.783				
Chromium	20	8.34	8.56	2.60	20	23.9	27.8	15.1
Cobalt	20	2.70	2.61	3.39				
Copper	20	3.08	2.98	3.30	20	13.4	13.5	0.743
Iron	20	8870	8850	0.226				
Lead	20	8.15	8.20	0.612	20	10.8	9.89	8.80
Magnesium	20	1170	1160	0.858				
Manganese	20	82.4	80.6	2.21				
Mercury	20	0.017	0.017	0				
Nickel	20	6.24	5.91	5.43	20	19.3	20.5	6.03
Potassium	20	431	437	1.38				
Selenium	NA	ND	ND	NC	NA	ND	ND	NC
Silver	NA	ND	ND	NC				
Sodium	20	152	154	1.31				
Thallium	20	0.115	0.108	6.28	20	0.124	0.132	6.25
Vanadium	20	14.2	14.5	2.09				
Zinc	20	18.7	17.4	7.20	20	33.3	31.6	5.24

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 2032-004

QC Sample 1 for following samples:
2026-01; 2032-01 – 06; 2034-01; 2044-01; 2049-02;
2055-01; 2056-01; 2059-01 – 09; 2061-01 – 07;
2092-01 – 05.011; 2102-01; 2111-01

QC Sample 2 2056-001

QC Sample 2 for following samples:
2026-01; 2032-01 – 06; 2034-01; 2044-01; 2049-02;
2055-01; 2056-01; 2059-01 – 09; 2061-01 – 07;
2092-01 – 05.011; 2102-01; 2111-01

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

DUPLICATE SAMPLE RECOVERY

Lab Case Number: E01- 2092, 2158, 2199, 2204, 2212, 2216, 2222, 2224, 2238, 2257, 2292

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Antimony	NA	ND	ND	NC	NA	ND	ND	NC
Arsenic	20	3.22	3.39	5.14	20	4.22	4.19	0.713
Barium	20	77.5	82.6	6.37				
Beryllium	20	0.663	0.692	4.28	NA	ND	ND	NC
Cadmium	20	0.339	0.283	18.0	NA	ND	ND	NC
Chromium	20	61.6	67.2	8.70	20	7.14	7.02	1.69
Copper	20	73.4	74.1	0.949	20	7.15	7.08	0.984
Lead	20	41.0	41.1	0.244	NA	ND	ND	NC
Mercury	20	0.086	0.088	2.30	NA	ND	ND	NC
Nickel	20	10.4	11.0	5.61	20	7.38	7.22	2.19
Selenium	NA	ND	ND	NC	NA	ND	ND	NC
Silver	NA	ND	ND	NC	NA	ND	ND	NC
Thallium	20	0.221	0.206	7.03	NA	ND	ND	NC
Zinc	20	61.6	65.0	5.37	20	18.0	17.8	1.12

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 2158-001

QC Sample 1 for following samples:
2092-007; 2158-001; 2199-001~004, 006~011
2204-001~009; 2212-001~005; 2216-005~008
2222-001~010; 2224-001~007; 2238-001
2257-001~005; 2292-001

QC Sample 2 2222-010

QC Sample 2 for following samples:
2092-007; 2158-001; 2199-001~004, 006~011
2204-001~009; 2212-001~005; 2216-005~008
2222-001~010; 2224-001~007; 2238-001
2257-001~005; 2292-001

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

DUPLICATE SAMPLE RECOVERY

Lab Case Number: E01- 2092, 2158, 2199, 2204, 2212, 2216, 2222, 2224, 2238, 2257, 2292

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 3	S3	D3	RPD3	CONTROL LIMIT 4	S4	D4	RPD4
Arsenic	20	3.54	3.56	0.563				
Lead	20	13.0	14.2	8.82				

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 2212-004

QC Sample 3 for following samples:
2092-007; 2158-001; 2199-001~004, 006~011
2204-001~009; 2212-001~005; 2216-005~008
2222-001~010; 2224-001~007; 2238-001
2257-001~005; 2292-001

QC Sample 4 _____

QC Sample 4 for following samples:

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Lab Case Number: E01- 2026, 2032, 2034, 2044, 2049, 2055, 2056, 2059, 2061, 2092, 2102, 2111

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

LABORATORY CONTROL SAMPLE

Lab Case Number: E01- 2092, 2158, 2199, 2204, 2212, 2216, 2222, 2224, 2238, 2257, 2292

ANALYTE	AQUEOUS (ug/L)			SOLID (mg/kg)			
	TRUE	FOUND	%R(1)	TRUE	FOUND	LIMITS	%R(2)
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
Chromium				108	112	79.2-137	104
Copper				63.7	65.6	52.2-75.2	103
Lead				52.4	48.4	37.3-67.6	92.4
Mercury				1.00	0.902	.614-1.39	90.2
Nickel				49.8	49.5	39-60.6	99.4
Selenium				56.8	47.7	41-72.6	84.0
Silver				34.1	34.5	25.4-42.9	101
Thallium				68.2	68.2	39-97.3	100
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

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INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SERIAL DILUTIONS & POST SPIKES

Lab Case Number: E01- 2026, 2032, 2034, 2044, 2049, 2055, 2056, 2059, 2061, 2092, 2102, 2111

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SERIAL DILUTION		%	POST SPIKE		%
	SR	SDR	Difference	SPR	SA	Recovery
Aluminum	9490	9730	2.50			
Antimony	ND			39.7	47.2	84.1
Arsenic	0.979			45.8	47.2	95.0
Barium	41.5	41.5	0			
Beryllium	0.455	0.443	2.67			
Cadmium	ND			45.4	47.2	96.2
Calcium	89.8	94.8	5.42			
Chromium	8.34	8.84	5.82			
Cobalt	2.70	2.89	6.80			
Copper	3.08	3.01	2.30			
Iron	8870	9620	8.11			
Lead	8.15	8.03	1.48			
Magnesium	1170	1260	7.41			
Manganese	82.4	86.0	4.28			
Mercury	0.017			0.313	0.295	100.0
Nickel	6.24			53.0	47.2	99.1
Potassium	431	439	1.84			
Selenium	ND			42.7	47.2	90.5
Silver	ND			31.3	29.5	106
Sodium	152			1100	944	100.0
Thallium	0.115			50.4	47.2	107.0
Vanadium	14.2	15.2	6.80			
Zinc	18.7	20.2	7.71			

SR = Sample Result
SDR = Sample Dilution Result

SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 75 - 125% Recovery

QC Sample : 2032-004

QC Sample for following samples:
2026-01; 2032-01 ~ 06; 2034-01; 2044-01; 2049-02; 2055-01; 2056-01; 2059-01 ~ 09; 2061-01 ~ 07; 2092-01 ~ 05,011; 2102-01; 2111-01

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SERIAL DILUTIONS & POST SPIKES

Lab Case Number: E01- 2092, 2158, 2199, 2204, 2212, 2216, 2222, 2224, 2238, 2257, 2292

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SERIAL DILUTION		%	POST SPIKE		%
	SR	SDR	Difference	SPR	SA	Recovery
Antimony	ND			40.1	46.0	87.2
Arsenic	3.22	3.41	5.73			
Barium	77.5	83.2	7.09			
Beryllium	0.663	0.648	2.29			
Cadmium	0.339			49.4	46.0	107.0
Chromium	61.6	66.8	8.10			
Copper	73.4	78.9	7.22			
Lead	41.0	41.3	0.729			
Mercury	0.086			0.369	0.287	98.6
Nickel	10.4	11.1	6.51			
Selenium	ND			45.3	46.0	98.5
Silver	ND			28.2	28.8	97.9
Thallium	0.221			50.3	46.0	109.0
Zinc	61.6	64.0	3.82			

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 : 2158-001

QC Sample for following samples:

2092-007; 2158-001; 2199-001~004, 006~011
2204-001~009; 2212-001~005; 2216-005~008
2222-001~010; 2224-001~007; 2238-001
2257-001~005; 2292-001

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869
4/10/01

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Soil
Units: S-mg/Kg

Batch ID: AP024-0021

Blank

Parameter	Method Blank	MDL	Analysis Date
otal Recoverable Phenol	ND	0.050	04/05/01

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
otal Recoverable Phenol	2014-001S	15.6	14.2	9	20

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
otal Recoverable Phenol	2014-001	ND	14	15.6	108	75 - 125

The above blank result applies to the follow samples E01-

2014-001	2014-007
2014-001S	2014-008
2014-001SD	2014-009
2014-002	2014-010
2014-003	2014-011
2014-004	1921-001
2014-005	2026-001
2014-006	2044-001
2092-011	2014-012

++ = 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
4/10/01

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Soil
Units: S-mg/Kg

Batch ID: AP024-0022

Blank

Parameter	Method Blank	MDL	Analysis Date
Total Recoverable Phenol	ND	2.50	04/10/01

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
Total Recoverable Phenol	2092-003S	13.6	14.5	6	20

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
Total Recoverable Phenol	2092-003	ND	15	13.6	91.9	75 - 125

The above blank result applies to the follow samples E01-

2092-003	2159-004
2092-003S	2159-006
2092-003SD	2159-009
2092-002	2185-001
2092-004	2185-003
2092-005	2111-001
2155-012	2159-005
2159-001	2159-007
2159-002	2159-008
2159-003	2185-002
	2195-001

++ = 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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4/6/01

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Soil
Units: S-mg/Kg

Batch ID: AP013-0016

Blank

Parameter	Method Blank	MDL	Analysis Date
Total Cyanide	ND	1.00	04/06/01

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
Total Cyanide	2026-001S	11.4	11.4	0	20

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
Total Cyanide	2026-001	ND	14.7	11.4	77.6	75 - 125

The above blank result applies to the follow samples E01-

2026-001
2026-001S
2026-001SD
2092-002
2092-003
2092-004
2092-005
2092-011
2111-001

++ = 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
B-0406	S-mg/Kg	ND	25

The above blank result applies to the follow samples E01-

LCS1-001	2092-003
2121-001SQC	2092-004
2121-001SQCD	2092-005
2121-001SQCS	2121-001
2132-001	2121-002
2132-002	2121-003
2132-003	2121-004
2132-004	2127-001
2132-005	2141-001
2132-006	2141-002
2092-001	2141-003
2092-002	2141-004

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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
2121-001SQC	557	ND	98.8 %	563.70	S-mg/Kg	75%-125%

NC - Non-Calculable, Sample Result > 4x Spike Added.

The above spike result applies to the following samples E01-

2132-001	2121-001
2132-002	2121-002
2132-003	2121-003
2132-004	2121-004
2132-005	2127-001
2132-006	2141-001
2092-001	2141-002
2092-002	2141-003
2092-003	2141-004
2092-004	B-0406
2092-005	LCS1-001

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INTEGRATED ANALYTICAL LABORATORIES

General Chemistry Quality Control

Duplicate Sample Results Summary

TPHC

QC Sample	Sample Result	Duplicate Result	Matrix-Units	RPD	Control Limit
2121-001SQC	ND	ND	S-mg/Kg	NC	20.0

The above duplicate results applies to the following samples E01-

2132-001	2121-001
2132-002	2121-002
2132-003	2121-003
2132-004	2121-004
2132-005	2127-001
2132-006	2141-001
2092-001	2141-002
2092-002	2141-003
2092-003	2141-004
2092-004	B-0406
2092-005	LCS1-001

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273 Franklin Road
Randolph, NJ 07869
4/5/01

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Soil
Units: S-mg/kg

Batch ID: ap040-0012

Blank

Parameter	Method Blank	MDL	Analysis Date
TPHC	ND	25	04/05/01

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
TPHC	2102-001D	ND	ND	NC	20.0

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
TPHC	2102-001S	ND	541	473	87.5	75 - 125

The above blank results applies to the following samples E01

2102-001
2102-001S
2099-001
2100-001
2101-001
2092-006
2092-007
2092-008
2092-009
2092-010
2092-011
2092-012
2092-013
2103-001
2110-006

++ = 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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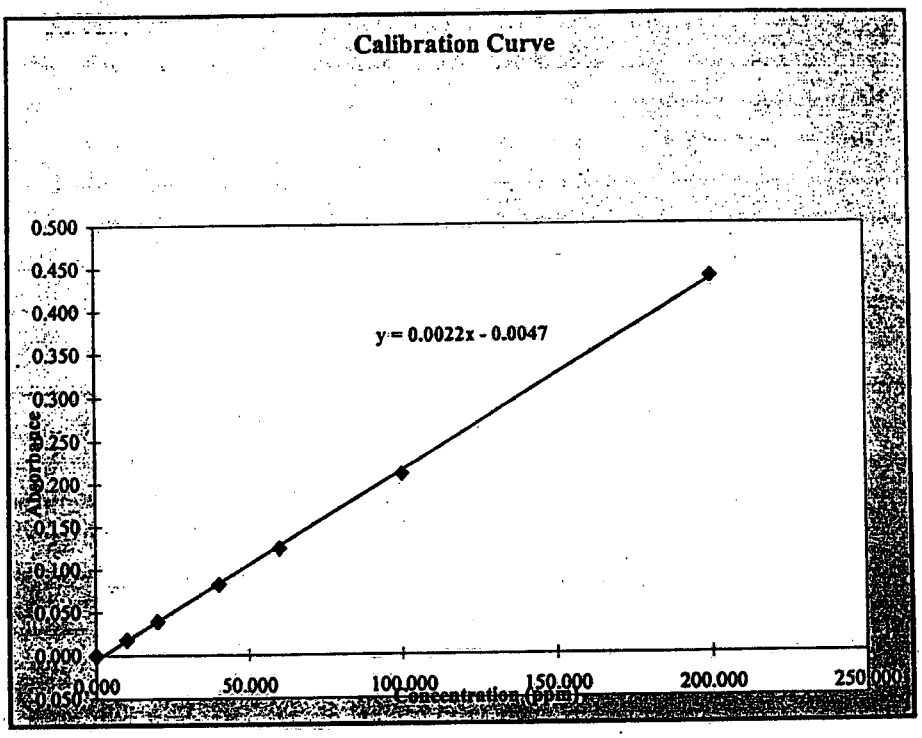
Integrated Analytical Laboratories

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:

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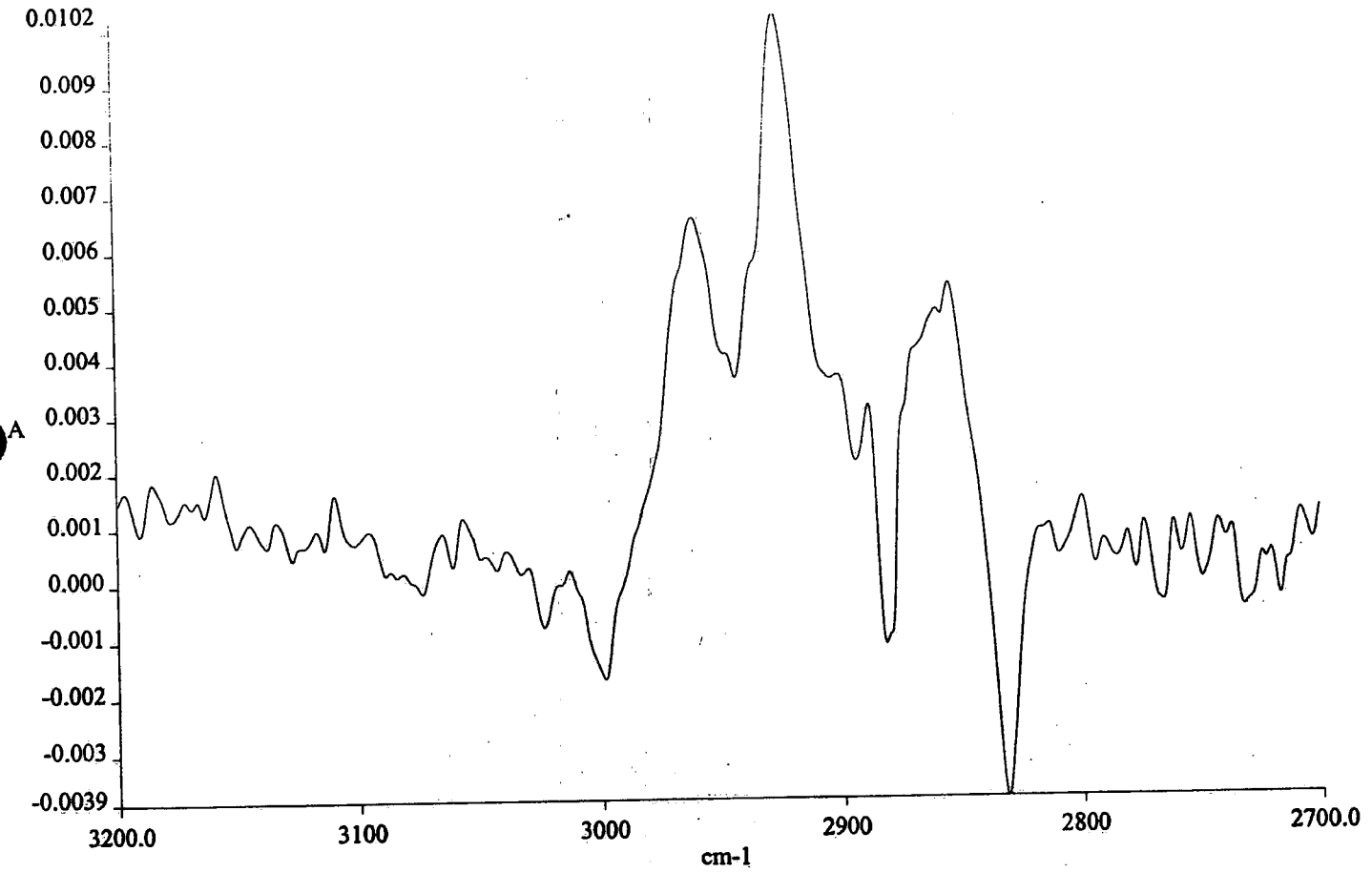

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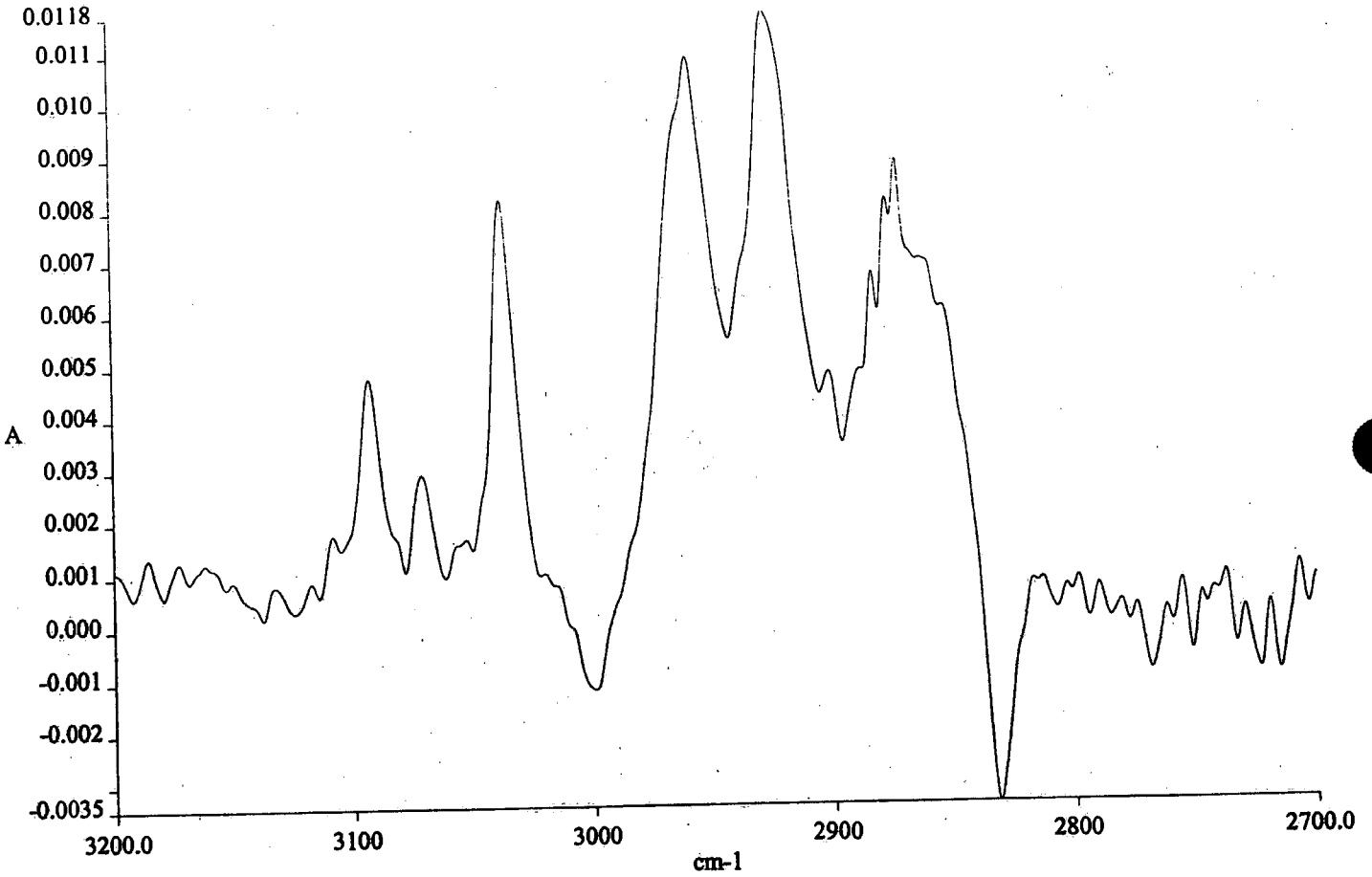
2582



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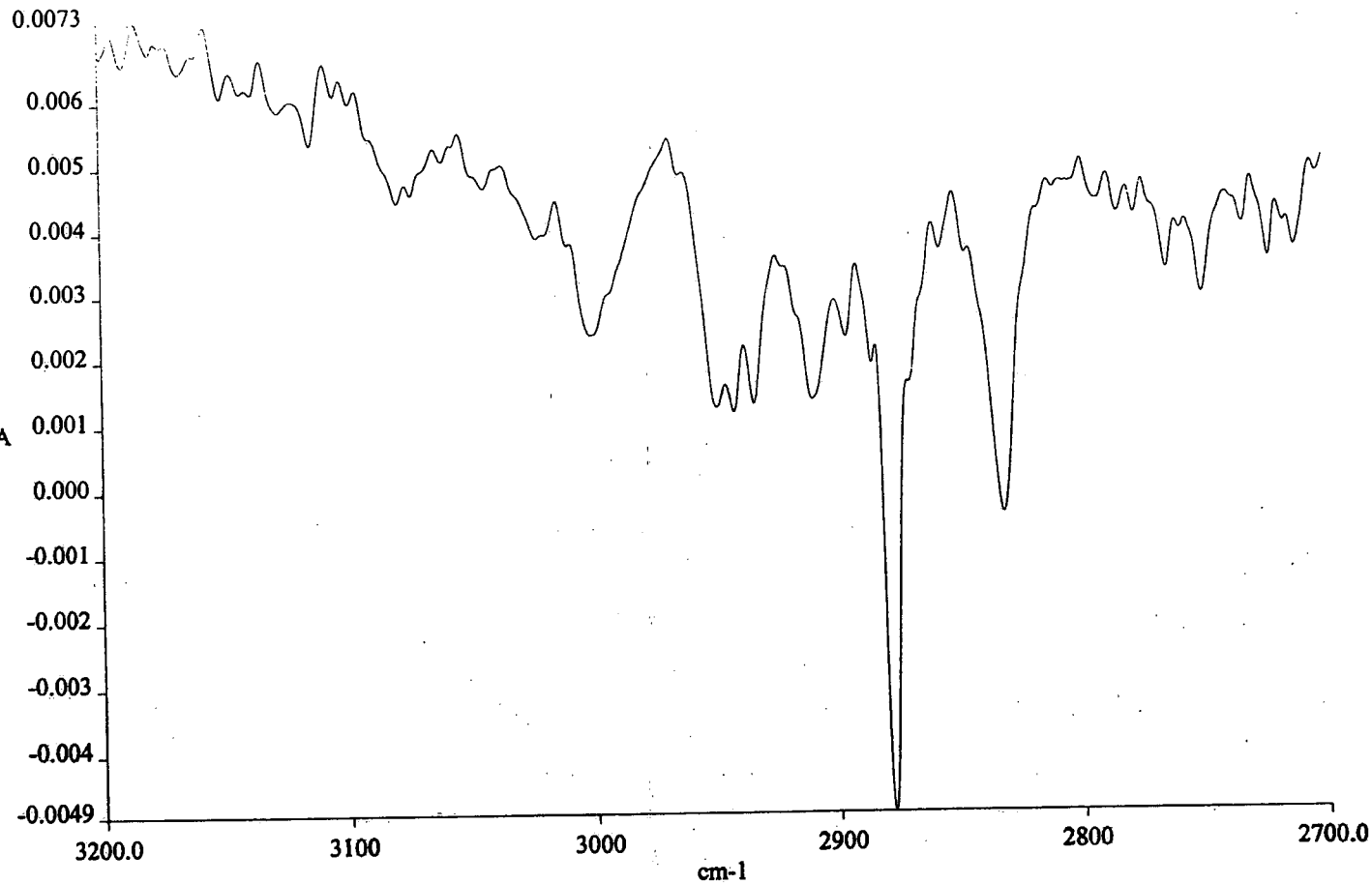

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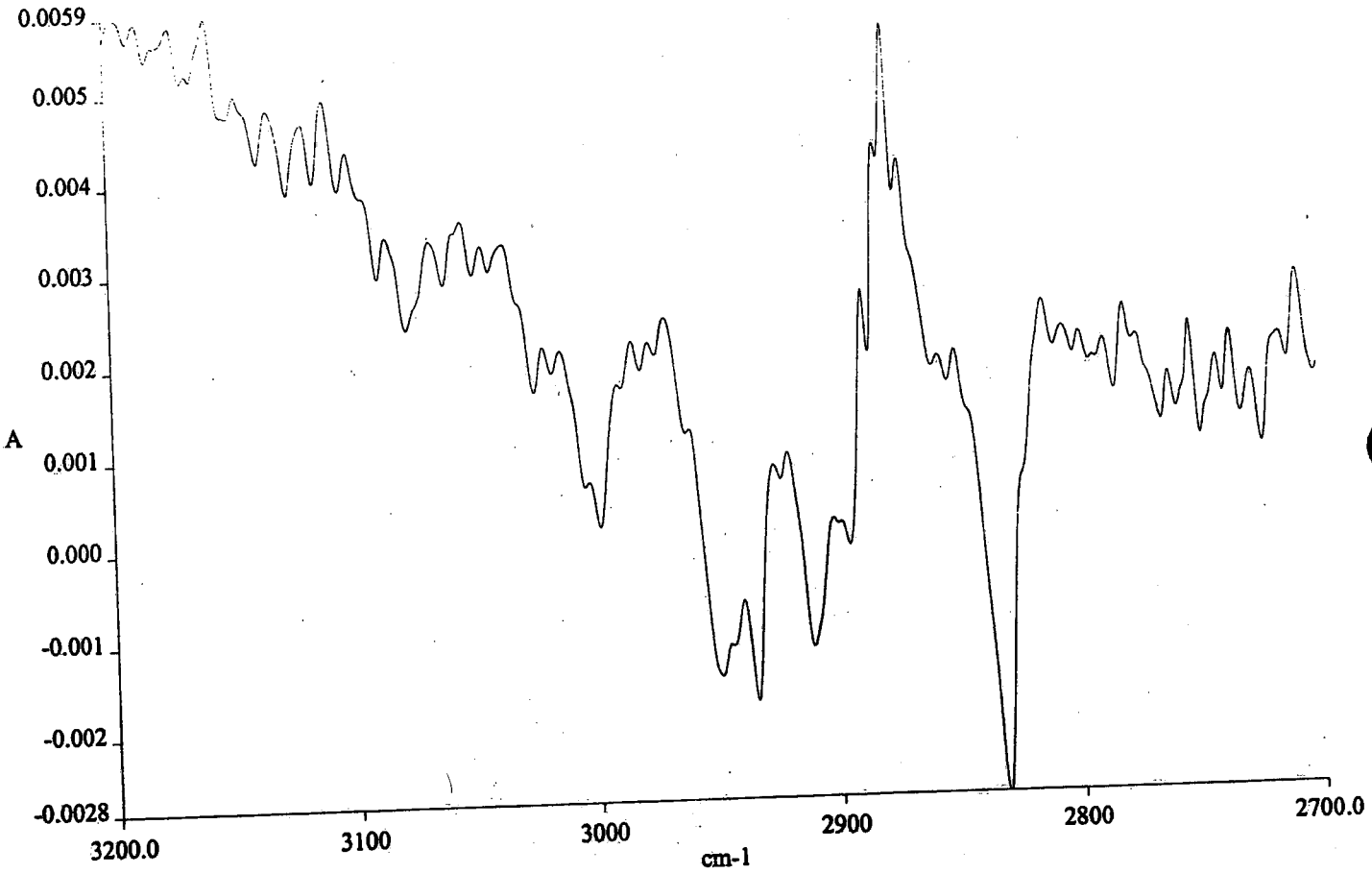
25984



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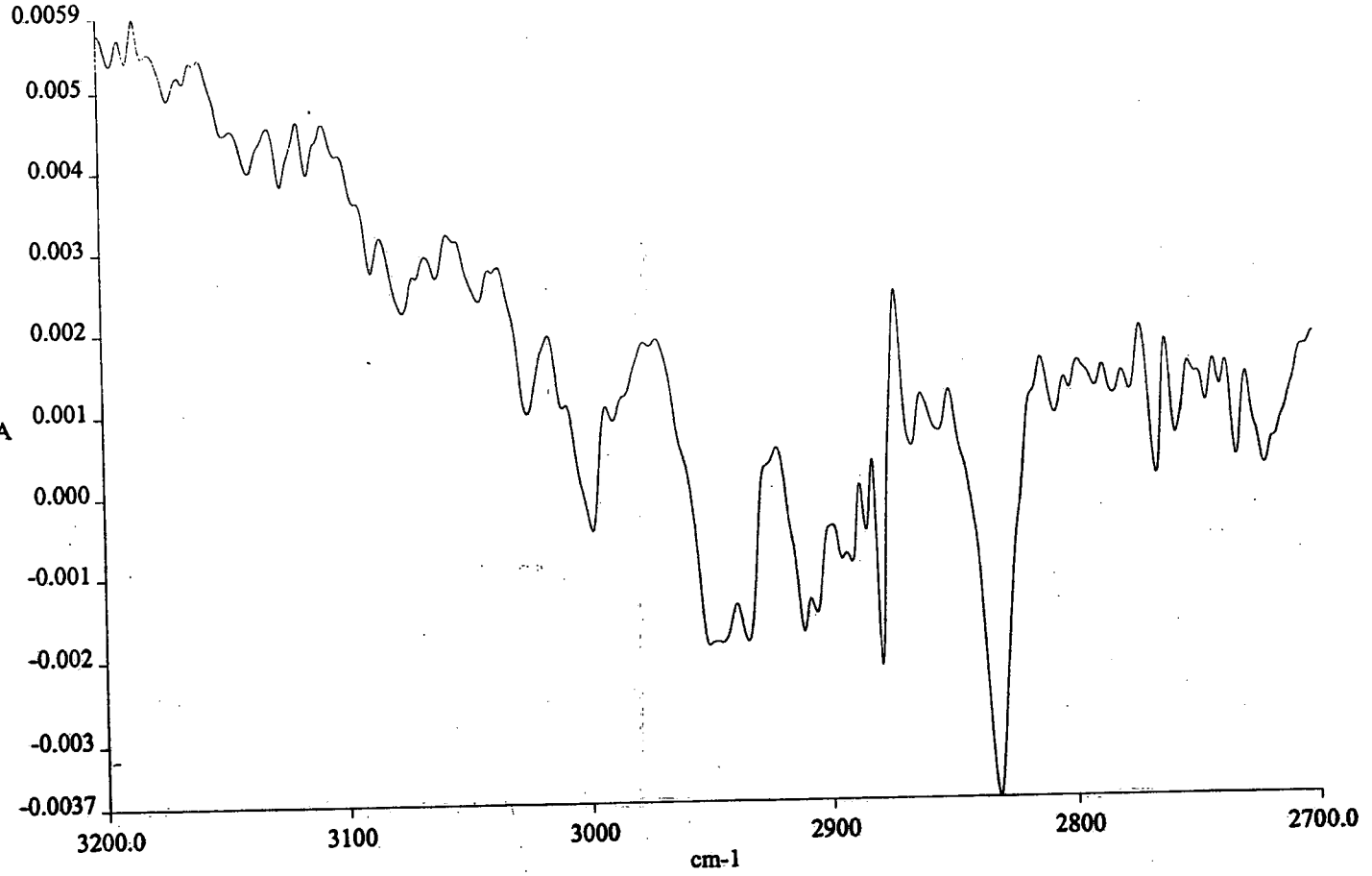

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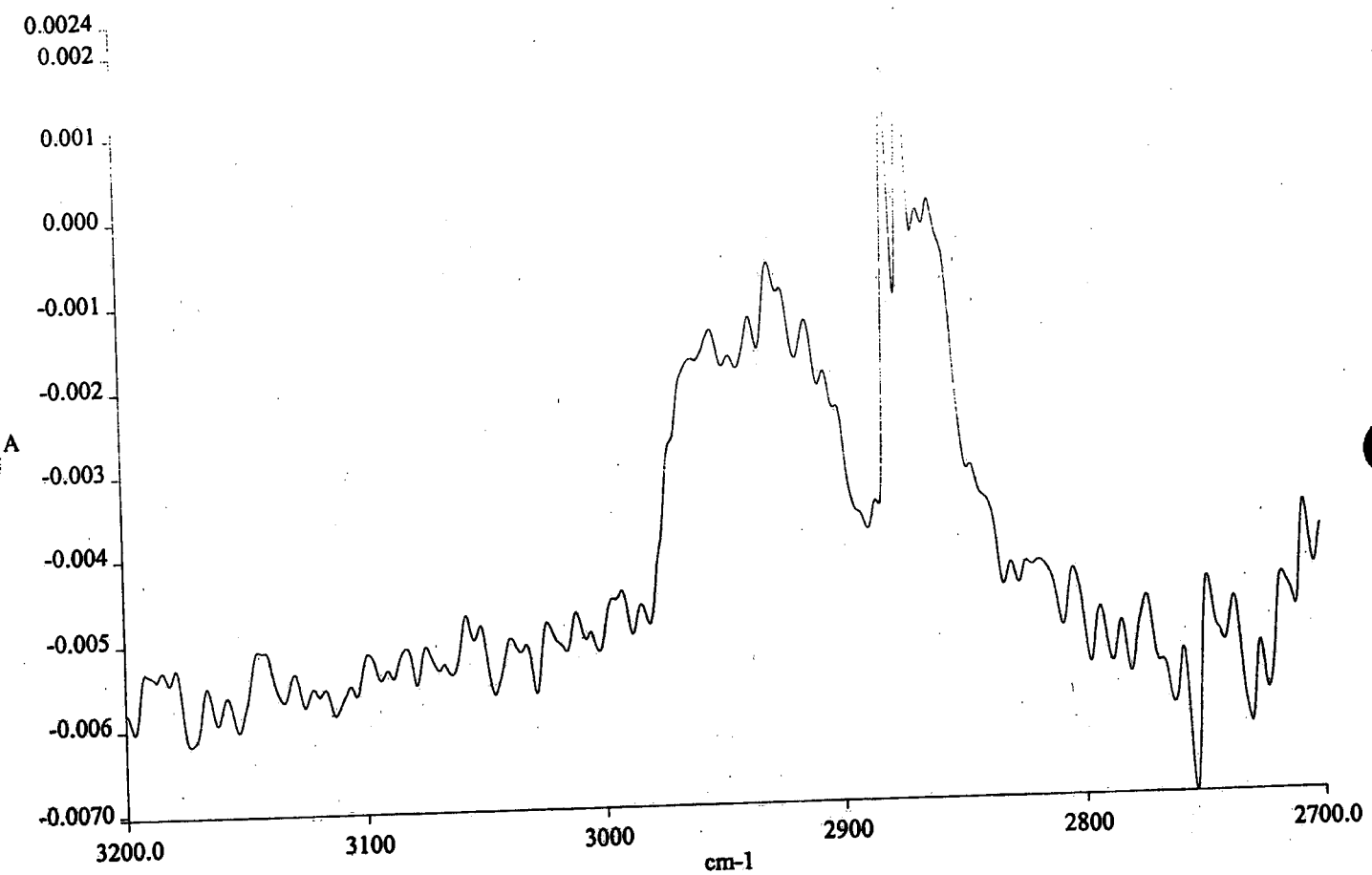

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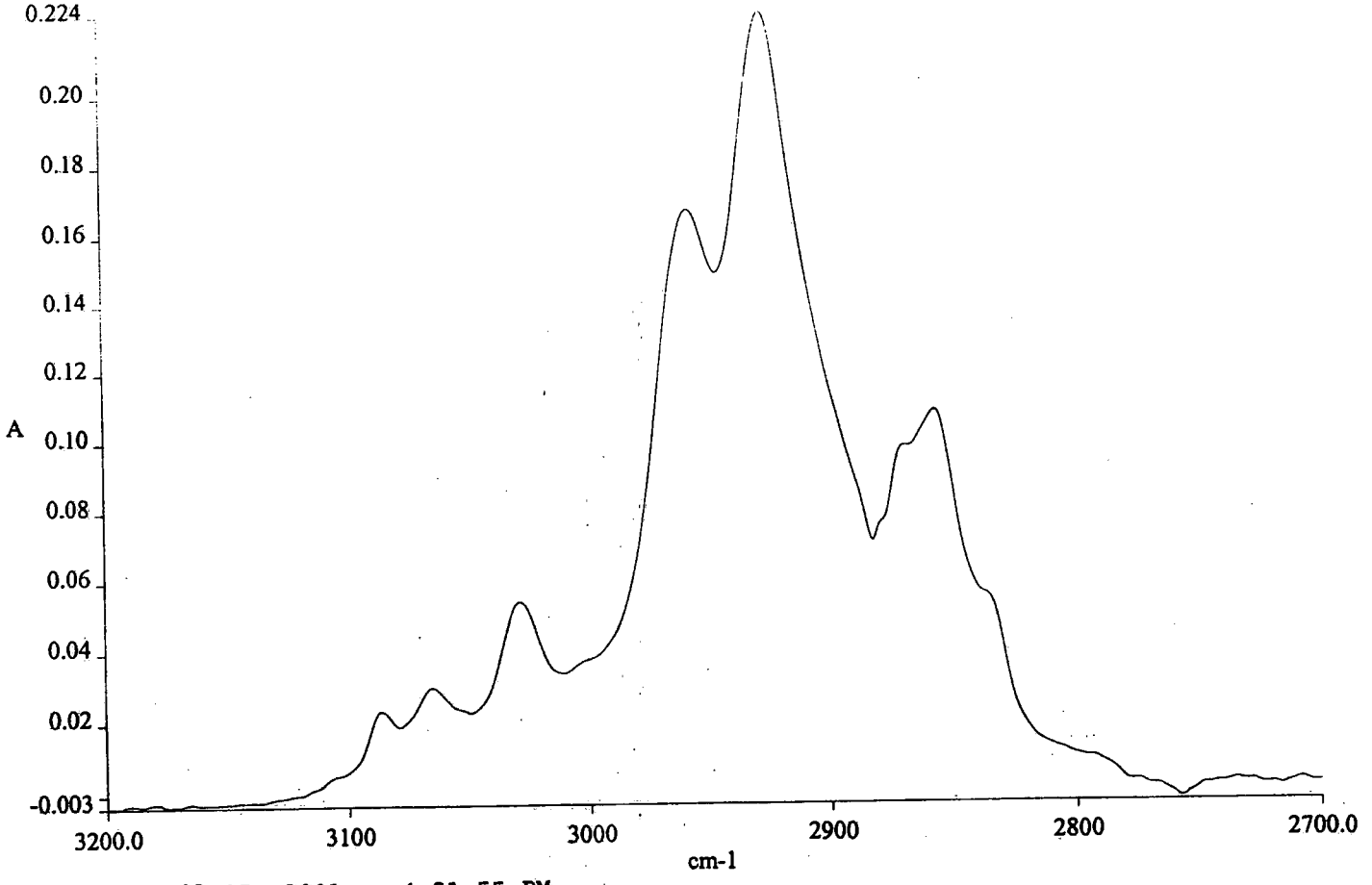
b-0405-3.sp

2587



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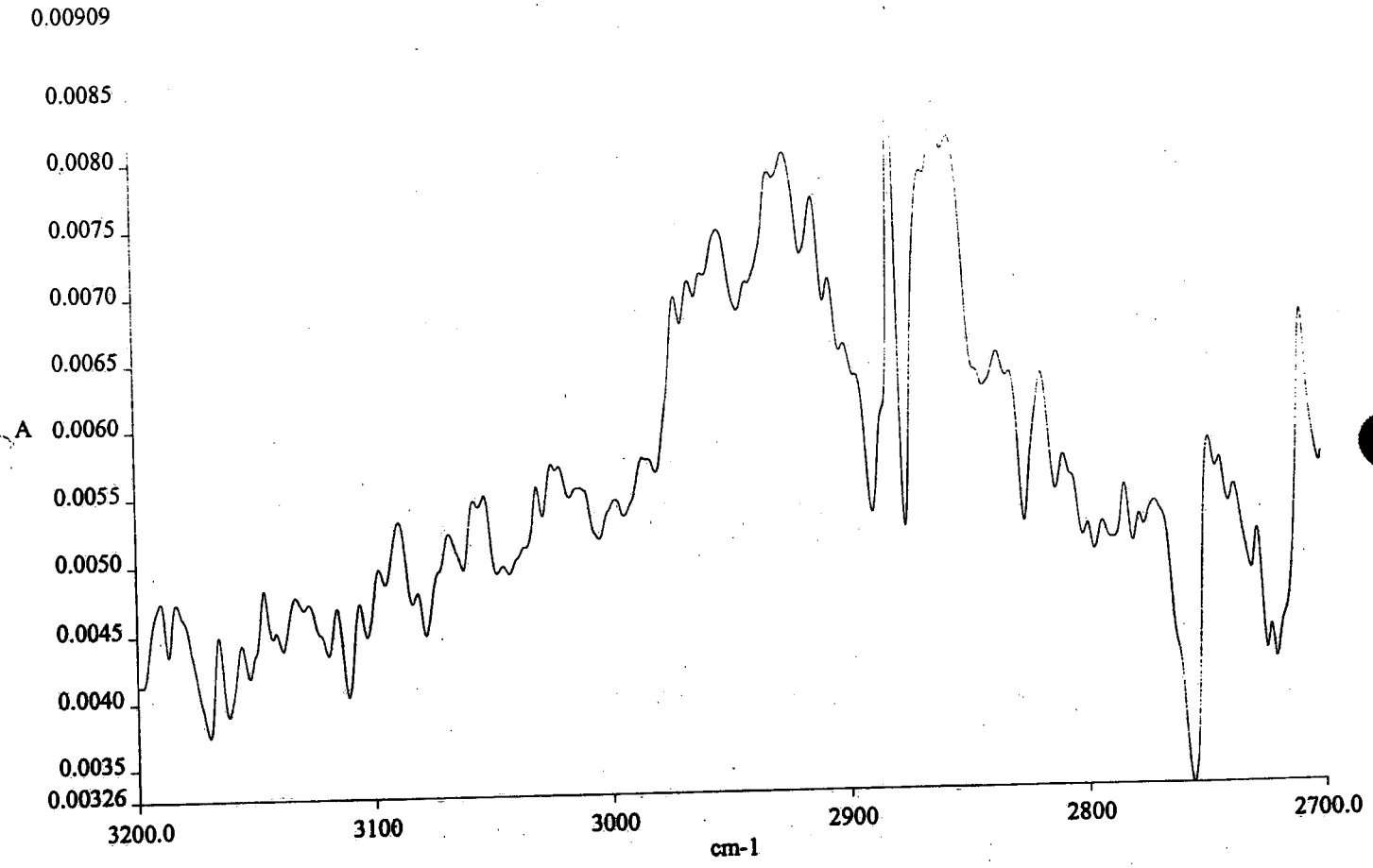

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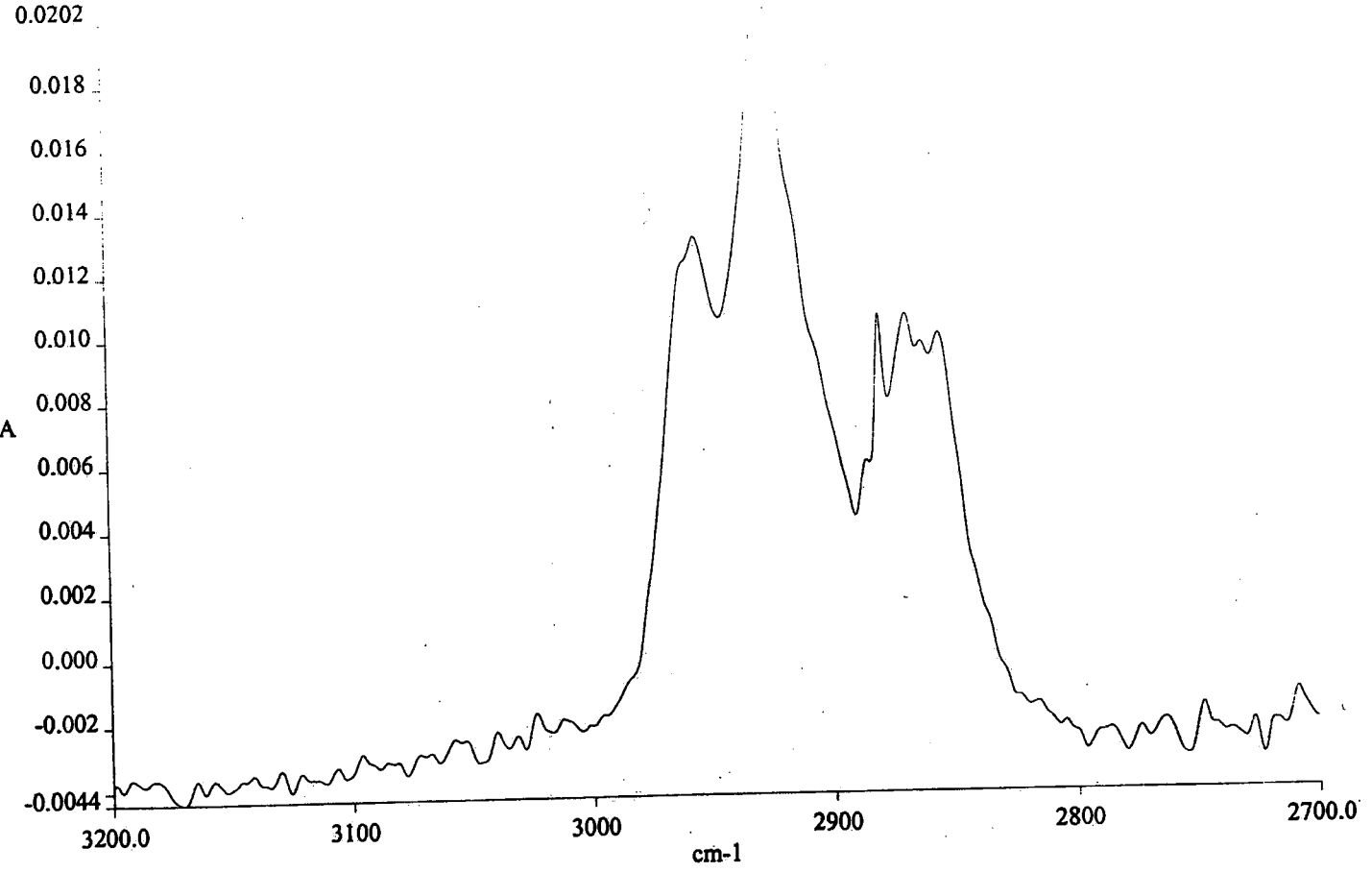

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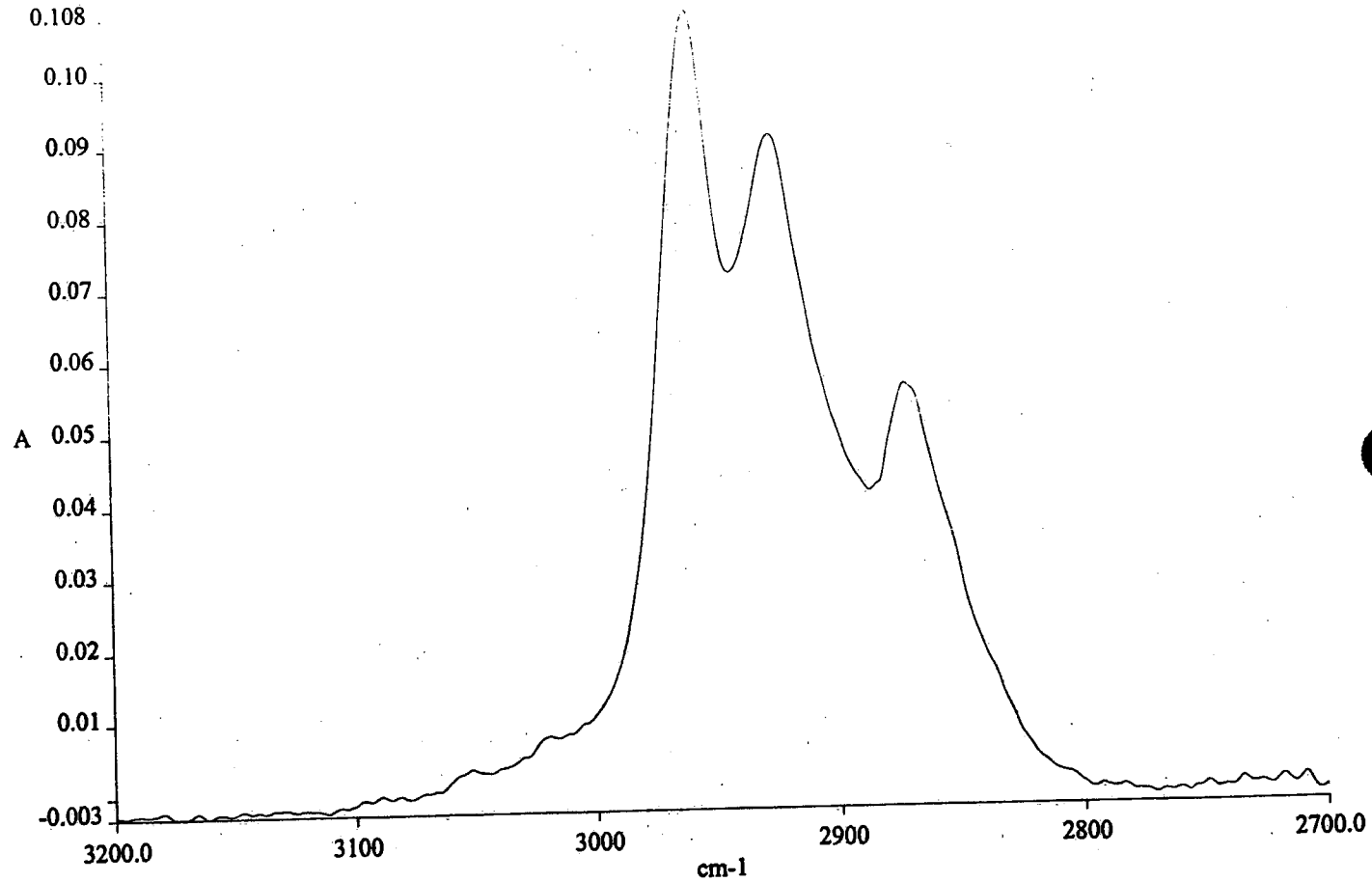

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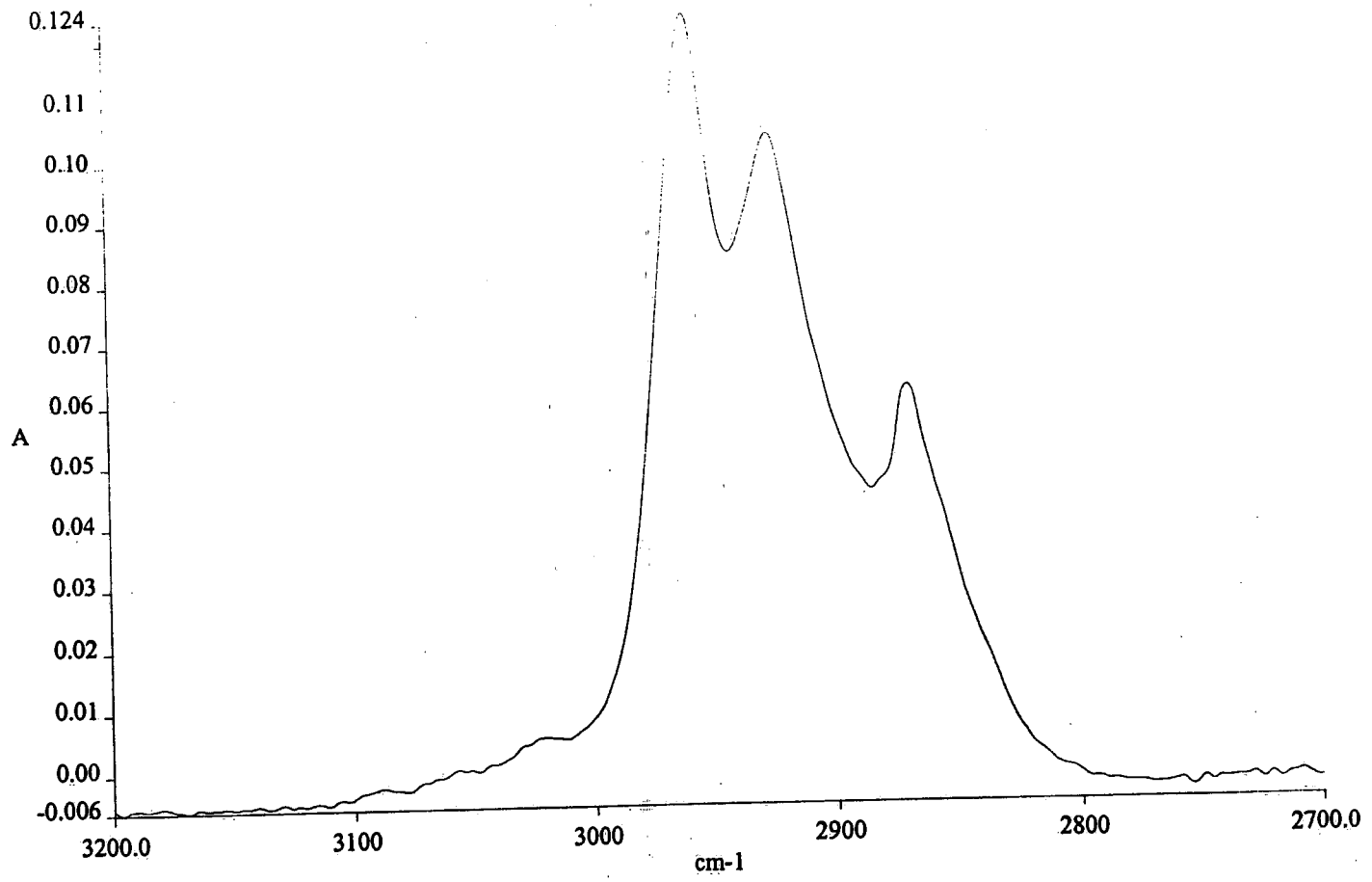

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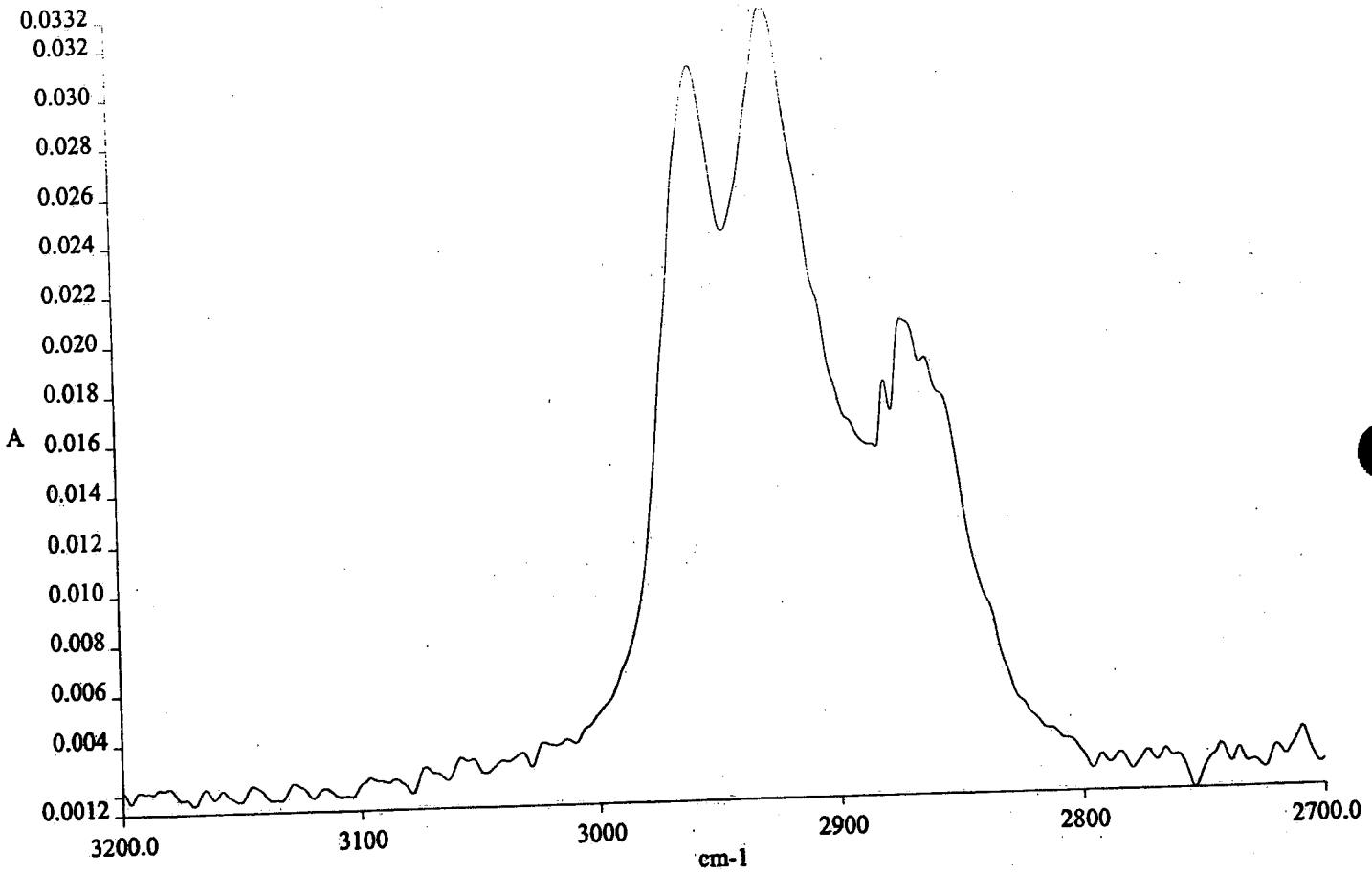

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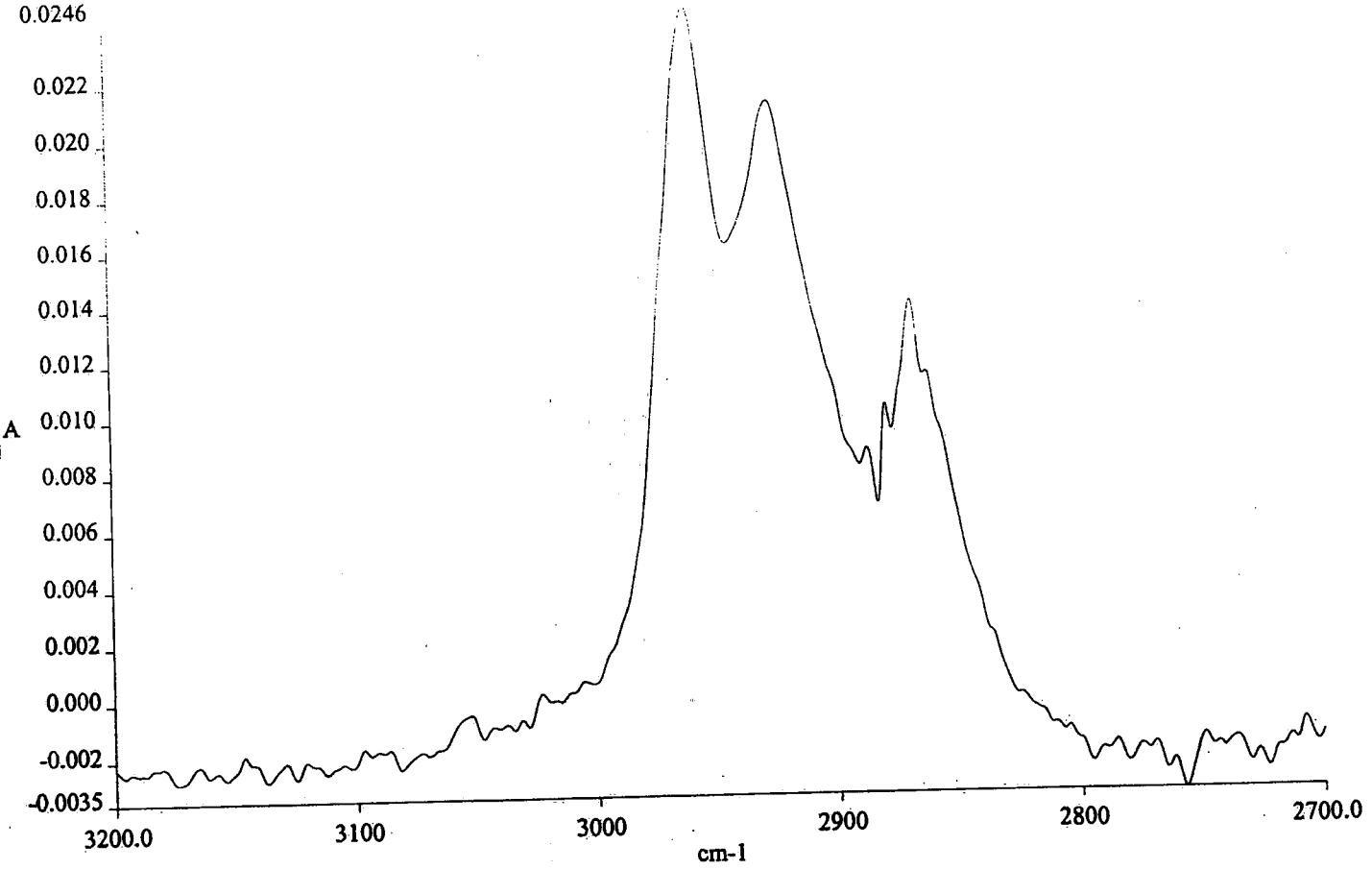

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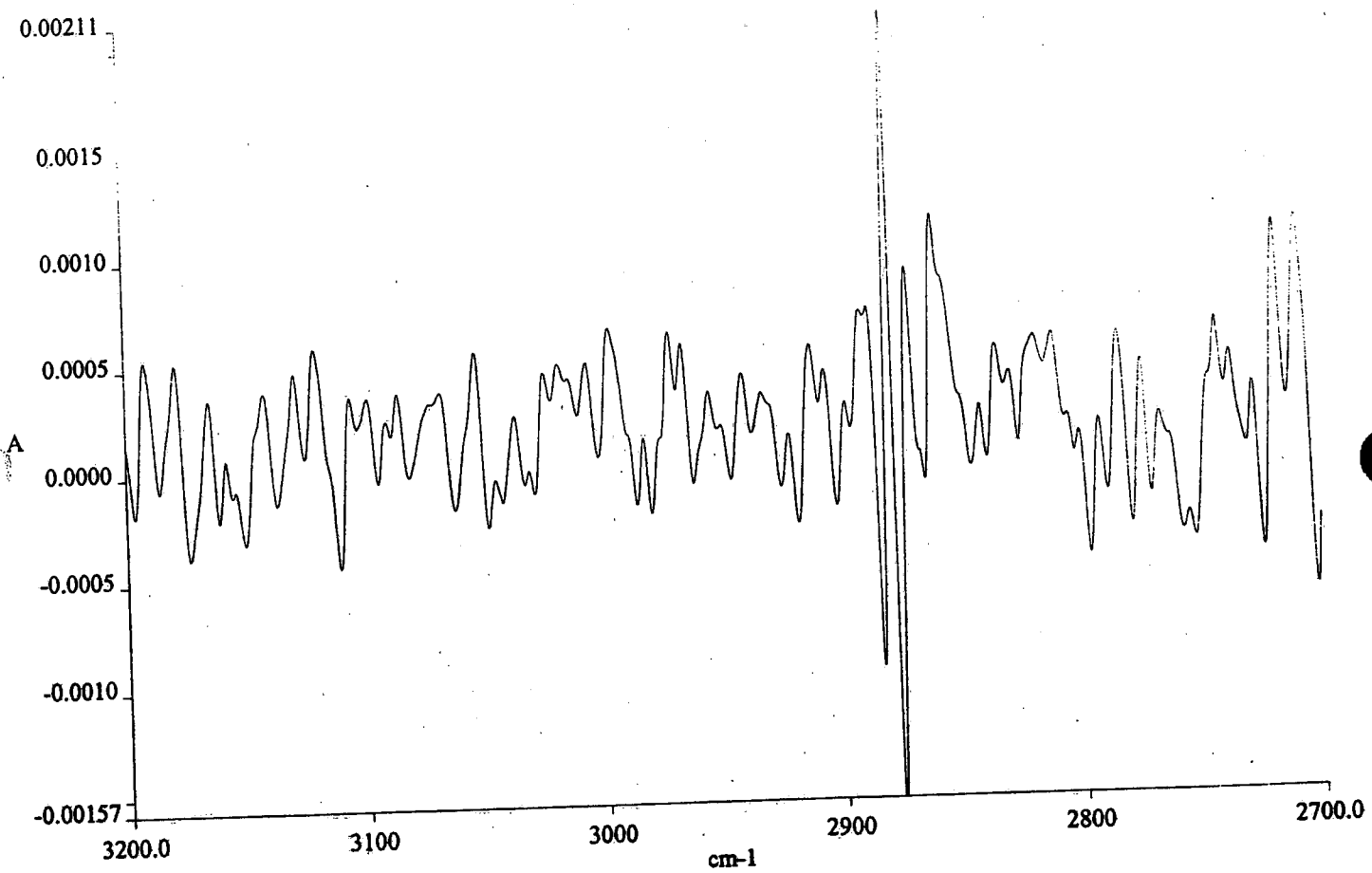

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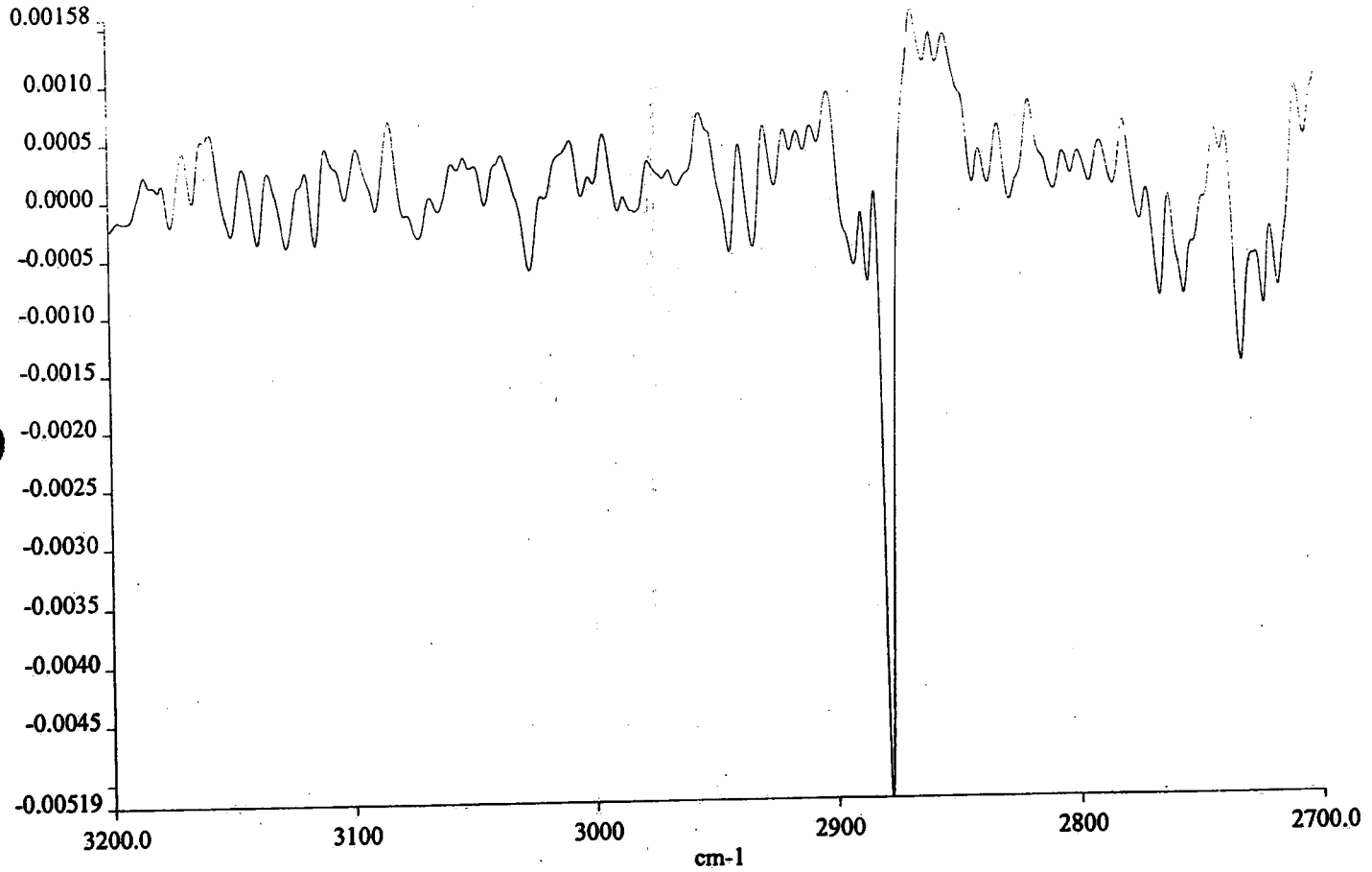

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2596

Phone # (973) 361-42[illegible]
Fax # (973) 989-5288

INTEGRATED ANALYT[illegible]AL LABORATORIES
CHAIN OF [illegible]STODY

[illegible] Franklin Rd
[illegible]olph, NJ 07869

CLIENT & PROJECT

Company Name:	ENVIROTACTICS
Address:	2517 HWY 35
	BLD. D. SUITE 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 5 °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)	VOH10 (1 2 3 4 5 6)	BNH15 (1 2 3 4 5 6)	PP METALS (1 2 3 4 5 6)	PCB (1 2 3 4 5 6)	(1 2 3 4 5 6)	(1 2 3 4 5 6)	(1 2 3 4 5 6)	(1 2 3 4 5 6)	(1 2 3 4 5 6)	Comments
S-45	WWT	4/3/01	8:40			S	2	01											103465
S-46	UST		9:30				2	2											451
S-47	UST		9:50				2	3											505
S-48	UST		10:30				2	4											447
S-49	UST		11:30				2	5											512
S-50			1:40				2	6	✓	✓									446
S-51	AST		2:00				2	7	✓	*	*	*	*			103506			RUN TPH ONLY
S-52	UST		2:20				2	8	✓		*					468			//
S-53	UST		3:00				1	9	✓		*								//
S-54	UST		3:05				1	10	✓		*								//

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]	4/4/01	11:00	Received by: [signature]
Relinquished by: [signature]	4-4-01	1300	Received by: Jean Cornista
Relinquished by:			Received by:
Relinquished by:			Received by:
Relinquished by:			Received by:

Comments:

Lab Case #
2092

PAGE: 1 OF 2

LAB COPIES [illegible]E & YELLOW; CLIENT COPY - PINK

2597

000505

Phone # (973) 361-[redacted]
Fax # (973) 989-5288

INTEGRATED ANALYT[redacted]L LABORATORIES
CHAIN OF [redacted]TODY

Franklin Rd
[redacted] 07869

CLIENT & PROJECT

Company Name:	ENVIROTACTICS
Address:	2517 HWY 35
	BLD O. SUITE 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 2. NaOH 3. HNO_3 4. H_2SO_4 5. MeOH 6. Other

COOLER TEMP 5 °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)	VOTO (1 2 3 4 5 6)	PP+40 (1 2 3 4 5 6)								Comments
S-55	AST	4/3/01	3:20		X	S	2	11	✓		✓								103448
S-56	UST		3:30			S	2	12	✓										449
S-57	UST		4:05			S	2	13	✓										507
TB	TRIP BLANK	4/3/01				X		14		✓									621

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]	4/4/01	11:00	Received by: [signature]
Relinquished by: [signature]	4/4/01	1300	Received by: [signature]
Relinquished by:			Received by:
Relinquished by:			Received by:
Relinquished by:			Received by:

Comments:

Lab Case # 2092

PAGE: 2 OF 2

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

2558

000507

CHAIN OF CUSTODY

Case No.: E01-2092
Project : ORBIS - NEWARK - 444
Client/Project: ENVTACT/ORBIS
Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736
Date Received: 04/04/01
Time Received: 13:00
Report Format: Reduced

P.O. #: _____

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736
Verbal Due: Apr 18
Report Due: Apr 25

# of Containers	2	2	2	2	2	2
IAL ID #	2092-001	2092-002	2092-003	2092-004	2092-005	2092-006
Client ID #	S-45	S-46	S-47	S-48	S-49	S-50
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Sample Date	04/03/01	04/03/01	04/03/01	04/03/01	04/03/01	04/03/01
Sample Time	08:40	09:30	09:50	10:30	11:30	13:40
Methanol Kit	√	√	√	√	√	√
Balance Rent	√					
VO+15, PP MP		√	√	√	√	
VO + 10, PP MP	√					√
Pesticides		√	√	√	√	
PCB		√	√	√	√	
BN + 15	√					
BNA + 25		√	√	√	√	
PP Metals-HIGH		√	√	√	√	
Pb-Lead	√					
Cyanide, Total		√	√	√	√	
Phenols		√	√	√	√	
% Solids	√	√	√	√	√	√
TPHC-48hr TAT	√	√	√	√	√	√
Electronic Del.	√					

Comments: NOTE 1: VO, BN, PPM & PCB DEPENDENT ON TPHC FOR SAMPLE #7.
BN DEPENDENT ON TPHC FOR SAMPLES #8 - #10.
VO DEPENDENT ON TPHC FOR SAMPLES #12 & #13.
NOTE 2: AS PER CHRIS N., ANALYZE SAMPLES #2 - #5 FOR PP+40 & TPHC. ANALYZE SAMPLE #1 FOR TPHC, VO, BN & PB. 4/4/01 (ES)
REV 01: AS PER CHRIS N. 4/10/01, RUN SAMPLE #7 FOR VOA+10, BN+15, PP METALS & PCBS. RUN SAMPLE #10 FOR PAH DUE 4/23/01. CANCEL OTHERS ON HOLD. mrf

000508

2599

CHAIN OF CUSTODY

Case No.: E01-2092
Project : ORBIS - NEWARK - 444
Client/Project: ENVTACT/ORBIS
Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736
Date Received: 04/04/01
Time Received: 13:00
Report Format: Reduced

P.O. #: _____

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736
Verbal Due: Apr 18
Report Due: Apr 25

# of Containers	2	2	1	1	2	2
IAL ID #	2092-007	2092-008	2092-009	2092-010	2092-011	2092-012
Client ID #	S-51	S-52	S-53	S-54	S-55	S-56
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Sample Date	04/03/01	04/03/01	04/03/01	04/03/01	04/03/01	04/03/01
Sample Time	14:00	14:20	15:00	15:05	15:20	15:30
Methanol Kit	√				√	√
VO+15, PP MP					√	
VO + 10, PP MP	√					C
Pesticides					√	
PCB	√				√	
BN + 15	√	C	C	C		
BNA + 25					√	
PAH				√		
PP Metals-HIGH	√				√	
Cyanide, Total					√	
Phenols					√	
% Solids	√	√	√	√	√	√
TPHC-48hr TAT	√	√	√	√	√	√

Comments: NOTE 1: VO, BN, PPM & PCB DEPENDENT ON TPHC FOR SAMPLE #7.
BN DEPENDENT ON TPHC FOR SAMPLES #8 - #10.
NOTE 2: VO DEPENDENT ON TPHC FOR SAMPLES #12 & #13.
NOTE 3: AS PER CHRIS N., ANALYZE SAMPLES #2 - #5 FOR PP+40 & TPHC. ANALYZE SAMPLE #1 FOR TPHC, VO, BN & PB. 4/4/01 (ES)
REV 01: AS PER CHRIS N. 4/10/01, RUN SAMPLE #7 FOR VOA+10, BN+15, PP METALS & PCBS. RUN SAMPLE #10 FOR PAH DUE 4/23/01. CANCEL OTHERS ON HOLD. mrf

CHAIN OF CUSTODY

Case No.: E01-2092
Project : ORBIS - NEWARK - 444
Client/Project: ENVTACT/ORBIS
Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736
Date Received: 04/04/01
Time Received: 13:00
Report Format: Reduced

P.O. #: _____

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736
Verbal Due: Apr 18
Report Due: Apr 25

# of Containers	2	1
IAL ID #	2092-013	2092-014
Client ID #	S-57	TB
Matrix	Soil	Soil
Sample Date	04/03/01	04/03/01
Sample Time	16:15	:
Methanol Kit	√	√
VO + 10, PP MP	C	√
% Solids	√	
TPHC-48hr TAT	√	

Comments: NOTE 1: VO, BN, PPM & PCB DEPENDENT ON TPHC FOR SAMPLE #7. BN DEPENDENT ON TPHC FOR SAMPLES #8 - #10.
NOTE 2: VO DEPENDENT ON TPHC FOR SAMPLES #12 & #13.
NOTE 3: AS PER CHRIS N., ANALYZE SAMPLES #2 - #5 FOR PP+40 & TPHC. ANALYZE SAMPLE #1 FOR TPHC, VO, BN & PB. 4/4/01 (ES)
REV 01: AS PER CHRIS N. 4/10/01, RUN SAMPLE #7 FOR VOA+10, BN+15, PP METALS & PCBS. RUN SAMPLE #10 FOR PAH DUE 4/23/01. CANCEL OTHERS ON HOLD. mrf

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: 2092 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 4/5

CORRECTIVE ACTION REQUIRED: YES [ ] (SEE BELOW) NO [✓]

CLIENT NOTIFIED: YES [✓] Date/ Time: 4/4/01 1530 NO [ ]

PROJECT CONTACT: Chris N.

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS: Analyze samples #2 - #5 for TPHC & PP+40.
Analyze sample #1 for TPHC, VO, BN & Pb.
Samples #12 + #13 not checked off for VO either on hold or active, Hold VO, run TPHC only.

VERIFIED/TAKEN BY: INITIAL ES DATE 4/4/01

000511

REV 10/00

2602

Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-2092
Client : Envirotactics Inc.
Project : ORBIS - NEWARK - 444

	GC/MS V		EXTRACT DATE	EXTRACT TIME	EXTRACT INITIAL	ANALYSIS DATE	ANALYSIS TIME	ANALYSIS INITIAL
Methanol Kit	2092-001	S				4/5		
	2092-002	S						
	2092-003	S						
	2092-004	S						
	2092-005	S						
	2092-006	S						
	2092-007	S						
	2092-011	S						
	2092-012	S						
	2092-013	S						
	2092-014	S						
Balance Rent	2092-001	S						
VO+15, PP MP	2092-002	S						
	2092-003	S						
	2092-004	S						
	2092-005	S						
	2092-011	S						
VO + 10, PP MP	2092-001	S						
	2092-006	S						
	2092	S						
	2092	S						
	2092	S						
	2092-014	S						

	GC EX							
Pesticides	2092-002	S	4/9	900	EDM2	4/10	200	LES
	2092-003	S						
	2092-004	S						
	2092-005	S						
	2092-011	S	4/5	900	EDM2	4/8	400	
PCB	2092-002	S	4/9	900	EDM2	4.9	400	"
	2092-003	S						
	2092-004	S						
	2092-005	S						
	2092-007	S	4/11	900	EDM2	4.12	400	"
	2092-011	S	4/5	900	EDM2	4.5	400	"

	GC/MS X							
BN + 15	2092-001	S	4/6	700 - 300	DL	4/6		DPhs
	2092	S						
	2092 -009	S	4/12	700 - 300	DL	4/12		DPhs
	2092 -010	S						
	2092	S						
BNA + 25	2092-002	S	4/6	700 - 300	DL	4/6		DPhs
	2092-003	S						
	2092-004	S						
	2092-005	S						

000512

2603

Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-2092
Client : Envirotactics Inc.
Project : ORBIS - NEWARK - 444

			GC/MS X	EXTRACT			ANALYSIS		
				DATE	TIME	INITIAL	DATE	TIME	INITIAL
BNA + 25	2092-011	S		4/5		DL	4/5		DL
			METALS						
PP Metals-HIGH	2092-002	S		4/4/01			4/5	1400	
	2092-003	S							
	2092-004	S							
	2092-005	S							
	2092-007	S		4/11/01			4/12	1200	
	2092-011	S		4/4/01			4/5	1400	
Pb-Lead	2092-001	S							
			WETCHEM						
Cyanide, Total	2092-002	S		4/5			4/6		
	2092-003	S							
	2092-004	S							
	2092-005	S							
	2092-011	S							
Phenols	2092-002	S		4/6	1000	DM	4/10	1500	DM
	2092-003	S							
	2092-004	S							
	2092-005	S							
	2092-011	S		4/12	1200	DM	4/5	1300	DM
% Solids	2092-001	S		4/5		KC			
	2092-002	S							
	2092-003	S							
	2092-004	S							
	2092-005	S							
	2092-006	S							
	2092-007	S							
	2092-008	S							
	2092-009	S							
	2092-010	S							
	2092-011	S							
	2092-012	S							
	2092-013	S							
TPHC-48hr TAT	2092-001	S		4/5	930	JR	4/5	1610	EC
	2092-002	S							
	2092-003	S							
	2092-004	S							
	2092-005	S							
	2092-006	S							
	2092-007	S							
	2092-008	S							
	2092-009	S							
	2092-010	S							
	2092-011	S							
	2092-012	S							

000513

2604

Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-2092
Client : Envirotactics Inc.
Project : ORBIS - NEWARK - 444

	WETCHEM		EXTRACT			ANALYSIS		
			DATE	TIME	INITIAL	DATE	TIME	INITIAL
TPHC-48hr TAT	2092-013	S	4/5	930	SR	4/5	1610	ec
	AIR							
Electronic Del.	2092-001	S						

REVIEW & APPROVAL: M Catalano
REMARKS :

000514

2605

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
(6 of 6)

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 - 444
Lab Case Number: E01-2435
Date Report Prepared: May 2, 2001

CLIENT SAMPLE ID	LABORATORY SAMPLE ID
S-58	2435-001
S-59	2435-002
S-60	2435-003
S-61	2435-004
S-62	2435-005
S-63	2435-006
S-64	2435-007
S-65	2435-008
S-66	2435-009
S-67	2435-010
S-68A	2435-011
S-68B	2435-012
TB	2435-013

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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Surrogate Compound Recovery Results Summary	
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Retention Time Shift Summary	
Chromatograms	

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 thirteen (13) soil sample(s) from Envirotactics Inc. (Project: ORBIS - 444) on April 17, 2001 for the analysis of:

(7) Volatiles + 15
(1) Volatiles + 10
(6) Semivolatiles - BNA + 25
(1) Semivolatiles - PAH
(6) PCB's
(6) Pesticides
(6) PP Metals
(6) Cyanide, Total
(6) Phenols
(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

5/2/01
Date

INTEGRATED ANALYTICAL LABORATORIES, LLC.

LABORATORY DELIVERABLES CHECK LIST

Lab Case Number: E01-2435

		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

5/2/01
Date

000003

2611

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC/MS VOLATILE ANALYSIS

Lab Case Number: E01 - 2435

	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

4/23/01
Date

rev 12/00

2612

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC/MS SEMIVOLATILE ANALYSIS

Lab Case Number: E01 - 2435

	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

05/01/01
Date

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC ANALYSIS - PCB'S, PESTICIDES, HERBICIDES

Lab Case Number: E01 - 2435

		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

14. 10. 2001
Date

INTEGRATED ANALYTICAL LABORATORIES

METAL ANALYSIS CONFORMANCE/NONCONFORMANCE SUMMARY

Lab Case Number: E01 - 2435

	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. Folke-Jorgensen
Inorganics Manager

04/19/01
Date

INTEGRATED ANALYTICAL LABORATORIES

PHC ANALYSIS CONFORMANCE/NONCONFORMANCE SUMMARY

Lab Case Number: E01 - 2435

	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

4-18-01
Date

rev 01/01

7.6/6

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - 444
Lab Case No.: E01-2435

Lab ID:	2435-001			2435-002			2435-003			2435-004		
Client ID:	S-58			S-59			S-60			S-61		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	4/16/2001			4/16/2001			4/16/2001			4/16/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (ppb)												
Benzene	317	J	715	ND		794	1190		705	787		695
Toluene	ND		715	ND		794	325	J	705	ND		695
Total Xylenes	ND		715	ND		794	200	J	705	ND		695
TOTAL VO's:	317	J		ND			1715	J		787		
TOTAL TIC's:	ND			ND			2308			ND		
TOTAL VO's & TIC's:	317	J		ND			4023	J		787		
Semivolatiles - BNA (ppb)												
bis(2-Ethylhexyl)phthalate	117		75.6	ND		77.8	ND		78.8	ND		79.5
TOTAL BNA'S:	117			ND			ND			ND		
TOTAL TIC's:	13628			ND			34895			ND		
TOTAL BNA'S & TIC's:	13745			ND			34895			ND		
PCB's (ppb)	ND		156	ND		157	ND		157	ND		162
Pesticides (ppb)												
alpha-BHC	ND		9.76	ND		9.79	ND		9.84	ND		10.2
beta-BHC	ND		9.76	ND		9.79	ND		9.84	ND		10.2
gamma-BHC	ND		9.76	ND		9.79	ND		9.84	ND		10.2
delta-BHC	ND		9.76	ND		9.79	ND		9.84	ND		10.2
Heptachlor	ND		9.76	ND		9.79	ND		9.84	ND		10.2
Aldrin	ND		9.76	ND		9.79	ND		9.84	ND		10.2
Heptachlor epoxide	ND		9.76	13.1		9.79	ND		9.84	ND		10.2
Endosulfan I	ND		9.76	15.4		9.79	ND		9.84	ND		10.2
4,4'-DDE	ND		9.76	11.5		9.79	ND		9.84	ND		10.2
Dieldrin	ND		9.76	12.1		9.79	ND		9.84	ND		10.2
Endrin	ND		9.76	ND		9.79	ND		9.84	ND		10.2
Endosulfan II	ND		9.76	ND		9.79	ND		9.84	ND		10.2
4,4'-DDD	ND		9.76	ND		9.79	ND		9.84	ND		10.2
Endrin aldehyde	ND		9.76	ND		9.79	ND		9.84	ND		10.2
Endosulfan sulfate	ND		9.76	ND		9.79	ND		9.84	ND		10.2
4,4'-DDT	ND		9.76	ND		9.79	ND		9.84	ND		10.2
Chlordane	ND		48.8	ND		49	ND		49.2	ND		50.8
Toxaphene	ND		48.8	ND		49	ND		49.2	ND		50.8

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.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - 444
Lab Case No.: E01-2435

Lab ID:	2435-001			2435-002			2435-003			2435-004		
Client ID:	S-58			S-59			S-60			S-61		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	4/16/2001			4/16/2001			4/16/2001			4/16/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Metals (ppm)												
Antimony	ND		2.38	ND		2.42	ND		2.42	ND		2.43
Arsenic	1.87		0.238	1.75		0.242	1.84		0.242	1.55		0.243
Beryllium	0.824		0.238	0.960		0.242	0.911		0.242	0.901		0.243
Cadmium	ND		0.238	0.257		0.242	0.330		0.242	0.303		0.243
Chromium	21.3		0.714	24.3		0.726	22.5		0.726	24.0		0.729
Copper	19.4		0.476	19.1		0.484	20.7		0.484	20.9		0.486
Lead	10.7		2.38	9.62		2.42	9.08		2.42	10.1		2.43
Mercury	ND		0.0149	ND		0.015	ND		0.015	ND		0.0152
Nickel	19.1		0.714	22.1		0.726	23.0		0.726	22.4		0.729
Selenium	ND		2.38	ND		2.42	ND		2.42	ND		2.43
Silver	ND		0.600	ND		0.605	ND		0.596	ND		0.604
Thallium	0.128		0.0952	0.161		0.0968	0.113		0.0968	0.150		0.0972
Zinc	70.8		1.19	67.3		1.21	115		1.21	54.7		1.22
General Analytical												
[illegible]nide, Total (ppm)	ND		1.20	ND		1.21	ND		1.21	ND		1.22
[illegible]enol (ppm)	ND		3.00	ND		3.02	7.23		3.03	ND		3.06
[illegible]otal Petroleum Hydrocarbons (ppm)	34.3		25.0	ND		25.0	229		25.0	34.9		25.0

Lab ID:	2435-005			2435-006			2435-007			2435-008		
Client ID:	S-62			S-63			S-64			S-65		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	4/16/2001			4/16/2001			4/16/2001			4/16/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (ppb)												
Benzene	418	J	710	~		~	~		~	~		~
TOTAL VO's:	418	J		~			~			~		
TOTAL TIC's:	ND			~		~	~		~	~		~
TOTAL VO's & TIC's:	418	J		~		~	~		~	~		~
Semivolatiles - BNA (ppb)												
TOTAL BNA'S:	ND		75.3	~			~			~		
TOTAL TIC's:	ND			~		~	~		~	~		
TOTAL BNA'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
[illegible] qualifiers on individual Volatiles are carried down through summation.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - 444
Lab Case No.: E01-2435

Lab ID:	2435-005			2435-006			2435-007			2435-008		
Client ID:	S-62			S-63			S-64			S-65		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	4/16/2001			4/16/2001			4/16/2001			4/16/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Semivolatiles - PAH (ppb)												
Naphthalene	~		~	~		~	~		~	ND		78.8
Acenaphthylene	~		~	~		~	~		~	ND		78.8
Acenaphthene	~		~	~		~	~		~	ND		78.8
Fluorene	~		~	~		~	~		~	ND		78.8
Phenanthrene	~		~	~		~	~		~	ND		78.8
Anthracene	~		~	~		~	~		~	ND		78.8
Fluoranthene	~		~	~		~	~		~	ND		78.8
Pyrene	~		~	~		~	~		~	ND		78.8
Benzo[a]anthracene	~		~	~		~	~		~	ND		78.8
Chrysene	~		~	~		~	~		~	ND		78.8
Benzo[b]fluoranthene	~		~	~		~	~		~	ND		78.8
Benzo[k]fluoranthene	~		~	~		~	~		~	ND		78.8
Benzo[a]pyrene	~		~	~		~	~		~	ND		78.8
Indeno[1,2,3-cd]pyrene	~		~	~		~	~		~	ND		78.8
Dibenz[a,h]anthracene	~		~	~		~	~		~	ND		78.8
Benzo[g,h,i]perylene	~		~	~		~	~		~	ND		78.8
PCB's (ppb)	ND		157	~		~	~		~	~		~
Pesticides (ppb)	ND		9.78	~		~	~		~	~		~
Metals (ppm)												
Antimony	ND		2.38	~		~	~		~	~		~
Arsenic	1.63		0.238	~		~	~		~	~		~
Beryllium	0.863		0.238	~		~	~		~	~		~
Cadmium	0.403		0.238	~		~	~		~	~		~
Chromium	22.8		0.714	~		~	~		~	~		~
Copper	18.8		0.476	~		~	~		~	~		~
Lead	9.08		2.38	~		~	~		~	~		~
Mercury	ND		0.0147	~		~	~		~	~		~
Nickel	21.8		0.714	~		~	~		~	~		~
Selenium	ND		2.38	~		~	~		~	~		~
Silver	ND		0.595	~		~	~		~	~		~
Thallium	0.145		0.0952	~		~	~		~	~		~
Zinc	60.9		1.19	~		~	~		~	~		~
General Analytical												
Cyanide, Total (ppm)	ND		1.19	~		~	~		~	~		~
Phenol (ppm)	ND		2.98	~		~	~		~	~		~
Total Petroleum Hydrocarbons (ppm)	57.9		25.0	54.0		25.0	286		25.0	986		47.8

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

000011

2619

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - 444
Lab Case No.: E01-2435

Lab ID:	2435-009			2435-010			2435-011			2435-012		
Client ID:	S-66			S-67			S-68A			S-68B		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date:	4/16/2001			4/16/2001			4/16/2001			4/16/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (ppb)												
Benzene	~		~	~		~	10500		763	32100		4910
Toluene	~		~	~		~	50200	D	1530	85000		4910
1,2-Dichlorobenzene	~		~	~		~	426	J	763	ND		4910
TOTAL VO's:	~			~			61126	J		117100		
TOTAL TIC's:	~		~	~		~	3590			ND		
TOTAL VO's & TIC's:	~		~	~		~	64716	J		117100		
Semivolatiles - BNA (ppb)												
Phenol	~		~	~		~	322		74.6	~		~
2-Methylphenol	~		~	~		~	293		74.6	~		~
4-Methylphenol	~		~	~		~	965		74.6	~		~
TOTAL BNA'S:	~			~			1580			~		
TOTAL TIC's:	~		~	~		~	ND			~		
TOTAL BNA'S & TIC's:	~		~	~		~	1580			~		
PCB's (ppb)	~		~	~		~	ND		152	~		~
Pesticides (ppb)	~		~	~		~	ND		9.51	~		~
Metals (ppm)												
Antimony	~		~	~		~	ND		2.31	~		~
Arsenic	~		~	~		~	1.01		0.231	~		~
Beryllium	~		~	~		~	0.728		0.231	~		~
Cadmium	~		~	~		~	0.268		0.231	~		~
Chromium	~		~	~		~	19.5		0.693	~		~
Copper	~		~	~		~	16.6		0.462	~		~
Lead	~		~	~		~	7.98		2.31	~		~
Mercury	~		~	~		~	ND		0.0145	~		~
Nickel	~		~	~		~	18.1		0.693	~		~
Selenium	~		~	~		~	ND		2.31	~		~
Silver	~		~	~		~	ND		0.580	~		~
Thallium	~		~	~		~	0.0943		0.0924	~		~
Zinc	~		~	~		~	49.1		1.16	~		~
General Analytical												
Cyanide, Total (ppm)	~		~	~		~	ND		1.16	~		~
Phenol (ppm)	~		~	~		~	ND		2.90	~		~
Total Petroleum Hydrocarbons (ppm)	422		25.0	64.8		25.0	26.8		25.0	~		~

~ = Sample not analyzed for
ND = 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 are carried down through summation.

000012

2620

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - 444
Lab Case No.: E01-2435

Lab ID:	2435-013		
Client ID:	TB		
Matrix:	Soil		
Sampled Date:	4/16/2001		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (ppb)			
TOTAL VO's:	ND		625
TOTAL TIC's:	ND		
TOTAL VO's & TIC's:	ND		

ND = Analyzed for but Not Detected at the MDL

1292

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-001
Client ID: S-58
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Data file: J9317.D

GC/MS Column: DB-624
Sample wt/vol: 0.042g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 16.8

Compound	Concentration	Q	MDL
Chloromethane	ND		715
Vinyl Chloride	ND		715
Bromomethane	ND		715
Chloroethane	ND		715
Trichlorofluoromethane	ND		715
Acrolein	ND		1430
1,1-Dichloroethene	ND		715
Methylene Chloride	ND		715
Acrylonitrile	ND		1430
trans-1,2-Dichloroethene	ND		715
1,1-Dichloroethane	ND		715
Chloroform	ND		715
1,1,1-Trichloroethane	ND		715
Carbon Tetrachloride	ND		715
1,2-Dichloroethane(EDC)	ND		715
Benzene	317	J	715
Trichloroethene	ND		715
1,2-Dichloropropane	ND		715
Bromodichloromethane	ND		715
2-Chloroethylvinyl Ether	ND		715
cis-1,3-Dichloropropene	ND		715
Toluene	ND		715
trans-1,3-Dichloropropene	ND		715
1,1,2-Trichloroethane	ND		715
Tetrachloroethene	ND		715
Dibromochloromethane	ND		715
Chlorobenzene	ND		715
Ethylbenzene	ND		715
Total Xylenes	ND		715
Bromoform	ND		715
1,1,2,2-Tetrachloroethane	ND		715
1,3-Dichlorobenzene	ND		715
1,4-Dichlorobenzene	ND		715
1,2-Dichlorobenzene	ND		715
Total Target Compounds:	317	J	

2622

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-001
Client ID: S-58
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Date File: J9317.D

GC/MS Column: DB-624
Sample wt/vol: 0.042g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 16.8

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-002
Client ID: S-59
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Data file: J9318.D

GC/MS Column: DB-624
Sample wt/vol: 0.038g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.1

Compound	Concentration	Q	MDL
Chloromethane	ND		794
Vinyl Chloride	ND		794
Bromomethane	ND		794
Chloroethane	ND		794
Trichlorofluoromethane	ND		794
Acrolein	ND		1590
1,1-Dichloroethene	ND		794
Methylene Chloride	ND		794
Acrylonitrile	ND		1590
trans-1,2-Dichloroethene	ND		794
1,1-Dichloroethane	ND		794
Chloroform	ND		794
1,1,1-Trichloroethane	ND		794
Carbon Tetrachloride	ND		794
1,2-Dichloroethane(EDC)	ND		794
Benzene	ND		794
Trichloroethene	ND		794
1,2-Dichloropropane	ND		794
Bromodichloromethane	ND		794
2-Chloroethylvinyl Ether	ND		794
cis-1,3-Dichloropropene	ND		794
Toluene	ND		794
trans-1,3-Dichloropropene	ND		794
1,1,2-Trichloroethane	ND		794
Tetrachloroethene	ND		794
Dibromochloromethane	ND		794
Chlorobenzene	ND		794
Ethylbenzene	ND		794
Total Xylenes	ND		794
Bromoform	ND		794
1,1,2,2-Tetrachloroethane	ND		794
1,3-Dichlorobenzene	ND		794
1,4-Dichlorobenzene	ND		794
1,2-Dichlorobenzene	ND		794

Total Target Compounds: 0

2624

000016

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-002
Client ID: S-59
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Date File: J9318.D

GC/MS Column: DB-624
Sample wt/vol: 0.038g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.1

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

000017

2625

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-003
Client ID: S-60
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Data file: J9319.D

GC/MS Column: DB-624
Sample wt/vol: 0.043g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.5

Compound	Concentration	Q	MDL
Chloromethane	ND		705
Vinyl Chloride	ND		705
Bromomethane	ND		705
Chloroethane	ND		705
Trichlorofluoromethane	ND		705
Acrolein	ND		1410
1,1-Dichloroethene	ND		705
Methylene Chloride	ND		705
Acrylonitrile	ND		1410
trans-1,2-Dichloroethene	ND		705
1,1-Dichloroethane	ND		705
Chloroform	ND		705
1,1,1-Trichloroethane	ND		705
Carbon Tetrachloride	ND		705
1,2-Dichloroethane(EDC)	ND		705
Benzene	1190		705
Trichloroethene	ND		705
1,2-Dichloropropane	ND		705
Bromodichloromethane	ND		705
2-Chloroethylvinyl Ether	ND		705
cis-1,3-Dichloropropene	ND		705
Toluene	325	J	705
trans-1,3-Dichloropropene	ND		705
1,1,2-Trichloroethane	ND		705
Tetrachloroethene	ND		705
Dibromochloromethane	ND		705
Chlorobenzene	ND		705
Ethylbenzene	ND		705
Total Xylenes	200	J	705
Bromoform	ND		705
1,1,2,2-Tetrachloroethane	ND		705
1,3-Dichlorobenzene	ND		705
1,4-Dichlorobenzene	ND		705
1,2-Dichlorobenzene	ND		705
Total Target Compounds:	1715	J	

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-003
Client ID: S-60
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Date File: J9319.D

GC/MS Column: DB-624
Sample wt/vol: 0.043g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.5

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	958	13.36
	Substituted benzene	1350	14.97

Total TICs = 2308

2627

000019

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-004
Client ID: S-61
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Data file: J9320.D

GC/MS Column: DB-624
Sample wt/vol: 0.044g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.2

Compound	Concentration	Q	MDL
Chloromethane	ND		695
Vinyl Chloride	ND		695
Bromomethane	ND		695
Chloroethane	ND		695
Trichlorofluoromethane	ND		695
Acrolein	ND		1390
1,1-Dichloroethene	ND		695
Methylene Chloride	ND		695
Acrylonitrile	ND		1390
trans-1,2-Dichloroethene	ND		695
1,1-Dichloroethane	ND		695
Chloroform	ND		695
1,1,1-Trichloroethane	ND		695
Carbon Tetrachloride	ND		695
1,2-Dichloroethane(EDC)	ND		695
Benzene	787		695
Trichloroethene	ND		695
1,2-Dichloropropane	ND		695
Bromodichloromethane	ND		695
2-Chloroethylvinyl Ether	ND		695
cis-1,3-Dichloropropene	ND		695
Toluene	ND		695
trans-1,3-Dichloropropene	ND		695
1,1,2-Trichloroethane	ND		695
Tetrachloroethene	ND		695
Dibromochloromethane	ND		695
Chlorobenzene	ND		695
Ethylbenzene	ND		695
Total Xylenes	ND		695
Bromoform	ND		695
1,1,2,2-Tetrachloroethane	ND		695
1,3-Dichlorobenzene	ND		695
1,4-Dichlorobenzene	ND		695
1,2-Dichlorobenzene	ND		695

Total Target Compounds: 787

2628

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-004
Client ID: S-61
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Date File: J9320.D

GC/MS Column: DB-624
Sample wt/vol: 0.044g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.2

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-005
Client ID: S-62
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Data file: J9321.D

GC/MS Column: DB-624
Sample wt/vol: 0.042g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 16.2

Compound	Concentration	Q	MDL
Chloromethane	ND		710
Vinyl Chloride	ND		710
Bromomethane	ND		710
Chloroethane	ND		710
Trichlorofluoromethane	ND		710
Acrolein	ND		1420
1,1-Dichloroethene	ND		710
Methylene Chloride	ND		710
Acrylonitrile	ND		1420
trans-1,2-Dichloroethene	ND		710
1,1-Dichloroethane	ND		710
Chloroform	ND		710
1,1,1-Trichloroethane	ND		710
Carbon Tetrachloride	ND		710
1,2-Dichloroethane(EDC)	ND		710
Benzene	418	J	710
Trichloroethene	ND		710
1,2-Dichloropropane	ND		710
Bromodichloromethane	ND		710
2-Chloroethylvinyl Ether	ND		710
cis-1,3-Dichloropropene	ND		710
Toluene	ND		710
trans-1,3-Dichloropropene	ND		710
1,1,2-Trichloroethane	ND		710
Tetrachloroethene	ND		710
Dibromochloromethane	ND		710
Chlorobenzene	ND		710
Ethylbenzene	ND		710
Total Xylenes	ND		710
Bromoform	ND		710
1,1,2,2-Tetrachloroethane	ND		710
1,3-Dichlorobenzene	ND		710
1,4-Dichlorobenzene	ND		710
1,2-Dichlorobenzene	ND		710
Total Target Compounds:	418	J	

7630

000022

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-005
Client ID: S-62
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Date File: J9321.D

GC/MS Column: DB-624
Sample wt/vol: 0.042g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 16.2

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

000023

2631

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-011
Client ID: S-68A
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Data file: J9322.D

GC/MS Column: DB-624
Sample wt/vol: 0.038g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 13.8

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	10500		763
Trichloroethene	ND		763
1,2-Dichloropropane	ND		763
Bromodichloromethane	ND		763
2-Chloroethylvinyl Ether	ND		763
cis-1,3-Dichloropropene	ND		763
Toluene	33000	E	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	426	J	763
Total Target Compounds:	43926	JE	

2632

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-011DIL
Client ID: S-68A
Date Received: 04/17/2001
Date Analyzed: 04/27/2001
Data file: J9451.D

GC/MS Column: DB-624
Sample wt/vol: 0.019g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 2
% Moisture: 13.8

Compound	Concentration	Q	MDL
Chloromethane	ND		1530
Vinyl Chloride	ND		1530
Bromomethane	ND		1530
Chloroethane	ND		1530
Trichlorofluoromethane	ND		1530
Acrolein	ND		3050
1,1-Dichloroethene	ND		1530
Methylene Chloride	ND		1530
Acrylonitrile	ND		3050
trans-1,2-Dichloroethene	ND		1530
1,1-Dichloroethane	ND		1530
Chloroform	ND		1530
1,1,1-Trichloroethane	ND		1530
Carbon Tetrachloride	ND		1530
1,2-Dichloroethane(EDC)	ND		1530
Benzene	14900		1530
Trichloroethene	ND		1530
1,2-Dichloropropane	ND		1530
Bromodichloromethane	ND		1530
2-Chloroethylvinyl Ether	ND		1530
cis-1,3-Dichloropropene	ND		1530
Toluene	50200		1530
trans-1,3-Dichloropropene	ND		1530
1,1,2-Trichloroethane	ND		1530
Tetrachloroethene	ND		1530
Dibromochloromethane	ND		1530
Chlorobenzene	ND		1530
Ethylbenzene	ND		1530
Total Xylenes	ND		1530
Bromoform	ND		1530
1,1,2,2-Tetrachloroethane	ND		1530
1,3-Dichlorobenzene	ND		1530
1,4-Dichlorobenzene	ND		1530
1,2-Dichlorobenzene	503	J	1530
Total Target Compounds:	65603	J	

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-011
Client ID: S-68A
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Date File: J9322.D

GC/MS Column: DB-624
Sample wt/vol: 0.038g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 13.8

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown hydrocarbon	2230	13.30
	Substituted benzene	1360	13.35

Total TICs = 3590

000026

2634

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-012
Client ID: S-68B
Date Received: 04/17/2001
Date Analyzed: 04/26/2001
Data file: I8369.D

GC/MS Column: DB-624
Sample wt/vol: 0.006g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 5
% Moisture: 15.1

Compound	Concentration	Q	MDL
Chloromethane	ND		4910
Vinyl Chloride	ND		4910
Bromomethane	ND		4910
Chloroethane	ND		4910
Trichlorofluoromethane	ND		4910
Acrolein	ND		9820
1,1-Dichloroethene	ND		4910
Methylene Chloride	ND		4910
Acrylonitrile	ND		4910
trans-1,2-Dichloroethene	ND		4910
1,1-Dichloroethane	ND		4910
Chloroform	ND		4910
1,1,1-Trichloroethane	ND		4910
Carbon Tetrachloride	ND		4910
1,2-Dichloroethane(EDC)	ND		4910
Benzene	32100		4910
Trichloroethene	ND		4910
1,2-Dichloropropane	ND		4910
Bromodichloromethane	ND		4910
2-Chloroethylvinyl Ether	ND		4910
cis-1,3-Dichloropropene	ND		4910
Toluene	85000		4910
trans-1,3-Dichloropropene	ND		4910
1,1,2-Trichloroethane	ND		4910
Tetrachloroethene	ND		4910
Dibromochloromethane	ND		4910
Chlorobenzene	ND		4910
Ethylbenzene	ND		4910
Total Xylenes	ND		4910
Bromoform	ND		4910
1,1,2,2-Tetrachloroethane	ND		4910
1,3-Dichlorobenzene	ND		4910
1,4-Dichlorobenzene	ND		4910
1,2-Dichlorobenzene	ND		4910

Total Target Compounds: 117100

2635

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-012
Client ID: S-68B
Date Received: 04/17/2001
Date Analyzed: 04/26/2001
Data file: I8369.D

GC/MS Column: DB-624
Sample wt/vol: 0.006g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 5
% Moisture: 15.1

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

000028

2636

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-013
Client ID: TB
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Data file: J9316.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

2637

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-013
Client ID: TB
Date Received: 04/17/2001
Date Analyzed: 04/24/2001
Data file: J9316.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

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-001
Client ID: S-58
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2163.D

GC/MS Column: DB-5
Sample wt/vol: 15.90g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 16.8

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		75.6
Phenol	ND		75.6
Aniline	ND		75.6
bis(2-Chloroethyl)ether	ND		75.6
2-Chlorophenol	ND		75.6
1,3-Dichlorobenzene	ND		75.6
1,4-Dichlorobenzene	ND		75.6
Benzyl alcohol	ND		75.6
1,2-Dichlorobenzene	ND		75.6
2-Methylphenol	ND		75.6
bis(2-chloroisopropyl)ether	ND		75.6
4-Methylphenol	ND		75.6
N-Nitroso-di-n-propylamine	ND		75.6
Hexachloroethane	ND		75.6
Nitrobenzene	ND		75.6
Isophorone	ND		75.6
2-Nitrophenol	ND		75.6
2,4-Dimethylphenol	ND		75.6
bis(2-Chloroethoxy)methane	ND		75.6
Benzoic acid	ND		75.6
2,4-Dichlorophenol	ND		75.6
1,2,4-Trichlorobenzene	ND		75.6
Naphthalene	ND		75.6
4-Chloroaniline	ND		75.6
Hexachlorobutadiene	ND		75.6
4-Chloro-3-methylphenol	ND		75.6
2-Methylnaphthalene	ND		75.6
Hexachlorocyclopentadiene	ND		75.6
2,4,6-Trichlorophenol	ND		75.6
2,4,5-Trichlorophenol	ND		75.6
2-Chloronaphthalene	ND		75.6
2-Nitroaniline	ND		75.6
Dimethylphthalate	ND		75.6
2,6-Dinitrotoluene	ND		75.6
Acenaphthylene	ND		75.6

2639

000031

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-001
Client ID: S-58
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2163.D

GC/MS Column: DB-5
Sample wt/vol: 15.90g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 16.8

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		75.6
Acenaphthene	ND		75.6
2,4-Dinitrophenol	ND		75.6
4-Nitrophenol	ND		75.6
2,4-Dinitrotoluene	ND		75.6
Dibenzofuran	ND		75.6
Diethylphthalate	ND		75.6
Fluorene	ND		75.6
4-Chlorophenyl-phenylether	ND		75.6
4-Nitroaniline	ND		75.6
4,6-Dinitro-2-methylphenol	ND		75.6
N-Nitrosodiphenylamine	ND		75.6
1,2-Diphenylhydrazine/Azobenzene	ND		75.6
4-Bromophenyl-phenylether	ND		75.6
Hexachlorobenzene	ND		75.6
Pentachlorophenol	ND		75.6
Phenanthrene	ND		75.6
Anthracene	ND		75.6
Carbazole	ND		75.6
Di-n-butylphthalate	ND		75.6
Fluoranthene	ND		75.6
Benzidine	ND		75.6
Pyrene	ND		75.6
3,3'-Dimethylbenzidine	ND		75.6
Butylbenzylphthalate	ND		75.6
3,3'-Dichlorobenzidine	ND		75.6
Benzo[a]anthracene	ND		75.6
Chrysene	ND		75.6
bis(2-Ethylhexyl)phthalate	117		75.6
Di-n-octylphthalate	ND		75.6
Benzo[b]fluoranthene	ND		75.6
Benzo[k]fluoranthene	ND		75.6
Benzo[a]pyrene	ND		75.6
Indeno[1,2,3-cd]pyrene	ND		75.6
Dibenz[a,h]anthracene	ND		75.6
Benzo[g,h,i]perylene	ND		75.6

Total Target Compounds: 117

2640

000032

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-001
Client ID: S-58
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Date File: B2163.D

GC/MS Column: DB-5
Sample wt/vol: 15.90g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 16.8

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown	7780	3.44
	Substituted naphthalene	847	3.65
	Unknown	1130	3.69
	Unknown	612	3.85
	Unknown	310	4.49
	Substituted benzene	658	4.73
	Unknown	1240	4.97
	Substituted benzene	393	7.40
	Substituted benzene	658	7.76

Total TICs = 13628

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-002
Client ID: S-59
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2164.D

GC/MS Column: DB-5
Sample wt/vol: 15.50g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.1

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		77.8
Phenol	ND		77.8
Aniline	ND		77.8
bis(2-Chloroethyl)ether	ND		77.8
2-Chlorophenol	ND		77.8
1,3-Dichlorobenzene	ND		77.8
1,4-Dichlorobenzene	ND		77.8
Benzyl alcohol	ND		77.8
1,2-Dichlorobenzene	ND		77.8
2-Methylphenol	ND		77.8
bis(2-chloroisopropyl)ether	ND		77.8
4-Methylphenol	ND		77.8
N-Nitroso-di-n-propylamine	ND		77.8
Hexachloroethane	ND		77.8
Nitrobenzene	ND		77.8
Isophorone	ND		77.8
2-Nitrophenol	ND		77.8
2,4-Dimethylphenol	ND		77.8
bis(2-Chloroethoxy)methane	ND		77.8
Benzoic acid	ND		77.8
2,4-Dichlorophenol	ND		77.8
1,2,4-Trichlorobenzene	ND		77.8
Naphthalene	ND		77.8
4-Chloroaniline	ND		77.8
Hexachlorobutadiene	ND		77.8
4-Chloro-3-methylphenol	ND		77.8
2-Methylnaphthalene	ND		77.8
Hexachlorocyclopentadiene	ND		77.8
2,4,6-Trichlorophenol	ND		77.8
2,4,5-Trichlorophenol	ND		77.8
2-Chloronaphthalene	ND		77.8
2-Nitroaniline	ND		77.8
Dimethylphthalate	ND		77.8
2,6-Dinitrotoluene	ND		77.8
Acenaphthylene	ND		77.8

7647

000034

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-002
Client ID: S-59
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2164.D

GC/MS Column: DB-5
Sample wt/vol: 15.50g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.1

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		77.8
Acenaphthene	ND		77.8
2,4-Dinitrophenol	ND		77.8
4-Nitrophenol	ND		77.8
2,4-Dinitrotoluene	ND		77.8
Dibenzofuran	ND		77.8
Diethylphthalate	ND		77.8
Fluorene	ND		77.8
4-Chlorophenyl-phenylether	ND		77.8
4-Nitroaniline	ND		77.8
4,6-Dinitro-2-methylphenol	ND		77.8
N-Nitrosodiphenylamine	ND		77.8
1,2-Diphenylhydrazine/Azobenzene	ND		77.8
4-Bromophenyl-phenylether	ND		77.8
Hexachlorobenzene	ND		77.8
Pentachlorophenol	ND		77.8
Phenanthrene	ND		77.8
Anthracene	ND		77.8
Carbazole	ND		77.8
Di-n-butylphthalate	ND		77.8
Fluoranthene	ND		77.8
Benzidine	ND		77.8
Pyrene	ND		77.8
3,3'-Dimethylbenzidine	ND		77.8
Butylbenzylphthalate	ND		77.8
3,3'-Dichlorobenzidine	ND		77.8
Benzo[a]anthracene	ND		77.8
Chrysene	ND		77.8
bis(2-Ethylhexyl)phthalate	ND		77.8
Di-n-octylphthalate	ND		77.8
Benzo[b]fluoranthene	ND		77.8
Benzo[k]fluoranthene	ND		77.8
Benzo[a]pyrene	ND		77.8
Indeno[1,2,3-cd]pyrene	ND		77.8
Dibenz[a,h]anthracene	ND		77.8
Benzo[g,h,i]perylene	ND		77.8

Total Target Compounds: 0

2643

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-002
Client ID: S-59
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2164.D

GC/MS Column: DB-5
Sample wt/vol: 15.50g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.1

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

2644

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-003
Client ID: S-60
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2165.D

GC/MS Column: DB-5
Sample wt/vol: 15.39g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.5

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		78.8
Phenol	ND		78.8
Aniline	ND		78.8
bis(2-Chloroethyl)ether	ND		78.8
2-Chlorophenol	ND		78.8
1,3-Dichlorobenzene	ND		78.8
1,4-Dichlorobenzene	ND		78.8
Benzyl alcohol	ND		78.8
1,2-Dichlorobenzene	ND		78.8
2-Methylphenol	ND		78.8
bis(2-chloroisopropyl)ether	ND		78.8
4-Methylphenol	ND		78.8
N-Nitroso-di-n-propylamine	ND		78.8
Hexachloroethane	ND		78.8
Nitrobenzene	ND		78.8
Isophorone	ND		78.8
2-Nitrophenol	ND		78.8
2,4-Dimethylphenol	ND		78.8
bis(2-Chloroethoxy)methane	ND		78.8
Benzoic acid	ND		78.8
2,4-Dichlorophenol	ND		78.8
1,2,4-Trichlorobenzene	ND		78.8
Naphthalene	ND		78.8
4-Chloroaniline	ND		78.8
Hexachlorobutadiene	ND		78.8
4-Chloro-3-methylphenol	ND		78.8
2-Methylnaphthalene	ND		78.8
Hexachlorocyclopentadiene	ND		78.8
2,4,6-Trichlorophenol	ND		78.8
2,4,5-Trichlorophenol	ND		78.8
2-Chloronaphthalene	ND		78.8
2-Nitroaniline	ND		78.8
Dimethylphthalate	ND		78.8
2,6-Dinitrotoluene	ND		78.8
Acenaphthylene	ND		78.8

2645
000037

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-003
Client ID: S-60
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2165.D

GC/MS Column: DB-5
Sample wt/vol: 15.39g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.5

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		78.8
Acenaphthene	ND		78.8
2,4-Dinitrophenol	ND		78.8
4-Nitrophenol	ND		78.8
2,4-Dinitrotoluene	ND		78.8
Dibenzofuran	ND		78.8
Diethylphthalate	ND		78.8
Fluorene	ND		78.8
4-Chlorophenyl-phenylether	ND		78.8
4-Nitroaniline	ND		78.8
4,6-Dinitro-2-methylphenol	ND		78.8
N-Nitrosodiphenylamine	ND		78.8
1,2-Diphenylhydrazine/Azobenzene	ND		78.8
4-Bromophenyl-phenylether	ND		78.8
Hexachlorobenzene	ND		78.8
Pentachlorophenol	ND		78.8
Phenanthrene	ND		78.8
Anthracene	ND		78.8
Carbazole	ND		78.8
Di-n-butylphthalate	ND		78.8
Fluoranthene	ND		78.8
Benzidine	ND		78.8
Pyrene	ND		78.8
3,3'-Dimethylbenzidine	ND		78.8
Butylbenzylphthalate	ND		78.8
3,3'-Dichlorobenzidine	ND		78.8
Benzo[a]anthracene	ND		78.8
Chrysene	ND		78.8
bis(2-Ethylhexyl)phthalate	ND		78.8
Di-n-octylphthalate	ND		78.8
Benzo[b]fluoranthene	ND		78.8
Benzo[k]fluoranthene	ND		78.8
Benzo[a]pyrene	ND		78.8
Indeno[1,2,3-cd]pyrene	ND		78.8
Dibenz[a,h]anthracene	ND		78.8
Benzo[g,h,i]perylene	ND		78.8

Total Target Compounds: 0

2646

000038

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-003
Client ID: S-60
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Date File: B2165.D

GC/MS Column: DB-5
Sample wt/vol: 15.39g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 17.5

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted naphthalene	1870	3.65
	Substituted naphthalene	347	3.67
	Substituted benzene	3800	4.37
	Unknown aromatic	1610	4.39
	Unknown aromatic	24400	4.51
	Substituted benzene	1230	5.34
	Substituted benzene	811	5.62
	Substituted benzene	827	6.32

Total TICs = 34895

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-004
Client ID: S-61
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2166.D

GC/MS Column: DB-5
Sample wt/vol: 15.38g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.2

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		79.5
Phenol	ND		79.5
Aniline	ND		79.5
bis(2-Chloroethyl)ether	ND		79.5
2-Chlorophenol	ND		79.5
1,3-Dichlorobenzene	ND		79.5
1,4-Dichlorobenzene	ND		79.5
Benzyl alcohol	ND		79.5
1,2-Dichlorobenzene	ND		79.5
2-Methylphenol	ND		79.5
bis(2-chloroisopropyl)ether	ND		79.5
4-Methylphenol	ND		79.5
N-Nitroso-di-n-propylamine	ND		79.5
Hexachloroethane	ND		79.5
Nitrobenzene	ND		79.5
Isophorone	ND		79.5
2-Nitrophenol	ND		79.5
2,4-Dimethylphenol	ND		79.5
bis(2-Chloroethoxy)methane	ND		79.5
Benzoic acid	ND		79.5
2,4-Dichlorophenol	ND		79.5
1,2,4-Trichlorobenzene	ND		79.5
Naphthalene	ND		79.5
4-Chloroaniline	ND		79.5
Hexachlorobutadiene	ND		79.5
4-Chloro-3-methylphenol	ND		79.5
2-Methylnaphthalene	ND		79.5
Hexachlorocyclopentadiene	ND		79.5
2,4,6-Trichlorophenol	ND		79.5
2,4,5-Trichlorophenol	ND		79.5
2-Chloronaphthalene	ND		79.5
2-Nitroaniline	ND		79.5
Dimethylphthalate	ND		79.5
2,6-Dinitrotoluene	ND		79.5
Acenaphthylene	ND		79.5

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-004
Client ID: S-61
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2166.D

GC/MS Column: DB-5
Sample wt/vol: 15.38g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.2

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		79.5
Acenaphthene	ND		79.5
2,4-Dinitrophenol	ND		79.5
4-Nitrophenol	ND		79.5
2,4-Dinitrotoluene	ND		79.5
Dibenzofuran	ND		79.5
Diethylphthalate	ND		79.5
Fluorene	ND		79.5
4-Chlorophenyl-phenylether	ND		79.5
4-Nitroaniline	ND		79.5
4,6-Dinitro-2-methylphenol	ND		79.5
N-Nitrosodiphenylamine	ND		79.5
1,2-Diphenylhydrazine/Azobenzene	ND		79.5
4-Bromophenyl-phenylether	ND		79.5
Hexachlorobenzene	ND		79.5
Pentachlorophenol	ND		79.5
Phenanthrene	ND		79.5
Anthracene	ND		79.5
Carbazole	ND		79.5
Di-n-butylphthalate	ND		79.5
Fluoranthene	ND		79.5
Benzidine	ND		79.5
Pyrene	ND		79.5
3,3'-Dimethylbenzidine	ND		79.5
Butylbenzylphthalate	ND		79.5
3,3'-Dichlorobenzidine	ND		79.5
Benzo[a]anthracene	ND		79.5
Chrysene	ND		79.5
bis(2-Ethylhexyl)phthalate	ND		79.5
Di-n-octylphthalate	ND		79.5
Benzo[b]fluoranthene	ND		79.5
Benzo[k]fluoranthene	ND		79.5
Benzo[a]pyrene	ND		79.5
Indeno[1,2,3-cd]pyrene	ND		79.5
Dibenz[a,h]anthracene	ND		79.5
Benzo[g,h,i]perylene	ND		79.5

Total Target Compounds: 0

000041

2647

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-004
Client ID: S-61
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2166.D

GC/MS Column: DB-5
Sample wt/vol: 15.38g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 18.2

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

000042

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-005
Client ID: S-62
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2167.D

GC/MS Column: DB-5
Sample wt/vol: 15.85g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 16.2

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		75.3
Phenol	ND		75.3
Aniline	ND		75.3
bis(2-Chloroethyl)ether	ND		75.3
2-Chlorophenol	ND		75.3
1,3-Dichlorobenzene	ND		75.3
1,4-Dichlorobenzene	ND		75.3
Benzyl alcohol	ND		75.3
1,2-Dichlorobenzene	ND		75.3
2-Methylphenol	ND		75.3
bis(2-chloroisopropyl)ether	ND		75.3
4-Methylphenol	ND		75.3
N-Nitroso-di-n-propylamine	ND		75.3
Hexachloroethane	ND		75.3
Nitrobenzene	ND		75.3
Isophorone	ND		75.3
2-Nitrophenol	ND		75.3
2,4-Dimethylphenol	ND		75.3
bis(2-Chloroethoxy)methane	ND		75.3
Benzoic acid	ND		75.3
2,4-Dichlorophenol	ND		75.3
1,2,4-Trichlorobenzene	ND		75.3
Naphthalene	ND		75.3
4-Chloroaniline	ND		75.3
Hexachlorobutadiene	ND		75.3
4-Chloro-3-methylphenol	ND		75.3
2-Methylnaphthalene	ND		75.3
Hexachlorocyclopentadiene	ND		75.3
2,4,6-Trichlorophenol	ND		75.3
2,4,5-Trichlorophenol	ND		75.3
2-Chloronaphthalene	ND		75.3
2-Nitroaniline	ND		75.3
Dimethylphthalate	ND		75.3
2,6-Dinitrotoluene	ND		75.3
Acenaphthylene	ND		75.3

000043

2651

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-005
Client ID: S-62
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2167.D

GC/MS Column: DB-5
Sample wt/vol: 15.85g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 16.2

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		75.3
Acenaphthene	ND		75.3
2,4-Dinitrophenol	ND		75.3
4-Nitrophenol	ND		75.3
2,4-Dinitrotoluene	ND		75.3
Dibenzofuran	ND		75.3
Diethylphthalate	ND		75.3
Fluorene	ND		75.3
4-Chlorophenyl-phenylether	ND		75.3
4-Nitroaniline	ND		75.3
4,6-Dinitro-2-methylphenol	ND		75.3
N-Nitrosodiphenylamine	ND		75.3
1,2-Diphenylhydrazine/Azobenzene	ND		75.3
4-Bromophenyl-phenylether	ND		75.3
Hexachlorobenzene	ND		75.3
Pentachlorophenol	ND		75.3
Phenanthrene	ND		75.3
Anthracene	ND		75.3
Carbazole	ND		75.3
Di-n-butylphthalate	ND		75.3
Fluoranthene	ND		75.3
Benzidine	ND		75.3
Pyrene	ND		75.3
3,3'-Dimethylbenzidine	ND		75.3
Butylbenzylphthalate	ND		75.3
3,3'-Dichlorobenzidine	ND		75.3
Benzo[a]anthracene	ND		75.3
Chrysene	ND		75.3
bis(2-Ethylhexyl)phthalate	ND		75.3
Di-n-octylphthalate	ND		75.3
Benzo[b]fluoranthene	ND		75.3
Benzo[k]fluoranthene	ND		75.3
Benzo[a]pyrene	ND		75.3
Indeno[1,2,3-cd]pyrene	ND		75.3
Dibenz[a,h]anthracene	ND		75.3
Benzo[g,h,i]perylene	ND		75.3

Total Target Compounds: 0

000044

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-005
Client ID: S-62
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2167.D

GC/MS Column: DB-5
Sample wt/vol: 15.85g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 16.2

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-008
Client ID: S-65
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2168.D

GC/MS Column: DB-5
Sample wt/vol: 15.19g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 16.4

Compound	Concentration	Q	MDL
Naphthalene	ND		78.8
Acenaphthylene	ND		78.8
Acenaphthene	ND		78.8
Fluorene	ND		78.8
Phenanthrene	ND		78.8
Anthracene	ND		78.8
Fluoranthene	ND		78.8
Pyrene	ND		78.8
Benzo[a]anthracene	ND		78.8
Chrysene	ND		78.8
Benzo[b]fluoranthene	ND		78.8
Benzo[k]fluoranthene	ND		78.8
Benzo[a]pyrene	ND		78.8
Indeno[1,2,3-cd]pyrene	ND		78.8
Dibenz[a,h]anthracene	ND		78.8
Benzo[g,h,i]perylene	ND		78.8

Total Target Compounds: 0

7654

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-011
Client ID: S-68A
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2169.D

GC/MS Column: DB-5
Sample wt/vol: 15.56g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 1
% Moisture: 13.8

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		74.6
Phenol	322		74.6
Aniline	ND		74.6
bis(2-Chloroethyl)ether	ND		74.6
2-Chlorophenol	ND		74.6
1,3-Dichlorobenzene	ND		74.6
1,4-Dichlorobenzene	ND		74.6
Benzyl alcohol	ND		74.6
1,2-Dichlorobenzene	ND		74.6
2-Methylphenol	293		74.6
bis(2-chloroisopropyl)ether	ND		74.6
4-Methylphenol	965		74.6
N-Nitroso-di-n-propylamine	ND		74.6
Hexachloroethane	ND		74.6
Nitrobenzene	ND		74.6
Isophorone	ND		74.6
2-Nitrophenol	ND		74.6
2,4-Dimethylphenol	ND		74.6
bis(2-Chloroethoxy)methane	ND		74.6
Benzoic acid	ND		74.6
2,4-Dichlorophenol	ND		74.6
1,2,4-Trichlorobenzene	ND		74.6
Naphthalene	ND		74.6
4-Chloroaniline	ND		74.6
Hexachlorobutadiene	ND		74.6
4-Chloro-3-methylphenol	ND		74.6
2-Methylnaphthalene	ND		74.6
Hexachlorocyclopentadiene	ND		74.6
2,4,6-Trichlorophenol	ND		74.6
2,4,5-Trichlorophenol	ND		74.6
2-Chloronaphthalene	ND		74.6
2-Nitroaniline	ND		74.6
Dimethylphthalate	ND		74.6
2,6-Dinitrotoluene	ND		74.6
Acenaphthylene	ND		74.6

2655

000047

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-011
Client ID: S-68A
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2169.D

GC/MS Column: DB-5
Sample wt/vol: 15.56g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 13.8

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		74.6
Acenaphthene	ND		74.6
2,4-Dinitrophenol	ND		74.6
4-Nitrophenol	ND		74.6
2,4-Dinitrotoluene	ND		74.6
Dibenzofuran	ND		74.6
Diethylphthalate	ND		74.6
Fluorene	ND		74.6
4-Chlorophenyl-phenylether	ND		74.6
4-Nitroaniline	ND		74.6
4,6-Dinitro-2-methylphenol	ND		74.6
N-Nitrosodiphenylamine	ND		74.6
1,2-Diphenylhydrazine/Azobenzene	ND		74.6
4-Bromophenyl-phenylether	ND		74.6
Hexachlorobenzene	ND		74.6
Pentachlorophenol	ND		74.6
Phenanthrene	ND		74.6
Anthracene	ND		74.6
Carbazole	ND		74.6
Di-n-butylphthalate	ND		74.6
Fluoranthene	ND		74.6
Benzidine	ND		74.6
Pyrene	ND		74.6
3,3'-Dimethylbenzidine	ND		74.6
Butylbenzylphthalate	ND		74.6
3,3'-Dichlorobenzidine	ND		74.6
Benzo[a]anthracene	ND		74.6
Chrysene	ND		74.6
bis(2-Ethylhexyl)phthalate	ND		74.6
Di-n-octylphthalate	ND		74.6
Benzo[b]fluoranthene	ND		74.6
Benzo[k]fluoranthene	ND		74.6
Benzo[a]pyrene	ND		74.6
Indeno[1,2,3-cd]pyrene	ND		74.6
Dibenz[a,h]anthracene	ND		74.6
Benzo[g,h,i]perylene	ND		74.6

Total Target Compounds: 1580

2656

000018

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-011
Client ID: S-68A
Date Received: 04/17/2001
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Date File: B2169.D

GC/MS Column: DB-5
Sample wt/vol: 15.56g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 1
% Moisture: 13.8

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-001
Client ID: S-58
Date Received: 04/17/2001
Date Extracted: 04/18/2001
Date Analyzed: 04/19/2001
Data file: V5323.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.8g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 20
% Moisture: 16.8

Compound	Concentration	Q	MDL
Aroclor-1016	ND		156
Aroclor-1221	ND		156
Aroclor-1232	ND		156
Aroclor-1242	ND		156
Aroclor-1248	ND		156
Aroclor-1254	ND		156
Aroclor-1260	ND		156

JLRK

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-002
Client ID: S-59
Date Received: 04/17/2001
Date Extracted: 04/18/2001
Date Analyzed: 04/19/2001
Data file: V5324.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.8g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 17.1

Compound	Concentration	Q	MDL
Aroclor-1016	ND		157
Aroclor-1221	ND		157
Aroclor-1232	ND		157
Aroclor-1242	ND		157
Aroclor-1248	ND		157
Aroclor-1254	ND		157
Aroclor-1260	ND		157

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-003
Client ID: S-60
Date Received: 04/17/2001
Date Extracted: 04/18/2001
Date Analyzed: 04/19/2001
Data file: V5325.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.8g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 17.5

Compound	Concentration	Q	MDL
Aroclor-1016	ND		157
Aroclor-1221	ND		157
Aroclor-1232	ND		157
Aroclor-1242	ND		157
Aroclor-1248	ND		157
Aroclor-1254	ND		157
Aroclor-1260	ND		157

2660
000052

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-004
Client ID: S-61
Date Received: 04/17/2001
Date Extracted: 04/18/2001
Date Analyzed: 04/19/2001
Data file: V5326.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 18.2

Compound	Concentration	Q	MDL
Aroclor-1016	ND		162
Aroclor-1221	ND		162
Aroclor-1232	ND		162
Aroclor-1242	ND		162
Aroclor-1248	ND		162
Aroclor-1254	ND		162
Aroclor-1260	ND		162

2661

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-005
Client ID: S-62
Date Received: 04/17/2001
Date Extracted: 04/18/2001
Date Analyzed: 04/19/2001
Data file: V5327.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.5g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 16.2

Compound	Concentration	Q	MDL
Aroclor-1016	ND		157
Aroclor-1221	ND		157
Aroclor-1232	ND		157
Aroclor-1242	ND		157
Aroclor-1248	ND		157
Aroclor-1254	ND		157
Aroclor-1260	ND		157

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-011
Client ID: S-68A
Date Received: 04/17/2001
Date Extracted: 04/18/2001
Date Analyzed: 04/19/2001
Data file: V5328.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.5g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 20
% Moisture: 13.8

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

000055

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-001
Client ID: S-58
Date Received: 04/17/2001
Date Extracted: 04/18/2001
Date Analyzed: 04/18/2001
Data file: W6068.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.8g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 16.8

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.76
beta-BHC	ND		9.76
gamma-BHC	ND		9.76
delta-BHC	ND		9.76
Heptachlor	ND		9.76
Aldrin	ND		9.76
Heptachlor epoxide	ND		9.76
Endosulfan I	ND		9.76
4,4'-DDE	ND		9.76
Dieldrin	ND		9.76
Endrin	ND		9.76
Endosulfan II	ND		9.76
4,4'-DDD	ND		9.76
Endrin aldehyde	ND		9.76
Endosulfan sulfate	ND		9.76
4,4'-DDT	ND		9.76
Chlordane	ND		48.8
Toxaphene	ND		48.8

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-002
Client ID: S-59
Date Received: 04/17/2001
Date Extracted: 04/18/2001
Date Analyzed: 04/18/2001
Data file: W6069.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.8g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 17.1

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.79
beta-BHC	ND		9.79
gamma-BHC	ND		9.79
delta-BHC	ND		9.79
Heptachlor	ND		9.79
Aldrin	ND		9.79
Heptachlor epoxide	13.1		9.79
Endosulfan I	15.4		9.79
4,4'-DDE	11.5		9.79
Dieldrin	12.1		9.79
Endrin	ND		9.79
Endosulfan II	ND		9.79
4,4'-DDD	ND		9.79
Endrin aldehyde	ND		9.79
Endosulfan sulfate	ND		9.79
4,4'-DDT	ND		9.79
Chlordane	ND		49
Toxaphene	ND		49

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-003
Client ID: S-60
Date Received: 04/17/2001
Date Extracted: 04/18/2001
Date Analyzed: 04/18/2001
Data file: W6070.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.8g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 17.5

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.84
beta-BHC	ND		9.84
gamma-BHC	ND		9.84
delta-BHC	ND		9.84
Heptachlor	ND		9.84
Aldrin	ND		9.84
Heptachlor epoxide	ND		9.84
Endosulfan I	ND		9.84
4,4'-DDE	ND		9.84
Dieldrin	ND		9.84
Endrin	ND		9.84
Endosulfan II	ND		9.84
4,4'-DDD	ND		9.84
Endrin aldehyde	ND		9.84
Endosulfan sulfate	ND		9.84
4,4'-DDT	ND		9.84
Chlordane	ND		49.2
Toxaphene	ND		49.2

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-004
Client ID: S-61
Date Received: 04/17/2001
Date Extracted: 04/18/2001
Date Analyzed: 04/18/2001
Data file: W6071.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.1g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 18.2

Compound	Concentration	Q	MDL
alpha-BHC	ND		10.2
beta-BHC	ND		10.2
gamma-BHC	ND		10.2
delta-BHC	ND		10.2
Heptachlor	ND		10.2
Aldrin	ND		10.2
Heptachlor epoxide	ND		10.2
Endosulfan I	ND		10.2
4,4'-DDE	ND		10.2
Dieldrin	ND		10.2
Endrin	ND		10.2
Endosulfan II	ND		10.2
4,4'-DDD	ND		10.2
Endrin aldehyde	ND		10.2
Endosulfan sulfate	ND		10.2
4,4'-DDT	ND		10.2
Chlordane	ND		50.8
Toxaphene	ND		50.8

000059

2667

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-005
Client ID: S-62
Date Received: 04/17/2001
Date Extracted: 04/18/2001
Date Analyzed: 04/18/2001
Data file: W6072.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.5g
Matrix-Units: Soil-µg/Kg (ppb)
Dilution Factor: 50
% Moisture: 16.2

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

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-011
Client ID: S-68A
Date Received: 04/17/2001
Date Extracted: 04/18/2001
Date Analyzed: 04/18/2001
Data file: W6073.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.5g
Matrix-Units: Soil-μg/Kg (ppb)
Dilution Factor: 50
% Moisture: 13.8

Compound	Concentration	Q	MDL
alpha-BHC	ND		9.51
beta-BHC	ND		9.51
gamma-BHC	ND		9.51
delta-BHC	ND		9.51
Heptachlor	ND		9.51
Aldrin	ND		9.51
Heptachlor epoxide	ND		9.51
Endosulfan I	ND		9.51
4,4'-DDE	ND		9.51
Dieldrin	ND		9.51
Endrin	ND		9.51
Endosulfan II	ND		9.51
4,4'-DDD	ND		9.51
Endrin aldehyde	ND		9.51
Endosulfan sulfate	ND		9.51
4,4'-DDT	ND		9.51
Chlordane	ND		47.5
Toxaphene	ND		47.5

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-001
Client ID: S-58
Date Received: 4/17/01
Date Analyzed: 4/18/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 16.8

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.38
Arsenic	1.87		1	0.238
Beryllium	0.824		1	0.238
Cadmium	ND		1	0.238
Chromium	21.3		1	0.714
Copper	19.4		1	0.476
Lead	10.7		1	2.38
Mercury	ND		1	0.0149
Nickel	19.1		1	0.714
Selenium	ND		1	2.38
Silver	ND		1	0.600
Thallium	0.128		1	0.0952
Zinc	70.8		1	1.19

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-002
Client ID: S-59
Date Received: 4/17/01
Date Analyzed: 4/18/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 17.1

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.42
Arsenic	1.75		1	0.242
Beryllium	0.960		1	0.242
Cadmium	0.257		1	0.242
Chromium	24.3		1	0.726
Copper	19.1		1	0.484
Lead	9.62		1	2.42
Mercury	ND		1	0.015
Nickel	22.1		1	0.726
Selenium	ND		1	2.42
Silver	ND		1	0.605
Thallium	0.161		1	0.0968
Zinc	67.3		1	1.21

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-003
Client ID: S-60
Date Received: 4/17/01
Date Analyzed: 4/18/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 17.5

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.42
Arsenic	1.84		1	0.242
Beryllium	0.911		1	0.242
Cadmium	0.330		1	0.242
Chromium	22.5		1	0.726
Copper	20.7		1	0.484
Lead	9.08		1	2.42
Mercury	ND		1	0.015
Nickel	23.0		1	0.726
Selenium	ND		1	2.42
Silver	ND		1	0.596
Thallium	0.113		1	0.0968
Zinc	115		1	1.21

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-004
Client ID: S-61
Date Received: 4/17/01
Date Analyzed: 4/18/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 18.2

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.43
Arsenic	1.55		1	0.243
Beryllium	0.901		1	0.243
Cadmium	0.303		1	0.243
Chromium	24.0		1	0.729
Copper	20.9		1	0.486
Lead	10.1		1	2.43
Mercury	ND		1	0.0152
Nickel	22.4		1	0.729
Selenium	ND		1	2.43
Silver	ND		1	0.604
Thallium	0.150		1	0.0972
Zinc	54.7		1	1.22

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-005
Client ID: S-62
Date Received: 4/17/01
Date Analyzed: 4/18/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 16.2

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.38
Arsenic	1.63		1	0.238
Beryllium	0.863		1	0.238
Cadmium	0.403		1	0.238
Chromium	22.8		1	0.714
Copper	18.8		1	0.476
Lead	9.08		1	2.38
Mercury	ND		1	0.0147
Nickel	21.8		1	0.714
Selenium	ND		1	2.38
Silver	ND		1	0.595
Thallium	0.145		1	0.0952
Zinc	60.9		1	1.19

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2435-011
Client ID: S-68A
Date Received: 4/17/01
Date Analyzed: 4/18/01
Matrix-Units: Soil-mg/Kg (ppm)
% Moisture: 13.8

Compound	Result	Q	DF	MDL
Antimony	ND		1	2.31
Arsenic	1.01		1	0.231
Beryllium	0.728		1	0.231
Cadmium	0.268		1	0.231
Chromium	19.5		1	0.693
Copper	16.6		1	0.462
Lead	7.98		1	2.31
Mercury	ND		1	0.0145
Nickel	18.1		1	0.693
Selenium	ND		1	2.31
Silver	ND		1	0.580
Thallium	0.0943		1	0.0924
Zinc	49.1		1	1.16

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CYANIDE, TOTAL

Client/Project: ENVTACT/ORBIS

Date Received: 4/17/01

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	% Moist	Date Analyzed
2435-001	S-58	ND		1	Soil-mg/Kg	1.20	16.8	4/18/01
2435-002	S-59	ND		1	Soil-mg/Kg	1.21	17.1	4/18/01
2435-003	S-60	ND		1	Soil-mg/Kg	1.21	17.5	4/18/01
2435-004	S-61	ND		1	Soil-mg/Kg	1.22	18.2	4/18/01
2435-005	S-62	ND		1	Soil-mg/Kg	1.19	16.2	4/18/01
2435-011	S-68A	ND		1	Soil-mg/Kg	1.16	13.8	4/18/01

INTEGRATED ANALYTICAL LABORATORIES, LLC.

PHENOL

Client/Project: ENVTACT/ORBIS

Date Received: 4/17/01

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	% Moist	Date Analyzed
2435-001	S-58	ND		1	Soil-mg/Kg	3.00	16.8	4/24/01
2435-002	S-59	ND		1	Soil-mg/Kg	3.02	17.1	4/24/01
2435-003	S-60	7.23		1	Soil-mg/Kg	3.03	17.5	4/24/01
2435-004	S-61	ND		1	Soil-mg/Kg	3.06	18.2	4/24/01
2435-005	S-62	ND		1	Soil-mg/Kg	2.98	16.2	4/24/01
2435-011	S-68A	ND		1	Soil-mg/Kg	2.90	13.8	4/24/01

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TOTAL PETROLEUM HYDROCARBONS

Client/Project: ENVTACT/ORBIS

Date Received: 4/17/01

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	% Moist	Date Analyzed
2435-001	S-58	34.3		1	Soil-mg/Kg	25.0	16.8	4/18/01
2435-002	S-59	ND		1	Soil-mg/Kg	25.0	17.1	4/18/01
2435-003	S-60	229		1	Soil-mg/Kg	25.0	17.5	4/18/01
2435-004	S-61	34.9		1	Soil-mg/Kg	25.0	18.2	4/18/01
2435-005	S-62	57.9		1	Soil-mg/Kg	25.0	16.2	4/18/01
2435-006	S-63	54		1	Soil-mg/Kg	25.0	20.1	4/18/01
2435-007	S-64	286		1	Soil-mg/Kg	25.0	16.2	4/18/01
2435-008	S-65	986		2	Soil-mg/Kg	47.8	16.4	4/18/01
2435-009	S-66	422		1	Soil-mg/Kg	25.0	16.1	4/18/01
2435-010	S-67	64.8		1	Soil-mg/Kg	25.0	19.4	4/18/01
2435-011	S-68A	26.8		1	Soil-mg/Kg	25.0	13.8	4/18/01

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
Semivolatiles - PAH	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: J9256.D

BFB Injection Date: 04/23/2001

Inst ID: MSD_J

BFB Injection Time: 10:16

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	16.3			
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	6.6			
173	Less than 2.0% of mass 174	0.4	(	0.5	)1
174	Great than 50.0% of mass 95	72.7			
175	5.0 - 9.0% of mass 174	5.2	(	7.2	)1
176	95.0 - 101.0% of mass 174	70.7	(	97.3	)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	J9257.D	04/23/2001	10:45
50PPB	STD-50PPB	J9258.D	04/23/2001	11:15
100PPB	STD-100PPB	J9259.D	04/23/2001	11:44
150PPB	STD-150PPB	J9260.D	04/23/2001	12:14
200PPB	STD-200PPB	J9261.D	04/23/2001	12:43
N/A	METHOD-BLK	J9263.D	04/23/2001	13:42
SP-1	2517-001	J9265.D	04/23/2001	14:41
S-1	2522-001	J9266.D	04/23/2001	15:17
1	2557-001	J9267.D	04/23/2001	15:48
ACS-7__9-9.5	2470-001	J9268.D	04/23/2001	16:17
SS-1	2520-001	J9276.D	04/23/2001	20:10
CCBW-SP-3	2472-001	J9277.D	04/23/2001	20:39
CCBW-SP-4	2472-002	J9278.D	04/23/2001	21:08
MS	2517-001MS	J9279.D	04/23/2001	21:37
MSD	2517-001MSD	J9280.D	04/23/2001	22:06

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J9309.D

BFB Injection Date: 04/24/2001

Inst ID: MSD_J

BFB Injection Time: 15:56

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.1			
75	30.0 - 60.0% of mass 95	46.0			
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	0.4	(	0.5	)1
174	Great than 50.0% of mass 95	72.1			
175	5.0 - 9.0% of mass 174	5.2	(	7.2	)1
176	95.0 - 101.0% of mass 174	68.6	(	95.2	)1
177	5.0 - 9.0% of mass 176	4.7	(	6.9	)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	J9310.D	04/24/2001	16:26
N/A	METHOD-BLK	J9312.D	04/24/2001	17:24
N/A	BLK-SPK	J9313.D	04/24/2001	17:53
A2-B7-SS1	2549-011	J9314.D	04/24/2001	18:22
A2-B7-SS2	2549-012	J9315.D	04/24/2001	18:52
TB	2435-013	J9316.D	04/24/2001	19:21
S-58	2435-001	J9317.D	04/24/2001	19:50
S-59	2435-002	J9318.D	04/24/2001	20:19
S-60	2435-003	J9319.D	04/24/2001	20:49
S-61	2435-004	J9320.D	04/24/2001	21:18
S-62	2435-005	J9321.D	04/24/2001	21:48
S-68A	2435-011	J9322.D	04/24/2001	22:17
N4-51	2428-001	J9323.D	04/24/2001	22:46
M5-40	2428-002	J9324.D	04/24/2001	23:15
O4-18	2428-003	J9325.D	04/24/2001	23:44
O4-155	2428-004	J9326.D	04/25/2001	0:14
MW-4A	2428-005	J9327.D	04/25/2001	0:43
M4-4B	2428-006	J9328.D	04/25/2001	1:12
N4-4	2428-007	J9329.D	04/25/2001	1:41
041701-TB	2445-004	J9330.D	04/25/2001	2:10

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J9309.D

BFB Injection Date : 04/24/200

Inst ID: MSD_J

BFB Injection Time: 15:56

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.1			
75	30.0 - 60.0% of mass 95	46.0			
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	0.4	(	0.5	)1
174	Great than 50.0% of mass 95	72.1			
175	5.0 - 9.0% of mass 174	5.2	(	7.2	)1
176	95.0 - 101.0% of mass 174	68.6	(	95.2	)1
177	5.0 - 9.0% of mass 176	4.7	(	6.9	)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
TPE-1	2445-001	J9331.D	04/25/2001	2:39
MS	2549-012MS	J9332.D	04/25/2001	3:08
MSD	2549-012MSD	J9333.D	04/25/2001	3:37

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J9447.D

BFB Injection Date: 04/27/2001

Inst ID: MSD_J

BFB Injection Time: 14:14

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.6			
75	30.0 - 60.0% of mass 95	45.7			
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	0.6	(	0.7	)1
174	Great than 50.0% of mass 95	78.8			
175	5.0 - 9.0% of mass 174	5.4	(	6.9	)1
176	95.0 - 101.0% of mass 174	75.5	(	95.8	)1
177	5.0 - 9.0% of mass 176	4.8	(	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	J9448.D	04/27/2001	14:43
N/A	METHOD-BLK	J9450.D	04/27/2001	15:41
S-68A	2435-011DIL	J9451.D	04/27/2001	16:10
TRIP	2544-001	J9453.D	04/27/2001	17:08
SEP-02	2544-002	J9454.D	04/27/2001	17:37
SEP-04	2544-003	J9455.D	04/27/2001	18:06
S-1	2589-001	J9456.D	04/27/2001	18:35
S-2	2589-002	J9457.D	04/27/2001	19:04
TRIP	2532-001	J9458.D	04/27/2001	19:33
PW-P1	2532-002	J9459.D	04/27/2001	20:02
PW-P2	2532-003	J9460.D	04/27/2001	20:31
DW-1	2532-004	J9461.D	04/27/2001	21:00
SEP-01	2532-005	J9462.D	04/27/2001	21:29
SEP-03	2532-006	J9463.D	04/27/2001	21:58
TRIP	2478-008	J9464.D	04/27/2001	22:27
P-6	2478-006	J9465.D	04/27/2001	22:56
PE-1	2571-001	J9466.D	04/27/2001	23:25
EPH-5	2508-005	J9467.D	04/27/2001	23:54
MS	2544-003MS	J9468.D	04/28/2001	0:23
MSD	2544-003MSD	J9469.D	04/28/2001	0:52

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J9447.D

BFB Injection Date : 04/27/200

Inst ID: MSD_J

BFB Injection Time: 14:14

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	17.6			
75	30.0 - 60.0% of mass 95	45.7			
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	0.6	(	0.7	)1
174	Great than 50.0% of mass 95	78.8			
175	5.0 - 9.0% of mass 174	5.4	(	6.9	)1
176	95.0 - 101.0% of mass 174	75.5	(	95.8	)1
177	5.0 - 9.0% of mass 176	4.8	(	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
N/A	BLK-SPK	J9471.D	04/28/2001	1:49

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: I8331.D

BFB Injection Date: 04/25/2001

Inst ID: MSD_I

BFB Injection Time: 8:55

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	22.4			
75	30.0 - 60.0% of mass 95	50.4			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.7			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	87.8			
175	5.0 - 9.0% of mass 174	6.5	(	7.4	)1
176	95.0 - 101.0% of mass 174	87.8	(	100.0	)1
177	5.0 - 9.0% of mass 176	6.1	(	7.0	)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
20	20_PPB_STD	I8332.D	04/25/2001	9:07
50	50_PPB_STD	I8333.D	04/25/2001	9:42
100	100_PPB_STD	I8334.D	04/25/2001	10:16
150	150_PPB_STD	I8335.D	04/25/2001	10:51
200	200_PPB_STD	I8336.D	04/25/2001	11:25
N/A	METHOD_BLK	I8343.D	04/25/2001	15:47
P113-93-LB-5	2369-009	I8344.D	04/25/2001	16:22
P113-133	2369-013	I8346.D	04/25/2001	17:31
P113-46-LB4	2369-014	I8348.D	04/25/2001	18:40
MS	BLK_SPK	I8350.D	04/25/2001	19:49
MS	BLK_SPKD	I8351.D	04/25/2001	20:24

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: I8353.D

BFB Injection Date: 04/26/2001

Inst ID: MSD_I

BFB Injection Time: 8:53

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	25.3			
75	30.0 - 60.0% of mass 95	55.6			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	8.7			
173	Less than 2.0% of mass 174	0.8	(	0.9	)1
174	Great than 50.0% of mass 95	85.4			
175	5.0 - 9.0% of mass 174	6.0	(	7.0	)1
176	95.0 - 101.0% of mass 174	82.0	(	96.0	)1
177	5.0 - 9.0% of mass 176	6.1	(	7.5	)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	I8354.D	04/26/2001	9:06
N/A	METHOD_BLK	I8359.D	04/26/2001	10:50
Q113-2-LB7	2369-015	I8360.D	04/26/2001	11:25
Q113-2-LB1	2369-016	I8361.D	04/26/2001	12:05
Q113-2-LB2	2369-017	I8362.D	04/26/2001	12:40
Q113-2-LB3	2369-018	I8363.D	04/26/2001	13:14
Q113-2-LB4	2369-019	I8364.D	04/26/2001	13:49
Q113-2-LB5	2369-020	I8365.D	04/26/2001	14:23
Q113-2-LB6	2369-021	I8366.D	04/26/2001	14:58
P113-46-LB-7	2369-010	I8367.D	04/26/2001	15:33
MS	BLK_SPK	I8368.D	04/26/2001	16:07
S-68B	2435-012	I8369.D	04/26/2001	16:42
MS	2593-002MS	I8370.D	04/26/2001	17:16
MSD	2593-002MSD	I8371.D	04/26/2001	17:51
SL/INITIAL	2593-002	I8372.D	04/26/2001	18:25
SL/CONTROL	2593-003	I8373.D	04/26/2001	18:59
WASTE_CLASS	2566-001	I8374.D	04/26/2001	19:34
4086-B4B	2553-005DIL	I8375.D	04/26/2001	20:08

VOLATILE METHOD BLANK SUMMARY

Lab File ID: J9312.D

Instrument ID: MSD J

Date Analyzed: 04/24/2001

Time Analyzed: 17:24

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
N/A	BLK-SPK	04/24/2001	17:53
A2-B7-SS1	2549-011	04/24/2001	18:22
A2-B7-SS2	2549-012	04/24/2001	18:52
TB	2435-013	04/24/2001	19:21
S-58	2435-001	04/24/2001	19:50
S-59	2435-002	04/24/2001	20:19
S-60	2435-003	04/24/2001	20:49
S-61	2435-004	04/24/2001	21:18
S-62	2435-005	04/24/2001	21:48
S-68A	2435-011	04/24/2001	22:17
N4-51	2428-001	04/24/2001	22:46
M5-40	2428-002	04/24/2001	23:15
O4-18	2428-003	04/24/2001	23:44
O4-155	2428-004	04/25/2001	0:14
MW-4A	2428-005	04/25/2001	0:43
M4-4B	2428-006	04/25/2001	1:12
N4-4	2428-007	04/25/2001	1:41
041701-TB	2445-004	04/25/2001	2:10
TPE-1	2445-001	04/25/2001	2:39
MS	2549-012MS	04/25/2001	3:08
MSD	2549-012MSD	04/25/2001	3:37

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/24/2001
Data file: J9312.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

000080

2688

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/24/2001
Data file: J9312.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: J9450.D

Instrument ID: MSD_J

Date Analyzed: 04/27/2001

Time Analyzed: 15:41

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S-68A	2435-011DIL	04/27/2001	16:10
TRIP	2544-001	04/27/2001	17:08
SEP-02	2544-002	04/27/2001	17:37
SEP-04	2544-003	04/27/2001	18:06
S-1	2589-001	04/27/2001	18:35
S-2	2589-002	04/27/2001	19:04
TRIP	2532-001	04/27/2001	19:33
PW-P1	2532-002	04/27/2001	20:02
PW-P2	2532-003	04/27/2001	20:31
DW-1	2532-004	04/27/2001	21:00
SEP-01	2532-005	04/27/2001	21:29
SEP-03	2532-006	04/27/2001	21:58
TRIP	2478-008	04/27/2001	22:27
P-6	2478-006	04/27/2001	22:56
PE-1	2571-001	04/27/2001	23:25
EPH-5	2508-005	04/27/2001	23:54
MS	2544-003MS	04/28/2001	0:23
MSD	2544-003MSD	04/28/2001	0:52
N/A	BLK-SPK	04/28/2001	1:49

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project:

Lab ID: METHOD-BLK
Client ID: N/A
Date Received:
Date Analyzed: 04/27/2001
Data file: J9450.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		250
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: 04/27/2001
Data file: J9450.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

00084

2692

VOLATILE METHOD BLANK SUMMARY

Lab File ID: I8359.D

Instrument ID: MSD_I

Date Analyzed: 04/26/2001

Time Analyzed: 10:50

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Q113-2-LB7	2369-015	04/26/2001	11:25
Q113-2-LB1	2369-016	04/26/2001	12:05
Q113-2-LB2	2369-017	04/26/2001	12:40
Q113-2-LB3	2369-018	04/26/2001	13:14
Q113-2-LB4	2369-019	04/26/2001	13:49
Q113-2-LB5	2369-020	04/26/2001	14:23
Q113-2-LB6	2369-021	04/26/2001	14:58
P113-46-LB-7	2369-010	04/26/2001	15:33
MS	BLK_SPK	04/26/2001	16:07
S-68B	2435-012	04/26/2001	16:42
MS	2593-002MS	04/26/2001	17:16
MSD	2593-002MSD	04/26/2001	17:51
SL/INITIAL	2593-002	04/26/2001	18:25
SL/CONTROL	2593-003	04/26/2001	18:59
WASTE_CLASS	2566-001	04/26/2001	19:34
4086-B4B	2553-005DIL	04/26/2001	20:08

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: N/A

Lab ID: METHOD_BLK
Client ID: N/A
Date Received: N/A
Date Analyzed: 04/26/2001
Data file: I8359.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		250
t-Butyl Alcohol(TBA)	ND		500
trans-1,2-Dichloroethene	ND		250
Methyl-t-Butyl Ether(MTBE)	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: 04/26/2001
Data file: I8359.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\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 23 13:08:03 2001
Response via : Initial Calibration

Calibration Files
20 =J9257.D 100 =J9259.D 50 =J9258.D
150 =J9260.D 200 =J9261.D

		Compound	20	100	50	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	ISTD						
2)	T	Dichlorodifluoromet	0.332	0.369	0.356	0.366	0.360	0.357	4.09
3)	P	Chloromethane	0.451	0.394	0.415	0.396	0.406	0.412	5.64
4)	C	Vinyl Chloride	0.349	0.327	0.337	0.331	0.334	0.336	2.50
5)	T	Bromomethane	0.211	0.132	0.169	0.115	0.105	0.146	29.70
6)	T	Chloroethane	0.232	0.177	0.207	0.160	0.148	0.185	18.71
7)	T	Trichlorofluorometh	0.281	0.308	0.302	0.307	0.295	0.299	3.77
8)	T	Acrolein	0.023	0.021	0.021	0.021	0.021	0.021	3.33
9)	MC	1,1-Dichloroethene	0.274	0.256	0.273	0.259	0.257	0.264	3.39
10)	T	Acetone	0.136	0.112	0.122	0.109	0.112	0.118	9.38
11)	T	Carbon Disulfide	0.886	0.806	0.838	0.803	0.796	0.826	4.56
12)	T	Vinyl Acetate	1.105	0.903	0.969	0.837	0.802	0.923	13.02
13)	T	Methylene Chloride	0.367	0.301	0.327	0.297	0.300	0.318	9.26
14)	T	Acrylonitrile	0.115	0.112	0.107	0.113	0.115	0.112	3.05
15)	T	t-Butyl Alcohol(TBA	0.053	0.046	0.049	0.046	0.047	0.048	6.41
16)	T	trans-1,2-Dichloroe	0.268	0.230	0.245	0.222	0.217	0.236	8.76
17)	T	Methyl-t-Butyl Ethe	1.014	0.840	0.902	0.833	0.828	0.883	8.92
[illegible]	P	1,1-Dichloroethane	0.536	0.460	0.482	0.444	0.442	0.473	8.19
[illegible]	T	Diisopropyl Ether(D	1.124	0.952	0.996	0.916	0.908	0.979	9.00
[illegible]	T	cis-1,2-Dichloroeth	0.511	0.424	0.448	0.413	0.413	0.442	9.31
21)	T	2,2-Dichloropropane	0.388	0.338	0.355	0.318	0.300	0.340	10.06
22)	T	2-Butanone(MEK)	0.268	0.238	0.244	0.234	0.248	0.246	5.44
23)	T	Bromochloromethane	0.252	0.216	0.226	0.209	0.210	0.223	7.92
25)	C	Chloroform	0.804	0.699	0.722	0.687	0.685	0.719	6.90
26)	T	1,1,1-Trichloroetha	0.537	0.517	0.508	0.508	0.505	0.515	2.55
27)	T	Carbon Tetrachlorid	0.422	0.435	0.417	0.433	0.434	0.428	1.94
28)	T	1,1-Dichloropropene	0.498	0.472	0.469	0.457	0.454	0.470	3.72
29)	T	1,2-Dichloroethane(	0.667	0.569	0.594	0.549	0.546	0.585	8.48
30)	S	1,2-Dichloroethane-	0.559	0.566	0.558	0.572	0.586	0.568	2.00
31)	I	1,4-Difluorobenzene	ISTD						
32)	M	Benzene	1.287	1.093	1.150	1.052	1.033	1.123	9.07
33)	M	Trichloroethene	0.315	0.282	0.286	0.276	0.274	0.286	5.78
34)	C	1,2-Dichloropropane	0.332	0.282	0.296	0.273	0.270	0.291	8.70
35)	T	Dibromomethane	0.201	0.171	0.180	0.166	0.163	0.176	8.56
36)	T	1,4-Dioxane	0.000	0.000	0.000	0.000	0.000	0.000	12.20
37)	T	Bromodichloromethan	0.397	0.360	0.366	0.355	0.356	0.367	4.79
38)	T	2-Chloroethylvinyl	0.270	0.239	0.246	0.233	0.232	0.244	6.45
39)	T	cis-1,3-Dichloropro	0.544	0.480	0.497	0.463	0.460	0.489	7.03
40)	T	4-Methyl-2-pentanon	0.381	0.343	0.350	0.337	0.344	0.351	4.85
41)	S	Toluene-d8	1.000	1.009	1.003	1.007	1.013	1.006	0.50
42)	MC	Toluene	0.820	0.709	0.735	0.681	0.672	0.723	8.24
43)	T	trans-1,3-Dichlorop	0.524	0.458	0.474	0.445	0.444	0.469	7.11
[illegible]	T	1,1,2-Trichloroetha	0.255	0.218	0.229	0.212	0.209	0.225	8.31
[illegible]	T	Tetrachloroethene	0.266	0.239	0.246	0.228	0.221	0.240	7.27
46)	T	1,3-Dichloropropane	0.547	0.462	0.492	0.442	0.435	0.476	9.59
47)	T	2-Hexanone	0.266	0.245	0.248	0.243	0.251	0.251	3.69
48)	T	Dibromochloromethan	0.278	0.268	0.267	0.267	0.272	0.271	1.76
49)	T	1,2-Dibromoethane(E	0.326	0.287	0.298	0.280	0.281	0.294	6.52

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50)	I	Chlorobenzene-d5	ISTD						
51)	MP	Chlorobenzene	1.127	0.943	1.007	0.909	0.887	0.974	9.90
52)	T	1,1,1,2-Tetrachloro	0.372	0.324	0.338	0.314	0.307	0.331	7.75
53)	C	Ethylbenzene	1.815	1.571	1.641	1.520	1.466	1.603	8.43
54)	T	m,p-Xylene	0.723	0.604	0.644	0.575	0.549	0.619	11.00
55)	T	o-Xylene	0.766	0.626	0.674	0.594	0.572	0.647	11.94
56)	T	Styrene	1.370	1.120	1.202	1.061	1.026	1.156	11.84
57)	P	Bromoform	0.194	0.206	0.195	0.210	0.217	0.204	4.90
58)	T	Isopropylbenzene	1.611	1.461	1.504	1.426	1.394	1.479	5.70
59)	S	Bromofluorobenzene	0.669	0.684	0.683	0.694	0.698	0.686	1.63
60)	P	1,1,2,2-Tetrachloro	0.504	0.432	0.449	0.415	0.410	0.442	8.55
61)	T	Bromobenzene	0.507	0.409	0.444	0.389	0.377	0.425	12.33
62)	T	1,2,3-Trichloroprop	0.494	0.428	0.444	0.419	0.416	0.440	7.29
63)	T	n-Propylbenzene	1.986	1.781	1.833	1.738	1.692	1.806	6.28
64)	T	2-Chlorotoluene	1.409	1.205	1.269	1.160	1.142	1.237	8.73
65)	T	1,3,5-Trimethylbenz	1.556	1.328	1.417	1.273	1.227	1.360	9.59
66)	T	4-Chlorotoluene	1.679	1.405	1.505	1.341	1.302	1.446	10.44
67)	T	tert-Butylbenzene	1.151	1.033	1.084	1.003	0.974	1.049	6.66
68)	T	1,2,4-Trimethylbenz	1.725	1.442	1.550	1.384	1.343	1.489	10.30
69)	T	sec-Butylbenzene	1.481	1.365	1.422	1.332	1.295	1.379	5.33
70)	T	1,3-Dichlorobenzene	0.961	0.781	0.850	0.734	0.710	0.807	12.54
71)	T	4-Isopropyltoluene	1.335	1.183	1.264	1.139	1.093	1.203	8.09
72)	T	1,4-Dichlorobenzene	1.010	0.819	0.893	0.776	0.749	0.849	12.36
73)	T	n-Butylbenzene	0.620	0.561	0.595	0.537	0.517	0.566	7.39
74)	T	1,2-Dichlorobenzene	0.956	0.769	0.849	0.728	0.706	0.802	12.74
75)	T	1,2-Dibromo-3-chlor	0.088	0.086	0.086	0.087	0.090	0.088	1.90
76)	T	1,2,4-Trichlorobenz	0.446	0.374	0.405	0.355	0.366	0.389	9.43
77)	T	Hexachlorobutadiene	0.123	0.118	0.117	0.112	0.112	0.117	4.00
78)	T	Naphthalene	1.340	1.196	1.266	1.179	1.178	1.232	5.71
79)	T	1,2,3-Trichlorobenz	0.344	0.294	0.320	0.285	0.298	0.308	7.70
80)	T	1,1,2-Trichloro-1,2	0.203	0.202	0.203	0.194	0.179	0.196	5.28
81)	T	Methyl acetate	0.286	0.251	0.264	0.242	0.238	0.256	7.55
82)	T	Cyclohexane	0.267	0.300	0.295	0.291	0.278	0.286	4.76
83)	T	Methyl cyclohexane	0.282	0.297	0.288	0.288	0.273	0.286	3.13

(#) = Out of Range

JME0423.M Mon Apr 23 13:08:11 2001 MSD_J

Instrument ID: MSD_J
Method ID: JME0423.M
Date: 04/23/2001

Average %RSD = 7.67

Refer to SW846 Method 8000B Section 7.5.1.

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Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9310.D
Acq On : 24 Apr 2001 16:26
Sample : 100PPB,STD-100PPB,W,5ml,100
Misc :
ALS Integration Params: LSCINT.P

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

Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 25 08:46:59 2001
Response via : Initial 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	90	0.00
2	T	Dichlorodifluoromethane	0.357	0.358	-0.3	87	0.00
3	P	Chloromethane	0.412	0.416	-1.0	94	0.00
4	C	Vinyl Chloride	0.336	0.349	-3.9	95	0.00
5	T	Bromomethane	0.146	0.142	2.7	97	0.00
6	T	Chloroethane	0.185	0.193	-4.3	97	0.00
7	T	Trichlorofluoromethane	0.299	0.319	-6.7	93	0.00
8	T	Acrolein	0.021	0.023	-9.5	97	0.00
9	MC	1,1-Dichloroethene	0.264	0.280	-6.1	98	0.00
10	T	Acetone	0.118	0.117	0.8	93	0.00
11	T	Carbon Disulfide	0.826	0.860	-4.1	96	0.00
12	T	Vinyl Acetate	0.923	1.046	-13.3	104	0.00
13	T	Methylene Chloride	0.318	0.329	-3.5	98	0.00
14	T	Acrylonitrile	0.112	0.121	-8.0	97	0.00
[illegible]	T	t-Butyl Alcohol(TBA)	0.048	0.049	-2.1	95	0.00
16	T	trans-1,2-Dichloroethene	0.236	0.247	-4.7	96	0.00
17	T	Methyl-t-Butyl Ether(MTBE)	0.883	0.909	-2.9	97	0.00
18	P	1,1-Dichloroethane	0.473	0.484	-2.3	94	0.00
19	T	Diisopropyl Ether(DIPE)	0.979	1.010	-3.2	95	0.00
20	T	cis-1,2-Dichloroethene	0.442	0.427	3.4	90	0.00
21	T	2,2-Dichloropropane	0.340	0.349	-2.6	93	0.00
22	T	2-Butanone(MEK)	0.246	0.236	4.1	89	0.00
23	T	Bromochloromethane	0.223	0.212	4.9	88	0.00
25	C	Chloroform	0.719	0.697	3.1	89	0.00
26	T	1,1,1-Trichloroethane	0.515	0.495	3.9	86	0.00
27	T	Carbon Tetrachloride	0.428	0.373	12.9	77	0.00
28	T	1,1-Dichloropropene	0.470	0.480	-2.1	91	0.00
29	T	1,2-Dichloroethane(EDC)	0.585	0.578	1.2	91	0.00
30	S	1,2-Dichloroethane-d4	0.568	0.587	-3.3	93	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	91	0.00
32	M	Benzene	1.123	1.089	3.0	90	0.00
33	M	Trichloroethene	0.286	0.271	5.2	87	0.00
34	C	1,2-Dichloropropane	0.291	0.281	3.4	90	0.00
35	T	Dibromomethane	0.176	0.166	5.7	88	0.00
37	T	Bromodichloromethane	0.367	0.328	10.6	83	0.00
38	T	2-Chloroethylvinyl Ether	0.244	0.233	4.5	89	0.00
39	T	cis-1,3-Dichloropropene	0.489	0.461	5.7	87	0.00
40	T	4-Methyl-2-pentanone(MIBK)	0.351	0.334	4.8	88	0.00
[illegible]	S	Toluene-d8	1.006	1.028	-2.2	93	0.00
[illegible]	MC	Toluene	0.723	0.695	3.9	89	0.00
43	T	trans-1,3-Dichloropropene	0.469	0.438	6.6	87	0.00
44	T	1,1,2-Trichloroethane	0.225	0.215	4.4	89	0.00
45	T	Tetrachloroethene	0.240	0.234	2.5	89	0.00
46	T	1,3-Dichloropropane	0.476	0.457	4.0	90	0.00

47	T	2-Hexanone	0.251	0.235	6.4	87	0.00
48	T	Dibromochloromethane	0.271	0.225	17.0	76	0.00
49	T	1,2-Dibromoethane(EDB)	0.294	0.275	6.5	87	0.00
	I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00
51	MP	Chlorobenzene	0.974	0.918	5.7	89	0.00
	T	1,1,1,2-Tetrachloroethane	0.331	0.292	11.8	83	0.00
53	C	Ethylbenzene	1.603	1.547	3.5	90	0.00
54	T	m,p-Xylene	0.619	0.589	4.8	90	0.00
55	T	o-Xylene	0.647	0.609	5.9	89	0.00
56	T	Styrene	1.156	1.095	5.3	90	0.00
57	P	Bromoform	0.204	0.157	23.0	70	0.00
58	T	Isopropylbenzene	1.479	1.412	4.5	89	0.00
59	S	Bromofluorobenzene	0.686	0.688	-0.3	92	0.00
60	P	1,1,2,2-Tetrachloroethane	0.442	0.422	4.5	90	0.00
61	T	Bromobenzene	0.425	0.395	7.1	89	0.00
62	T	1,2,3-Trichloropropane	0.440	0.408	7.3	87	0.00
63	T	n-Propylbenzene	1.806	1.725	4.5	89	0.00
64	T	2-Chlorotoluene	1.237	1.166	5.7	89	0.00
65	T	1,3,5-Trimethylbenzene	1.360	1.291	5.1	89	0.00
66	T	4-Chlorotoluene	1.446	1.377	4.8	90	0.00
67	T	tert-Butylbenzene	1.049	0.999	4.8	89	0.00
68	T	1,2,4-Trimethylbenzene	1.489	1.410	5.3	90	0.00
69	T	sec-Butylbenzene	1.379	1.316	4.6	88	0.00
70	T	1,3-Dichlorobenzene	0.807	0.754	6.6	88	0.00
71	T	4-Isopropyltoluene	1.203	1.143	5.0	89	0.00
72	T	1,4-Dichlorobenzene	0.849	0.790	6.9	88	0.00
73	T	n-Butylbenzene	0.566	0.540	4.6	88	0.00
74	T	1,2-Dichlorobenzene	0.802	0.751	6.4	90	0.00
75	T	1,2-Dibromo-3-chloropropane	0.088	0.074	15.9	79	0.00
76	T	1,2,4-Trichlorobenzene	0.389	0.366	5.9	90	0.00
77	T	Hexachlorobutadiene	0.117	0.116	0.9	90	0.00
78	T	Naphthalene	1.232	1.123	8.8	86	0.00
79	T	1,2,3-Trichlorobenzene	0.308	0.285	7.5	89	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.196	0.201	-2.6	91	0.00
81	T	Methyl acetate	0.256	0.250	2.3	92	0.00
82	T	Cyclohexane	0.286	0.289	-1.0	88	0.00
83	T	Methyl cyclohexane	0.286	0.284	0.7	88	0.00

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

J9310.D JME0423.M Wed Apr 25 08:48:17 2001 MSD_J

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-27-01\J9448.D
Acq On : 27 Apr 2001 14:43
Sample : 100PPB,STD-100PPB,W,5ml,100
Misc :
S Integration Params: LSCINT.P

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

Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sat Apr 28 12:58:10 2001
Response via : Initial 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	86	0.00
2	T	Dichlorodifluoromethane	0.357	0.366	-2.5	85	0.00
3	P	Chloromethane	0.412	0.452	-9.7	99	0.00
4	C	Vinyl Chloride	0.336	0.363	-8.0	95	-0.01
5	T	Bromomethane	0.146	0.194	-32.9	127	0.00
6	T	Chloroethane	0.185	0.232	-25.4	113	0.00
7	T	Trichlorofluoromethane	0.299	0.365	-22.1	102	0.00
8	T	Acrolein	0.021	0.017	19.0	69	0.00
9	MC	1,1-Dichloroethene	0.264	0.314	-18.9	106	0.00
10	T	Acetone	0.118	0.105	11.0	81	-0.01
11	T	Carbon Disulfide	0.826	0.915	-10.8	98	0.00
12	T	Vinyl Acetate	0.923	1.017	-10.2	97	0.00
13	T	Methylene Chloride	0.318	0.362	-13.8	103	0.00
14	T	Acrylonitrile	0.112	0.112	0.0	86	0.00
[illegible]	T	t-Butyl Alcohol(TBA)	0.048	0.034	29.2	64	-0.01
16	T	trans-1,2-Dichloroethene	0.236	0.278	-17.8	104	0.00
17	T	Methyl-t-Butyl Ether(MTBE)	0.883	0.821	7.0	84	-0.01
18	P	1,1-Dichloroethane	0.473	0.513	-8.5	96	0.00
19	T	Diisopropyl Ether(DIPE)	0.979	1.054	-7.7	95	0.00
20	T	cis-1,2-Dichloroethene	0.442	0.403	8.8	82	0.00
21	T	2,2-Dichloropropane	0.340	0.297	12.6	76	0.00
22	T	2-Butanone(MEK)	0.246	0.180	26.8	65	-0.01
23	T	Bromochloromethane	0.223	0.194	13.0	77	0.00
25	C	Chloroform	0.719	0.641	10.8	79	-0.01
26	T	1,1,1-Trichloroethane	0.515	0.432	16.1	72	0.00
27	T	Carbon Tetrachloride	0.428	0.330	22.9	65	0.00
28	T	1,1-Dichloropropene	0.470	0.427	9.1	78	0.00
29	T	1,2-Dichloroethane(EDC)	0.585	0.518	11.5	78	-0.01
30	S	1,2-Dichloroethane-d4	0.568	0.548	3.5	83	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	84	0.00
32	M	Benzene	1.123	1.104	1.7	84	0.00
33	M	Trichloroethene	0.286	0.269	5.9	80	0.00
34	C	1,2-Dichloropropane	0.291	0.273	6.2	81	-0.01
35	T	Dibromomethane	0.176	0.153	13.1	75	0.00
37	T	Bromodichloromethane	0.367	0.314	14.4	73	0.00
38	T	2-Chloroethylvinyl Ether	0.244	0.195	20.1	68	-0.01
39	T	cis-1,3-Dichloropropene	0.489	0.420	14.1	73	0.00
40	T	4-Methyl-2-pentanone(MIBK)	0.351	0.257	26.8	63	-0.01
[illegible]	S	Toluene-d8	1.006	1.027	-2.1	85	0.00
42	MC	Toluene	0.723	0.699	3.3	82	0.00
43	T	trans-1,3-Dichloropropene	0.469	0.386	17.7	70	0.00
44	T	1,1,2-Trichloroethane	0.225	0.194	13.8	74	-0.01
45	T	Tetrachloroethene	0.240	0.236	1.7	82	0.00
46	T	1,3-Dichloropropane	0.476	0.421	11.6	76	-0.01

47 T	2-Hexanone	0.251	0.174	30.7	59	0.00
48 T	Dibromochloromethane	0.271	0.210	22.5	65	-0.01
49 T	1,2-Dibromoethane(EDB)	0.294	0.241	18.0	70	0.00
50 I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.00
[redacted] MP	Chlorobenzene	0.974	0.939	3.6	84	0.00
[redacted] T	1,1,1,2-Tetrachloroethane	0.331	0.281	15.1	73	-0.01
C	Ethylbenzene	1.603	1.495	6.7	80	-0.01
54 T	m,p-Xylene	0.619	0.591	4.5	83	0.00
55 T	o-Xylene	0.647	0.608	6.0	82	0.00
56 T	Styrene	1.156	1.091	5.6	82	-0.01
57 P	Bromoform	0.204	0.137	32.8	56	0.00
58 T	Isopropylbenzene	1.479	1.362	7.9	79	0.00
59 S	Bromofluorobenzene	0.686	0.659	3.9	81	-0.01
60 P	1,1,2,2-Tetrachloroethane	0.442	0.349	21.0	68	0.00
61 T	Bromobenzene	0.425	0.398	6.4	82	-0.01
62 T	1,2,3-Trichloropropane	0.440	0.341	22.5	67	-0.01
63 T	n-Propylbenzene	1.806	1.671	7.5	79	-0.01
64 T	2-Chlorotoluene	1.237	1.123	9.2	79	-0.01
65 T	1,3,5-Trimethylbenzene	1.360	1.266	6.9	80	-0.01
66 T	4-Chlorotoluene	1.446	1.345	7.0	81	-0.01
67 T	tert-Butylbenzene	1.049	0.965	8.0	79	-0.01
68 T	1,2,4-Trimethylbenzene	1.489	1.377	7.5	81	0.00
69 T	sec-Butylbenzene	1.379	1.285	6.8	79	0.00
70 T	1,3-Dichlorobenzene	0.807	0.750	7.1	81	-0.01
71 T	4-Isopropyltoluene	1.203	1.116	7.2	80	-0.01
72 T	1,4-Dichlorobenzene	0.849	0.780	8.1	80	0.00
73 T	n-Butylbenzene	0.566	0.529	6.5	80	-0.01
74 T	1,2-Dichlorobenzene	0.802	0.733	8.6	80	0.00
75 T	1,2-Dibromo-3-chloropropane	0.088	0.048	45.5	47	-0.01
76 T	1,2,4-Trichlorobenzene	0.389	0.279	28.3	63	0.00
[redacted] T	Hexachlorobutadiene	0.117	0.101	13.7	72	0.00
[redacted] T	Naphthalene	1.232	0.655	46.8	46	0.00
[redacted] T	1,2,3-Trichlorobenzene	0.308	0.180	41.6	51	0.00
80 T	1,1,2-Trichloro-1,2,2-trifl	0.196	0.232	-18.4	97	0.00
81 T	Methyl acetate	0.256	0.237	7.4	80	0.00
82 T	Cyclohexane	0.286	0.271	5.2	76	0.00
83 T	Methyl cyclohexane	0.286	0.279	2.4	79	0.00

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

J8923.D JME0423.M Sat Apr 28 13:16:04 2001 MSD_J

Response Factor Report 5970 - In

Method : C:\HPCHEM\1\METHODS\IME0425.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 25 13:24:27 2001
Response via : Initial Calibration

Calibration Files
20 =I8332.D 50 =I8333.D 100 =I8334.D
150 =I8335.D 200 =I8336.D

		Compound	20	50	100	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------						
2)	T	Dichlorodifluorometha	0.256	0.246	0.240	0.229	0.229	0.240	4.88
3)	P	Chloromethane	0.160	0.154	0.149	0.142	0.138	0.148	6.16
4)	C	Vinyl Chloride	0.158	0.154	0.154	0.150	0.148	0.153	2.44
5)	T	Bromomethane	0.207	0.210	0.207	0.171	0.173	0.194	10.09
6)	T	Chloroethane	0.118	0.118	0.118	0.109	0.080	0.109	15.22
7)	T	Trichlorofluoromethan	0.436	0.426	0.422	0.411	0.408	0.421	2.66
8)	T	Acrolein	0.005	0.006	0.006	0.006	0.006	0.006	5.65
9)	MC	1,1-Dichloroethene	0.216	0.199	0.208	0.201	0.204	0.206	3.33
10)	T	Acetone	0.049	0.035	0.035	0.033	0.031	0.037	19.22
11)	T	Carbon Disulfide	0.592	0.571	0.579	0.561	0.557	0.572	2.45
12)	T	Vinyl Acetate	0.733	0.780	0.782	0.740	0.704	0.748	4.42
13)	T	Methylene Chloride	0.230	0.231	0.228	0.224	0.218	0.226	2.39
14)	T	Acrylonitrile	0.025	0.029	0.031	0.029	0.030	0.029	7.60
15)	T	t-Butyl Alcohol(TBA)	0.012	0.009	0.011	0.010	0.009	0.010	13.26
16)	T	trans-1,2-Dichloroeth	0.258	0.247	0.253	0.240	0.239	0.248	3.38
17)	T	Methyl-t-Butyl Ether(	0.533	0.588	0.624	0.575	0.550	0.574	6.16
18)	P	1,1-Dichloroethane	0.454	0.440	0.455	0.433	0.424	0.441	3.08
19)	T	Diisopropyl Ether(DIP	0.778	0.773	0.788	0.749	0.730	0.764	3.10
20)	T	cis-1,2-Dichloroethen	0.283	0.251	0.252	0.242	0.241	0.254	6.73
21)	T	2,2-Dichloropropane	0.411	0.383	0.371	0.359	0.351	0.375	6.34
22)	T	2-Butanone(MEK)	0.052	0.052	0.051	0.050	0.045	0.050	5.54
23)	T	Bromochloromethane	0.203	0.199	0.210	0.191	0.192	0.199	3.88
25)	C	Chloroform	0.554	0.547	0.566	0.529	0.532	0.546	2.81
26)	T	1,1,1-Trichloroethane	0.454	0.443	0.450	0.451	0.448	0.449	0.87
27)	T	Carbon Tetrachloride	0.365	0.376	0.375	0.383	0.366	0.373	2.03
28)	T	1,1-Dichloropropene	0.346	0.339	0.340	0.332	0.326	0.337	2.28
29)	T	1,2-Dichloroethane(ED	0.335	0.355	0.365	0.357	0.341	0.351	3.55
30)	S	1,2-Dichloroethane-d4	0.323	0.371	0.396	0.404	0.405	0.380	9.07
31)	I	1,4-Difluorobenzene	----------ISTD----------						
32)	M	Benzene	0.682	0.672	0.653	0.659	0.651	0.663	2.00
33)	M	Trichloroethene	0.388	0.365	0.366	0.367	0.363	0.370	2.81
34)	C	1,2-Dichloropropane	0.311	0.306	0.313	0.295	0.300	0.305	2.35
35)	T	Dibromomethane	0.255	0.281	0.287	0.281	0.286	0.278	4.65
37)	T	Bromodichloromethane	0.556	0.554	0.580	0.558	0.560	0.562	1.90
38)	T	2-Chloroethylvinyl Et	0.131	0.147	0.154	0.154	0.152	0.148	6.69
39)	T	cis-1,3-Dichloroprope	0.460	0.455	0.476	0.461	0.464	0.463	1.73
40)	T	4-Methyl-2-pentanone(	0.167	0.174	0.174	0.172	0.167	0.171	2.10
41)	S	Toluene-d8	0.758	0.756	0.782	0.755	0.773	0.765	1.56
42)	MC	Toluene	0.503	0.481	0.488	0.470	0.467	0.482	3.04
43)	T	trans-1,3-Dichloropro	0.363	0.387	0.410	0.398	0.394	0.390	4.41
44)	T	1,1,2-Trichloroethane	0.203	0.216	0.224	0.218	0.218	0.216	3.53
45)	T	Tetrachloroethene	0.475	0.452	0.447	0.439	0.430	0.449	3.73
46)	T	1,3-Dichloropropane	0.388	0.399	0.402	0.396	0.379	0.393	2.37
47)	T	2-Hexanone	0.099	0.119	0.121	0.119	0.115	0.115	7.81
48)	T	Dibromochloromethane	0.380	0.417	0.462	0.451	0.446	0.431	7.63
49)	T	1,2-Dibromoethane(EDB	0.318	0.346	0.351	0.356	0.340	0.342	4.26

			ISTD						
50)	I	Chlorobenzene-d5							
51)	MP	Chlorobenzene	1.008	1.035	1.024	0.994	1.015	1.015	1.56
52)	T	1,1,1,2-Tetrachloroet	0.528	0.549	0.585	0.562	0.563	0.557	3.75
53)	C	Ethylbenzene	1.422	1.461	1.483	1.388	1.410	1.433	2.70
54)	T	m,p-Xylene	0.514	0.516	0.507	0.500	0.492	0.506	1.96
55)	T	o-Xylene	0.519	0.508	0.508	0.495	0.497	0.506	1.97
56)	T	Styrene	0.813	0.833	0.838	0.819	0.821	0.825	1.26
57)	P	Bromoform	0.422	0.530	0.560	0.533	0.547	0.518	10.62
58)	T	Isopropylbenzene	1.325	1.367	1.322	1.276	1.328	1.324	2.44
59)	S	Bromofluorobenzene	0.835	0.936	0.921	0.915	0.945	0.911	4.83
60)	P	1,1,2,2-Tetrachloroet	0.321	0.384	0.398	0.378	0.384	0.373	8.10
61)	T	Bromobenzene	0.499	0.557	0.567	0.544	0.530	0.540	4.89
62)	T	1,2,3-Trichloropropan	0.330	0.366	0.364	0.334	0.352	0.349	4.83
63)	T	n-Propylbenzene	1.579	1.601	1.584	1.589	1.600	1.591	0.60
64)	T	2-Chlorotoluene	1.138	1.172	1.203	1.147	1.208	1.174	2.71
65)	T	1,3,5-Trimethylbenzen	1.057	1.113	1.093	1.070	1.129	1.092	2.71
66)	T	4-Chlorotoluene	1.282	1.349	1.325	1.278	1.319	1.310	2.31
67)	T	tert-Butylbenzene	1.017	1.053	1.066	1.068	1.058	1.052	1.97
68)	T	1,2,4-Trimethylbenzen	1.043	1.092	1.126	1.070	1.100	1.086	2.90
69)	T	sec-Butylbenzene	1.123	1.219	1.211	1.181	1.259	1.199	4.22
70)	T	1,3-Dichlorobenzene	0.658	0.709	0.724	0.702	0.720	0.702	3.77
71)	T	4-Isopropyltoluene	0.916	1.017	0.985	0.981	0.997	0.979	3.89
72)	T	1,4-Dichlorobenzene	0.649	0.704	0.716	0.693	0.708	0.694	3.82
73)	T	n-Butylbenzene	0.801	0.854	0.885	0.872	0.892	0.861	4.23
74)	T	1,2-Dichlorobenzene	0.500	0.498	0.533	0.504	0.523	0.512	3.02
75)	T	1,2-Dibromo-3-chlorop	0.027	0.022	0.030	0.030	0.032	0.028	12.97
76)	T	1,2,4-Trichlorobenzen	0.089	0.083	0.111	0.139	0.140	0.113	23.85
77)	T	Hexachlorobutadiene	0.081	0.071	0.071	0.063	0.065	0.070	10.31
78)	T	Naphthalene	0.134	0.116	0.153	0.178	0.206	0.157	22.58
79)	T	1,2,3-Trichlorobenzen	0.064	0.052	0.065	0.090	0.103	0.075	28.01
80)	T	1,1,2-Trichloro-1,2,2	0.672	0.663	0.627	0.606	0.619	0.637	4.51
81)	T	Methyl Acetate	0.169	0.192	0.192	0.189	0.191	0.187	5.34
82)	T	Cyclohexane	0.282	0.252	0.237	0.233	0.243	0.249	7.91
83)	T	Methylcyclohexane	0.333	0.328	0.304	0.299	0.306	0.314	4.91

(#) = Out of Range

IME0425.M Wed Apr 25 13:27:59 2001 MSD_I

Instrument ID: MSD_I
Method ID: IME0425.M
Date: 04/25/2001

Average %RSD = 6.34

Refer to SW846 Method 8000B Section 7.5.1.

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\04-26-01\I8354.D Vial: 23
Acq On : 26 Apr 2001 9:06 Operator: SANGEETA
Sample : 100,100_PPB_STD,W,5.0mL,100 Inst : 5970 - In
Misc : N/A,N/A,N/A Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\IME0425.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 30 14:48:33 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	70	0.00
2	T	Dichlorodifluoromethane	0.240	0.302	-25.8	88	-0.02
3	P	Chloromethane	0.148	0.130	12.2	61	-0.01
4	C	Vinyl Chloride	0.153	0.150	2.0	68	-0.01
5	T	Bromomethane	0.194	0.201	-3.6	68	0.00
6	T	Chloroethane	0.109	0.105	3.7	62	0.00
7	T	Trichlorofluoromethane	0.421	0.556	-32.1	92	0.00
8	T	Acrolein	0.006	0.006	0.0	61	0.00
9	MC	1,1-Dichloroethene	0.206	0.221	-7.3	75	-0.02
10	T	Acetone	0.037	0.041	-10.8	81	-0.02
11	T	Carbon Disulfide	0.572	0.567	0.9	69	-0.01
12	T	Vinyl Acetate	0.748	0.749	-0.1	67	-0.01
[illegible]	T	Methylene Chloride	0.226	0.222	1.8	68	0.00
[illegible]	T	Acrylonitrile	0.029	0.031	-6.9	70	0.00
[illegible]	T	t-Butyl Alcohol(TBA)	0.010	0.012	-20.0	80	-0.01
16	T	trans-1,2-Dichloroethene	0.248	0.264	-6.5	73	0.00
17	T	Methyl-t-Butyl Ether(MTBE)	0.574	0.689	-20.0	77	-0.02
18	P	1,1-Dichloroethane	0.441	0.463	-5.0	71	-0.01
19	T	Diisopropyl Ether(DIPE)	0.764	0.713	6.7	63	0.00
20	T	cis-1,2-Dichloroethene	0.254	0.254	0.0	70	0.00
21	T	2,2-Dichloropropane	0.375	0.464	-23.7	87	-0.03
22	T	2-Butanone(MEK)	0.050	0.054	-8.0	74	0.00
23	T	Bromochloromethane	0.199	0.211	-6.0	71	-0.02
25	C	Chloroform	0.546	0.613	-12.3	76	-0.02
26	T	1,1,1-Trichloroethane	0.449	0.557	-24.1	86	-0.02
27	T	Carbon Tetrachloride	0.373	0.468	-25.5	87	-0.02
28	T	1,1-Dichloropropene	0.337	0.367	-8.9	76	-0.02
29	T	1,2-Dichloroethane(EDC)	0.351	0.450	-28.2	86	-0.02
30	S	1,2-Dichloroethane-d4	0.380	0.475	-25.0	84	-0.02
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	70	-0.01
32	M	Benzene	0.663	0.629	5.1	68	0.00
33	M	Trichloroethene	0.370	0.396	-7.0	76	-0.02
34	C	1,2-Dichloropropane	0.305	0.278	8.9	63	0.00
35	T	Dibromomethane	0.278	0.316	-13.7	77	0.00
37	T	Bromodichloromethane	0.562	0.647	-15.1	78	0.00
38	T	2-Chloroethylvinyl Ether	0.148	0.153	-3.4	70	-0.02
39	T	cis-1,3-Dichloropropene	0.463	0.482	-4.1	71	-0.02
[illegible]	T	4-Methyl-2-pentanone(MIBK)	0.171	0.176	-2.9	71	0.00
[illegible]	S	Toluene-d8	0.765	0.781	-2.1	70	0.00
42	MC	Toluene	0.482	0.469	2.7	68	-0.01
43	T	trans-1,3-Dichloropropene	0.390	0.445	-14.1	76	0.00
44	T	1,1,2-Trichloroethane	0.216	0.227	-5.1	71	0.00
45	T	Tetrachloroethene	0.449	0.491	-9.4	77	0.00
46	T	1,3-Dichloropropane	0.393	0.426	-8.4	74	-0.02

47	T	2-Hexanone	0.115	0.124	-7.8	72	0.00
48	T	Dibromochloromethane	0.431	0.514	-19.3	78	-0.02
49	T	1,2-Dibromoethane(EDB)	0.342	0.393	-14.9	79	-0.02
50	I	Chlorobenzene-d5	1.000	1.000	0.0	72	-0.01
51	MP	Chlorobenzene	1.015	1.051	-3.5	73	-0.01
[illegible]	T	1,1,1,2-Tetrachloroethane	0.557	0.622	-11.7	76	-0.02
[illegible]	C	Ethylbenzene	1.433	1.498	-4.5	72	-0.02
54	T	m,p-Xylene	0.506	0.515	-1.8	73	-0.02
55	T	o-Xylene	0.506	0.507	-0.2	71	-0.02
56	T	Styrene	0.825	0.876	-6.2	75	-0.02
57	P	Bromoform	0.518	0.641	-23.7	82	-0.01
58	T	Isopropylbenzene	1.324	1.394	-5.3	75	-0.01
59	S	Bromofluorobenzene	0.911	1.028	-12.8	80	-0.01
60	P	1,1,2,2-Tetrachloroethane	0.373	0.427	-14.5	77	-0.03
61	T	Bromobenzene	0.540	0.606	-12.2	76	-0.01
62	T	1,2,3-Trichloropropane	0.349	0.409	-17.2	80	-0.01
63	T	n-Propylbenzene	1.591	1.768	-11.1	80	0.00
64	T	2-Chlorotoluene	1.174	1.276	-8.7	76	-0.02
65	T	1,3,5-Trimethylbenzene	1.092	1.185	-8.5	78	0.00
66	T	4-Chlorotoluene	1.310	1.432	-9.3	77	-0.02
67	T	tert-Butylbenzene	1.052	1.217	-15.7	82	0.00
68	T	1,2,4-Trimethylbenzene	1.086	1.198	-10.3	76	-0.02
69	T	sec-Butylbenzene	1.199	1.349	-12.5	80	0.00
70	T	1,3-Dichlorobenzene	0.702	0.813	-15.8	80	-0.01
71	T	4-Isopropyltoluene	0.979	1.145	-17.0	83	-0.03
72	T	1,4-Dichlorobenzene	0.694	0.833	-20.0	83	-0.03
73	T	n-Butylbenzene	0.861	1.027	-19.3	83	-0.02
74	T	1,2-Dichlorobenzene	0.512	0.625	-22.1	84	-0.02
75	T	1,2-Dibromo-3-chloropropane	0.028	0.030	-7.1	72	-0.02
76	T	1,2,4-Trichlorobenzene	0.113	0.078	31.0	50	-0.02
77	T	Hexachlorobutadiene	0.070	0.081	-15.7	82	0.00
[illegible]	T	Naphthalene	0.157	0.079	49.7	37	0.00
79	T	1,2,3-Trichlorobenzene	0.075	0.046	38.7	51	-0.02
80	T	1,1,2-Trichloro-1,2,2-trifl	0.637	0.720	-13.0	82	-0.02
81	T	Methyl Acetate	0.187	0.187	0.0	69	0.00
82	T	Cyclohexane	0.249	0.242	2.8	73	-0.02
83	T	Methylcyclohexane	0.314	0.305	2.9	72	-0.02

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

I8334.D IME0425.M Mon Apr 30 15:25:10 2001 MSD_I

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/24/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD-BLK	SOIL	J9312.D	101	100	96
BLK-SPK	MEOH	J9313.D	104	101	98
2549-011	MEOH	J9314.D	96	88	79
2549-012	MEOH	J9315.D	98	90	80
2435-013	MEOH	J9316.D	101	88	80
2435-001	MEOH	J9317.D	91	79	73
2435-002	MEOH	J9318.D	91	76	72
2435-003	MEOH	J9319.D	89	77	72
2435-004	MEOH	J9320.D	92	78	73
2435-005	MEOH	J9321.D	95	79	74
2435-011	MEOH	J9322.D	86	67	68
2428-001	SOLID	J9323.D	101	101	96
2428-002	SOLID	J9324.D	102	100	97
2428-003	SOLID	J9325.D	102	101	96
2428-004	SOLID	J9326.D	102	101	96
2428-005	SOLID	J9327.D	102	100	96
2428-006	SOLID	J9328.D	101	100	97
2428-007	SOLID	J9329.D	101	100	97
2445-004	MEOH	J9330.D	102	97	85
2445-001	MEOH	J9331.D	95	80	75
2549-012MS	MEOH	J9332.D	91	83	74
2549-012MSD	MEOH	J9333.D	96	88	78

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	57-130	43-133
SMC2 = Toluene-d8	50 ppb	27-142	39-137
SMC3 = Bromofluorobenzene	50 ppb	23-127	23-145

Column to be used to flag recovery values

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/27/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD-BLK	SOIL	J9450.D	97	99	92
2435-011DIL	MEOH	J9451.D	94	90	74
2544-001	MEOH	J9453.D	101	99	82
2544-002	MEOH	J9454.D	93	89	75
2544-003	MEOH	J9455.D	95	92	77
2589-001	MEOH	J9456.D	96	92	77
2589-002	MEOH	J9457.D	97	94	79
2532-001	MEOH	J9458.D	98	95	79
2532-002	MEOH	J9459.D	91	86	73
2532-003	MEOH	J9460.D	96	91	76
2532-004	MEOH	J9461.D	94	88	74
2532-005	MEOH	J9462.D	91	86	74
2532-006	MEOH	J9463.D	90	86	73
2478-008	MEOH	J9464.D	124	129	94
2478-006	MEOH	J9465.D	90	95	115
2571-001	MEOH	J9466.D	106	92	82
2508-005	MEOH	J9467.D	110	95	90
2544-003MS	MEOH	J9468.D	94	87	77
2544-003MSD	MEOH	J9469.D	98	88	78
BLK-SPK	MEOH	J9471.D	89	81	72

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	57-130	43-133
SMC2 = Toluene-d8	50 ppb	27-142	39-137
SMC3 = Bromofluorobenzene	50 ppb	23-127	23-145

Column to be used to flag recovery values

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/26/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD_BLK	SOIL	I8359.D	113	104	112
2369-015	SOLID	I8360.D	114	105	109
2369-016	SOLID	I8361.D	115	102	111
2369-017	SOLID	I8362.D	118	102	113
2369-018	SOLID	I8363.D	115	102	113
2369-019	SOLID	I8364.D	122	106	106
2369-020	SOLID	I8365.D	118	105	109
2369-021	SOLID	I8366.D	118	104	110
2369-010	SOLID	I8367.D	120	105	108
BLK_SPK	MEOH	I8368.D	123	103	112
2435-012	MEOH	I8369.D	130	95	95
2593-002MS	MEOH	I8370.D	116	100	106
2593-002MSD	MEOH	I8371.D	118	103	105
2593-002DIL	SOIL	I8372.D	117	104	110
2593-003DIL	SOIL	I8373.D	114	103	110
2566-001	SOIL	I8374.D	119	104	109
2553-005DIL	SOIL	I8375.D	117	104	111

	Concentration	Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	19-146	69-141
SMC2 = Toluene-d8	50 ppb	18-168	93-111
SMC3 = Bromofluorobenzene	50 ppb	16-145	84-131

Column to be used to flag recovery values

MEOH VOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2549-012

Batch No.: JM0084

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	55.0	110	56 - 120
Benzene	50.0	0.0	54.4	109	64 - 126
Trichloroethene	50.0	0.0	50.4	101	66 - 120
Toluene	50.0	0.0	52.9	106	65 - 122
Chlorobenzene	50.0	0.0	51.1	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	50.9	102	8	11	56 - 120
Benzene	0.0	51.2	102	7	10	64 - 126
Trichloroethene	0.0	47.1	94	7	9	66 - 120
Toluene	0.0	50.3	101	5	9	65 - 122
Chlorobenzene	0.0	47.3	95	7	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: 2593-002

Batch No.: IM0084

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	41.1	82	48 - 149
Benzene	50.0	0.0	43.9	88	59 - 149
Trichloroethene	50.0	93.8	152.2	117	55 - 143
Toluene	50.0	0.0	45.3	91	54 - 150
Chlorobenzene	50.0	0.0	47.1	94	55 - 144

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD #	% REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	0.0	42.7		85	4	17	48 - 149
Benzene	0.0	44.3		89	1	15	59 - 149
Trichloroethene	93.8	157.8		128	9	15	55 - 143
Toluene	0.0	47.3		95	4	16	54 - 150
Chlorobenzene	0.0	46.5		93	1	15	55 - 144

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 LABORATORY CONTROL SAMPLE RECOVERY

Matrix spike Lab sample ID: BLK SPK

Batch No.: IM0084

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	43.0	86	70 - 130
Benzene	50.0	0.0	44.1	88	70 - 130
Trichloroethene	50.0	0.0	50.6	101	70 - 130
Toluene	50.0	0.0	47.7	95	70 - 130
Chlorobenzene	50.0	0.0	48.3	97	70 - 130

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 __5__ outside limits

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J9259.D

Date Analyzed: 04/23/2001

Instrument ID: MSD_J

Time Analyzed: 11:44

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	544613	6.38	800616	7.21	677227	10.58
	UPPER LIMIT	1089226	6.88	1601232	7.71	1354454	11.08
	LOWER LIMIT	272306.5	5.88	400308	6.71	338613.5	10.08
	LAB SAMPLE ID						
01	STD-20PPB	559545	6.38	815576	7.21	682412	10.58
02	STD-50PPB	548517	6.38	797523	7.21	669552	10.58
03	STD-150PPB	529742	6.38	787281	7.21	671976	10.58
04	STD-200PPB	515903	6.38	775760	7.21	674704	10.58
05	METHOD-BLK	522230	6.38	751229	7.21	625266	10.58
06	2517-001	518603	6.38	751159	7.21	649126	10.58
07	2522-001	498630	6.38	732212	7.21	645737	10.58
08	2557-001	527843	6.38	766467	7.21	668999	10.58
09	2470-001	494621	6.38	720803	7.21	629912	10.58
10	2520-001	525767	6.38	762652	7.21	642893	10.58
11	2472-001	522732	6.38	759889	7.21	656031	10.58
12	2472-002	518750	6.38	755862	7.21	655329	10.58
13	2517-001MS	490080	6.38	722107	7.21	632167	10.58
14	2517-001MSD	464912	6.38	687328	7.21	604466	10.58
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.

FORM 8

000106

2714

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J9310.D

Date Analyzed: 04/24/2001

Instrument ID: MSD_J

Time Analyzed: 16:26

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	487828	6.38	726739	7.21	621375	10.58
	UPPER LIMIT	975656	6.88	1453478	7.71	1242750	11.08
	LOWER LIMIT	243914	5.88	363369.5	6.71	310687.5	10.08
	LAB SAMPLE ID						
01	METHOD-BLK	484137	6.38	704529	7.21	589293	10.58
02	BLK-SPK	486949	6.38	714464	7.21	597540	10.58
03	2549-011	442102	6.38	650399	7.21	565769	10.58
04	2549-012	448365	6.38	665539	7.21	585506	10.58
05	2435-013	466964	6.38	682073	7.21	600588	10.58
06	2435-001	460137	6.38	678655	7.21	592450	10.58
07	2435-002	478455	6.38	703842	7.21	613933	10.58
08	2435-003	472139	6.38	694217	7.21	607023	10.58
09	2435-004	476459	6.38	705906	7.21	615426	10.58
10	2435-005	459475	6.38	686821	7.21	603241	10.58
11	2435-011	490613	6.38	720542	7.21	629198	10.58
12	2428-001	497897	6.38	730389	7.21	623830	10.58
13	2428-002	494819	6.38	726840	7.21	619594	10.58
14	2428-003	497858	6.38	731347	7.21	621740	10.58
15	2428-004	492861	6.38	728417	7.21	618780	10.58
16	2428-005	496906	6.38	729840	7.21	628849	10.58
17	2428-006	487831	6.38	714586	7.21	602979	10.58
18	2428-007	493554	6.38	726057	7.21	616129	10.58
19	2445-004	455298	6.38	667029	7.21	589800	10.58
20	2445-001	482483	6.38	709130	7.21	631394	10.58
21	2549-012MS	451279	6.38	662778	7.21	578741	10.58
22	2549-012MSD	458532	6.38	677383	7.21	594230	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): J9448.D

Instrument ID: MSD_J

Date Analyzed: 04/27/2001

Time Analyzed: 14:43

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	468378	6.38	668551	7.21	571234	10.58
	UPPER LIMIT	936756	6.88	1337102	7.71	1142468	11.08
	LOWER LIMIT	234189	5.88	334275.5	6.71	285617	10.08
	LAB SAMPLE ID						
01	METHOD-BLK	461810	6.38	665647	7.21	545321	10.58
02	2435-011DIL	405450	6.38	603502	7.21	547682	10.57
03	2544-001	390566	6.38	579062	7.21	514203	10.58
04	2544-002	406994	6.38	601715	7.21	536508	10.57
05	2544-003	390619	6.38	577127	7.21	522441	10.58
06	2589-001	399440	6.38	593216	7.21	532143	10.58
07	2589-002	406951	6.38	600251	7.21	542977	10.57
08	2532-001	414046	6.38	611665	7.21	546016	10.57
09	2532-002	419473	6.38	619478	7.21	550841	10.57
10	2532-003	414140	6.38	608903	7.21	544865	10.58
11	2532-004	398359	6.38	590978	7.21	530113	10.57
12	2532-005	418710	6.38	614538	7.21	550355	10.58
13	2532-006	440690	6.38	650563	7.21	579046	10.57
14	2478-008	404024	6.38	596009	7.21	535604	10.57
15	2478-006	425246	6.38	633950	7.21	598186	10.57
16	2571-001	402558	6.38	591901	7.21	535800	10.57
17	2508-005	412440	6.38	605151	7.21	542900	10.58
18	2544-003MS	429275	6.38	624385	7.21	551863	10.58
19	2544-003MSD	424117	6.38	620581	7.21	550042	10.58
20	BLK-SPK	453959	6.38	657960	7.21	585176	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.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): I8334.D

Date Analyzed: 04/25/2001

Instrument ID: MSD_I

Time Analyzed: 10:16

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	2201812	9.56	2004561	10.79	1291351	15.82
	UPPER LIMIT	4403624	10.06	4009122	11.29	2582702	16.32
	LOWER LIMIT	1100906	9.06	1002280.5	10.29	645675.5	15.32
	LAB SAMPLE ID						
01	20_PPB_STD	2295489	9.57	2059228	10.83	1373035	15.85
02	50_PPB_STD	2260829	9.59	2029945	10.83	1290580	15.84
03	150_PPB_STD	2260909	9.57	2011571	10.81	1321355	15.81
04	200_PPB_STD	2236111	9.55	1956268	10.80	1253208	15.81
05	METHOD_BLK	1867553	9.53	1626329	10.76	1092949	15.78
06	2369-009	1854056	9.53	1606495	10.78	1062293	15.81
07	2369-013	1789223	9.47	1516702	10.71	919356	15.75
08	2369-014	1763214	9.51	1509422	10.75	1019886	15.78
09	BLK_SPK	1692704	9.53	1455171	10.76	1008930	15.79
10	BLK_SPKD	1715422	9.52	1443632	10.78	972392	15.79
11							
12							
13							
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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): I8354.D

Date Analyzed: 04/26/2001

Instrument ID: MSD_I

Time Analyzed: 9:06

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	1540245	9.55	1410795	10.78	923587	15.80
	UPPER LIMIT	3080490	10.05	2821590	11.28	1847174	16.30
	LOWER LIMIT	770122.5	9.05	705397.5	10.28	461793.5	15.30
	LAB SAMPLE ID						
01	METHOD_BLK	1538923	9.56	1288802	10.79	890973	15.80
02	2369-015	1520870	9.53	1279522	10.76	918912	15.77
03	2369-016	1452791	9.56	1236405	10.80	870942	15.80
04	2369-017	1421244	9.55	1235084	10.79	867651	15.81
05	2369-018	1441533	9.55	1215356	10.79	839031	15.81
06	2369-019	1364994	9.56	1161096	10.79	837557	15.82
07	2369-020	1370291	9.56	1136435	10.80	803135	15.83
08	2369-021	1379484	9.56	1141741	10.81	821380	15.82
09	2369-010	1341088	9.56	1133858	10.80	786887	15.82
10	BLK_SPK	1289407	9.56	1103681	10.80	787873	15.82
11	2435-012	1228513	9.55	1058111	10.81	809140	15.82
12	2593-002MS	1391115	9.56	1157914	10.81	803673	15.83
13	2593-002MSD	1350689	9.56	1166856	10.82	803680	15.85
14	2593-002	1328019	9.56	1119111	10.80	791746	15.85
15	2593-003	1361613	9.57	1111871	10.81	762347	15.84
16	2566-001	1306682	9.57	1064339	10.81	743110	15.84
17	2553-005DIL	1299182	9.56	1093938	10.79	740869	15.82
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 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 #
2435-001	S-58	104133	4/13/01	106.2	116.6	10.4	CA706	LS182
2435-002	S-59	104132	4/13/01	106.6	116.0	9.4	CA706	LS182
2435-003	S-60	104134	4/13/01	105.9	116.7	10.8	CA706	LS182
2435-004	S-61	104135	4/13/01	106.1	117.2	11.1	CA706	LS182
2435-005	S-62	104128	4/13/01	105.4	115.8	10.5	CA706	LS182
2435-011	S-68A	104129	4/13/01	106.7	116.2	9.6	CA706	LS182
2435-013	TB	104136	4/13/01	106.6	116.6	10.0	CA706	LS182

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\04-24-01\J9317.D
Acq On : 24 Apr 2001 19:50
Sample : S-58,2435-001,M,0.042g,16.8
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 24 20:09:50 2001

Vial: 9
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 23 13:08:03 2001
Response via : Initial Calibration
DataAcq Meth : JME0423

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	460137	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	678655	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	592450	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	238150	45.53	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 91.06%			
41) Toluene-d8	8.89	98	542544	39.72	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 79.44%			
59) Bromofluorobenzene	11.98	95	298020	36.69	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 73.38%			
Target Compounds						Qvalue
32) Benzene	6.79	78	33741	2.21	UG	# 100

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

000112

Z720

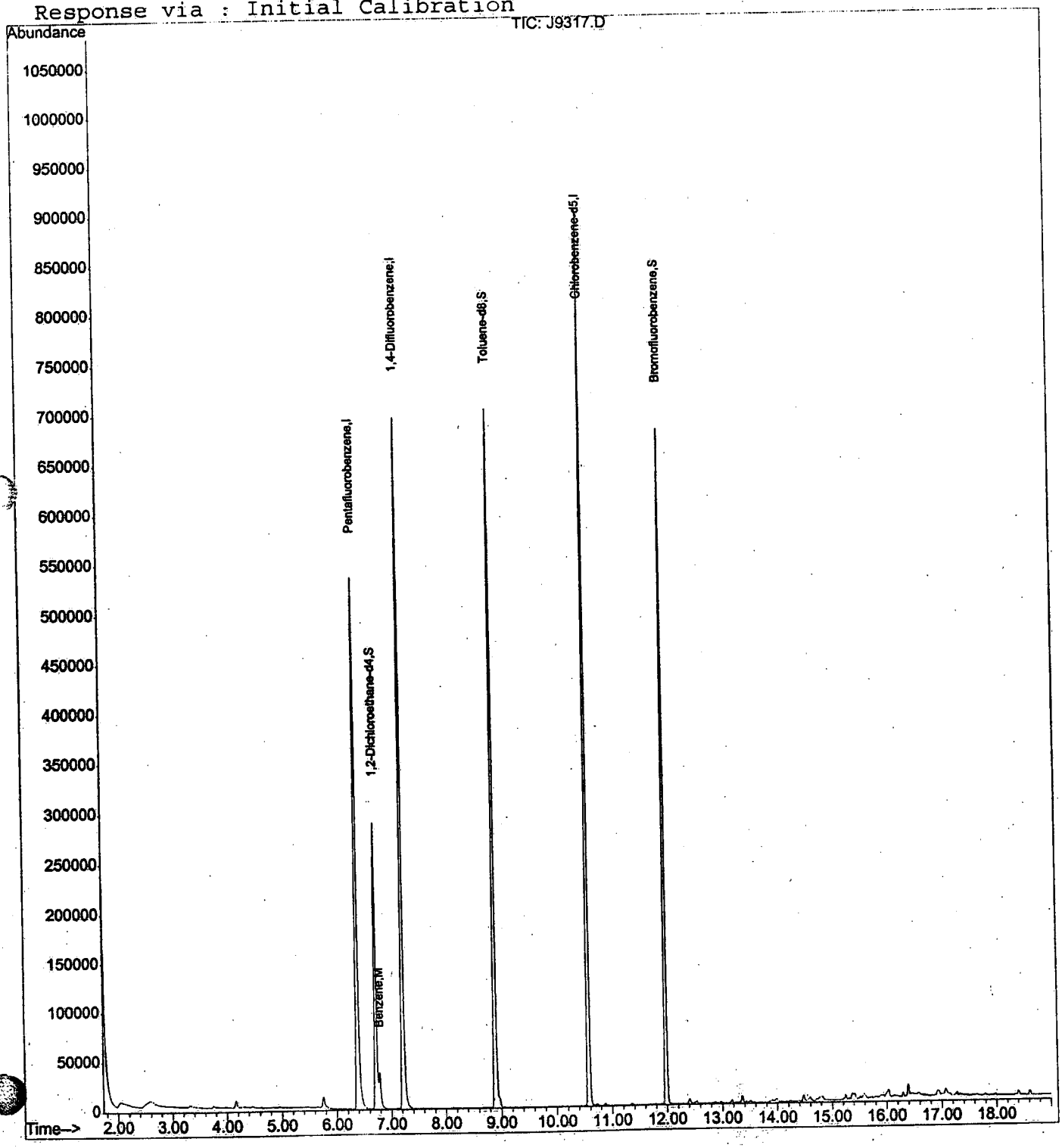
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9317.D
Acq On : 24 Apr 2001 19:50
Sample : S-58,2435-001,M,0.042g,16.8
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 25 9:18 2001

Vial: 9
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 25 09:04:08 2001
Response via : Initial Calibration



00113

2721

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9317.D
Acq On : 24 Apr 2001 19:50
[redacted]mple : S-58,2435-001,M,0.042g,16.8
[redacted]sc : ENVTACT/ORBIS,4/16/01,4/17/01,1
MS Integration Params: Lscint.p

Vial: 9
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0423.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	2.576	71	84	100	rBV6	5876	57595	3.29%	0.691%
2	5.755	393	398	414	rVB	11789	39838	2.28%	0.478%
3	6.383	453	460	483	rVB	535207	1317046	75.27%	15.803%
4	6.717	485	493	498	rBV	289281	656268	37.51%	7.874%
5	6.788	498	500	518	rVB	36799	80467	4.60%	0.965%
6	7.213	536	542	562	rVB	695965	1533629	87.65%	18.401%
[redacted]	8.894	698	708	729	rVB	703513	1511599	86.39%	18.137%
[redacted]	10.575	867	874	884	rBV	901616	1749704	100.00%	20.994%
[redacted]	11.983	1005	1013	1026	rBV	681046	1299107	74.25%	15.587%
[redacted]	14.798	1285	1291	1301	rVB4	3656	18528	1.06%	0.222%
11	16.033	1406	1413	1418	rVB6	7576	24365	1.39%	0.292%
12	16.388	1443	1448	1452	rBV	12862	27564	1.58%	0.331%
13	16.924	1497	1501	1507	rBV7	4867	18585	1.06%	0.223%

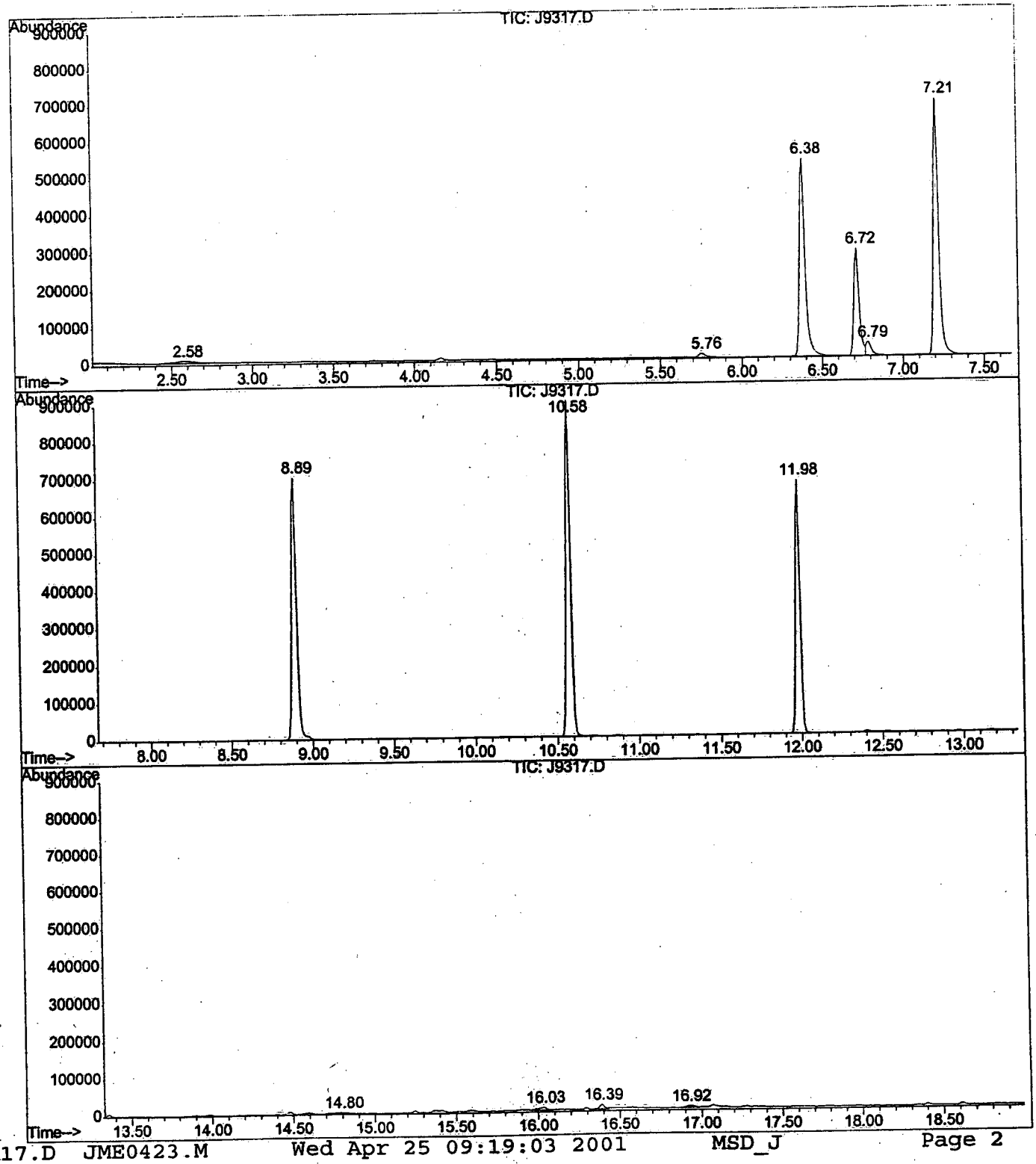
Sum of corrected areas: 8334295

2722

00114

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-24-01\J9317.D
Operator : XINGFANG WANG
Acquired : 24 Apr 2001 19:50 using AcqMethod JME0423
Instrument : MSD_J
Sample Name: S-58,2435-001,M,0.042g,16.8
Misc Info : ENVTACT/ORBIS,4/16/01,4/17/01,1
Vial Number: 9
Quant File :JME0423.RES (RTE Integrator)



2723

000115

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9318.D
Acq On : 24 Apr 2001 20:19
Sample : S-59,2435-002,M,0.038g,17.1
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 24 20:38:59 2001

Vial: 10
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0423.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 23 13:08:03 2001
Response via : Initial Calibration
DataAcq Meth : JME0423

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	478455	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	703842	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	613933	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	246857	45.39	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 90.78%			
41) Toluene-d8	8.89	98	539337	38.07	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 76.14%			
59) Bromofluorobenzene	11.98	95	304224	36.14	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 72.28%			

Target Compounds Qvalue

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

2724

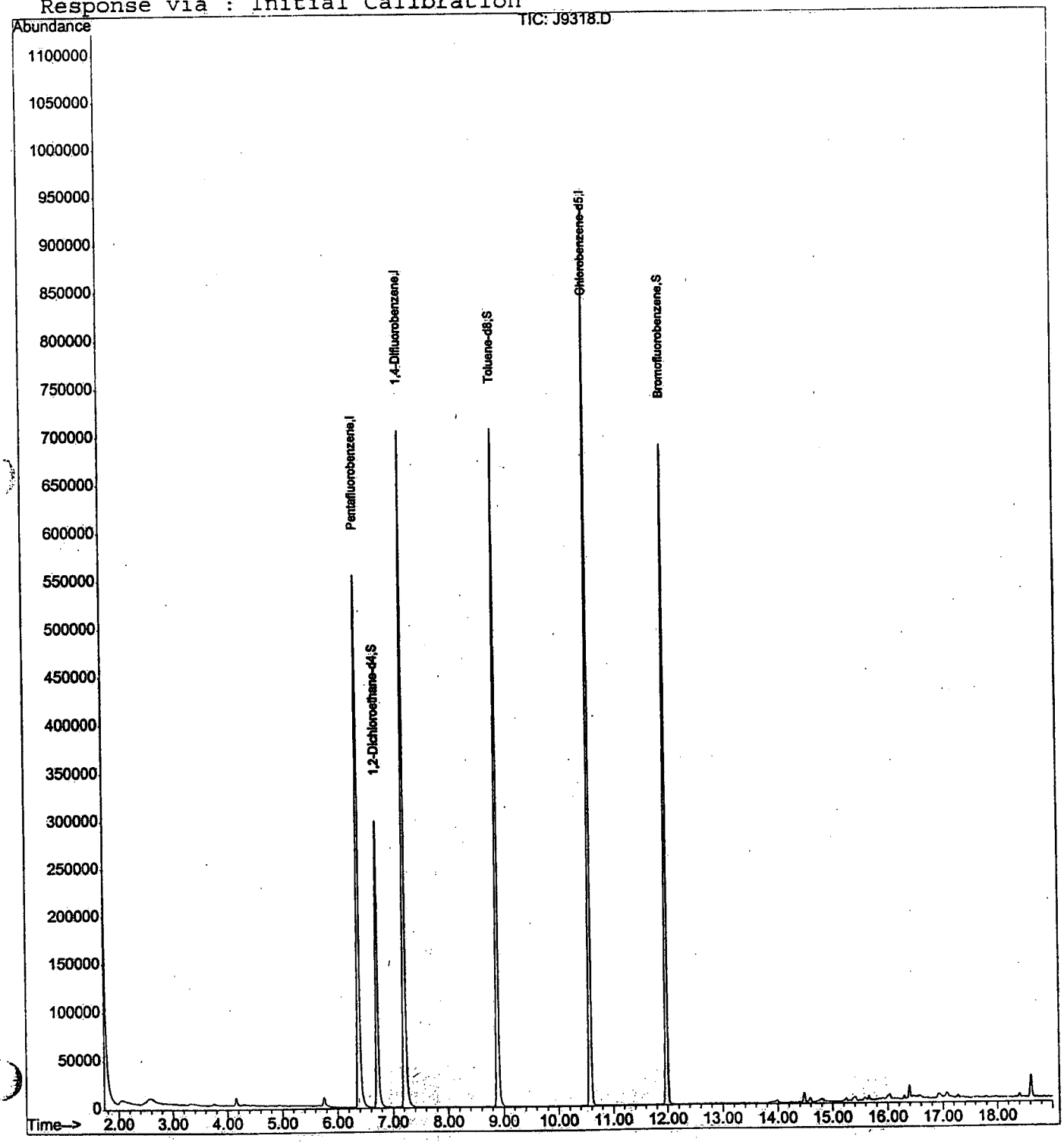
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9318.D
Acq On : 24 Apr 2001 20:19
Sample : S-59,2435-002,M,0.038g,17.1
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 25 9:19 2001

Vial: 10
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 25 09:04:08 2001
Response via : Initial Calibration



2725

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9318.D
Acq On : 24 Apr 2001 20:19
Sample : S-59,2435-002,M,0.038g,17.1
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
ALS Integration Params: Lscint.p

Vial: 10
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0423.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	2.586	77	85	107	rVB7	5380	48618	2.68%	0.570%
2	4.155	236	240	248	rBV	8769	22722	1.25%	0.266%
3	5.755	393	398	410	rVB	10598	34988	1.93%	0.410%
4	6.383	453	460	482	rVB	554443	1370509	75.60%	16.059%
5	6.717	487	493	514	rVB	299147	688055	37.95%	8.062%
6	7.213	536	542	563	rBV	704828	1585337	87.45%	18.576%
7	8.894	701	708	725	rVB	705780	1492932	82.35%	17.493%
8	10.575	866	874	886	rBV	935607	1812909	100.00%	21.243%
9	11.983	1004	1013	1031	rBV	688213	1332403	73.50%	15.612%
10	13.988	1191	1211	1218	rBV2	3142	18781	1.04%	0.220%
11	14.474	1254	1259	1264	rBV	10194	23478	1.30%	0.275%
12	16.388	1442	1448	1452	rBV	14478	31670	1.75%	0.371%
13	16.935	1497	1502	1508	rBV9	4365	18779	1.04%	0.220%
14	18.616	1663	1668	1674	rBV	23144	53046	2.93%	0.622%

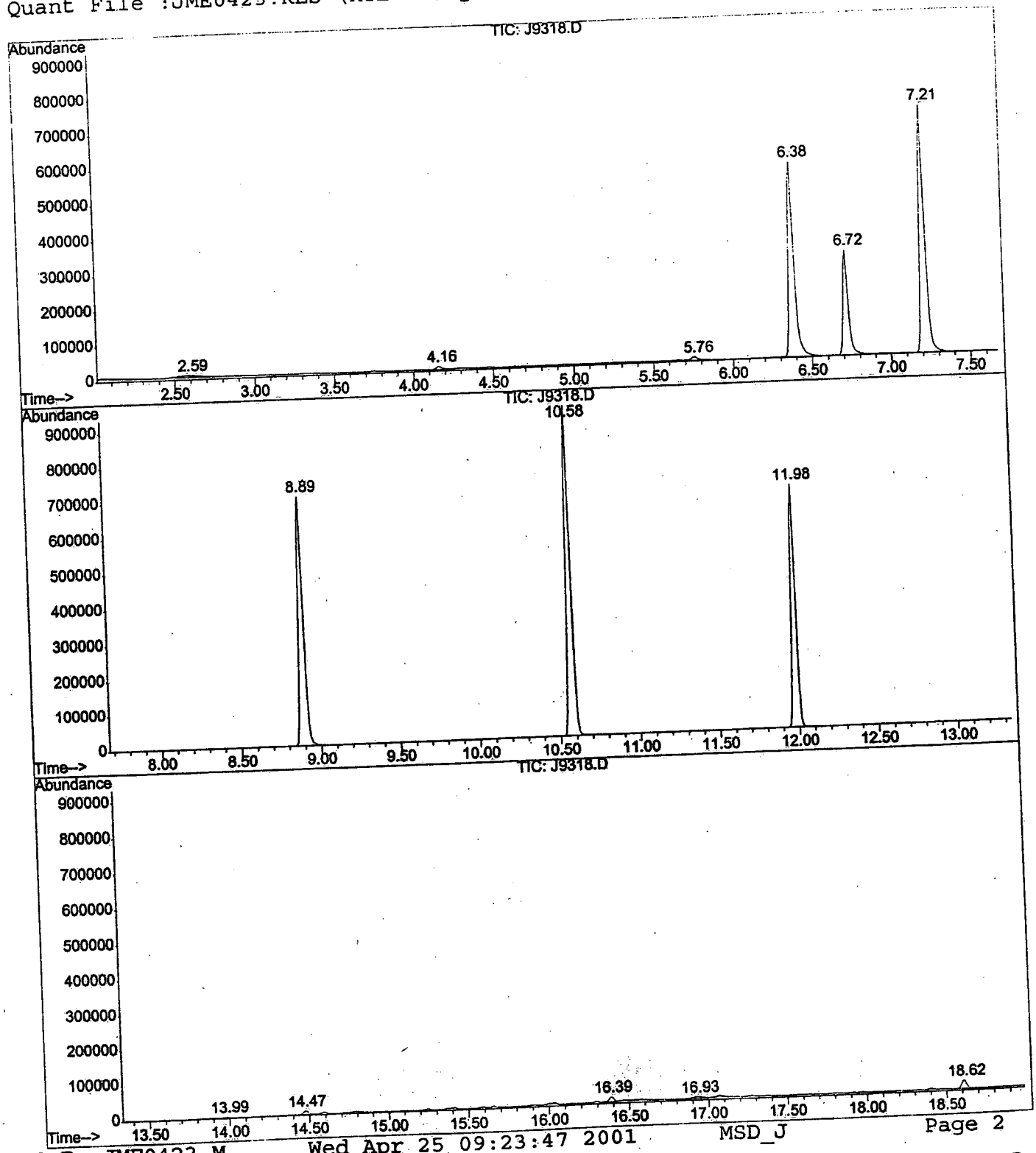
Sum of corrected areas: 8534227

000118

2726

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-24-01\J9318.D
Operator : XINGFANG WANG
Acquired : 24 Apr 2001 20:19 using AcqMethod JME0423
Instrument : MSD_J
Sample Name: S-59,2435-002,M,0.038g,17.1
Misc Info : ENVTACT/ORBIS,4/16/01,4/17/01,1
Vial Number: 10
Quant File :JME0423.RES (RTE Integrator)



000119

2727

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9319.D Vial: 11
Acq On : 24 Apr 2001 20:49 Operator: XINGFANG WANG
Sample : S-60,2435-003,M,0.043g,17.5 Inst : MSD_J
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1 Multiplr: 1.00
ALS Integration Params: LSCINT.P
Quant Time: Apr 24 21:08:08 2001 Quant Results File: JME0423.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 23 13:08:03 2001
Response via : Initial Calibration
DataAcq Meth : JME0423

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	472139	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	694217	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	607023	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	239114	44.55	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 89.10%			
41) Toluene-d8	8.89	98	535277	38.31	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 76.62%			
59) Bromofluorobenzene	11.98	95	297566	35.75	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 71.50%			
Target Compounds						Qvalue
32) Benzene	6.79	78	131728	8.45	UG	# 100
42) Toluene	8.97	92	23159	2.31	UG	# 100
53) Ethylbenzene	10.74	91	8839	0.45	UG	# 68
54) m,p-Xylene	10.87	106	6438	0.86	UG	# 49
55) o-Xylene	11.34	106	4405	0.56	UG	# 47

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

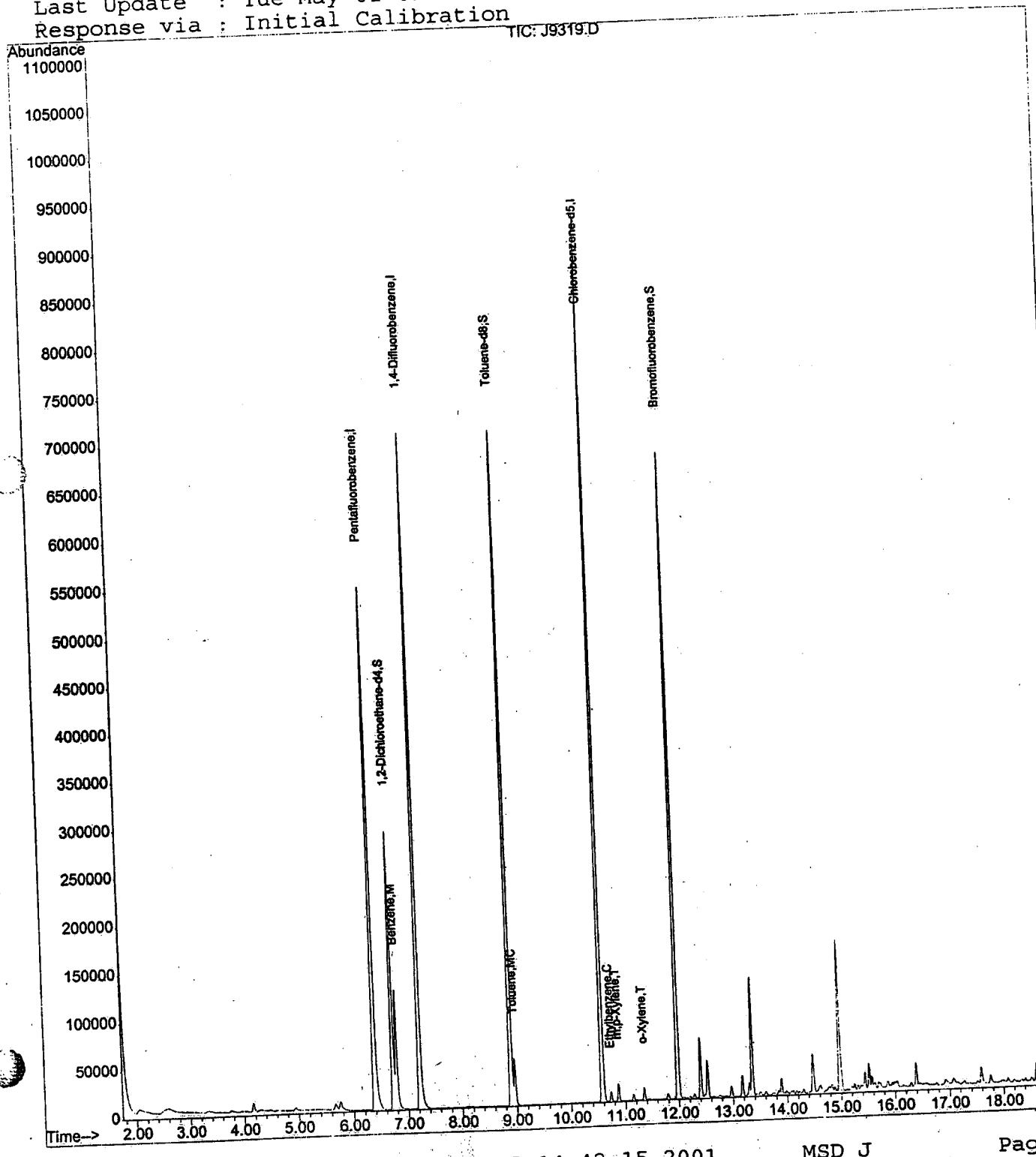
Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9319.D
Acq On : 24 Apr 2001 20:49
Sample : S-60,2435-003,M,0.043g,17.5
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
MS Integration Params: LSCINT.P
Quant Time: May 2 14:41 2001

Vial: 11
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Tue May 01 09:49:30 2001
Response via : Initial Calibration



2729

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9319.D
Acq On : 24 Apr 2001 20:49
Sample : S-60,2435-003,M,0.043g,17.5
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
S Integration Params: Lscint.p

Vial: 11
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0423.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	4.155	237	240	248	rVB	9066	21072	1.17%	0.210%
2	5.664	383	389	394	rBV2	6283	18363	1.02%	0.183%
3	5.755	394	398	414	rVB	9694	36352	2.03%	0.362%
4	6.383	452	460	484	rVB	546412	1354193	75.47%	13.472%
5	6.717	484	493	497	rBV	290463	647852	36.11%	6.445%
6	6.788	497	500	516	rVB	125801	296562	16.53%	2.950%
[redacted]	7.213	536	542	562	rVB	705197	1567042	87.33%	15.589%
[redacted]	8.894	701	708	713	rBV	704362	1473647	82.13%	14.660%
[redacted]	8.965	713	715	725	rVB	49850	95632	5.33%	0.951%
10	10.575	866	874	885	rBV	924940	1794339	100.00%	17.851%
11	10.727	885	889	895	rVB	10440	20372	1.14%	0.203%
12	10.869	898	903	909	rBV	18949	36902	2.06%	0.367%
13	11.345	945	950	955	rBV	13583	25390	1.42%	0.253%
14	11.983	1001	1013	1020	rBV	675118	1301083	72.51%	12.944%
15	12.398	1048	1054	1059	rVV	64251	131096	7.31%	1.304%
16	12.530	1060	1067	1072	rVB	39683	85173	4.75%	0.847%
17	12.965	1105	1110	1118	rVB2	11456	24083	1.34%	0.240%
18	13.168	1125	1130	1136	rBV	21992	46331	2.58%	0.461%
19	13.299	1136	1143	1145	rVV	14389	28793	1.60%	0.286%
20	13.360	1145	1149	1153	rVB	124593	243974	13.60%	2.427%
21	13.897	1198	1202	1206	rVB	16131	33430	1.86%	0.333%
22	14.474	1246	1259	1265	rBV	41856	103147	5.75%	1.026%
23	14.616	1265	1273	1279	rVB5	6876	27005	1.51%	0.269%
24	14.768	1279	1288	1291	rBV7	5547	20141	1.12%	0.200%
25	14.970	1302	1308	1317	rVB	158034	342836	19.11%	3.411%
26	15.446	1350	1355	1358	rVB2	17082	32069	1.79%	0.319%
27	15.517	1358	1362	1365	rBV	26547	45092	2.51%	0.449%
28	15.689	1376	1379	1390	rBV7	6487	22540	1.26%	0.224%
[redacted]	16.388	1443	1448	1452	rBV	25339	49930	2.78%	0.497%
[redacted]	16.924	1497	1501	1509	rBV6	5300	19758	1.10%	0.197%
31	17.583	1562	1566	1579	rVB2	17457	41541	2.32%	0.413%

2730

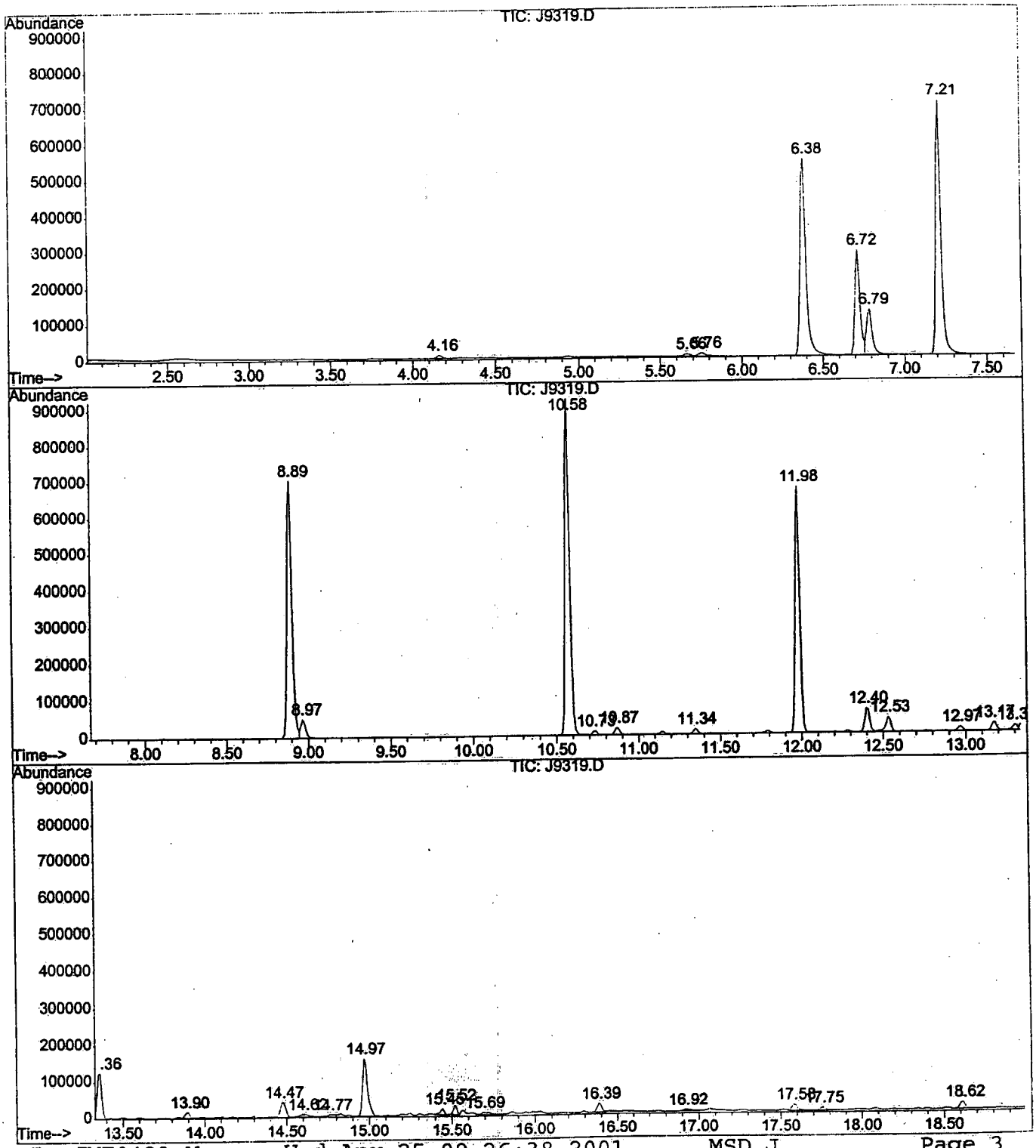
000122

32	17.755	1579	1583	1590	rBV7	8693	20074	1.12%	0.200%
33	18.616	1663	1668	1674	rVB	19867	46196	2.57%	0.460%

Sum of corrected areas: 10052010

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-24-01\J9319.D
Operator : XINGFANG WANG
Acquired : 24 Apr 2001 20:49 using AcqMethod JME0423
Instrument : MSD_J
Sample Name: S-60,2435-003,M,0.043g,17.5
Misc Info : ENVTACT/ORBIS,4/16/01,4/17/01,1
Vial Number: 11
Quant File :JME0423.RES (RTE Integrator)



2732

000124

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9319.D
Acq On : 24 Apr 2001 20:49
Sample : S-60,2435-003,M,0.043g,17.5
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
S Integration Params: Lscint.p

Vial: 11
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

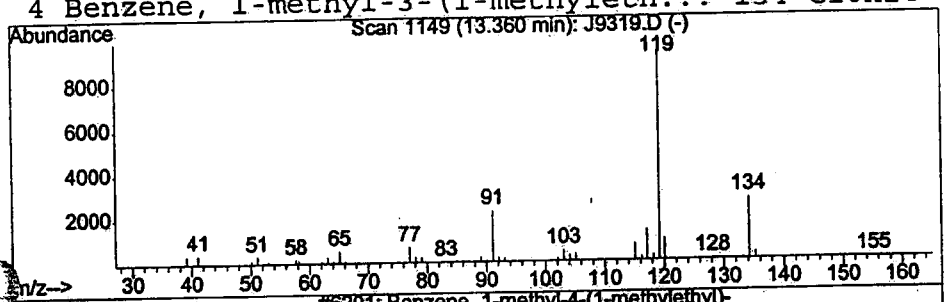
Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

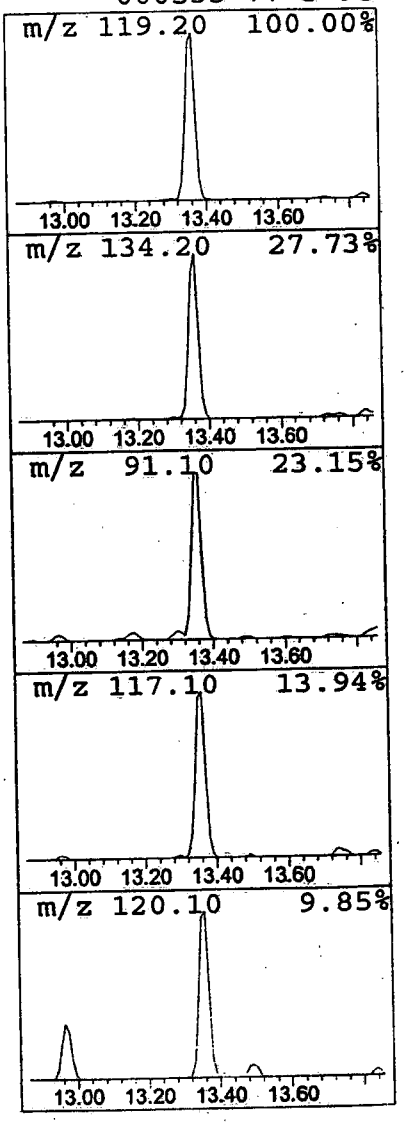
****

Peak Number 1 Substituted benzene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.36	6.80 UG	243974	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	97
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	95
4	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	95





7733

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9319.D
Acq On : 24 Apr 2001 20:49
Sample : S-60,2435-003,M,0.043g,17.5
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
MS Integration Params: Lscint.p

Vial: 11
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

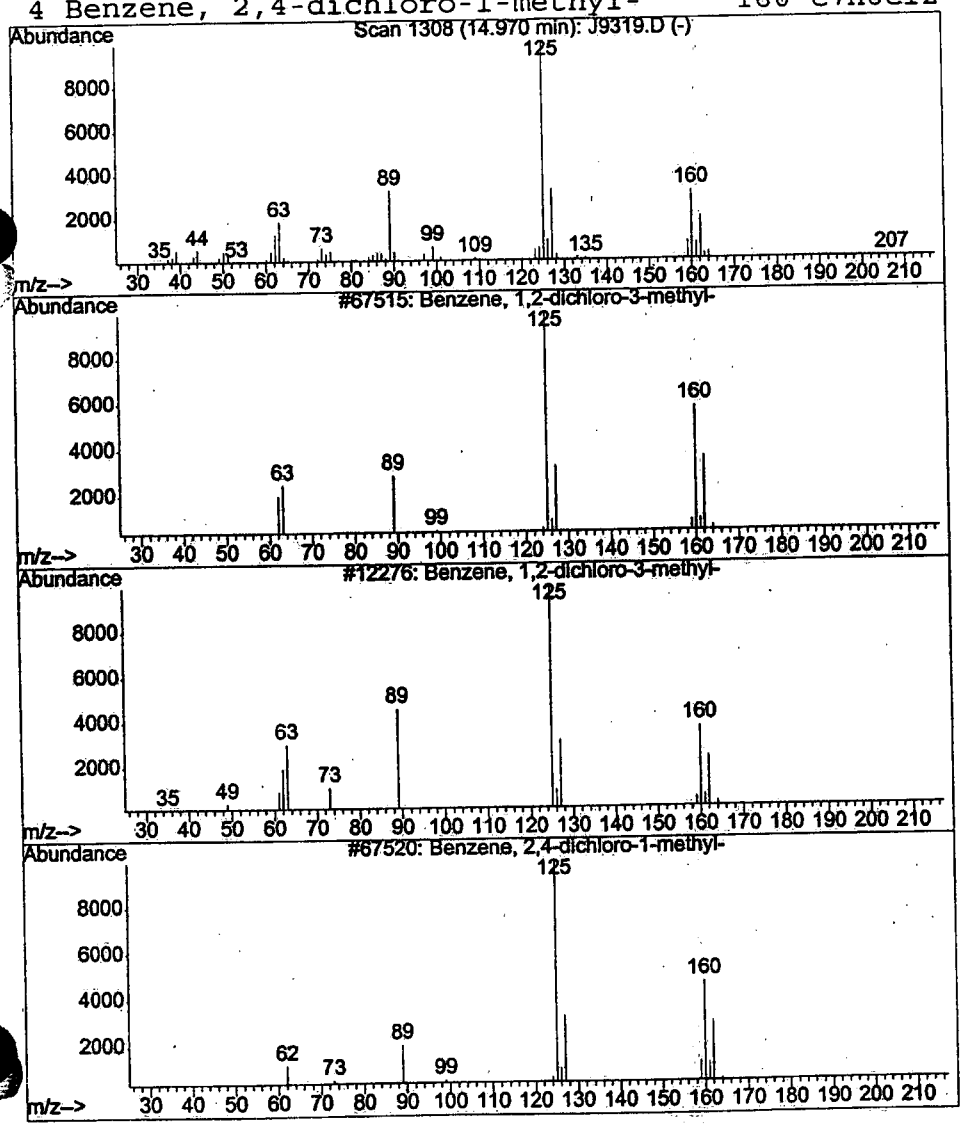
Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

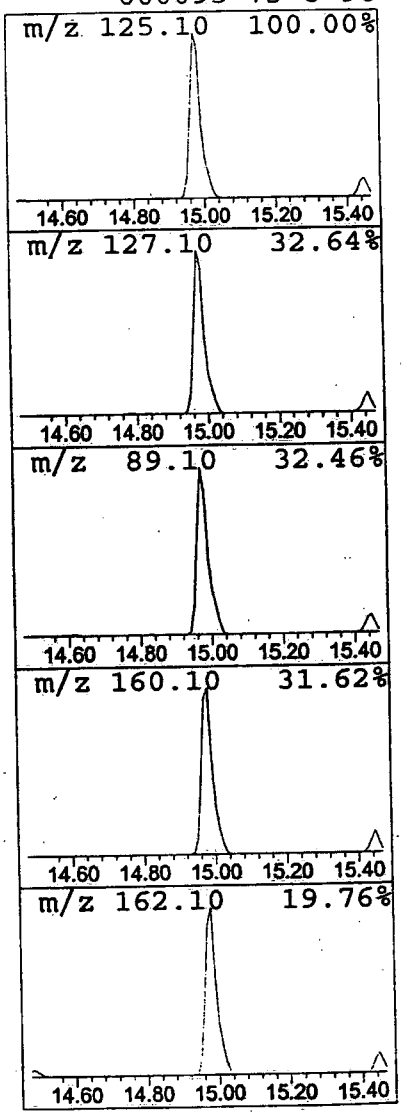
****

Peak Number 2 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.97	9.55 UG	342836	Chlorobenzene-d5	10.58

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2-dichloro-3-methyl-	160	C7H6Cl2	032768-54-0	97
2	Benzene, 1,2-dichloro-3-methyl-	160	C7H6Cl2	032768-54-0	97
3	Benzene, 2,4-dichloro-1-methyl-	160	C7H6Cl2	000095-73-8	96
4	Benzene, 2,4-dichloro-1-methyl-	160	C7H6Cl2	000095-73-8	96





2734

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9320.D
Acq On : 24 Apr 2001 21:18
Sample : S-61,2435-004,M,0.044g,18.2
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 24 21:37:48 2001

Vial: 12
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 23 13:08:03 2001
Response via : Initial Calibration
DataAcq Meth : JME0423

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	476459	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	705906	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	615426	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	248149	45.82	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 91.64%			
41) Toluene-d8	8.89	98	554172	39.00	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 78.00%			
59) Bromofluorobenzene	11.98	95	307680	36.46	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 72.92%			
Target Compounds						Qvalue
32) Benzene	6.79	78	89828	5.66	UG	# 100

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

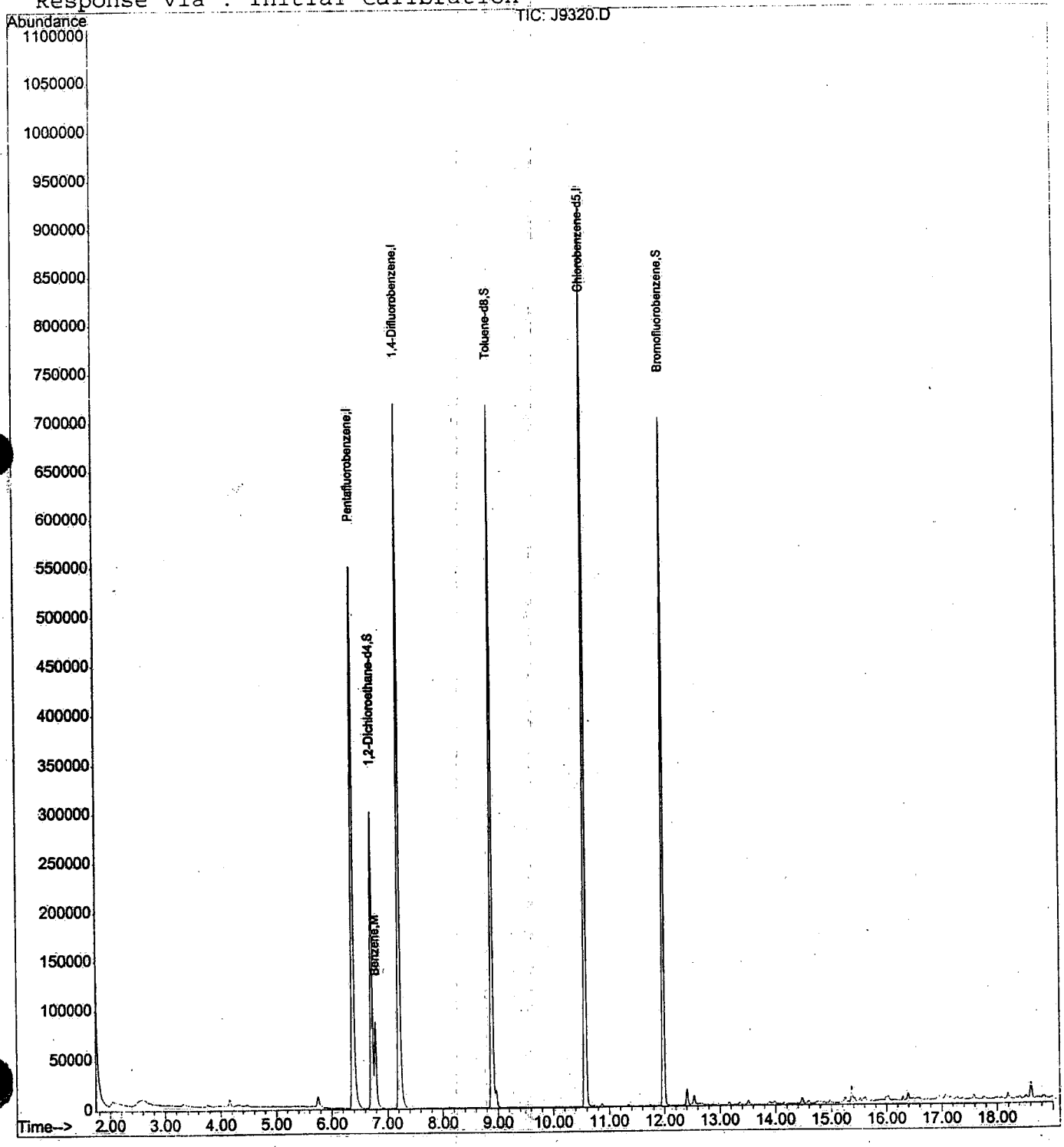
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9320.D
Acq On : 24 Apr 2001 21:18
Sample : S-61,2435-004,M,0.044g,18.2
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 25 9:27 2001

Vial: 12
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 25 09:04:08 2001
Response via : Initial Calibration



2736

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9320.D
Acq On : 24 Apr 2001 21:18
Sample : S-61,2435-004,M,0.044g,18.2
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
'S Integration Params: Lscint.p

Vial: 12
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0423.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

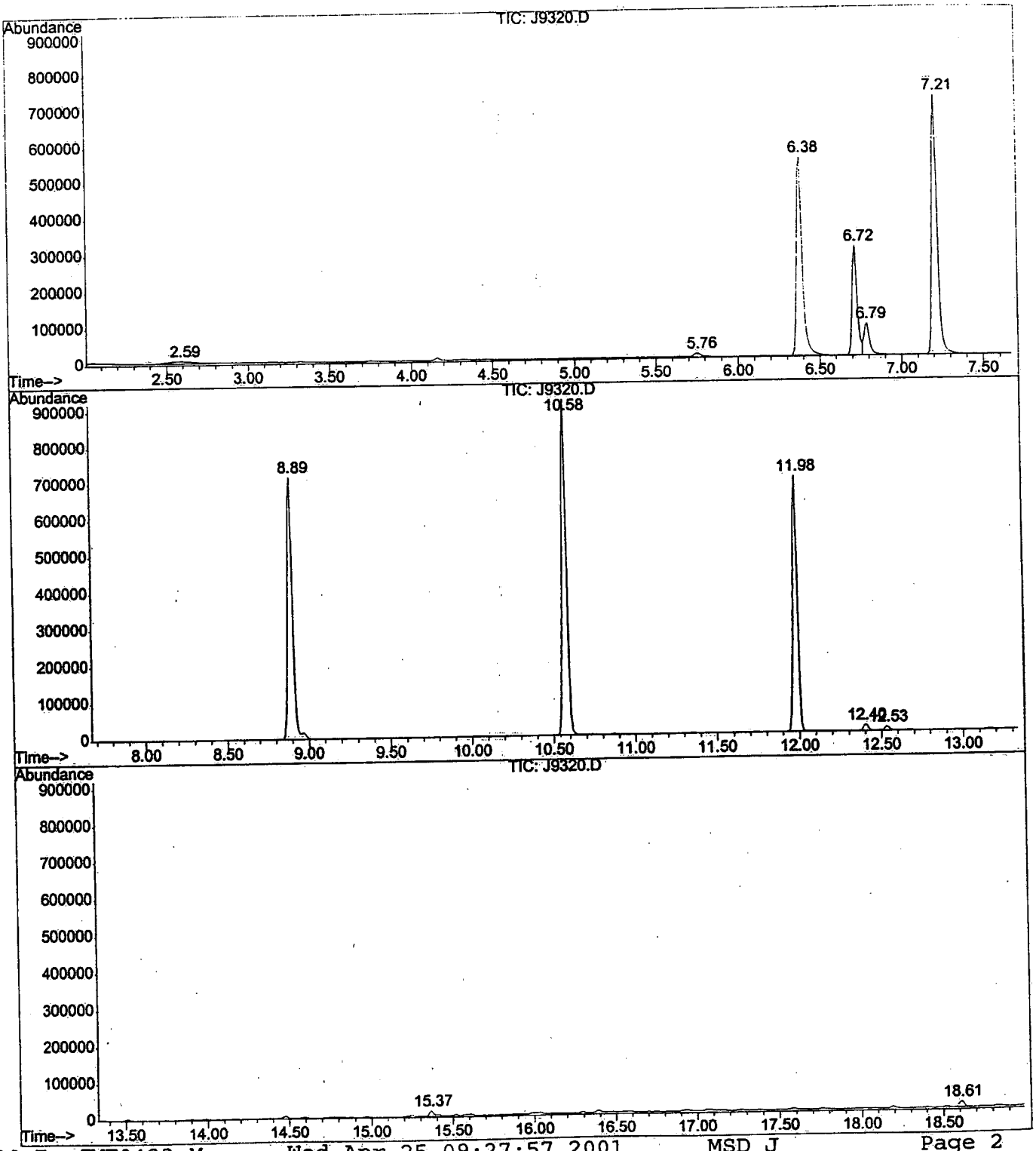
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.586	68	85	106	rBV5	6457	76716	4.22%	0.870%
2	5.755	393	398	417	rVB	11620	43226	2.38%	0.490%
3	6.383	452	460	484	rVV	549635	1360986	74.88%	15.440%
4	6.717	486	493	497	rVV	301846	670638	36.90%	7.608%
5	6.788	497	500	520	rVB	87896	214236	11.79%	2.430%
6	7.213	536	542	563	rVB	718366	1589734	87.46%	18.035%
7	8.894	700	708	725	rVB	716081	1556884	85.66%	17.663%
8	10.575	867	874	884	rBV	922568	1817575	100.00%	20.620%
9	11.983	1003	1013	1029	rBV	701125	1347282	74.13%	15.285%
10	12.398	1046	1054	1060	rBV2	16273	36103	1.99%	0.410%
11	12.530	1060	1067	1072	rBV	9887	22039	1.21%	0.250%
12	15.365	1343	1347	1357	rBV2	16471	42059	2.31%	0.477%
13	18.605	1663	1667	1674	rVB2	16102	37149	2.04%	0.421%

Sum of corrected areas: 8814627

2737

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-24-01\J9320.D
Operator : XINGFANG WANG
Acquired : 24 Apr 2001 21:18 using AcqMethod JME0423
Instrument : MSD_J
Sample Name: S-61,2435-004,M,0.044g,18.2
Misc Info : ENVTACT/ORBIS,4/16/01,4/17/01,1
Vial Number: 12
Quant File :JME0423.RES (RTE Integrator)



2738

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9321.D
Acq On : 24 Apr 2001 21:48
Sample : S-62,2435-005,M,0.042g,16.2
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
S Integration Params: LSCINT.P
Quant Time: Apr 24 22:07:16 2001

Vial: 13
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 23 13:08:03 2001
Response via : Initial Calibration
DataAcq Meth : JME0423

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	459475	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	686821	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	603241	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	248499	47.58	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.16%			
41) Toluene-d8	8.89	98	544930	39.42	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 78.84%			
59) Bromofluorobenzene	11.98	95	305866	36.98	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 73.96%			
Target Compounds						Qvalue
32) Benzene	6.79	78	45437	2.94	UG	# 100

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

2739

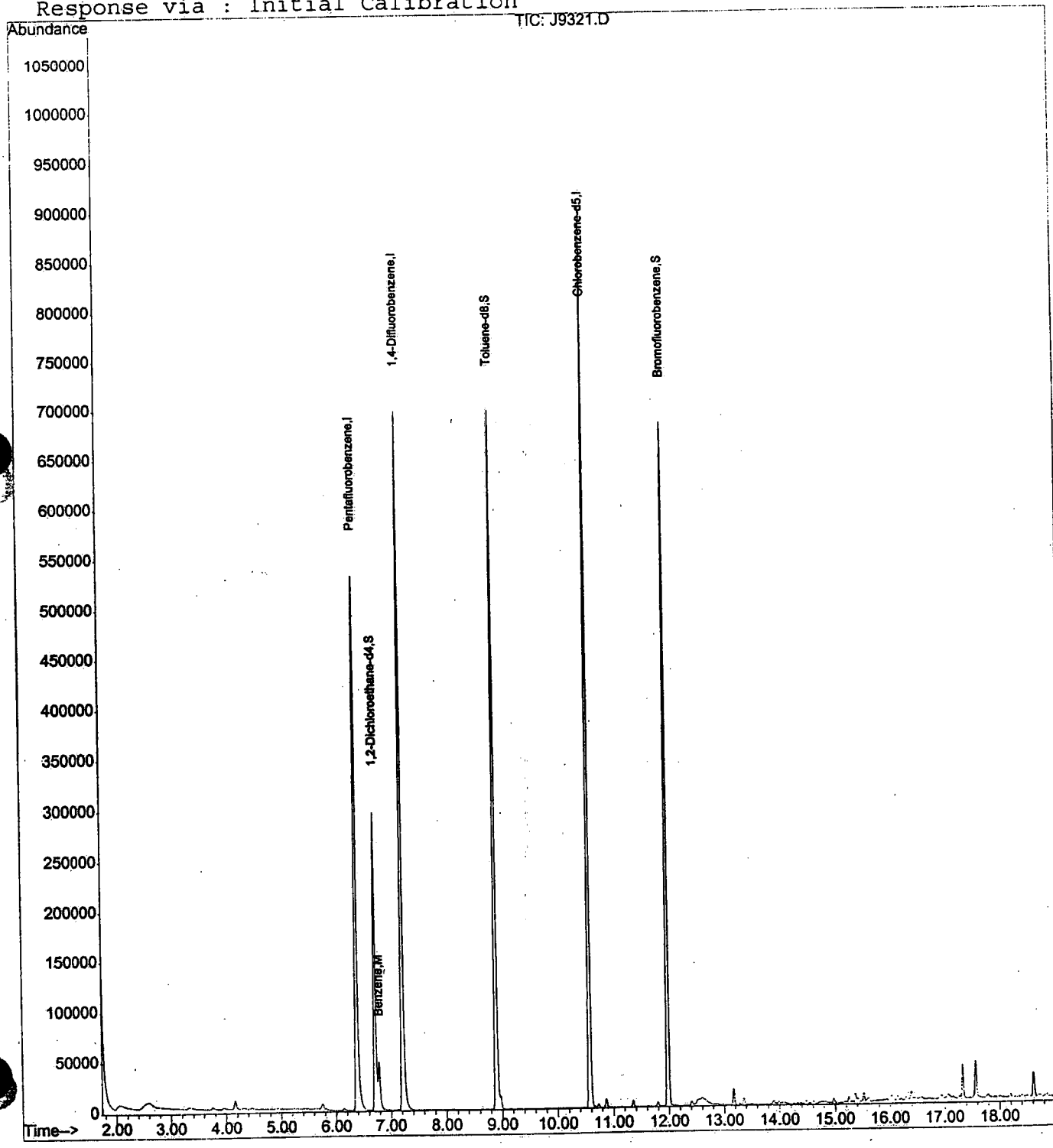
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9321.D
Acq On : 24 Apr 2001 21:48
Sample : S-62,2435-005,M,0.042g,16.2
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 25 9:28 2001

Vial: 13
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 25 09:04:08 2001
Response via : Initial Calibration



2740

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9321.D
Acq On : 24 Apr 2001 21:48
Sample : S-62,2435-005,M,0.042g,16.2
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
MS Integration Params: Lscint.p

Vial: 13
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0423.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

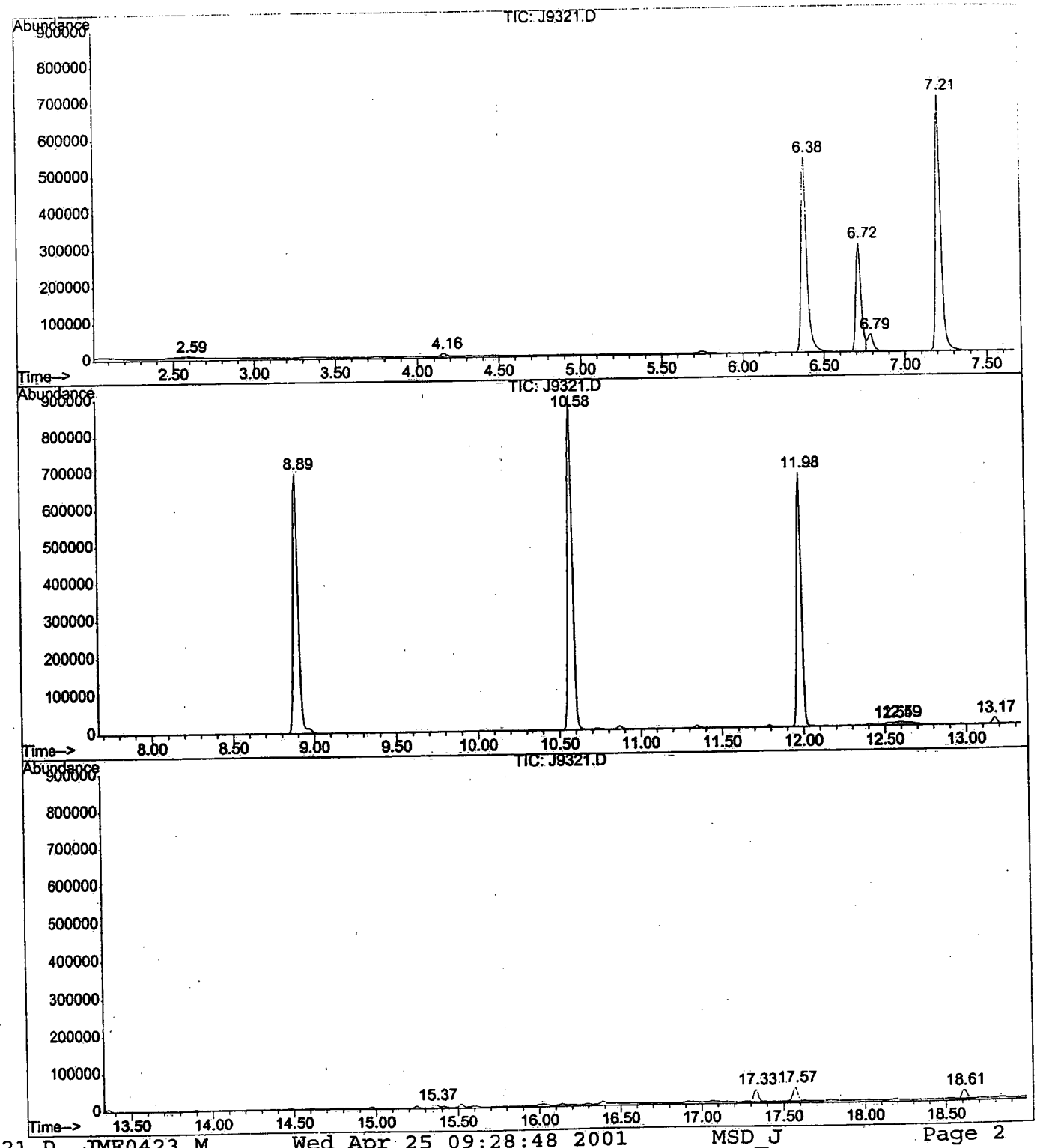
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.586	74	85	99	rVB5	5057	44223	2.48%	0.509%
2	4.155	235	240	247	rVB	8490	19550	1.10%	0.225%
3	6.383	451	460	482	rBV	531842	1312419	73.72%	15.115%
4	6.717	486	493	497	rVV	296479	663135	37.25%	7.637%
5	6.788	497	500	514	rVB	48071	119379	6.71%	1.375%
6	7.213	536	542	566	rVB	697265	1546744	86.89%	17.814%
7	8.894	697	708	725	rBB	696948	1523121	85.56%	17.542%
8	10.575	866	874	884	rBV	900738	1780189	100.00%	20.502%
9	11.983	1006	1013	1025	rBV	682258	1334903	74.99%	15.374%
10	12.540	1059	1068	1069	rVV4	6179	22840	1.28%	0.263%
11	12.591	1070	1073	1094	rVB4	7230	51622	2.90%	0.595%
12	13.168	1125	1130	1137	rBV	16714	32108	1.80%	0.370%
13	15.365	1343	1347	1350	rBV2	9102	18822	1.06%	0.217%
14	17.330	1531	1541	1550	rBV	34012	73097	4.11%	0.842%
15	17.573	1559	1565	1578	rVB	38070	85165	4.78%	0.981%
16	18.606	1663	1667	1674	rBV	24254	55603	3.12%	0.640%

Sum of corrected areas: 8682920

2741

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-24-01\J9321.D
Operator : XINGFANG WANG
Acquired : 24 Apr 2001 21:48 using AcqMethod JME0423
Instrument : MSD_J
Sample Name: S-62,2435-005,M,0.042g,16.2
Misc Info : ENVTACT/ORBIS,4/16/01,4/17/01,1
Vial Number: 13
Quant File :JME0423.RES (RTE Integrator)



2742

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9322.D
Acq On : 24 Apr 2001 22:17
Sample : S-68A,2435-011,M,0.038g,13.8
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
S Integration Params: LSCINT.P
Quant Time: Apr 24 22:36:16 2001

Vial: 14
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0423.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 23 13:08:03 2001
Response via : Initial Calibration
DataAcq Meth : JME0423

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	490613	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	720542	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	629198	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	240290	43.09	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 86.18%			
41) Toluene-d8	8.89	98	488872	33.71	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 67.42%			
59) Bromofluorobenzene	11.98	95	293223	33.99	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 67.98%			
Target Compounds						Qvalue
32) Benzene	6.79	78	1117045	69.01	UG	# 100
42) Toluene	8.97	92	2253708	216.23	UG	# 100
74) 1,2-Dichlorobenzene	13.90	146	28175	2.79	UG	# 82

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

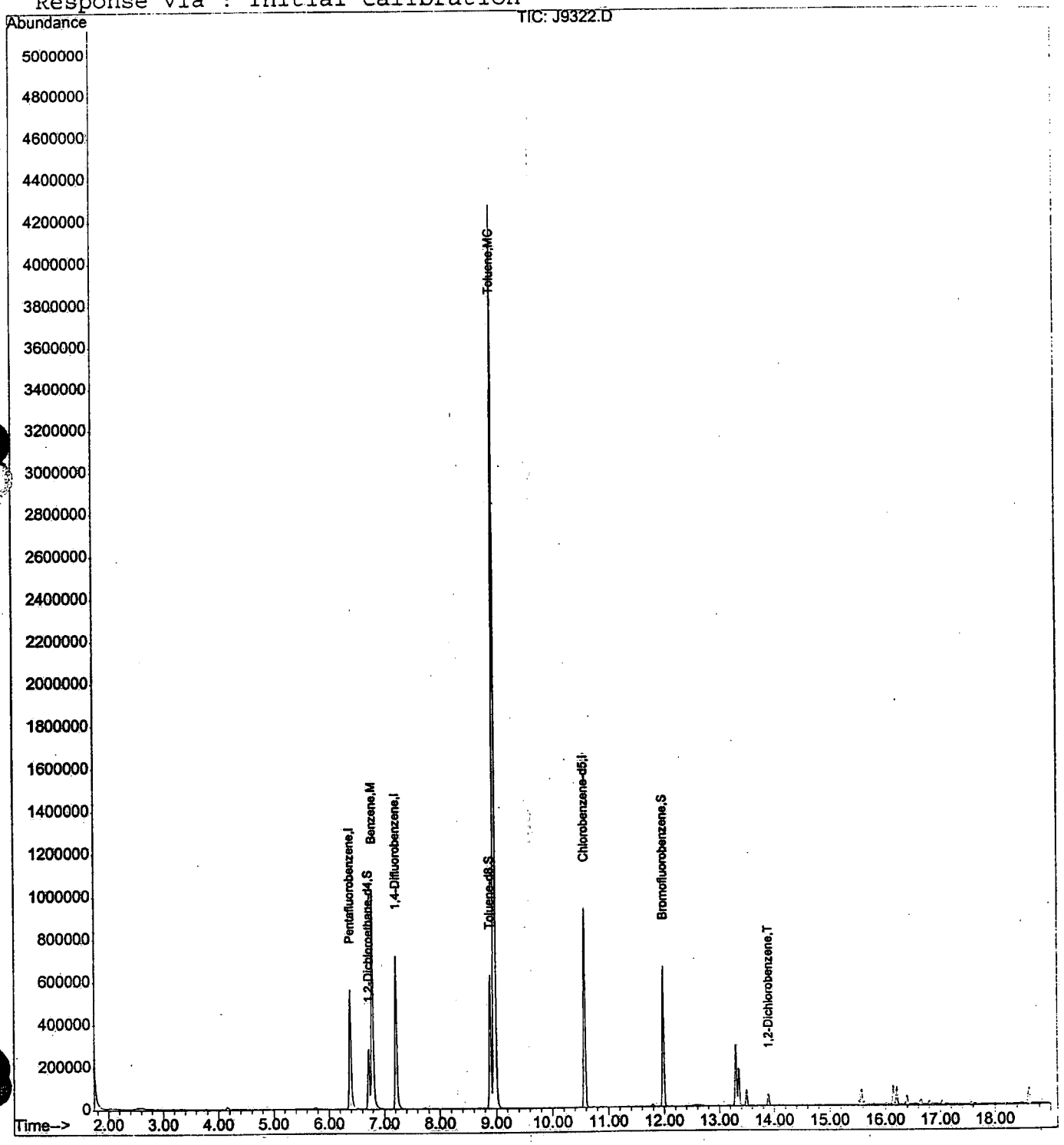
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9322.D
Acq On : 24 Apr 2001 22:17
Sample : S-68A,2435-011,M,0.038g,13.8
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 25 9:29 2001

Vial: 14
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 25 09:04:08 2001
Response via : Initial Calibration



2744

000136

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-27-01\J9451.D Vial: 5
Acq On : 27 Apr 2001 16:10 Operator: XINGFANG WANG
Sample : S-68A,2435-011DIL,M,0.019g,13.8 Inst : MSD_J
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,2 Multiplr: 1.00
'S Integration Params: LSCINT.P
Quant Time: Apr 27 16:29:28 2001 Quant Results File: JME0423.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 23 13:08:03 2001
Response via : Initial Calibration
DataAcq Meth : JME0423

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	405450	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	603502	50.00	UG	0.00
50) Chlorobenzene-d5	10.57	117	547682	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	109285	23.71	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 47.42%			
41) Toluene-d8	8.89	98	274522	22.60	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 45.20%			
59) Bromofluorobenzene	11.97	95	139715	18.60	UG	-0.01
Spiked Amount 50.000	Range 23 - 145		Recovery = 37.20%			
Target Compounds						Qvalue
32) Benzene	6.79	78	662307	48.85	UG	# 100
42) Toluene	8.96	92	1434377	164.31	UG	# 100
74) 1,2-Dichlorobenzene	13.90	146	14457	1.65	UG	# 82

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

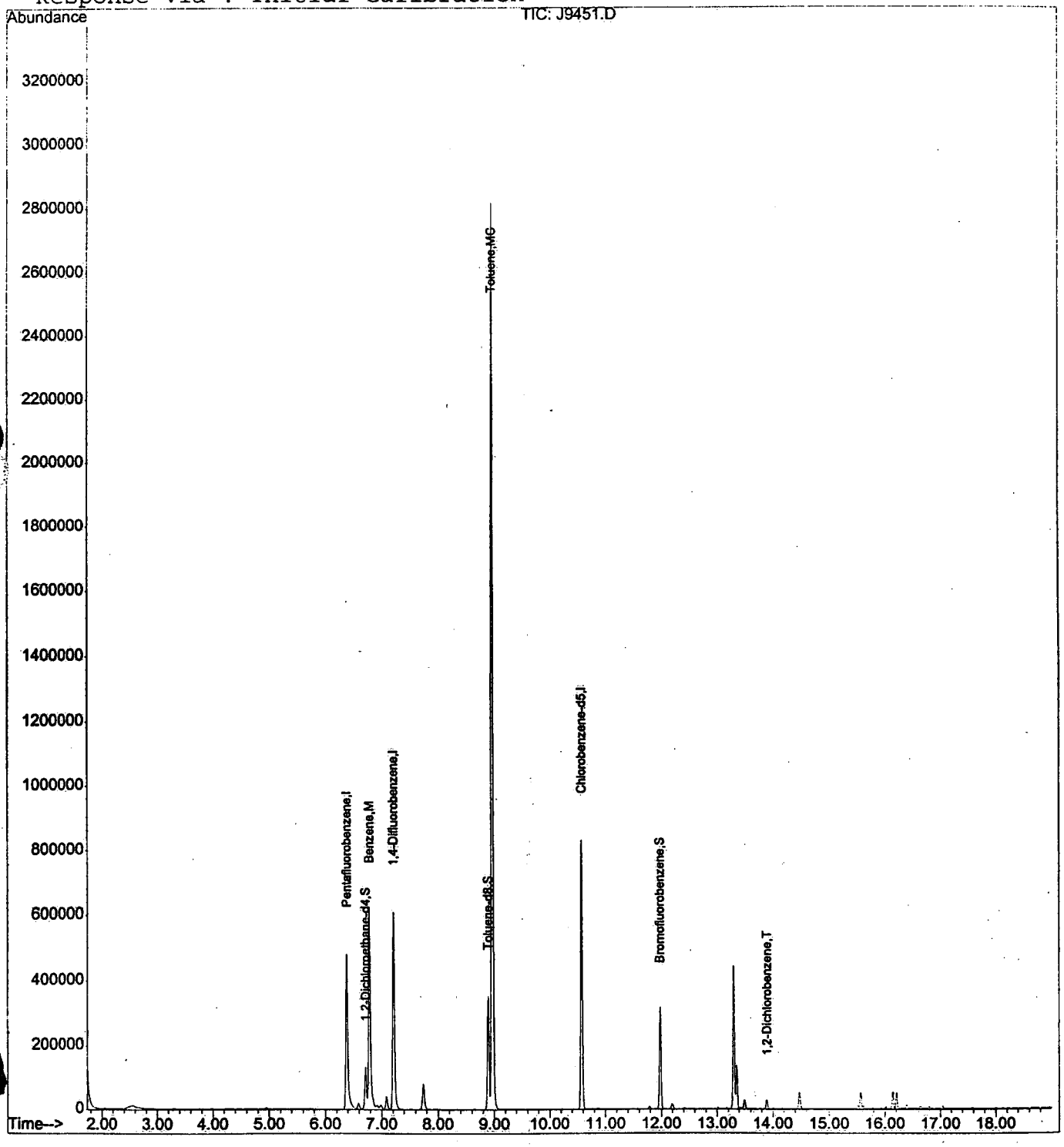
2745

00037

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-27-01\J9451.D Vial: 5
Acq On : 27 Apr 2001 16:10 Operator: XINGFANG WAN
Sample : S-68A,2435-011DIL,M,0.019g,13.8 Inst : MSD_J
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 28 10:47 2001 Quant Results File: JME0423.RES

Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sat Apr 28 09:33:37 2001
Response via : Initial Calibration



2746

000138

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9322.D
Acq On : 24 Apr 2001 22:17
Sample : S-68A,2435-011,M,0.038g,13.8
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
S Integration Params: Lscint.p

Vial: 14
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0423.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

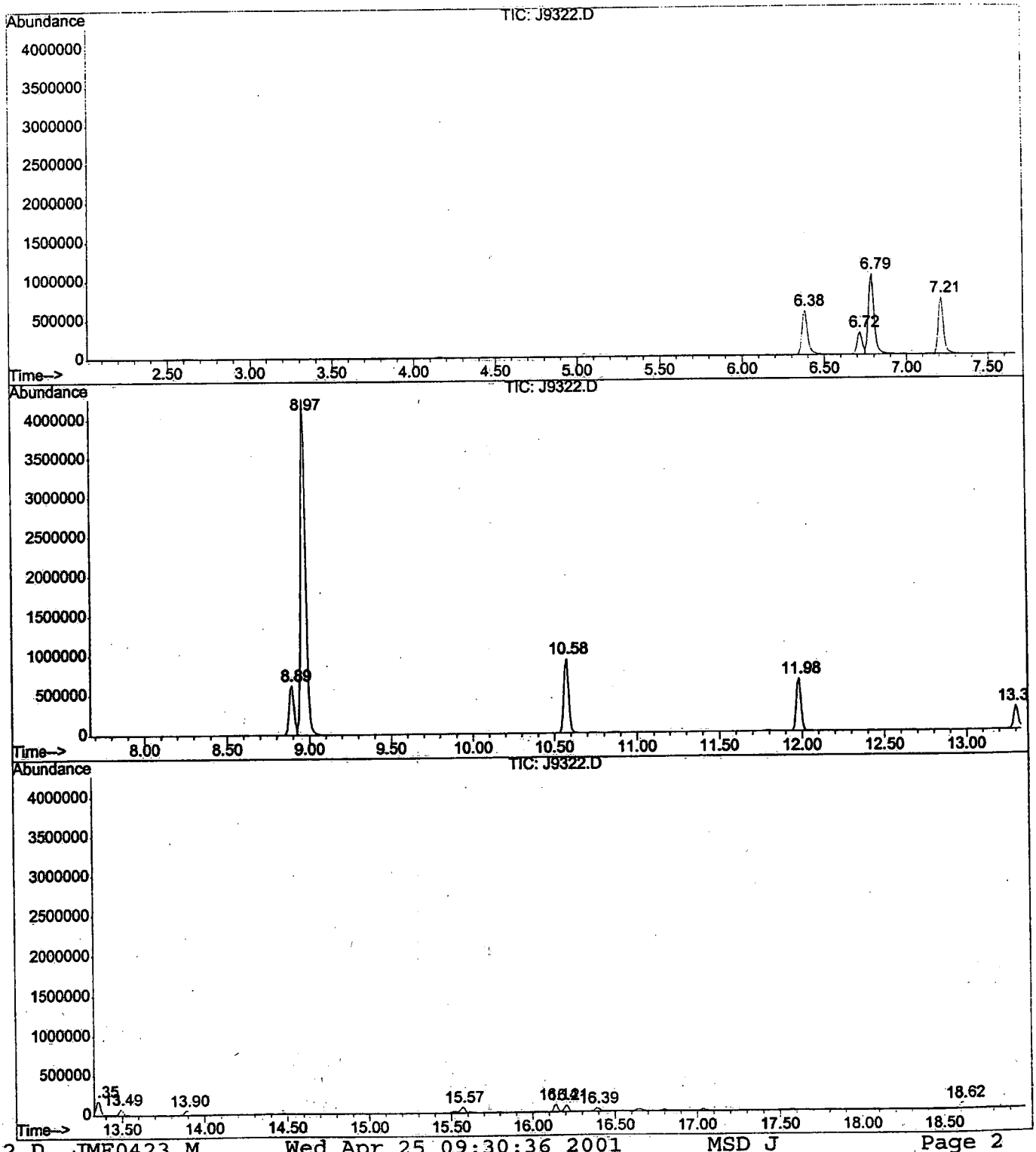
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.383	452	460	483	rVB	564214	1404595	15.69%	6.563%
2	6.717	485	493	496	rVV	286991	641008	7.16%	2.995%
3	6.788	496	500	528	rVB	1030006	2430091	27.15%	11.354%
4	7.213	536	542	564	rBV	722069	1623665	18.14%	7.586%
5	8.894	702	708	711	rBV	627727	1330638	14.86%	6.217%
6	8.965	711	715	731	rVB	4277035	8951623	100.00%	41.825%
7	10.575	865	874	886	rBV	939118	1863499	20.82%	8.707%
9	11.983	1007	1013	1023	rBV	665766	1287412	14.38%	6.015%
9	13.299	1136	1143	1146	rBV	292032	544705	6.08%	2.545%
10	13.350	1146	1148	1153	rVB	178489	333431	3.72%	1.558%
11	13.492	1158	1162	1169	rVB	77654	136315	1.52%	0.637%
12	13.897	1191	1202	1207	rBV	56015	116853	1.31%	0.546%
13	15.568	1364	1367	1377	rVB2	77008	175984	1.97%	0.822%
14	16.145	1419	1424	1427	rBV	92634	157390	1.76%	0.735%
15	16.205	1427	1430	1436	rVB	86747	144127	1.61%	0.673%
16	16.388	1442	1448	1454	rBV	42056	90392	1.01%	0.422%
17	18.616	1663	1668	1673	rBV	75337	170661	1.91%	0.797%

Sum of corrected areas: 21402389

2747

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-24-01\J9322.D
Operator : XINGFANG WANG
Acquired : 24 Apr 2001 22:17 using AcqMethod JME0423
Instrument : MSD_J
Sample Name: S-68A,2435-011,M,0.038g,13.8
Misc Info : ENVTACT/ORBIS,4/16/01,4/17/01,1
Vial Number: 14
Quant File :JME0423.RES (RTE Integrator)



2748

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9322.D
Acq On : 24 Apr 2001 22:17
Sample : S-68A,2435-011,M,0.038g,13.8
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
"S Integration Params: Lscint.p

Vial: 14
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

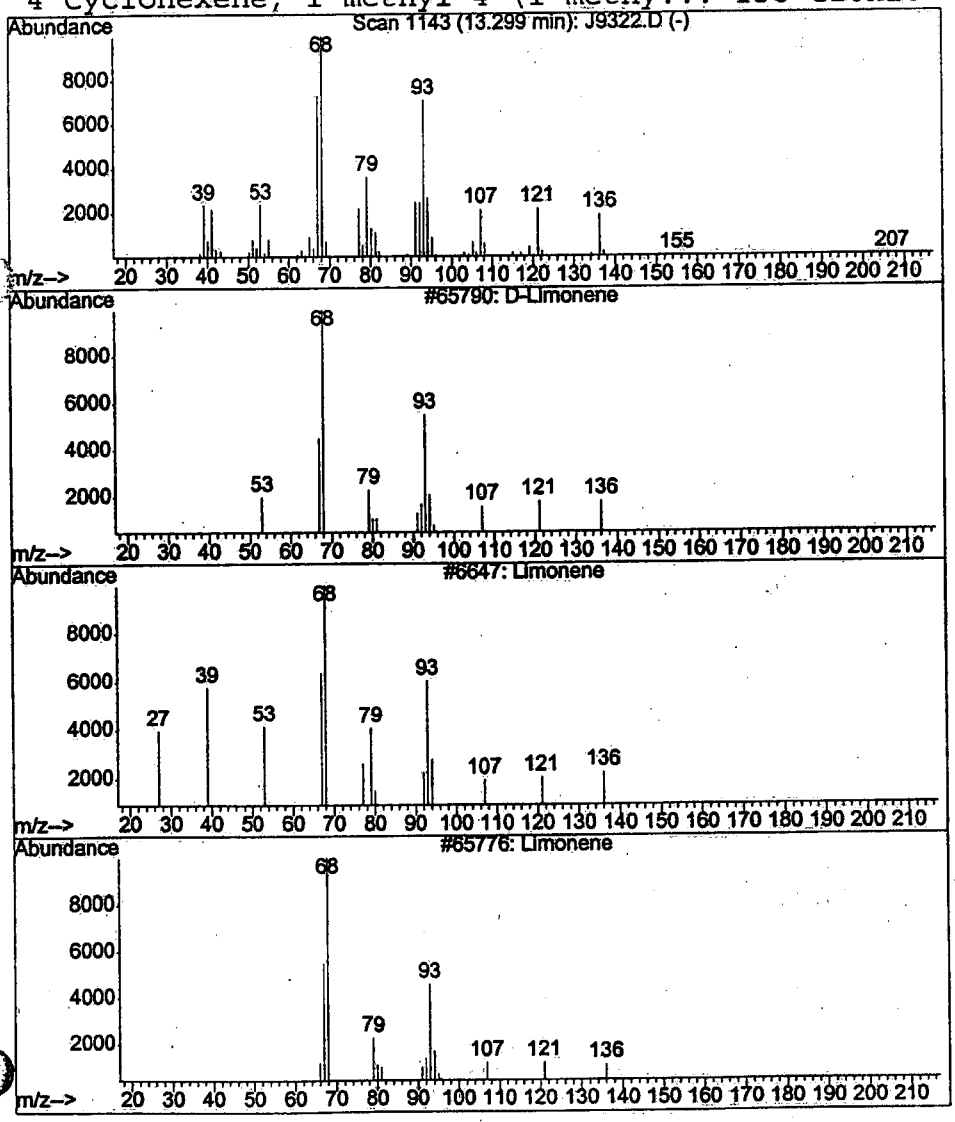
Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

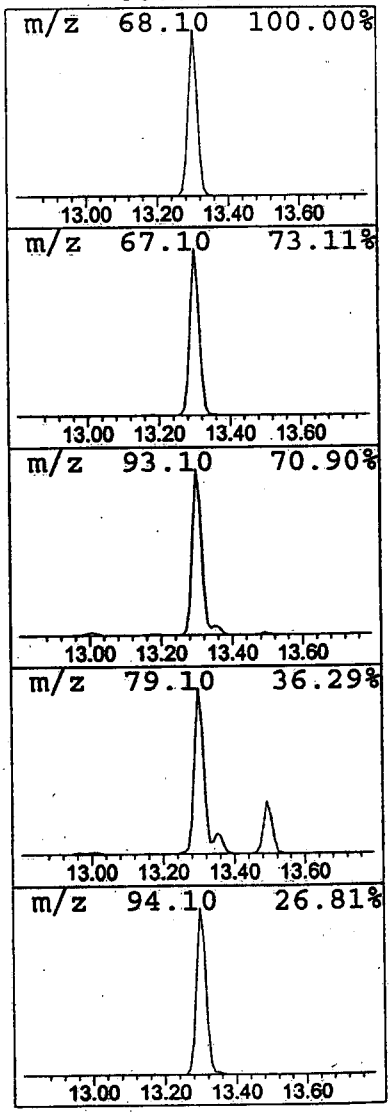
****

Peak Number 1 Unknown hydrocarbon Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.30	14.62 UG	544705	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	94
3	Limonene	136	C10H16	000138-86-3	93
4	Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	007705-14-8	90





2749

000141

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9322.D
Acq On : 24 Apr 2001 22:17
Sample : S-68A,2435-011,M,0.038g,13.8
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
'S Integration Params: Lscint.p

Vial: 14
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

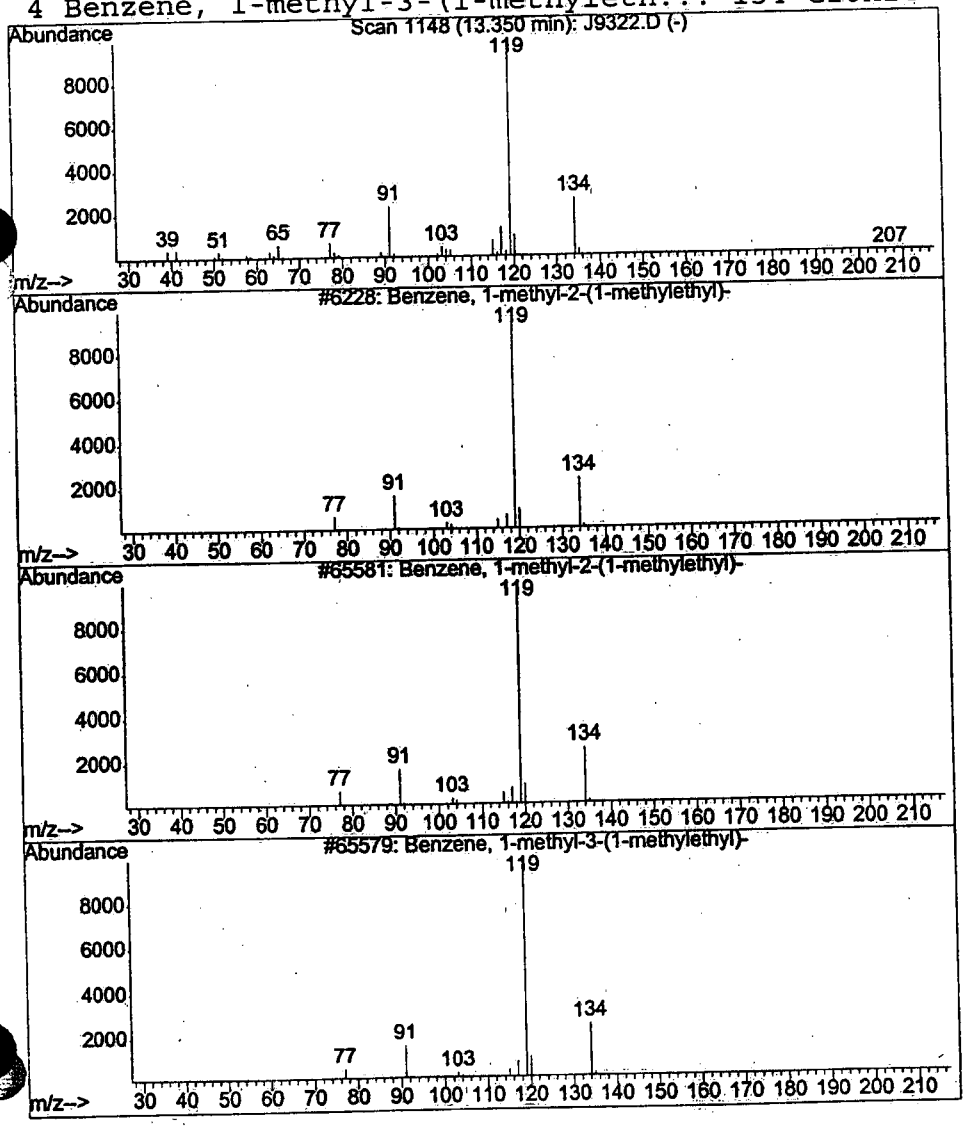
Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Library : C:\DATABASE\NBS75K.L

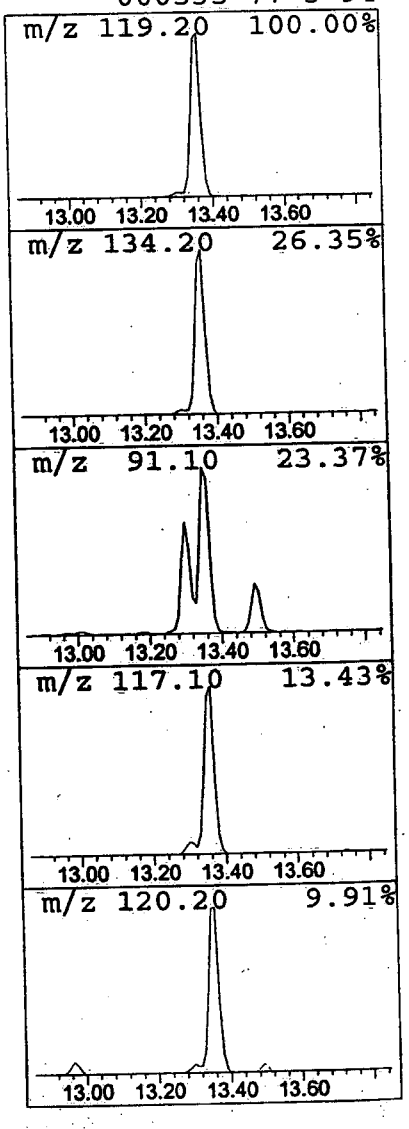
****

Peak Number 2 Substituted benzene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.35	8.95 UG	333431	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





7750

0002-42

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\04-26-01\I8369.D
Acq On : 26 Apr 2001 16:42
Sample : S-68B,2435-012,M,0.006g,15.1
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,5
MS Integration Params: rteint.p
Quant Time: Apr 30 15:50 2001

Vial: 14
Operator: SANGEETA
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: IME0425.RES

Quant Method : C:\HPCHEM\1\METHODS\IME0425.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 30 14:44:16 2001
Response via : Initial Calibration
DataAcq Meth : VOAI

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	9.55	168	1228513	50.00	UG	0.00
31) 1,4-Difluorobenzene	10.81	114	1058111	50.00	UG	0.01
50) Chlorobenzene-d5	15.82	117	809140	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	10.04	65	120295	12.89	UG	0.00
Spiked Amount 50.000	Range 36 - 115		Recovery = 25.78%#			
41) Toluene-d8	13.32	98	157755	9.75	UG	0.02
Spiked Amount 50.000	Range 35 - 117		Recovery = 19.50%#			
59) Bromofluorobenzene	17.92	95	139293	9.45	UG	0.02
Spiked Amount 50.000	Range 47 - 115		Recovery = 18.90%#			
Target Compounds						Qvalue
32) Benzene	10.17	78	459392	32.72	UG	99
42) Toluene	13.44	92	882524	86.56	UG	98

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

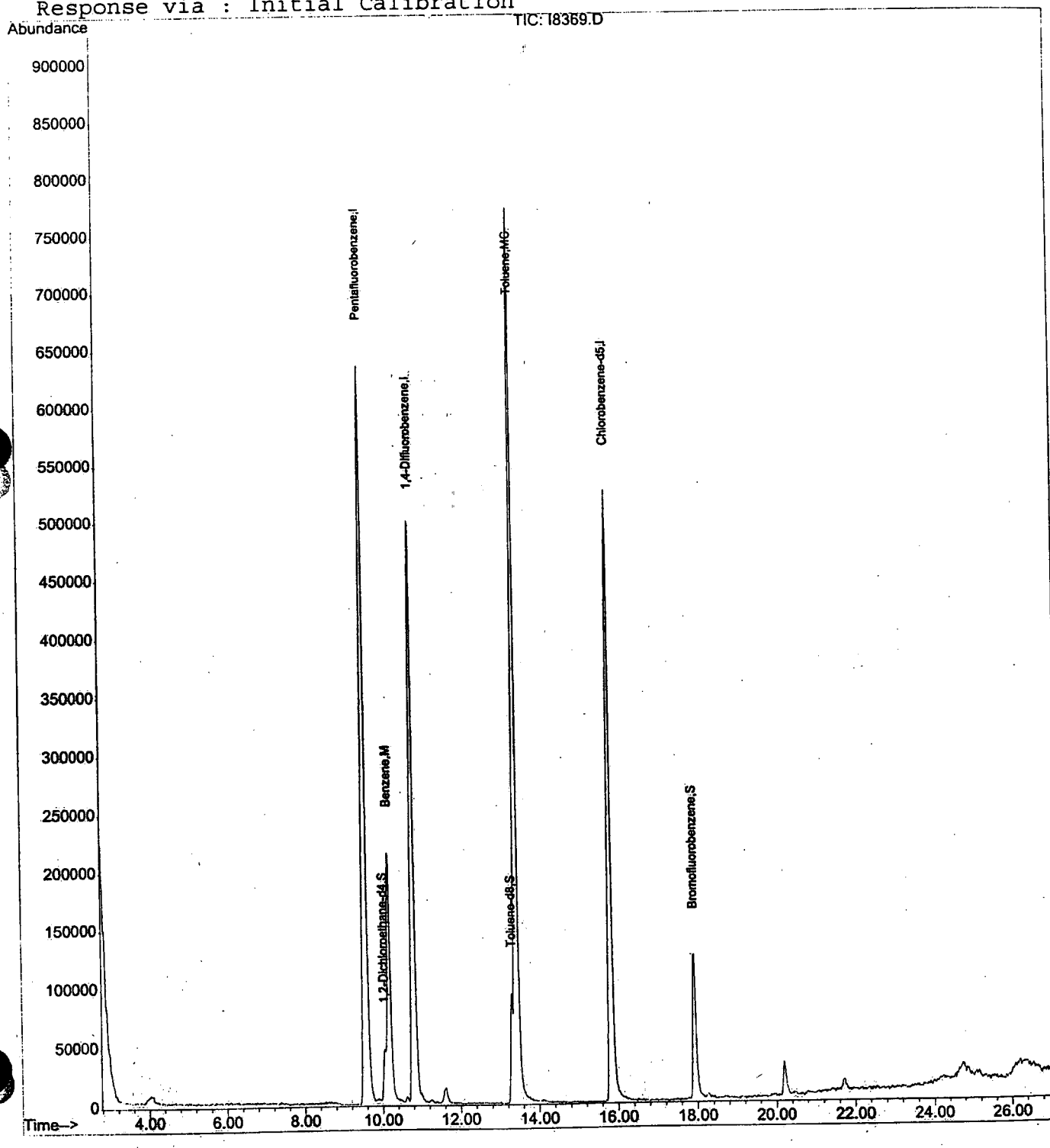
Quantitation Report

Data File : C:\HPCHEM\1\DATA\04-26-01\I8369.D
Acq On : 26 Apr 2001 16:42
Sample : S-68B,2435-012,M,0.006g,15.1
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,5
MS Integration Params: rteint.p
Quant Time: Apr 30 15:50 2001

Vial: 14
Operator: SANGEETA
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: IME0425.RES

Method : C:\HPCHEM\1\METHODS\IME0425.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 30 14:44:16 2001
Response via : Initial Calibration



2752

000144

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\04-26-01\I8369.D
Acq On : 26 Apr 2001 16:42
Sample : S-68B,2435-012,M,0.006g,15:1
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,5
MS Integration Params: LSCINT.P

Vial: 14
Operator: SANGEETA
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IME0425.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

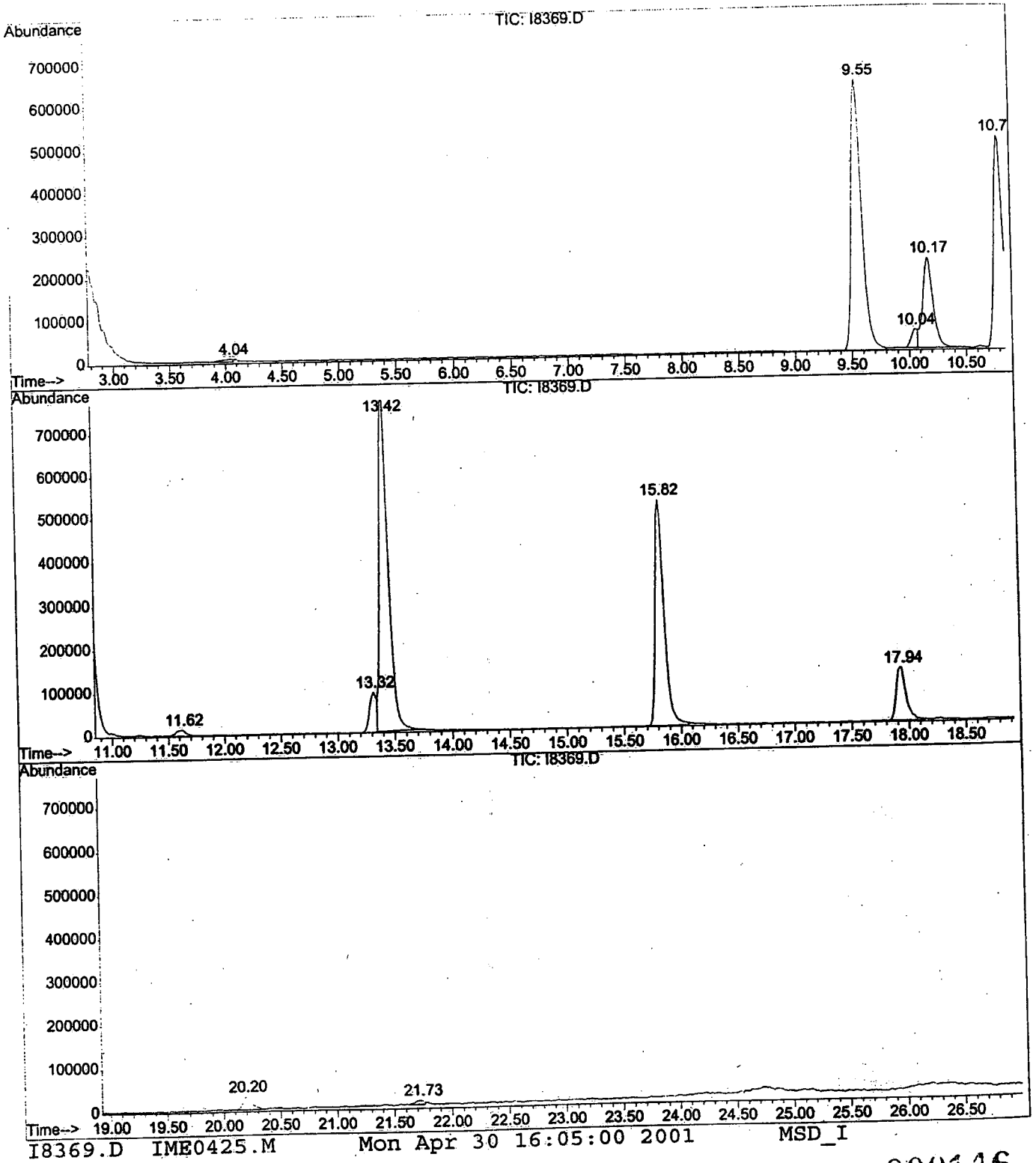
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.037	72	83	85	rBV6	6857	49995	1.19%	0.295%
2	9.554	432	441	457	rBV	635800	4041520	96.56%	23.819%
3	10.044	468	473	475	rBV	43613	182396	4.36%	1.075%
4	10.166	475	481	498	rVB	212081	1313848	31.39%	7.743%
5	10.793	515	522	534	rBV	497416	2854064	68.19%	16.820%
6	11.623	565	576	585	rVB4	13792	86692	2.07%	0.511%
7	13.317	679	686	688	rBV	93472	425969	10.18%	2.510%
8	13.421	688	693	713	rVB	769730	4185666	100.00%	24.668%
9	15.821	842	849	865	rBV	523442	2865802	68.47%	16.890%
10	17.936	979	987	1000	rBV2	123262	746737	17.84%	4.401%
11	20.196	1128	1134	1145	rBV3	29374	166485	3.98%	0.981%
12	21.732	1227	1234	1236	rBV3	9350	48660	1.16%	0.287%

Sum of corrected areas: 16967834

I8369.D IME0425.M Mon Apr 30 16:05:00 2001 MSD_I

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\04-26-01\I8369.D
Operator : SANGEETA
Acquired : 26 Apr 2001 16:42 using AcqMethod VOAI
Instrument : 5970 - In
Sample Name: S-68B,2435-012,M,0.006g,15.1
Misc Info : ENVTACT/ORBIS,04/16/01,04/17/01,5
Vial Number: 14
Quant File :IME0425.RES (RTE Integrator)



I8369.D IME0425.M Mon Apr 30 16:05:00 2001 MSD_I

000146

2754

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9316.D
Acq On : 24 Apr 2001 19:21
Sample : TB,2435-013,MB,0.04g,0
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
IS Integration Params: LSCINT.P
Quant Time: Apr 24 19:40:49 2001

Vial: 8
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 23 13:08:03 2001
Response via : Initial Calibration
DataAcq Meth : JME0423

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	466964	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	682073	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	600588	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	268588	50.60	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 101.20%			
41) Toluene-d8	8.89	98	602478	43.88	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 87.76%			
59) Bromofluorobenzene	11.98	95	328366	39.87	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 79.74%			

Target Compounds Qvalue

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

2755

000147

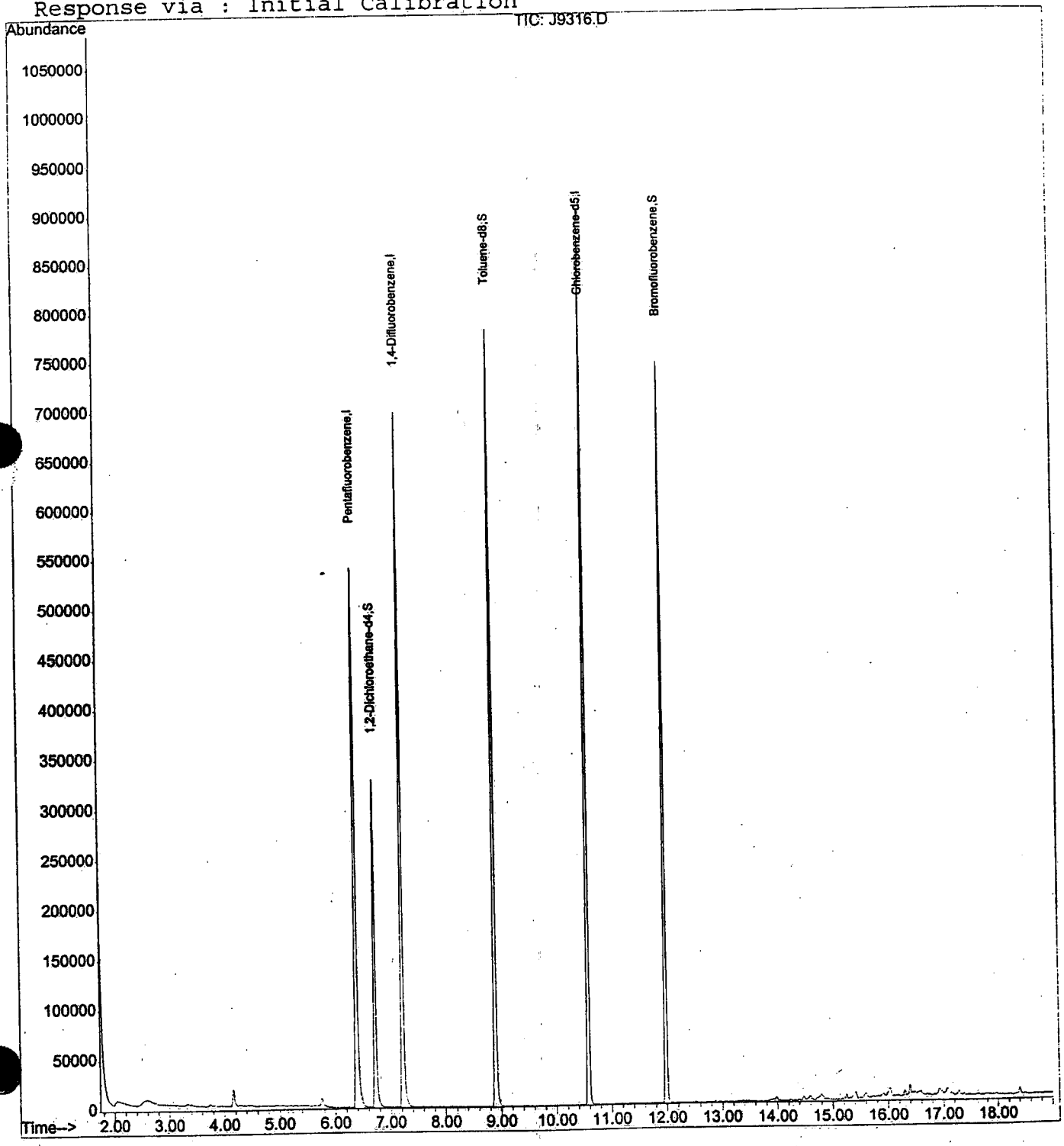
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9316.D
Acq On : 24 Apr 2001 19:21
Sample : TB,2435-013,MB,0.04g,0
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
MS Integration Params: LSCINT.P
Quant Time: Apr 25 9:16 2001

Vial: 8
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 25 09:04:08 2001
Response via : Initial Calibration



2756

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9316.D
Acq On : 24 Apr 2001 19:21
Sample : TB,2435-013,MB,0.04g,0
Misc : ENVTACT/ORBIS,4/16/01,4/17/01,1
Integration Params: Lscint.p

Vial: 8
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0423.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

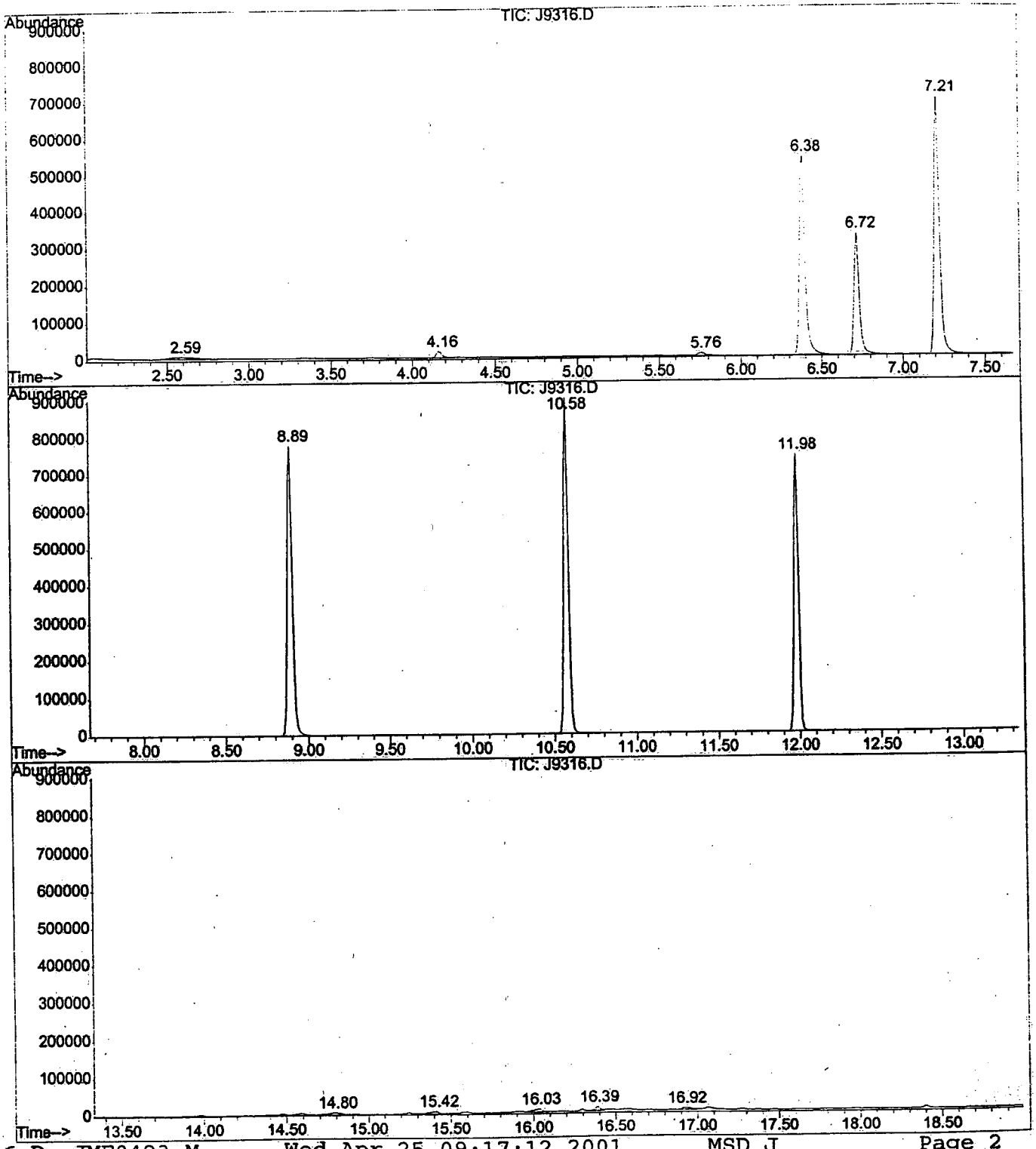
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.586	74	85	108	rVB5	5311	54178	3.05%	0.618%
2	4.155	236	240	248	rBV	16925	41002	2.31%	0.468%
3	5.755	393	398	412	rVB2	8972	31568	1.78%	0.360%
4	6.383	452	460	484	rVB	540587	1333554	75.14%	15.223%
5	6.717	485	493	515	rVB	328237	747908	42.14%	8.538%
6	7.213	536	542	564	rVB	698646	1543178	86.95%	17.616%
7	8.894	699	708	723	rBV	781539	1665189	93.83%	19.009%
8	10.575	866	874	887	rBV	905186	1774699	100.00%	20.259%
9	11.983	1005	1013	1027	rBV	746041	1434462	80.83%	16.375%
10	14.798	1279	1291	1302	rBV6	5532	36564	2.06%	0.417%
11	15.416	1343	1352	1357	rVB3	6432	25895	1.46%	0.296%
12	16.033	1406	1413	1419	rVB6	8052	27515	1.55%	0.314%
13	16.388	1443	1448	1452	rBV	10598	23644	1.33%	0.270%
14	16.925	1496	1501	1508	rBV5	5110	20742	1.17%	0.237%

Sum of corrected areas: 8760098

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-24-01\J9316.D
Operator : XINGFANG WANG
Acquired : 24 Apr 2001 19:21 using AcqMethod JME0423
Instrument : MSD_J
Sample Name: TB,2435-013,MB,0.04g,0
Misc Info : ENVTACT/ORBIS,4/16/01,4/17/01,1
Vial Number: 8
Quant File :JME0423.RES (RTE Integrator)



2758

000150

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9312.D
Acq On : 24 Apr 2001 17:24
Sample : N/A,METHOD-BLK,S,0.1g,0
Misc :
S Integration Params: LSCINT.P
Quant Time: Apr 24 17:43:48 2001

Vial: 4
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00
Quant Results File: JME0423.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 23 13:08:03 2001
Response via : Initial Calibration
DataAcq Meth : JME0423

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	484137	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	704529	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	589293	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	277510	50.43	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 100.86%			
41) Toluene-d8	8.89	98	709586	50.04	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.08%			
59) Bromofluorobenzene	11.98	95	388395	48.07	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 96.14%			

Target Compounds Qvalue

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

2759

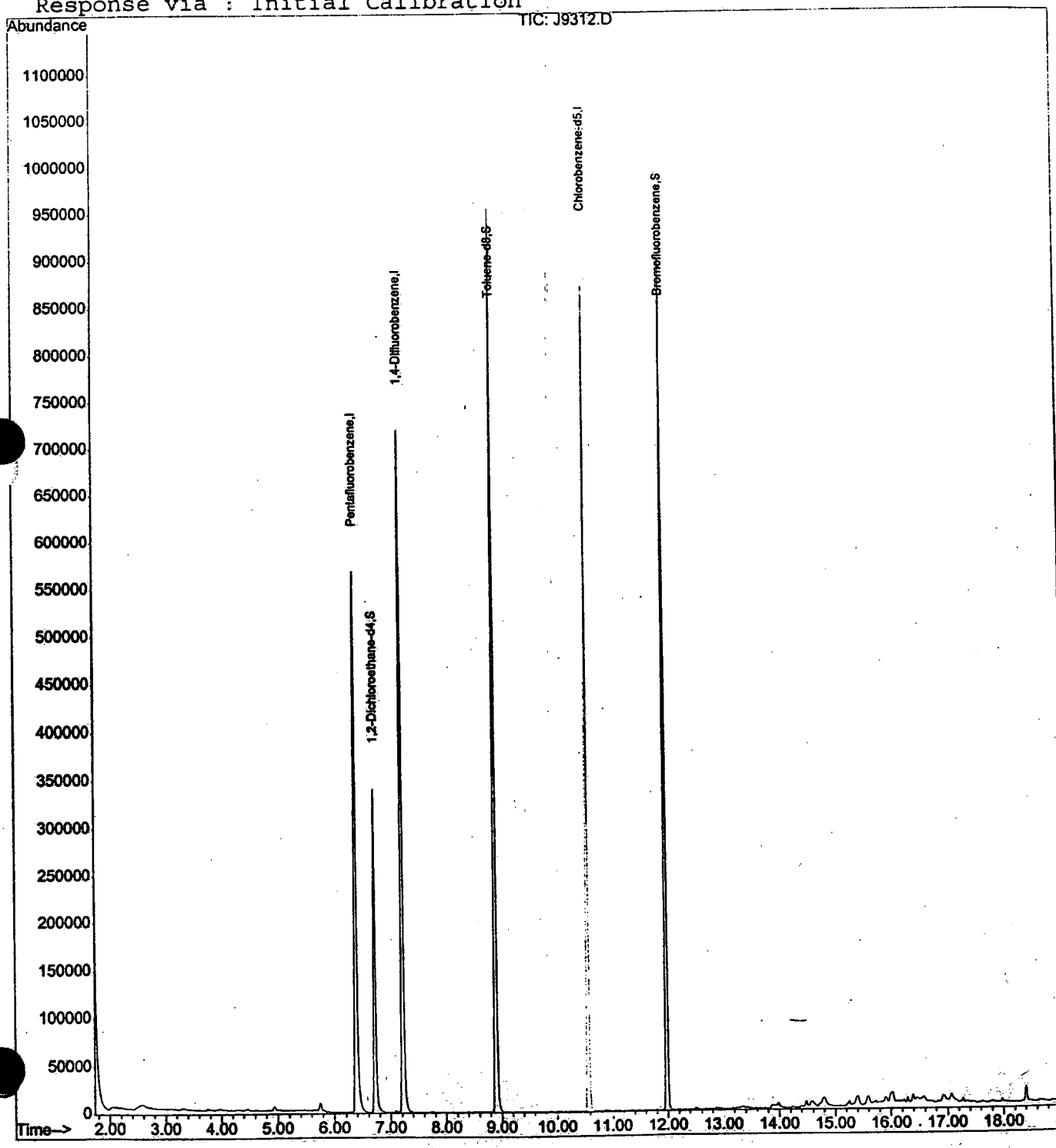
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9312.D
Acq On : 24 Apr 2001 17:24
Sample : N/A,METHOD-BLK,S,0.1g,0
Misc :
MS Integration Params: LSCINT.P
Quant Time: Apr 25 8:50 2001

Vial: 4
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Wed Apr 25 08:47:34 2001
Response via : Initial Calibration



2760

000152

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-24-01\J9312.D
Acq On : 24 Apr 2001 17:24
Sample : N/A,METHOD-BLK,S,0.1g,0
Misc :
Integration Params: Lscint.p

Vial: 4
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\JME0423.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

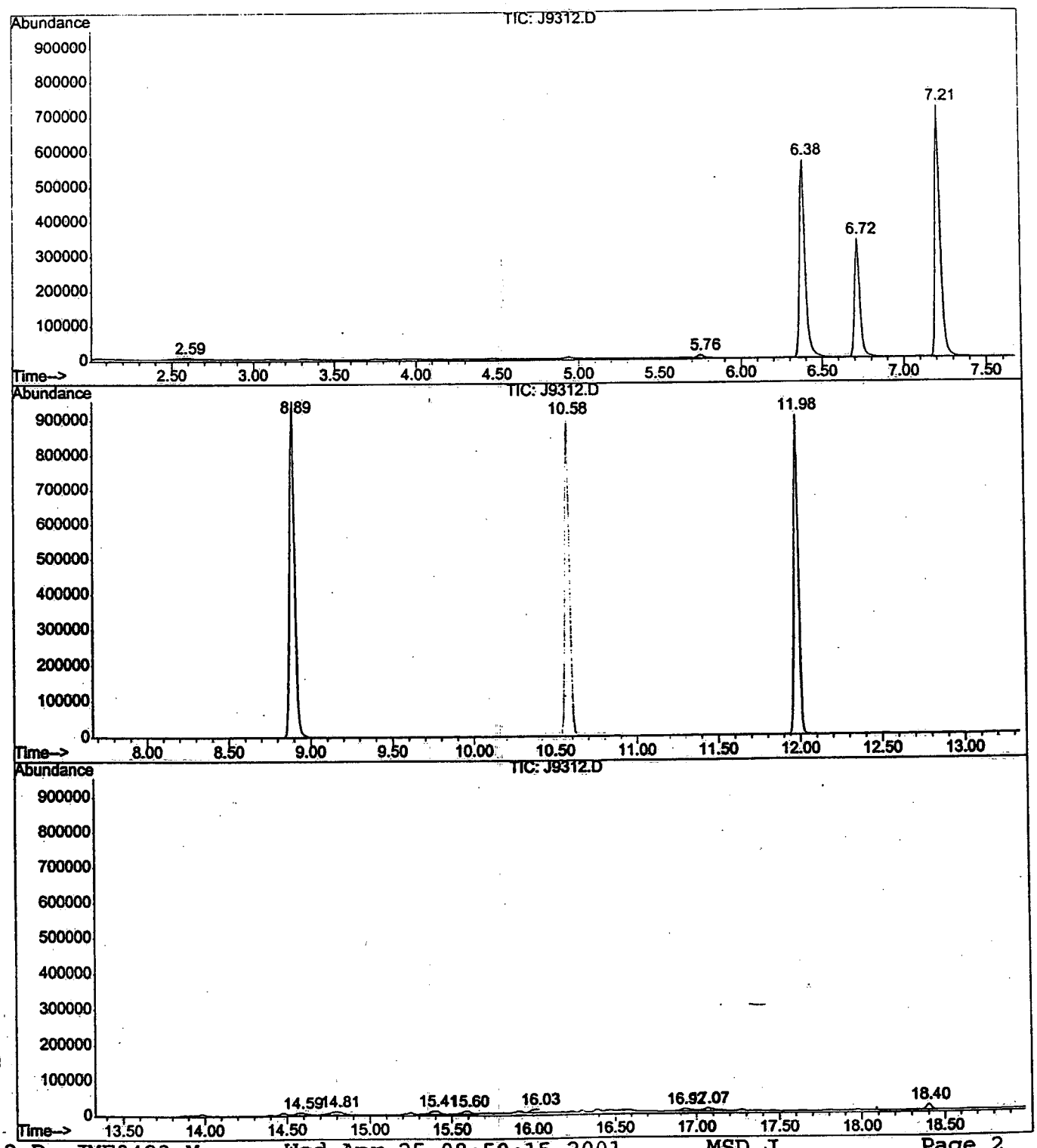
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.586	72	85	97	rBV5	3612	33024	1.69%	0.346%
2	5.755	393	398	408	rVB	9766	31481	1.61%	0.330%
3	6.383	454	460	484	rVB	568571	1382764	70.58%	14.497%
4	6.717	486	493	515	rVB	340688	772749	39.44%	8.101%
5	7.213	536	542	565	rVB	719778	1591633	81.24%	16.686%
6	8.894	702	708	724	rBV	954896	1959163	100.00%	20.539%
7	10.575	867	874	887	rBV	902681	1740332	88.83%	18.245%
8	11.983	1004	1013	1029	rBV	907550	1709385	87.25%	17.921%
9	14.585	1263	1270	1279	rVB4	5628	28518	1.46%	0.299%
10	14.808	1279	1292	1301	rBV4	9407	59155	3.02%	0.620%
11	15.405	1339	1351	1358	rVB5	9502	42154	2.15%	0.442%
12	15.598	1362	1370	1376	rBV2	8687	33122	1.69%	0.347%
13	16.033	1405	1413	1418	rBV6	10035	41624	2.12%	0.436%
14	16.924	1497	1501	1511	rBV9	6837	30105	1.54%	0.316%
15	17.066	1511	1515	1530	rVB7	9148	41299	2.11%	0.433%
16	18.403	1637	1647	1652	rBV	17185	42041	2.15%	0.441%

Sum of corrected areas: 9538549

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-24-01\J9312.D
Operator : XINGFANG WANG
Acquired : 24 Apr 2001 17:24 using AcqMethod JME0423
Instrument : MSD_J
Sample Name: N/A,METHOD-BLK,S,0.1g,0
Misc Info :
Vial Number: 4
Quant File :JME0423.RES (RTE Integrator)



2762

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-27-01\J9450.D
Acq On : 27 Apr 2001 15:41
Sample : N/A,METHOD-BLK,S,0.1g,0
Misc :
3 Integration Params: LSCINT.P
Quant Time: Apr 27 16:00:31 2001

Vial: 4
Operator: XINGFANG WANG
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Quant Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 23 13:08:03 2001
Response via : Initial Calibration
DataAcq Meth : JME0423

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.38	168	461810	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.21	114	665647	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	545321	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.72	65	254329	48.45	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 96.90%			
41) Toluene-d8	8.89	98	663920	49.55	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.10%			
59) Bromofluorobenzene	11.97	95	342376	45.79	UG	-0.01
Spiked Amount 50.000	Range 23 - 145		Recovery = 91.58%			
Target Compounds						Qvalue

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

2763

000155

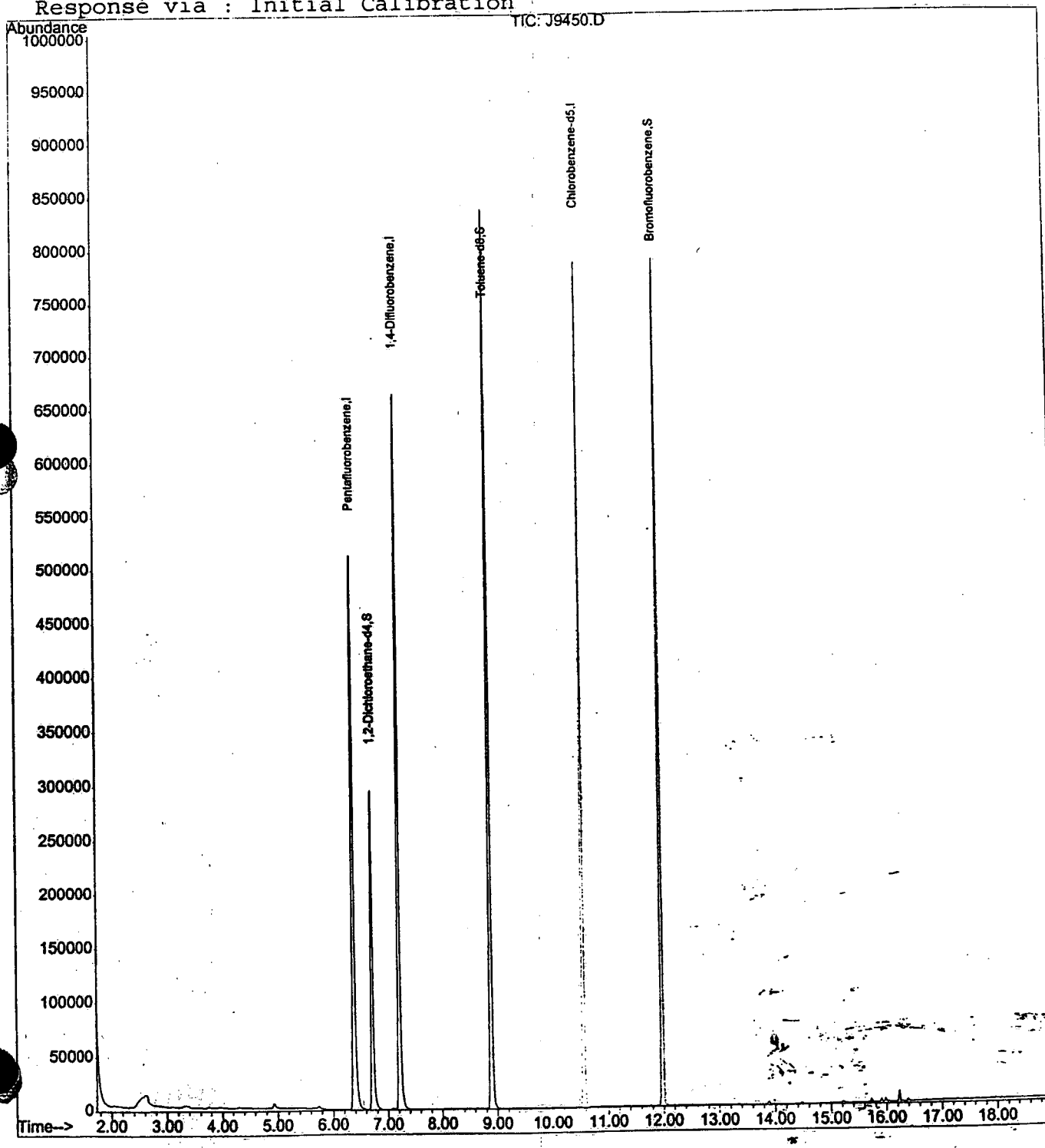
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-27-01\J9450.D
Acq On : 27 Apr 2001 15:41
Sample : N/A,METHOD-BLK,S,0.1g,0
Misc :
MS Integration Params: LSCINT.P
Quant Time: Apr 28 13:02 2001

Vial: 4
Operator: XINGFANG WAN
Inst : MSD_J
Multiplr: 1.00

Quant Results File: JME0423.RES

Method : C:\MSDCHEM\1\METHODS\JME0423.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Sat Apr 28 12:58:10 2001
Response via : Initial Calibration



Z764

000156

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-27-01\J9450.D
Acq On : 27 Apr 2001 15:41
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\JME0423.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	2.606	67	87	103	rBV5	10911	125123	6.82%	1.452%
2	6.383	452	460	482	rVV	512708	1292355	70.44%	14.998%
3	6.717	485	493	514	rVB	295217	716726	39.06%	8.318%
4	7.213	535	542	565	rVB	663988	1498122	81.65%	17.386%
5	8.884	701	707	725	rBV	837296	1834778	100.00%	21.293%
6	10.575	866	874	887	rBV	794926	1610606	87.78%	18.692%
7	11.983	1006	1013	1027	rVB	789264	1538994	83.88%	17.861%

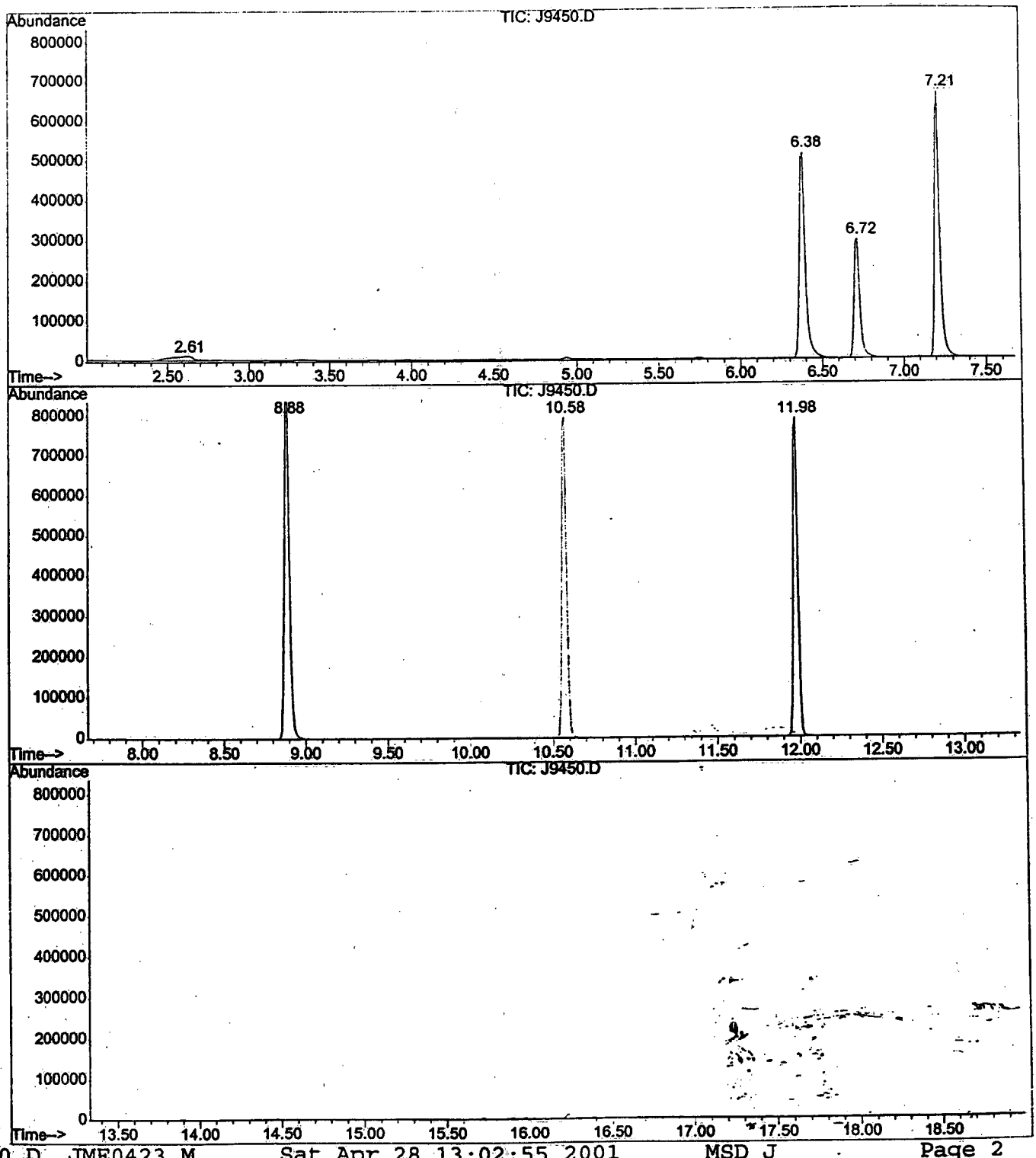
Sum of corrected areas: 8616704

2765

000157

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-27-01\J9450.D
Operator : XINGFANG WANG
Acquired : 27 Apr 2001 15:41 using AcqMethod JME0423
Instrument : MSD_J
Sample Name: N/A,METHOD-BLK,S,0.1g,0
Misc Info :
Vial Number: 4
Quant File :JME0423.RES (RTE Integrator)



2766

000158

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\04-26-01\I8359.D
Acq On : 26 Apr 2001 10:50
Sample : N/A,METHOD_BLK,S,0.1g,0
Misc : N/A,N/A,N/A
IS Integration Params: rteint.p
Quant Time: Apr 30 15:30 2001

Vial: 4
Operator: SANGEETA
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: IME0425.RES

Quant Method : C:\HPCHEM\1\METHODS\IME0425.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 30 14:44:16 2001
Response via : Initial Calibration
DataAcq Meth : VOAI

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	9.56	168	1538923	50.00	UG	0.00
31) 1,4-Difluorobenzene	10.79	114	1288802	50.00	UG	0.00
50) Chlorobenzene-d5	15.80	117	890973	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	10.05	65	661607	56.58	UG	0.00
Spiked Amount 50.000	Range 36 - 115		Recovery = 113.16%			
41) Toluene-d8	13.30	98	1028982	52.20	UG	0.00
Spiked Amount 50.000	Range 35 - 117		Recovery = 104.40%			
59) Bromofluorobenzene	17.91	95	906849	55.89	UG	0.00
Spiked Amount 50.000	Range 47 - 115		Recovery = 111.78%			

Target Compounds Qvalue

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

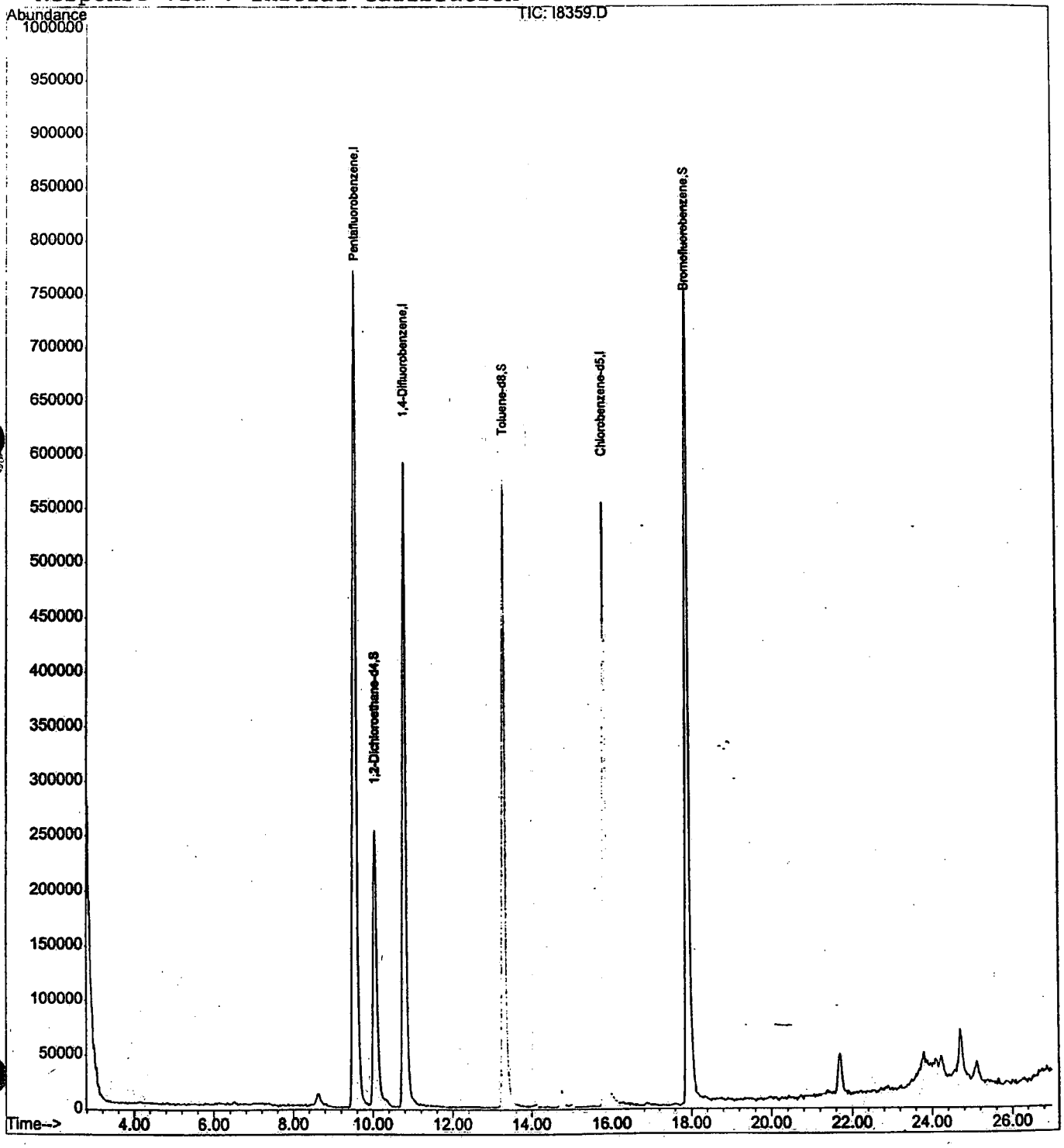
Quantitation Report

Data File : C:\HPCHEM\1\DATA\04-26-01\I8359.D
Acq On : 26 Apr 2001 10:50
Sample : N/A,METHOD_BLK,S,0.1g,0
Misc : N/A,N/A,N/A
MS Integration Params: rteint.p
Quant Time: Apr 30 15:30 2001

Vial: 4
Operator: SANGEETA
Inst : 5970 - In
Multiplr: 1.00

Quant Results File: IME0425.RES

Method : C:\HPCHEM\1\METHODS\IME0425.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 8260B
Last Update : Mon Apr 30 14:44:16 2001
Response via : Initial Calibration



2768

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\04-26-01\I8359.D
Acq On : 26 Apr 2001 10:50
Sample : N/A,METHOD_BLK,S,0.1g,0
Misc : N/A,N/A,N/A
MS Integration Params: LSCINT.P

Vial: 4
Operator: SANGEETA
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IME0425.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

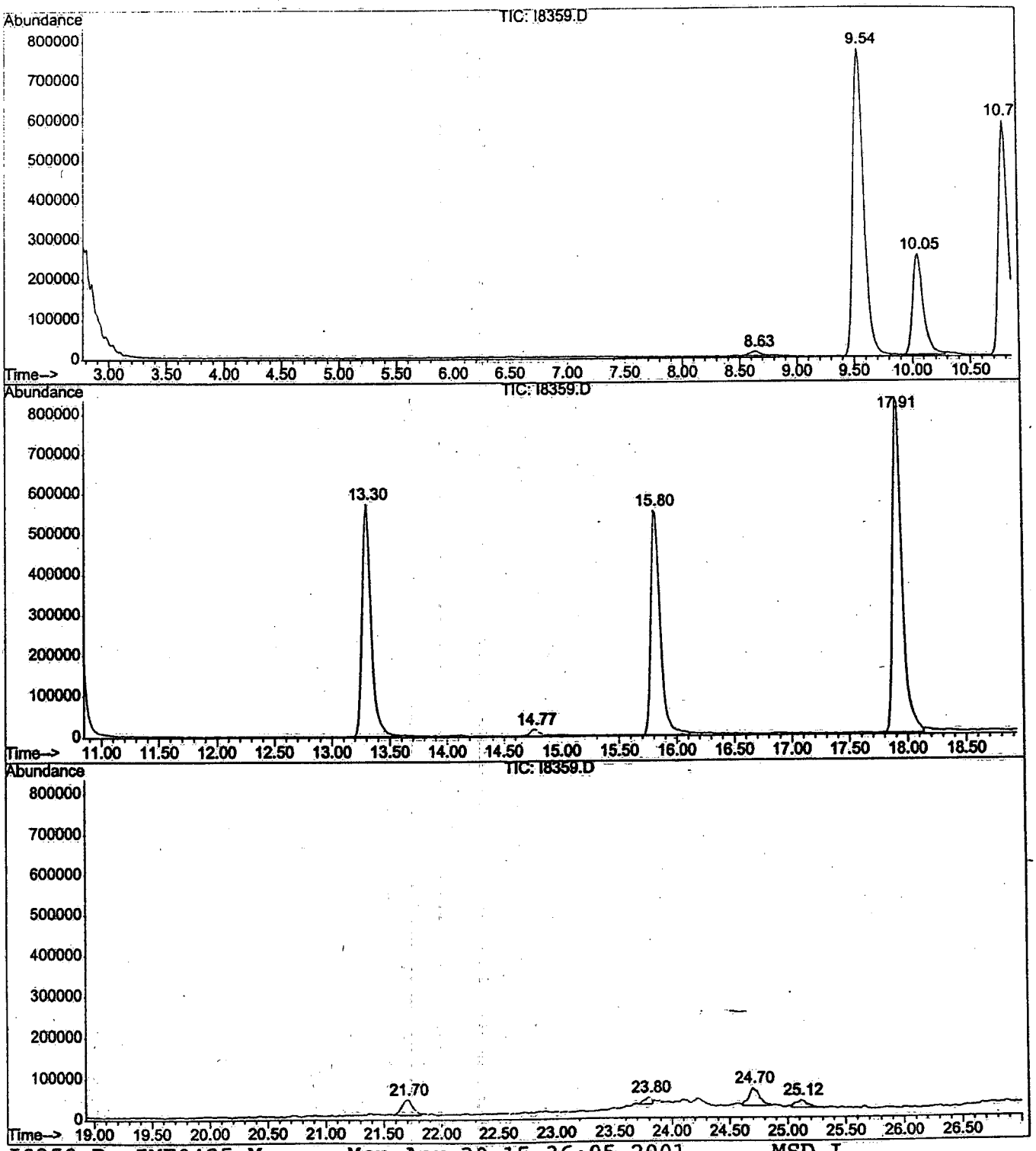
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	8.633	373	381	389	rBV2	10739	73542	1.48%	0.336%
2	9.541	431	440	458	rBV	772057	4964858	100.00%	22.670%
3	10.050	465	473	488	rBV	251925	1640324	33.04%	7.490%
4	10.788	512	521	538	rBV	591444	3415993	68.80%	15.597%
5	13.302	677	685	704	rBV	574077	3158224	63.61%	14.420%
6	14.767	772	780	786	rBV3	15917	91206	1.84%	0.416%
7	15.802	840	847	867	rBV	554325	3165272	63.75%	14.453%
8	17.908	977	984	999	rBV	833628	4656270	93.78%	21.261%
9	21.700	1222	1230	1238	rBV	37602	260310	5.24%	1.189%
10	23.801	1362	1368	1370	rVV6	17579	78216	1.58%	0.357%
11	24.699	1422	1428	1439	rVB3	43526	273563	5.51%	1.249%
12	25.116	1450	1456	1466	rVB	18869	123179	2.48%	0.562%

Sum of corrected areas: 21900957

I8359.D IME0425.M Mon Apr 30 15:36:04 2001 MSD_I

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\04-26-01\I8359.D
Operator : SANGEETA
Acquired : 26 Apr 2001 10:50 using AcqMethod VOAI
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 :IME0425.RES (RTE Integrator)



I8359.D IME0425.M Mon Apr 30 15:36:05 2001 MSD_I

2770

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B2054.D

DFTPP Injection Date : 04/16/2001

Inst ID: MSDB

DFTPP Injection Time: 09:19

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	39.3			
68	Less than 2.0% of mass 69	0.0	(	0.0	)1
69	Mass 69 relative abundance	42.1			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	53.9			
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	6.6			
275	10.0 - 30.0% of mass 198	23.6			
365	Greater than 1.0% of mass 198	2.7			
441	Present, but less than mass 443	9.41	(	76.9	)3
442	40.0 - 100.0% of mass 198	63.7			
443	17.0 - 23.0% of mass 442	12.2	(	19.2	)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
.	50BNA-STD-INJ-F	B2055.D	04/16/2001	10:34
.	20BNA-STD-INJ-F	B2056.D	04/16/2001	10:50
.	120BNA-STD-INJ-	B2057.D	04/16/2001	11:05
.	80BNA-STD-INJ-F	B2058.D	04/16/2001	11:21
.	160BNA-STD-INJ-	B2059.D	04/16/2001	11:37
.	50-OLMO4-STD-IN	B2060.D	04/16/2001	11:52
.	20-OLMO4-STD-IN	B2061.D	04/16/2001	12:05
.	80-OLMO4-STD-IN	B2062.D	04/16/2001	12:20
.	120-OLMO4-STD-	B2063.D	04/16/2001	12:34
.	160-OLMO4-STD-	B2064.D	04/16/2001	12:50
.	Method-Blank	B2065.D	04/16/2001	13:05
CCC6-CS1_3-7'	2334-001	B2066.D	04/16/2001	13:21
CCC6-CS2_3-7'	2334-002	B2067.D	04/16/2001	13:37
CCC6-CS3_3-7'	2334-003	B2068.D	04/16/2001	13:52
CCC6-CS3_3-7'	2334-004	B2069.D	04/16/2001	14:08
CCC6-GS3_3-7'	2334-007	B2070.D	04/16/2001	14:24
5A3-SB-5A_0-0	2294-007	B2071.D	04/16/2001	14:39
5A3-SB-5B_24-	2294-008	B2072.D	04/16/2001	14:55
5A3-SB-4A_3.5	2294-014	B2073.D	04/16/2001	15:11
5A3-SB-4B_6-6	2294-015	B2074.D	04/16/2001	15:27
E-4A-PES-W	2328-001	B2075.D	04/16/2001	15:42
E-4A-PES-S	2328-002	B2076.D	04/16/2001	15:58
E-4A-PES-N	2328-003	B2077.D	04/16/2001	16:14

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B2054.D

DFTPP Injection Date : 04/16/2001

Inst ID: MSDB

DFTPP Injection Time: 09:19

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	39.3			
68	Less than 2.0% of mass 69	0.0	(	0.0	)1
69	Mass 69 relative abundance	42.1			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	53.9			
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	6.6			
275	10.0 - 30.0% of mass 198	23.6			
365	Greater than 1.0% of mass 198	2.7			
441	Present, but less than mass 443	9.4	(	76.9	)3
442	40.0 - 100.0% of mass 198	63.7			
443	17.0 - 23.0% of mass 442	12.2	(	19.2	)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
E-4A-PEB-01	2328-004	B2078.D	04/16/2001	16:29
B2	2338-012	B2079.D	04/16/2001	16:45
B15	2338-023	B2080.D	04/16/2001	17:00
B12	2338-021	B2081.D	04/16/2001	17:16
B13	2338-022	B2082.D	04/16/2001	17:32
DA-1_0-6'	2338-026	B2083.D	04/16/2001	17:47
DA-2_0-6'	2338-028	B2084.D	04/16/2001	18:03
SP-1	2338-032	B2085.D	04/16/2001	18:18
HA-1	2408-001	B2086.D	04/16/2001	18:34
B15	2338-023MS	B2087.D	04/16/2001	18:49
B15	2338-023MSD	B2088.D	04/16/2001	19:05
.	Method-Blank	B2089.D	04/16/2001	19:20
S-1	2298-001	B2090.D	04/16/2001	19:36
S-2	2298-002	B2091.D	04/16/2001	19:52

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B2155.D

DFTPP Injection Date : 04/19/2001

Inst ID: MSDB

DFTPP Injection Time: 06:04

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	35.9			
68	Less than 2.0% of mass 69	0.0	(	0.0	)1
69	Mass 69 relative abundance	40.8			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	55.2			
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	23.6			
365	Greater than 1.0% of mass 198	3.6			
441	Present, but less than mass 443	10.32	(	70.8	)3
442	40.0 - 100.0% of mass 198	74.4			
443	17.0 - 23.0% of mass 442	14.6	(	19.6	)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
.	50-BNA-STD-INJ-F	B2156.D	04/19/2001	06:12
.	50-OLMO4-STD-IN	B2157.D	04/19/2001	06:26
.	Method-Blk	B2158.D	04/19/2001	06:41
BSS-1	2436-001	B2159.D	04/19/2001	06:56
BSS-2	2436-002	B2160.D	04/19/2001	07:26
BSS-3	2436-003	B2161.D	04/19/2001	07:57
.	Method-Blk	B2162.D	04/19/2001	08:55
S-58	2435-001	B2163.D	04/19/2001	09:10
S-59	2435-002	B2164.D	04/19/2001	09:25
S-60	2435-003	B2165.D	04/19/2001	09:40
S-61	2435-004	B2166.D	04/19/2001	09:56
S-62	2435-005	B2167.D	04/19/2001	10:11
S-65	2435-008	B2168.D	04/19/2001	10:26
S-68A	2435-011	B2169.D	04/19/2001	10:41
S-68B	2435-012	B2170.D	04/19/2001	10:57
CF-1	2195-005	B2171.D	04/19/2001	11:12
WP-1B	2195-002	B2172.D	04/19/2001	11:27
TP103-A2	2195-003	B2173.D	04/19/2001	11:43
001	2427-001	B2174.D	04/19/2001	11:58
002	2427-002	B2175.D	04/19/2001	12:13

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B2177.D

DFTPP Injection Date : 04/20/2001

Inst ID: MSDB

DFTPP Injection Time: 07:37

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	33.0			
68	Less than 2.0% of mass 69	0.0	(	0.0	)1
69	Mass 69 relative abundance	35.9			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	48.7			
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	6.8			
275	10.0 - 30.0% of mass 198	25.0			
365	Greater than 1.0% of mass 198	4.0			
441	Present, but less than mass 443	11.83	(	69.3	)3
442	40.0 - 100.0% of mass 198	88.0			
443	17.0 - 23.0% of mass 442	17.1	(	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
.	50-BNA-STD-INJ-F	B2179.D	04/20/2001	08:25
.	50-OLMO4-STD-IN	B2180.D	04/20/2001	08:45
BERRY-2	2447-002	B2181.D	04/20/2001	09:00
BERRY-4	2447-004	B2182.D	04/20/2001	09:16
BERRY-6	2447-006	B2183.D	04/20/2001	09:32
BERRY-8	2447-008	B2184.D	04/20/2001	09:47
S-59	2435-002MS	B2185.D	04/20/2001	10:03
S-59	2435-002MSD	B2186.D	04/20/2001	10:20
.	Method-Blk	B2187.D	04/20/2001	10:36
.	Blank-MS	B2188.D	04/20/2001	10:51
.	Blank-MSD	B2189.D	04/20/2001	11:07
P113-133	2369-013	B2190.D	04/20/2001	11:23
Q113-2-LB7	2369-015	B2191.D	04/20/2001	11:39
Q113-2-LB1	2369-016	B2192.D	04/20/2001	11:55
Q113-2-LB3	2369-018	B2193.D	04/20/2001	12:11
.	Method-Blk	B2194.D	04/20/2001	12:43
CC10-GS3_3-7'	2507-003	B2195.D	04/20/2001	12:59
CC10-CS1_3-7'	2507-004	B2196.D	04/20/2001	13:14
CC10-CS2_3-7'	2507-005	B2197.D	04/20/2001	13:33
CC10-CS3_3-7'	2507-006	B2198.D	04/20/2001	13:49
CCT-CS5_8'	2471-001	B2199.D	04/20/2001	14:05
CCT-CS6_8'	2471-002	B2200.D	04/20/2001	14:21
CCT-CS7_8'	2471-003	B2201.D	04/20/2001	14:37

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: B2177.D

DFTPP Injection Date : 04/20/2001

Inst ID: MSDB

DFTPP Injection Time: 07:37

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	33.0			
68	Less than 2.0% of mass 69	0.0	(	0.0	)1
69	Mass 69 relative abundance	35.9			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	48.7			
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	6.8			
275	10.0 - 30.0% of mass 198	25.0			
365	Greater than 1.0% of mass 198	4.0			
441	Present, but less than mass 443	11.8	(	69.3	)3
442	40.0 - 100.0% of mass 198	88.0			
443	17.0 - 23.0% of mass 442	17.1	(	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
CCT-CS8_8'	2471-004	B2202.D	04/20/2001	14:53
CCT-GS8_8'	2471-008	B2203.D	04/20/2001	15:09
WC-1.COMP	2476-001	B2204.D	04/20/2001	15:25
SP-1	2517-001	B2205.D	04/20/2001	15:41
SP-1	2517-001MS	B2206.D	04/20/2001	15:57
SP-1	2517-001MSD	B2207.D	04/20/2001	16:13
Q113-2-LB4	2369-019	B2208.D	04/20/2001	16:28
Q113-2-LB5	2369-020	B2209.D	04/20/2001	16:43
P113-46-LB-7	2369-010	B2210.D	04/20/2001	16:59
P113-46-LB-4	2369-014	B2211.D	04/20/2001	17:15
Q113-2-LB2	2369-017	B2212.D	04/20/2001	17:30
P113-46-LB-7	2369-009	B2213.D	04/20/2001	17:46
Q113-2-LB6	2369-021	B2214.D	04/20/2001	18:02
N4-51	2428-001	B2215.D	04/20/2001	18:17
M5-40	2428-002	B2216.D	04/20/2001	18:33
O4-18	2428-003	B2217.D	04/20/2001	18:49
O4-155	2428-004	B2218.D	04/20/2001	19:04
MW-4A	2428-005	B2219.D	04/20/2001	19:20
MW-4B	2428-006	B2220.D	04/20/2001	19:36
N4-4	2428-007	B2221.D	04/20/2001	19:51

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: B2162.D

Instrument ID: MSDA

Date Extracted: 04/19/01

Matrix: SOIL

Date Analyzed: 04/19/2001

Time Analyzed: 08:55

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S-58	2435-001	04/19/2001	09:10
S-59	2435-002	04/19/2001	09:25
S-60	2435-003	04/19/2001	09:40
S-61	2435-004	04/19/2001	09:56
S-62	2435-005	04/19/2001	10:11
S-65	2435-008	04/19/2001	10:26
S-68A	2435-011	04/19/2001	10:41
S-68B	2435-012	04/19/2001	10:57
CF-1	2195-005	04/19/2001	11:12
WP-1B	2195-002	04/19/2001	11:27
TP103-A2	2195-003	04/19/2001	11:43
001	2427-001	04/19/2001	11:58
002	2427-002	04/19/2001	12:13
BERRY-2	2447-002	04/20/2001	09:00
BERRY-4	2447-004	04/20/2001	09:16
BERRY-6	2447-006	04/20/2001	09:32
BERRY-8	2447-008	04/20/2001	09:47
S-59	2435-002MS	04/20/2001	10:03
S-59	2435-002MSD	04/20/2001	10:20

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blk
Client ID: .
Date Received: N/A
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2162.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

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blk
Client ID: .
Date Received: N/A
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2162.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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000170

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: N/A

Lab ID: Method-Blk
Client ID: .
Date Received: N/A
Date Extracted: 04/19/2001
Date Analyzed: 04/19/2001
Data file: B2162.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

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Response Factor Report MSD_B

Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration

Calibration Files
160 =B2059.D 80 =B2058.D 50 =B2055.D
20 =B2056.D 120 =B2057.D

		Compound	160	80	50	20	120	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD						
2)	T	N-Nitrosodimethylam	0.663	0.605	0.671	0.566	0.615	0.624	6.97
3)	T	Pyridine	0.677	0.626	0.670	0.597	0.654	0.645	5.10
4)	S	2-Fluorophenol	1.025	1.000	1.160	0.959	0.953	1.019	8.23
5)	T	Benzaldehyde	0.989	1.314	0.932	0.889	1.007	1.026	16.31
6)	S	Phenol-d5	1.254	1.172	1.300	1.223	1.215	1.233	3.86
7)	MC	Phenol	1.242	1.312	1.197	1.321	1.509	1.316	9.04
8)	T	Aniline	1.659	1.233	1.667	1.409	1.727	1.539	13.66
9)	T	bis(2-Chloroethyl)e	1.031	1.328	1.038	0.988	0.897	1.056	15.34
10)	M	2-Chlorophenol	1.256	1.163	1.028	1.175	1.316	1.188	9.16
11)	T	1,3-Dichlorobenzene	1.276	1.417	1.322	1.067	1.341	1.284	10.26
12)	MC	1,4-Dichlorobenzene	1.499	1.295	1.642	1.376	1.554	1.473	9.39
13)	T	Benzyl alcohol	0.657	0.613	0.670	0.544	0.605	0.618	8.03
14)	T	1,2-Dichlorobenzene	1.199	1.364	1.420	1.097	1.227	1.261	10.32
15)	T	2-Methylphenol	0.999	1.047	1.086	0.913	1.022	1.013	6.42
16)	T	bis(2-chloroisoprop	1.038	0.990	1.156	1.077	1.066	1.065	5.71
17)	T	4-Methylphenol	0.979	0.952	1.018	0.877	0.961	0.957	5.37
18)	MP	N-Nitroso-di-n-prop	0.559	0.601	0.760	0.626	0.656	0.640	11.80
19)	T	Acetophenone	1.393	1.378	1.513	1.307	1.422	1.403	5.31
20)	T	2-Aminotoluene +4-A	1.808	1.986	2.292	2.003	1.921	2.002	8.96
21)	T	Hexachloroethane	0.485	0.489	0.524	0.424	0.476	0.480	7.48
22)	I	Naphthalene-d8	ISTD						
23)	S	Nitrobenzene-d5	0.354	0.320	0.298	0.278	0.343	0.319	9.87
24)	T	Nitrobenzene	0.260	0.253	0.274	0.276	0.282	0.269	4.55
25)	T	Isophorone	0.505	0.477	0.512	0.480	0.500	0.495	3.16
26)	TC	2-Nitrophenol	0.186	0.164	0.116	0.149	0.200	0.163	20.11
27)	T	2,4-Dimethylphenol	0.308	0.309	0.264	0.320	0.339	0.308	8.88
28)	T	bis(2-Chloroethoxy)	0.341	0.317	0.350	0.302	0.367	0.335	7.71
29)	T	Benzoic acid	0.105	0.103	0.091	0.071	0.106	0.095	15.45
30)	T	2,4-Dimethylaniline	0.399	0.388	0.404	0.384	0.404	0.396	2.39
31)	TC	2,4-Dichlorophenol	0.263	0.287	0.230	0.281	0.323	0.277	12.33
32)	M	1,2,4-Trichlorobenz	0.302	0.309	0.298	0.276	0.327	0.302	6.06
33)	T	Naphthalene	0.901	1.018	1.022	0.931	0.907	0.956	6.26
34)	T	4-Chloroaniline	0.518	0.508	0.506	0.454	0.468	0.491	5.73
35)	TC	Hexachlorobutadiene	0.201	0.189	0.181	0.169	0.188	0.185	6.30
36)	T	Caprolactam	0.071	0.077	0.081	0.075	0.075	0.076	4.78
37)	MC	4-Chloro-3-methylph	0.216	0.223	0.180	0.224	0.239	0.216	10.12
38)	T	2-Methylnaphthalene	0.558	0.618	0.688	0.601	0.621	0.617	7.54
39)	I	Acenaphthene-d10	ISTD						
40)	TP	Hexachlorocyclopent	0.458	0.357	0.350	0.257	0.403	0.365	20.35
41)	TC	2,4,6-Trichlorophen	0.404	0.358	0.276	0.320	0.383	0.348	14.68
42)	T	2,4,5-Trichlorophen	0.398	0.352	0.349	0.300	0.355	0.351	9.86
43)	S	2-Fluorobiphenyl	1.395	1.283	1.308	1.171	1.404	1.312	7.23
44)	T	1-1'-Biphenyl	1.568	1.471	1.418	1.238	1.410	1.421	8.45
45)	T	2-Chloronaphthalene	1.221	1.061	1.043	0.928	1.059	1.062	9.82
46)	T	2-Nitroaniline	0.219	0.197	0.211	0.171	0.229	0.206	10.94
47)	T	Dimethylphthalate	1.124	0.969	1.005	0.943	1.151	1.038	8.98

48)	T	2,6-Dinitrotoluene	0.266	0.223	0.206	0.160	0.209	0.213	17.89
49)	T	Acenaphthylene	1.679	1.568	1.658	1.583	1.826	1.663	6.18
50)	T	3-Nitroaniline	0.313	0.281	0.302	0.236	0.333	0.293	12.68
51)	MC	Acenaphthene	1.109	1.022	1.077	0.977	1.120	1.061	5.69
52)	T	2,4-Dinitrophenol	0.100	0.078	0.041	0.039	0.077	0.067	39.14
53)	MP	4-Nitrophenol	0.138	0.135	0.111	0.119	0.143	0.129	10.66
)	M	2,4-Dinitrotoluene	0.284	0.241	0.244	0.191	0.293	0.251	16.27
)	T	Dibenzofuran	1.472	1.360	1.378	1.294	1.500	1.401	6.03
56)	T	Diethylphthalate	1.057	1.010	1.022	0.871	0.966	0.985	7.29
57)	T	Fluorene	1.123	1.169	1.195	1.027	1.205	1.144	6.33
58)	T	4-Chlorophenyl-phen	0.654	0.532	0.562	0.480	0.624	0.570	12.30
59)	T	4-Nitroaniline	0.273	0.238	0.231	0.184	0.285	0.242	16.39
60)	I	Phenanthrene-d10	----------ISTD----------						
61)	T	4,6-Dinitro-2-methy	0.093	0.077	0.048	0.042	0.085	0.069	32.90
62)	TC	N-Nitrosodiphenylam	0.481	0.447	0.485	0.434	0.477	0.465	4.92
63)	T	1,2-Diphenylhydrazi	0.731	0.596	0.703	0.592	0.695	0.664	9.72
64)	S	2,4,6-Tribromopheno	0.127	0.118	0.125	0.115	0.105	0.118	7.51
65)	T	4-Bromophenyl-pheny	0.245	0.207	0.228	0.178	0.213	0.214	11.66
66)	T	Hexachlorobenzene	0.264	0.261	0.272	0.213	0.287	0.259	10.78
67)	T	Atrazine	0.194	0.173	0.184	0.153	0.168	0.174	8.83
68)	MC	Pentachlorophenol	0.137	0.134	0.097	0.100	0.141	0.122	17.57
69)	T	Phenanthrene	0.917	0.951	0.979	0.809	0.930	0.917	7.08
70)	T	Anthracene	0.941	0.936	1.001	0.834	0.990	0.940	7.02
71)	T	Carbazole	0.831	0.764	0.825	0.676	0.839	0.787	8.73
72)	T	Di-n-butylphthalate	1.026	0.932	0.979	0.793	0.964	0.939	9.40
73)	TC	Fluoranthene	0.951	0.821	0.874	0.713	0.919	0.856	10.95
74)	T	Benzidine	0.272	0.228	0.217	0.195	0.248	0.232	12.61
75)	I	Chrysene-d12	----------ISTD----------						
76)	M	Pyrene	1.358	1.354	1.423	1.256	1.348	1.348	4.43
77)	S	Terphenyl-d14	1.012	1.142	1.163	1.162	1.119	1.120	5.58
78)	T	3,3'-Dimethylbenzid	0.261	0.227	0.279	0.297	0.245	0.262	10.45
79)	T	Butylbenzylphthalat	0.581	0.541	0.561	0.491	0.557	0.546	6.23
80)	T	3,3'-Dichlorobenzid	0.308	0.278	0.324	0.261	0.295	0.293	8.38
81)	T	Benzo[a]anthracene	1.019	0.954	1.003	0.844	1.005	0.965	7.44
82)	T	Chrysene	1.011	0.935	0.990	0.835	0.999	0.954	7.60
83)	T	bis(2-Ethylhexyl)ph	0.692	0.652	0.686	0.564	0.688	0.656	8.23
84)	I	Perylene-d12	----------ISTD----------						
85)	TC	Di-n-octylphthalate	1.021	0.995	1.085	0.938	1.014	1.010	5.20
86)	T	Benzo[b]fluoranthen	1.176	0.996	0.930	0.890	1.138	1.026	12.32
87)	T	Benzo[k]fluoranthen	0.887	0.955	1.092	0.901	0.857	0.938	9.93
88)	TC	Benzo[a]pyrene	0.968	0.896	0.935	0.801	0.921	0.904	7.02
89)	T	Indeno[1,2,3-cd]pyr	1.284	1.208	1.266	1.007	1.254	1.204	9.45
90)	T	Dibenz[a,h]anthrace	1.053	1.005	1.037	0.824	1.036	0.991	9.60
91)	T	Benzo[g,h,i]perylen	1.037	1.004	1.070	0.876	1.017	1.001	7.39

(#) = Out of Range

BS1401.M Mon Apr 16 13:05:29 2001 MSD_B

Instrument ID: MSD_B
Method ID: BS1401.M
Date: 04/16/2001

Average %RSD = 10.09

Refer to SW846 Method 8000B Section 7.5.1.

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2156.D
Acq On : 19 Apr 2001 6:12
Sample : .,50-BNA-STD-INJ-FOR-04/18/01
Misc :
S Integration Params: rteint.p

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 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	92	-0.01
2	T	N-Nitrosodimethylamine	0.624	0.644	-3.2	88	-0.03
3	T	Pyridine	0.645	0.617	4.3	85	-0.03
4	S	2-Fluorophenol	1.019	1.075	-5.5	85	-0.01
5	T	Benzaldehyde	1.026	0.933	9.1	94	-0.02
6	S	Phenol-d5	1.233	1.300	-5.4	92	-0.02
7	MC	Phenol	1.316	1.355	-3.0	104	-0.02
8	T	Aniline	1.539	1.625	-5.6	89	-0.02
9	T	bis(2-Chloroethyl)ether	1.056	1.065	-0.9	94	-0.01
10	M	2-Chlorophenol	1.188	1.047	11.9	93	-0.02
11	T	1,3-Dichlorobenzene	1.284	1.401	-9.1	97	-0.01
12	MC	1,4-Dichlorobenzene	1.473	1.525	-3.5	85	-0.02
13	T	Benzyl alcohol	0.618	0.671	-8.6	92	-0.02
14	T	1,2-Dichlorobenzene	1.261	1.473	-16.8	95	-0.01
15	T	2-Methylphenol	1.013	1.177	-16.2	99	-0.02
16	T	bis(2-chloroisopropyl)ether	1.065	1.129	-6.0	90	-0.02
17	T	4-Methylphenol	0.957	1.046	-9.3	94	-0.02
18	MP	N-Nitroso-di-n-propylamine	0.640	0.743	-16.1	90	-0.02
19	T	Acetophenone	1.403	1.573	-12.1	95	-0.02
20	T	2-Aminotoluene +4-Aminotolu	2.002	2.340	-16.9	94	-0.02
21	T	Hexachloroethane	0.480	0.513	-6.9	90	-0.01
22	I	Naphthalene-d8	1.000	1.000	0.0	92	-0.01
23	S	Nitrobenzene-d5	0.319	0.312	2.2	96	-0.02
24	T	Nitrobenzene	0.269	0.284	-5.6	95	-0.02
25	T	Isophorone	0.495	0.550	-11.1	99	-0.02
26	TC	2-Nitrophenol	0.163	0.156	4.3	123	-0.01
27	T	2,4-Dimethylphenol	0.308	0.262	14.9	91	-0.02
28	T	bis(2-Chloroethoxy)methane	0.335	0.364	-8.7	96	-0.01
29	T	Benzoic acid	0.095	0.106	-11.6	107	-0.03
30	T	2,4-Dimethylaniline	0.396	0.437	-10.4	99	-0.02
31	TC	2,4-Dichlorophenol	0.277	0.236	14.8	94	-0.02
32	M	1,2,4-Trichlorobenzene	0.302	0.317	-5.0	98	-0.01
33	T	Naphthalene	0.956	1.053	-10.1	95	-0.01
34	T	4-Chloroaniline	0.491	0.523	-6.5	95	-0.02
35	TC	Hexachlorobutadiene	0.185	0.201	-8.6	102	-0.01
36	T	Caprolactam	0.076	0.085	-11.8	97	-0.03
37	MC	4-Chloro-3-methylphenol	0.216	0.221	-2.3	113	-0.01
38	T	2-Methylnaphthalene	0.617	0.677	-9.7	91	-0.01
39	I	Acenaphthene-d10	1.000	1.000	0.0	106	0.00
40	TP	Hexachlorocyclopentadiene	0.365	0.303	17.0	92	-0.01
41	TC	2,4,6-Trichlorophenol	0.348	0.304	12.6	117	-0.01
42	T	2,4,5-Trichlorophenol	0.351	0.381	-8.5	116	-0.01
43	S	2-Fluorobiphenyl	1.312	1.280	2.4	104	0.00
44	T	1-1'-Biphenyl	1.421	1.577	-11.0	118	-0.01
45	T	2-Chloronaphthalene	1.062	1.132	-6.6	115	-0.01

46	T	2-Nitroaniline	0.206	0.225	-9.2	113	-0.01
47	T	Dimethylphthalate	1.038	1.067	-2.8	113	-0.01
48	T	2,6-Dinitrotoluene	0.213	0.254	-19.2	131	-0.01
49	T	Acenaphthylene	1.663	1.688	-1.5	108	-0.01
	T	3-Nitroaniline	0.293	0.316	-7.8	111	-0.01
	MC	Acenaphthene	1.061	1.098	-3.5	108	-0.01
	T	2,4-Dinitrophenol	0.067	0.076	-13.4	198	-0.01
	MP	4-Nitrophenol	0.129	0.132	-2.3	126	-0.01
54	M	2,4-Dinitrotoluene	0.251	0.265	-5.6	116	-0.01
55	T	Dibenzofuran	1.401	1.465	-4.6	113	0.00
56	T	Diethylphthalate	0.985	1.044	-6.0	109	-0.01
57	T	Fluorene	1.144	1.245	-8.8	111	0.00
58	T	4-Chlorophenyl-phenylether	0.570	0.631	-10.7	119	-0.01
59	T	4-Nitroaniline	0.242	0.272	-12.4	125	-0.02
60	I	Phenanthrene-d10	1.000	1.000	0.0	125	-0.02
61	T	4,6-Dinitro-2-methylphenol	0.069	0.068	1.4	175	-0.01
62	TC	N-Nitrosodiphenylamine	0.465	0.493	-6.0	127	-0.01
63	T	1,2-Diphenylhydrazine/Azobe	0.664	0.745	-12.2	132	-0.01
64	S	2,4,6-Tribromophenol	0.118	0.123	-4.2	123	-0.01
65	T	4-Bromophenyl-phenylether	0.214	0.223	-4.2	122	-0.01
66	T	Hexachlorobenzene	0.259	0.273	-5.4	125	-0.01
67	T	Atrazine	0.174	0.189	-8.6	128	-0.02
68	MC	Pentachlorophenol	0.122	0.110	9.8	142	-0.02
69	T	Phenanthrene	0.917	0.939	-2.4	120	-0.02
70	T	Anthracene	0.940	0.942	-0.2	117	-0.02
71	T	Carbazole	0.787	0.789	-0.3	119	-0.01
72	T	Di-n-butylphthalate	0.939	0.993	-5.8	126	-0.02
73	TC	Fluoranthene	0.856	0.852	0.5	121	-0.02
74	T	Benzidine	0.232	0.196	15.5	112	-0.02
	I	Chrysene-d12	1.000	1.000	0.0	112	-0.01
	M	Pyrene	1.348	1.534	-13.8	121	-0.01
77	S	Terphenyl-d14	1.120	1.269	-13.3	122	-0.01
78	T	3,3'-Dimethylbenzidine	0.262	0.265	-1.1	106	-0.02
79	T	Butylbenzylphthalate	0.546	0.604	-10.6	120	-0.02
80	T	3,3'-Dichlorobenzidine	0.293	0.304	-3.8	105	-0.02
81	T	Benzo[a]anthracene	0.965	0.966	-0.1	108	-0.02
82	T	Chrysene	0.954	0.982	-2.9	111	-0.02
83	T	bis(2-Ethylhexyl)phthalate	0.656	0.710	-8.2	116	-0.01
84	I	Perylene-d12	1.000	1.000	0.0	102	-0.02
85	TC	Di-n-octylphthalate	1.010	1.116	-10.5	105	-0.01
86	T	Benzo[b]fluoranthene	1.026	0.955	6.9	105	-0.03
87	T	Benzo[k]fluoranthene	0.938	1.082	-15.4	101	-0.02
88	TC	Benzo[a]pyrene	0.904	0.942	-4.2	103	-0.02
89	T	Indeno[1,2,3-cd]pyrene	1.204	1.251	-3.9	101	-0.05
90	T	Dibenz[a,h]anthracene	0.991	1.016	-2.5	100	-0.05
91	T	Benzo[g,h,i]perylene	1.001	1.061	-6.0	101	-0.04

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

B2055.D BS1401.M Thu Apr 19 07:27:08 2001 MSD_B

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\04-20-01\B2179.D
Acq On : 20 Apr 2001 8:25
Sample : .,50-BNA-STD-INJ-FOR-04/20/01
Misc :
"S Integration Params: rteint.p

Vial: 3
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 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	107	-0.01
2	T	N-Nitrosodimethylamine	0.624	0.541	13.3	86	-0.03
3	T	Pyridine	0.645	0.590	8.5	94	-0.02
4	S	2-Fluorophenol	1.019	1.064	-4.4	98	-0.01
5	T	Benzaldehyde	1.026	0.849	17.3	96	-0.02
6	S	Phenol-d5	1.233	1.251	-1.5	103	-0.02
7	MC	Phenol	1.316	1.288	2.1	115	-0.02
8	T	Aniline	1.539	1.544	-0.3	99	-0.02
9	T	bis(2-Chloroethyl)ether	1.056	1.053	0.3	108	-0.01
10	M	2-Chlorophenol	1.188	1.031	13.2	107	-0.02
11	T	1,3-Dichlorobenzene	1.284	1.298	-1.1	105	-0.01
12	MC	1,4-Dichlorobenzene	1.473	1.513	-2.7	99	-0.02
13	T	Benzyl alcohol	0.618	0.654	-5.8	104	-0.02
14	T	1,2-Dichlorobenzene	1.261	1.406	-11.5	106	-0.01
15	T	2-Methylphenol	1.013	1.136	-12.1	112	-0.02
16	T	bis(2-chloroisopropyl)ether	1.065	1.075	-0.9	99	-0.02
17	T	4-Methylphenol	0.957	0.999	-4.4	105	-0.02
18	MP	N-Nitroso-di-n-propylamine	0.640	0.706	-10.3	99	-0.02
19	T	Acetophenone	1.403	1.507	-7.4	106	-0.02
20	T	2-Aminotoluene +4-Aminotolu	2.002	2.219	-10.8	103	-0.02
21	T	Hexachloroethane	0.480	0.513	-6.9	105	-0.01
22	I	Naphthalene-d8	1.000	1.000	0.0	102	-0.01
23	S	Nitrobenzene-d5	0.319	0.316	0.9	108	-0.02
24	T	Nitrobenzene	0.269	0.278	-3.3	103	-0.02
25	T	Isophorone	0.495	0.543	-9.7	108	-0.02
26	TC	2-Nitrophenol	0.163	0.153	6.1	134	-0.02
27	T	2,4-Dimethylphenol	0.308	0.267	13.3	103	-0.02
28	T	bis(2-Chloroethoxy)methane	0.335	0.350	-4.5	102	-0.02
29	T	Benzoic acid	0.095	0.102	-7.4	114	-0.03
30	T	2,4-Dimethylaniline	0.396	0.414	-4.5	104	-0.02
31	TC	2,4-Dichlorophenol	0.277	0.257	7.2	114	-0.02
32	M	1,2,4-Trichlorobenzene	0.302	0.340	-12.6	116	-0.01
33	T	Naphthalene	0.956	1.120	-17.2	111	-0.01
34	T	4-Chloroaniline	0.491	0.514	-4.7	104	-0.02
35	TC	Hexachlorobutadiene	0.185	0.197	-6.5	111	-0.01
36	T	Caprolactam	0.076	0.089	-17.1	111	-0.03
37	MC	4-Chloro-3-methylphenol	0.216	0.216	0.0	122	-0.01
38	T	2-Methylnaphthalene	0.617	0.661	-7.1	98	-0.01
39	I	Acenaphthene-d10	1.000	1.000	0.0	120	0.01
40	TP	Hexachlorocyclopentadiene	0.365	0.324	11.2	111	-0.01
41	TC	2,4,6-Trichlorophenol	0.348	0.360	-3.4	157	0.01
42	T	2,4,5-Trichlorophenol	0.351	0.360	-2.6	124	-0.01
43	S	2-Fluorobiphenyl	1.312	1.268	3.4	116	0.00
44	T	1-1'-Biphenyl	1.421	1.348	5.1	114	-0.01
45	T	2-Chloronaphthalene	1.062	1.055	0.7	121	0.00

46	T	2-Nitroaniline	0.206	0.221	-7.3	125	0.00
47	T	Dimethylphthalate	1.038	1.096	-5.6	131	0.00
48	T	2,6-Dinitrotoluene	0.213	0.226	-6.1	131	0.00
49	T	Acenaphthylene	1.663	1.691	-1.7	122	0.00
	T	3-Nitroaniline	0.293	0.316	-7.8	126	0.00
	MC	Acenaphthene	1.061	1.062	-0.1	118	0.00
	T	2,4-Dinitrophenol	0.067	0.082	-22.4	239	0.00
	MP	4-Nitrophenol	0.129	0.130	-0.8	141	0.00
54	M	2,4-Dinitrotoluene	0.251	0.278	-10.8	137	0.00
55	T	Dibenzofuran	1.401	1.432	-2.2	125	0.00
56	T	Diethylphthalate	0.985	1.050	-6.6	123	0.02
57	T	Fluorene	1.144	1.195	-4.5	120	0.02
58	T	4-Chlorophenyl-phenylether	0.570	0.579	-1.6	124	0.02
59	T	4-Nitroaniline	0.242	0.253	-4.5	131	0.01
60	I	Phenanthrene-d10	1.000	1.000	0.0	134	0.05
61	T	4,6-Dinitro-2-methylphenol	0.069	0.077	-11.6	214	0.02
62	TC	N-Nitrosodiphenylamine	0.465	0.481	-3.4	133	0.02
63	T	1,2-Diphenylhydrazine/Azobe	0.664	0.632	4.8	121	0.02
64	S	2,4,6-Tribromophenol	0.118	0.146	-23.7	157	0.03
65	T	4-Bromophenyl-phenylether	0.214	0.222	-3.7	130	0.03
66	T	Hexachlorobenzene	0.259	0.288	-11.2	142	0.04
67	T	Atrazine	0.174	0.171	1.7	124	0.03
68	MC	Pentachlorophenol	0.122	0.119	2.5	164	0.04
69	T	Phenanthrene	0.917	0.917	0.0	126	0.05
70	T	Anthracene	0.940	0.990	-5.3	133	0.05
71	T	Carbazole	0.787	0.794	-0.9	129	0.06
72	T	Di-n-butylphthalate	0.939	0.992	-5.6	136	0.06
73	TC	Fluoranthene	0.856	0.891	-4.1	137	0.05
74	T	Benzidine	0.232	0.164	29.3	101	0.05
	I	Chrysene-d12	1.000	1.000	0.0	132	0.04
	M	Pyrene	1.348	1.467	-8.8	136	0.05
77	S	Terphenyl-d14	1.120	1.194	-6.6	136	0.05
78	T	3,3'-Dimethylbenzidine	0.262	0.260	0.8	123	0.04
79	T	Butylbenzylphthalate	0.546	0.546	0.0	129	0.04
80	T	3,3'-Dichlorobenzidine	0.293	0.320	-9.2	131	0.04
81	T	Benzo[a]anthracene	0.965	0.970	-0.5	128	0.04
82	T	Chrysene	0.954	0.962	-0.8	129	0.04
83	T	bis(2-Ethylhexyl)phthalate	0.656	0.710	-8.2	137	0.04
84	I	Perylene-d12	1.000	1.000	0.0	118	0.02
85	TC	Di-n-octylphthalate	1.010	1.160	-14.9	126	0.03
86	T	Benzo[b]fluoranthene	1.026	1.061	-3.4	134	0.01
87	T	Benzo[k]fluoranthene	0.938	0.989	-5.4	106	0.02
88	TC	Benzo[a]pyrene	0.904	0.936	-3.5	118	0.01
89	T	Indeno[1,2,3-cd]pyrene	1.204	1.228	-2.0	114	-0.03
90	T	Dibenz[a,h]anthracene	0.991	1.010	-1.9	114	-0.02
91	T	Benzo[g,h,i]perylene	1.001	1.036	-3.5	114	-0.03

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

B2055.D BS1401.M Fri Apr 20 08:39:28 2001 MSD_B

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/19/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
Method-Blk	SOIL	B2158.D	58	64	53	62	89	115
2436-001	SOIL	B2159.D	N/A	N/A	60	73	N/A	96
2436-002	SOIL	B2160.D	N/A	N/A	65	76	N/A	89
2436-003	SOIL	B2161.D	N/A	N/A	61	72	N/A	102
Method-Blk	SOIL	B2162.D	80	86	58	66	87	102
2435-001	SOIL	B2163.D	67	86	57	69	96	98
2435-002	SOIL	B2164.D	73	83	60	68	99	106
2435-003	SOIL	B2165.D	67	86	58	66	94	104
2435-004	SOIL	B2166.D	73	85	60	68	104	109
2435-005	SOIL	B2167.D	74	78	63	72	105	112
2435-008	SOIL	B2168.D	N/A	N/A	68	80	N/A	92
2435-011	SOIL	B2169.D	74	80	61	69	98	94
2435-012	SOIL	B2170.D	75	87	59	67	96	92
2195-005	SOIL	B2171.D	81	84	68	80	105	94
2195-002	SOIL	B2172.D	N/A	N/A	63	77	N/A	92
2195-003	SOIL	B2173.D	N/A	N/A	72	76	N/A	91
2427-001	SOIL	B2174.D	N/A	N/A	59	73	N/A	93
2427-002	SOIL	B2175.D	N/A	N/A	61	76	N/A	97

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	41-99	42-95
S2 (PHL) = Phenol-d5	48-87	59-97
S3 (NBZ) = Nitrobenzene-d5	52-84	49-105
S4 (FBP) = 2-Fluorobiphenyl	61-102	54-110
S5 (TBP) = 2,4,6-Tribromophenol	68-105	48-126
S6 (TPH) = Terphenyl-d14	49-132	53-123

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/20/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
2447-002	SOIL	B2181.D	N/A	N/A	63	83	N/A	95
2447-004	SOIL	B2182.D	N/A	N/A	71	78	N/A	95
2447-006	SOIL	B2183.D	N/A	N/A	63	77	N/A	89
2447-008	SOIL	B2184.D	N/A	N/A	65	83	N/A	91
2435-002MS	SOIL	B2185.D	58	76	58	75	98	94
2435-002MSD	SOIL	B2186.D	64	78	55	69	102	96
Method-Blk	SOIL	B2187.D	81	86	73	81	105	92
Blank-MS	SOIL	B2188.D	67	85	62	79	104	108
Blank-MSD	SOIL	B2189.D	74	86	63	71	97	108
2369-013	SOIL	B2190.D	61	76	63	69	95	82
2369-015	SOIL	B2191.D	57	75	59	70	100	90
2369-016	SOIL	B2192.D	63	77	62	73	83	62
2369-018	SOIL	B2193.D	67	81	64	72	77	89
Method-Blk	SOIL	B2194.D	63	74	59	64	96	86
2507-003	SOIL	B2195.D	N/A	N/A	58	68	N/A	80
2507-004	SOIL	B2196.D	N/A	N/A	49*	60*	N/A	76
2507-005	SOIL	B2197.D	N/A	N/A	53	65	N/A	82
2507-006	SOIL	B2198.D	N/A	N/A	59	72	N/A	89
2471-001	SOIL	B2199.D	N/A	N/A	53	62	N/A	83
2471-002	SOIL	B2200.D	N/A	N/A	55	66	N/A	90
2471-003	SOIL	B2201.D	N/A	N/A	54	68	N/A	88
2471-004	SOIL	B2202.D	N/A	N/A	54	66	N/A	88
2471-008	SOIL	B2203.D	N/A	N/A	38*	57*	N/A	90

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	41-99	42-95
S2 (PHL) = Phenol-d5	48-87	59-97
S3 (NBZ) = Nitrobenzene-d5	52-84	49-105
S4 (FBP) = 2-Fluorobiphenyl	61-102	54-110
S5 (TBP) = 2,4,6-Tribromophenol	68-105	48-126
S6 (TPH) = Terphenyl-d14	49-132	53-123

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/20/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
2476-001	SOIL	B2204.D	57	73	60	68	92	93
2517-001	SOIL	B2205.D	59	71	55	65	89	87
2517-001MS	SOIL	B2206.D	64	76	54	65	98	97
2517-001MSD	SOIL	B2207.D	63	77	58	65	93	94
2369-010	SOIL	B2210.D	66	75	53	66	77	62
2369-014	SOIL	B2211.D	71	85	60	77	83	71
2369-017	SOIL	B2212.D	52	67	53	64	51*	79
2369-009	SOIL	B2213.D	46	71	44*	52*	114	68
2369-021	SOIL	B2214.D	7*	8*	7*	9*	1*	9*
2428-001	SOIL	B2215.D	37*	45*	39*	44*	17*	41*
2428-002	SOIL	B2216.D	64	69	62	72	19*	65
2428-003	SOIL	B2217.D	60	68	64	71	21*	63
2428-004	SOIL	B2218.D	63	71	65	77	35*	70
2428-005	SOIL	B2219.D	59	65	55	60*	101	56
2428-006	SOIL	B2220.D	74	79	67	77	31*	65
2428-007	SOIL	B2221.D	69	76	68	77	29*	66

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	41-99	42-95
S2 (PHL) = Phenol-d5	48-87	59-97
S3 (NBZ) = Nitrobenzene-d5	52-84	49-105
S4 (FBP) = 2-Fluorobiphenyl	61-102	54-110
S5 (TBP) = 2,4,6-Tribromophenol	68-105	48-126
S6 (TPH) = Terphenyl-d14	49-132	53-123

* Column to be used to flag recovery values

SOIL SEMIVOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2435-002 Batch No.: B041901S1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	100.0	0.0	71.9	72	26 - 90
2-Chlorophenol	100.0	0.0	63.2	63	25 - 102
1,4-Dichlorobenzene	50.0	0.0	28.4	57	28 - 104
N-Nitroso-di-n-propylamine	50.0	0.0	43.4	87	41 - 126
1,2,4-Trichlorobenzene	50.0	0.0	30.8	62	38 - 107
4-Chloro-3-methylphenol	100.0	0.0	80.0	80	26 - 103
Acenaphthene	50.0	0.0	38.8	78	31 - 137
4-Nitrophenol	100.0	0.0	87.4	87	11 - 114
2,4-Dinitrotoluene	50.0	0.0	43.5	87	28 - 89
Pentachlorophenol	100.0	0.0	86.5	87	17 - 109
Pyrene	50.0	0.0	43.0	86	35 - 142

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	0.0	67.9	68	6	42	26 - 90
2-Chlorophenol	0.0	66.6	67	6	40	25 - 102
1,4-Dichlorobenzene	0.0	29.2	58	2	28	28 - 104
N-Nitroso-di-n-propylamine	0.0	42.1	84	4	38	41 - 126
1,2,4-Trichlorobenzene	0.0	29.3	59	5	28	38 - 107
4-Chloro-3-methylphenol	0.0	82.7	83	4	42	26 - 103
Acenaphthene	0.0	39.3	79	1	31	31 - 137
4-Nitrophenol	0.0	85.1	85	2	50	11 - 114
2,4-Dinitrotoluene	0.0	43.8	88	1	38	28 - 89
Pentachlorophenol	0.0	89.8	90	3	50	17 - 109
Pyrene	0.0	43.0	86	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

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): B2055.D

Date Analyzed: 04/16/2001

Instrument ID: MSDB

Time Analyzed: 10:34

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	62814	2.31	220286	2.84	107769	3.61
	UPPER LIMIT	125628	2.81	440572	3.34	215538	4.11
	LOWER LIMIT	31407	1.81	110143	2.34	53885	3.11
	LAB SAMPLE ID						
01	20BNA-STD-INJ-FOR	66862	2.31	221744	2.84	114923	3.59
02	120BNA-STD-INJ-FO	62692	2.31	205504	2.84	98408	3.59
03	80BNA-STD-INJ-FOR	63171	2.31	209904	2.84	101330	3.59
04	160BNA-STD-INJ-FO	59883	2.31	196322	2.84	92597	3.59
05	50-OLMO4-STD-INJ-F	67517	2.31	246556	2.84	138264	3.59
06	20-OLMO4-STD-INJ-F	61396	2.30	237054	2.84	132412	3.59
07	80-OLMO4-STD-INJ-F	84447	2.31	297944	2.84	165812	3.59
08	120-OLMO4-STD-INJ	59252	2.30	228151	2.84	126531	3.59
09	160-OLMO4-STD-INJ	63585	2.31	228664	2.84	134032	3.59
10	Method-Blank	55181	2.30	215666	2.84	115882	3.59
11	2334-001	52650	2.30	204894	2.84	111326	3.59
12	2334-002	57419	2.31	214221	2.84	107524	3.60
13	2334-003	55130	2.31	138805	2.85	100242	3.61
14	2334-004	54376	2.31	146063	2.85	98953	3.61
15	2334-007	58520	2.30	227125	2.84	116767	3.59
16	2294-007	54734	2.30	212224	2.84	105634	3.59
17	2294-008	59876	2.31	226155	2.84	110546	3.59
18	2294-014	61130	2.30	228813	2.84	111132	3.59
19	2294-015	58809	2.30	224528	2.84	107149	3.59
20	2328-001	58673	2.30	228003	2.84	107947	3.59
21	2328-002	60207	2.30	232000	2.84	111984	3.59
22	2328-003	60842	2.30	237907	2.84	110090	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): B2055.D

Date Analyzed: 04/16/2001

Instrument ID: MSDB

Time Analyzed: 10:34

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	62814	2.31	220286	2.84	107769	3.61
	UPPER LIMIT	125628	2.81	440572	3.34	215538	4.11
	LOWER LIMIT	31407	1.81	110143	2.34	53885	3.11
	LAB SAMPLE ID						
01	2328-004	63536	2.30	242227	2.84	119991	3.59
02	2338-012	54844	2.3	209902	2.84	93755	3.59
03	2338-023	52255	2.3	201752	2.84	94658	3.59
04	2338-021	55470	2.3	204738	2.84	95888	3.59
05	2338-022	54551	2.3	208412	2.84	93177	3.59
06	2338-026	53234	2.3	200085	2.84	93178	3.59
07	2338-028	55021	2.3	204562	2.84	93094	3.59
08	2338-032	48588	2.3	175445	2.84	78371	3.59
09	2408-001	52148	2.3	185725	2.84	85344	3.59
10	2338-023MS	47620	2.3	171947	2.84	83846	3.59
11	2338-023MSD	49151	2.3	173598	2.84	81553	3.59
12	Method-Blank	49217	2.3	178532	2.84	85203	3.59
13	2298-001	55588	2.3	197865	2.84	90917	3.59
14	2298-002	55343	2.3	192481	2.84	87155	3.59
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): B2055.D

Date Analyzed: 04/16/2001

Instrument ID: MSDB

Time Analyzed: 10:34

	40UG/L	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	150635		4.28		95250		6.04		103900		7.27	
	UPPER LIMIT	301270		4.78		190500		6.54		207800		7.77	
	LOWER LIMIT	75318		3.78		47625		5.54		51950		6.77	
	LAB SAMPLE ID												
01	20BNA-STD-INJ-FOR	174964		4.26		102636		5.99		106231		7.25	
02	120BNA-STD-INJ-FO	151411		4.26		101717		6.00		113193		7.25	
03	80BNA-STD-INJ-FOR	154677		4.25		99065		5.99		108095		7.25	
04	160BNA-STD-INJ-FO	145198		4.25		103513		5.99		117162		7.25	
05	50-OLMO4-STD-INJ-F	196960		4.25		105272		5.99		108988		7.24	
06	20-OLMO4-STD-INJ-F	203148		4.25		103594		5.99		112081		7.24	
07	80-OLMO4-STD-INJ-F	250644		4.25		128382		5.99		133046		7.24	
08	120-OLMO4-STD-INJ	181566		4.25		101171		5.99		106071		7.25	
09	160-OLMO4-STD-INJ	190970		4.25		100647		5.99		105920		7.24	
10	Method-Blank	175386		4.25		91926		5.99		91523		7.24	
11	2334-001	162440		4.25		87608		5.99		94204		7.25	
12	2334-002	155480		4.25		92433		5.99		104557		7.24	
13	2334-003	160709		4.25		106312		5.99		115372		7.24	
14	2334-004	166318		4.25		107483		5.98		114933		7.24	
15	2334-007	173421		4.25		101374		5.99		109408		7.24	
16	2294-007	157807		4.24		97348		5.99		109003		7.24	
17	2294-008	177090		4.24		96941		5.98		109366		7.24	
18	2294-014	172680		4.24		96456		5.99		107816		7.23	
19	2294-015	161365		4.24		89760		6.00		104765		7.23	
20	2328-001	168443		4.24		92621		5.98		101804		7.24	
21	2328-002	170194		4.24		94351		5.98		105283		7.23	
22	2328-003	167872		4.24		95200		5.98		105977		7.24	

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): B2055.D

Date Analyzed: 04/16/2001

Instrument ID: MSDB

Time Analyzed: 10:34

	50UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	150635	4.28	95250	6.04	103900	7.27
	UPPER LIMIT	301270	4.78	190500	6.54	207800	7.77
	LOWER LIMIT	75318	3.78	47625	5.54	51950	6.77
	LAB SAMPLE ID						
01	2328-004	174601	4.23	96088	6.00	112118	7.23
02	2338-012	149279	4.24	92764	5.98	111911	7.24
03	2338-023	142802	4.24	81547	5.98	99463	7.23
04	2338-021	145890	4.23	90806	5.98	109237	7.23
05	2338-022	147530	4.23	93024	5.98	115501	7.24
06	2338-026	144170	4.23	87785	5.98	106422	7.23
07	2338-028	142529	4.23	86147	5.98	105661	7.23
08	2338-032	126178	4.23	100721	5.98	129077	7.25
09	2408-001	132451	4.23	99614	5.98	125312	7.24
10	2338-023MS	131593	4.24	90632	5.98	114270	7.23
11	2338-023MSD	127373	4.23	89838	5.98	114189	7.23
12	Method-Blank	131171	4.23	96065	5.98	117313	7.24
13	2298-001	141538	4.24	95452	5.98	120250	7.24
14	2298-002	140832	4.24	101481	5.98	126781	7.24
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): B2156.D

Date Analyzed: 04/19/2001

Instrument ID: MSDB

Time Analyzed: 06:12

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	57667	2.30	202480	2.83	114526	3.59
	UPPER LIMIT	115334	2.80	404960	3.33	229052	4.09
	LOWER LIMIT	28834	1.80	101240	2.33	57263	3.09
	LAB SAMPLE ID						
01	50-OLMO4-STD-INJ-F	65176	2.30	254129	2.83	152441	3.59
02	Method-Blk	87026	2.30	328384	2.83	182987	3.59
03	2436-001	59980	2.30	241637	2.83	126441	3.59
04	2436-002	57506	2.30	233207	2.83	122424	3.59
05	2436-003	55644	2.30	229693	2.83	129157	3.59
06	Method-Blk	56661	2.29	239671	2.83	127382	3.59
07	2435-001	54788	2.29	226886	2.83	123609	3.59
08	2435-002	49300	2.29	201397	2.83	116977	3.59
09	2435-003	52537	2.29	215107	2.83	121194	3.59
10	2435-004	52427	2.29	210145	2.83	119621	3.59
11	2435-005	52230	2.29	200046	2.83	115118	3.59
12	2435-008	47530	2.29	178685	2.83	97547	3.59
13	2435-011	45067	2.29	167545	2.83	95955	3.59
14	2435-012	48975	2.29	196349	2.83	108977	3.59
15	2195-005	49423	2.29	187464	2.83	104307	3.59
16	2195-002	50462	2.29	194530	2.83	101093	3.59
17	2195-003	55242	2.29	221316	2.83	106398	3.59
18	2427-001	50766	2.29	192273	2.83	104186	3.59
19	2427-002	50769	2.29	185862	2.83	103185	3.59
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): B2156.D

Date Analyzed: 04/19/2001

Instrument ID: MSDB

Time Analyzed: 06:12

	40UG/L	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	12 HOUR STD	187829		4.24		106483		5.98		106284		7.24	
	UPPER LIMIT	375658		4.74		212966		6.48		212568		7.74	
	LOWER LIMIT	93915		3.74		53242		5.48		53142		6.74	
	LAB SAMPLE ID												
01	50-OLMO4-STD-INJ-F	243877		4.23		128827		5.98		117590		7.23	
02	Method-Blk	316028		4.24		155771		5.99		138870		7.23	
03	2436-001	191669		4.24		113160		5.99		133301		7.24	
04	2436-002	174838		4.24		115425		5.99		139860		7.24	
05	2436-003	184667		4.23		105701		6.00		131291		7.23	
06	Method-Blk	191234		4.26		108755		6.00		126760		7.26	
07	2435-001	183041		4.24		101820		5.98		118016		7.24	
08	2435-002	173640		4.24		93331		5.98		108129		7.24	
09	2435-003	181413		4.24		93628		5.98		111031		7.24	
10	2435-004	176056		4.24		93738		5.98		111238		7.24	
11	2435-005	173438		4.24		96602		5.98		112547		7.23	
12	2435-008	150529		4.24		96116		5.98		118347		7.23	
13	2435-011	145576		4.24		90050		5.98		109619		7.23	
14	2435-012	162201		4.23		99284		5.98		118128		7.23	
15	2195-005	150792		4.23		96236		5.98		117462		7.24	
16	2195-002	153138		4.24		91582		6.00		116803		7.23	
17	2195-003	169652		4.24		101640		5.99		123015		7.23	
18	2427-001	152713		4.23		97181		5.97		118615		7.23	
19	2427-002	149691		4.23		93034		5.98		113326		7.23	
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): B2179.D

Date Analyzed: 04/20/2001

Instrument ID: MSDB

Time Analyzed: 08:25

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	67135	2.30	224147	2.83	129192	3.61
	UPPER LIMIT	134270	2.80	448294	3.33	258384	4.11
	LOWER LIMIT	33568	1.80	112074	2.33	64596	3.11
	LAB SAMPLE ID						
01	50-OLMO4-STD-INJ-F	59175	2.29	212908	2.83	130686	3.61
02	2447-002	60714	2.29	229589	2.83	119082	3.60
03	2447-004	51308	2.29	183605	2.83	110579	3.60
04	2447-006	54053	2.29	203734	2.83	116307	3.61
05	2447-008	54926	2.29	207718	2.83	109329	3.60
06	2435-002MS	57527	2.29	221928	2.83	118984	3.60
07	2435-002MSD	58514	2.29	226035	2.83	120307	3.61
08	Method-Blk	53269	2.29	195252	2.83	112000	3.60
09	Blank-MS	52367	2.29	201491	2.83	108613	3.60
10	Blank-MSD	51777	2.29	206786	2.83	114578	3.61
11	2369-013	50568	2.29	177754	2.83	103140	3.59
12	2369-015	52505	2.29	196154	2.83	107681	3.60
13	2369-016	43084	2.29	150015	2.83	78901	3.59
14	2369-018	41658	2.29	151757	2.83	78621	3.60
15	Method-Blk	55026	2.29	214824	2.83	119983	3.59
16	2507-003	53257	2.29	217470	2.83	114515	3.59
17	2507-004	56051	2.29	216814	2.83	119333	3.59
18	2507-005	57156	2.29	215183	2.83	116590	3.60
19	2507-006	54956	2.29	218220	2.83	117297	3.59
20	2471-001	56691	2.29	227352	2.83	122241	3.59
21	2471-002	56317	2.29	222307	2.83	123448	3.59
22	2471-003	53589	2.29	211876	2.83	115071	3.60

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): B2179.D

Date Analyzed: 04/20/2001

Instrument ID: MSDB

Time Analyzed: 08:25

	40UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	67135		2.30		224147		2.83		129192		3.61	
	UPPER LIMIT	134270		2.80		448294		3.33		258384		4.11	
	LOWER LIMIT	33568		1.80		112074		2.33		64596		3.11	
	LAB SAMPLE ID												
01	2471-004	54182		2.29		211001		2.83		111749		3.59	
02	2471-008	53058		2.29		205495		2.83		108523		3.59	
03	2476-001	52980		2.29		198794		2.83		109498		3.59	
04	2517-001	56785		2.29		216352		2.83		115445		3.59	
05	2517-001MS	56493		2.29		223569		2.83		119854		3.59	
06	2517-001MSD	58556		2.29		218147		2.83		119604		3.59	
07	2369-019	35706		2.29		124544		2.85		160938		3.9	
08	2369-020	33298*		2.29		126257		2.85		70021		3.62	
09	2369-010	45234		2.29		168723		2.83		91155		3.59	
10	2369-014	40964		2.29		151152		2.83		81117		3.59	
11	2369-017	41794		2.29		150605		2.83		79999		3.59	
12	2369-009	48329		2.29		184018		2.83		93481		3.59	
13	2369-021	52926		2.29		205897		2.83		102328		3.59	
14	2428-001	48944		2.29		187996		2.83		93719		3.59	
15	2428-002	46049		2.29		179893		2.83		88618		3.59	
16	2428-003	45799		2.29		177678		2.83		89735		3.59	
17	2428-004	45428		2.29		175114		2.83		90508		3.59	
18	2428-005	44044		2.29		177474		2.83		90771		3.59	
19	2428-006	46531		2.29		184651		2.83		90323		3.59	
20	2428-007	46849		2.29		180801		2.83		91443		3.59	
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): B2179.D

Date Analyzed: 04/20/2001

Instrument ID: MSDB

Time Analyzed: 08:25

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	201899	4.30	125943	6.04	122114	7.28
	UPPER LIMIT	403798	4.80	251886	6.54	244228	7.78
	LOWER LIMIT	100950	3.80	62972	5.54	61057	6.78
	LAB SAMPLE ID						
01	50-OLMO4-STD-INJ-F	225946	4.31	150386	6.04	135851	7.29
02	2447-002	195204	4.29	123253	6.03	139866	7.27
03	2447-004	175523	4.29	115944	6.03	131135	7.28
04	2447-006	178872	4.30	122652	6.03	141217	7.28
05	2447-008	180060	4.29	126378	6.03	145154	7.28
06	2435-002MS	195307	4.30	125126	6.03	139017	7.28
07	2435-002MSD	196831	4.31	123332	6.04	135139	7.29
08	Method-Blk	178973	4.29	111741	6.03	122084	7.27
09	Blank-MS	180304	4.29	107343	6.03	119484	7.28
10	Blank-MSD	176408	4.30	105858	6.04	117792	7.27
11	2369-013	165154	4.28	113715	6.02	132566	7.26
12	2369-015	174978	4.28	116703	6.01	131369	7.27
13	2369-016	104438	4.28	155920	6.09	165443	7.31
14	2369-018	174444	4.35	156994	6.06	168771	7.27
15	Method-Blk	189236	4.26	140790	6.00	153641	7.25
16	2507-003	184607	4.26	130530	6.00	144894	7.25
17	2507-004	188397	4.26	136115	6.00	151680	7.25
18	2507-005	188038	4.28	126890	6.01	142711	7.27
19	2507-006	186104	4.27	127213	6.01	144547	7.25
20	2471-001	187685	4.26	128972	6.00	144256	7.25
21	2471-002	190470	4.26	127171	6.00	144477	7.25
22	2471-003	181050	4.28	119631	6.01	133958	7.27

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): B2179.D

Date Analyzed: 04/20/2001

Instrument ID: MSDB

Time Analyzed: 08:25

	50UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	201899	4.30	125943	6.04	122114	7.28
	UPPER LIMIT	403798	4.80	251886	6.54	244228	7.78
	LOWER LIMIT	100950	3.80	62972	5.54	61057	6.78
	LAB SAMPLE ID						
01	2471-004	188079	4.27	121971	6.01	135058	7.26
02	2471-008	175913	4.27	115109	6.01	135305	7.25
03	2476-001	178094	4.26	116567	6.00	135705	7.25
04	2517-001	186148	4.25	118541	5.99	138773	7.25
05	2517-001MS	190638	4.26	118379	5.99	132111	7.25
06	2517-001MSD	184909	4.25	116828	5.99	132313	7.25
07	2369-019	25429*	4.44	129700	6.01	126430	7.25
08	2369-020	106*	4.27	126824	6.01	129749	7.25
09	2369-010	155972	4.26	154053	6.03	165251	7.26
10	2369-014	154797	4.25	149914	6.01	163055	7.27
11	2369-017	71091*	4.25	164435	6.07	150802	7.28
12	2369-009	157057	4.25	152782	6.00	158007	7.25
13	2369-021	163696	4.25	159603	6.00	170057	7.25
14	2428-001	162593	4.25	150354	6.01	163244	7.25
15	2428-002	153877	4.25	143642	6.00	155294	7.25
16	2428-003	151610	4.24	147560	5.99	153735	7.25
17	2428-004	147759	4.25	145681	6.00	153928	7.26
18	2428-005	150535	4.25	142674	6.02	150883	7.25
19	2428-006	152353	4.25	149049	6.00	158290	7.26
20	2428-007	148846	4.26	148417	6.01	155605	7.26
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 Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2163.D
Acq On : 19 Apr 2001 9:10
Sample : S-58,2435-001,S,15.90g,16.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

IS Integration Params: rteint.p
Quant Time: Apr 19 09:20:37 2001
Quant Results File: BS1401.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration
DataAcq Meth : BS1401

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.29	152	54788	40.00	UG	-0.02
22) Naphthalene-d8	2.83	136	226886	40.00	UG	-0.01
39) Acenaphthene-d10	3.59	164	123609	40.00	UG	0.00
60) Phenanthrene-d10	4.24	188	183041	40.00	UG	-0.01
75) Chrysene-d12	5.98	240	101820	40.00	UG	-0.01
84) Perylene-d12	7.24	264	118016	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	1.78	112	93869	67.23	UG	-0.02
Spiked Amount 100.000	Range 41 - 82		Recovery = 67.23%			
6) Phenol-d5	2.13	99	145000m	85.88	UG	-0.02
Spiked Amount 100.000	Range 48 - 87		Recovery = 85.88%			
23) Nitrobenzene-d5	2.52	82	51376	28.42	UG	-0.02
Spiked Amount 50.000	Range 52 - 84		Recovery = 56.84%			
43) 2-Fluorobiphenyl	3.28	172	140801	34.72	UG	-0.01
Spiked Amount 50.000	Range 61 - 102		Recovery = 69.44%			
64) 2,4,6-Tribromophenol	3.94	330	51977	96.19	UG	0.00
Spiked Amount 100.000	Range 68 - 105		Recovery = 96.19%			
77) Terphenyl-d14	5.11	244	140047	49.14	UG	0.00
Spiked Amount 50.000	Range 49 - 132		Recovery = 98.28%			
Target Compounds						Qvalue
83) bis(2-Ethylhexyl)phthalate	5.95	149	2582	1.55	UG	# 74

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

2801

000193

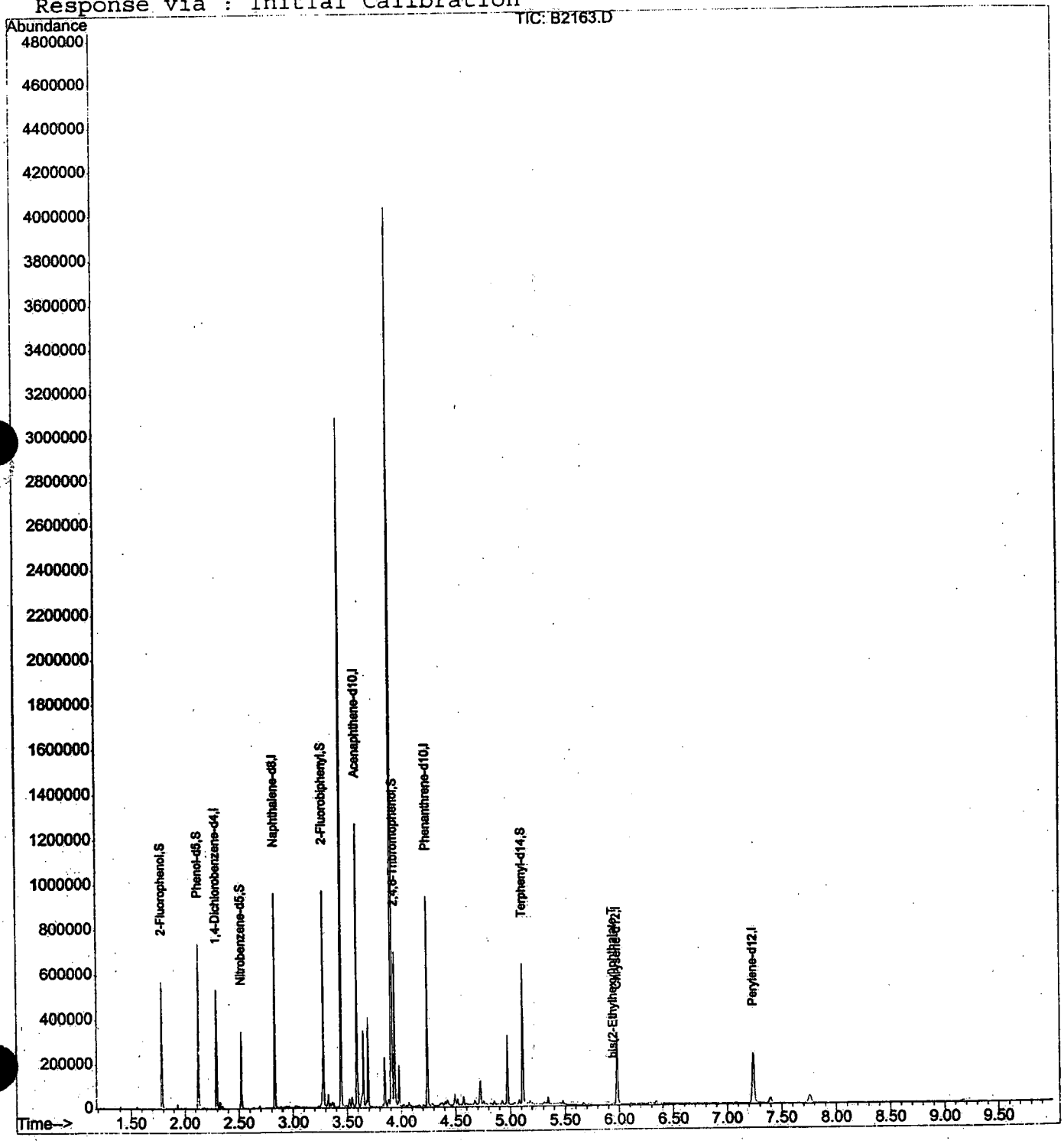
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2163.D
Acq On : 19 Apr 2001 9:10
Sample : S-58,2435-001,S,15.90g,16.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: rteint.p
Quant Time: Apr 19 9:41 2001

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1401.RES

Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration



2802

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2163.D
Acq On : 19 Apr 2001 9:10
Sample : S-58,2435-001,S,15.90g,16.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
LS Integration Params: LSCINT.P

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1401.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	1.784	111	113	116	rBV	571085	272904	12.06%	3.013%
2	2.125	174	177	179	rBV	738800	350627	15.50%	3.871%
3	2.291	206	208	211	rBV	532331	302007	13.35%	3.334%
4	2.521	248	251	261	rBV	348667	153163	6.77%	1.691%
5	2.831	306	309	311	rBV	962229	431731	19.08%	4.767%
6	3.269	387	391	392	rBV2	105222	75136	3.32%	0.830%
7	3.279	392	393	396	rVV	968645	364857	16.13%	4.028%
8	3.322	398	401	403	rVB2	57051	41283	1.82%	0.456%
9	3.445	421	424	426	rBV	3077096	1475964	65.24%	16.296%
10	3.589	448	451	455	rVB	1261634	573809	25.36%	6.335%
11	3.648	460	462	465	rVV	341155	161180	7.12%	1.780%
12	3.691	468	470	473	rVB	399954	215072	9.51%	2.375%
13	3.846	497	499	503	rVB	226451	116682	5.16%	1.288%
14	3.910	508	511	513	rVV	4029423	2262242	100.00%	24.977%
15	3.936	513	516	521	rVV	688903	362805	16.04%	4.006%
16	3.979	521	524	526	rVB	185076	104302	4.61%	1.152%
17	4.241	570	573	576	rBV	937656	437288	19.33%	4.828%
18	4.492	615	620	623	rBV2	54705	44754	1.98%	0.494%
19	4.727	660	664	666	rBV	109155	94678	4.19%	1.045%
20	4.973	707	710	713	rBV	314471	179442	7.93%	1.981%
21	5.112	733	736	739	rBV	629083	362335	16.02%	4.000%
22	5.983	895	899	907	rVB	310071	273053	12.07%	3.015%
23	7.238	1127	1134	1149	rBV	229678	298464	13.19%	3.295%
24	7.398	1158	1164	1173	rVB	24847	38436	1.70%	0.424%
25	7.756	1225	1231	1241	rBV	34781	65055	2.88%	0.718%

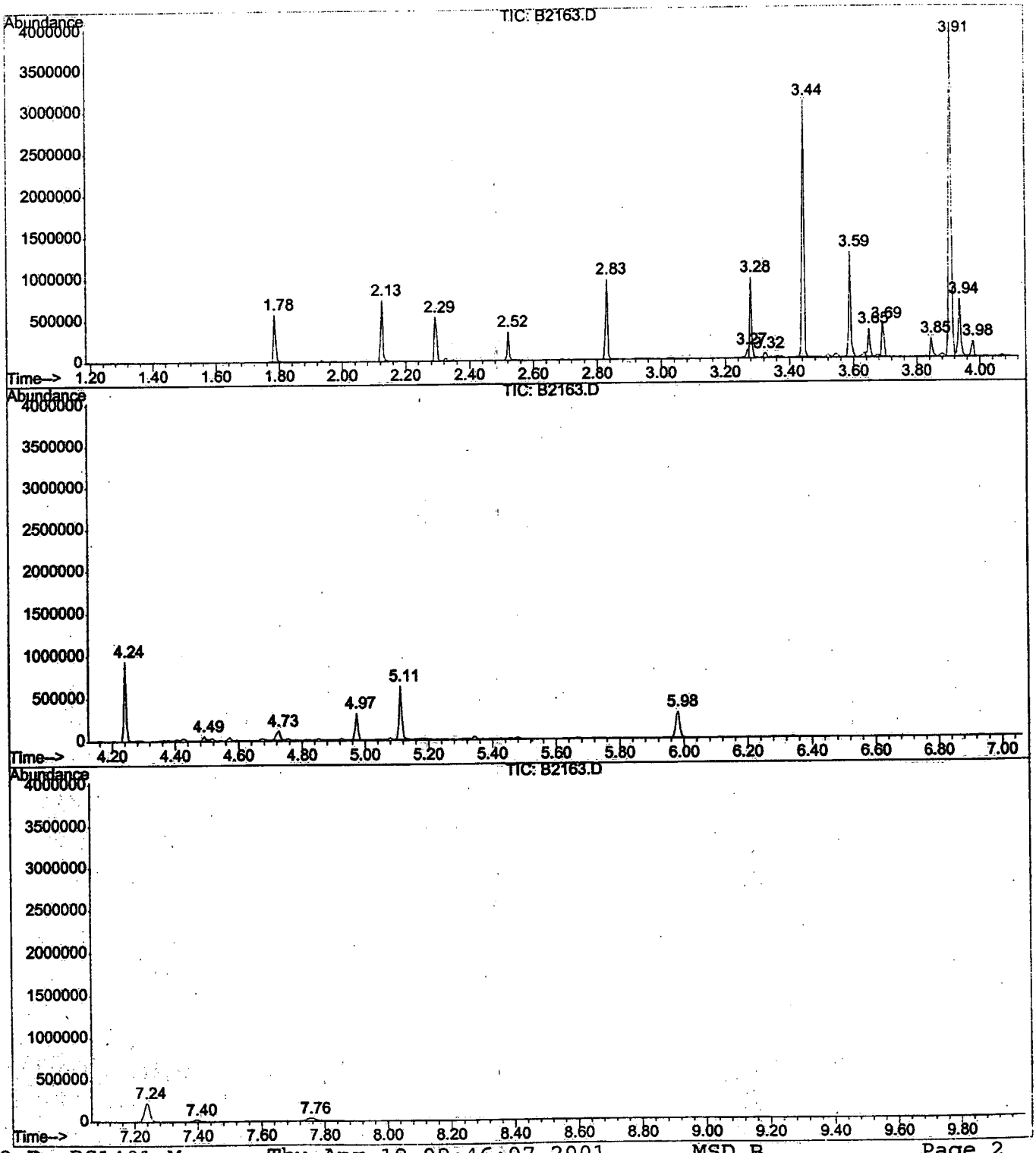
Sum of corrected areas: 9057269

2803

000295

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-19-01\B2163.D
Operator : JC
Acquired : 19 Apr 2001 9:10 using AcqMethod BS1401
Instrument : MSD_B
Sample Name: S-58,2435-001,S,15.90g,16.8,04/19/01
Misc Info : ENVTACT/ORBIS,04/16/01,04/17/01,1
Vial Number: 2
Quant File :BS1401.RES (RTE Integrator)



2804

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2163.D
Acq On : 19 Apr 2001 9:10
Sample : S-58,2435-001,S,15.90g,16.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: LSCINT.P

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

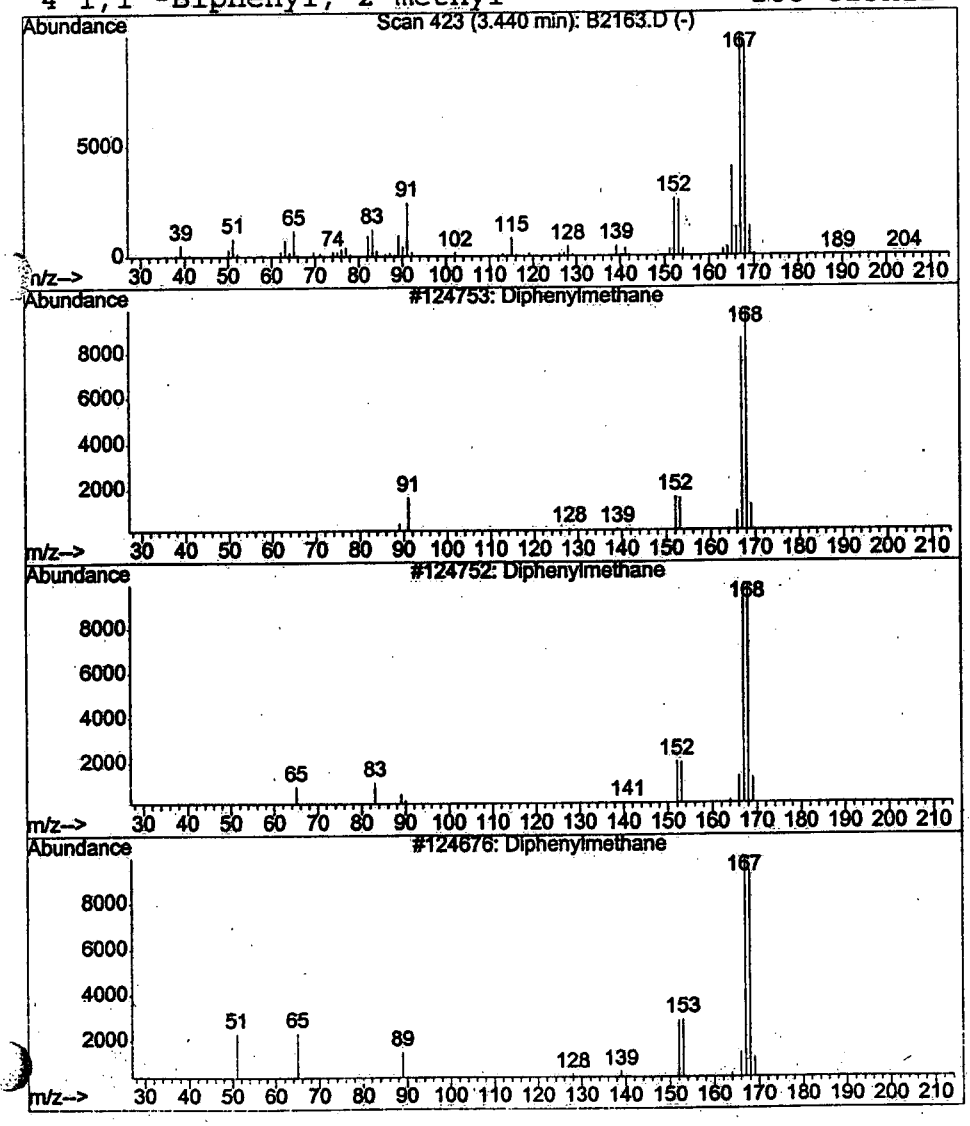
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

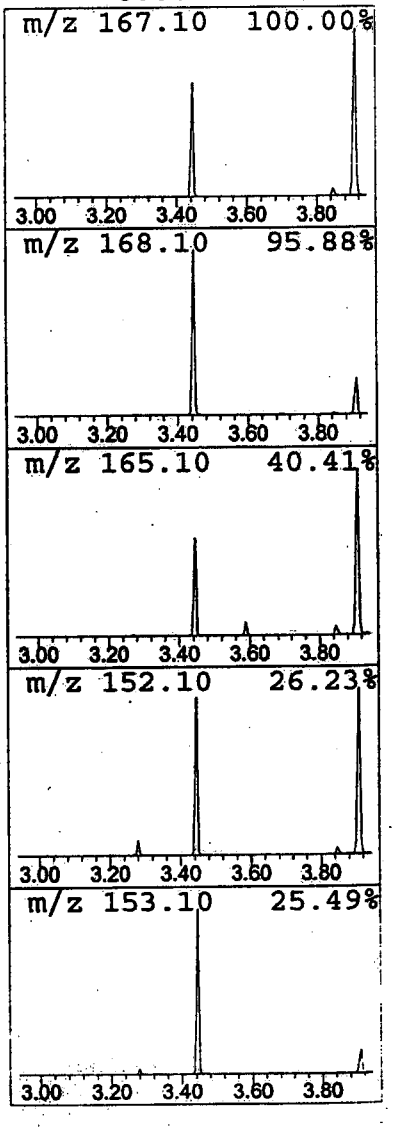
****

Peak Number 1 Unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.44	102.89 UG	1475960	Acenaphthene-d10	3.59

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diphenylmethane	168	C13H12	000101-81-5	96
2	Diphenylmethane	168	C13H12	000101-81-5	95
3	Diphenylmethane	168	C13H12	000101-81-5	94
4	1,1'-Biphenyl, 2-methyl-	168	C13H12	000643-58-3	90





7805

000197

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2163.D
Acq On : 19 Apr 2001 9:10
Sample : S-58,2435-001,S,15.90g,16.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: LSCINT.P

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

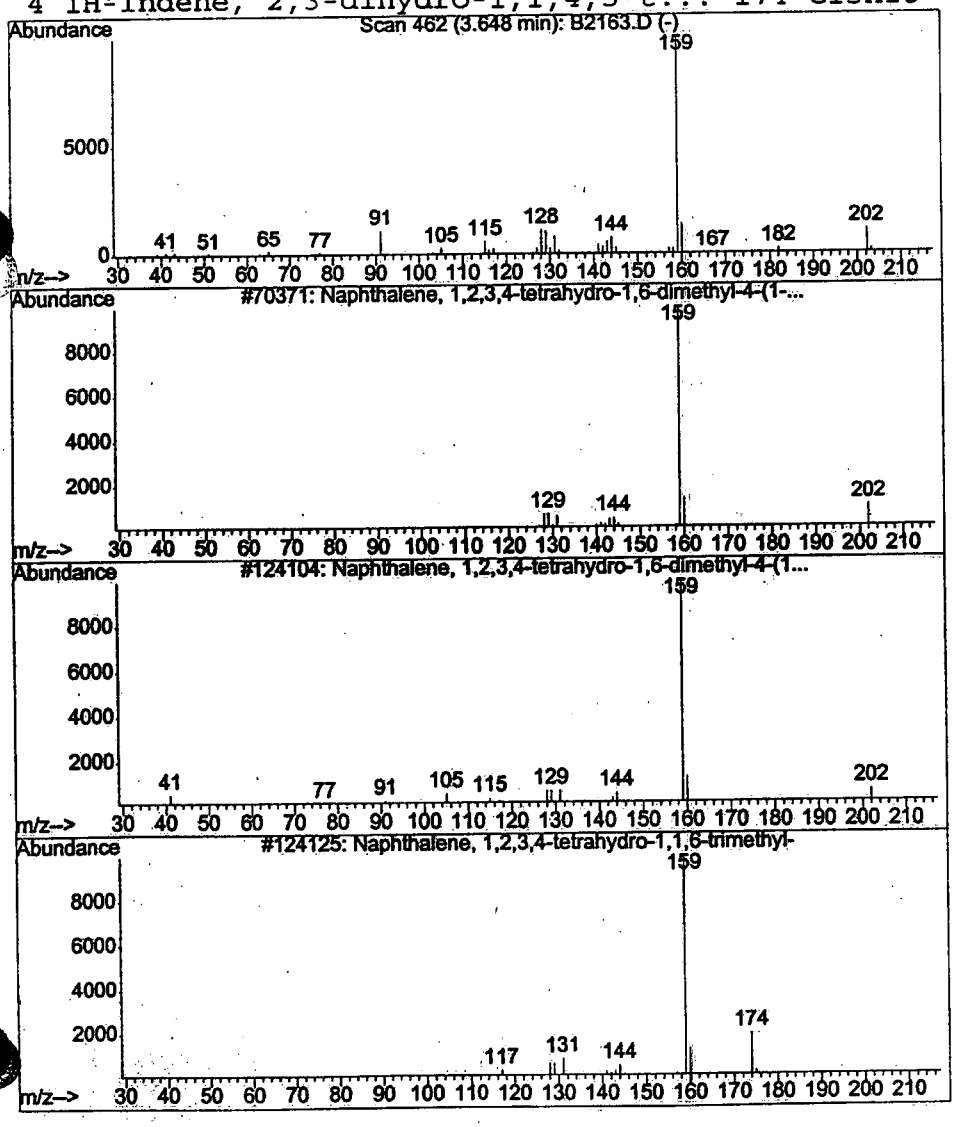
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

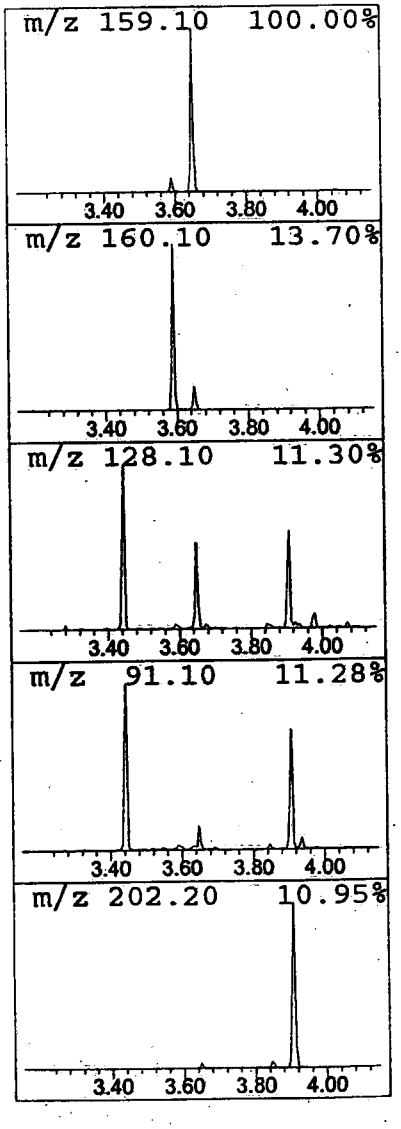
****

Peak Number 2 Substituted naphthalene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.65	11.24 UG	161180	Acenaphthene-d10	3.59

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-...	202	C15H22	000483-77-2	96
2	Naphthalene, 1,2,3,4-tetrahydro-...	202	C15H22	000483-77-2	91
3	Naphthalene, 1,2,3,4-tetrahydro-...	174	C13H18	000475-03-6	86
4	1H-Indene, 2,3-dihydro-1,1,4,5-t...	174	C13H18	016204-57-2	80





000198

7806

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2163.D
Acq On : 19 Apr 2001 9:10
Sample : S-58,2435-001,S,15.90g,16.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: LSCINT.P

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

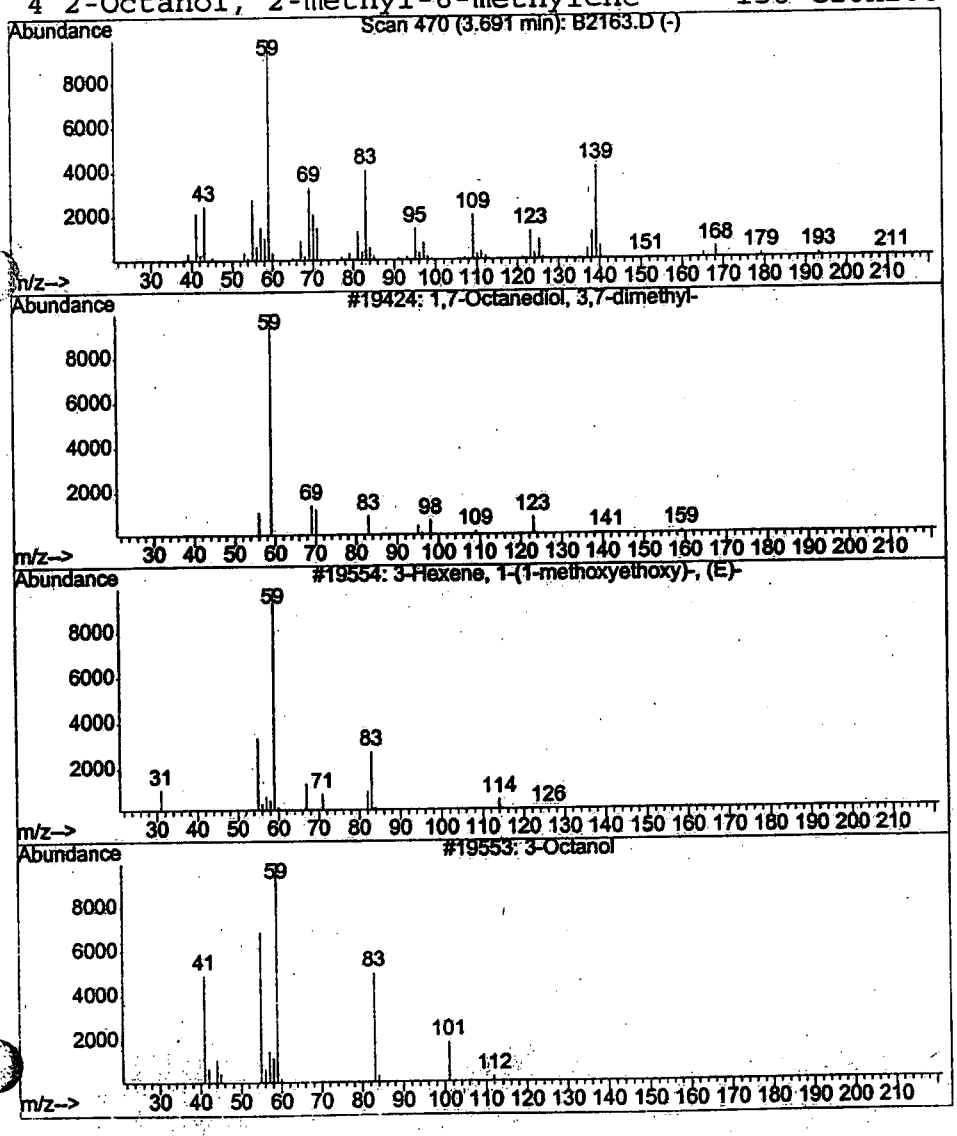
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

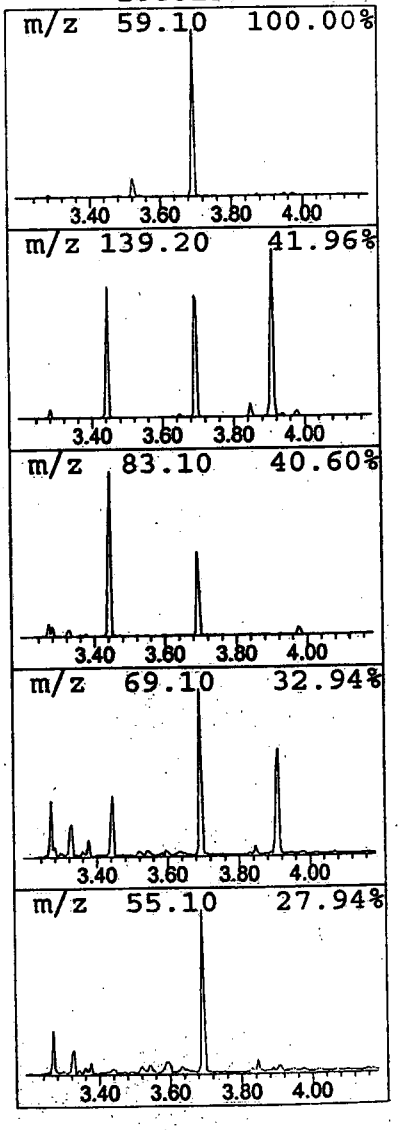
****

Peak Number 3 Unknown — Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.69	14.99 UG	215072	Acenaphthene-d10	3.59

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,7-Octanediol, 3,7-dimethyl-	174	C10H22O2	000107-74-4	43
2	3-Hexene, 1-(1-methoxyethoxy)-, ...	158	C9H18O2	054340-97-5	38
3	3-Octanol	130	C8H18O	020296-29-1	38
4	2-Octanol, 2-methyl-6-methylene-	156	C10H20O	1000132-19-1	37





7807

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2163.D
Acq On : 19 Apr 2001 9:10
Sample : S-58,2435-001,S,15.90g,16.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
ICS Integration Params: LSCINT.P

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

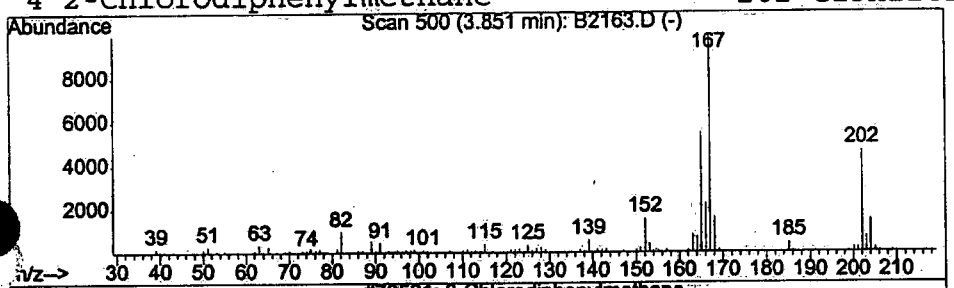
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

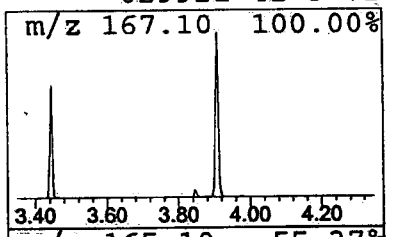
****

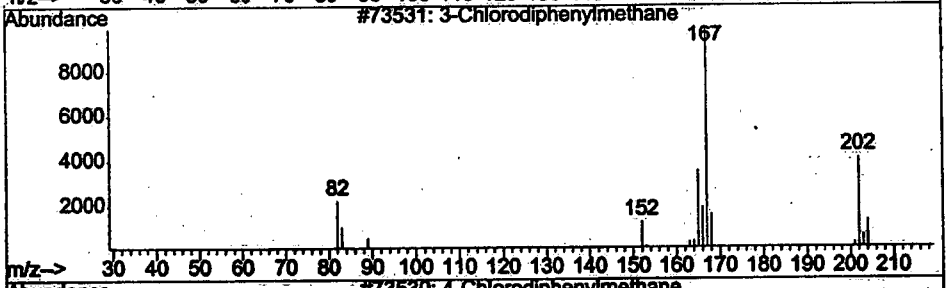
Peak Number 4 Unknown — Concentration Rank 7

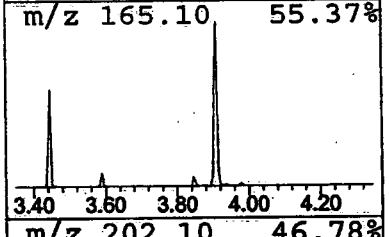
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.85	8.13 UG	116682	Acenaphthene-d10	3.59

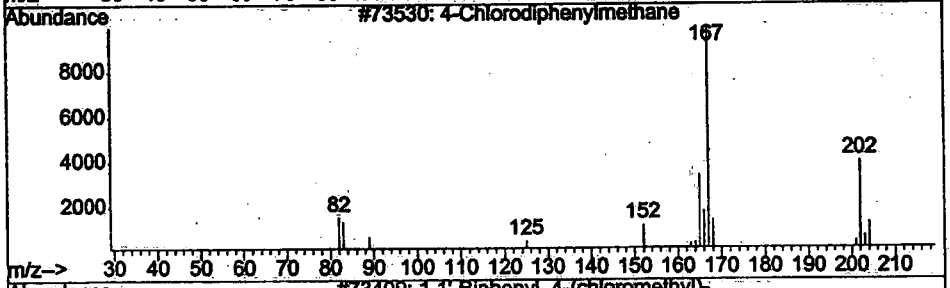
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Chlorodiphenylmethane	202	C13H11Cl	1000202-29-0	87
2	4-Chlorodiphenylmethane	202	C13H11Cl	1000202-28-9	81
3	1,1'-Biphenyl, 4-(chloromethyl)-	202	C13H11Cl	001667-11-4	76
4	2-Chlorodiphenylmethane	202	C13H11Cl	029921-41-3	72

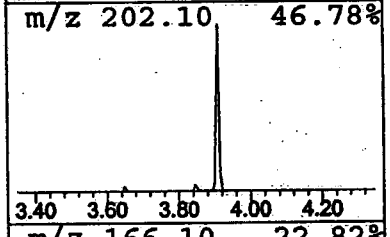


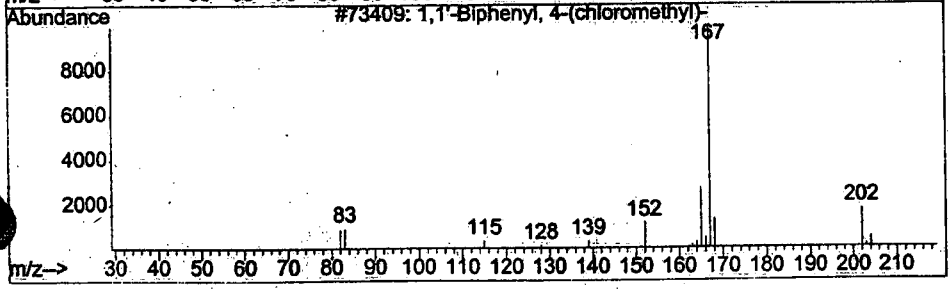


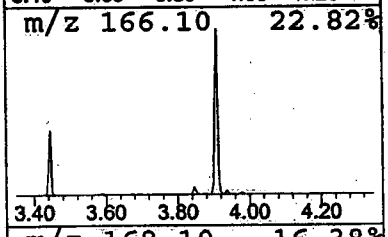


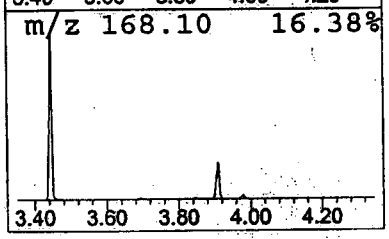












7808

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2163.D
Acq On : 19 Apr 2001 9:10
Sample : S-58,2435-001,S,15.90g,16.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
S Integration Params: LSCINT.P

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

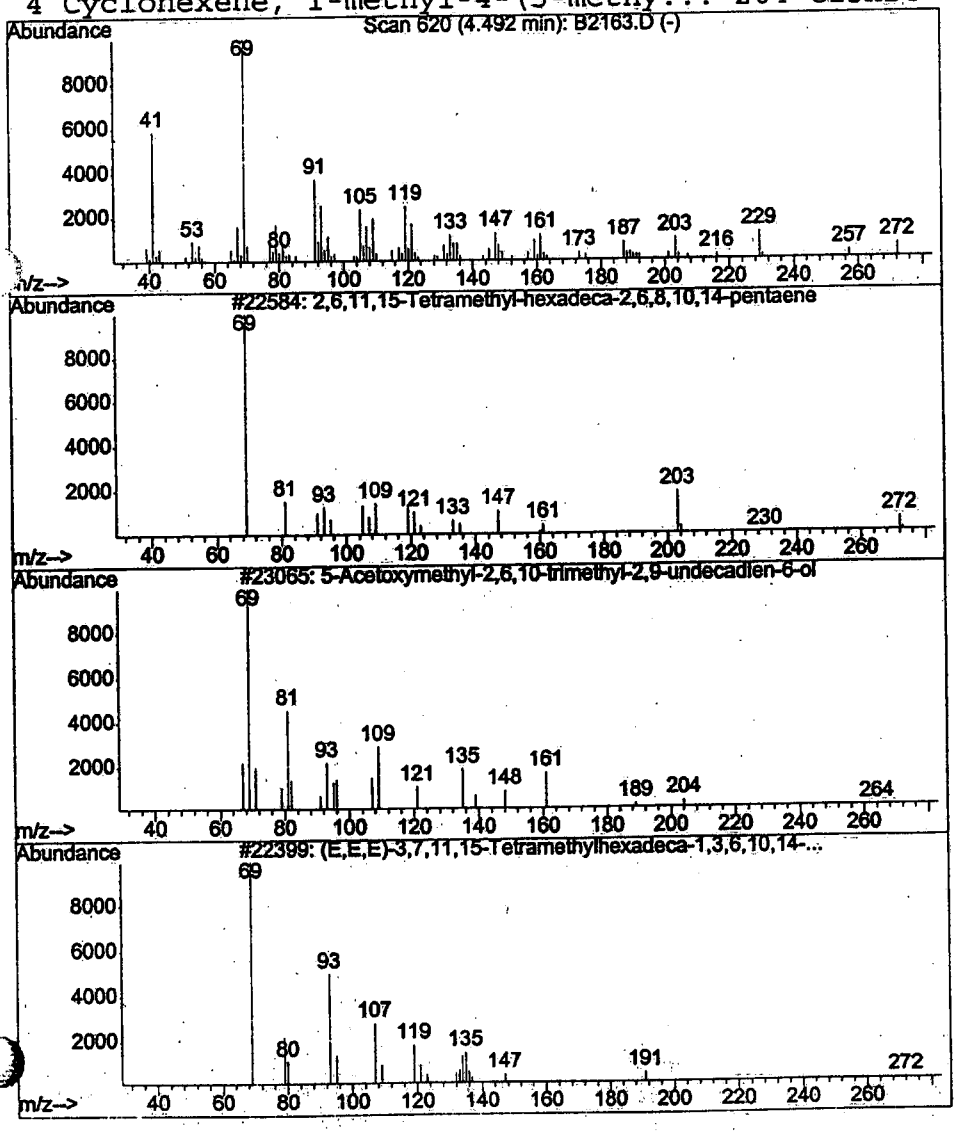
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

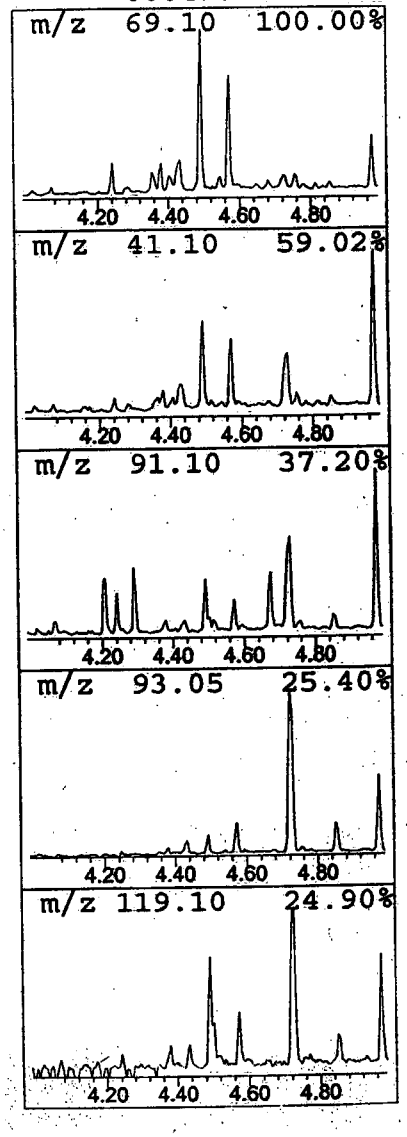
****

Peak Number 5 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.49	4.09 UG	44754	Phenanthrene-d10	4.24

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,6,11,15-Tetramethyl-hexadeca-2...	272	C20H32	038259-79-9	62
2	5-Acetoxymethyl-2,6,10-trimethyl...	282	C17H30O3	1000144-12-3	47
3	(E,E,E)-3,7,11,15-Tetramethylhex...	272	C20H32	077898-97-6	46
4	Cyclohexene, 1-methyl-4-(5-methy...	204	C15H24	000495-61-4	42





7809
000201

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2163.D
Acq On : 19 Apr 2001 9:10
Sample : S-58,2435-001,S,15.90g,16.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
ALS Integration Params: LSCINT.P

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

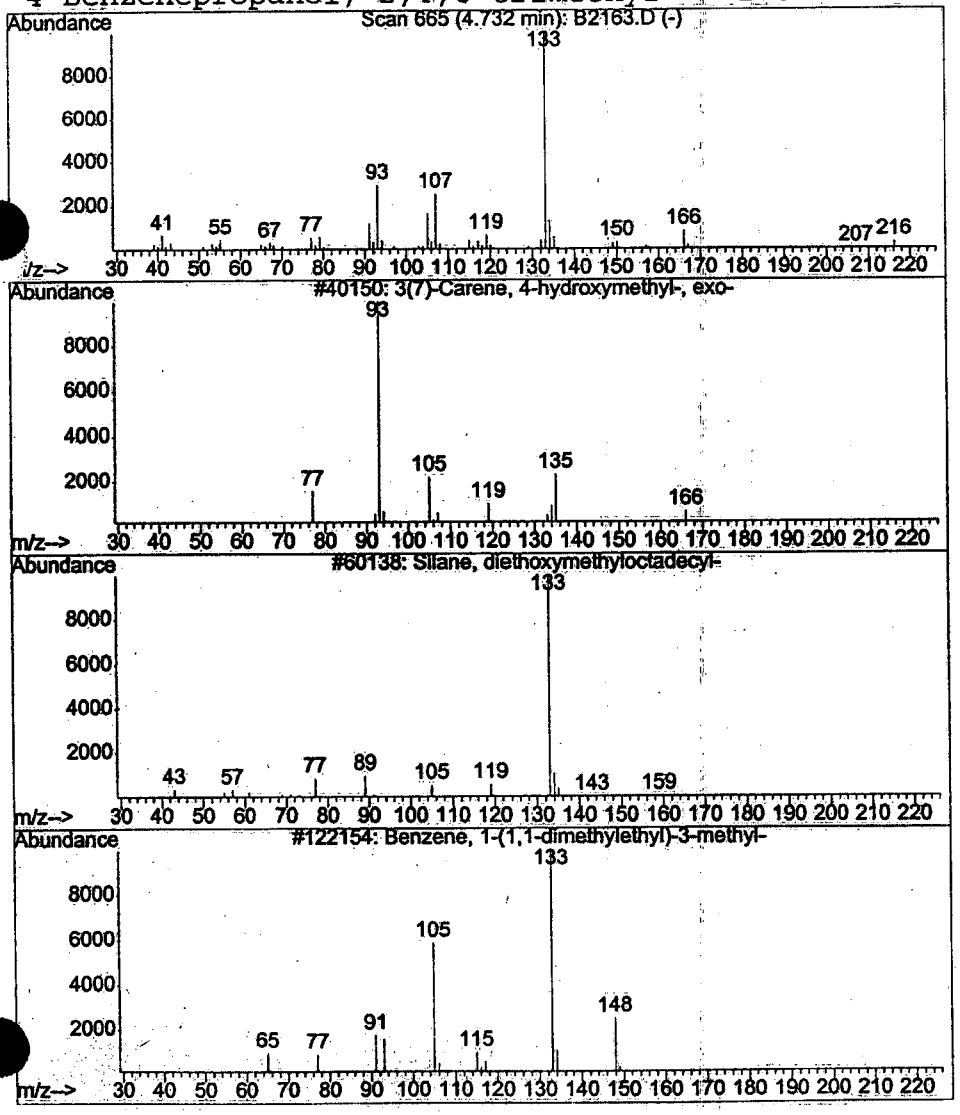
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

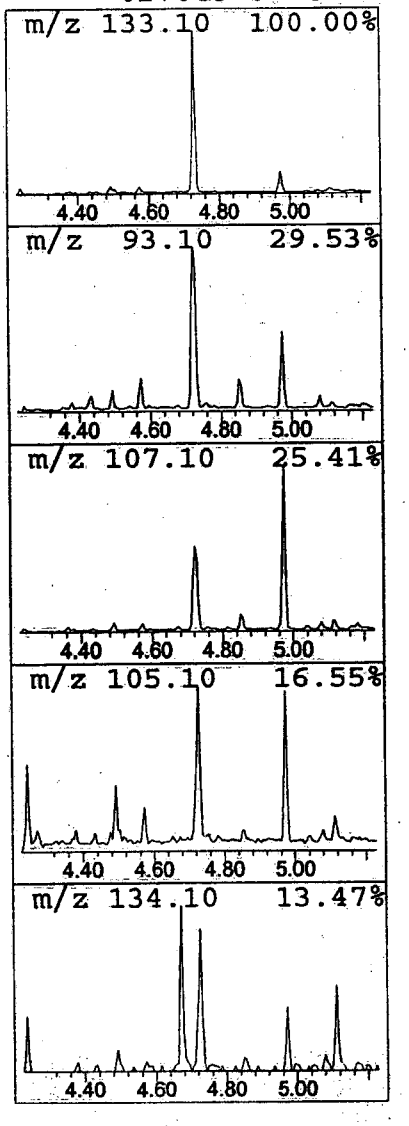
****

Peak Number 6 Substituted benzene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.73	8.66 UG	94678	Phenanthrene-d10	4.24

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3(7)-Carene, 4-hydroxymethyl-, exo-	166	C11H18O	018680-59-6	35
2	Silane, diethoxymethyloctadecyl-	386	C23H50O2Si	067859-75-0	35
3	Benzene, 1-(1,1-dimethylethyl)-3...	148	C11H16	001075-38-3	35
4	Benzenepropanol, 2,4,6-trimethyl-	178	C12H18O	027645-07-4	35





2810

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2163.D
Acq On : 19 Apr 2001 9:10
Sample : S-58,2435-001,S,15.90g,16.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: LSCINT.P

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

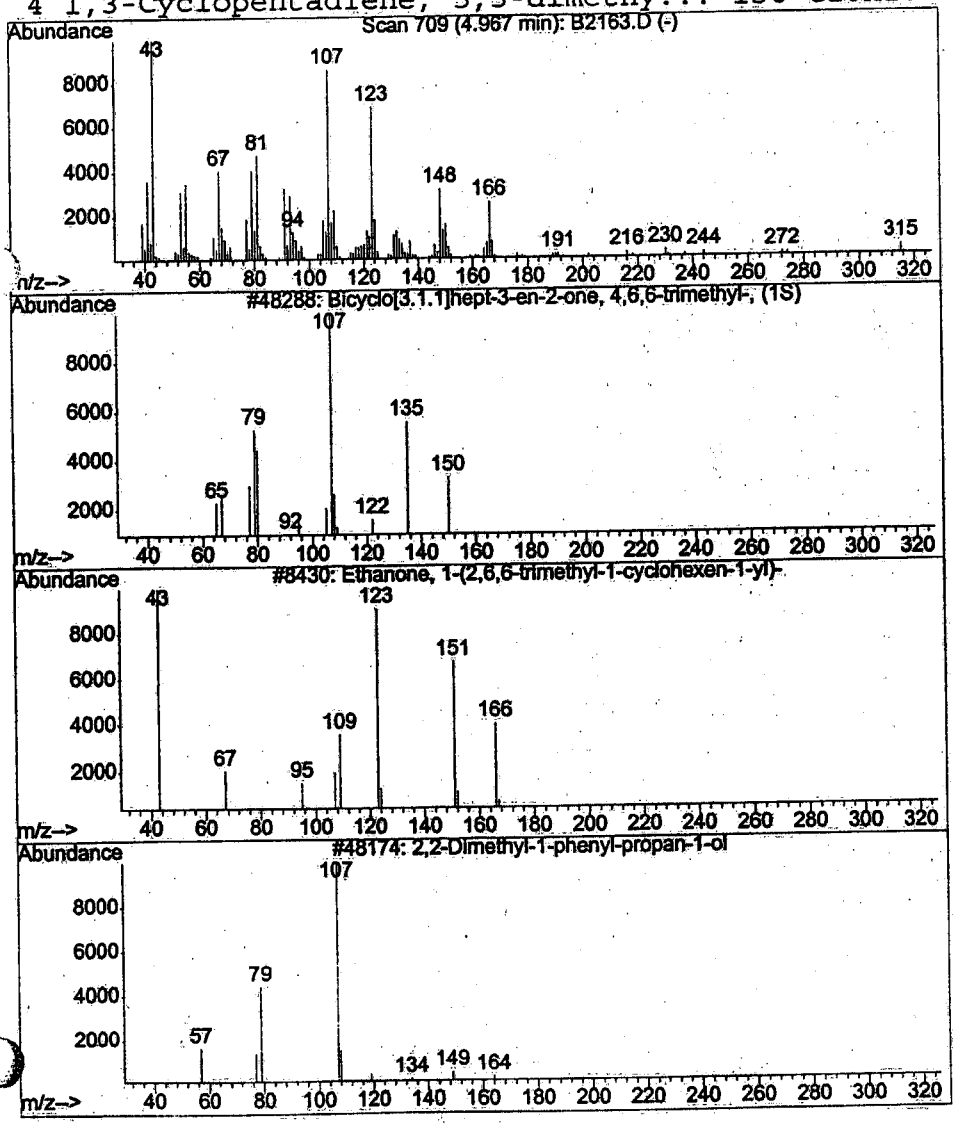
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

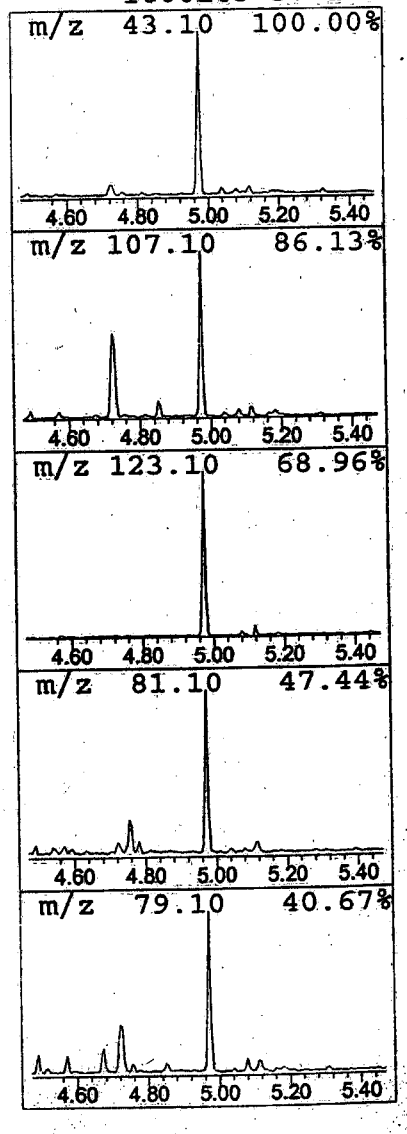
****

Peak Number 7 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.97	16.41 UG	179442	Phenanthrene-d10	4.24

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[3.1.1]hept-3-en-2-one, 4...	150	C10H14O	001196-01-6	38
2	Ethanone, 1-(2,6,6-trimethyl-1-c...	166	C11H18O	001197-92-8	30
3	2,2-Dimethyl-1-phenyl-propan-1-ol	164	C11H16O	052086-52-9	27
4	1,3-Cyclopentadiene, 5,5-dimethy...	136	C10H16	1000163-57-1	27





2811

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2163.D
Acq On : 19 Apr 2001 9:10
Sample : S-58,2435-001,S,15.90g,16.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: LSCINT.P

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

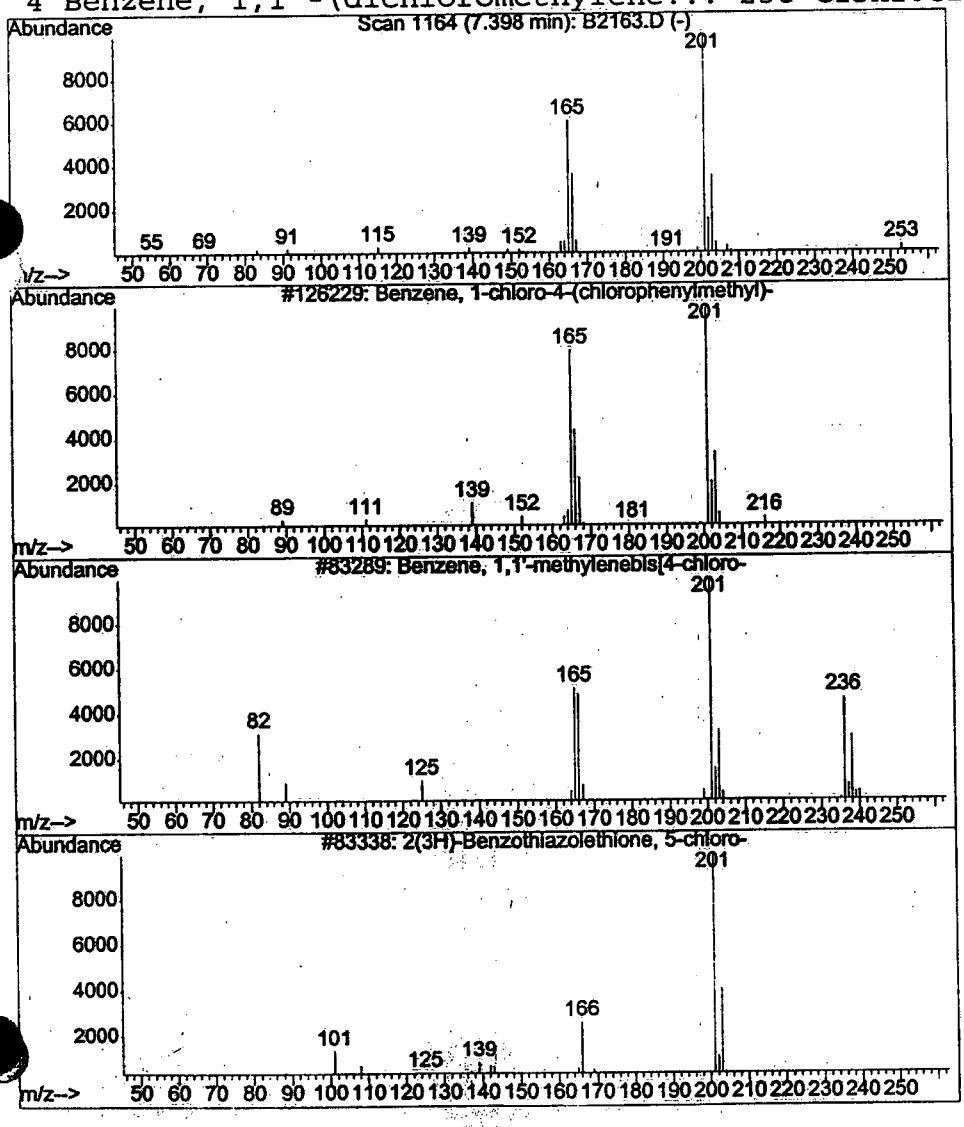
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

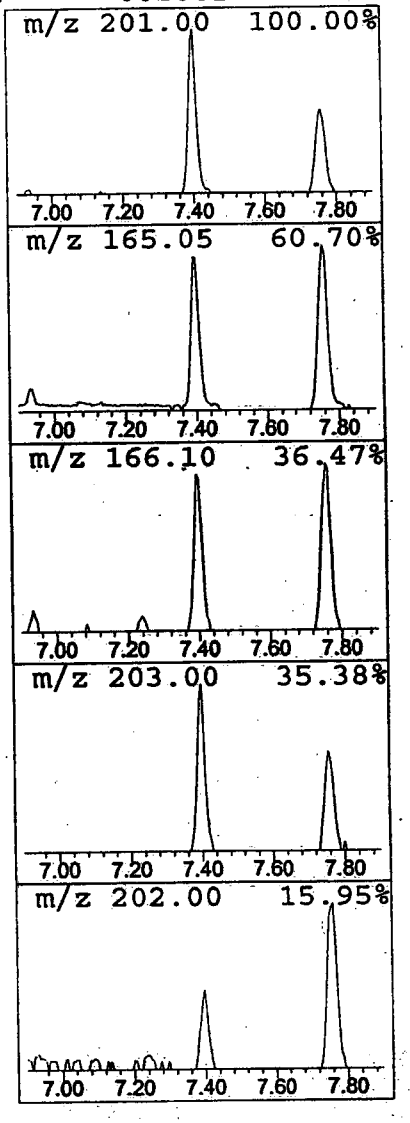
****

Peak Number 8 Substituted benzene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.40	5.15 UG	38436	Perylene-d12	7.24

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	83
2	Benzene, 1,1'-methylenebis[4-chl...	236	C13H10Cl2	000101-76-8	56
3	2(3H)-Benzothiazolethione, 5-chl...	201	C7H4ClNS2	005331-91-9	45
4	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	43





7817

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2163.D
Acq On : 19 Apr 2001 9:10
Sample : S-58,2435-001,S,15.90g,16.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
"S Integration Params: LSCINT.P

Vial: 2
Operator: JC
Inst : MSD_B
Multiplr: 1.00

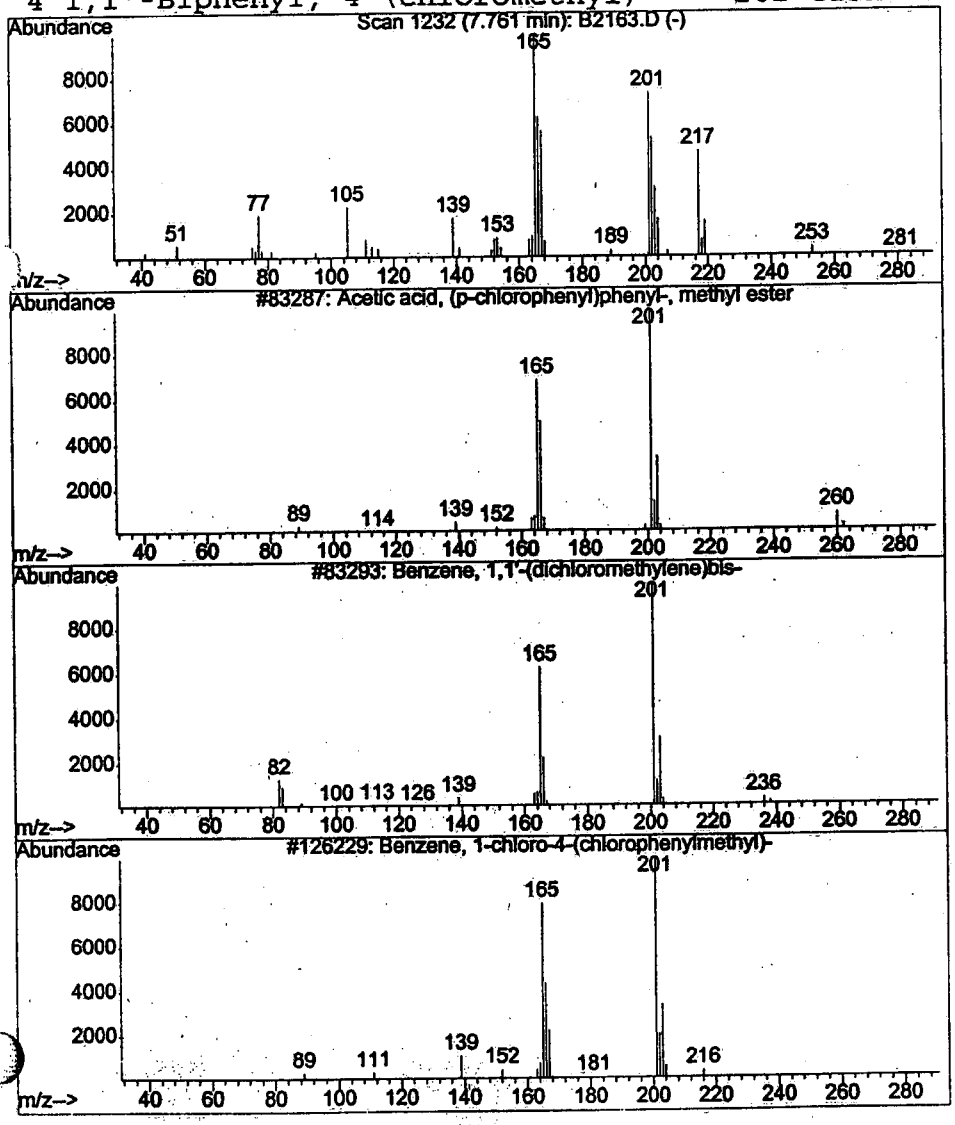
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

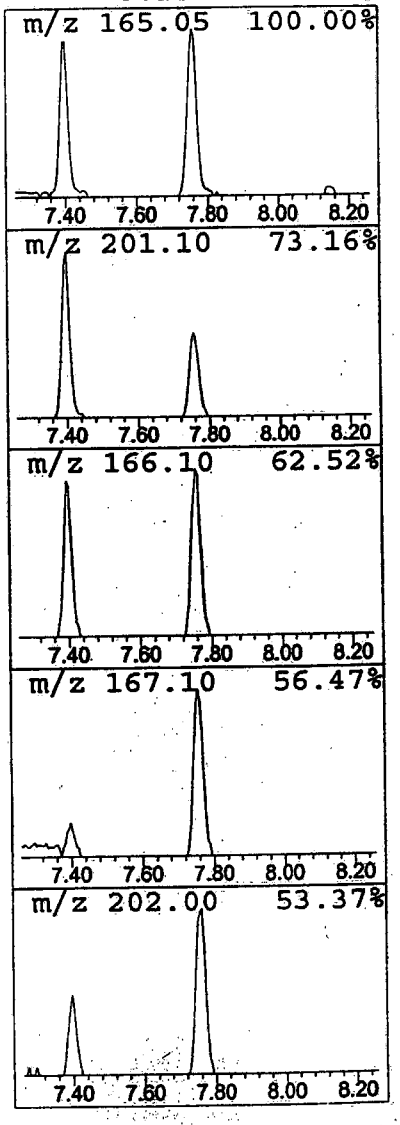
****

Peak Number 9 Substituted benzene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.76	8.72 UG	65055	Perylene-d12	7.24

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, (p-chlorophenyl)phe...	260	C15H13ClO2	005359-46-6	50
2	Benzene, 1,1'-(dichloromethylene...	236	C13H10Cl2	002051-90-3	37
3	Benzene, 1-chloro-4-(chloropheny...	236	C13H10Cl2	000134-83-8	35
4	1,1'-Biphenyl, 4-(chloromethyl)-	202	C13H11Cl	001667-11-4	27





7813

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2164.D
Acq On : 19 Apr 2001 9:25
Sample : S-59,2435-002,S,15.50g,17.1,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: rteint.p
Quant Time: Apr 19 09:35:48 2001

Vial: 3
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1401.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration
DataAcq Meth : BS1401

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.29	152	49300	40.00	UG	-0.02
22) Naphthalene-d8	2.83	136	201397	40.00	UG	-0.01
39) Acenaphthene-d10	3.59	164	116977	40.00	UG	0.00
60) Phenanthrene-d10	4.24	188	173640	40.00	UG	-0.02
75) Chrysene-d12	5.98	240	93331	40.00	UG	-0.02
84) Perylene-d12	7.24	264	108129	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	1.78	112	92111	73.32	UG	-0.02
Spiked Amount 100.000	Range 41 - 82		Recovery = 73.32%			
6) Phenol-d5	2.13	99	126660m	83.37	UG	-0.02
Spiked Amount 100.000	Range 48 - 87		Recovery = 83.37%			
23) Nitrobenzene-d5	2.52	82	48307	30.11	UG	-0.02
Spiked Amount 50.000	Range 52 - 84		Recovery = 60.22%			
43) 2-Fluorobiphenyl	3.28	172	130068	33.90	UG	-0.01
Spiked Amount 50.000	Range 61 - 102		Recovery = 67.80%			
64) 2,4,6-Tribromophenol	3.93	330	50780	99.06	UG	-0.01
Spiked Amount 100.000	Range 68 - 105		Recovery = 99.06%			
77) Terphenyl-d14	5.11	244	138859	53.16	UG	-0.01
Spiked Amount 50.000	Range 49 - 132		Recovery = 106.32%			

Target Compounds Qvalue

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

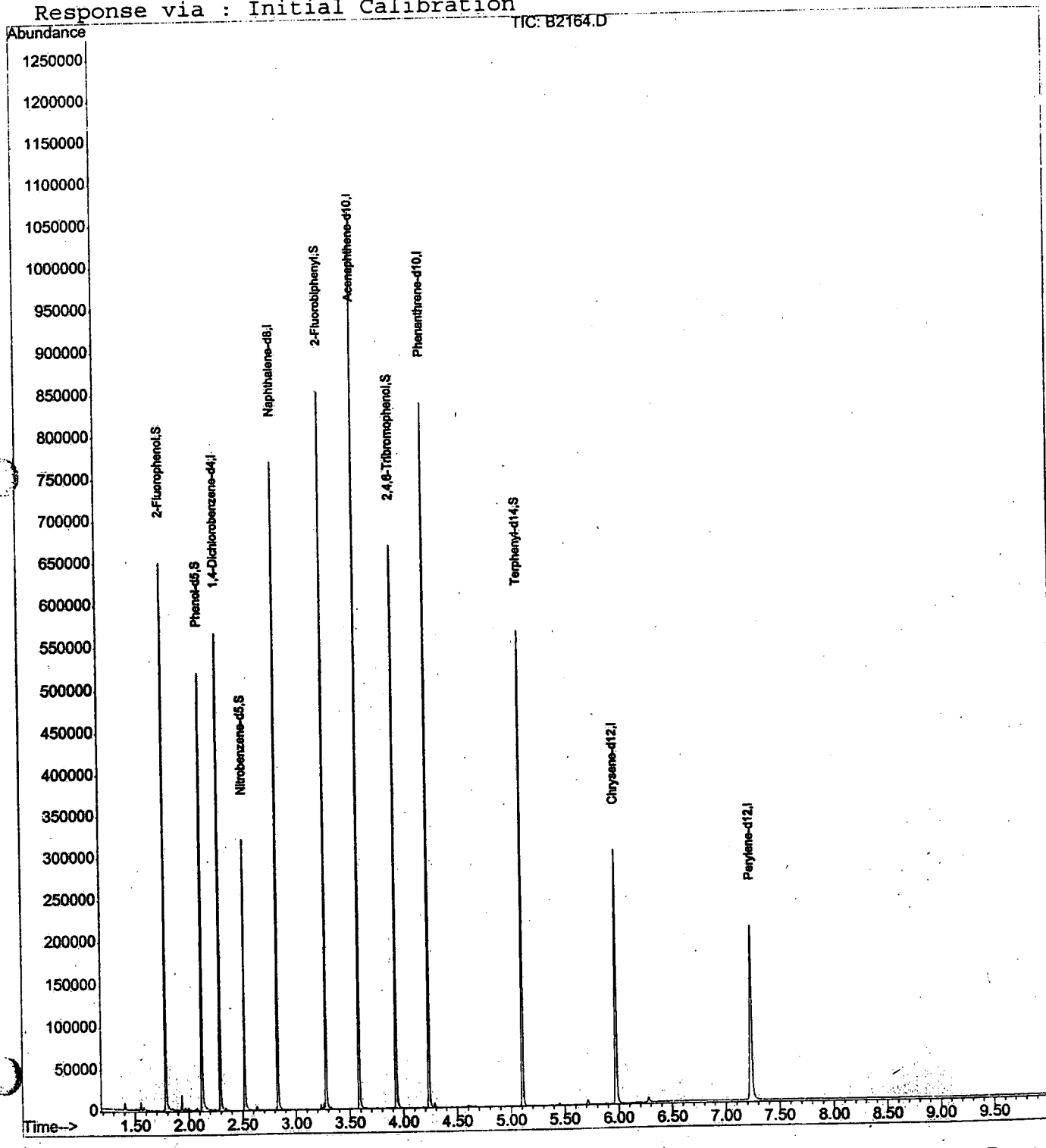
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2164.D
Acq On : 19 Apr 2001 9:25
Sample : S-59,2435-002,S,15.50g,17.1,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: rteint.p
Quant Time: Apr 19 9:42 2001

Vial: 3
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1401.RES

Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration



2815

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2164.D Vial: 3
Acq On : 19 Apr 2001 9:25 Operator: JC
Sample : S-59,2435-002,S,15.50g,17.1,04/19/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

No Library Search Compounds Detected

****
B2164.D BS1401.M Thu Apr 19 09:44:19 2001 MSD_B

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2165.D
Acq On : 19 Apr 2001 9:40
Sample : S-60,2435-003,S,15.39g,17.5,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: rteint.p
Quant Time: Apr 19 09:51:03 2001

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1401.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration
DataAcq Meth : BS1401

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.29	152	52537	40.00	UG	-0.02
22) Naphthalene-d8	2.83	136	215107	40.00	UG	-0.01
39) Acenaphthene-d10	3.59	164	121194	40.00	UG	0.00
60) Phenanthrene-d10	4.24	188	181413	40.00	UG	-0.01
75) Chrysene-d12	5.98	240	93628	40.00	UG	-0.02
84) Perylene-d12	7.24	264	111031	40.00	UG	-0.02

System Monitoring Compounds						
4) 2-Fluorophenol	1.78	112	89945	67.18	UG	-0.02
Spiked Amount 100.000	Range 41 - 82		Recovery = 67.18%			
6) Phenol-d5	2.13	99	139816	86.35	UG	-0.02
Spiked Amount 100.000	Range 48 - 87		Recovery = 86.35%			
23) Nitrobenzene-d5	2.52	82	49537	28.90	UG	-0.02
Spiked Amount 50.000	Range 52 - 84		Recovery = 57.80%			
43) 2-Fluorobiphenyl	3.28	172	130977	32.94	UG	-0.01
Spiked Amount 50.000	Range 61 - 102		Recovery = 65.88%			
64) 2,4,6-Tribromophenol	3.93	330	50600	94.48	UG	-0.01
Spiked Amount 100.000	Range 68 - 105		Recovery = 94.48%			
77) Terphenyl-d14	5.11	244	136722	52.17	UG	0.00
Spiked Amount 50.000	Range 49 - 132		Recovery = 104.34%			

Target Compounds Qvalue

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

2817

000209

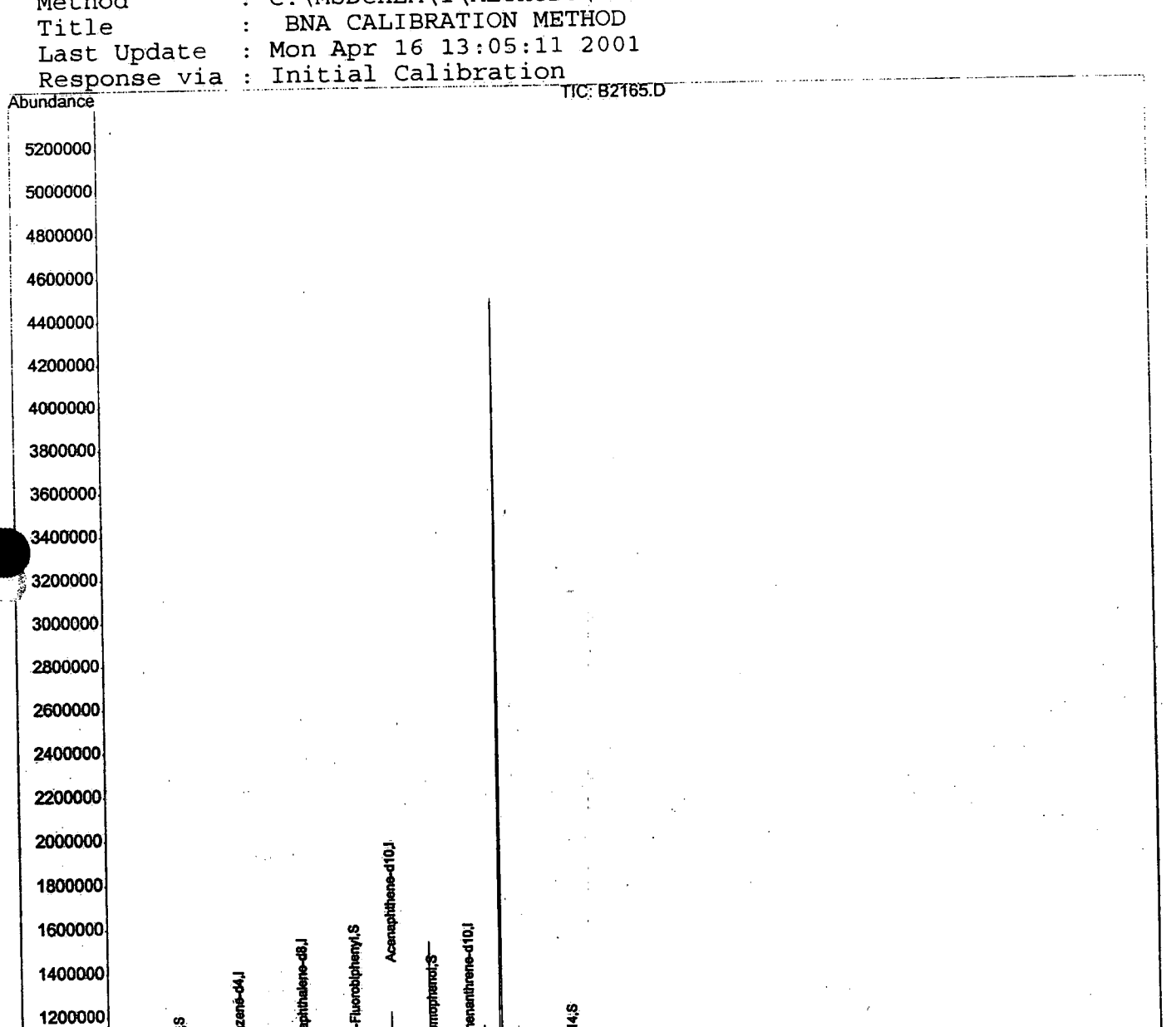
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2165.D
Acq On : 19 Apr 2001 9:40
Sample : S-60,2435-003,S,15.39g,17.5,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: rteint.p
Quant Time: Apr 19 9:54 2001

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1401.RES

Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration



2818

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2165.D
Acq On : 19 Apr 2001 9:40
Sample : S-60,2435-003,S,15.39g,17.5,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\BS1401.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

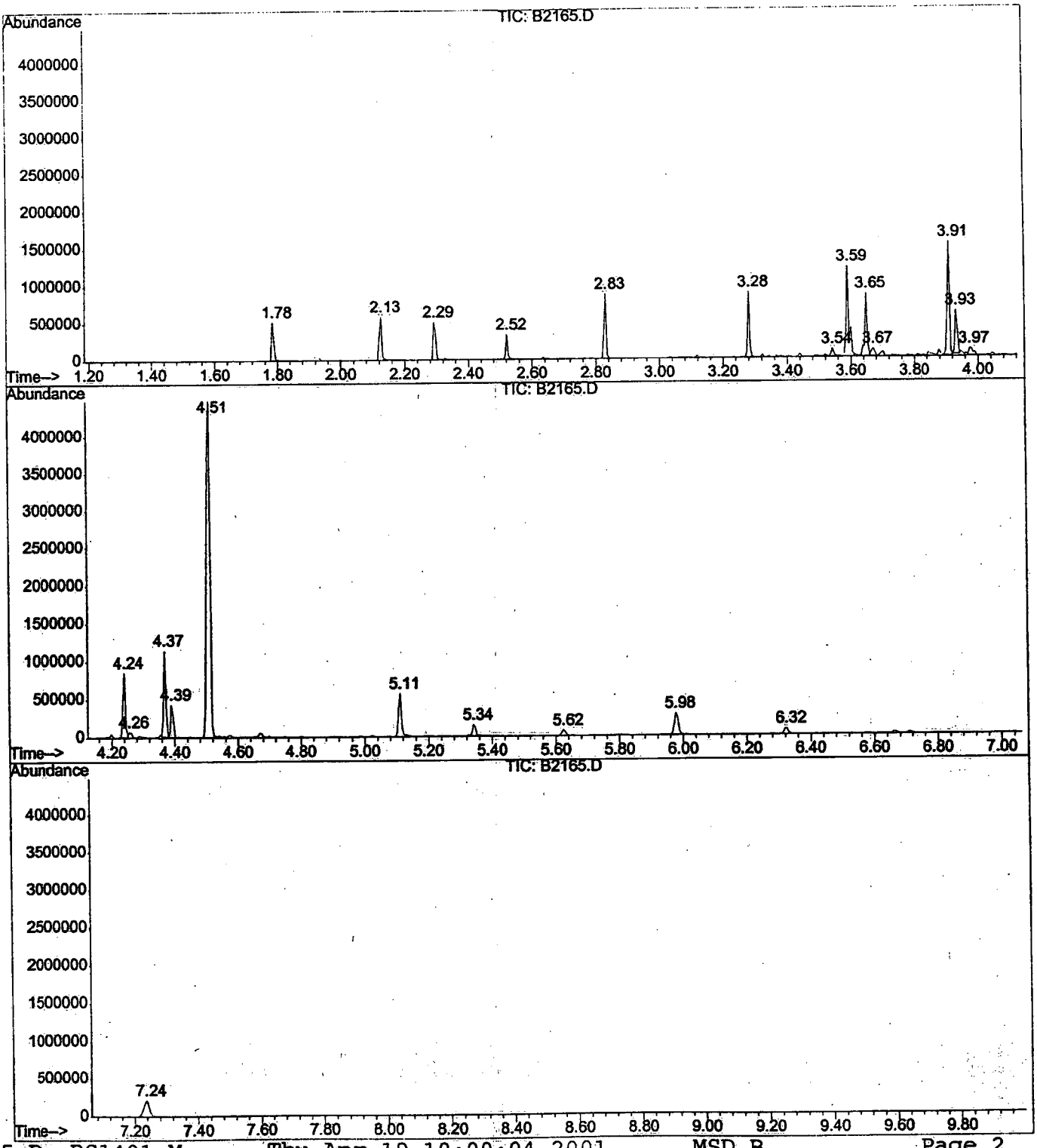
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.783	111	113	116	rBV	519042	258063	7.35%	2.546%
2	2.125	174	177	179	rBV	581922	312970	8.92%	3.088%
3	2.291	206	208	211	rBV	509761	288751	8.23%	2.849%
4	2.521	248	251	262	rBV	336195	147433	4.20%	1.455%
5	2.831	306	309	311	rBV	870252	408458	11.64%	4.030%
6	3.279	391	393	396	rBV	884343	356907	10.17%	3.522%
7	3.541	440	442	448	rBV2	111895	71658	2.04%	0.707%
8	3.589	448	451	455	rVV	1213790	721390	20.55%	7.118%
9	3.648	458	462	464	rVV	844919	427073	12.17%	4.214%
10	3.669	464	466	469	rVB3	106907	78965	2.25%	0.779%
11	3.910	508	511	513	rBV	1521409	768240	21.89%	7.580%
12	3.931	513	515	517	rBV	587757	305996	8.72%	3.019%
13	3.974	522	523	528	rVB2	97731	90623	2.58%	0.894%
14	4.241	570	573	575	rBV	847879	452637	12.90%	4.466%
15	4.257	575	576	580	rVB2	70181	46340	1.32%	0.457%
16	4.369	595	597	599	rVB	1130280	545593	15.55%	5.383%
17	4.390	599	601	604	rVB	426557	231287	6.59%	2.282%
18	4.513	619	624	626	rBV	4482675	3509668	100.00%	34.629%
19	5.112	732	736	739	rBV	567792	367226	10.46%	3.623%
20	5.341	777	779	782	rBV	144843	95881	2.73%	0.946%
21	5.625	825	832	836	rBV	73504	63063	1.80%	0.622%
22	5.977	894	898	903	rBV	290224	245882	7.01%	2.426%
23	6.324	959	963	967	rBV	77014	64684	1.84%	0.638%
24	7.238	1127	1134	1144	rBV	219615	276151	7.87%	2.725%

Sum of corrected areas: 10134939

2819

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\04-19-01\B2165.D
Operator : JC
Acquired : 19 Apr 2001 9:40 using AcqMethod BS1401
Instrument : MSD_B
Sample Name: S-60,2435-003,S,15.39g,17.5,04/19/01
Misc Info : ENVTACT/ORBIS,04/16/01,04/17/01,1
Vial Number: 4
Quant File :BS1401.RES (RTE Integrator)



2820

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2165.D
Acq On : 19 Apr 2001 9:40
Sample : S-60,2435-003,S,15.39g,17.5,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

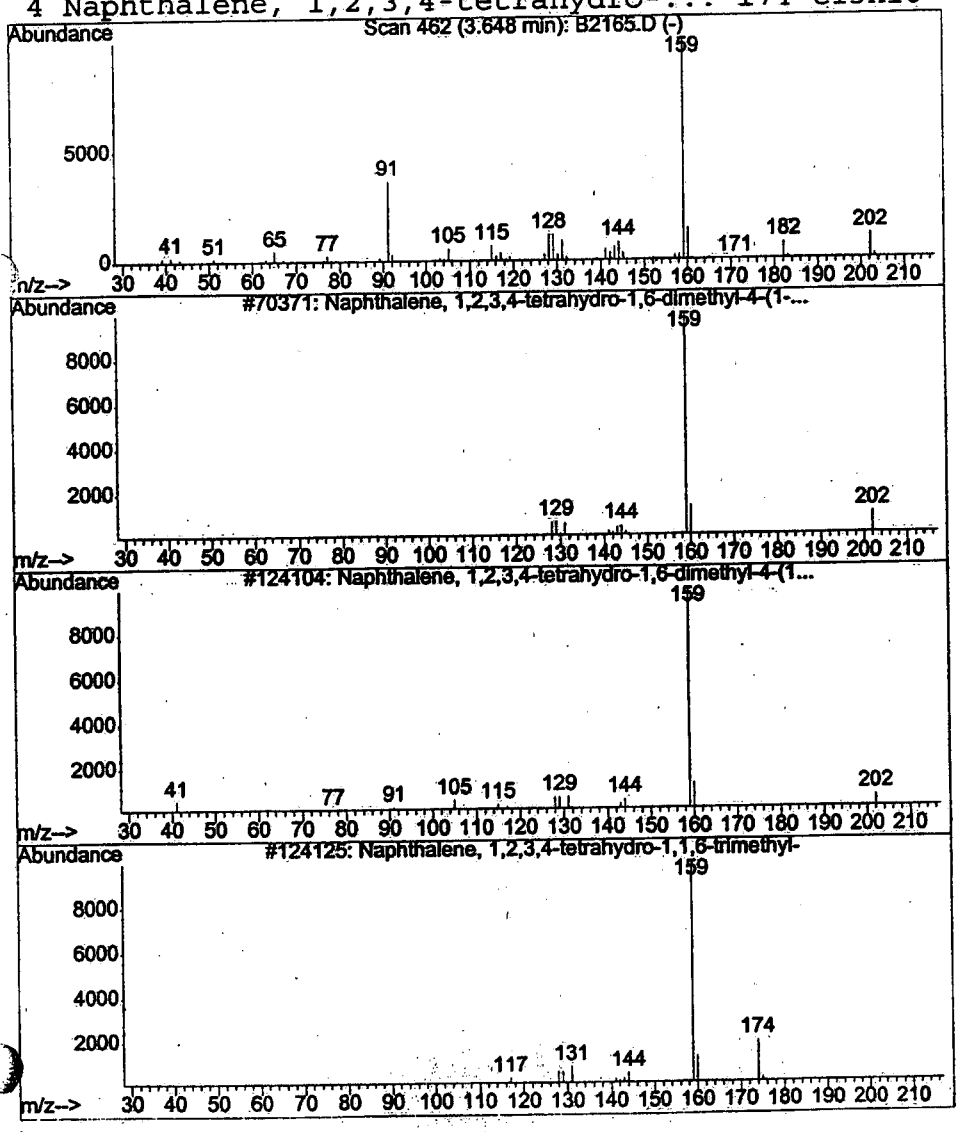
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

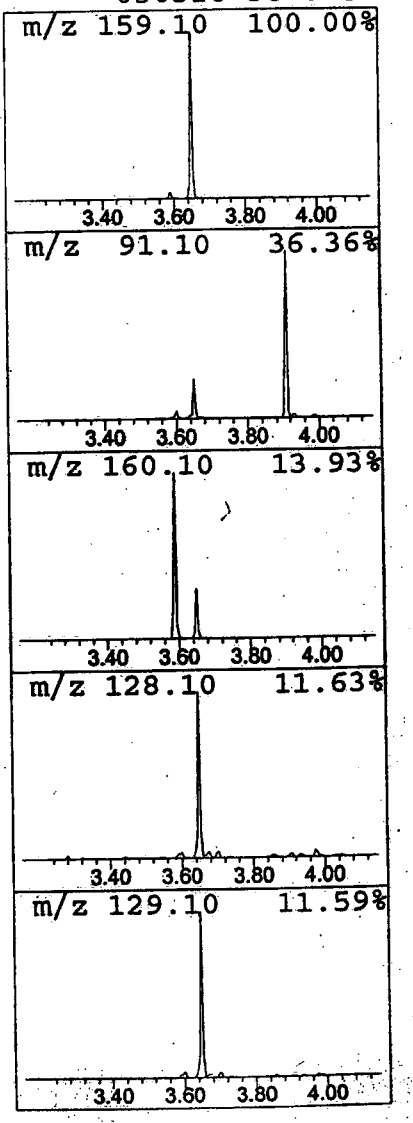
****

Peak Number 1 Substituted naphthalene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.65	23.68 UG	427073	Acenaphthene-d10	3.59

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-...	202	C15H22	000483-77-2	96
2	Naphthalene, 1,2,3,4-tetrahydro-...	202	C15H22	000483-77-2	95
3	Naphthalene, 1,2,3,4-tetrahydro-...	174	C13H18	000475-03-6	86
4	Naphthalene, 1,2,3,4-tetrahydro-...	174	C13H18	030316-36-0	80





787.1

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2165.D
Acq On : 19 Apr 2001 9:40
Sample : S-60,2435-003,S,15.39g,17.5,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
; Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

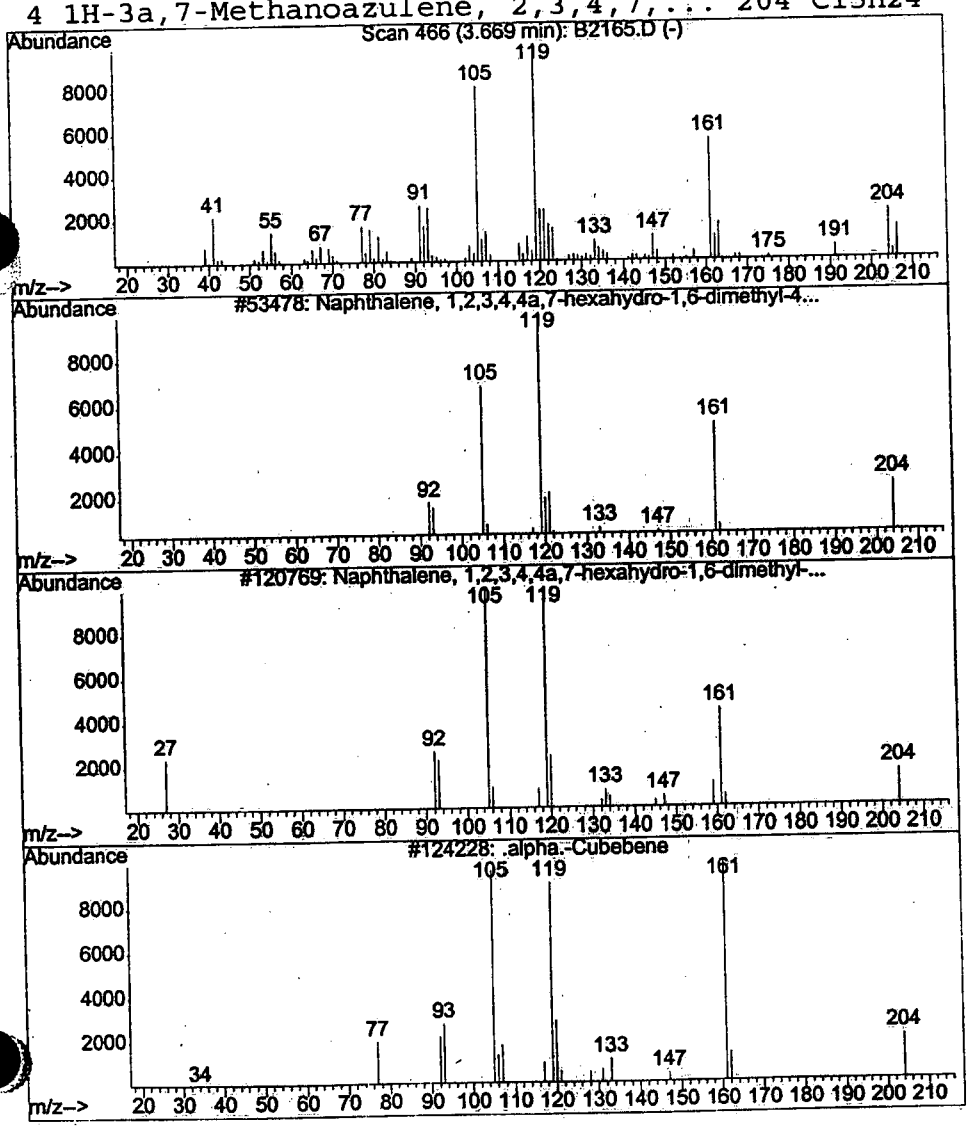
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

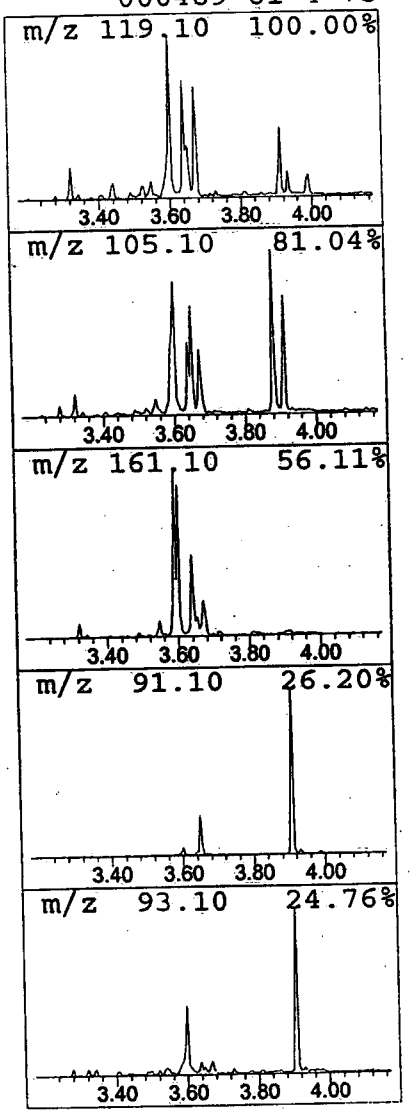
****

Peak Number 2 Substituted naphthalene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.67	4.38 UG	78965	Acenaphthene-d10	3.59

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4,4a,7-hexahy...	204	C15H24	016728-99-7	96
2	Naphthalene, 1,2,3,4,4a,7-hexahy...	204	C15H24	016728-99-7	87
3	.alpha.-Cubebene	204	C15H24	017699-14-8	83
4	1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	76





7822

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2165.D
Acq On : 19 Apr 2001 9:40
Sample : S-60,2435-003,S,15.39g,17.5,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

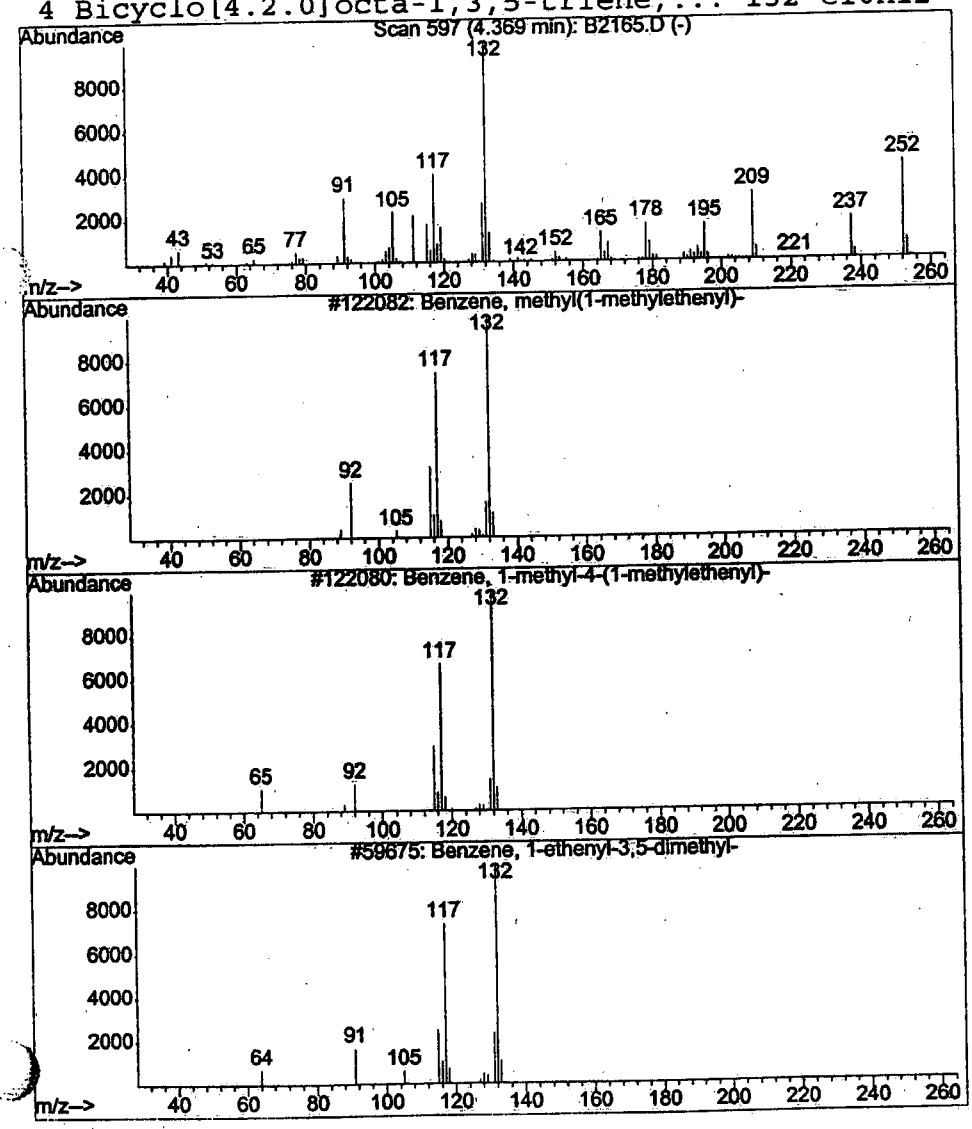
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

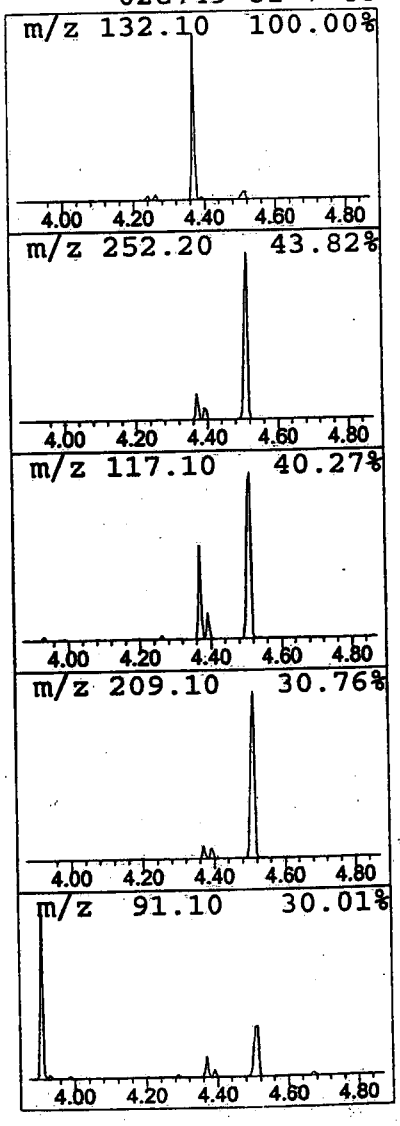
****

Peak Number 3 Substituted benzene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.37	48.21 UG	545593	Phenanthrene-d10	4.24

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, methyl(1-methylethenyl)-	132	C10H12	026444-18-8	50
2	Benzene, 1-methyl-4-(1-methyleth...	132	C10H12	001195-32-0	50
3	Benzene, 1-ethenyl-3,5-dimethyl-	132	C10H12	005379-20-4	49
4	Bicyclo[4.2.0]octa-1,3,5-triene,...	132	C10H12	028749-81-7	46





2823
000215

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2165.D
Acq On : 19 Apr 2001 9:40
Sample : S-60,2435-003,S,15.39g,17.5,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
; Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

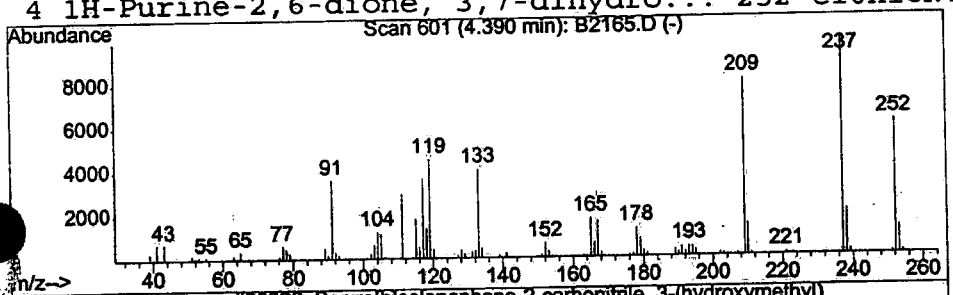
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

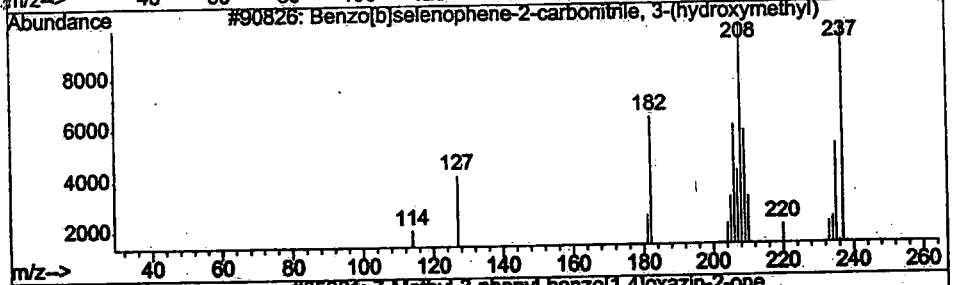
****

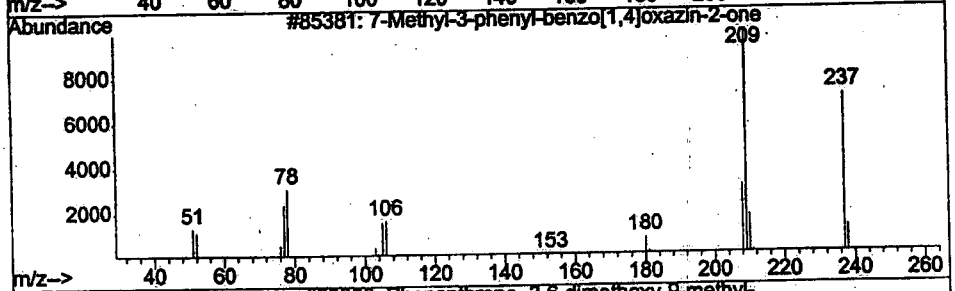
Peak Number 4 Unknown aromatic Concentration Rank 4

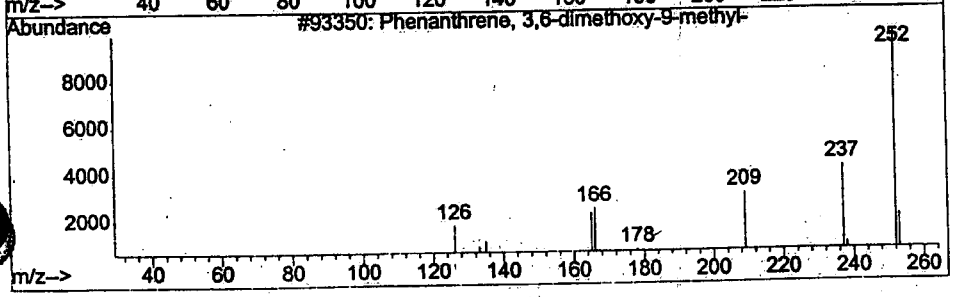
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.39	20.44 UG	231287	Phenanthrene-d10	4.24

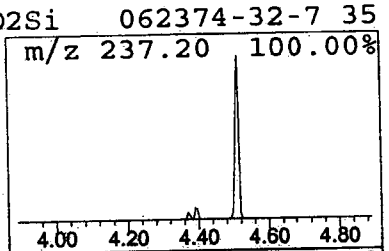
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]selenophene-2-carbonitri...	237	C10H7NOSe	039812-13-0	46
2	7-Methyl-3-phenyl-benzo[1,4]oxaz...	237	C15H11NO2	062103-88-2	45
3	Phenanthrene, 3,6-dimethoxy-9-me...	252	C17H16O2	015638-09-2	40
4	1H-Purine-2,6-dione, 3,7-dihydro...	252	C10H16N4O2Si	062374-32-7	35

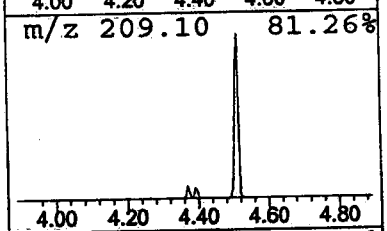


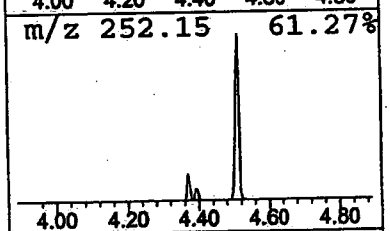


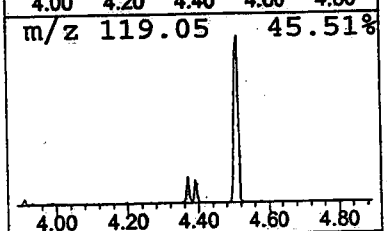


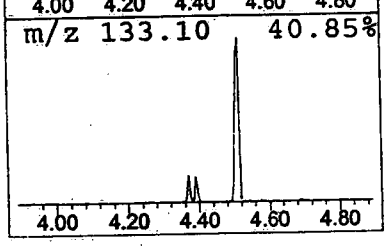












7874

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2165.D
Acq On : 19 Apr 2001 9:40
Sample : S-60,2435-003,S,15.39g,17.5,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
J Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

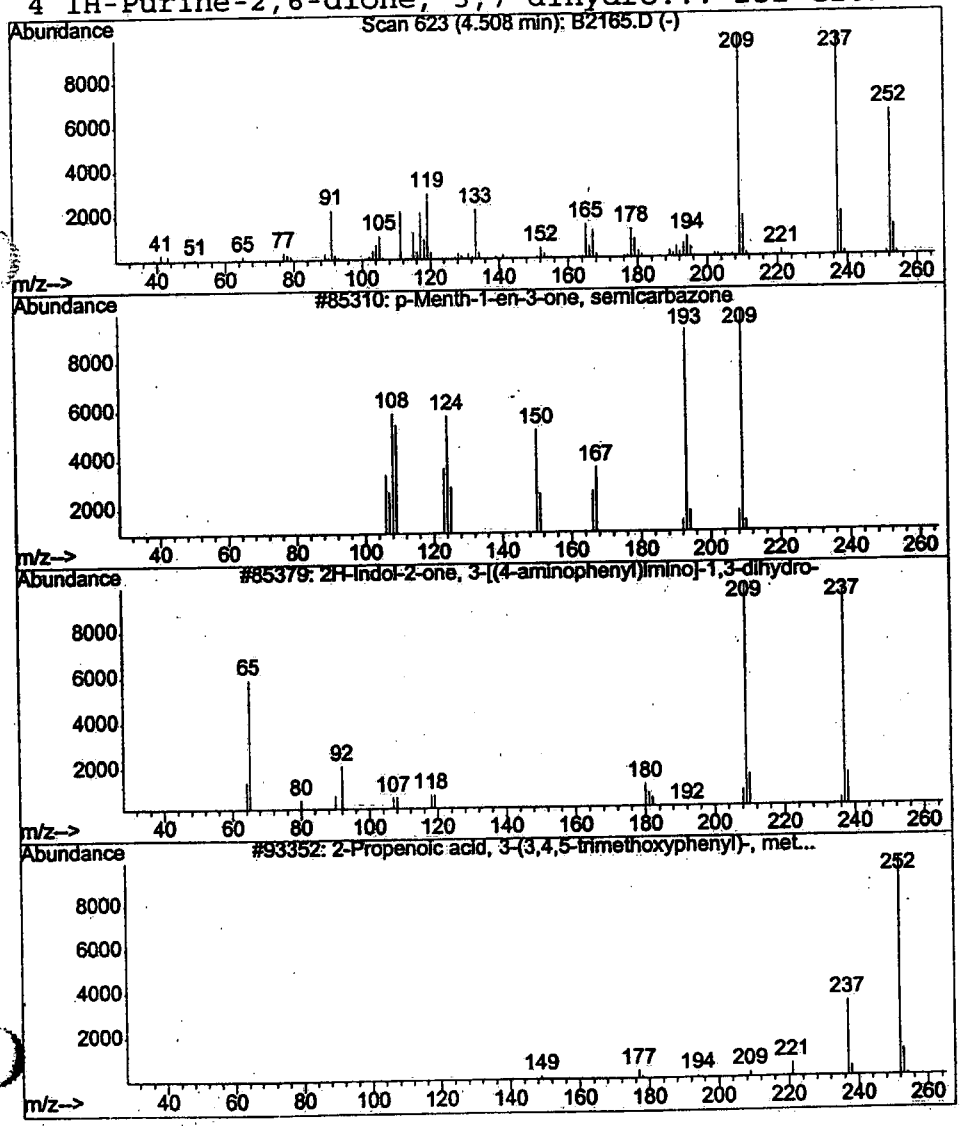
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

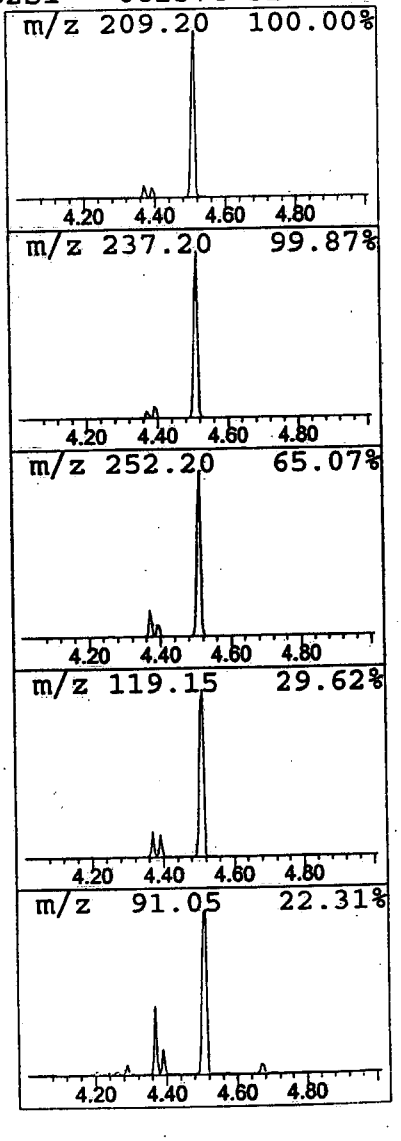
****

Peak Number 5 Unknown aromatic Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.51	310.15 UG	3509670	Phenanthrene-d10	4.24

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	p-Menth-1-en-3-one, semicarbazone	209	C11H19N3O	004713-41-1	78
2	2H-Indol-2-one, 3-[(4-aminopheny...	237	C14H11N3O	033829-07-1	52
3	2-Propenoic acid, 3-(3,4,5-trime...	252	C13H16O5	007560-49-8	49
4	1H-Purine-2,6-dione, 3,7-dihydro...	252	C10H16N4O2Si	062374-32-7	47





7825

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2165.D Vial: 4
Acq On : 19 Apr 2001 9:40 Operator: JC
Sample : S-60,2435-003,S,15.39g,17.5,04/19/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1 Multiplr: 1.00
Integration Params: LSCINT.P

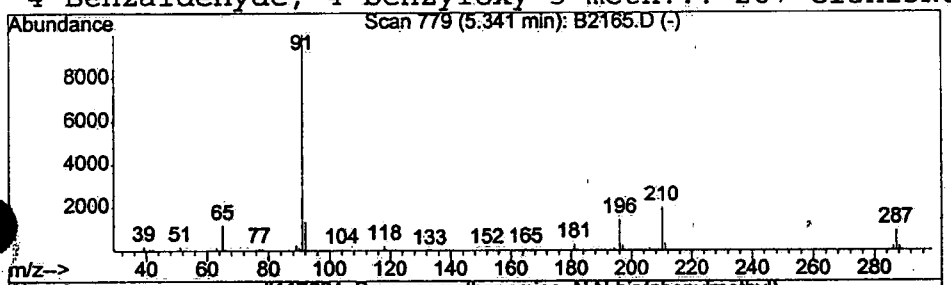
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

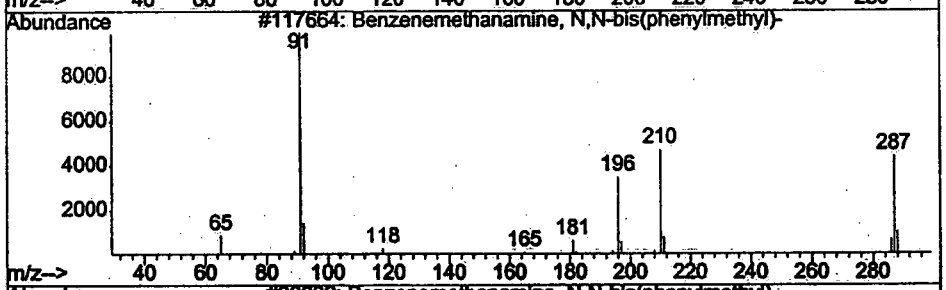
****

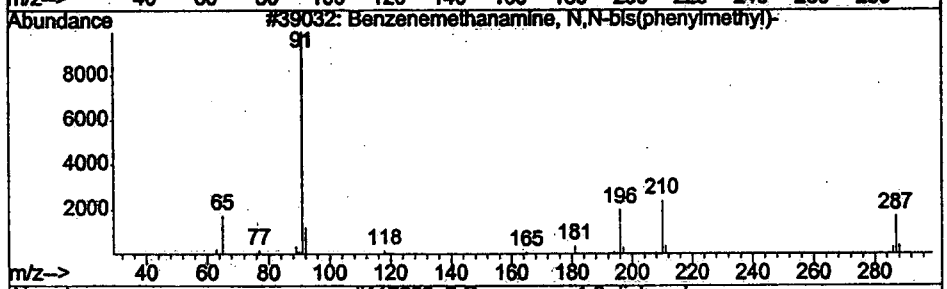
Peak Number 6 Substituted benzene Concentration Rank 5

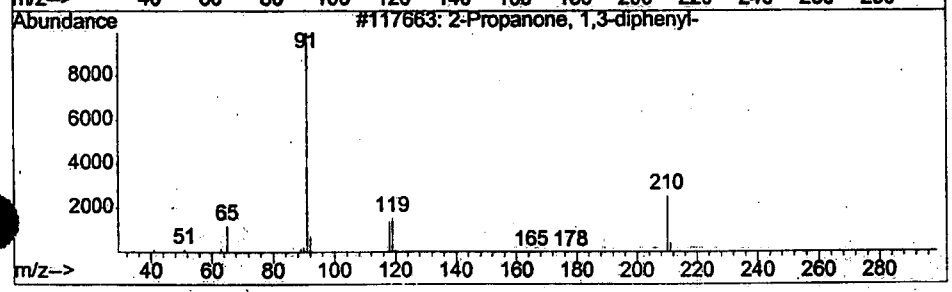
R.T.	EstConc	Area	Relative to ISTD	R.T.
5.34	15.60 UG	95881	Chrysene-d12	5.98

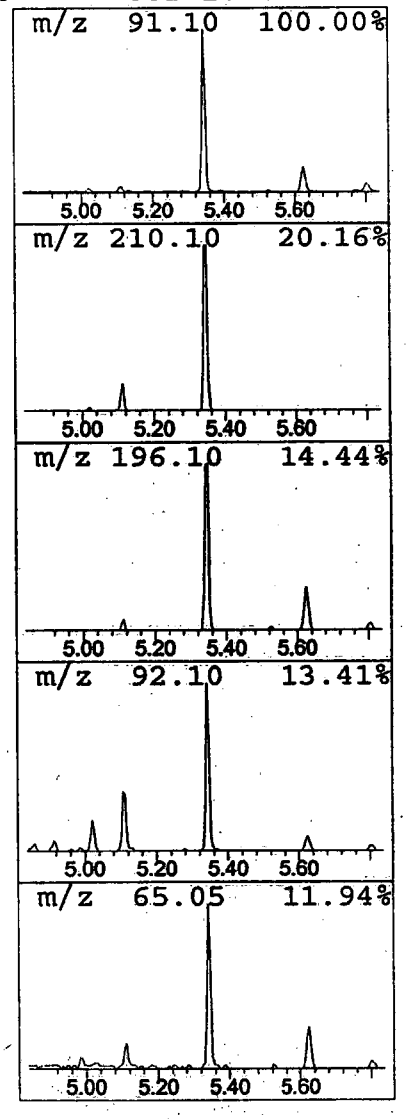
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	97
2	Benzenemethanamine, N,N-bis(phen...	287	C21H21N	000620-40-6	97
3	2-Propanone, 1,3-diphenyl-	210	C15H14O	000102-04-5	46
4	Benzaldehyde, 4-benzyloxy-5-meth...	287	C15H13NO5	002426-84-8	43











7876

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2165.D
Acq On : 19 Apr 2001 9:40
Sample : S-60,2435-003,S,15.39g,17.5,04/19/01
'isc : ENVTACT/ORBIS,04/16/01,04/17/01,1
3 Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

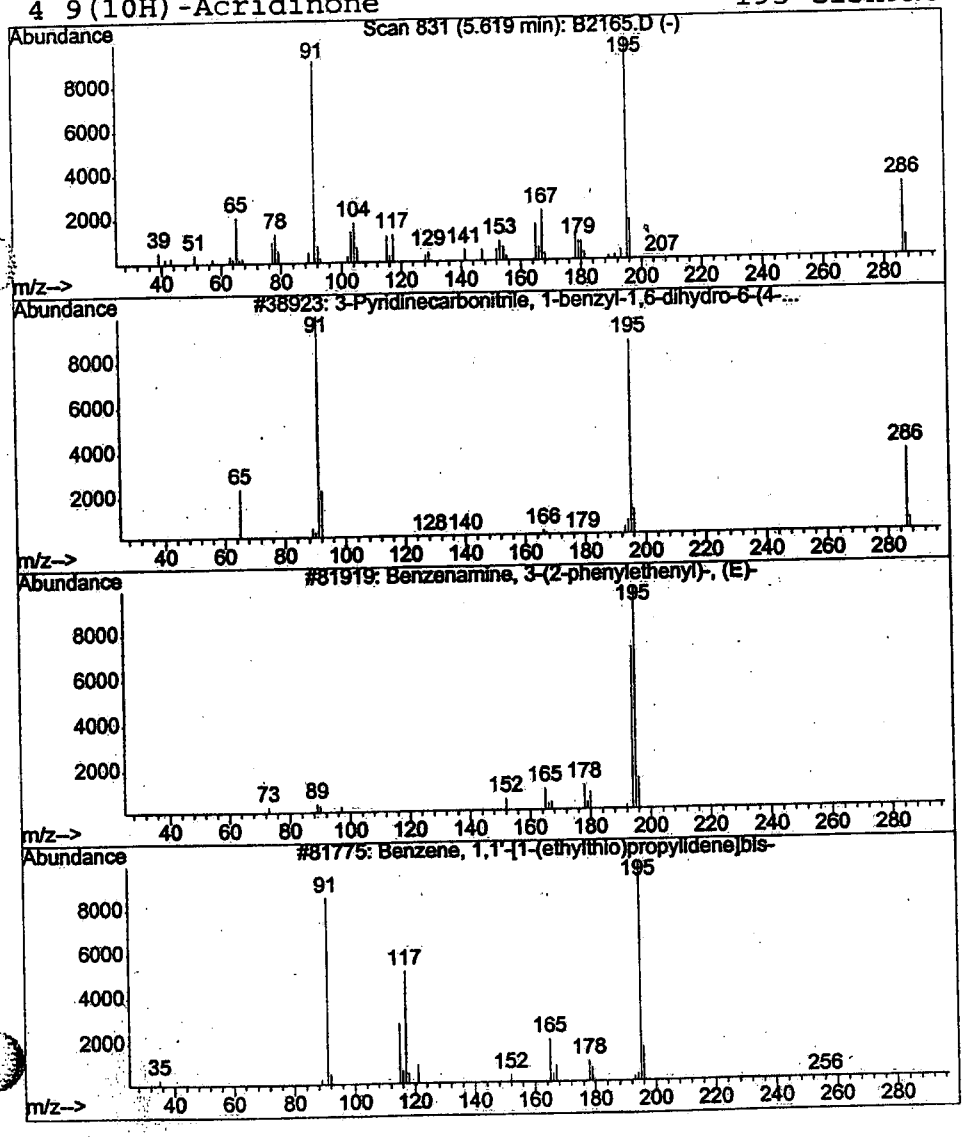
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

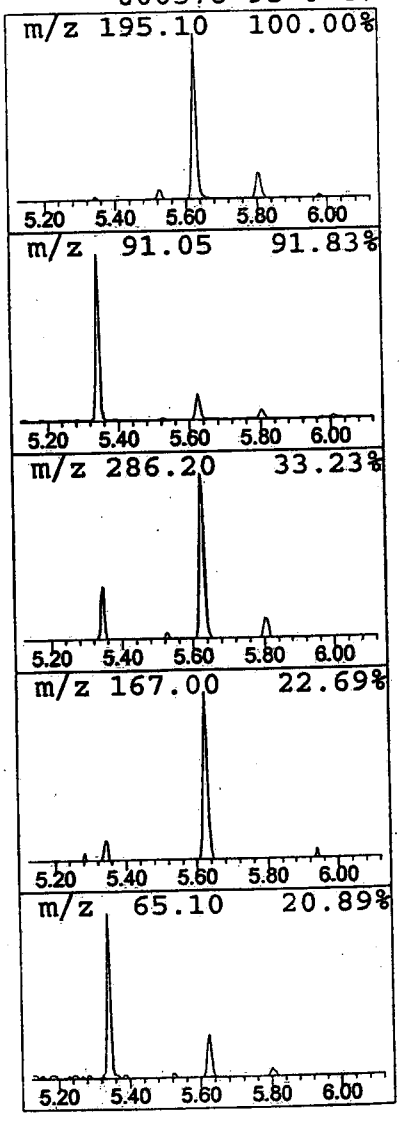
****

Peak Number 7 Substituted benzene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.62	10.26 UG	63063	Chrysene-d12	5.98

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Pyridinecarbonitrile, 1-benzyl...	286	C20H18N2	1000142-90-4	58
2	Benzenamine, 3-(2-phenylethenyl)...	195	C14H13N	014064-82-5	47
3	Benzene, 1,1'-[1-(ethylthio)prop...	256	C17H20S	053699-80-2	47
4	9(10H)-Acridinone	195	C13H9NO	000578-95-0	47





7877

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2165.D
Acq On : 19 Apr 2001 9:40
Sample : S-60,2435-003,S,15.39g,17.5,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
Integration Params: LSCINT.P

Vial: 4
Operator: JC
Inst : MSD_B
Multiplr: 1.00

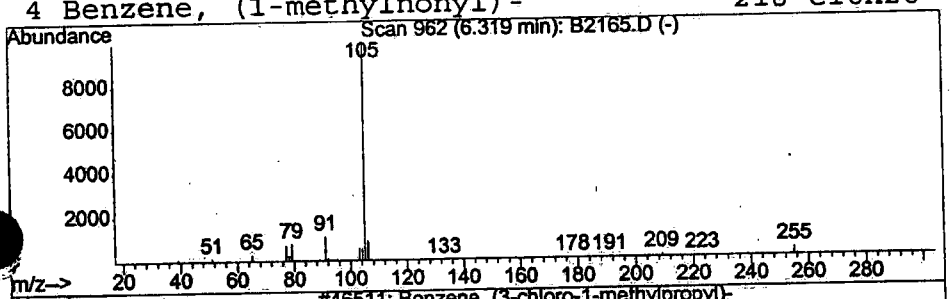
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

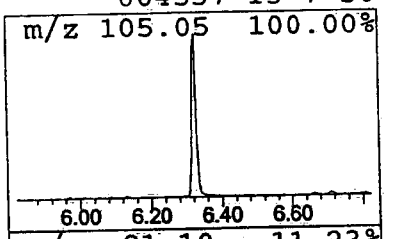
****

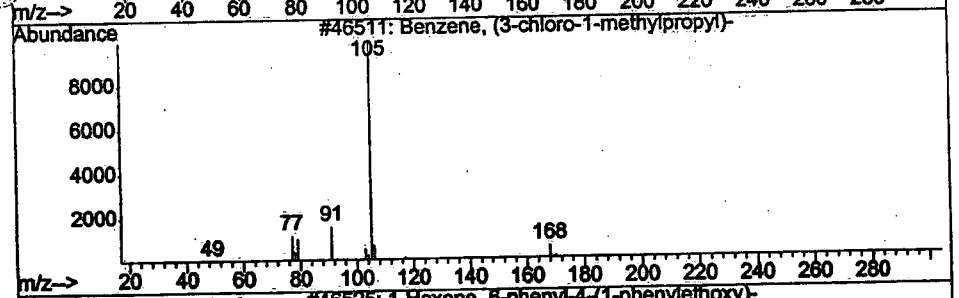
Peak Number 8 Substituted benzene Concentration Rank 6

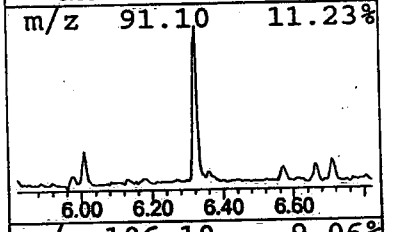
R.T.	EstConc	Area	Relative to ISTD	R.T.
6.32	10.52 UG	64684	Chrysene-d12	5.98

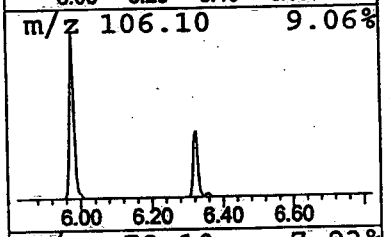
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (3-chloro-1-methylpropyl)-	168	C10H13Cl	013556-61-1	72
2	1-Hexene, 6-phenyl-4-(1-phenylet...	280	C20H24O	1000190-48-6	64
3	1-Hexene, 3-methyl-6-phenyl-4-(1...	294	C21H26O	1000194-52-4	50
4	Benzene, (1-methylnonyl)-	218	C16H26	004537-13-7	50

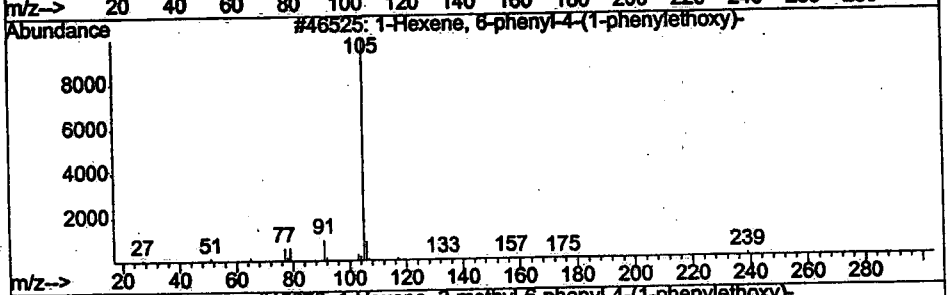


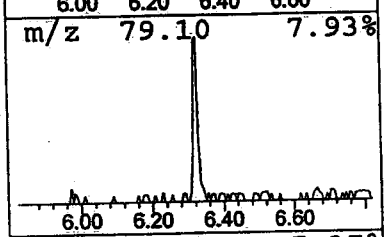


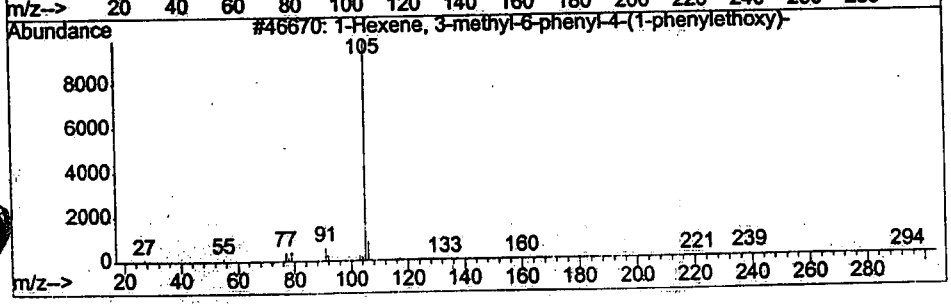


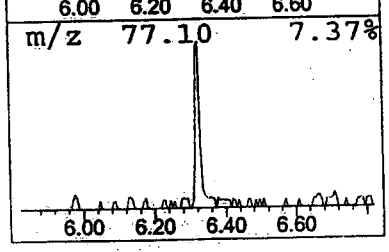












2828

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2166.D Vial: 5
Acq On : 19 Apr 2001 9:56 Operator: JC
Sample : S-61,2435-004,S,15.38g,18.2,04/19/01 Inst : MSD_B
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: Apr 19 10:06:12 2001 Quant Results File: BS1401.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration
DataAcq Meth : BS1401

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.29	152	52427	40.00	UG	-0.02
22) Naphthalene-d8	2.83	136	210145	40.00	UG	-0.01
39) Acenaphthene-d10	3.59	164	119621	40.00	UG	0.00
60) Phenanthrene-d10	4.24	188	176056	40.00	UG	-0.02
75) Chrysene-d12	5.98	240	93738	40.00	UG	-0.02
84) Perylene-d12	7.24	264	111238	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	1.78	112	97366	72.88	UG	-0.02
Spiked Amount 100.000	Range 41 - 82		Recovery = 72.88%			
6) Phenol-d5	2.13	99	136565m	84.52	UG	-0.02
Spiked Amount 100.000	Range 48 - 87		Recovery = 84.52%			
23) Nitrobenzene-d5	2.52	82	50259	30.02	UG	-0.02
Spiked Amount 50.000	Range 52 - 84		Recovery = 60.04%			
43) 2-Fluorobiphenyl	3.28	172	132538	33.78	UG	-0.01
Spiked Amount 50.000	Range 61 - 102		Recovery = 67.56%			
64) 2,4,6-Tribromophenol	3.93	330	53842	103.60	UG	-0.01
Spiked Amount 100.000	Range 68 - 105		Recovery = 103.60%			
77) Terphenyl-d14	5.11	244	142513	54.32	UG	-0.01
Spiked Amount 50.000	Range 49 - 132		Recovery = 108.64%			

Target Compounds Qvalue

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

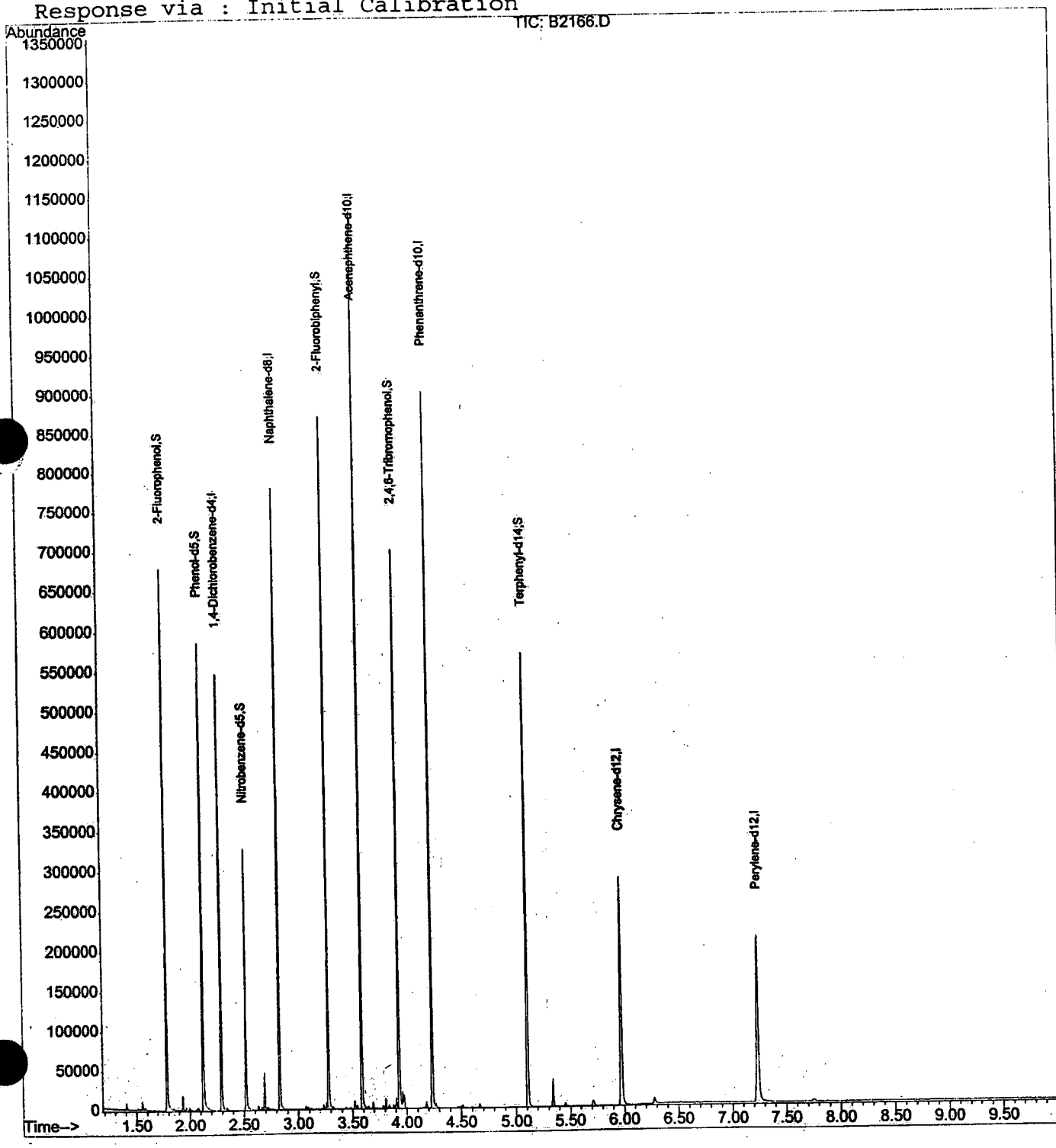
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2166.D
Acq On : 19 Apr 2001 9:56
Sample : S-61,2435-004,S,15.38g,18.2,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: rteint.p
Quant Time: Apr 19 10:19 2001

Vial: 5
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1401.RES

Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration



2830

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2166.D
Acq On : 19 Apr 2001 9:56
Sample : S-61,2435-004,S,15.38g,18.2,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

Vial: 5
Operator: JC
Inst : MSD_B
Multiplr: 1.00

No Library Search Compounds Detected

****
B2166.D BS1401.M Thu Apr 19 10:20:18 2001 MSD_B

000223

2831

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2167.D
Acq On : 19 Apr 2001 10:11
Sample : S-62,2435-005,S,15.85g,16.2,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
Integration Params: rteint.p
Quant Time: Apr 19 10:21:29 2001

Vial: 6
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1401.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration
DataAcq Meth : BS1401

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.29	152	52230	40.00	UG	-0.02
22) Naphthalene-d8	2.83	136	200046	40.00	UG	-0.01
39) Acenaphthene-d10	3.59	164	115118	40.00	UG	0.00
60) Phenanthrene-d10	4.24	188	173438	40.00	UG	-0.02
75) Chrysene-d12	5.98	240	96602	40.00	UG	-0.01
84) Perylene-d12	7.23	264	112547	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	1.78	112	98991	74.37	UG	-0.02
Spiked Amount 100.000	Range 41 - 82		Recovery = 74.37%			
6) Phenol-d5	2.12	99	125182	77.77	UG	-0.03
Spiked Amount 100.000	Range 48 - 87		Recovery = 77.77%			
23) Nitrobenzene-d5	2.52	82	50467	31.66	UG	-0.02
Spiked Amount 50.000	Range 52 - 84		Recovery = 63.32%			
43) 2-Fluorobiphenyl	3.28	172	135460	35.87	UG	-0.01
Spiked Amount 50.000	Range 61 - 102		Recovery = 71.74%			
64) 2,4,6-Tribromophenol	3.93	330	53755	104.99	UG	-0.01
Spiked Amount 100.000	Range 68 - 105		Recovery = 104.99%			
77) Terphenyl-d14	5.11	244	151885	56.17	UG	0.00
Spiked Amount 50.000	Range 49 - 132		Recovery = 112.34%			

Target Compounds	Qvalue

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

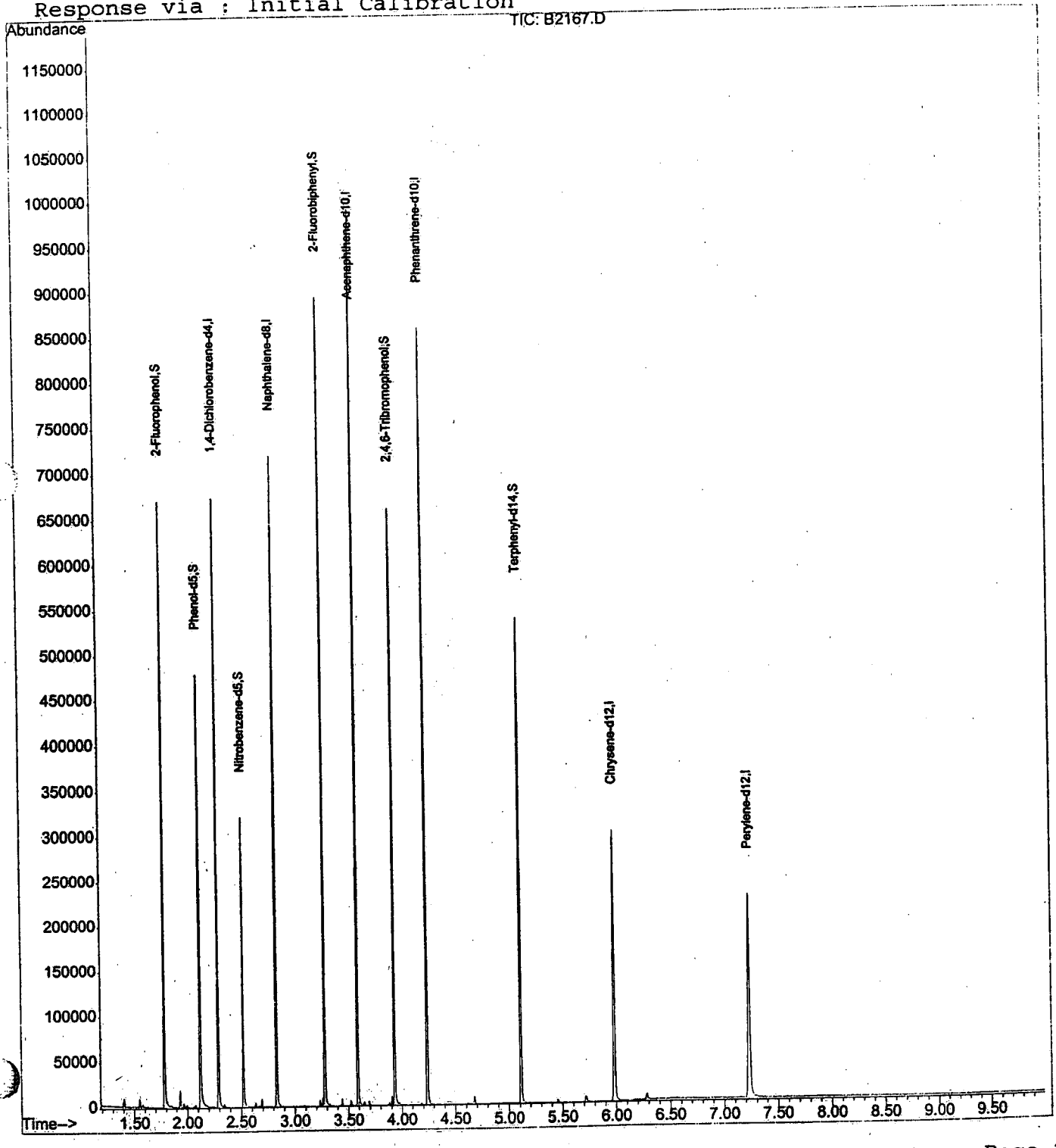
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2167.D
Acq On : 19 Apr 2001 10:11
Sample : S-62,2435-005,S,15.85g,16.2,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: rteint.p
Quant Time: Apr 19 10:46 2001

Vial: 6
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1401.RES

Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration



2833

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2167.D
Acq On : 19 Apr 2001 10:11
Sample : S-62,2435-005,S,15.85g,16.2,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.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

****
B2167.D BS1401.M Thu Apr 19 10:48:39 2001 MSD_B

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2169.D
Acq On : 19 Apr 2001 10:41
Sample : S-68A,2435-011,S,15.56g,13.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
Vial: 7
Operator: JC
Inst : MSD_B
Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: Apr 19 10:52:00 2001
Quant Results File: BS1401.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration
DataAcq Meth : BS1401

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.29	152	45067	40.00	UG	-0.02
22) Naphthalene-d8	2.83	136	167545	40.00	UG	-0.01
39) Acenaphthene-d10	3.59	164	95955	40.00	UG	0.00
60) Phenanthrene-d10	4.24	188	145576	40.00	UG	-0.02
75) Chrysene-d12	5.98	240	90050	40.00	UG	-0.02
84) Perylene-d12	7.23	264	109619	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	1.78	112	85332	74.30	UG	-0.02
Spiked Amount 100.000	Range 41 - 82		Recovery = 74.30%			
6) Phenol-d5	2.12	99	110796	79.77	UG	-0.03
Spiked Amount 100.000	Range 48 - 87		Recovery = 79.77%			
23) Nitrobenzene-d5	2.52	82	40691	30.48	UG	-0.02
Spiked Amount 50.000	Range 52 - 84		Recovery = 60.96%			
43) 2-Fluorobiphenyl	3.28	172	108117	34.35	UG	-0.01
Spiked Amount 50.000	Range 61 - 102		Recovery = 68.70%			
64) 2,4,6-Tribromophenol	3.93	330	41969	97.66	UG	-0.01
Spiked Amount 100.000	Range 68 - 105		Recovery = 97.66%			
77) Terphenyl-d14	5.11	244	118583	47.05	UG	-0.01
Spiked Amount 50.000	Range 49 - 132		Recovery = 94.10%			
Target Compounds						Qvalue
7) Phenol	2.13	94	6404m	4.32	UG	
15) 2-Methylphenol	2.37	108	4483	3.93	UG	93
17) 4-Methylphenol	2.43	108	13958	12.94	UG	97

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

2835

000227

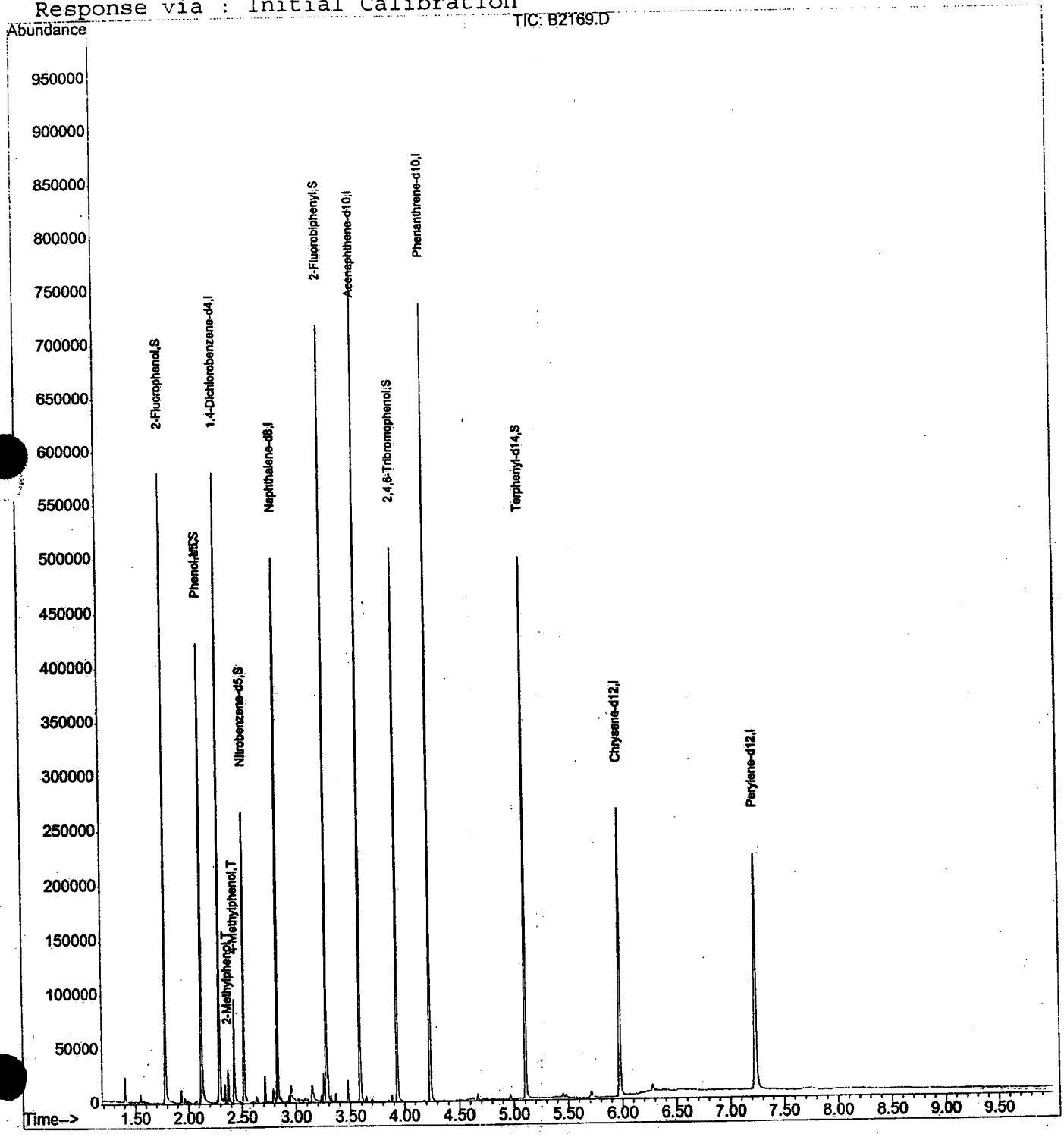
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2169.D
Acq On : 19 Apr 2001 10:41
Sample : S-68A,2435-011,S,15.56g,13.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: rteint.p
Quant Time: Apr 19 10:55 2001

Vial: 7
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1401.RES

Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration



2036

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Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2169.D
Acq On : 19 Apr 2001 10:41
Sample : S-68A,2435-011,S,15.56g,13.8,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
Vial: 7
Operator: JC
Inst : MSD_B
Multiplr: 1.00
Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

No Library Search Compounds Detected

****
B2169.D BS1401.M Thu Apr 19 10:55:57 2001 MSD_B

000229

2837

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2168.D
Acq On : 19 Apr 2001 10:26
Sample : S-65,2435-008,S,15.19g,16.4,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
Integration Params: rteint.p
Quant Time: Apr 19 10:36:44 2001

Vial: 9
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1401.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration
DataAcq Meth : BS1401

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.29	152	47530	40.00	UG	-0.02
22) Naphthalene-d8	2.83	136	178685	40.00	UG	-0.01
39) Acenaphthene-d10	3.59	164	97547	40.00	UG	0.00
60) Phenanthrene-d10	4.24	188	150529	40.00	UG	-0.02
75) Chrysene-d12	5.98	240	96116	40.00	UG	-0.02
84) Perylene-d12	7.23	264	118347	40.00	UG	-0.02

System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	UG	
Spiked Amount 100.000	Range 41 - 82		Recovery =	0.00%#		
6) Phenol-d5	0.00	99	0d	0.00	UG	
Spiked Amount 100.000	Range 48 - 87		Recovery =	0.00%#		
23) Nitrobenzene-d5	2.52	82	48566	34.11	UG	-0.02
Spiked Amount 50.000	Range 52 - 84		Recovery =	68.22%		
43) 2-Fluorobiphenyl	3.28	172	128057	40.02	UG	-0.01
Spiked Amount 50.000	Range 61 - 102		Recovery =	80.04%		
64) 2,4,6-Tribromophenol	0.00	330	0d	0.00	UG	
Spiked Amount 100.000	Range 68 - 105		Recovery =	0.00%#		
77) Terphenyl-d14	5.11	244	124348	46.22	UG	-0.01
Spiked Amount 50.000	Range 49 - 132		Recovery =	92.44%		

Target Compounds	Qvalue

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

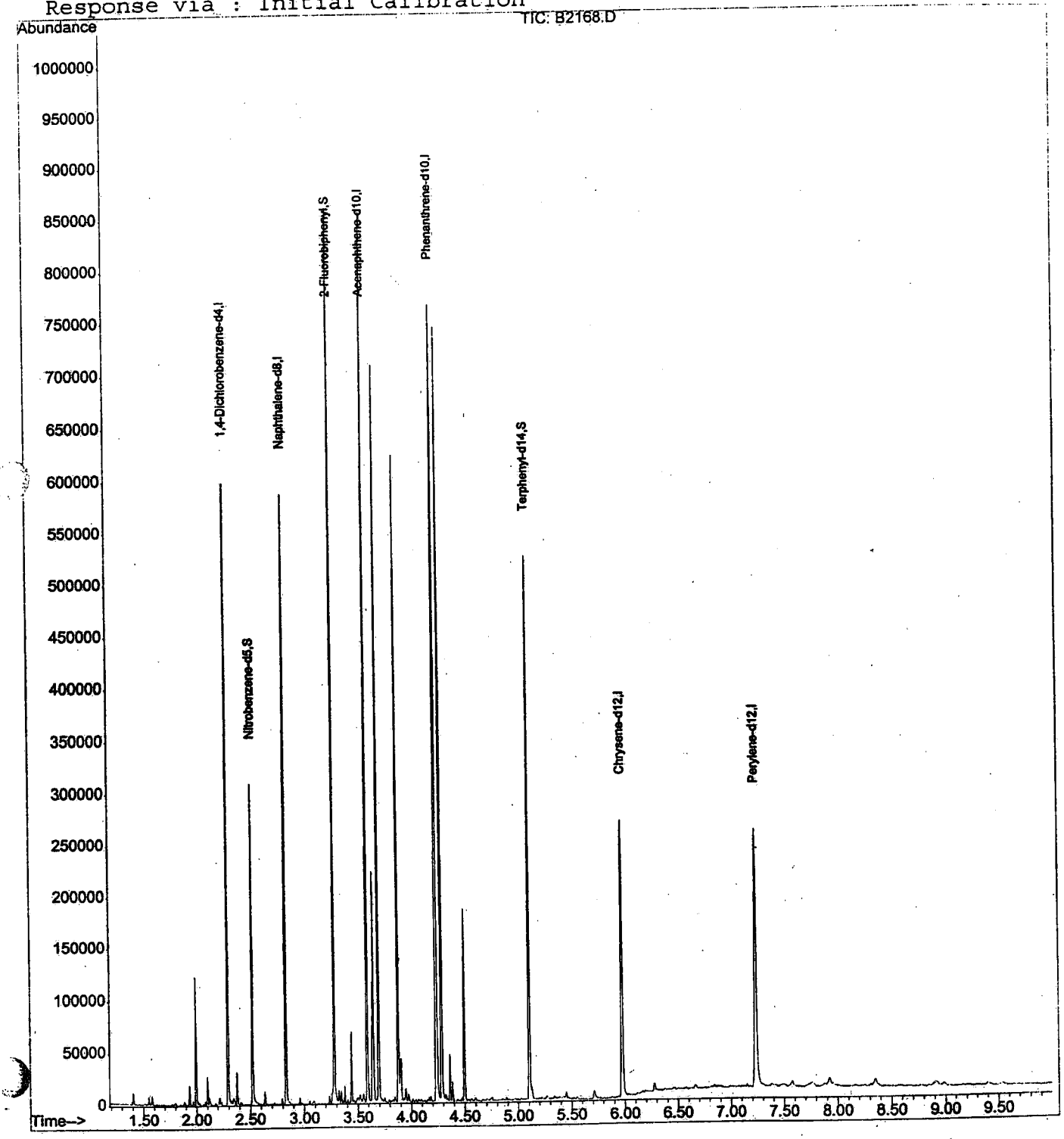
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2168.D
Acq On : 19 Apr 2001 10:26
Sample : S-65,2435-008,S,15.19g,16.4,04/19/01
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,1
MS Integration Params: rteint.p
Quant Time: Apr 19 10:47 2001

Vial: 9
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1401.RES

Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration



000231

Z839

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2162.D Vial: 1
Acq On : 19 Apr 2001 8:55 Operator: JC
Sample : .,Method-Blk,S,30.0g,0.0,04/19/01 Inst : MSD_B
Misc : N/A,N/A,N/A,1 Multiplr: 1.00
RTE Integration Params: rteint.p
Quant Time: Apr 19 09:05:34 2001 Quant Results File: BS1401.RES

Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration
DataAcq Meth : BS1401

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	2.29	152	56661	40.00	UG	-0.02
22) Naphthalene-d8	2.83	136	239671	40.00	UG	-0.01
39) Acenaphthene-d10	3.59	164	127382	40.00	UG	0.00
60) Phenanthrene-d10	4.26	188	191234	40.00	UG	0.00
75) Chrysene-d12	6.00	240	108755	40.00	UG	0.00
84) Perylene-d12	7.26	264	126760	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	1.78	112	114873	79.56	UG	-0.02
Spiked Amount 100.000	Range 41 - 82		Recovery = 79.56%			
6) Phenol-d5	2.13	99	150337	86.09	UG	-0.02
Spiked Amount 100.000	Range 48 - 87		Recovery = 86.09%			
23) Nitrobenzene-d5	2.52	82	55570	29.10	UG	-0.02
Spiked Amount 50.000	Range 52 - 84		Recovery = 58.20%			
43) 2-Fluorobiphenyl	3.28	172	138563	33.16	UG	0.00
Spiked Amount 50.000	Range 61 - 102		Recovery = 66.32%			
64) 2,4,6-Tribromophenol	3.94	330	49169	87.10	UG	0.00
Spiked Amount 100.000	Range 68 - 105		Recovery = 87.10%			
77) Terphenyl-d14	5.13	244	155091	50.95	UG	0.01
Spiked Amount 50.000	Range 49 - 132		Recovery = 101.90%			

Target Compounds **Qvalue**

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

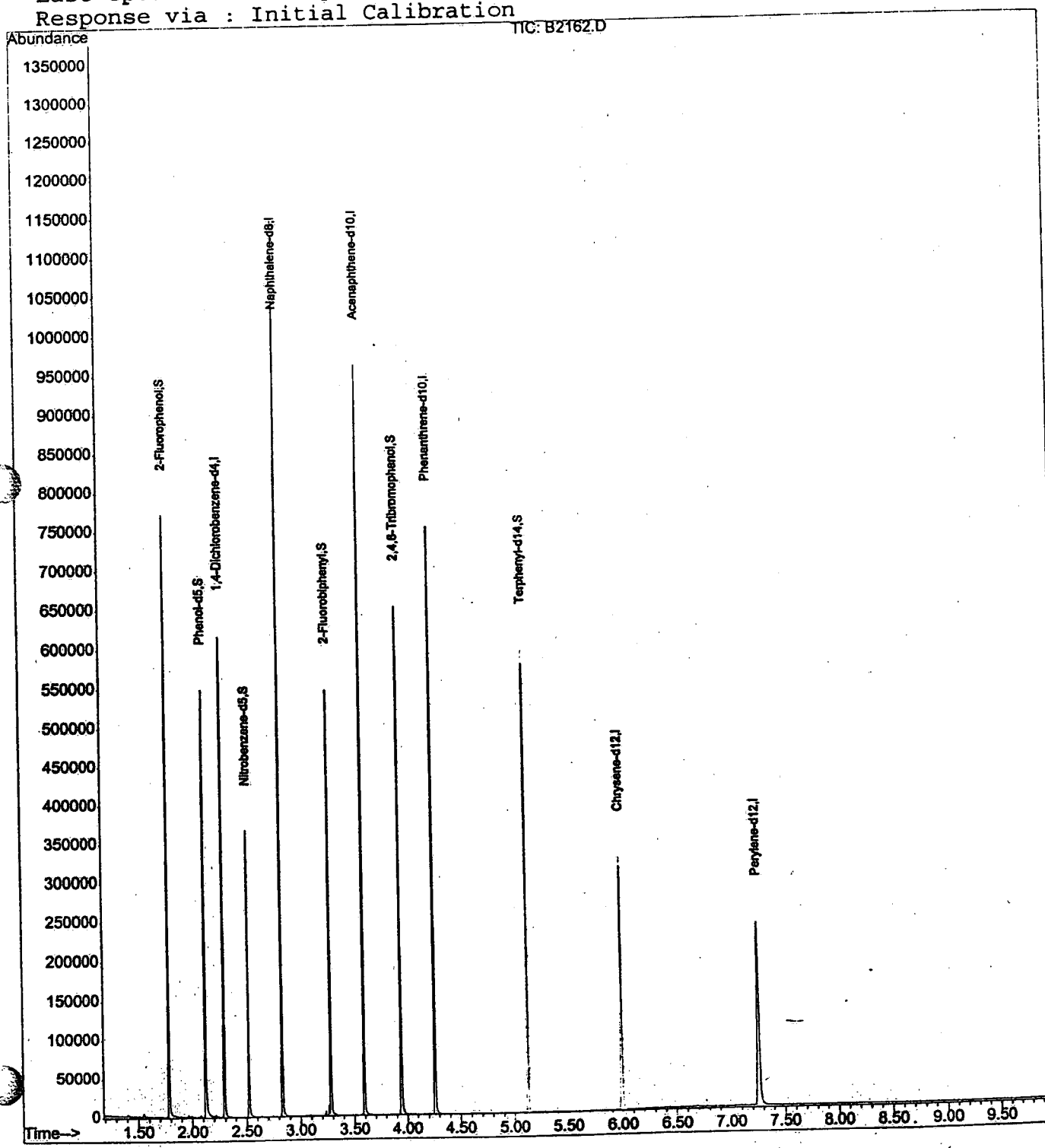
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2162.D
Acq On : 19 Apr 2001 8:55
Sample : .,Method-Blk,S,30.0g,0.0,04/19/01
Misc : N/A,N/A,N/A,1
MS Integration Params: rteint.p
Quant Time: Apr 19 9:40 2001

Vial: 1
Operator: JC
Inst : MSD_B
Multiplr: 1.00

Quant Results File: BS1401.RES

Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 16 13:05:11 2001
Response via : Initial Calibration



000233

2841

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\04-19-01\B2162.D
Acq On : 19 Apr 2001 8:55
Sample : .,Method-Blk,S,30.0g,0.0,04/19/01
Misc : N/A,N/A,N/A,1
MS Integration Params: LSCINT.P
Quant Method : C:\MSDCHEM\1\METHODS\BS1401.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NIST98.L

Vial: 1
Operator: JC
Inst : MSD_B
Multiplr: 1.00

No Library Search Compounds Detected

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B2162.D BS1401.M Thu Apr 19 09:44:12 2001 MSD_B

2842

000234

PCB METHOD BLANK SUMMARY

Lab File ID: V5322.D

Instrument ID: GC-V

Date Extracted: 04/18/2001

Matrix: SOIL

Date Analyzed: 04/19/2001

Time Analyzed: 13:45

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S-58	2435-001	04/19/2001	14:16
S-59	2435-002	04/19/2001	14:46
S-60	2435-003	04/19/2001	15:17
S-61	2435-004	04/19/2001	15:48
S-62	2435-005	04/19/2001	16:19
S-68A	2435-011	04/19/2001	16:49
PCB	2435-005-MS1	04/19/2001	17:20
PCB	2435-005-MSD1	04/19/2001	17:51
PCB	PBS0418-MS1	04/19/2001	18:22

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0418-BLK1
Client ID: (2435)
Date Received: NA
Date Extracted: 04/18/2001
Date Analyzed: 04/19/2001
Data file: V5322.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		6.68
Aroclor-1221	ND		6.68
Aroclor-1232	ND		6.68
Aroclor-1242	ND		6.68
Aroclor-1248	ND		6.68
Aroclor-1254	ND		6.68
Aroclor-1260	ND		6.68

7844

000236

PCB METHOD BLANK SUMMARY

Lab File ID: V5254.D

Instrument ID: GC-V

Date Extracted: 04/17/2001

Matrix: SOIL

Date Analyzed: 04/17/2001

Time Analyzed: 14:08

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
T3-4B	2393-001	04/17/2001	14:39
T2-5B	2393-002	04/17/2001	15:10
T5-3B	2393-003	04/17/2001	15:41
SP-6	2299-006	04/17/2001	16:11
SP-10	2299-010	04/17/2001	17:13
CONPILE	2329-006	04/17/2001	17:44
MT._HOPE_WC	2342-001	04/17/2001	18:14
MT._HOPE_WC	2349-001	04/17/2001	18:45
SD-1	2352-011	04/17/2001	19:16
WC-1	2336-001	04/17/2001	19:47
PCB	2336-001-MS1	04/17/2001	20:17
PCB	2336-001-MSD1	04/17/2001	20:48
SP-7	2299-007	04/18/2001	08:36
PCB	PBS0417-MS1	04/18/2001	10:09

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0417-BLK1
Client ID: (2299..2406)
Date Received: NA
Date Extracted: 04/17/2001
Date Analyzed: 04/17/2001
Data file: V5254.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		6.68
Aroclor-1221	ND		6.68
Aroclor-1232	ND		6.68
Aroclor-1242	ND		6.68
Aroclor-1248	ND		6.68
Aroclor-1254	ND		6.68
Aroclor-1260	ND		6.68

2846

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/16/2001

Instrument ID: Varian 3400

GC Column (1st): DB-5

Data File: V5203.D V5204.D V5205.D V5206.D V5207.D

Compound	RT OF STANDARDS 200	500	1000	2000	4000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	5.80	5.80	5.80	5.80	5.80	5.80	5.73	5.87
Aroclor-1016 {2}	6.89	6.89	6.89	6.89	6.89	6.89	6.82	6.96
Aroclor-1016 {3}	7.33	7.33	7.33	7.33	7.33	7.33	7.26	7.40
Aroclor-1016 {4}	9.21	9.21	9.21	9.20	9.21	9.21	9.14	9.28
Aroclor-1016 {5}	9.68	9.68	9.68	9.68	9.68	9.68	9.61	9.75
Aroclor-1221			3.83				3.76	3.90
Aroclor-1221 {2}			5.44				5.37	5.51
Aroclor-1221 {3}			5.67				5.60	5.74
Aroclor-1221 {4}			5.80				5.73	5.87
Aroclor-1221 {5}			6.89				6.82	6.96
Aroclor-1232			5.80				5.73	5.87
Aroclor-1232 {2}			6.84				6.77	6.91
Aroclor-1232 {3}			8.35				8.28	8.42
Aroclor-1232 {4}			9.20				9.13	9.27
Aroclor-1232 {5}			10.05				9.98	10.12
Aroclor-1242			7.33				7.26	7.40
Aroclor-1242 {2}			9.21				9.14	9.28
Aroclor-1242 {3}			9.78				9.71	9.85
Aroclor-1242 {4}			10.99				10.92	11.06
Aroclor-1242 {5}			11.51				11.44	11.58
Aroclor-1248			8.08				8.01	8.15
Aroclor-1248 {2}			9.20				9.13	9.27
Aroclor-1248 {3}			9.77				9.70	9.84
Aroclor-1248 {4}			10.98				10.91	11.05
Aroclor-1248 {5}			11.50				11.43	11.57
Aroclor-1254			11.74				11.67	11.81
Aroclor-1254 {2}			12.57				12.50	12.64
Aroclor-1254 {3}			13.72				13.65	13.79
Aroclor-1254 {4}			14.46				14.39	14.53
Aroclor-1254 {5}			15.34				15.27	15.41
Aroclor-1260	15.33	15.33	15.34	15.33	15.33	15.33	15.26	15.40
Aroclor-1260 {2}	15.90	15.89	15.90	15.90	15.90	15.90	15.83	15.97
Aroclor-1260 {3}	17.54	17.54	17.54	17.54	17.54	17.54	17.47	17.61
Aroclor-1260 {4}	18.47	18.46	18.47	18.47	18.47	18.47	18.40	18.54
Aroclor-1260 {5}	20.51	20.51	20.51	20.51	20.51	20.51	20.44	20.58

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/16/2001

Instrument ID: Varian 3400

GC Column (1st): DB-5

Data File: V5203.D V5204.D V5205.D V5206.D V5207.D

Compound	CALIBRATION FACTORS 200	500	1000	2000	4000	MEAN	%RSD
Aroclor-1016	6672	6307	6130	6299	5566	6195	6.51
Aroclor-1016 {2}	5181	5010	4852	4945	4423	4882	5.80
Aroclor-1016 {3}	9232	8669	8314	8453	7477	8429	7.56
Aroclor-1016 {4}	5490	5191	5025	5218	4606	5106	6.37
Aroclor-1016 {5}	7758	7309	7030	7223	6395	7143	6.94
Aroclor-1221			1844				
Aroclor-1221 {2}			3291				
Aroclor-1221 {3}			2993				
Aroclor-1221 {4}			8375				
Aroclor-1221 {5}			1162				
Aroclor-1232			5309				
Aroclor-1232 {2}			2669				
Aroclor-1232 {3}			3987				
Aroclor-1232 {4}			1884				
Aroclor-1232 {5}			3951				
Aroclor-1242			6113				
Aroclor-1242 {2}			3645				
Aroclor-1242 {3}			4399				
Aroclor-1242 {4}			8256				
Aroclor-1242 {5}			8426				
Aroclor-1248			10489				
Aroclor-1248 {2}			5622				
Aroclor-1248 {3}			5023				
Aroclor-1248 {4}			14680				
Aroclor-1248 {5}			14650				
Aroclor-1254			12476				
Aroclor-1254 {2}			10870				
Aroclor-1254 {3}			17457				
Aroclor-1254 {4}			11933				
Aroclor-1254 {5}			20494				
Aroclor-1260	29057	26240	25071	25765	23666	25960	7.65
Aroclor-1260 {2}	24814	23618	22739	23482	21470	23225	5.30
Aroclor-1260 {3}	55339	52397	51001	54829	54016	53517	3.35
Aroclor-1260 {4}	25301	23869	23282	24270	22182	23781	4.87
Aroclor-1260 {5}	14305	13588	13800	14493	13247	13887	3.69
					Average %RSD		5.80

2848

000240

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/16/2001

Instrument ID: Varian 3400

GC Column (2nd): DB-1701P

Data File: V5203.C V5204.C V5205.C V5206.C V5207.C

Compound	RT OF STANDARDS 200	500	1000	2000	4000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	6.35	6.35	6.35	6.35	6.35	6.35	6.28	6.42
Aroclor-1016 {2}	7.42	7.42	7.42	7.42	7.42	7.42	7.35	7.49
Aroclor-1016 {3}	8.78	8.78	8.78	8.78	8.78	8.78	8.71	8.85
Aroclor-1016 {4}	9.16	9.16	9.16	9.16	9.16	9.16	9.09	9.23
Aroclor-1016 {5}	9.48	9.48	9.48	9.48	9.48	9.48	9.41	9.55
Aroclor-1221			4.10				4.03	4.17
Aroclor-1221 {2}			5.80				5.73	5.87
Aroclor-1221 {3}			6.21				6.14	6.28
Aroclor-1221 {4}			6.37				6.30	6.44
Aroclor-1221 {5}			7.44				7.37	7.51
Aroclor-1232			6.35				6.28	6.42
Aroclor-1232 {2}			7.42				7.35	7.49
Aroclor-1232 {3}			8.78				8.71	8.85
Aroclor-1232 {4}			9.48				9.41	9.55
Aroclor-1232 {5}			10.59				10.52	10.66
Aroclor-1242			8.11				8.04	8.18
Aroclor-1242 {2}			9.48				9.41	9.55
Aroclor-1242 {3}			10.93				10.86	11.00
Aroclor-1242 {4}			11.92				11.85	11.99
Aroclor-1242 {5}			12.65				12.58	12.72
Aroclor-1248			8.77				8.70	8.84
Aroclor-1248 {2}			9.86				9.79	9.93
Aroclor-1248 {3}			10.58				10.51	10.65
Aroclor-1248 {4}			10.87				10.80	10.94
Aroclor-1248 {5}			11.52				11.45	11.59
Aroclor-1254			12.46				12.39	12.53
Aroclor-1254 {2}			13.57				13.50	13.64
Aroclor-1254 {3}			14.73				14.66	14.80
Aroclor-1254 {4}			15.17				15.10	15.24
Aroclor-1254 {5}			16.30				16.23	16.37
Aroclor-1260	15.17	15.17	15.17	15.17	15.17	15.17	15.10	15.24
Aroclor-1260 {2}	16.43	16.43	16.43	16.43	16.43	16.43	16.36	16.50
Aroclor-1260 {3}	17.44	17.44	17.44	17.45	17.44	17.44	17.37	17.51
Aroclor-1260 {4}	18.41	18.41	18.41	18.41	18.41	18.41	18.34	18.48
Aroclor-1260 {5}	20.69	20.69	20.69	20.70	20.69	20.69	20.62	20.76

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/16/2001 **Instrument ID:** Varian 3400

GC Column (2nd): DB-1701P

Data File: V5203.C V5204.C V5205.C V5206.C V5207.C

Compound	CALIBRATION FACTORS 200	500	1000	2000	4000	MEAN	%RSD
Aroclor-1016	7071	6724	6455	6572	5807	6526	7.11
Aroclor-1016 {2}	13283	12580	11842	11866	10540	12022	8.48
Aroclor-1016 {3}	31330	29189	27508	28318	26189	28507	6.76
Aroclor-1016 {4}	9868	10089	9685	9900	8761	9661	5.41
Aroclor-1016 {5}	10786	10294	9833	10071	8942	9985	6.82
Aroclor-1221			2067				
Aroclor-1221 {2}			3581				
Aroclor-1221 {3}			2342				
Aroclor-1221 {4}			8585				
Aroclor-1221 {5}			801				
Aroclor-1232			5527				
Aroclor-1232 {2}			4402				
Aroclor-1232 {3}			10157				
Aroclor-1232 {4}			3612				
Aroclor-1232 {5}			4885				
Aroclor-1242			3862				
Aroclor-1242 {2}			7238				
Aroclor-1242 {3}			1451				
Aroclor-1242 {4}			7823				
Aroclor-1242 {5}			5547				
Aroclor-1248			17099				
Aroclor-1248 {2}			11598				
Aroclor-1248 {3}			13372				
Aroclor-1248 {4}			12977				
Aroclor-1248 {5}			8139				
Aroclor-1254			12042				
Aroclor-1254 {2}			10474				
Aroclor-1254 {3}			15053				
Aroclor-1254 {4}			8896				
Aroclor-1254 {5}			18847				
Aroclor-1260	21952	20003	18925	19075	17026	19396	9.24
Aroclor-1260 {2}	17259	16084	15299	15402	13659	15541	8.43
Aroclor-1260 {3}	20029	18317	17403	17583	15673	17801	8.87
Aroclor-1260 {4}	47361	44171	42059	43501	40664	43551	5.79
Aroclor-1260 {5}	5273	5335	5219	5517	4981	5265	3.69
					Average %RSD		7.06

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/19/2001 Instrument ID: Varian 3400

Data File: V5320.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.80	5.73	5.87	6195	5842	5.69
Aroclor-1016 {2}	6.89	6.82	6.96	4882	4581	6.17
Aroclor-1016 {3}	7.33	7.26	7.40	8429	7880	6.51
Aroclor-1016 {4}	9.20	9.13	9.27	5106	4825	5.51
Aroclor-1016 {5}	9.68	9.61	9.75	7143	6711	6.05
Aroclor-1260	15.33	15.26	15.40	25960	24695	4.87
Aroclor-1260 {2}	15.89	15.82	15.96	23225	22308	3.95
Aroclor-1260 {3}	17.53	17.46	17.60	53517	50423	5.78
Aroclor-1260 {4}	18.46	18.39	18.53	23781	23056	3.05
Aroclor-1260 {5}	20.50	20.43	20.57	13887	13762	0.90
					Average %D	4.85

Data File: V5320.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.34	6.27	6.41	6526	6251	4.21
Aroclor-1016 {2}	7.41	7.34	7.48	12022	11513	4.23
Aroclor-1016 {3}	8.76	8.69	8.83	28507	26548	6.87
Aroclor-1016 {4}	9.15	9.08	9.22	9661	9392	2.78
Aroclor-1016 {5}	9.47	9.40	9.54	9985	9527	4.59
Aroclor-1260	15.15	15.08	15.22	19396	18641	3.89
Aroclor-1260 {2}	16.41	16.34	16.48	15541	15117	2.72
Aroclor-1260 {3}	17.42	17.35	17.49	17801	17308	2.77
Aroclor-1260 {4}	18.39	18.32	18.46	43551	42024	3.51
Aroclor-1260 {5}	20.67	20.60	20.74	5265	5314	0.92
					Average %D	3.65

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/19/2001 Instrument ID: Varian 3400

Data File: V5332.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.80	5.73	5.87	6195	6340	2.34
Aroclor-1016 {2}	6.89	6.82	6.96	4882	5013	2.67
Aroclor-1016 {3}	7.32	7.25	7.39	8429	8581	1.81
Aroclor-1016 {4}	9.20	9.13	9.27	5106	5214	2.12
Aroclor-1016 {5}	9.67	9.60	9.74	7143	7321	2.48
Aroclor-1260	15.32	15.25	15.39	25960	26681	2.78
Aroclor-1260 {2}	15.88	15.81	15.95	23225	24045	3.53
Aroclor-1260 {3}	17.53	17.46	17.60	53517	54070	1.03
Aroclor-1260 {4}	18.46	18.39	18.53	23781	24752	4.08
Aroclor-1260 {5}	20.50	20.43	20.57	13887	14600	5.14
					Average %D	2.80

Data File: V5332.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.34	6.27	6.41	6526	6732	3.16
Aroclor-1016 {2}	7.40	7.33	7.47	12022	12279	2.14
Aroclor-1016 {3}	8.76	8.69	8.83	28507	28695	0.66
Aroclor-1016 {4}	9.14	9.07	9.21	9661	10169	5.26
Aroclor-1016 {5}	9.46	9.39	9.53	9985	10317	3.32
Aroclor-1260	15.14	15.07	15.21	19396	20037	3.30
Aroclor-1260 {2}	16.40	16.33	16.47	15541	16213	4.33
Aroclor-1260 {3}	17.41	17.34	17.48	17801	18553	4.22
Aroclor-1260 {4}	18.38	18.31	18.45	43551	44840	2.96
Aroclor-1260 {5}	20.66	20.59	20.73	5265	5685	7.98
					Average %D	3.73

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/19/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(2435)	0418-BLK1	SOIL	105		84		111		87	
S-58	2435-001	SOIL	102		146		102		160	
S-59	2435-002	SOIL	94		100		104		108	
S-60	2435-003	SOIL	90		92		100		102	
S-61	2435-004	SOIL	86		96		96		106	
S-62	2435-005	SOIL	86		96		98		102	
S-68A	2435-011	SOIL	90		100		102		110	
PCB	2435-005-MS1	SOIL	66		70		69		73	
PCB	2435-005-MSD1	SOIL	67		73		69		76	
PCB	PBS0418-MS1	SOIL	92		80		96		83	

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: 2435-005-MSD1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	5.0	0.0	21.0	420 *	58 - 140
Aroclor-1260	5.0	0.0	4.1	82	56 - 161

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	#	MSD % REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	19.4	*	388	8	14	58 - 140
Aroclor-1260	0.0	4.1		82	0	18	56 - 161

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: __2___ out of __4__ outside limits

SOIL PCB BLANK SPIKE RECOVERY

Matrix spike Lab sample ID: PBS0418-MS1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	5.0	0.0	5.5	110	58 - 140
Aroclor-1260	5.0	0.0	5.1	102	56 - 161

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-V **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 4.97 DCB 1 22.63 TCMX 2 4.83 DCB 2 22.78

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
(2435)	0418-BLK1	04/19/2001	13:45	4.97		22.63		4.83		22.78	
S-58	2435-001	04/19/2001	14:16	4.97		22.63		4.83		22.78	
S-59	2435-002	04/19/2001	14:46	4.97		22.63		4.83		22.77	
S-60	2435-003	04/19/2001	15:17	4.96		22.62		4.83		22.76	
S-61	2435-004	04/19/2001	15:48	4.97		22.63		4.83		22.78	
S-62	2435-005	04/19/2001	16:19	4.97		22.63		4.83		22.78	
S-68A	2435-011	04/19/2001	16:49	4.97		22.63		4.83		22.77	
PCB	2435-005-MS1	04/19/2001	17:20	4.97		22.63		4.83		22.78	
PCB	2435-005-MSD1	04/19/2001	17:51	4.97		22.63		4.83		22.78	
PCB	PBS0418-MS1	04/19/2001	18:22	4.97		22.62		4.83		22.76	

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:\MSDCHEM\1\DATA\04-19-01\V5323.D\ADC1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5323.D\ADC1B.CH
Acq On : 19 Apr 2001 14:16 Operator:
Sample : S-58,2435-001,S,30.8g,16.8,04/18/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:33:46 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.97	4.83	3701848	3656465	5.063	5.094
Spiked Amount 100.000			Recovery =		5.06%	5.09%
2) S DCB	22.63	22.78	4358378	4463449	7.335	7.987
Spiked Amount 100.000			Recovery =		7.34%	7.99%
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.

Z857

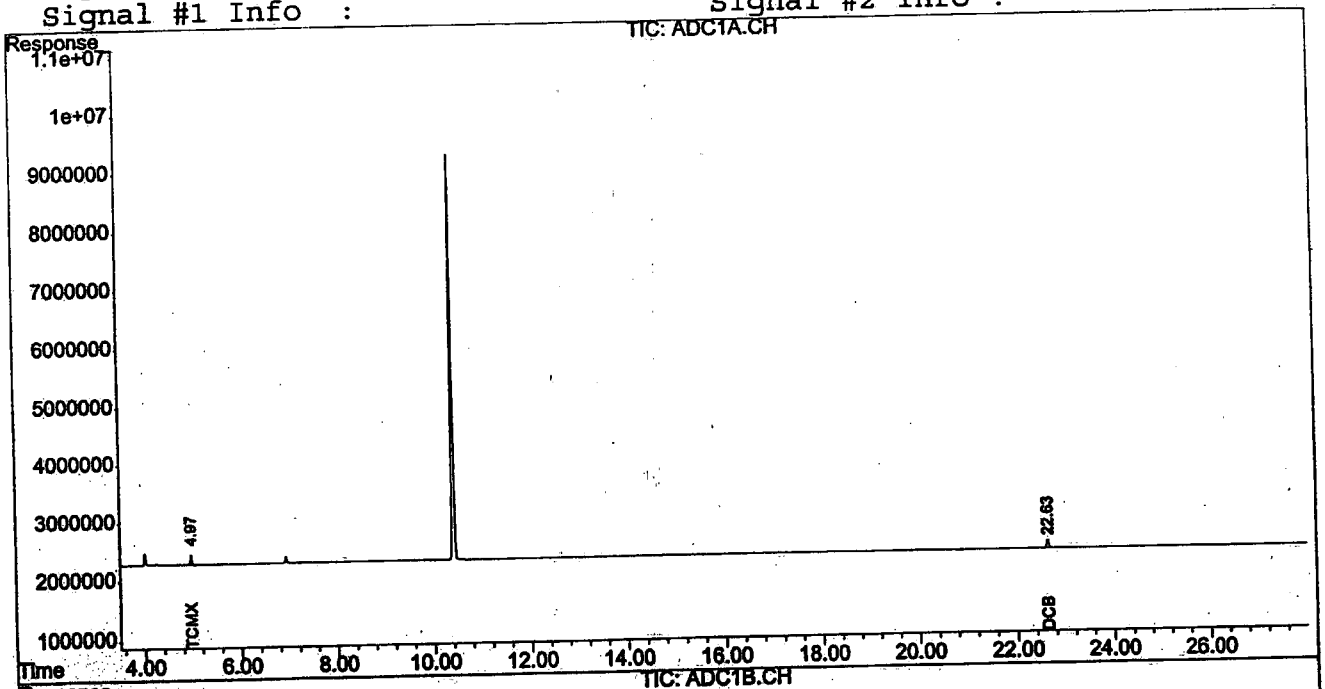
000249

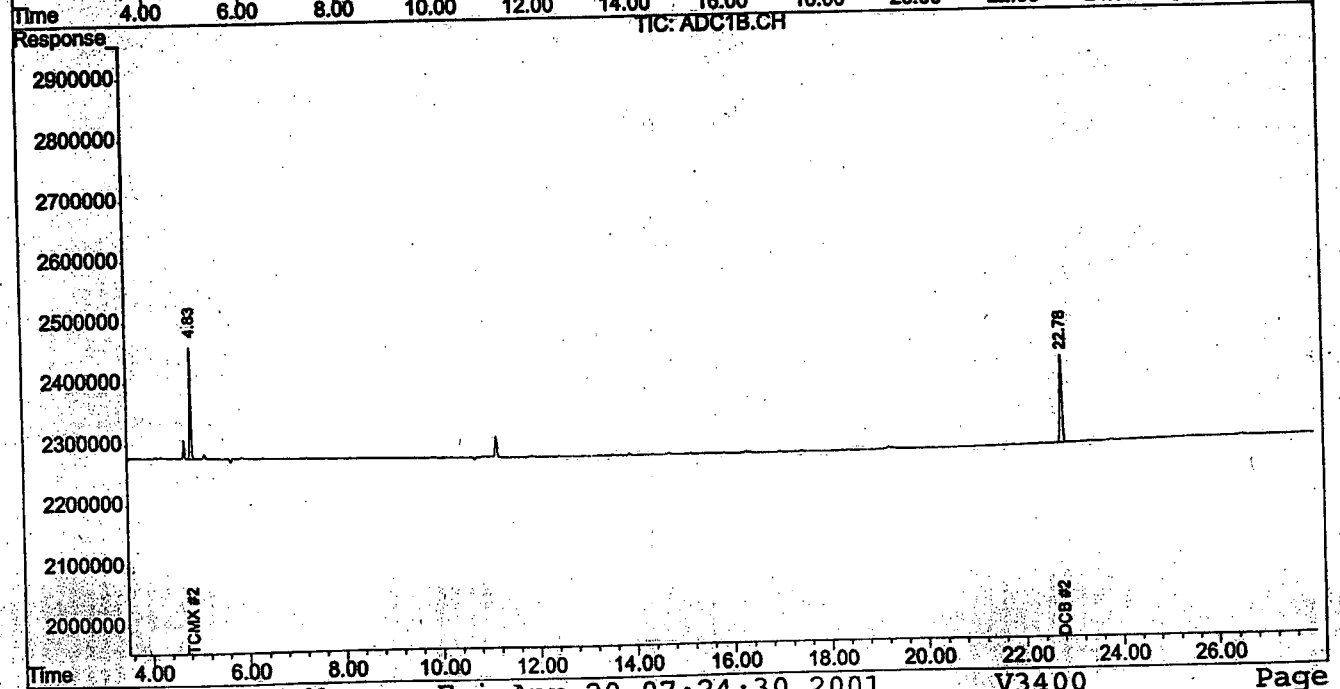
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5323.D\ADC1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5323.D\ADC1B.CH
Acq On : 19 Apr 2001 14:16 Operator:
Sample : S-58,2435-001,S,30.8g,16.8,04/18/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:34 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





7858

000250

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5324.D\ADC1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5324.D\ADC1B.CH
Acq On : 19 Apr 2001 14:46 Operator:
Sample : S-59,2435-002,S,30.8g,17.1,04/18/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 15:04:04 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.97	4.83	3450447	3753918	4.720	5.230
Spiked Amount 100.000			Recovery =		4.72%	5.23%
2) S DCB	22.63	22.77	2999716	3036204	5.048	5.433
Spiked Amount 100.000			Recovery =		5.05%	5.43%
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

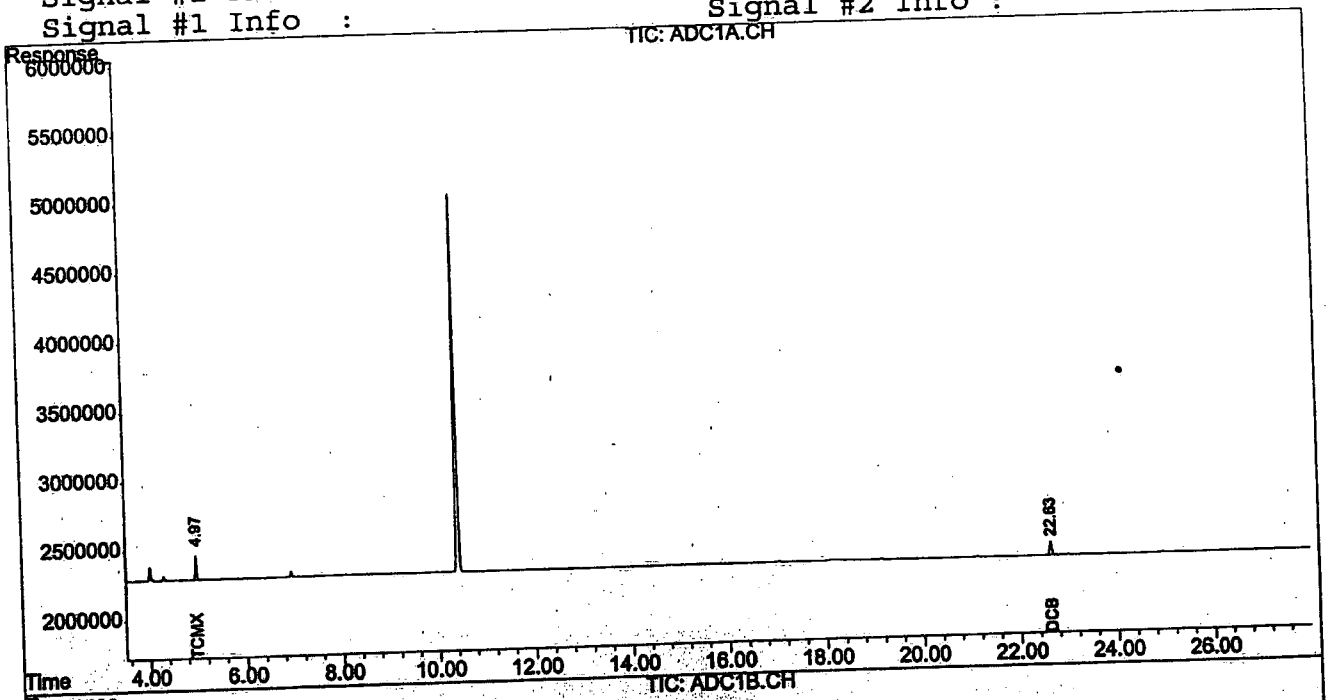
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

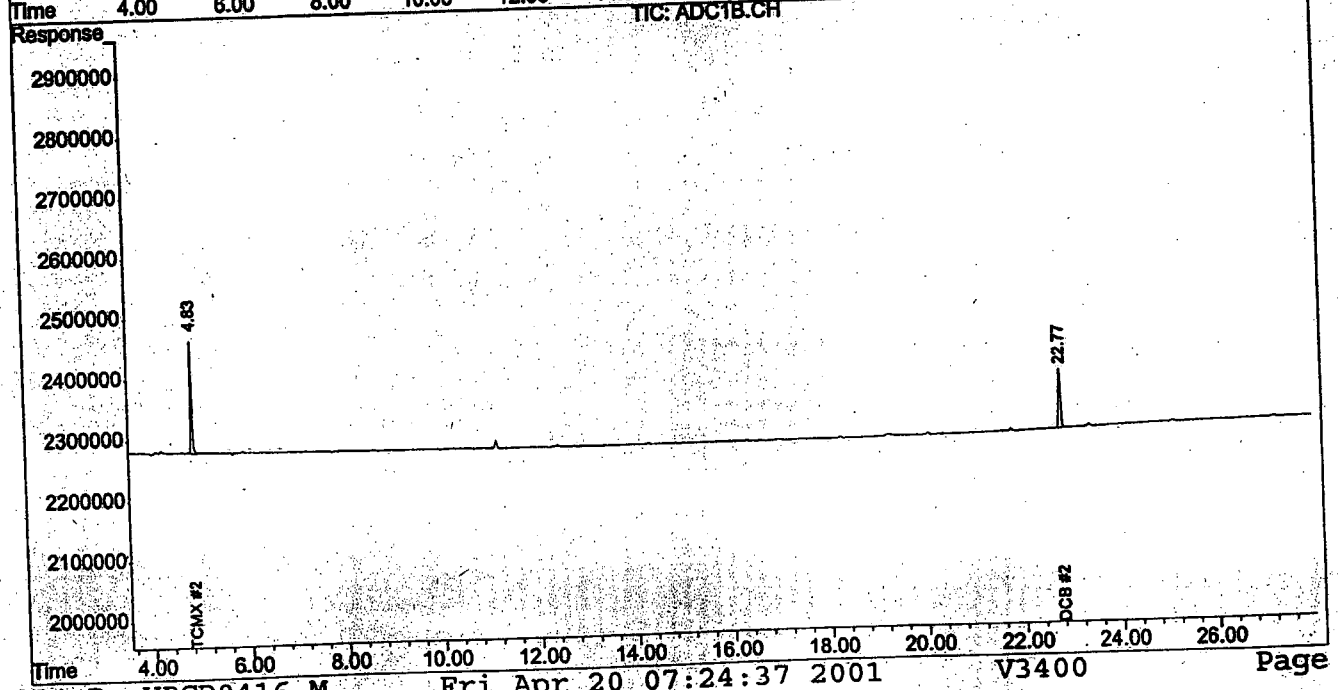
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5324.D\ADC1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5324.D\ADC1B.CH
Acq On : 19 Apr 2001 14:46 Operator:
Sample : S-59,2435-002,S,30.8g,17.1,04/18/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 15:04 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





2860

000252

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5325.D\ADC1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5325.D\ADC1B.CH
Acq On : 19 Apr 2001 15:17 Operator:
Sample : S-60,2435-003,S,30.8g,17.5,04/18/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 07:01:34 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.96	4.83	3286428	3597735	4.495	5.012
Spiked Amount 100.000			Recovery =		4.50%	5.01%
2) S DCB	22.62	22.76	2711236	2849697	4.563	5.100
Spiked Amount 100.000			Recovery =		4.56%	5.10%
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.

000253

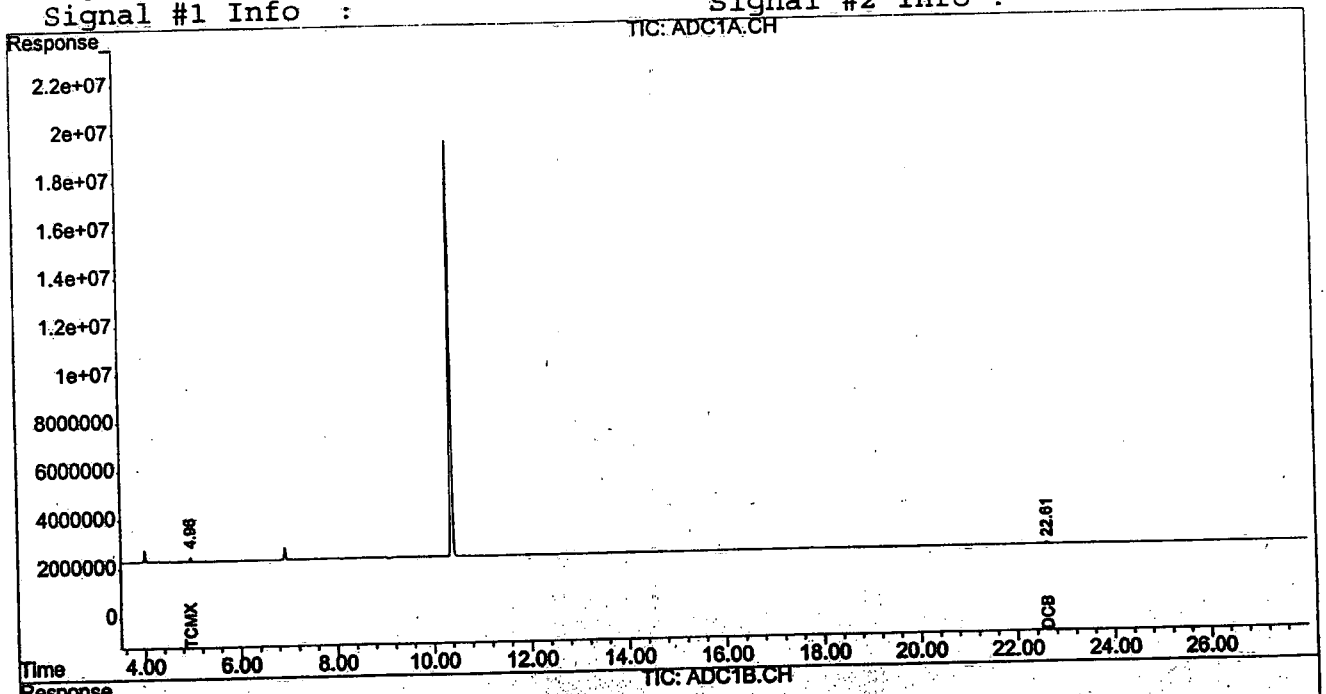
2861

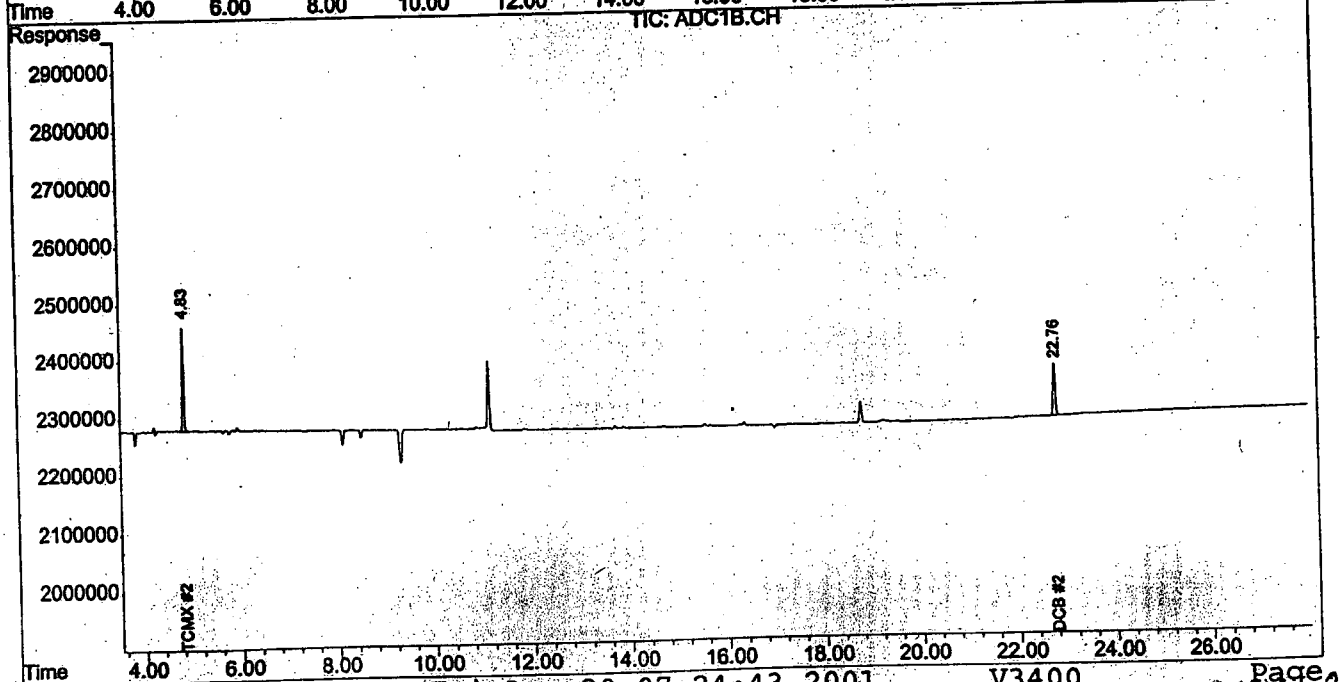
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5325.D\ADC1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5325.D\ADC1B.CH
Acq On : 19 Apr 2001 15:17 Operator:
Sample : S-60,2435-003,S,30.8g,17.5,04/18/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 7:02 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000234

2862

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5326.D\ADC1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5326.D\ADC1B.CH
Acq On : 19 Apr 2001 15:48 Operator:
Sample : S-61,2435-004,S,30.1g,18.2,04/18/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 06:58:55 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.97	4.83	3111230	3433670	4.256	4.784
Spiked Amount 100.000			Recovery =		4.26%	4.78%
2) S DCB	22.63	22.78	2876954	2952248	4.842	5.283
Spiked Amount 100.000			Recovery =		4.84%	5.28%
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

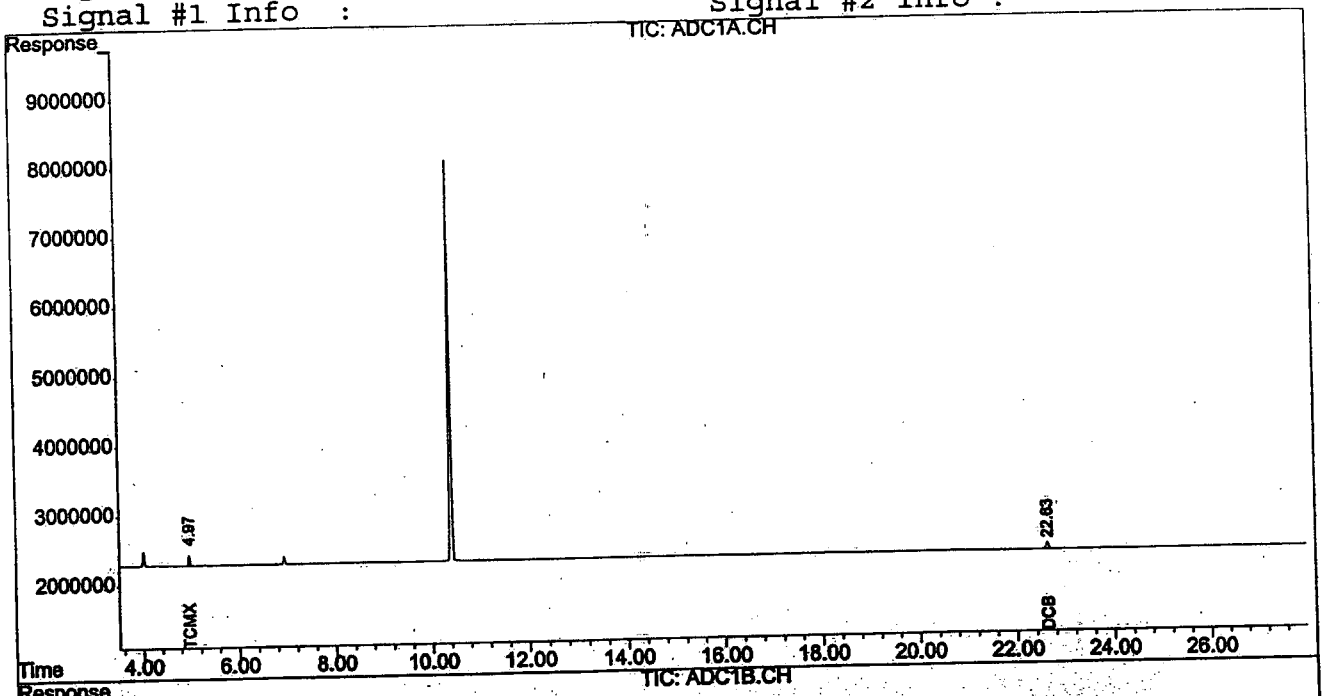
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

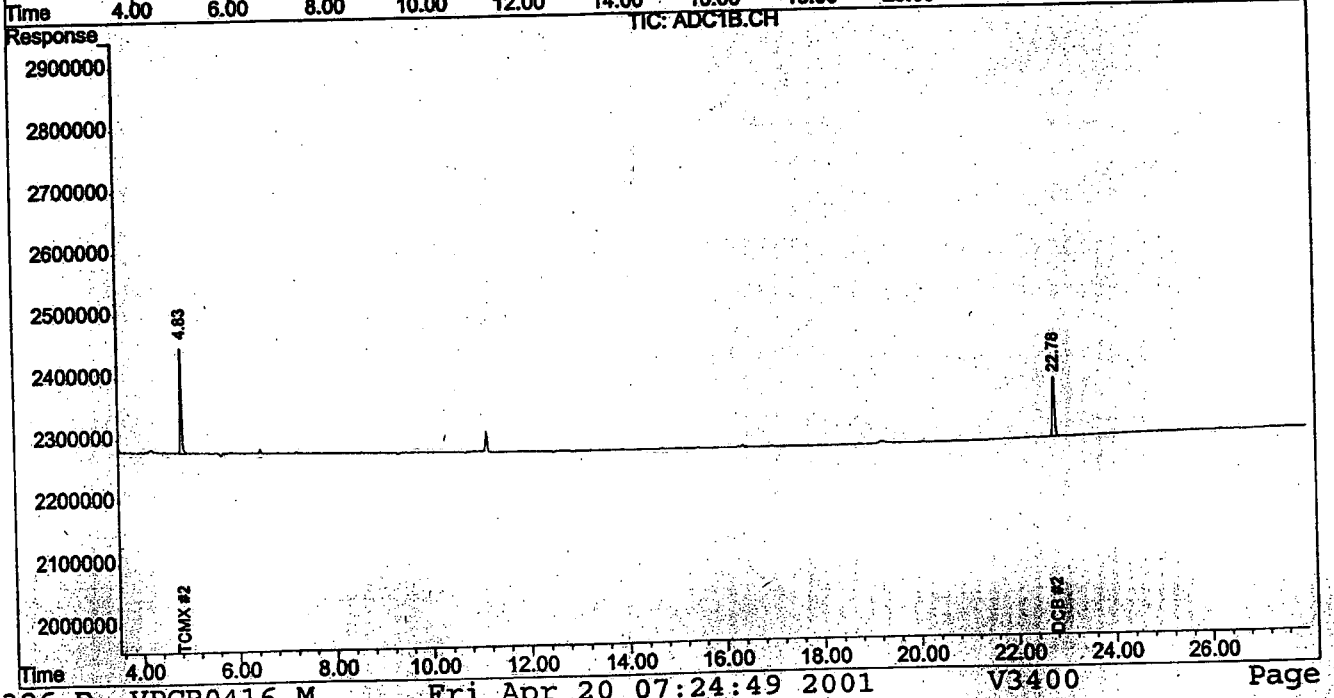
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5326.D\ADC1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5326.D\ADC1B.CH
Acq On : 19 Apr 2001 15:48 Operator:
Sample : S-61,2435-004,S,30.1g,18.2,04/18/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 7:02 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





2864

000256

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5327.D\ADC1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5327.D\ADC1B.CH
Acq On : 19 Apr 2001 16:19 Operator:
Sample : S-62,2435-005,S,30.5g,16.2,04/18/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 06:59:01 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.97	4.83	3164101	3483993	4.328	4.854
Spiked Amount 100.000			Recovery =		4.33%	4.85%
2) S DCB	22.63	22.78	2830698	2856978	4.764	5.113
Spiked Amount 100.000			Recovery =		4.76%	5.11%
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.

Z865

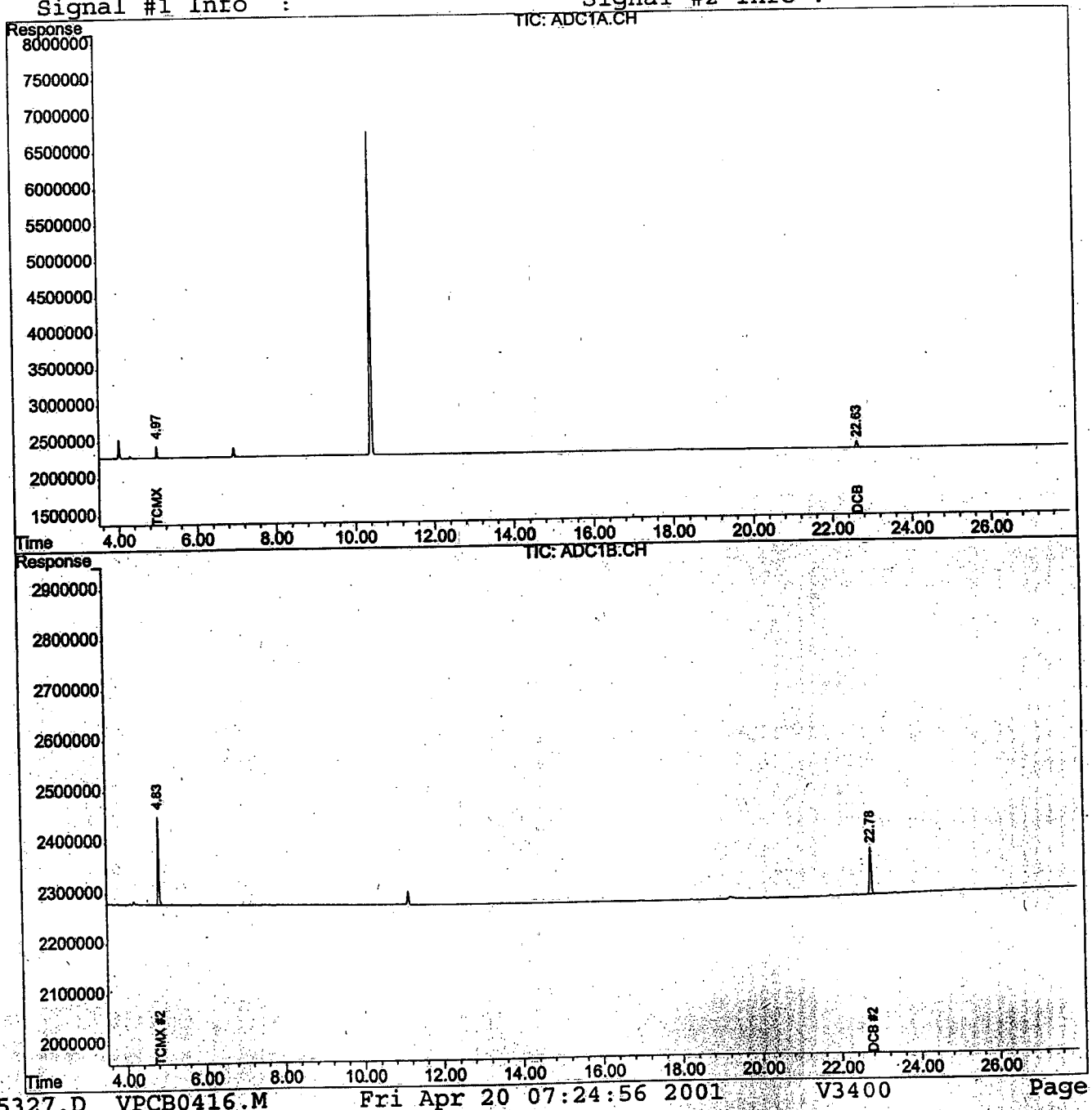
000257

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5327.D\ADC1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5327.D\ADC1B.CH
Acq On : 19 Apr 2001 16:19 Operator:
Sample : S-62,2435-005,S,30.5g,16.2,04/18/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 7:02 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



2866

000258

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5328.D\ADC1A.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5328.D\ADC1B.CH
Acq On : 19 Apr 2001 16:49 Operator:
Sample : S-68A,2435-011,S,30.5g,13.8,04/18/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 06:59:07 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.97	4.83	3306497	3678432	4.523	5.125
Spiked Amount 100.000			Recovery =		4.52%	5.13%
2) S DCB	22.63	22.77	2971249	3071603	5.000	5.497
Spiked Amount 100.000			Recovery =		5.00%	5.50%
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

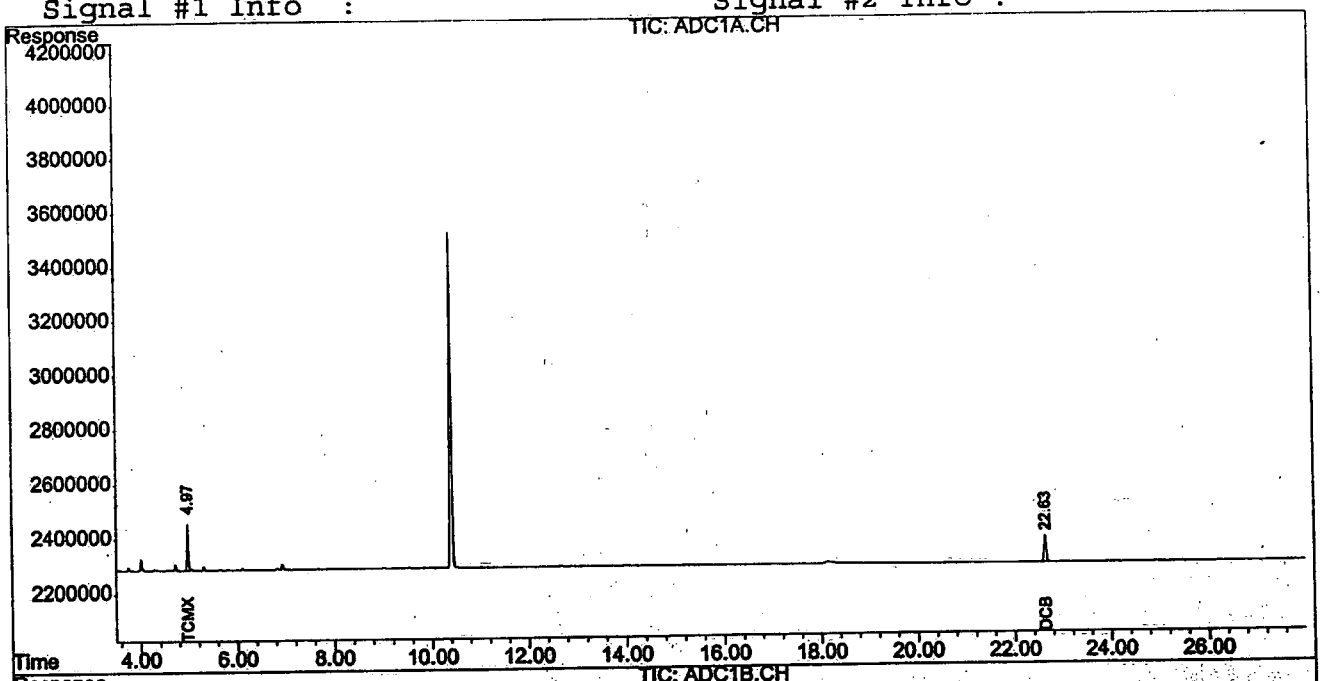
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

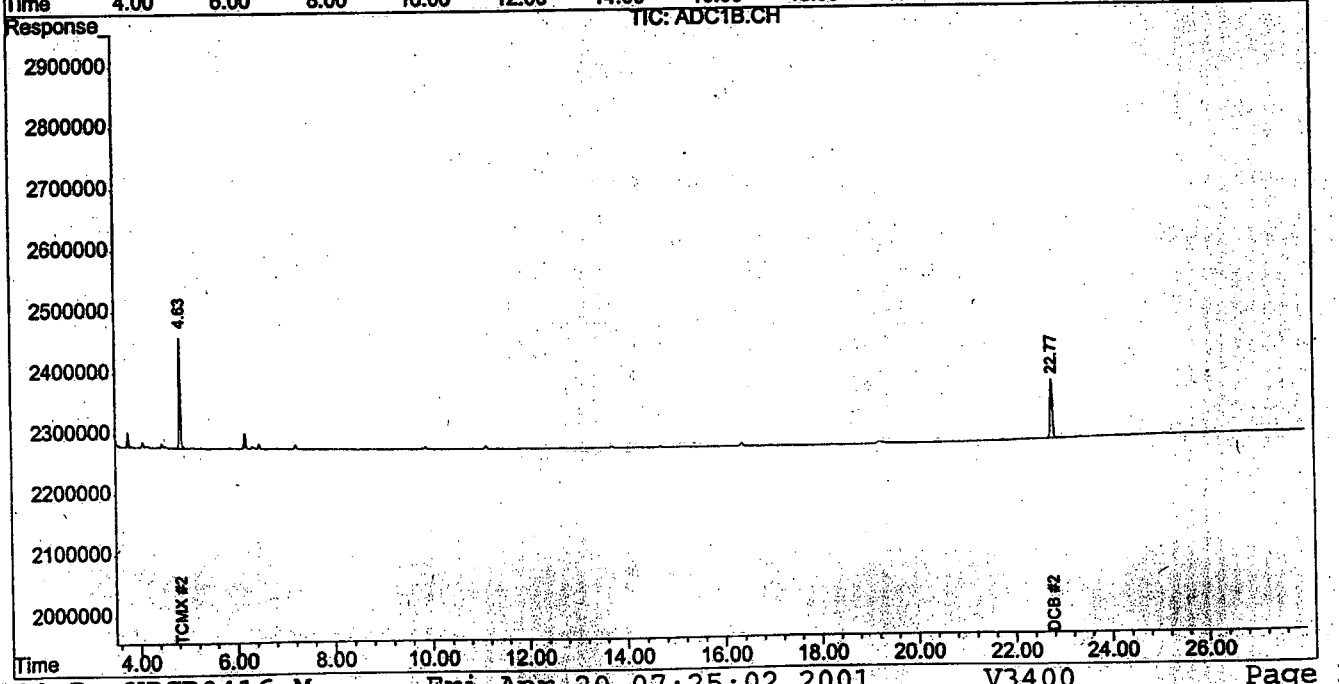
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5328.D\ADC1A.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5328.D\ADC1B.CH
Acq On : 19 Apr 2001 16:49 Operator:
Sample : S-68A,2435-011,S,30.5g,13.8,04/18/01 Inst : V_3400
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,20 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 7:03 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2868

000260

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5322.D\ADC1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5322.D\ADC1B.CH
Acq On : 19 Apr 2001 13:45 Operator:
Sample : (2435),0418-BLK1,S,30.0g,0,04/18/01 Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:13:43 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.97	4.83	77020982	79950165	105.349	111.383
Spiked Amount 100.000			Recovery	=	105.35%	111.38%
2) S DCB	22.63	22.78	50132658	48818984	84.366	87.361
Spiked Amount 100.000			Recovery	=	84.37%	87.36%
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

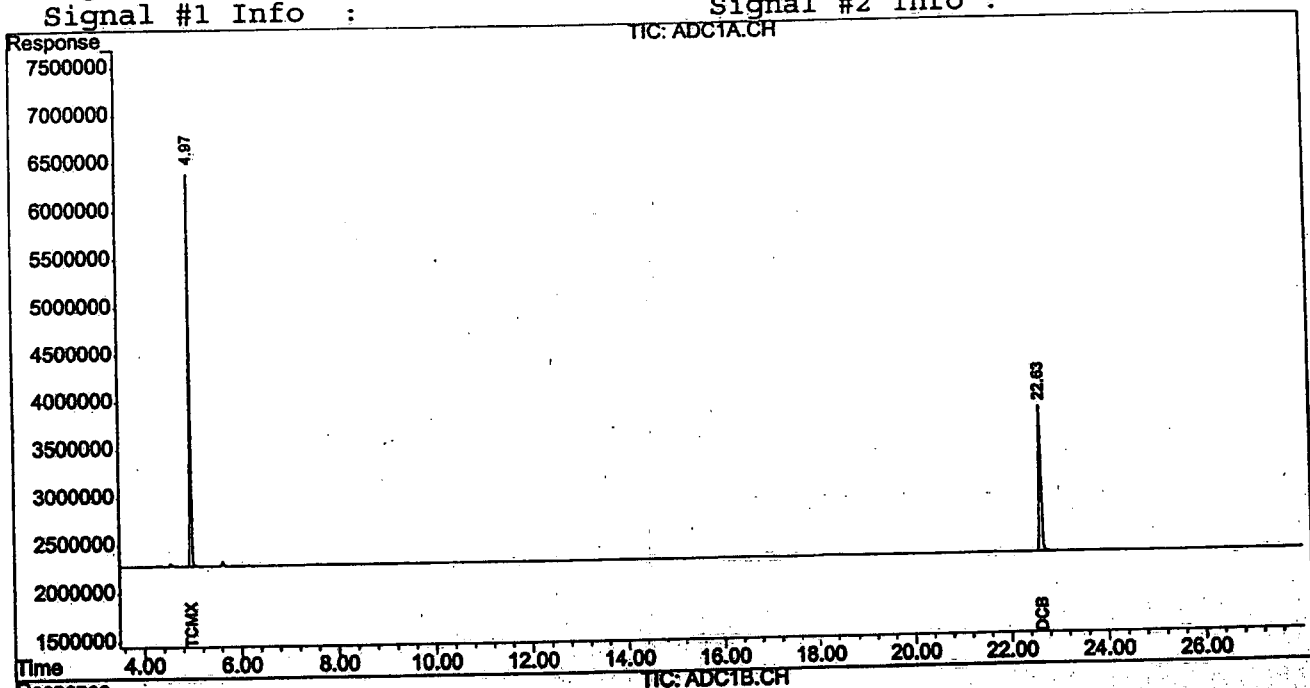
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

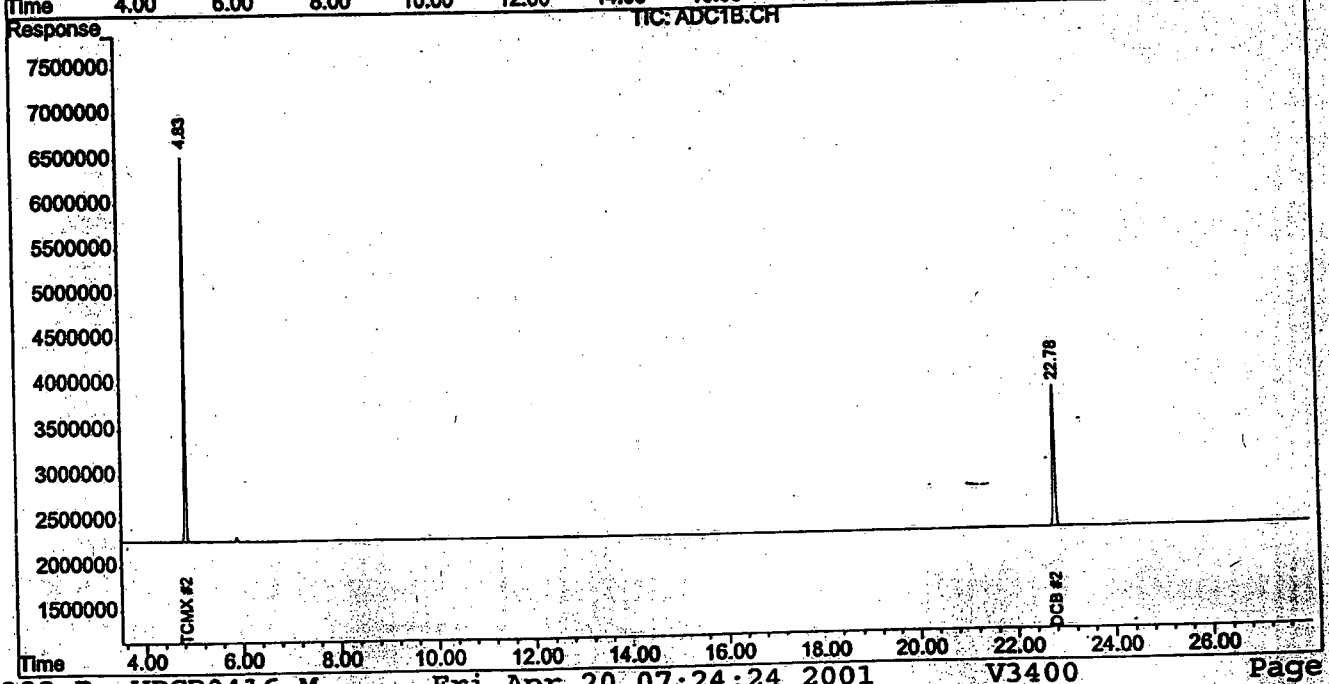
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5322.D\ADC1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5322.D\ADC1B.CH
Acq On : 19 Apr 2001 13:45 Operator:
Sample : (2435),0418-BLK1,S,30.0g,0,04/18/01 Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 14:14 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2870

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5335.D\ADC1A.CH Vial: 24
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5335.D\ADC1B.CH
Acq On : 19 Apr 2001 20:25 Operator:
Sample : (2195..2451),0419-BLK2,S,30.0g,0,04/19/0 Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 06:59:51 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.97	4.83	74234285	76972419	101.538	107.235
Spiked Amount 100.000			Recovery =		101.54%	107.23%
2) S DCB	22.62	22.77	48842637	47662970	82.195	85.293
Spiked Amount 100.000			Recovery =		82.19%	85.29%
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

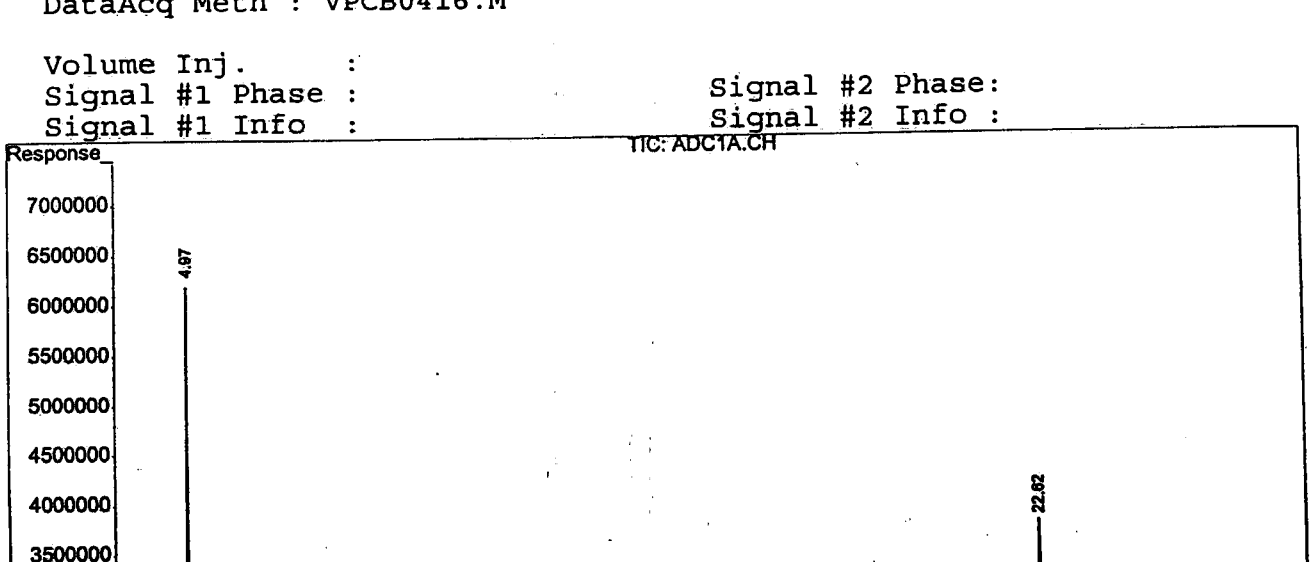
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

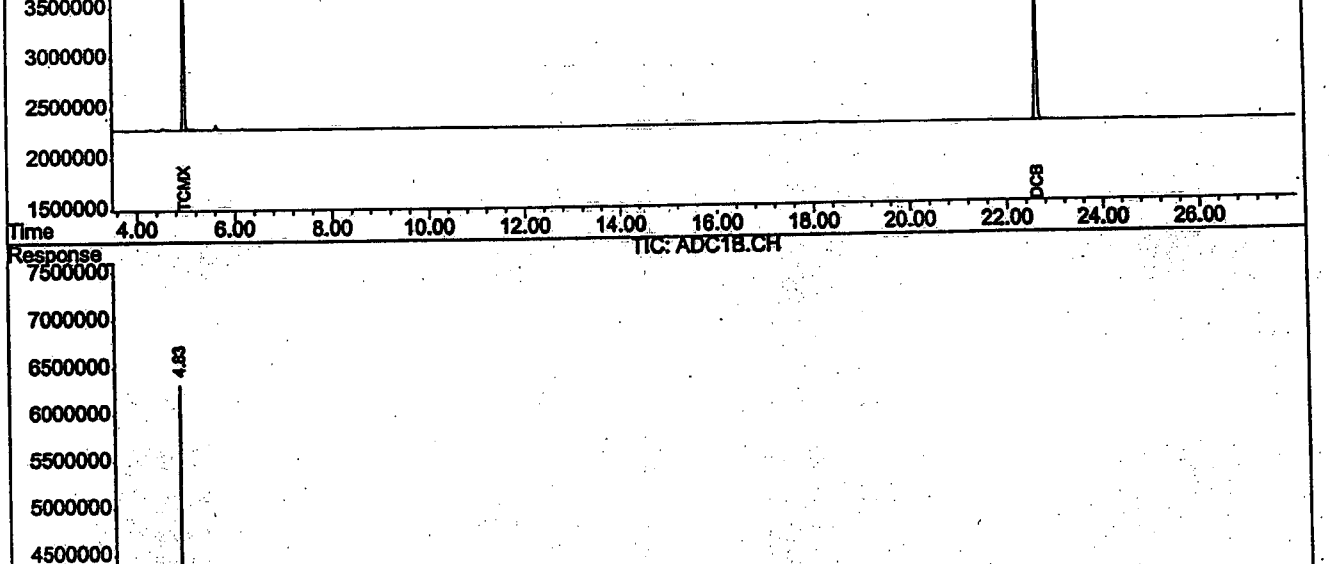
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5335.D\ADC1A.CH Vial: 24
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5335.D\ADC1B.CH
Acq On : 19 Apr 2001 20:25 Operator:
Sample : (2195..2451),0419-BLK2,S,30.0g,0,04/19/0 Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 7:06 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2872

000264

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5320.D\ADC1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5320.D\ADC1B.CH
Acq On : 19 Apr 2001 12:43 Operator:
Sample : 8082_C_IAS1483,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:38:56 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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		4.97	4.83	63835228	65918457	87.314	91.835
Spiked Amount 100.000				Recovery =		87.31%	91.83%
2) S DCB		22.63	22.77	54506656	53213292	91.727	95.225
Spiked Amount 100.000				Recovery =		91.73%	95.22%
Target Compounds							
3) L2 Aroclor-1016		5.80	6.34	5842215	6250983	943.092	957.888
4) L2 Aroclor-1016	(2)	6.89	7.41	4581219	11513340	938.337	957.677
5) L2 Aroclor-1016	(3)	7.33	8.76	7880124	26548075	934.856	931.291
6) L2 Aroclor-1016	(4)	9.20	9.15	4824809	9392186	944.937	962.585
7) L2 Aroclor-1016	(5)	9.68	9.47	6711086	9526928	939.508	954.096
Sum Aroclor-1016				29839452	63231512	4700.730	4763.536
Average Aroclor-1016						940.146	952.707
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		15.33	15.15	24695035	18641210	951.286	961.082
34) L8 Aroclor-1260	(2)	15.89	16.41	22307759	15117401	960.522	972.759
35) L8 Aroclor-1260	(3)	17.53	17.42	50422615	17307738	942.188	972.295
36) L8 Aroclor-1260	(4)	18.46	18.39	23056023	42023714	969.528	964.928
37) L8 Aroclor-1260	(5)	20.50	20.67	13762183	5313544	991.043	1009.217
Sum Aroclor-1260				134.2E6	98403608	4814.567	4880.282
Average Aroclor-1260						962.913	976.056

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

2873

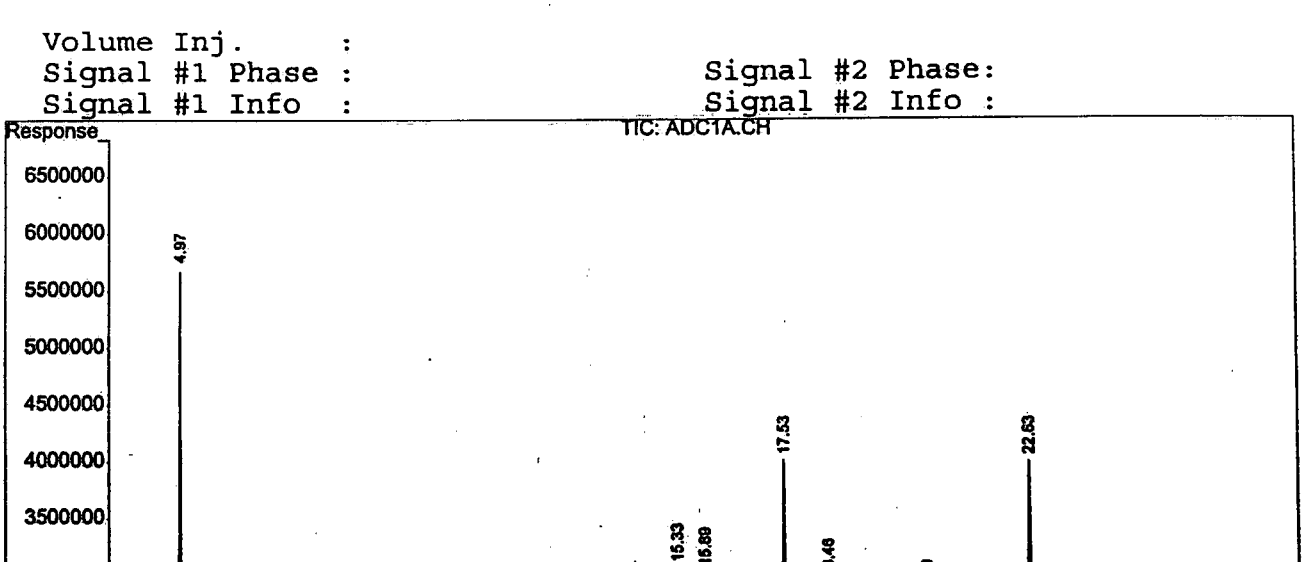
000265

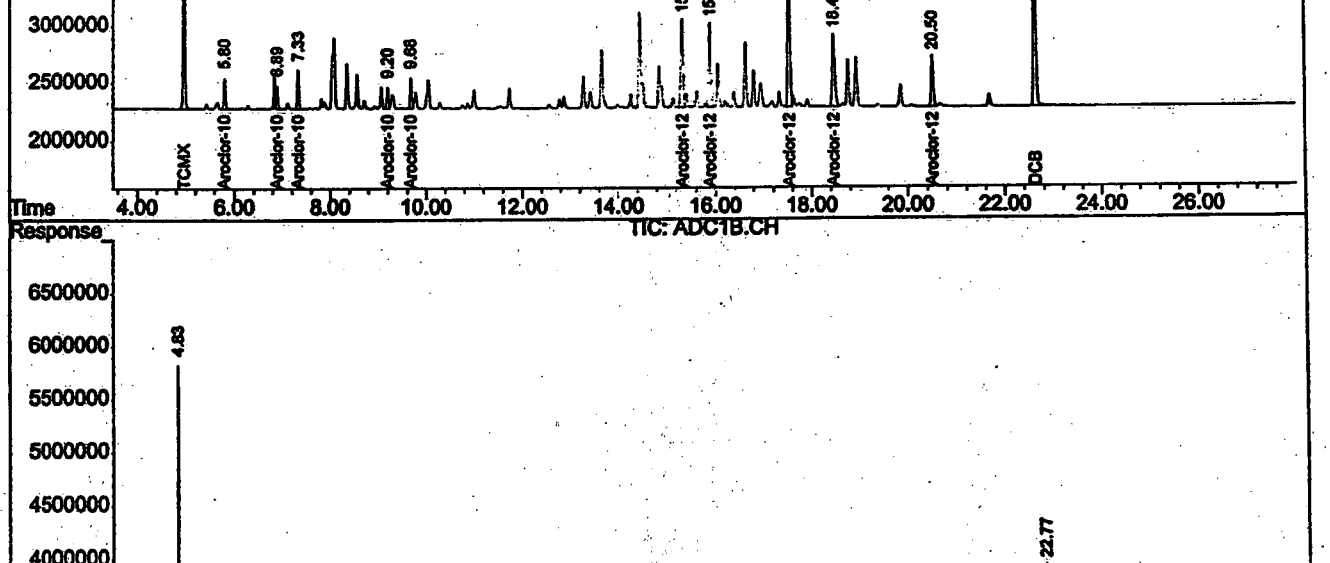
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5320.D\ADC1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5320.D\ADC1B.CH
Acq On : 19 Apr 2001 12:43 Operator:
Sample : 8082_C_IAS1483,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 19 13:39 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2874

000266

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5332.D\ADC1A.CH Vial: 21
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5332.D\ADC1B.CH
Acq On : 19 Apr 2001 18:53 Operator:
Sample : 8082_C_IAS1483,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 06:59:31 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.96	4.83	69688970	71444127	95.321	99.533
Spiked Amount 100.000			Recovery =		95.32%	99.53%
2) S DCB	22.62	22.77	57747539	56111259	97.181	100.411
Spiked Amount 100.000			Recovery =		97.18%	100.41%
Target Compounds						
3) L2 Aroclor-1016	5.80	6.34	6339540	6731784	1023.374	1031.565
4) L2 Aroclor-1016 {2}	6.89	7.40	5012523	12279008	1026.678	1021.365
5) L2 Aroclor-1016 {3}	7.32	8.76	8581389	28694691	1018.050	1006.593
6) L2 Aroclor-1016 {4}	9.20	9.14	5213998	10168852	1021.159	1042.184
7) L2 Aroclor-1016 {5}	9.67	9.46	7320554	10316745	1024.830	1033.194
Sum Aroclor-1016			32468005	68191081	5114.091	5134.900
Average Aroclor-1016					1022.818	1026.980
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	15.32	15.14	26680991	20036569	1027.788	1033.022
34) L8 Aroclor-1260 {2}	15.88	16.40	24044813	16213154	1035.316	1043.268
35) L8 Aroclor-1260 {3}	17.53	17.41	54069994	18552892	1010.342	1042.244
36) L8 Aroclor-1260 {4}	18.46	18.38	24751654	44839860	1040.831	1029.591
37) L8 Aroclor-1260 {5}	20.50	20.66	14600088	5685391	1051.382	1079.843
Sum Aroclor-1260			144.1E6	105.3E6	5165.659	5227.969
Average Aroclor-1260					1033.132	1045.594

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

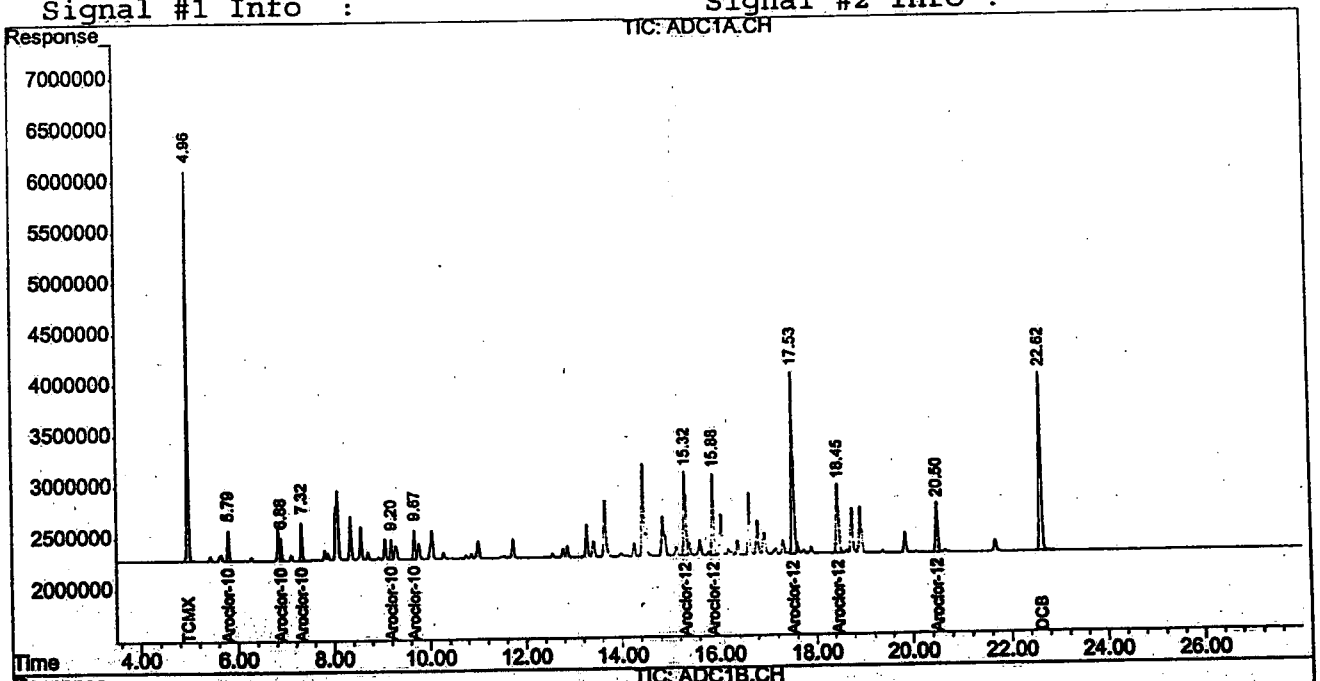
2875

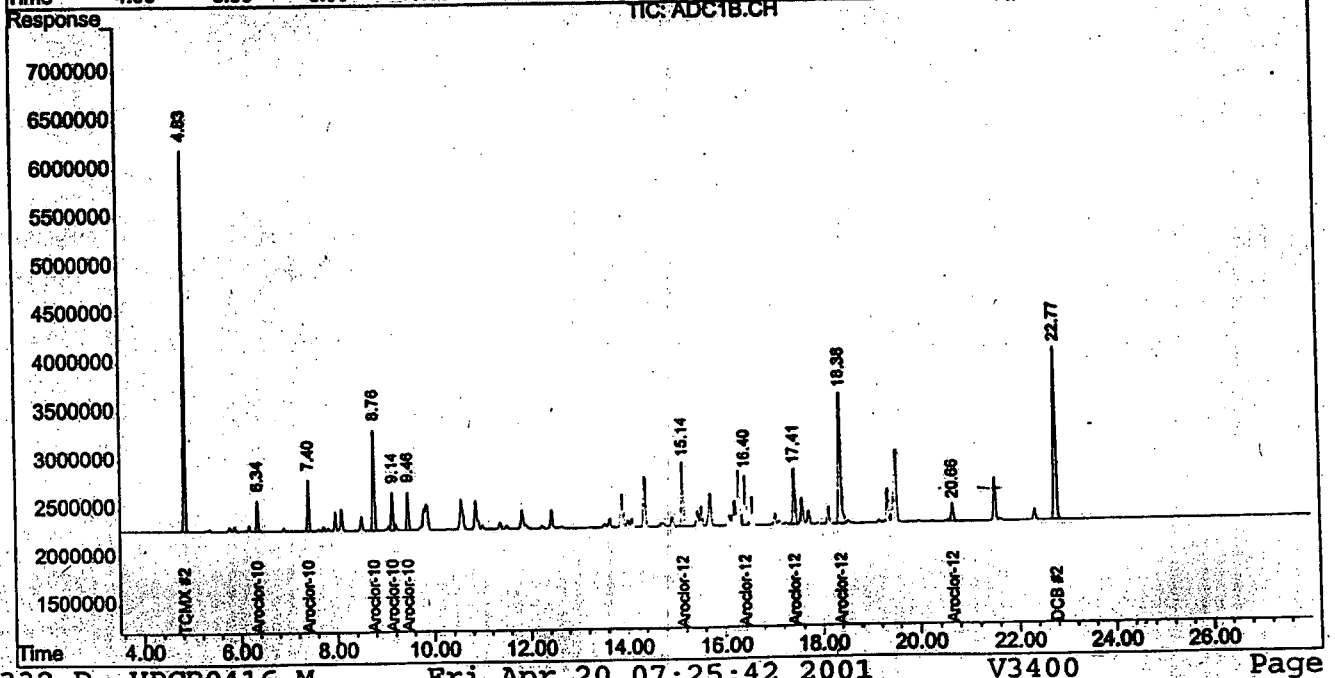
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-19-01\V5332.D\ADC1A.CH Vial: 21
Signal #2 : C:\MSDCHEM\1\DATA\04-19-01\V5332.D\ADC1B.CH
Acq On : 19 Apr 2001 18:53 Operator:
Sample : 8082_C_IAS1483,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 20 7:05 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2876

000268

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: W6067.D

Instrument ID: GC-W

Date Extracted: 04/18/2001

Matrix: SOIL

Date Analyzed: 04/18/2001

Time Analyzed: 15:40

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S-58	2435-001	04/18/2001	16:12
S-59	2435-002	04/18/2001	16:37
S-60	2435-003	04/18/2001	17:02
S-61	2435-004	04/18/2001	17:27
S-62	2435-005	04/18/2001	17:52
S-68A	2435-011	04/18/2001	18:17
PEST	2435-011-MS1	04/18/2001	18:42
PEST	2435-011-MSD1	04/18/2001	19:07
PEST	PBA0418-MS1	04/18/2001	19:32

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: NA

Lab ID: 0418-BK1
Client ID: (2369.2435)
Date Received: NA
Date Extracted: 04/18/2001
Date Analyzed: 04/18/2001
Data file: W6067.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

2878

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/17/2001

Instrument ID: GC-W

GC Column (1st): DB-5

Data File: W6047.D W6046.D W6045.D W6044.D W6043.D

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	100	200	300	RT	FROM	TO
alpha-BHC	4.53	4.53	4.54	4.53	4.53	4.53	4.46	4.60
beta-BHC	5.03	5.02	5.03	5.03	5.02	5.03	4.96	5.10
gamma-BHC	5.16	5.15	5.16	5.16	5.15	5.16	5.09	5.23
delta-BHC	5.63	5.63	5.64	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	7.55	7.55	7.55	7.55	7.55	7.55	7.48	7.62
Heptachlor epoxide	8.56	8.56	8.56	8.56	8.56	8.56	8.49	8.63
Endosulfan I	9.48	9.47	9.48	9.48	9.47	9.48	9.41	9.55
4,4'-DDE	10.24	10.24	10.24	10.24	10.24	10.24	10.17	10.31
Dieldrin	10.17	10.17	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	10.98	10.98	10.98	10.98	10.97	10.98	10.91	11.05
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	12.16	12.16	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}			9.73				9.66	9.80
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: 04/17/2001

Instrument ID: GC-W

GC Column (1st): DB-5

Data File: W6047.D W6046.D W6045.D W6044.D W6043.D

Compound	CALIBRATION FACTORS 10	50	100	200	300	MEAN	%RSD
alpha-BHC	32216986	36125081	37429292	37604754	36869523	36049127	6.15
beta-BHC	14118261	13301066	13493825	13327903	12979227	13444056	3.13
gamma-BHC	29865167	32525501	33472012	33447261	32695551	32401098	4.57
delta-BHC	29676070	32103763	33772073	33788093	33084697	32484939	5.28
Heptachlor	26725572	28249899	28770249	28305053	27337795	27877714	2.97
Aldrin	28639623	30789202	31112182	30332949	29115822	29997956	3.58
Heptachlor epoxide	27003141	27983729	27817466	26656690	25433853	26978976	3.80
Endosulfan I	25392228	26169373	26006603	24938342	23719696	25245248	3.90
4,4'-DDE	25475852	27688988	27830662	27083304	25674064	26750574	4.16
Dieldrin	26607376	28223932	28431000	27426576	26178168	27373410	3.59
Endrin	25443688	26427840	26438222	25372186	24100990	25556585	3.76
Endosulfan II	23879640	24220848	24213087	23333198	22169186	23563192	3.65
4,4'-DDD	22671415	23871808	23866404	23266590	22179382	23171120	3.21
Endrin aldehyde	19332812	18471419	18237020	17360360	16441611	17968644	6.15
Endosulfan sulfate	21853472	21843950	22050296	21340691	20292140	21476110	3.32
4,4'-DDT	16696398	18079504	19330011	19561983	18877810	18509141	6.27
Endrin ketone	27388174	26732862	26196570	24839679	23317521	25694961	6.33
Methoxychlor	9558489	9207733	9343214	9113222	8562754	9157082	4.06
alpha-Chlordane	27008484	27954641	28189067	27655763	26580030	27477597	2.44
gamma-Chlordane	27212790	29177007	29679431	29208674	28110758	28677732	3.49
Chlordane 500 ppb			3325856				
Chlordane {2}			701847				
Chlordane {3}			3217812				
Chlordane {4}			1867590				
Chlordane {5}			875989				
Toxaphene 500 ppb			482385				
Toxaphene {2}			783935				
Toxaphene {3}			358150				
Toxaphene {4}			367729				
Toxaphene {5}			437857				

000272

7880

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/17/2001

Instrument ID: GC-W

GC Column (2nd): DB-1701P

Data File: W6047.C W6046.C W6045.C W6044.C W6043.C

Compound	RT OF STANDARDS 10	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	5.58	5.58	5.59	5.58	5.58	5.58	5.51	5.65
beta-BHC	8.64	8.64	8.64	8.64	8.64	8.64	8.57	8.71
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	9.21	9.21	9.21	9.14	9.28
Heptachlor	7.02	7.01	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	9.53	9.53	9.54	9.54	9.54	9.53	9.46	9.60
Endosulfan I	10.22	10.22	10.22	10.22	10.22	10.22	10.15	10.29
4,4'-DDE	10.99	10.99	10.99	10.99	10.99	10.99	10.92	11.06
Dieldrin	11.26	11.26	11.26	11.26	11.26	11.26	11.19	11.33
Endrin	11.78	11.78	11.78	11.78	11.78	11.78	11.71	11.85
Endosulfan II	13.22	13.23	13.23	13.23	13.23	13.23	13.16	13.30
4,4'-DDD	13.22	13.23	13.23	13.23	13.23	13.23	13.16	13.30
Endrin aldehyde	14.37	14.37	14.37	14.37	14.37	14.37	14.30	14.44
Endosulfan sulfate	15.27	15.27	15.27	15.27	15.27	15.27	15.20	15.34
4,4'-DDT	13.68	13.68	13.68	13.68	13.68	13.68	13.61	13.75
Endrin ketone	16.30	16.30	16.30	16.30	16.30	16.30	16.23	16.37
Methoxychlor	15.54	15.54	15.55	15.55	15.55	15.54	15.47	15.61
alpha-Chlordane	10.61	10.61	10.61	10.61	10.61	10.61	10.54	10.68
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}			10.61				10.54	10.68
Chlordane {5}			10.67				10.60	10.74
Toxaphene 500 ppb			14.01				13.94	14.08
Toxaphene {2}			14.76				14.69	14.83
Toxaphene {3}			15.01				14.94	15.08
Toxaphene {4}			15.20				15.13	15.27
Toxaphene {5}			15.66				15.59	15.73

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/17/2001

Instrument ID: GC-W

GC Column (2nd): DB-1701P

Data File: W6047.C W6046.C W6045.C W6044.C W6043.C

Compound	CALIBRATION FACTORS 10	50	100	200	300	MEAN	%RSD
alpha-BHC	10257660	11417272	11837620	12025946	11881373	11483974	6.29
beta-BHC	5271312	4840203	4829090	4771607	4707932	4884029	4.56
gamma-BHC	9519222	10374480	10800830	10928308	10789147	10482397	5.51
delta-BHC	9441854	10116302	10687999	10737054	10589456	10314533	5.30
Heptachlor	8114819	8401743	8770488	8885284	8798502	8594167	3.79
Aldrin	9175552	9734699	9982508	9981805	9785409	9731994	3.40
Heptachlor epoxide	8819921	8948946	9075010	8997320	8792518	8926743	1.34
Endosulfan I	8311984	8399231	8538499	8486312	8288723	8404950	1.28
4,4'-DDE	8122253	8700987	9012454	9050906	8865048	8750330	4.31
Dieldrin	8604470	9021210	9278623	9277882	9088093	9054056	3.05
Endrin	8316578	8571303	8804749	8764509	8566930	8604814	2.26
Endosulfan II	16203924	15984065	15960477	15549157	15075671	15754659	2.84
4,4'-DDD	16178469	16008424	15962366	15549157	15075671	15754818	2.82
Endrin aldehyde	5945949	5529252	5537611	5511548	5380483	5580969	3.83
Endosulfan sulfate	6973996	6914611	7119133	7109580	6940781	7011620	1.37
4,4'-DDT	3749646	4809679	5468032	5813155	5828703	5133843	17.08
Endrin ketone	8080021	8166588	8288461	8197265	7950059	8136479	1.57
Methoxychlor	2605299	2827727	2976026	3021267	2943282	2874720	5.80
alpha-Chlordane	8870096	8972478	9141375	9122138	8932217	9007661	1.32
gamma-Chlordane	8855518	9092169	9347663	9394699	9225184	9183046	2.37
Chlordane 500 ppb			181521				
Chlordane {2}			236871				
Chlordane {3}			1042462				
Chlordane {4}			948255				
Chlordane {5}			591144				
Toxaphene 500 ppb			224072				
Toxaphene {2}			166954				
Toxaphene {3}			225306				
Toxaphene {4}			105891				
Toxaphene {5}			106157				

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/18/2001 **Instrument ID:** GC-W

Data File: W6064.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	4.55	4.48	4.62	36049127	35513139	1.49
beta-BHC	5.05	4.98	5.12	13444056	12781942	4.92
gamma-BHC	5.17	5.10	5.24	32401098	31808647	1.83
delta-BHC	5.65	5.58	5.72	32484939	32363579	0.37
Heptachlor	6.74	6.67	6.81	27877714	27919519	0.15
Aldrin	7.56	7.49	7.63	29997956	29667004	1.10
Heptachlor epoxide	8.56	8.49	8.63	26978976	26497417	1.78
Endosulfan I	9.48	9.41	9.55	25245248	24765003	1.90
4,4'-DDE	10.25	10.18	10.32	26750574	26298909	1.69
Dieldrin	10.17	10.10	10.24	27373410	27119043	0.93
Endrin	10.73	10.66	10.80	25556585	25387364	0.66
Endosulfan II	10.98	10.91	11.05	23563192	22958724	2.57
4,4'-DDD	11.36	11.29	11.43	23171120	23028581	0.62
Endrin aldehyde	11.51	11.44	11.58	17968644	17402535	3.15
Endosulfan sulfate	12.16	12.09	12.23	21476110	20889296	2.73
4,4'-DDT	12.39	12.32	12.46	18509141	17529516	5.29
Endrin ketone	13.37	13.30	13.44	25694961	24574810	4.36
Methoxychlor	14.07	14.00	14.14	9157082	8636317	5.69
alpha-Chlordane	9.59	9.52	9.66	27477597	26371002	4.03
gamma-Chlordane	9.18	9.11	9.25	28677732	27900856	2.71
					Average %D	2.40
Chlordane 500 ppb	9.18	9.11	9.25	3325856	3246693	2.38
Chlordane {2}	9.38	9.31	9.45	701847	677951	3.40
Chlordane {3}	9.58	9.51	9.65	3217812	3113308	3.25
Chlordane {4}	9.73	9.66	9.80	1867590	1810058	3.08
Chlordane {5}	11.58	11.51	11.65	875989	855483	2.34
Toxaphene 500 ppb	13.18	13.11	13.25	482385	444742	7.80
Toxaphene {2}	13.30	13.23	13.37	783935	755615	3.61
Toxaphene {3}	13.59	13.52	13.66	358150	304921	14.86
Toxaphene {4}	14.05	13.98	14.12	367729	344996	6.18
Toxaphene {5}	14.55	14.48	14.62	437857	427580	2.35
					Average %D	4.93

000275

7883

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/18/2001 Instrument ID: GC-W

Data File: W6064.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	5.60	5.53	5.67	11483974	12493492	8.79
beta-BHC	8.65	8.58	8.72	4884029	5053698	3.47
gamma-BHC	6.55	6.48	6.62	10482397	11269057	7.50
delta-BHC	9.22	9.15	9.29	10314533	11216090	8.74
Heptachlor	7.03	6.96	7.10	8594167	9205487	7.11
Aldrin	7.70	7.63	7.77	9731994	10441159	7.29
Heptachlor epoxide	9.54	9.47	9.61	8926743	9464764	6.03
Endosulfan I	10.23	10.16	10.30	8404950	8904221	5.94
4,4'-DDE	11.00	10.93	11.07	8750330	9347668	6.83
Dieldrin	11.26	11.19	11.33	9054056	9619245	6.24
Endrin	11.79	11.72	11.86	8604814	9106054	5.83
Endosulfan II	13.23	13.16	13.30	15754659	16476742	4.58
4,4'-DDD	13.23	13.16	13.30	15754818	16476742	4.58
Endrin aldehyde	14.37	14.30	14.44	5580969	5729333	2.66
Endosulfan sulfate	15.28	15.21	15.35	7011620	7303498	4.16
4,4'-DDT	13.68	13.61	13.75	5133843	5168710	0.68
Endrin ketone	16.30	16.23	16.37	8136479	8328555	2.36
Methoxychlor	15.55	15.48	15.62	2874720	2859663	0.52
alpha-Chlordane	10.62	10.55	10.69	9007661	9426699	4.65
gamma-Chlordane	10.46	10.39	10.53	9183046	9647621	5.06
					Average %D	5.15
Chlordane 500 ppb	8.39	8.32	8.46	181521	189949	4.64
Chlordane {2}	10.06	9.99	10.13	236871	245677	3.72
Chlordane {3}	10.46	10.39	10.53	1042462	1080398	3.64
Chlordane {4}	10.62	10.55	10.69	948255	971967	2.50
Chlordane {5}	10.68	10.61	10.75	591144	618430	4.62
Toxaphene 500 ppb	14.02	13.95	14.09	224072	228024	1.76
Toxaphene {2}	14.77	14.70	14.84	166954	164754	1.32
Toxaphene {3}	15.02	14.95	15.09	225306	236072	4.78
Toxaphene {4}	15.21	15.14	15.28	105891	103896	1.88
Toxaphene {5}	15.66	15.59	15.73	106157	107659	1.41
					Average %D	3.03

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/18/2001 Instrument ID: GC-W

Data File: W6082.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	4.55	4.48	4.62	36049127	35720907	0.91
beta-BHC	5.04	4.97	5.11	13444056	12915065	3.93
gamma-BHC	5.17	5.10	5.24	32401098	32175406	0.70
delta-BHC	5.65	5.58	5.72	32484939	32756702	0.84
Heptachlor	6.74	6.67	6.81	27877714	28773559	3.21
Aldrin	7.55	7.48	7.62	29997956	30114944	0.39
Heptachlor epoxide	8.56	8.49	8.63	26978976	26967598	0.04
Endosulfan I	9.48	9.41	9.55	25245248	25275541	0.12
4,4'-DDE	10.25	10.18	10.32	26750574	27038039	1.07
Dieldrin	10.17	10.10	10.24	27373410	27743193	1.35
Endrin	10.73	10.66	10.80	25556585	25903033	1.36
Endosulfan II	10.98	10.91	11.05	23563192	23521021	0.18
4,4'-DDD	11.36	11.29	11.43	23171120	23817383	2.79
Endrin aldehyde	11.50	11.43	11.57	17968644	18062018	0.52
Endosulfan sulfate	12.16	12.09	12.23	21476110	21450460	0.12
4,4'-DDT	12.39	12.32	12.46	18509141	18885731	2.03
Endrin ketone	13.37	13.30	13.44	25694961	25720083	0.10
Methoxychlor	14.07	14.00	14.14	9157082	9274986	1.29
alpha-Chlordane	9.58	9.51	9.65	27477597	27162467	1.15
gamma-Chlordane	9.18	9.11	9.25	28677732	28610543	0.23
					Average %D	1.12

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/18/2001 Instrument ID: GC-W

Data File: W6082.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	5.59	5.52	5.66	11483974	12658382	10.23
beta-BHC	8.65	8.58	8.72	4884029	5134160	5.12
gamma-BHC	6.55	6.48	6.62	10482397	11462775	9.35
delta-BHC	9.21	9.14	9.28	10314533	11468281	11.19
Heptachlor	7.02	6.95	7.09	8594167	9475905	10.26
Aldrin	7.70	7.63	7.77	9731994	10624649	9.17
Heptachlor epoxide	9.54	9.47	9.61	8926743	9651821	8.12
Endosulfan I	10.22	10.15	10.29	8404950	9098631	8.25
4,4'-DDE	11.00	10.93	11.07	8750330	9629231	10.04
Dieldrin	11.26	11.19	11.33	9054056	9873745	9.05
Endrin	11.78	11.71	11.85	8604814	9312677	8.23
Endosulfan II	13.23	13.16	13.30	15754659	17101571	8.55
4,4'-DDD	13.23	13.16	13.30	15754818	17101571	8.55
Endrin aldehyde	14.37	14.30	14.44	5580969	5947872	6.57
Endosulfan sulfate	15.27	15.20	15.34	7011620	7635530	8.90
4,4'-DDT	13.68	13.61	13.75	5133843	5572416	8.54
Endrin ketone	16.30	16.23	16.37	8136479	8860725	8.90
Methoxychlor	15.54	15.47	15.61	2874720	3093580	7.61
alpha-Chlordane	10.62	10.55	10.69	9007661	9711783	7.82
gamma-Chlordane	10.46	10.39	10.53	9183046	9938287	8.22
					Average %D	8.63

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/18/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(2369.2435)	0418-BK1	SOIL	92		84		94		91	
S-58	2435-001	SOIL	60		90		70		105	
S-59	2435-002	SOIL	60		90		70		110	
S-60	2435-003	SOIL	45	*	64		45	*	70	
S-61	2435-004	SOIL	60		90		65		100	
S-62	2435-005	SOIL	60		80		70		100	
S-68A	2435-011	SOIL	60		85		65		100	
PEST	2435-011-MS1	SOIL	69		82		74		96	
PEST	2435-011-MSD1	SOIL	68		76		74		95	
PEST	PBA0418-MS1	SOIL	79		75		87		87	
(2434)	0418-BK2	AQUEOUS	81		75		88		90	
TP-WW-3S_SUMP	2434-001	AQUEOUS	56	*	82		71		96	
PEST	2434-001-MS2	AQUEOUS	54	*	87		68		98	
PEST	2434-001-MSD2	AQUEOUS	57	*	91		73		102	
PEST	PBA0418-MS2	AQUEOUS	81		81		89		90	

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 PESTICIDES MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2435-011-MSD1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC	100.0	0.0	86.1	86	44 - 149
Heptachlor	100.0	0.0	91.3	91	50 - 157
Aldrin	100.0	0.0	86.6	87	40 - 150
Dieldrin	100.0	0.0	91.1	91	56 - 134
Endrin	100.0	0.0	95.3	95	65 - 148
4,4'-DDT	100.0	0.0	104.8	105	42 - 175

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC	0.0	77.8	78	10	18	44 - 149
Heptachlor	0.0	83.5	84	8	18	50 - 157
Aldrin	0.0	78.3	78	11	18	40 - 150
Dieldrin	0.0	81.4	81	12	13	56 - 134
Endrin	0.0	86.1	86	10	14	65 - 148
4,4'-DDT	0.0	94.2	94	11	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

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SOIL PESTICIDES BLANK SPIKE RECOVERY

Matrix spike Lab sample ID: PBA0418-MS1

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC	100.0	0.0	80.9	81	44 - 149
Heptachlor	100.0	0.0	85.6	86	50 - 157
Aldrin	100.0	0.0	83.7	84	40 - 150
Dieldrin	100.0	0.0	82.1	82	56 - 134
Endrin	100.0	0.0	87.0	87	65 - 148
4,4'-DDT	100.0	0.0	81.7	82	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 18.69 TCMX 2 3.70 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	#
(2369.2435)	0418-BK1	04/18/2001	15:40	3.85		18.69		3.70		18.65	
S-58	2435-001	04/18/2001	16:12	3.84		18.69		3.69		18.65	
S-59	2435-002	04/18/2001	16:37	3.85		18.69		3.68		18.65	
S-60	2435-003	04/18/2001	17:02	3.85		18.69		3.68		18.65	
S-61	2435-004	04/18/2001	17:27	3.86		18.69		3.69		18.64	
S-62	2435-005	04/18/2001	17:52	3.85		18.69		3.69		18.64	
S-68A	2435-011	04/18/2001	18:17	3.85		18.69		3.68		18.64	
PEST	2435-011-MS1	04/18/2001	18:42	3.85		18.69		3.69		18.64	
PEST	2435-011-MSD1	04/18/2001	19:07	3.84		18.69		3.68		18.64	
PEST	PBA0418-MS1	04/18/2001	19:32	3.85		18.69		3.68		18.64	
(2434)	0418-BK2	04/18/2001	19:57	3.85		18.69		3.68		18.64	
TP-WW-3S_SUMP	2434-001	04/18/2001	20:22	3.85		18.69		3.68		18.64	
PEST	2434-001-MS2	04/18/2001	20:47	3.85		18.69		3.69		18.64	
PEST	2434-001-MSD2	04/18/2001	21:12	3.85		18.69		3.68		18.64	
PEST	PBA0418-MS2	04/18/2001	21:37	3.85		18.69		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\04-18-01\W6068.D\ECD1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6068.D\ECD2A.CH
Acq On : 4-18-01 16:12:29 Operator: LAG
Sample : S-58,2435-001,S,30.8g,16.8,04/18/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 14:57 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0417.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	50538870	21256717	1.197m	1.443m
Spiked Amount 100.000			Recovery =		1.20%	1.44%
2) S DCB	18.69	18.65	52413640	20010926	1.754	2.064
Spiked Amount 100.000			Recovery =		1.75%	2.06%
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.
W6068.D WPTC0417.M Wed Apr 25 15:03:34 2001 GC_W Page 1

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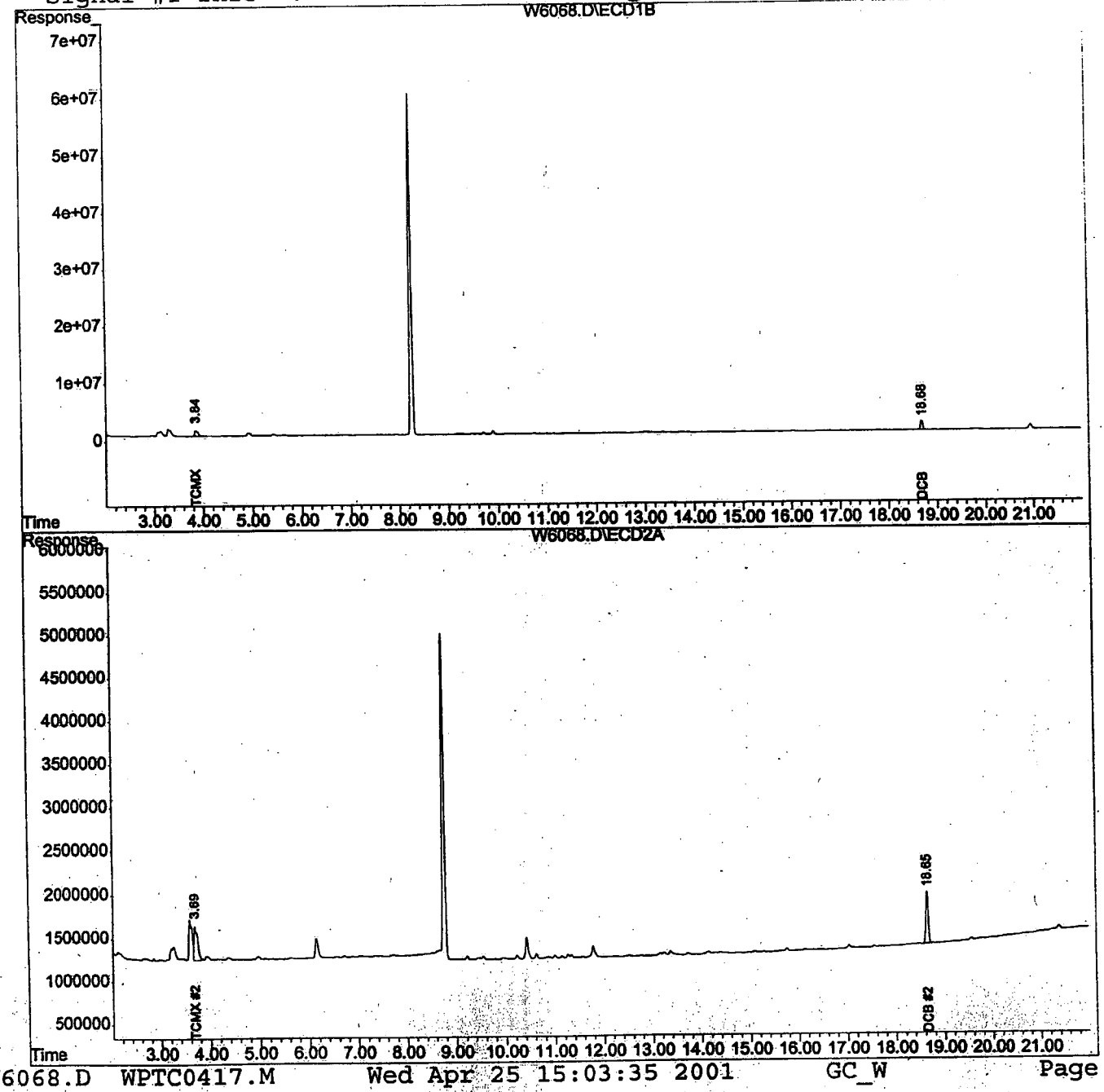
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6068.D\ECD1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6068.D\ECD2A.CH
Acq On : 4-18-01 16:12:29 Operator: LAG
Sample : S-58,2435-001,S,30.8g,16.8,04/18/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 14:57 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0417.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:\HPCHEM\1\DATA\04-18-01\W6069.D\ECD1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6069.D\ECD2A.CH
Acq On : 4-18-01 16:37:25 Operator: LAG
Sample : S-59,2435-002,S,30.8g,17.1,04/18/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 14:59 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0417.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	52446108	20331472	1.242	1.380
Spiked Amount 100.000			Recovery	=	1.24%	1.38%
2) S DCB	18.69	18.65	53971262	21110180	1.806	2.178
Spiked Amount 100.000			Recovery	=	1.81%	2.18%
Target Compounds						
9) T Heptachlor epoxi	8.56	9.53	30805083	11917700	1.142	1.335m
10) T Endosulfan I	9.48	10.22	36872750	13177216	1.461	1.568
T 4,4'-DDE	10.25	11.00	28479616	10205987	1.065	1.166m
12) T Dieldrin	10.17	11.26	30386945	11193497	1.110	1.236m
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.
W6069.D WPTC0417.M Wed Apr 25 15:03:40 2001 GC_W Page 1

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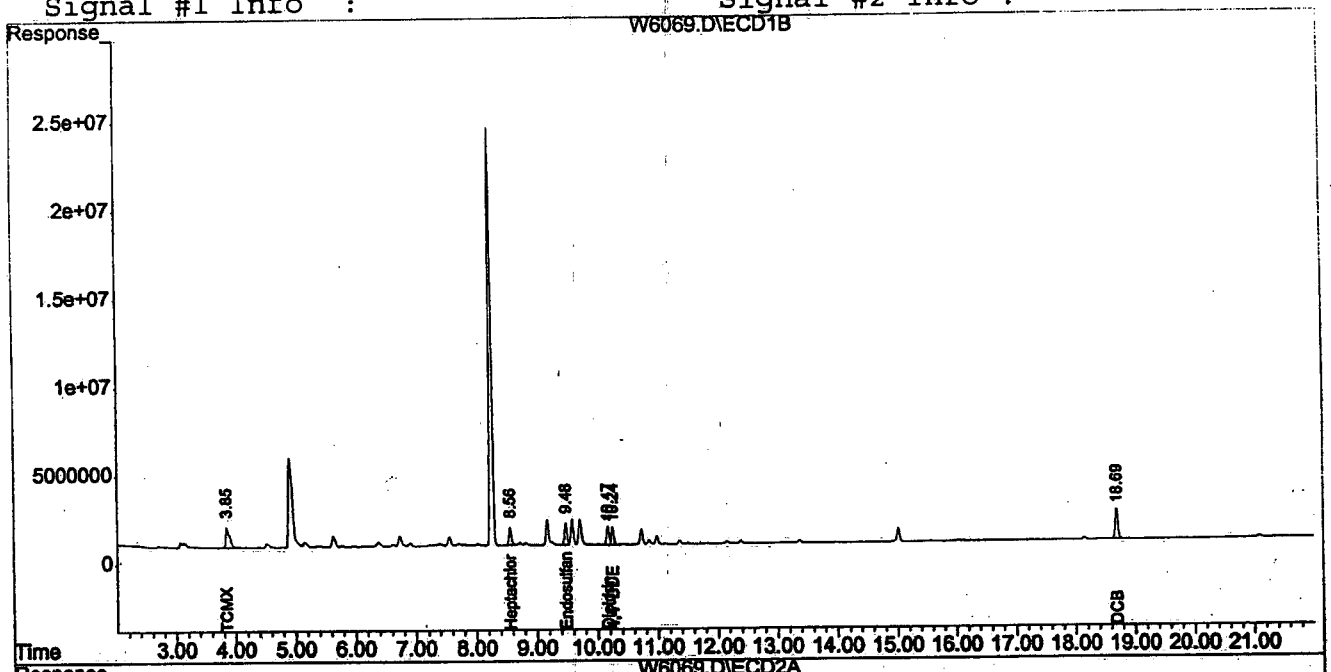
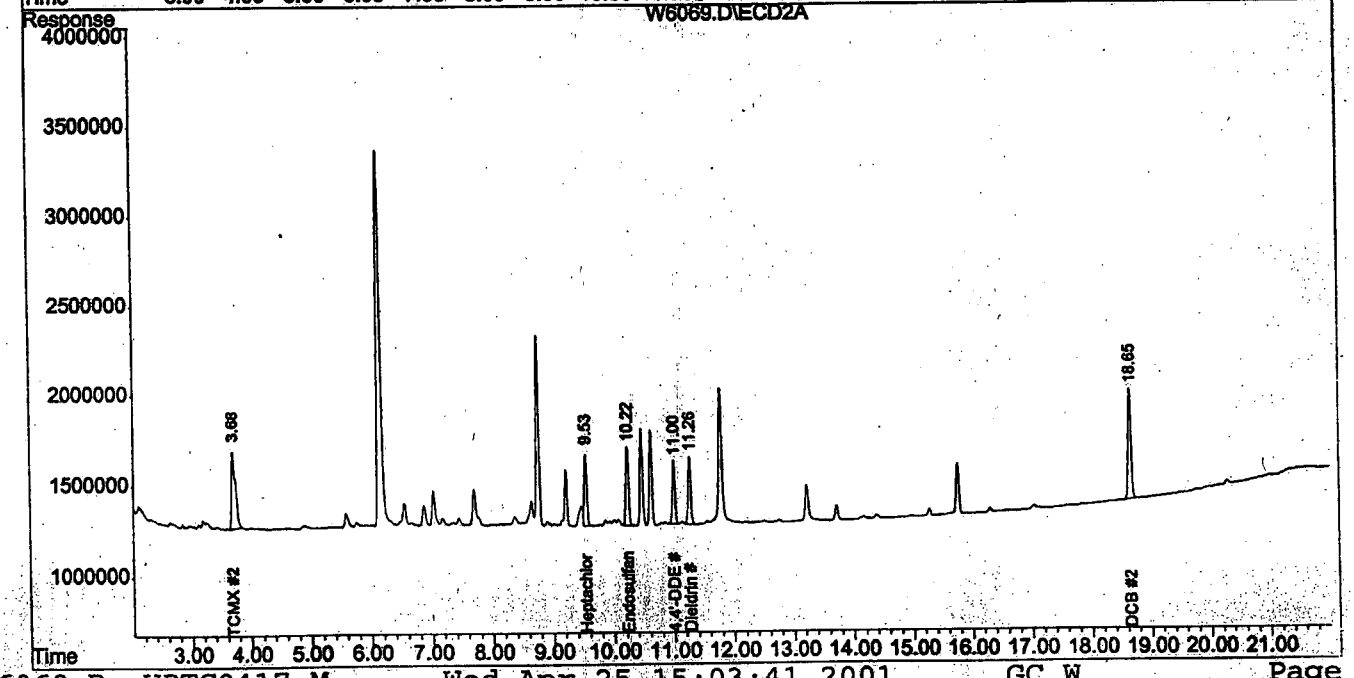
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6069.D\ECD1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6069.D\ECD2A.CH
Acq On : 4-18-01 16:37:25 Operator: LAG
Sample : S-59,2435-002,S,30.8g,17.1,04/18/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 14:59 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0417.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:\HPCHEM\1\DATA\04-18-01\W6070.D\ECD1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6070.D\ECD2A.CH
Acq On : 4-18-01 17:02:26 Operator: LAG
Sample : S-60,2435-003,S,30.8g,17.5,04/18/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 15:23 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0417.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	39556676	13682364	0.937m	0.929m
Spiked Amount 100.000			Recovery	=	0.94%	0.93%
2) S DCB	18.69	18.65	38140406	13578629	1.277m	1.401m
Spiked Amount 100.000			Recovery	=	1.28%	1.40%
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

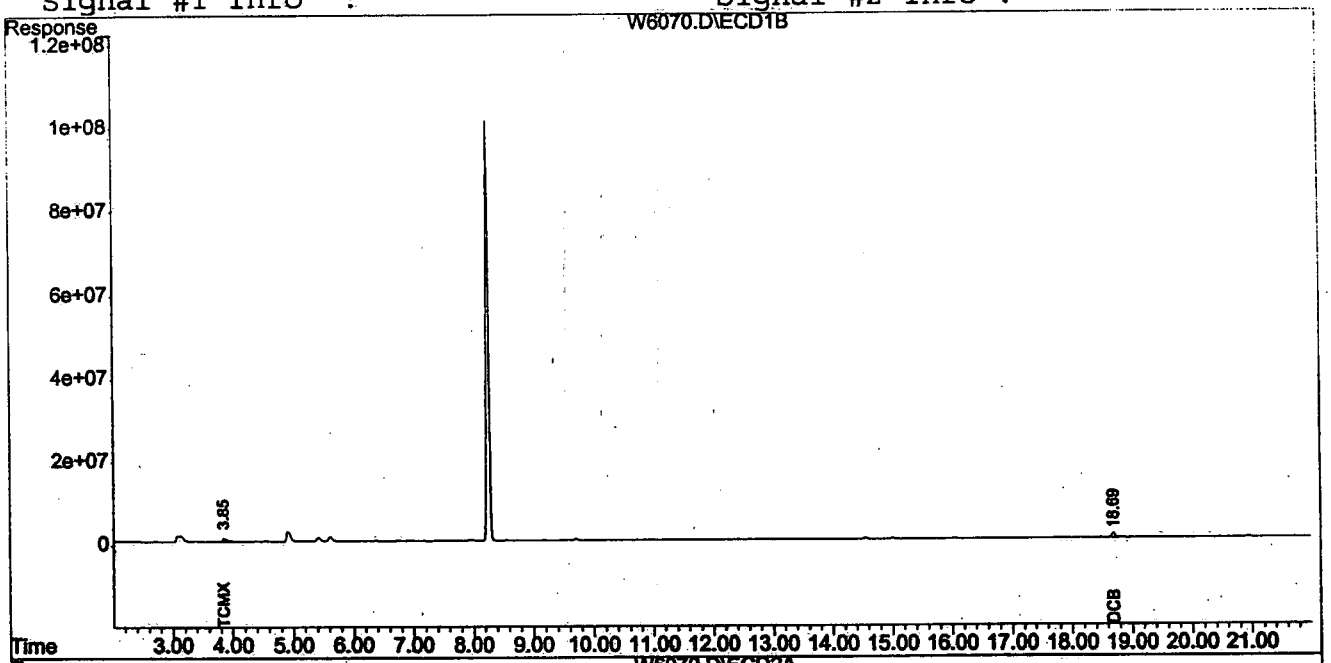
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

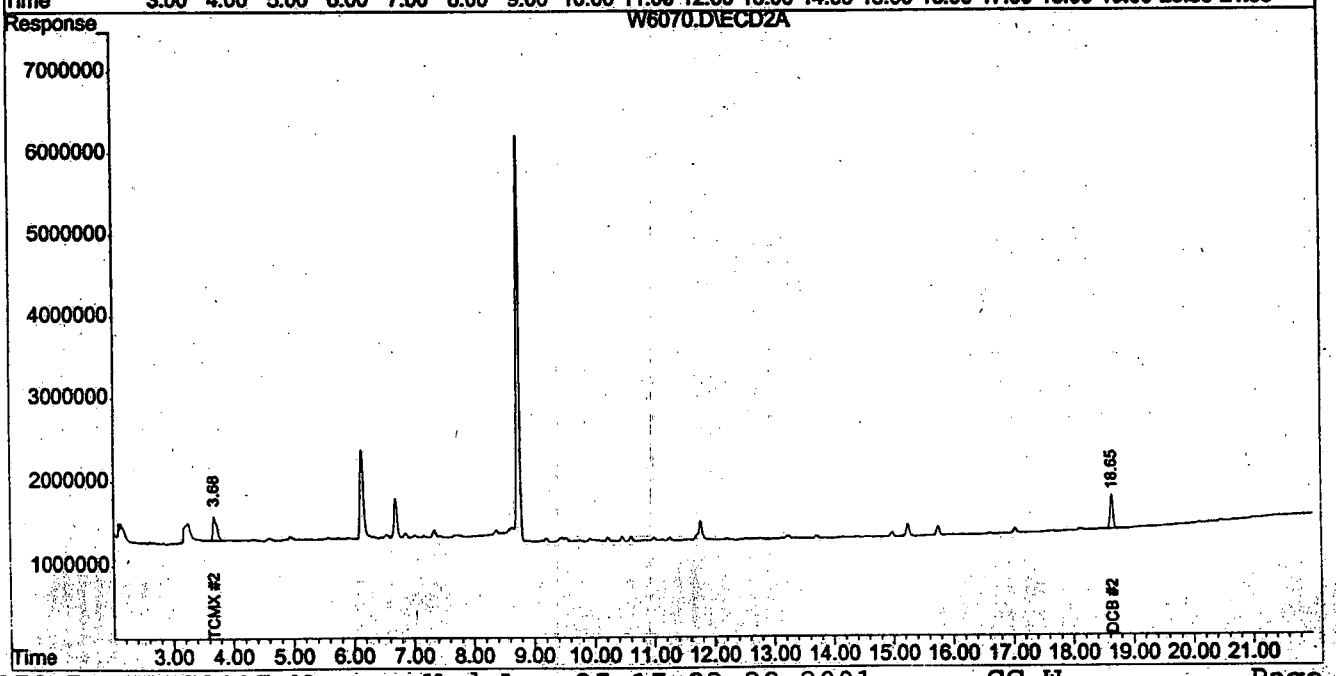
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6070.D\ECD1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6070.D\ECD2A.CH
Acq On : 4-18-01 17:02:26 Operator: LAG
Sample : S-60,2435-003,S,30.8g,17.5,04/18/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 15:23 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0417.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:\HPCHEM\1\DATA\04-18-01\W6071.D\ECD1B.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6071.D\ECD2A.CH
Acq On : 4-18-01 17:27:22 Operator: LAG
Sample : S-61,2435-004,S,30.1g,18.2,04/18/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 15:00 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0417.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	49001510	19455994	1.160	1.320m
Spiked Amount 100.000			Recovery	=	1.16%	1.32%
2) S DCB	18.69	18.64	52746768	19586072	1.765	2.020
Spiked Amount 100.000			Recovery	=	1.76%	2.02%
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

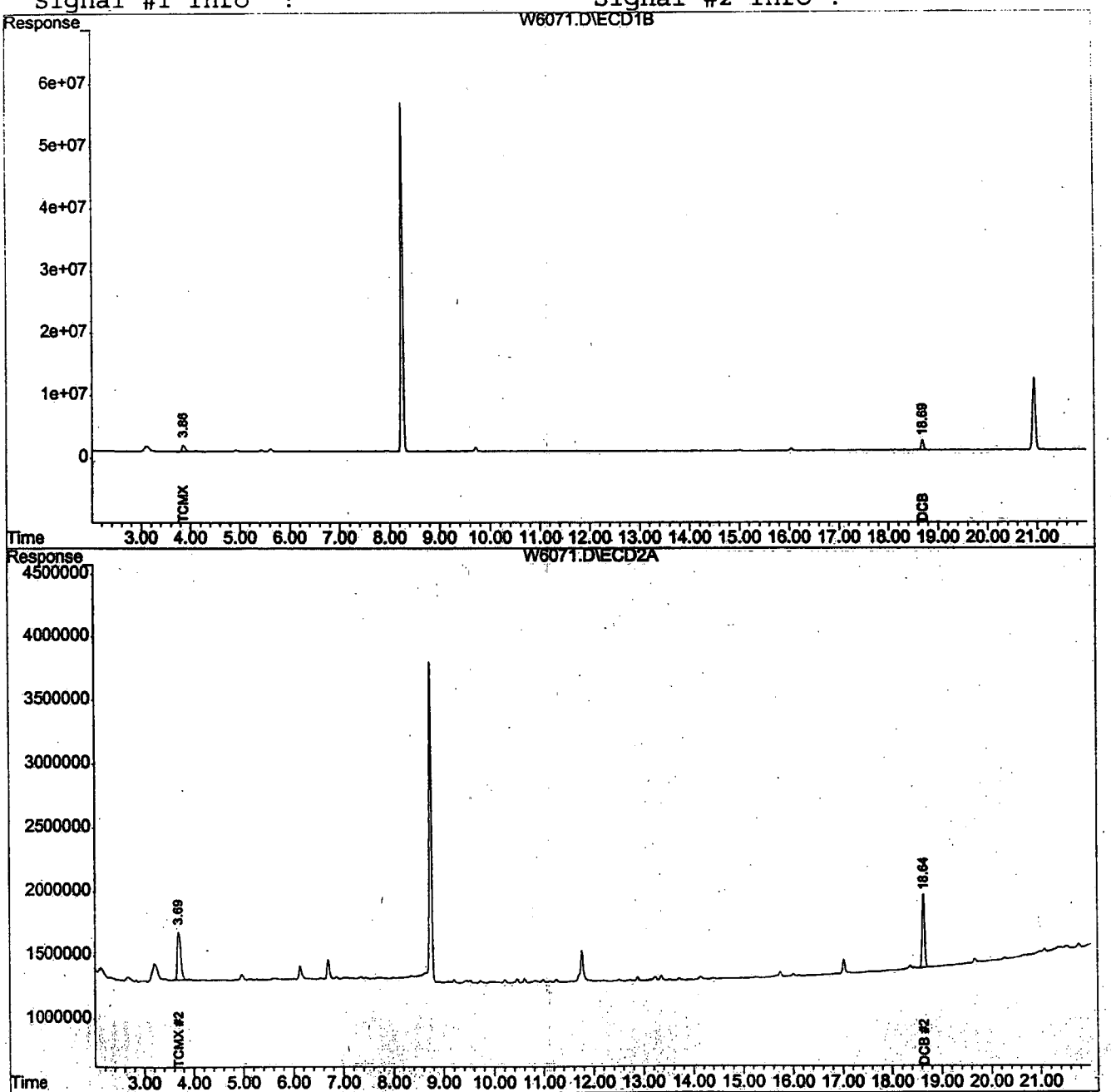
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6071.D\ECD1B.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6071.D\ECD2A.CH
Acq On : 4-18-01 17:27:22 Operator: LAG
Sample : S-61,2435-004,S,30.1g,18.2,04/18/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 15:00 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0417.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:\HPCHEM\1\DATA\04-18-01\W6072.D\ECD1B.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6072.D\ECD2A.CH
Acq On : 4-18-01 17:52:17 Operator: LAG
Sample : S-62,2435-005,S,30.5g,16.2,04/18/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 15:01 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0417.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	50324640	19964484	1.192	1.355
Spiked Amount 100.000			Recovery	=	1.19%	1.36%
2) S DCB	18.69	18.64	49026182	19529052	1.641	2.015
Spiked Amount 100.000			Recovery	=	1.64%	2.02%
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

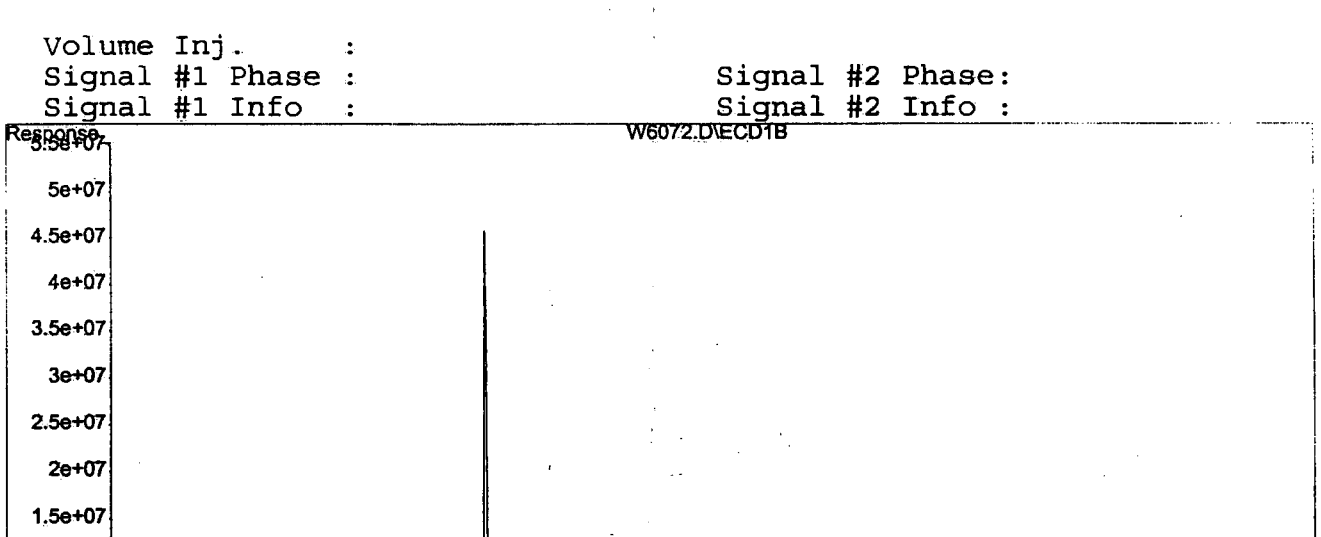
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W6072.D WPTC0417.M Wed Apr 25 15:03:58 2001 GC_W Page 1

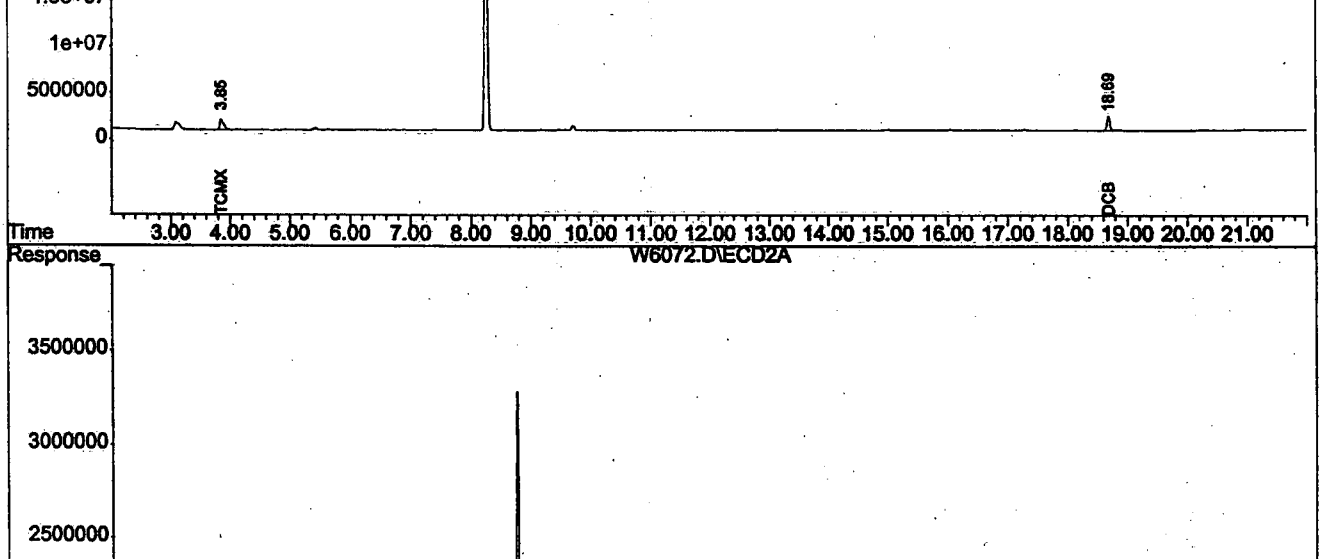
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6072.D\ECD1B.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6072.D\ECD2A.CH
Acq On : 4-18-01 17:52:17 Operator: LAG
Sample : S-62,2435-005,S,30.5g,16.2,04/18/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 15:01 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0417.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2900

000292

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6073.D\ECD1B.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6073.D\ECD2A.CH
Acq On : 4-18-01 18:17:14 Operator: LAG
Sample : S-68A,2435-011,S,30.5g,13.8,04/18/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 15:01 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0417.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	51936634	19722818	1.230	1.339m
Spiked Amount 100.000			Recovery =		1.23%	1.34%
2) S DCB	18.69	18.64	52153392	19390364	1.746	2.000
Spiked Amount 100.000			Recovery =		1.75%	2.00%
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

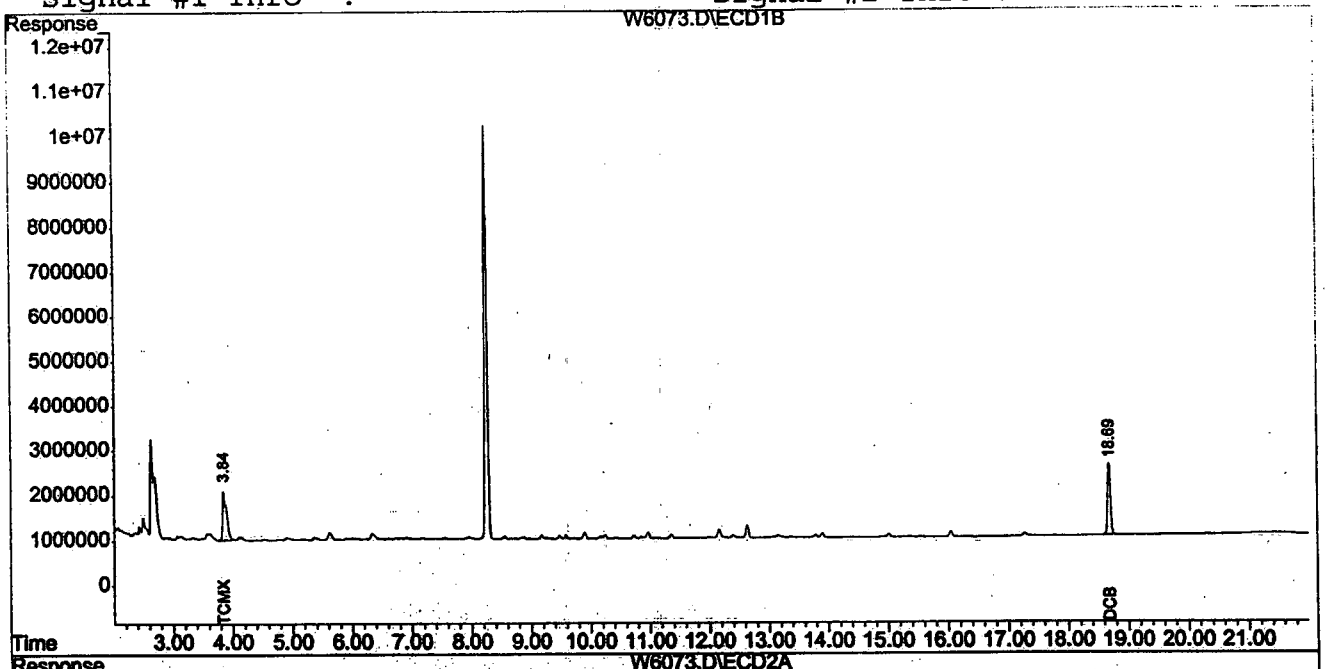
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

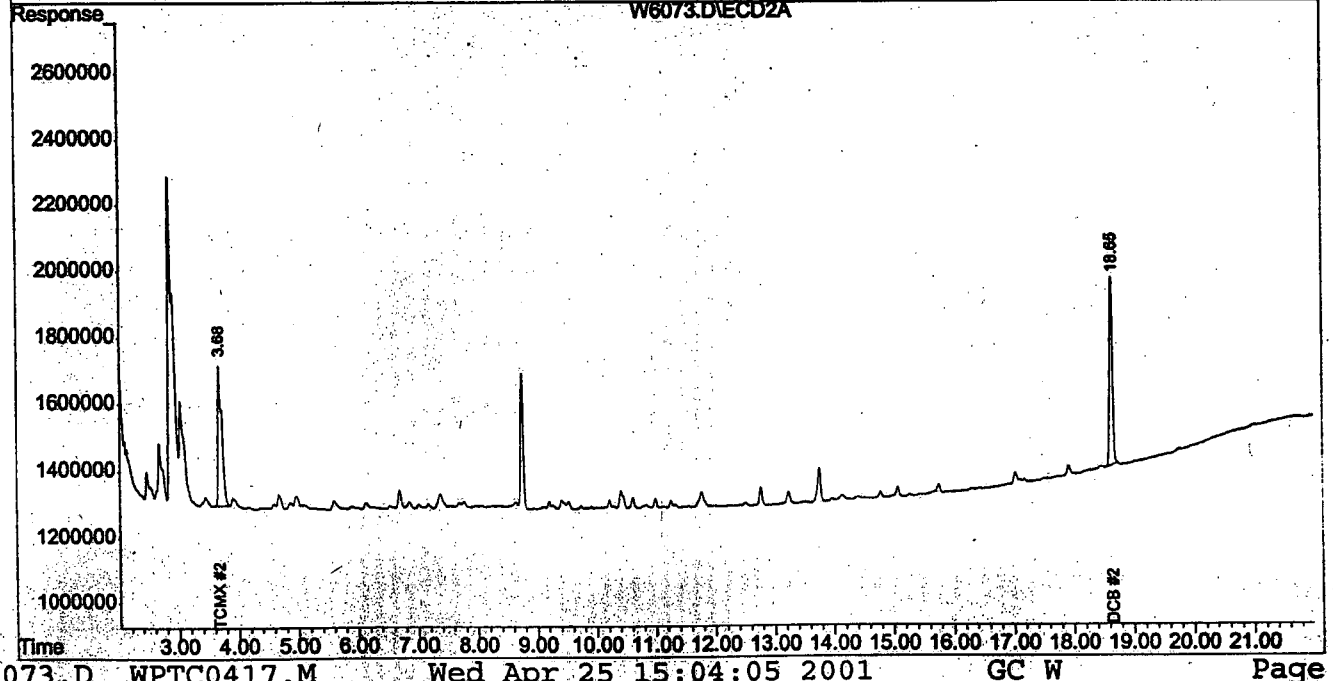
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6073.D\ECD1B.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6073.D\ECD2A.CH
Acq On : 4-18-01 18:17:14 Operator: LAG
Sample : S-68A,2435-011,S,30.5g,13.8,04/18/01 Inst : GC_W
Misc : ENVTACT/ORBIS,04/16/01,04/17/01,50 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 15:01 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0417.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2902

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6067.D\ECD1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6067.D\ECD2A.CH
Acq On : 4-18-01 15:40:48 Operator: LAG
Sample : (2369.2435),0418-BK1,S,30.0g,0.0,04/18/0 Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 14:56 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0417.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

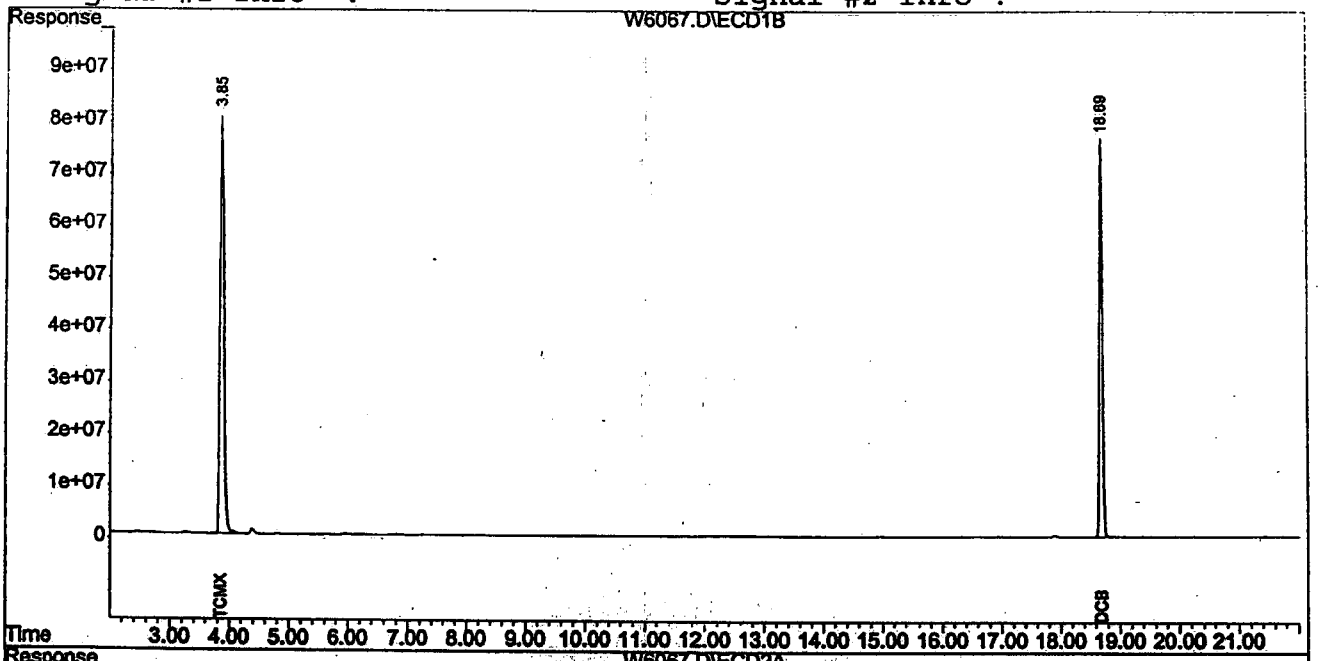
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	3.85	3.70	3869.2E6	1389.7E6	91.619	94.321
Spiked Amount 100.000			Recovery =		91.62%	94.32%
2) S DCB	18.69	18.65	2523.0E6	881.0E6	84.442	90.878
Spiked Amount 100.000			Recovery =		84.44%	90.88%
Target Compounds						
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

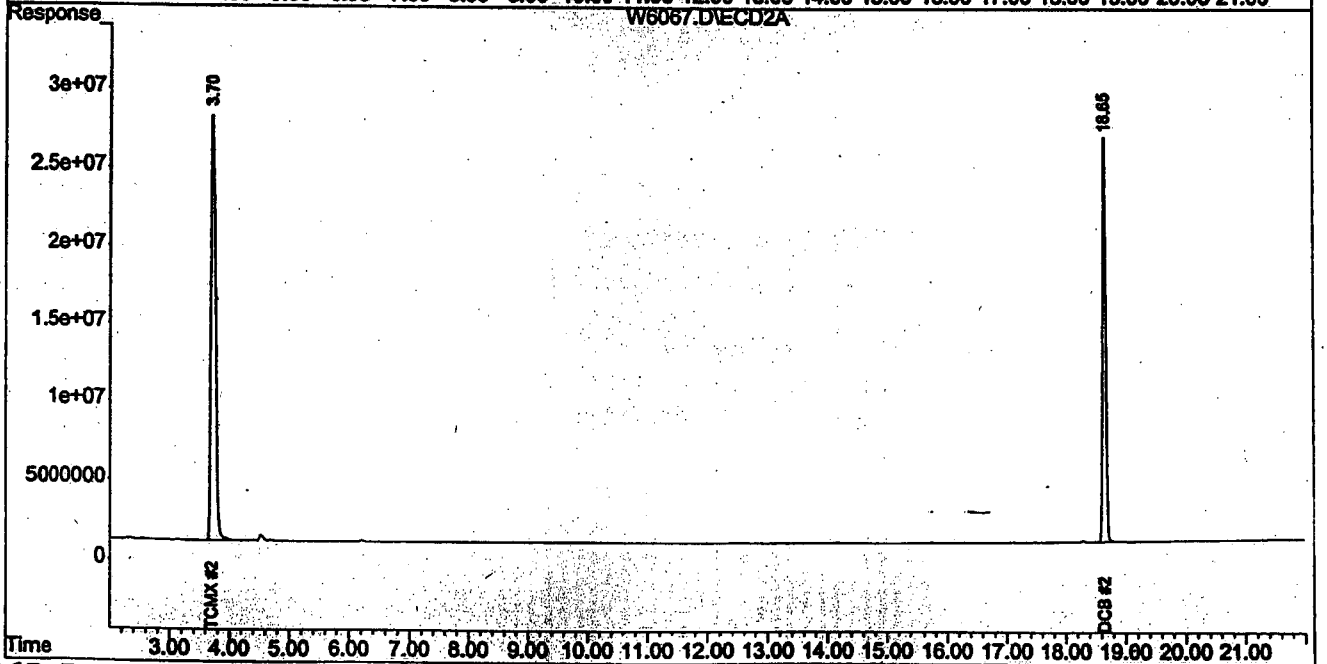
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W6067.D WPTC0417.M Wed Apr 25 15:03:28 2001 GC_W Page 1

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6067.D\ECD1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6067.D\ECD2A.CH
Acq On : 4-18-01 15:40:48 Operator: LAG
Sample : (2369.2435),0418-BK1,S,30.0g,0.0,04/18/0 Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 25 14:56 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0417.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2904

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6064.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6064.D\ECD2A.CH
Acq On : 4-18-01 13:50:40 Operator: LAG
Sample : PEST_C_IAS_1494,100_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 18 14:13 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0417.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	3.88	3.72	4126.2E6	1555.4E6	97.703	105.566
Spiked Amount	100.000			Recovery	=	97.70%	105.57%
2) S	DCB	18.69	18.65	2554.6E6	940.0E6	85.500	96.965
Spiked Amount	100.000			Recovery	=	85.50%	96.97%
	Target Compounds						
3) T	alpha-BHC	4.55	5.60	3551.3E6	1249.3E6	98.513	108.791
4) T	beta-BHC	5.05	8.65	1278.2E6	505.4E6	95.075	103.474
5) T	gamma-BHC	5.17	6.55	3180.9E6	1126.9E6	98.172	107.505
6) T	delta-BHC	5.65	9.22	3236.4E6	1121.6E6	99.626	108.741
7) T	Heptachlor	6.74	7.03	2792.0E6	920.5E6	100.150	107.113
8) T	Aldrin	7.56	7.70	2966.7E6	1044.1E6	98.897	107.287
9) T	Heptachlor epoxi	8.56	9.54	2649.7E6	946.5E6	98.215	106.027
10) T	Endosulfan I	9.48	10.23	2476.5E6	890.4E6	98.098	105.940
11) T	4,4'-DDE	10.25	11.00	2629.9E6	934.8E6	98.312	106.826
12) T	Dieldrin	10.17	11.26	2711.9E6	961.9E6	99.071	106.242
13) T	Endrin	10.73	11.79	2538.7E6	910.6E6	99.338	105.825
14) T	Endosulfan II	10.98	13.23	2295.9E6	1647.7E6	97.435	104.583
15) T	4,4'-DDD	11.36	13.23	2302.9E6	1647.7E6	99.385	104.582
16) T	Endrin aldehyde	11.51	14.37	1740.3E6	572.9E6	96.849	102.658
17) T	Endosulfan sulfa	12.16	15.28	2088.9E6	730.3E6	97.268	104.163
18) T	4,4'-DDT	12.39	13.68	1753.0E6	516.9E6	94.707	100.679
19) T	Endrin ketone	13.37	16.30	2457.5E6	832.9E6	95.641	102.361
20) T	Methoxychlor	14.07	15.55	863.6E6	286.0E6	94.313	99.476
21) T	alpha-Chlordane	9.59	10.62	2637.1E6	942.7E6	95.973	104.652
22) T	gamma-Chlordane	9.18	10.46	2790.1E6	964.8E6	97.291	105.059
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

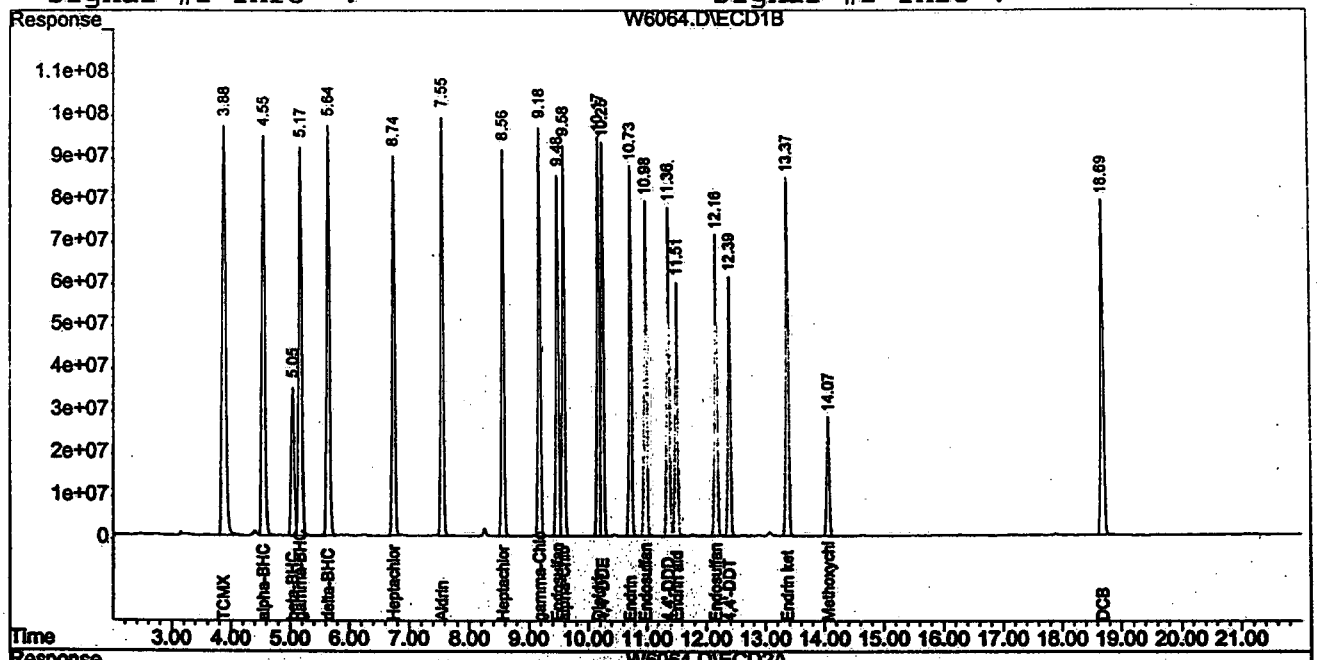
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

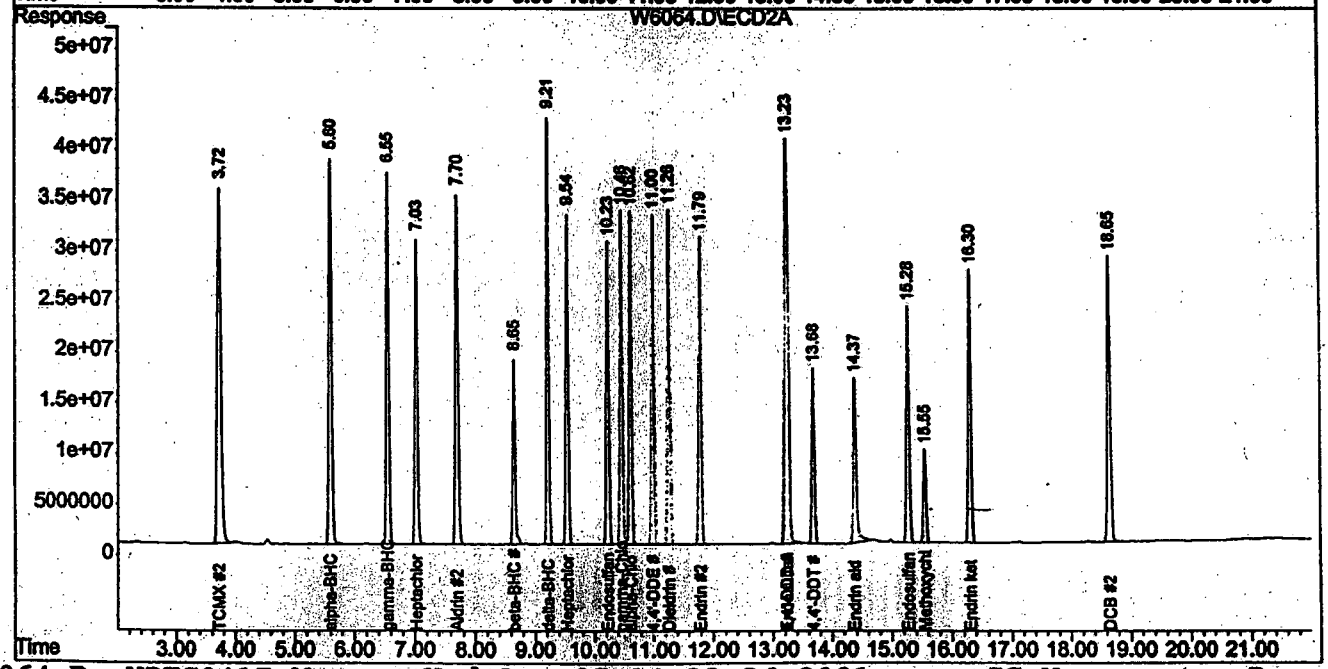
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6064.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6064.D\ECD2A.CH
Acq On : 4-18-01 13:50:40 Operator: LAG
Sample : PEST_C_IAS_1494,100_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 18 14:13 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0417.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2906

000298

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6082.D\ECD1B.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6082.D\ECD2A.CH
Acq On : 4-18-01 22:02:20 Operator: LAG
Sample : PEST_C_IAS_1494,100_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 19 9:08 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0417.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	3.88	3.72	4129.2E6	1563.6E6	97.773	106.118
Spiked Amount	100.000			Recovery	=	97.77%	106.12%
2) S	DCB	18.69	18.64	2840.0E6	1011.5E6	95.053	104.339
Spiked Amount	100.000			Recovery	=	95.05%	104.34%
	Target Compounds						
3) T	alpha-BHC	4.55	5.59	3572.1E6	1265.8E6	99.090	110.226
4) T	beta-BHC	5.04	8.65	1291.5E6	513.4E6	96.065	105.121
5) T	gamma-BHC	5.17	6.55	3217.5E6	1146.3E6	99.303	109.353
6) T	delta-BHC	5.65	9.21	3275.7E6	1146.8E6	100.837	111.186
7) T	Heptachlor	6.74	7.02	2877.4E6	947.6E6	103.213	110.260
8) T	Aldrin	7.55	7.70	3011.5E6	1062.5E6	100.390	109.172
9) T	Heptachlor epoxi	8.56	9.54	2696.8E6	965.2E6	99.958	108.123
10) T	Endosulfan I	9.48	10.22	2527.6E6	909.9E6	100.120	108.253
11) T	4,4'-DDE	10.25	11.00	2703.8E6	962.9E6	101.075	110.044
12) T	Dieldrin	10.17	11.26	2774.3E6	987.4E6	101.351	109.053
13) T	Endrin	10.73	11.78	2590.3E6	931.3E6	101.356	108.226
14) T	Endosulfan II	10.98	13.23	2352.1E6	1710.2E6	99.821	108.549
15) T	4,4'-DDD	11.36	13.23	2381.7E6	1710.2E6	102.789	108.548
16) T	Endrin aldehyde	11.50	14.37	1806.2E6	594.8E6	100.520	106.574
17) T	Endosulfan sulfa	12.16	15.27	2145.0E6	763.6E6	99.881	108.898
18) T	4,4'-DDT	12.39	13.68	1888.6E6	557.2E6	102.035	108.543
19) T	Endrin ketone	13.37	16.30	2572.0E6	886.1E6	100.098	108.901
20) T	Methoxychlor	14.07	15.54	927.5E6	309.4E6	101.288	107.613
21) T	alpha-Chlordane	9.58	10.62	2716.2E6	971.2E6	98.853	107.817
22) T	gamma-Chlordane	9.18	10.46	2861.1E6	993.8E6	99.766	108.224
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

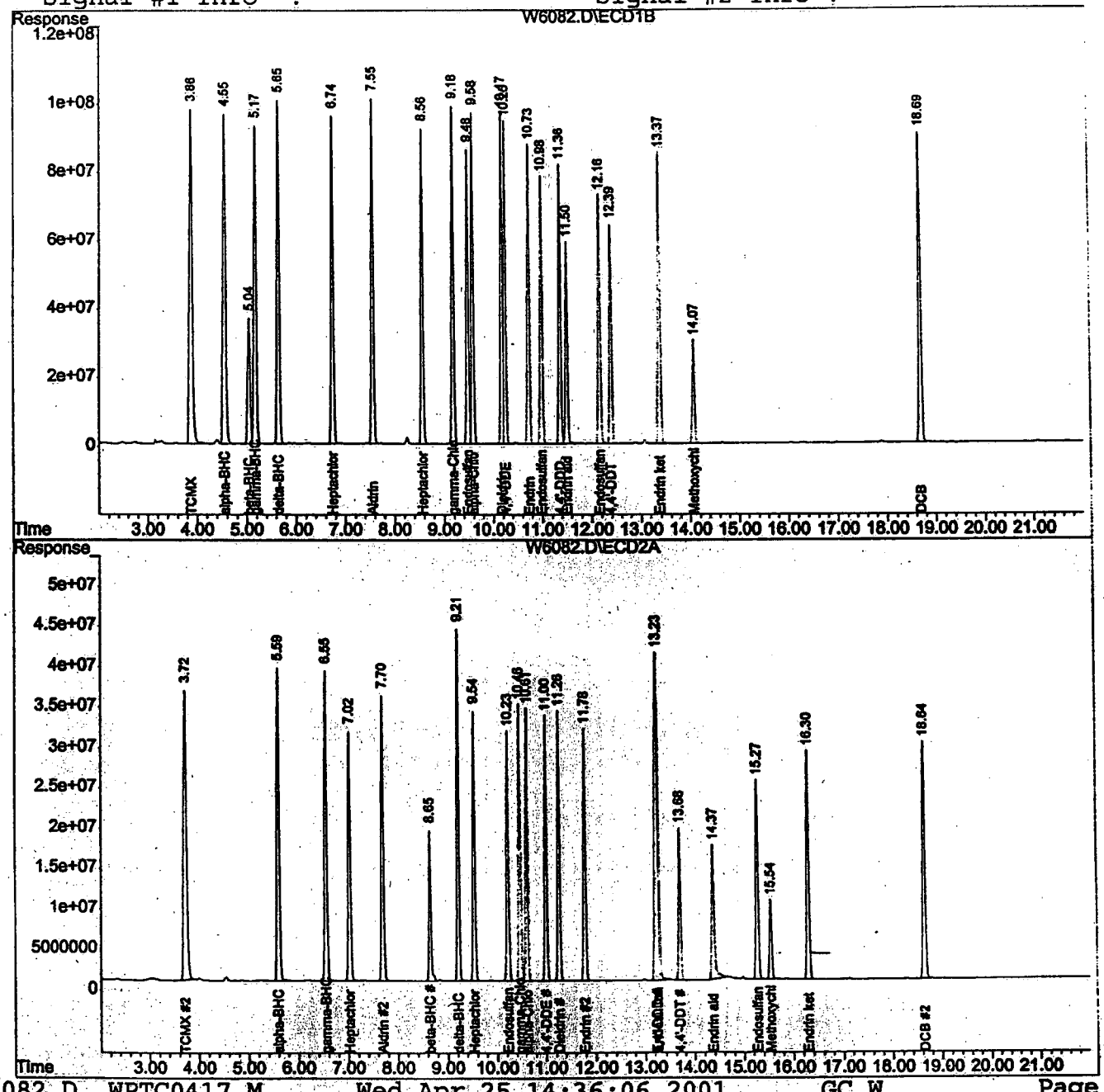
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6082.D\ECD1B.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6082.D\ECD2A.CH
Acq On : 4-18-01 22:02:20 Operator: LAG
Sample : PEST_C_IAS_1494,100_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 19 9:08 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0417.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



2908

300

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6065.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6065.D\ECD2A.CH
Acq On : 4-18-01 14:17:08 Operator: LAG
Sample : TOX_C_IAS_1490,0.5_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 18 14:52 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0417.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	3.88	3.72	4046.2E6	1494.6E6	95.808	101.439
Spiked Amount 100.000			Recovery =		95.81%	101.44%
2) S DCB	18.69	18.65	2609.9E6	1183.8E6	87.350	122.111 #
Spiked Amount 100.000			Recovery =		87.35%	122.11%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
28) L2 Toxaphene	13.18	14.02	222.4E6	114.0E6	460.982	508.818
29) L2 Toxaphene {2}	13.30	14.77	377.8E6	82376864	481.937	493.412
30) L2 Toxaphene {3}	13.59	15.02	152.5E6	118.0E6	425.688m	523.891
31) L2 Toxaphene {4}	14.05	15.21	172.5E6	51948047	469.089	490.580
32) L2 Toxaphene {5}	14.55	15.66	213.8E6	53829374	488.263	507.073
Sum Toxaphene			1138.9E6	420.2E6	2325.960	2523.774
Average Toxaphene					465.192	504.755

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

2909

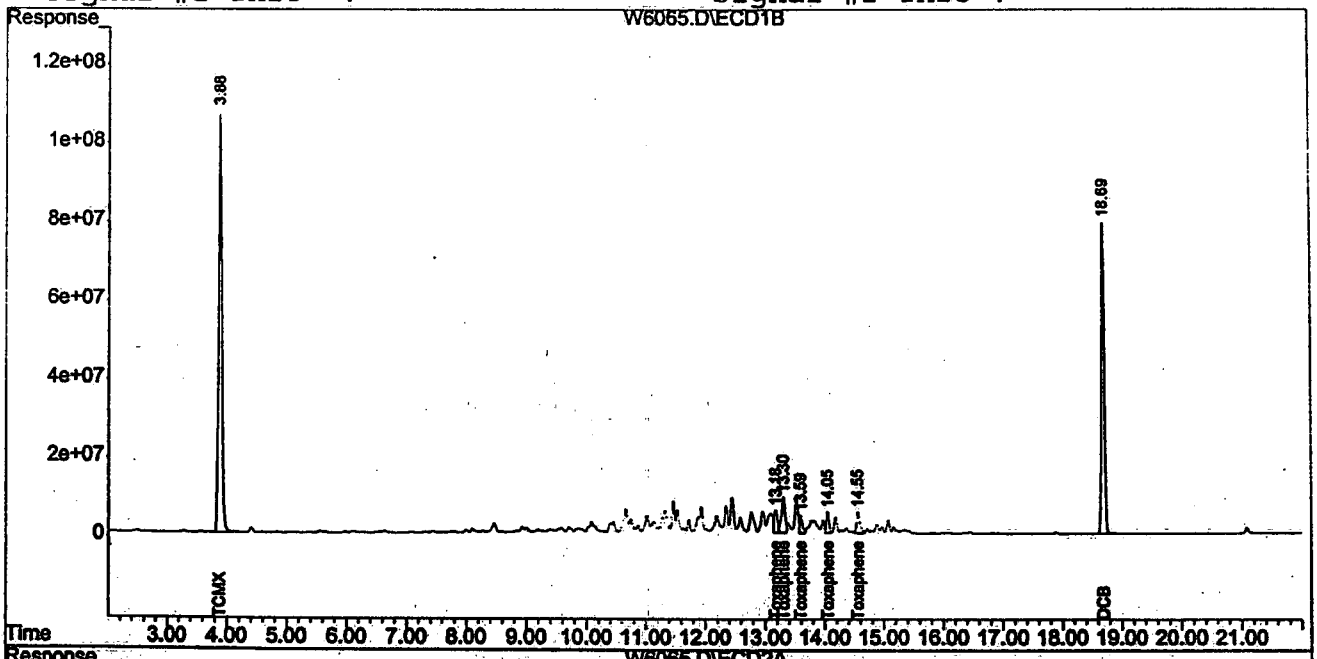
000301

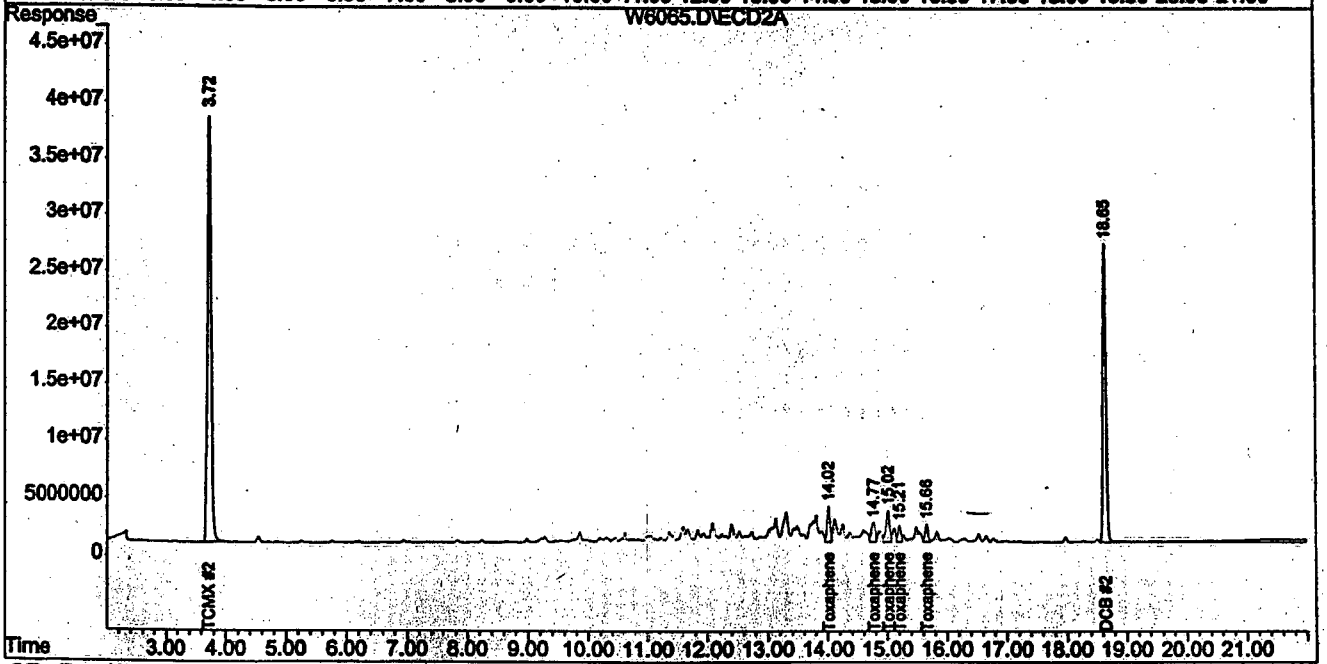
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6065.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6065.D\ECD2A.CH
Acq On : 4-18-01 14:17:08 Operator: LAG
Sample : TOX_C_IAS_1490,0.5_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 18 14:52 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0417.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2910

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6066.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6066.D\ECD2A.CH
Acq On : 4-18-01 14:42:12 Operator: LAG
Sample : CHLOR_C_IAS_1491,0.5_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 25 14:35 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0417.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	3.88	3.72	4254.7E6	1580.9E6	100.745	107.297
Spiked Amount 100.000			Recovery	=	100.74%	107.30%
2) S DCB	18.69	18.65	2805.1E6	966.2E6	93.884	99.667
Spiked Amount 100.000			Recovery	=	93.88%	99.67%
Target Compounds						
23) L1 Chlordane	9.18	8.39	1623.3E6	94974286	488.099	523.214
24) L1 Chlordane {2}	9.38	10.06	339.0E6	122.8E6	482.976	518.587
L1 Chlordane {3}	9.58	10.46	1556.7E6	540.2E6	483.762	518.195
L1 Chlordane {4}	9.73	10.62	905.0E6	486.0E6	484.597	512.503
27) L1 Chlordane {5}	11.58	10.68	427.7E6	309.2E6	488.295	523.079
Sum Chlordane			4851.7E6	1553.2E6	2427.729	2595.579
Average Chlordane					485.546	519.116
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.

2911

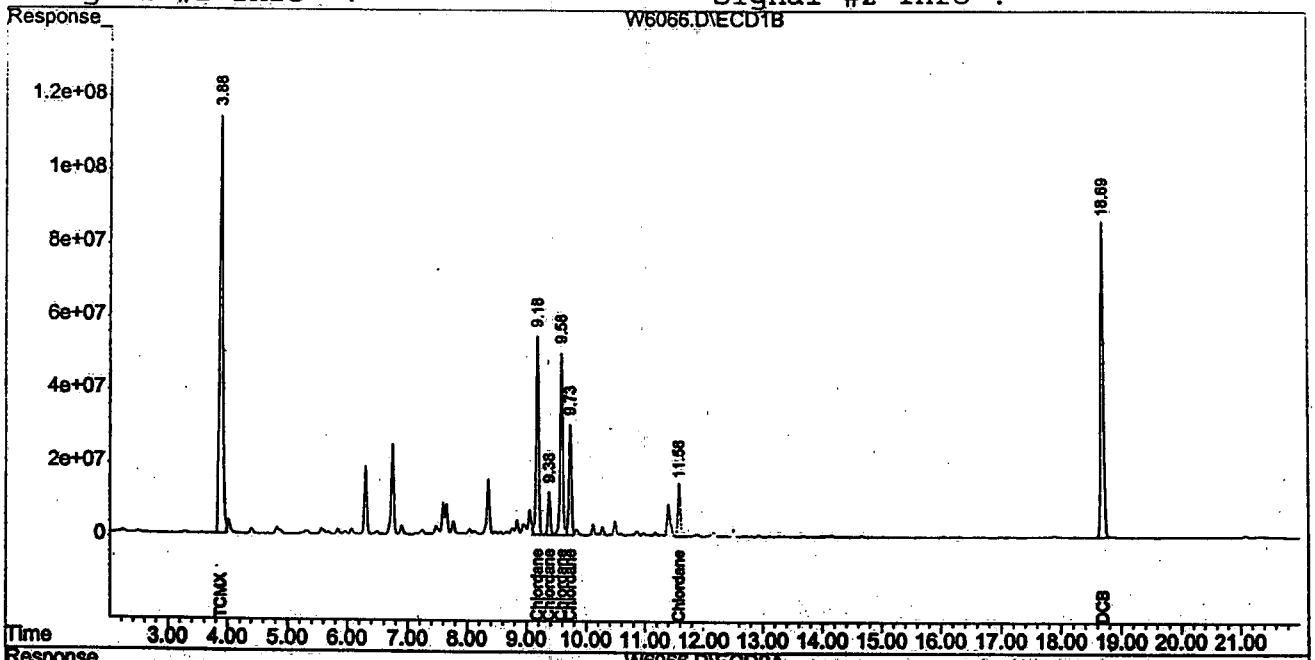
000303

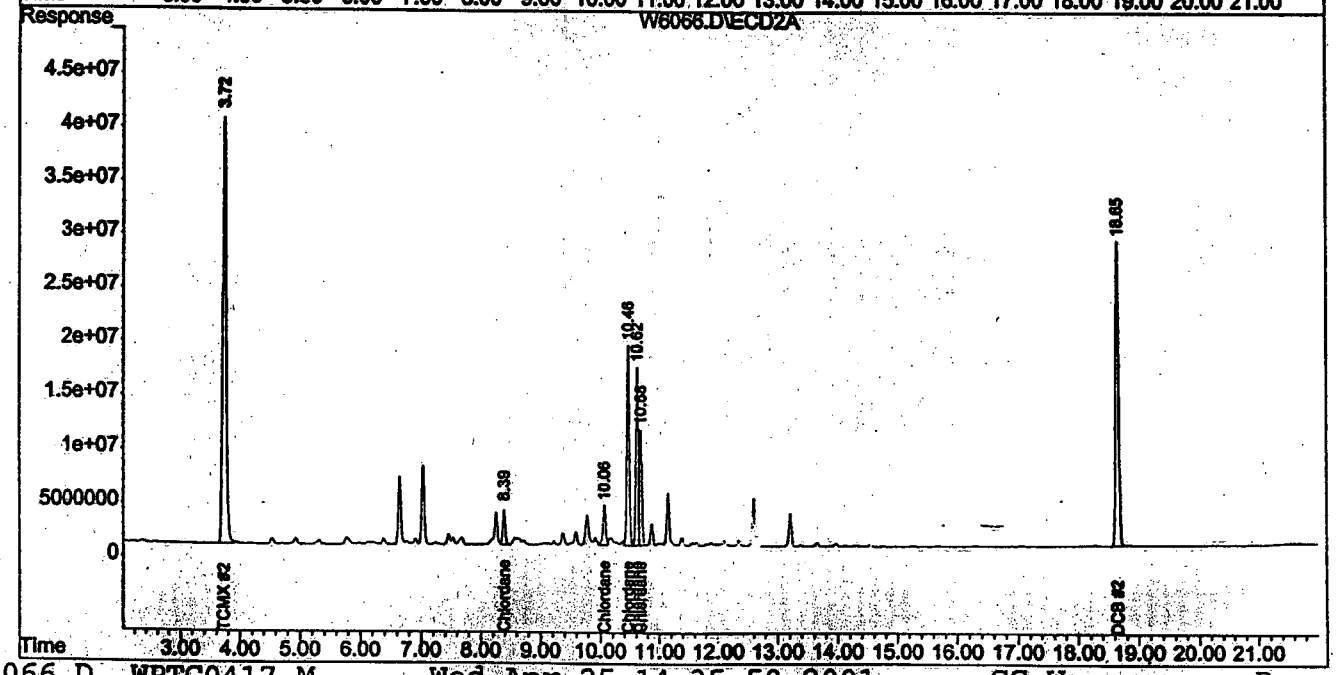
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-18-01\W6066.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\04-18-01\W6066.D\ECD2A.CH
Acq On : 4-18-01 14:42:12 Operator: LAG
Sample : CHLOR_C_IAS_1491,0.5_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 25 14:35 2001 Quant Results File: WPTC0417.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0417.M (Chemstation Integrator)
Title :
Last Update : Tue Apr 17 15:05:34 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0417.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- 2028, 2293, 2333, 2412, 2425, 2435, 2436, 2438, 2442, 2429

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	INITIAL CALIBRATION	CONTINUING CALIBRATION 1	CONTINUING CALIBRATION 2	INST. MDL	REAGENT BLANK	MDL	IDL
Antimony	ND	ND	ND	0.100	ND	2.00	
Arsenic	ND	ND	ND	0.010	ND	0.200	
Beryllium	ND	ND	ND	0.010	ND	0.200	
Cadmium	ND	ND	ND	0.010	ND	0.200	
Chromium	ND	ND	ND	0.030	ND	0.600	
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	
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	
Selenium	ND	ND	ND	0.100	ND	2.00	
Silver	ND	ND	ND	0.020	ND	0.500	
Thallium	ND	ND	ND	0.004	ND	0.080	
Zinc	ND	ND	ND	0.050	ND	1.00	

This QC Blank applies to the following samples:

2028-001~004; 2293-001~008; 2333-008; 2412-001;
2425-001~004; 2435-001~005,011; 2436-001~003;
2438-001; 2442-001; 2429-001

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Lab Case Number: E01- 2028, 2293, 2333, 2412, 2425, 2435, 2436, 2438, 2442, 2429

Concentration/Units: ppb (µg/L)

ANALYTE	INITIAL CALIBRATION			CONTINUING CALIBRATION					MDL	IDL
	TRUE	FOUND	%R (1)	TRUE	FOUND	%R (1)	FOUND	%R (1)		
Antimony	120	119	99.2	120	123	103	122	102	100	
Arsenic	20.0	19.5	97.5	20.0	19.3	96.5	19.1	95.5	10.0	
Beryllium	10.0	10.1	101	10.0	11.0	110	10.5	105	10.0	
Cadmium	10.0	10.4	104	10.0	10.6	106	10.5	105	10.0	
Chromium	20.0	20.4	102	20.0	20.1	101	18.3	91.5	30.0	
Copper	50.0	51.0	102	50.0	49.3	98.6	48.7	97.4	20.0	
Iron	200	194	97.0	200	197	98.5	194	97.0	150	
Lead	10.0	10.0	100	10.0	9.89	98.9	9.88	98.8	100	
Manganese	30.0	30.9	103	30.0	27.9	93.0	28.0	93.3	20.0	
Mercury	5.00	5.15	103	5.00	5.07	101	4.77	95.4	0.250	
Nickel	80.0	80.2	100	80.0	74.1	92.6	73.4	91.8	30.0	
Selenium	10.0	10.7	107	10.0	10.5	105	10.5	105	100	
Silver	500	493	98.6	500	473	94.6	463	92.6	20.0	
Thallium	20.0	20.5	103	20.0	20.2	101	19.4	97.0	4.00	
Zinc	40.0	42.3	106	40.0	41.8	105	41.0	103	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- 2028, 2293, 2333, 2412, 2425, 2435, 2436, 2438, 2442, 2429

Matrix: Aqueous Concentration/Units: ppb(ug/L)

ANALYTE / MASS	INITIAL			FINAL		
	SOL A	SOL AB	%R	SOL A	SOL AB	%R
Arsenic / 75	0.22	8.42	82.0	0.20	8.29	80.9
Copper / 65	2.95	12.0	90.5	3.60	13.2	96.0
Manganese / 55	3.38	14.0	106.2	3.21	13.4	101.9
Nickel / 60	1.92	11.1	91.8	1.68	10.4	87.2
Zinc / 66	9.32	17.8	84.8	10.60	19.4	88.0

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- 2028, 2293, 2333, 2412, 2425, 2435, 2436, 2438, 2442, 2429

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Antimony	42.8	ND	94.7	45.2					75-125
Arsenic	53.2	8.06	99.9	45.2	43.1	0.980	101	41.6	75-125
Beryllium	49.1	0.608	107	45.2					75-125
Cadmium	45.9	ND	102	45.2					75-125
Chromium	83.1	38.9	97.8	45.2					75-125
Copper	62.0	18.9	95.4	45.2					75-125
Iron	31000	33000	NC	226					75-125
Lead	59.7	11.7	106	45.2	44.6	ND	107	41.6	75-125
Manganese	378	339	86.3	45.2					75-125
Mercury	0.348	0.078	95.7	0.282					75-125
Nickel	62.2	15.7	103	45.2					75-125
Selenium	48.1	ND	106	45.2					75-125
Silver	27.0	ND	95.4	28.3					75-125
Thallium	46.7	0.140	103	45.2					75-125
Zinc	81.0	36.6	98.2	45.2					75-125

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 2028-001

QC Sample 1 for following samples:
2028-001~004; 2293-001~008; 2333-008; 2412-001; 2425-001~004; 2435-001~005,011; 2436-001~003; 2438-001; 2442-001; 2429-001

QC Sample 2 2425-003

QC Sample 2 for following samples:
2028-001~004; 2293-001~008; 2333-008; 2412-001; 2425-001~004; 2435-001~005,011; 2436-001~003; 2438-001; 2442-001; 2429-001

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

DUPLICATE SAMPLE RECOVERY

Lab Case Number: E01- 2028, 2293, 2333, 2412, 2425, 2435, 2436, 2438, 2442, 2429

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Antimony	NA	ND	ND	NC				
Arsenic	20	8.06	8.16	1.23	20	0.980	0.940	4.17
Beryllium	20	0.608	0.638	4.82				
Cadmium	NA	ND	ND	NC				
Chromium	20	38.9	33.9	13.7				
Copper	20	18.9	19.2	1.57				
Iron	20	33000	31800	3.70				
Lead	20	11.7	12.1	3.36	NA	ND	ND	NC
Manganese	20	339	334	1.49				
Mercury	20	0.078	0.071	9.40				
Nickel	20	15.7	15.9	1.27				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				
Thallium	20	0.140	0.142	1.42				
Zinc	20	36.6	36.5	0.274				

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 2028-001

QC Sample 1 for following samples:
2028-001-004; 2293-001-008; 2333-008; 2412-001; 2425-001-004; 2435-001-005,011; 2436-001-003; 2438-001; 2442-001; 2429-001

QC Sample 2 2425-003

QC Sample 2 for following samples:
2028-001-004; 2293-001-008; 2333-008; 2412-001; 2425-001-004; 2435-001-005,011; 2436-001-003; 2438-001; 2442-001; 2429-001

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Lab Case Number: E01- 2028, 2293, 2333, 2412, 2425, 2435, 2436, 2438, 2442, 2429

ANALYTE	AQUEOUS (ug/L)			SOLID (mg/kg)			
	TRUE	FOUND	%R(1)	TRUE	FOUND	LIMITS	%R(2)
Antimony				26.2	10.3	D.L.-53.1	39.3
Arsenic				36.2	38.4	26.9-45.4	106
Beryllium				59.4	73.7	60.4-93.7	124
Cadmium				35.6	32.1	27.4-43.8	90.2
Chromium				108	112	79.2-137	104
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
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
Selenium				56.8	47.7	41-72.6	84.0
Silver				34.1	34.5	25.4-42.9	101
Thallium				68.2	68.2	39-97.3	100
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- 2028, 2293, 2333, 2412, 2425, 2435, 2436, 2438, 2442, 2429

Matrix: Soil Concentration/Units: ppm (mg/kg)

ANALYTE	SERIAL DILUTION		%	POST SPIKE		%
	SR	SDR	Difference	SPR	SA	Recovery
Antimony	ND			35.3	45.2	78.1
Arsenic	8.06	8.41	4.25			
Beryllium	0.608			46.4	45.2	101.0
Cadmium	ND			43.1	45.2	95.4
Chromium	38.9	37.3	4.20			
Copper	18.9			57.6	45.2	85.6
Iron	33000	32700	0.913			
Lead	11.7	12.8	8.98			
Manganese	339	326	3.91			
Mercury	0.078			0.352	0.282	97.2
Nickel	15.7	16.3	3.75			
Selenium	ND			41.2	45.2	91.2
Silver	ND			29.6	28.3	105
Thallium	0.140			44.7	45.2	98.6
Zinc	36.6			72.9	45.2	80.3

SR = Sample Result
SDR = Sample Dilution Result

SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 75 - 125% Recovery

QC Sample : 2028-001

QC Sample for following samples:
2028-001~004; 2293-001~008; 2333-008; 2412-001; 2425-001~004; 2435-001~005,011; 2436-001~003; 2438-001; 2442-001; 2429-001

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869
4/24/01

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Soil
Units: S-mg/Kg

Batch ID: AP024-0028

Blank

Parameter	Method Blank	MDL	Analysis Date
Total Recoverable Phenol	ND	2.50	04/24/2001

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
Total Recoverable Phenol	2435-002S	14.1	14.3	1	20

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
Total Recoverable Phenol	2435-002	ND	15.0	14.1	93.4	75 - 125

The above blank result applies to the follow samples E01-

2435-002	2435-011
2435-002D	2476-001
2435-002S	2195-005
2435-002SD	2517-001
2435-001	2522-001
2435-003	2557-001
2435-004	2576-001
2435-005	2583-001

++ = 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
4/19/01

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Soil
Units: S-mg/Kg

Batch ID: AP013-0026

Blank

Parameter	Method Blank	MDL	Analysis Date
Total Cyanide	ND	1.00	04/18/01

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
Total Cyanide	2435-001S	16.9	16.8	1	20

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
Total Cyanide	2435-001	ND	15.0	16.9	113	75 - 125

The above blank result applies to the follow samples E01-

2435-001	2435-012
2435-001D	2428-001
2435-001S	2428-002
2435-001SD	2428-003
2435-002	2428-004
2435-003	2428-005
2435-004	2428-006
2435-005	2428-007
2435-011	

++ = 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
B-0418	S-mg/Kg	ND	25

The above blank result applies to the follow samples E01-

LCS1-001	1987-7DT
2431-001SQC	2435-001
2431-001SQCD	2435-002
2431-001SQCS	2435-003
1987-7DD	2435-004
2430-001	2435-005
2431-001	2435-006
2432-001	2435-007
2432-002	2435-008
2432-003	2435-009
2432-004	2435-010
2432-005	2435-011

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
2431-001SQC	471	ND	86.4 %	545.26	S-mg/Kg	75%-125%

NC - Non-Calculable, Sample Result > 4x Spike Added.

The above spike result applies to the following samples E01-

1987-7DD	2435-002
2430-001	2435-003
2431-001	2435-004
2432-001	2435-005
2432-002	2435-006
2432-003	2435-007
2432-004	2435-008
2432-005	2435-009
1987-7DT	2435-010
2435-001	2435-011

2923

000315

INTEGRATED ANALYTICAL LABORATORIES

General Chemistry Quality Control

Duplicate Sample Results Summary

TPHC

QC Sample	Sample Result	Duplicate Result	Matrix-Units	RPD	Control Limit
2431-001SQC	ND	ND	S-mg/Kg	NC	20.0

The above duplicate results applies to the following samples E01-

1987-7DD	2435-002
2430-001	2435-003
2431-001	2435-004
2432-001	2435-005
2432-002	2435-006
2432-003	2435-007
2432-004	2435-008
2432-005	2435-009
1987-7DT	2435-010
2435-001	2435-011

2924

000316

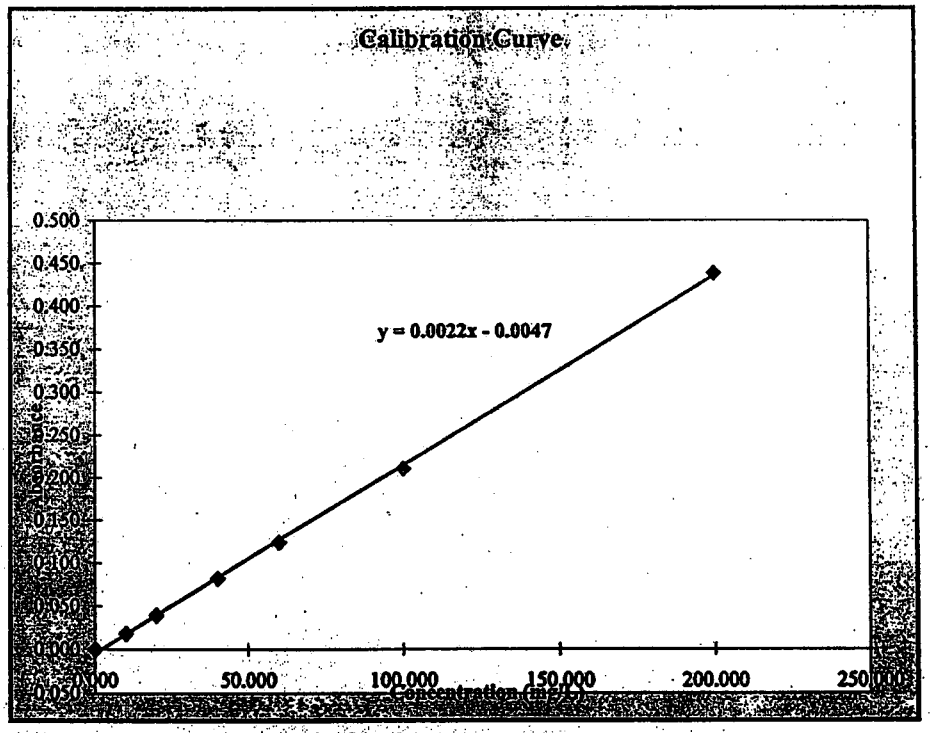
Integrated Analytical Laboratories

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

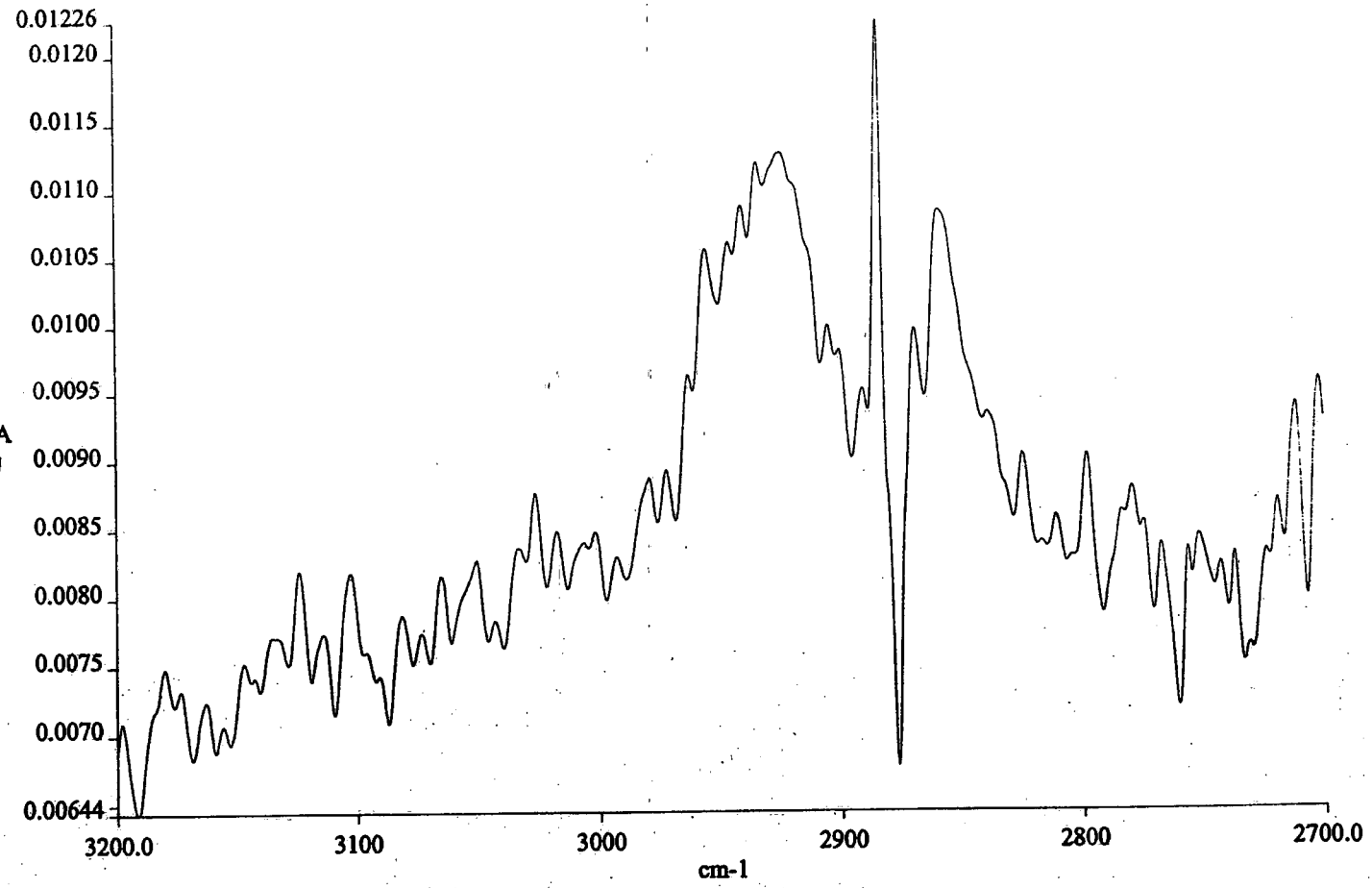
R^2=	0.999785534
Slope=	0.0022
Intercept=	-0.00471



Comments:

000317

2925



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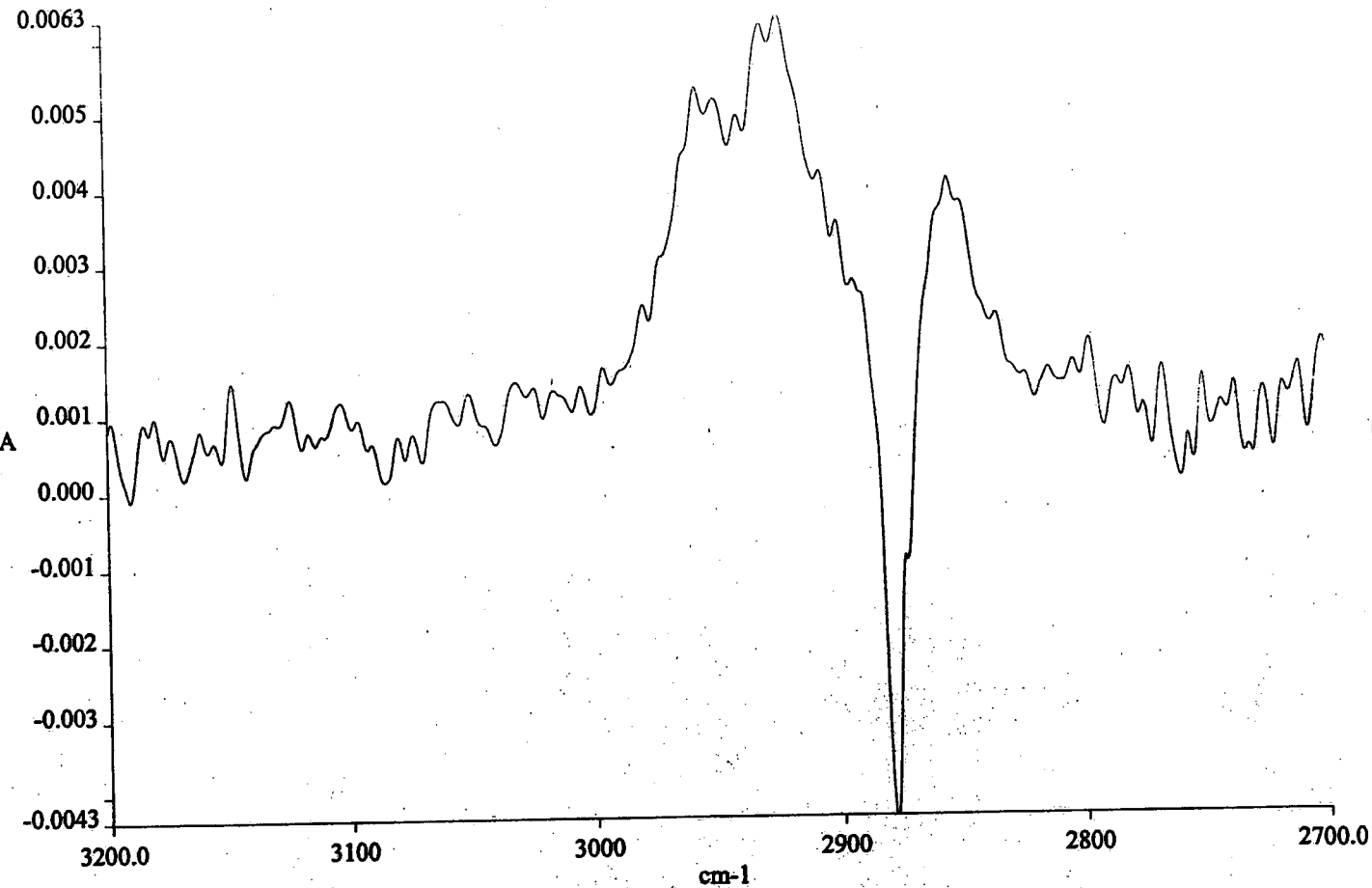
b-0418-3.sp

2926

0318



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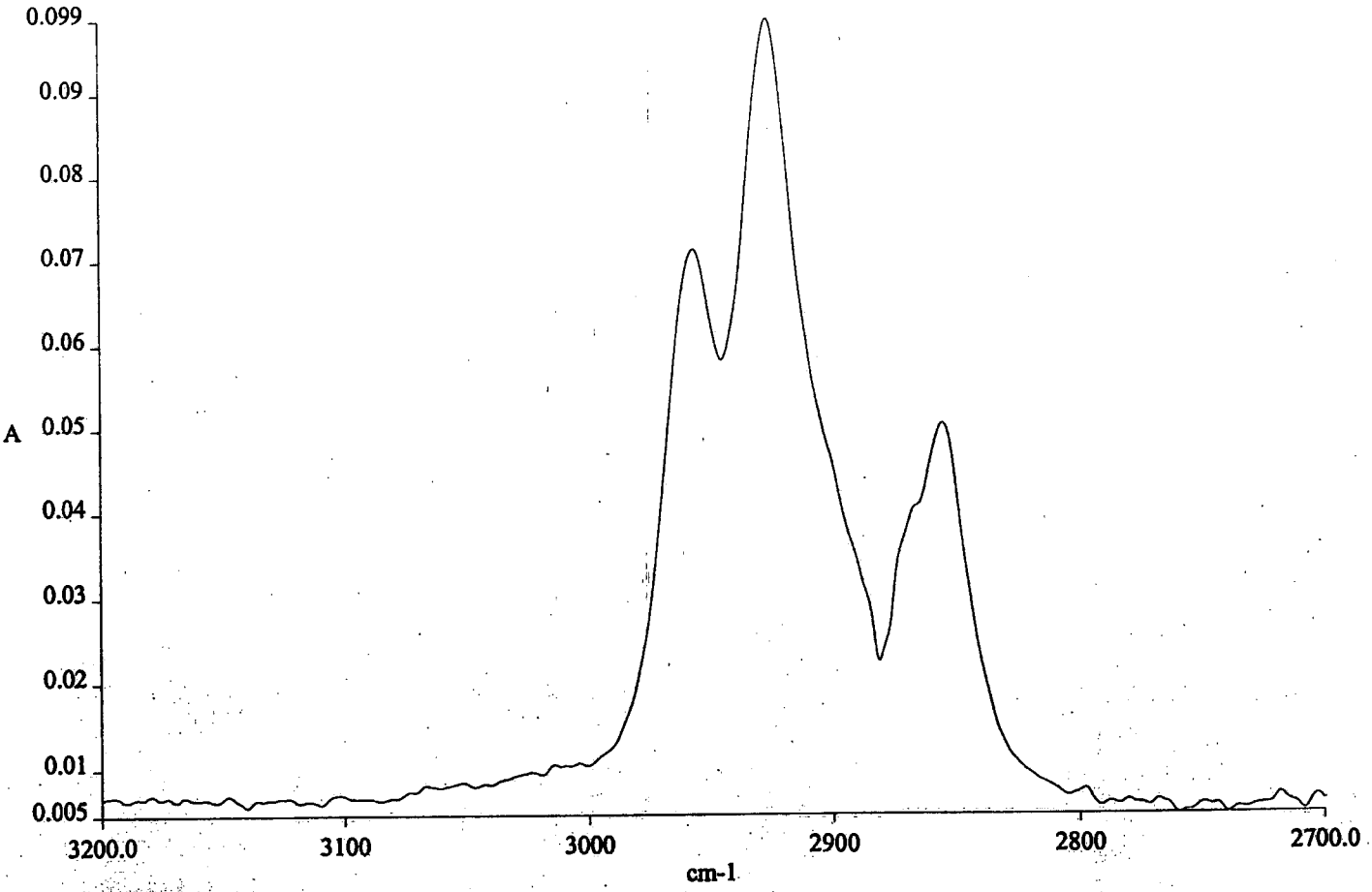

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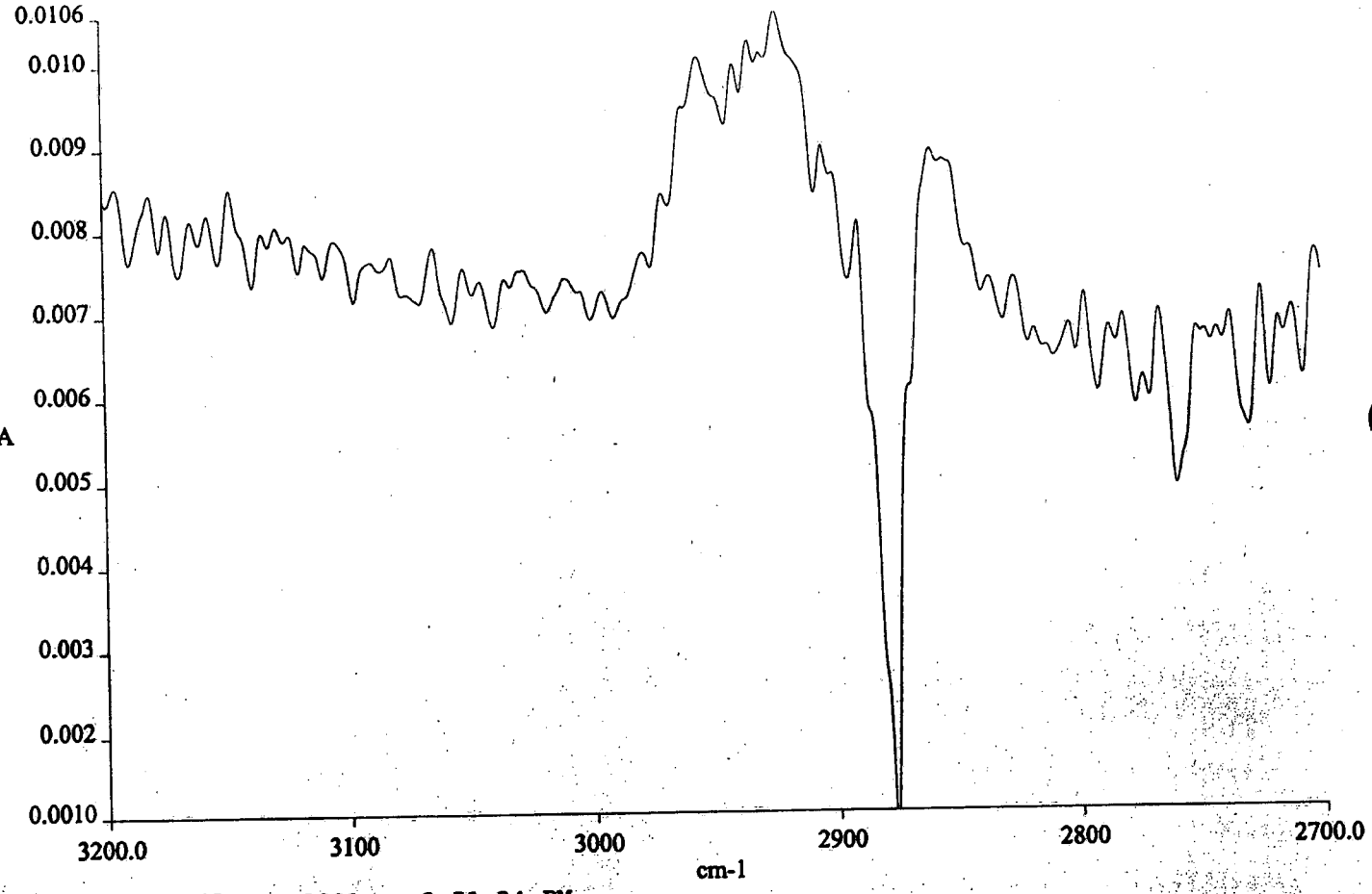
2928



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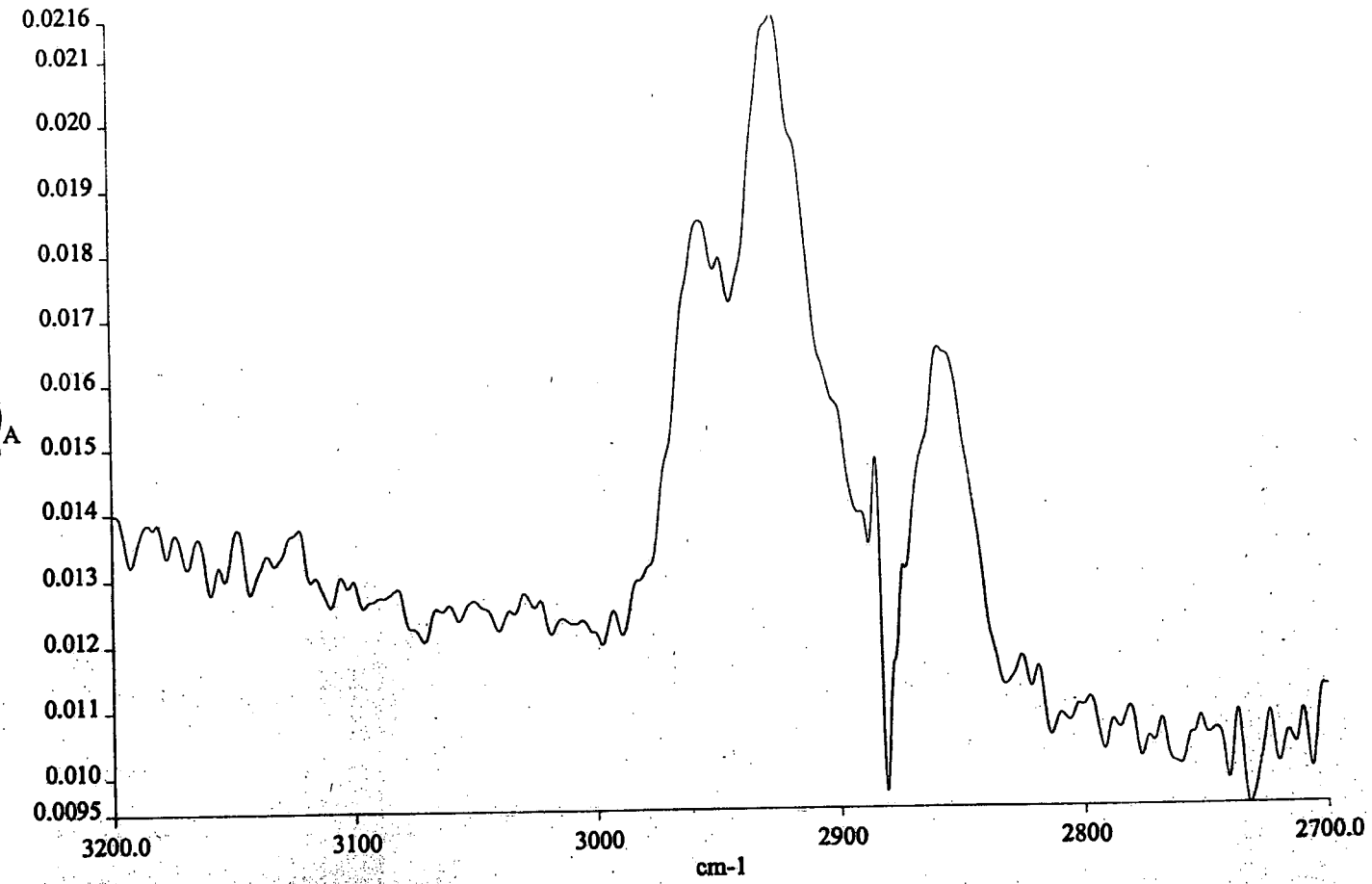
b-0418-3.sp



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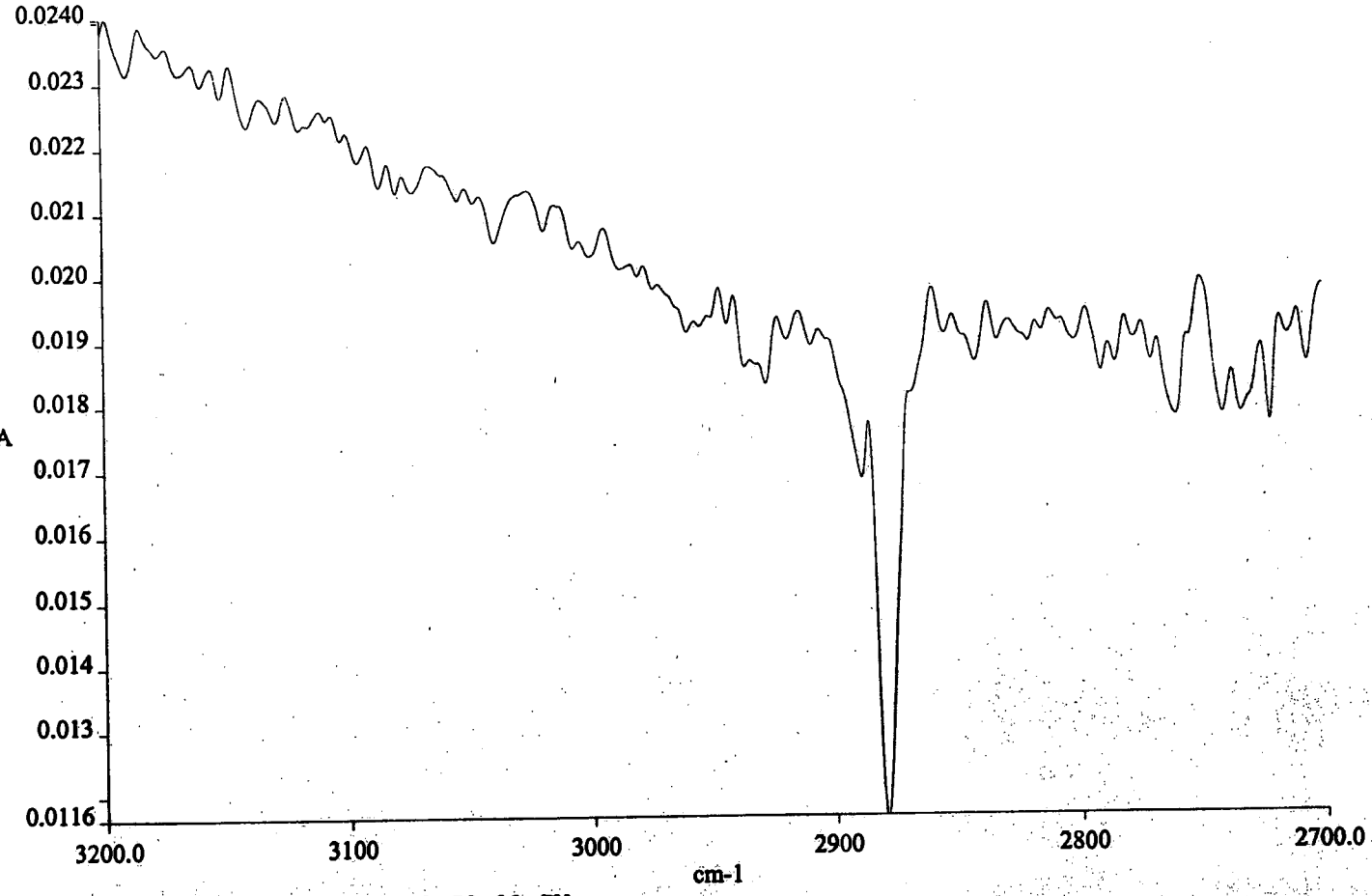
b-0418-3.sp

2930

000322



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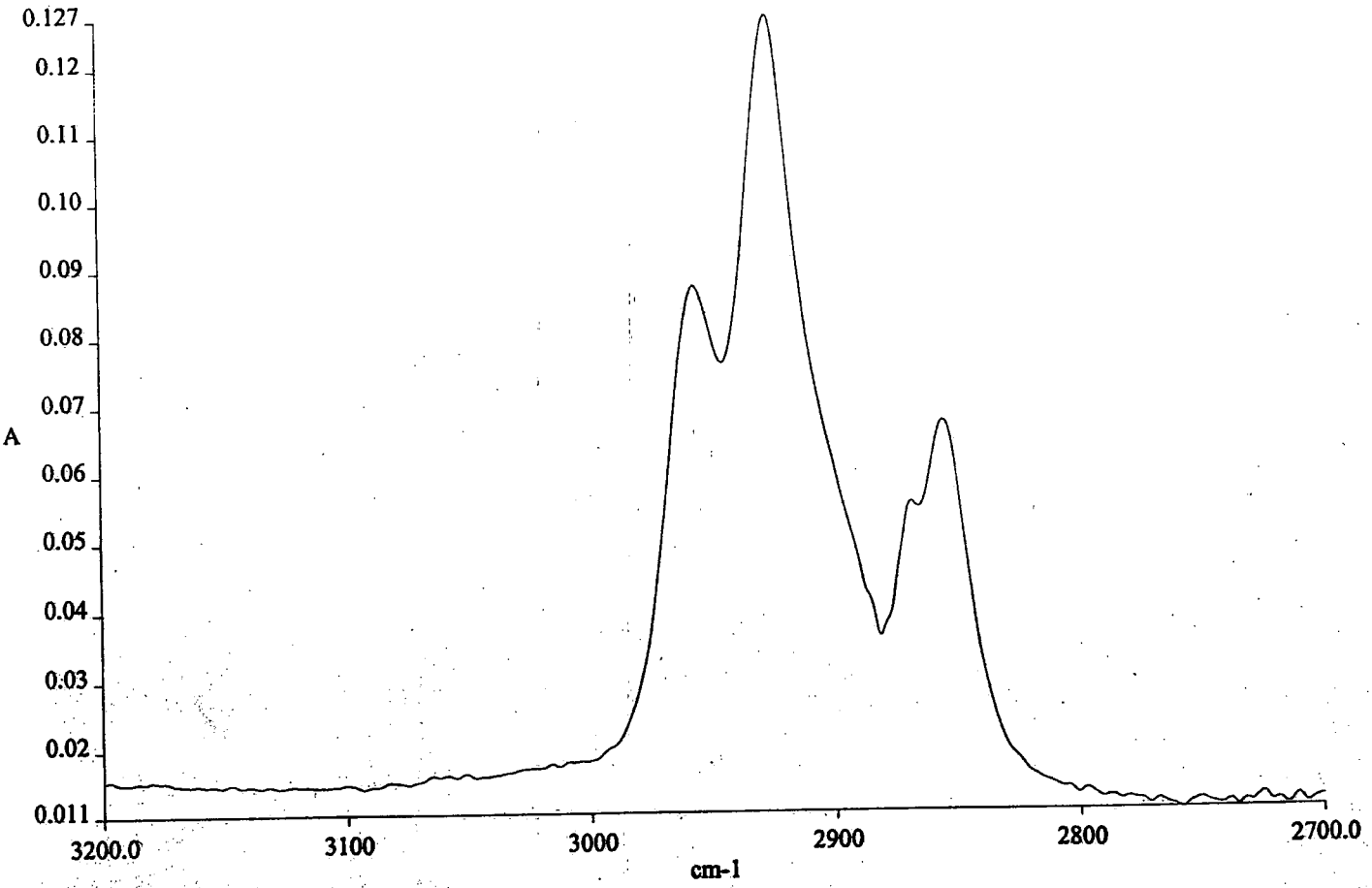

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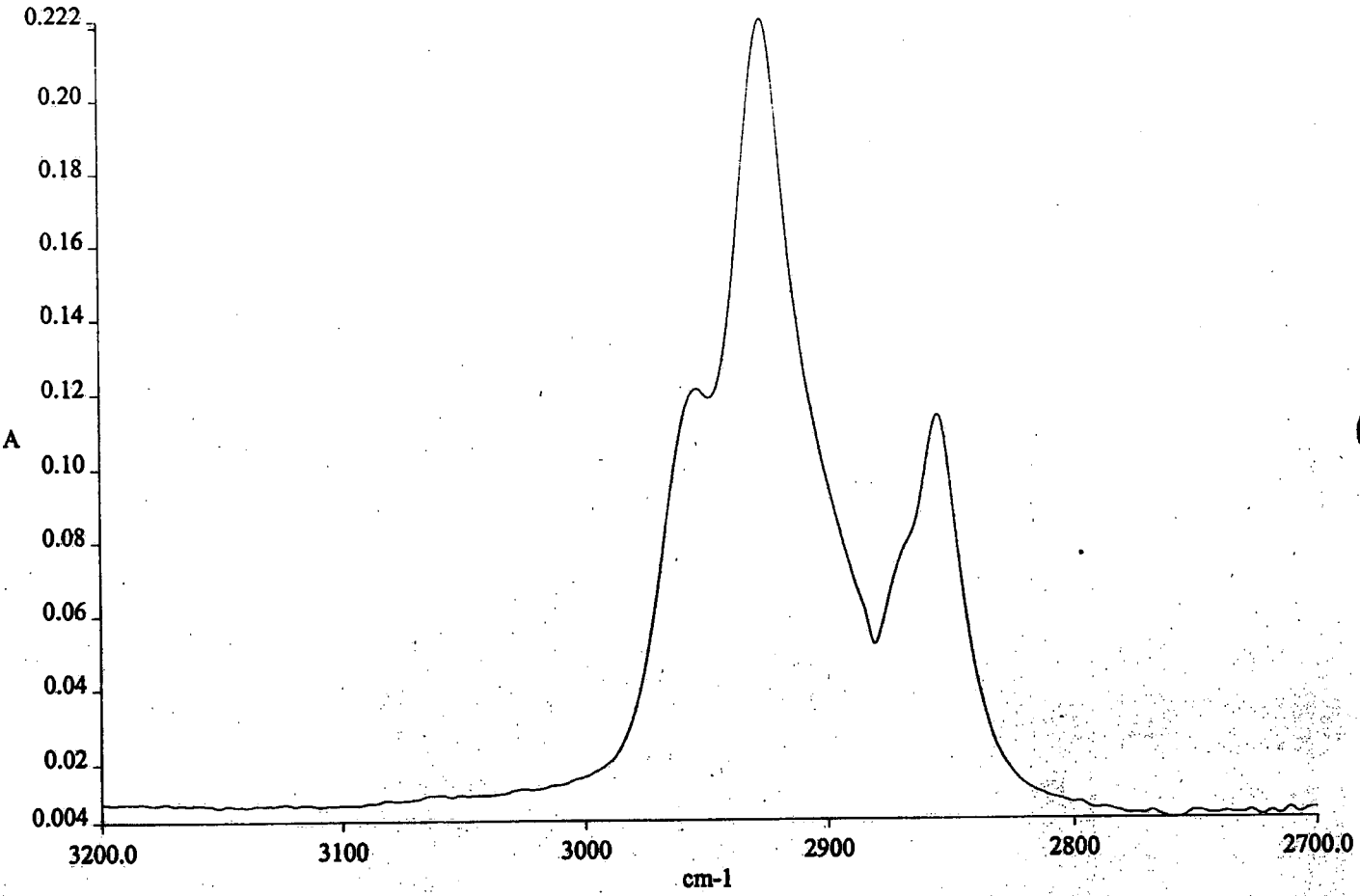

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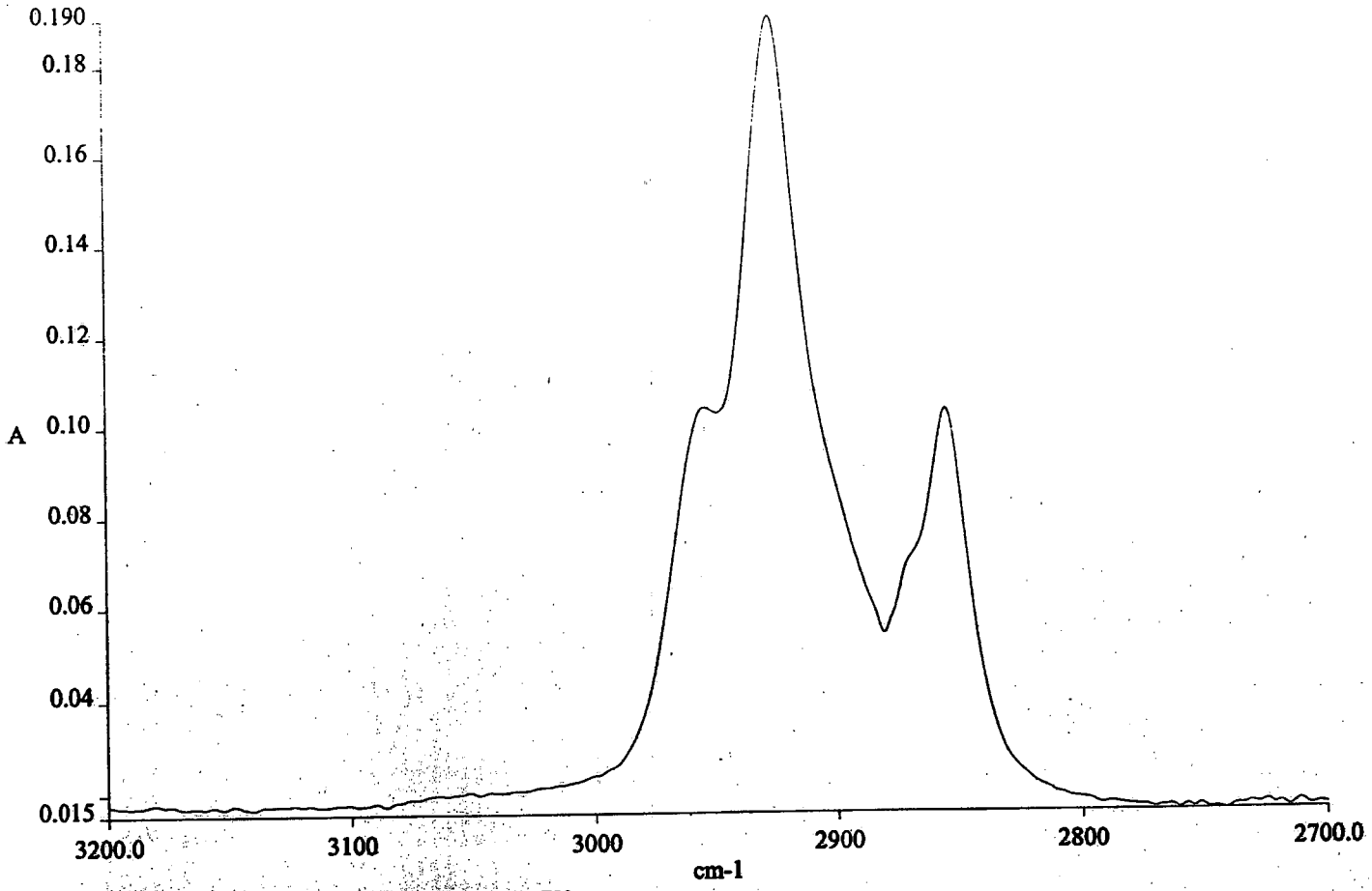

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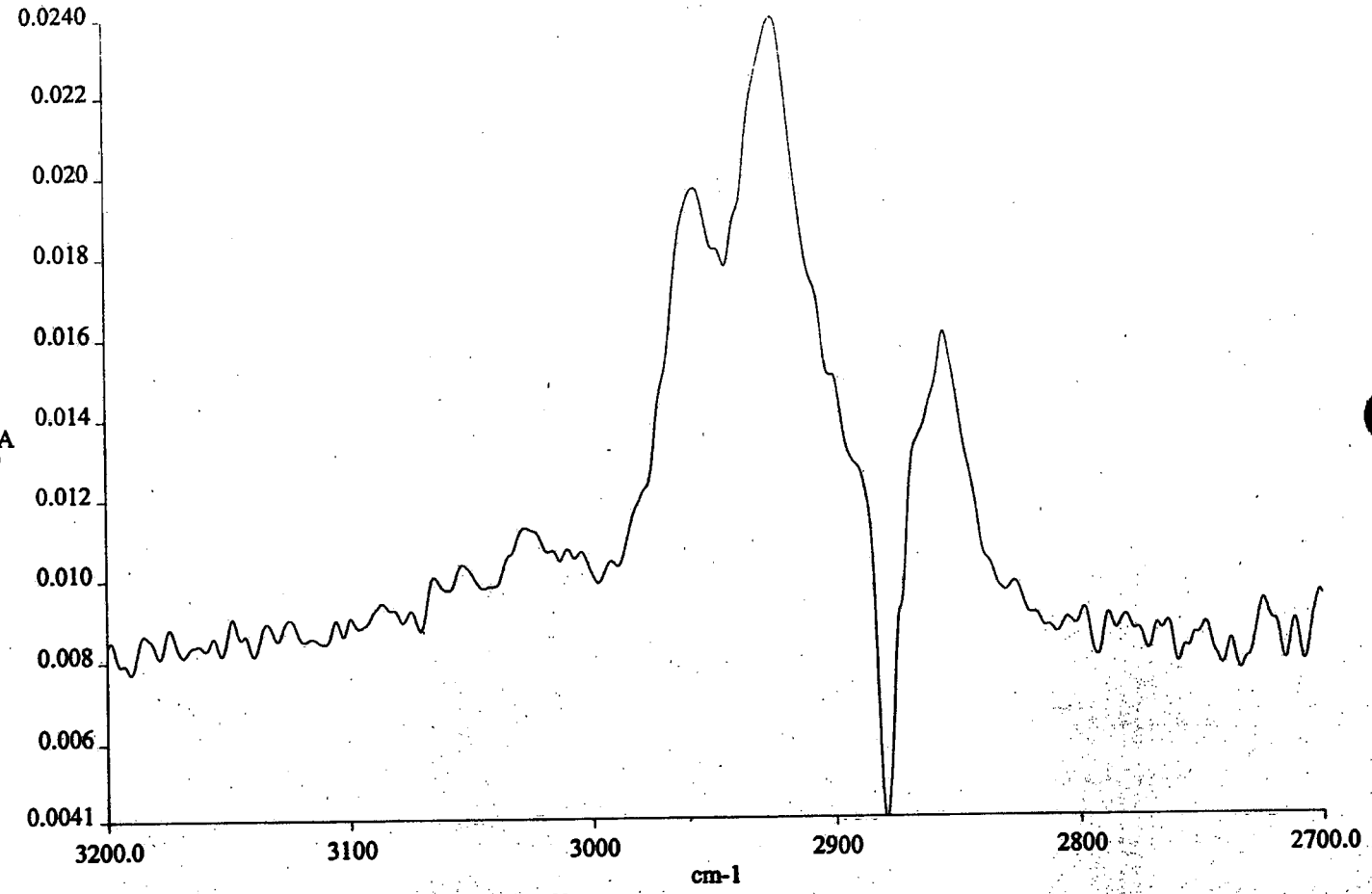
b-0418-3.sp

000326

2934



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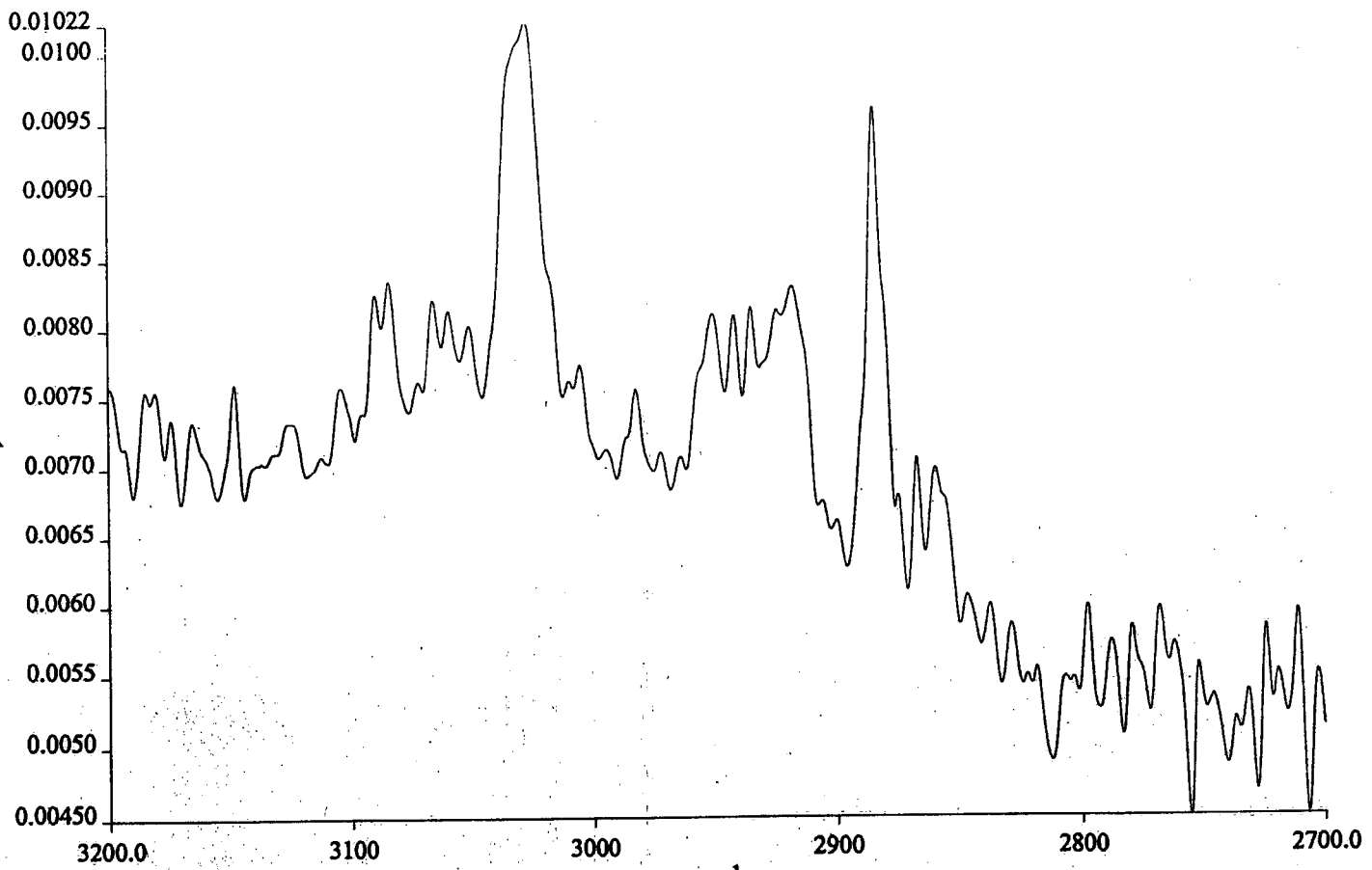

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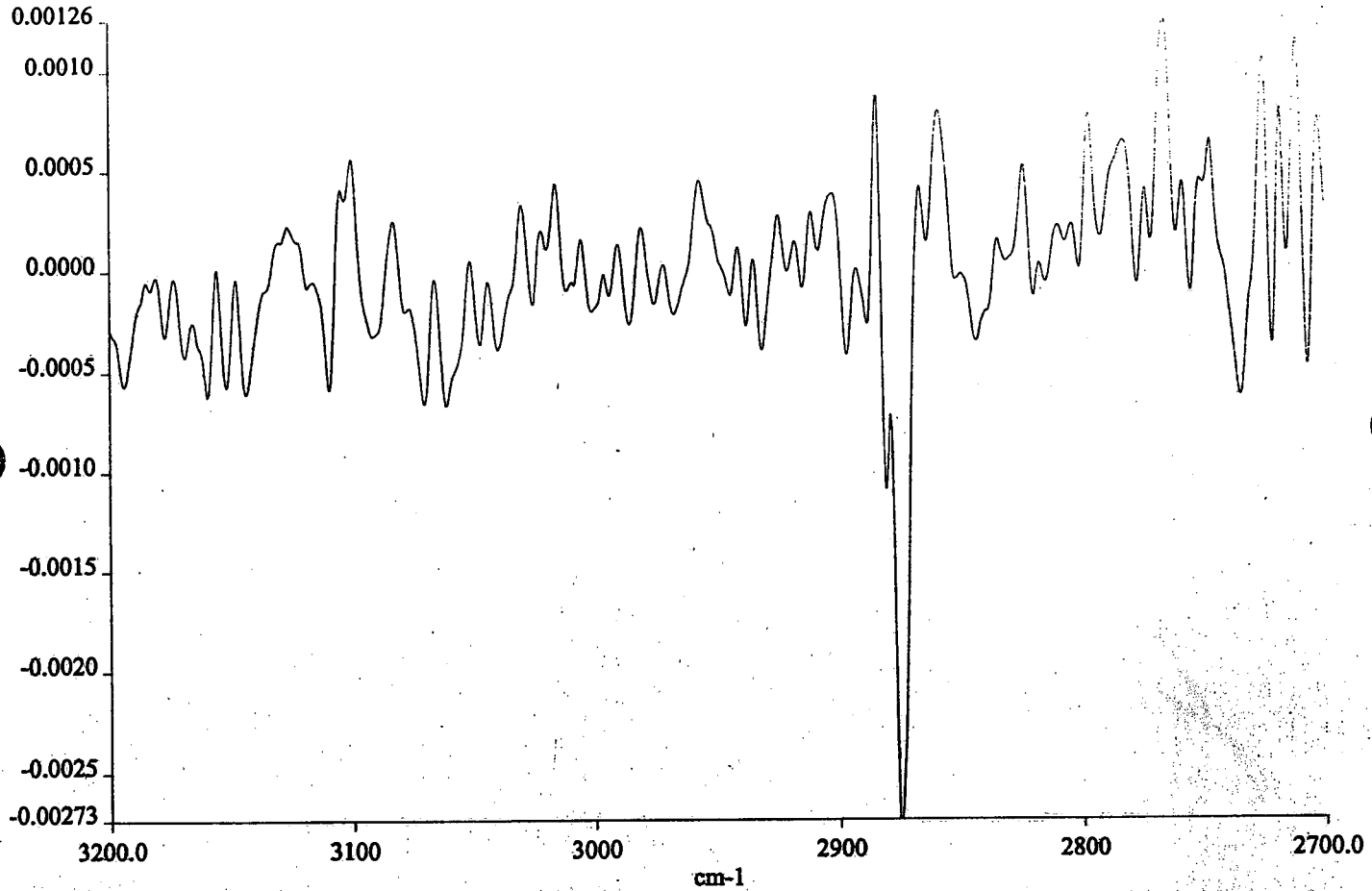
b-0418-3.sp

000328

2936



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C:\PEL_DATA\SPECTRA\BLANK\B-0418-3.SP, 2 scans, 4 cm-1

Phone # (973) 361-42[redacted]
Fax # (973) 989-5288

INTEGRATED ANALYTI[redacted]LABORATORIES
CHAIN OF [redacted]ODY

273 Fr[redacted] Rd
[redacted]ndol[redacted]7869

CLIENT & PROJECT

Company Name:	ENVIROTECTICH INC
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 wk4)
Other:

ANALYTICAL PARAMETERS / PRESERVATIVES

** Circle format required

Sample ID	Sample Description	Date	Time	am	pm	Matrix	# of Containers	Lab ID	TPH	PP+40	PAH								Comments
S-58		4/16/01	8:30	X		S	2	01	✓	✓									00104133
S-59			9:05				2	2	✓	✓									132
S-60			10:00				2	3	✓	✓									134
S-61			10:20				2	4	✓	✓									135
S-62			10:35				2	5	✓	✓									128
S-63			11:17				1	6	✓		✓								HOLD PAH ANALYSIS
S-64			11:45				1	7	✓		✓								"
S-65			11:58				1	8	✓		✓								"
S-66			12:25				1	9	✓		✓								"
S-67			12:47				1	10	✓		✓								"

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

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:	John Lovell	4/17/01	1225	Received by:	Jason Lovell
Relinquished by:	John Lovell	4/17/01	1620	Received by:	Paul Comisto
Relinquished by:				Received by:	
Relinquished by:				Received by:	
Relinquished by:				Received by:	

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Comments:

Lab Case #
2435

PAGE: 1 OF 2

Phone # (973) 361-4252
Fax # (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES
CHAIN OF CUSTODY

573 Franklin Rd
dolph, NJ 07869

CLIENT & PROJECT

Company Name:	ENVIROTACTICS INC.
Address:	2517 HWY 35
	BLD 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* (1 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 wkj)
Other:

ANALYTICAL PARAMETERS / PRESERVATIVES

** Circle format required

Sample ID	Sample Description	Sampling Date	Sampling Time	am	pm	Matrix	# of Containers	Lab ID	TPH	PP+40	VOT+10
S-68A		4/16/01	1:10		✓	S	2	11	✓	✓	
S-68B		1	1:15		✓	S	2	12	✓	✓	
TB	TRIP Blank	1				X	1	13			✓

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

Comments
00104129
00104130 HOLD SAMPLE
00104136

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]	4/17/01	1225	Received by: [signature]
Relinquished by:	[signature]	4/17/01	1620	Received by: FedEx courier
Relinquished by:				Received by:
Relinquished by:				Received by:
Relinquished by:				Received by:

Comments:

Lab Case #
2435

PAGE: 2 OF 2

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Rev 03

CHAIN OF CUSTODY

Case No.: E01-2435
Project : ORBIS - 444
Client/Project: ENVTACT/ORBIS
Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736
Date Received: 04/17/01
Time Received: 16:20
Report Format: Reduced

P.O. #: _____

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736
Verbal Due: May 1
Report Due: May 8

# of Containers	2	2	2	2	2	2
IAL ID #	2435-001	2435-002	2435-003	2435-004	2435-005	2435-006
Client ID #	S-58	S-59	S-60	S-61	S-62	S-63
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Sample Date	04/16/01	04/16/01	04/16/01	04/16/01	04/16/01	04/16/01
Sample Time	08:30	09:05	10:00	10:20	10:35	11:17
Methanol Kit	√	√	√	√	√	
Balance Rent	√					
VO+15, PP MP	√	√	√	√	√	
Pesticides	√	√	√	√	√	
PCB	√	√	√	√	√	
BNA + 25	√	√	√	√	√	
PAH						C
PP Metals-HIGH	√	√	√	√	√	
Cyanide, Total	√	√	√	√	√	
Phenols	√	√	√	√	√	
% Solids	√	√	√	√	√	√
TPHC-48hr TAT	√	√	√	√	√	√
Electronic Del.	√					

Comments: NOTE 1: PAH DEPENDENT ON TPHC FOR SAMPLES #6 - #10.
NOTE 2: SAMPLE #12 ON HOLD PENDING RESULTS OF SAMPLE #11. AS PER CHRIS N., EXTRACT & HOLD PCB, PEST & BNA ON SAMPLE #12. 4/18/01 (ES)
REV 01: AS PER CHRIS N. 4/18/01, RUN SAMPLE #8 FOR PAH DUE 5/1/01. CANCEL OTHER PAH'S ON HOLD. mrf
REV 02: PER CHRIS N., RUN VO ANALYSIS ON SAMPLE #12 4/24/01. RESULTS DUE 5/4/01. ALL OTHERS REMAIN ON HOLD. dgk
REV 03: PER CHRIS N., CANCEL ALL ANALYSIS ON HOLD FOR SAMPLE #12 4/30/01. dgk

CHAIN OF CUSTODY

Case No.: E01-2435
Project : ORBIS - 444
Client/Project: ENVTACT/ORBIS
Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736
Date Received: 04/17/01
Time Received: 16:20
Report Format: Reduced

P.O. #: _____

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736
Verbal Due: May 1
Report Due: May 8

# of Containers	2	2	2	2	2	2
IAL ID #	2435-007	2435-008	2435-009	2435-010	2435-011	2435-012
Client ID #	S-64	S-65	S-66	S-67	S-68A	S-68B
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Sample Date	04/16/01	04/16/01	04/16/01	04/16/01	04/16/01	04/16/01
Sample Time	11:45	11:58	12:25	12:47	13:10	13:15
Methanol Kit					√	√
VO+15, PP MP					√	√
Pesticides					√	C
PCB					√	C
BNA + 25					√	C
PAH	C	√	C	C		
Extract & Hold						√
PP Metals-HIGH					√	C
Cyanide, Total					√	C
Phenols					√	C
% Solids	√	√	√	√	√	√
TPHC-48hr TAT	√	√	√	√	√	C

Comments: NOTE 1: PAH DEPENDENT ON TPHC FOR SAMPLES #6 - #10.
NOTE 2: SAMPLE #12 ON HOLD PENDING RESULTS OF SAMPLE #11. AS PER CHRIS N., EXTRACT & HOLD PCB, PEST & BNA ON SAMPLE #12. 4/18/01 (ES)
REV 01: AS PER CHRIS N. 4/18/01, RUN SAMPLE #8 FOR PAH DUE 5/1/01. CANCEL OTHER PAH'S ON HOLD. mrf
REV 02: PER CHRIS N., RUN VO ANALYSIS ON SAMPLE #12 4/24/01. RESULTS DUE 5/4/01. ALL OTHERS REMAIN ON HOLD. dgk
REV 03: PER CHRIS N., CANCEL ALL ANALYSIS ON HOLD FOR SAMPLE #12 4/30/01. dgk

CHAIN OF CUSTODY

Case No.: E01-2435
Project : ORBIS - 444
Client/Project: ENVTACT/ORBIS
Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736
Date Received: 04/17/01
Time Received: 16:20
Report Format: Reduced

P.O. #: _____

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736
Verbal Due: May 1
Report Due: May 8

# of Containers	1
IAL ID #	2435-013
Client ID #	TB
Matrix	Soil
Sample Date	04/16/01
Sample Time	:
Methanol Kit	√
VO + 10, PP MP	√

Comments: NOTE 1: PAH DEPENDENT ON TPHC FOR SAMPLES #6 - #10.
NOTE 2: SAMPLE #12 ON HOLD PENDING RESULTS OF SAMPLE #11. AS PER CHRIS N., EXTRACT & HOLD PCB, PEST & BNA ON SAMPLE #12. 4/18/01 (ES)
REV 01: AS PER CHRIS N. 4/18/01, RUN SAMPLE #8 FOR PAH DUE 5/1/01. CANCEL OTHER PAH'S ON HOLD. mrf
REV 02: PER CHRIS N., RUN VO ANALYSIS ON SAMPLE #12 4/24/01. RESULTS DUE 5/4/01. ALL OTHERS REMAIN ON HOLD. dgk
REV 03: PER CHRIS N., CANCEL ALL ANALYSIS ON HOLD FOR SAMPLE #12 4/30/01. dgk

7947

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: 2435 CLIENT: Enviotactics

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

CHAIN OF CUSTODY: (COMPLETE) / INCOMPLETE Comments:

Sample Bottles Intact:	✓	Comments:
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 DM DATE 4/18/01

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 DM DATE

000335

2943

Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-2435
Client : Envirotactics Inc.
Project : ORBIS - 444

			GC/MS V	EXTRACT DATE	EXTRACT TIME	EXTRACT INITIAL	ANALYSIS DATE	ANALYSIS TIME	ANALYSIS INITIAL
Methanol Kit	2435-001	S					4/18	900	
	2435-002	S							
	2435-003	S							
	2435-004	S							
	2435-005	S							
	2435-011	S							
	2435-012	S							
	2435-013	S							
Balance Rent	2435-001	S							
VO+15, PP MP	2435-001	S							
	2435-002	S							
	2435-003	S							
	2435-004	S							
	2435-005	S							
	2435-011	S							
	2435	S							
VO + 10, PP MP	2435-013	S							
			GC EX						
Pesticides	2435-001	S		4/18	900	Tom2	4.18	405	US
	2435-002	S							
	2435-003	S							
	2435-004	S							
	2435-005	S							
	2435-011	S							
	2435-012	S		4/19	900	Tom2			
PCB	2435-001	S		4/18	900	Tom2	4.18	405	MY
	2435-002	S							
	2435-003	S							
	2435-004	S							
	2435-005	S							
	2435-011	S							
	2435-012	S		4/19	900	Tom2	4.19	300	MY
			GC/MS X						
BNA + 25	2435-001	S		4/19	700-300	DL	4/20		DL
	2435-002	S							
	2435-003	S							
	2435-004	S							
	2435-005	S							
	2435-011	S							
	2435	S							
PAH	2435-006	S		4/20	700-300	DL			
	2435	S							
	2435	S							
	2435	S							
	2435	S							

Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-2435
Client : Envirotactics Inc.
Project : ORBIS - 444

	EXTRACT		EXTRACT DATE	EXTRACT TIME	EXTRACT INITIAL	ANALYSIS DATE	ANALYSIS TIME	ANALYSIS INITIAL
Extract & Hold	2435-012	S	4/19	7:30-3M	DL		—	
	METALS							
PP Metals-HIGH	2435-001	S	4/18/01		DL	4/18	1200	DL
	2435-002	S						
	2435-003	S						
	2435-004	S						
	2435-005	S						
	2435-011	S						
	2435	S	—			—		
	WETCHEM							
Cyanide, Total	2435-001	S	4/18/01	8:00	BS	4/18/01	14:20	BS
	2435-002	S						
	2435-003	S						
	2435-004	S						
	2435-005	S						
	2435-011	S						
	2435	S						
Phenols	2435-001	S	4/18	900	DM	4/24	1230	DM
	2435-002	S						
	2435-003	S						
	2435-004	S						
	2435-005	S						
	2435-011	S						
	2435	S						
% Solids	2435-001	S	4/18	1100	EC			
	2435-002	S						
	2435-003	S						
	2435-004	S						
	2435-005	S						
	2435-006	S						
	2435-007	S						
	2435-008	S						
	2435-009	S						
	2435-010	S						
	2435-011	S						
	2435	S						
TPHC-48hr TAT	2435-001	S	4/18	8000	DM	4/18	1430	EC
	2435-002	S						
	2435-003	S						
	2435-004	S						
	2435-005	S						
	2435-006	S						
	2435-007	S						
	2435-008	S						
	2435-009	S						

Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-2435
Client : Envirotactics Inc.
Project : ORBIS - 444

	WETCHEM		EXTRACT			ANALYSIS		
			DATE	TIME	INITIAL	DATE	TIME	INITIAL
TPHC-48hr TAT	2435-010	S	4/18	800	DM	4/18	1430	ac
	2435-011	S	↓				↓	
	2435	S						
	AIR							
Electronic Del.	2435-001	S	—			—		

REVIEW & APPROVAL: [signature]
REMARKS :

ACCREDITED LABORATORIES, INC.

Implementing Tomorrow's Technology, Today™....

Analytical Data Report

for

Envirotactics
2517 Rt. 35, Bldg. D Suite 202
Manasquan, NJ 08736

Project: Orbis

Accredited Laboratories Case No.: 9880
Date Received: 10/27/00

Field ID	Laboratory Sample #
T1	200013298
T2	200013299
T3	200013300
T4	200013301

Accredited Laboratories, Inc. New Jersey Certification Number 12007. This data has been reviewed and accepted by:

T Gaydos

Theodore C. Gaydos
Technical Director

(732) 541-2025

CORPORATE OFFICES
20 Pershing Avenue
Carteret, New Jersey 07008

FAX (732) 541-1383

Printed on RECYCLED paper made with 20% post consumer waste

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Quality Control PCBs: Standard Calibrations Retention Time Window Surrogate Recovery Summary Analytical Sequence MS/MSD Summary Method Blank	14
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ACCREDITED LABORATORIES, INC.
20 PERSHING AVENUE
CARTERET, NEW JERSEY 07008
PHONE (732) 541-2025 FAX (732) 541-1383

CHAIN OF CUSTODY FORM

STATE AGENCY (NJ) NY PA CT DE OTHER

ENT	ENVIRO TACTICS		
ADDRESS	2517 HWY 35 BLD D-202		
CITY	MANASQUAN		
STATE	NJ	ZIP	08731

PROJECT	ORBIS
CONTACT	CHRIS NEUFFER
PHONE	732-292-0100
FAX	732-292-2808

ALI SAMPLE #	FIELD ID	*C	**M	DATE / TIME SAMPLED	SAMPLE DESCRIPTION	ANALYSIS
0013298	T1	2	S	10/27 4:30	TRANSFORMERS	PCB
0013299	T2	2	S	10/27 4:35		PCB
0013300	T3	2	S	10/27 4:40		PCB
0013301	T4	2	S	10/27 4:45		PCB

*C = NO. CONTAINERS TURNAROUND: STANDARD FAX (If Blank, Std. 3 weeks)

DELIVERABLES (circle one): STD (REDUCED) FULL OTHER

RELINQUISHED BY PRINT	RELINQUISHED BY SIGN	RECEIVED BY PRINT	RECEIVED BY SIGN	ORGANIZATION	DATE	TIME	REASON
CHRIS NEUFFER	[signature]	[signature]	[signature]	ALI	10/27/00	1830	[signature]

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: CHRIS NEUFFER SIGN: [signature]

COMMENTS	HAZSITE
	2949

ALI QUOTE#	
ALI CASE#	9880
P.O.#	

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Accredited Laboratories, Inc. Name: JASON MILLER	Location: Carteret, N.J. Title: Sno
Field Sample Seal No. None	Date Broken: __/__/__	Military Time Seal Broken _____
Case No. 9880	__ Check if No Seal on Sample Shuttle.	

Field #	Laboratory #	Test Name	Date Sampled	Date Received
T1	200013298	PCB	10/27/00	10/27/00
T2	200013299	PCB	10/27/00	10/27/00
T3	200013300	PCB	10/27/00	10/27/00
T4	200013301	PCB	10/27/00	10/27/00

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
11/3/00	10:00	Printed Name JASON MILLER Signature	Printed Name P. Kunkle Signature PK	Extraction
11/3/00	12:00	Printed Name P. Kunkle Signature PK	Printed Name JASON MILLER Signature	Cold Storage
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

FORM: 29ICOC

METHODOLOGY SUMMARY

PCB's - EPA 8082 (soil/solid)

A 30 gram portion of solid is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone using sonication technique. The extract is separated from the sample by either centrifugation or filtration. The extract is then solvent-exchanged to hexane in a K-D concentrator to a final volume of 10 ml. The extract is injected into a gas chromatograph and the compounds in the GC effluent are detected by an electron capture detector.

7951

Date: 10/30/00 ACCREDITED LABORATORIES, INC. Time: 9:36:51

ORGANIC ANALYSIS LABORATORY CHRONICLE

DISK

Client: Envirotactics
Test Date Due: 11/03/00
Fax Data Due: **11/08/00** Hard Copy Due: **11/08/00**
Client Project Name: Orbis

Date Sampled:10/27/00 Date Received:10/27/00 Report Package: Reduced

Test: PCB QC#: _____
Test Description:PCBs (PCB)

By Method: _____

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#	x	Date	Time	Init	Date	Time	Init	
T1	9880	200013298	S	11/3/00		PK	11/4/00	02:24	JH	
T2	9880	200013299	S	"	"	"	"	03:01	"	
T3	9880	200013300	S	"	"	"	"	03:38	"	
T4	9880	200013301	S	"	"	"	"	04:16	"	

Reviewed by: _____ Date: 11/08/00

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other

RPT:Report01

4

CONFORMANCE/NON-CONFORMANCE SUMMARY

Accredited Labs received 4 soil samples (Project: Orbis; ALI Case #9880) from Envirotactics, Inc. on 10/27/00 for the analyses of PCBs.

All analyses were performed within the required holding time.

All analyses were reported on a dry weight basis.

The MDL levels were elevated for ALI Sample #0013300 due to matrix interference.

"The laboratory has reviewed the quality assurance and quality control measurements for the sample analysis stated above."

T Gaydos

Theodore C. Gaydos
Technical Director

State of New Jersey
Department of Environmental Protection

Certifies That

ACCREDITED LABORATORIES INCORPORATED

LABORATORY CERTIFICATION NO. [illegible]007

[illegible] the requirements of the

Regulations Governing The Certification Of

Laboratories And Environmental Measurements N.J.A.C. 7:18 et. seq.

is hereby approved as a

State Certified Environmental Laboratory

To perform the analyses as indicated on the Annual Certified Parameter List

which must accompany this certificate to be valid

Expiration Date June 30, 2001

Joseph F. Aiello, Chief
Office of Quality Assurance

THIS CERTIFICATE IS TO BE CONSPICUOUSLY DISPLAYED AT THE LABORATORY WITH THE ANNUAL CERTIFIED PARAMETER LIST IN A LOCATION ON THE PREMISES VISIBLE TO THE PUBLIC.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9880	MATRIX	Soil
SAMPLE NUMBER	0013298	DILUTION FACTOR	1
DATA FILE	>G7827	DATE EXTRACTED	11/03/00
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	11/04/00
FIELD ID	T1	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	17.9
11104282	Aroclor-1221	U	17.9
11141165	Aroclor-1232	U	17.9
53469219	Aroclor-1242	U	17.9
12672296	Aroclor-1248	U	17.9
11097691	Aroclor-1254	25500 E I	17.9
11096825	Aroclor-1260	U	17.9

Percent Solid of 92.9 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9880	MATRIX	Soil
SAMPLE NUMBER	0013298DL 10	DILUTION FACTOR	10
DATA FILE	>G7845	DATE EXTRACTED	11/03/00
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	11/06/00
FIELD ID	T1	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		179
11104282	Aroclor-1221	U		179
11141165	Aroclor-1232	U		179
53469219	Aroclor-1242	U		179
12672296	Aroclor-1248	U		179
11097691	Aroclor-1254	41000	DI	179
11096825	Aroclor-1260	U		179

Percent Solid of 92.9 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9880	MATRIX	Soil
SAMPLE NUMBER	0013299	DILUTION FACTOR	1
DATA FILE	>G7828	DATE EXTRACTED	11/03/00
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	11/04/00
FIELD ID	T2	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	25.4
11104282	Aroclor-1221	U	25.4
11141165	Aroclor-1232	U	25.4
53469219	Aroclor-1242	U	25.4
12672296	Aroclor-1248	U	25.4
11097691	Aroclor-1254	U	25.4
11096825	Aroclor-1260	22800 E I	25.4

Percent Solid of 65.5 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9880	MATRIX	Soil
SAMPLE NUMBER	0013299DL 20	DILUTION FACTOR	20
DATA FILE	>G7846	DATE EXTRACTED	11/03/00
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	11/06/00
FIELD ID	T2	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		509
11104282	Aroclor-1221	U		509
11141165	Aroclor-1232	U		509
53469219	Aroclor-1242	U		509
12672296	Aroclor-1248	U		509
11097691	Aroclor-1254	U		509
11096825	Aroclor-1260	35000	DI	509

Percent Solid of 65.5 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9880	MATRIX	Soil
SAMPLE NUMBER	0013300	DILUTION FACTOR	10
DATA FILE	>G7829	DATE EXTRACTED	11/03/00
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	11/04/00
FIELD ID	T3	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		232
11104282	Aroclor-1221	U		232
11141165	Aroclor-1232	U		232
53469219	Aroclor-1242	U		232
12672296	Aroclor-1248	U		232
11097691	Aroclor-1254	U		232
11096825	Aroclor-1260	2310	I	232

Percent Solid of 71.9 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9880	MATRIX	Soil
SAMPLE NUMBER	0013301	DILUTION FACTOR	1
DATA FILE	>G7830	DATE EXTRACTED	11/03/00
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	11/04/00
FIELD ID	T4	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	21.0
11104282	Aroclor-1221	U	21.0
11141165	Aroclor-1232	U	21.0
53469219	Aroclor-1242	U	21.0
12672296	Aroclor-1248	U	21.0
11097691	Aroclor-1254	U	21.0
11096825	Aroclor-1260	11600 E I	21.0

Percent Solid of 79.2 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9880	MATRIX	Soil
SAMPLE NUMBER	0013301DL 20	DILUTION FACTOR	20
DATA FILE	>G7847	DATE EXTRACTED	11/03/00
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	11/06/00
FIELD ID	T4	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		421
11104282	Aroclor-1221	U		421
11141165	Aroclor-1232	U		421
53469219	Aroclor-1242	U		421
12672296	Aroclor-1248	U		421
11097691	Aroclor-1254	U		421
11096825	Aroclor-1260	13000	DI	421

Percent Solid of 79.2 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

Initial Calibration Data
HSL Compounds

Case No:

Instrument ID: GC/ECD #7

Contractor: ACCREDITED LABS INC.

Calibration Date: 01/11/00

Contract No: CA7PCB

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % RSD for CCC is 20%

Comp No.	Compound	Laboratory ID: >G4995 RF 1.00	>G4994 RF 10.00	>G4993 RF 25.00	>G4992 RF 50.00	>G4991 RF 100.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CORR1	CCC	SPCC	
1)	Tetrachloro-m-xylene	464375.	411014.	388830.	352823.	299289.	6.129	383266.	16.167	.997740			(Conc=.200,
2)	Aroclor-1016 Peak 1	10431.0	8862.20	8423.72	7563.74	6582.56	9.396	8372.64	17.244	.996199			
3)	Aroclor-1016 Peak 2	22905.0	19867.3	20050.2	18944.3	17172.1	10.517	19787.8	10.524	.998304			
4)	Aroclor-1016 Peak 3	7554.00	7068.10	7132.88	6411.04	6151.62	10.859	6863.53	8.315	.999221			
5)	Aroclor-1260 Peak 1	72871.0	61340.4	56951.3	52941.6	46165.7	18.777	58054.0	17.204	.996772			
6)	Aroclor-1260 Peak 2	63563.0	58345.6	55868.4	52532.6	47371.7	19.892	55536.3	10.957	.998148			
7)	Aroclor-1260 Peak 3	109806.	100842.	98976.8	93276.4	84020.3	22.661	97384.3	9.799	.998092			
8)	DCB	626210.	559026.	515750.	508109.	392872.	28.962	520393.	16.397	.993678			(Conc=.200,

RF - Response Factor (Subscript is amount in ug/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 11/03/00

Contractor: ACCREDITED LABS INC.

Time: 18:17

Contract No: CA7PCB

Laboratory ID: >G7814

Instrument ID: GC/ECD #7

Initial Calibration Date: 01/11/00

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Tetrachloro-m-xylene	383266.	356033.	7.11			(Conc=1.00)
Aroclor-1016 Peak 1	8372.64	8280.36	1.10			
Aroclor-1016 Peak 2	19787.8	17579.5	11.16			
Aroclor-1016 Peak 3	6863.53	6085.64	11.33			
Aroclor-1260 Peak 1	58054.0	63610.3	9.57			
Aroclor-1260 Peak 2	55536.3	63334.1	14.04			
Aroclor-1260 Peak 3	97384.3	104761.	7.57			
DCB	520393.	571271.	9.78			(Conc=1.00)

RF - Response Factor from daily standard file at 25.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 11/06/00

Contractor: ACCREDITED LABS INC.

Time: 17:59

Contract No: CA7PCB

Laboratory ID: >G7843

Instrument ID: GC/ECD #7

Initial Calibration Date: 01/11/00

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Tetrachloro-m-xylene	383266.	436823.	13.97			(Conc=1.00)
Aroclor-1016 Peak 1	8372.64	7466.88	10.82			
Aroclor-1016 Peak 2	19787.8	17248.8	12.83			
Aroclor-1016 Peak 3	6863.53	6338.80	7.65			
Aroclor-1260 Peak 1	58054.0	65519.9	12.86			
Aroclor-1260 Peak 2	55536.3	60434.8	8.82			
Aroclor-1260 Peak 3	97384.3	109567.	12.51			
DCB	520393.	549123.	5.52			(Conc=1.00)

RF - Response Factor from daily standard file at 25.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

ACCREDITED LABORATORIES, INC.
RETENTION TIME WINDOW

Instrument ID: HP5890-G
Date Analyzed: 01/11/00

GC #7 Primary Column

ANALYTE	RETENTION TIMES 0.10 ug/L	1.0 ug/L	2.5 ug/L	5.0 ug/L	10.0 ug/L	Average
Aroclor-1016 Peak 1	9.41	9.40	9.39	9.39	9.39	9.40
Aroclor-1016 Peak 2	10.55	10.53	10.51	10.50	10.49	10.52
Aroclor-1016 Peak 3	10.89	10.88	10.85	10.84	10.83	10.86
Aroclor-1260 Peak 1	18.80	18.79	18.77	18.77	18.76	18.78
Aroclor-1260 Peak 2	19.91	19.91	19.89	19.88	19.87	19.89
Aroclor-1260 Peak 3	22.68	22.67	22.66	22.65	22.65	22.66

ANALYTE	RT WINDOW	FROM	TO
Aroclor-1016 Peak 1	± .070	9.33	9.47
Aroclor-1016 Peak 2	± .070	10.45	10.59
Aroclor-1016 Peak 3	± .070	10.79	10.93
Aroclor-1260 Peak 1	± .070	18.71	18.85
Aroclor-1260 Peak 2	± .070	19.82	19.96
Aroclor-1260 Peak 3	± .070	22.59	22.73

ACCREDITED LABORATORIES, INC.
RETENTION TIME WINDOW

Instrument ID: HP5890-H
Date Analyzed: 01/11/00

GC #8 Confirmation Column

ANALYTE	RETENTION TIMES 0.10 ug/L	1.0 ug/L	2.5 ug/L	5.0 ug/L	10.0 ug/L	Average
Aroclor-1016 Peak 1	7.42	7.42	7.41	7.40	7.39	7.41
Aroclor-1016 Peak 2	9.26	9.22	9.19	9.17	9.16	9.20
Aroclor-1016 Peak 3	11.32	11.31	11.30	11.29	11.28	11.30
Aroclor-1260 Peak 1	17.04	17.02	17.01	16.99	16.99	17.01
Aroclor-1260 Peak 2	21.04	21.02	21.02	21.00	21.00	21.02
Aroclor-1260 Peak 3	22.42	22.42	22.41	22.40	22.39	22.41

ANALYTE	RT WINDOW	FROM	TO
Aroclor-1016 Peak 1	± .070	7.34	7.48
Aroclor-1016 Peak 2	± .070	9.13	9.27
Aroclor-1016 Peak 3	± .070	11.23	11.37
Aroclor-1260 Peak 1	± .070	16.94	17.08
Aroclor-1260 Peak 2	± .070	20.95	21.09
Aroclor-1260 Peak 3	± .070	22.34	22.48

ACCREDITED LABORATORIES, INC.
RT WINDOW FOR MULTICOMPONENT ANALYTES

Instrument ID: HP5890-G

Date Analyzed: 11/03/00

COMPOUND NAME	RT OF STD	WINDOW FROM	WINDOW TO
Aroclor-1016 Peak 1	8.77	8.70	8.84
Aroclor-1016 Peak 2	9.98	9.91	10.05
Aroclor-1016 Peak 3	10.28	10.21	10.35
Aroclor-1221 Peak 1	6.29	6.22	6.36
Aroclor-1221 Peak 2	6.61	6.54	6.68
Aroclor-1221 Peak 3	6.84	6.77	6.91
Aroclor-1232 Peak 1	6.84	6.77	6.91
Aroclor-1232 Peak 2	8.14	8.07	8.21
Aroclor-1232 Peak 3	9.98	9.91	10.05
Aroclor-1242 Peak 1	9.98	9.91	10.05
Aroclor-1242 Peak 2	11.91	11.84	11.98
Aroclor-1242 Peak 3	12.41	12.34	12.48
Aroclor-1248 Peak 1	9.98	9.91	10.05
Aroclor-1248 Peak 2	11.10	11.03	11.17
Aroclor-1248 Peak 3	12.41	12.34	12.48
Aroclor-1254 Peak 1	13.58	13.51	13.65
Aroclor-1254 Peak 2	14.60	14.53	14.67
Aroclor-1254 Peak 3	16.14	16.07	16.21
Aroclor-1260 Peak 1	18.12	18.05	18.19
Aroclor-1260 Peak 2	19.26	19.19	19.33
Aroclor-1260 Peak 3	22.05	21.98	22.12

ACCREDITED LABORATORIES, INC.
RT WINDOW FOR MULTICOMPONENT ANALYTES

Instrument ID: HP5890-H

Date Analyzed: 11/03/00

COMPOUND NAME	RT OF STD	WINDOW FROM	WINDOW TO
Aroclor-1016 Peak 1	7.40	7.33	7.47
Aroclor-1016 Peak 2	9.31	9.24	9.38
Aroclor-1016 Peak 3	11.30	11.23	11.37
Aroclor-1221 Peak 1	5.59	5.52	5.66
Aroclor-1221 Peak 2	6.06	5.99	6.13
Aroclor-1221 Peak 3	6.27	6.20	6.34
Aroclor-1232 Peak 1	6.27	6.20	6.34
Aroclor-1232 Peak 2	7.40	7.33	7.47
Aroclor-1232 Peak 3	9.31	9.24	9.38
Aroclor-1242 Peak 1	7.40	7.33	7.47
Aroclor-1242 Peak 2	9.31	9.24	9.38
Aroclor-1242 Peak 3	11.71	11.64	11.78
Aroclor-1248 Peak 1	10.42	10.35	10.49
Aroclor-1248 Peak 2	11.30	11.23	11.37
Aroclor-1248 Peak 3	11.71	11.64	11.78
Aroclor-1254 Peak 1	13.61	13.54	13.68
Aroclor-1254 Peak 2	15.30	15.23	15.37
Aroclor-1254 Peak 3	18.38	18.31	18.45
Aroclor-1260 Peak 1	16.94	16.87	17.01
Aroclor-1260 Peak 2	20.91	20.84	20.98
Aroclor-1260 Peak 3	22.33	22.26	22.40

ACCREDITED LABORATORIES, INC.
RT WINDOW FOR MULTICOMPONENT ANALYTES

Instrument ID: HP5890-G

Date Analyzed: 11/06/00

COMPOUND NAME	RT OF STD	WINDOW FROM	WINDOW TO
Aroclor-1016 Peak 1	8.77	8.70	8.84
Aroclor-1016 Peak 2	9.96	9.89	10.03
Aroclor-1016 Peak 3	10.27	10.20	10.34
Aroclor-1221 Peak 1	6.29	6.22	6.36
Aroclor-1221 Peak 2	6.61	6.54	6.68
Aroclor-1221 Peak 3	6.83	6.76	6.90
Aroclor-1232 Peak 1	6.83	6.76	6.90
Aroclor-1232 Peak 2	8.10	8.03	8.17
Aroclor-1232 Peak 3	9.96	9.89	10.03
Aroclor-1242 Peak 1	9.96	9.89	10.03
Aroclor-1242 Peak 2	11.90	11.83	11.97
Aroclor-1242 Peak 3	12.40	12.33	12.47
Aroclor-1248 Peak 1	9.96	9.89	10.03
Aroclor-1248 Peak 2	11.09	11.02	11.16
Aroclor-1248 Peak 3	12.40	12.33	12.47
Aroclor-1254 Peak 1	13.58	13.51	13.65
Aroclor-1254 Peak 2	14.60	14.53	14.67
Aroclor-1254 Peak 3	16.12	16.05	16.19
Aroclor-1260 Peak 1	18.11	18.04	18.18
Aroclor-1260 Peak 2	19.25	19.18	19.32
Aroclor-1260 Peak 3	22.05	21.98	22.12

ACCREDITED LABORATORIES, INC.
RT WINDOW FOR MULTICOMPONENT ANALYTES

Instrument ID: HP5890-H

Date Analyzed: 11/06/00

COMPOUND NAME	RT OF STD	WINDOW FROM	WINDOW TO
Aroclor-1016 Peak 1	7.39	7.32	7.46
Aroclor-1016 Peak 2	9.30	9.23	9.37
Aroclor-1016 Peak 3	11.29	11.22	11.36
Aroclor-1221 Peak 1	5.60	5.53	5.67
Aroclor-1221 Peak 2	6.06	5.99	6.13
Aroclor-1221 Peak 3	6.28	6.21	6.35
Aroclor-1232 Peak 1	6.28	6.21	6.35
Aroclor-1232 Peak 2	7.39	7.32	7.46
Aroclor-1232 Peak 3	9.30	9.23	9.37
Aroclor-1242 Peak 1	7.39	7.32	7.46
Aroclor-1242 Peak 2	9.30	9.23	9.37
Aroclor-1242 Peak 3	11.70	11.63	11.77
Aroclor-1248 Peak 1	10.41	10.34	10.48
Aroclor-1248 Peak 2	11.29	11.22	11.36
Aroclor-1248 Peak 3	11.70	11.63	11.77
Aroclor-1254 Peak 1	13.60	13.53	13.67
Aroclor-1254 Peak 2	15.29	15.22	15.36
Aroclor-1254 Peak 3	18.37	18.30	18.44
Aroclor-1260 Peak 1	16.93	16.86	17.00
Aroclor-1260 Peak 2	20.91	20.84	20.98
Aroclor-1260 Peak 3	22.32	22.25	22.39

ACCREDITED LABORATORIES, INC.
PCB SURROGATE RECOVERY

Case Number : 9880 Client Name : ENVIROTACTIC

GC Column : RTX-5 Column ID : 0.53mm

Instrument ID : HP5890-G

	LAB FILE ID	LAB SAMPLE ID	TCX %REC #	DCB %REC #	TOT OUT
01	>G7816	PBLK98	71	74	0
02	>G7818	PBLK98-A	72	78	0
03	>G7827	0013298	71	103	0
04	>G7828	0013299	57	127	0
05	>G7829	0013300	68	122	0
06	>G7830	0013301	68	80	0
07	>G7845	0013298DL	70	88	0
08	>G7846	0013299DL	68	77	0
09	>G7847	0013301DL	63	96	0
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

ADVISORY QC LIMITS

TCX = Tetrachloro-m-xylene (30-150)
DCB = Decachlorobiphenyl (30-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

ACCREDITED LABORATORIES, INC.
PCB ANALYTICAL SEQUENCE

Case Number : 9880 Client Name : ENVIROTACTIC

GC Column : RTX-5 Column ID : 0.53mm

Instrument ID : HP5890-G

THE ANALYTICAL SEQUENCE FOR BLANKS AND SAMPLES IS GIVEN BELOW:

SURROGATE RT FROM CHECK STANDARD
TCX: 5.55 DCB: 28.34

	LAB FILE ID.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
01	>G7816	PBLK98	11/03/00	19:32	5.55		28.34	
02	>G7818	PBLK98-A	11/03/00	20:47	5.55		28.33	
03	>G7827	0013298	11/04/00	02:24	5.52		28.31	
04	>G7828	0013299	11/04/00	03:01	5.62	*	28.36	
05	>G7829	0013300	11/04/00	03:38	5.53		28.31	
06	>G7830	0013301	11/04/00	04:16	5.54		28.32	
07	>G7845	0013298DL	11/06/00	19:14	5.55		28.33	
08	>G7846	0013299DL	11/06/00	19:51	5.55		28.35	
09	>G7847	0013301DL	11/06/00	20:29	5.55		28.30	
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
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27								
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29								
30								

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
DCB = Decachlorobiphenyl (± 0.10 MINUTES)

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

24

ACCREDITED LABORATORIES, INC.
SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix Spike Sample Number: 0013427

Sample Data File: >G7820

Date Extracted: 11/03/00

MS Data File: >G7837

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC ** LIMITS REC
Aroclor-1260	333	0.000	227	68	40-140

MSD Data File: >G7838

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS ** RPD	REC
Aroclor-1260	333	221	66	3	25	40-140

Column used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

** Values were generated within ALI for advisory purposes only

COMMENTS: _____

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER		MATRIX	Soil
SAMPLE NUMBER	PBLK98	DILUTION FACTOR	1
DATA FILE	>G7816	DATE EXTRACTED	11/03/00
CLIENT NAME		DATE ANALYZED	11/03/00
FIELD ID		ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	16.7
11104282	Aroclor-1221	U	16.7
11141165	Aroclor-1232	U	16.7
53469219	Aroclor-1242	U	16.7
12672296	Aroclor-1248	U	16.7
11097691	Aroclor-1254	U	16.7
11096825	Aroclor-1260	U	16.7

Percent Solid of 100. is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

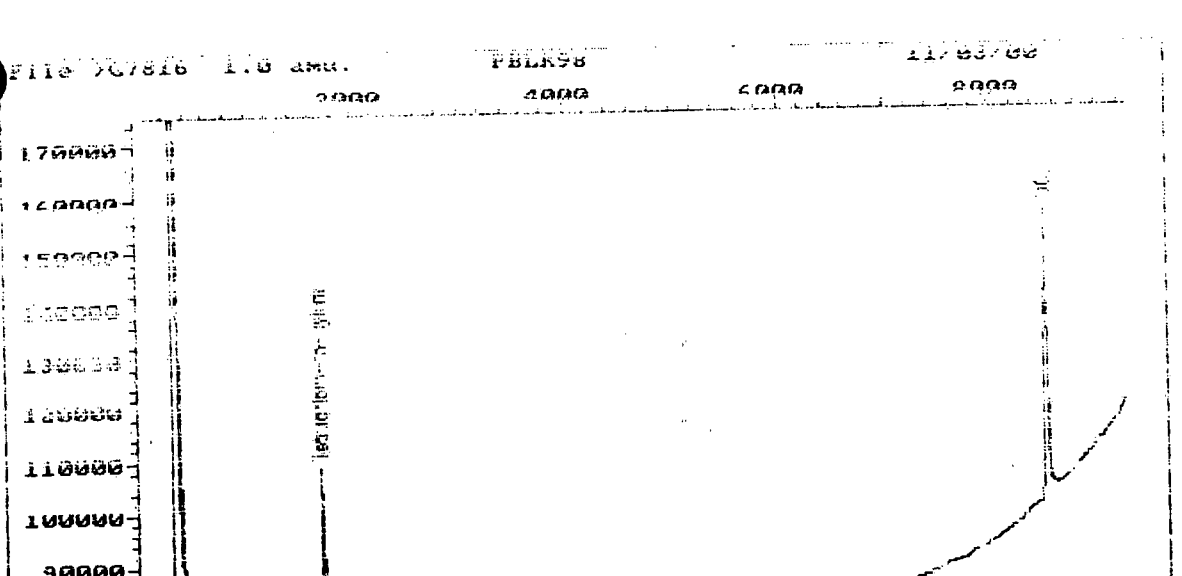
ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER		MATRIX	Soil
SAMPLE NUMBER	PBLK98-A	DILUTION FACTOR	1
DATA FILE	>G7818	DATE EXTRACTED	11/03/00
CLIENT NAME		DATE ANALYZED	11/03/00
FIELD ID		ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	16.7
11104282	Aroclor-1221	U	16.7
11141165	Aroclor-1232	U	16.7
53469219	Aroclor-1242	U	16.7
12672296	Aroclor-1248	U	16.7
11097691	Aroclor-1254	U	16.7
11096825	Aroclor-1260	U	16.7

Percent Solid of 100. is used for all target compounds.

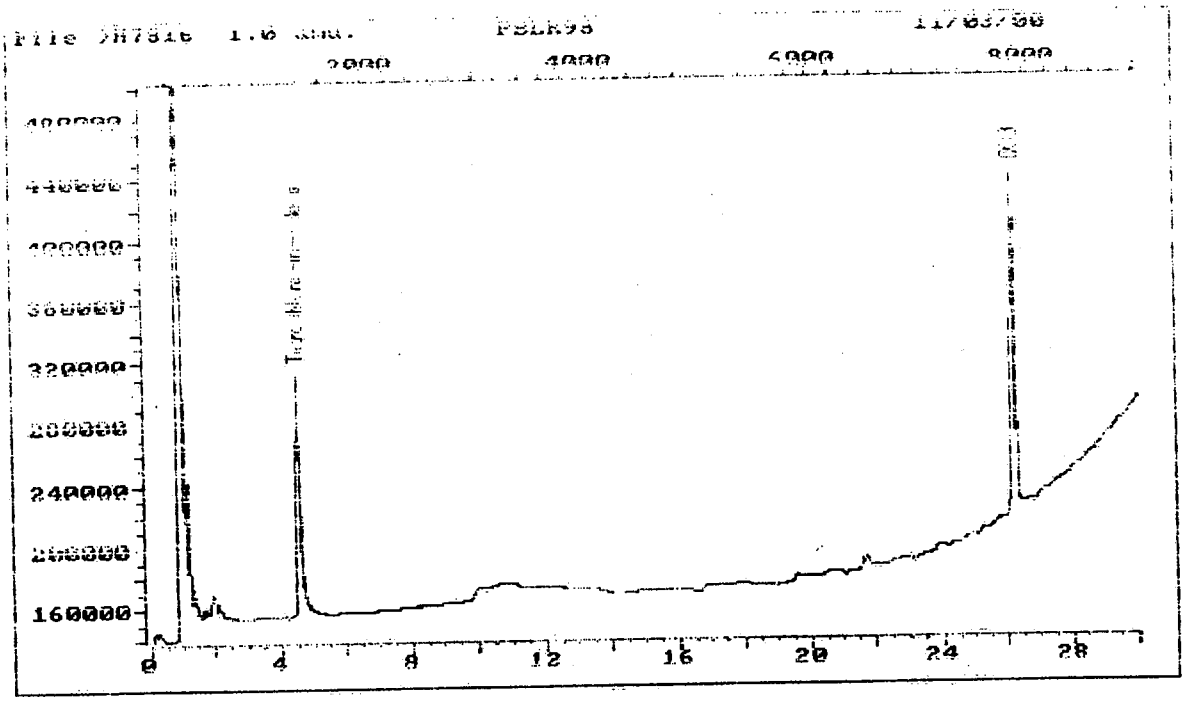
B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.



Data File: >G7816::G4 Quant Output File: ^G7816::QT
Name: PBLK98 Instrument ID: G
Misc: 11/03/00

Id File: IDPP7::G5
Title: PESTICIDES/PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 000112 14:36 Last Qcal Time: 001103 16:25

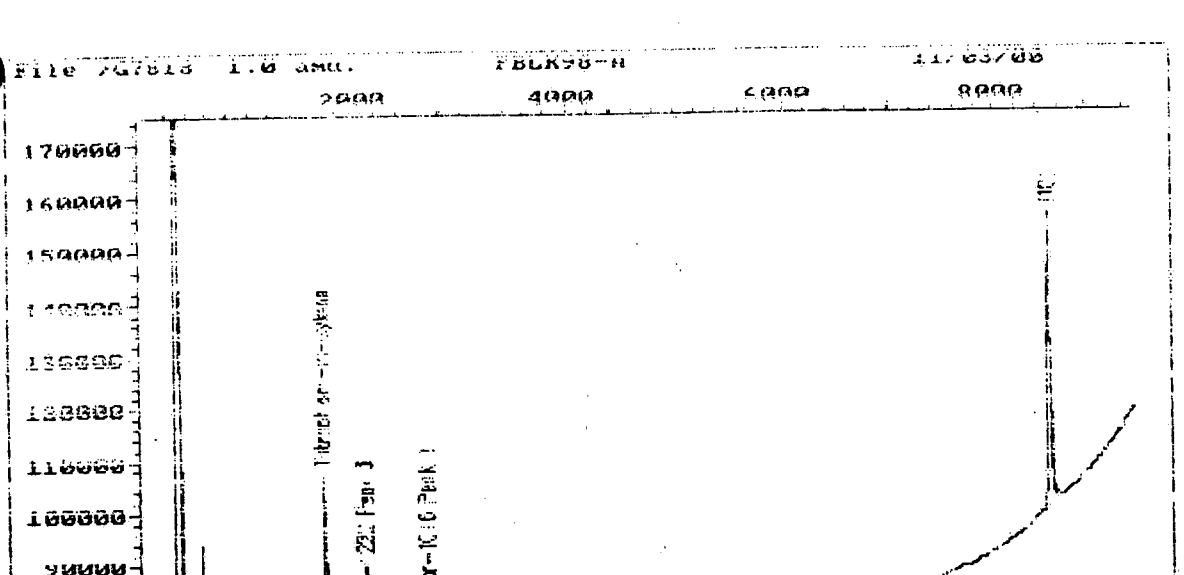
Operator ID: JEFF
Quant Time : 001106 10:46
Injected at: 001103 19:32



Data File: >H7816::G4 Quant Output File: ^H7816::QT
Name: PBLK98 Instrument ID: H
Misc: 11/03/00

Id File: IDPP8::G5
Title: PESTICIDES/PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 000112 14:38 Last Qcal Time: 001103 17:02

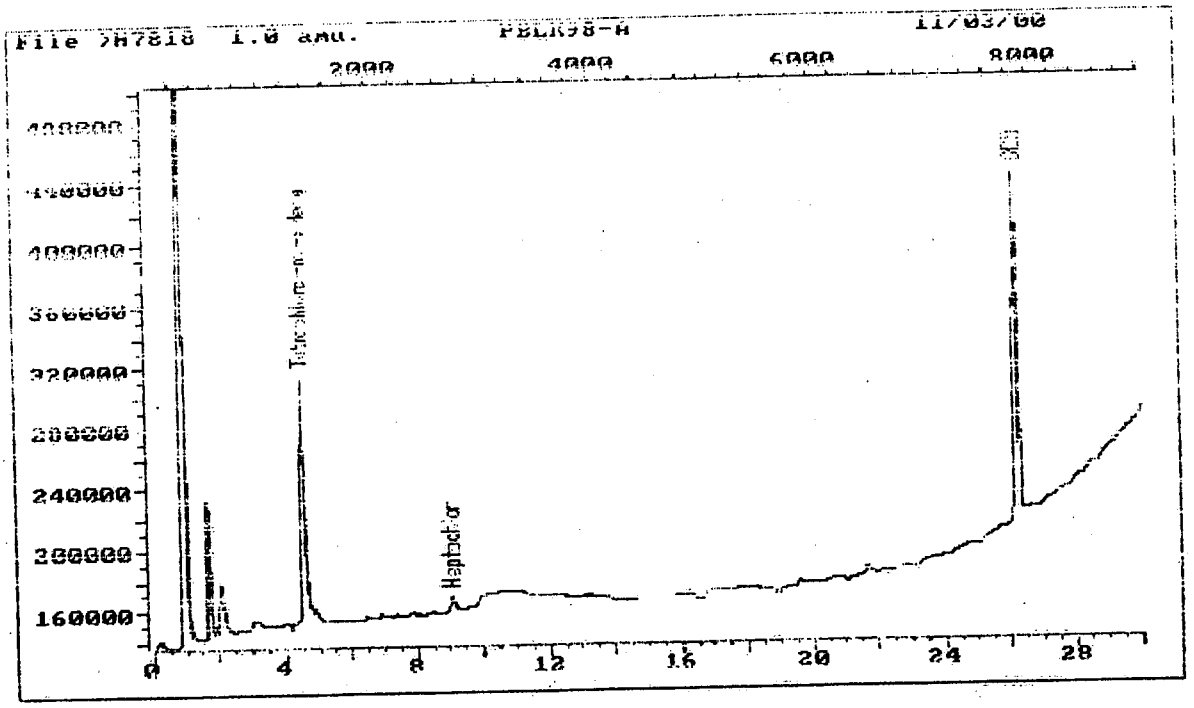
Operator ID: JEFF
Quant Time : 001106 12:02
Injected at: 001103 20:09



Data File: >G7818::G4 Quant Output File: ^G7818::QT
Name: PBLK98-A Instrument ID: G
Misc: 11/03/00

Id File: IDPP7::G5
Title: PESTICIDES/PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 000112 14:36 Last Qcal Time: 001103 16:25

Operator ID: JEFF
Quant Time : 001106 10:51
Injected at: 001103 20:47

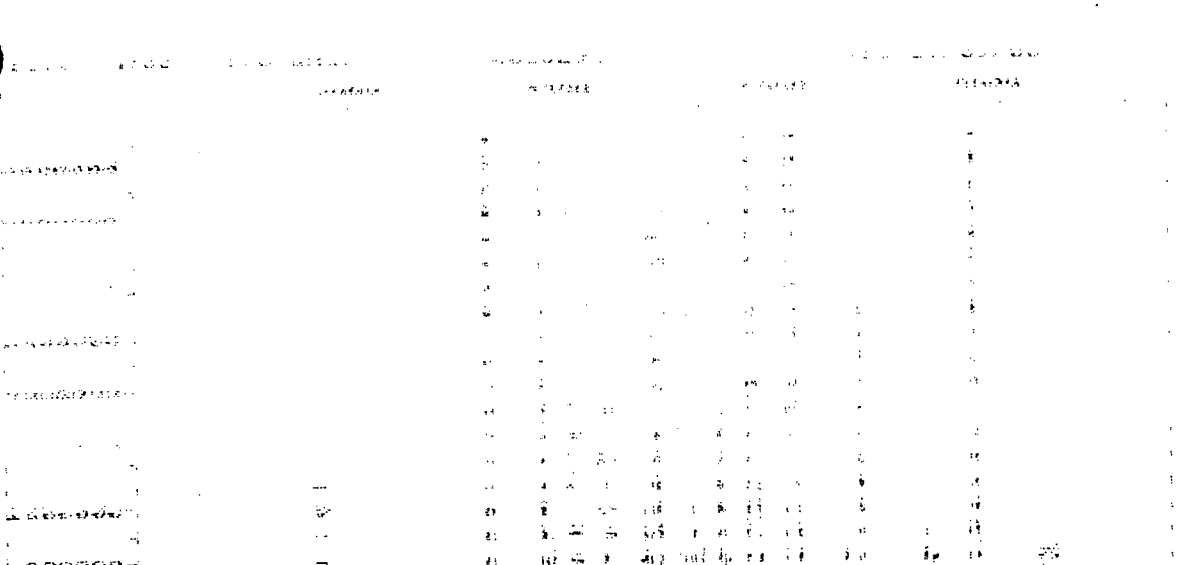


Data File: >H7818::G4
Name: PBLK98-A
Misc: 11/03/00

Quant Output File: ^H7818::QT
Instrument ID: H

Id File: IDPP8::G5
Title: PESTICIDES/PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 000112 14:38 Last Qcal Time: 001103 17:02

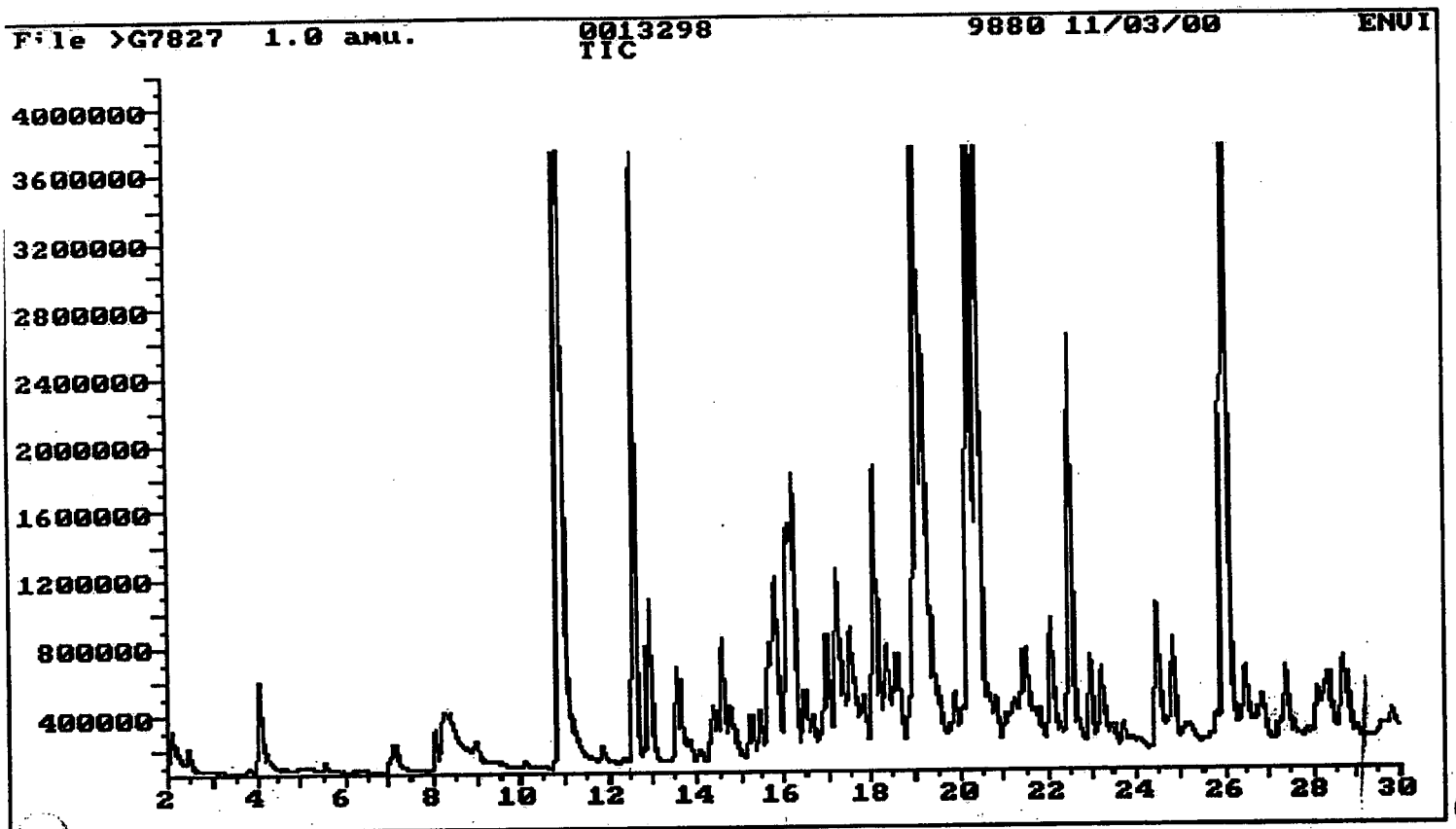
Operator ID: JEFF
Quant Time : 001106 12:07
Injected at: 001103 21:24



Data File: >G7027::G4 Quant Output File: ^G7027::QT
Name: 0013298 Instrument ID: G
Misc: 9880 11/03/00 ENVIROTACTICS T1

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001103 18:17

Operator ID: JEFF
Quant Time : 001106 11:12
Injected at: 001104 02:24


File >G7827 1.0 amu.
0013298
TIC
9880 11/03/00
ENVI
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3200000
2800000
2400000
2000000
1600000
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2
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6
8
10
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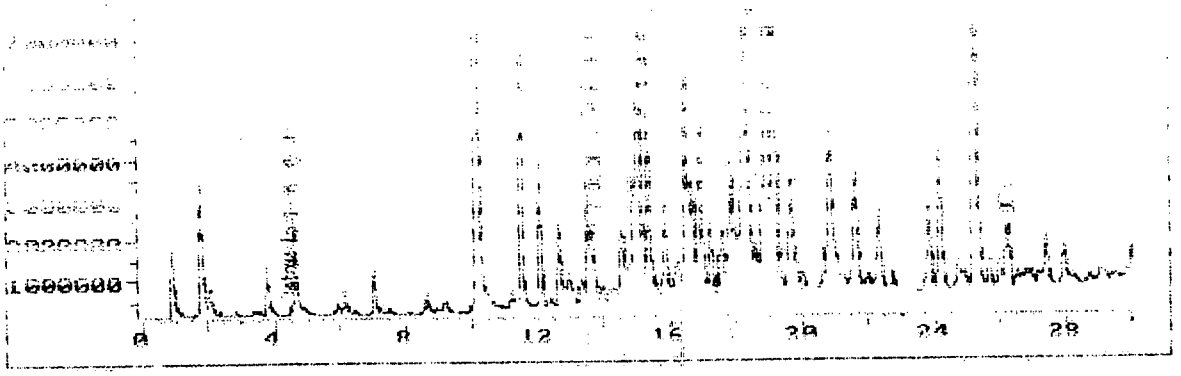
30

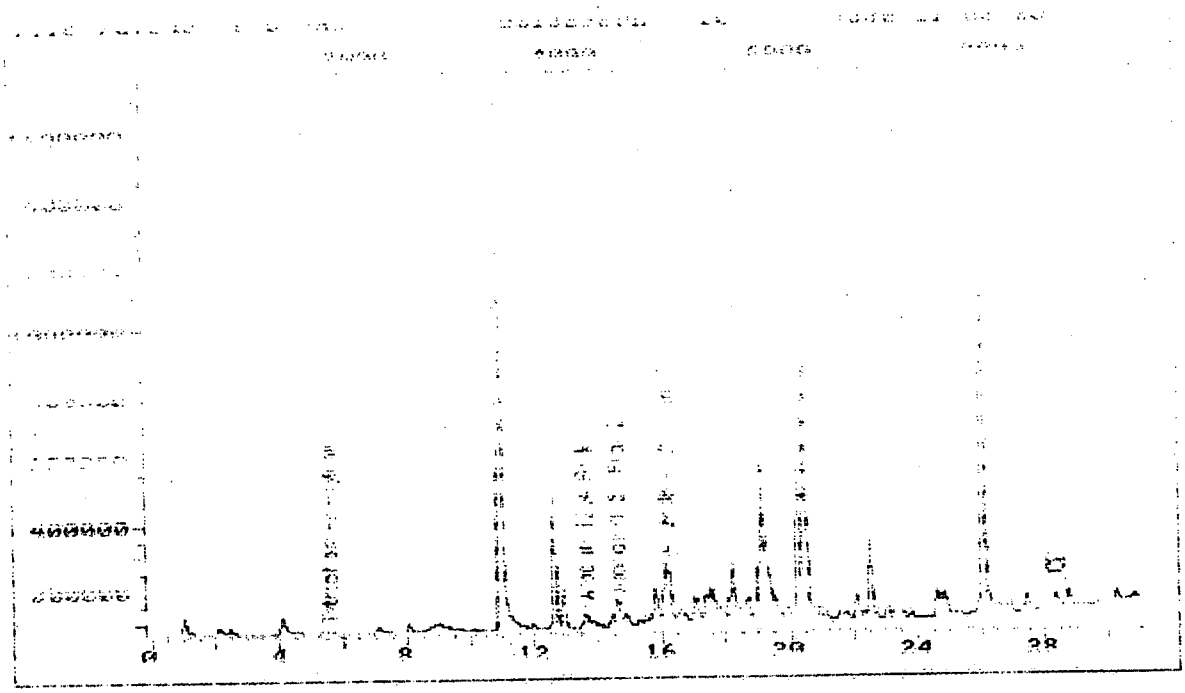
2981



Data File: >H7827::G4 Quant Output File: ^H7827::QT
Name: 0013298 Instrument ID: H
Misc: 9080 11/03/00 ENVIROTACTICS T1

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001103 18:54

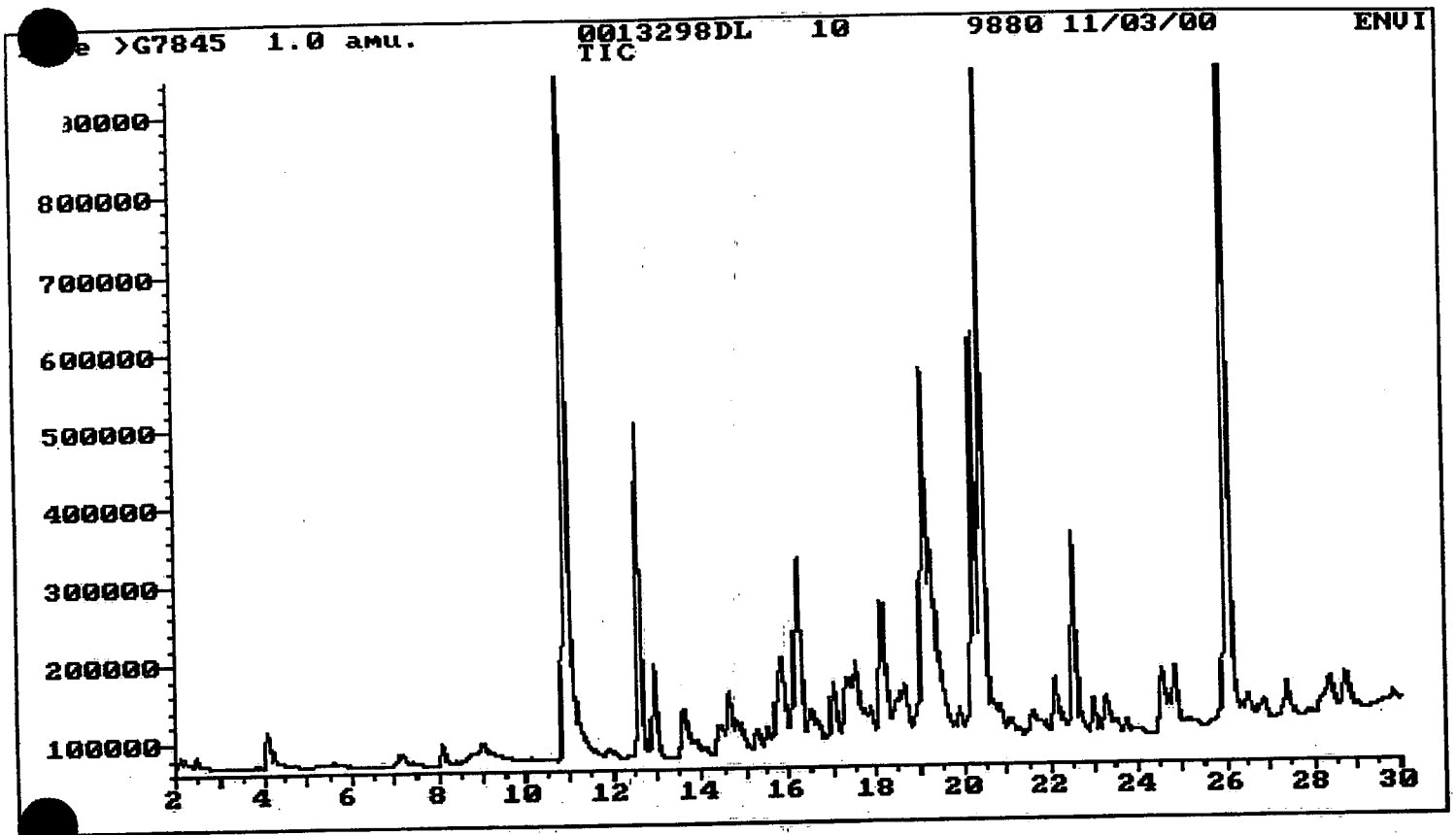
Operator ID: JEFF
Quant Time : 001106 12:22
Injected at: 001104 03:01



Data File: >G7845::G5 Quant Output File: `G7845::QT
Name: 0013298DL 10 Instrument ID: G
Misc: 0880 11/03/00 ENVIROTACTICS T1

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001106 17:59

Operator ID: JEFF
Quant Time : 001107 10:32
Injected at: 001106 19:14


e >G7845 1.0 amu.
0013298DL 10
TIC
9880 11/03/00
ENVI
800000
700000
600000
500000
400000
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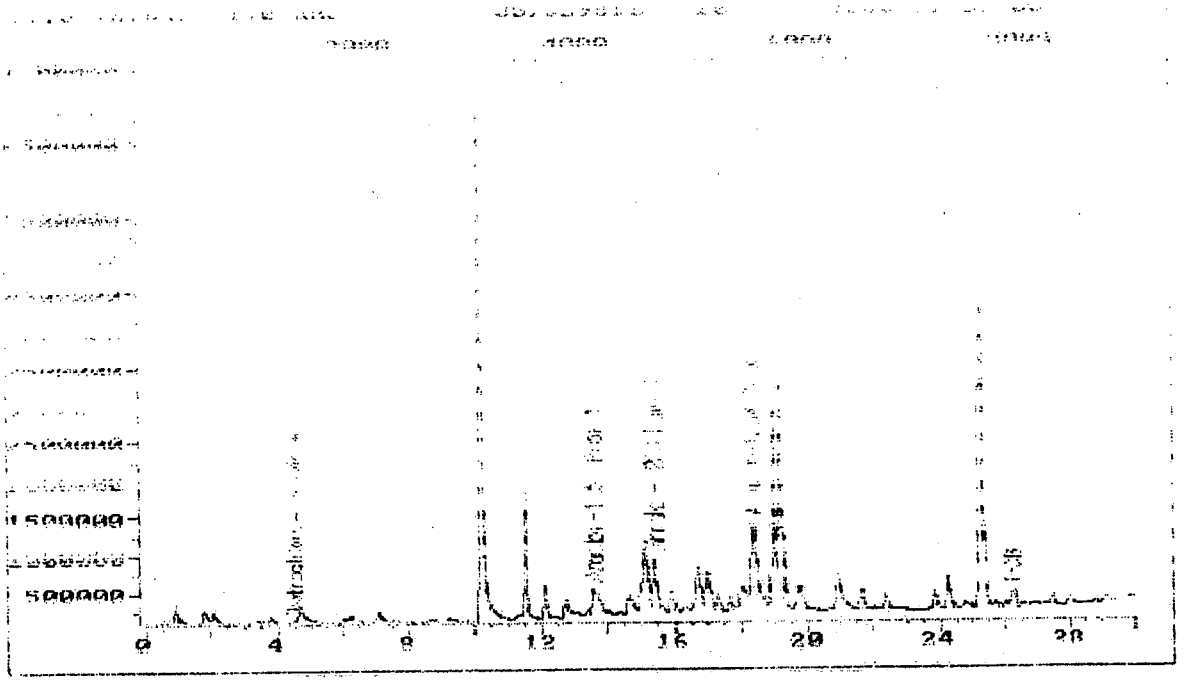
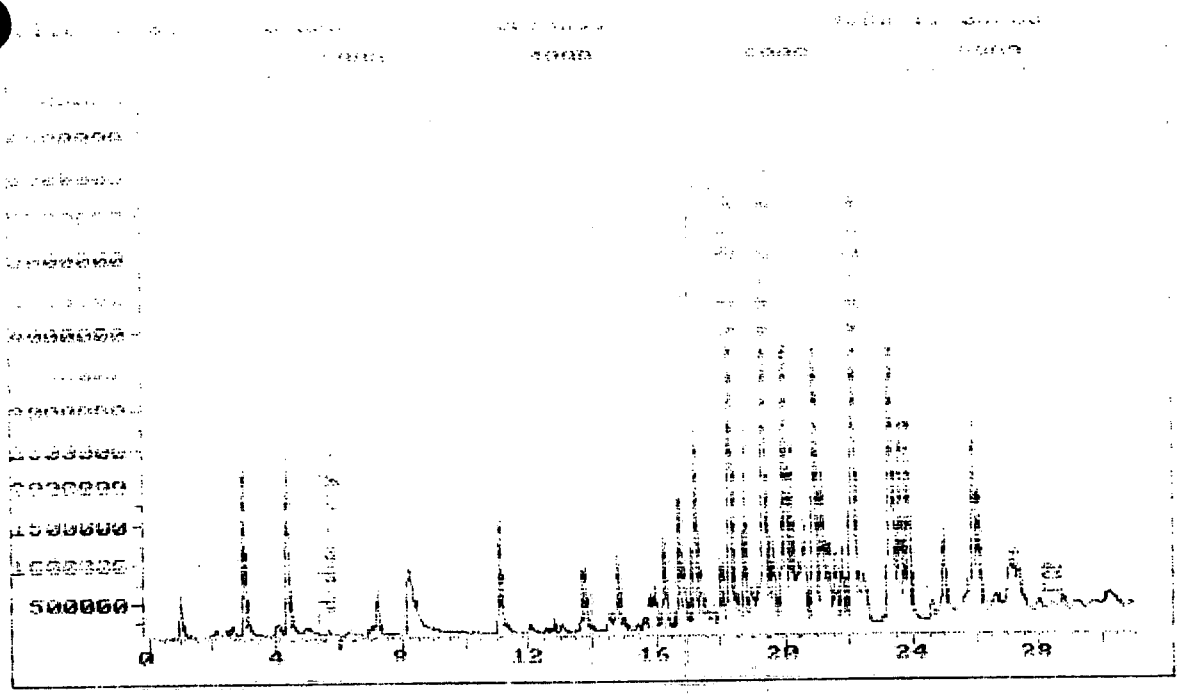
100000
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30



Data File: >H7845::G5 Quant Output File: ^H7845::QT
Name: 0013298DL 10 Instrument ID: H
Misc: 9880 11/03/00 ENVIROTACTICS T1

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001106 18:36

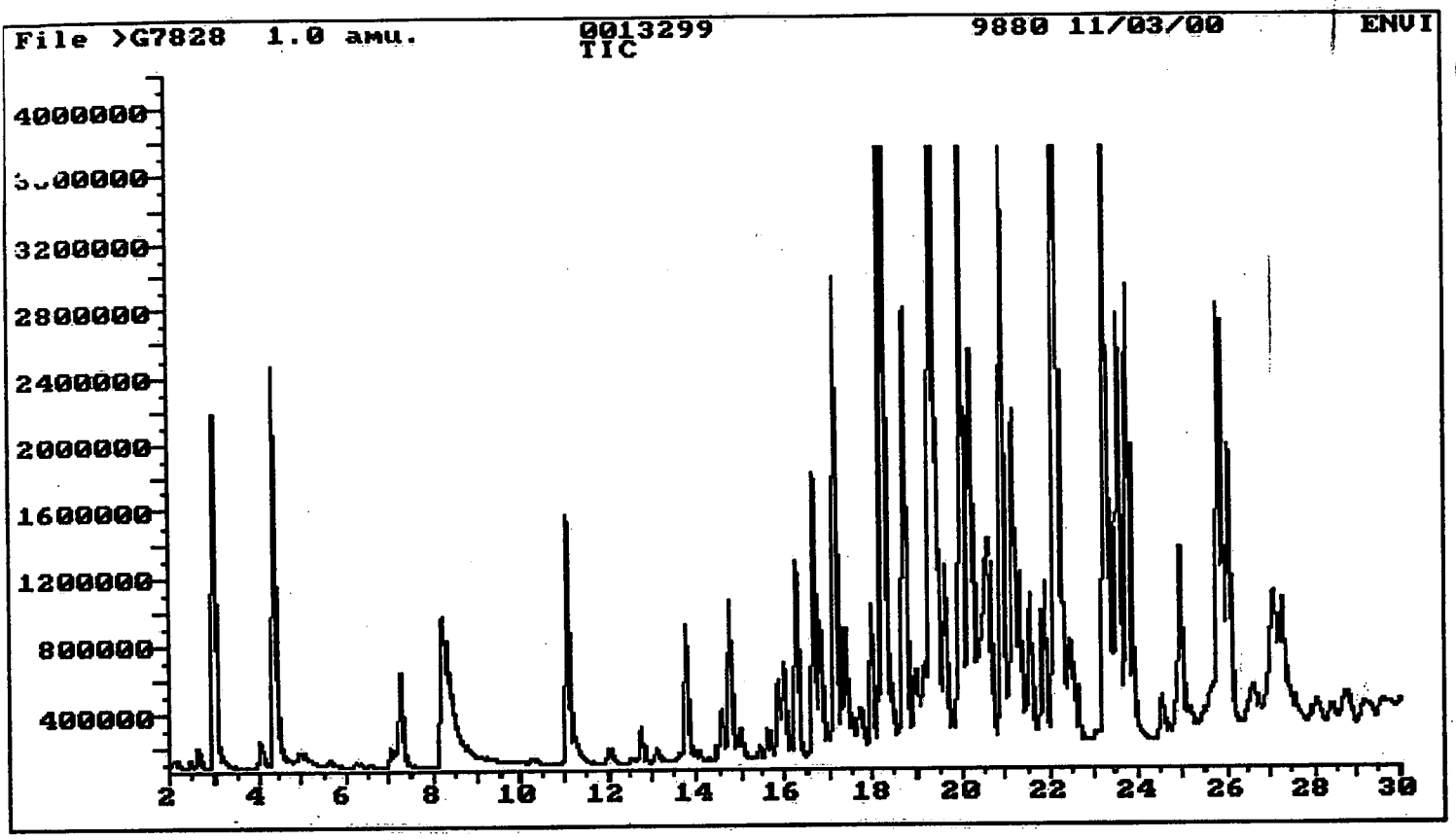
Operator ID: JEFF
Quant Time : 001107 12:44
Injected at: 001106 19:51



Data File: >C7828::G4 Quant Output File: ^C7828::QT
Name: 0013299 Instrument ID: G
Misc: 9880 11/03/00 ENVIROTACTICS T2

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001103 18:17

Operator ID: JEFF
Quant Time : 001106 11:13
Injected at: 001104 03:01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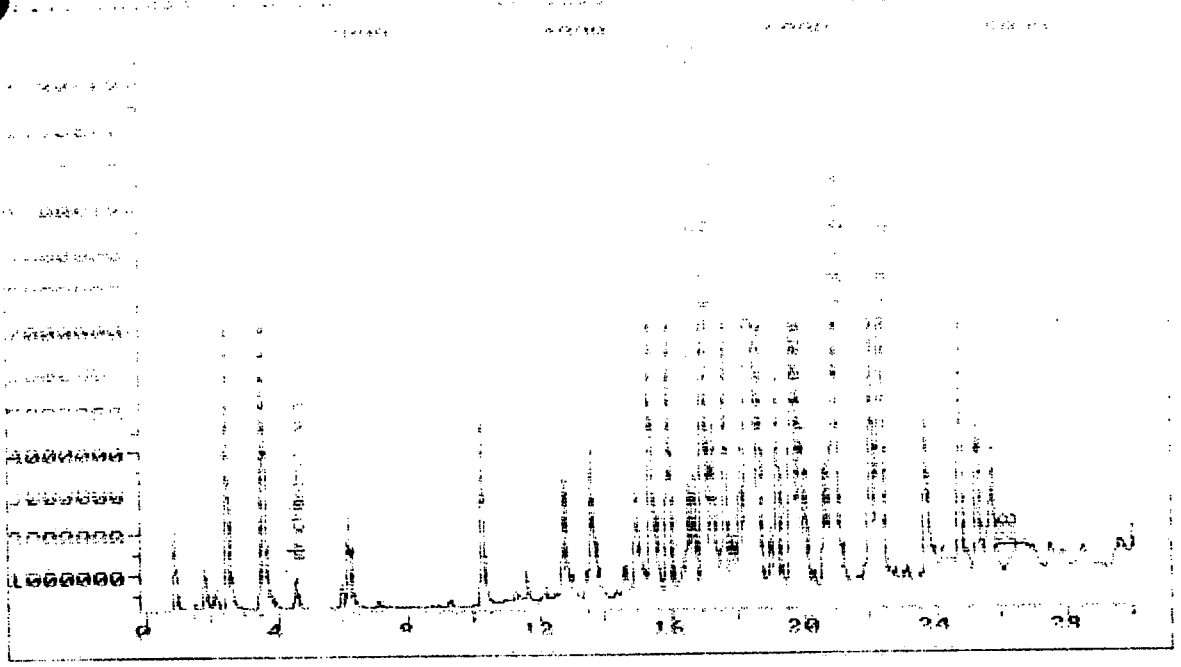
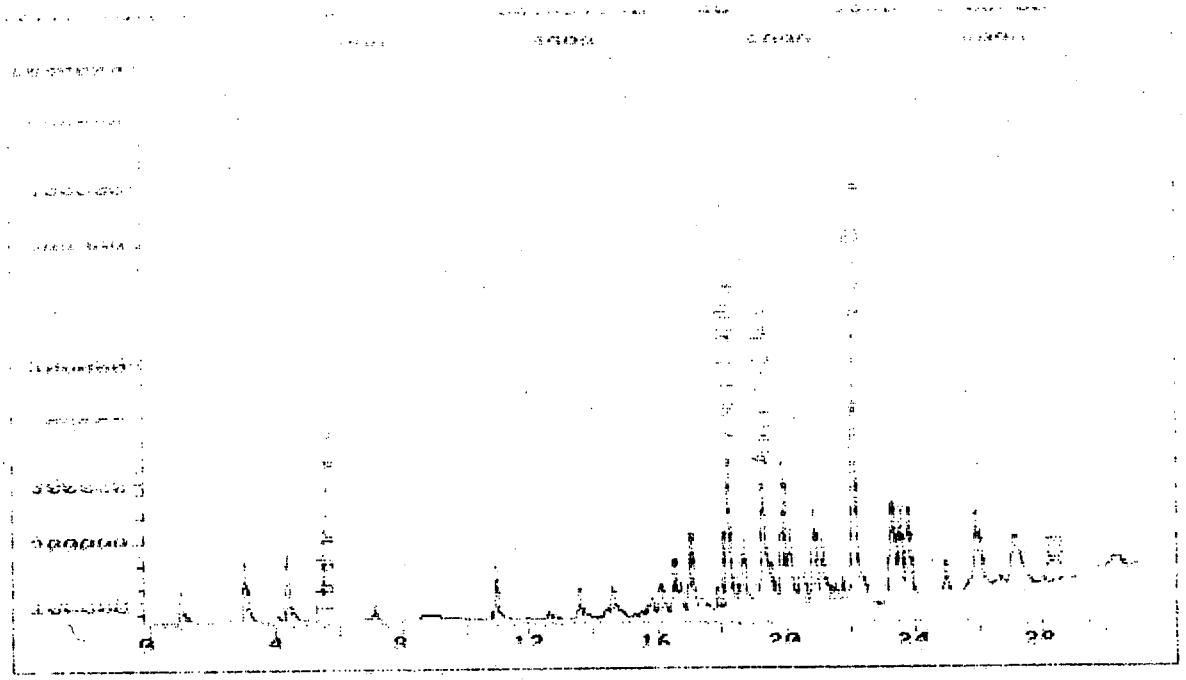


Data File: >H7828::G4 Quant Output File: ^H7828::QT
Name: 0013299 Instrument ID: H
Misc: 8880 11/03/00 ENVIROTACTICS T2

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001103 18:54

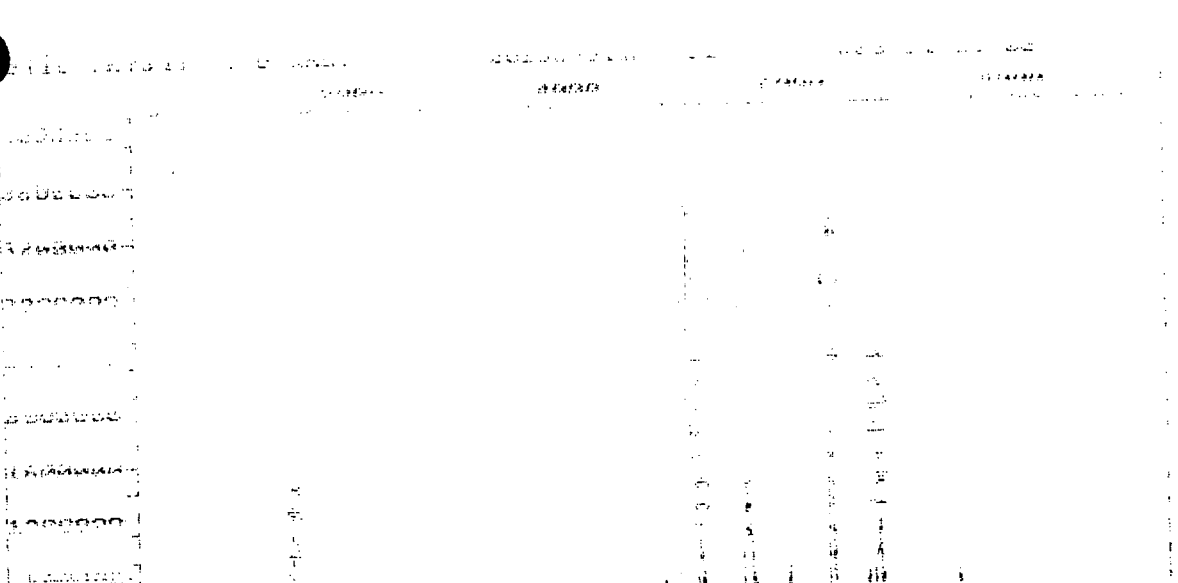
Operator ID: JEFF
Quant Time : 001106 12:23
Injected at: 001104 03:38



Data File: >C7846::C5 Quant Output File: ^C7846::QT
Name: 0013299DL 20 Instrument ID: G
Misc: 9880 11/03/00 ENVIROTACTICS T2

Id File: ID7PCB::C5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001106 17:59

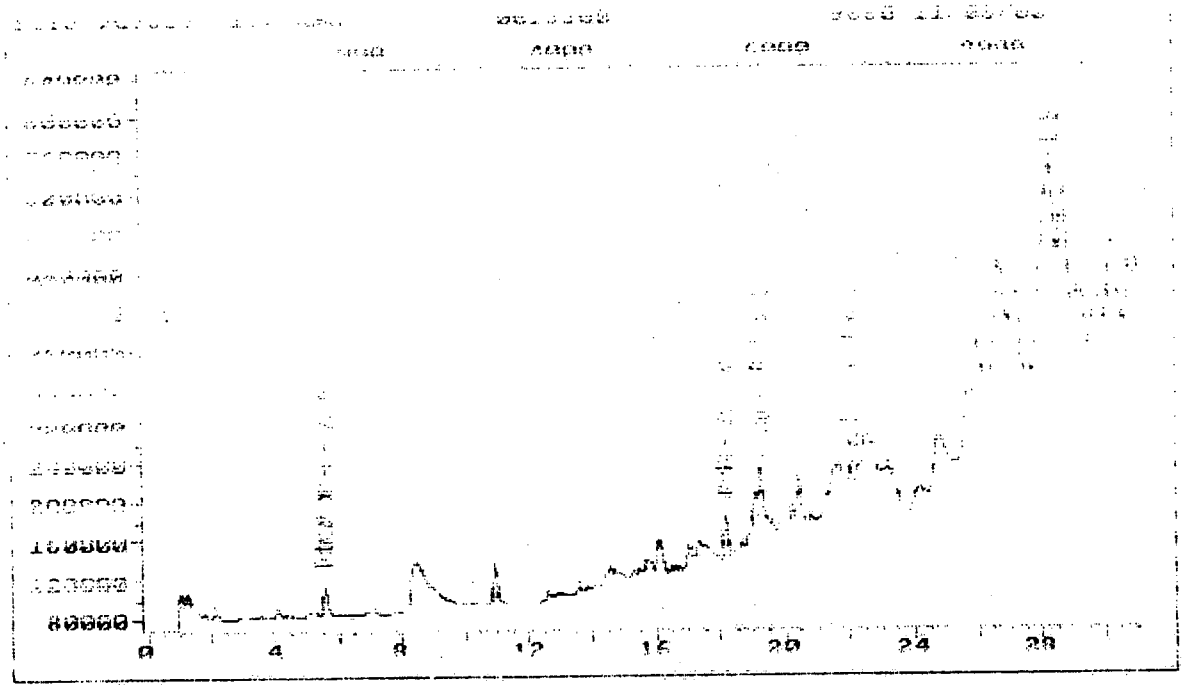
Operator ID: JEFF
Quant Time : 001107 10:33
Injected at: 001106 19:51



Data File: >H7846::G5 Quant Output File: ^H7846::QT
Name: 0013299DL 20 Instrument ID: H
Misc: 9880 11/03/00 ENVIROTACTICS T2

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001106 18:36

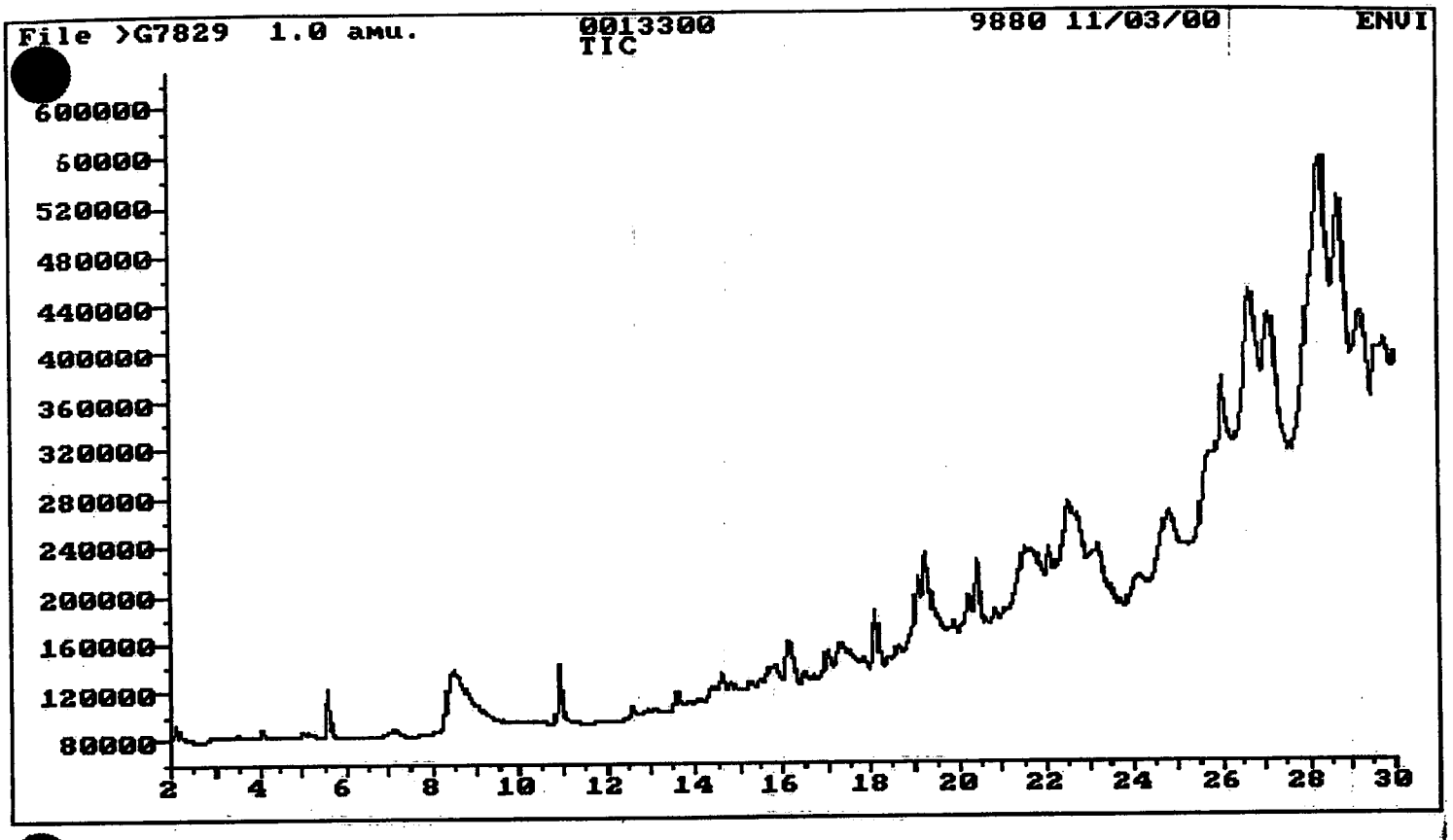
Operator ID: JEFF
Quant Time : 001107 12:47
Injected at: 001106 20:29



Data File: >G7829::G4 Quant Output File: ^G7829::QT
Name: 0013300 Instrument ID: G
Misc: 9880 11/03/00 ENVIROTACTICS T3

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001103 18:17

Operator ID: JEFF
Quant Time : 001106 11:14
Injected at: 001104 03:38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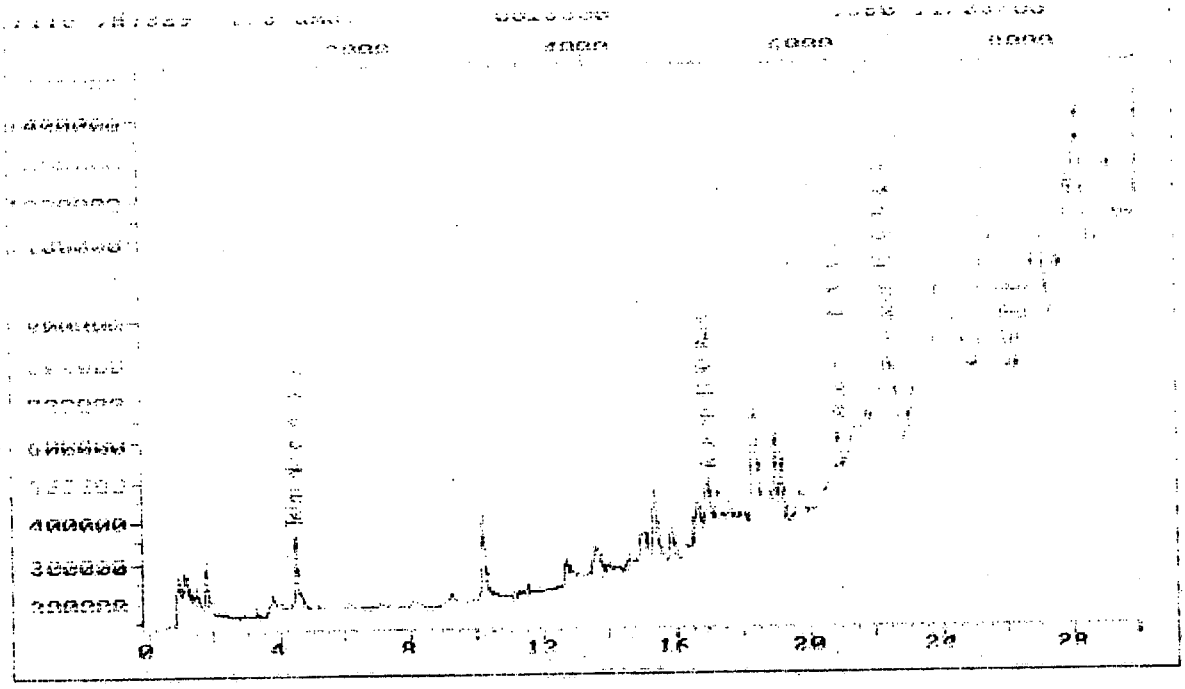
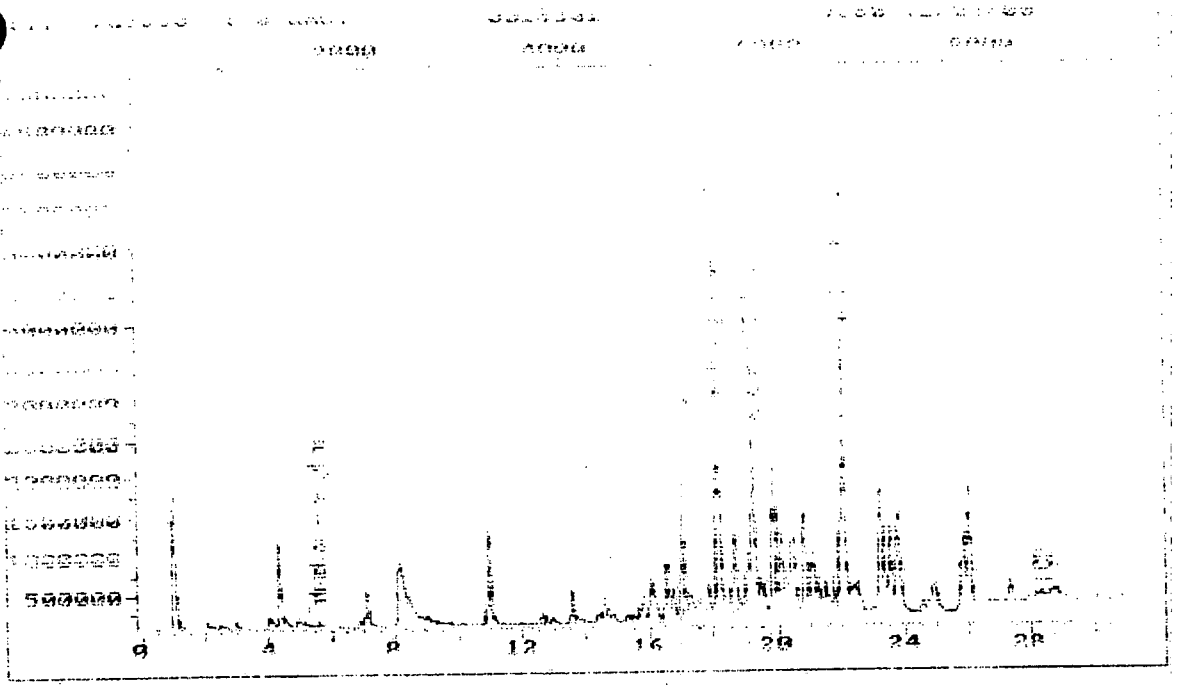


Data File: >H7829::G4 Quant Output File: ^H7829::QT
Name: 0013300 Instrument ID: H
Misc: 9880 11/03/00 ENVIROTACTICS T3

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001103 18:54

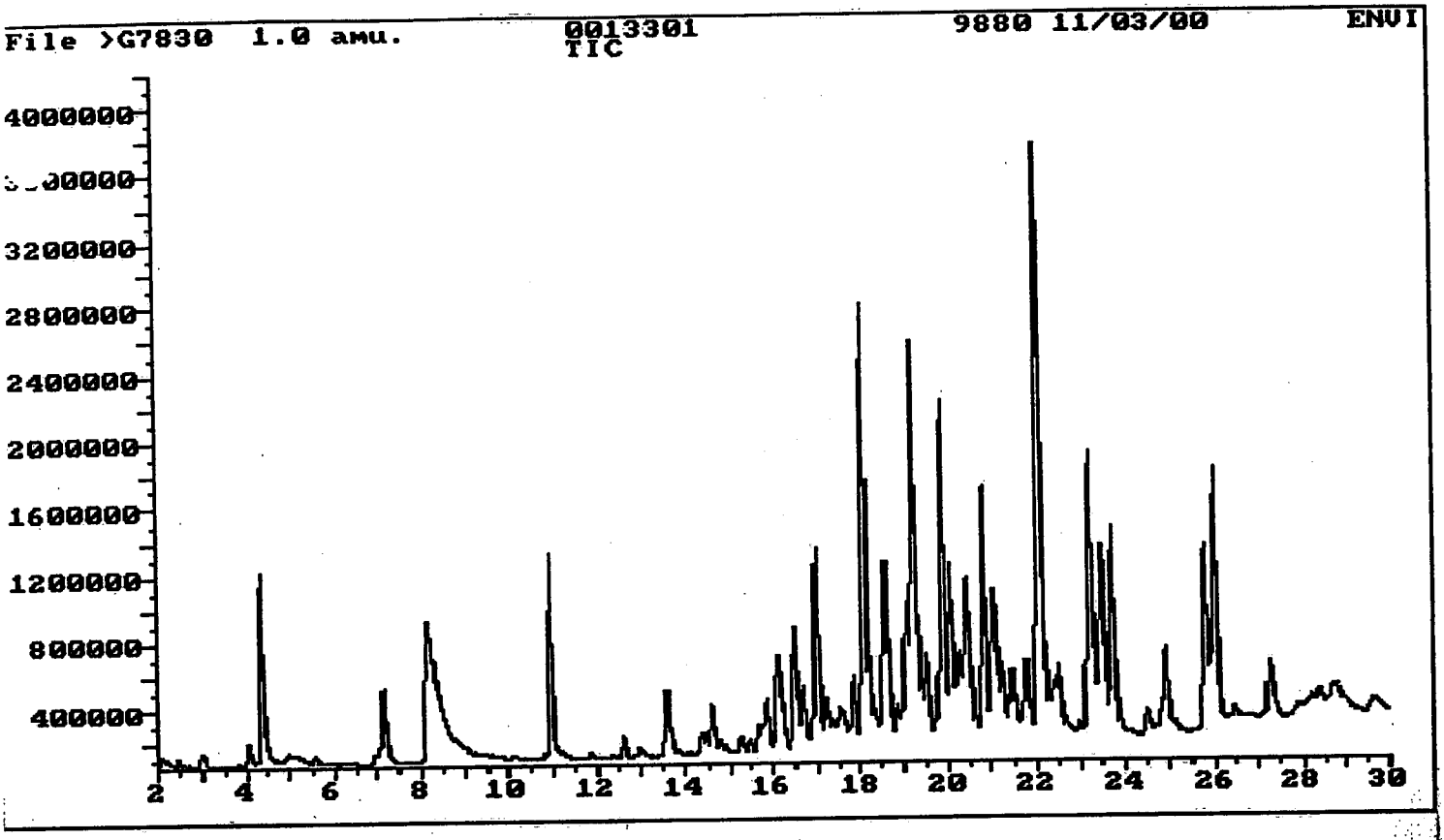
Operator ID: JEFF
Quant Time : 001106 12:24
Injected at: 001104 04:16



Data File: >G7830::G4 Quant Output File: `G7830::QT
Name: 0013301 Instrument ID: G
Misc: 9880 11/03/00 ENVIROTACTICS T4

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001103 18:17

Operator ID: JEFF
Quant Time : 001106 11:15
Injected at: 001104 04:16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ENVI
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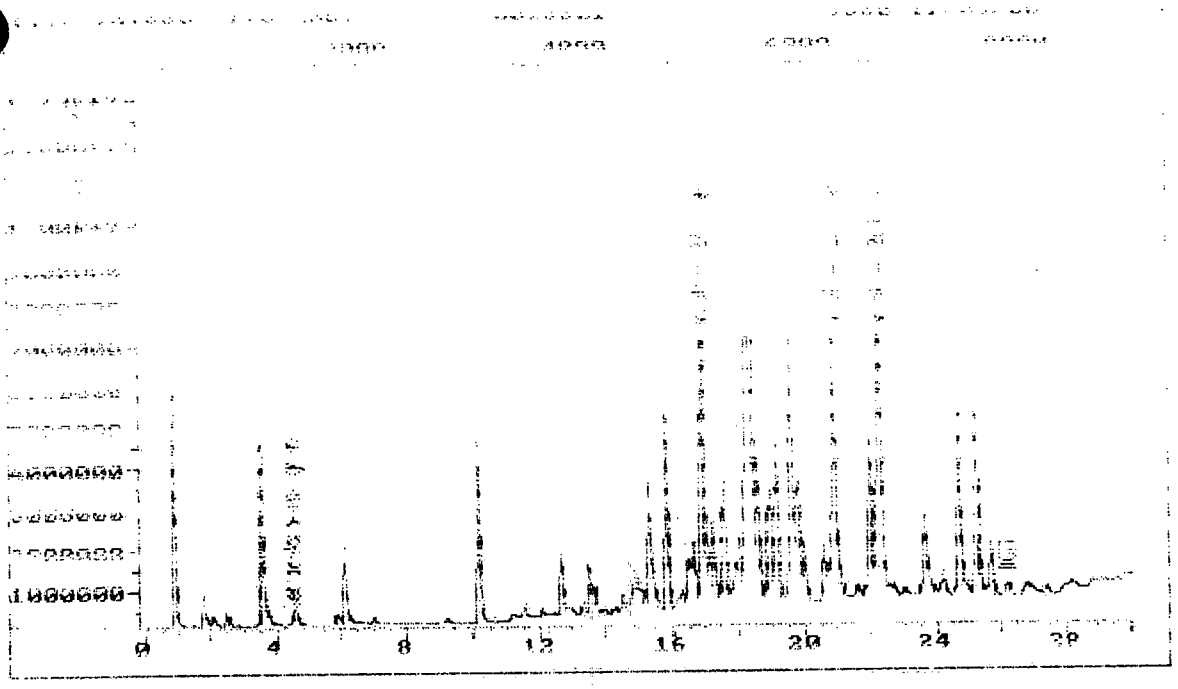
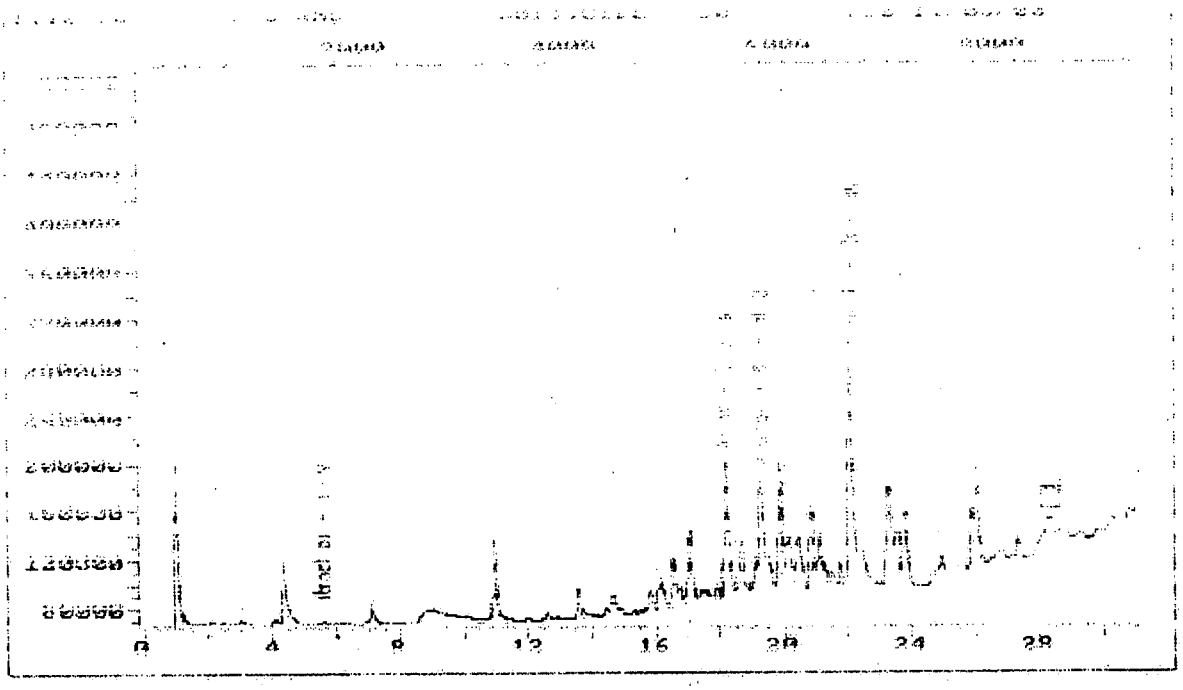


Data File: >H7830::G4 Quant Output File: ^H7830::QT
Name: 0013301 Instrument ID: H
Misc: 9880 11/03/00 ENVIROTACTICS T4

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001103 18:54

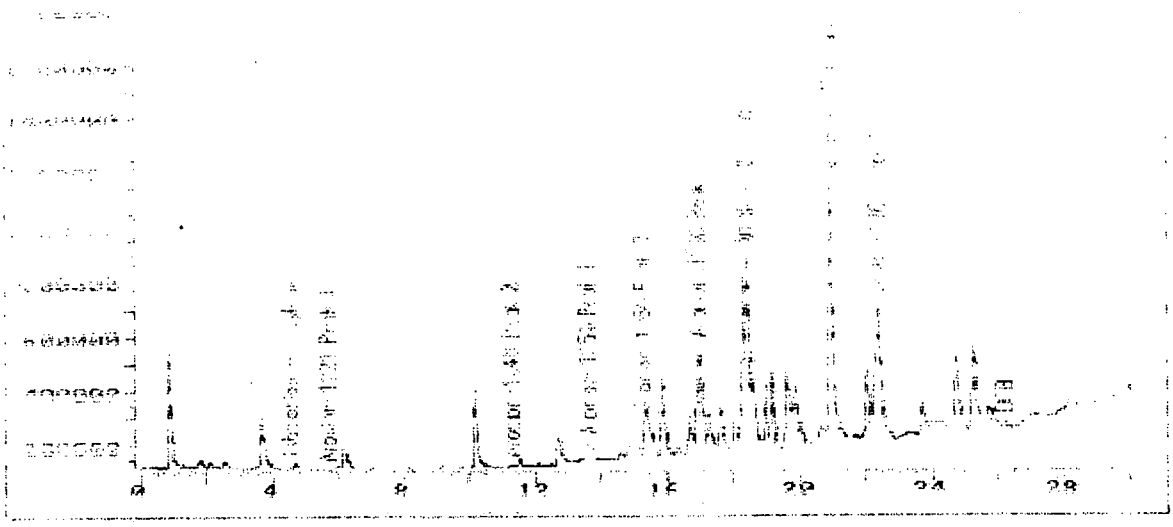
Operator ID: JEFF
Quant Time : 001106 12:25
Injected at: 001104 04:53



Data File: >G7847::G5 Quant Output File: ^G7847::QT
Name: 0013301DL 20 Instrument ID: G
Misc: 9880 11/03/00 ENVIROTACTICS T4

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001106 17:59

Operator ID: JEFF
Quant Time : 001107 10:34
Injected at: 001106 20:20



Data File: >H7047::C5 Quant Output File: ^H7047::QT
Name: 0013301DL 20 Instrument ID: H
Misc: 9880 11/03/00 ENVIROTACTICS T4

Id File: ID8PCB::C5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 000113 09:17 Last Qcal Time: 001106 18:36

Operator ID: JEFF
Quant Time : 001107 14:43
Injected at: 001106 21:06

ACCREDITED LABORATORIES, INC.
Implementing Tomorrow's Technology, Today™....

Analytical Data Report

for

Envirotactics
2517 Rt. 35, Bldg. D Suite 202
Manasquan, NJ 08736

Project: Orbis

Accredited Laboratories Case No.: 2025
Date Received: 03/16/01

Field ID	Laboratory Sample #
S-MW-5-A	200102748
TB	200102751

Accredited Laboratories, Inc. New Jersey Certification Number 12007. This data has been reviewed and accepted by:

Theodore C. Gaydos
Technical Director

(732) 541-2025
CORPORATE OFFICES
20 Pershing Avenue
Carteret, New Jersey 07008
FAX (732) 541-1383

Printed on RECYCLED paper made with 20% post consumer waste

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Blanks	
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General Chemistry:	138
Sample Duplicate	
MS Summary	
Total Petroleum Hydrocarbons:	140
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ACCREDITED LABORATORIES, INC.
20 PERSHING AVENUE
CARTERET, NEW JERSEY 07008
PHONE (732) 541-2025 FAX (732) 541-1383

CHAIN OF CUSTODY FORM

STATE AGENCY (NJ) NY PA CT DE OTHER

CLIENT	Envirotactics Inc.	PROJECT	Orbis
ADDRESS	2517 Rt 35, Bldg D, Suite 202	CONTACT	Rich George
CITY	Manasquan	PHONE	732-292-0100
STATE	NJ ZIP 08736	FAX	732-292-2808

ALI SAMPLE #	FIELD ID	*C	**M	DATE / TIME SAMPLED	SAMPLE DESCRIPTION	ANALYSIS
0102747	S-MW-4	2	S	3-14-01	15-16'	HOLD
0102748	S-MW-5-A	2	S	3-14-01	0.5-2'	HOLD
0102749	S-MW-5-B	2	S	3-14-01	9-10'	HOLD
0102750	S-MW-8	2	S	3-15-01/10:00	10-11'	HOLD
0102751	TB	1	A		Trip Blank	HOLD

3/16/01 - release S-MW-5-A (0102748) for PP+40 + TPHC @ TB(2751) VOIS

*M = MATRIX A = AQUEOUS S = SOIL SL = SLUDGE P = POTABLE WATER O = OIL F = FILTER K = SOLID X = OTHER

*C = NO. CONTAINERS TURNAROUND: _____ (If Blank, Std. 3 weeks)

DELIVERABLES (circle one) STD (REDUCED) FULL OTHER _____

RELINQUISHED BY PRINT	RELINQUISHED BY SIGN	RECEIVED BY PRINT	RECEIVED BY SIGN	ORGANIZATION	DATE	TIME	REASON
Jim Hackett	[signature]	R Coffey	[signature]	ALI	3-15	14:00	Trans
		Jason Miller	[signature]	ALI	3/16/01	9:30	Analysis

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: _____ SIGN: _____

COMMENTS	1 unused neatt Jar returned
	Cooler Temp 3001

ALI QUOTE#	2025
ALI CASE#	
P.O.#	

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J. Name: [illegible]	Title: Sec
Field Sample Seal No. None	Date Broken: __/__/__	Military Time Seal Broken _____
Case No. 2025	( ) Check if No Seal on Sample Shuttle.	

Field #	Laboratory #	Test Name	Date Sampled	Date Received
S-MW-5-A	200102748	MEVO15	03/14/01	03/16/01
TB	200102751	MEVO15	03/14/01	03/16/01

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
3/21/01		Printed Name [illegible]	Printed Name W.LLORENTE	ANALYSIS
		Signature [signature]	Signature [signature]	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	

FORM: 291COC

2

3002

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J. Name: [illegible] Title: Sec
Field Sample Seal No. None	Date Broken: __/__/__ Military Time Seal Broken _____
Case No. 2025	__ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
S-MW-5-A	200102748	BNA25	03/14/01	03/16/01

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
3/22/01	12.00	Printed Name [illegible] Signature	Printed Name B. Fischer Signature Bf	Extraction
3/22/01	17:00	Printed Name B. Fischer Signature Bf	Printed Name [illegible] Signature	Cold Storage
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

FORM: 291COC

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Accredited Laboratories, Inc. Name: [illegible]	Location: Carteret, N.J. Title: SAO
Field Sample Seal No. None	Date Broken: __/__/__	Military Time Seal Broken _____
Case No. 2025	✓ Check if No Seal on Sample Shuttle.	

Field #	Laboratory #	Test Name	Date Sampled	Date Received
S-MW-5-A	200102748	PEST/PCB	03/14/01	03/16/01

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
3/22/01	2:00 PM	Printed Name [illegible]	Printed Name J Bustin	Extraction
		Signature [illegible]	Signature J Bustin	
3/22/01	6:00 PM	Printed Name J Bustin	Printed Name [illegible]	Cold Storage
		Signature J Bustin	Signature [illegible]	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	

FORM: 291COC

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3004

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J. Name: _____ Title: _____
Field Sample Seal No. _____	Date Broken: __/__/__ Military Time Seal Broken _____
Case No. 2025	✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
S-MW-5-A	200102748	PPMET	03/14/01	03/16/01

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
		Printed Name [illegible]	Printed Name L. Rupp	prep
		Signature	Signature L R	
03/22		Printed Name L. Rupp	Printed Name [illegible]	storage
		Signature L. R	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	

FORM: 291COC

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J. Name: [illegible] Title: Sam
Field Sample Seal No. [illegible]	Date Broken: __/__/__ Military Time Seal Broken _____
Case No. 2025	__ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
S-MW-5-A	200102748	% SOLIDS	03/14/01	03/16/01

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
3/19		Printed Name [illegible]	Printed Name Lindquist	
		Signature	Signature	Analysis
3/19		Printed Name Lindquist	Printed Name [illegible]	
		Signature	Signature	Cold Storage
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	

FORM: 291COC

6

3006

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J. Name: _____ Title: _____
Field Sample Seal No. _____	Date Broken: __/__/__ Military Time Seal Broken _____
Case No. 2025	__ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
S-MW-5-A	200102748	CN	03/14/01	03/16/01

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
3/23		Printed Name _____	Printed Name _____	
		Signature _____	Signature _____	Analysis
3/23		Printed Name _____	Printed Name _____	
		Signature _____	Signature _____	cold storage
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	

FORM: 291COC

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J. Name:	Title:
Field Sample Seal No. None	Date Broken: __/__/__	Military Time Seal Broken _____
Case No. 2025	Check if No Seal on Sample Shuttle.	

Field #	Laboratory #	Test Name	Date Sampled	Date Received
S-MW-5-A	200102748	TPHC	03/14/01	03/16/01

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
3/19/01	15:00	Printed Name [illegible]	Printed Name RBAUTISTA	
		Signature [illegible]	Signature RBautista	EXTRACTION
3/19/01	16:00	Printed Name RBAUTISTA	Printed Name [illegible]	
		Signature RBautista	Signature [illegible]	COLD STORAGE
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	

FORM: 29ICOC

METHODOLOGY SUMMARY

Volatile Organics - EPA 8260 (soil)

An inert gas is purged through a 5 g sample at elevated temperature. Alternatively the soil is extracted with methanol. A portion of extract is spiked into a purging vessel and purged by an inert gas. The vapor is swept through a sorbent column where the purgeables are trapped. After purging is completed, the sorbent column is heated and back-flushed with the inert gas to desorb the purgeables onto a GC column. The GC is temperature programmed to separate the purgeables which are then detected with a mass spectrometer.

Base-Neutral/Acid Extractables - EPA 8270 (soil)

A 30 gram portion of soil is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone. The methylene chloride extract is dried and concentrated and a measured amount is injected onto a GC and the analytes are detected with a mass spectrometer.

Pesticides/PCB's - EPA 8081/8082 (soil/solid)

A 30 gram portion of solid is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone using sonication technique. The extract is separated from the sample by either centrifugation or filtration. The extract is then solvent-exchanged to hexane in a K-D concentrator to a final volume of 10 ml. The extract is injected into a gas chromatograph and the compounds in the GC effluent are detected by an electron capture detector.

Metals (soil)

A 1-5 gram portion of soil is digested with nitric acid and hydrogen peroxide. The digestate is then refluxed with either nitric acid or hydrochloric acid. Diluted hydrochloric acid is used as the final reflux acid for the flame AA or ICAP of Ag, Al, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Ni, Sb, Sn, Tl and Zn. Diluted nitric acid is employed as the final dilution acid for the furnace AA analysis of As, Pb and Se. For the graphite furnace analysis, an aliquot of the digestate is spiked with nickel nitrate solution and is placed into the graphite furnace. The aliquot is then slowly evaporated to dryness, charred and atomized. The absorption of the EDL radiation during atomization is proportional to the element concentration. For the flame AA, the digestate is aspirated and atomized in a flame. The absorption of the HCL radiation during atomization is proportional to the element concentration. The basis of ICAP method is the measurement of

atomic emission by an optical spectroscope technique. The emission spectra are dispersed by a grating spectrometer and the intensities of the line are measured and processed by a computer system. For mercury analysis, a 0.5-1.0 gram portion of sample is digested with potassium permanganate and persulfate at acidic condition in a water bath at 95°C. The mercury in the sample is reduced to the elemental state and detected by the cold vapor technique in a closed system. The analytical procedures are derived from "EPA Methods for Evaluating Solid Waste, 3rd Edition, 1986" The AA technique is specified in Method 7000 series. The ICAP technique is specified in Method 6010.

Total Cyanide - SW 846, 9010 (solid)

A representative portion of sample is weighed and placed into a cyanide distillation apparatus. The cyanide as hydrocyanic acid is released from cyanide complexes by means of a reflux-distillation operation and absorbed in a scrubber containing sodium hydroxide solution. The cyanide ion in the absorbing solution is then determined colorimetrically according to EPA "Test Methods for Evaluating Solid Wastes", SW 846.

Petroleum Hydrocarbons - Modified EPA 418.1 (soil)

A 30 gram portion of soil is extracted with fluorocarbon 113. Interferences are removed with silica gel adsorbent. Infrared analysis of the extract is performed by direct comparison with standards.

Date: 03/19/01 ACCREDITED LABORATORIES, INC. Time: 11:15:20

ORGANIC ANALYSIS LABORATORY CHRONICLE

PP LIST

Client: Envirotactics Test Date Due: 03/28/01
Fax Data Due: **03/28/01** Hard Copy Due: **03/28/01**
Client Project Name: Orbis

Date Sampled:03/14/01 Date Received:03/16/01 Report Package: Reduced

Test: MEVO15 QC#: _____
Test Description:Methanol Preserved Volatiles+15 (MEVO15)

By Method: _____

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
S-MW-5-A	2025	200102748	S				03/21/01 I	21:28	WL I	
TB	2025	200102751	S					12:16		

Reviewed by: _____ Date: 3/28/01

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other RPT:Report01

11

Date: 03/19/01 ACCREDITED LABORATORIES, INC. Time: 11:15:20

ORGANIC ANALYSIS LABORATORY CHRONICLE

?P LIST

Client: Envirotactics Test Date Due: 03/28/01
Fax Data Due: **03/28/01** Hard Copy Due: **03/28/01**
Client Project Name: Orbis

Date Sampled:03/14/01 Date Received:03/16/01 Report Package: Reduced

Test: BNA25 QC#: _____
Test Description:Base Neutral Acid Compounds + 25 (BNA25)

By Method: _____

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
S-MW-5-A	2025	200102748	S	3-22-01		BR	3/23/01	14:45	DM.	

Reviewed by: _____ Date: 3/28/01

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other
RPT:Report01

12

Date: 03/19/01 ACCREDITED LABORATORIES, INC. Time: 11:15:28

ORGANIC ANALYSIS LABORATORY CHRONICLE

PP LIST

Client: Envirotactics
Test Date Due: 03/21/01
Fax Data Due: **03/28/01**
Hard Copy Due: **03/28/01**
Client Project Name: Orbis

Date Sampled:03/14/01 Date Received:03/16/01 Report Package: Reduced

Test: PEST/PCB
QC#:_____
Test Description:Pesticides/PCBs (Pest/PCB)

By Method: _____

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
S-MW-5-A	2025	200102748	S	3/22/01		JRB	3-29-01	04:53	DK	

Reviewed by: _____ Date: 3/29/01

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other

RPT:Report01

13

3013

Date: 03/19/01 ACCREDITED LABORATORIES, INC. Time: 11:15:13

INORGANIC ANALYSIS LABORATORY CHRONICLE

PP LIST

Client: Envirotactics
Fax Data Due: **03/28/01**
Test Date Due: 03/28/01
Hard Copy Due: **03/28/01**
Field#: S-MW-5-A Case#: 2025 Sample#: 200102748
Client Sample Description:
Date Sampled: 03/14/01 Date Received: 03/16/01 Report Package: Reduced

Test: PPMET
Test Description: Priority Pollutant Metals (PPMET)
Project Name: Orbis
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge:X=Oth
Sample Comments:

QC#: 01014 = ICP
01013 = GPA
01003 CV

By Method: _____

LABORATORY CHRONICLE

MTX	ELEMENT	SYM	RESULT	MDL	UNITS	PREPARATION DATE	PREPARATION INIT	ANALYSIS DATE	ANALYSIS INIT	REF
S	Antimony	Sb				03-22	LR	03-23	N	X
S	Arsenic	As						03-23	LT	149-18
S	Beryllium	Be							N	X
S	Cadmium	Cd								X
S	Chromium-T	Cr								X
S	Copper	Cu								X
S	Lead	Pb								X
S	Mercury	Hg					SR	03-23	SR	125-73
S	Nickel	Ni				03-22	LR	03-23	N	X
S	Selenium	Se						03-23	LT	994-81
S	Silver	Ag						03-23	N	X
S	Thallium	Tl							LT	
S	Zinc	Zn						03-23	N	X

X = 123-82

Quality control Report Number(s): 010314 B

Reviewed by: LT Date: 03/28 RPT:Report02

14

3014

Date: 03/19/01

Accredited Laboratories, Inc.
General Chemistry Laboratory Chronicle

Time: 11:15:43
Page: 1

PP LIST

Client Name: Envirotactics
Client Field Number: S-MW-5-A
Client Sample Description:
Date Sampled: 03/14/01
Client Project Name: Orbis
Phases:

Case#: 2025

Date Received: 03/16/01

Sample#: 200102748
Fax Data Due: **03/28/01**
Hard Copy Due: **03/28/01**
Report Package: Reduced

			ANALYTICAL DATA			SAMPLE PREP		SAMPLE ANALYSIS		
Mtx	Analytes	Test Due Date	RESULTS	MDL	UNITS	DATE	INIT	DATE	INIT	REF
S	% SOLIDS	03/28/01	84.4	0.10	%	3-19-01	d.d	3-19-01	d.d	6300
S	CN	03/28/01	ND	1.08	mg/kg	3-23-01	d.d	3-26-01	d.d	126-86

3015

Reviewed By: _____ Date: _____

Matrix:A=Aqueous: S=Soil: O=Oil: K=Solid: F=Filters: P=Potable Water: G=Sludge: X=Other: RPT:Report06

15

Date: 03/19/01 ACCREDITED LABORATORIES, INC. Time: 11:15:35

ORGANIC ANALYSIS LABORATORY CHRONICLE

PP LIST

Client: Envirotactics
Test Date Due: 03/21/01
Fax Data Due: **03/28/01**
Hard Copy Due: **03/28/01**
Client Project Name: Orbis
Case #: 2025

Date Sampled:03/14/01 Date Received:03/16/01 Report Pkg: Reduced

Test: TPHC Sample Matrix: S
Test Description:Total Petroleum Hydrocarbons (TPHC)

Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid By Method: _____
:F=Filters:P=Potable Water:G=Sludge:X=Other

SAMPLE IDENTIFICATION		ANALYTICAL DATA			LABORATORY CHRONICLE EXTRACTION		ANALYSIS		
Field#	Sample#	RESULT	MDL	UNITS	DATE	TIME	DATE	TIME	INIT
S-MW-5-A	200102748	1540	46	MG/KG	3-19-01		3-19-01		RB

QUALITY CONTROL:

Method Blank : _____
Mean Percent Spike Recovery : _____
Relative Percent Difference of Duplicate Spikes : _____

Reviewed by: _____ Date: 03-28-01 RPT:Report03

16

CONFORMANCE/NON-CONFORMANCE SUMMARY

Accredited Labs received 4 soil samples and 1 trip blank sample (Project: Orbis; ALI Case #2025) from Envirotactics, Inc. on 3/16/01 for the analyses of Priority Pollutants +40 and Total Petroleum Hydrocarbons.

Upon sample receipt, all samples were on hold. On 3/16/01, the client released ALI Sample #0102748 and 0102751 for analysis.

All analyses were performed within the required holding time.

All analyses were reported on a dry weight basis.

In the Volatile Organic analysis, the MDL levels were elevated due to the methanol preservation technique used at the time of sampling. The methylene chloride results reported are due to laboratory contamination.

"The laboratory has reviewed the quality assurance and quality control measurements for the sample analysis stated above."

Theodore C. Gaydos
Technical Director

State of New Jersey

Department of Environmental Protection

Certifies That

ACCREDITE[illegible]RIE[illegible]RPORATED

L[illegible]IFIC[illegible]07

[illegible] the requ[illegible]

Regulations Governing The Certification Of

Laboratories And Environmental Measurements N.J.A.C. 7:18 et seq.

is hereby [illegible]

State Certified Environmental Laboratory

To perform the analyses as indicated on the attached Certified Parameter List

which must accompany this certificate to be valid

Expiration Date: June [illegible], 2001

Joseph P. Aiello, Chief
Office of Quality Assurance

THIS CERTIFICATE IS TO BE CONSPICUOUSLY DISPLAYED AT THE LABORATORY WITH THE ANNUAL CERTIFIED PARAMETER LIST IN A LOCATION ON THE PREMISES VISIBLE TO THE PUBLIC.

ACCREDITED LABORATORIES, INC.
VOLATILE ORGANIC ANALYSIS DATA

F NUMBER	2025	MATRIX	Soil
LE NUMBER	0102748	DILUTION FACTOR	109
DATA FILE	>A0854	DATE EXTRACTED	
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	03/21/01
FIELD ID	S-MW-5-A	ANALYZED BY	WILLIAM

CAS #	COMPOUND	UG/KG		MDL
107028	Acrolein	U		3200
107131	Acrylonitrile	U		3200
74873	Chloromethane	U		650
75014	Vinyl Chloride	U		650
74839	Bromomethane	U		650
75003	Chloroethane	U		650
75694	Trichlorofluoromethane	U		650
75354	1,1-Dichloroethene	U		650
75092	Methylene Chloride	790	B	650
156605	trans-1,2-Dichloroethene	U		650
75343	1,1-Dichloroethane	U		650
67663	Chloroform	U		650
71556	1,1,1-Trichloroethane	U		650
56235	Carbon Tetrachloride	U		650
107062	1,2-Dichloroethane	18000	R	650

CAS #	COMPOUND	UG/KG		MDL
71432	Benzene	1900		650
79016	Trichloroethene	U		650
78875	1,2-Dichloropropane	U		650
75274	Bromodichloromethane	U		650
10061015	cis-1,3-dichloropropene	U		650
108883	Toluene	38000	E	650
10061026	trans-1,3-Dichloropropene	U		650
79005	1,1,2-Trichloroethane	U		650
127184	Tetrachloroethene	U		650
124481	Dibromochloromethane	U		650
100414	Ethylbenzene	910		650
108907	Chlorobenzene	220	J	650
75252	Bromoform	U		650
79345	1,1,2,2-Tetrachloroethane	U		650
110758	2-Chloroethylvinylether	U		650

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	91 %	70-121	OK
Toluene-d8	83 %	81-117	OK
Bromofluorobenzene	80 %	74-121	OK

Percent solid of 84.4 is used for all target compounds.

J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected,
D - Indicates result is based on a dilution.
I - Result exceeds industrial surface soil standards.*

B - Indicates compound found in associated blank.
E - Indicates result exceeds highest calibration standard
R - Result exceeds residential surface soil standards.*

* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Name: Accredited Labs, Inc. Lab Sample ID: 0102748

Client Name: ENVIROTACTICS Field ID: S-MW-5-A

Case No.: 2025 Date Extracted:

Lab File ID: >A0854 Date Analyzed: 03/21/01

CONCENTRATION UNITS: (ug/L or ug/Kg): ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	8.58	5600	
2.		Unknown	10.53	5300	
3.		Unknown	23.38	3500	
4.		Unknown aromatic	23.83	3200	
5.		Unknown aromatic	24.60	11000	
6.		Unknown	24.69	17000	
7.		Unknown	25.90	31000	
8.		Unknown	26.31	2500	
9.		Unknown	27.53	92000	
10.		Unknown	27.67	12000	
11.		Unknown	27.81	46000	
12.	149	Benzene, 1,2-dichloro-	29.10	18000	
13.		Unknown	32.78	2200	
14.		Unknown hydrocarbon	33.42	3100	
15.		Unknown	34.19	2400	

* Unknowns are defined as: Compounds that are less than 80% probability or have no database entries from the library.

FORM I SV-TIC

ACCREDITED LABORATORIES, INC.
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 2025
LE NUMBER 01027480L
DATA FILE >A0873
CLIENT NAME ENVIROTACTICS
FIELD ID S-MW-5-A

MATRIX Soil
DILUTION FACTOR 2180
DATE EXTRACTED
DATE ANALYZED 03/22/01
ANALYZED BY WILLIAM

CAS #	COMPOUND	UG/KG		MDL	CAS #	COMPOUND	UG/KG		MDL
107028	Acrolein	U		65000	71432	Benzene	U		13000
107131	Acrylonitrile	U		65000	79016	Trichloroethene	U		13000
74873	Chloromethane	U		13000	78875	1,2-Dichloropropane	U		13000
75014	Vinyl Chloride	U		13000	75274	Bromodichloromethane	U		13000
74839	Bromomethane	U		13000	10061015	cis-1,3-dichloropropene	U		13000
75003	Chloroethane	U		13000	108883	Toluene	49000	D	13000
75694	Trichlorofluoromethane	U		13000	10061026	trans-1,3-Dichloropropene	U		13000
75354	1,1-Dichloroethene	U		13000	79005	1,1,2-Trichloroethane	U		13000
75092	Methylene Chloride	U		13000	127184	Tetrachloroethene	U		13000
156605	trans-1,2-Dichloroethene	U		13000	124481	Dibromochloromethane	U		13000
75343	1,1-Dichloroethane	U		13000	100414	Ethylbenzene	U		13000
67663	Chloroform	U		13000	108907	Chlorobenzene	U		13000
71556	1,1,1-Trichloroethane	U		13000	75252	Bromoform	U		13000
56235	Carbon Tetrachloride	U		13000	79345	1,1,2,2-Tetrachloroethane	U		13000
107062	1,2-Dichloroethane	24000	DR	13000	110758	2-Chloroethylvinylether	U		13000

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	91 %	70-121	OK
Toluene-d8	109 %	81-117	OK
Bromofluorobenzene	123 %	74-121	OUT

Percent solid of 84.4 is used for all target compounds.

J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected,
D - Indicates result is based on a dilution.
I - Result exceeds industrial surface soil standards.*
B - Indicates compound found in associated blank.
E - Indicates result exceeds highest calibration standard
R - Result exceeds residential surface soil standards.*

* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC.
VOLATILE ORGANIC ANALYSIS DATA

E NUMBER	2025	MATRIX	Soil
PLE NUMBER	0102751	DILUTION FACTOR	125
DATA FILE	A0840	DATE EXTRACTED	
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	03/21/01
FIELD ID	TB	ANALYZED BY	WILLIAM

CAS #	COMPOUND	UG/KG		MDL
107028	Acrolein	U		3100
107131	Acrylonitrile	U		3100
74873	Chloromethane	U		630
75014	Vinyl Chloride	U		630
74839	Bromomethane	U		630
75003	Chloroethane	U		630
75694	Trichlorofluoromethane	U		630
75354	1,1-Dichloroethene	U		630
75092	Methylene Chloride	780	B	630
156605	trans-1,2-Dichloroethene	U		630
75343	1,1-Dichloroethane	U		630
67663	Chloroform	U		630
71556	1,1,1-Trichloroethane	U		630
56235	Carbon Tetrachloride	U		630
107062	1,2-Dichloroethane	U		630

CAS #	COMPOUND	UG/KG	MDL
71432	Benzene	U	630
79016	Trichloroethene	U	630
78875	1,2-Dichloropropane	U	630
75274	Bromodichloromethane	U	630
10061015	cis-1,3-dichloropropene	U	630
108883	Toluene	U	630
10061026	trans-1,3-Dichloropropene	U	630
79005	1,1,2-Trichloroethane	U	630
127184	Tetrachloroethene	U	630
124481	Dibromochloromethane	U	630
100414	Ethylbenzene	U	630
108907	Chlorobenzene	U	630
75252	Bromoform	U	630
79345	1,1,2,2-Tetrachloroethane	U	630
110758	2-Chloroethylvinylether	U	630

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	82 %	70-121	OK
Toluene-d8	85 %	81-117	OK
Bromofluorobenzene	85 %	74-121	OK

Percent solid of 100 is used for all target compounds.

J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected,
D - Indicates result is based on a dilution.
I - Result exceeds industrial surface soil standards.*

B - Indicates compound found in associated blank.
E - Indicates result exceeds highest calibration standard
R - Result exceeds residential surface soil standards.*

* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Accredited Labs, Inc. Lab Sample ID: 0102751

Client Name: ENVIROTACTICS Field ID: TB

Case No.: 2025 Date Extracted:

Lab File ID: >A0840 Date Analyzed: 03/21/01

CONCENTRATION UNITS: (ug/L or ug/Kg): ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

* Unknowns are defined as: Compounds that are less than 80% probability or have no database entries from the library.

FORM I SV-TIC

[illegible] LABORATORIES, INC.
[illegible] ORGANIC ANALYSIS DATA

[illegible] NUMBER	2025	MATRIX	Soil
[illegible] NUMBER	0102748	DILUTION FACTOR	1.0
GC/MS FILE	SF370/	DATE EXTRACTED	03/22/01
CLIENT NAME	ENVIROTREELLES	DATE ANALYZED	03/23/01
FIELD ID	S-MW-5-A	ANALYZED BY	DANIEL

CAS #	COMPOUND	UG/KG		MDL
[illegible]	Acenaphthene	770		390
208968	Acenaphthylene	540		390
120127	Anthracene	1600		390
56553	Benzo(a)Anthracene	3500	R	390
50328	Benzo(a)Pyrene	3100	R	390
205992	Benzo(b)fluoranthene	5300	R	390
191242	Benzo(g,h,i)Perylene	490		390
207089	Benzo(k)Fluoranthene	1900	R	390
65850	Benzoic Acid	U		2000
100516	Benzyl Alcohol	U		390
111444	bis(-2-Chloroethyl)Ether	U		390
108601	bis(2-Chloroisopropyl)ether	U		390
117817	Bis(2-Ethylhexyl)Phthalate	2100	B	390
111911	bis(-2-Chloroethoxy)Methane	U		390
101553	4-Bromophenyl-phenylether	U		390
85687	Butylbenzylphthalate	U		390
106478	4-Chloroaniline	1100		390
91587	2-Chloronaphthalene	U		390
[illegible]507	4-Chloro-3-methylphenol	U		390
[illegible]578	2-Chlorophenol	U		390
005723	4-Chlorophenyl-phenylether	U		390
218019	Chrysene	3000		390
53703	Dibenzo(a,h)Anthracene	410		390
132649	Dibenzofuran	470		390
95501	1,2-Dichlorobenzene	7900	E	390
541731	1,3-Dichlorobenzene	780		390
106467	1,4-Dichlorobenzene	4900		390
91941	3,3'-Dichlorobenzidine	U		390
120832	2,4-Dichlorophenol	U		390
84662	Diethylphthalate	U		390
105679	2,4-Dimethylphenol	U		390
131113	Dimethyl Phthalate	U		390
84742	Di-n-Butylphthalate	U		390
534521	4,6-Dinitro-2-methylphenol	U		390

CAS #	COMPOUND	UG/KG		MDL
51285	2,4-Dinitrophenol	U		390
121142	2,4-Dinitrotoluene	U		390
606202	2,6-Dinitrotoluene	U		390
117840	Di-n-octyl phthalate	U		390
206440	Fluoranthene	3800		390
86737	Fluorene	2600		390
118741	Hexachlorobenzene	U		390
87683	Hexachlorobutadiene	U		390
77474	Hexachlorocyclopentadiene	U		390
67721	Hexachloroethane	U		390
193395	Indeno(1,2,3-cd)Pyrene	640		390
78591	Isophorone	220	J	390
91576	2-Methylnaphthalene	U		390
95487	2-Methylphenol	U		390
108394	3&4-Methylphenol	110	J	390
91203	Naphthalene	290	J	390
88744	2-Nitroaniline	U		390
99092	3-Nitroaniline	U		390
100016	4-Nitroaniline	U		390
98953	Nitrobenzene	U		390
88755	2-Nitrophenol	U		390
100027	4-Nitrophenol	9600	E	390
62759	N-Nitrosodimethylamine	U		390
86306	N-Nitrosodiphenylamine	1700		390
621647	N-Nitroso-Di-n-propylamine	U		390
87865	Pentachlorophenol	U		390
85018	Phenanthrene	4700		390
108952	Phenol	U		390
129000	Pyrene	5600		390
120821	1,2,4-Trichlorobenzene	1000		390
95954	2,4,5-Trichlorophenol	U		390
88062	2,4,6-Trichlorophenol	U		390
92875	Benzidine	4900		390
122667	1,2-Diphenylhydrazine	U		390

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	48 %	23-120	OK
2-Fluorobiphenyl	124 %	30-115	OUT
Terphenyl-d14	89 %	18-137	OK
Phenol-d5	62 %	24-113	OK
2-Fluorophenol	85 %	25-121	OK
2,4,6-Tribromophenol	45 %	19-122	OK

Percent solid of 84.4 is used for all target compounds.

J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
D - Indicates result is based on a dilution.
I - Results exceed industrial surface soil standards.*

B - Indicates compound found in associated blank.
E - Concentration exceeds highest calibration standard.
R - Result exceeds residential surface soil standards.*

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* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.
[illegible]-Methylphenol and 4-Methylphenol can not be separated by the method applied.

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[illegible]

[illegible] ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUND

Lab Name: Accredited Labs, Inc. Lab Sample ID: 0102/48

Client Name: ENVIROTACTICS Field ID: S-MW-5-A

Case No.: 2025 Date Extracted: 03/22/01

Lab File ID: >F3707 Date Analyzed: 03/23/01

CONCENTRATION UNITS: (ug/L or ug/Kg): ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Aldol Condensate	4.59	11000	B
2.		Unknown aromatic	6.59	42000	
3.		Unknown hydrocarbon	7.76	18000	
4.	1124272	*** See below	7.90	5500	
5.		Unknown aromatic	11.05	2100	
6.	10458147	*** See below	11.21	2000	
7.		Unknown aromatic	11.83	3300	
8.		Unknown hydrocarbon	11.89	2000	
9.		Unknown aromatic	12.52	2500	
10.		Unknown aromatic	12.91	3900	
11.	621272	Phenol, 3-propyl-	13.08	2100	
12.		Unknown aromatic	13.26	4200	
13.	499752	*** See below	13.49	2700	
14.		Unknown aromatic	14.21	1500	
15.		Unknown	14.70	1800	
16.		Unknown aromatic	14.78	2100	
17.	469614	*** See below	15.19	5600	
18.		Unknown aromatic	17.22	1700	
19.	77532	Cedrol	17.80	3500	
20.		Unknown aromatic	18.74	5400	
21.		Unknown aromatic	20.21	4400	
22.		Unknown aromatic	20.39	3400	
23.		Unknown aromatic	20.82	4700	
24.		Unknown aromatic	21.50	9100	
25.		Unknown aromatic	24.76	2300	

***

4. Cyclohexane, 1-methyl-4-(1-methylethylidene)-
6. Cyclohexanone, 5-methyl-2-(1-methylethyl)-
13. Phenol, 2-methyl-5-(1-methylethyl)-
17. 1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hexahydro-3,6

* Unknowns are defined as: Compounds that are less than 80% probability or have no database entries from the library.

FORM I SV-TIC

[illegible]	[illegible]	MATRIX	Soil
[illegible]	[illegible]	DILUTION FACTOR	[illegible]
[illegible]	[illegible]	DATE EXTRACTED	[illegible]
[illegible]	ENVIROTACTICS	DATE ANALYZED	[illegible]
[illegible]	[illegible]	ANALYZED BY	[illegible]

CAS #	COMPOUND	UG/KG	MDL
[illegible]	Acenaphthene	U	39000
208968	Acenaphthylene	U	39000
120127	Anthracene	U	39000
56553	Benzo(a)Anthracene	U	39000
50328	Benzo(a)Pyrene	U	39000
205992	Benzo(b)fluoranthene	U	39000
191742	Benzo(g,h,i)Perylene	U	39000
207089	Benzo(k)Fluoranthene	U	39000
65850	Benzoic Acid	U	200000
100516	Benzyl Alcohol	U	39000
111444	bis(-2-Chloroethyl)Ether	U	39000
108601	bis(2-Chloroisopropyl)ether	U	39000
117817	Bis(2-Ethylhexyl)Phthalate	U	39000
111911	bis(-2-Chloroethoxy)Methane	U	39000
101553	4-Bromophenyl-phenylether	U	39000
85687	Butylbenzylphthalate	U	39000
106478	4-Chloroaniline	U	39000
91587	2-Chloronaphthalene	U	39000
[illegible]07	4-Chloro-3-methylphenol	U	39000
[illegible]578	2-Chlorophenol	U	39000
[illegible]005723	4-Chlorophenyl-phenylether	U	39000
218019	Chrysene	U	39000
53703	Dibenzo(a,h)Anthracene	U	39000
132649	Dibenzofuran	U	39000
95501	1,2-Dichlorobenzene	71000 D	39000
541731	1,3-Dichlorobenzene	U	39000
106467	1,4-Dichlorobenzene	U	39000
91941	3,3'-Dichlorobenzidine	U	39000
120832	2,4-Dichlorophenol	U	39000
84662	Diethylphthalate	U	39000
105679	2,4-Dimethylphenol	U	39000
131113	Dimethyl Phthalate	U	39000
84742	Di-n-Butylphthalate	U	39000
534521	4,6-Dinitro-2-methylphenol	U	39000

CAS #	COMPOUND	UG/KG	MDL
51785	2,4-Dinitrophenol	U	39000
121142	2,4-Dinitrotoluene	U	39000
606202	2,6-Dinitrotoluene	U	39000
117840	Di-n-octyl phthalate	U	39000
206440	Fluoranthene	6500 J D	39000
86737	Fluorene	U	39000
118741	Hexachlorobenzene	U	39000
87683	Hexachlorobutadiene	U	39000
77474	Hexachlorocyclopentadiene	U	39000
67721	Hexachloroethane	U	39000
193395	Indeno(1,7,3-cd)Pyrene	U	39000
78591	Isophorone	U	39000
91576	2-Methylnaphthalene	U	39000
95487	2-Methylphenol	U	39000
108394	3&4-Methylphenol	U	39000
91203	Naphthalene	U	39000
88744	2-Nitroaniline	U	39000
99092	3-Nitroaniline	U	39000
100016	4-Nitroaniline	U	39000
98953	Nitrobenzene	U	39000
88755	2-Nitrophenol	U	39000
100027	4-Nitrophenol	12000 J D	39000
62759	N-Nitrosodimethylamine	U	39000
86306	N-Nitrosodiphenylamine	U	39000
621647	N-Nitroso-Di-n-propylamine	U	39000
87865	Pentachlorophenol	U	39000
85018	Phenanthrene	8300 J D	39000
108952	Phenol	U	39000
129000	Pyrene	5400 J D	39000
120821	1,2,4-Trichlorobenzene	U	39000
95954	2,4,5-Trichlorophenol	U	39000
88062	2,4,6-Trichlorophenol	U	39000
92875	Benzidine	4000 J D	39000
122667	1,2-Diphenylhydrazine	U	39000

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	35 %	23-120	OK
2-Fluorobiphenyl	76 %	30-115	OK
Terphenyl-d14	71 %	18-137	OK
Phenol-d5	44 %	24-113	OK
2-Fluorophenol	31 %	25-121	OK
2,4,6-Tribromophenol	34 %	19-122	OK

Percent solid of 84.4 is used for all target compounds.

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[illegible] - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
D - Indicates result is based on a dilution.
I - Results exceed industrial surface soil standards.*

B - Indicates compound found in associated blank.
E - Concentration exceeds highest calibration standard.
R - Result exceeds residential surface soil standards.*

* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 04 Number 1.
[illegible]

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ACCREDITED LABORATORIES, INC
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER	2025	MATRIX	Soil
SAMPLE NUMBER	0102748	DILUTION FACTOR	1
DATA FILE	>A3837	DATE EXTRACTED	03/22/01
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	03/29/01
FIELD ID	S-MW-5-A	ANALYZED BY	PHIL

CAS#	COMPOUND	UG/KG	MDL
319846	A-BHC	7.72	.790
319857	B-BHC	U	.790
58899	G-BHC (Lindane)	U	.790
319868	D-BHC	U	.790
76448	Heptachlor	U	.790
309002	Aldrin	U	.790
1024573	Heptachlor Epoxide	U	.790
959988	Endosulfan I	57.8 E	.790
5103719	A-Chlordane	17.9	.790
5103742	G-Chlordane	8.26	.790
60571	Dieldrin	U	1.58
72559	4,4'-DDE	3420 E R	1.58
72208	Endrin	U	1.58
33213659	Endosulfan II	111 E	1.58
72548	4,4'-DDD	7820 E R	1.58
7421934	Endrin Aldehyde	U	1.58
1031078	Endosulfan Sulfate	U	1.58
50293	4,4'-DDT	U	1.58
53494705	Endrin Ketone	U	1.58
72435	Methoxychlor	U	7.90
8001352	Toxaphene	U	39.5
12674112	Aroclor-1016	U	19.7
11104282	Aroclor-1221	U	19.7
11141165	Aroclor-1232	U	19.7
53469219	Aroclor-1242	U	19.7
12672296	Aroclor-1248	U	19.7
11097691	Aroclor-1254	U	19.7
11096825	Aroclor-1260	U	19.7

Percent Solid of 84.4 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

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ACCREDITED LABORATORIES, INC
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER	2025	MATRIX	Soil
SAMPLE NUMBER	01027480L 5	DILUTION FACTOR	5
DATA FILE	>A3838	DATE EXTRACTED	03/22/01
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	03/29/01
FIELD ID	S-MW-5-A	ANALYZED BY	PHIL

CAS#	COMPOUND	UG/KG		MDL
319846	A-BHC	6.58	D	3.95
319857	B-BHC	U		3.95
58899	G-BHC (Lindane)	U		3.95
319868	D-BHC	U		3.95
76448	Heptachlor	U		3.95
309002	Aldrin	U		3.95
1024573	Heptachlor Epoxide	U		3.95
959988	Endosulfan I	66.7	D	3.95
5103719	A-Chlordane	22.9	D	3.95
5103742	G-Chlordane	6.00	D	3.95
60571	Dieldrin	U		7.90
72559	4,4'-DDE	3590	E DR	7.90
72208	Endrin	U		7.90
33213659	Endosulfan II	103	D	7.90
72548	4,4'-DDD	13800	E DI	7.90
7421934	Endrin Aldehyde	U		7.90
1031078	Endosulfan Sulfate	U		7.90
50293	4,4'-DDT	U		7.90
53494705	Endrin Ketone	U		7.90
72435	Methoxychlor	U		39.5
8001352	Toxaphene	U		197
12674112	Aroclor-1016	U		98.7
11104282	Aroclor-1221	U		98.7
11141165	Aroclor-1232	U		98.7
53469219	Aroclor-1242	U		98.7
12672296	Aroclor-1248	U		98.7
11097691	Aroclor-1254	U		98.7
11096825	Aroclor-1260	U		98.7

Percent Solid of 84.4 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER	2025	MATRIX	Soil
SAMPLE NUMBER	0102748DL 500	DILUTION FACTOR	500
DATA FILE	>A3839	DATE EXTRACTED	03/22/01
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	03/29/01
FIELD ID	S-MW-5-A	ANALYZED BY	PHIL

CAS#	COMPOUND	UG/KG		MDL
319846	A-BHC	U		395
319857	B-BHC	U		395
58899	G-BHC (Lindane)	U		395
319868	D-BHC	U		395
76448	Heptachlor	U		395
309002	Aldrin	U		395
1024573	Heptachlor Epoxide	U		395
959988	Endosulfan I	U		395
5103719	A-Chlordane	U		395
5103742	G-Chlordane	U		395
60571	Dieldrin	U		790
72559	4,4'-DDE	3740	DR	790
72208	Endrin	U		790
33213659	Endosulfan II	U		790
72548	4,4'-DDD	13200	DI	790
7421934	Endrin Aldehyde	U		790
1031078	Endosulfan Sulfate	U		790
50293	4,4'-DDT	U		790
53494705	Endrin Ketone	U		790
72435	Methoxychlor	U		3950
8001352	Toxaphene	U		19700
12674112	Aroclor-1016	U		9870
11104282	Aroclor-1221	U		9870
11141165	Aroclor-1232	U		9870
53469219	Aroclor-1242	U		9870
12672296	Aroclor-1248	U		9870
11097691	Aroclor-1254	U		9870
11096825	Aroclor-1260	U		9870

Percent Solid of 84.4 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC.
INORGANIC ANALYSIS DATA SHEET

Case #: 2025
Sample #: 0102748
Field ID: S-MW-5-A
Client Name: ENVIROTACTIC

Matrix: Soil
Date Received: 03/16/01

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7440-36-0	Antimony	ND	5.70	1	P	03/23/01
7440-38-2	Arsenic	6.99	1.52	4	F	03/23/01
7440-41-7	Beryllium	1.11	.380	1	P	03/23/01
7440-43-9	Cadmium	9.65	.760	1	P	03/23/01
7440-47-3	Chromium	16.0	2.28	1	P	03/23/01
7440-50-8	Copper	33.8	2.28	1	P	03/23/01
7439-92-1	Lead	88.1	15.2	1	P	03/23/01
7439-97-6	Mercury	ND	.592	1	CV	03/23/01
7440-02-0	Nickel	1200	3.80	1	P	03/23/01
7782-49-2	Selenium	ND	1.90	5	F	03/23/01
7440-22-4	Silver	ND	1.52	1	P	03/23/01
7440-28-0	Thallium	ND	1.90	5	F	03/26/01
7440-66-6	Zinc	995	7.60	1	P	03/23/01

Percent Solid of 84.4 is used for all target elements

ND - Element analyzed for but not detected.
P - Analyzed by ICP
F - Analyzed by GFA
CV - Analyzed by Cold Vapor
A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 2025
Sample #: 0102748
Client Name: ENVIROTACT
Field Number: S-MW-5-A

Matrix: Soil
Date Received: 03/16/01
% Moisture: 15.6

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK RESULTS	METHOD BLANK MDL	ANALYSIS DATE
Solids, Percent	84.4	0.10	%	1.			03/19/01
Cyanide, Total	ND	1.08	mg/Kg	1.	ND	0.01	03/26/01

Accredited Laboratories, Inc.
Total Petroleum Hydrocarbon Analysis

Client: ENVIROTACT
Case #: 2025
Analyst: RB

Matrix: Soil
Date Received: 03/16/01
Date Analyzed: 03/19/01

Field #	Sample #	Amount Used (g)	% S	DF	ABS	Result mg/Kg	MDL mg/Kg
S-MW-5-A	0102748	15.51	84.4	10	15	1540	46

Response Factor = .13423396

% S = Percent Solids
DF = Dilution Factor
ABS = Absorbance

Method Blank: < 20 mg/Kg

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION
BROMOFLUOROBENZENE (BFB)

Lab Name: ACCREDITED LABORATORIES, INC. Contract: _____

Lab File ID: >A9739 BFB Injection Date: 01/02/01

Instrument ID: HP5970BA BFB Injection Time: 09:52

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.0
75	30.0 - 60.0% of mass 95	51.9
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	8.1
173	Less than 2.0% of mass 174	.6(.9)1
174	Greater than 50.0% of mass 95	73.9
175	5.0 - 9.0% of mass 174	5.1(6.9)1
176	95.0 - 101.0% of mass 174	73.7(99.8)1
177	5.0 - 9.0% of mass 176	5.9(8.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		VSTD050	>A9740	01/02/01	10:12
02		VSTD020	>A9741	01/02/01	11:18
03		VSTD010	>A9742	01/02/01	11:58
04		VSTD100	>A9743	01/02/01	12:39
05		VSTD200	>A9744	01/02/01	13:19
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

33

FORM V VOA

3033

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION
BROMOFLUOROBENZENE (BFB)

Lab Name: ACCREDITED LABORATORIES, INC. Contract: _____

Lab File ID: >A0796 BFB Injection Date: 03/19/01

Instrument ID: HP5970BA BFB Injection Time: 10:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.9
75	30.0 - 60.0% of mass 95	56.3
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	8.4
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	70.2
175	5.0 - 9.0% of mass 174	5.1(7.3)1
176	95.0 - 101.0% of mass 174	66.8(95.2)1
177	5.0 - 9.0% of mass 176	5.9(8.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		VSTD050	>A0797	03/19/01	11:03
02		VBLKA80	>A0798	03/19/01	11:57
03		0102452	>A0799	03/19/01	13:09
04		0102453	>A0800	03/19/01	13:49
05		0102454	>A0801	03/19/01	14:29
06		0102455	>A0802	03/19/01	15:09
07		0102456	>A0803	03/19/01	15:49
08		0102457	>A0804	03/19/01	16:29
09		0102458	>A0805	03/19/01	17:09
10		0102459	>A0806	03/19/01	17:49
11		0102460	>A0807	03/19/01	18:28
12		0102461	>A0808	03/19/01	19:08
13		0102462	>A0809	03/19/01	19:48
14		0102463	>A0810	03/19/01	20:27
15		0102463MS	>A0811	03/19/01	21:07
16		0102463MSD	>A0812	03/19/01	21:46
17					
18					
19					
20					
21					
22					

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FORM V VOA

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION
BROMOFLUOROBENZENE (BFB)

Lab Name: ACCREDITED LABORATORIES, INC. Contract: _____

Lab File ID: >A0837 BFB Injection Date: 03/21/01

Instrument ID: HP5970BA BFB Injection Time: 10:09

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.0
75	30.0 - 60.0% of mass 95	56.7
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	69.2
175	5.0 - 9.0% of mass 174	5.2(7.5)1
176	95.0 - 101.0% of mass 174	68.0(98.2)1
177	5.0 - 9.0% of mass 176	5.6(8.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		VSTD050	>A0838	03/21/01	10:28
02		VBLKA82	>A0839	03/21/01	11:22
03		0102751	>A0840	03/21/01	12:16
04		0102606	>A0841	03/21/01	12:56
05		0102309	>A0842	03/21/01	13:36
06		BLANK	>A0843	03/21/01	14:15
07		0102636DL	>A0844	03/21/01	14:55
08		0102576	>A0845	03/21/01	15:35
09		0102453	>A0846	03/21/01	16:08
10		0102454	>A0847	03/21/01	16:48
11		0102600	>A0848	03/21/01	17:28
12		0102601	>A0849	03/21/01	18:08
13		0102602	>A0850	03/21/01	18:48
14		0102603	>A0851	03/21/01	19:28
15		0102604	>A0852	03/21/01	20:08
16		0102605	>A0853	03/21/01	20:48
17		0102748	>A0854	03/21/01	21:28
18					
19					
20					
21					
22					

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5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION
BROMOFLUOROBENZENE (BFB)

Lab Name: ACCREDITED LABORATORIES, INC. Contract: _____

Lab File ID: >A0859 BFB Injection Date: 03/22/01

Instrument ID: HP5970BA BFB Injection Time: 10:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.4
75	30.0 - 60.0% of mass 95	54.7
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	8.5
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	77.2
175	5.0 - 9.0% of mass 174	5.1(6.7)1
176	95.0 - 101.0% of mass 174	74.5(96.4)1
177	5.0 - 9.0% of mass 176	5.6(7.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		VSTD050	>A0860	03/22/01	10:38
02		VBLKA83	>A0861	03/22/01	11:33
03		0102842	>A0862	03/22/01	12:28
04		0102843	>A0863	03/22/01	13:08
05		0102845	>A0864	03/22/01	13:48
06		0102846	>A0865	03/22/01	14:28
07		0102847	>A0866	03/22/01	15:09
08		0102848	>A0867	03/22/01	15:49
09		0102849	>A0868	03/22/01	16:29
10		0102850	>A0869	03/22/01	17:09
11		0102844	>A0870	03/22/01	17:50
12		0102851	>A0871	03/22/01	18:30
13		0102852	>A0872	03/22/01	19:10
14		0102748DL	>A0873	03/22/01	19:50
15		0102847MS	>A0874	03/22/01	20:30
16		0102847MSD	>A0875	03/22/01	21:10
17					
18					
19					
20					
21					
22					

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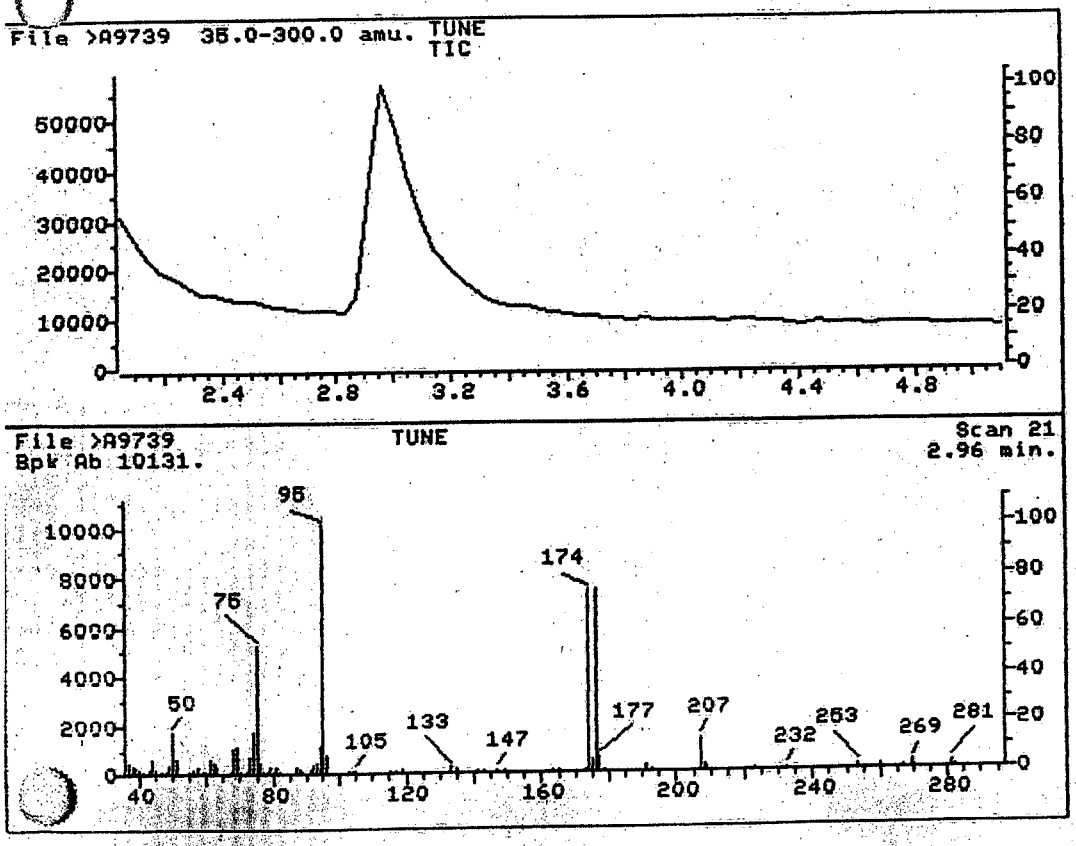
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	17.04	17.04	OK
75	30-60% of mass 95	51.89	51.89	OK
95	Base peak, 100% relative abundance	100.00	100.00	OK
96	5-9% of mass 95	8.14	8.14	OK
173	Less than 2% of mass 174	.64	.87	OK
174	Greater than 50% of mass 95	73.91	73.91	OK
175	5-9% of mass 174	5.08	6.88	OK
176	95-101% of mass 174	73.73	99.76	OK
177	5-9% of mass 176	5.87	7.97	OK

Injection Date: 01/02/01
Injection Time: 09:52
Data File: >A9739
Scan: 21



>A9739 TUNE
21

File: >A9739 Scan #: 21 Retn. time: 2.96

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	108.0	72.00	75.0	109.00	16.0	147.95	38.0	209.15	192.0
37.15	410.0	73.10	799.0	111.10	22.0	149.15	83.0	210.15	29.0
38.05	368.0	74.10	1757.0	112.00	18.0	150.05	30.0	218.20	35.0
39.15	272.0	75.10	5257.0	113.20	29.0	155.10	35.0	219.00	42.0
40.05	196.0	76.10	459.0	115.10	72.0	156.20	30.0	220.20	19.0
41.15	147.0	77.10	120.0	116.10	48.0	156.70	14.0	221.20	32.0
43.05	159.0	78.15	90.0	117.00	81.0	161.15	42.0	223.25	67.0
44.05	650.0	79.05	263.0	118.10	45.0	162.15	17.0	232.15	124.0
45.05	204.0	80.15	71.0	119.10	150.0	163.15	85.0	234.20	23.0
47.10	101.0	80.95	272.0	119.95	32.0	165.05	66.0	239.10	23.0
48.10	70.0	82.05	91.0	121.15	40.0	170.95	11.0	247.15	37.0
49.10	392.0	85.15	45.0	123.05	17.0	173.00	65.0	249.15	63.0
50.10	1726.0	86.95	237.0	125.05	32.0	174.10	7488.0	250.05	16.0
51.10	644.0	87.95	207.0	126.05	23.0	175.10	515.0	253.15	224.0
52.10	35.0	89.00	82.0	127.05	56.0	176.10	7470.0	254.20	59.0
55.10	133.0	91.10	230.0	128.05	55.0	177.10	595.0	260.20	210.0
56.10	191.0	92.10	330.0	129.15	30.0	178.20	40.0	261.20	42.0
57.15	311.0	93.10	483.0	130.10	49.0	179.10	96.0	262.20	33.0
58.15	83.0	94.10	1099.0	131.10	40.0	181.10	20.0	265.25	35.0
59.15	130.0	95.10	10131.0	133.10	264.0	191.15	237.0	267.15	81.0
62.05	578.0	96.10	825.0	134.10	55.0	192.20	57.0	268.25	31.0
62.05	423.0	97.10	59.0	135.10	210.0	193.20	148.0	269.25	359.0
63.05	303.0	98.00	24.0	137.10	32.0	194.10	24.0	270.25	100.0
64.15	36.0	101.15	26.0	140.95	96.0	195.10	56.0	271.25	43.0
65.15	29.0	101.95	11.0	143.05	96.0	205.05	39.0	281.30	304.0
67.15	76.0	103.05	106.0	145.05	24.0	206.25	23.0	282.20	89.0
68.10	1078.0	104.05	91.0	145.95	25.0	207.15	1387.0	283.20	56.0
69.10	1087.0	105.15	112.0	147.05	123.0	208.15	315.0	297.30	26.0
70.10	95.0	107.15	36.0						

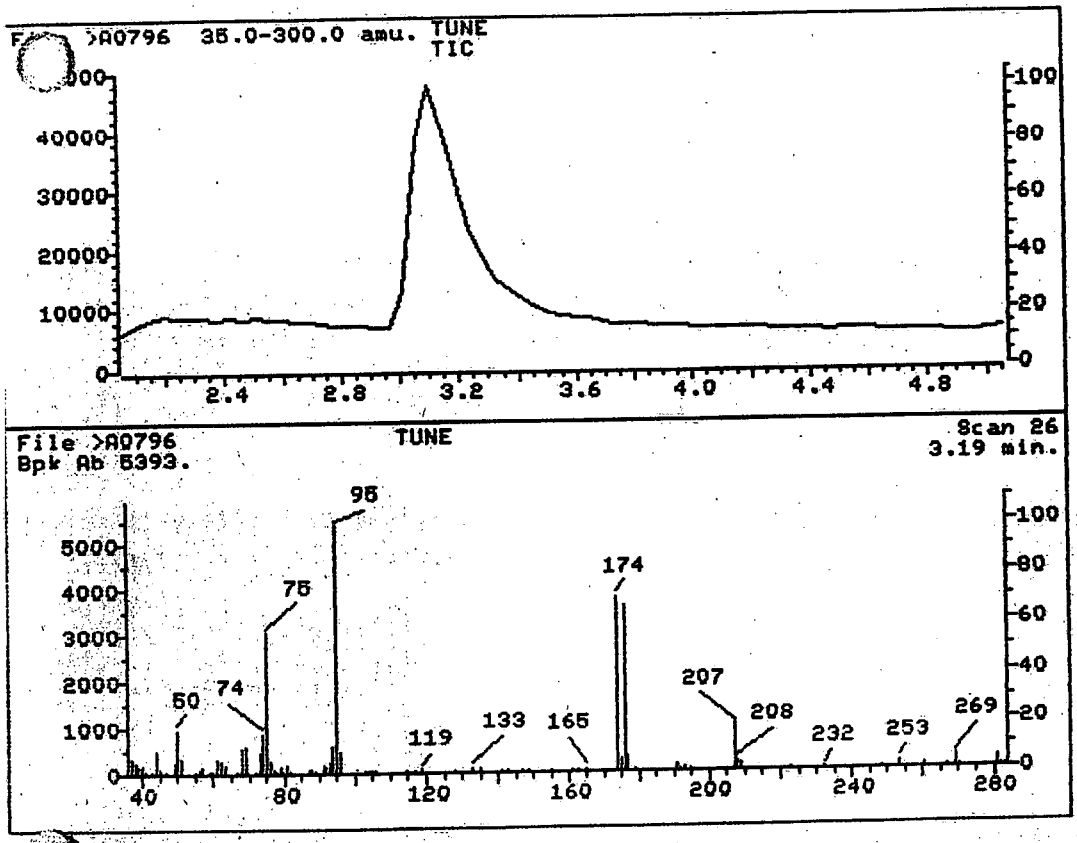
BX336

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	17.95	17.95	OK
75	30-60% of mass 95	56.28	56.28	OK
95	Base peak, 100% relative abundance	100.00	100.00	OK
96	5-9% of mass 95	8.42	8.42	OK
173	Less than 2% of mass 174	0.00	0.00	OK
174	Greater than 50% of mass 95	70.16	70.16	OK
175	5-9% of mass 174	5.12	7.29	OK
176	95-101% of mass 174	66.79	95.19	OK
177	5-9% of mass 176	5.90	8.83	OK

Injection Date: 03/19/01
Injection Time: 10:33
Data File: >A0796
Scan: 26



96
26

TUNE

File: >A0796 Scan #: 26 Retn. time: 3.19

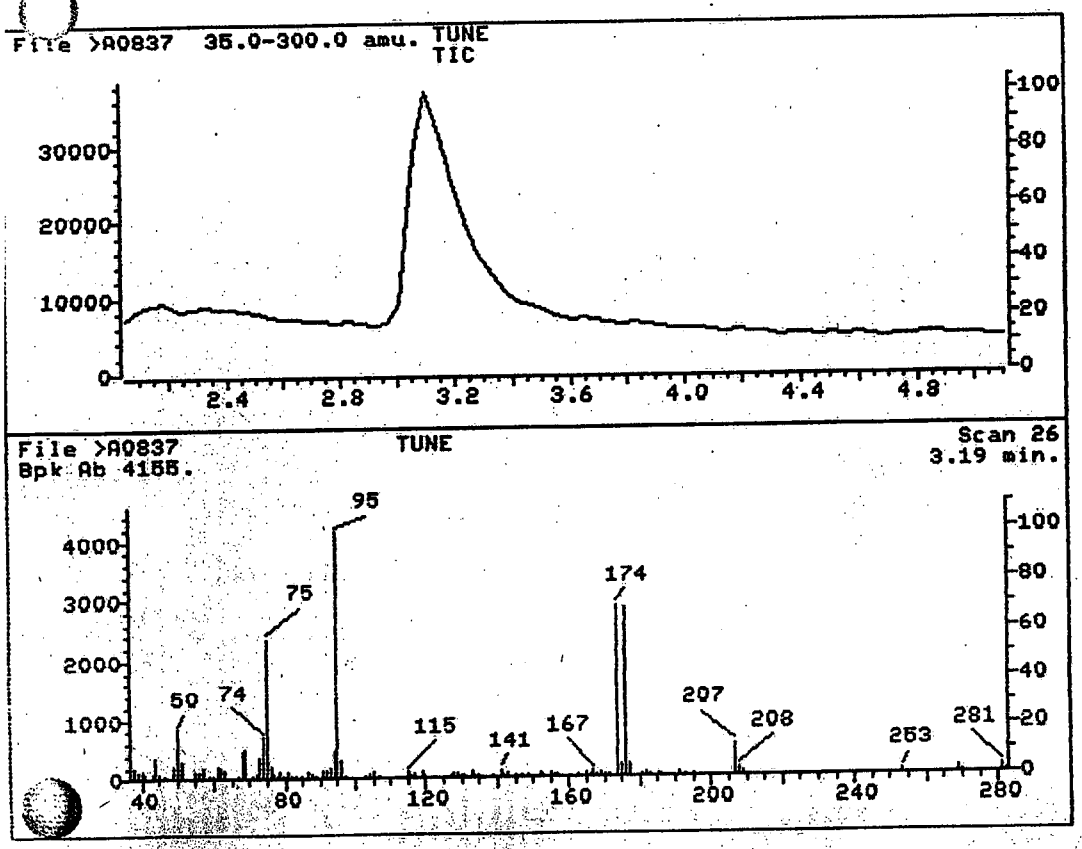
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.90	33.00	65.05	17.00	95.00	5393.00	141.00	51.00	193.00	99.00
37.00	306.00	66.95	46.00	96.00	454.00	142.10	17.00	195.05	39.00
38.00	254.00	67.95	568.00	96.80	34.00	143.00	48.00	204.95	24.00
38.90	128.00	68.95	580.00	102.00	15.00	144.70	13.00	207.00	998.00
39.95	203.00	69.95	59.00	102.90	72.00	147.00	57.00	208.00	208.00
40.95	67.00	71.05	31.00	103.90	65.00	147.90	26.00	209.10	150.00
41.95	20.00	71.95	68.00	104.90	55.00	148.80	37.00	218.95	26.00
43.05	66.00	73.00	464.00	105.95	35.00	149.90	11.00	223.05	39.00
43.95	514.00	74.00	885.00	106.95	26.00	154.95	42.00	232.10	51.00
44.85	96.00	75.00	3035.00	111.05	16.00	155.95	22.00	248.95	39.00
46.95	53.00	76.00	271.00	114.95	50.00	160.95	49.00	250.90	19.00
47.85	30.00	77.00	108.00	115.95	33.00	162.90	52.00	253.10	148.00
48.95	234.00	78.00	66.00	117.00	64.00	165.00	66.00	254.00	32.00
49.95	968.00	78.90	147.00	118.00	26.00	165.80	12.00	255.10	22.00
51.00	336.00	79.90	43.00	119.00	90.00	168.10	15.00	260.10	80.00
55.00	56.00	80.90	171.00	121.00	21.00	170.00	22.00	261.00	20.00
56.10	98.00	81.90	43.00	125.70	10.00	173.95	3784.00	266.95	36.00
57.00	159.00	86.95	123.00	126.90	30.00	174.95	276.00	269.05	261.00
00	52.00	87.95	118.00	128.05	52.00	175.95	3602.00	270.05	65.00
00	77.00	88.95	41.00	128.95	30.00	176.95	318.00	281.00	236.00
00	313.00	91.05	183.00	129.95	27.00	178.95	50.00	282.00	73.00
61.95	266.00	91.95	144.00	133.05	122.00	184.20	19.00	283.00	42.00
63.05	197.00	92.95	230.00	133.95	27.00	191.00	167.00	283.95	23.00
64.05	19.00	93.95	590.00	134.95	88.00	192.00	45.00		

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	20.02	20.02	OK
75	30-60% of mass 95	56.73	56.73	OK
95	Base peak, 100% relative abundance	100.00	100.00	OK
96	5-9% of mass 95	7.58	7.58	OK
173	Less than 2% of mass 174	0.00	0.00	OK
174	Greater than 50% of mass 95	69.24	69.24	OK
175	5-9% of mass 174	5.17	7.47	OK
176	95-101% of mass 174	68.01	98.23	OK
177	5-9% of mass 176	5.61	8.25	OK

Injection Date: 03/21/01
Injection Time: 10:09
Data File: >A0837
Scan: 26



2041

>A0837 TUNE
26

File: >A0837 Scan #: 26 Retn. time: 3.19

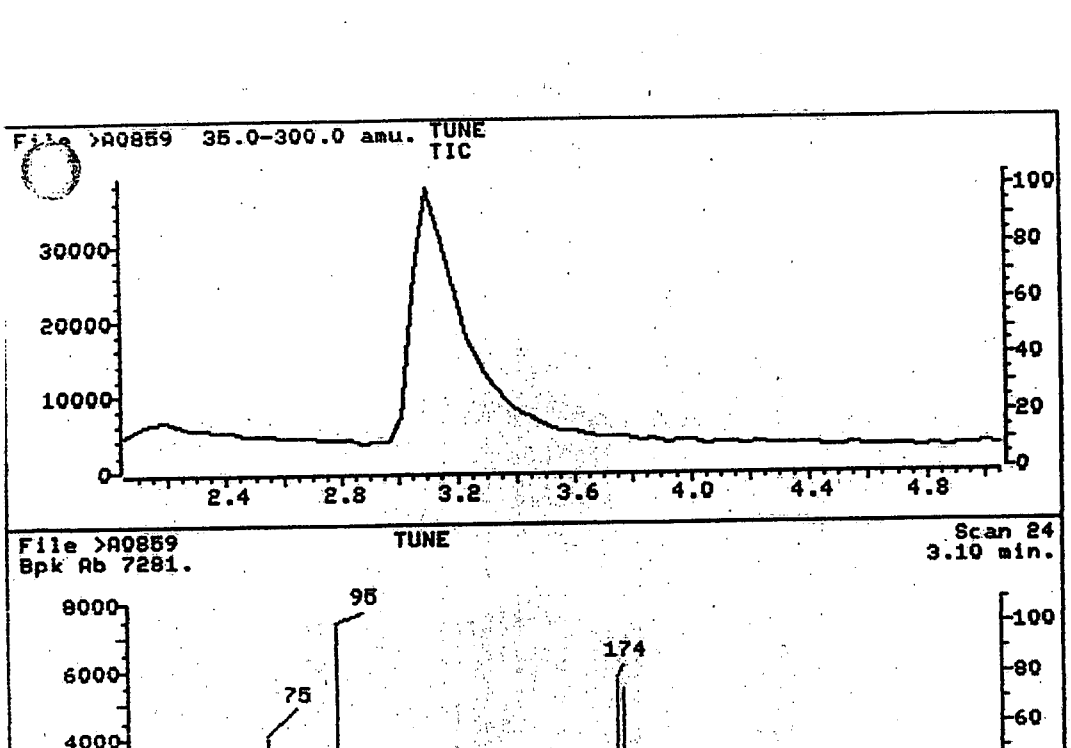
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.90	236.00	73.00	369.00	105.00	97.00	143.90	16.00	177.95	19.00
38.00	179.00	74.00	694.00	107.05	29.00	145.00	42.00	180.95	42.00
39.05	126.00	75.00	2357.00	109.05	24.00	147.00	50.00	182.05	64.00
39.95	145.00	76.00	217.00	109.95	13.00	148.90	30.00	183.05	44.00
41.05	86.00	77.00	71.00	114.95	103.00	151.05	23.00	183.80	19.00
43.05	85.00	78.00	47.00	115.95	32.00	152.05	94.00	185.10	27.00
43.95	350.00	78.80	121.00	117.00	62.00	153.05	59.00	186.10	27.00
44.95	82.00	79.90	45.00	118.00	23.00	154.05	22.00	191.00	86.00
46.85	42.00	80.90	121.00	119.10	101.00	155.05	87.00	192.00	19.00
48.95	203.00	81.90	36.00	120.00	27.00	156.05	55.00	193.00	61.00
49.95	832.00	83.00	48.00	121.00	20.00	157.05	36.00	193.90	15.00
51.00	282.00	85.05	31.00	124.90	16.00	158.85	26.00	195.05	30.00
55.00	99.00	86.25	10.00	127.00	58.00	161.90	15.00	198.15	13.00
56.00	98.00	86.95	99.00	127.90	80.00	162.90	35.00	198.95	20.00
57.00	200.00	87.95	86.00	129.05	74.00	164.00	23.00	207.00	537.00
59.00	46.00	88.95	60.00	129.95	30.00	165.00	85.00	208.00	144.00
60.00	46.00	89.65	17.00	131.05	36.00	166.00	30.00	209.00	84.00
60.90	229.00	90.95	151.00	133.05	118.00	167.00	109.00	222.95	23.00
61.95	183.00	91.95	143.00	133.95	30.00	168.00	43.00	248.85	26.00
63.05	151.00	92.95	173.00	134.95	52.00	169.00	62.00	250.60	11.00
64.05	26.00	93.95	452.00	135.95	11.00	170.00	41.00	253.00	72.00
66.95	49.00	95.00	4155.00	136.95	25.00	171.10	44.00	268.95	130.00
67.95	479.00	96.00	315.00	139.10	36.00	173.95	2877.00	269.95	34.00
68.95	512.00	97.00	37.00	141.00	124.00	174.95	215.00	281.00	142.00
70.95	51.00	102.90	45.00	141.90	47.00	175.95	2826.00	282.10	44.00
71.95	77.00	104.00	64.00	142.90	75.00	176.95	233.00	283.00	25.00

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	18.38	18.38	OK
75	30-60% of mass 95	54.73	54.73	OK
95	Base peak, 100% relative abundance	100.00	100.00	OK
96	5-9% of mass 95	8.46	8.46	OK
173	Less than 2% of mass 174	0.00	0.00	OK
174	Greater than 50% of mass 95	77.24	77.24	OK
175	5-9% of mass 174	5.15	6.67	OK
176	95-101% of mass 174	74.50	96.44	OK
177	5-9% of mass 176	5.58	7.49	OK

Injection Date: 03/22/01
Injection Time: 10:20
Data File: >A0859
Scan: 24



TUNE

File: >A0859 Scan #: 24 Retn. time: 3.10

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.90	33.00	62.05	350.00	90.95	109.00	130.95	34.00	177.95	19.00
37.00	371.00	63.05	233.00	91.95	193.00	133.05	102.00	178.95	28.00
38.00	278.00	67.05	32.00	92.95	308.00	135.05	56.00	189.00	12.00
39.05	154.00	67.95	770.00	93.95	813.00	141.00	79.00	191.00	81.00
39.95	130.00	68.95	706.00	95.00	7281.00	142.00	28.00	192.00	22.00
41.05	53.00	69.95	50.00	96.00	616.00	143.00	64.00	193.00	58.00
43.05	68.00	71.95	60.00	97.10	27.00	145.00	24.00	204.95	12.00
43.95	364.00	73.00	494.00	102.10	15.00	145.80	11.00	207.00	490.00
44.95	107.00	74.00	1248.00	103.00	56.00	147.00	41.00	208.00	120.00
46.95	63.00	75.00	3985.00	104.00	58.00	154.05	14.00	209.00	81.00
47.95	25.00	76.00	319.00	105.00	58.00	154.95	31.00	210.00	19.00
48.95	299.00	77.00	89.00	105.95	36.00	155.95	25.00	248.85	19.00
49.95	1338.00	78.00	44.00	106.95	21.00	156.85	24.00	253.00	67.00
51.00	425.00	78.90	194.00	114.95	49.00	163.00	30.00	260.00	28.00
55.00	26.00	80.00	52.00	115.95	27.00	165.00	26.00	269.05	121.00
55.90	112.00	80.90	192.00	117.00	65.00	173.95	5624.00	270.05	38.00
57.00	198.00	81.90	49.00	119.00	84.00	174.95	375.00	271.05	20.00
59.00	36.00	86.95	148.00	127.90	42.00	175.95	5424.00	281.10	130.00
59.90	75.00	87.95	140.00	129.05	25.00	176.95	406.00	282.10	38.00
00	365.00	88.95	38.00	129.95	33.00				

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Initial Calibration Data
HSL Compounds

Case No:

Instrument ID: HP5970BA

Contractor: Accredited Labs

Calibration Date: 01/02/01

Contract No: CAAS11

Minimum RF for SPCC is 0.1 Maximum % RSD for CCC is 20%

Laboratory ID:	>A9742	>A9741	>A9740	>A9743	>A9744					
Compound	RF 10.00	RF 20.00	RF 50.00	RF 100.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Acrolein	.00110	.00478	.00523	.00725	.00666	.454	.00501	48.064		
Acrylonitrile	.02816	.03235	.02904	.04111	.03478	.633	.03309	15.737		
Acetone	.04501	.04550	.04720	.04761	.04108	.484	.04528	5.722		
Dichlorodifluoromethane	.46640	.55118	.51642	.51970	.47573	.266	.50589	6.863		
Chloromethane	.17386	.20148	.21003	.21039	.19238	.290	.19763	7.691		**
Vinyl Chloride	.13027	.14160	.15088	.16992	.15750	.301	.15003	10.073	*	
Bromomethane	.21247	.21758	.21482	.23806	.22919	.339	.22242	4.878		
Chloroethane	.07362	.09168	.09144	.10394	.09665	.347	.09147	12.235		
Trichlorofluoromethane	.96562	1.01619	.88743	1.00037	.85580	.381	.94508	7.450		
1,1-Dichloroethene	.39368	.43174	.39216	.48686	.43573	.459	.42803	9.049	*	
Carbon disulfide	.34141	.38120	.35500	.41969	.37710	.494	.37488	7.967		
Methylene Chloride	.31337	.28969	.23784	.29011	.30276	.562	.28676	10.133		
trans-1,2-Dichloroethene	.38479	.39230	.36346	.43858	.40337	.604	.39650	6.980		
1,1-Dichloroethane	.45504	.47859	.42888	.55537	.49935	.719	.48345	9.939		**
Vinyl acetate	.43400	.34576	.30200	.37259	.29404	.742	.34968	16.315		
2,2-Dichloropropane	.45574	.51943	.45656	.51947	.48898	.857	.48804	6.486		
2-Butanone	.05784	.07252	.07369	.07830	.07113	.886	.07070	10.857		
cis-1,2-dichloroethene	.46645	.46284	.44266	.55469	.50710	.867	.48675	9.163		
Chloroform	.67417	.71707	.65735	.79726	.72962	.945	.71509	7.652	*	
Bromochloromethane	.22846	.26155	.23222	.30325	.28822	.921	.26274	12.621		
1,1,1-Trichloroethane	.77143	.80892	.72964	.91019	.85605	.966	.81525	8.666		
T-butyl alcohol	.01960	.02133	.02045	.02506	.02248	.608	.02178	9.726		
1,2-Dichloroethane-d4	.50218	.54078	.49742	.61284	.57313	.921	.54527	8.941		
1,1-Dichloropropene	.92073	.72999	.54866	.54418	.48558	.875	.64583	27.710		
Carbon Tetrachloride	1.35823	1.21621	.93797	.98042	.90294	.866	1.07915	18.382		
1,2-Dichloroethane	.53825	.57541	.51240	.62986	.59882	.934	.57095	8.198		
Benzene	.61382	.68158	.64847	.73983	.67989	.912	.67272	6.929		
Trichloroethene	.43549	.45992	.42142	.49506	.46983	1.034	.45634	6.340		
1,2-Dichloropropane	.25360	.26139	.23241	.30093	.27783	1.083	.26507	9.693	*	
Bromodichloromethane	.73674	.87585	.81901	.94927	.89816	1.133	.85581	9.504		

(Conc=50.0,100.0,250.0,50
(Conc=50.0,100.0,250.0,50
(Conc=100.0,200.0,500.0,1

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

[redacted] No: Instrument ID: HP5970BA

[redacted] actor: Accredited Labs Calibration Date: 01/02/01

Contract No: CAAS11

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % RSD for CCC is 20%

Laboratory ID:	>A9742	>A9741	>A9740	>A9743	>A9744					
Compound	RF 10.00	RF 20.00	RF 50.00	RF 100.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Dibromomethane	.37830	.42094	.41241	.45557	.41706	1.102	.41525	7.314		
2-Chloroethylvinylether	.10968	.12131	.11892	.16176	.15967	1.193	.13427	18.279		
cis-1,3-dichloropropene	.49452	.53718	.49774	.58509	.56681	1.212	.53627	7.543		(Conc=9.45,18.9,47.3,94.5
Toluene-d8	.81206	.87100	.87166	.95782	.91047	1.246	.88460	6.100		
Toluene	.80906	.87193	.83181	.96502	.91991	1.256	.87955	7.244	*	
trans-1,3-Dichloropropene	.42706	.46636	.44075	.53507	.51252	1.313	.47635	9.707		(Conc=10.5,21.1,52.8,105.
1,1,2-Trichloroethane	.21888	.23225	.21360	.26414	.23773	1.341	.23332	8.485		
4-Methyl-2-pentanone	.22383	.22323	.20147	.25442	.22645	1.243	.22588	8.347		
1,2-Dibromoethane	.45702	.49664	.44948	.56530	.53481	1.415	.50065	9.929		
Bromofluorobenzene	.82760	.83655	.77552	.92582	.89510	1.689	.85212	6.940		
2-Hexanone	.17048	.18246	.15853	.18567	.18146	.929	.17572	6.365		
1,3-dichloropropane	.51521	.59417	.52814	.59336	.56426	.918	.55903	6.521		
Tetrachloroethene	.61107	.73107	.72304	.69234	.64765	.900	.68104	7.489		
[redacted]omochloromethane	.88446	1.02600	.98275	1.07613	1.01119	.939	.99610	7.128		
[redacted]benzene	1.49365	1.58088	1.45340	1.53836	1.43180	1.014	1.49962	4.067	*	
[redacted]obenzene	.89343	.97095	.92567	1.02678	.96961	1.003	.95729	5.287		**
1,1,1,2-Tetrachloroethane	.58924	.66532	.67272	.68966	.62874	1.015	.64914	6.193		
m,p-Xylene	1.36300	1.44902	1.33472	1.42671	1.29820	1.028	1.37433	4.575		(Conc=20.0,40.0,100.0,200
o-Xylene	1.36540	1.51933	1.35653	1.42175	1.27944	1.072	1.38849	6.409		(Conc=20.0,40.0,100.0,200
Styrene	.84080	.91860	.80667	.91025	.84811	1.076	.86489	5.543		(Conc=20.0,40.0,100.0,200
Bromoform	.62975	.75509	.74108	.80997	.78263	1.097	.74370	9.274		**
Isopropylbenzene	2.37454	2.53981	2.32546	2.79701	2.65620	.881	2.53860	7.703		
1,1,2,2-Tetrachloroethane	.75126	.81815	.73266	.84818	.77743	.917	.78554	6.047		**
1,2,3-Trichloropropane	.26510	.28234	.25804	.31092	.29401	.919	.28208	7.604		
n-Propyl benzene	2.72854	2.85401	2.53189	2.90948	2.80750	.917	2.76628	5.309		
Bromobenzene	1.65841	1.70346	1.51778	1.87264	1.79061	.909	1.70858	7.885		
1,3,5-Trimethylbenzene	2.29827	2.39670	2.13952	2.56806	2.40210	.935	2.36093	6.658		
2-Chlorotoluene	2.24450	2.28548	2.13807	2.47877	2.37603	.926	2.30457	5.622		
4-Chlorotoluene	2.59825	2.73121	2.45604	2.87953	2.72618	.937	2.67824	5.945		
tert-Butylbenzene	2.21383	2.35525	2.21609	2.46570	2.36429	.961	2.32304	4.639		

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

[redacted] - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: HP5970BA

Factor: Accredited Labs Calibration Date: 01/02/01

Contract No: CAAS11

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % RSD for CCC is 20%

Laboratory ID:	>A9742	>A9741	>A9740	>A9743	>A9744					
Compound	RF 10.00	RF 20.00	RF 50.00	RF 100.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
1,2,4-Trimethylbenzene	2.34768	2.42842	2.21142	2.64900	2.49721	.968	2.42675	6.739		
sec-Butylbenzene	2.77195	2.97632	2.62348	3.19949	2.96768	.982	2.90778	7.547		
p-Isopropyltoluene	2.38992	2.61326	2.43337	2.72293	2.57994	.995	2.54789	5.339		
1,3-Dichlorobenzene	1.38214	1.53850	1.37483	1.54806	1.42079	.993	1.45286	5.811		
1,4-Dichlorobenzene	1.42794	1.58918	1.46094	1.56324	1.45564	1.002	1.49939	4.790		
n-Butylbenzene	2.38774	2.51757	2.20989	2.64025	2.45911	1.032	2.44291	6.541		
1,2-Dichlorobenzene	1.35782	1.48671	1.34050	1.47831	1.37315	1.034	1.40730	4.952		
1,2-Dibromo-3-Chloropropane	.24230	.28940	.27569	.33288	.31770	1.108	.29159	12.214		
1,2,4-Trichlorobenzene	1.17249	1.29597	1.25733	1.42658	1.33695	1.178	1.29786	7.255		
Hexachlorobutadiene	.91842	1.00906	.99727	1.19280	1.06108	1.189	1.03573	9.807		
Naphthalene	1.69761	1.99967	1.68134	2.29879	2.07552	1.200	1.95059	13.461		
1,2,3-Trichlorobenzene	1.04616	1.17911	1.11899	1.37657	1.22673	1.223	1.18952	10.467		
Methyl t-butyl ether	1.20274	1.28338	1.14329	1.34535	1.26234	.283	1.24742	6.202		

(Conc=100.0,200.0,500.0,1

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

- Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

[redacted] No: Calibration Date: 03/21/01

[redacted] actor: Accredited Labs Time: 10:28

Contract No: CAAS11 Laboratory ID: >A0838

Instrument ID: HP5970BA Initial Calibration Date: 01/02/01

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % Diff for CCC is 30%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Acrolein	.00501	.01386	176.92			(Conc=250.00)
Acrylonitrile	.03309	.03202	3.23			(Conc=250.00)
Acetone	.04528	.03332	26.42			
Dichlorodifluoromethane	.50589	.35400	30.02			
Chloromethane	.19763	.14999	24.11		**	
Vinyl Chloride	.15003	.12634	15.79	*		
Bromomethane	.22242	.21156	4.89			
Chloroethane	.09147	.08665	5.26			
Trichlorofluoromethane	.94508	.82151	13.08			
1,1-Dichloroethene	.42803	.38775	9.41	*		
Carbon disulfide	.37488	.41627	11.04			
Methylene Chloride	.28676	.24969	12.93			
trans-1,2-Dichloroethene	.39650	.36803	7.18			
[redacted] Dichloroethane	.48345	.44672	7.60		**	
[redacted] acetate	.34968	.33439	4.37			
[redacted] Dichloropropane	.48804	.46754	4.20			
2-Butanone	.07070	.06269	11.32			
cis-1,2-dichloroethene	.48675	.44525	8.52			
Chloroform	.71509	.67618	5.44	*		
Bromochloromethane	.26274	.25590	2.60			
1,1,1-Trichloroethane	.81525	.69896	14.26			
T-butyl alcohol	.02178	.01836	15.74			(Conc=500.00)
1,2-Dichloroethane-d4	.54527	.48786	10.53			
1,1-Dichloropropene	.64583	.57072	11.63			
Carbon Tetrachloride	1.07915	.91381	15.32			
1,2-Dichloroethane	.57095	.49715	12.93			
Benzene	.67272	.68755	2.20			
Trichloroethene	.45634	.42164	7.60			
1,2-Dichloropropane	.26507	.24520	7.50	*		
Bromodichloromethane	.85581	.81579	4.68			
Dibromomethane	.41525	.40351	2.83			
2-Chloroethylvinylether	.13427	.12019	10.48			

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

[redacted] - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: | Calibration Date: 03/21/01

ractor: Accredited Labs | Time: 10:28

Contract No: CAAS11 | Laboratory ID: >A0838

Instrument ID: HP5970BA | Initial Calibration Date: 01/02/01

Minimum $\overline{RF}$ for SPCC is 0.1 | Maximum % Diff for CCC is 30%

Compound	RF	$\overline{RF}$	%Diff	CCC	SPCC	
cis-1,3-dichloropropene	.53627	.50312	6.18			(Conc=47.30)
Toluene-d8	.88460	.88443	.02			
Toluene	.87955	.86490	1.67	*		
trans-1,3-Dichloropropene	.47635	.43600	8.47			(Conc=52.80)
1,1,2-Trichloroethane	.23332	.21933	6.00			
4-Methyl-2-pentanone	.22588	.19448	13.90			
1,2-Dibromoethane	.50065	.45155	9.81			
Bromofluorobenzene	.85212	.75476	11.43			
2-Hexanone	.17572	.14616	16.82			
1,3-dichloropropane	.55903	.55264	1.14			
Tetrachloroethene	.68104	.71403	4.84			
Dibromochloromethane	.99610	.92252	7.39			
Ethylbenzene	1.49962	1.51321	.91	*		
Chlorobenzene	.95729	.93289	2.55		**	
1,1,1,2-Tetrachloroethane	.64914	.66791	2.89			
m-Xylene	1.37433	1.36091	.98			(Conc=100.00)
o-Xylene	1.38849	1.43704	3.50			(Conc=100.00)
Styrene	.86489	.84942	1.79			(Conc=100.00)
Bromoform	.74370	.72008	3.18		**	
Isopropylbenzene	2.53860	2.35751	7.13			
1,1,2,2-Tetrachloroethane	.78554	.73275	6.72		**	
1,2,3-Trichloropropane	.28208	.25261	10.45			
n-Propyl benzene	2.76628	2.64583	4.35			
Bromobenzene	1.70858	1.50839	11.72			
1,3,5-Trimethylbenzene	2.36093	2.17527	7.86			
2-Chlorotoluene	2.30457	2.16670	5.98			
4-Chlorotoluene	2.67824	2.52406	5.76			
tert-Butylbenzene	2.32304	2.27587	2.03			
1,2,4-Trimethylbenzene	2.42675	2.24778	7.37			
sec-Butylbenzene	2.90778	2.63594	9.35			
p-Isopropyltoluene	2.54789	2.48985	2.28			
1,3-Dichlorobenzene	1.45286	1.39592	3.92			

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

No:

Calibration Date: 03/21/01

actor: Accredited Labs

Time: 10:28

Contract No: CAAS11

Laboratory ID: >A0838

Instrument ID: HP5970BA

Initial Calibration Date: 01/02/01

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % Diff for CCC is 30%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
1,4-Dichlorobenzene	1.49939	1.46014	2.62			
n-Butylbenzene	2.44291	2.34648	3.95			
1,2-Dichlorobenzene	1.40730	1.36994	2.65			
1,2-Dibromo-3-Chloropropane	.29159	.25454	12.71			
1,2,4-Trichlorobenzene	1.29786	1.34178	3.38			
Hexachlorobutadiene	1.03573	1.03617	.04			
Naphthalene	1.95059	1.67506	14.13			
1,2,3-Trichlorobenzene	1.18952	1.12793	5.18			
Methyl t-butyl ether	1.24742	1.25665	.74			(Conc=500.00)

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

- Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 03/22/01

Contractor: Accredited Labs

Time: 10:38

Contract No: CAAS11

Laboratory ID: >A0860

Instrument ID: HP5970BA

Initial Calibration Date: 01/02/01

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % Diff for CCC is 30%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Acrolein	.00501	.01348	169.30			(Conc=250.00)
Acrylonitrile	.03309	.03394	2.57			(Conc=250.00)
Acetone	.04528	.03355	25.91			
Dichlorodifluoromethane	.50589	.34442	31.92			
Chloromethane	.19763	.16053	18.77		**	
Vinyl Chloride	.15003	.13599	9.36	*		
Bromomethane	.22242	.20585	7.45			
Chloroethane	.09147	.09211	.70			
Trichlorofluoromethane	.94508	.79139	16.26			
1,1-Dichloroethene	.42803	.38613	9.79	*		
Carbon disulfide	.37488	.40365	7.68			
Methylene Chloride	.28676	.25921	9.61			
trans-1,2-Dichloroethene	.39650	.36647	7.57			
1,1-Dichloroethane	.48345	.46049	4.75		**	
Vinyl acetate	.34968	.34608	1.03			
2,2-Dichloropropane	.48804	.47015	3.67			
2-Butanone	.07070	.07248	2.52			
cis-1,2-dichloroethene	.48675	.46114	5.26			
Chloroform	.71509	.69544	2.75	*		
Bromochloromethane	.26274	.26821	2.08			
1,1,1-Trichloroethane	.81525	.71610	12.16			
T-butyl alcohol	.02178	.01911	12.26			(Conc=500.00)
1,2-Dichloroethane-d4	.54527	.48494	11.06			
1,1-Dichloropropene	.64583	.56672	12.25			
Carbon Tetrachloride	1.07915	.87094	19.29			
1,2-Dichloroethane	.57095	.51814	9.25			
Benzene	.67272	.69131	2.76			
Trichloroethene	.45634	.41959	8.05			
1,2-Dichloropropane	.26507	.25762	2.81	*		
Bromodichloromethane	.85581	.79492	7.11			
Dibromomethane	.41525	.40484	2.51			
2-Chloroethylvinylether	.13427	.12944	3.60			

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

[redacted] No:
Calibration Date: 03/22/01

[redacted] actor: Accredited Labs
Time: 10:38

Contract No: CAAS11
Laboratory ID: >A0860

Instrument ID: HP5970BA
Initial Calibration Date: 01/02/01

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % Diff for CCC is 30%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
cis-1,3-dichloropropene	.53627	.51801	3.40			(Conc=47.30)
Toluene-d8	.88460	.90296	2.08			
Toluene	.87955	.89433	1.68	*		
trans-1,3-Dichloropropene	.47635	.43360	8.98			(Conc=52.80)
1,1,2-Trichloroethane	.23332	.22413	3.94			
4-Methyl-2-pentanone	.22588	.19636	13.07			
1,2-Dibromoethane	.50065	.45817	8.49			
Bromofluorobenzene	.85212	.76846	9.82			
2-Hexanone	.17572	.14688	16.41			
1,3-dichloropropane	.55903	.55793	.20			
Tetrachloroethene	.68104	.72550	6.53			
Dibromochloromethane	.99610	.92492	7.15			
Ethylbenzene	1.49962	1.50121	.11	*		
Chlorobenzene	.95729	.93718	2.10		**	
[redacted],2-Tetrachloroethane	.64914	.66267	2.09			
[redacted]Xylene	1.37433	1.38425	.72			(Conc=100.00)
o-Xylene	1.38849	1.39127	.20			(Conc=100.00)
Styrene	.86489	.83554	3.39			(Conc=100.00)
Bromoform	.74370	.66962	9.96		**	
Isopropylbenzene	2.53860	2.48643	2.06			
1,1,2,2-Tetrachloroethane	.78554	.75663	3.68		**	
1,2,3-Trichloropropane	.28208	.25837	8.41			
n-Propyl benzene	2.76628	2.73204	1.24			
Bromobenzene	1.70858	1.55181	9.18			
1,3,5-Trimethylbenzene	2.36093	2.27840	3.50			
2-Chlorotoluene	2.30457	2.28731	.75			
4-Chlorotoluene	2.67824	2.60459	2.75			
tert-Butylbenzene	2.32304	2.31227	.46			
1,2,4-Trimethylbenzene	2.42675	2.32706	4.11			
sec-Butylbenzene	2.90778	2.77594	4.53			
p-Isopropyltoluene	2.54789	2.56516	.68			
1,3-Dichlorobenzene	1.45286	1.47213	1.33			

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

[redacted] - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 03/22/01

Contractor: Accredited Labs

Time: 10:38

Contract No: CAAS11

Laboratory ID: >A0860

Instrument ID: HP5970BA

Initial Calibration Date: 01/02/01

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % Diff for CCC is 30%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
1,4-Dichlorobenzene	1.49939	1.53152	2.14			
n-Butylbenzene	2.44291	2.46500	.90			
1,2-Dichlorobenzene	1.40730	1.47104	4.53			
1,2-Dibromo-3-Chloropropane	.29159	.24950	14.44			
1,2,4-Trichlorobenzene	1.29786	1.30463	.52			
Hexachlorobutadiene	1.03573	.94242	9.01			
Naphthalene	1.95059	1.64991	15.41			
1,2,3-Trichlorobenzene	1.18952	1.11452	6.30			
Methyl t-butyl ether	1.24742	1.27373	2.11			(Conc=500.00)

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

- Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

ACCREDITED LABORATORIES, INC.
WATER/SOIL VOLATILE SURROGATE RECOVERY

	ALI Sample No.	Mtx	S1 (DCE-d4)	S2 (TOL-d8)	S3 (BFB)	TOTAL OUT
1	VBLKA82	S	99	105	100	0
2	VBLKA83	S	101	104	101	0
3	0102748	S	91	83	80	0
4	0102748DL	S	91	109	123 *	1
5	0102751	S	82	85	85	0
6	0102463MS	S	142 *	94	95	1
7	0102463MSD	S	137 *	94	106	1

EPA CLP QC Limits for:	WATER	SOIL
S1 (DCE-d4) = 1,2-Dichloroethane-d4	(76-114)	(70-121)
S2 (TOL-d8) = Toluene-d8	(88-110)	(81-117)
S3 (BFB) = Bromofluorobenzene	(86-115)	(74-121)

* Values outside of EPA contract laboratory QC limits

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: SAS No.: _____ SDG No.:

Lab File ID (Standard): >A0797 Date Analyzed: 03/19/01

Instrument ID: HP5970BA Time Analyzed: 11:03

GC Column: RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

	IS1(DFB) AREA	#	RT	#	IS2(CBZ) AREA	#	RT	#	IS3(PFB) AREA	#	RT	#
	12 HOUR STD		210264		14.94		156689		22.20		245507		13.03	
	UPPER LIMIT		420528		15.44		313378		22.70		491014		13.53	
	LOWER LIMIT		105132		14.44		78345		21.70		122753		12.53	
	LAB SAMPLE NO.													
01	VBLKA80		199030		14.93		153609		22.24		222514		13.03	
02	0102463MS		72582	*	14.94		53310	*	22.21		71842	*	13.04	
03	0102463MSD		83982	*	14.93		63923	*	22.20		86204	*	13.03	
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22														

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (PFB) = Pentafluorobenzene
IS4 (DCB) = 1,4-Dichlorobenzene-d4

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

55

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

3A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: SAS No.: _____ SDG No.:

Lab File ID (Standard): >A0797 Date Analyzed: 03/19/01

Instrument ID: HP5970BA Time Analyzed: 11:03

GC Column: RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

	IS4(DCB) AREA #	IS4(DCB) RT #				
12 HOUR STD	119592	28.06				
UPPER LIMIT	239184	28.56				
LOWER LIMIT	59796	27.56				
LAB SAMPLE NO.						
01 VBLKA80	107922	28.05				
02 0102463MS	28670*	28.06				
03 0102463MSD	36436*	28.05				
04						
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22						

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (PFB) = Pentafluorobenzene
IS4 (DCB) = 1,4-Dichlorobenzene-d4

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

56

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

3056

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: 2025 SAS No.: _____ SDG No.:

Lab File ID (Standard): >A0838 Date Analyzed: 03/21/01

Instrument ID: HP5970BA Time Analyzed: 10:28

GC Column: RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

	IS1(DFB) AREA	#	RT	#	IS2(CBZ) AREA	#	RT	#	IS3(PFB) AREA	#	RT	#
12 HOUR STD	172597		14.94		129121		22.20		201755		13.03	
UPPER LIMIT	345194		15.44		258242		22.70		403510		13.53	
LOWER LIMIT	86298		14.44		64560		21.70		100878		12.53	
LAB SAMPLE NO.												
01 VBLKA82	151668		14.98		118215		22.24		172729		13.07	
02 0102748	126594		14.98		105041		22.24		132423		13.07	
03 0102751	146758		14.94		113517		22.25		167323		13.03	
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22												

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (PFB) = Pentafluorobenzene
IS4 (DCB) = 1,4-Dichlorobenzene-d4

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.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: 2025 SAS No.: _____ SDG No.:

Lab File ID (Standard): >A0838 Date Analyzed: 03/21/01

Instrument ID: HP5970BA Time Analyzed: 10:28

GC Column: RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

	IS4(DCB) AREA #	RT #					
12 HOUR STD	94552	28.06					
UPPER LIMIT	189104	28.56					
LOWER LIMIT	47276	27.56					
LAB SAMPLE NO.							
01 VBLKA82	83619	28.05					
02 0102748	63305	28.10					
03 0102751	79601	28.06					
04							
05							
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20							
21							
22							

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (PFB) = Pentafluorobenzene
IS4 (DCB) = 1,4-Dichlorobenzene-d4

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

58

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

2054

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: 2025 SAS No.: _____ SDG No.:

Lab File ID (Standard): >A0860 Date Analyzed: 03/22/01

Instrument ID: HP5970BA Time Analyzed: 10:38

GC Column: RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS1(DFB) AREA	#	RT	#	IS2(CBZ) AREA	#	RT	#	IS3(PFB) AREA	#	RT	#
	12 HOUR STD	164496		14.94		124446		22.20		187882		13.03	
	UPPER LIMIT	328992		15.44		248892		22.70		375764		13.53	
	LOWER LIMIT	82248		14.44		62223		21.70		93941		12.53	
	LAB SAMPLE NO.												
01	VBLKA83	142884		14.98		113021		22.24		160828		13.07	
02	0102748DL	110173		14.98		91239		22.24		109398		13.07	
03													
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21													
22													

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (PFB) = Pentafluorobenzene
IS4 (DCB) = 1,4-Dichlorobenzene-d4

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

59

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

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: 2025 SAS No.: _____ SDG No.:

Lab File ID (Standard): >A0860 Date Analyzed: 03/22/01

Instrument ID: HP5970BA Time Analyzed: 10:38

GC Column: RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

	IS4(DCB) AREA #	RT #				
12 HOUR STD	88621	28.06				
UPPER LIMIT	177242	28.56				
LOWER LIMIT	44310	27.56				
LAB SAMPLE NO.						
01 VBLKA83	79581	28.09				
02 0102748DL	64646	28.10				
03						
04						
05						
06						
07						
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20						
21						
22						

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (PFB) = Pentafluorobenzene
IS4 (DCB) = 1,4-Dichlorobenzene-d4

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

60

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

2060

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Accredited Labs, Inc. Contract: _____

Lab Code: GC/MS Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix Spike - ALI Sample No.: 0102463

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50	0	58	116	59-172
Trichloroethene	50	0	48	96	62-137
Benzene	50	0	58	116	66-142
Toluene	50	0	51	101	59-139
Chlorobenzene	50	0	49	98	60-133

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	58	115	1	22	59-172
Trichloroethene	50	54	107	12	24	62-137
Benzene	50	60	121	4	21	66-142
Toluene	50	56	112	11	21	59-139
Chlorobenzene	50	55	111	12	21	60-133

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of qc limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

ACCREDITED LABORATORIES, INC.
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER
LE NUMBER V8LKA82
DATA FILE >A0839
ENT NAME
FIELD ID

MATRIX Soil
DILUTION FACTOR 125
DATE EXTRACTED
DATE ANALYZED 03/21/01
ANALYZED BY WILLIAM

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
107028	Acrolein	U	3100	71432	Benzene	U	630
107131	Acrylonitrile	U	3100	79016	Trichloroethene	U	630
74873	Chloromethane	U	630	78875	1,2-Dichloropropane	U	630
75014	Vinyl Chloride	U	630	75274	Bromodichloromethane	U	630
74839	Bromomethane	U	630	10061015	cis-1,3-dichloropropene	U	630
75003	Chloroethane	U	630	108883	Toluene	U	630
75694	Trichlorofluoromethane	U	630	10061026	trans-1,3-Dichloropropene	U	630
75354	1,1-Dichloroethene	U	630	79005	1,1,2-Trichloroethane	U	630
75092	Methylene Chloride	480 J	630	127184	Tetrachloroethene	U	630
156605	trans-1,2-Dichloroethene	U	630	124481	Dibromochloromethane	U	630
75343	1,1-Dichloroethane	U	630	100414	Ethylbenzene	U	630
67663	Chloroform	U	630	108907	Chlorobenzene	U	630
71556	1,1,1-Trichloroethane	U	630	75252	Bromoform	U	630
56235	Carbon Tetrachloride	U	630	79345	1,1,2,2-Tetrachloroethane	U	630
107062	1,2-Dichloroethane	U	630	110758	2-Chloroethylvinylether	U	630

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	99 %	70-121	OK
Toluene-d8	105 %	81-117	OK
Bromofluorobenzene	100 %	74-121	OK

Percent solid of 100 is used for all target compounds.

J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected,
D - Indicates result is based on a dilution.
I - Result exceeds industrial surface soil standards.*

B - Indicates compound found in associated blank.
E - Indicates result exceeds highest calibration standard
R - Result exceeds residential surface soil standards.*

* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Accredited Labs, Inc.

Lab Sample ID: VBLKA82

Client Name:

Field ID:

Case No.:

Date Extracted:

Lab File ID: >A0839

Date Analyzed: 03/21/01

CONCENTRATION UNITS: (ug/L or ug/Kg): ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

* Unknowns are defined as: Compounds that are less than 80% probability or have no database entries from the library.

FORM I SV-TIC

ACCREDITED LABORATORIES, INC.
VOLATILE ORGANIC ANALYSIS DATA

E NUMBER
...MPLE NUMBER VBLKA83
DATA FILE >A0861
CLIENT NAME
FIELD ID

MATRIX Soil
DILUTION FACTOR 125
DATE EXTRACTED
DATE ANALYZED 03/22/01
ANALYZED BY WILLIAM

CAS #	COMPOUND	UG/KG	MDL
107028	Acrolein	U	3100
107131	Acrylonitrile	U	3100
74873	Chloromethane	U	630
75014	Vinyl Chloride	U	630
74839	Bromomethane	U	630
75003	Chloroethane	U	630
75694	Trichlorofluoromethane	U	630
75354	1,1-Dichloroethene	U	630
75092	Methylene Chloride	620 J	630
156605	trans-1,2-Dichloroethene	U	630
75343	1,1-Dichloroethane	U	630
67663	Chloroform	U	630
71556	1,1,1-Trichloroethane	U	630
56235	Carbon Tetrachloride	U	630
107062	1,2-Dichloroethane	U	630
71432	Benzene	U	630
79016	Trichloroethene	U	630
78875	1,2-Dichloropropane	U	630
75274	Bromodichloromethane	U	630
10061015	cis-1,3-dichloropropene	U	630
108883	Toluene	U	630
10061026	trans-1,3-Dichloropropene	U	630
79005	1,1,2-Trichloroethane	U	630
127184	Tetrachloroethene	U	630
124481	Dibromochloromethane	U	630
100414	Ethylbenzene	U	630
108907	Chlorobenzene	U	630
75252	Bromoform	U	630
79345	1,1,2,2-Tetrachloroethane	U	630
110758	2-Chloroethylvinylether	U	630

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	101 %	70-121	OK
Toluene-d8	104 %	81-117	OK
Bromofluorobenzene	101 %	74-121	OK

Percent solid of 100 is used for all target compounds.

J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected,
D - Indicates result is based on a dilution.
I - Result exceeds industrial surface soil standards.*
B - Indicates compound found in associated blank.
E - Indicates result exceeds highest calibration standard
R - Result exceeds residential surface soil standards.*

*** Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.**

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Accredited Labs, Inc. Lab Sample ID: VBLKA83

Client Name: Field ID:

Case No.: Date Extracted:

Lab File ID: >A0861 Date Analyzed: 03/22/01

CONCENTRATION UNITS: (ug/L or ug/Kg): ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

* Unknowns are defined as: Compounds that are less than 80% probability or have no database entries from the library.

FORM I SV-TIC

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: SAS No.: _____ SDG No.:

Lab File ID: >A0798 Lab Sample ID: VBLKA80

Date Analyzed: 03/19/01 Time Analyzed: 11:57

GC Column: RTX-502 ID: 0.53(mm) Heated Purge: (Y/N) Y

Instrument ID: HP5970A

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01		0102463MS	>A0811	21:07
02		0102463MSD	>A0812	21:46
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
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22				
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25				
26				
27				
28				
29				
30				

COMMENTS: _____

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: 2025 SAS No.: _____ SDG No.:

Lab File ID: >A0839 Lab Sample ID: VBLKA82

Date Analyzed: 03/21/01 Time Analyzed: 11:22

GC Column: RTX-502 ID: 0.53(mm) Heated Purge: (Y/N) Y

Instrument ID: HP5970A

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01		0102748	>A0854	21:28
02		0102751	>A0840	12:16
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
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21				
22				
23				
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27				
28				
29				
30				

COMMENTS: _____

67

3067

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

L. . Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: 2025 SAS No.: _____ SDG No.:

Lab File ID: >A0861 Lab Sample ID: VBLKA83

Date Analyzed: 03/22/01 Time Analyzed: 11:33

GC Column: RTX-502 ID: 0.53(mm) Heated Purge: (Y/N) Y

Instrument ID: HP5970A

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01		0102748DL	>A0873	19:50
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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29				
30				

MENTS:

68

30068

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ACCREDITED LABORATORIES, INC. Contract: _____

File ID: >F3501 DFTPP Injection Date: 03/07/01

Instrument ID: HP5970BF DFTPP Injection Time: 12:51

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.3
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	63.2
70	Less than 2.0% of mass 69	.3(.5)1
127	40.0 - 60.0% of mass 198	50.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% Relative abundance	100.
199	5.0 - 9.0% of mass 198	7.1
275	10.0 - 30.0% of mass 198	22.2
365	Greater than 1.00% of mass 198	2.59
441	Present, but less than mass 443	0.0
442	Greater than 40.0% of mass 198	60.5
443	17.0 - 23.0% of mass 442	11.5(19.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	SSTD050	>F3502	03/07/01	13:06
02	_____	SSTD160	>F3503	03/07/01	13:49
03	_____	SSTD020	>F3505	03/07/01	15:39
04	_____	SSTD080	>F3506	03/07/01	16:22
05	_____	SSTD120	>F3507	03/07/01	17:06
06	_____	0101716	>F3508	03/07/01	17:49
07	_____	0101717	>F3509	03/07/01	18:32
08	_____	0101718	>F3510	03/07/01	19:15
09	_____	0101719	>F3511	03/07/01	19:58
10	_____	0101720	>F3512	03/07/01	20:41
11	_____	0101721	>F3513	03/07/01	21:24
12	_____	0101722	>F3514	03/07/01	22:08
13	_____	0101723	>F3515	03/07/01	22:51
14	_____	0101711DL	>F3516	03/07/01	23:34
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

69

Lab Name: ACCREDITED LABORATORIES, INC. Contract: _____

Lab File ID: >F3661 DFTPP Injection Date: 03/20/01

Instrument ID: HP5970BF DFTPP Injection Time: 10:39

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	50.1
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	57.8
70	Less than 2.0% of mass 69	.3(.5)1
127	40.0 - 60.0% of mass 198	49.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% Relative abundance	100.
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	21.4
365	Greater than 1.00% of mass 198	2.22
441	Present, but less than mass 443	10.3
442	Greater than 40.0% of mass 198	65.1
443	17.0 - 23.0% of mass 442	12.6(19.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD050	>F3662	03/20/01	10:48
02		0102444DL	>F3663	03/20/01	11:31
03		0102446DL	>F3664	03/20/01	12:21
04		0102473DL	>F3665	03/20/01	13:53
05		SBLK57	>F3666	03/20/01	14:56
06		0102520	>F3667	03/20/01	15:39
07		0102520MS	>F3668	03/20/01	16:22
08		0102520MSD	>F3669	03/20/01	17:05
09		0102539	>F3670	03/20/01	17:47
10		0102540	>F3671	03/20/01	18:30
11		0102541	>F3672	03/20/01	19:13
12		0102547	>F3673	03/20/01	19:55
13		0102543	>F3674	03/20/01	20:38
14		0102544	>F3675	03/20/01	21:21
15		0102545	>F3676	03/20/01	22:04
16					
17					
18					
19					
20					
21					
22					

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FORM V SV

3070

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ACCREDITED LABORATORIES, INC. Contract: _____

File ID: >F3697 DFTPP Injection Date: 03/23/01

Instrument ID: HP5970BF DFTPP Injection Time: 08:01

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	54.6
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	63.1
70	Less than 2.0% of mass 69	.4(.6)1
127	40.0 - 60.0% of mass 198	51.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% Relative abundance	100.
199	5.0 - 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	20.3
365	Greater than 1.00% of mass 198	2.36
441	Present, but less than mass 443	9.7
442	Greater than 40.0% of mass 198	61.0
443	17.0 - 23.0% of mass 442	12.0(19.7)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	SSTD050	>F3698	03/23/01	08:15
02	_____	0102576	>F3699	03/23/01	09:00
03	_____	SBLK60	>F3700	03/23/01	09:43
04	_____	SBLK61	>F3701	03/23/01	10:26
05	_____	0102516	>F3702	03/23/01	11:09
06	_____	0102517	>F3703	03/23/01	11:53
07	_____	0102530	>F3704	03/23/01	12:36
08	_____	0102574DL	>F3705	03/23/01	13:19
09	_____	0102634	>F3706	03/23/01	14:02
10	_____	0102748	>F3707	03/23/01	14:45
11	_____	0102738	>F3708	03/23/01	15:28
12	_____	0102739	>F3709	03/23/01	16:11
13	_____	0102738MS	>F3710	03/23/01	16:54
14	_____	0102486DL	>F3711	03/23/01	17:37
15	_____	0102487DL	>F3712	03/23/01	18:20
16	_____	0102488DL	>F3713	03/23/01	19:03
17	_____	0102493DL	>F3714	03/23/01	19:46
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____

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DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ACCUTEST LABORATORIES, INC. Contract: _____

Lab File ID: BF3735 DFTPP Injection Date: 03/27/01

Instrument ID: HP5972BF DFTPP Injection Time: 08:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.9
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	64.6
70	Less than 2.0% of mass 69	.3(.5)1
127	40.0 - 60.0% of mass 198	50.1
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% Relative abundance	100.
199	5.0 - 9.0% of mass 198	7.1
275	10.0 - 30.0% of mass 198	20.7
365	Greater than 1.00% of mass 198	2.44
441	Present, but less than mass 443	9.4
442	Greater than 40.0% of mass 198	59.4
443	17.0 - 23.0% of mass 442	11.5(19.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD050	>F3734	03/27/01	08:18
02		0102927	>F3735	03/27/01	09:00
03		SBLK63	>F3736	03/27/01	09:43
04		0102919	>F3737	03/27/01	10:25
05		0102926DL	>F3738	03/27/01	11:08
06		0102634DL	>F3739	03/27/01	11:50
07		0102748DL	>F3740	03/27/01	12:33
08		0103045	>F3741	03/27/01	13:15
09		0103043	>F3742	03/27/01	13:58
10		0103044	>F3743	03/27/01	14:40
11		0103046	>F3744	03/27/01	15:22
12		0102600	>F3745	03/27/01	16:05
13		0102601	>F3746	03/27/01	16:47
14		0102602	>F3747	03/27/01	17:29
15		0102603	>F3748	03/27/01	18:12
16		0102604	>F3749	03/27/01	18:54
17		0102605	>F3750	03/27/01	19:36
18					
19					
20					
21					
22					

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FORM V SV

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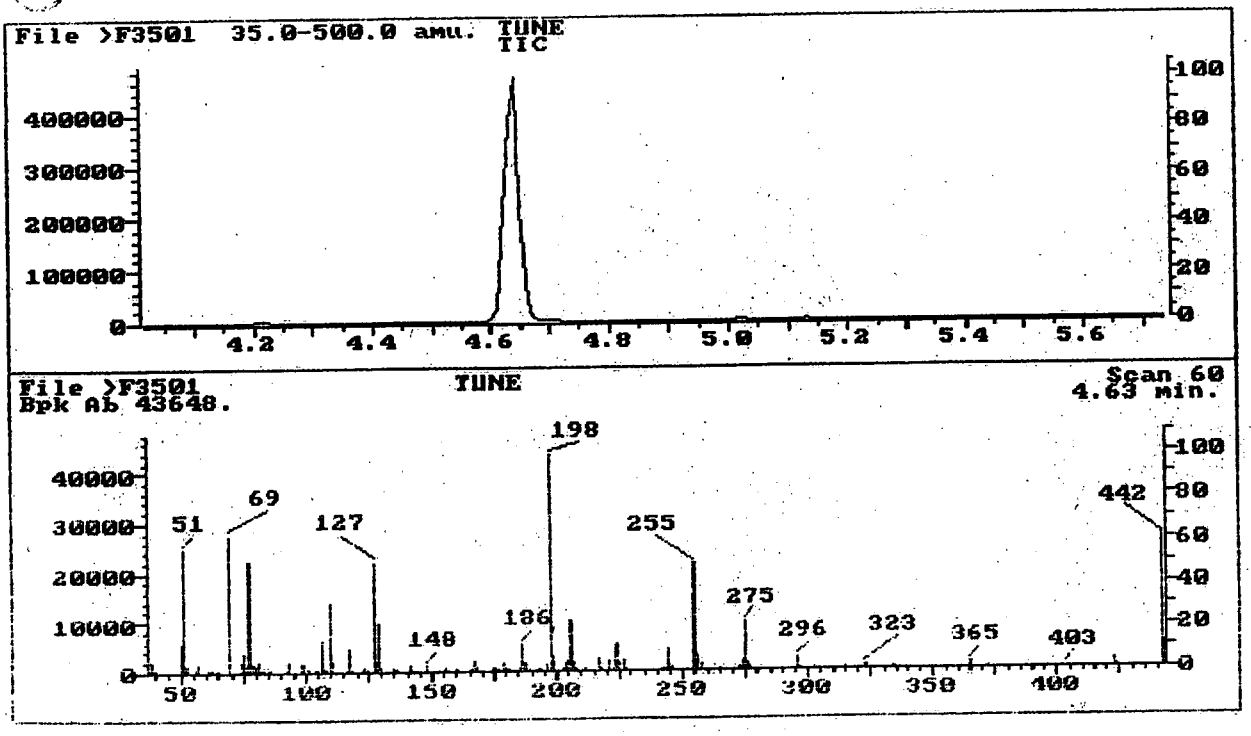
GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphosphine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
51	30-60% of mass 198	57.28	57.28	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	63.21	63.21	Ok
70	Less than 2% of mass 69	.30	.47	Ok
127	40-60% of mass 198	50.70	50.70	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	7.05	7.05	Ok
275	10-30% of mass 198	22.22	22.22	Ok
365	Greater than 1% of mass 198	2.59	2.59	Ok
441	Less than mass 443	0.00	0.00	Ok
442	Greater than 40% of mass 198	60.52	60.52	Ok
443	17-23% of mass 442	11.51	19.01	Ok

Injection Date: 03/07/01
Injection Time: 12:51
Data File: >F3501
Scan: 60



Spectrum Scan #: MS Retn. time: 4.69

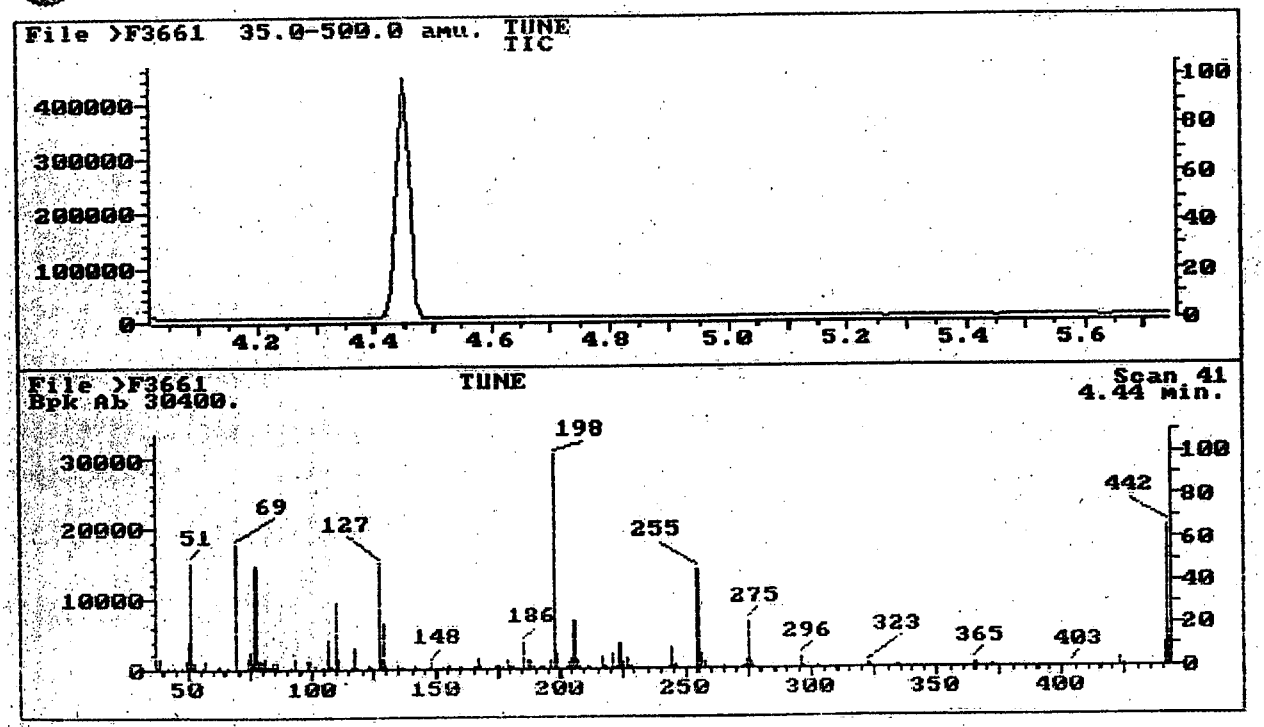
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	92.0	104.00	573.0	152.95	206.0	206.05	10124.0	276.05	1900.0
38.00	598.0	105.00	518.0	158.95	147.0	207.05	1377.0	277.05	852.0
39.00	2274.0	107.00	6348.0	160.05	338.0	208.00	951.0	278.05	154.0
40.10	510.0	108.00	977.0	161.05	488.0	209.00	151.0	283.00	81.0
41.10	103.0	110.00	14158.0	162.05	150.0	211.00	491.0	284.00	83.0
44.10	192.0	111.00	7031.0	163.95	69.0	215.00	114.0	285.10	111.0
49.05	278.0	112.10	210.0	164.95	406.0	216.00	237.0	293.00	172.0
50.05	6097.0	113.00	78.0	166.05	334.0	217.00	2767.0	296.00	7648.0
51.05	25000.1	116.10	359.0	167.05	2044.0	218.00	375.0	297.05	376.0
52.05	1240.0	117.00	4439.0	168.05	836.0	219.10	53.0	301.95	50.0
55.05	128.0	117.95	374.0	169.05	154.0	221.00	2405.0	303.05	305.0
56.05	753.0	122.05	409.0	171.05	90.0	223.00	624.0	304.05	78.0
57.05	1690.0	122.95	662.0	171.90	183.0	224.10	5608.0	314.05	146.0
61.05	282.0	123.95	299.0	173.00	259.0	225.05	1404.0	315.00	321.0
62.05	302.0	124.95	298.0	174.00	441.0	226.95	2382.0	316.00	150.0
63.05	909.0	127.05	22128.1	175.00	765.0	227.95	308.0	321.00	97.0
64.00	128.0	128.05	1774.0	176.00	282.0	228.95	475.0	323.10	819.0
65.00	455.0	129.05	9683.0	177.00	381.0	231.05	186.0	324.10	167.0
69.00	27592.1	130.05	776.0	178.00	138.0	233.95	158.0	327.00	162.0
70.00	129.0	131.05	197.0	179.00	1633.0	234.95	157.0	333.05	77.0
73.10	188.0	131.95	84.0	180.00	967.0	235.95	96.0	334.05	513.0
4.00	2060.0	134.05	235.0	181.00	513.0	237.05	179.0	335.05	135.0
5.00	3582.0	135.05	698.0	182.00	61.0	239.05	106.0	341.05	114.0
76.10	1262.0	136.00	285.0	184.00	145.0	240.05	64.0	346.05	184.0
77.10	22392.1	137.00	334.0	185.10	800.0	241.05	119.0	352.00	241.0
78.10	1598.0	138.00	74.0	186.10	5552.0	242.05	301.0	353.10	201.0
79.00	1429.0	140.10	127.0	187.10	1624.0	243.00	371.0	354.00	262.0
80.00	1169.0	141.00	1155.0	188.00	168.0	244.00	4303.0	365.00	1132.0
81.00	1766.0	142.00	344.0	189.00	318.0	245.00	639.0	366.00	140.0
81.95	407.0	143.00	267.0	189.95	53.0	246.00	854.0	372.05	405.0
82.95	422.0	145.00	76.0	191.05	172.0	247.00	176.0	373.05	99.0
85.05	301.0	146.00	182.0	191.95	490.0	249.00	177.0	383.05	131.0
85.95	403.0	147.00	563.0	193.05	509.0	253.10	125.0	390.00	49.0
87.05	185.0	148.00	1189.0	194.05	110.0	255.00	21416.1	402.10	148.0
91.05	374.0	149.00	227.0	194.95	88.0	256.00	3080.0	403.10	228.0
92.05	387.0	150.00	72.0	196.05	1355.0	257.10	237.0	404.10	75.0
93.05	2429.0	151.00	169.0	197.95	43648.1	258.00	1333.0	421.15	204.0
94.05	179.0	151.70	97.0	198.95	3077.0	259.00	207.0	422.15	199.0
96.05	94.0	153.00	397.0	200.05	225.0	265.05	500.0	423.00	1536.0
98.05	1659.0	153.95	273.0	201.55	213.0	265.95	91.0	424.00	311.0
99.05	1460.0	155.05	549.0	203.05	296.0	273.05	742.0	442.05	26416.1
100.00	133.0	156.05	911.0	204.05	1425.0	274.05	1783.0	443.05	5023.0
101.00	912.0	157.05	201.0	205.05	2460.0	275.05	9699.0	444.05	493.0
103.00	279.0								

GC/MS PERFORMANCE SUMMARY

Decafluorotriphenylphosphine (DFTPP)

m/z	Ion abundance criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
51	30-60% of mass 198	50.17	50.17	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	57.84	57.84	Ok
70	Less than 2% of mass 69	.29	.51	Ok
127	40-60% of mass 198	49.44	49.44	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	6.90	6.90	Ok
275	10-30% of mass 198	21.37	21.37	Ok
365	Greater than 1% of mass 198	2.22	2.22	Ok
441	Less than mass 443	10.26	81.25	Ok
442	Greater than 40% of mass 198	65.11	65.11	Ok
443	17-23% of mass 442	12.63	19.40	Ok

Injection Date: 03/20/01
Injection Time: 10:33
Data File: >F3661
Scan: 41



le: >k3661 Scan #: 41 Retn. time: 4.44

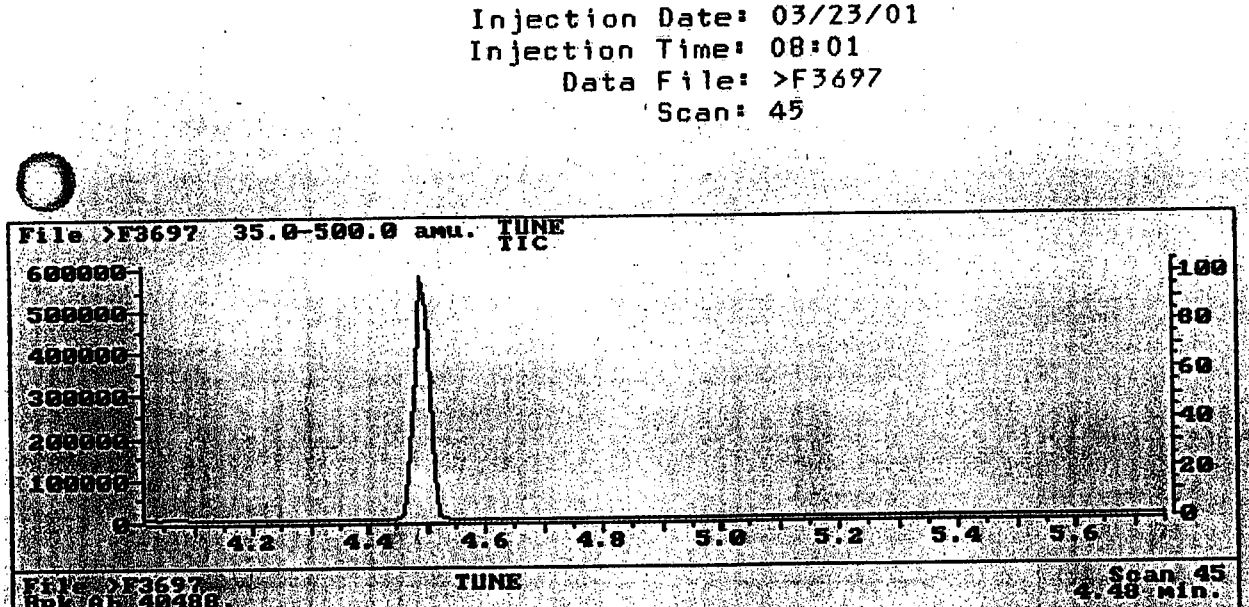
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	104.0	91.95	252.0	147.00	325.0	198.95	2097.0	273.05	443.0
38.00	200.0	93.05	1621.0	148.00	799.0	200.05	141.0	274.05	1145.0
39.00	1360.0	94.05	99.0	149.00	164.0	201.55	148.0	275.05	6495.0
40.00	176.0	95.05	75.0	151.20	100.0	203.05	229.0	276.05	843.0
41.10	208.0	96.05	95.0	152.00	59.0	204.05	924.0	277.05	497.0
43.10	106.0	97.05	75.0	153.00	217.0	205.05	1594.0	277.95	75.0
44.10	194.0	98.05	1044.0	153.95	169.0	206.05	6709.0	285.10	102.0
46.95	232.0	99.05	1070.0	154.95	444.0	207.05	961.0	293.00	115.0
47.95	112.0	100.00	87.0	155.95	572.0	208.00	261.0	296.00	1653.0
48.95	1107.0	101.00	578.0	157.05	100.0	211.00	292.0	296.95	241.0
50.05	3865.0	103.00	190.0	158.05	137.0	215.00	79.0	303.05	200.0
51.05	15236.0	104.00	379.0	158.95	113.0	216.00	162.0	314.05	85.0
52.05	772.0	105.00	358.0	159.95	254.0	217.00	1755.0	315.00	180.0
55.05	175.0	107.00	4096.0	161.05	315.0	218.00	226.0	316.00	101.0
55.95	436.0	108.00	634.0	165.05	253.0	221.00	1987.0	323.10	522.0
57.05	1122.0	110.00	9501.0	166.05	201.0	223.00	378.0	324.00	118.0
61.05	179.0	111.00	1377.0	167.05	1365.0	224.00	3509.0	327.00	115.0
61.95	198.0	112.00	177.0	168.05	616.0	225.00	948.0	333.05	54.0
63.05	542.0	116.00	263.0	168.95	115.0	226.05	121.0	334.05	326.0
63.90	80.0	117.00	2921.0	171.90	125.0	226.95	1546.0	335.05	86.0
65.10	276.0	117.95	247.0	173.00	187.0	228.05	203.0	341.05	66.0
67.10	63.0	119.85	67.0	174.00	291.0	228.95	325.0	345.95	104.0
69.00	17584.1	121.95	290.0	175.00	507.0	231.05	131.0	352.10	166.0
70.00	89.0	122.95	471.0	176.10	184.0	233.95	90.0	353.00	120.0
73.10	183.0	123.95	217.0	176.90	259.0	234.95	107.0	354.00	155.0
74.10	1300.0	124.95	169.0	178.00	101.0	237.05	121.0	365.00	676.0
75.00	2245.0	127.05	15031.0	179.00	970.0	241.05	78.0	366.00	109.0
76.10	800.0	128.05	1219.0	180.00	658.0	242.05	187.0	372.05	301.0
77.10	14504.0	128.95	6445.0	181.00	340.0	243.10	232.0	373.05	62.0
78.10	992.0	129.95	545.0	184.00	98.0	244.00	2869.0	383.05	81.0
79.00	989.0	131.05	102.0	185.10	487.0	245.00	400.0	402.10	98.0
80.00	779.0	132.05	64.0	186.00	3790.0	246.00	513.0	403.10	165.0
81.00	1244.0	134.05	172.0	187.00	1088.0	246.90	106.0	421.15	122.0
81.95	253.0	135.05	505.0	188.10	116.0	249.00	103.0	422.15	143.0
83.05	288.0	136.00	188.0	189.00	250.0	255.00	13915.0	423.10	1080.0
83.95	862.0	137.00	241.0	191.05	135.0	256.00	2049.0	424.10	222.0
85.05	218.0	140.00	84.0	191.95	327.0	257.00	176.0	439.70	59.0
85.95	831.0	141.00	675.0	192.95	292.0	258.00	761.0	441.05	3119.0
87.05	145.0	142.00	260.0	194.05	68.0	259.00	136.0	442.05	19792.1
88.05	144.0	143.00	176.0	196.05	1020.0	264.95	331.0	443.05	3839.0
91.05	265.0	145.90	140.0	197.95	30400.1	266.05	60.0	444.05	330.0

GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphospine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
51	30-60% of mass 198	54.61	54.61	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	63.11	63.11	Ok
70	Less than 2% of mass 69	.39	.62	Ok
127	40-60% of mass 198	51.16	51.16	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	7.04	7.04	Ok
275	10-30% of mass 198	20.31	20.31	Ok
365	Greater than 1% of mass 198	2.36	2.36	Ok
441	Less than mass 443	9.67	80.47	Ok
442	Greater than 40% of mass 198	61.00	61.00	Ok
443	17-23% of mass 442	12.02	19.70	Ok

Injection Date: 03/23/01
Injection Time: 08:01
Data File: >F3697
Scan: 45



>F3697 TUNE
45

File: >F3697 Scan #: 45 Retn. time: 4.48

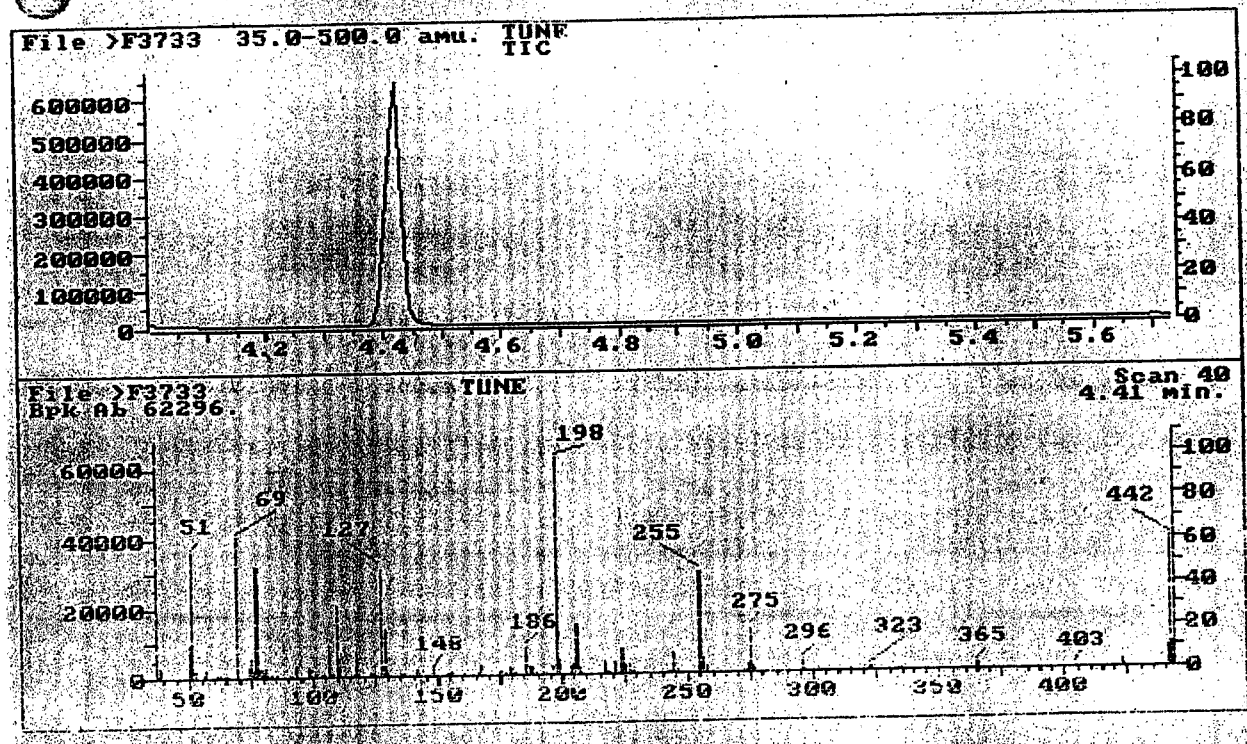
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
38.00	339.0	100.10	120.0	153.95	271.0	203.05	284.0	273.05	560.0
39.00	1856.0	101.00	800.0	154.95	524.0	204.05	1254.0	274.05	1501.0
40.00	1713.0	103.00	270.0	155.95	746.0	205.05	2253.0	275.05	8225.0
41.10	203.0	104.00	485.0	157.05	179.0	206.05	8877.0	276.05	1137.0
43.10	161.0	105.00	483.0	157.95	182.0	207.05	1264.0	277.05	730.0
44.00	187.0	107.00	5799.0	158.95	148.0	208.00	321.0	277.95	105.0
49.05	195.0	108.00	958.0	159.95	302.0	209.00	133.0	283.00	85.0
50.05	5735.0	110.00	13205.0	160.95	466.0	211.00	382.0	285.00	112.0
51.05	22112.1	111.00	1926.0	161.95	125.0	215.00	106.0	293.00	148.0
52.05	1090.0	112.00	212.0	165.05	342.0	216.00	250.0	296.00	2142.0
55.05	244.0	113.00	83.0	166.05	327.0	216.90	2412.0	296.95	327.0
56.05	661.0	116.00	328.0	167.05	1838.0	218.00	293.0	302.95	234.0
57.05	1604.0	117.00	4108.0	168.05	707.0	221.00	2741.0	304.05	82.0
58.05	73.0	117.95	350.0	168.95	143.0	223.00	555.0	314.05	124.0
61.05	260.0	118.95	54.0	170.15	51.0	224.00	4685.0	314.90	210.0
62.05	278.0	119.95	78.0	170.95	90.0	225.00	1210.0	316.10	133.0
63.05	893.0	121.95	372.0	171.90	179.0	226.05	123.0	321.00	67.0
64.10	114.0	123.05	664.0	173.00	224.0	226.95	2045.0	323.10	688.0
65.00	374.0	123.95	283.0	174.00	412.0	227.95	286.0	324.10	128.0
69.00	25552.1	124.95	271.0	175.00	701.0	228.95	408.0	327.00	147.0
70.00	159.0	127.05	20712.1	176.00	254.0	230.95	189.0	333.05	72.0
.00	196.0	128.05	1723.0	177.00	335.0	233.95	146.0	334.05	465.0
.00	1981.0	128.95	8883.0	178.00	116.0	235.05	158.0	335.05	124.0
5.00	3330.0	130.05	746.0	179.00	1336.0	235.95	88.0	341.05	103.0
76.10	1060.0	131.05	156.0	180.00	918.0	237.05	144.0	346.05	147.0
77.10	20952.1	131.95	65.0	181.00	429.0	239.05	80.0	352.00	201.0
78.10	1483.0	132.85	48.0	182.10	74.0	239.95	70.0	353.00	140.0
79.00	1493.0	133.95	238.0	184.00	104.0	240.95	116.0	354.00	236.0
80.00	1035.0	135.05	696.0	185.10	735.0	242.05	251.0	365.00	955.0
81.00	1590.0	136.00	244.0	186.00	4945.0	243.00	276.0	366.00	153.0
81.95	391.0	137.00	313.0	187.00	1351.0	244.00	3819.0	370.95	52.0
83.05	421.0	137.90	60.0	188.00	141.0	245.00	534.0	372.05	378.0
83.95	81.0	140.10	98.0	189.00	318.0	245.90	652.0	373.05	87.0
85.05	314.0	141.00	999.0	190.95	153.0	247.00	144.0	383.05	93.0
86.05	415.0	142.00	345.0	191.95	431.0	249.00	135.0	402.10	146.0
87.05	224.0	143.00	228.0	192.95	492.0	253.10	103.0	403.10	215.0
91.05	405.0	144.10	57.0	194.05	86.0	255.00	18360.1	421.15	183.0
92.05	369.0	145.00	74.0	195.15	66.0	256.00	2772.0	423.00	1398.0
93.05	2287.0	146.00	166.0	196.05	1306.0	257.00	230.0	424.00	260.0
94.05	204.0	147.00	525.0	197.95	40488.1	258.00	1076.0	441.05	3915.0
95.05	86.0	148.00	1084.0	198.95	2850.0	259.00	177.0	442.05	24696.1
96.15	120.0	149.00	235.0	200.05	205.0	264.95	402.0	443.05	4865.0
98.05	1479.0	151.10	130.0	201.55	214.0	272.15	54.0	444.05	429.0
99.05	1351.0	153.00	311.0						

BFB/DFTPP PERFORMANCE STANDARD

Decafluorotriphenylphosphine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
51	30-60% of mass 198	57.87	57.87	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	44.54	44.54	Ok
70	Less than 2% of mass 69	.32	.50	Ok
127	40-60% of mass 198	50.13	50.13	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	7.11	7.11	Ok
275	10-30% of mass 198	20.75	20.75	Ok
365	Greater than 1% of mass 198	2.44	2.44	Ok
441	Less than mass 443	9.42	81.68	Ok
442	Greater than 40% of mass 198	59.42	59.42	Ok
443	17-23% of mass 442	11.53	19.40	Ok

Injection Date: 03/27/01
Injection Time: 08:03
Data File: >F3733
Scan: 40



[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	268.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	119.0
[illegible]	[illegible]	[illegible]	421.0	[illegible]	263.0	[illegible]	556.0	284.00	99.0
40.00	259.0	104.00	280.0	159.05	236.0	214.90	195.0	285.00	206.0
41.00	319.0	105.00	746.0	157.95	497.0	216.00	588.0	292.20	59.0
43.00	192.0	107.00	5198.0	161.05	620.0	217.00	3859.0	293.00	231.0
44.00	143.0	108.00	1395.0	161.95	717.0	218.00	499.0	294.10	69.0
45.10	96.0	110.00	20608.1	164.05	180.0	219.00	50.0	296.00	3690.0
50.05	9513.0	111.00	852.0	164.95	611.0	221.00	5740.0	296.95	534.0
51.05	36048.1	112.10	335.0	166.05	570.0	223.00	907.0	302.05	65.0
52.05	1777.0	113.00	176.0	167.05	2930.0	224.00	7698.0	303.05	473.0
53.05	86.0	116.10	567.0	167.95	1267.0	225.00	1997.0	304.05	107.0
55.05	357.0	117.00	6731.0	169.05	248.0	225.95	236.0	314.05	176.0
56.05	1083.0	117.95	500.0	170.05	98.0	226.95	3311.0	314.90	418.0
57.05	2484.0	119.95	101.0	171.05	158.0	227.95	473.0	316.00	201.0
57.95	132.0	120.95	66.0	172.00	266.0	228.95	722.0	321.00	107.0
61.05	440.0	121.95	609.0	173.00	346.0	229.95	80.0	323.00	1150.0
62.05	476.0	122.95	991.0	174.00	626.0	231.05	280.0	324.10	186.0
63.05	1257.0	123.95	427.0	175.00	1073.0	233.05	69.0	327.00	196.0
64.00	192.0	124.95	422.0	176.00	340.0	233.95	191.0	328.00	108.0
[illegible]5.00	681.0	127.05	31232.1	177.00	584.0	234.95	200.0	332.10	91.0
[illegible].10	139.0	128.05	2581.0	178.10	231.0	235.95	122.0	333.05	135.0
69.00	40216.1	128.95	13946.0	179.00	2333.0	236.95	230.0	334.05	695.0
70.00	200.0	129.95	1186.0	180.00	1439.0	239.05	147.0	335.05	186.0
73.00	358.0	131.05	212.0	181.00	742.0	240.05	116.0	341.05	136.0
74.00	2978.0	132.05	144.0	182.00	108.0	240.95	200.0	346.05	235.0
75.00	5346.0	133.05	87.0	183.00	83.0	242.05	424.0	352.00	313.0
76.10	1678.0	134.05	396.0	184.00	169.0	243.00	442.0	353.00	238.0
77.10	32040.1	135.05	1105.0	185.10	1179.0	244.00	5911.0	354.00	348.0
78.10	2194.0	136.00	443.0	186.00	8049.0	245.00	808.0	365.00	1522.0
79.00	2339.0	137.00	488.0	187.00	2179.0	245.90	1202.0	366.00	178.0
80.00	1704.0	138.00	112.0	188.10	249.0	246.90	259.0	371.05	78.0
81.00	2498.0	138.90	70.0	189.10	488.0	249.00	226.0	372.05	567.0
81.95	612.0	140.00	181.0	190.05	90.0	253.00	148.0	373.05	140.0
82.95	589.0	141.00	1575.0	190.95	263.0	255.00	28928.1	383.05	151.0
84.05	87.0	142.00	583.0	191.95	684.0	256.00	4324.0	390.00	70.0
84.95	417.0	142.90	362.0	192.95	712.0	257.10	320.0	392.00	50.0
86.05	615.0	145.10	98.0	194.05	155.0	258.00	1792.0	402.00	216.0
87.05	295.0	146.00	283.0	196.05	2050.0	259.00	256.0	403.10	302.0
88.05	113.0	147.00	889.0	197.95	67296.2	263.95	53.0	404.00	119.0
88.95	67.0	148.00	1746.0	198.95	4427.0	264.95	692.0	421.05	293.0
90.95	605.0	149.00	377.0	200.05	319.0	265.95	119.0	422.15	282.0
91.95	589.0	150.10	114.0	201.55	342.0	271.05	65.0	423.00	2185.0
93.05	3653.0	151.10	715.0	203.05	432.0	271.95	71.0	424.00	407.0
94.05	254.0	151.70	143.0	204.05	2083.0	273.05	899.0	439.10	57.0
95.05	139.0	152.00	152.0	205.05	3408.0	274.05	2396.0	441.05	5866.0
96.05	138.0	153.00	522.0	206.05	14298.0	275.05	12926.0	442.05	37016.1
98.05	2642.0	153.95	451.0	207.05	1884.0	276.05	1741.0	443.05	7182.0
99.05	7110.0	154.95	855.0	208.00	479.0	277.05	1086.0	444.05	684.0
99.90	194.0								

80

[illegible]

[illegible] : Accredited Labs Calibration Date: [illegible]

[illegible]tract No: CALFAR

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Compound	Laboratory ID: >F3505 RF 20.00	>F3502 RF 50.00	>F3506 RF 80.00	>F3507 RF 120.00	>F3503 RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Pyridine	1.18345	1.00957	1.29157	1.26906	1.32326	.288	1.21538	10.383		
N-Nitrosodimethylamine	1.09940	1.13157	1.01201	1.02365	1.25719	.293	1.10476	8.956		
2-Fluorophenol	1.27138	1.61871	1.51972	1.52910	1.68499	.673	1.52478	10.304		
Aniline	2.86086	2.82239	2.99194	2.99863	3.39165	.932	3.01309	7.486		
Phenol-d5	2.16974	2.33096	2.18110	2.07439	2.39145	.968	2.22943	5.786		
Phenol	2.40471	2.51162	2.56851	2.31824	2.71992	.971	2.50460	6.160	*	
bis(-2-Chloroethyl)Ether	1.84675	1.78774	1.63684	1.42951	1.70084	.958	1.68034	9.617		
2-Chlorophenol	1.58391	1.66556	1.63927	1.51576	1.62283	.963	1.60547	3.628		
1,3-Dichlorobenzene	1.48575	1.56104	1.51638	1.44490	1.45217	.988	1.49205	3.215		
1,4-Dichlorobenzene	1.44697	1.55963	1.51274	1.41997	1.45097	1.005	1.47805	3.847	*	
Benzyl Alcohol	1.18911	1.30677	1.36228	1.32696	1.49919	1.077	1.33686	8.349		
1,2-Dichlorobenzene	1.41814	1.46416	1.41449	1.31747	1.35175	1.057	1.39320	4.180		
2-Methylphenol	1.75854	1.84025	1.91532	1.68810	1.91524	1.130	1.82349	5.462		
bis(2-Chloroisopropyl)ether	4.58528	4.38582	4.16618	3.35410	4.49408	1.111	4.19709	11.830		
3&4-Methylphenol	1.99265	1.97984	1.87410	1.76309	1.99696	1.176	1.92133	5.301		
N-Nitroso-Di-n-propylamine	1.92518	1.69009	1.84818	1.67425	2.05514	1.159	1.83857	8.751		**
Hexachloroethane	.56573	.56870	.54811	.50722	.54156	1.140	.54627	4.514		
Nitrobenzene-d5	.47699	.44286	.42047	.37523	.41797	.861	.42670	8.733		
Nitrobenzene	.52111	.45393	.40679	.39266	.36291	.865	.42748	14.456		
Isophorone	1.07833	.96421	.99531	.92193	1.02611	.918	.99718	5.970		
2-Nitrophenol	.21767	.22592	.22773	.22134	.20481	.931	.21950	4.148	*	
2,4-Dimethylphenol	.34512	.33579	.33565	.31621	.32403	.963	.33136	3.410		
Benzoic Acid	.14970	.19309	.22644	.19052	.19463	1.027	.19088	14.298		
bis(-2-Chloroethoxy)Methane	.53610	.49877	.48778	.46370	.46324	.973	.48992	6.136		
2,4-Dichlorophenol	.25596	.27125	.27800	.25385	.25707	.989	.26323	4.080	*	
1,2,4-Trichlorobenzene	.25884	.25563	.25255	.24391	.23201	.994	.24859	4.347		
Naphthalene	1.08327	1.02034	.87132	.71999	.80861	1.005	.90071	16.621		
4-Chloroaniline	.45472	.42578	.43421	.36644	.39556	1.036	.41534	8.338		
Hexachlorobutadiene	.11110	.10519	.10271	.08356	.09364	1.046	.09924	10.868	*	
4-Chloro-3-methylphenol	.44316	.39546	.39749	.33973	.35744	1.154	.38666	10.380	*	

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

[illegible]

[illegible]

[illegible]

Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	%RSD	CCC	SPCC
2-Methylnaphthalene	1.04575	.95477	.97745	.77146	.81451	1.152	.90165	[illegible]		
Hexachlorocyclopentadiene	.06730	.11041	.14604	.15164	.17187	.874	.17945	31.874		**
2,4,6-Trichlorophenol	.32754	.34376	.34177	.33104	.37934	.895	.33559	7.676	*	
2,4,5-Trichlorophenol	.33751	.35383	.34699	.30950	.31831	.907	.33373	5.650		
2-Chloronaphthalene	1.17770	1.17674	1.06798	1.01424	1.01771	.913	1.06887	5.099		
2-Fluorobiphenyl	1.18936	1.13019	1.07052	.89925	1.03556	.904	1.06497	10.296		
2-Nitroaniline	.67718	.64586	.61750	.56521	.71169	.945	.64349	8.720		
Dimethyl Phthalate	1.54028	1.43385	1.49705	1.34892	1.47200	.980	1.45842	4.965		
Acenaphthylene	2.08777	1.93622	1.82009	1.33559	1.62739	.977	1.76141	16.547		
3-Nitroaniline	.46732	.47537	.48705	.46391	.46022	1.011	.47077	2.269		
Acenaphthene	1.33330	1.25926	1.20203	1.10222	1.13652	1.006	1.20667	7.714	*	
2,4-Dinitrophenol	.11401	.19263	.25605	.25863	.23969	1.026	.21220	28.720		**
4-Nitrophenol	.19614	.20955	.22017	.21328	.25669	1.055	.21917	10.371		**
Dibenzofuran	1.73393	1.66338	1.56779	1.39606	1.44695	1.031	1.56162	9.097		
2,6-Dinitrotoluene	.38035	.37171	.38503	.37132	.37928	.990	.37754	1.565		
[illegible]-Dinitrotoluene	.57790	.55986	.59778	.55477	.55384	1.050	.56883	3.316		
[illegible]ethylphthalate	1.74668	1.50393	1.35215	1.14327	1.49488	1.090	1.44818	15.308		
4-Chlorophenyl-phenylether	.56045	.50877	.52297	.46966	.51400	1.089	.51517	6.308		
Fluorene	1.44596	1.37735	1.32297	1.20500	1.25563	1.084	1.32138	7.231		
4-Nitroaniline	.50379	.46400	.45708	.35501	.31559	1.111	.41909	19.034		
2,4,6-Tribromophenol	.11985	.13393	.14698	.14200	.12513	1.127	.13358	8.457		
4,6-Dinitro-2-methylphenol	.14928	.16206	.13878	.12751	.16953	.908	.14943	11.384		
N-Nitrosodiphenylamine	.48547	.43335	.39634	.33385	.37304	.907	.40441	14.331	*	
Azobenzene	1.32190	1.20523	.93824	.76332	1.05267	.907	1.05627	20.769		
4-Bromophenyl-phenylether	.15922	.16385	.16007	.14624	.16239	.948	.15835	4.430		
Hexachlorobenzene	.14905	.15931	.15704	.14998	.14915	.963	.15291	3.199		
Pentachlorophenol	.08634	.11419	.11834	.12056	.11657	.991	.11120	12.671	*	
Phenanthrene	1.17539	1.12474	1.05488	.82547	1.03563	1.003	1.04322	12.836		
Anthracene	1.21152	1.12467	1.00425	.81476	1.01876	1.009	1.03479	14.408		
Di-n-Butylphthalate	1.86530	1.64099	1.16813	.85153	1.25305	1.092	1.35580	29.526		

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Instrument ID: [illegible]

Contractor: Accredited Labs

Calibration Date: 03/07/01

Contract No: [illegible]

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:	>F3505	>F3502	>F3506	>F3507	>F3503					
	RF	RF	RF	RF	RF					
Compound	20.00	50.00	80.00	120.00	160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Fluoranthene	1.28453	1.20052	1.18931	.94006	1.12410	1.153	1.14770	11.269	*	
Benzidine	.56103	.42045	.51085	.48767	.51766	.881	.49953	10.322		
Pyrene	1.42213	1.42267	1.25919	1.09581	1.43845	.883	1.32745	11.214		
Terphenyl-d14	.78798	.80622	.78195	.75196	.82505	.903	.79063	3.467		
Butylbenzylphthalate	1.02013	.96904	.92643	.82222	.98771	.957	.94510	8.104		
3,3'-Dichlorobenzidine	.39703	.36847	.37199	.33183	.42030	1.002	.37792	8.786		
Benzo(a)Anthracene	1.32527	1.33906	1.29409	1.16835	1.30566	.998	1.28648	5.308		
Bis(2-Ethylhexyl)Phthalate	1.50250	1.34589	1.16091	.92940	1.13682	1.014	1.21510	17.955		
Chrysene	1.27044	1.18861	1.10054	.93283	1.12301	1.003	1.12309	11.149		
Di-n-octyl phthalate	2.89385	2.37266	1.65638	1.37793	2.28110	.950	2.11638	28.489	*	
Benzo(b)fluoranthene	1.65109	1.64607	1.64968	1.58798	1.88218	.974	1.68340	6.786		
Benzo(k)Fluoranthene	1.40389	1.45417	1.32721	1.27437	1.40924	.976	1.37378	5.234		
Benzo(a)Pyrene	1.51031	1.46734	1.44173	1.32386	1.55771	.996	1.46019	6.029	*	
Indeno(1,2,3-cd)Pyrene	1.77725	1.63035	1.51041	1.38236	1.41834	1.072	1.54374	10.491		
Dibenzo(a,h)Anthracene	1.46500	1.34771	1.18307	1.16438	1.21815	1.073	1.27566	10.016		
Benzo(g,h,i)Perylene	1.53119	1.36321	1.30305	1.21369	1.14095	1.087	1.31042	11.425		

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Instrument ID: [illegible] Initial Calibration Date: [illegible]

Maximum $\overline{RF}$ for SPCC is 0.05 Maximum %Diff for CCC is 30%

Compound	RF	$\overline{RF}$	%Diff	CCC	SPCC
Pyridine	1.21538	1.23841	1.89		
N-Nitrosodimethylamine	1.10476	1.06114	3.95		
2-Fluorophenol	1.52478	1.59628	4.69		
Aniline	3.01309	2.89649	3.97		
Phenol-d5	2.22943	2.34998	5.41		
Phenol	2.50460	2.60435	3.98	*	
bis(-2-Chloroethyl)Ether	1.68034	1.88202	12.00		
2-Chlorophenol	1.60547	1.81372	12.97		
1,3-Dichlorobenzene	1.49205	1.56364	4.80		
1,4-Dichlorobenzene	1.47805	1.58489	7.23	*	
Benzyl Alcohol	1.33686	1.44305	7.94		
1,2-Dichlorobenzene	1.39320	1.51813	8.97		
2-Methylphenol	1.82349	1.79940	1.32		
bis(2-Chloroisopropyl)ether	4.19709	3.70427	11.74		
3&4-Methylphenol	1.92133	1.97618	2.85		
N-Nitroso-Di-n-propylamine	1.83857	1.80044	2.07		**
Hexachloroethane	.54627	.54211	.76		
Nitrobenzene-d5	.42670	.43399	1.71		
Nitrobenzene	.42748	.46642	9.11		
Isophorone	.99718	1.04433	4.73		
2-Nitrophenol	.21950	.23904	8.91	*	
2,4-Dimethylphenol	.33136	.34786	4.98		
Benzoic Acid	.19088	.18035	5.52		
bis(-2-Chloroethoxy)Methane	.48992	.51895	5.93		
2,4-Dichlorophenol	.26323	.25980	1.30	*	
1,2,4-Trichlorobenzene	.24859	.24935	.31		
Naphthalene	.90071	1.03980	15.44		
4-Chloroaniline	.41534	.46170	11.16		
Hexachlorobutadiene	.09924	.09171	7.59	*	
4-Chloro-3-methylphenol	.38666	.44188	14.28	*	
2-Methylnaphthalene	.90169	.70541	21.77		
Hexachlorocyclopentadiene	.12945	.13861	7.08		**

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Minimum RF for SPCC is 0.05 Maximum % Diff for CCC is 20%

Compound	RF	$\overline{RF}$	%Diff	CCC	SPCC
2,4,6-Trichlorophenol	.33329	.35558	6.69	*	
2,4,5-Trichlorophenol	.32523	.33648	3.46		
2-Chloronaphthalene	1.16887	1.12653	3.62		
2-Fluorobiphenyl	1.06497	1.13581	6.65		
2-Nitroaniline	.64549	.64874	.50		
Dimethyl Phthalate	1.45847	1.55026	6.30		
Acenaphthylene	1.76141	1.82807	3.78		
3-Nitroaniline	.47077	.53557	13.77		
Acenaphthene	1.70667	1.56338	8.02	*	
2,4-Dinitrophenol	.21220	.24294	14.49		**
4-Nitrophenol	.21917	.20739	5.37		**
Dibenzofuran	1.56162	1.72785	10.64		
2,6-Dinitrotoluene	.37754	.40349	6.87		
2,4-Dinitrotoluene	.56883	.60361	6.11		
Diethylphthalate	1.44818	1.73198	19.60		
4-Chlorophenyl-phenylether	.51517	.55233	7.21		
Fluorene	1.32138	1.47065	11.30		
4-Nitroaniline	.41909	.53278	27.13		
2,4,6-Tribromophenol	.13358	.14374	7.61		
4,6-Dinitro-2-methylphenol	.14943	.16203	8.43		
N-Nitrosodiphenylamine	.40441	.45446	12.38	*	
Azobenzene	1.05627	1.06988	1.29		
4-Bromophenyl-phenylether	.15835	.16309	2.99		
Hexachlorobenzene	.15291	.15383	.60		
Pentachlorophenol	.11120	.10669	4.06	*	
Phenanthrene	1.04322	1.10935	6.34		
Anthracene	1.03479	1.05431	1.89		
Di-n-Butylphthalate	1.35580	1.44645	6.69		
Fluoranthene	1.14770	1.21015	5.44	*	
Benzidine	.49953	.49243	1.42		
Pyrene	1.32765	1.40952	6.17		
Terphenyl-d14	.79063	.83768	5.95		

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

[illegible]

[illegible]actor: Accredited Labs

Time: [illegible]

[illegible]ntract No: CALFOR

[illegible]

Instrument ID: [illegible]

Initial Calibration Date: [illegible]

Minimum $\overline{RF}$ for SPCC is 0.05

Maximum % Diff for CCC is 30%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Butylbenzylphthalate	.94510	1.02139	8.07		
3,3'-Dichlorobenzidine	.37792	.32950	12.81		
Benzo(a)Anthracene	1.20648	1.34549	4.59		
Bis(2-Ethylhexyl)Phthalate	1.21510	1.22925	1.16		
Chrysene	1.12309	1.21918	8.56		
Di-n-octyl phthalate	2.11638	1.99430	5.77	*	
Benzo(b)fluoranthene	1.68340	1.61898	3.83		
Benzo(k)Fluoranthene	1.37378	1.51966	10.62		
Benzo(a)Pyrene	1.46019	1.49430	2.34	*	
Indeno(1,2,3-cd)Pyrene	1.54374	1.60269	3.82		
Dibenzo(a,h)Anthracene	1.27566	1.25674	1.48		
Benzo(g,h,i)Perylene	1.31042	1.37458	4.90		

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Contractor: Accredited Labs | Time: 0811B

Contract No: CANTON | Laboratory ID: 913454

Instrument ID: HP5890II | Initial Calibration Date: 03/02/91

Minimum $\overline{RF}$ for SPCC is 0.05 | Maximum % Diff for CCC is 40%

Compound	RF	$\overline{RF}$	%Diff	CCC	SPCC
Pyridine	1.21538	1.08566	10.67		
N-Nitrosodimethylamine	1.10476	1.06140	3.93		
2-Fluorophenol	1.52478	1.41799	7.00		
Aniline	3.01309	2.70921	10.12		
Phenol-d5	2.22943	2.06756	7.26		
Phenol	2.50460	2.41319	3.65	*	
bis(-2-Chloroethyl)Ether	1.68034	1.77526	5.65		
2-Chlorophenol	1.60547	1.75000	9.00		
1,3-Dichlorobenzene	1.49205	1.53400	2.81		
1,4-Dichlorobenzene	1.47805	1.53249	3.68	*	
Benzyl Alcohol	1.33686	1.29784	2.92		
1,2-Dichlorobenzene	1.39320	1.44691	3.85		
2-Methylphenol	1.82349	1.61692	11.33		
bis(2-Chloroisopropyl)ether	4.19709	3.38597	19.33		
3&4-Methylphenol	1.92133	1.86526	2.92		
N-Nitroso-Di-n-propylamine	1.83857	1.61318	12.26		**
Hexachloroethane	.54627	.53091	2.81		
Nitrobenzene-d5	.42670	.41248	3.33		
Nitrobenzene	.42748	.46005	7.62		
Isophorone	.99718	.91284	8.46		
2-Nitrophenol	.21950	.23413	6.67	*	
2,4-Dimethylphenol	.33136	.34272	3.43		
Benzoic Acid	.19088	.12317	35.47		
bis(-2-Chloroethoxy)Methane	.48992	.48105	1.81		
2,4-Dichlorophenol	.26323	.25708	2.34	*	
1,2,4-Trichlorobenzene	.24859	.24262	2.40		
Naphthalene	.90071	.93392	3.69		
4-Chloroaniline	.41534	.40567	2.33		
Hexachlorobutadiene	.09924	.09168	7.62	*	
4-Chloro-3-methylphenol	.38666	.41191	6.53	*	
2-Methylnaphthalene	.90169	.65373	27.50		
Hexachlorocyclopentadiene	.12945	.11977	7.47		**

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Compound	RF	$\overline{RF}$	%Diff		
2,4,6-Tribromophenol	.13358	.13939	4.35		
4,6-Dinitro-2-methylphenol	.14943	.13669	8.53		
N-Nitrosodiphenylamine	.40441	.45619	12.80	*	
Azobenzene	1.05627	1.03741	1.79		
4-Bromophenyl-phenylether	.15835	.16550	4.51		
Hexachlorobenzene	.15291	.15763	3.09		
Pentachlorophenol	.11120	.10672	4.03	*	
Phenanthrene	1.04322	1.11627	7.00		
Anthracene	1.03479	1.10284	6.58		
Di-n-Butylphthalate	1.35580	1.37229	1.22		
Fluoranthene	1.14770	1.22026	6.32	*	
Benzidine	.49953	.43338	13.24		
Pyrene	1.32765	1.41426	6.52		
Terphenyl-d14	.79063	.82483	4.33		

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

[illegible]

Maximum RF for SPCC is 0.30 Maximum % Diff for CCC is 30%

Compound	RF	$\overline{RF}$	%Diff	CCC	SPCC
Butylbenzylphthalate	.94519	.92400	2.23		
3,3'-Dichlorobenzidine	.37797	.30646	18.94		
Benzo(a)Anthracene	1.28648	1.30158	1.17		
Bis(2-Ethylhexyl)Phthalate	1.21510	1.21464	.04		
Chrysene	1.12389	1.14911	2.32		
Di-n-octyl phthalate	2.11638	2.10679	.48		*
Benzo(b)fluoranthene	1.68340	1.67394	.56		
Benzo(k)Fluoranthene	1.37378	1.45252	5.73		
Benzo(a)Pyrene	1.46019	1.46311	.20		*
Indeno(1,2,3-cd)Pyrene	1.54374	1.55258	.57		
Dibenzo(a,h)Anthracene	1.27566	1.24751	2.21		
Benzo(g,h,i)Perylene	1.31042	1.33938	2.21		

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

	LAB SAMPLE ID	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	Total
01	SBLK01	62	73	76	67	64	56	0
02	0107748	48	124*	89	67	65	45	1
03	0107743D	35	76	71	44	31	34	0
04	0107570MS	71	79	80	66	77	83	0
05	0107570MSD	78	88	87	70	73	95	0
06								
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl-d14	(18-137)
S4 (PHL)	= Phenol-d5	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)

Column to be used to flag recovery values
* Values outside of contract required QC limits
0 Surrogate diluted out

90

3090

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	76552	8.39	354283	11.57	19[illegible]15	15.95
	UPPER LIMIT	153104	8.89	708566	12.07	365050	16.45
	LOWER LIMIT	38276	7.89	177142	11.07	96758	15.45
	LAB SAMPLE NO.						
01	0102520MS	75774	8.39	357233	11.57	198054	15.95
02	0102520MSD	70564	8.39	329961	11.57	182459	15.97
03							
04							
05							
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20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = 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 internal standard area values with an asterisk.
* Values outside of QC limits.

91

3091

	IS4(PHN)		IS5(CRY)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	348146	19.60	333361	26.26	279204	29.59
UPPER LIMIT	696292	20.10	666722	26.76	558408	30.09
LOWER LIMIT	174073	19.10	166680	25.76	139602	29.09
LAB SAMPLE NO.						
01 0102520MS	364051	19.60	328966	26.26	241535	29.59
02 0102520MSD	336249	19.60	305646	26.25	218425	29.59
03						
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22						

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = 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 internal standard area values with an asterisk.
* Values outside of QC limits.

92

		IS1(DCB)		IS2(NPT)		IS3(ANT)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	90000	8.41	460476	11.57	263860	16.00
	UPPER LIMIT	180000	8.91	920952	12.07	527720	16.50
	LOWER LIMIT	45000	7.91	230238	11.07	131930	15.50
	LAB SAMPLE NO						
01	SBLK61	53227	8.41	256237	11.57	140994	15.99
02	0102748	70022	8.47	419505	11.64	173509*	16.26
03							
04							
05							
06							
07							
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19							
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22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = 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 internal standard area values with an asterisk.
* Values outside of QC limits.

93

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	496469	19.65	447743	26.31	355711	29.66
	UPPER LIMIT	992938	20.15	894486	26.81	711422	30.16
	LOWER LIMIT	248235	19.15	223622	25.81	177856	29.16
	LAB SAMPLE NO.						
01	SBLK61	255935	19.61	239987	26.28	194465	29.62
02	0102/48	340311	19.79	178425*	26.52	70141*	29.83
03							
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21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = 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 internal standard area values with an asterisk.
* Values outside of QC limits.

94

	IS1(DCB)		IS2(NPT)		IS3(ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	91501	8.33	461184	11.51	280992	15.91
UPPER LIMIT	183002	8.83	922368	12.01	561984	16.41
LOWER LIMIT	45750	7.83	230592	11.01	140496	15.41
LAB SAMPLE NO.						
01 0102748DI	92779	8.33	440236	11.51	243494	15.91
02						
03						
04						
05						
06						
07						
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22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = 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 internal standard area values with an asterisk.
* Values outside of QC limits.

95

	IS4(PHN)		IS5(CRY)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	454704	19.56	421892	26.23	332957	29.58
UPPER LIMIT	908408	20.06	843784	26.73	665914	30.08
LOWER LIMIT	227102	19.06	210946	25.73	166478	29.08
LAB SAMPLE NU						
01 0102748DL	445112	19.57	401355	26.23	317406	29.56
02						
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22						

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = 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 internal standard area values with an asterisk
* Values outside of QC limits.

96

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	MS #	QC LIMITS RPD	QC LIMITS REC.
Phenol	6700	0	4800	72		35	26- 90
2-Chlorophenol	6700	0	5400	80		50	25-102
1,4-Dichlorobenzene	3300	0	3100	94		27	28-104
N-Nitroso-Di-n-prop.(1)	3300	0	2200	67		38	41-126
1,2,4-Trichlorobenzene	3300	0	3200	97		23	38-107
4-Chloro-3-methylphenol	6700	0	5400	80		33	26-103
Acenaphthene	3300	0	3000	91		19	31-137
4-Nitrophenol	6700	0	6800	101		50	11-114
2,4-Dinitrotoluene	3300	0	3100	94	*	47	28- 89
Pentachlorophenol	6700	0	5900	88		47	17-109
Pyrene	3300	0	3200	97		36	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	MSD #	% RPD	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	6700	4800	72		12		35	26- 90
2-Chlorophenol	6700	5400	80		9		50	25-102
1,4-Dichlorobenzene	3300	3100	94		10		27	28-104
N-Nitroso-Di-n-prop.(1)	3300	2200	67		5		38	41-126
1,2,4-Trichlorobenzene	3300	3200	97		3		23	38-107
4-Chloro-3-methylphenol	6700	5400	80		13		33	26-103
Acenaphthene	3300	3000	91		10		19	31-137
4-Nitrophenol	6700	6800	101		17		50	11-114
2,4-Dinitrotoluene	3300	3100	94	*	14		47	28- 89
Pentachlorophenol	6700	5900	88		16		47	17-109
Pyrene	3300	3200	97		10		36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 1 out of 22 outside limits

COMMENTS: _____

#	Compound	Qual	Value
[illegible]	Acenaphthene	U	330
[illegible]	Acenaphthylene	U	330
120127	Anthracene	U	330
[illegible]	Benzo(a)Anthracene	U	330
[illegible]	Benzo(a)Pyrene	U	330
[illegible]	Benzo(b)Fluoranthene	U	330
191242	Benzo(g,h,i)Perylene	U	330
207089	Benzo(k)Fluoranthene	U	330
65850	Benzoic Acid	U	1700
100516	Benzyl Alcohol	U	330
111444	bis(-2-Chloroethyl)Ether	U	330
108601	bis(2-Chloroisopropyl)ether	U	330
117817	Bis(2-Ethylhexyl)Phthalate	85 J	330
111911	bis(-2-Chloroethoxy)Methane	U	330
101553	4-Bromophenyl-phenylether	U	330
85687	Butylbenzylphthalate	U	330
106478	4-Chloroaniline	U	330
91587	2-Chloronaphthalene	U	330
[illegible]507	4-Chloro-3-methylphenol	U	330
[illegible]578	2-Chlorophenol	U	330
7005723	4-Chlorophenyl-phenylether	U	330
218019	Chrysene	U	330
53703	Dibenzo(a,h)Anthracene	U	330
132649	Dibenzofuran	U	330
95501	1,2-Dichlorobenzene	U	330
541731	1,3-Dichlorobenzene	U	330
106467	1,4-Dichlorobenzene	U	330
91941	3,3'-Dichlorobenzidine	U	330
120832	2,4-Dichlorophenol	U	330
84662	Diethylphthalate	U	330
105679	2,4-Dimethylphenol	U	330
131113	Dimethyl Phthalate	U	330
84742	Di-n-Butylphthalate	U	330
534521	4,6-Dinitro-2-methylphenol	U	330

#	Compound	Qual	Value
5124	2,4-Dinitrophenol	U	330
121142	2,4-Dinitrotoluene	U	330
606202	2,6-Dinitrotoluene	U	330
117840	Di-n-octyl phthalate	U	330
206440	Fluoranthene	U	330
86737	Fluorene	U	330
118741	Hexachlorobenzene	U	330
87683	Hexachlorobutadiene	U	330
77474	Hexachlorocyclopentadiene	U	330
67721	Hexachloroethane	U	330
193395	Indeno(1,2,3-cd)Pyrene	U	330
78591	Isophorone	U	330
91576	2-Methylnaphthalene	U	330
95487	2-Methylphenol	U	330
108394	3&4-Methylphenol	U	330
91203	Naphthalene	U	330
88744	2-Nitroaniline	U	330
99092	3-Nitroaniline	U	330
100016	4-Nitroaniline	U	330
98953	Nitrobenzene	U	330
88755	2-Nitrophenol	U	330
100027	4-Nitrophenol	U	330
62759	N-Nitrosodimethylamine	U	330
86306	N-Nitrosodiphenylamine	U	330
621647	N-Nitroso-Di-n-propylamine	U	330
87865	Pentachlorophenol	U	330
85018	Phenanthrene	U	330
108952	Phenol	U	330
129000	Pyrene	U	330
120821	1,2,4-Trichlorobenzene	U	330
95954	2,4,5-Trichlorophenol	U	330
88062	2,4,6-Trichlorophenol	U	330
92875	Benzidine	U	330
122667	1,2-Diphenylhydrazine	U	330

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
Nitrobenzene-d5	67 %	23-120	OK
2-Fluorobiphenyl	73 %	30-115	OK
Terphenyl-d14	76 %	18-137	OK
Phenol-d5	67 %	24-113	OK
2-Fluorophenol	64 %	25-121	OK
2,4,6-Tribromophenol	66 %	19-122	OK

Percent solid of 100 is used for all target compounds.

98

B - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
D - Indicates result is based on a dilution.
I - Results exceed industrial surface soil standards.*

R - Indicates compound found in associated blank.
E - Concentration exceeds highest calibration standard.
R - Result exceeds residential surface soil standards.*

* Flags are based on New Jersey Soil Cleanup Criteria Proposed Rule Based upon Memorandum of Number 1.

30946

Lab Number	Corresponding Spectra	RT	Est. Conc.	Q
1	Mixed Condensate	4.46	170.0	

* Unknowns are defined as: Compounds that are less than 80% probability or have no database entries from the library.

FORM I SV-TIC

Date Analyzed: 03/20/01

Time Analyzed: 1356

Matrix: (soil/water) SOIL

Level: (low/med) LOW

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

	EPA SAMPLE NO	SAS SAMPLE ID	LAB FILE ID	DATE ANALYZED
01		0102520MS	>F3668	03/20/01
02		0102520MSD	>F3669	03/20/01
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
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19				
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24				
25				
26				
27				
28				
29				
30				

COMMENTS: _____

100

3100

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSDs

	EPA SAMPLE No.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01		0107748	>F3707	03/23/01
02		0107748DL	>F3740	03/27/01
03				
04				
05				
06				
07				
08				
09				
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30				

COMMENTS: _____

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: GC/ECD #1

Contractor: ACCREDITED LABS INC. Calibration Date: 01/22/01

Contract No: CAPST1

Minimum $\overline{RF}$ for SPCC is 5000 Maximum % RSD for CCC is 20%

Comp No.	Compound	Laboratory ID: >A2956 RF .0200	>A2955 RF .100	>A2954 RF .200	>A2953 RF .400	>A2952 RF .800	$\overline{RRT}$	$\overline{RF}$	% RSD	CORR1	CCC SPCC	
1)	Tetrachloro-m-xylene	216350.	213510.	217920.	214298.	211640.	5.247	214744.	1.141	.999961		
2)	A-BHC	209150.	224070.	262595.	300840.	335359.	6.390	266403.	19.707	.998328		
3)	B-BHC	163150.	151520.	149360.	160040.	166260.	7.323	158066.	4.644	.999617		
4)	G-BHC (Lindane)	217600.	229510.	260155.	295177.	332615.	7.413	267011.	17.757	.998098		
5)	D-BHC	178750.	183520.	199835.	229738.	271127.	8.307	212594.	18.025	.996625		
6)	Heptachlor	240750.	225030.	224560.	235620.	253229.	9.757	235838.	5.064	.999218		
7)	Aldrin	267450.	233190.	249600.	298988.	344915.	10.990	278828.	15.878	.996877		
8)	Heptachlor Epoxide	232400.	238560.	242240.	272840.	305899.	12.573	258388.	11.921	.998107		
9)	G-Chlordane	251200.	240550.	244560.	274900.	311889.	13.520	264620.	11.181	.997740		
10)	Endosulfan I	215200.	230400.	232635.	259360.	287859.	13.980	245091.	11.714	.998428		
11)	A-Chlordane	255450.	245990.	255195.	285320.	315449.	14.123	271481.	10.575	.998455		
12)	Dieldrin	225800.	230715.	251477.	280089.	302730.	15.040	258162.	12.719	.999017		(Conc=.0400
13)	4,4'-DDE	225200.	269075.	280200.	308200.	324859.	15.123	281507.	13.664	.999507		(Conc=.0400
14)	Endrin	200375.	196920.	207840.	222299.	232019.	15.907	211891.	7.026	.999640		(Conc=.0400
15)	Endosulfan II	225375.	238275.	245898.	271889.	283964.	16.340	253080.	9.569	.999521		(Conc=.0400
16)	4,4'-DDD	128750.	137550.	146657.	164169.	182254.	16.880	151876.	14.126	.998474		(Conc=.0400
17)	Endrin Aldehyde	216375.	201720.	195597.	199289.	201319.	17.153	202860.	3.911	.999951		(Conc=.0400
18)	Endosulfan Sulfate	218175.	209475.	214860.	230109.	251934.	18.120	224911.	7.512	.998841		(Conc=.0400
19)	4,4'-DDT	207600.	157000.	157027.	171099.	190154.	18.363	176576.	12.479	.998141		(Conc=.0400
20)	Endrin Ketone	285000.	279400.	289500.	302840.	305945.	19.983	292537.	3.915	.999919		(Conc=.0400
21)	Methoxychlor	96395.0	103151.	103712.	102626.	100977.	20.880	101372.	2.924	.999945		(Conc=.200,
22)	Toxaphene Peak 1	2928.00	3241.60	3779.16	3900.14	4223.76	19.050	3614.53	14.444	.999219		(Conc=1.00,
23)	Toxaphene Peak 2	7480.00	5012.80	5115.20	5564.50	5899.27	19.527	5814.35	17.146	.999195		(Conc=1.00,
24)	Toxaphene Peak 3	4167.00	5154.60	5758.36	5680.04	5742.53	19.883	5300.51	12.848	.999949		(Conc=1.00,
25)	DCB	304175.	274755.	272640.	271509.	298690.	27.663	284354.	5.540	.998794		(Conc=.0400

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No:

Instrument ID: GC/ECD #1

Contractor: ACCREDITED LABS INC.

Calibration Date: 01/22/01

Contract No: CA1PCB

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % RSD for CCC is 20%

Comp No.	Compound	Laboratory ID: >A2971 RF 1.00	>A2970 RF 10.00	>A2969 RF 25.00	>A2968 RF 50.00	>A2967 RF 100.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CORR1	CCC SPCC	
1)	Tetrachloro-m-xylene	215560.	248574.	230959.	217332.	193324.	5.283	221150.	9.235	.998605		(Conc=.200
2)	Aroclor-1016 Peak 1	5400.00	5244.00	4467.20	3998.56	3697.76	8.367	4561.50	16.408	.998394		
3)	Aroclor-1016 Peak 2	14960.0	14264.0	12138.5	10924.2	10239.3	9.333	12505.2	16.431	.998781		
4)	Aroclor-1016 Peak 3	5480.00	5677.60	4894.72	4449.60	4174.72	9.693	4935.33	13.068	.998874		
5)	Aroclor-1260 Peak 1	56703.0	48490.1	42321.7	39447.1	39117.5	17.450	45215.9	16.458	.999751		
6)	Aroclor-1260 Peak 2	42199.0	43193.3	38928.6	36921.3	36768.4	18.567	39602.1	7.502	.999839		
7)	Aroclor-1260 Peak 3	62175.0	70809.9	65233.3	63652.9	64865.5	21.350	65347.3	5.019	.999879		
8)	DCB	288120.	311760.	309408.	307056.	282068.	27.717	299682.	4.535	.999298		(Conc=.200,

RF - Response Factor (Subscript is amount in ug/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 03/26/01

Contractor: ACCREDITED LABS INC. Time: 11:15

Contract No: CAPST1 Laboratory ID: >A3770

Instrument ID: GC/ECD #1 Initial Calibration Date: 01/22/01

Minimum $\overline{RF}$ for SPCC is 5000 Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Tetrachloro-m-xylene	214744.	219120.	2.04			
A-BHC	266403.	287955.	8.09			
B-BHC	158066.	162520.	2.82			
G-BHC (Lindane)	267011.	306560.	14.81			
D-BHC	212594.	242920.	14.26			
Heptachlor	235838.	264495.	12.15			
Aldrin	278828.	294475.	5.61			
Heptachlor Epoxide	258388.	281080.	8.78			
G-Chlordane	264620.	293875.	11.06			
Endosulfan I	245091.	267840.	9.28			
A-Chlordane	271481.	289155.	6.51			
Dieldrin	258162.	296700.	14.93			(Conc=.400)
4,4'-DDE	281507.	292217.	3.80			(Conc=.400)
Endrin	211891.	240880.	13.68			(Conc=.400)
Endosulfan II	253080.	286680.	13.28			(Conc=.400)
4,4'-DDD	151876.	173188.	14.03			(Conc=.400)
Endrin Aldehyde	202860.	225940.	11.38			(Conc=.400)
Endosulfan Sulfate	224911.	196918.	12.45			(Conc=.400)
4,4'-DDT	176576.	194457.	10.13			(Conc=.400)
Endrin Ketone	292537.	320980.	9.72			(Conc=.400)
Methoxychlor	101372.	113676.	12.14			(Conc=2.00)
Toxaphene Peak 1	3614.53	4036.32	11.67			(Conc=25.00)
Toxaphene Peak 2	5814.35	5795.88	.32			(Conc=25.00)
Toxaphene Peak 3	5300.51	6078.04	14.67			(Conc=25.00)
DCB	284354.	303577.	6.76			(Conc=.400)

RF - Response Factor from daily standard file at .200 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

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Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 03/28/01

Contractor: ACCREDITED LABS INC.

Time: 17:21

Contract No: CAPST1

Laboratory ID: >A3818

Instrument ID: GC/ECD #1

Initial Calibration Date: 01/22/01

Minimum $\overline{RF}$ for SPCC is 5000 Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Tetrachloro-m-xylene	214744.	216755.	.94			
A-BHC	266403.	301795.	13.29			
B-BHC	158066.	147515.	6.68			
G-BHC (Lindane)	267011.	300235.	12.44			
D-BHC	212594.	242700.	14.16			
Heptachlor	235838.	263135.	11.57			
Aldrin	278828.	292100.	4.76			
Heptachlor Epoxide	258388.	290195.	12.31			
G-Chlordane	264620.	299555.	13.20			
Endosulfan I	245091.	275840.	12.55			
A-Chlordane	271481.	298035.	9.78			
Dieldrin	258162.	296517.	14.86			(Conc=.400)
4,4'-DDE	281507.	306300.	8.81			(Conc=.400)
Endrin	211891.	242640.	14.51			(Conc=.400)
Endosulfan II	253080.	285700.	12.89			(Conc=.400)
4,4'-DDD	151876.	169638.	11.69			(Conc=.400)
Endrin Aldehyde	202860.	214977.	5.97			(Conc=.400)
Endosulfan Sulfate	224911.	244438.	8.68			(Conc=.400)
4,4'-DDT	176576.	196000.	11.00			(Conc=.400)
Endrin Ketone	292537.	333260.	13.92			(Conc=.400)
Methoxychlor	101372.	115360.	13.80			(Conc=2.00)
Toxaphene Peak 1	3614.53	3858.40	6.75			(Conc=25.00)
Toxaphene Peak 2	5814.35	5896.04	1.40			(Conc=25.00)
Toxaphene Peak 3	5300.51	5729.92	8.10			(Conc=25.00)
DCB	284354.	307457.	8.13			(Conc=.400)

RF - Response Factor from daily standard file at .200 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 03/26/01

Contractor: ACCREDITED LABS INC.

Time: 13:05

Contract No: CA1PCB

Laboratory ID: >A3773

Instrument ID: GC/ECD #1

Initial Calibration Date: 01/22/01

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Tetrachloro-m-xylene	221150.	217034.	1.86			(Conc=1.00)
Aroclor-1016 Peak 1	4561.50	4412.60	3.26			
Aroclor-1016 Peak 2	12505.2	12017.2	3.90			
Aroclor-1016 Peak 3	4935.33	5427.84	9.98			
Aroclor-1260 Peak 1	45215.9	49311.0	9.06			
Aroclor-1260 Peak 2	39602.1	43913.4	10.89			
Aroclor-1260 Peak 3	65347.3	74593.8	14.15			
DCB	299682.	336884.	12.41			(Conc=1.00)

RF - Response Factor from daily standard file at 25.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 03/28/01

Contractor: ACCREDITED LABS INC.

Time: 19:11

Contract No: CA1PCB

Laboratory ID: >A3821

Instrument ID: GC/ECD #1

Initial Calibration Date: 01/22/01

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Tetrachloro-m-xylene	221150.	219880.	.57			(Conc=1.00)
Aroclor-1016 Peak 1	4561.50	4569.28	.17			
Aroclor-1016 Peak 2	12505.2	12865.6	2.88			
Aroclor-1016 Peak 3	4935.33	4827.04	2.19			
Aroclor-1260 Peak 1	45215.9	49712.4	9.94			
Aroclor-1260 Peak 2	39602.1	44458.1	12.26			
Aroclor-1260 Peak 3	65347.3	74606.6	14.17			
DCB	299682.	329825.	10.06			(Conc=1.00)

RF - Response Factor from daily standard file at 25.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

ACCREDITED LABORATORIES, INC.
RETENTION TIME WINDOW

Instrument ID: HP5890-A GC #1 Primary Column
Dates Analyzed: 01/22/01 to 01/23/01

ANALYTE	RETENTION TIMES 1/40 Mix A/B	1/8 Mix A/B	1/4 Mix A/B	1/2 Mix A/B	High Mix A/B	Average
A-BHC	6.38	6.38	6.40	6.38	6.40	6.39
B-BHC	7.32	7.32	7.33	7.33	7.32	7.32
G-BHC (Lindane)	7.42	7.40	7.42	7.40	7.43	7.41
D-BHC	8.30	8.30	8.32	8.32	8.30	8.31
Heptachlor	9.75	9.75	9.77	9.75	9.77	9.76
Aldrin	10.98	10.98	11.00	11.00	10.98	10.99
Heptachlor Epoxide	12.57	12.57	12.58	12.58	12.57	12.57
G-Chlordane	13.52	13.50	13.53	13.53	13.52	13.52
Endosulfan I	13.98	13.97	13.98	13.97	14.00	13.98
A-Chlordane	14.12	14.12	14.13	14.13	14.12	14.12
Dieldrin	15.03	15.03	15.05	15.03	15.05	15.04
4,4'-DDE	15.12	15.12	15.13	15.13	15.12	15.12
Endrin	15.90	15.90	15.92	15.90	15.92	15.91
Endosulfan II	16.33	16.33	16.35	16.35	16.33	16.34
4,4'-DDD	16.88	16.87	16.88	16.87	16.90	16.88
Endrin Aldehyde	17.15	17.13	17.17	17.17	17.15	17.15
Endosulfan Sulfate	18.12	18.10	18.13	18.13	18.12	18.12
4,4'-DDT	18.37	18.35	18.37	18.35	18.38	18.36
Endrin Ketone	19.98	19.97	20.00	19.98	19.98	19.98
Methoxychlor	20.88	20.87	20.88	20.87	20.90	20.88
Toxaphene Peak 1	19.05	19.05	19.05	19.05	19.05	19.05
Toxaphene Peak 2	19.48	19.53	19.53	19.53	19.55	19.53
Toxaphene Peak 3	19.88	19.88	19.88	19.88	19.88	19.88

ANALYTE	RT WINDOW	FROM	TO
A-BHC	± .050	6.34	6.44
B-BHC	± .050	7.27	7.37
G-BHC (Lindane)	± .050	7.36	7.46
D-BHC	± .050	8.26	8.36
Heptachlor	± .050	9.71	9.81
Aldrin	± .050	10.94	11.04
Heptachlor Epoxide	± .070	12.50	12.64
G-Chlordane	± .070	13.45	13.59
Endosulfan I	± .070	13.91	14.05
A-Chlordane	± .070	14.05	14.19
Dieldrin	± .070	14.97	15.11
4,4'-DDE	± .070	15.05	15.19
Endrin	± .070	15.84	15.98
Endosulfan II	± .070	16.27	16.41
4,4'-DDD	± .070	16.81	16.95
Endrin Aldehyde	± .070	17.08	17.22
Endosulfan Sulfate	± .070	18.05	18.19
4,4'-DDT	± .070	18.29	18.43
Endrin Ketone	± .070	19.91	20.05
Methoxychlor	± .070	20.81	20.95
Toxaphene Peak 1	± .070	18.98	19.12
Toxaphene Peak 2	± .070	19.46	19.60
Toxaphene Peak 3	± .070	19.81	19.95

ACCREDITED LABORATORIES, INC.
RETENTION TIME WINDOW

Instrument ID: HP5890-B GC #2 Confirmation Column
Dates Analyzed: 01/22/01 to 01/23/01

ANALYTE	RETENTION TIMES 1/40 Mix A/B	1/8 Mix A/B	1/4 Mix A/B	1/2 Mix A/B	High Mix A/B	Average
A-BHC	6.43	6.43	6.43	6.43	6.44	6.43
G-BHC (Lindane)	7.77	7.77	7.77	7.77	7.78	7.77
Heptachlor	8.33	8.33	8.33	8.33	8.34	8.33
Aldrin	9.20	9.20	9.20	9.20	9.20	9.20
B-BHC	10.98	10.98	10.98	10.98	10.98	10.98
D-BHC	11.63	11.64	11.64	11.64	11.64	11.64
Heptachlor Epoxide	11.92	11.92	11.92	11.92	11.92	11.92
Endosulfan I	12.87	12.87	12.87	12.87	12.88	12.87
G-Chlordane	13.28	13.28	13.28	13.28	13.28	13.28
A-Chlordane	13.53	13.53	13.53	13.53	13.53	13.53
4,4'-DDE	14.09	14.09	14.09	14.09	14.09	14.09
Dieldrin	14.32	14.32	14.32	14.32	14.33	14.32
Endrin	15.10	15.10	15.10	15.10	15.11	15.10
Endosulfan II	17.24	17.24	17.23	17.24	17.24	17.24
4,4'-DDD	17.39	17.39	17.39	17.39	17.40	17.39
4,4'-DDT	17.95	17.95	17.95	17.95	17.96	17.95
Endrin Aldehyde	18.98	18.98	18.98	18.99	18.99	18.98
Endosulfan Sulfate	20.34	20.34	20.34	20.34	20.34	20.34
Methoxychlor	20.74	20.75	20.75	20.75	20.75	20.75
Endrin Ketone	21.69	21.69	21.69	21.70	21.69	21.69
Toxaphene Peak 1	17.49	17.50	17.50	17.50	17.51	17.50
Toxaphene Peak 2	17.80	17.79	17.79	17.80	17.80	17.80
Toxaphene Peak 3	19.99	19.99	19.99	20.00	20.00	20.00

ANALYTE	RT WINDOW	FROM	TO
A-BHC	± .050	6.38	6.48
G-BHC (Lindane)	± .050	7.72	7.82
Heptachlor	± .050	8.28	8.38
Aldrin	± .050	9.15	9.25
B-BHC	± .050	10.93	11.03
D-BHC	± .050	11.59	11.69
Heptachlor Epoxide	± .070	11.85	11.99
Endosulfan I	± .070	12.80	12.94
G-Chlordane	± .070	13.21	13.35
A-Chlordane	± .070	13.46	13.60
4,4'-DDE	± .070	14.02	14.16
Dieldrin	± .070	14.25	14.39
Endrin	± .070	15.03	15.17
Endosulfan II	± .070	17.17	17.31
4,4'-DDD	± .070	17.32	17.46
4,4'-DDT	± .070	17.88	18.02
Endrin Aldehyde	± .070	18.91	19.05
Endosulfan Sulfate	± .070	20.27	20.41
Methoxychlor	± .070	20.68	20.82
Endrin Ketone	± .070	21.62	21.76
Toxaphene Peak 1	± .070	17.43	17.57
Toxaphene Peak 2	± .070	17.73	17.87
Toxaphene Peak 3	± .070	19.93	20.07

ACCREDITED LABORATORIES, INC.
RETENTION TIME WINDOW

Instrument ID: HP5890-A
Date Analyzed: 01/22/01

GC #1 Primary Column

ANALYTE	0.10 ug/L	1.0 ug/L	RETENTION TIMES 2.5 ug/L	5.0 ug/L	10.0 ug/L	Average
Aroclor-1016 Peak 1	8.37	8.35	8.37	8.37	8.38	8.37
Aroclor-1016 Peak 2	9.33	9.33	9.33	9.33	9.33	9.33
Aroclor-1016 Peak 3	9.70	9.68	9.70	9.68	9.70	9.69
Aroclor-1260 Peak 1	17.45	17.45	17.45	17.45	17.45	17.45
Aroclor-1260 Peak 2	18.57	18.57	18.57	18.57	18.57	18.57
Aroclor-1260 Peak 3	21.35	21.35	21.35	21.35	21.35	21.35

ANALYTE	RT WINDOW	FROM	TO
Aroclor-1016 Peak 1	± .070	8.30	8.44
Aroclor-1016 Peak 2	± .070	9.26	9.40
Aroclor-1016 Peak 3	± .070	9.62	9.76
Aroclor-1260 Peak 1	± .070	17.38	17.52
Aroclor-1260 Peak 2	± .070	18.50	18.64
Aroclor-1260 Peak 3	± .070	21.28	21.42

ACCREDITED LABORATORIES, INC.
RETENTION TIME WINDOW

Instrument ID: HP5890-B
Date Analyzed: 01/22/01

GC #2 Confirmation Column

ANALYTE	RETENTION TIMES 0.10 ug/L	1.0 ug/L	2.5 ug/L	5.0 ug/L	10.0 ug/L	Average
Aroclor-1016 Peak 1	6.64	6.64	6.63	6.64	6.63	6.64
Aroclor-1016 Peak 2	8.16	8.16	8.15	8.16	8.15	8.16
Aroclor-1016 Peak 3	8.63	8.63	8.63	8.63	8.63	8.63
Aroclor-1260 Peak 1	15.97	15.96	15.96	15.96	15.96	15.96
Aroclor-1260 Peak 2	17.33	17.32	17.32	17.33	17.32	17.32
Aroclor-1260 Peak 3	19.98	19.98	19.97	19.98	19.97	19.98

ANALYTE	RT WINDOW	FROM	TO
Aroclor-1016 Peak 1	± .070	6.57	6.71
Aroclor-1016 Peak 2	± .070	8.09	8.23
Aroclor-1016 Peak 3	± .070	8.56	8.70
Aroclor-1260 Peak 1	± .070	15.89	16.03
Aroclor-1260 Peak 2	± .070	17.25	17.39
Aroclor-1260 Peak 3	± .070	19.91	20.05

ACCREDITED LABORATORIES, INC.
PESTICIDE RETENTION TIME WINDOW

Instrument ID: HP5890-A

Primary Column

Date Analyzed: 03/26/01

COMPOUND NAME	RT OF STD	WINDOW FROM	WINDOW TO
A-BHC	6.32	6.27	6.37
B-BHC	7.32	7.27	7.37
G-BHC (Lindane)	7.33	7.28	7.38
D-BHC	8.30	8.25	8.35
Heptachlor	9.65	9.60	9.70
Aldrin	10.90	10.85	10.95
Heptachlor Epoxide	12.48	12.41	12.55
G-Chlordane	13.43	13.36	13.50
Endosulfan I	13.87	13.80	13.94
A-Chlordane	14.03	13.96	14.10
Dieldrin	14.92	14.85	14.99
4,4'-DDE	15.05	14.98	15.12
Endrin	15.78	15.71	15.85
Endosulfan II	16.27	16.20	16.34
4,4'-DDD	16.80	16.73	16.87
Endrin Aldehyde	17.08	17.01	17.15
Endosulfan Sulfate	18.05	17.98	18.12
4,4'-DDT	18.27	18.20	18.34
Endrin Ketone	19.92	19.85	19.99
Methoxychlor	20.80	20.73	20.87
Toxaphene Peak 1	19.00	18.93	19.07
Toxaphene Peak 2	19.50	19.43	19.57
Toxaphene Peak 3	19.85	19.78	19.92

ACCREDITED LABORATORIES, INC.
PESTICIDE RETENTION TIME WINDOW

Instrument ID: HP5890-B

Confirmation Column

Date Analyzed: 03/26/01

COMPOUND NAME	RT OF STD	WINDOW FROM	WINDOW TO
A-BHC	6.44	6.39	6.49
G-BHC (Lindane)	7.79	7.74	7.84
Heptachlor	8.35	8.30	8.40
Aldrin	9.23	9.18	9.28
B-BHC	11.01	10.96	11.06
D-BHC	11.67	11.62	11.72
Heptachlor Epoxide	11.94	11.87	12.01
Endosulfan I	12.90	12.83	12.97
G-Chlordane	13.31	13.24	13.38
A-Chlordane	13.56	13.49	13.63
4,4'-DDE	14.14	14.07	14.21
Dieldrin	14.35	14.28	14.42
Endrin	15.14	15.07	15.21
Endosulfan II	17.28	17.21	17.35
4,4'-DDD	17.43	17.36	17.50
4,4'-DDT	17.99	17.92	18.06
Endrin Aldehyde	19.02	18.95	19.09
Endosulfan Sulfate	20.38	20.31	20.45
Methoxychlor	20.78	20.71	20.85
Endrin Ketone	21.74	21.67	21.81
Toxaphene Peak 1	17.52	17.45	17.59
Toxaphene Peak 2	17.81	17.74	17.88
Toxaphene Peak 3	20.04	19.97	20.11

ACCREDITED LABORATORIES, INC.
PESTICIDE RETENTION TIME WINDOW

Instrument ID: HP5890-A Primary Column

Date Analyzed: 03/28/01

COMPOUND NAME	RT OF STD	WINDOW FROM	TO
A-BHC	6.35	6.30	6.40
B-BHC	7.38	7.33	7.43
G-BHC (Lindane)	7.38	7.33	7.43
D-BHC	8.37	8.32	8.42
Heptachlor	9.70	9.65	9.75
Aldrin	10.95	10.90	11.00
Heptachlor Epoxide	12.55	12.48	12.62
G-Chlordane	13.50	13.43	13.57
Endosulfan I	13.93	13.86	14.00
A-Chlordane	14.08	14.01	14.15
Dieldrin	14.98	14.91	15.05
4,4'-DDE	15.10	15.03	15.17
Endrin	15.85	15.78	15.92
Endosulfan II	16.33	16.26	16.40
4,4'-DDD	16.87	16.80	16.94
Endrin Aldehyde	17.15	17.08	17.22
Endosulfan Sulfate	18.12	18.05	18.19
4,4'-DDT	18.33	18.26	18.40
Endrin Ketone	19.98	19.91	20.05
Methoxychlor	20.85	20.78	20.92
Toxaphene Peak 1	19.02	18.95	19.09
Toxaphene Peak 2	19.52	19.45	19.59
Toxaphene Peak 3	19.87	19.80	19.94

ACCREDITED LABORATORIES, INC.
PESTICIDE RETENTION TIME WINDOW

Instrument ID: HP5890-B Confirmation Column

Date Analyzed: 03/28/01

COMPOUND NAME	RT OF STD	WINDOW FROM	WINDOW TO
A-BHC	6.45	6.40	6.50
G-BHC (Lindane)	7.80	7.75	7.85
Heptachlor	8.36	8.31	8.41
Aldrin	9.22	9.17	9.27
B-BHC	11.00	10.95	11.05
D-BHC	11.66	11.61	11.71
Heptachlor Epoxide	11.94	11.87	12.01
Endosulfan I	12.91	12.84	12.98
G-Chlordane	13.31	13.24	13.38
A-Chlordane	13.55	13.48	13.62
4,4'-DDE	14.13	14.06	14.20
Dieldrin	14.36	14.29	14.43
Endrin	15.15	15.08	15.22
Endosulfan II	17.27	17.20	17.34
4,4'-DDD	17.44	17.37	17.51
4,4'-DDT	18.00	17.93	18.07
Endrin Aldehyde	19.01	18.94	19.08
Endosulfan Sulfate	20.36	20.29	20.43
Methoxychlor	20.79	20.72	20.86
Endrin Ketone	21.72	21.65	21.79
Toxaphene Peak 1	17.45	17.38	17.52
Toxaphene Peak 2	17.74	17.67	17.81
Toxaphene Peak 3	19.96	19.89	20.03

ACCREDITED LABORATORIES, INC.
RT WINDOW FOR MULTICOMPONENT ANALYTES

Instrument ID: HP5890-A

Date Analyzed: 03/26/01

COMPOUND NAME	RT OF STD	WINDOW FROM	WINDOW TO
Aroclor-1016 Peak 1	8.55	8.48	8.62
Aroclor-1016 Peak 2	9.57	9.50	9.64
Aroclor-1016 Peak 3	9.92	9.85	9.99
Aroclor-1221 Peak 1	6.05	5.98	6.12
Aroclor-1221 Peak 2	6.37	6.30	6.44
Aroclor-1221 Peak 3	6.55	6.48	6.62
Aroclor-1232 Peak 1	6.55	6.48	6.62
Aroclor-1232 Peak 2	8.55	8.48	8.62
Aroclor-1232 Peak 3	9.57	9.50	9.64
Aroclor-1242 Peak 1	8.55	8.48	8.62
Aroclor-1242 Peak 2	9.57	9.50	9.64
Aroclor-1242 Peak 3	12.12	12.05	12.19
Aroclor-1248 Peak 1	9.57	9.50	9.64
Aroclor-1248 Peak 2	12.12	12.05	12.19
Aroclor-1248 Peak 3	13.35	13.28	13.42
Aroclor-1254 Peak 1	13.35	13.28	13.42
Aroclor-1254 Peak 2	14.30	14.23	14.37
Aroclor-1254 Peak 3	17.80	17.73	17.87
Aroclor-1260 Peak 1	17.80	17.73	17.87
Aroclor-1260 Peak 2	18.95	18.88	19.02
Aroclor-1260 Peak 3	21.75	21.68	21.82

ACCREDITED LABORATORIES, INC.
RT WINDOW FOR MULTICOMPONENT ANALYTES

Instrument ID: HP5890-B

Date Analyzed: 03/26/01

COMPOUND NAME	RT OF STD	WINDOW FROM	WINDOW TO
Aroclor-1016 Peak 1	6.69	6.62	6.76
Aroclor-1016 Peak 2	8.25	8.18	8.32
Aroclor-1016 Peak 3	8.72	8.65	8.79
Aroclor-1221 Peak 1	4.85	4.78	4.92
Aroclor-1221 Peak 2	5.30	5.23	5.37
Aroclor-1221 Peak 3	5.46	5.39	5.53
Aroclor-1232 Peak 1	5.46	5.39	5.53
Aroclor-1232 Peak 2	6.69	6.62	6.76
Aroclor-1232 Peak 3	8.25	8.18	8.32
Aroclor-1242 Peak 1	6.69	6.62	6.76
Aroclor-1242 Peak 2	8.25	8.18	8.32
Aroclor-1242 Peak 3	11.99	11.92	12.06
Aroclor-1248 Peak 1	8.72	8.65	8.79
Aroclor-1248 Peak 2	10.44	10.37	10.51
Aroclor-1248 Peak 3	11.99	11.92	12.06
Aroclor-1254 Peak 1	11.99	11.92	12.06
Aroclor-1254 Peak 2	15.18	15.11	15.25
Aroclor-1254 Peak 3	17.51	17.44	17.58
Aroclor-1260 Peak 1	16.13	16.06	16.20
Aroclor-1260 Peak 2	17.51	17.44	17.58
Aroclor-1260 Peak 3	20.19	20.12	20.26

ACCREDITED LABORATORIES, INC.
RT WINDOW FOR MULTICOMPONENT ANALYTES

Instrument ID: HP5890-A

Date Analyzed: 03/28/01

COMPOUND NAME	RT OF STD	WINDOW FROM	WINDOW TO
Aroclor-1016 Peak 1	8.30	8.23	8.37
Aroclor-1016 Peak 2	9.28	9.21	9.35
Aroclor-1016 Peak 3	9.63	9.56	9.70
Aroclor-1221 Peak 1	5.85	5.78	5.92
Aroclor-1221 Peak 2	6.17	6.10	6.24
Aroclor-1221 Peak 3	6.35	6.28	6.42
Aroclor-1232 Peak 1	6.35	6.28	6.42
Aroclor-1232 Peak 2	8.30	8.23	8.37
Aroclor-1232 Peak 3	9.28	9.21	9.35
Aroclor-1242 Peak 1	8.30	8.23	8.37
Aroclor-1242 Peak 2	9.28	9.21	9.35
Aroclor-1242 Peak 3	11.78	11.71	11.85
Aroclor-1248 Peak 1	9.28	9.21	9.35
Aroclor-1248 Peak 2	11.78	11.71	11.85
Aroclor-1248 Peak 3	13.00	12.93	13.07
Aroclor-1254 Peak 1	13.00	12.93	13.07
Aroclor-1254 Peak 2	13.93	13.86	14.00
Aroclor-1254 Peak 3	17.40	17.33	17.47
Aroclor-1260 Peak 1	17.40	17.33	17.47
Aroclor-1260 Peak 2	18.52	18.45	18.59
Aroclor-1260 Peak 3	21.30	21.23	21.37

ACCREDITED LABORATORIES, INC.
RT WINDOW FOR MULTICOMPONENT ANALYTES

Instrument ID: HP5890-B

Date Analyzed: 03/28/01

COMPOUND NAME	RT OF STD	WINDOW FROM	WINDOW TO
Aroclor-1016 Peak 1	6.63	6.56	6.70
Aroclor-1016 Peak 2	8.17	8.10	8.24
Aroclor-1016 Peak 3	8.64	8.57	8.71
Aroclor-1221 Peak 1	4.81	4.74	4.88
Aroclor-1221 Peak 2	5.25	5.18	5.32
Aroclor-1221 Peak 3	5.41	5.34	5.48
Aroclor-1232 Peak 1	5.41	5.34	5.48
Aroclor-1232 Peak 2	6.63	6.56	6.70
Aroclor-1232 Peak 3	8.17	8.10	8.24
Aroclor-1242 Peak 1	6.63	6.56	6.70
Aroclor-1242 Peak 2	8.17	8.10	8.24
Aroclor-1242 Peak 3	11.88	11.81	11.95
Aroclor-1248 Peak 1	8.64	8.57	8.71
Aroclor-1248 Peak 2	10.35	10.28	10.42
Aroclor-1248 Peak 3	11.88	11.81	11.95
Aroclor-1254 Peak 1	11.88	11.81	11.95
Aroclor-1254 Peak 2	15.04	14.97	15.11
Aroclor-1254 Peak 3	17.35	17.28	17.42
Aroclor-1260 Peak 1	15.98	15.91	16.05
Aroclor-1260 Peak 2	17.35	17.28	17.42
Aroclor-1260 Peak 3	20.00	19.93	20.07

ACCREDITED LABORATORIES, INC.
PESTICIDE SURROGATE RECOVERY

Case Number : 2025 Client Name : ENVIROTACTIC

GC Column : RTX-5 Column ID : 0.53mm

Instrument ID : HP5890-A

	LAB FILE ID	LAB SAMPLE ID	TCX %REC #	DCB %REC #	TOT OUT
01	>A3776	PBLK19-F	59	88	0
02	>A3837	0102748	105	191 *	1
03	>A3838	0102748DL	125	218 *	1
04	>A3839	0102748DL	77	207 *	1
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

	ADVISORY QC LIMITS
TCX = Tetrachloro-m-xylene	(30-150)
DCB = Decachlorobiphenyl	(30-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

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ACCREDITED LABORATORIES, INC.
PESTICIDE ANALYTICAL SEQUENCE

Case Number : 2025 (G)
Client Name : ENVIROTACTIC (G)
GC Column : RTX-5
Column ID : 0.53mm
Instrument ID : HP5890-A

THE ANALYTICAL SEQUENCE FOR BLANKS AND SAMPLES IS GIVEN BELOW:

SURROGATE RT FROM CHECK STANDARD
TCX: 5.58 DCB: 28.57

	LAB FILE ID.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	>A3776	PBLK19-F	03/26/01	16:59	5.58	28.57
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
DCB = Decachlorobiphenyl (± 0.10 MINUTES)

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

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ACCREDITED LABORATORIES, INC.
PESTICIDE ANALYTICAL SEQUENCE

Case Number : 2025 Client Name : ENVIROTACTIC

GC Column : RTX-5 Column ID : 0.53mm

Instrument ID : HP5890-A

THE ANALYTICAL SEQUENCE FOR BLANKS AND SAMPLES IS GIVEN BELOW:

SURROGATE RT FROM CHECK STANDARD
TCX: 5.22 DCB: 27.63

	LAB FILE ID.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	>A3837	0102748	03/29/01	04:53	5.25	27.67
02	>A3838	0102748DL	03/29/01	05:30	5.23	27.65
03	>A3839	0102748DL	03/29/01	06:06	5.23	27.65
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS
TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
DCB = Decachlorobiphenyl (± 0.10 MINUTES)

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

ACCREDITED LABORATORIES, INC.
PESTICIDE DDT / ENDRIN BREAKDOWN SUMMARY

Lab Sample	: DDT/ENDRIN	Date Analyzed	: 03/26/01
Data File	: >A3769	Time Analyzed	: 10:39
GC Column	: RTX-5	Column ID	: 0.53mm
Instrument ID	: HP5890-A		

4,4'-DDT % breakdown : 2.2

Endrin % breakdown : 0.0

Combined % breakdown : 2.2

ACCREDITED LABORATORIES, INC.
PESTICIDE DDT / ENDRIN BREAKDOWN SUMMARY

Lab Sample : DDT/ENDRIN
Data File : >A3817
GC Column : RTX-5
Instrument ID : HP5890-A

Date Analyzed : 03/28/01
Time Analyzed : 16:45
Column ID : 0.53mm

4,4'-DDT % breakdown : 5.1

Endrin % breakdown : 1.3

Combined % breakdown : 6.4

ACCREDITED LABORATORIES, INC.
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix Spike Sample No.: 0102405

Sample Data File: >A3749

Date Extracted: 03/21/01

MS Data file: >A3750

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC
G-BHC (Lindane)	8.33	0.00	7.65	92	46-127
Heptachlor	8.33	0.00	9.69	116	35-130
Aldrin	8.33	0.00	7.32	88	34-132
Dieldrin	16.7	2.70	22.9	121	31-134
Endrin	16.7	0.00	17.8	107	42-139
4,4'-DDT	16.7	38.4	52.8	86	23-134

MSD Data File: >A3751

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
G-BHC (Lindane)	8.33	8.38	101	9	50	46-127
Heptachlor	8.33	9.64	116	1	31	35-130
Aldrin	8.33	7.17	86	2	43	34-132
Dieldrin	16.7	20.9	109	10	38	31-134
Endrin	16.7	18.7	112	5	45	42-139
4,4'-DDT	16.7	46.5	49	56 *	50	23-134

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

* Values outside of QC limits

RPD: 1 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS: _____

ACCREDITED LABORATORIES, INC.
SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix Spike Sample Number: 0102520

Sample Data File: >A3734

Date Extracted: 03/19/01

MS Data File: >A3735

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC ** LIMITS REC
Aroclor-1260	333	0.000	288	86	40-140

MSD Data File: >A3736

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS ** RPD	QC LIMITS ** REC
Aroclor-1260	333	311	93	8	25	40-140

Column used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

** Values were generated within ALI for advisory purposes only

COMMENTS: _____

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ACCREDITED LABORATORIES, INC
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER
SAMPLE NUMBER PBLK19-F
DATA FILE >A3776
CLIENT NAME
FIELD ID

MATRIX Soil
DILUTION FACTOR 1
DATE EXTRACTED 03/22/01
DATE ANALYZED 03/26/01
ANALYZED BY PHIL

CAS#	COMPOUND	UG/KG	MDL
319846	A-BHC	U	.667
319857	B-BHC	U	.667
58899	G-BHC (Lindane)	U	.667
319868	D-BHC	U	.667
76448	Heptachlor	U	.667
309002	Aldrin	U	.667
1024573	Heptachlor Epoxide	U	.667
959988	Endosulfan I	U	.667
5103719	A-Chlordane	U	.667
5103742	G-Chlordane	U	.667
60571	Dieldrin	U	1.33
72559	4,4'-DDE	U	1.33
72208	Endrin	U	1.33
33213659	Endosulfan II	U	1.33
72548	4,4'-DDD	U	1.33
7421934	Endrin Aldehyde	U	1.33
1031078	Endosulfan Sulfate	U	1.33
50293	4,4'-DDT	U	1.33
53494705	Endrin Ketone	U	1.33
72435	Methoxychlor	U	6.67
8001352	Toxaphene	U	33.3
12674112	Aroclor-1016	U	16.7
11104282	Aroclor-1221	U	16.7
11141165	Aroclor-1232	U	16.7
53469219	Aroclor-1242	U	16.7
12672296	Aroclor-1248	U	16.7
11097691	Aroclor-1254	U	16.7
11096825	Aroclor-1260	U	16.7

Percent Solid of 100. is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

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ACCREDITED LABORATORIES, INC.
INITIAL CALIBRATION

Initial Calibration Source: PE/LEEMAN

Concentration Units: µg/L

Analyte	Initial Calibration True	Found	% Rec	Date	Method
Antimony	7500.0	7380.00	98.4	03/23/01	P
Arsenic	30.0	30.30	101.0	03/23/01	F
Beryllium	7500.0	7090.00	94.5	03/23/01	P
Cadmium	7500.0	7090.00	94.5	03/23/01	P
Chromium	7500.0	7600.00	101.3	03/23/01	P
Copper	7500.0	8230.00	109.7	03/23/01	P
Lead	7500.0	7850.00	104.7	03/23/01	P
Mercury	4.0	4.27	106.8	03/23/01	CV
Nickel	7500.0	6980.00	93.1	03/23/01	P
Selenium	30.0	30.60	102.0	03/23/01	F
Silver	750.0	747.00	99.6	03/23/01	P
Thallium	30.0	30.60	102.0	03/26/01	F
Zinc	7500.0	7590.00	101.2	03/23/01	P

Control Limits:

Mercury 80-120; ICP Metals 90-110; GFA 80-120; CN 85-115

ALI FORM II (Part I) - INORGANICS

ACCREDITED LABORATORIES, INC.
CONTINUING CALIBRATION VERIFICATION

Initial Calibration Source: PE/LEEMAN

Continuing Calibration Source: ALI

Concentration Units: µg/L

Analyte	Continuing Calibration(s) True	Found 1	% Rec	Date 1	Found 2	% Rec	Date 2	M
Antimony	5000.0	4850.00	97.0	03/23/01	5100.00	102.0	03/23/01	P
Arsenic	40.0	42.40	106.0	03/23/01	42.90	107.3	03/23/01	F
Beryllium	5000.0	4820.00	96.4	03/23/01	5140.00	102.8	03/23/01	P
Cadmium	5000.0	4650.00	93.0	03/23/01	5230.00	104.6	03/23/01	P
Chromium	5000.0	4700.00	94.0	03/23/01	5140.00	102.8	03/23/01	P
Copper	5000.0	5040.00	100.8	03/23/01	4990.00	99.8	03/23/01	P
Lead	5000.0	4510.00	90.2	03/23/01	5280.00	105.6	03/23/01	P
Mercury	5.0	4.94	98.8	03/23/01	4.78	95.6	03/23/01	CV
Nickel	5000.0	4700.00	94.0	03/23/01	5170.00	103.4	03/23/01	P
Selenium	40.0	41.10	102.8	03/23/01	39.70	99.3	03/23/01	F
Silver	500.0	493.00	98.6	03/23/01	503.00	100.6	03/23/01	P
Thallium	40.0	38.40	96.0	03/26/01	39.80	99.5	03/26/01	F
Zinc	5000.0	4840.00	96.8	03/23/01	5100.00	102.0	03/23/01	P

Control Limits: Mercury 80-120; ICP Metals 90-110; GFA 80-120; CN 85-115

ALI FORM II (Part II) - INORGANICS

ACCREDITED LABORATORIES, INC.
CONTINUING CALIBRATION VERIFICATION

Initial Calibration Source: PE/LEEMAN

Continuing Calibration Source: ALI

Concentration Units: µg/L

Analyte	True	Continuing Calibration(s) Found 3	% Rec	Date 3	Found 4	% Rec	Date 4	M
Antimony	5000.0	5030.00	100.6	03/23/01				P
Arsenic	40.0	42.00	105.0	03/23/01				F
Beryllium	5000.0	5010.00	100.2	03/23/01				P
Cadmium	5000.0	4970.00	99.4	03/23/01				P
Chromium	5000.0	4950.00	99.0	03/23/01				P
Copper	5000.0	5040.00	100.8	03/23/01				P
Lead	5000.0	4810.00	96.2	03/23/01				P
Mercury	5000.0	4960.00	99.2	03/23/01	40.80	102.0	03/23/01	F
Nickel	40.0	39.30	98.3	03/23/01				P
Selenium	500.0	503.00	100.6	03/23/01				P
Silver	5000.0	4980.00	99.6	03/23/01				P
Thallium								
Zinc								

Control Limits: Mercury 80-120; ICP Metals 90-110; GFA 80-120; CN 85-115

ALI FORM II (Part II) - INORGANICS

ACCREDITED LABORATORIES, INC.
INITIAL CALIBRATION & PREPARATORY BLANKS

reparation Blank Matrix: Soil

Analyte	Initial Calibration Blank (µg/L) Result	Date	Preparation Blank (mg/kg) Result	Date	Method
Antimony	< 75.0	03/23/01	< 7.5	03/23/01	P
Arsenic	< 5.0	03/23/01	< .5	03/23/01	F
Beryllium	< 5.0	03/23/01	< .5	03/23/01	P
Cadmium	< 10.0	03/23/01	< 1.0	03/23/01	P
Chromium	< 30.0	03/23/01	< 3.0	03/23/01	P
Copper	< 30.0	03/23/01	< 3.0	03/23/01	P
Lead	< 200.0	03/23/01	< 20.0	03/23/01	P
Mercury	< .5	03/23/01	< .1	03/23/01	CV
Nickel	< 50.0	03/23/01	< 5.0	03/23/01	P
Selenium	< 5.0	03/23/01	< .5	03/23/01	F
Silver	< 20.0	03/23/01	< 2.0	03/23/01	P
Thallium	< 5.0	03/26/01	< .5	03/26/01	F
Zinc	< 100.0	03/23/01	< 10.0	03/23/01	P

ALI FORM III (Part I) - INORGANICS

ACCREDITED LABORATORIES, INC.
CONTINUING CALIBRATION BLANKS

Concentration Units: µg/L

Analyte	Continuing Calibration Blank(s) Result 1	Date 1	Result 2	Date 2	Result 3	Date 3	Method
Antimony	< 75.0	03/23/01	< 75.0	03/23/01	< 75.0	03/23/01	P
Arsenic	< 5.0	03/23/01	< 5.0	03/23/01	< 5.0	03/23/01	F
Beryllium	< 5.0	03/23/01	< 5.0	03/23/01	< 5.0	03/23/01	P
Cadmium	< 10.0	03/23/01	< 10.0	03/23/01	< 10.0	03/23/01	P
Chromium	< 30.0	03/23/01	< 30.0	03/23/01	< 30.0	03/23/01	P
Copper	< 30.0	03/23/01	< 30.0	03/23/01	< 30.0	03/23/01	P
Lead	< 200.0	03/23/01	< 200.0	03/23/01	< 200.0	03/23/01	P
Mercury	< .5	03/23/01	< .5	03/23/01			CV
Nickel	< 50.0	03/23/01	< 50.0	03/23/01	< 50.0	03/23/01	P
Selenium	< 5.0	03/23/01	< 5.0	03/23/01	< 5.0	03/23/01	F
Silver	< 20.0	03/23/01	< 20.0	03/23/01	< 20.0	03/23/01	P
Thallium	< 5.0	03/26/01	< 5.0	03/26/01			F
Zinc	< 100.0	03/23/01	< 100.0	03/23/01	< 100.0	03/23/01	P

ALI FORM III (Part II) - INORGANICS

ACCREDITED LABORATORIES, INC.
ICP INTERFERENCE CHECK SAMPLE

ICP ID Number: ES-2000

ICS Source: SPEX-3-129AS

Concentration Units: µg/L

Analyte	True		Initial Found			Final Found		
	Sol A	Sol AB	Sol A	Sol AB	% Rec	Sol A	Sol AB	% Rec
Antimony	0.	1000.	133.	976.0	97.6	104.	972.0	97.2
Arsenic	0.	500.	31.	480.0	96.0	32.	499.0	99.8
Beryllium	0.	1000.	61.	877.0	87.7	63.	939.0	93.9
Cadmium	0.	500.	11.	423.0	84.6	4.	444.0	88.8
Chromium	0.	500.	-9.	482.0	96.4	-10.	472.0	94.4
Copper	0.	1000.	54.	919.0	91.9	-81.	933.0	93.3
Lead	0.	1000.	3.	868.0	86.8	-5.	921.0	92.1
Mercury	0.	1000.	3.	912.0	91.2	-9.	917.0	91.7
Nickel	0.	1000.	8.	908.0	90.8	12.	946.0	94.6
Selenium								
Silver								
Thallium								
Zinc								

ALI FORM IV - INORGANICS

ACCREDITED LABORATORIES, INC.
SPIKE SAMPLE RECOVERY

Sample #: 0102372 Matrix: Soil

Concentration Units: mg/kg

Analyte	Spike Added	Sample Result	Spiked Sample Result	% Recovery	Q	QC Limits %Rec	Date Analyzed	M
Antimony	31.85	6.43	37.9	98.8		75-125	03/15/01	P
Arsenic	3.16	7.57	10.1	79.9		75-125	03/14/01	F
Beryllium	3.18	1.29	4.48	100.2		75-125	03/15/01	P
Cadmium	3.18	2.31	5.36	95.8		75-125	03/15/01	P
Chromium	12.74	21.8	34.1	96.6		75-125	03/15/01	P
Copper	15.92	161	159	-12.6			03/15/01	P
Lead	31.85	25.9	56.1	94.8		75-125	03/15/01	P
Mercury	2.00	ND	1.85	92.5		75-125	03/14/01	CV
Nickel	31.85	15.0	45.9	97.0		75-125	03/15/01	P
Selenium	3.16	ND	2.65	83.7		75-125	03/14/01	F
Silver	3.18	ND	3.92	123.1		75-125	03/15/01	P
Thallium	3.16	ND	2.82	89.1		75-125	03/14/01	F
Zinc	31.85	58.3	86.6	88.9		75-125	03/15/01	P

Comments:
ND - Element analyzed for but not detected.
P - Analyzed by ICP
F - Analyzed by GFA
CV - Analyzed by cold vapor
A - Analyzed by flame AA

ALI FORM V (Part I) - INORGANICS

ACCREDITED LABORATORIES, INC.
DUPLICATES

Sample #: 0102372 Matrix: Soil

% Solids: 83.7

Concentration Units (µG/L, MG/L or MG/KG dry weight): MG/KG

Analyte	Control Limit	Sample Result	Duplicate Result	RPD	Q	Date Analyzed	M
Antimony	5.71	7.69	7.00	9.4		03/15/01	P
Arsenic		9.04	8.34	8.1		03/14/01	F
Beryllium	.380	1.54	1.51	2.0		03/15/01	P
Cadmium	.761	2.75	3.06	10.7		03/15/01	P
Chromium		26.0	25.8	.8		03/15/01	P
Copper		193	188	2.6		03/15/01	P
Lead	15.2	31.0	31.2	.6		03/15/01	P
Mercury		ND	ND			03/14/01	CV
Nickel	3.80	17.9	18.3	2.2		03/15/01	P
Selenium		ND	ND			03/14/01	F
Silver		ND	ND			03/15/01	P
Thallium		ND	ND			03/14/01	F
Zinc		69.7	68.1	2.3		03/15/01	P

ND - Element analyzed for but not detected or detected below MDL.

ALI FORM VI - INORGANICS

ACCREDITED LABORATORIES, INC.
LABORATORY CONTROL SAMPLE

Solid LCS Source: ALI

Aqueous LCS Source: ALI

Analyte	Aqueous (µg/L) True	Found	%Rec	Q	M	Solid (mg/kg) True	Found	%Rec	Q	M
Antimony						50.0	49.0	98.0		P
Arsenic						5.0	5.0	100.0		F
Beryllium						5.0	5.0	100.0		P
Cadmium						5.0	5.0	100.0		P
Chromium						20.0	19.0	95.0		P
Copper						25.0	25.0	100.0		P
Lead						50.0	37.0	74.0		P
Mercury						2.0	2.0	100.0		CV
Nickel						50.0	46.0	92.0		P
Selenium						5.0	5.0	100.0		F
Silver						5.0	5.0	100.0		P
Thallium						5.0	5.0	100.0		F
Zinc						50.0	51.0	102.0		P

ALI FORM VII - INORGANICS

ACCREDITED LABORATORIES, INC.
ICP SERIAL DILUTION SUMMARY

Sample #: 0102372 Matrix: Soil

Concentration Units: µg/L

Analyte	MDL	Initial Sample Result	Serial Dilution Result	% Difference	Date Date Analyzed	M
Antimony	75.0	101	184	82.2	03/15/01	P
Beryllium	5.00	20.3	25.1	23.6	03/15/01	P
Cadmium	10.0	36.2	53.5	47.8	03/15/01	P
Chromium	30.0	342	329	3.8	03/15/01	P
Copper	30.0	2530	2490	1.6	03/15/01	P
Lead	200	407	347	14.7	03/15/01	P
Nickel	50.0	235	248	5.5	03/15/01	P
Silver	20.0	ND	ND		03/15/01	P
Zinc	100	916	775	15.4	03/15/01	P

ND - Element analyzed for but not detected or detected below MDL.

ALI FORM IX - INORGANICS

ACCREDITED LABORATORIES, INC.
GENERAL CHEMISTRY DUPLICATE SAMPLE RESULTS SUMMARY

Matrix: Soil

ANALYTES	SAMPLE #	ORIGINAL SAMPLE CONCENTRATION	UNITS	DUPICATE SAMPLE CONCENTRATION	RPD	QC LIMITS
Cyanide, Total	0102926	ND	mg/Kg	ND	.0	20%

ACCREDITED LABORATORIES, INC.
GENERAL CHEMISTRY MATRIX SPIKE SUMMARY

Matrix: Soil

ANALYTES	SAMPLE #	SPIKE ADDED	UNITS	SAMPLE CONCENTRATION	SPIKE CONCENTRATION	% RECOVERY	QC LIMITS
Cyanide, Total	0102926	22.4	mg/Kg	ND	21.9	97.8	75-125

ACCREDITED LABORATORIES, INC.

TOTAL PETROLEUM HYDROCARBONS
SOIL DUPLICATE AND MATRIX SPIKE SUMMARY

DUPLICATE SAMPLE #:200102502

ORIGINAL CONCENTRATION (mg/Kg)	DUPLICATE CONCENTRATION (mg/Kg)	RPD	RPD QC LIMIT
ND	ND	0	25

MATRIX SPIKE SAMPLE #:200102502

SPIKE ADDED (mg/Kg)	SAMPLE CONC (mg/Kg)	MS CONC (mg/Kg)	% RECOVERY	RECOVERY QC LIMITS
210	ND	202	96	75-125

Data ID: WILLIAM
Output File: ^A0839::QT
Data File: >A0839::01
Name: VBLKA82
Text:

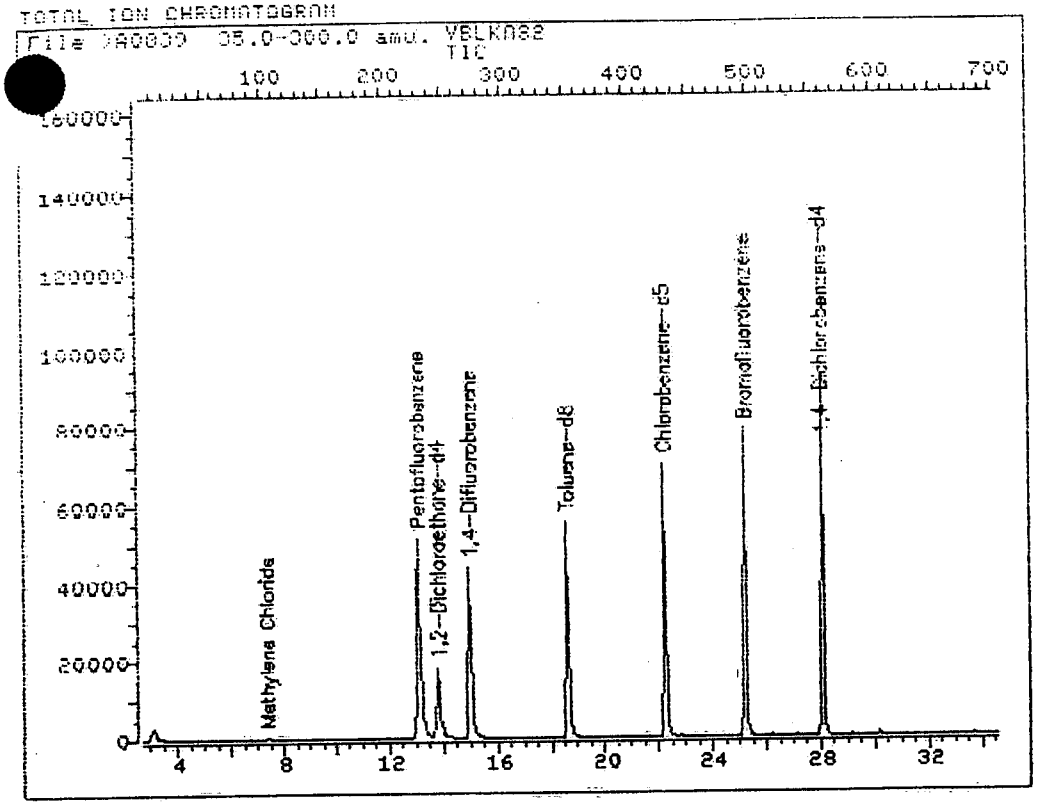
Quant Rev: 7 Quant Time: 010321 11:57
Injected at: 010321 11:22
Dilution Factor: 1.00000
Instrument ID: HP5970BA

ID File: IDAS11::SC
Title: Accredited Labs ID file for 8260
Last Calibration: 010102 15:29

Last Qcal Time: 010320 11:42

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Pentafluorobenzene	13.07	229	172729	50.00	ug/l	100
13)	Methylene Chloride	7.35	103	3820	3.86	ug/l	97
24)	*1,4-Difluorobenzene	14.98	271	151668	50.00	ug/l	79
25)	1,2-Dichloroethane-d4	13.80	245	71633	49.73	ug/l	93
36)	Toluene-d8	18.61	351	137662	52.34	ug/l	93
42)	Bromofluorobenzene	25.23	497	115496M	50.08	ug/l	
43)	*Chlorobenzene-d5	22.24	431	118215	50.00	ug/l	100
55)	*1,4-Dichlorobenzene-d4	28.05	559	83619	50.00	ug/l	95

* Compound is ISTD



Data File: >A0839::D1 Quant Output File: ^A0839::QT
Name: VBLKA82 Instrument ID: HP5970BA
Misc:

Id File: IDAS11::SC
Title: Accredited Labs ID file for 8260
Last Calibration: 010102 15:29 Last Qcal Time: 010320 11:42

Operator ID: WILLIAM
Quant Time : 010321 11:57
Injected at: 010321 11:22

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Operator ID: WILLIAM
Data File: ^A0861::QT
Area File: >A0861::D1
Name: VBLKA83
Text:

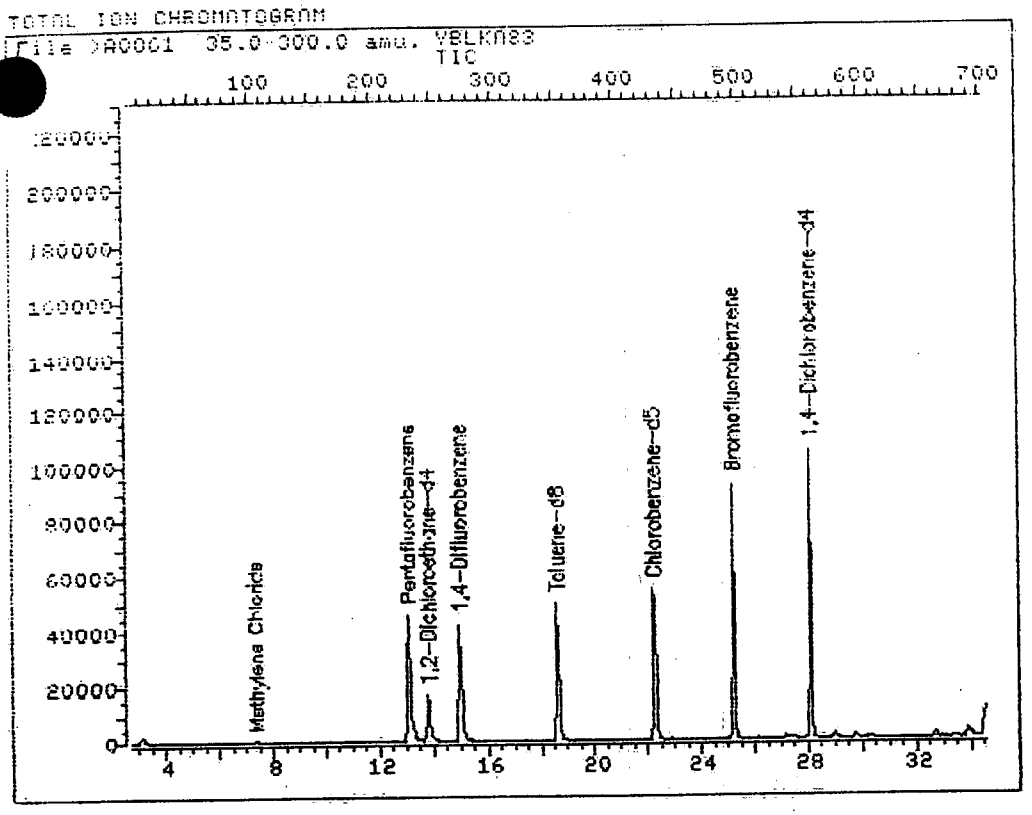
Quant Rev: 7
Quant Time: 010322 12:08
Injected at: 010322 11:33
Dilution Factor: 1.00000
Instrument ID: HP5970BA

ID File: IDAS11::SC
Title: Accredited Labs ID file for 8260
Last Calibration: 010102 15:29

Last Qcal Time: 010320 11:42

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Pentafluorobenzene	13.07	229	160828	50.00	ug/l	100
13)	Methylene Chloride	7.35	103	4601	4.99	ug/l	99
24)	*1,4-Difluorobenzene	14.98	271	142884	50.00	ug/l	84
25)	1,2-Dichloroethane-d4	13.80	245	68710	50.63	ug/l	93
36)	Toluene-d8	18.61	351	129102	52.10	ug/l	93
42)	Bromofluorobenzene	25.23	497	110228	50.73	ug/l	85
43)	*Chlorobenzene-d5	22.24	431	113021	50.00	ug/l	100
55)	*1,4-Dichlorobenzene-d4	28.09	560	79581	50.00	ug/l	91

* Compound is ISTD



Data File: >A0861::D1 Quant Output File: ^A0861::QT
Name: VBLKA83 Instrument ID: HP5970BA
Misc:

Id File: IDAS11::SC
Title: Accredited Labs ID file for 8260
Last Calibration: 010102 15:29 Last Qcal Time: 010320 11:42

Operator ID: WILLIAM
Quant Time : 010322 12:08
Injected at: 010322 11:33

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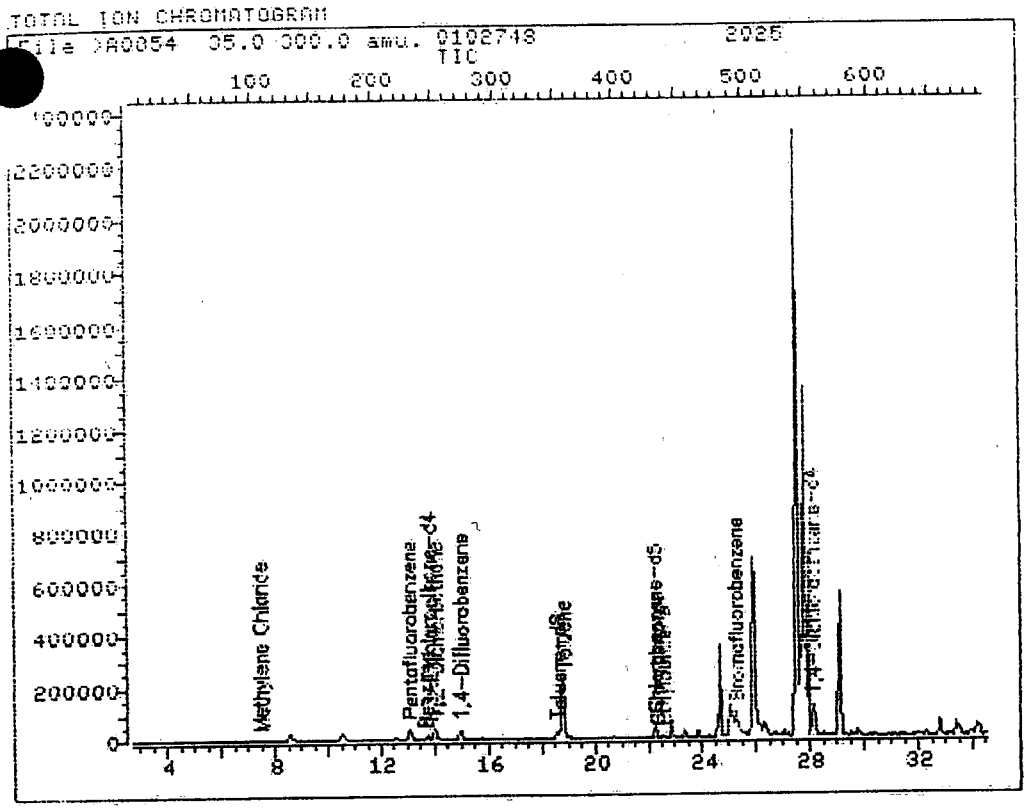
Operator ID: WILLIAM
Output File: ^A0854::QT
Data File: >A0854::D1
Name: 0102748
Type: 2029

Quant Rev: 7 Quant Time: 010321 22:03
Injected at: 010321 21:28
Dilution Factor: 1.00000
Instrument ID: HP5970BA
ENVIROTACTICS S-MW-5-A

ID File: IDAS11::SC
Title: Accredited Labs ID file for 8260
Last Calibration: 010102 15:29 Last Qcal Time: 010320 11:42

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Pentafluorobenzene	13.07	229	132423	50.00	ug/l	100
13)	Methylene Chloride	7.44	105	4673	6.15	ug/l	88
24)	*1,4-Difluorobenzene	14.98	271	126594	50.00	ug/l	80
25)	1,2-Dichloroethane-d4	13.80	245	54817	45.59	ug/l	91
28)	1,2-Dichloroethane	14.03	250	204693	141.60	ug/l	91
29)	Benzene	13.66	242	25662	15.07	ug/l	100
36)	Toluene-d8	18.61	351	90942	41.42	ug/l	90
37)	Toluene	18.79	355	650406	292.07	ug/l	98
42)	Bromofluorobenzene	25.26	493	76747	39.87	ug/l	90
43)	*Chlorobenzene-d5	22.24	431	105041	50.00	ug/l	100
48)	Ethylbenzene	22.56	438	22266M	7.07	ug/l	84
49)	Chlorobenzene	22.33	433	3452	1.72	ug/l	100
74)	*1,4-Dichlorobenzene-d4	28.10	554	63305	50.00	ug/l	93

* Compound is ISTD



Data File: >A0854::D1 Quant Output File: ^A0854::QT
Name: 0102748 Instrument ID: HP5970BA
Misc: 2025 ENVIROTACTICS S-MW-5-A

Id File: IDAS11::SC
Title: Accredited Labs ID file for 8260
Last Calibration: 010102 15:29 Last Qcal Time: 010320 11:42

Operator ID: WILLIAM
Quant Time : 010321 22:03
Injected at: 010321 21:28

QUANT REPORT

Quant Rev: 7 Quant Time: 010322 20:25
Injected at: 010322 19:50
Dilution Factor: 1.00000
Instrument ID: HP5970BA
S-MW-5-A

perator ID: WILLIAM
ut File: ^A0873::QT
ata File: >A0873::D1
ame: 01A2748DL
ode: 2025

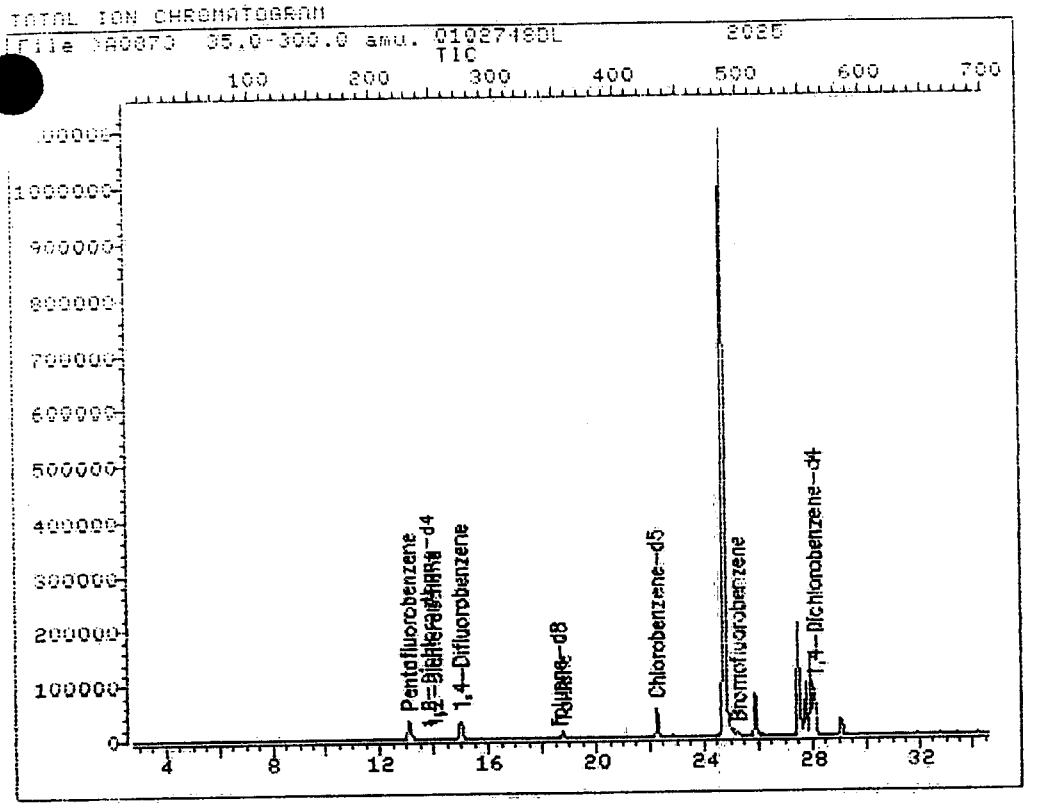
ENVIROTACTICS

D File: IDAS11::SC
itle: Accredited Labs ID file for 8260
ast Calibration: 010102 15:29

Last Qcal Time: 010320 11:42

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Pentafluorobenzene	13.07	228	109398	50.00	ug/l	100
24)	*1,4-Difluorobenzene	14.98	270	110173	50.00	ug/l	80
25)	1,2-Dichloroethane-d4	13.80	244	2385	2.28	ug/l	89
28)	1,2-Dichloroethane	14.03	249	11562	9.19	ug/l	93
36)	Toluene-d8	18.61	350	5199	2.72	ug/l	96
37)	Toluene	18.79	354	36984	19.08	ug/l	97
42)	Bromofluorobenzene	25.24	496	3789M	2.26	ug/l	
43)	*Chlorobenzene-d5	22.24	430	91239	50.00	ug/l	100
55)	*1,4-Dichlorobenzene-d4	28.10	559	64646	50.00	ug/l	88

* Compound is ISTD



Data File: >A0873::D1 Quant Output File: ^A0873::QT
Name: 0102748DL Instrument ID: HP5970BA
Misc: 2025 ENVIROTACTICS S-MW-5-A

Id File: IDAS11::SC
Title: Accredited Labs ID file for 8260
Last Calibration: 010102 15:29 Last Qcal Time: 010320 11:42

Operator ID: WILLIAM
Quant Time : 010322 20:25
Injected at: 010322 19:50

QUANT REPORT

perator ID: WILLIAM
ut File: ^A0840::QT
a File: >A0840::01
ame: 0102751
e: 2025

Quant Rev: 7

ENVIROTACTICS

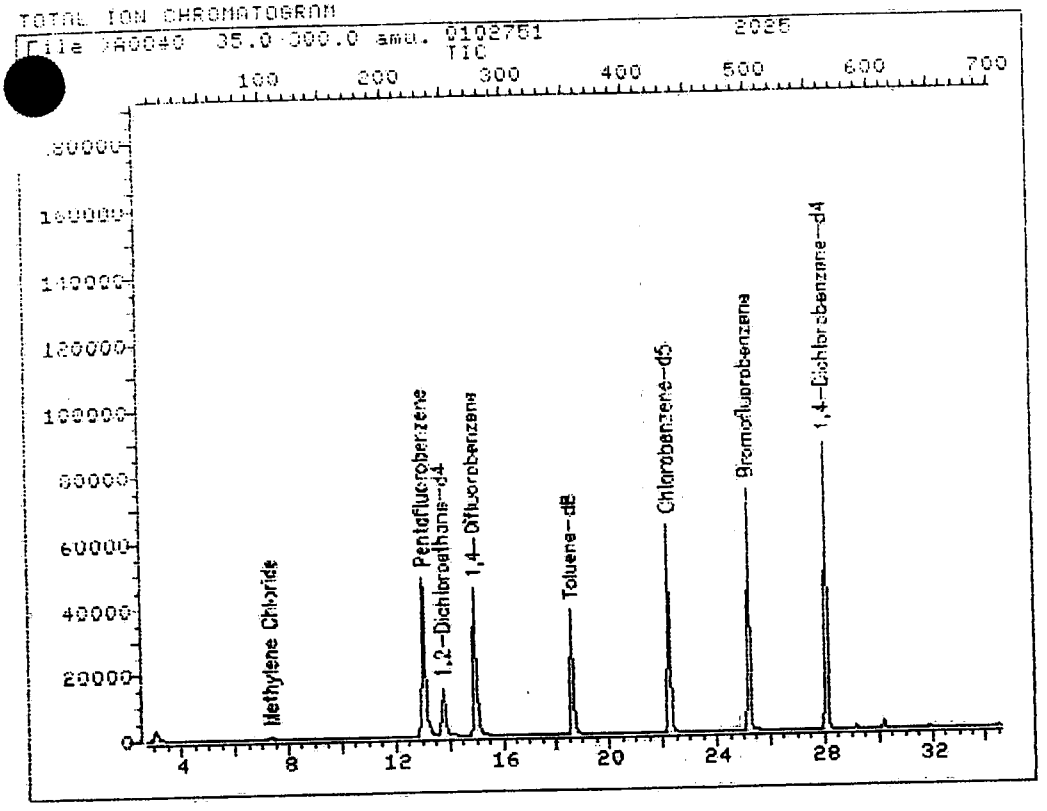
Quant Time: 010321 12:52
Injected at: 010321 12:16
Dilution Factor: 1.00000
Instrument ID: HP5970BA
TB

D File: IDAS11::SC
itle: Accredited Labs ID file for 8260
ast Calibration: 010102 15:29

Last Qcal Time: 010320 11:42

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Pentafluorobenzene	13.03	228	167323	50.00	ug/l	100
13)	Methylene Chloride	7.31	102	6023	6.28	ug/l	94
24)	*1,4-Difluorobenzene	14.94	270	146758	50.00	ug/l	84
25)	1,2-Dichloroethane-d4	13.76	244	57483	41.24	ug/l	92
36)	Toluene-d8	18.57	350	108773	42.74	ug/l	91
42)	Bromofluorobenzene	25.20	496	95080	42.60	ug/l	87
43)	*Chlorobenzene-d5	22.25	431	113517	50.00	ug/l	100
55)	*1,4-Dichlorobenzene-d4	28.06	559	79601	50.00	ug/l	95

* Compound is ISTD



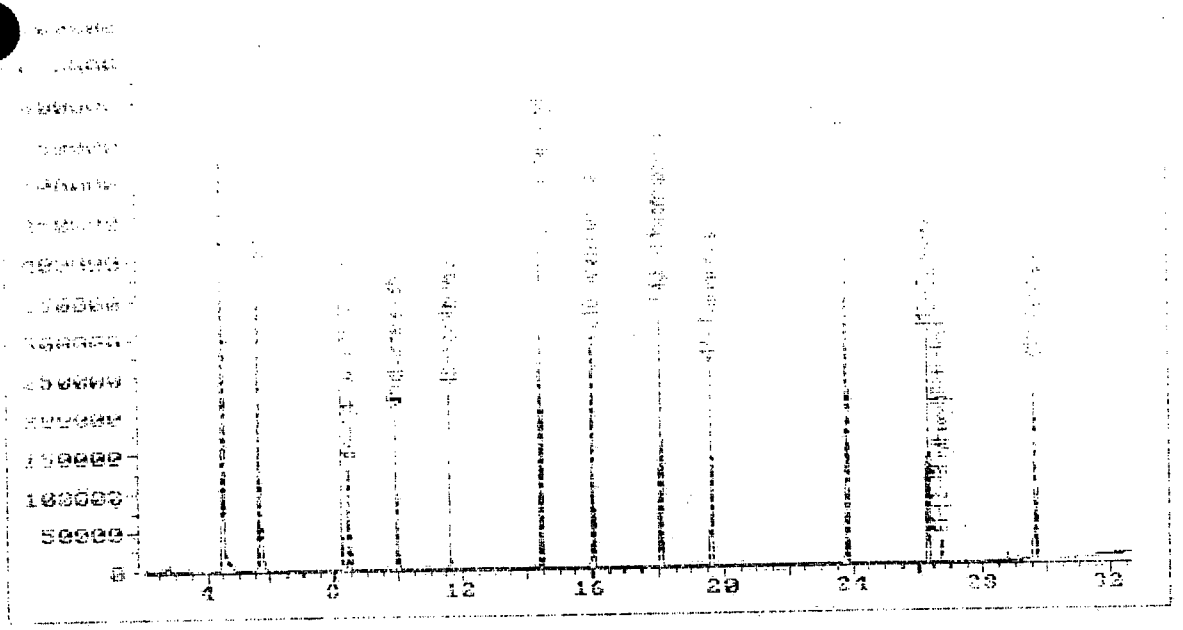
Data File: >A0840::D1 Quant Output File: ^A0840::QT
Name: 0102751 Instrument ID: HP5970BA
Misc: 2025 ENVIROTACTICS TB

Id File: IDAS11::SC
Title: Accredited Labs ID file for 8260
Last Calibration: 010102 15:29 Last Qcal Time: 010320 11:42

Operator ID: WILLIAM
Quant Time : 010321 12:52
Injected at: 010321 12:16

Compound	R.T.	Scan#	Area	Conc.	Units	Q
1) *d4 1,4-Dichlorobenzene	8.41	315	53227	40.00	ug/l	93
4) 2-Fluorophenol	5.58	176	261471	128.87	ug/l	100
6) Phenol-d5	8.15	302	396930	133.80	ug/l	78
19) *d8-Naphthalene	11.57	470	256237	40.00	ug/l	98
20) Nitrobenzene-d5	9.92	389	182981	66.94	ug/l	93
34) *d10-Acenaphthene	15.99	687	140994	40.00	ug/l	97
39) 2-Fluorobiphenyl	14.42	610	274185	73.04	ug/l	95
54) 2,4,6-Tribromophenol	18.03	787	62574	132.90	ug/l	95
55) *d10-Phenanthrene	19.61	865	255935	40.00	ug/l	100
67) *d12-Chrysene	26.28	1192	239987	40.00	ug/l	100
70) Terphenyl-d14	23.77	1069	361722	76.26	ug/l	93
74) Bis(2-Ethylhexyl)Phthalate	26.68	1212	18638	2.56	ug/l	77
76) *d12-Perylene	29.62	1356	194465	40.00	ug/l	100

* Compound is ISTD



Data File: >F3701::62
Name: SBLK61
Misc: 03/22/01

Quant Output File: >F>701::QT
Instrument ID: AHP59706
BTL# 2

Id File: IDF08::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 010308 08:38 Last Qcal Time: <none>

Operator ID: DANIEL
Quant Time : 010323 11:00
Injected at: 010323 10:26

Operator ID: DANIEL Quant Rev: 7 Quant Time: 010323 15:19
Input File: ^F3707::F1 Injected at: 010323 14:45
Data File: >F3707::G2 Dilution Factor: 1.00000
Name: 0107748 Instrument ID: AHP5970B
Misc: 7025 03/22/01 ENVIRONTACTICS S-MW-5-A RTI # R

ID File: IDFOR::MF
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 010308 08:38 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.47	317	70022	40.00	ug/l	88
4)	2-Fluorophenol	5.69	181	456135	170.89	ug/l	100
6)	Phenol-d5	8.23	305	486959	174.77	ug/l	86
10)	1,3-Dichlorobenzene	8.35	311	51492	19.71	ug/l	98
11)	1,4-Dichlorobenzene	8.51	319	320398	123.83	ug/l	91
13)	1,2-Dichlorobenzene	9.35	360	485384M	199.02	ug/l	90
16)	3&4-Methylphenol	9.90	387	9586	2.85	ug/l	98
19)	*d8-Naphthalene	11.64	472	419505	40.00	ug/l	97
20)	Nitrobenzene-d5	10.05	394	214158	47.86	ug/l	91
22)	Isophorone	10.64	423	59219	5.66	ug/l	96
28)	1,2,4-Trichlorobenzene	11.56	468	68533	26.29	ug/l	95
29)	Naphthalene	11.68	474	68196	7.22	ug/l	79
30)	4-Chloroaniline	12.14	496	116708	26.79	ug/l	100
33)	*d10-Acenaphthene	16.26	697	123509	40.00	ug/l	93
34)	2-Fluorobiphenyl	14.47	610	409247	124.45	ug/l	95
42)	Acenaphthylene	15.93	681	88696	16.31	ug/l	97
44)	Acenaphthene	16.30	699	67862	18.21	ug/l	96
46)	4-Nitrophenol	17.02	734	164592	243.22	ug/l	94
47)	Dibenzofuran	16.71	719	57937	12.02	ug/l	87
52)	Fluorene	17.49	757	269413	66.03	ug/l	98
54)	2,4,6-Tribromophenol	18.50	806	37352	90.56	ug/l	98
55)	*d10-Phenanthrene	19.79	869	340311	40.00	ug/l	100
57)	N-Nitrosodiphenylamine	18.05	784	143845	41.81	ug/l	73
62)	Phenanthrene	19.88	873	1063066	119.78	ug/l	98
63)	Anthracene	20.00	879	363628	41.30	ug/l	85
66)	Fluoranthene	22.99	1024	950465M	97.34	ug/l	100
67)	*d12-Chrysene	26.52	1195	178425	40.00	ug/l	100
68)	Benzidine	23.11	1030	278926	125.18	ug/l	88
69)	Pyrene	23.48	1048	846629	142.96	ug/l	87
70)	Terphenyl-d14	24.00	1073	312658	88.65	ug/l	95
73)	Benzo(a)Anthracene	26.48	1193	509752	88.83	ug/l	89
74)	Bis(2-Ethylhexyl)Phthalate	26.85	1211	292480	53.96	ug/l	82
75)	Chrysene	26.58	1198	374372	74.73	ug/l	89
76)	*d12-Perylene	29.83	1355	70141	40.00	ug/l	100
78)	Benzo(b)fluoranthene	29.02	1316	250257M	84.78	ug/l	86
79)	Benzo(k)Fluoranthene	29.06	1318	118519M	49.20	ug/l	96
80)	Benzo(a)Pyrene	29.70	1349	198897	77.68	ug/l	94
81)	Indeno(1,2,3-cd)Pyrene	31.83	1452	43972	16.24	ug/l	88
82)	Dibenzo(a,h)Anthracene	31.83	1452	23424	10.47	ug/l	79
83)	Benzo(g,h,i)Perylene	32.26	1473	28618M	12.45	ug/l	81

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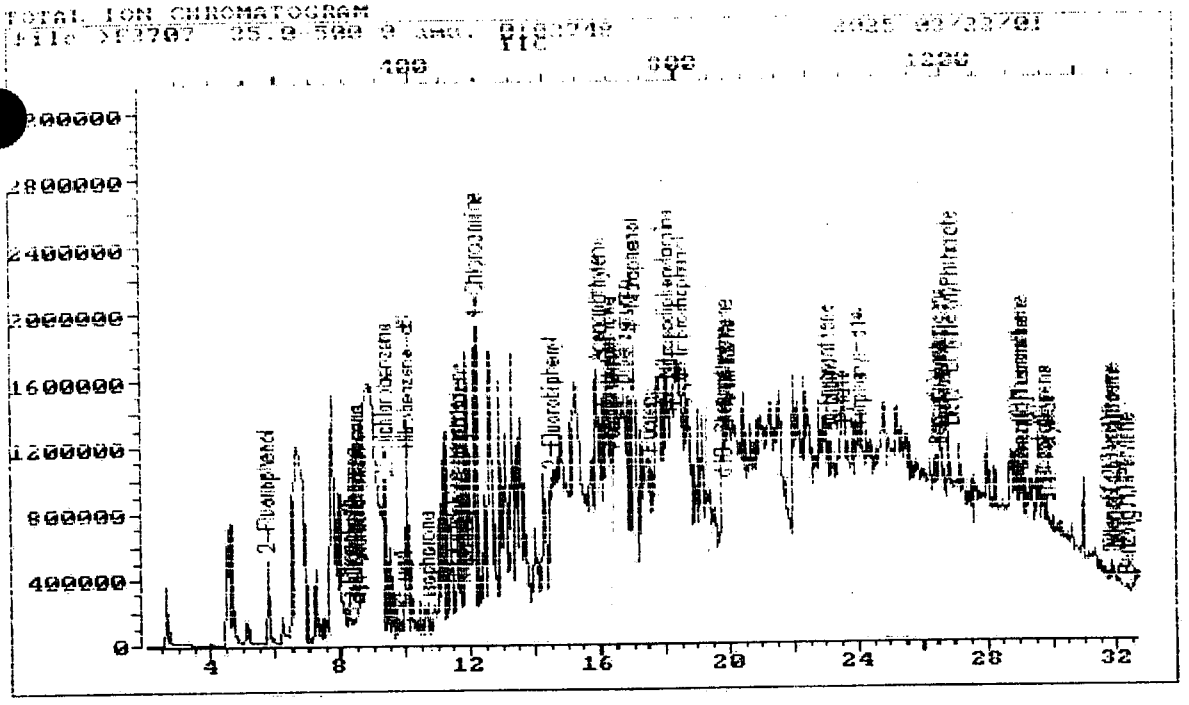
* Compound is ISTD



Data File: >F3707::G2 Quant Output File: ^F3707::E1
Name: 0102748 Instrument ID: AHP5970B
Misc: 2025 03/22/01 ENVIROTACTICS S-MW-5-A BTL# 8

Id File: IDF08::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 010308 08:38 Last Qcal Time: <none>

Operator ID: DANIEL
Quant Time : 010323 15:19
Injected at: 010323 14:45

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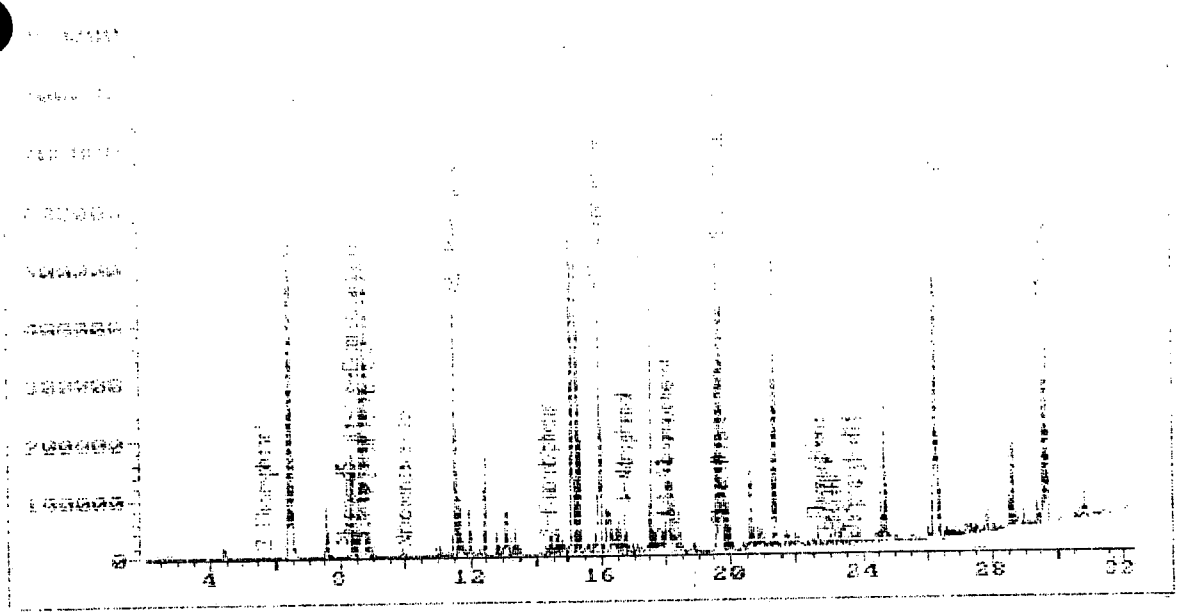
	Compound	Rt	Grang	Area			
[illegible]	*d4 1,4-Dichlorobenzene	[illegible]	[illegible]	[illegible]	[illegible]	ug/l	[illegible]
[illegible]	2-Fluorophenol	[illegible]	[illegible]	[illegible]	[illegible]	ug/l	[illegible]
[illegible]	Phenol-d5	8.17	303	4539	[illegible]	ug/l	[illegible]
[illegible]	1,2-Dichlorobenzene	8.84	336	57885	[illegible]	ug/l	[illegible]
19)	*d8-Naphthalene	11.51	467	440736	40.00	ug/l	99
20)	Nitrobenzene-d5	9.92	389	1634M	.348	ug/l	
34)	*d10-Acenaphthene	15.91	683	243494	40.00	ug/l	97
39)	2-Fluorobiphenyl	14.34	606	4895	.755	ug/l	93
46)	4-Nitrophenol	16.71	722	4144	3.11	ug/l	84
54)	2,4,6-Tribromophenol	17.98	784	561M	.690	ug/l	
55)	*d10-Phenanthrene	19.57	867	445112	40.00	ug/l	100
62)	Phenanthrene	19.61	864	24532	2.11	ug/l	97
66)	Fluoranthene	22.59	1010	20882	1.64	ug/l	100
67)	*d12-Chrysene	26.23	1188	401355	40.00	ug/l	100
[illegible]	Benzidine	22.83	1022	5138	1.03	ug/l	93
69)	Pyrene	23.12	1036	18047	1.35	ug/l	94
70)	Terphenyl-d14	23.67	1063	5612	.707	ug/l	90
76)	*d12-Perylene	29.56	1351	317406	40.00	ug/l	100

* Compound is ISTD

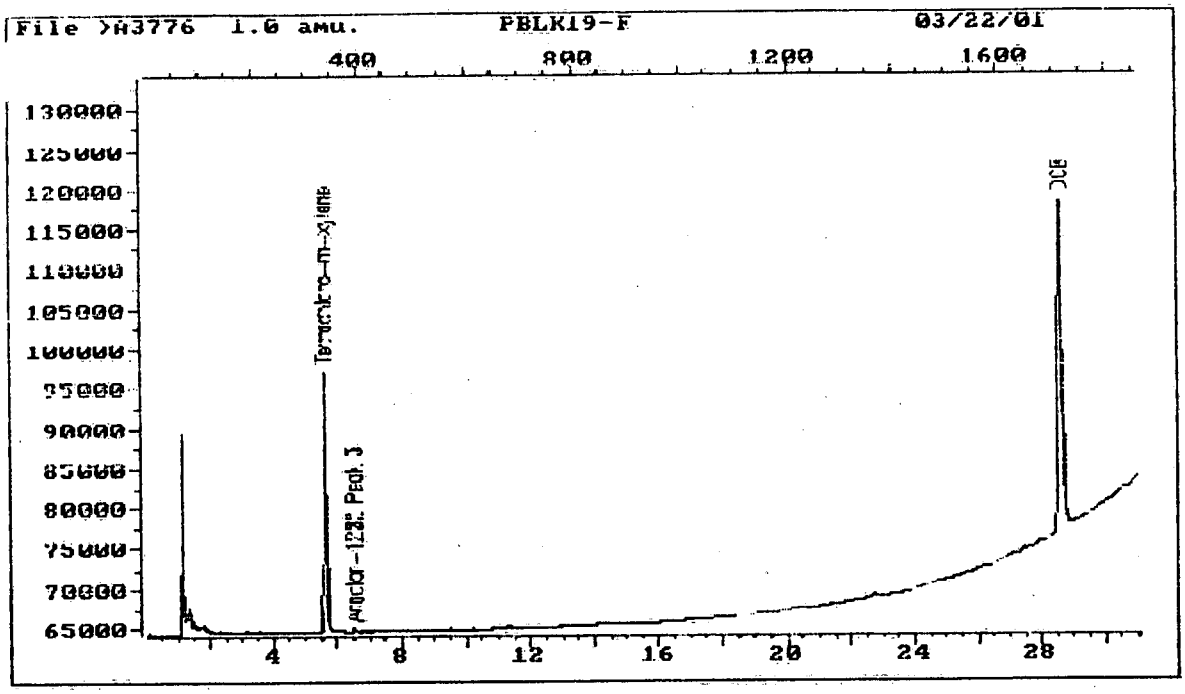


Data File: >F3740::GZ Quant Output File: ^F3740::QT
Name: 0102748DL Instrument ID: AHP5970B
Misc: 2025 03/22/01 ENVIROTACTICS S-MW-5-A BTL# 2

Id File: IDF08::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 010308 08:38 Last Qcal Time: <none>

Operator ID: DANIEL
Quant Time : 010327 13:06
Injected at: 010327 12:33

156



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Name: PBLK19-F Instrument ID: A
Misc: 03/22/01

Id File: IDPP1::G5
Title: PESTICIDES/PCB'S HP5890-A RTX-5 0.53mm 1.0uL
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Operator ID: PHIL
Quant Time : 010326 17:30
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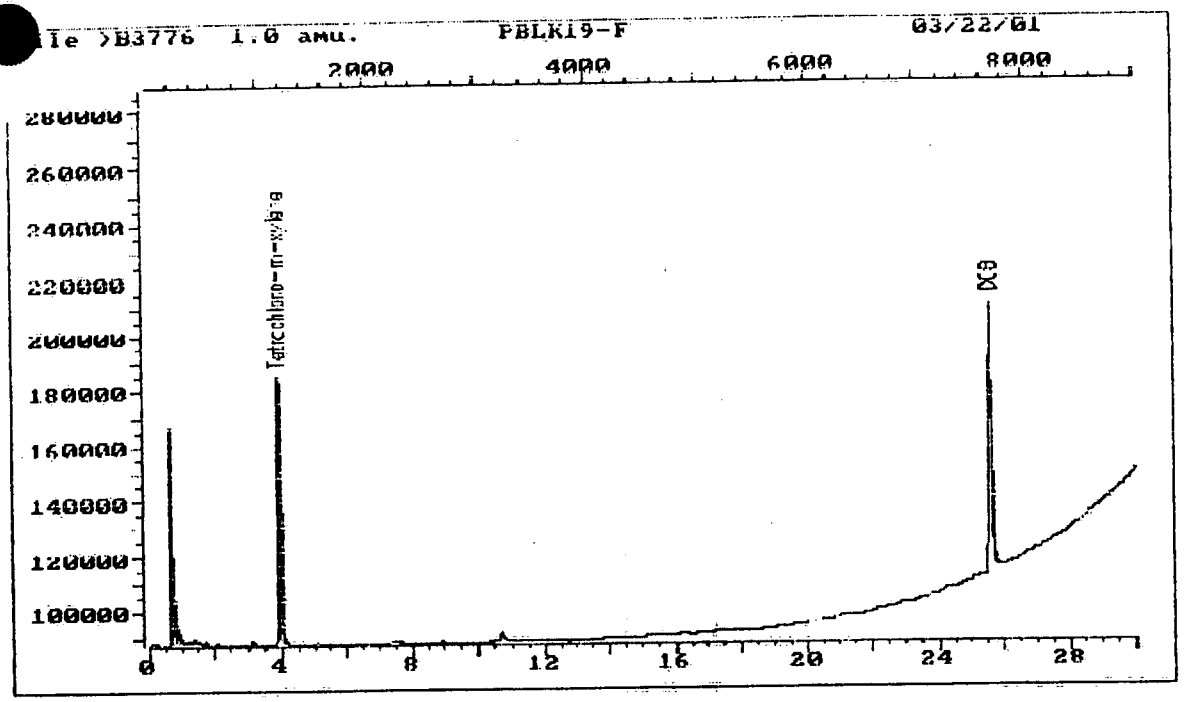
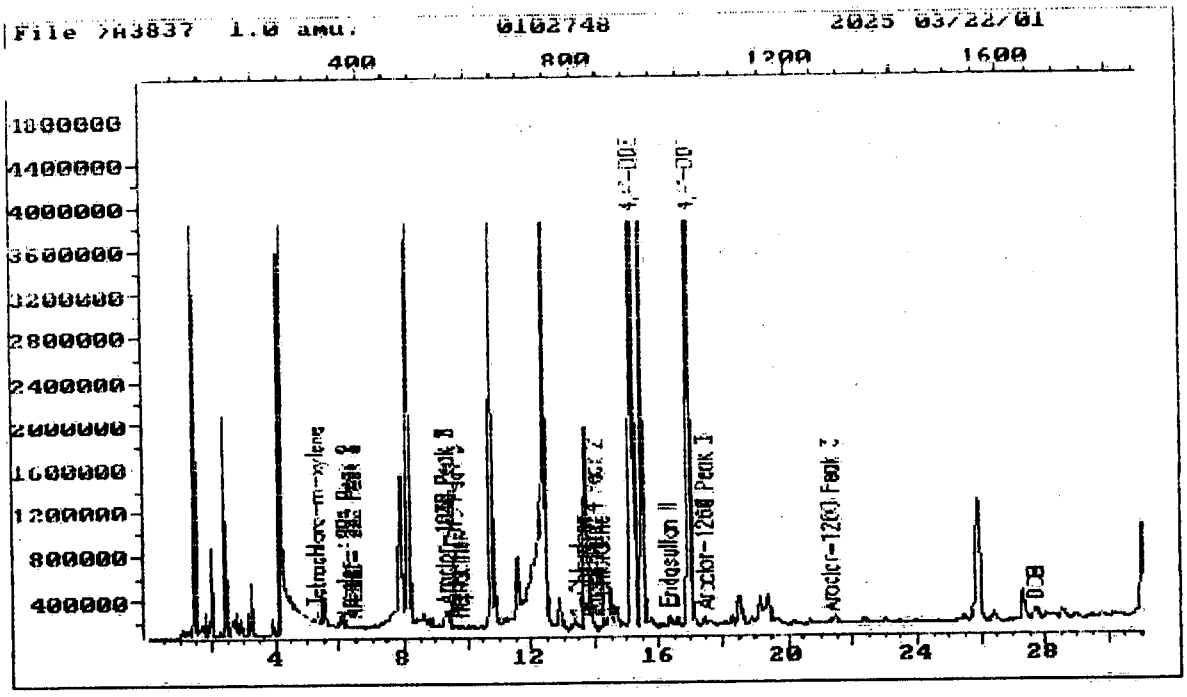


Data File: >B3776::G1 Quant Output File: ^B3776::QT
Name: PBLK19-F Instrument ID: B
Misc: 03/22/01

Id File: IDPP2::G5
Title: PESTICIDES/PCB'S HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 010124 12:08 Last Qcal Time: 010326 11:52

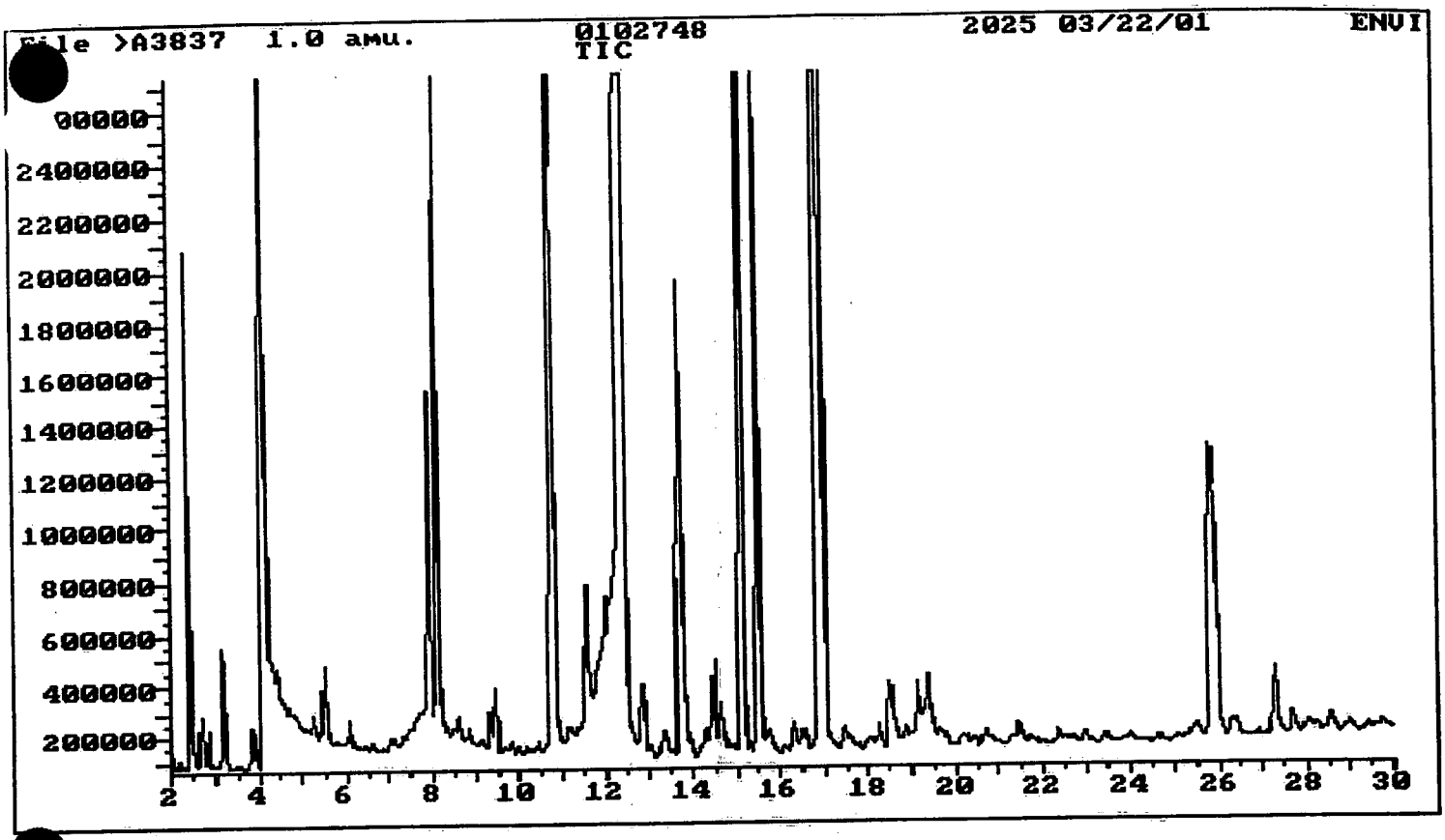
Operator ID: PHIL
Quant Time : 010326 18:08
Injected at: 010326 17:35



Data File: >A3837::G2 Quant Output File: ^A3837::QT
Name: 0102748 Instrument ID: A
Misc: 2025 03/22/01 ENVIROTACTICS S-MW-5-A

Id File: IDPP1::G5
Title: PESTICIDES/PCB'S HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 010124 12:05 Last Qcal Time: 010328 17:21

Operator ID: PHIL
Quant Time : 010329 09:15
Injected at: 010329 04:53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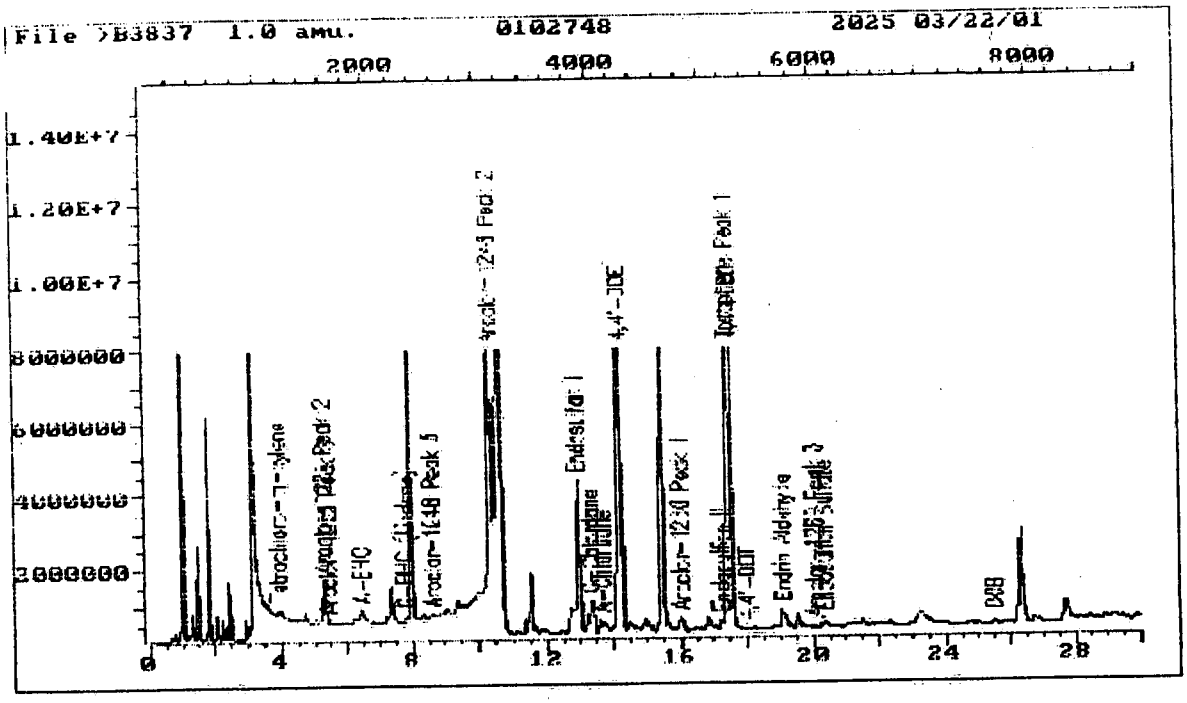
160



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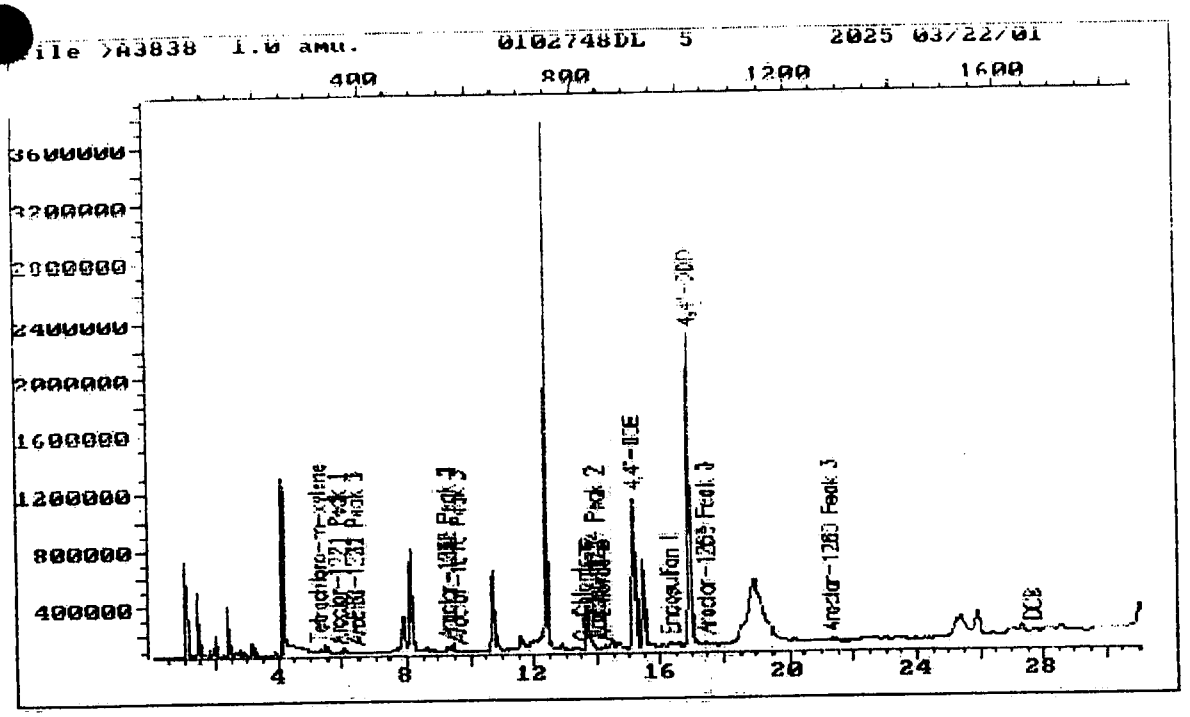
Id File: IDPP2::G5
Title: PESTICIDES/PCB'S HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 010124 12:08 Last Qcal Time: 010328 17:58

Operator ID: PHIL
Quant Time : 010329 11:15
Injected at: 010329 05:30

161

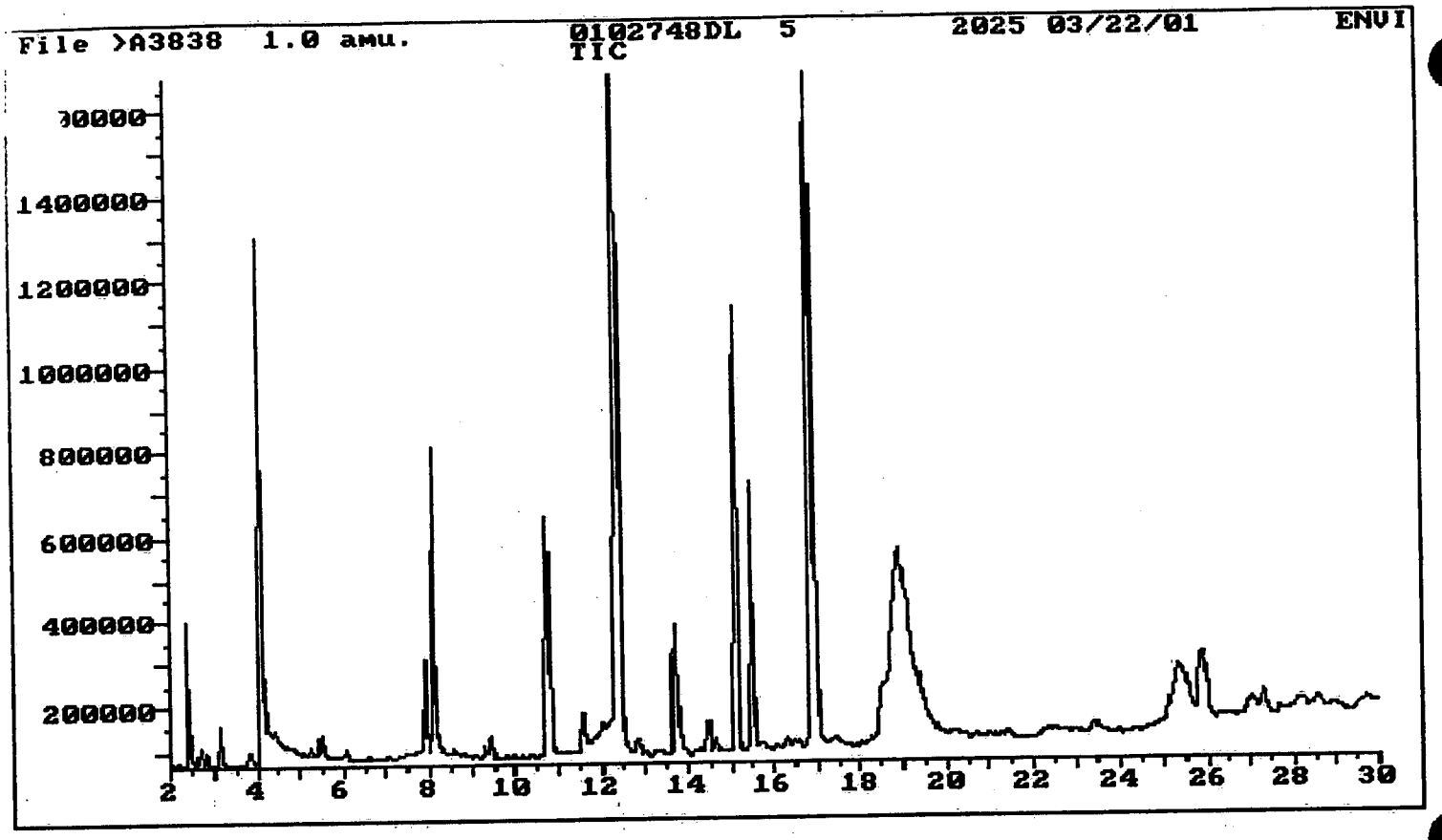


Data File: >A3838::G2 Quant Output File: ^A3838::QT
Name: 0102748DL 5 Instrument ID: A
Misc: 2025 03/22/01 ENVIROTACTICS S-MW-5-A

Id File: IDPP1::G5
Title: PESTICIDES/PCB'S HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 010124 12:05 Last Qcal Time: 010328 17:21

Operator ID: PHIL
Quant Time : 010329 09:18
Injected at: 010329 05:30

162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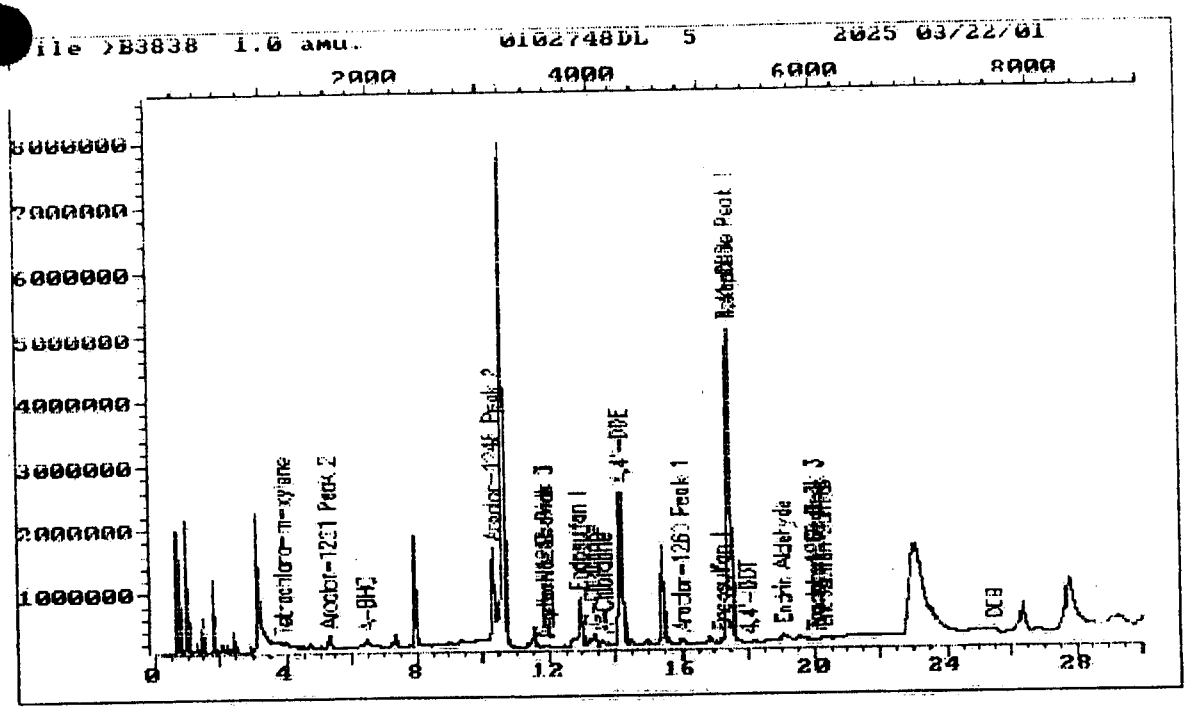

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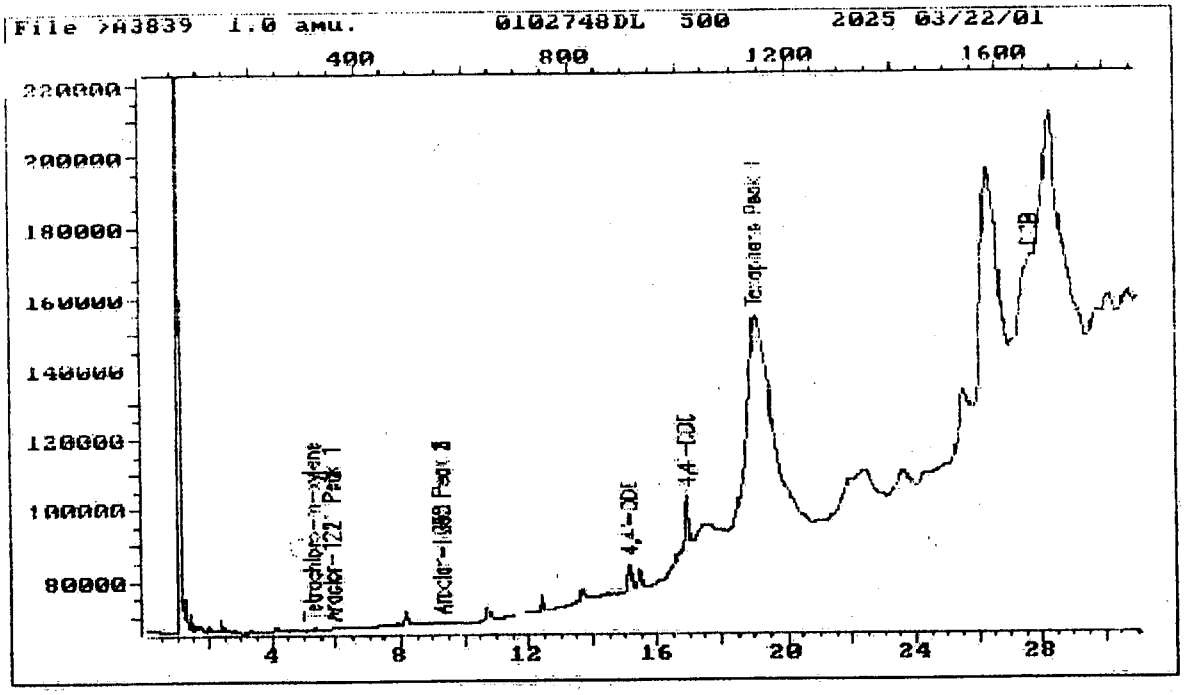
Misc: 2025 03/22/01 ENVIROTACTICS S-MW-5-A

Id File: IDPP2::G5
Title: PESTICIDES/PCB'S HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 010124 12:08 Last Qcal Time: 010328 17:58

Operator ID: PHIL
Quant Time : 010329 11:17
Injected at: 010329 06:06



Data File: >A3839::G2 Quant Output File: ^A3839::QT
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Misc: 2025 03/22/01 ENVIROTACTICS S-MW-5-A

Id File: IDPP1::G5
Title: PESTICIDES/PCB'S HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 010124 12:05 Last Qcal Time: 010328 17:21

Operator ID: PHIL
Quant Time : 010329 09:20
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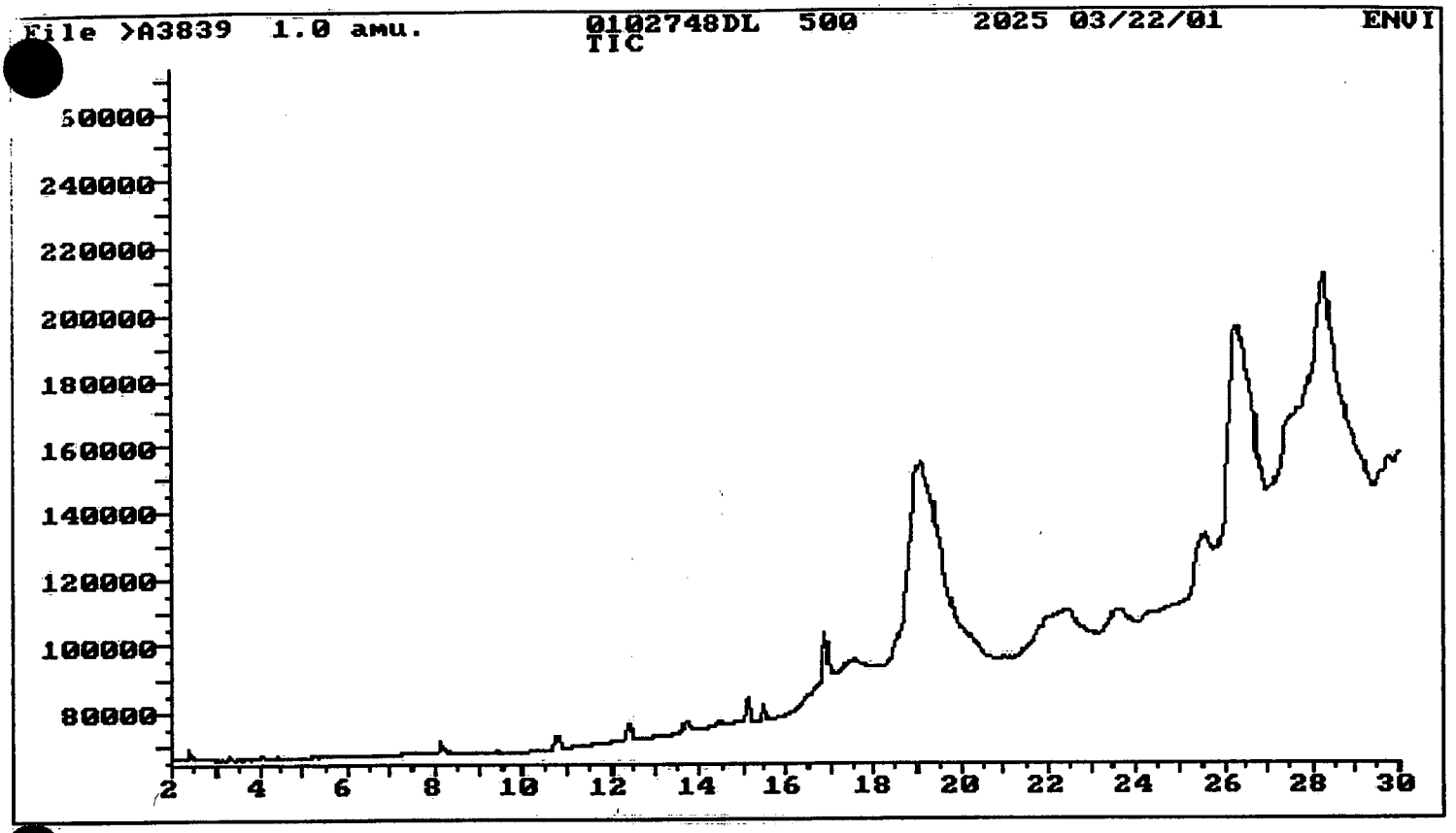
165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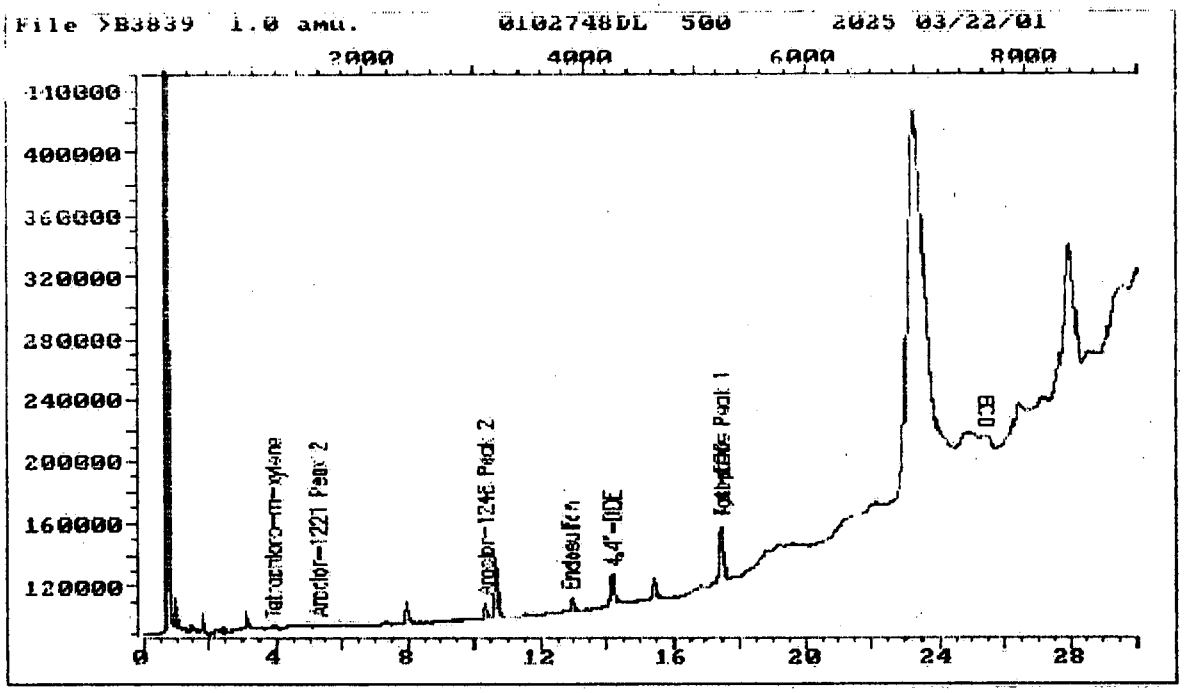
166



Data File: >B3839::G2 Quant Output File: ^B3839::QT
Name: 0102748DL 500 Instrument ID: B
Misc: 2025 03/22/01 ENVIROTACTICS S-MW-5-A

Id File: IDPP2::G5
Title: PESTICIDES/PCB'S HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 010124 12:08 Last Qcal Time: 010328 17:58

Operator ID: PHIL
Quant Time : 010329 11:20
Injected at: 010329 06:43

PAR/SIR/RIW

Orbis Products Corporation
55 Virginia Street
Newark, Essex County, NJ
Case #86-11-17-0100 Ref 15
Attachment 11
Groundwater Laboratory Reports
(1 of 3)

stewart title

All Hazsite Disks
~~Faddy~~ Groundwater
included.

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-002
Client ID: MW-2
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9113.D

GC/MS Column: DB-624
Sample wt/vol: 0.01mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 500
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		305
Vinyl Chloride	558		165
Bromomethane	ND		235
Chloroethane	ND		325
Trichlorofluoromethane	ND		190
Acrolein	ND		2970
1,1-Dichloroethene	ND		250
Methylene Chloride	ND		955
Acrylonitrile	ND		635
trans-1,2-Dichloroethene	ND		195
1,1-Dichloroethane	ND		165
Chloroform	ND		155
1,1,1-Trichloroethane	ND		190
Carbon Tetrachloride	ND		195
1,2-Dichloroethane(EDC)	ND		175
Benzene	17300		150
Trichloroethene	ND		180
1,2-Dichloropropane	ND		125
Bromodichloromethane	ND		125
2-Chloroethylvinyl Ether	ND		125
cis-1,3-Dichloropropene	ND		95
Toluene	355		165
trans-1,3-Dichloropropene	ND		135
1,1,2-Trichloroethane	ND		155
Tetrachloroethene	ND		190
Dibromochloromethane	ND		155
Chlorobenzene	ND		140
Ethylbenzene	ND		150
Total Xylenes	ND		450
Bromoform	ND		140
1,1,2,2-Tetrachloroethane	ND		135
1,3-Dichlorobenzene	ND		110
1,4-Dichlorobenzene	ND		110
1,2-Dichlorobenzene	ND		95

Total Target Compounds: 18213

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-002
Client ID: MW-2
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9113.D

GC/MS Column: DB-624
Sample wt/vol: 0.01mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 500
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-003
Client ID: MW-3
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9114.D

GC/MS Column: DB-624
Sample wt/vol: 0.005mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1000
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		610
Vinyl Chloride	ND		330
Bromomethane	ND		470
Chloroethane	ND		650
Trichlorofluoromethane	ND		380
Acrolein	ND		5940
1,1-Dichloroethene	ND		500
Methylene Chloride	ND		1910
Acrylonitrile	ND		1270
trans-1,2-Dichloroethene	ND		390
1,1-Dichloroethane	ND		330
Chloroform	ND		310
1,1,1-Trichloroethane	ND		380
Carbon Tetrachloride	ND		390
1,2-Dichloroethane(EDC)	ND		350
Benzene	57500		300
Trichloroethene	ND		360
1,2-Dichloropropane	ND		250
Bromodichloromethane	ND		250
2-Chloroethylvinyl Ether	ND		250
cis-1,3-Dichloropropene	ND		190
Toluene	1540		330
trans-1,3-Dichloropropene	ND		270
1,1,2-Trichloroethane	ND		310
Tetrachloroethene	ND		380
Dibromochloromethane	ND		310
Chlorobenzene	ND		280
Ethylbenzene	ND		300
Total Xylenes	ND		900
Bromoform	ND		280
1,1,2,2-Tetrachloroethane	ND		270
1,3-Dichlorobenzene	ND		220
1,4-Dichlorobenzene	ND		220
1,2-Dichlorobenzene	ND		190

Total Target Compounds: 59040

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-003
Client ID: MW-3
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9114.D

GC/MS Column: DB-624
Sample wt/vol: 0.005mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1000
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

C00013

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-004
Client ID: MW-5
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9115.D

GC/MS Column: DB-624
Sample wt/vol: 0.01mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 500
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		305
Vinyl Chloride	ND		165
Bromomethane	ND		235
Chloroethane	ND		325
Trichlorofluoromethane	ND		190
Acrolein	ND		2970
1,1-Dichloroethene	ND		250
Methylene Chloride	ND		955
Acrylonitrile	ND		635
trans-1,2-Dichloroethene	ND		195
1,1-Dichloroethane	ND		165
Chloroform	649		155
1,1,1-Trichloroethane	ND		190
Carbon Tetrachloride	ND		195
1,2-Dichloroethane(EDC)	ND		175
Benzene	7590		150
Trichloroethene	ND		180
1,2-Dichloropropane	ND		125
Bromodichloromethane	ND		125
2-Chloroethylvinyl Ether	ND		125
cis-1,3-Dichloropropene	ND		95
Toluene	32400		165
trans-1,3-Dichloropropene	ND		135
1,1,2-Trichloroethane	ND		155
Tetrachloroethene	2110		190
Dibromochloromethane	ND		155
Chlorobenzene	ND		140
Ethylbenzene	ND		150
Total Xylenes	614		450
Bromoform	ND		140
1,1,2,2-Tetrachloroethane	ND		135
1,3-Dichlorobenzene	ND		110
1,4-Dichlorobenzene	ND		110
1,2-Dichlorobenzene	198		95

Total Target Compounds: 43561

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-004
Client ID: MW-5
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9115.D

GC/MS Column: DB-624
Sample wt/vol: 0.01mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 500
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-005
Client ID: MW-6
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9116.D

GC/MS Column: DB-624
Sample wt/vol: 0.5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 10
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		6.1
Vinyl Chloride	12.1		3.3
Bromomethane	ND		4.7
Chloroethane	ND		6.5
Trichlorofluoromethane	ND		3.8
Acrolein	ND		59.4
1,1-Dichloroethene	ND		5
Methylene Chloride	ND		19.1
Acrylonitrile	ND		12.7
trans-1,2-Dichloroethene	ND		3.9
1,1-Dichloroethane	ND		3.3
Chloroform	36.9		3.1
1,1,1-Trichloroethane	ND		3.8
Carbon Tetrachloride	ND		3.9
1,2-Dichloroethane(EDC)	ND		3.5
Benzene	3.92		3
Trichloroethene	70.9		3.6
1,2-Dichloropropane	ND		2.5
Bromodichloromethane	ND		2.5
2-Chloroethylvinyl Ether	ND		2.5
cis-1,3-Dichloropropene	ND		1.9
Toluene	41.9		3.3
trans-1,3-Dichloropropene	ND		2.7
1,1,2-Trichloroethane	ND		3.1
Tetrachloroethene	ND		3.8
Dibromochloromethane	ND		3.1
Chlorobenzene	ND		2.8
Ethylbenzene	266		3
Total Xylenes	423		9
Bromoform	ND		2.8
1,1,2,2-Tetrachloroethane	ND		2.7
1,3-Dichlorobenzene	ND		2.2
1,4-Dichlorobenzene	ND		2.2
1,2-Dichlorobenzene	ND		1.9

Total Target Compounds: 854.72

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-005
Client ID: MW-6
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Date File: E9116.D

GC/MS Column: DB-624
Sample wt/vol: 0.5mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 10
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown alkane	349	3.03
	Unknown alkane	225	3.36
	Unknown alkane	246	4.52
	Unknown alkane	123	4.82
	Unknown alkane	83	5.15
	Unknown cyclic hydrocarbon	187	5.87
	Unknown cyclic hydrocarbon	92	7.93
	Substituted benzene	112	12.46
	Substituted benzene	143	12.56
	Substituted benzene	128	12.59
	Substituted benzene	128	12.67
	Substituted benzene	125	12.92
	Substituted benzene	607	13.13
	Substituted benzene	95	13.66
	Unknown aromatic	165	13.91

Total TICs = 2808

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-006
Client ID: MW-7
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9117.D

GC/MS Column: DB-624
Sample wt/vol: 1mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 5
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		3.05
Vinyl Chloride	ND		1.65
Bromomethane	ND		2.35
Chloroethane	ND		3.25
Trichlorofluoromethane	ND		1.9
Acrolein	ND		29.7
1,1-Dichloroethene	ND		2.5
Methylene Chloride	ND		9.55
Acrylonitrile	ND		6.35
trans-1,2-Dichloroethene	ND		1.95
1,1-Dichloroethane	ND		1.65
Chloroform	228		1.55
1,1,1-Trichloroethane	ND		1.9
Carbon Tetrachloride	ND		1.95
1,2-Dichloroethane(EDC)	ND		1.75
Benzene	195		1.5
Trichloroethene	ND		1.8
1,2-Dichloropropane	ND		1.25
Bromodichloromethane	ND		1.25
2-Chloroethylvinyl Ether	ND		1.25
cis-1,3-Dichloropropene	ND		0.95
Toluene	110		1.65
trans-1,3-Dichloropropene	ND		1.35
1,1,2-Trichloroethane	7.51		1.55
Tetrachloroethene	6.19		1.9
Dibromochloromethane	ND		1.55
Chlorobenzene	ND		1.4
Ethylbenzene	8.62		1.5
Total Xylenes	ND		4.5
Bromoform	ND		1.4
1,1,2,2-Tetrachloroethane	ND		1.35
1,3-Dichlorobenzene	ND		1.1
1,4-Dichlorobenzene	ND		1.1
1,2-Dichlorobenzene	2.98		0.95

Total Target Compounds: 558.3

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-006
Client ID: MW-7
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Date File: E9117.D

GC/MS Column: DB-624
Sample wt/vol: 1mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 5
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown	18.5	9.67
	Substituted benzene	97.5	12.58
	Substituted benzene	21.5	12.70
	Substituted benzene	161	13.18
	Substituted benzene	21.5	13.52
	Unknown	62	13.76
	Substituted benzene	89	14.19
	Unknown	23	14.32

Total TICs = 494

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-007
Client ID: MW-8
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9118.D

GC/MS Column: DB-624
Sample wt/vol: 0.001mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 5000
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		3050
Vinyl Chloride	ND		1650
Bromomethane	ND		2350
Chloroethane	ND		3250
Trichlorofluoromethane	ND		1900
Acrolein	ND		29700
1,1-Dichloroethene	ND		2500
Methylene Chloride	ND		9550
Acrylonitrile	ND		6350
trans-1,2-Dichloroethene	ND		1950
1,1-Dichloroethane	ND		1650
Chloroform	ND		1550
1,1,1-Trichloroethane	ND		1900
Carbon Tetrachloride	ND		1950
1,2-Dichloroethane(EDC)	ND		1750
Benzene	249000		1500
Trichloroethene	ND		1800
1,2-Dichloropropane	ND		1250
Bromodichloromethane	ND		1250
2-Chloroethylvinyl Ether	ND		1250
cis-1,3-Dichloropropene	ND		950
Toluene	250000		1650
trans-1,3-Dichloropropene	ND		1350
1,1,2-Trichloroethane	ND		1550
Tetrachloroethene	ND		1900
Dibromochloromethane	ND		1550
Chlorobenzene	ND		1400
Ethylbenzene	ND		1500
Total Xylenes	ND		4500
Bromoform	ND		1400
1,1,2,2-Tetrachloroethane	ND		1350
1,3-Dichlorobenzene	ND		1100
1,4-Dichlorobenzene	ND		1100
1,2-Dichlorobenzene	ND		950

Total Target Compounds: 499000

C000025

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-007
Client ID: MW-8
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9118.D

GC/MS Column: DB-624
Sample wt/vol: 0.001mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 5000
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

CC00026

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-008
Client ID: FB
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9110.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		0.61
Vinyl Chloride	ND		0.33
Bromomethane	ND		0.47
Chloroethane	ND		0.65
Trichlorofluoromethane	ND		0.38
Acrolein	ND		5.94
1,1-Dichloroethene	ND		0.5
Methylene Chloride	ND		1.91
Acrylonitrile	ND		1.27
trans-1,2-Dichloroethene	ND		0.39
1,1-Dichloroethane	ND		0.33
Chloroform	ND		0.31
1,1,1-Trichloroethane	ND		0.38
Carbon Tetrachloride	ND		0.39
1,2-Dichloroethane(EDC)	ND		0.35
Benzene	ND		0.3
Trichloroethene	ND		0.36
1,2-Dichloropropane	ND		0.25
Bromodichloromethane	ND		0.25
2-Chloroethylvinyl Ether	ND		0.25
cis-1,3-Dichloropropene	ND		0.19
Toluene	ND		0.33
trans-1,3-Dichloropropene	ND		0.27
1,1,2-Trichloroethane	ND		0.31
Tetrachloroethene	ND		0.38
Dibromochloromethane	ND		0.31
Chlorobenzene	ND		0.28
Ethylbenzene	ND		0.3
Total Xylenes	ND		0.9
Bromoform	ND		0.28
1,1,2,2-Tetrachloroethane	ND		0.27
1,3-Dichlorobenzene	ND		0.22
1,4-Dichlorobenzene	ND		0.22
1,2-Dichlorobenzene	ND		0.19

Total Target Compounds: 0

3151

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-008
Client ID: FB
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9110.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

3/82

000028

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-009
Client ID: TB
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9111.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		0.61
Vinyl Chloride	ND		0.33
Bromomethane	ND		0.47
Chloroethane	ND		0.65
Trichlorofluoromethane	ND		0.38
Acrolein	ND		5.94
1,1-Dichloroethene	ND		0.5
Methylene Chloride	ND		1.91
Acrylonitrile	ND		1.27
trans-1,2-Dichloroethene	ND		0.39
1,1-Dichloroethane	ND		0.33
Chloroform	ND		0.31
1,1,1-Trichloroethane	ND		0.38
Carbon Tetrachloride	ND		0.39
1,2-Dichloroethane(EDC)	ND		0.35
Benzene	ND		0.3
Trichloroethene	ND		0.36
1,2-Dichloropropane	ND		0.25
Bromodichloromethane	ND		0.25
2-Chloroethylvinyl Ether	ND		0.25
cis-1,3-Dichloropropene	ND		0.19
Toluene	ND		0.33
trans-1,3-Dichloropropene	ND		0.27
1,1,2-Trichloroethane	ND		0.31
Tetrachloroethene	ND		0.38
Dibromochloromethane	ND		0.31
Chlorobenzene	ND		0.28
Ethylbenzene	ND		0.3
Total Xylenes	ND		0.9
Bromoform	ND		0.28
1,1,2,2-Tetrachloroethane	ND		0.27
1,3-Dichlorobenzene	ND		0.22
1,4-Dichlorobenzene	ND		0.22
1,2-Dichlorobenzene	ND		0.19

Total Target Compounds: 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-009
Client ID: TB
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9111.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

3184

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-001
Client ID: MW-1
Date Received: 05/03/2004
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9779.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		0.35
Phenol	ND		0.33
Aniline	7.4		0.37
bis(2-Chloroethyl)ether	ND		0.36
2-Chlorophenol	ND		0.36
1,3-Dichlorobenzene	ND		0.37
1,4-Dichlorobenzene	ND		0.29
Benzyl alcohol	ND		0.46
1,2-Dichlorobenzene	ND		0.31
2-Methylphenol	ND		0.39
bis(2-chloroisopropyl)ether	ND		0.45
4-Methylphenol	ND		0.33
N-Nitroso-di-n-propylamine	ND		0.5
Hexachloroethane	ND		0.48
Nitrobenzene	ND		0.33
Isophorone	ND		0.1
2-Nitrophenol	ND		0.36
2,4-Dimethylphenol	ND		0.32
bis(2-Chloroethoxy)methane	ND		0.36
Benzoic acid	ND		0.49
2,4-Dichlorophenol	ND		0.48
1,2,4-Trichlorobenzene	ND		0.22
Naphthalene	ND		0.14
4-Chloroaniline	ND		0.9
Hexachlorobutadiene	ND		0.42
4-Chloro-3-methylphenol	ND		0.25
2-Methylnaphthalene	ND		0.18
Hexachlorocyclopentadiene	ND		0.47
2,4,6-Trichlorophenol	ND		0.64
2,4,5-Trichlorophenol	ND		0.51
2-Chloronaphthalene	ND		0.23
2-Nitroaniline	ND		0.33
Dimethylphthalate	ND		0.17
2,6-Dinitrotoluene	ND		0.36
Acenaphthylene	ND		0.15

3/05

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-001
Client ID: MW-1
Date Received: 05/03/2004
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9779.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		0.52
Acenaphthene	ND		0.21
2,4-Dinitrophenol	ND		0.6
4-Nitrophenol	ND		0.87
2,4-Dinitrotoluene	ND		0.29
Dibenzofuran	ND		0.13
Diethylphthalate	ND		0.16
Fluorene	ND		0.18
4-Chlorophenyl-phenylether	ND		0.23
4-Nitroaniline	ND		0.66
4,6-Dinitro-2-methylphenol	ND		0.45
N-Nitrosodiphenylamine	ND		0.32
1,2-Diphenylhydrazine/Azobenzene	ND		0.31
4-Bromophenyl-phenylether	ND		0.31
Hexachlorobenzene	ND		0.29
Pentachlorophenol	ND		0.59
Phenanthrene	ND		0.26
Anthracene	ND		0.31
Carbazole	ND		0.21
Di-n-butylphthalate	ND		0.23
Fluoranthene	ND		0.18
Benzidine	ND		0.35
Pyrene	ND		0.16
3,3'-Dimethylbenzidine	ND		0.81
Butylbenzylphthalate	ND		0.41
3,3'-Dichlorobenzidine	ND		0.29
Benzo[a]anthracene	ND		0.15
Chrysene	ND		0.25
bis(2-Ethylhexyl)phthalate	ND		0.26
Di-n-octylphthalate	ND		0.19
Benzo[b]fluoranthene	ND		0.34
Benzo[k]fluoranthene	ND		0.25
Benzo[a]pyrene	ND		0.15
Indeno[1,2,3-cd]pyrene	ND		0.59
Dibenz[a,h]anthracene	ND		0.48
Benzo[g,h,i]perylene	ND		0.69

Total Target Compounds: 7.4

3186

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-001
Client ID: MW-1
Date Received: 05/03/2004
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Date File: C9779.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	23.2	3.46
	Substituted benzene	4.4	3.52
	Substituted benzene	43.3	4.38
	Substituted benzene	8.3	4.41
	Unknown	44	8.11
	Substituted benzene	45.2	8.27
	Substituted benzene	5.2	8.88
	Unknown	17.4	9.02
	Unknown	26.9	9.12
	Substituted benzene	14.9	9.78

Total TICs = 232.8

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-002
Client ID: MW-2
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9780.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		0.35
Phenol	ND		0.33
Aniline	12.9		0.37
bis(2-Chloroethyl)ether	ND		0.36
2-Chlorophenol	ND		0.36
1,3-Dichlorobenzene	ND		0.37
1,4-Dichlorobenzene	1.34		0.29
Benzyl alcohol	ND		0.46
1,2-Dichlorobenzene	11.4		0.31
2-Methylphenol	ND		0.39
bis(2-chloroisopropyl)ether	ND		0.45
4-Methylphenol	1.39		0.33
N-Nitroso-di-n-propylamine	ND		0.5
Hexachloroethane	ND		0.48
Nitrobenzene	ND		0.33
Isophorone	ND		0.1
2-Nitrophenol	ND		0.36
2,4-Dimethylphenol	4.84		0.32
bis(2-Chloroethoxy)methane	ND		0.36
Benzoic acid	ND		0.49
2,4-Dichlorophenol	ND		0.48
1,2,4-Trichlorobenzene	ND		0.22
Naphthalene	1.03		0.14
4-Chloroaniline	ND		0.9
Hexachlorobutadiene	ND		0.42
4-Chloro-3-methylphenol	ND		0.25
2-Methylnaphthalene	ND		0.18
Hexachlorocyclopentadiene	ND		0.47
2,4,6-Trichlorophenol	ND		0.64
2,4,5-Trichlorophenol	ND		0.51
2-Chloronaphthalene	ND		0.23
2-Nitroaniline	ND		0.33
Dimethylphthalate	ND		0.17
2,6-Dinitrotoluene	ND		0.36
Acenaphthylene	ND		0.15

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-002
Client ID: MW-2
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9780.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		0.52
Acenaphthene	ND		0.21
2,4-Dinitrophenol	ND		0.6
4-Nitrophenol	ND		0.87
2,4-Dinitrotoluene	ND		0.29
Dibenzofuran	ND		0.13
Diethylphthalate	ND		0.16
Fluorene	ND		0.18
4-Chlorophenyl-phenylether	ND		0.23
4-Nitroaniline	ND		0.66
4,6-Dinitro-2-methylphenol	ND		0.45
N-Nitrosodiphenylamine	ND		0.32
1,2-Diphenylhydrazine/Azobenzene	ND		0.31
4-Bromophenyl-phenylether	ND		0.31
Hexachlorobenzene	ND		0.29
Pentachlorophenol	ND		0.59
Phenanthrene	ND		0.26
Anthracene	ND		0.31
Carbazole	ND		0.21
Di-n-butylphthalate	ND		0.23
Fluoranthene	ND		0.18
Benzidine	ND		0.35
Pyrene	ND		0.16
3,3'-Dimethylbenzidine	ND		0.81
Butylbenzylphthalate	ND		0.41
3,3'-Dichlorobenzidine	ND		0.29
Benzo[a]anthracene	ND		0.15
Chrysene	ND		0.25
bis(2-Ethylhexyl)phthalate	ND		0.26
Di-n-octylphthalate	ND		0.19
Benzo[b]fluoranthene	ND		0.34
Benzo[k]fluoranthene	ND		0.25
Benzo[a]pyrene	ND		0.15
Indeno[1,2,3-cd]pyrene	ND		0.59
Dibenz[a,h]anthracene	ND		0.48
Benzo[g,h,i]perylene	ND		0.69

Total Target Compounds: 32.9

3189

CC0035

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-002
Client ID: MW-2
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Date File: C9780.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	144	3.46
	Substituted benzene	32.6	3.51
	Substituted benzene	64.4	4.38
	Substituted benzene	13.3	4.41
	Substituted benzene	4.7	5.25
	Substituted benzene	5.1	5.58
	Unknown cyclic hydrocarbon	61.1	7.24
	Unknown alkane	9.5	7.33
	Substituted benzene	5.6	8.02
	Unknown	5.5	8.11
	Substituted benzene	25.4	8.37
	Substituted benzene	11.3	8.88
	Unknown	27.1	10.34
	Unknown	6.8	11.18
	Unknown	9.3	11.99

Total TICs = 425.7

CC0036

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-003
Client ID: MW-3
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9781.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		0.35
Phenol	3.2		0.33
Aniline	7.33		0.37
bis(2-Chloroethyl)ether	ND		0.36
2-Chlorophenol	ND		0.36
1,3-Dichlorobenzene	ND		0.37
1,4-Dichlorobenzene	0.95		0.29
Benzyl alcohol	ND		0.46
1,2-Dichlorobenzene	3.58		0.31
2-Methylphenol	ND		0.39
bis(2-chloroisopropyl)ether	ND		0.45
4-Methylphenol	ND		0.33
N-Nitroso-di-n-propylamine	ND		0.5
Hexachloroethane	ND		0.48
Nitrobenzene	ND		0.33
Isophorone	ND		0.1
2-Nitrophenol	ND		0.36
2,4-Dimethylphenol	ND		0.32
bis(2-Chloroethoxy)methane	ND		0.36
Benzoic acid	ND		0.49
2,4-Dichlorophenol	ND		0.48
1,2,4-Trichlorobenzene	ND		0.22
Naphthalene	ND		0.14
4-Chloroaniline	ND		0.9
Hexachlorobutadiene	ND		0.42
4-Chloro-3-methylphenol	ND		0.25
2-Methylnaphthalene	ND		0.18
Hexachlorocyclopentadiene	ND		0.47
2,4,6-Trichlorophenol	ND		0.64
2,4,5-Trichlorophenol	ND		0.51
2-Chloronaphthalene	ND		0.23
2-Nitroaniline	ND		0.33
Dimethylphthalate	ND		0.17
2,6-Dinitrotoluene	ND		0.36
Acenaphthylene	ND		0.15

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-003
Client ID: MW-3
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9781.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		0.52
Acenaphthene	ND		0.21
2,4-Dinitrophenol	ND		0.6
4-Nitrophenol	ND		0.87
2,4-Dinitrotoluene	ND		0.29
Dibenzofuran	ND		0.13
Diethylphthalate	ND		0.16
Fluorene	ND		0.18
4-Chlorophenyl-phenylether	ND		0.23
4-Nitroaniline	ND		0.66
4,6-Dinitro-2-methylphenol	ND		0.45
N-Nitrosodiphenylamine	ND		0.32
1,2-Diphenylhydrazine/Azobenzene	ND		0.31
4-Bromophenyl-phenylether	ND		0.31
Hexachlorobenzene	ND		0.29
Pentachlorophenol	ND		0.59
Phenanthrene	ND		0.26
Anthracene	ND		0.31
Carbazole	ND		0.21
Di-n-butylphthalate	ND		0.23
Fluoranthene	ND		0.18
Benzidine	ND		0.35
Pyrene	ND		0.16
3,3'-Dimethylbenzidine	ND		0.81
Butylbenzylphthalate	ND		0.41
3,3'-Dichlorobenzidine	ND		0.29
Benzo[a]anthracene	ND		0.15
Chrysene	ND		0.25
bis(2-Ethylhexyl)phthalate	ND		0.26
Di-n-octylphthalate	ND		0.19
Benzo[b]fluoranthene	ND		0.34
Benzo[k]fluoranthene	ND		0.25
Benzo[a]pyrene	ND		0.15
Indeno[1,2,3-cd]pyrene	ND		0.59
Dibenz[a,h]anthracene	ND		0.48
Benzo[g,h,i]perylene	ND		0.69

Total Target Compounds: 15.06

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-003
Client ID: MW-3
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Date File: C9781.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	136	3.46
	Substituted benzene	104	3.51
	Substituted benzene	178	4.38
	Substituted benzene	47.8	4.41
	Substituted benzene	32.3	5.25
	Substituted benzene	70.5	5.58
	Unknown cyclic hydrocarbon	4.2	5.88
	Substituted benzene	310	6.26
	Unknown cyclic hydrocarbon	107	6.29
	Substituted benzene	12.9	8.09

Total TICs = 1002.7

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-004
Client ID: MW-5
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9785.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 10
% Moisture: 100

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		3.5
Phenol	119		3.3
Aniline	3720	E	3.7
bis(2-Chloroethyl)ether	ND		3.6
2-Chlorophenol	ND		3.6
1,3-Dichlorobenzene	ND		3.7
1,4-Dichlorobenzene	3.89		2.9
Benzyl alcohol	ND		4.6
1,2-Dichlorobenzene	81.7		3.1
2-Methylphenol	ND		3.9
bis(2-chloroisopropyl)ether	ND		4.5
4-Methylphenol	356		3.3
N-Nitroso-di-n-propylamine	ND		5
Hexachloroethane	ND		4.8
Nitrobenzene	ND		3.3
Isophorone	ND		1
2-Nitrophenol	ND		3.6
2,4-Dimethylphenol	ND		3.2
bis(2-Chloroethoxy)methane	ND		3.6
Benzoic acid	ND		4.9
2,4-Dichlorophenol	ND		4.8
1,2,4-Trichlorobenzene	ND		2.2
Naphthalene	ND		1.4
4-Chloroaniline	ND		9
Hexachlorobutadiene	ND		4.2
4-Chloro-3-methylphenol	ND		2.5
2-Methylnaphthalene	9.48		1.8
Hexachlorocyclopentadiene	ND		4.7
2,4,6-Trichlorophenol	ND		6.4
2,4,5-Trichlorophenol	ND		5.1
2-Chloronaphthalene	ND		2.3
2-Nitroaniline	ND		3.3
Dimethylphthalate	ND		1.7
2,6-Dinitrotoluene	ND		3.6
Acenaphthylene	ND		1.5

3194

C00010

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-004
Client ID: MW-5
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9785.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 10
% Moisture: 100

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		5.2
Acenaphthene	ND		2.1
2,4-Dinitrophenol	ND		6
4-Nitrophenol	ND		8.7
2,4-Dinitrotoluene	ND		2.9
Dibenzofuran	ND		1.3
Diethylphthalate	ND		1.6
Fluorene	ND		1.8
4-Chlorophenyl-phenylether	ND		2.3
4-Nitroaniline	ND		6.6
4,6-Dinitro-2-methylphenol	ND		4.5
N-Nitrosodiphenylamine	ND		3.2
1,2-Diphenylhydrazine/Azobenzene	ND		3.1
4-Bromophenyl-phenylether	ND		3.1
Hexachlorobenzene	ND		2.9
Pentachlorophenol	ND		5.9
Phenanthrene	ND		2.6
Anthracene	ND		3.1
Carbazole	ND		2.1
Di-n-butylphthalate	ND		2.3
Fluoranthene	ND		1.8
Benzidine	ND		3.5
Pyrene	ND		1.6
3,3'-Dimethylbenzidine	ND		8.1
Butylbenzylphthalate	ND		4.1
3,3'-Dichlorobenzidine	ND		2.9
Benzo[a]anthracene	ND		1.5
Chrysene	ND		2.5
bis(2-Ethylhexyl)phthalate	ND		2.6
Di-n-octylphthalate	ND		1.9
Benzo[b]fluoranthene	ND		3.4
Benzo[k]fluoranthene	ND		2.5
Benzo[a]pyrene	ND		1.5
Indeno[1,2,3-cd]pyrene	ND		5.9
Dibenz[a,h]anthracene	ND		4.8
Benzo[g,h,i]perylene	ND		6.9

Total Target Compounds: 4290.07 E

3195

C00011

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWAR

Lab ID: 2867-004DIL
Client ID: MW-5
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/07/2001
Data file: C9796.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 230
% Moisture: 100

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		80.5
Phenol	ND		75.9
Aniline	16000		85.1
bis(2-Chloroethyl)ether	ND		82.8
2-Chlorophenol	ND		82.8
1,3-Dichlorobenzene	ND		85.1
1,4-Dichlorobenzene	ND		66.7
Benzyl alcohol	ND		106
1,2-Dichlorobenzene	ND		71.3
2-Methylphenol	ND		89.7
bis(2-chloroisopropyl)ether	ND		104
4-Methylphenol	381		75.9
N-Nitroso-di-n-propylamine	ND		115
Hexachloroethane	ND		110
Nitrobenzene	ND		75.9
Isophorone	ND		23
2-Nitrophenol	ND		82.8
2,4-Dimethylphenol	ND		73.6
bis(2-Chloroethoxy)methane	ND		82.8
Benzoic acid	ND		113
2,4-Dichlorophenol	ND		110
1,2,4-Trichlorobenzene	ND		50.6
Naphthalene	ND		32.2
4-Chloroaniline	ND		207
Hexachlorobutadiene	ND		96.6
4-Chloro-3-methylphenol	ND		57.5
2-Methylnaphthalene	ND		41.4
Hexachlorocyclopentadiene	ND		108
2,4,6-Trichlorophenol	ND		147
2,4,5-Trichlorophenol	ND		117
2-Chloronaphthalene	ND		52.9
2-Nitroaniline	ND		75.9
Dimethylphthalate	ND		39.1
2,6-Dinitrotoluene	ND		82.8
Acenaphthylene	ND		34.5

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWAR

Lab ID: 2867-004DIL
Client ID: MW-5
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/07/2001
Data file: C9796.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 230
% Moisture: 100

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		120
Acenaphthene	ND		48.3
2,4-Dinitrophenol	ND		138
4-Nitrophenol	ND		200
2,4-Dinitrotoluene	ND		66.7
Dibenzofuran	ND		29.9
Diethylphthalate	ND		36.8
Fluorene	ND		41.4
4-Chlorophenyl-phenylether	ND		52.9
4-Nitroaniline	ND		152
4,6-Dinitro-2-methylphenol	ND		104
N-Nitrosodiphenylamine	ND		73.6
1,2-Diphenylhydrazine/Azobenzene	ND		71.3
4-Bromophenyl-phenylether	ND		71.3
Hexachlorobenzene	ND		66.7
Pentachlorophenol	ND		136
Phenanthrene	ND		59.8
Anthracene	ND		71.3
Carbazole	ND		48.3
Di-n-butylphthalate	ND		52.9
Fluoranthene	ND		41.4
Benzidine	ND		80.5
Pyrene	ND		36.8
3,3'-Dimethylbenzidine	ND		186
Butylbenzylphthalate	ND		94.3
3,3'-Dichlorobenzidine	ND		66.7
Benzo[a]anthracene	ND		34.5
Chrysene	ND		57.5
bis(2-Ethylhexyl)phthalate	ND		59.8
Di-n-octylphthalate	ND		43.7
Benzo[b]fluoranthene	ND		78.2
Benzo[k]fluoranthene	ND		57.5
Benzo[a]pyrene	ND		34.5
Indeno[1,2,3-cd]pyrene	ND		136
Dibenz[a,h]anthracene	ND		110
Benzo[g,h,i]perylene	ND		159

Total Target Compounds: 16381

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-004
Client ID: MW-5
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Date File: C9785.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 10
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	655	3.45
	Substituted benzene	1600	3.47
	Substituted benzene	981	3.51
000127-18-4	Tetrachloroethylene	275	3.90
	Substituted benzene	219	4.63
	Substituted benzene	101	4.90
	Substituted benzene	105	5.25
	Substituted benzene	65	5.90
	Unknown cyclic hydrocarbon	1110	6.50
	Substituted benzene	195	7.14
	Unknown	115	7.24
	Unknown cyclic hydrocarbon	264	7.28
	Unknown cyclic hydrocarbon	83	7.36
	Unknown cyclic hydrocarbon	90	7.42
	Substituted benzene	280	7.80
	Substituted benzene	406	7.86
	Substituted benzene	162	8.03
	Substituted phenol	247	8.09
	Unknown	113	8.12
	Substituted phenol	228	8.29
	Substituted benzene	217	8.37
	Unknown	280	8.70
	Unknown	301	9.70
	Unknown	59	9.77
	Substituted benzene	251	10.62
	Total TICs =	8402	

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-005
Client ID: MW-6
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9782.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		0.35
Phenol	ND		0.33
Aniline	ND		0.37
bis(2-Chloroethyl)ether	ND		0.36
2-Chlorophenol	ND		0.36
1,3-Dichlorobenzene	ND		0.37
1,4-Dichlorobenzene	ND		0.29
Benzyl alcohol	ND		0.46
1,2-Dichlorobenzene	ND		0.31
2-Methylphenol	ND		0.39
bis(2-chloroisopropyl)ether	ND		0.45
4-Methylphenol	ND		0.33
N-Nitroso-di-n-propylamine	ND		0.5
Hexachloroethane	ND		0.48
Nitrobenzene	ND		0.33
Isophorone	ND		0.1
2-Nitrophenol	ND		0.36
2,4-Dimethylphenol	ND		0.32
bis(2-Chloroethoxy)methane	ND		0.36
Benzoic acid	ND		0.49
2,4-Dichlorophenol	ND		0.48
1,2,4-Trichlorobenzene	ND		0.22
Naphthalene	ND		0.14
4-Chloroaniline	ND		0.9
Hexachlorobutadiene	ND		0.42
4-Chloro-3-methylphenol	ND		0.25
2-Methylnaphthalene	ND		0.18
Hexachlorocyclopentadiene	ND		0.47
2,4,6-Trichlorophenol	ND		0.64
2,4,5-Trichlorophenol	ND		0.51
2-Chloronaphthalene	ND		0.23
2-Nitroaniline	ND		0.33
Dimethylphthalate	ND		0.17
2,6-Dinitrotoluene	ND		0.36
Acenaphthylene	ND		0.15

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-005
Client ID: MW-6
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9782.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		0.52
Acenaphthene	ND		0.21
2,4-Dinitrophenol	ND		0.6
4-Nitrophenol	ND		0.87
2,4-Dinitrotoluene	ND		0.29
Dibenzofuran	ND		0.13
Diethylphthalate	ND		0.16
Fluorene	ND		0.18
4-Chlorophenyl-phenylether	ND		0.23
4-Nitroaniline	ND		0.66
4,6-Dinitro-2-methylphenol	ND		0.45
N-Nitrosodiphenylamine	ND		0.32
1,2-Diphenylhydrazine/Azobenzene	ND		0.31
4-Bromophenyl-phenylether	ND		0.31
Hexachlorobenzene	ND		0.29
Pentachlorophenol	ND		0.59
Phenanthrene	ND		0.26
Anthracene	ND		0.31
Carbazole	ND		0.21
Di-n-butylphthalate	ND		0.23
Fluoranthene	ND		0.18
Benzidine	ND		0.35
Pyrene	ND		0.16
3,3'-Dimethylbenzidine	ND		0.81
Butylbenzylphthalate	ND		0.41
3,3'-Dichlorobenzidine	ND		0.29
Benzo[a]anthracene	ND		0.15
Chrysene	ND		0.25
bis(2-Ethylhexyl)phthalate	ND		0.26
Di-n-octylphthalate	ND		0.19
Benzo[b]fluoranthene	ND		0.34
Benzo[k]fluoranthene	ND		0.25
Benzo[a]pyrene	ND		0.15
Indeno[1,2,3-cd]pyrene	ND		0.59
Dibenz[a,h]anthracene	ND		0.48
Benzo[g,h,i]perylene	ND		0.69

Total Target Compounds: 0

3200

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: 444-ORBIS-NEWARK
Lab Case Number: E01-2867
Date Report Prepared: May 14, 2001

CLIENT SAMPLE ID	LABORATORY SAMPLE ID
MW-1	2867-001
MW-2	2867-002
MW-3	2867-003
MW-5	2867-004
MW-6	2867-005
MW-7	2867-006
MW-8	2867-007
FB	2867-008
TB	2867-009

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.

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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 nine (9) aqueous sample(s) from Envirotactics Inc. (Project: 444-ORBIS-NEWARK) on May 3, 2001 for the analysis of:

(8) Volatiles + 15
(1) Volatiles + 10
(8) Semivolatiles - BNA + 25
(8) PCB's
(8) Pesticides
(8) PP Metals
(8) Cyanide, Total
(8) Phenols

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

MCdavis
Reviewed by

5/17/01
Date

INTEGRATED ANALYTICAL LABORATORIES, LLC.

LABORATORY DELIVERABLES CHECK LIST

Lab Case Number: E01-2867

		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

5/17/07
Date

3206

000003

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC/MS VOLATILE ANALYSIS

Lab Case Number: E01 - 2867

	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		NA
b. System Performance Check Compounds		NA
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

5/11/01
Date

rev 12/00

3207

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC/MS SEMIVOLATILE ANALYSIS

Lab Case Number: E01 - 2867

	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

5/8/01
Date

rev 01/01

3208

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC ANALYSIS - PCB'S, PESTICIDES, HERBICIDES

Lab Case Number: E01 - 28807

		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

5.09.01
Date

rev 01/01

INTEGRATED ANALYTICAL LABORATORIES

METAL ANALYSIS CONFORMANCE/NONCONFORMANCE SUMMARY

Lab Case Number: E01-2867

	No	Yes
1. Calibration Summary Meet Criteria.		✓
2. ICP Interference Check Sample Results Meets Criteria (if applicable)		NA
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 # 2912-007 Ag: 65.3 % Recovery	✓	
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:
Low recovery for silver probaly due to matrix-interference. However the 2 other QC sets in same batch passed for Ag.

H. Falke-Jorgensen
Inorganics Manager

05/09/01
Date

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: Envirotactics Inc.
Project: 444-ORBIS-NEWARK
Lab Case No.: E01-2867

Lab ID:	2867-001			2867-002			2867-003			2867-004		
Client ID:	MW-1			MW-2			MW-3			MW-5		
Matrix:	Aqueous			Aqueous			Aqueous			Aqueous		
Sampled Date:	5/2/2001			5/2/2001			5/2/2001			5/2/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (ppb)												
Vinyl Chloride	ND		0.33	558		165	ND		330	ND		165
Chloroform	ND		0.31	ND		155	ND		310	649		155
Benzene	23.1		0.3	17300		150	57500		300	7590		150
Toluene	1.57		0.33	355		165	1540		330	32400		165
Tetrachloroethene	ND		0.38	ND		190	ND		380	2110		190
Chlorobenzene	119	D	0.56	ND		140	ND		280	ND		140
Ethylbenzene	0.362		0.3	ND		150	ND		300	ND		150
Total Xylenes	ND		0.9	ND		450	ND		900	614		450
1,4-Dichlorobenzene	0.468		0.22	ND		110	ND		220	ND		110
1,2-Dichlorobenzene	1.14		0.19	ND		95	ND		190	198		95
TOTAL VO's:	145.64			18213			59040			43561		
TOTAL TIC's:	10.4			ND			ND			ND		
TOTAL VO's & TIC's:	156.04			18213			59040			43561		
Semivolatiles - BNA (ppb)												
Phenol	ND		0.33	ND		0.33	3.2		0.33	119		3.3
Aniline	7.4		0.37	12.9		0.37	7.33		0.37	16000	D	85.1
1,4-Dichlorobenzene	ND		0.29	1.34		0.29	0.95		0.29	3.89		2.9
1,2-Dichlorobenzene	ND		0.31	11.4		0.31	3.58		0.31	81.7		3.1
4-Methylphenol	ND		0.33	1.39		0.33	ND		0.33	356		3.3
2,4-Dimethylphenol	ND		0.32	4.84		0.32	ND		0.32	ND		3.2
Naphthalene	ND		0.14	1.03		0.14	ND		0.14	ND		1.4
2-Methylnaphthalene	ND		0.18	ND		0.18	ND		0.18	9.48		1.8
TOTAL BNA'S:	7.4			32.9			15.06			16570.1		
TOTAL TIC's:	232.8			425.7			1002.7			8402		
TOTAL BNA'S & TIC's:	240.2			458.6			1017.76			24972.1		
PCB's (ppb)	ND		0.2	ND		0.2	ND		0.2	ND		0.2

ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: Envirotactics Inc.
Project: 444-ORBIS-NEWARK
Lab Case No.: E01-2867

	Lab ID:	2867-001			2867-002			2867-003			2867-004		
	Client ID:	MW-1			MW-2			MW-3			MW-5		
	Matrix:	Aqueous			Aqueous			Aqueous			Aqueous		
	Sampled Date:	5/2/2001			5/2/2001			5/2/2001			5/2/2001		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Pesticides (ppb)													
alpha-BHC		ND		0.01	ND		0.01	ND		0.01	ND		0.01
beta-BHC		ND		0.01	ND		0.01	ND		0.01	ND		0.01
gamma-BHC		ND		0.01	ND		0.01	ND		0.01	ND		0.01
delta-BHC		ND		0.01	ND		0.01	ND		0.01	ND		0.01
Heptachlor		ND		0.01	ND		0.01	ND		0.01	ND		0.01
Aldrin		ND		0.01	ND		0.01	ND		0.01	ND		0.01
Heptachlor epoxide		ND		0.01	ND		0.01	ND		0.01	ND		0.01
Endosulfan I		ND		0.01	ND		0.01	ND		0.01	ND		0.01
4,4'-DDE		ND		0.01	ND		0.01	ND		0.01	ND		0.01
Dieldrin		ND		0.01	ND		0.01	ND		0.01	ND		0.01
Endrin		ND		0.01	ND		0.01	ND		0.01	ND		0.01
Endosulfan II		ND		0.01	ND		0.01	ND		0.01	ND		0.01
4,4'-DDD		ND		0.01	ND		0.01	ND		0.01	ND		0.01
Endrin aldehyde		ND		0.01	ND		0.01	ND		0.01	ND		0.01
Endosulfan sulfate		ND		0.01	ND		0.01	ND		0.01	ND		0.01
[illegible]-DDT		ND		0.01	ND		0.01	ND		0.01	ND		0.01
[illegible]ordane		ND		0.075	ND		0.075	ND		0.075	ND		0.075
[illegible]xaphene		ND		0.075	ND		0.075	ND		0.075	ND		0.075
Metals (ppm)													
Antimony		ND		0.008	ND		0.008	ND		0.008	ND		0.008
Arsenic		0.00583		0.004	0.00624		0.004	ND		0.004	0.0282		0.004
Beryllium		ND		0.004	ND		0.004	ND		0.004	ND		0.004
Cadmium		ND		0.0006	0.00148		0.0006	ND		0.0006	ND		0.0006
Chromium		ND		0.020	ND		0.020	ND		0.020	0.0269		0.020
Copper		ND		0.040	ND		0.040	ND		0.040	ND		0.040
Lead		ND		0.004	ND		0.004	ND		0.004	0.0138		0.004
Mercury		ND		0.0005	ND		0.0005	ND		0.0005	ND		0.0005
Nickel		ND		0.020	0.0561		0.020	ND		0.020	0.144		0.020
Selenium		ND		0.008	ND		0.008	ND		0.008	ND		0.008
Silver		ND		0.0004	ND		0.0004	ND		0.0004	ND		0.0004
Thallium		ND		0.008	ND		0.008	ND		0.008	ND		0.008
Zinc		ND		0.020	0.366		0.020	0.0341		0.020	0.143		0.020
General Analytical													
Cyanide, Total (ppm)		0.024		0.020	ND		0.020	ND		0.020	ND		0.020
Phenol (ppm)		ND		0.050	ND		0.050	0.0545		0.050	46.6		0.050

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: Envirotactics Inc.
Project: 444-ORBIS-NEWARK
Lab Case No.: E01-2867

Lab ID:	2867-005			2867-006			2867-007			2867-008		
Client ID:	MW-6			MW-7			MW-8			FB		
Matrix:	Aqueous			Aqueous			Aqueous			Aqueous		
Sampled Date:	5/2/2001			5/2/2001			5/2/2001			5/2/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (ppb)												
Vinyl Chloride	12.1		3.3	ND		1.65	ND		1650	ND		0.33
Chloroform	36.9		3.1	228		1.55	ND		1550	ND		0.31
Benzene	3.92		3	195		1.5	249000		1500	ND		0.3
Trichloroethene	70.9		3.6	ND		1.8	ND		1800	ND		0.36
Toluene	41.9		3.3	110		1.65	250000		1650	ND		0.33
1,1,2-Trichloroethane	ND		3.1	7.51		1.55	ND		1550	ND		0.31
Tetrachloroethene	ND		3.8	6.19		1.9	ND		1900	ND		0.38
Ethylbenzene	266		3	8.62		1.5	ND		1500	ND		0.3
Total Xylenes	423		9	ND		4.5	ND		4500	ND		0.9
1,2-Dichlorobenzene	ND		1.9	2.98		0.95	ND		950	ND		0.19
TOTAL VO's:	854.72			558.3			499000			ND		
TOTAL TIC's:	2808			494			ND			ND		
TOTAL VO's & TIC's:	3662.72			1052.3			499000			ND		
Semivolatiles - BNA (ppb)												
Phenol	ND		0.33	ND		0.33	5450	D	132	ND		0.33
Aniline	ND		0.37	ND		0.37	109		7.4	ND		0.37
1,2-Dichlorobenzene	ND		0.31	ND		0.31	185		6.2	ND		0.31
2-Methylphenol	ND		0.39	ND		0.39	508		7.8	ND		0.39
4-Methylphenol	ND		0.33	1.58		0.33	28300	D	132	ND		0.33
TOTAL BNA'S:	ND			1.58			34552			ND		
TOTAL TIC's:	36.1			1172.4			10294			ND		
TOTAL BNA'S & TIC's:	36.1			1174			44846			ND		
PCB's (ppb)	ND		0.2	ND		0.2	ND		0.2	ND		0.2

ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: Envirotactics Inc.
Project: 444-ORBIS-NEWARK
Lab Case No.: E01-2867

Lab ID:	2867-005			2867-006			2867-007			2867-008		
Client ID:	MW-6			MW-7			MW-8			FB		
Matrix:	Aqueous			Aqueous			Aqueous			Aqueous		
Sampled Date:	5/2/2001			5/2/2001			5/2/2001			5/2/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Pesticides (ppb)												
alpha-BHC	ND		0.01	ND		0.01	ND		0.01	ND		0.002
beta-BHC	ND		0.01	ND		0.01	ND		0.01	ND		0.002
gamma-BHC	ND		0.01	ND		0.01	ND		0.01	ND		0.002
delta-BHC	ND		0.01	ND		0.01	ND		0.01	ND		0.002
Heptachlor	ND		0.01	ND		0.01	ND		0.01	ND		0.002
Aldrin	ND		0.01	ND		0.01	ND		0.01	ND		0.002
Heptachlor epoxide	ND		0.01	ND		0.01	ND		0.01	ND		0.002
Endosulfan I	ND		0.01	ND		0.01	ND		0.01	ND		0.002
4,4'-DDE	ND		0.01	ND		0.01	1.78		0.01	ND		0.002
Dieldrin	ND		0.01	ND		0.01	ND		0.01	ND		0.002
Endrin	ND		0.01	ND		0.01	ND		0.01	ND		0.002
Endosulfan II	ND		0.01	ND		0.01	0.967		0.01	ND		0.002
4,4'-DDD	ND		0.01	ND		0.01	4.15		0.01	ND		0.002
Endrin aldehyde	ND		0.01	ND		0.01	ND		0.01	ND		0.002
Endosulfan sulfate	ND		0.01	ND		0.01	ND		0.01	ND		0.002
4,4'-DDT	ND		0.01	ND		0.01	ND		0.01	ND		0.002
[illegible]lordane	ND		0.075	ND		0.075	ND		0.075	ND		0.015
[illegible]taphene	ND		0.075	ND		0.075	ND		0.075	ND		0.015
[illegible]etals (ppm)												
Antimony	ND		0.008	ND		0.008	ND		0.008	ND		0.008
Arsenic	0.00449		0.004	0.00697		0.004	0.0101		0.004	ND		0.004
Beryllium	ND		0.004	ND		0.004	ND		0.004	ND		0.004
Cadmium	ND		0.0006	0.000817		0.0006	0.000766		0.0006	ND		0.0006
Chromium	ND		0.020	ND		0.020	0.0485		0.020	ND		0.020
Copper	ND		0.040	0.0477		0.040	ND		0.040	ND		0.040
Lead	ND		0.004	ND		0.004	ND		0.004	ND		0.004
Mercury	ND		0.0005	ND		0.0005	ND		0.0005	ND		0.0005
Nickel	ND		0.020	ND		0.020	0.0248		0.020	ND		0.020
Selenium	ND		0.008	ND		0.008	ND		0.008	ND		0.008
Silver	ND		0.0004	ND		0.0004	ND		0.0004	ND		0.0004
Thallium	ND		0.008	ND		0.008	ND		0.008	ND		0.008
Zinc	ND		0.020	0.0489		0.020	0.0658		0.020	ND		0.020
General Analytical												
Cyanide, Total (ppm)	ND		0.020	ND		0.020	ND		0.020	ND		0.020
Phenol (ppm)	0.0747		0.050	0.124		0.050	26.5		0.050	ND		0.050

Lab ID:	2867-009		
Client ID:	TB		
Matrix:	Aqueous		
Sampled Date:	5/2/2001		
PARAMETER(Units)	Conc	Q	MDL
[illegible]latiles (ppb)			
TOTAL VO's:	ND		
TOTAL TIC's:	ND		
TOTAL VO's & TIC's:	ND		

ND = Analyzed for but Not Detected at the MDL

3214

000011

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-001
Client ID: MW-1
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9112.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		0.61
Vinyl Chloride	ND		0.33
Bromomethane	ND		0.47
Chloroethane	ND		0.65
Trichlorofluoromethane	ND		0.38
Acrolein	ND		5.94
1,1-Dichloroethene	ND		0.5
Methylene Chloride	ND		1.91
Acrylonitrile	ND		1.27
trans-1,2-Dichloroethene	ND		0.39
1,1-Dichloroethane	ND		0.33
Chloroform	ND		0.31
1,1,1-Trichloroethane	ND		0.38
Carbon Tetrachloride	ND		0.39
1,2-Dichloroethane(EDC)	ND		0.35
Benzene	23.1		0.3
Trichloroethene	ND		0.36
1,2-Dichloropropane	ND		0.25
Bromodichloromethane	ND		0.25
2-Chloroethylvinyl Ether	ND		0.25
cis-1,3-Dichloropropene	ND		0.19
Toluene	1.57		0.33
trans-1,3-Dichloropropene	ND		0.27
1,1,2-Trichloroethane	ND		0.31
Tetrachloroethene	ND		0.38
Dibromochloromethane	ND		0.31
Chlorobenzene	150	E	0.28
Ethylbenzene	0.362		0.3
Total Xylenes	ND		0.9
Bromoform	ND		0.28
1,1,2,2-Tetrachloroethane	ND		0.27
1,3-Dichlorobenzene	ND		0.22
1,4-Dichlorobenzene	0.468		0.22
1,2-Dichlorobenzene	1.14		0.19
Total Target Compounds:	176.64	E	

C000213

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-001DIL
Client ID: MW-1
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Data file: E9136.D

GC/MS Column: DB-624
Sample wt/vol: 2.5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 2
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		1.22
Vinyl Chloride	ND		0.66
Bromomethane	ND		0.94
Chloroethane	ND		1.3
Trichlorofluoromethane	ND		0.76
Acrolein	ND		11.9
1,1-Dichloroethene	ND		1
Methylene Chloride	ND		3.82
Acrylonitrile	ND		2.54
trans-1,2-Dichloroethene	ND		0.78
1,1-Dichloroethane	ND		0.66
Chloroform	ND		0.62
1,1,1-Trichloroethane	ND		0.76
Carbon Tetrachloride	ND		0.78
1,2-Dichloroethane(EDC)	ND		0.7
Benzene	17.6		0.6
Trichloroethene	ND		0.72
1,2-Dichloropropane	ND		0.5
Bromodichloromethane	ND		0.5
2-Chloroethylvinyl Ether	ND		0.5
cis-1,3-Dichloropropene	ND		0.38
Toluene	1.2		0.66
trans-1,3-Dichloropropene	ND		0.54
1,1,2-Trichloroethane	ND		0.62
Tetrachloroethene	ND		0.76
Dibromochloromethane	ND		0.62
Chlorobenzene	119		0.56
Ethylbenzene	ND		0.6
Total Xylenes	ND		1.8
Bromoform	ND		0.56
1,1,2,2-Tetrachloroethane	ND		0.54
1,3-Dichlorobenzene	ND		0.44
1,4-Dichlorobenzene	ND		0.44
1,2-Dichlorobenzene	0.804		0.38

Total Target Compounds: 138.604

000013

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-001
Client ID: MW-1
Date Received: 05/03/2001
Date Analyzed: 05/10/2001
Date File: E9112.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
001634-04-4	Methyl-t-Butyl Ether(MTBE)	10.4	4.82

Total TICs = 10.4

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-005
Client ID: MW-6
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Date File: C9782.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown cyclic hydrocarbon	5.5	4.37
	Substituted benzene	11.1	5.83
	Substituted benzene	6.8	7.77
	Substituted benzene	12.7	8.11

Total TICs = 36.1

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-006
Client ID: MW-7
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Date File: C9786.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	30.4	5.57
	Substituted benzene	105	5.89
	Unknown	25.4	6.37
	Substituted benzene	130	6.51
	Unknown	33.6	6.66
	Substituted benzene	35.2	7.14
	Unknown cyclic hydrocarbon	12.9	7.28
	Unknown	12.5	7.60
	Substituted benzene	36	8.09
	Unknown	84.5	8.12
	Unknown	14.7	8.41
	Unknown	33.1	8.68
	Unknown alkane	46.6	8.70
	Unknown	62.1	8.84
	Unknown	21.4	8.91
	Unknown alkane	227	9.24
	Unknown	21.8	9.32
	Unknown	90.7	9.67
	Unknown	22.3	9.74
	Unknown	14.1	10.01
	Unknown	19.8	10.21
	Unknown	24.8	11.19
	Unknown	20.9	11.37
	Unknown	12.6	11.44
	Unknown	35	11.95
	Total TICs =	1172.4	

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-007
Client ID: MW-8
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9788.D

GC/MS Column: DB-5
Sample wt/vol: 500mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 10
% Moisture: 100

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		7
Phenol	3910	E	6.6
Aniline	109		7.4
bis(2-Chloroethyl)ether	ND		7.2
2-Chlorophenol	ND		7.2
1,3-Dichlorobenzene	ND		7.4
1,4-Dichlorobenzene	ND		5.8
Benzyl alcohol	ND		9.2
1,2-Dichlorobenzene	185		6.2
2-Methylphenol	508		7.8
bis(2-chloroisopropyl)ether	ND		9
4-Methylphenol	7500	E	6.6
N-Nitroso-di-n-propylamine	ND		10
Hexachloroethane	ND		9.6
Nitrobenzene	ND		6.6
Isophorone	ND		2
2-Nitrophenol	ND		7.2
2,4-Dimethylphenol	ND		6.4
bis(2-Chloroethoxy)methane	ND		7.2
Benzoic acid	ND		9.8
2,4-Dichlorophenol	ND		9.6
1,2,4-Trichlorobenzene	ND		4.4
Naphthalene	ND		2.8
4-Chloroaniline	ND		18
Hexachlorobutadiene	ND		8.4
4-Chloro-3-methylphenol	ND		5
2-Methylnaphthalene	ND		3.6
Hexachlorocyclopentadiene	ND		9.4
2,4,6-Trichlorophenol	ND		12.8
2,4,5-Trichlorophenol	ND		10.2
2-Chloronaphthalene	ND		4.6
2-Nitroaniline	ND		6.6
Dimethylphthalate	ND		3.4
2,6-Dinitrotoluene	ND		7.2
Acenaphthylene	ND		3

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-007
Client ID: MW-8
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9788.D

GC/MS Column: DB-5
Sample wt/vol: 500mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 10
% Moisture: 100

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		10.4
Acenaphthene	ND		4.2
2,4-Dinitrophenol	ND		12
4-Nitrophenol	ND		17.4
2,4-Dinitrotoluene	ND		5.8
Dibenzofuran	ND		2.6
Diethylphthalate	ND		3.2
Fluorene	ND		3.6
4-Chlorophenyl-phenylether	ND		4.6
4-Nitroaniline	ND		13.2
4,6-Dinitro-2-methylphenol	ND		9
N-Nitrosodiphenylamine	ND		6.4
1,2-Diphenylhydrazine/Azobenzene	ND		6.2
4-Bromophenyl-phenylether	ND		6.2
Hexachlorobenzene	ND		5.8
Pentachlorophenol	ND		11.8
Phenanthrene	ND		5.2
Anthracene	ND		6.2
Carbazole	ND		4.2
Di-n-butylphthalate	ND		4.6
Fluoranthene	ND		3.6
Benzidine	ND		7
Pyrene	ND		3.2
3,3'-Dimethylbenzidine	ND		16.2
Butylbenzylphthalate	ND		8.2
3,3'-Dichlorobenzidine	ND		5.8
Benzo[a]anthracene	ND		3
Chrysene	ND		5
bis(2-Ethylhexyl)phthalate	ND		5.2
Di-n-octylphthalate	ND		3.8
Benzo[b]fluoranthene	ND		6.8
Benzo[k]fluoranthene	ND		5
Benzo[a]pyrene	ND		3
Indeno[1,2,3-cd]pyrene	ND		11.8
Dibenz[a,h]anthracene	ND		9.6
Benzo[g,h,i]perylene	ND		13.8

Total Target Compounds: 12212 E

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWAR

Lab ID: 2867-007DIL
Client ID: MW-8
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/07/2001
Data file: C9795.D

GC/MS Column: DB-5
Sample wt/vol: 500mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 200
% Moisture: 100

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		140
Phenol	5450		132
Aniline	384		148
bis(2-Chloroethyl)ether	ND		144
2-Chlorophenol	ND		144
1,3-Dichlorobenzene	ND		148
1,4-Dichlorobenzene	ND		116
Benzyl alcohol	ND		184
1,2-Dichlorobenzene	ND		124
2-Methylphenol	583		156
bis(2-chloroisopropyl)ether	ND		180
4-Methylphenol	28300		132
N-Nitroso-di-n-propylamine	ND		200
Hexachloroethane	ND		192
Nitrobenzene	ND		132
Isophorone	ND		40
2-Nitrophenol	ND		144
2,4-Dimethylphenol	ND		128
bis(2-Chloroethoxy)methane	ND		144
Benzoic acid	ND		196
2,4-Dichlorophenol	ND		192
1,2,4-Trichlorobenzene	ND		88
Naphthalene	ND		56
4-Chloroaniline	ND		360
Hexachlorobutadiene	ND		168
4-Chloro-3-methylphenol	ND		100
2-Methylnaphthalene	ND		72
Hexachlorocyclopentadiene	ND		188
2,4,6-Trichlorophenol	ND		256
2,4,5-Trichlorophenol	ND		204
2-Chloronaphthalene	ND		92
2-Nitroaniline	ND		132
Dimethylphthalate	ND		68
2,6-Dinitrotoluene	ND		144
Acenaphthylene	ND		60

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWAR

Lab ID: 2867-007DIL
Client ID: MW-8
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/07/2001
Data file: C9795.D

GC/MS Column: DB-5
Sample wt/vol: 500mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 200
% Moisture: 100

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		208
Acenaphthene	ND		84
2,4-Dinitrophenol	ND		240
4-Nitrophenol	ND		348
2,4-Dinitrotoluene	ND		116
Dibenzofuran	ND		52
Diethylphthalate	ND		64
Fluorene	ND		72
4-Chlorophenyl-phenylether	ND		92
4-Nitroaniline	ND		264
4,6-Dinitro-2-methylphenol	ND		180
N-Nitrosodiphenylamine	ND		128
1,2-Diphenylhydrazine/Azobenzene	ND		124
4-Bromophenyl-phenylether	ND		124
Hexachlorobenzene	ND		116
Pentachlorophenol	ND		236
Phenanthrene	ND		104
Anthracene	ND		124
Carbazole	ND		84
Di-n-butylphthalate	ND		92
Fluoranthene	ND		72
Benzidine	ND		140
Pyrene	ND		64
3,3'-Dimethylbenzidine	ND		324
Butylbenzylphthalate	ND		164
3,3'-Dichlorobenzidine	ND		116
Benzo[a]anthracene	ND		60
Chrysene	ND		100
bis(2-Ethylhexyl)phthalate	ND		104
Di-n-octylphthalate	ND		76
Benzo[b]fluoranthene	ND		136
Benzo[k]fluoranthene	ND		100
Benzo[a]pyrene	ND		60
Indeno[1,2,3-cd]pyrene	ND		236
Dibenz[a,h]anthracene	ND		192
Benzo[g,h,i]perylene	ND		276

Total Target Compounds: 34717

000054

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-007
Client ID: MW-8
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Date File: C9788.D

GC/MS Column: DB-5
Sample wt/vol: 500mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 10
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	488	3.45
	Substituted benzene	1030	3.47
	Substituted benzene	1030	3.52
	Substituted benzene	138	5.16
	Unknown	134	6.29
	Substituted benzene	216	7.13
	Unknown cyclic hydrocarbon	766	7.28
	Substituted phenol	1000	7.83
	Substituted benzene	312	8.04
	Unknown	272	8.08
	Substituted benzene	252	8.37
	Unknown	394	8.41
	Unknown	570	8.45
	Unknown	148	8.62
	Substituted benzene	450	8.66
	Substituted benzene	114	8.73
	Unknown	132	8.80
	Substituted benzene	102	8.95
	Unknown	100	9.09
	Substituted benzene	2020	11.17
	Substituted benzene	380	11.31
	Substituted benzene	88	11.40
	Unknown cyclic hydrocarbon	158	11.96

Total TICs = 10294

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-008
Client ID: FB
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9787.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		0.35
Phenol	ND		0.33
Aniline	ND		0.37
bis(2-Chloroethyl)ether	ND		0.36
2-Chlorophenol	ND		0.36
1,3-Dichlorobenzene	ND		0.37
1,4-Dichlorobenzene	ND		0.29
Benzyl alcohol	ND		0.46
1,2-Dichlorobenzene	ND		0.31
2-Methylphenol	ND		0.39
bis(2-chloroisopropyl)ether	ND		0.45
4-Methylphenol	ND		0.33
N-Nitroso-di-n-propylamine	ND		0.5
Hexachloroethane	ND		0.48
Nitrobenzene	ND		0.33
Isophorone	ND		0.1
2-Nitrophenol	ND		0.36
2,4-Dimethylphenol	ND		0.32
bis(2-Chloroethoxy)methane	ND		0.36
Benzoic acid	ND		0.49
2,4-Dichlorophenol	ND		0.48
1,2,4-Trichlorobenzene	ND		0.22
Naphthalene	ND		0.14
4-Chloroaniline	ND		0.9
Hexachlorobutadiene	ND		0.42
4-Chloro-3-methylphenol	ND		0.25
2-Methylnaphthalene	ND		0.18
Hexachlorocyclopentadiene	ND		0.47
2,4,6-Trichlorophenol	ND		0.64
2,4,5-Trichlorophenol	ND		0.51
2-Chloronaphthalene	ND		0.23
2-Nitroaniline	ND		0.33
Dimethylphthalate	ND		0.17
2,6-Dinitrotoluene	ND		0.36
Acenaphthylene	ND		0.15

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-008
Client ID: FB
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9787.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		0.52
Acenaphthene	ND		0.21
2,4-Dinitrophenol	ND		0.6
4-Nitrophenol	ND		0.87
2,4-Dinitrotoluene	ND		0.29
Dibenzofuran	ND		0.13
Diethylphthalate	ND		0.16
Fluorene	ND		0.18
4-Chlorophenyl-phenylether	ND		0.23
4-Nitroaniline	ND		0.66
4,6-Dinitro-2-methylphenol	ND		0.45
N-Nitrosodiphenylamine	ND		0.32
1,2-Diphenylhydrazine/Azobenzene	ND		0.31
4-Bromophenyl-phenylether	ND		0.31
Hexachlorobenzene	ND		0.29
Pentachlorophenol	ND		0.59
Phenanthrene	ND		0.26
Anthracene	ND		0.31
Carbazole	ND		0.21
Di-n-butylphthalate	ND		0.23
Fluoranthene	ND		0.18
Benzidine	ND		0.35
Pyrene	ND		0.16
3,3'-Dimethylbenzidine	ND		0.81
Butylbenzylphthalate	ND		0.41
3,3'-Dichlorobenzidine	ND		0.29
Benzo[a]anthracene	ND		0.15
Chrysene	ND		0.25
bis(2-Ethylhexyl)phthalate	ND		0.26
Di-n-octylphthalate	ND		0.19
Benzo[b]fluoranthene	ND		0.34
Benzo[k]fluoranthene	ND		0.25
Benzo[a]pyrene	ND		0.15
Indeno[1,2,3-cd]pyrene	ND		0.59
Dibenz[a,h]anthracene	ND		0.48
Benzo[g,h,i]perylene	ND		0.69

Total Target Compounds: 0

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000057

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-008
Client ID: FB
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9787.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-001
Client ID: MW-1
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: V5532.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.2
Aroclor-1221	ND		0.2
Aroclor-1232	ND		0.2
Aroclor-1242	ND		0.2
Aroclor-1248	ND		0.2
Aroclor-1254	ND		0.2
Aroclor-1260	ND		0.2

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-002
Client ID: MW-2
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: V5533.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.2
Aroclor-1221	ND		0.2
Aroclor-1232	ND		0.2
Aroclor-1242	ND		0.2
Aroclor-1248	ND		0.2
Aroclor-1254	ND		0.2
Aroclor-1260	ND		0.2

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INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-003
Client ID: MW-3
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: V5534.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.2
Aroclor-1221	ND		0.2
Aroclor-1232	ND		0.2
Aroclor-1242	ND		0.2
Aroclor-1248	ND		0.2
Aroclor-1254	ND		0.2
Aroclor-1260	ND		0.2

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-004
Client ID: MW-5
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: V5535.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.2
Aroclor-1221	ND		0.2
Aroclor-1232	ND		0.2
Aroclor-1242	ND		0.2
Aroclor-1248	ND		0.2
Aroclor-1254	ND		0.2
Aroclor-1260	ND		0.2

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-005
Client ID: MW-6
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: V5536.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.2
Aroclor-1221	ND		0.2
Aroclor-1232	ND		0.2
Aroclor-1242	ND		0.2
Aroclor-1248	ND		0.2
Aroclor-1254	ND		0.2
Aroclor-1260	ND		0.2

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INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-006
Client ID: MW-7
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: V5537.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.2
Aroclor-1221	ND		0.2
Aroclor-1232	ND		0.2
Aroclor-1242	ND		0.2
Aroclor-1248	ND		0.2
Aroclor-1254	ND		0.2
Aroclor-1260	ND		0.2

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INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-007
Client ID: MW-8
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: V5538.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.2
Aroclor-1221	ND		0.2
Aroclor-1232	ND		0.2
Aroclor-1242	ND		0.2
Aroclor-1248	ND		0.2
Aroclor-1254	ND		0.2
Aroclor-1260	ND		0.2

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INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-008
Client ID: FB
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: V5539.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.2
Aroclor-1221	ND		0.2
Aroclor-1232	ND		0.2
Aroclor-1242	ND		0.2
Aroclor-1248	ND		0.2
Aroclor-1254	ND		0.2
Aroclor-1260	ND		0.2

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-001
Client ID: MW-1
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: W6401.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 5
% Moisture: 100

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.01
beta-BHC	ND		0.01
gamma-BHC	ND		0.01
delta-BHC	ND		0.01
Heptachlor	ND		0.01
Aldrin	ND		0.01
Heptachlor epoxide	ND		0.01
Endosulfan I	ND		0.01
4,4'-DDE	ND		0.01
Dieldrin	ND		0.01
Endrin	ND		0.01
Endosulfan II	ND		0.01
4,4'-DDD	ND		0.01
Endrin aldehyde	ND		0.01
Endosulfan sulfate	ND		0.01
4,4'-DDT	ND		0.01
Chlordane	ND		0.075
Toxaphene	ND		0.075

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INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-002
Client ID: MW-2
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/07/2001
Data file: W6440.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 5
% Moisture: 100

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.01
beta-BHC	ND		0.01
gamma-BHC	ND		0.01
delta-BHC	ND		0.01
Heptachlor	ND		0.01
Aldrin	ND		0.01
Heptachlor epoxide	ND		0.01
Endosulfan I	ND		0.01
4,4'-DDE	ND		0.01
Dieldrin	ND		0.01
Endrin	ND		0.01
Endosulfan II	ND		0.01
4,4'-DDD	ND		0.01
Endrin aldehyde	ND		0.01
Endosulfan sulfate	ND		0.01
4,4'-DDT	ND		0.01
Chlordane	ND		0.075
Toxaphene	ND		0.075

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INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-003
Client ID: MW-3
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: W6403.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 5
% Moisture: 100

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.01
beta-BHC	ND		0.01
gamma-BHC	ND		0.01
delta-BHC	ND		0.01
Heptachlor	ND		0.01
Aldrin	ND		0.01
Heptachlor epoxide	ND		0.01
Endosulfan I	ND		0.01
4,4'-DDE	ND		0.01
Dieldrin	ND		0.01
Endrin	ND		0.01
Endosulfan II	ND		0.01
4,4'-DDD	ND		0.01
Endrin aldehyde	ND		0.01
Endosulfan sulfate	ND		0.01
4,4'-DDT	ND		0.01
Chlordane	ND		0.075
Toxaphene	ND		0.075

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INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-004
Client ID: MW-5
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/07/2001
Data file: W6441.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 5
% Moisture: 100

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.01
beta-BHC	ND		0.01
gamma-BHC	ND		0.01
delta-BHC	ND		0.01
Heptachlor	ND		0.01
Aldrin	ND		0.01
Heptachlor epoxide	ND		0.01
Endosulfan I	ND		0.01
4,4'-DDE	ND		0.01
Dieldrin	ND		0.01
Endrin	ND		0.01
Endosulfan II	ND		0.01
4,4'-DDD	ND		0.01
Endrin aldehyde	ND		0.01
Endosulfan sulfate	ND		0.01
4,4'-DDT	ND		0.01
Chlordane	ND		0.075
Toxaphene	ND		0.075

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-005
Client ID: MW-6
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: W6405.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 5
% Moisture: 100

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.01
beta-BHC	ND		0.01
gamma-BHC	ND		0.01
delta-BHC	ND		0.01
Heptachlor	ND		0.01
Aldrin	ND		0.01
Heptachlor epoxide	ND		0.01
Endosulfan I	ND		0.01
4,4'-DDE	ND		0.01
Dieldrin	ND		0.01
Endrin	ND		0.01
Endosulfan II	ND		0.01
4,4'-DDD	ND		0.01
Endrin aldehyde	ND		0.01
Endosulfan sulfate	ND		0.01
4,4'-DDT	ND		0.01
Chlordane	ND		0.075
Toxaphene	ND		0.075

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CC0071

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-006
Client ID: MW-7
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: W6406.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 5
% Moisture: 100

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.01
beta-BHC	ND		0.01
gamma-BHC	ND		0.01
delta-BHC	ND		0.01
Heptachlor	ND		0.01
Aldrin	ND		0.01
Heptachlor epoxide	ND		0.01
Endosulfan I	ND		0.01
4,4'-DDE	ND		0.01
Dieldrin	ND		0.01
Endrin	ND		0.01
Endosulfan II	ND		0.01
4,4'-DDD	ND		0.01
Endrin aldehyde	ND		0.01
Endosulfan sulfate	ND		0.01
4,4'-DDT	ND		0.01
Chlordane	ND		0.075
Toxaphene	ND		0.075

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000072

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-007
Client ID: MW-8
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: W6407.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 5
% Moisture: 100

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.01
beta-BHC	ND		0.01
gamma-BHC	ND		0.01
delta-BHC	ND		0.01
Heptachlor	ND		0.01
Aldrin	ND		0.01
Heptachlor epoxide	ND		0.01
Endosulfan I	ND		0.01
4,4'-DDE	1.78		0.01
Dieldrin	ND		0.01
Endrin	ND		0.01
Endosulfan II	0.967		0.01
4,4'-DDD	4.15		0.01
Endrin aldehyde	ND		0.01
Endosulfan sulfate	ND		0.01
4,4'-DDT	ND		0.01
Chlordane	ND		0.075
Toxaphene	ND		0.075

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000073

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-008
Client ID: FB
Date Received: 05/03/2001
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: W6408.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.002
beta-BHC	ND		0.002
gamma-BHC	ND		0.002
delta-BHC	ND		0.002
Heptachlor	ND		0.002
Aldrin	ND		0.002
Heptachlor epoxide	ND		0.002
Endosulfan I	ND		0.002
4,4'-DDE	ND		0.002
Dieldrin	ND		0.002
Endrin	ND		0.002
Endosulfan II	ND		0.002
4,4'-DDD	ND		0.002
Endrin aldehyde	ND		0.002
Endosulfan sulfate	ND		0.002
4,4'-DDT	ND		0.002
Chlordane	ND		0.015
Toxaphene	ND		0.015

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-001
Client ID: MW-1
Date Received: 5/3/01
Date Analyzed: 5/8/01
Matrix-Units: Aqueous-mg/L (ppm)
% Moisture: 100

Compound	Result	Q	DF	MDL
Antimony	ND		1	0.008
Arsenic	0.00583		1	0.004
Beryllium	ND		1	0.004
Cadmium	ND		1	0.0006
Chromium	ND		1	0.020
Copper	ND		1	0.040
Lead	ND		1	0.004
Mercury	ND		1	0.0005
Nickel	ND		1	0.020
Selenium	ND		1	0.008
Silver	ND		1	0.0004
Thallium	ND		1	0.008
Zinc	ND		1	0.020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-002
Client ID: MW-2
Date Received: 5/3/01
Date Analyzed: 5/8/01
Matrix-Units: Aqueous-mg/L (ppm)
% Moisture: 100

Compound	Result	Q	DF	MDL
Antimony	ND		1	0.008
Arsenic	0.00624		1	0.004
Beryllium	ND		1	0.004
Cadmium	0.00148		1	0.0006
Chromium	ND		1	0.020
Copper	ND		1	0.040
Lead	ND		1	0.004
Mercury	ND		1	0.0005
Nickel	0.0561		1	0.020
Selenium	ND		1	0.008
Silver	ND		1	0.0004
Thallium	ND		1	0.008
Zinc	0.366		1	0.020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-003
Client ID: MW-3
Date Received: 5/3/01
Date Analyzed: 5/8/01
Matrix-Units: Aqueous-mg/L (ppm)
% Moisture: 100

Compound	Result	Q	DF	MDL
Antimony	ND		1	0.008
Arsenic	ND		1	0.004
Beryllium	ND		1	0.004
Cadmium	ND		1	0.0006
Chromium	ND		1	0.020
Copper	ND		1	0.040
Lead	ND		1	0.004
Mercury	ND		1	0.0005
Nickel	ND		1	0.020
Selenium	ND		1	0.008
Silver	ND		1	0.0004
Thallium	ND		1	0.008
Zinc	0.0341		1	0.020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-004
Client ID: MW-5
Date Received: 5/3/01
Date Analyzed: 5/8/01
Matrix-Units: Aqueous-mg/L (ppm)
% Moisture: 100

Compound	Result	Q	DF	MDL
Antimony	ND		1	0.008
Arsenic	0.0282		1	0.004
Beryllium	ND		1	0.004
Cadmium	ND		1	0.0006
Chromium	0.0269		1	0.020
Copper	ND		1	0.040
Lead	0.0138		1	0.004
Mercury	ND		1	0.0005
Nickel	0.144		1	0.020
Selenium	ND		1	0.008
Silver	ND		1	0.0004
Thallium	ND		1	0.008
Zinc	0.143		1	0.020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-005
Client ID: MW-6
Date Received: 5/3/01
Date Analyzed: 5/8/01
Matrix-Units: Aqueous-mg/L (ppm)
% Moisture: 100

Compound	Result	Q	DF	MDL
Antimony	ND		1	0.008
Arsenic	0.00449		1	0.004
Beryllium	ND		1	0.004
Cadmium	ND		1	0.0006
Chromium	ND		1	0.020
Copper	ND		1	0.040
Lead	ND		1	0.004
Mercury	ND		1	0.0005
Nickel	ND		1	0.020
Selenium	ND		1	0.008
Silver	ND		1	0.0004
Thallium	ND		1	0.008
Zinc	ND		1	0.020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-006
Client ID: MW-7
Date Received: 5/3/01
Date Analyzed: 5/8/01
Matrix-Units: Aqueous-mg/L (ppm)
% Moisture: 100

Compound	Result	Q	DF	MDL
Antimony	ND		1	0.008
Arsenic	0.00697		1	0.004
Beryllium	ND		1	0.004
Cadmium	0.000817		1	0.0006
Chromium	ND		1	0.020
Copper	0.0477		1	0.040
Lead	ND		1	0.004
Mercury	ND		1	0.0005
Nickel	ND		1	0.020
Selenium	ND		1	0.008
Silver	ND		1	0.0004
Thallium	ND		1	0.008
Zinc	0.0489		1	0.020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-007
Client ID: MW-8
Date Received: 5/3/01
Date Analyzed: 5/8/01
Matrix-Units: Aqueous-mg/L (ppm)
% Moisture: 100

Compound	Result	Q	DF	MDL
Antimony	ND		1	0.008
Arsenic	0.0101		1	0.004
Beryllium	ND		1	0.004
Cadmium	0.000766		1	0.0006
Chromium	0.0485		1	0.020
Copper	ND		1	0.040
Lead	ND		1	0.004
Mercury	ND		1	0.0005
Nickel	0.0248		1	0.020
Selenium	ND		1	0.008
Silver	ND		1	0.0004
Thallium	ND		1	0.008
Zinc	0.0658		1	0.020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/444-ORBIS-NEWARK

Lab ID: 2867-008
Client ID: FB
Date Received: 5/3/01
Date Analyzed: 5/8/01
Matrix-Units: Aqueous-mg/L (ppm)
% Moisture: 100

Compound	Result	Q	DF	MDL
Antimony	ND		1	0.008
Arsenic	ND		1	0.004
Beryllium	ND		1	0.004
Cadmium	ND		1	0.0006
Chromium	ND		1	0.020
Copper	ND		1	0.040
Lead	ND		1	0.004
Mercury	ND		1	0.0005
Nickel	ND		1	0.020
Selenium	ND		1	0.008
Silver	ND		1	0.0004
Thallium	ND		1	0.008
Zinc	ND		1	0.020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CYANIDE, TOTAL

Client/Project: ENVTACT/444-ORBIS-NEWARK

Date Received: 5/3/01

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	% Moist	Date Analyzed
2867-001	MW-1	0.024		1	Aqueous-mg/L	0.020	100	5/10/01
2867-002	MW-2	ND		1	Aqueous-mg/L	0.020	100	5/10/01
2867-003	MW-3	ND		1	Aqueous-mg/L	0.020	100	5/10/01
2867-004	MW-5	ND		1	Aqueous-mg/L	0.020	100	5/10/01
2867-005	MW-6	ND		1	Aqueous-mg/L	0.020	100	5/10/01
2867-006	MW-7	ND		1	Aqueous-mg/L	0.020	100	5/10/01
2867-007	MW-8	ND		1	Aqueous-mg/L	0.020	100	5/10/01
2867-008	FB	ND		1	Aqueous-mg/L	0.020	100	5/10/01

INTEGRATED ANALYTICAL LABORATORIES, LLC.

PHENOL

Client/Project: ENVTACT/444-ORBIS-NEWARK

Date Received: 5/3/01

Lab ID	Client ID	Result	Q	DF	Matrix-Units	MDL	% Moist	Date Analyzed
2867-001	MW-1	ND		1	Aqueous-mg/L	0.050	100	5/9/01
2867-002	MW-2	ND		1	Aqueous-mg/L	0.050	100	5/9/01
2867-003	MW-3	0.0545		1	Aqueous-mg/L	0.050	100	5/9/01
2867-004	MW-5	46.6		100	Aqueous-mg/L	0.050	100	5/9/01
2867-005	MW-6	0.0747		1	Aqueous-mg/L	0.050	100	5/9/01
2867-006	MW-7	0.124		1	Aqueous-mg/L	0.050	100	5/9/01
2867-007	MW-8	26.5		100	Aqueous-mg/L	0.050	100	5/9/01
2867-008	FB	ND		1	Aqueous-mg/L	0.050	100	5/9/01

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METHODOLOGY SUMMARY

Analytical Parameter	Aqueous Samples Method #	Soil/Other Samples Method #
Volatiles + 15	EPA 624	NA
Volatiles + 10	EPA 624	NA
Semivolatiles - BNA + 25	EPA 625	NA
PCB's	EPA 8082	NA
Pesticides	EPA 8081A	NA
P.P. Metals	EPA 200.8	NA
Metals (Mercury)	EPA 245.2	NA
Cyanide, Total	EPA 335.2	NA
Phenols	EPA 420.2	NA

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: E9084.D

BFB Injection Date: 05/09/2001

Inst ID: MSD_E

BFB Injection Time: 10:51

m/z	Ion Abudance Criteria	%Relative Abundance
50	15 - 40.0% of mass 95	18.9
75	30.0 - 60.0% of mass 95	47.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.9 (1.0)1
174	Great than 50.0% of mass 95	90.9
175	5.0 - 9.0% of mass 174	5.7 (6.3)1
176	95.0 - 101.0% of mass 174	88.4 (97.3)1
177	5.0 - 9.0% of mass 176	6.2 (7.0)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
20-PPB-STD	20-PPB-STD	E9085.D	05/09/2001	11:33
5-PPB-STD	5-PPB-STD	E9086.D	05/09/2001	12:24
100-PPB-STD	100-PPB-STD	E9087.D	05/09/2001	12:52
METHOD-BLK	METHOD-BLK	E9089.D	05/09/2001	2:18
MW-10	2839-006DIL	E9090.D	05/09/2001	2:54
MW-15S	2839-015DIL	E9091.D	05/09/2001	3:22
MW-12D	2839-021DIL	E9092.D	05/09/2001	3:50
MW1-0501	2855-001	E9093.D	05/09/2001	4:18
LFB	LFB	E9094.D	05/09/2001	4:46
2855-003MS	2855-003MS	E9095.D	05/09/2001	5:14
2855-003MSD	2855-003MSD	E9096.D	05/09/2001	5:42
MW-6S	2839-016	E9098.D	05/09/2001	6:38
MW-6	2839-017	E9099.D	05/09/2001	7:05
MW-1	2839-018	E9100.D	05/09/2001	7:33
MW-8	2839-019	E9101.D	05/09/2001	8:01
MW-7	2839-020	E9102.D	05/09/2001	8:29
TCLP-BLK	TCLP-BLK	E9103.D	05/09/2001	8:57
OENJ-NC-5	2827-001	E9104.D	05/09/2001	9:25
OENJ-BAG-5	2827-004	E9105.D	05/09/2001	9:53
MW2-0501	2855-002	E9106.D	05/09/2001	10:21

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: E9084.D

BFB Injection Date : 05/09/200

Inst ID: MSD_E

BFB Injection Time: 10:51

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	18.9			
75	30.0 - 60.0% of mass 95	47.0			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.6			
173	Less than 2.0% of mass 174	0.9	(	1.0	)1
174	Great than 50.0% of mass 95	90.9			
175	5.0 - 9.0% of mass 174	5.7	(	6.3	)1
176	95.0 - 101.0% of mass 174	88.4	(	97.3	)1
177	5.0 - 9.0% of mass 176	6.2	(	7.0	)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
MW3-0501	2855-003	E9107.D	05/09/2001	10:48
TB-0501	2855-004	E9108.D	05/09/2001	11:16
FB-0501	2855-005	E9109.D	05/09/2001	11:44
FB	2867-008	E9110.D	05/10/2001	12:12
TB	2867-009	E9111.D	05/10/2001	12:40
MW-1	2867-001	E9112.D	05/10/2001	1:08
MW-2	2867-002	E9113.D	05/10/2001	1:36
MW-3	2867-003	E9114.D	05/10/2001	2:03
MW-5	2867-004	E9115.D	05/10/2001	2:31
MW-6	2867-005	E9116.D	05/10/2001	2:59
MW-7	2867-006	E9117.D	05/10/2001	3:27
MW-8	2867-007	E9118.D	05/10/2001	3:55
A5/7	2941-001	E9119.D	05/10/2001	4:23
TRIP	2862-004	E9120.D	05/10/2001	4:51
MW-13	2862-003	E9121.D	05/10/2001	5:19
MW-12	2862-002	E9122.D	05/10/2001	5:46
TCLPMS	TCLPMS	E9124.D	05/10/2001	6:42
2941-001MS	2941-001MS	E9125.D	05/10/2001	7:10
2941-001MSD	2941-001MSD	E9126.D	05/10/2001	7:38
MW1	2898-001	E9128.D	05/10/2001	8:47
MW4	2898-002	E9129.D	05/10/2001	9:15

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: E9084.D

BFB Injection Date : 05/09/200

Inst ID: MSD_E

BFB Injection Time: 10:51

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	18.9			
75	30.0 - 60.0% of mass 95	47.0			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.6			
173	Less than 2.0% of mass 174	0.9	(	1.0	)1
174	Great than 50.0% of mass 95	90.9			
175	5.0 - 9.0% of mass 174	5.7	(	6.3	)1
176	95.0 - 101.0% of mass 174	88.4	(	97.3	)1
177	5.0 - 9.0% of mass 176	6.2	(	7.0	)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
MW5	2898-003	E9130.D	05/10/2001	9:43
MW6	2898-004	E9131.D	05/10/2001	10:11

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: E9132.D

BFB Injection Date: 05/10/2001

Inst ID: MSD_E

BFB Injection Time: 10:40

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	24.3			
75	30.0 - 60.0% of mass 95	51.3			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.8			
173	Less than 2.0% of mass 174	0.5	(	0.9	)1
174	Great than 50.0% of mass 95	61.1			
175	5.0 - 9.0% of mass 174	4.5	(	7.4	)1
176	95.0 - 101.0% of mass 174	61.3	(	100.4	)1
177	5.0 - 9.0% of mass 176	4.0	(	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
20-PPB-STD	20-PPB-STD	E9133.D	05/10/2001	11:18
METHOD-BLK	METHOD-BLK	E9135.D	05/10/2001	12:48
MW-1	2867-001DIL	E9136.D	05/10/2001	1:16
MW-5	2862-001	E9137.D	05/10/2001	1:44
LFB	LFB	E9138.D	05/10/2001	2:12
2898-005MS	2898-005MS	E9139.D	05/10/2001	2:40
2898-005MSD	2898-005MSD	E9140.D	05/10/2001	3:08
MW7	2898-005	E9142.D	05/10/2001	4:19
MW8	2898-006	E9143.D	05/10/2001	4:47
MW9	2898-007	E9144.D	05/10/2001	5:15
SUPPLY	2898-008	E9145.D	05/10/2001	5:43
WP-6	2868-005	E9147.D	05/10/2001	6:39
TRIP_BLANK	2868-007	E9148.D	05/10/2001	7:07
WP-2	2868-001	E9149.D	05/10/2001	7:35
WP-3	2868-002	E9150.D	05/10/2001	8:03
WP-4	2868-003	E9151.D	05/10/2001	8:31
WP-5	2868-004	E9152.D	05/10/2001	8:59
WP-7	2868-006	E9153.D	05/10/2001	9:26
MW-1	2892-001	E9154.D	05/10/2001	9:54
MW-2	2892-002	E9155.D	05/10/2001	10:22

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: E9132.D

BFB Injection Date : 05/10/200

Inst ID: MSD_E

BFB Injection Time: 10:40

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	24.3			
75	30.0 - 60.0% of mass 95	51.3			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.8			
173	Less than 2.0% of mass 174	0.5	(	0.9	)1
174	Great than 50.0% of mass 95	61.1			
175	5.0 - 9.0% of mass 174	4.5	(	7.4	)1
176	95.0 - 101.0% of mass 174	61.3	(	100.4	)1
177	5.0 - 9.0% of mass 176	4.0	(	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
MW-3	2892-003	E9156.D	05/10/2001	10:50
A_5/8	2967-001	E9158.D	05/10/2001	11:46
A1	2966-001	E9159.D	05/11/2001	12:14
SPW-1	2912-007	E9160.D	05/11/2001	12:42
SUMP_1	2916-001	E9161.D	05/11/2001	1:10
FIELD_BLANK	2924-007	E9162.D	05/11/2001	1:38
TRIP_BLANK	2924-008	E9163.D	05/11/2001	2:05
MW1	2924-003	E9164.D	05/11/2001	2:33
MW7	2924-005	E9165.D	05/11/2001	3:01
MW6	2924-004	E9168.D	05/11/2001	4:25
MID	2931-002	E9170.D	05/11/2001	5:21
EFF	2931-003	E9171.D	05/11/2001	5:49
INF	2931-001	E9172.D	05/11/2001	6:17
INFL	2950-001	E9173.D	05/11/2001	6:45
B/W_GAC	2950-002	E9174.D	05/11/2001	7:13
EFF	2950-003	E9175.D	05/11/2001	7:41
2892-004MS	2892-004MS	E9176.D	05/11/2001	8:08
2892-004MSD	2892-004MSD	E9177.D	05/11/2001	8:35
MW-4	2892-004	E9179.D	05/11/2001	9:41
T-COMP	2949-009	E9180.D	05/11/2001	10:09

VOLATILE METHOD BLANK SUMMARY

Lab File ID: E9089.D

Instrument ID: MSD_E

Date Analyzed: 05/09/2001

Time Analyzed: 02:18

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
MW-10	2839-006DIL	05/09/2001	2:54
MW-15S	2839-015DIL	05/09/2001	3:22
MW-12D	2839-021DIL	05/09/2001	3:50
MW1-0501	2855-001	05/09/2001	4:18
LFB	LFB	05/09/2001	4:46
2855-003MS	2855-003MS	05/09/2001	5:14
2855-003MSD	2855-003MSD	05/09/2001	5:42
MW-6S	2839-016	05/09/2001	6:38
MW-6	2839-017	05/09/2001	7:05
MW-1	2839-018	05/09/2001	7:33
MW-8	2839-019	05/09/2001	8:01
MW-7	2839-020	05/09/2001	8:29
TCLP-BLK	TCLP-BLK	05/09/2001	8:57
OENJ-NC-5	2827-001	05/09/2001	9:25
OENJ-BAG-5	2827-004	05/09/2001	9:53
MW2-0501	2855-002	05/09/2001	10:21
MW3-0501	2855-003	05/09/2001	10:48
TB-0501	2855-004	05/09/2001	11:16
FB-0501	2855-005	05/09/2001	11:44
FB	2867-008	05/10/2001	12:12
TB	2867-009	05/10/2001	12:40
MW-1	2867-001	05/10/2001	1:08
MW-2	2867-002	05/10/2001	1:36
MW-3	2867-003	05/10/2001	2:03
MW-5	2867-004	05/10/2001	2:31
MW-6	2867-005	05/10/2001	2:59
MW-7	2867-006	05/10/2001	3:27
MW-8	2867-007	05/10/2001	3:55
A5/7	2941-001	05/10/2001	4:23
TRIP	2862-004	05/10/2001	4:51

VOLATILE METHOD BLANK SUMMARY

Lab File ID: E9089.D

Instrument ID: MSD_E

Date Analyzed: 05/09/2001

Time Analyzed: 02:18

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
MW-13	2862-003	05/10/2001	5:19
MW-12	2862-002	05/10/2001	5:46
TCLPMS	TCLPMS	05/10/2001	6:42
2941-001MS	2941-001MS	05/10/2001	7:10
2941-001MSD	2941-001MSD	05/10/2001	7:38
MW1	2898-001	05/10/2001	8:47
MW4	2898-002	05/10/2001	9:15
MW5	2898-003	05/10/2001	9:43
MW6	2898-004	05/10/2001	10:11

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: NA

Lab ID: METHOD-BLK
Client ID: METHOD-BLK
Date Received: NA
Date Analyzed: 05/09/2001
Data file: E9089.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		0.61
Vinyl Chloride	ND		0.33
Bromomethane	ND		0.47
Chloroethane	ND		0.65
Trichlorofluoromethane	ND		0.38
Acrolein	ND		5.94
1,1-Dichloroethene	ND		0.5
Methylene Chloride	ND		1.91
Acrylonitrile	ND		1.27
trans-1,2-Dichloroethene	ND		0.39
1,1-Dichloroethane	ND		0.33
Chloroform	ND		0.31
1,1,1-Trichloroethane	ND		0.38
Carbon Tetrachloride	ND		0.39
1,2-Dichloroethane(EDC)	ND		0.35
Benzene	ND		0.3
Trichloroethene	ND		0.36
1,2-Dichloropropane	ND		0.25
Bromodichloromethane	ND		0.25
2-Chloroethylvinyl Ether	ND		0.25
cis-1,3-Dichloropropene	ND		0.19
Toluene	ND		0.33
trans-1,3-Dichloropropene	ND		0.27
1,1,2-Trichloroethane	ND		0.31
Tetrachloroethene	ND		0.38
Dibromochloromethane	ND		0.31
Chlorobenzene	ND		0.28
Ethylbenzene	ND		0.3
Total Xylenes	ND		0.9
Bromoform	ND		0.28
1,1,2,2-Tetrachloroethane	ND		0.27
1,3-Dichlorobenzene	ND		0.22
1,4-Dichlorobenzene	ND		0.22
1,2-Dichlorobenzene	ND		0.19

Total Target Compounds: 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: NA

Lab ID: METHOD-BLK
Client ID: METHOD-BLK
Date Received: NA
Date Analyzed: 05/09/2001
Data file: E9089.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

000094

3263

VOLATILE METHOD BLANK SUMMARY

Lab File ID: E9135.D Instrument ID: MSD_E

Date Analyzed: 05/10/2001 Time Analyzed: 12:48

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
MW-1	2867-001DIL	05/10/2001	1:16
MW-5	2862-001	05/10/2001	1:44
LFB	LFB	05/10/2001	2:12
2898-005MS	2898-005MS	05/10/2001	2:40
2898-005MSD	2898-005MSD	05/10/2001	3:08
MW7	2898-005	05/10/2001	4:19
MW8	2898-006	05/10/2001	4:47
MW9	2898-007	05/10/2001	5:15
SUPPLY	2898-008	05/10/2001	5:43
WP-6	2868-005	05/10/2001	6:39
TRIP_BLANK	2868-007	05/10/2001	7:07
WP-2	2868-001	05/10/2001	7:35
WP-3	2868-002	05/10/2001	8:03
WP-4	2868-003	05/10/2001	8:31
WP-5	2868-004	05/10/2001	8:59
WP-7	2868-006	05/10/2001	9:26
MW-1	2892-001	05/10/2001	9:54
MW-2	2892-002	05/10/2001	10:22
MW-3	2892-003	05/10/2001	10:50
A_5/8	2967-001	05/10/2001	11:46
A1	2966-001	05/11/2001	12:14
SPW-1	2912-007	05/11/2001	12:42
SUMP_1	2916-001	05/11/2001	1:10
FIELD_BLANK	2924-007	05/11/2001	1:38
TRIP_BLANK	2924-008	05/11/2001	2:05
MW1	2924-003	05/11/2001	2:33
MW7	2924-005	05/11/2001	3:01
MW6	2924-004	05/11/2001	4:25
MID	2931-002	05/11/2001	5:21
EFF	2931-003	05/11/2001	5:49
INF	2931-001	05/11/2001	6:17
INFL	2950-001	05/11/2001	6:45

37C4

VOLATILE METHOD BLANK SUMMARY

Lab File ID: E9135.D Instrument ID: MSD_E

Date Analyzed: 05/10/2001 Time Analyzed: 12:48

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
B/W_GAC	2950-002	05/11/2001	7:13
EFF	2950-003	05/11/2001	7:41
2892-004MS	2892-004MS	05/11/2001	8:08
2892-004MSD	2892-004MSD	05/11/2001	8:35
MW-4	2892-004	05/11/2001	9:41
T-COMP	2949-009	05/11/2001	10:09

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: NA

Lab ID: METHOD-BLK
Client ID: METHOD-BLK
Date Received: NA
Date Analyzed: 05/10/2001
Data file: E9135.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		0.61
Vinyl Chloride	ND		0.33
Bromomethane	ND		0.47
Chloroethane	ND		0.65
Trichlorofluoromethane	ND		0.38
Acrolein	ND		5.94
1,1-Dichloroethene	ND		0.5
Methylene Chloride	ND		1.91
Acrylonitrile	ND		1.27
trans-1,2-Dichloroethene	ND		0.39
1,1-Dichloroethane	ND		0.33
Chloroform	ND		0.31
1,1,1-Trichloroethane	ND		0.38
Carbon Tetrachloride	ND		0.39
1,2-Dichloroethane(EDC)	ND		0.35
Benzene	ND		0.3
Trichloroethene	ND		0.36
1,2-Dichloropropane	ND		0.25
Bromodichloromethane	ND		0.25
2-Chloroethylvinyl Ether	ND		0.25
cis-1,3-Dichloropropene	ND		0.19
Toluene	ND		0.33
trans-1,3-Dichloropropene	ND		0.27
1,1,2-Trichloroethane	ND		0.31
Tetrachloroethene	ND		0.38
Dibromochloromethane	ND		0.31
Chlorobenzene	ND		0.28
Ethylbenzene	ND		0.3
Total Xylenes	ND		0.9
Bromoform	ND		0.28
1,1,2,2-Tetrachloroethane	ND		0.27
1,3-Dichlorobenzene	ND		0.22
1,4-Dichlorobenzene	ND		0.22
1,2-Dichlorobenzene	ND		0.19

Total Target Compounds: 0

CC0097

3266

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: NA

Lab ID: METHOD-BLK
Client ID: METHOD-BLK
Date Received: NA
Date Analyzed: 05/10/2001
Data file: E9135.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

Response Factor Report MSD_E2

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration

Calibration Files
20 =E9085.D 5 =E9086.D 100 =E9087.D
= =

		Compound	20	5	100	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------				
2)	T	Dichlorodifluorometha	0.149	0.120	0.202	0.157	26.54
3)	P	Chloromethane	0.483	0.467	0.521	0.490	5.68
4)	C	Vinyl Chloride	0.335	0.296	0.386	0.339	13.18
5)	T	Bromomethane	0.151	0.156	0.151	0.153	1.76
6)	T	Chloroethane	0.221	0.198	0.235	0.218	8.66
7)	T	Trichlorofluoromethan	0.225	0.179	0.296	0.234	25.20
8)	T	Acrolein	0.023	0.025	0.024	0.024	4.84
9)	MC	1,1-Dichloroethene	0.251	0.232	0.279	0.254	9.40
10)	T	Acetone	0.171	0.214	0.158	0.181	16.15
11)	T	Carbon Disulfide	0.723	0.680	0.866	0.756	12.94
12)	T	Vinyl Acetate	1.356	1.372	1.342	1.357	1.10
13)	T	Methylene Chloride	0.347	0.365	0.341	0.351	3.60
14)	T	Acrylonitrile	0.100	0.110	0.105	0.105	5.00
15)	T	t-Butyl Alcohol(TBA)	0.028	0.034	0.027	0.030	12.54
16)	T	trans-1,2-Dichloroeth	0.317	0.291	0.325	0.311	5.83
17)	T	Methyl-t-Butyl Ether(	0.906	0.936	0.928	0.924	1.67
[illegible])	P	1,1-Dichloroethane	0.707	0.641	0.729	0.693	6.60
[illegible])	T	Diisopropyl Ether(DIP	1.548	1.572	1.552	1.557	0.83
20)	T	cis-1,2-Dichloroethen	0.501	0.469	0.494	0.488	3.36
21)	T	2,2-Dichloropropane	0.324	0.265	0.355	0.314	14.58
22)	T	2-Butanone(MEK)	0.253	0.303	0.253	0.270	10.63
23)	T	Bromochloromethane	0.220	0.219	0.218	0.219	0.50
25)	C	Chloroform	0.821	0.797	0.829	0.816	2.01
26)	T	1,1,1-Trichloroethane	0.480	0.371	0.558	0.469	19.96
27)	T	Carbon Tetrachloride	0.367	0.244	0.490	0.367	33.52
28)	T	1,1-Dichloropropene	0.505	0.418	0.569	0.497	15.24
29)	T	1,2-Dichloroethane(ED	0.667	0.671	0.658	0.665	1.01
30)	S	1,2-Dichloroethane-d4	0.558	0.576	0.553	0.563	2.17
31)	I	1,4-Difluorobenzene	----------ISTD----------				
32)	M	Benzene	1.350	1.286	1.290	1.309	2.76
33)	M	Trichloroethene	0.315	0.282	0.323	0.307	7.03
34)	C	1,2-Dichloropropane	0.381	0.370	0.374	0.375	1.51
35)	T	Dibromomethane	0.161	0.164	0.162	0.162	0.86
36)	T	1,4-Dioxane	0.002	0.003	0.002	0.002	14.46
37)	T	Bromodichloromethane	0.371	0.350	0.407	0.376	7.73
38)	T	2-Chloroethylvinyl Et	0.159	0.153	0.171	0.161	5.83
39)	T	cis-1,3-Dichloroprope	0.493	0.464	0.530	0.495	6.67
40)	T	4-Methyl-2-pentanone(	0.280	0.278	0.295	0.284	3.38
41)	S	Toluene-d8	1.010	0.999	1.010	1.007	0.62
42)	MC	Toluene	0.849	0.783	0.823	0.818	4.07
43)	T	trans-1,3-Dichloropro	0.408	0.379	0.450	0.412	8.62
[illegible])	T	1,1,2-Trichloroethane	0.202	0.207	0.199	0.203	2.04
[illegible])	T	Tetrachloroethene	0.283	0.241	0.288	0.271	9.62
46)	T	1,3-Dichloropropane	0.455	0.458	0.435	0.449	2.80
47)	T	2-Hexanone	0.234	0.219	0.253	0.236	7.27
48)	T	Dibromochloromethane	0.198	0.185	0.243	0.208	14.69
49)	T	1,2-Dibromoethane(EDB	0.224	0.218	0.228	0.223	2.37

50)	I	Chlorobenzene-d5	----------ISTD----------				
51)	MP	Chlorobenzene	1.221	1.196	1.176	1.198	1.86
52)	T	1,1,1,2-Tetrachloroet	0.350	0.329	0.381	0.354	7.39
53)	C	Ethylbenzene	2.000	1.792	1.977	1.923	5.92
1)	T	m,p-Xylene	0.774	0.719	0.716	0.736	4.45
5)	T	o-Xylene	0.776	0.725	0.720	0.740	4.19
56)	T	Styrene	1.279	1.207	1.216	1.234	3.14
57)	P	Bromoform	0.111	0.108	0.154	0.124	20.71
58)	T	Isopropylbenzene	1.724	1.471	1.778	1.657	9.87
59)	S	Bromofluorobenzene	0.621	0.622	0.627	0.624	0.49
60)	P	1,1,2,2-Tetrachloroet	0.320	0.330	0.320	0.324	1.71
61)	T	Bromobenzene	0.466	0.449	0.456	0.457	1.80
62)	T	1,2,3-Trichloropropan	0.335	0.343	0.329	0.336	2.17
63)	T	n-Propylbenzene	2.251	1.930	2.294	2.159	9.22
64)	T	2-Chlorotoluene	1.464	1.372	1.436	1.424	3.32
65)	T	1,3,5-Trimethylbenzen	1.625	1.448	1.608	1.560	6.25
66)	T	4-Chlorotoluene	1.726	1.640	1.674	1.680	2.58
67)	T	tert-Butylbenzene	1.276	1.089	1.324	1.230	10.10
68)	T	1,2,4-Trimethylbenzen	1.709	1.579	1.672	1.653	4.05
69)	T	sec-Butylbenzene	1.766	1.464	1.895	1.709	12.93
70)	T	1,3-Dichlorobenzene	0.877	0.873	0.832	0.861	2.90
71)	T	4-Isopropyltoluene	1.573	1.361	1.594	1.509	8.52
72)	T	1,4-Dichlorobenzene	0.893	0.880	0.870	0.881	1.33
73)	T	n-Butylbenzene	1.464	1.223	1.565	1.417	12.37
74)	T	1,2-Dichlorobenzene	0.800	0.833	0.762	0.798	4.42
75)	T	1,2-Dibromo-3-chlorop	0.038	0.038	0.047	0.041	13.14
76)	T	1,2,4-Trichlorobenzen	0.438	0.481	0.467	0.462	4.84
77)	T	Hexachlorobutadiene	0.214	0.234	0.236	0.228	5.22
78)	T	Naphthalene	0.638	0.812	0.723	0.724	12.00
79)	T	1,2,3-Trichlorobenzen	0.321	0.417	0.342	0.360	13.97
)	T	Ethane,1,1,2-trichlor	0.179	0.146	0.242	0.189	25.73
81)	T	Methyl Acetate	0.250	0.274	0.251	0.258	5.19
82)	T	Cyclohexane	0.322	0.244	0.443	0.337	29.77
83)	T	Methyl Cyclohexane	0.458	0.320	0.627	0.468	32.89

(#) = Out of Range

EA050901.M Wed May 09 13:20:44 2001 MSD_E2

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\05-10-01\E9133.D
Acq On : 10 May 2001 11:18 am
Sample : 20-PPB-STD,20-PPB-STD,A,5mL,100
Misc : NA,NA,NA
MS Integration Params: LSCINT.P

Vial: 2
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 35% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	97	0.00
2	T	Dichlorodifluoromethane	0.157	0.163	-3.8	106	0.00
3	P	Chloromethane	0.490	0.467	4.7	94	0.00
4	C	Vinyl Chloride	0.339	0.350	-3.2	101	0.00
5	T	Bromomethane	0.153	0.174	-13.7	112	0.00
6	T	Chloroethane	0.218	0.236	-8.3	104	0.00
7	T	Trichlorofluoromethane	0.234	0.238	-1.7	102	0.00
8	T	Acrolein	0.024	0.018	25.0	73	0.00
9	MC	1,1-Dichloroethene	0.254	0.263	-3.5	102	0.00
10	T	Acetone	0.181	0.150	17.1	85	0.00
11	T	Carbon Disulfide	0.756	0.752	0.5	101	0.00
[illegible]	T	Vinyl Acetate	1.357	1.277	5.9	91	0.00
[illegible]	T	Methylene Chloride	0.351	0.340	3.1	95	0.00
[illegible]	T	Acrylonitrile	0.105	0.084	20.0	82	0.00
15	T	t-Butyl Alcohol(TBA)	0.030	0.027	10.0	93	0.00
16	T	trans-1,2-Dichloroethene	0.311	0.323	-3.9	99	-0.05
17	T	Methyl-t-Butyl Ether(MTBE)	0.924	0.808	12.6	87	0.00
18	P	1,1-Dichloroethane	0.693	0.727	-4.9	100	0.00
19	T	Diisopropyl Ether(DIPE)	1.557	1.505	3.3	94	0.00
20	T	cis-1,2-Dichloroethene	0.488	0.498	-2.0	96	0.00
21	T	2,2-Dichloropropane	0.314	0.385	-22.6	116	0.00
22	T	2-Butanone(MEK)	0.270	0.219	18.9	84	0.00
23	T	Bromochloromethane	0.219	0.208	5.0	91	0.00
25	C	Chloroform	0.816	0.831	-1.8	98	0.00
26	T	1,1,1-Trichloroethane	0.469	0.533	-13.6	108	0.00
27	T	Carbon Tetrachloride	0.367	0.416	-13.4	110	0.00
28	T	1,1-Dichloropropene	0.497	0.526	-5.8	101	0.00
29	T	1,2-Dichloroethane(EDC)	0.665	0.622	6.5	90	0.00
30	S	1,2-Dichloroethane-d4	0.563	0.516	8.3	90	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	97	0.00
32	M	Benzene	1.309	1.383	-5.7	99	0.00
33	M	Trichloroethene	0.307	0.320	-4.2	98	0.00
34	C	1,2-Dichloropropane	0.375	0.378	-0.8	96	0.00
35	T	Dibromomethane	0.162	0.148	8.6	89	0.00
36	T	1,4-Dioxane	0.002	0.002	0.0	73	0.00
37	T	Bromodichloromethane	0.376	0.365	2.9	95	0.00
[illegible]	T	2-Chloroethylvinyl Ether	0.161	0.129	-19.9	78	0.00
[illegible]	T	cis-1,3-Dichloropropene	0.495	0.478	3.4	94	0.00
[illegible]	T	4-Methyl-2-pentanone(MIBK)	0.284	0.230	19.0	80	0.00
41	S	Toluene-d8	1.007	1.012	-0.5	97	0.00
42	MC	Toluene	0.818	0.866	-5.9	99	0.00
43	T	trans-1,3-Dichloropropene	0.412	0.381	7.5	90	0.00
44	T	1,1,2-Trichloroethane	0.203	0.182	10.3	87	0.00
45	T	Tetrachloroethene	0.271	0.293	-8.1	100	0.00

46	T	1,3-Dichloropropane	0.449	0.409	8.9	87	0.00
47	T	2-Hexanone	0.236	0.188	20.3	78	0.00
48	T	Dibromochloromethane	0.208	0.184	11.5	90	0.00
49	T	1,2-Dibromoethane(EDB)	0.223	0.195	12.6	84	0.00
	I	Chlorobenzene-d5	1.000	1.000	0.0	95	0.00
51	MP	Chlorobenzene	1.198	1.221	-1.9	95	0.00
52	T	1,1,1,2-Tetrachloroethane	0.354	0.359	-1.4	98	0.00
53	C	Ethylbenzene	1.923	2.072	-7.7	99	0.00
54	T	m,p-Xylene	0.736	0.800	-8.7	99	0.00
55	T	o-Xylene	0.740	0.791	-6.9	97	0.00
56	T	Styrene	1.234	1.268	-2.8	95	0.00
57	P	Bromoform	0.124	0.101	18.5	87	0.00
58	T	Isopropylbenzene	1.657	1.780	-7.4	98	0.00
59	S	Bromofluorobenzene	0.624	0.610	2.2	94	0.00
60	P	1,1,2,2-Tetrachloroethane	0.324	0.275	15.1	82	0.00
61	T	Bromobenzene	0.457	0.445	2.6	91	0.00
62	T	1,2,3-Trichloropropane	0.336	0.287	14.6	82	0.00
63	T	n-Propylbenzene	2.159	2.319	-7.4	98	0.00
64	T	2-Chlorotoluene	1.424	1.481	-4.0	96	0.00
65	T	1,3,5-Trimethylbenzene	1.560	1.646	-5.5	97	0.00
66	T	4-Chlorotoluene	1.680	1.743	-3.8	96	0.00
67	T	tert-Butylbenzene	1.230	1.316	-7.0	98	0.00
68	T	1,2,4-Trimethylbenzene	1.653	1.716	-3.8	96	0.00
69	T	sec-Butylbenzene	1.709	1.833	-7.3	99	0.00
70	T	1,3-Dichlorobenzene	0.861	0.845	1.9	92	0.00
71	T	4-Isopropyltoluene	1.509	1.610	-6.7	98	0.00
72	T	1,4-Dichlorobenzene	0.881	0.850	3.5	91	0.00
73	T	n-Butylbenzene	1.417	1.481	-4.5	96	0.00
74	T	1,2-Dichlorobenzene	0.798	0.735	7.9	88	0.00
75	T	1,2-Dibromo-3-chloropropane	0.041	0.031	24.4	80	0.00
76	T	1,2,4-Trichlorobenzene	0.462	0.367	20.6	80	0.00
77	T	Hexachlorobutadiene	0.228	0.217	4.8	96	0.00
79	T	1,2,3-Trichlorobenzene	0.360	0.253	29.7	75	0.00
80	T	Ethane,1,1,2-trichloro-1,2,	0.189	0.215	-13.8	114	-0.01
81	T	Methyl Acetate	0.258	0.217	15.9	83	0.00
82	T	Cyclohexane	0.337	0.369	-9.5	109	0.00
83	T	Methyl Cyclohexane	0.468	0.526	-12.4	109	0.00

(#) = Out of Range
E9085.D EA050901.M Thu May 10 12:01:55 2001 MSD_E2

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 05/09/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD-BLK	AQUEOUS	E9089.D	101	99	95
2839-006DIL	AQUEOUS	E9090.D	95	99	95
2839-015DIL	AQUEOUS	E9091.D	94	99	99
2839-021DIL	AQUEOUS	E9092.D	97	99	99
2855-001	AQUEOUS	E9093.D	93	100	98
LFB	AQUEOUS	E9094.D	93	100	99
2855-003MS	AQUEOUS	E9095.D	96	100	101
2855-003MSD	AQUEOUS	E9096.D	93	99	100
2839-016	AQUEOUS	E9098.D	93	98	94
2839-017	AQUEOUS	E9099.D	94	98	97
2839-018	AQUEOUS	E9100.D	97	97	97
2839-019	AQUEOUS	E9101.D	97	99	95
2839-020	AQUEOUS	E9102.D	97	97	93
TCLP-BLK	AQUEOUS	E9103.D	98	98	93
2827-001	AQUEOUS	E9104.D	98	98	94
2827-004	AQUEOUS	E9105.D	102	99	96
2855-002	AQUEOUS	E9106.D	100	98	97
2855-003	AQUEOUS	E9107.D	101	98	96
2855-004	AQUEOUS	E9108.D	101	98	95
2855-005	AQUEOUS	E9109.D	103	99	96
2867-008	AQUEOUS	E9110.D	103	99	97
2867-009	AQUEOUS	E9111.D	105	98	97

	Concentration	Aqueous
SMC1 = 1,2-Dichloroethane-d4	30 ppb	72-141
SMC2 = Toluene-d8	30 ppb	94-101
SMC3 = Bromofluorobenzene	30 ppb	82-110

Column to be used to flag recovery values

3777-

CC0103

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 05/09/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
2867-001	AQUEOUS	E9112.D	104	99	101
2867-002	AQUEOUS	E9113.D	102	98	97
2867-003	AQUEOUS	E9114.D	103	97	96
2867-004	AQUEOUS	E9115.D	104	99	98
2867-005	AQUEOUS	E9116.D	102	100	101
2867-006	AQUEOUS	E9117.D	105	98	100
2867-007	AQUEOUS	E9118.D	101	97	97
2941-001	AQUEOUS	E9119.D	110	98	99
2862-004	AQUEOUS	E9120.D	106	99	97
2862-003	AQUEOUS	E9121.D	103	99	101
2862-002	AQUEOUS	E9122.D	101	99	100
TCLPMS	AQUEOUS	E9124.D	97	100	103
2941-001MS	AQUEOUS	E9125.D	96	100	102
2941-001MSD	AQUEOUS	E9126.D	97	99	99
2898-001	AQUEOUS	E9128.D	89	99	95
2898-002	AQUEOUS	E9129.D	94	99	96
2898-003	AQUEOUS	E9130.D	101	98	96
2898-004	AQUEOUS	E9131.D	103	97	97

	Concentration	Aqueous
SMC1 = 1,2-Dichloroethane-d4	30 ppb	72-141
SMC2 = Toluene-d8	30 ppb	94-101
SMC3 = Bromofluorobenzene	30 ppb	82-110

Column to be used to flag recovery values —

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 05/10/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD-BLK	AQUEOUS	E9135.D	92	99	92
2867-001DIL	AQUEOUS	E9136.D	99	99	99
2862-001	AQUEOUS	E9137.D	92	99	98
LFB	AQUEOUS	E9138.D	92	101	99
2898-005MS	AQUEOUS	E9139.D	90	101	100
2898-005MSD	AQUEOUS	E9140.D	90	100	98
2898-005	AQUEOUS	E9142.D	85	98	92
2898-006	AQUEOUS	E9143.D	85	99	96
2898-007	AQUEOUS	E9144.D	87	98	94
2898-008	AQUEOUS	E9145.D	86	98	95
2868-005	AQUEOUS	E9147.D	90	96	93
2868-007	AQUEOUS	E9148.D	90	96	92
2868-001	AQUEOUS	E9149.D	90	98	93
2868-002	AQUEOUS	E9150.D	91	97	93
2868-003	AQUEOUS	E9151.D	93	97	94
2868-004	AQUEOUS	E9152.D	93	98	94
2868-006	AQUEOUS	E9153.D	93	99	97
2892-001	AQUEOUS	E9154.D	91	95	92
2892-002	AQUEOUS	E9155.D	90	98	93
2892-003	AQUEOUS	E9156.D	92	97	97
2967-001	AQUEOUS	E9158.D	92	98	96
2966-001	AQUEOUS	E9159.D	93	98	97
2912-007	AQUEOUS	E9160.D	94	97	97
2916-001	AQUEOUS	E9161.D	93	97	94

	Concentration	Aqueous
SMC1 = 1,2-Dichloroethane-d4	30 ppb	72-141
SMC2 = Toluene-d8	30 ppb	94-101
SMC3 = Bromofluorobenzene	30 ppb	82-110

Column to be used to flag recovery values —

3274

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 05/10/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
2924-007	AQUEOUS	E9162.D	93	98	95
2924-008	AQUEOUS	E9163.D	95	98	95
2924-003	AQUEOUS	E9164.D	98	97	95
2924-005	AQUEOUS	E9165.D	95	97	93
2924-004	AQUEOUS	E9168.D	95	100	97
2931-002	AQUEOUS	E9170.D	102	97	100
2931-003	AQUEOUS	E9171.D	97	98	98
2931-001	AQUEOUS	E9172.D	92	97	96
2950-001	AQUEOUS	E9173.D	90	97	96
2950-002	AQUEOUS	E9174.D	94	97	94
2950-003	AQUEOUS	E9175.D	97	97	95
2892-004MS	AQUEOUS	E9176.D	97	100	101
2892-004MSD	AQUEOUS	E9177.D	98	100	101
2892-004	AQUEOUS	E9179.D	95	98	95
2949-009	AQUEOUS	E9180.D	98	98	94

	Concentration	Aqueous
SMC1 = 1,2-Dichloroethane-d4	30 ppb	72-141
SMC2 = Toluene-d8	30 ppb	94-101
SMC3 = Bromofluorobenzene	30 ppb	82-110

Column to be used to flag recovery values

3225

AQUEOUS VOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2855-003

Batch No.: EA0153

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	20.0	0.0	27.9	140	49 - 168
Benzene	20.0	0.0	21.6	108	58 - 145
Trichloroethene	20.0	0.0	23.6	118	50 - 158
Toluene	20.0	0.0	21.4	107	58 - 147
Chlorobenzene	20.0	0.0	21.1	106	58 - 145

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD #	% REC	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	0.0	26.9		135	4	20	49 - 168
Benzene	0.0	21.8		109	1	14	58 - 145
Trichloroethene	0.0	23.9		120	2	18	50 - 158
Toluene	0.0	21.7		109	2	15	58 - 147
Chlorobenzene	0.0	21.5		108	2	14	58 - 145

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

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 2855-003MSD
Client ID: 2855-003MSD
Date Received: NA
Date Analyzed: 05/09/2001
Data file: E9096.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	Sample	Conc. MSD	%Rec. MSD
Chloromethane	20.0	0.0	24.5	122	0.0	23.4	117
Vinyl Chloride	20.0	0.0	35.9	179	0.0	34.4	172
Bromomethane	20.0	0.0	26.0	130	0.0	26.1	131
Chloroethane	20.0	0.0	25.4	127	0.0	24.5	123
Trichlorofluoromethane	20.0	0.0	30.2	151	0.0	27.9	139
Acrolein	200	0.0	112.0	56	0.0	103.0	52
1,1-Dichloroethene	20.0	0.0	27.9	139	0.0	26.9	135
Methylene Chloride	20.0	0.0	20.4	102	0.0	19.3	97
Acrylonitrile	200	0.0	201.0	100	0.0	190.1	95
trans-1,2-Dichloroethene	20.0	0.0	23.0	115	0.0	22.6	113
1,1-Dichloroethane	20.0	0.0	21.7	109	0.0	21.9	110
Chloroform	20.0	0.0	21.0	105	0.0	21.3	106
1,1,1-Trichloroethane	20.0	0.0	23.6	118	0.0	24.2	121
Carbon Tetrachloride	20.0	0.0	24.5	122	0.0	23.2	116
1,2-Dichloroethane(EDC)	20.0	0.0	19.5	97	0.0	19.1	95
Benzene	20.0	0.0	21.6	108	0.0	21.8	109
Trichloroethene	20.0	0.0	23.6	118	0.0	23.9	119
1,2-Dichloropropane	20.0	0.0	20.9	104	0.0	20.8	104
Bromodichloromethane	20.0	0.0	19.5	97	0.0	19.5	98
2-Chloroethylvinyl Ether	20.0	0.0	15.3	76	0.0	14.2	71
cis-1,3-Dichloropropene	20.0	0.0	18.9	95	0.0	19.2	96
Toluene	20.0	0.0	21.4	107	0.0	21.7	109
trans-1,3-Dichloropropene	20.0	0.0	19.2	96	0.0	19.0	95
1,1,2-Trichloroethane	20.0	0.0	19.0	95	0.0	18.3	91
Tetrachloroethene	20.0	0.0	24.6	123	0.0	24.8	124
Dibromochloromethane	20.0	0.0	18.7	93	0.0	18.3	92
Chlorobenzene	20.0	0.0	21.1	105	0.0	21.5	107
Ethylbenzene	20.0	0.0	23.0	115	0.0	23.6	118
total-Xylenes	60.0	0.0	67.6	113	0.0	68.4	114
Bromoform	20.0	0.0	16.6	83	0.0	16.3	82
1,1,2,2-Tetrachloroethane	20.0	0.0	18.9	94	0.0	17.6	88
1,3-Dichlorobenzene	20.0	0.0	21.3	107	0.0	21.1	105
1,4-Dichlorobenzene	20.0	0.0	21.1	105	0.0	20.7	104
1,2-Dichlorobenzene	20.0	0.0	19.5	97	0.0	19.0	95

AQUEOUS VOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2898-005

Batch No.: EA0156

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	20.0	0.0	28.1	141	49 - 168
Benzene	20.0	0.0	22.1	111	58 - 145
Trichloroethene	20.0	0.0	23.9	120	50 - 158
Toluene	20.0	0.0	21.7	109	58 - 147
Chlorobenzene	20.0	0.0	21.5	108	58 - 145

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD % # REC	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	0.0	27.4	137	3	20	49 - 168
Benzene	0.0	22.4	112	1	14	58 - 145
Trichloroethene	0.0	24.4	122	2	18	50 - 158
Toluene	0.0	22.0	110	1	15	58 - 147
Chlorobenzene	0.0	21.7	109	1	14	58 - 145

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

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 2898-005MSD
Client ID: 2898-005MSD
Date Received: NA
Date Analyzed: 05/10/2001
Data file: E9140.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	Sample	Conc. MSD	%Rec. MSD
Chloromethane	20.0	0.0	24.6	123	0.0	23.6	118
Vinyl Chloride	20.0	0.0	36.9	185	0.0	36.1	180
Bromomethane	20.0	0.0	28.2	141	0.0	27.5	138
Chloroethane	20.0	0.0	25.8	129	0.0	25.6	128
Trichlorofluoromethane	20.0	0.0	28.0	140	0.0	24.1	120
Acrolein	200	0.0	96.0	48	0.0	93.0	47
1,1-Dichloroethene	20.0	0.0	28.1	141	0.0	27.4	137
Methylene Chloride	20.0	0.0	20.2	101	0.0	19.6	98
Acrylonitrile	200	0.0	167.5	84	0.0	164.3	82
trans-1,2-Dichloroethene	20.0	0.0	22.8	114	0.0	22.5	113
1,1-Dichloroethane	20.0	0.0	21.7	108	0.0	21.9	109
Chloroform	20.0	0.0	21.2	106	0.0	21.5	108
1,1,1-Trichloroethane	20.0	0.0	24.0	120	0.0	23.8	119
Carbon Tetrachloride	20.0	0.0	24.5	123	0.0	23.9	120
1,2-Dichloroethane(EDC)	20.0	0.0	18.8	94	0.0	18.9	95
Benzene	20.0	0.0	22.1	110	0.0	22.4	112
Trichloroethene	20.0	0.0	23.9	120	0.0	24.4	122
1,2-Dichloropropane	20.0	0.0	21.0	105	0.0	21.0	105
Bromodichloromethane	20.0	0.0	20.1	100	0.0	20.3	101
2-Chloroethylvinyl Ether	20.0	0.0	14.7	73	0.0	14.4	72
cis-1,3-Dichloropropene	20.0	0.0	20.1	101	0.0	20.5	103
Toluene	20.0	0.0	21.7	108	0.0	22.0	110
trans-1,3-Dichloropropene	20.0	0.0	19.9	100	0.0	19.8	99
1,1,2-Trichloroethane	20.0	0.0	18.4	92	0.0	18.1	91
Tetrachloroethene	20.0	0.0	25.0	125	0.0	24.9	125
Dibromochloromethane	20.0	0.0	19.0	95	0.0	19.4	97
Chlorobenzene	20.0	0.0	21.5	107	0.0	21.7	109
Ethylbenzene	20.0	0.0	23.9	120	0.0	24.2	121
total-Xylenes	60.0	0.0	69.1	115	0.0	69.8	116
Bromoform	20.0	0.0	17.8	89	0.0	17.5	88
1,1,2,2-Tetrachloroethane	20.0	0.0	17.8	89	0.0	17.3	86
1,3-Dichlorobenzene	20.0	0.0	21.4	107	0.0	21.0	105
1,4-Dichlorobenzene	20.0	0.0	21.0	105	0.0	20.6	103
1,2-Dichlorobenzene	20.0	0.0	19.3	97	0.0	18.8	94

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): E9085.D

Date Analyzed: 05/09/2001

Instrument ID: MSD_E

Time Analyzed: 11:33

	30UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	24 HOUR STD	448886	6.57	641142	7.40	501727	10.75
	UPPER LIMIT	897772	7.07	1282284	7.90	1003454	11.25
	LOWER LIMIT	224443	6.07	320571	6.90	250863.5	10.25
	LAB SAMPLE ID						
01	5-PPB-STD	451549	6.57	644391	7.40	494620	10.75
02	100-PPB-STD	444869	6.57	647047	7.40	498578	10.75
03	METHOD-BLK	464913	6.57	657556	7.40	506166	10.75
04	2839-006DIL	458194	6.57	649599	7.40	496690	10.75
05	2839-015DIL	425576	6.57	607249	7.40	468486	10.75
06	2839-021DIL	424328	6.57	608459	7.40	471683	10.75
07	2855-001	442141	6.57	636626	7.40	494394	10.75
08	LFB	443574	6.57	640597	7.40	489814	10.75
09	2855-003MS	423404	6.57	614093	7.40	477062	10.75
10	2855-003MSD	445018	6.57	647582	7.40	493201	10.75
11	2839-016	432609	6.57	626738	7.40	473549	10.75
12	2839-017	415457	6.57	604438	7.40	463366	10.75
13	2839-018	412888	6.57	600748	7.40	461291	10.75
14	2839-019	409470	6.57	594497	7.40	461417	10.75
15	2839-020	428155	6.57	627404	7.40	473095	10.75
16	TCLP-BLK	420638	6.57	611610	7.40	467663	10.75
17	2827-001	403388	6.57	589896	7.40	453431	10.75
18	2827-004	395392	6.57	582974	7.40	451959	10.75
19	2855-002	415216	6.57	606974	7.40	462723	10.75
20	2855-003	402888	6.57	587243	7.40	451629	10.75
21	2855-004	416936	6.57	606375	7.40	461614	10.75
22	2855-005	388083	6.57	567685	7.40	445504	10.75

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): E9085.D

Date Analyzed: 05/09/2001

Instrument ID: MSD_E

ime Analyzed: 11:33

	30UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	24 HOUR STD	448886	6.57	641142	7.40	501727	10.75
	UPPER LIMIT	897772	7.07	1282284	7.90	1003454	11.25
	LOWER LIMIT	224443	6.07	320571	6.90	250863.5	10.25
	LAB SAMPLE ID						
23	2867-008	386173	6.57	566265	7.40	440812	10.75
24	2867-009	385618	6.57	570773	7.40	440959	10.75
25	2867-001	383203	6.57	566617	7.40	437704	10.75
26	2867-002	407594	6.57	593982	7.40	450647	10.75
27	2867-003	408364	6.57	602998	7.40	451802	10.75
28	2867-004	390958	6.57	573110	7.40	444565	10.75
29	2867-005	402137	6.57	586021	7.40	454088	10.75
30	2867-006	391036	6.57	572057	7.40	449281	10.75
31	2867-007	401758	6.57	588457	7.40	451090	10.75
32	2941-001	390465	6.57	573468	7.40	445883	10.75
33	2862-004	390682	6.57	571887	7.40	444569	10.75
34	2862-003	387780	6.57	571316	7.40	448011	10.75
35	2862-002	408889	6.57	595033	7.40	461936	10.75
36	TCLPMS	424889	6.57	613573	7.40	479016	10.75
37	2941-001MS	421283	6.57	609568	7.40	473987	10.75
38	2941-001MSD	447008	6.57	648837	7.40	497245	10.75
39	2898-001	514324	6.57	730552	7.40	561393	10.75
40	2898-002	421206	6.57	606383	7.40	465095	10.75
41	2898-003	429244	6.57	616895	7.40	476427	10.75
42	2898-004	424849	6.57	612856	7.40	469011	10.75
43							
44							

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): E9133.D

Date Analyzed: 05/10/2001

Instrument ID: MSD_E

Time Analyzed: 11:18

	30UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	24 HOUR STD	435473	6.57	619504	7.40	478376	10.75
	UPPER LIMIT	870946	7.07	1239008	7.90	956752	11.25
	LOWER LIMIT	217736.5	6.07	309752	6.90	239188	10.25
	LAB SAMPLE ID						
01	METHOD-BLK	414189	6.57	594706	7.40	456932	10.75
02	2867-001DIL	402935	6.57	580086	7.40	449860	10.75
03	2862-001	403735	6.57	583913	7.40	450583	10.75
04	LFB	414713	6.57	597939	7.40	465113	10.75
05	2898-005MS	411982	6.57	594873	7.40	458166	10.75
06	2898-005MSD	431161	6.57	625388	7.40	473498	10.75
07	2898-005	410247	6.57	594188	7.40	440843	10.75
08	2898-006	398993	6.57	577995	7.40	443007	10.75
09	2898-007	426498	6.57	616949	7.40	458383	10.75
10	2898-008	408961	6.57	591029	7.40	444474	10.75
11	2868-005	418543	6.57	604530	7.40	452412	10.75
12	2868-007	415709	6.57	605658	7.40	448418	10.75
13	2868-001	407360	6.57	594123	7.40	440627	10.75
14	2868-002	408534	6.57	597194	7.40	443029	10.75
15	2868-003	404148	6.57	596064	7.40	440589	10.75
16	2868-004	392892	6.57	573779	7.40	431276	10.75
17	2868-006	411640	6.57	604224	7.40	456769	10.75
18	2892-001	409491	6.57	593924	7.40	444625	10.75
19	2892-002	409472	6.57	596381	7.40	446538	10.75
20	2892-003	419422	6.57	612956	7.40	460216	10.75
21	2967-001	426237	6.57	611753	7.40	467984	10.75
22	2966-001	421316	6.57	604995	7.40	460461	10.75

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): E9133.D

Date Analyzed: 05/10/2001

Instrument ID: MSD_E

ime Analyzed: 11:18

	30UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	24 HOUR STD	435473	6.57	619504	7.40	478376	10.75
	UPPER LIMIT	870946	7.07	1239008	7.90	956752	11.25
	LOWER LIMIT	217736.5	6.07	309752	6.90	239188	10.25
	LAB SAMPLE ID						
23	2912-007	407858	6.57	592382	7.40	449421	10.75
24	2916-001	432170	6.57	617378	7.40	464102	10.75
25	2924-007	403164	6.57	585543	7.40	446154	10.75
26	2924-008	400603	6.57	581218	7.40	445235	10.75
27	2924-003	396059	6.57	575840	7.40	444193	10.75
28	2924-005	407578	6.57	594269	7.40	449423	10.75
29	2924-004	403914	6.57	587134	7.40	441847	10.75
30	2931-002	388551	6.57	578042	7.40	445184	10.75
31	2931-003	398597	6.57	580981	7.40	449002	10.75
32	2931-001	428247	6.57	625109	7.40	463339	10.75
33	2950-001	427391	6.57	618906	7.40	463281	10.75
34	2950-002	429504	6.57	620720	7.40	464457	10.75
35	2950-003	415802	6.57	607060	7.40	453677	10.75
36	2892-004MS	418936	6.57	612394	7.40	471394	10.75
37	2892-004MSD	403822	6.57	590174	7.40	460753	10.75
38	2892-004	496793	6.57	719063	7.40	542071	10.75
39	2949-009	416599	6.57	606883	7.40	456446	10.75
40							
41							
42							
43							
44							

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.

Quantitation Report (QT/LSC Reviewed)

Data File : C:\HPCHEM\1\DATA\05-09-01\E9112.D Vial: 29
Acq On : 10 May 2001 1:08 am Operator: AMY
Sample : MW-1,2867-001,A,5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 9:16 2001 Quant Results File: EA050901.RES

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration
DataAcq Meth : EA042501

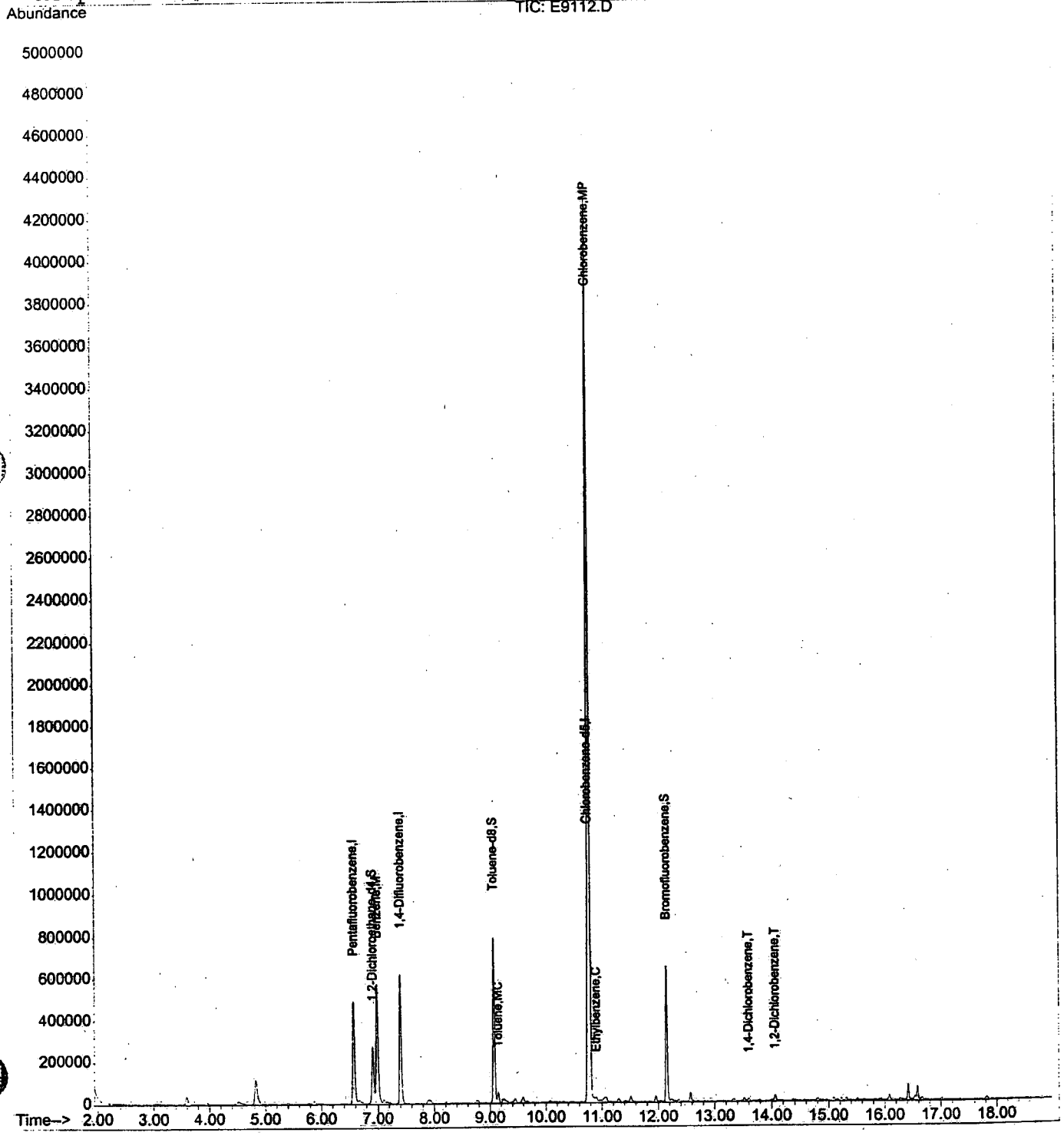
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.57	168	383203	30.00	UG		0.00
31) 1,4-Difluorobenzene	7.40	114	566617	30.00	UG		0.00
50) Chlorobenzene-d5	10.75	117	437704	30.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.91	65	224119	31.19	UG		0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 103.97%				
41) Toluene-d8	9.07	98	565263	29.73	UG		0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 99.10%				
59) Bromofluorobenzene	12.15	95	274830	30.21	UG		0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 100.70%				
Target Compounds							Qvalue
32) Benzene	6.98	78	571641	23.13	UG		100
42) Toluene	9.15	92	24291	1.57	UG		99
51) Chlorobenzene	10.78	112	2617009	149.76	UG	#	100
53) Ethylbenzene	10.90	91	10154	0.36	UG		99
72) 1,4-Dichlorobenzene	13.60	146	6009	0.47	UG		99
74) 1,2-Dichlorobenzene	14.06	146	13222	1.14	UG	#	99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9112.D Vial: 29
Acq On : 10 May 2001 1:08 am Operator: AMY
Sample : MW-1,2867-001,A,5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 9:16 2001 Quant Results File: EA050901.RES

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration



3265

000116

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-10-01\E9136.D Vial: 5
Acq On : 10 May 2001 1:16 pm Operator: AMY
Sample : MW-1,2867-001DIL,A,2.5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
IS Integration Params: LSCINT.P
Quant Time: May 10 13:38 2001 Quant Results File: EA050901.RES

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration
DataAcq Meth : EA042501

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.57	168	402935	30.00	UG		0.00
31) 1,4-Difluorobenzene	7.40	114	580086	30.00	UG		0.00
50) Chlorobenzene-d5	10.75	117	449860	30.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.91	65	224892	29.77	UG		0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 99.23%				
41) Toluene-d8	9.07	98	578178	29.70	UG		0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 99.00%				
59) Bromofluorobenzene	12.15	95	276906	29.61	UG		0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 98.70%				
Target Compounds							Qvalue
32) Benzene	6.98	78	222275	8.78	UG		100
42) Toluene	9.15	92	9513	0.60	UG		100
51) Chlorobenzene	10.78	112	1069993	59.58	UG	#	100
74) 1,2-Dichlorobenzene	14.06	146	4809	0.40	UG	#	99

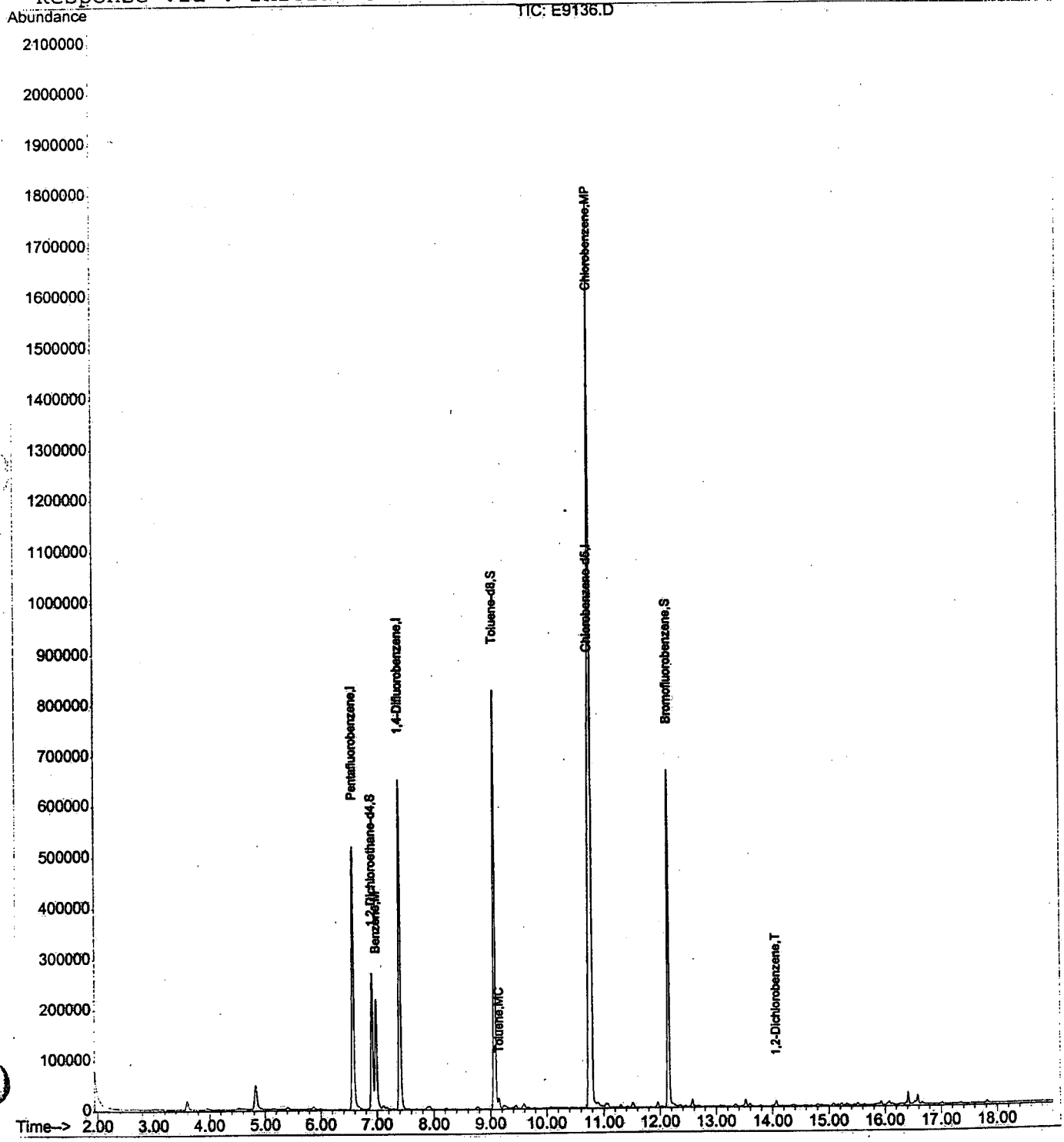
(#) = qualifier out of range (m) = manual integration

3256

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-10-01\E9136.D Vial: 5
Acq On : 10 May 2001 1:16 pm Operator: AMY
Sample : MW-1,2867-001DIL,A,2.5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 13:38 2001 Quant Results File: EA050901.RES

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration



3267

CC0113

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9112.D Vial: 29
Acq On : 10 May 2001 1:08 am Operator: AMY
Sample : MW-1,2867-001,A,5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
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

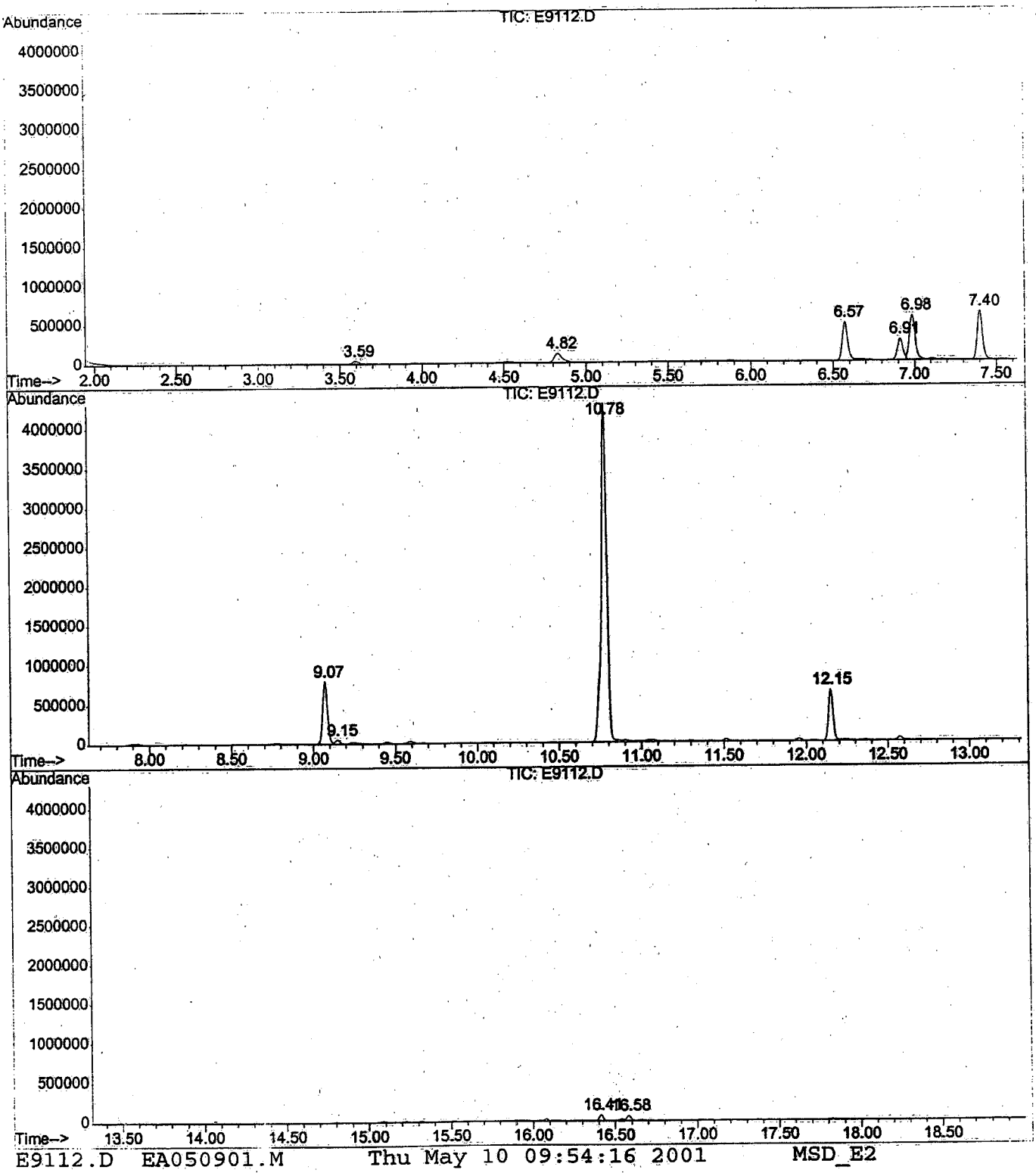
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.590	306	316	340	rBV2	37805	115627	1.14%	0.626%
2	4.825	537	552	580	rBV	116233	405991	4.01%	2.199%
3	6.572	874	886	900	rBV	495311	1166756	11.52%	6.321%
4	6.911	932	951	958	rBV	276933	657156	6.49%	3.560%
5	6.985	958	965	982	rVB	570070	1340149	13.23%	7.260%
6	7.403	1032	1045	1067	rBV	622469	1380427	13.63%	7.478%
7	9.072	1346	1364	1373	rBV2	794689	1660265	16.39%	8.994%
8	9.150	1373	1379	1388	rVV	51770	110256	1.09%	0.597%
9	10.782	1671	1691	1704	rBV2	4297376	10130398	100.00%	54.879%
10	12.147	1941	1952	1963	rBV	651832	1269343	12.53%	6.876%
11	16.415	2761	2768	2778	rBV2	76025	119393	1.18%	0.647%
12	16.582	2795	2800	2809	rVB	64571	103754	1.02%	0.562%

Sum of corrected areas: 18459515

E9112.D EA050901.M Thu May 10 09:54:15 2001 MSD_E2

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-09-01\E9112.D
Operator : AMY
Acquired : 10 May 2001 1:08 am using AcqMethod EA042501
Instrument : MSD_E2
Sample Name: MW-1,2867-001,A,5mL,100
Misc Info : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
Vial Number: 29
Quant File :EA050901.RES (RTE Integrator)



E9112.D EA050901.M Thu May 10 09:54:16 2001 MSD_E2

32609

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9112.D Vial: 29
Acq On : 10 May 2001 1:08 am Operator: AMY
Sample : MW-1,2867-001,A,5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

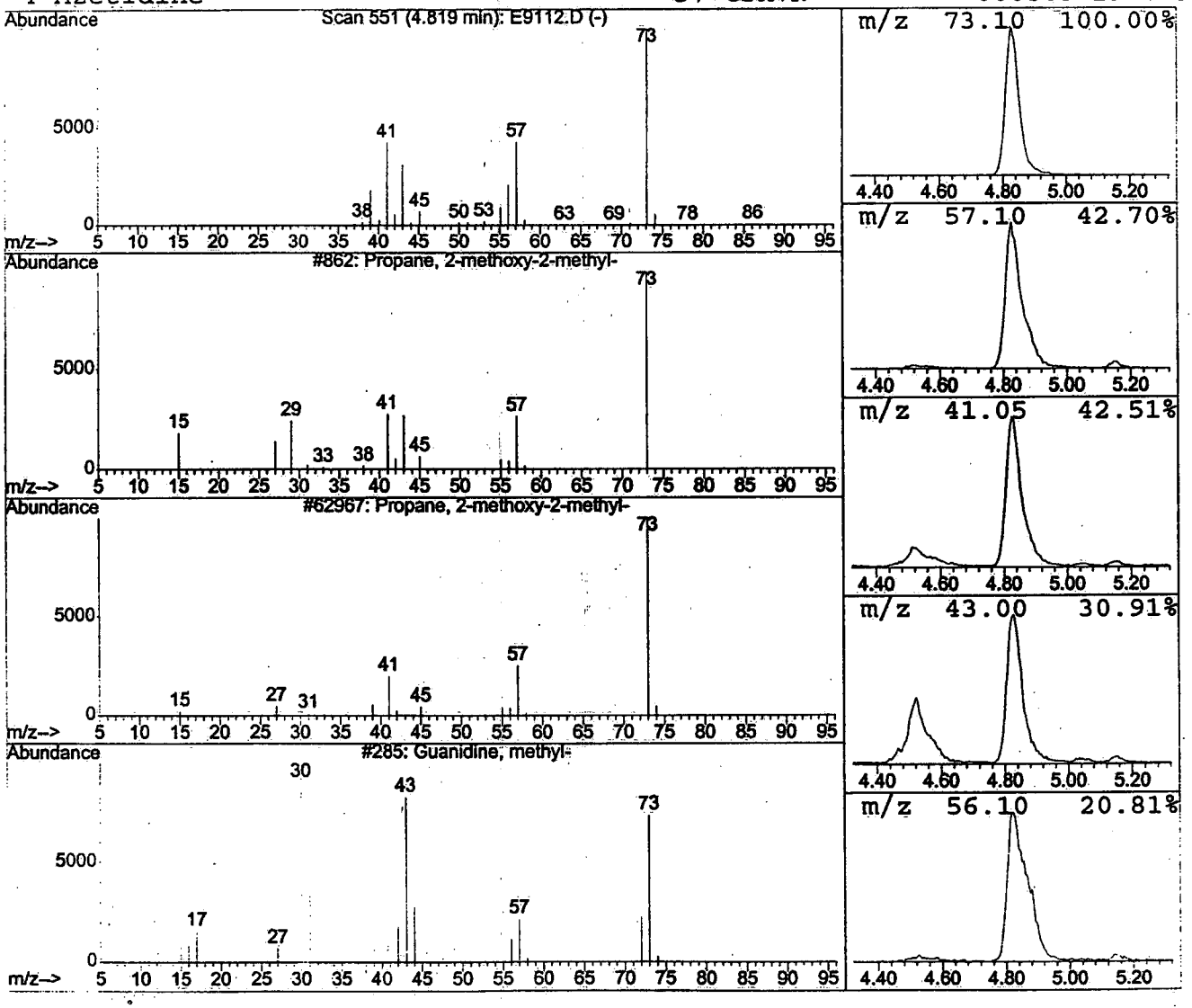
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Methyl-t-Butyl Ether(MTBE) Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.82	10.44 UG	405991	Pentafluorobenzene	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propane, 2-methoxy-2-methyl-	88	C5H12O	001634-04-4	64
2	Propane, 2-methoxy-2-methyl-	88	C5H12O	001634-04-4	56
3	Guanidine, methyl-	73	C2H7N3	000471-29-4	9
4	Azetidine	57	C3H7N	000503-29-7	9



3290

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-09-01\E9113.D Vial: 30
Acq On : 10 May 2001 1:36 am Operator: AMY
Sample : MW-2,2867-002,A,0.01mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
IS Integration Params: LSCINT.P
Quant Time: May 10 9:17 2001 Quant Results File: EA050901.RES

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration
DataAcq Meth : EA042501

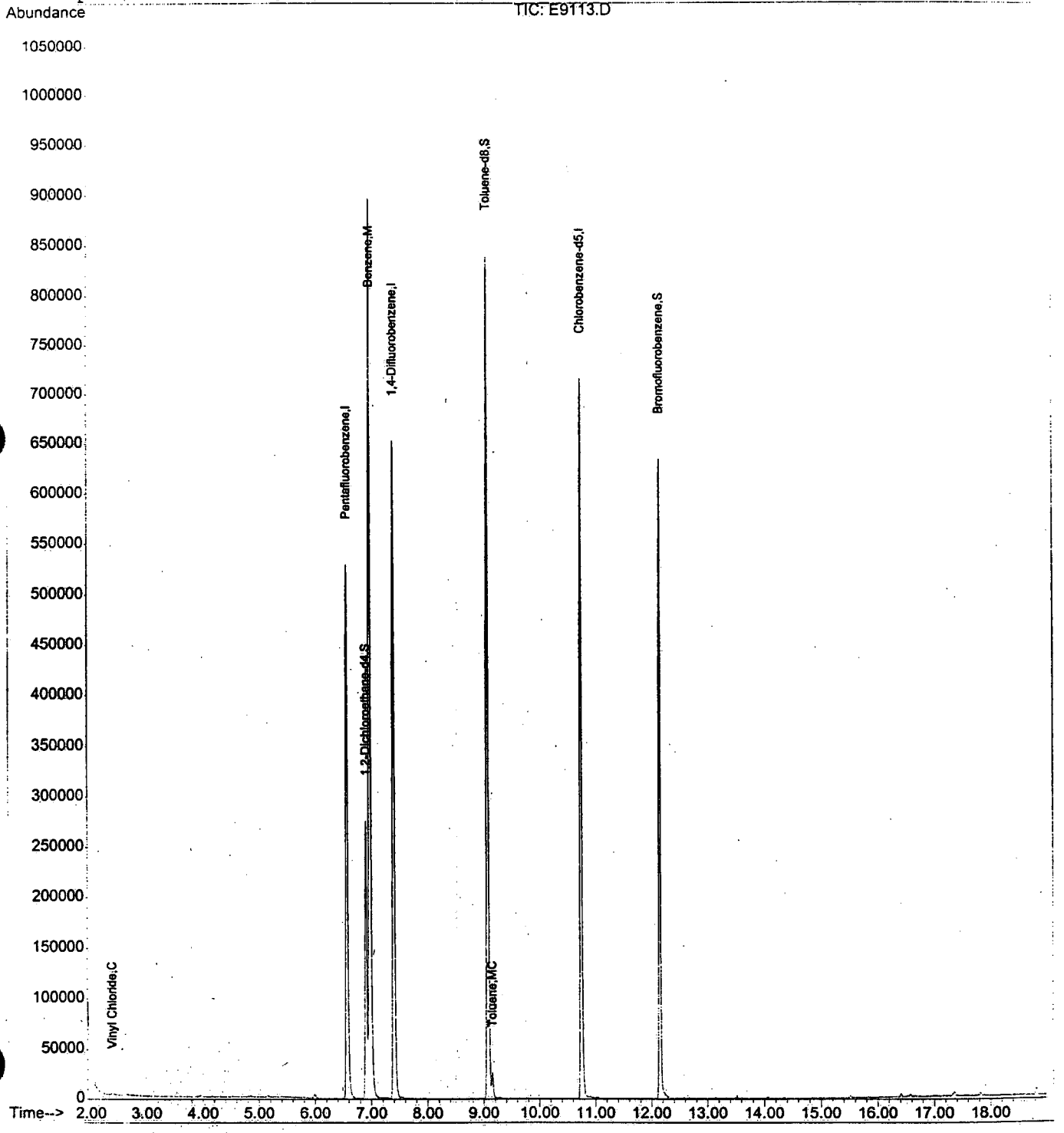
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	6.57	168	407594	30.00 UG	0.00
31) 1,4-Difluorobenzene	7.40	114	593982	30.00 UG	0.00
50) Chlorobenzene-d5	10.75	117	450647	30.00 UG	0.00
System Monitoring Compounds					
30) 1,2-Dichloroethane-d4	6.91	65	234733	30.71 UG	0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 102.37%		
41) Toluene-d8	9.07	98	586924	29.45 UG	0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 98.17%		
59) Bromofluorobenzene	12.15	95	272025	29.04 UG	0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 96.80%		
Target Compounds					Qvalue
4) Vinyl Chloride	2.38	62	5142m	1.12 UG	
32) Benzene	6.98	78	895317	34.56 UG	100
42) Toluene	9.15	92	11493	0.71 UG	96

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9113.D Vial: 30
Acq On : 10 May 2001 1:36 am Operator: AMY
Sample : MW-2,2867-002,A,0.01mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 9:17 2001 Quant Results File: EA050901.RES

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration



3292

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9113.D Vial: 30
Acq On : 10 May 2001 1:36 am Operator: AMY
Sample : MW-2,2867-002,A,0.01mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
LS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
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

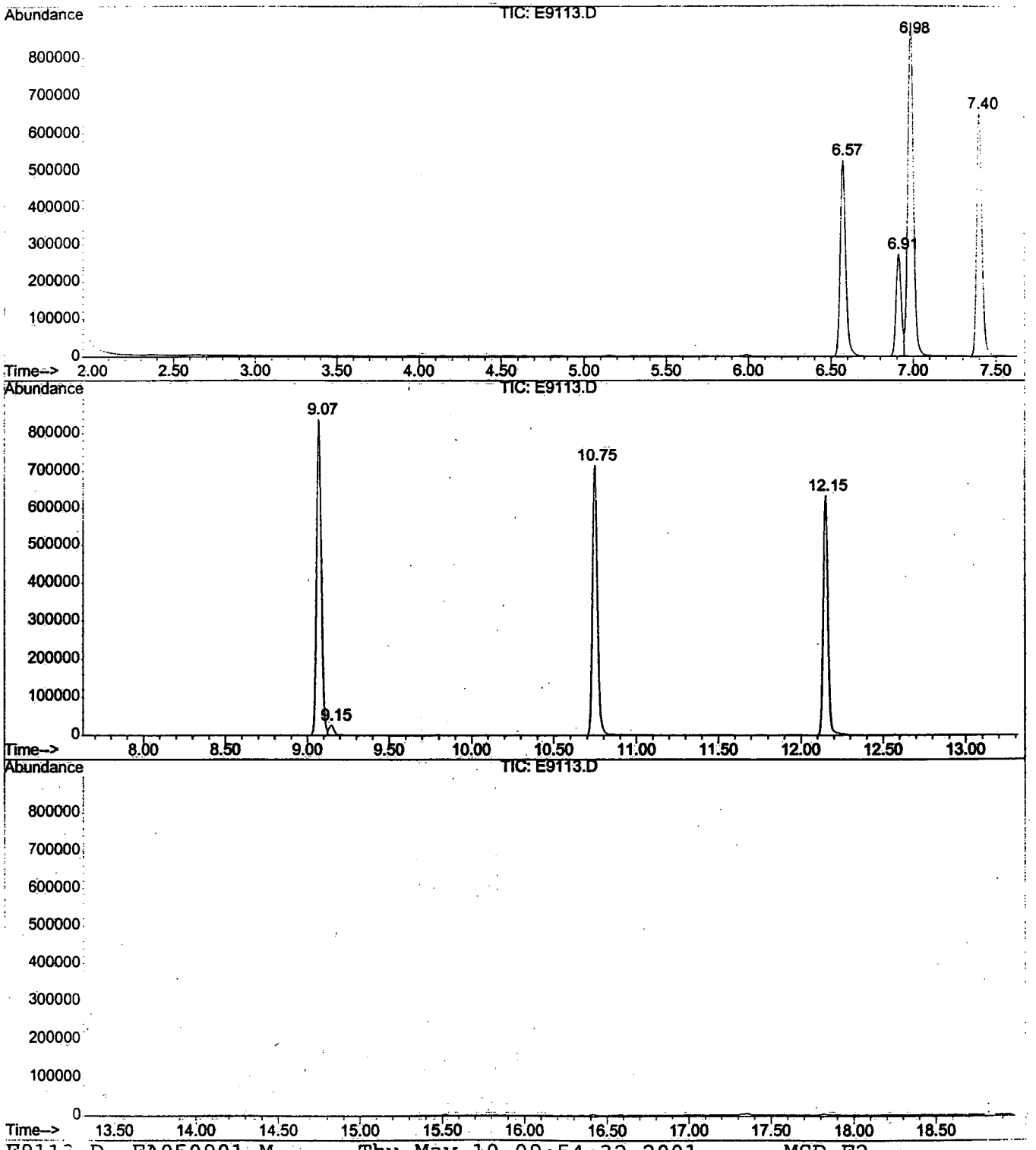
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.571	874	886	915	rBV2	528618	1233698	58.73%	12.449%
2	6.911	939	951	957	rBV	274848	626883	29.84%	6.326%
3	6.985	957	965	991	rVB	896893	2100745	100.00%	21.199%
4	7.398	1033	1044	1068	rBV	652440	1450438	69.04%	14.637%
5	9.071	1352	1364	1374	rBV	839499	1701608	81.00%	17.171%
6	9.150	1374	1379	1390	rVB	25975	53760	2.56%	0.543%
7	10.750	1672	1685	1711	rBV	715877	1480129	70.46%	14.936%
8	12.152	1939	1953	1986	rBV	633866	1262369	60.09%	12.739%

Sum of corrected areas: 9909630

E9113.D EA050901.M Thu May 10 09:54:31 2001 MSD_E2

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-09-01\E9113.D
Operator : AMY
Acquired : 10 May 2001 1:36 am using AcqMethod EA042501
Instrument : MSD_E2
Sample Name: MW-2,2867-002,A,0.01mL,100
Misc Info : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
Vial Number: 30
Quant File :EA050901.RES (RTE Integrator)



E9113.D EA050901.M Thu May 10 09:54:32 2001 MSD_E2

3294

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-09-01\E9114.D Vial: 31
Acq On : 10 May 2001 2:03 am Operator: AMY
Sample : MW-3,2867-003,A,0.005mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 9:18 2001 Quant Results File: EA050901.RES

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration
DataAcq Meth : EA042501

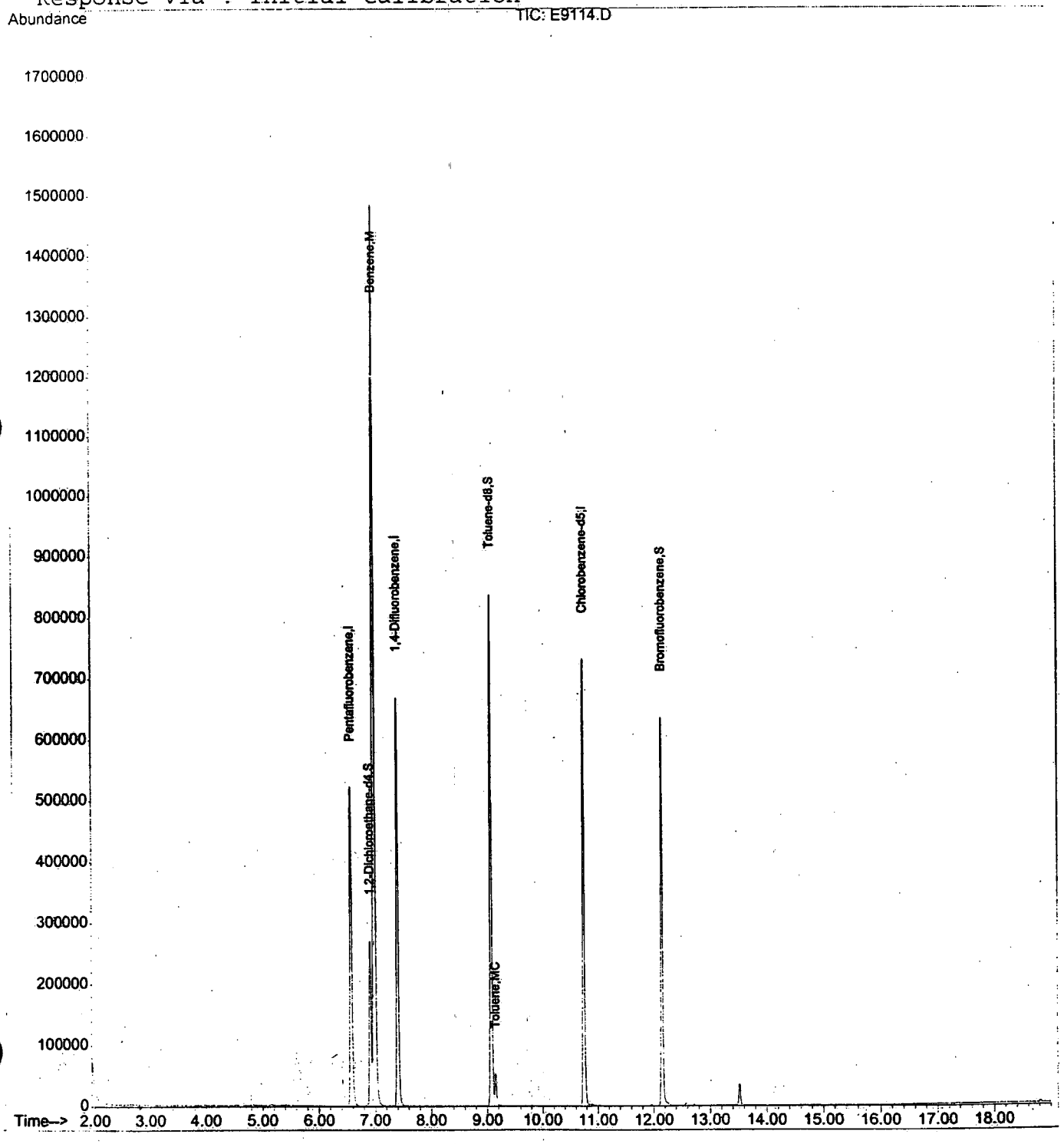
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.57	168	408364	30.00	UG	0.00
31) 1,4-Difluorobenzene	7.40	114	602998	30.00	UG	0.00
50) Chlorobenzene-d5	10.75	117	451802	30.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.91	65	236278	30.86	UG	0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 102.87%			
41) Toluene-d8	9.07	98	586707	29.00	UG	0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 96.67%			
59) Bromofluorobenzene	12.15	95	269105	28.66	UG	0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 95.53%			
Target Compounds						Qvalue
32) Benzene	6.98	78	1511618	57.47	UG	100
42) Toluene	9.15	92	25389	1.54	UG	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9114.D Vial: 31
Acq On : 10 May 2001 2:03 am Operator: AMY
Sample : MW-3,2867-003,A,0.005mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 9:18 2001 Quant Results File: EA050901.RES

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration



3296

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9114.D Vial: 31
Acq On : 10 May 2001 2:03 am Operator: AMY
Sample : MW-3,2867-003,A,0.005mL,100 Inst : MSD_E2
'isc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
.S Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
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

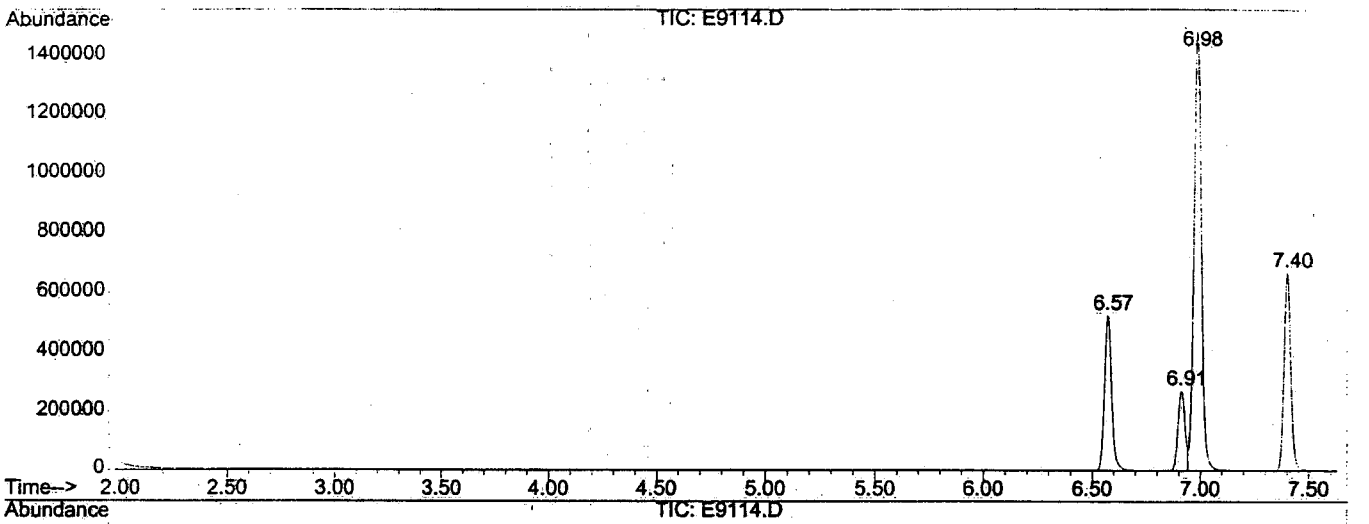
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.569	873	885	914	rBV	522780	1239550	34.88%	10.790%
2	6.909	939	950	956	rBV	270738	618869	17.41%	5.387%
3	6.982	956	964	998	rVB	1486491	3554093	100.00%	30.938%
4	7.400	1033	1044	1066	rBV	668054	1462765	41.16%	12.733%
5	9.074	1350	1364	1373	rBV	836976	1706113	48.00%	14.851%
6	9.147	1373	1378	1393	rVB	52712	113397	3.19%	0.987%
7	10.748	1673	1684	1705	rBV	731675	1485628	41.80%	12.932%
8	12.149	1939	1952	1986	rBV	635550	1239127	34.86%	10.786%
9	13.520	2207	2214	2226	rBV	35473	68318	1.92%	0.595%

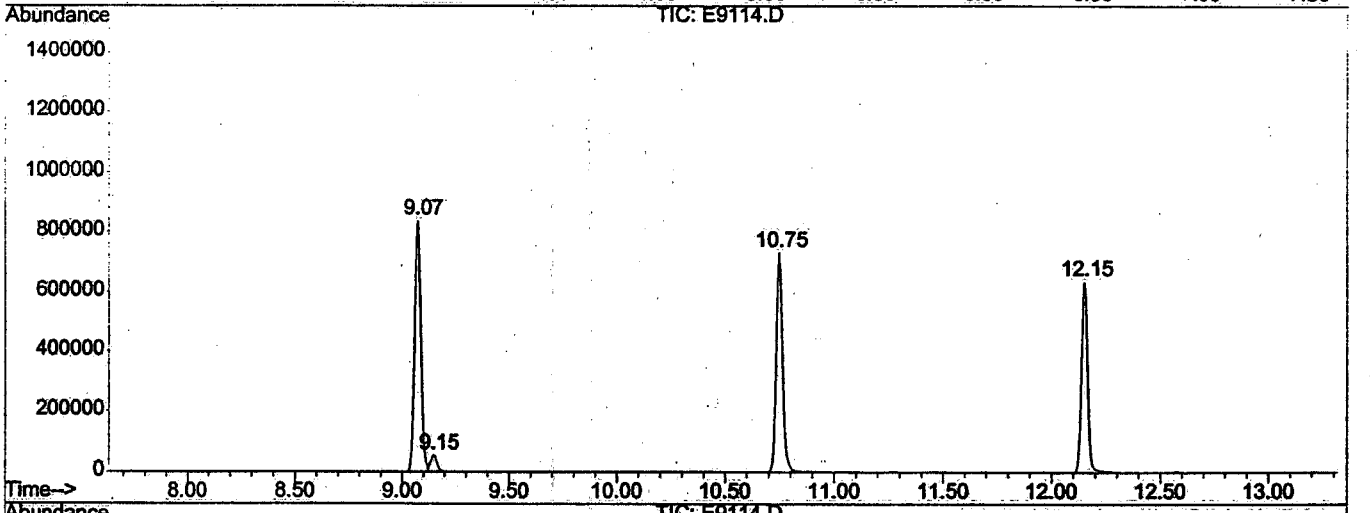
Sum of corrected areas: 11487860

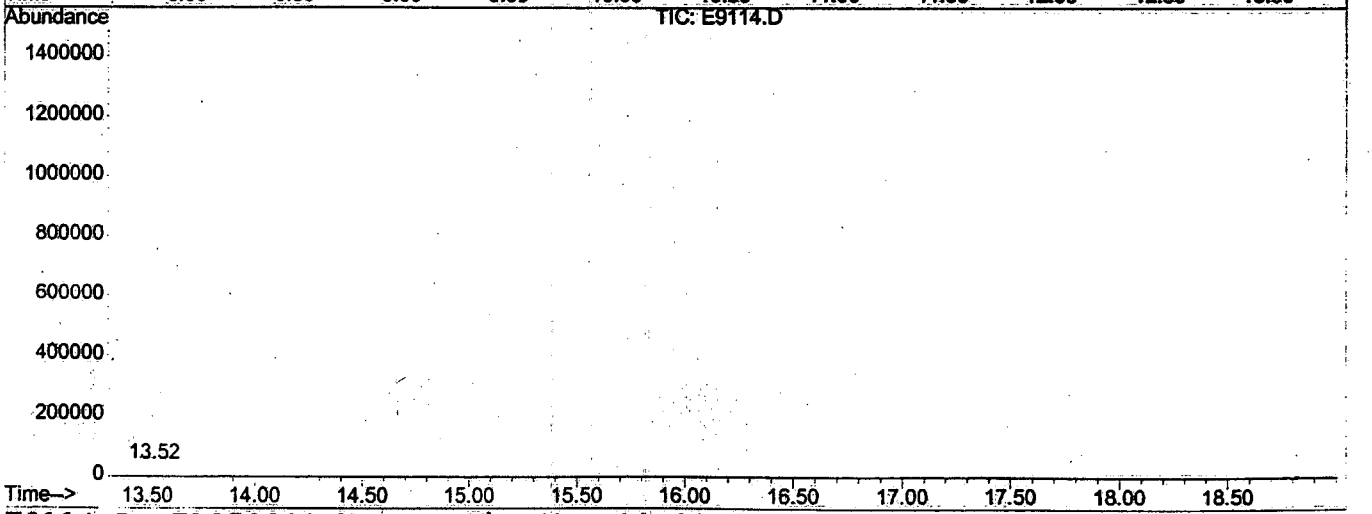
E9114.D EA050901.M Thu May 10 09:54:45 2001 MSD_E2

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-09-01\E9114.D
Operator : AMY
Acquired : 10 May 2001 2:03 am using AcqMethod EA042501
Instrument : MSD_E2
Sample Name: MW-3,2867-003,A,0.005mL,100
Misc Info : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
Vial Number: 31
Quant File :EA050901.RES (RTE Integrator)







E9114.D EA050901.M Thu May 10 09:54:46 2001 MSD_E2

3298

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-09-01\E9115.D Vial: 32
Acq On : 10 May 2001 2:31 am Operator: AMY
Sample : MW-5,2867-004,A,0.01mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 9:19 2001 Quant Results File: EA050901.RES

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration
DataAcq Meth : EA042501

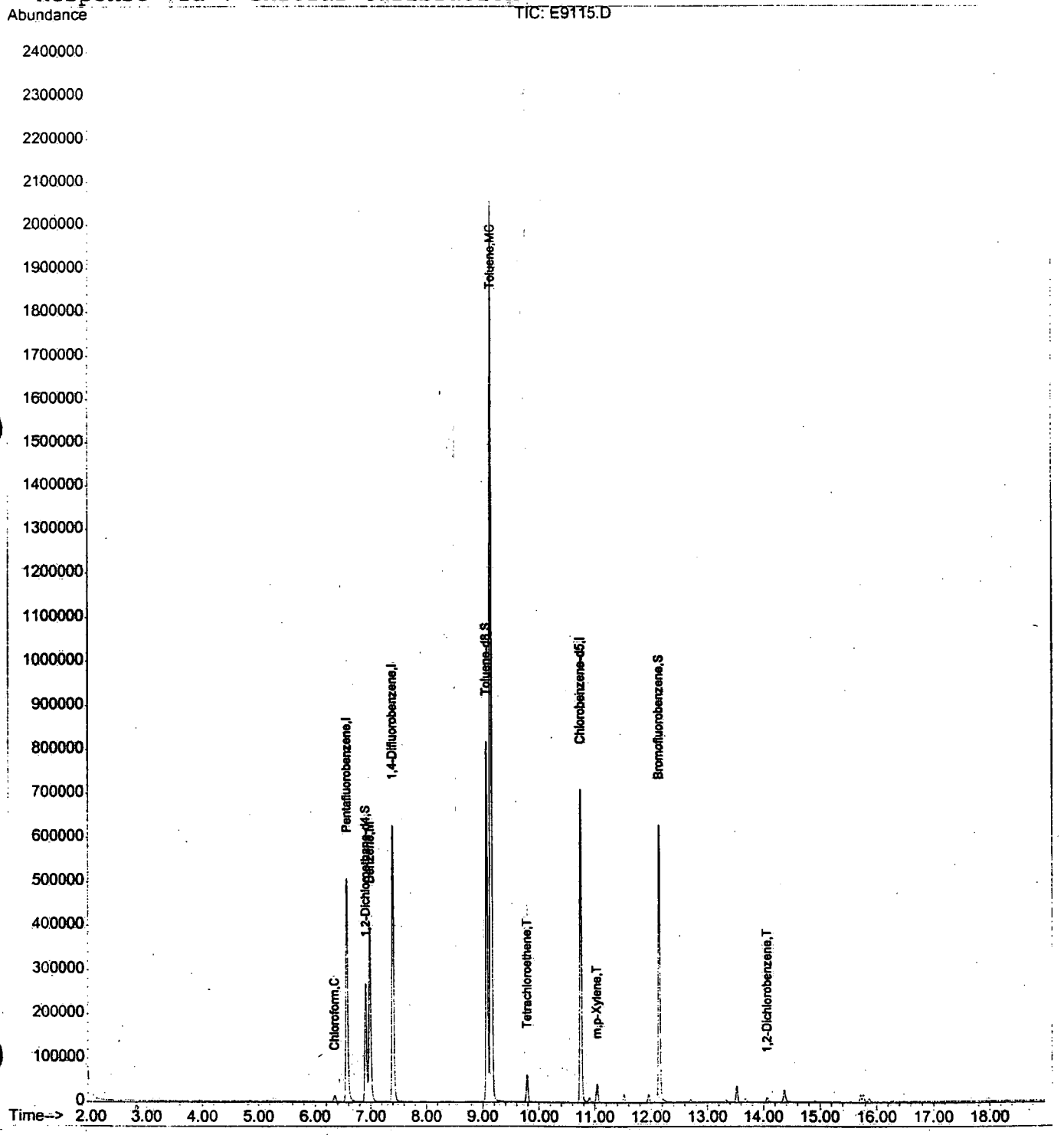
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.57	168	390958	30.00	UG		0.00
31) 1,4-Difluorobenzene	7.40	114	573110	30.00	UG		0.00
50) Chlorobenzene-d5	10.75	117	444565	30.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.91	65	229168	31.26	UG		0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 104.20%				
41) Toluene-d8	9.07	98	568936	29.59	UG		0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 98.63%				
59) Bromofluorobenzene	12.15	95	271971	29.43	UG		0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 98.10%				
Target Compounds							Qvalue
25) Chloroform	6.35	83	13788	1.30	UG		100
32) Benzene	6.98	78	379333	15.17	UG		100
42) Toluene	9.15	92	1012341	64.77	UG		98
45) Tetrachloroethene	9.79	166	21782	4.21	UG	#	78
54) m,p-Xylene	11.04	106	13393	1.23	UG		96
74) 1,2-Dichlorobenzene	14.07	146	4673	0.40	UG	#	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9115.D Vial: 32
Acq On : 10 May 2001 2:31 am Operator: AMY
Sample : MW-5,2867-004,A,0.01mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 9:19 2001 Quant Results File: EA050901.RES

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration



3300

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9115.D Vial: 32
Acq On : 10 May 2001 2:31 am Operator: AMY
Sample : MW-5,2867-004,A,0.01mL,100 Inst : MSD_E2
'isc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
iS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
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

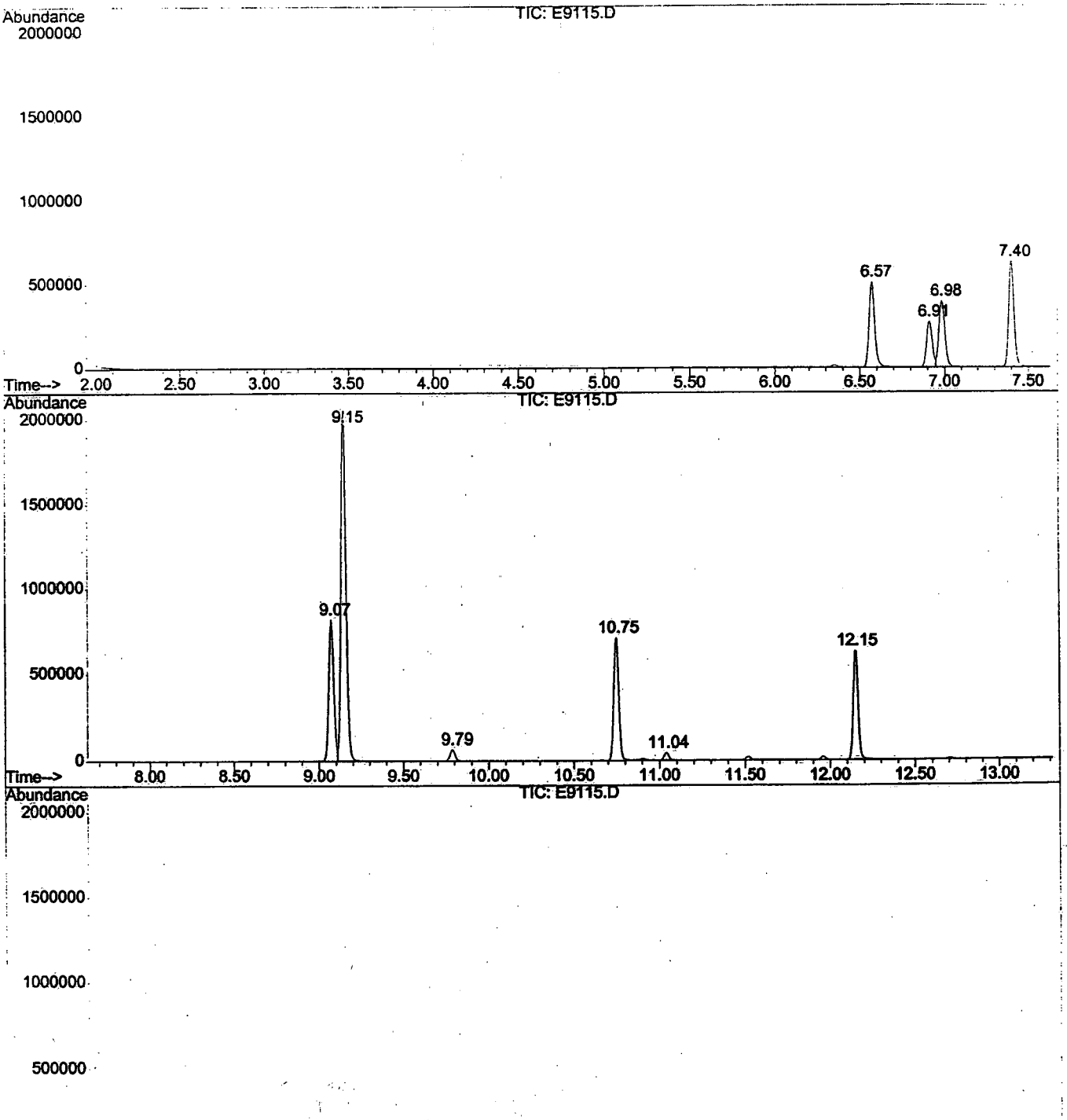
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.572	873	886	916	rBV	507540	1189637	27.57%	9.060%
2	6.912	938	951	958	rBV	269775	619794	14.36%	4.720%
3	6.985	958	965	990	rVB	392008	932959	21.62%	7.105%
4	7.398	1033	1044	1069	rBV	627417	1393540	32.29%	10.613%
5	9.072	1353	1364	1371	rBV2	819094	1644469	38.11%	12.524%
6	9.150	1371	1379	1404	rVB	2055605	4315226	100.00%	32.863%
7	9.788	1490	1501	1514	rBV	64137	131774	3.05%	1.004%
8	10.751	1674	1685	1704	rBV	709176	1420128	32.91%	10.815%
9	11.038	1732	1740	1751	rVB	41977	83855	1.94%	0.639%
10	12.147	1941	1952	1985	rBV	628120	1258665	29.17%	9.585%
11	13.523	2206	2215	2225	rBV	37574	69176	1.60%	0.527%
12	14.365	2366	2376	2397	rBV2	28601	71797	1.66%	0.547%

Sum of corrected areas: 13131020

E9115.D EA050901.M Thu May 10 09:54:56 2001 MSD_E2

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-09-01\E9115.D
Operator : AMY
Acquired : 10 May 2001 2:31 am using AcqMethod EA042501
Instrument : MSD_E2
Sample Name: MW-5,2867-004,A,0.01mL,100
Misc Info : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
Vial Number: 32
Quant File :EA050901.RES (RTE Integrator)



E9115.D EA050901.M Thu May 10 09:54:58 2001 MSD_E2

3302

000133

Quantitation Report (QT/LSC Reviewed)

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D Vial: 33
Acq On : 10 May 2001 2:59 am Operator: AMY
Sample : MW-6,2867-005,A,0.5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 9:20 2001 Quant Results File: EA050901.RES

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration
DataAcq Meth : EA042501

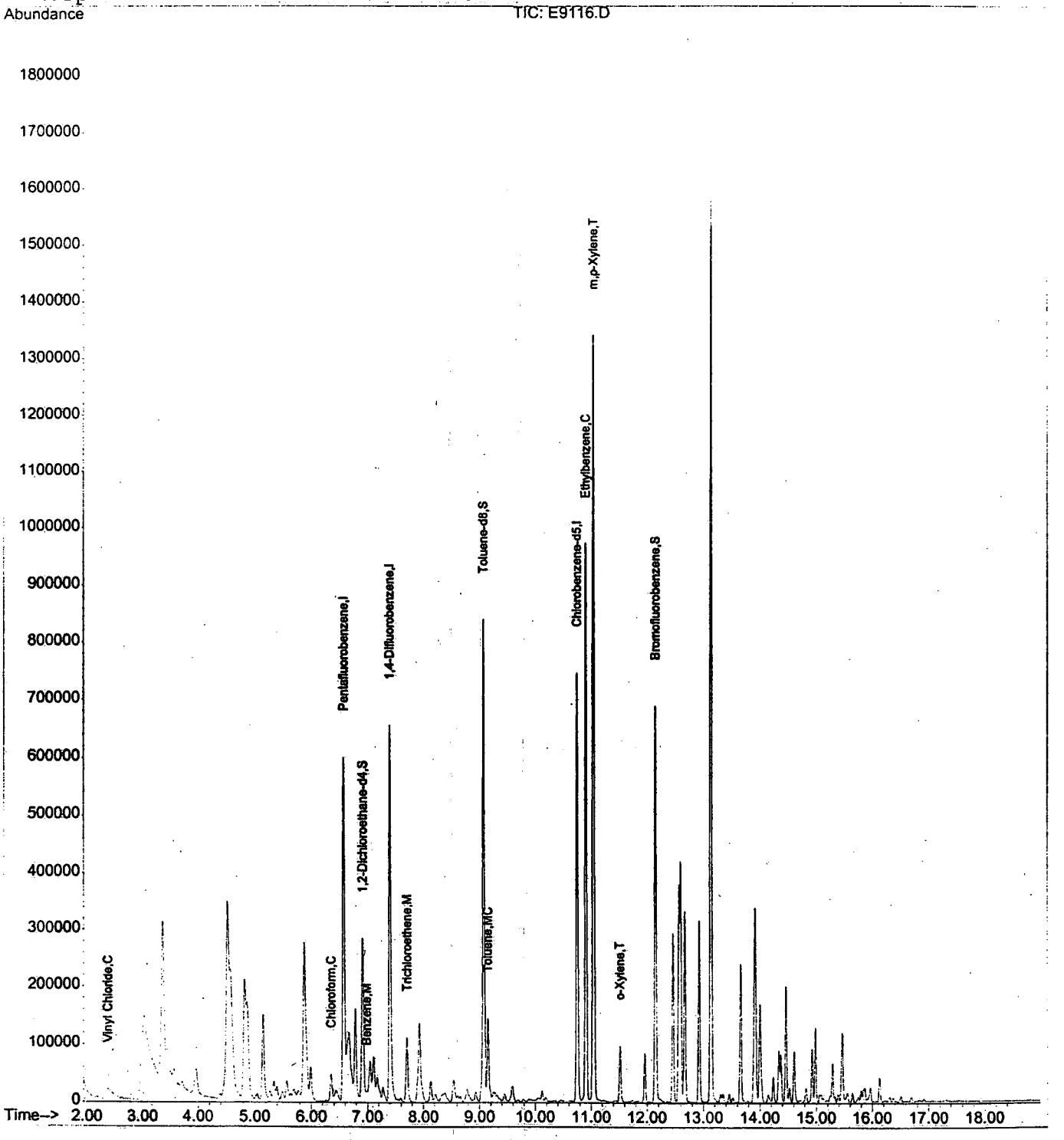
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.57	168	402137	30.00	UG		0.00
31) 1,4-Difluorobenzene	7.40	114	586021	30.00	UG		0.00
50) Chlorobenzene-d5	10.75	117	454088	30.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.91	65	230472	30.56	UG		0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 101.87%				
41) Toluene-d8	9.07	98	588393	29.92	UG		0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 99.73%				
59) Bromofluorobenzene	12.15	95	286955	30.40	UG		0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 101.33%				
Target Compounds							Qvalue
4) Vinyl Chloride	2.37	62	5485m	1.21	UG		
25) Chloroform	6.35	83	40338	3.69	UG		99
32) Benzene	6.98	78	10016	0.39	UG		99
33) Trichloroethene	7.71	95	42469	7.09	UG	#	68
42) Toluene	9.15	92	67002	4.19	UG		98
53) Ethylbenzene	10.90	91	774744	26.62	UG		100
54) m,p-Xylene	11.04	106	440686	39.55	UG		99
55) o-Xylene	11.52	106	30892	2.76	UG		100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D Vial: 33
Acq On : 10 May 2001 2:59 am Operator: AMY
Sample : MW-6,2867-005,A,0.5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 9:20 2001 Quant Results File: EA050901.RES

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration



33024

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D Vial: 33
Acq On : 10 May 2001 2:59 am Operator: AMY
Sample : MW-6,2867-005,A,0.5mL,100 Inst : MSD_E2
'isc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
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	2.373	71	83	123	rBV4	17541	138779	4.69%	0.439%
2	3.032	186	209	255	rBV4	144005	1656550	55.94%	5.237%
3	3.362	259	272	303	rVB2	271965	1069160	36.10%	3.380%
4	3.958	375	386	415	rVB3	47712	202339	6.83%	0.640%
5	4.518	475	493	500	rBV	338808	1167436	39.42%	3.691%
6	4.821	540	551	556	rBV	203790	581758	19.64%	1.839%
7	5.150	603	614	630	rBV	146827	392858	13.27%	1.242%
8	5.339	643	650	656	rVV3	27298	65079	2.20%	0.206%
9	5.396	657	661	670	rVB2	21873	45406	1.53%	0.144%
10	5.490	671	679	686	rBV3	12666	29892	1.01%	0.094%
11	5.569	686	694	703	rBV3	30284	76199	2.57%	0.241%
12	5.872	740	752	768	rBV	267136	886292	29.93%	2.802%
13	5.987	768	774	797	rVB	60043	160610	5.42%	0.508%
14	6.348	831	843	852	rBV2	46784	120476	4.07%	0.381%
15	6.437	853	860	875	rVB7	16714	60278	2.04%	0.191%
16	6.573	875	886	894	rBV2	596977	1424460	48.10%	4.503%
17	6.782	918	926	940	rVB	152375	371637	12.55%	1.175%
18	6.913	941	951	961	rBV	276142	619375	20.91%	1.958%
19	7.039	967	975	981	rBV4	53910	130961	4.42%	0.414%
20	7.107	982	988	995	rVV4	63747	162167	5.48%	0.513%
21	7.175	996	1001	1014	rVB2	34364	99778	3.37%	0.315%
22	7.274	1014	1020	1034	rVB3	23755	66856	2.26%	0.211%
23	7.399	1034	1044	1066	rBV	652798	1486982	50.21%	4.701%
24	7.708	1091	1103	1127	rVB	111942	277276	9.36%	0.877%
25	7.928	1127	1145	1168	rBV3	137194	455899	15.39%	1.441%
26	8.137	1171	1185	1193	rBV	35469	82499	2.79%	0.261%
27	8.215	1193	1200	1213	rVB6	11262	30072	1.02%	0.095%
28	8.351	1213	1226	1227	rBV5	11629	33395	1.13%	0.106%
29	8.540	1251	1262	1271	rBV4	36739	105873	3.58%	0.335%
30	8.775	1295	1307	1323	rBV5	20496	77657	2.62%	0.246%
31	8.932	1329	1337	1348	rVB4	15377	35531	1.20%	0.112%

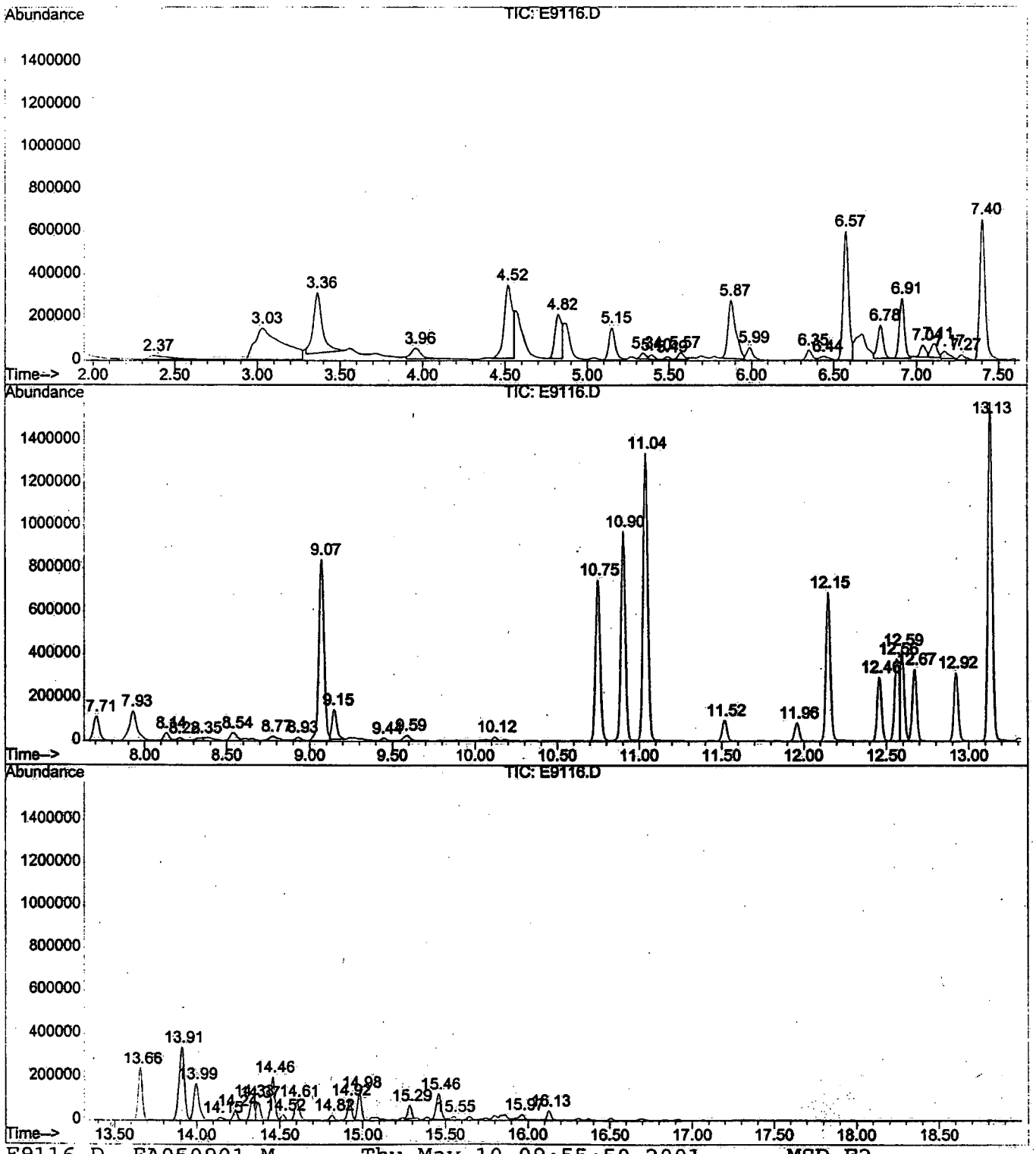
32	9.073	1348	1364	1373	rBV	838704	1790507	60.46%	5.660%
33	9.146	1373	1378	1391	rVB	137151	282919	9.55%	0.894%
34	9.444	1427	1435	1447	rVB4	12176	30536	1.03%	0.097%
35	9.586	1449	1462	1476	rVB4	26132	76479	2.58%	0.242%
	10.119	1558	1564	1571	rVV2	16832	30292	1.02%	0.096%
7	10.747	1673	1684	1698	rBV	746532	1463150	49.41%	4.626%
8	10.904	1699	1714	1725	rVV	971653	1845456	62.32%	5.834%
39	11.040	1729	1740	1763	rVB	1339217	2651407	89.53%	8.382%
40	11.516	1821	1831	1847	rVB	97054	197823	6.68%	0.625%
41	11.960	1906	1916	1925	rBV2	84960	165539	5.59%	0.523%
42	12.148	1940	1952	1986	rBV	688783	1332958	45.01%	4.214%
43	12.457	2001	2011	2022	rBV	294619	545463	18.42%	1.724%
44	12.562	2022	2031	2034	rVV	378963	697763	23.56%	2.206%
45	12.593	2035	2037	2045	rVV	419713	626492	21.15%	1.981%
46	12.671	2045	2052	2066	rVB	331519	621959	21.00%	1.966%
47	12.922	2088	2100	2115	rBV	316608	608704	20.55%	1.924%
48	13.132	2123	2140	2164	rBV	1578165	2961462	100.00%	9.362%
49	13.660	2227	2241	2260	rBV	240425	464854	15.70%	1.470%
50	13.911	2275	2289	2298	rBV4	339315	804234	27.16%	2.542%
51	13.995	2298	2305	2325	rVB4	169077	397850	13.43%	1.258%
52	14.146	2325	2334	2344	rBV3	13393	36090	1.22%	0.114%
53	14.235	2344	2351	2360	rVV	43782	79575	2.69%	0.252%
54	14.335	2362	2370	2374	rVV	89638	177274	5.99%	0.560%
55	14.371	2374	2377	2386	rVV	82348	134208	4.53%	0.424%
56	14.460	2386	2394	2401	rVV	200647	343290	11.59%	1.085%
57	14.523	2401	2406	2413	rVV2	24278	43155	1.46%	0.136%
58	14.607	2413	2422	2434	rVV2	87523	176001	5.94%	0.556%
59	14.816	2451	2462	2469	rVB2	24624	45957	1.55%	0.145%
60	14.920	2469	2482	2488	rBV	93844	169040	5.71%	0.534%
61	14.983	2488	2494	2503	rVB	129036	215531	7.28%	0.681%
62	15.286	2546	2552	2557	rVB	60207	97304	3.29%	0.308%
63	15.459	2576	2585	2595	rVV3	118352	245418	8.29%	0.776%
64	15.548	2596	2602	2612	rVB	15845	32572	1.10%	0.103%
65	15.966	2672	2682	2689	rVB3	23482	54776	1.85%	0.173%
66	16.128	2706	2713	2723	rBV	41526	72554	2.45%	0.229%

Sum of corrected areas: 31632122

E9116.D EA050901.M Thu May 10 09:55:49 2001 MSD_E2

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-09-01\E9116.D
Operator : AMY
Acquired : 10 May 2001 2:59 am using AcqMethod EA042501
Instrument : MSD_E2
Sample Name: MW-6,2867-005,A,0.5mL,100
Misc Info : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
Vial Number: 33
Quant File :EA050901.RES (RTE Integrator)



E9116.D EA050901.M Thu May 10 09:55:50 2001 MSD_E2

CC0133

3307

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D Vial: 33
Acq On : 10 May 2001 2:59 am Operator: AMY
Sample : MW-6,2867-005,A,0.5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

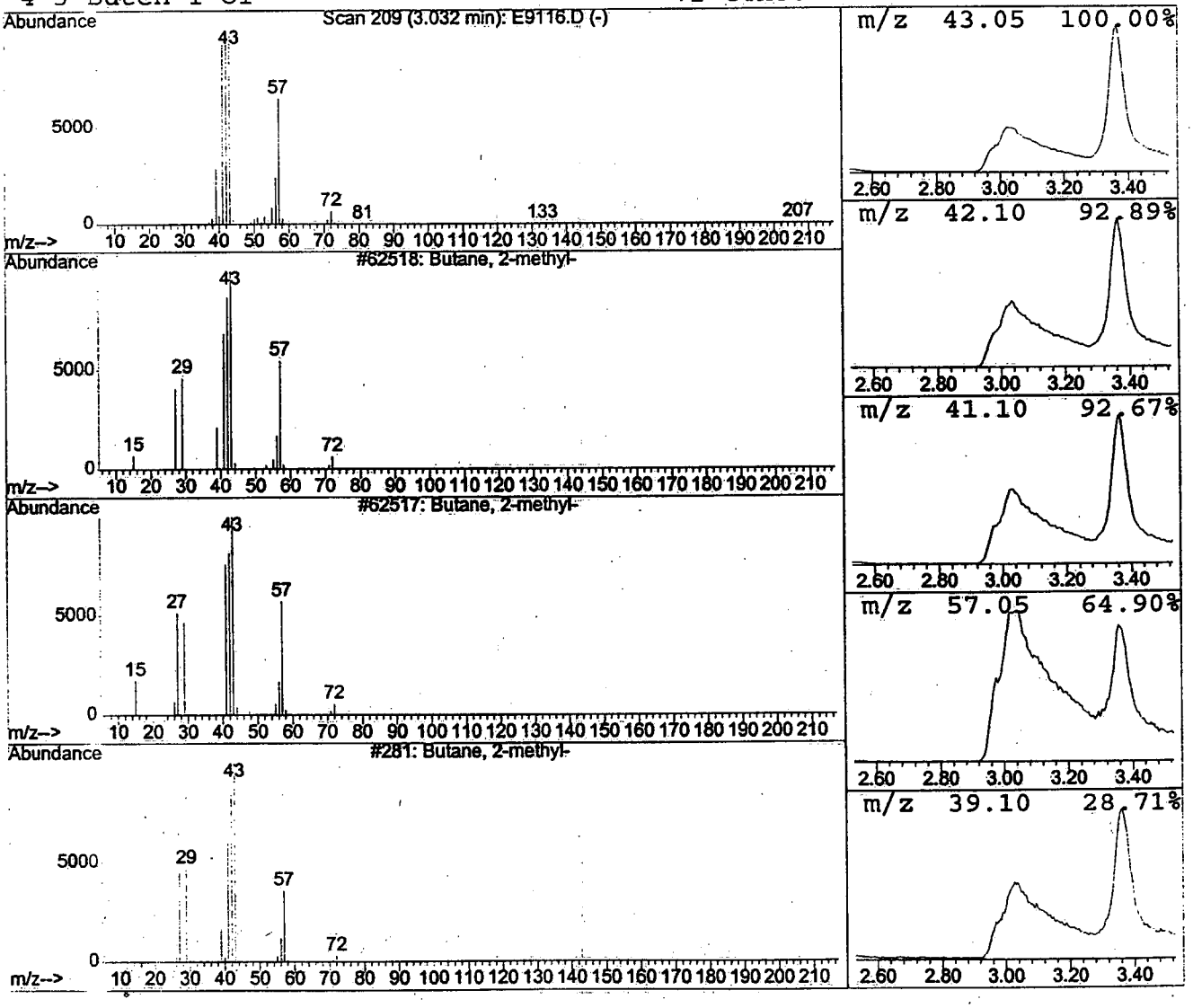
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Unknown alkane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.03	34.89 UG	1656550	Pentafluorobenzene	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	91
2	Butane, 2-methyl-	72	C5H12	000078-78-4	86
3	Butane, 2-methyl-	72	C5H12	000078-78-4	80
4	3-Buten-1-ol	72	C4H8O	000627-27-0	43



33048

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D Vial: 33
Acq On : 10 May 2001 2:59 am Operator: AMY
Sample : MW-6,2867-005,A,0.5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

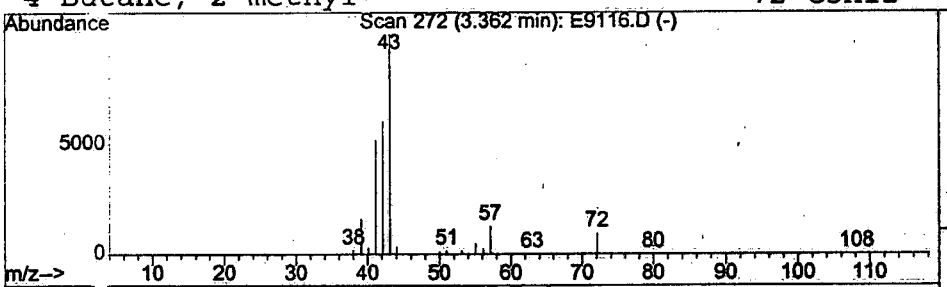
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

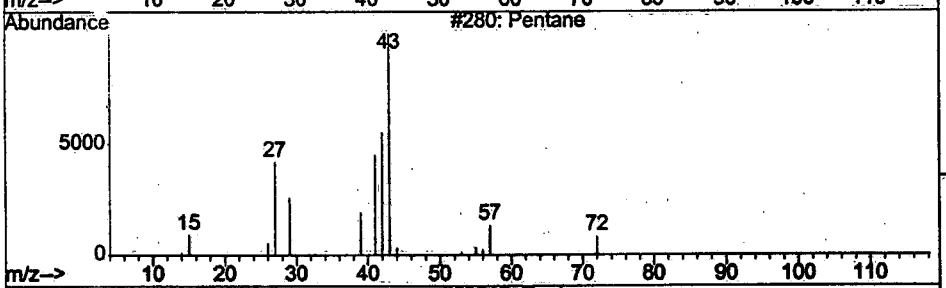
****

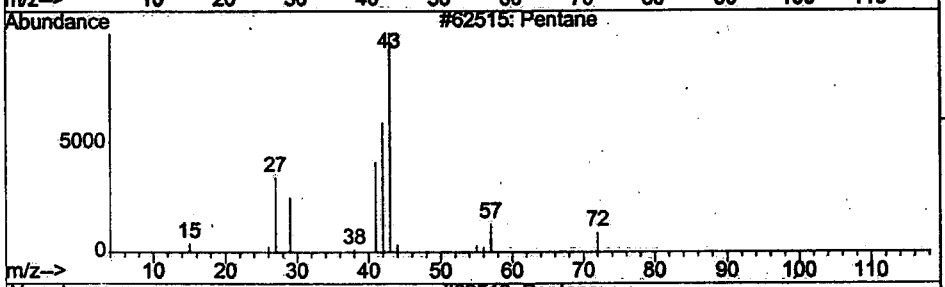
Peak Number 2 Unknown alkane Concentration Rank 4

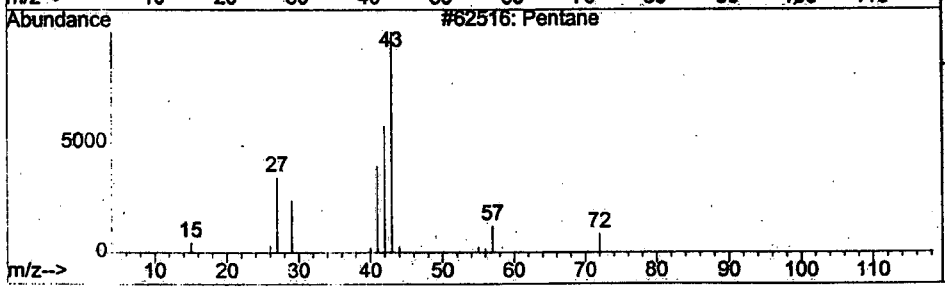
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.36	22.52 UG	1069160	Pentafluorobenzene	6.57

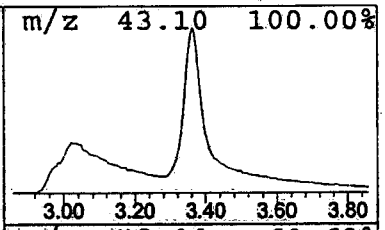
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	90
2	Pentane	72	C5H12	000109-66-0	90
3	Pentane	72	C5H12	000109-66-0	86
4	Butane, 2-methyl-	72	C5H12	000078-78-4	64

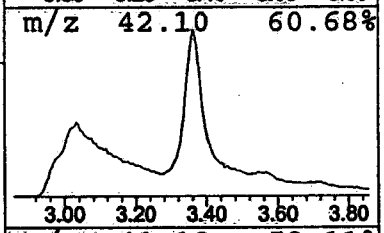


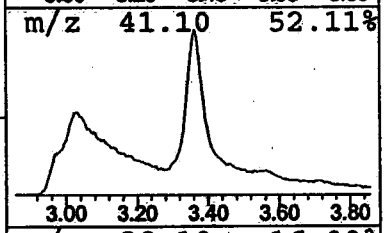


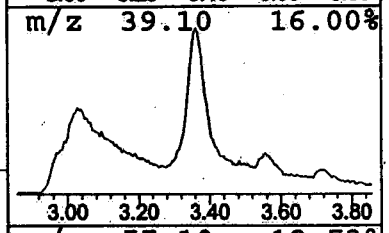


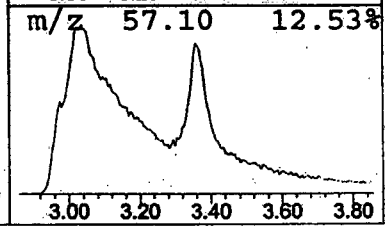












3309

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D Vial: 33
Acq On : 10 May 2001 2:59 am Operator: AMY
Sample : MW-6,2867-005,A,0.5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

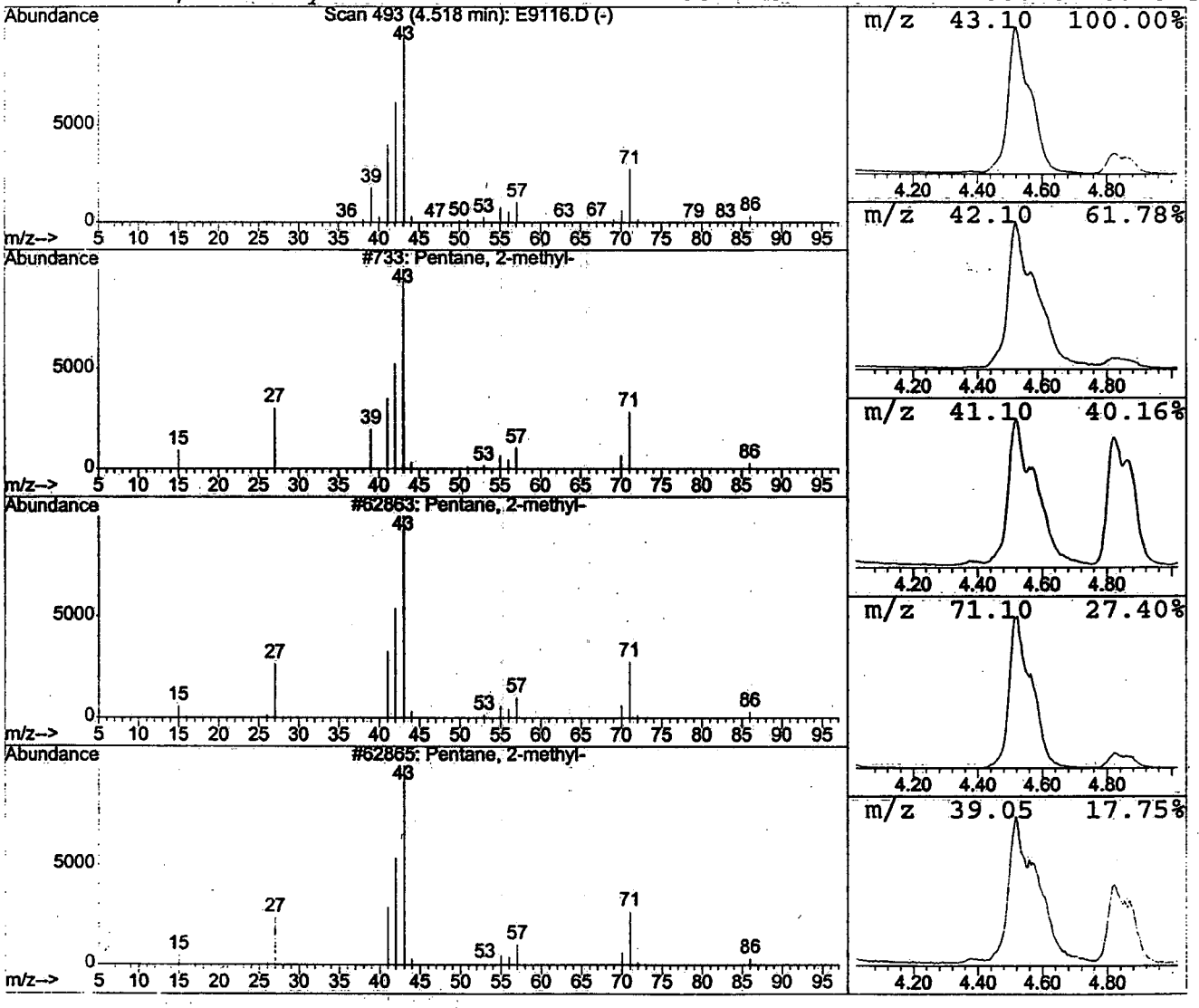
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Unknown alkane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.52	24.59 UG	1167440	Pentafluorobenzene	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	58



3310

CC0141

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D Vial: 33
Acq On : 10 May 2001 2:59 am Operator: AMY
Sample : MW-6,2867-005,A,0.5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

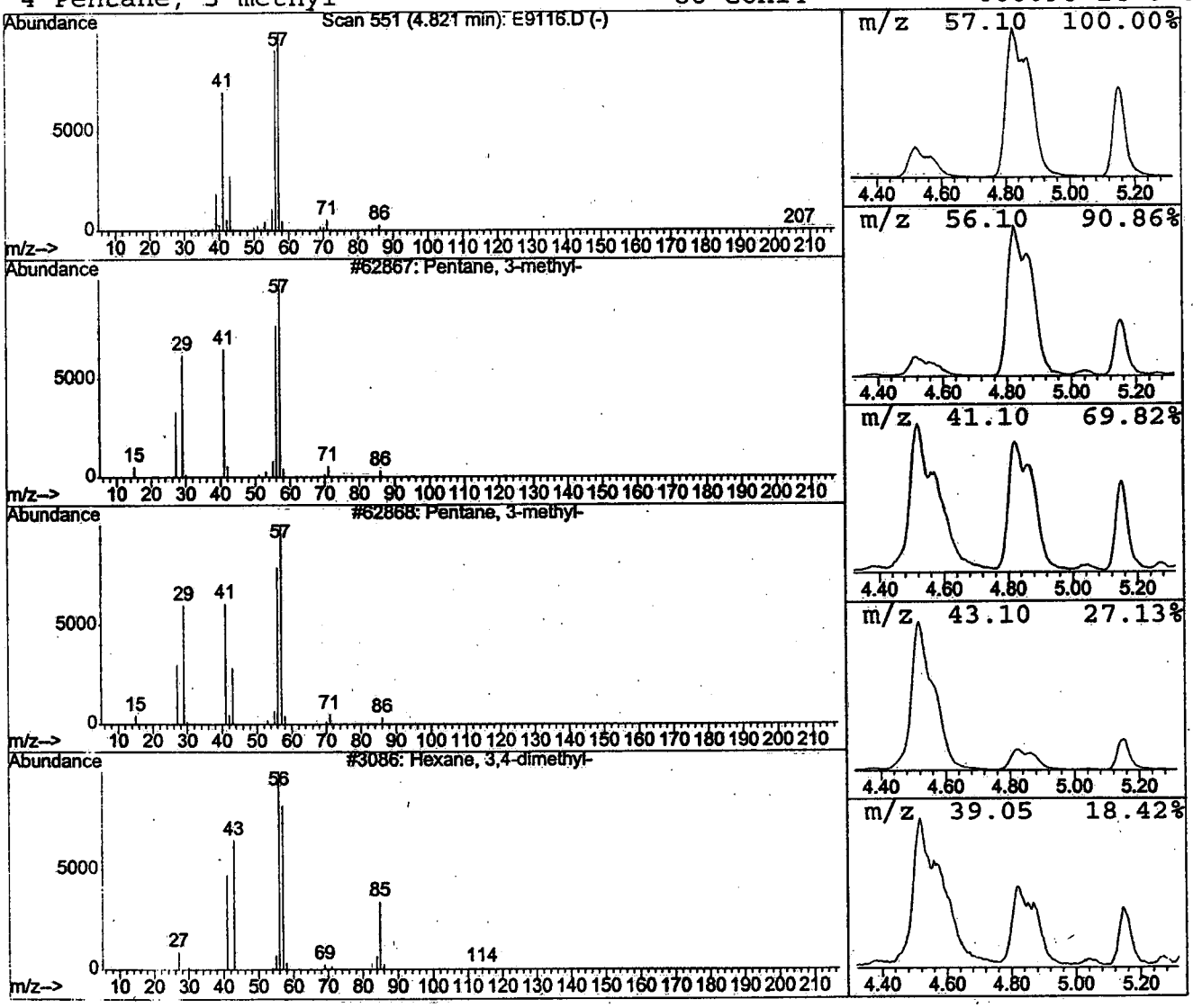
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Unknown alkane Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.82	12.25 UG	581758	Pentafluorobenzene	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
3	Hexane, 3,4-dimethyl-	114	C8H18	000583-48-2	56
4	Pentane, 3-methyl-	86	C6H14	000096-14-0	52



3311

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D Vial: 33
Acq On : 10 May 2001 2:59 am Operator: AMY
Sample : MW-6,2867-005,A,0.5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

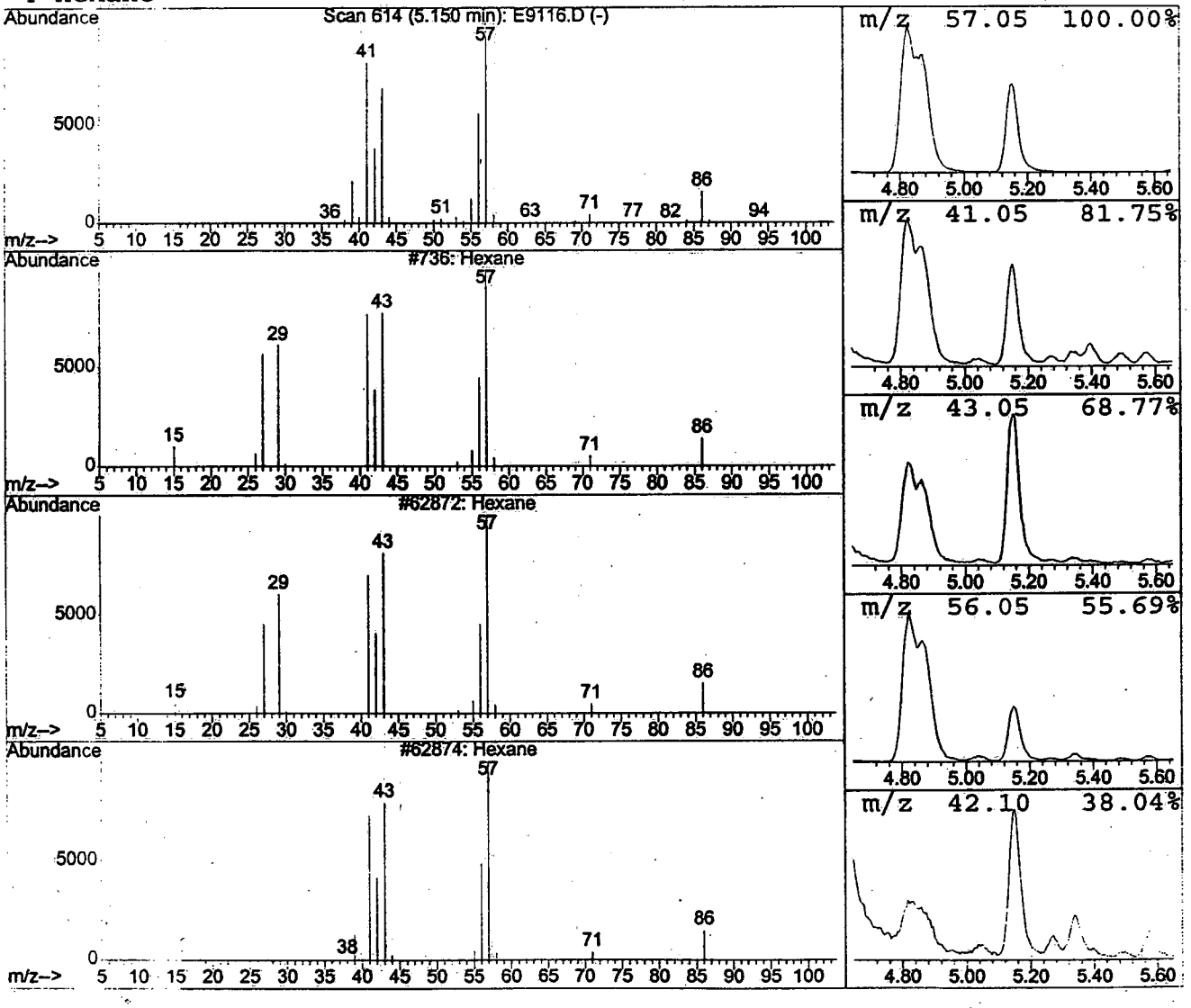
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 5 Unknown alkane Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.15	8.27 UG	392858	Pentafluorobenzene	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane	86	C6H14	000110-54-3	91
2	Hexane	86	C6H14	000110-54-3	90
3	Hexane	86	C6H14	000110-54-3	87
4	Hexane	86	C6H14	000110-54-3	72



3312

CC0143

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D Vial: 33
Acq On : 10 May 2001 2:59 am Operator: AMY
Sample : MW-6,2867-005,A,0.5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

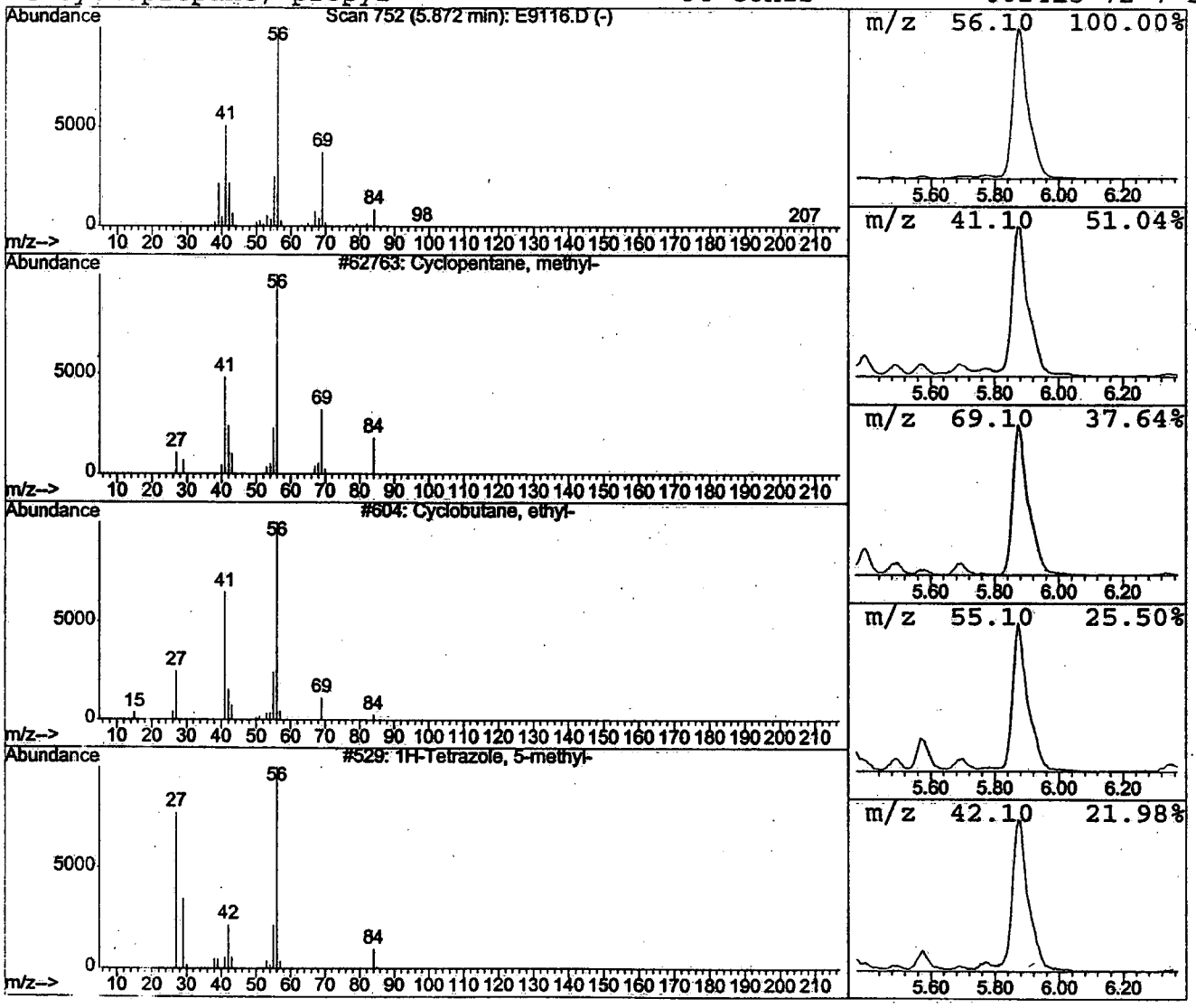
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 6 Unknown cyclic hydrocarbon Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.87	18.67 UG	886292	Pentafluorobenzene	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	83
2	Cyclobutane, ethyl-	84	C6H12	004806-61-5	72
3	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	64
4	Cyclopropane, propyl-	84	C6H12	002415-72-7	56



3313

000144

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D Vial: 33
Acq On : 10 May 2001 2:59 am Operator: AMY
Sample : MW-6,2867-005,A,0.5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

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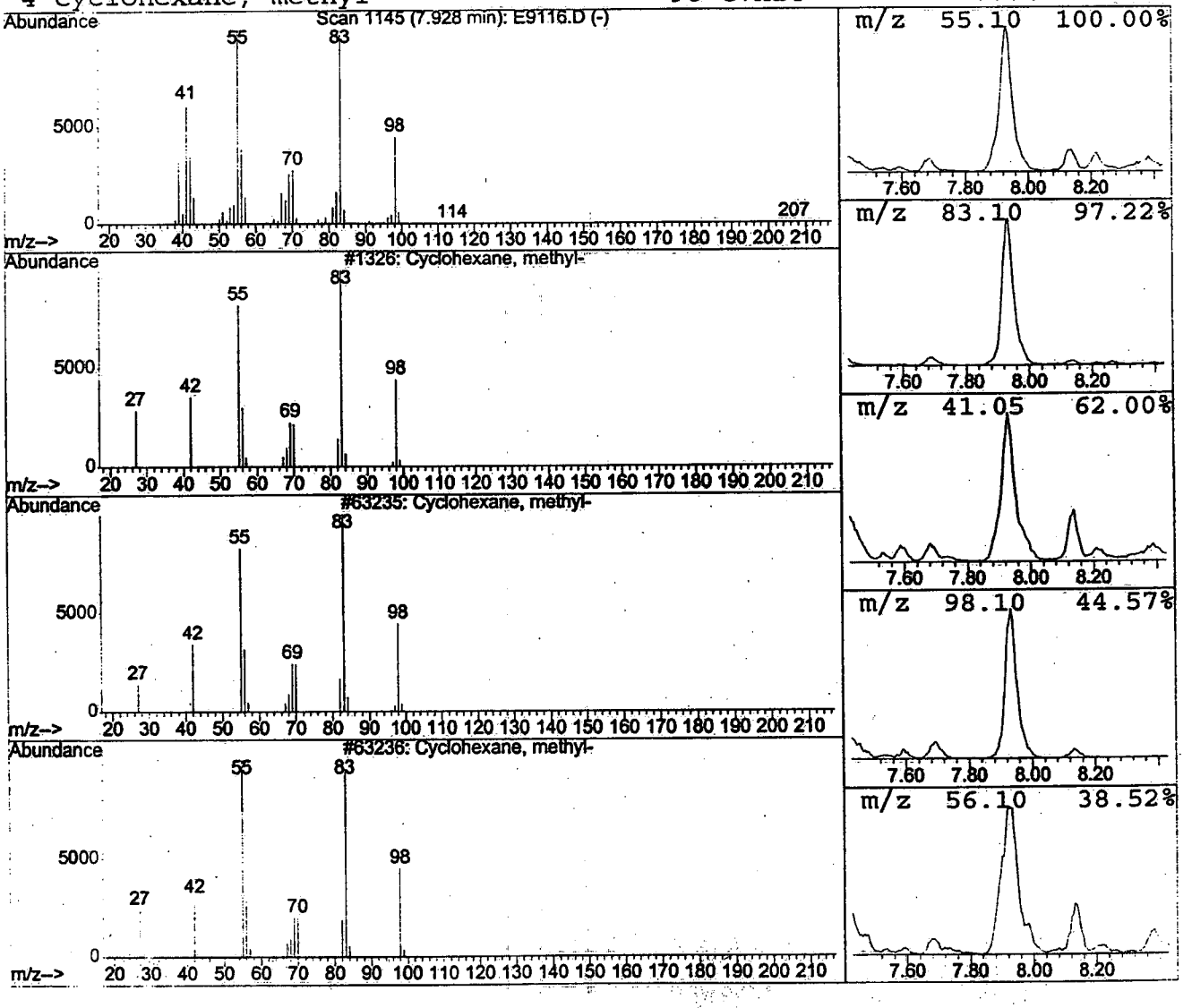
Peak Number 7 Unknown cyclic hydrocarbon Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.93	9.20 UG	455899	1,4-Difluorobenzene	7.40

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, methyl-	98	C7H14	000108-87-2	95
2	Cyclohexane, methyl-	98	C7H14	000108-87-2	95
3	Cyclohexane, methyl-	98	C7H14	000108-87-2	90
4	Cyclohexane, methyl-	98	C7H14	000108-87-2	58



3314

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D
Acq On : 10 May 2001 2:59 am
Sample : MW-6,2867-005,A,0.5mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

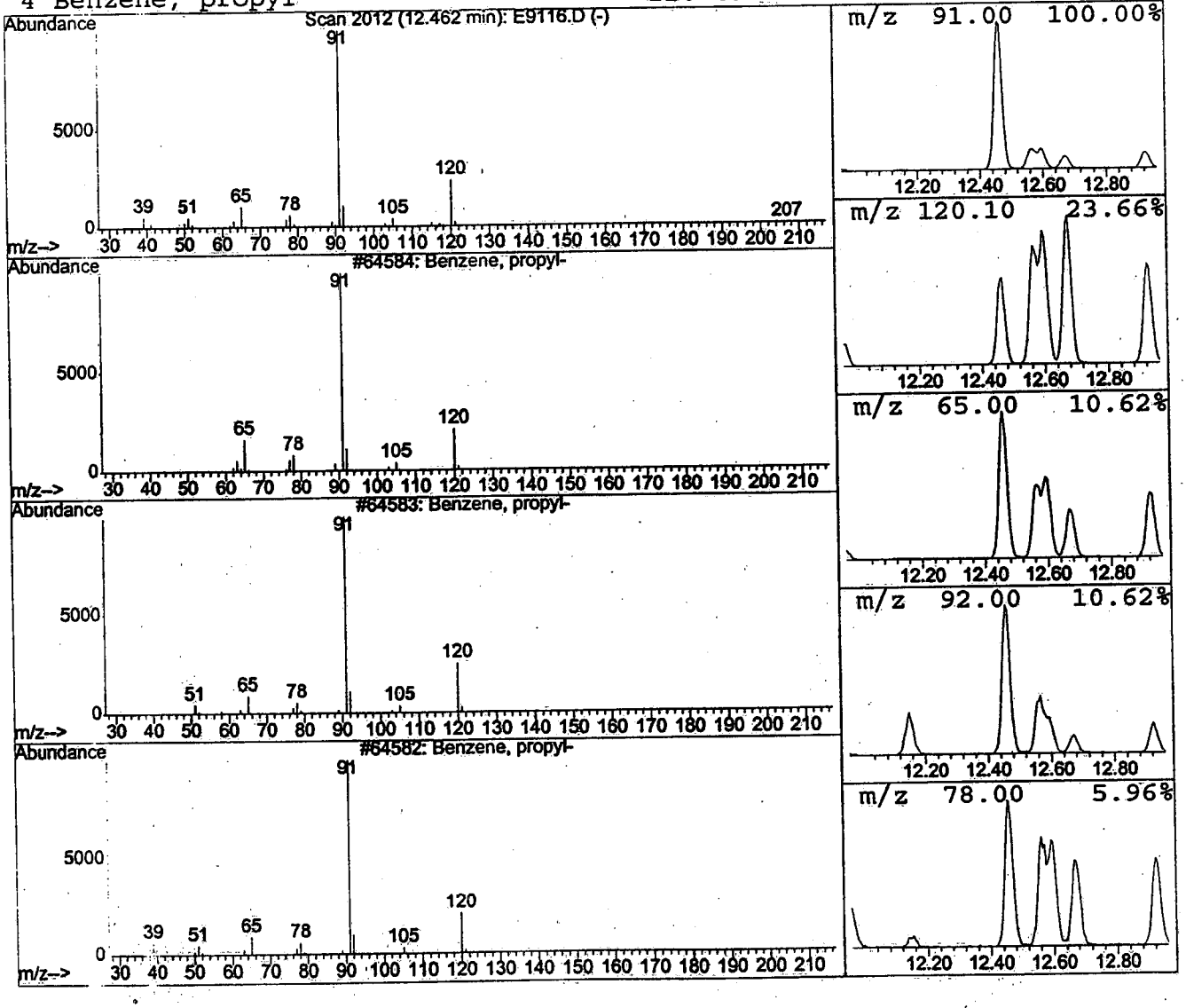
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 8 Substituted benzene Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.46	11.18 UG	545463	Chlorobenzene-d5	10.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, propyl-	120	C9H12	000103-65-1	91
2	Benzene, propyl-	120	C9H12	000103-65-1	91
3	Benzene, propyl-	120	C9H12	000103-65-1	90
4	Benzene, propyl-	120	C9H12	000103-65-1	90



3315

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D
Acq On : 10 May 2001 2:59 am
Sample : MW-6,2867-005,A,0.5mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

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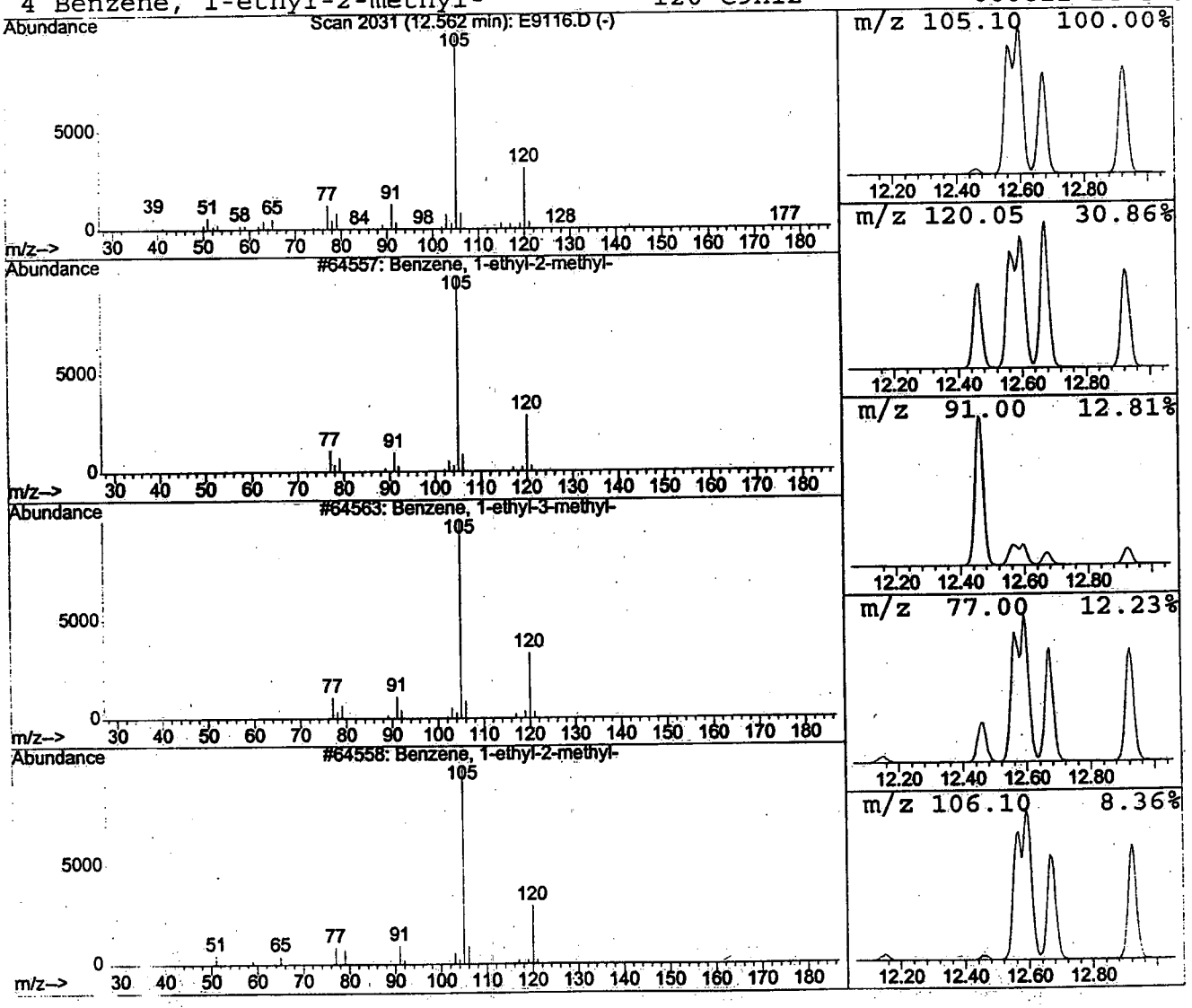
Peak Number 9 Substituted benzene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.56	14.31 UG	697763	Chlorobenzene-d5	10.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	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



3316

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D
Acq On : 10 May 2001 2:59 am
Sample : MW-6,2867-005,A,0.5mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

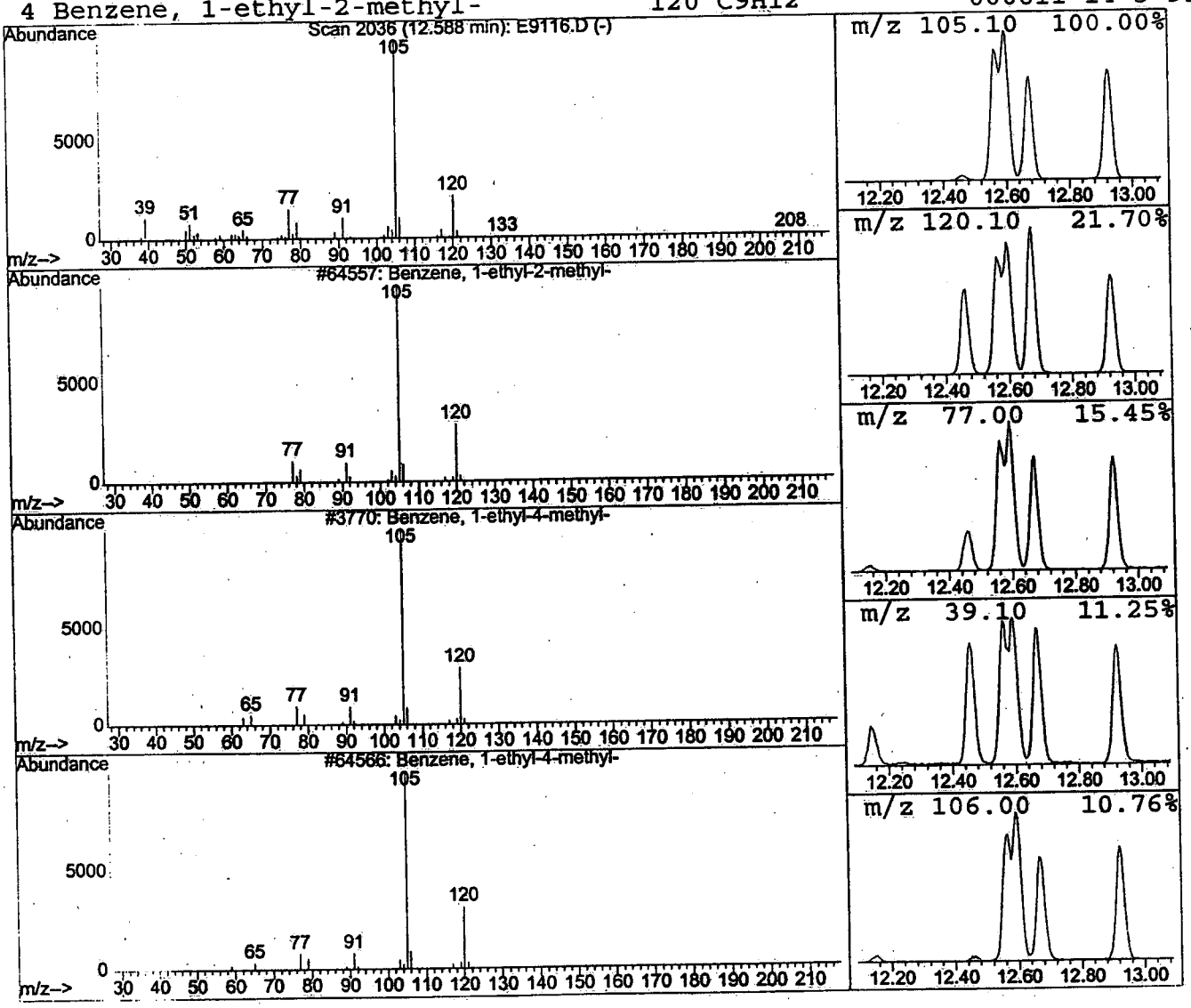
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 10 Substituted benzene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.59	12.85 UG	626492	Chlorobenzene-d5	10.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91
2	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	91
3	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	91
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91



337

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D
Acq On : 10 May 2001 2:59 am
Sample : MW-6,2867-005,A,0.5mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

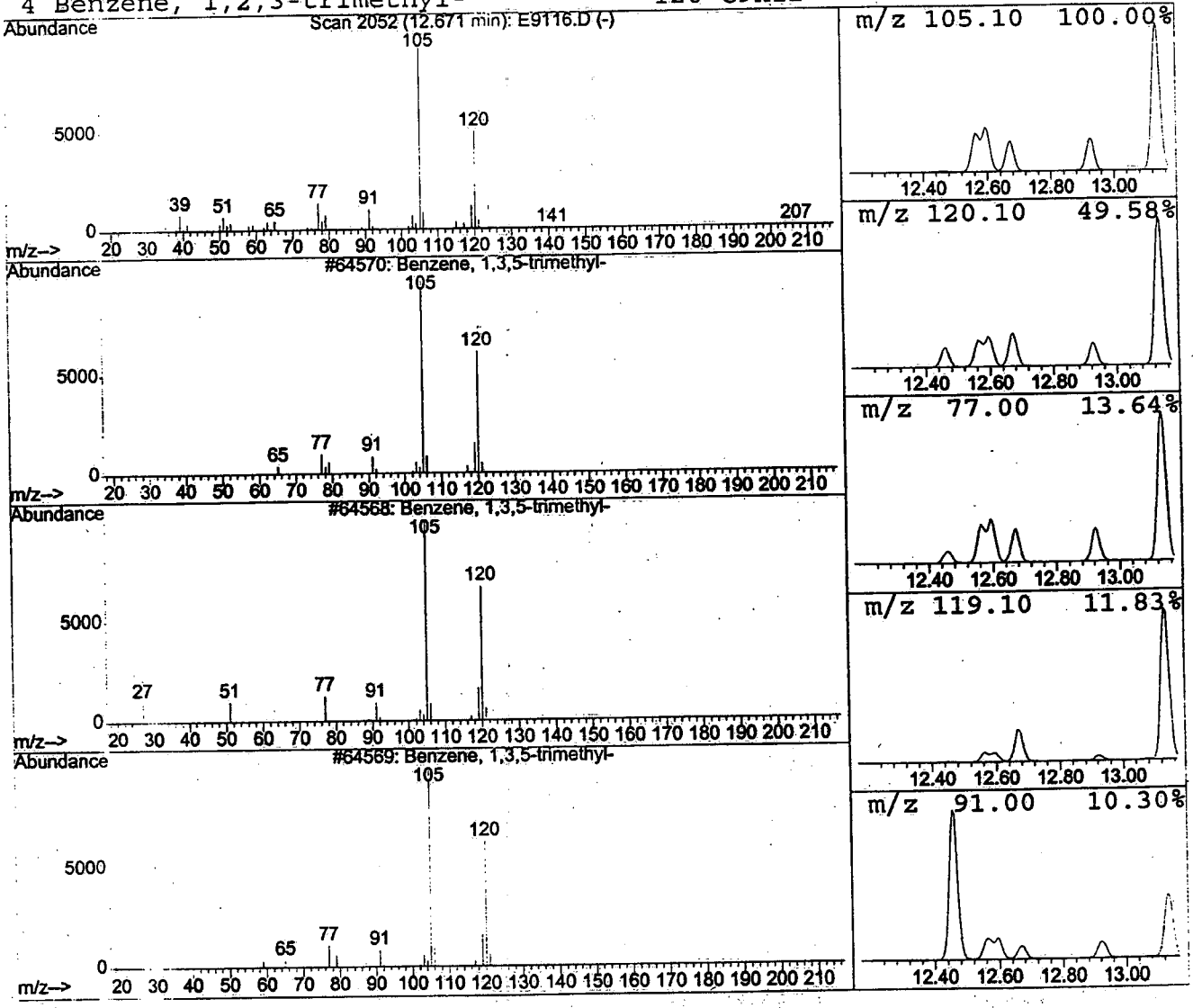
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 11 Substituted benzene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.67	12.75 UG	621959	Chlorobenzene-d5	10.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	97
2	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	95
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	95
4	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95



000149

33146

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D
Acq On : 10 May 2001 2:59 am
Sample : MW-6,2867-005,A,0.5mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

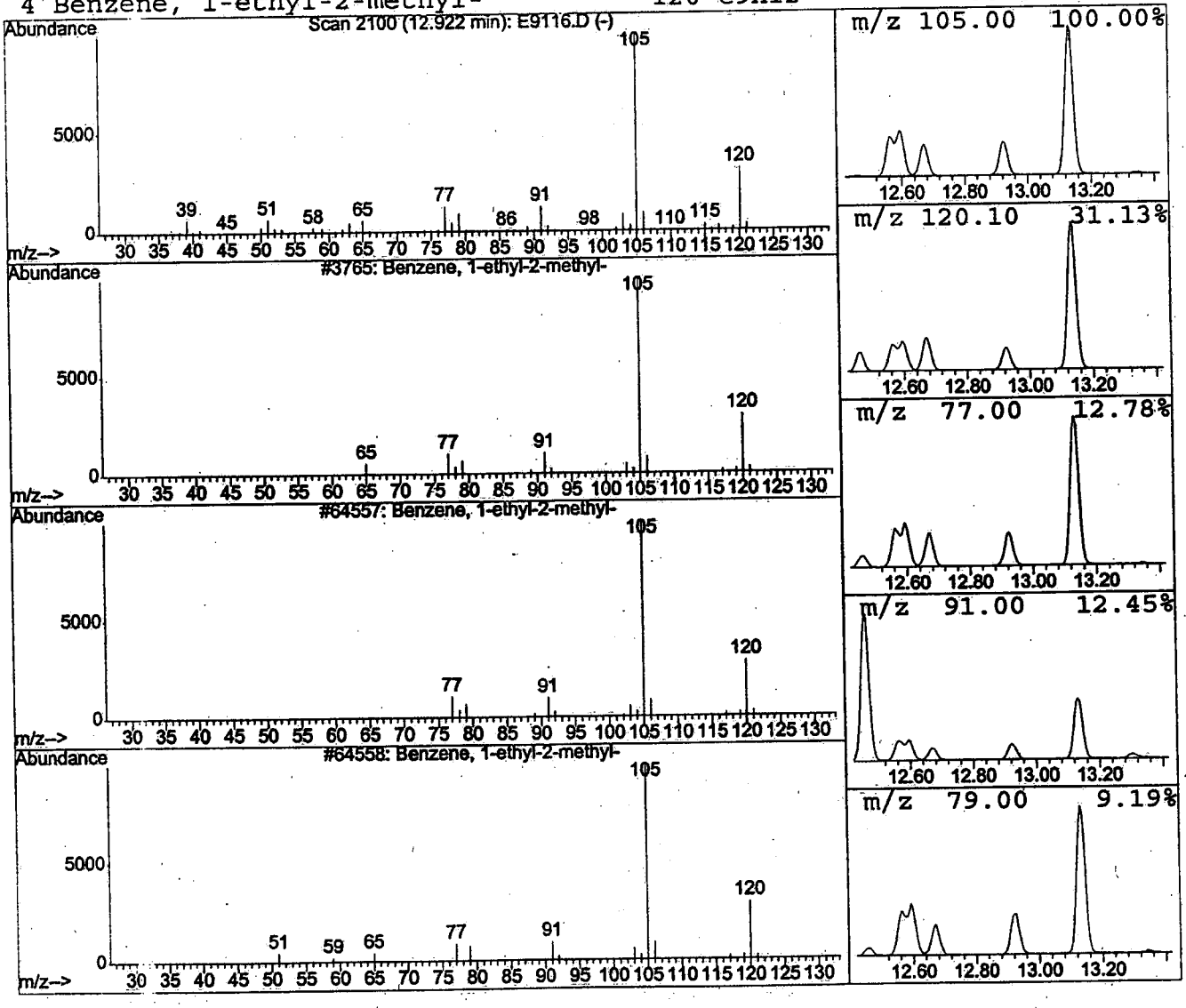
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 12 Substituted benzene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.92	12.48 UG	608704	Chlorobenzene-d5	10.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	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



CC0150

3319

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D
Acq On : 10 May 2001 2:59 am
Sample : MW-6,2867-005,A,0.5mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

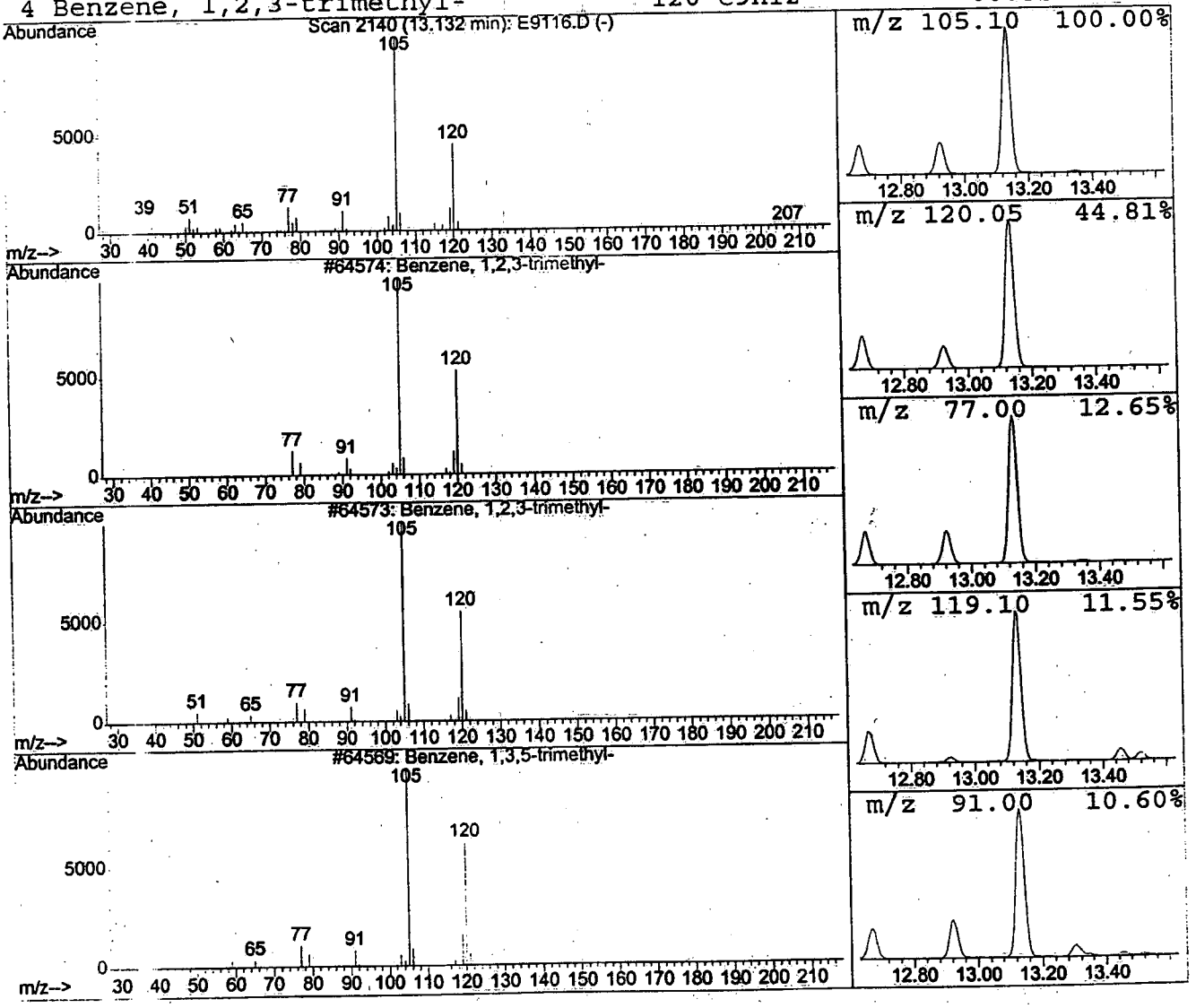
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 13 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.13	60.72 UG	2961460	Chlorobenzene-d5	10.75

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, 1,3,5-trimethyl-	120	C9H12	000108-67-8	95
4	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95



3320

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D
Acq On : 10 May 2001 2:59 am
Sample : MW-6,2867-005,A,0.5mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 33
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

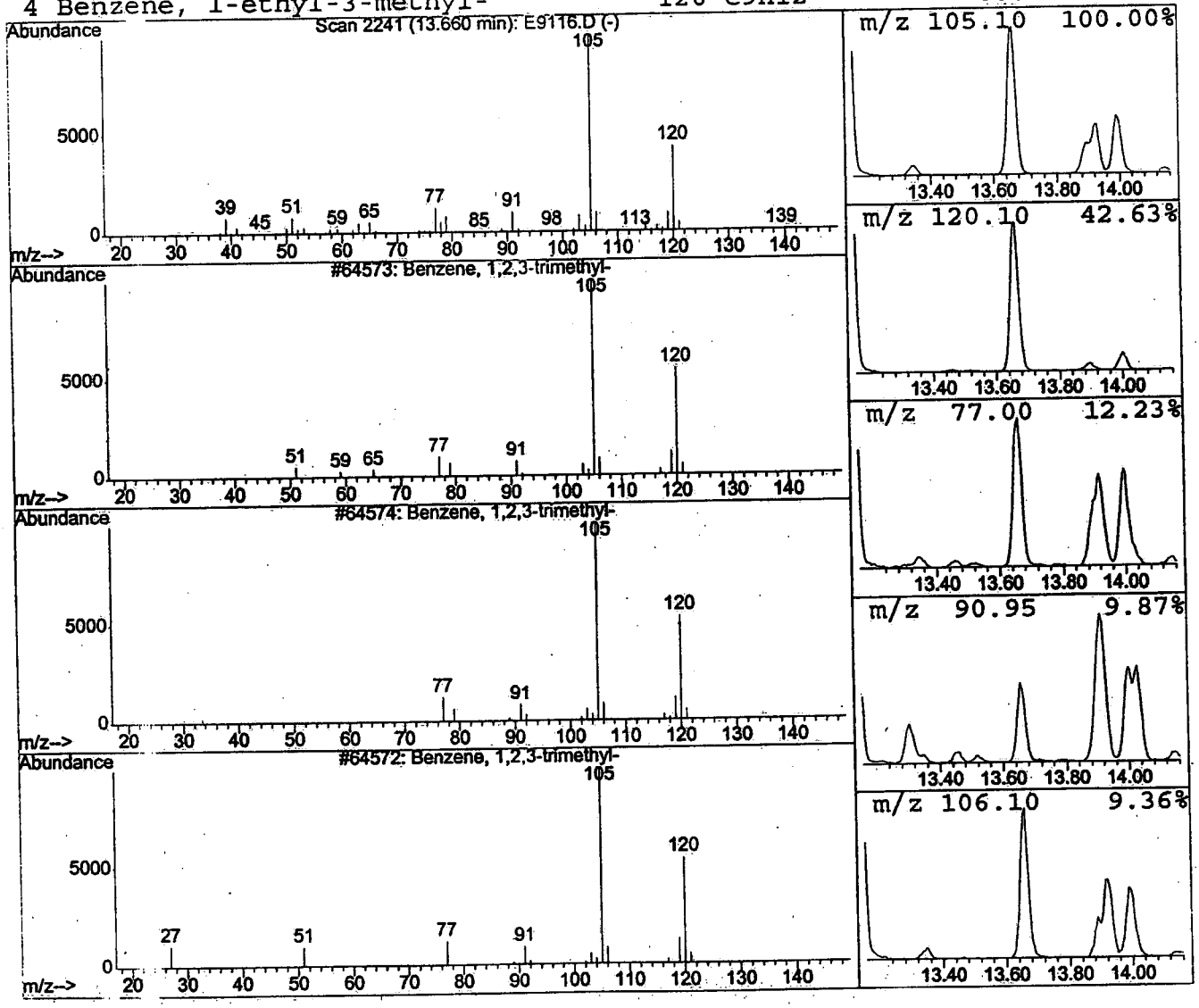
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 14 Substituted benzene Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.66	9.53 UG	464854	Chlorobenzene-d5	10.75

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, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94
4	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94



000152

3321

Data File : C:\HPCHEM\1\DATA\05-09-01\E9116.D Vial: 33
Acq On : 10 May 2001 2:59 am Operator: AMY
Sample : MW-6,2867-005,A,0.5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

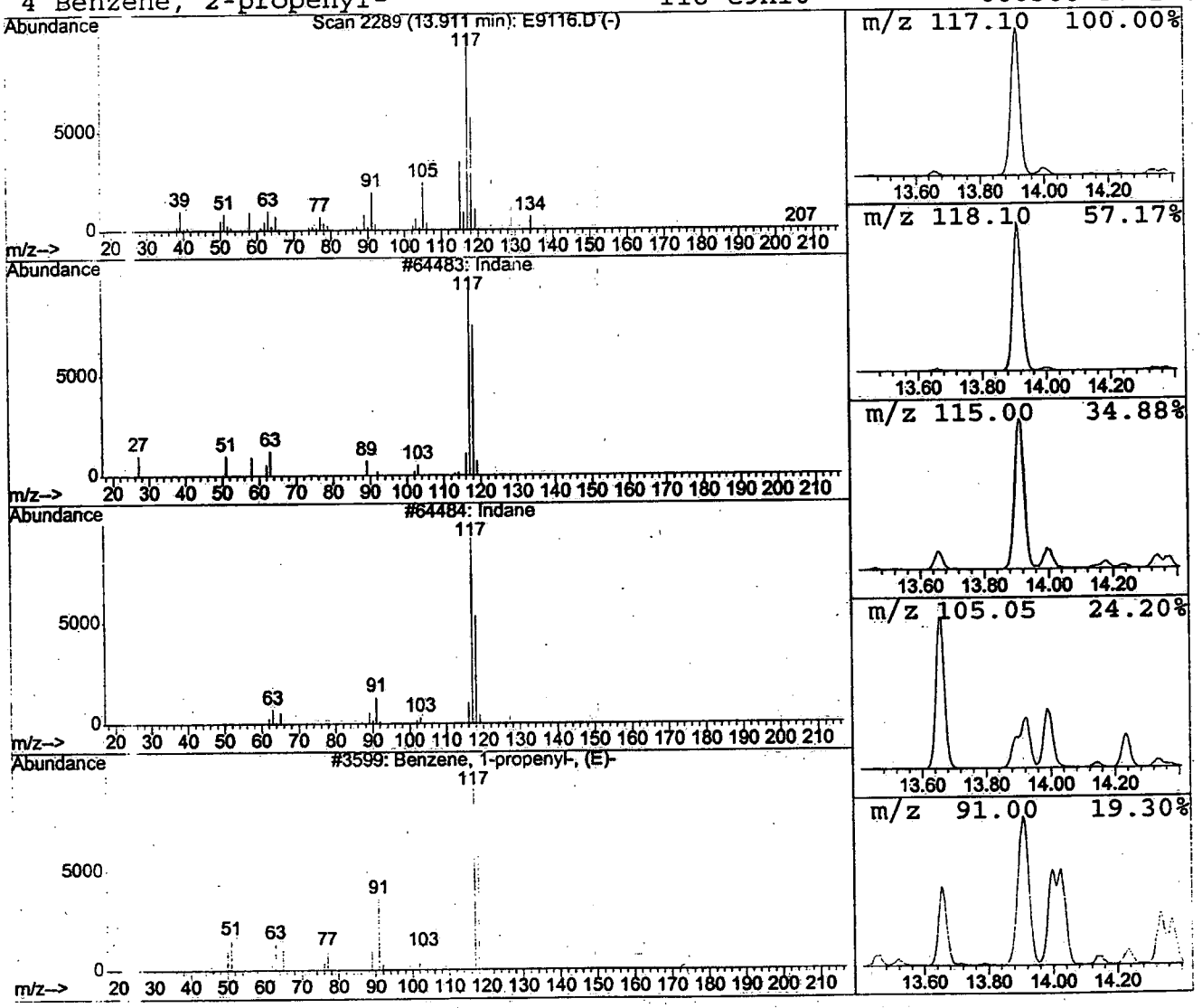
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 15 Unknown aromatic Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.91	16.49 UG	804234	Chlorobenzene-d5	10.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	89
2	Indane	118	C9H10	000496-11-7	70
3	Benzene, 1-propenyl-, (E)-	118	C9H10	000873-66-5	64
4	Benzene, 2-propenyl-	118	C9H10	000300-57-2	64



3322

Quantitation Report (QT/LSC Reviewed)

Data File : C:\HPCHEM\1\DATA\05-09-01\E9117.D Vial: 34
Acq On : 10 May 2001 3:27 am Operator: AMY
Sample : MW-7,2867-006,A,1mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 9:23 2001 Quant Results File: EA050901.RES

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration
DataAcq Meth : EA042501

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.57	168	391036	30.00	UG		0.00
31) 1,4-Difluorobenzene	7.40	114	572057	30.00	UG		0.00
50) Chlorobenzene-d5	10.75	117	449281	30.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.91	65	231134	31.52	UG		0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 105.07%				
41) Toluene-d8	9.07	98	566139	29.49	UG		0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 98.30%				
59) Bromofluorobenzene	12.15	95	279698	29.95	UG		0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 99.83%				
Target Compounds							Qvalue
25) Chloroform	6.35	83	485128	45.63	UG		99
32) Benzene	6.98	78	971782	38.95	UG		100
42) Toluene	9.15	92	344157	22.06	UG		98
44) 1,1,2-Trichloroethane	9.60	83	5813	1.50	UG		99
45) Tetrachloroethene	9.79	166	6387	1.24	UG	#	100
53) Ethylbenzene	10.90	91	49622	1.72	UG		100
74) 1,2-Dichlorobenzene	14.06	146	7129	0.60	UG	#	70

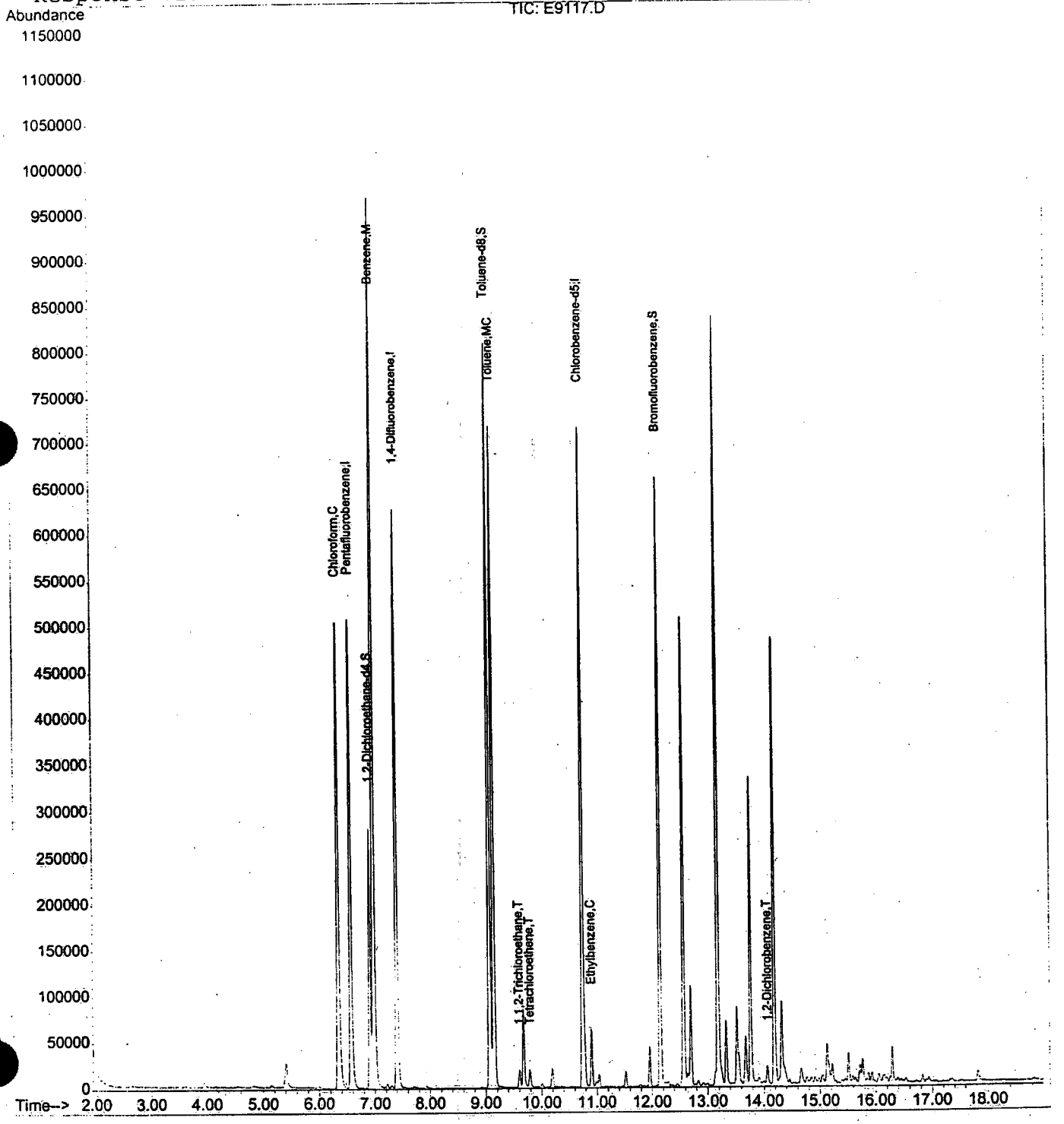
(#) = qualifier out of range (m) = manual integration

3323

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9117.D Vial: 34
Acq On : 10 May 2001 3:27 am Operator: AMY
Sample : MW-7,2867-006,A,1mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 9:23 2001 Quant Results File: EA050901.RES

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration



3324

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9117.D
Acq On : 10 May 2001 3:27 am
Sample : MW-7,2867-006,A,1mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 34
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
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	5.410	654	664	681	rBV2	25046	69981	3.04%	0.370%
2	6.347	828	843	873	rBV	504389	1257769	54.66%	6.642%
3	6.571	873	886	908	rBV	507107	1187709	51.62%	6.272%
4	6.911	940	951	957	rBV	280945	614933	26.72%	3.247%
5	6.985	957	965	997	rVB	969680	2301023	100.00%	12.151%
6	7.403	1034	1045	1065	rBV	626312	1386519	60.26%	7.322%
7	9.071	1353	1364	1372	rBV	808579	1650570	71.73%	8.716%
8	9.150	1372	1379	1395	rVB	715983	1463044	63.58%	7.726%
9	9.600	1453	1465	1471	rBV3	19528	41256	1.79%	0.218%
10	9.673	1471	1479	1493	rVV	85605	190527	8.28%	1.006%
11	9.788	1493	1501	1515	rVB4	19524	44102	1.92%	0.233%
12	10.191	1566	1578	1589	rBV	20279	45782	1.99%	0.242%
13	10.745	1673	1684	1703	rBV	715488	1529707	66.48%	8.078%
14	10.902	1705	1714	1723	rVV	61902	119459	5.19%	0.631%
15	11.038	1734	1740	1752	rVB2	14136	31423	1.37%	0.166%
16	11.519	1824	1832	1842	rVB2	17064	35322	1.54%	0.187%
17	11.958	1904	1916	1927	rBV2	43961	87245	3.79%	0.461%
18	12.147	1939	1952	1966	rBV	659381	1293275	56.20%	6.829%
19	12.576	2016	2034	2043	rBV	507572	996013	43.29%	5.260%
20	12.701	2050	2058	2067	rVB2	108315	217536	9.45%	1.149%
21	13.182	2130	2150	2170	rBV	836062	1640373	71.29%	8.662%
22	13.329	2170	2178	2193	rVB	70425	142817	6.21%	0.754%
23	13.522	2206	2215	2234	rVB	85058	221182	9.61%	1.168%
24	13.679	2234	2245	2253	rBV3	52450	117707	5.12%	0.622%
25	13.763	2253	2261	2279	rVV	329140	629965	27.38%	3.327%
26	14.066	2311	2319	2330	rVB3	19775	43920	1.91%	0.232%
27	14.186	2332	2342	2355	rBV	482495	907779	39.45%	4.794%
28	14.322	2355	2368	2389	rVB4	88504	237072	10.30%	1.252%
29	14.662	2426	2433	2447	rBV4	15835	43659	1.90%	0.231%
30	15.128	2514	2522	2532	rVV2	42088	109952	4.78%	0.581%
31	15.217	2535	2539	2547	rVB4	19184	36298	1.58%	0.192%

000156

3325

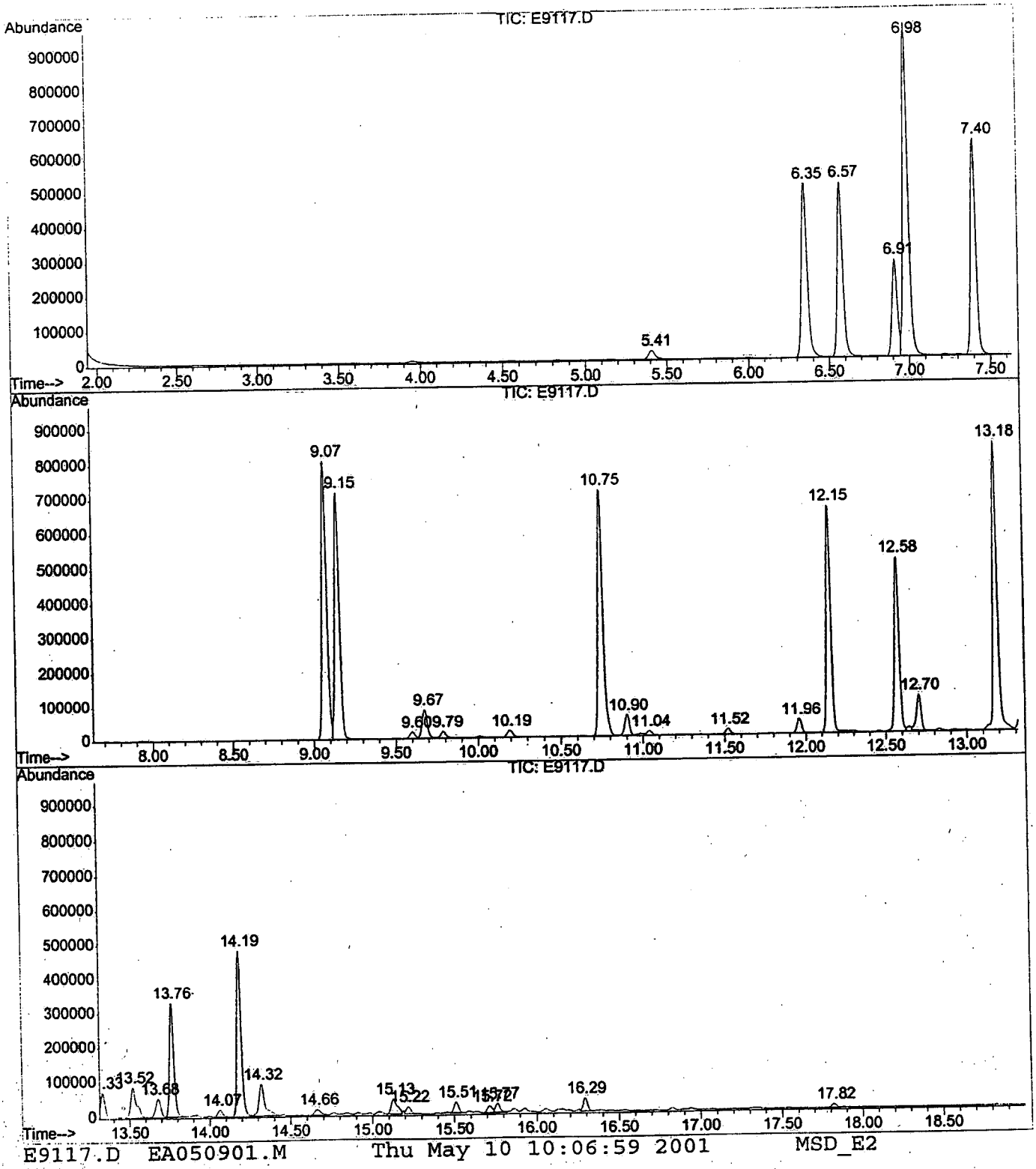
32	15.510	2589	2595	2605	rVB2	30970	56906	2.47%	0.301%
33	15.719	2627	2635	2639	rBV5	18861	41138	1.79%	0.217%
34	15.766	2639	2644	2655	rVV5	25118	52459	2.28%	0.277%
35	16.289	2739	2744	2754	rVB2	36966	66386	2.89%	0.351%
	17.821	3029	3037	3046	rBV6	11206	25831	1.12%	0.136%

Sum of corrected areas: 18936639

E9117.D EA050901.M Thu May 10 10:06:58 2001 MSD_E2

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-09-01\E9117.D
Operator : AMY
Acquired : 10 May 2001 3:27 am using AcqMethod EA042501
Instrument : MSD_E2
Sample Name: MW-7,2867-006,A,1mL,100
Misc Info : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
Vial Number: 34
Quant File :EA050901.RES (RTE Integrator)



E9117.D EA050901.M Thu May 10 10:06:59 2001 MSD_E2

3327

Data File : C:\HPCHEM\1\DATA\05-09-01\E9117.D
Acq On : 10 May 2001 3:27 am
Sample : MW-7,2867-006,A,1mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 34
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

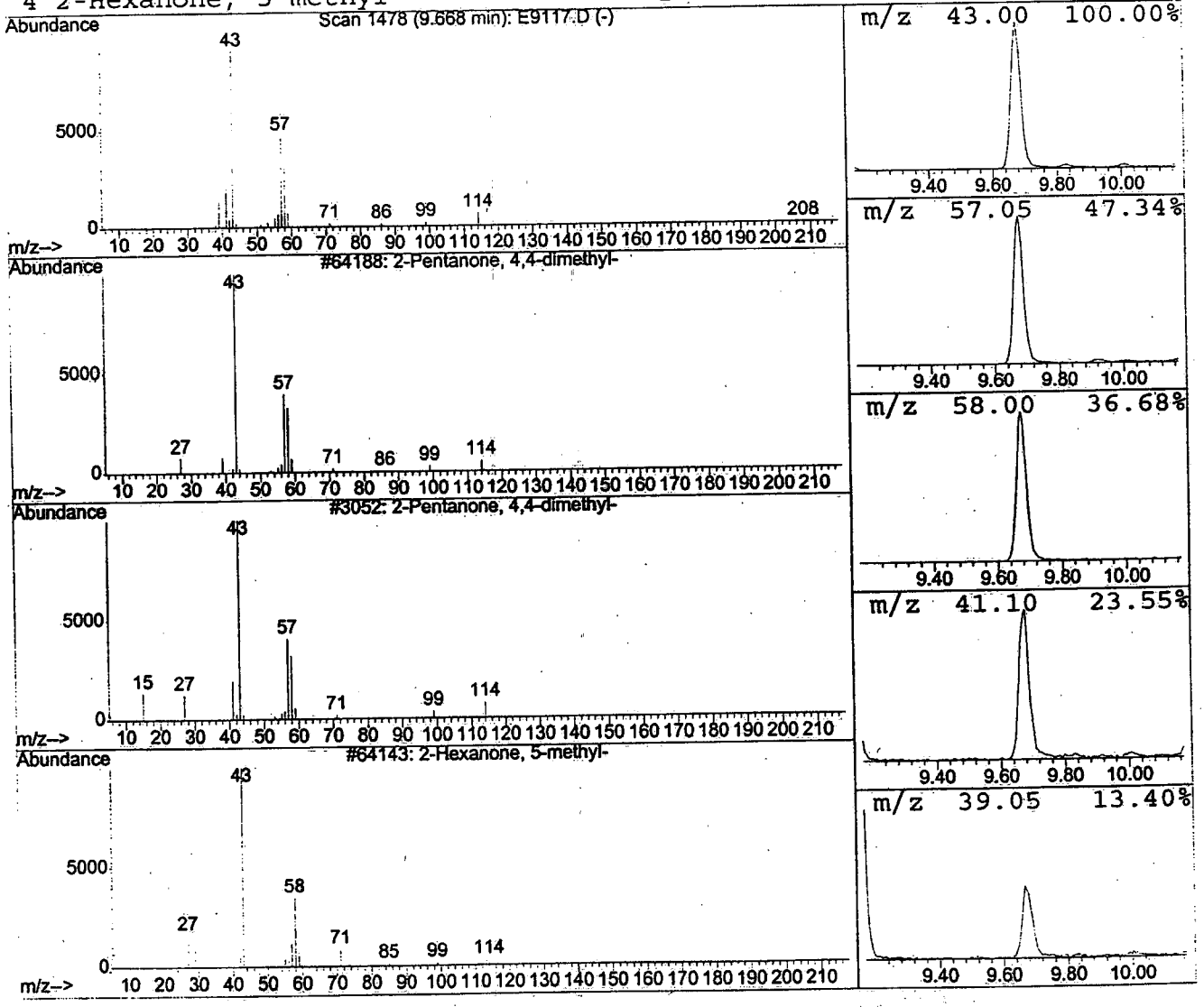
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Unknown — Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.67	3.74 UG	190527	Chlorobenzene-d5	10.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4,4-dimethyl-	114	C7H14O	000590-50-1	87
2	2-Pentanone, 4,4-dimethyl-	114	C7H14O	000590-50-1	87
3	2-Hexanone, 5-methyl-	114	C7H14O	000110-12-3	78
4	2-Hexanone, 5-methyl-	114	C7H14O	000110-12-3	72



000159

33246

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9117.D
Acq On : 10 May 2001 3:27 am
Sample : MW-7,2867-006,A,1mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 34
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

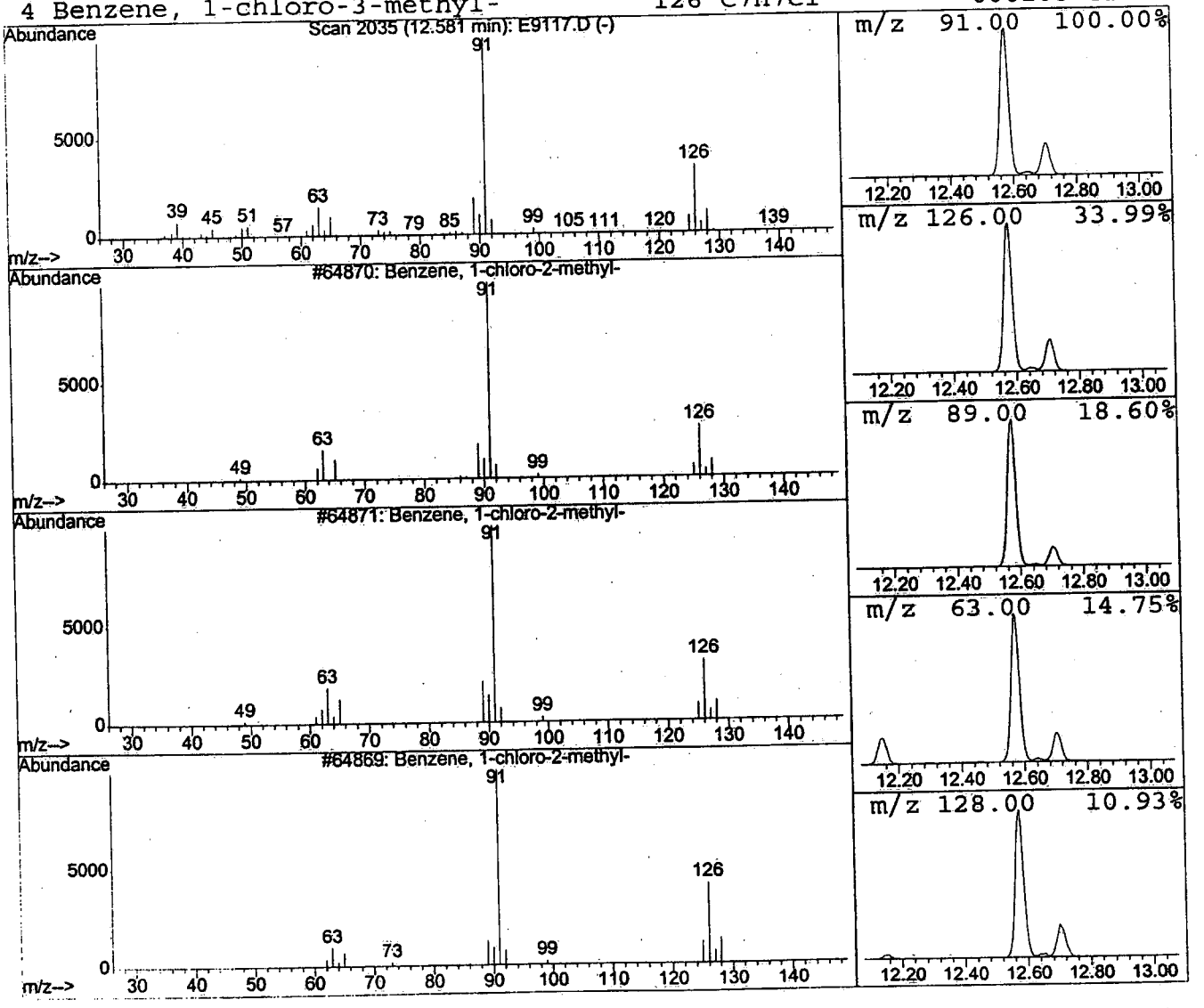
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Substituted benzene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.58	19.53 UG	996013	Chlorobenzene-d5	10.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	96
2	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	94
3	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	91
4	Benzene, 1-chloro-3-methyl-	126	C7H7Cl	000108-41-8	90



3329

Data File : C:\HPCHEM\1\DATA\05-09-01\E9117.D
Acq On : 10 May 2001 3:27 am
Sample : MW-7,2867-006,A,1mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 34
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

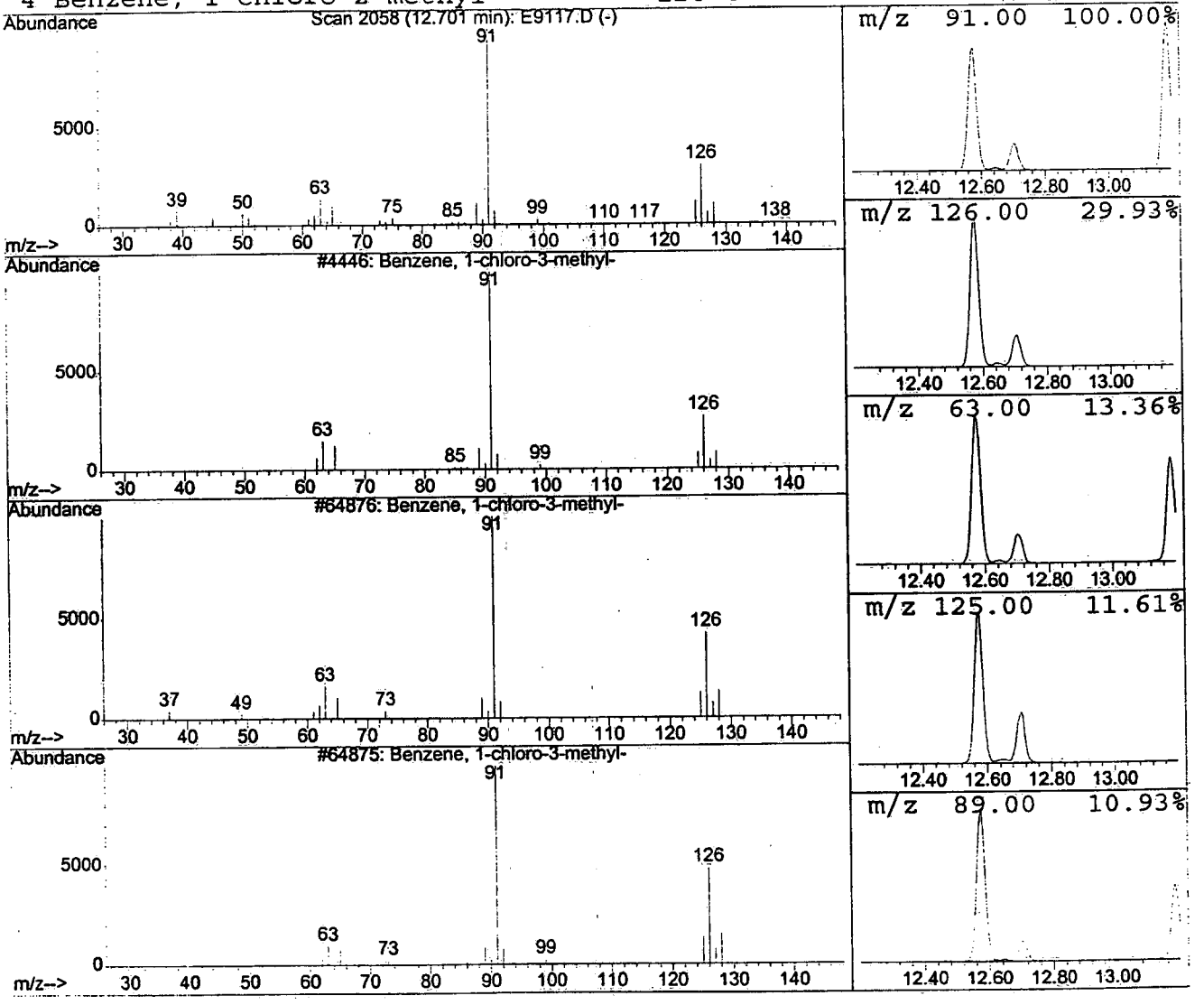
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Substituted benzene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.70	4.27 UG	217536	Chlorobenzene-d5	10.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-3-methyl-	126	C7H7Cl	000108-41-8	97
2	Benzene, 1-chloro-3-methyl-	126	C7H7Cl	000108-41-8	94
3	Benzene, 1-chloro-3-methyl-	126	C7H7Cl	000108-41-8	94
4	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	94



Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9117.D
Acq On : 10 May 2001 3:27 am
Sample : MW-7,2867-006,A,1mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 34
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

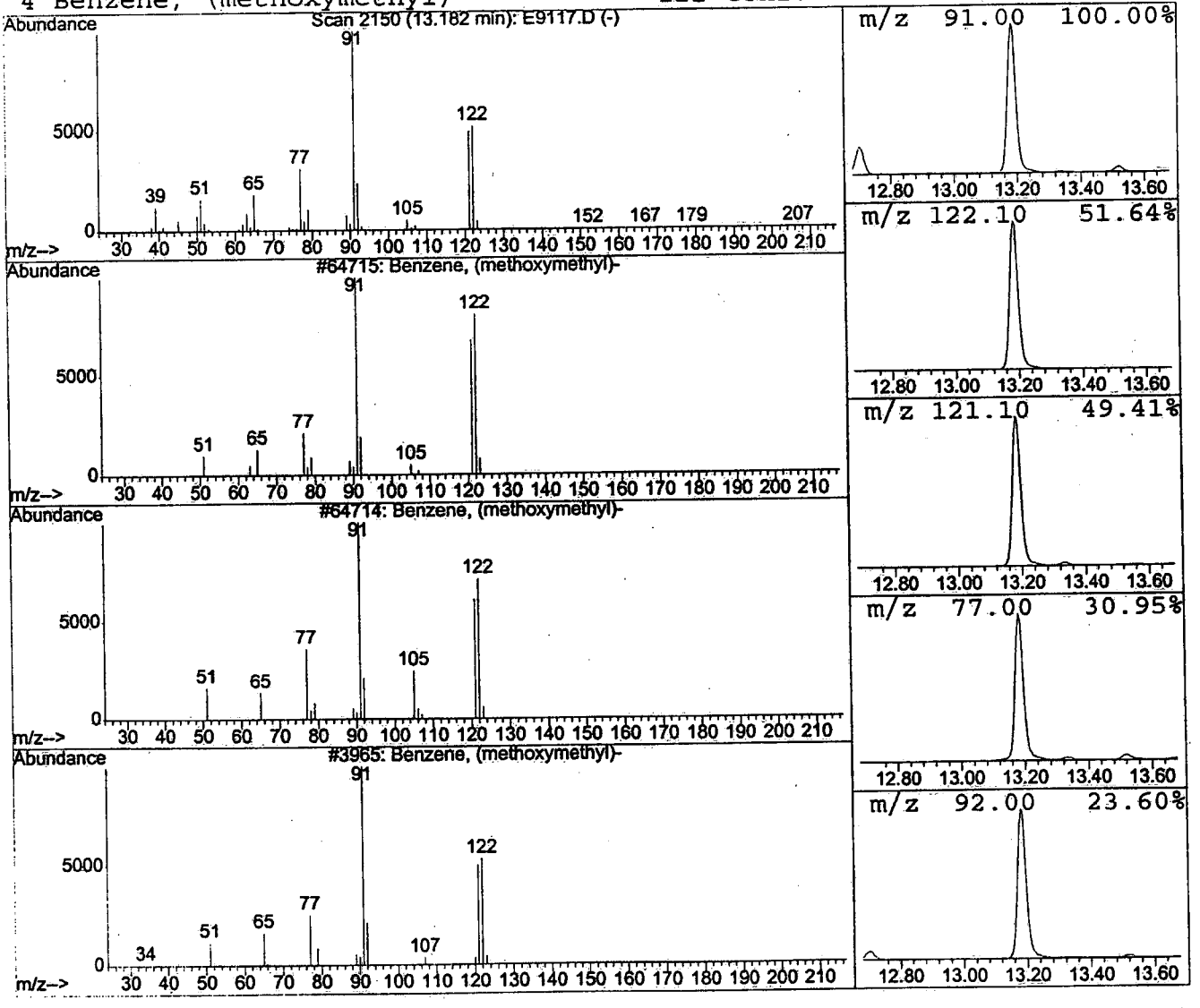
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.18	32.17 UG	1640370	Chlorobenzene-d5	10.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (methoxymethyl)-	122	C8H10O	000538-86-3	93
2	Benzene, (methoxymethyl)-	122	C8H10O	000538-86-3	91
3	Benzene, (methoxymethyl)-	122	C8H10O	000538-86-3	91
4	Benzene, (methoxymethyl)-	122	C8H10O	000538-86-3	81



3331

Data File : C:\HPCHEM\1\DATA\05-09-01\E9117.D Vial: 34
Acq On : 10 May 2001 3:27 am Operator: AMY
Sample : MW-7,2867-006,A,1mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

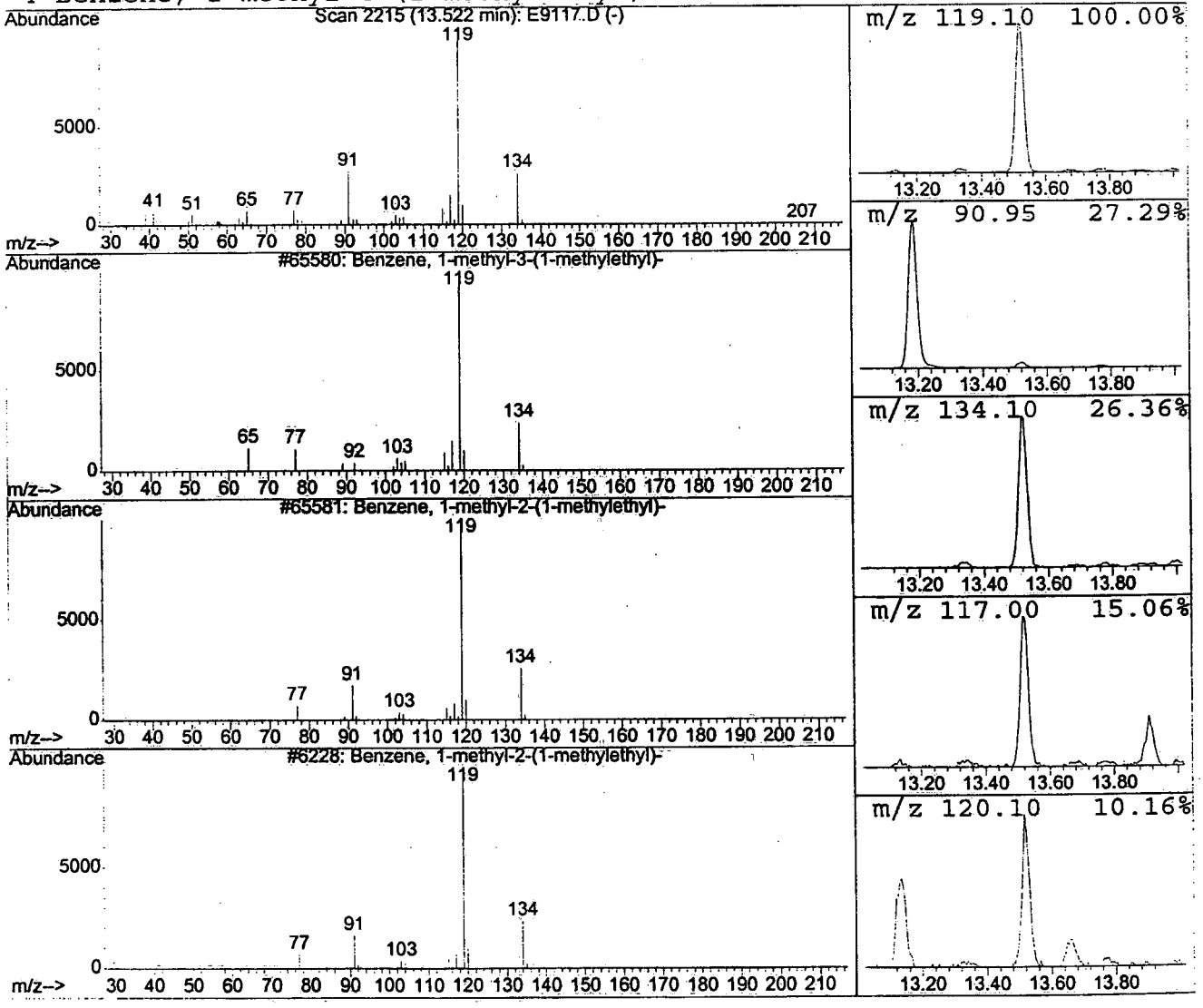
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 5 Substituted benzene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.52	4.34 UG	221182	Chlorobenzene-d5	10.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-(1-methylethyl)	134	C10H14	000535-77-3	95
2	Benzene, 1-methyl-2-(1-methylethyl)	134	C10H14	000527-84-4	94
3	Benzene, 1-methyl-2-(1-methylethyl)	134	C10H14	000527-84-4	94
4	Benzene, 1-methyl-4-(1-methylethyl)	134	C10H14	000099-87-6	94



3332

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9117.D
Acq On : 10 May 2001 3:27 am
Sample : MW-7,2867-006,A,1mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 34
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

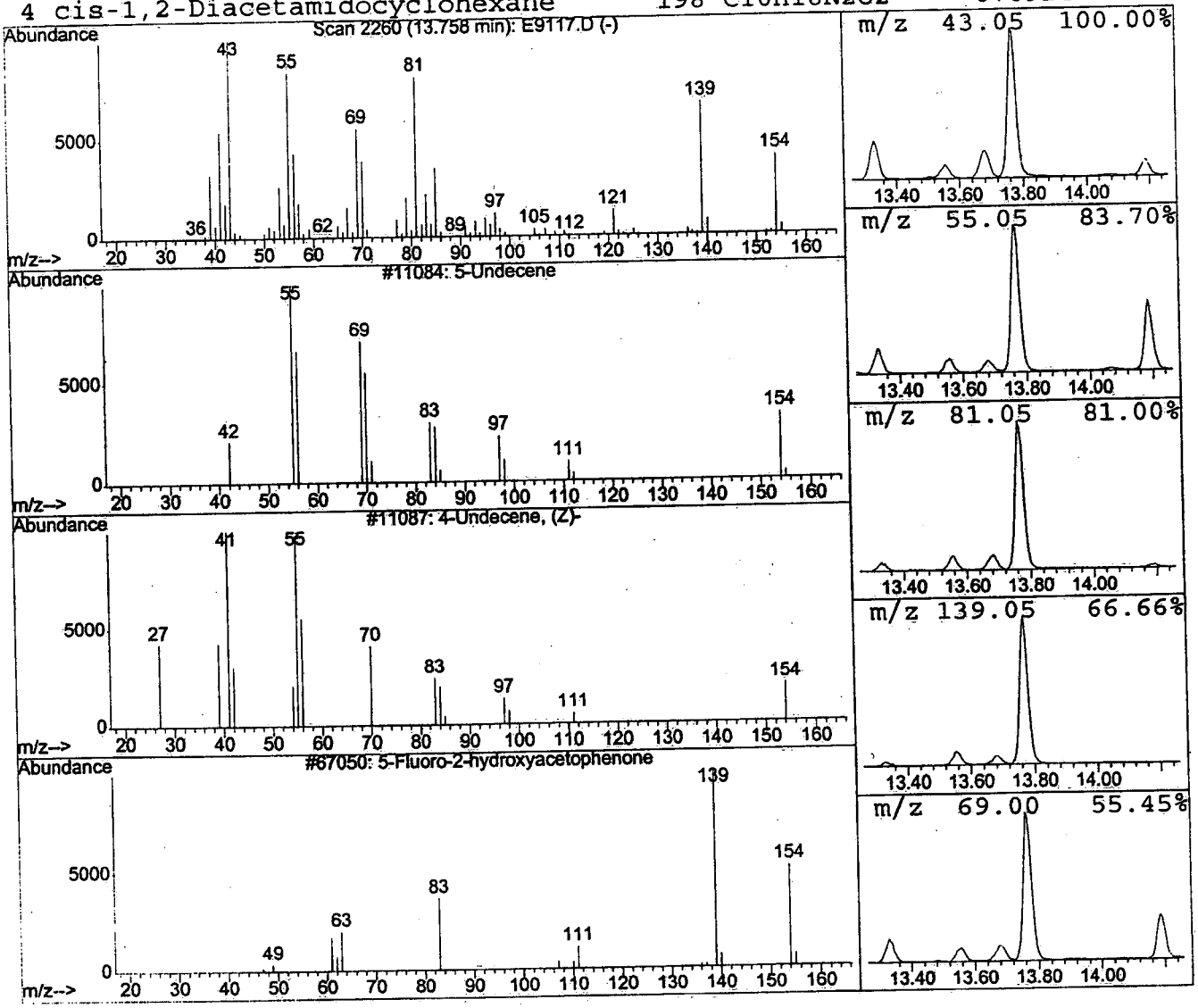
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 6 Unknown — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.76	12.35 UG	629965	Chlorobenzene-d5	10.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Undecene	154	C11H22	004941-53-1	27
2	4-Undecene, (Z)-	154	C11H22	000821-98-7	27
3	5-Fluoro-2-hydroxyacetophenone	154	C8H7FO2	000394-32-1	25
4	cis-1,2-Diacetamidocyclohexane	198	C10H18N2O2	070924-77-5	22



000161

3333

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9117.D
Acq On : 10 May 2001 3:27 am
Sample : MW-7,2867-006,A,1mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 34
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

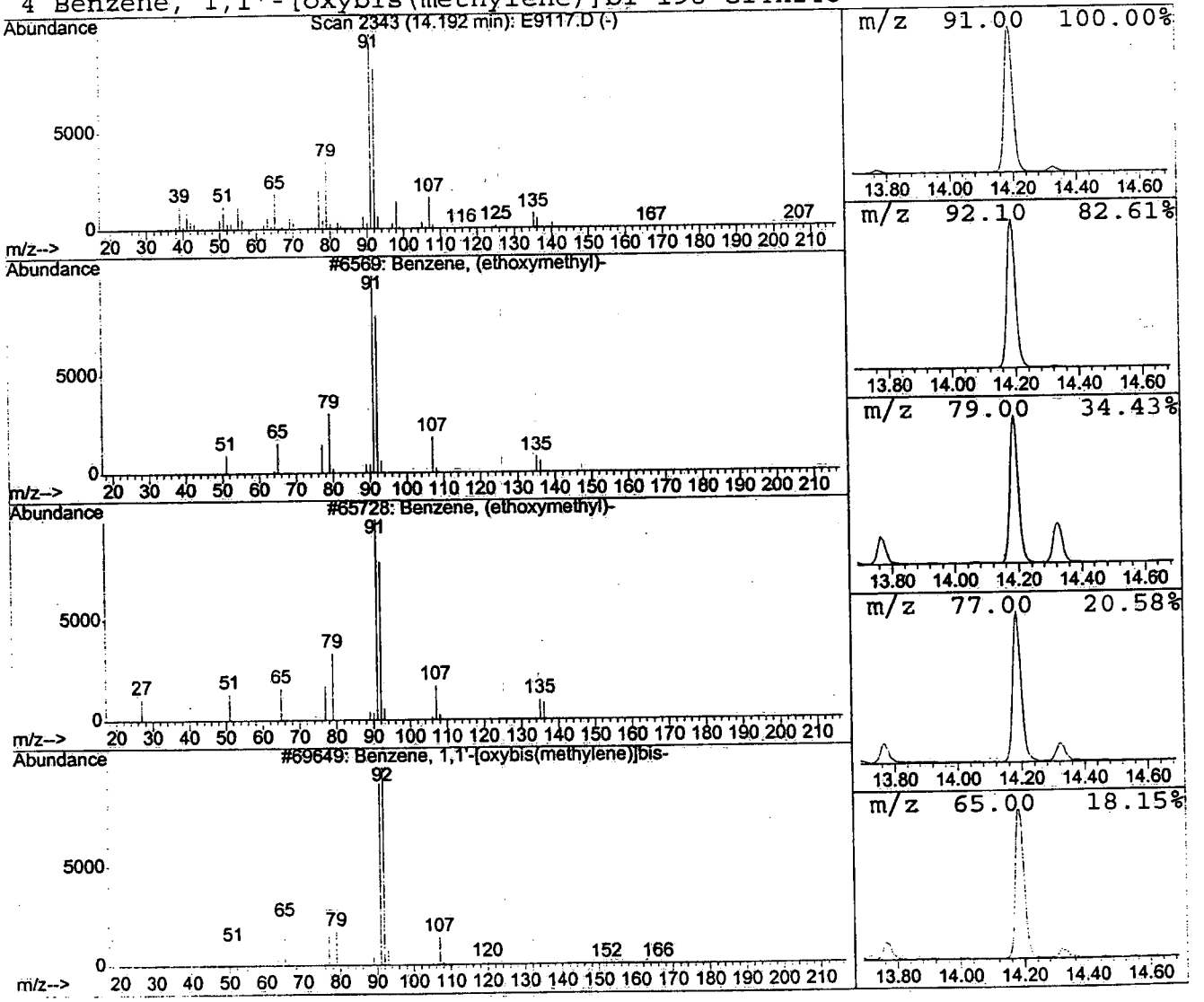
Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

****

Peak Number 7 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.19	17.80 UG	907779	Chlorobenzene-d5	10.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (ethoxymethyl)-	136	C9H12O	000539-30-0	93
2	Benzene, (ethoxymethyl)-	136	C9H12O	000539-30-0	91
3	Benzene, 1,1'-[oxybis(methylene)]bi	198	C14H14O	000103-50-4	59
4	Benzene, 1,1'-[oxybis(methylene)]bi	198	C14H14O	000103-50-4	58



CC0185

3334

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9117.D
Acq On : 10 May 2001 3:27 am
Sample : MW-7,2867-006,A,1mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P

Vial: 34
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Library : C:\DATABASE\NBS75K.L

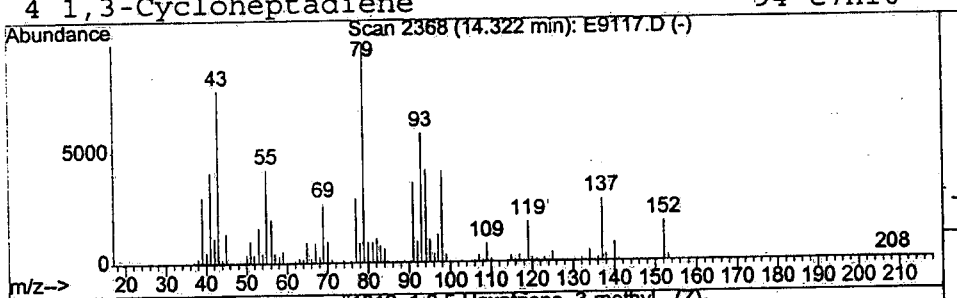
****

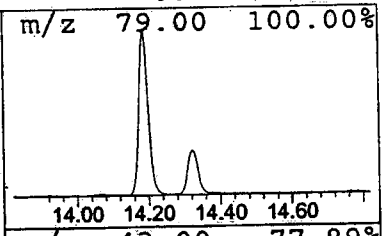
Peak Number 8 Unknown

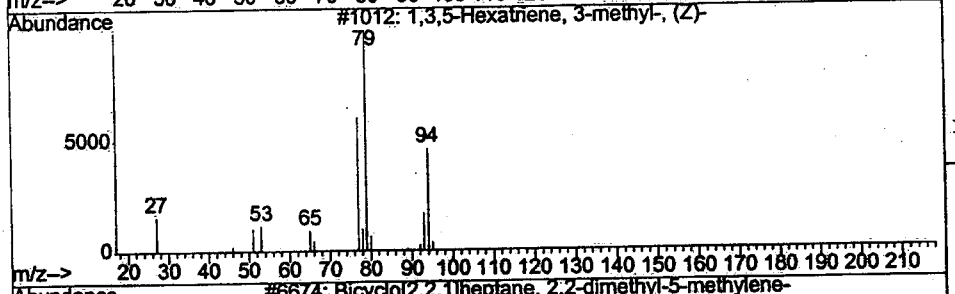
Concentration Rank 5

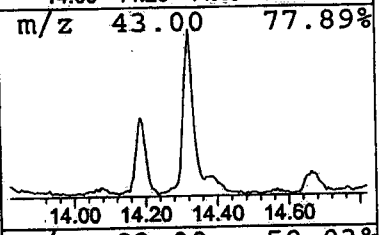
R.T.	EstConc	Area	Relative to ISTD	R.T.
14.32	4.65 UG	237072	Chlorobenzene-d5	10.75

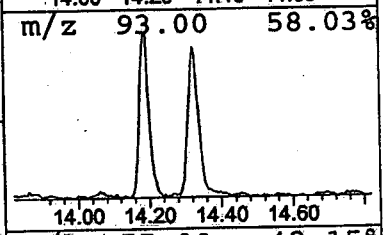
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3,5-Hexatriene, 3-methyl-, (Z)-	94	C7H10	024587-27-7	43
2	Bicyclo[2.2.1]heptane, 2,2-dimethyl	136	C10H16	000497-32-5	40
3	1,3,5-Hexatriene, 3-methyl-, (E)-	94	C7H10	024587-26-6	38
4	1,3-Cycloheptadiene	94	C7H10	004054-38-0	38

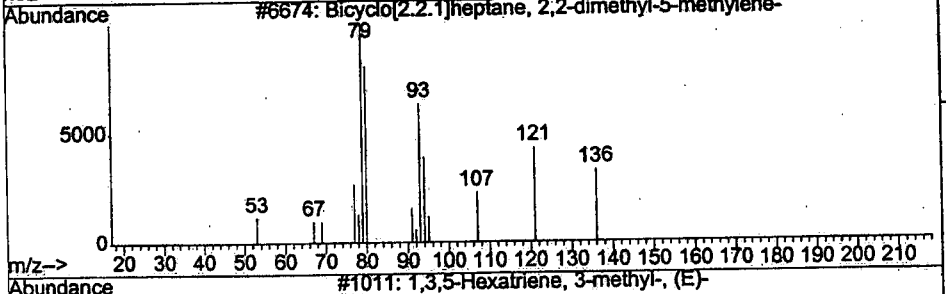


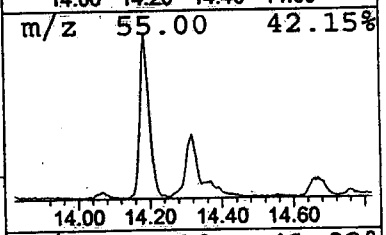


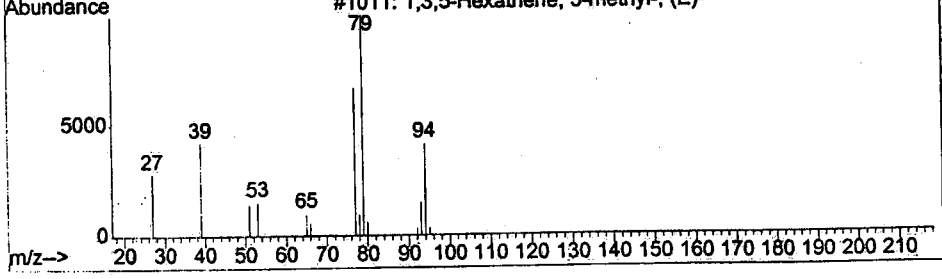


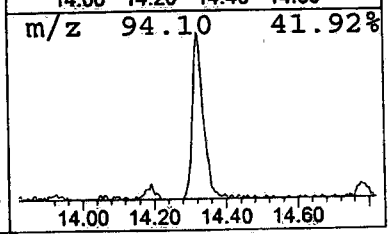












3335

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-09-01\E9118.D Vial: 35
Acq On : 10 May 2001 3:55 am Operator: AMY
Sample : MW-8,2867-007,A,0.001mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 9:24 2001 Quant Results File: EA050901.RES

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration
DataAcq Meth : EA042501

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.57	168	401758	30.00	UG	0.00
31) 1,4-Difluorobenzene	7.40	114	588457	30.00	UG	0.00
50) Chlorobenzene-d5	10.75	117	451090	30.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.91	65	228209	30.29	UG	0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 100.97%			
41) Toluene-d8	9.07	98	575813	29.16	UG	0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 97.20%			
59) Bromofluorobenzene	12.15	95	272167	29.03	UG	0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 96.77%			
Target Compounds						Qvalue
32) Benzene	6.99	78	1275789	49.71	UG	100
42) Toluene	9.15	92	801329	49.93	UG	99

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

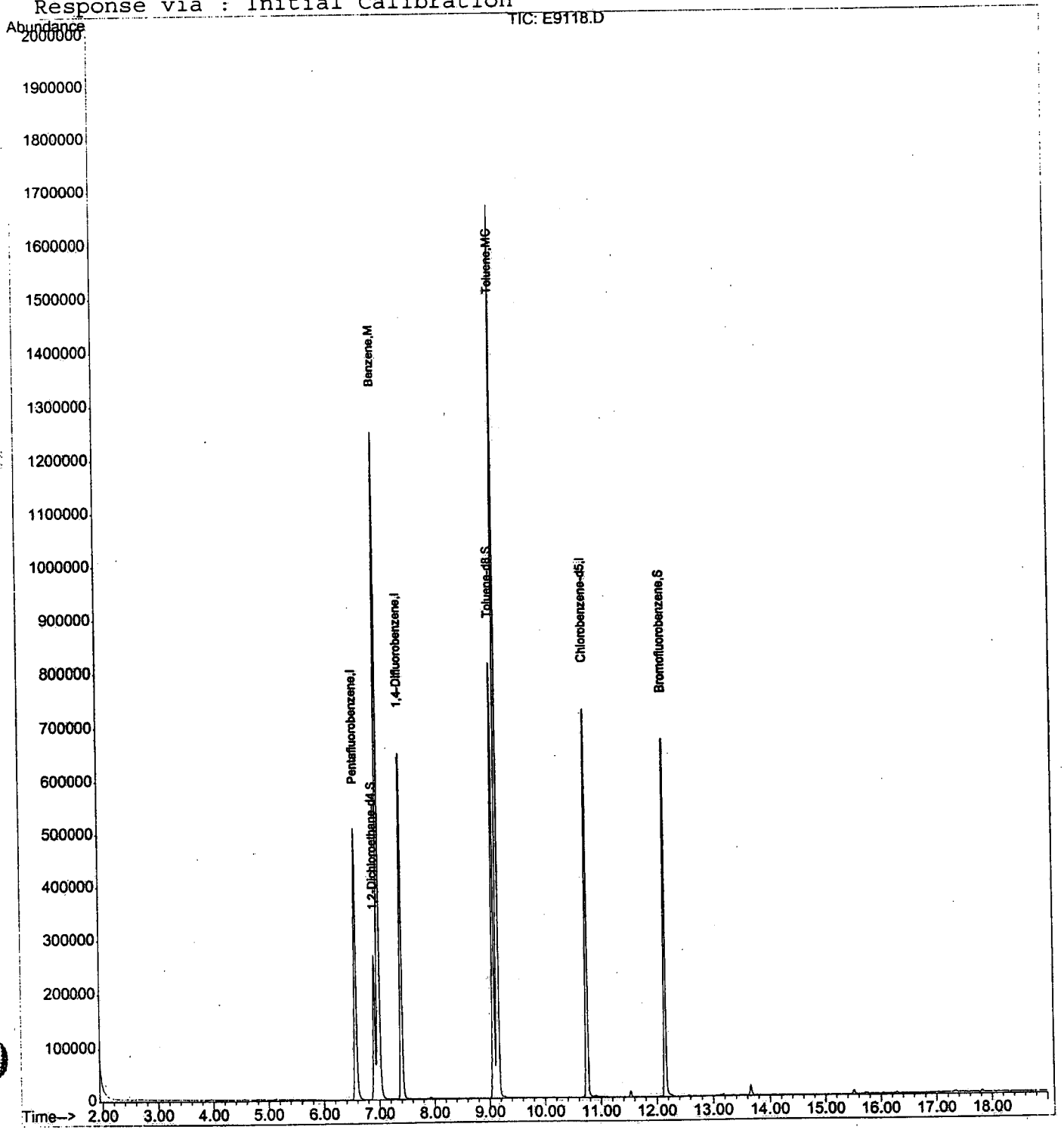
Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9118.D
Acq On : 10 May 2001 3:55 am
Sample : MW-8,2867-007,A,0.001mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P
Quant Time: May 10 9:24 2001

Vial: 35
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Quant Results File: EA050901.RES

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration



3337

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9118.D Vial: 35
Acq On : 10 May 2001 3:55 am Operator: AMY
Sample : MW-8,2867-007,A,0.001mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
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

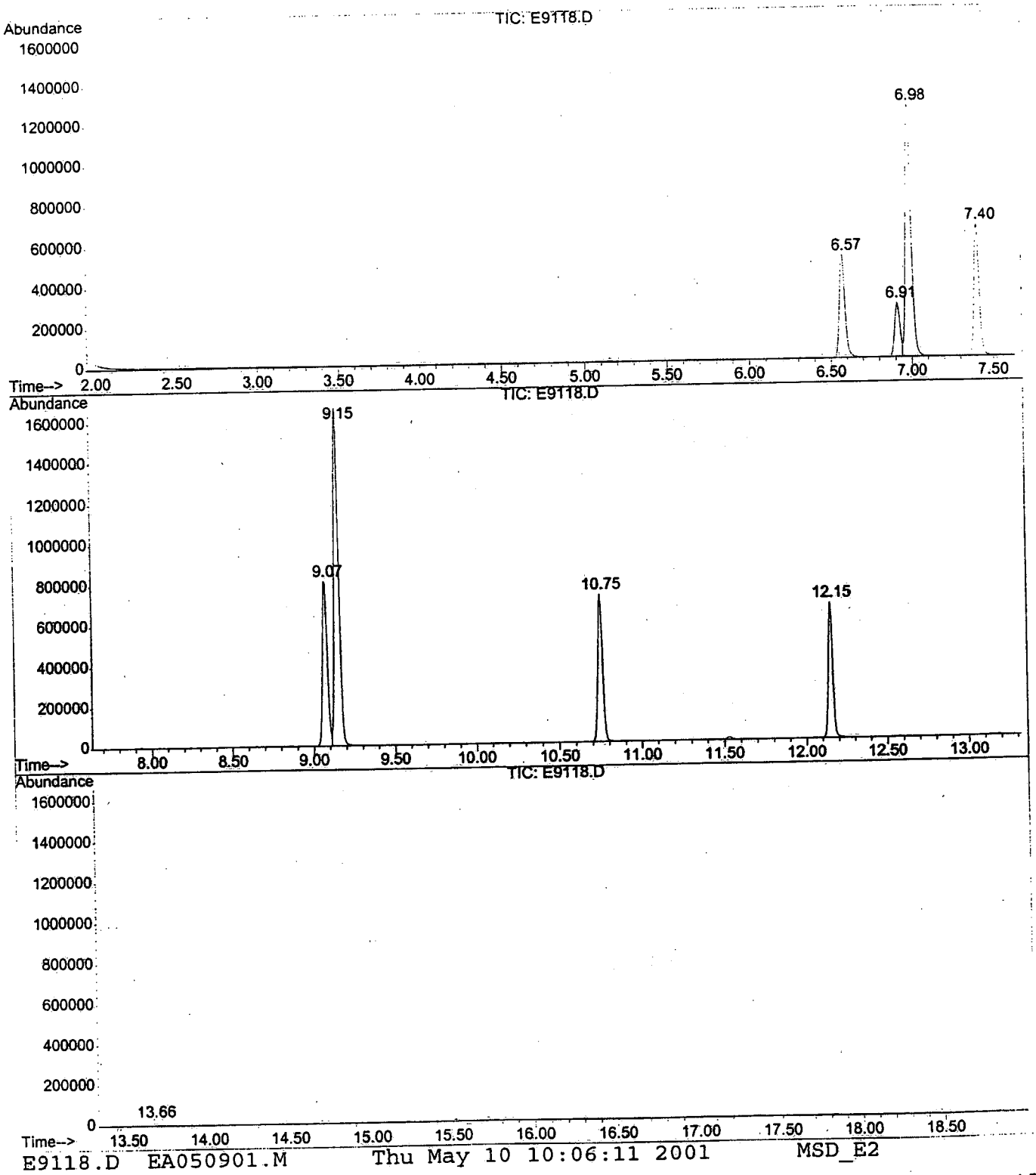
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.574	874	886	911	rBV	508986	1218797	36.01%	8.671%
2	6.909	939	950	956	rBV	270074	602777	17.81%	4.288%
3	6.982	956	964	987	rVB	1248038	2986146	88.23%	21.244%
4	7.401	1033	1044	1067	rBV	649459	1428265	42.20%	10.161%
5	9.069	1347	1363	1371	rBV2	814437	1682382	49.71%	11.969%
6	9.148	1371	1378	1399	rVB	1667712	3384362	100.00%	24.077%
7	10.748	1670	1684	1704	rBV	728154	1436602	42.45%	10.220%
8	12.150	1939	1952	1985	rBV	670647	1272216	37.59%	9.051%
9	13.661	2232	2241	2256	rBV2	21184	44703	1.32%	0.318%

Sum of corrected areas: 14056250

E9118.D EA050901.M Thu May 10 10:06:10 2001 MSD_E2

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-09-01\E9118.D
Operator : AMY
Acquired : 10 May 2001 3:55 am using AcqMethod EA042501
Instrument : MSD_E2
Sample Name: MW-8,2867-007,A,0.001mL,100
Misc Info : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
Vial Number: 35
Quant File :EA050901.RES (RTE Integrator)



E9118.D EA050901.M Thu May 10 10:06:11 2001 MSD_E2

CC0179

3339

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-09-01\E9110.D Vial: 27
Acq On : 10 May 2001 12:12 am Operator: AMY
Sample : FB,2867-008,A,5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 9:15 2001 Quant Results File: EA050901.RES

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration
DataAcq Meth : EA042501

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.57	168	386173	30.00	UG	0.00
31) 1,4-Difluorobenzene	7.40	114	566265	30.00	UG	0.00
50) Chlorobenzene-d5	10.75	117	440812	30.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.91	65	224377	30.99	UG	0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 103.30%			
41) Toluene-d8	9.07	98	561945	29.58	UG	0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 98.60%			
59) Bromofluorobenzene	12.15	95	266829	29.12	UG	0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 97.07%			

Target Compounds Qvalue

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

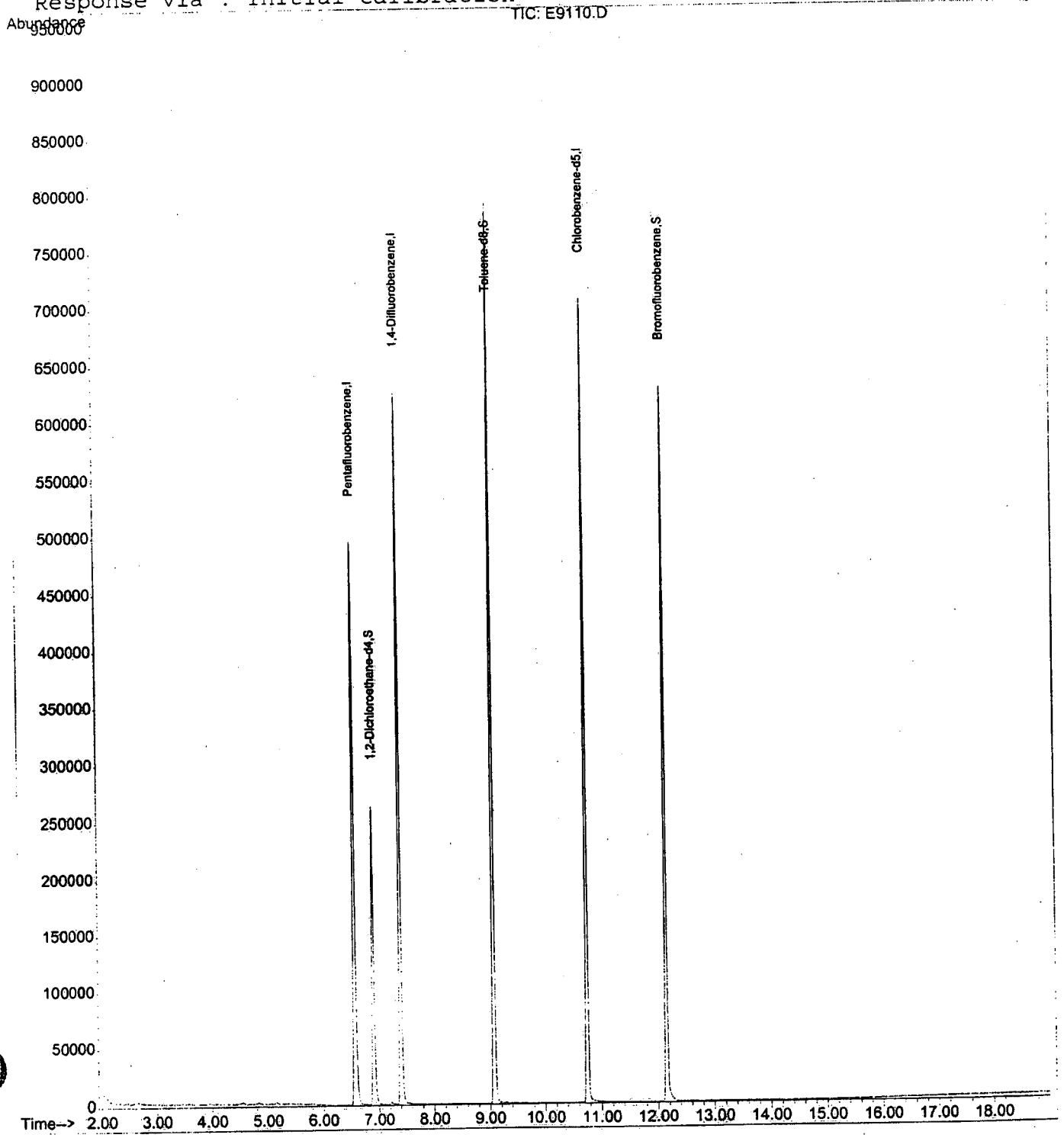
Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9110.D
Acq On : 10 May 2001 12:12 am
Sample : FB,2867-008,A,5mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P
Quant Time: May 10 9:15 2001

Vial: 27
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Quant Results File: EA050901.RES

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration



CC01172

3341

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9110.D Vial: 27
Acq On : 10 May 2001 12:12 am Operator: AMY
Sample : FB,2867-008,A,5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
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	6.572	874	886	913	rBV	494985	1171633	71.33%	15.693%
2	6.912	940	951	973	rBV	262496	620678	37.79%	8.314%
3	7.398	1032	1044	1065	rBV	624873	1381877	84.13%	18.509%
4	9.072	1352	1364	1392	rBV2	791191	1642641	100.00%	22.002%
5	10.745	1673	1684	1707	rBV	706183	1408341	85.74%	18.864%
6	12.147	1940	1952	1989	rBV	628120	1240704	75.53%	16.618%

Sum of corrected areas: 7465874

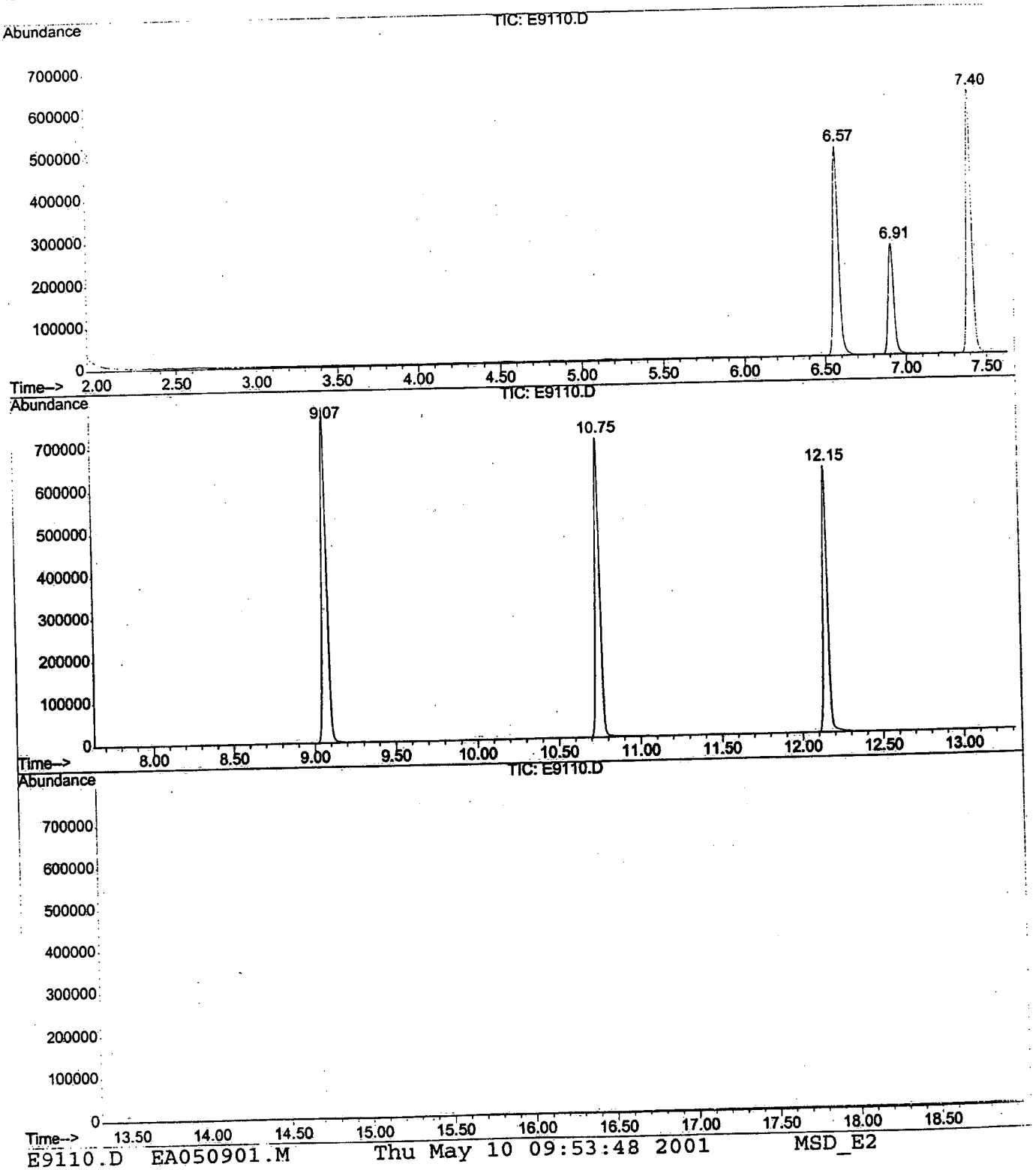
E9110.D EA050901.M Thu May 10 09:53:47 2001 MSD_E2

CC0173

3342

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-09-01\E9110.D
Operator : AMY
Acquired : 10 May 2001 12:12 am using AcqMethod EA042501
Instrument : MSD_E2
Sample Name: FB,2867-008,A,5mL,100
Misc Info : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
Vial Number: 27
Quant File :EA050901.RES (RTE Integrator)



E9110.D EA050901.M Thu May 10 09:53:48 2001 MSD_E2

000424

3343

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-09-01\E9111.D Vial: 28
Acq On : 10 May 2001 12:40 am Operator: AMY
Sample : TB,2867-009,A,5mL,100 Inst : MSD_E2
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01 Multiplr: 1.00
IS Integration Params: LSCINT.P
Quant Time: May 10 9:15 2001 Quant Results File: EA050901.RES

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration
DataAcq Meth : EA042501

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.57	168	385618	30.00	UG	0.00
31) 1,4-Difluorobenzene	7.40	114	570773	30.00	UG	0.00
50) Chlorobenzene-d5	10.75	117	440959	30.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.91	65	226799	31.37	UG	0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 104.57%			
41) Toluene-d8	9.07	98	565513	29.53	UG	0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 98.43%			
59) Bromofluorobenzene	12.15	95	266650	29.09	UG	0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 96.97%			
Target Compounds						Qvalue

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

3344

000175

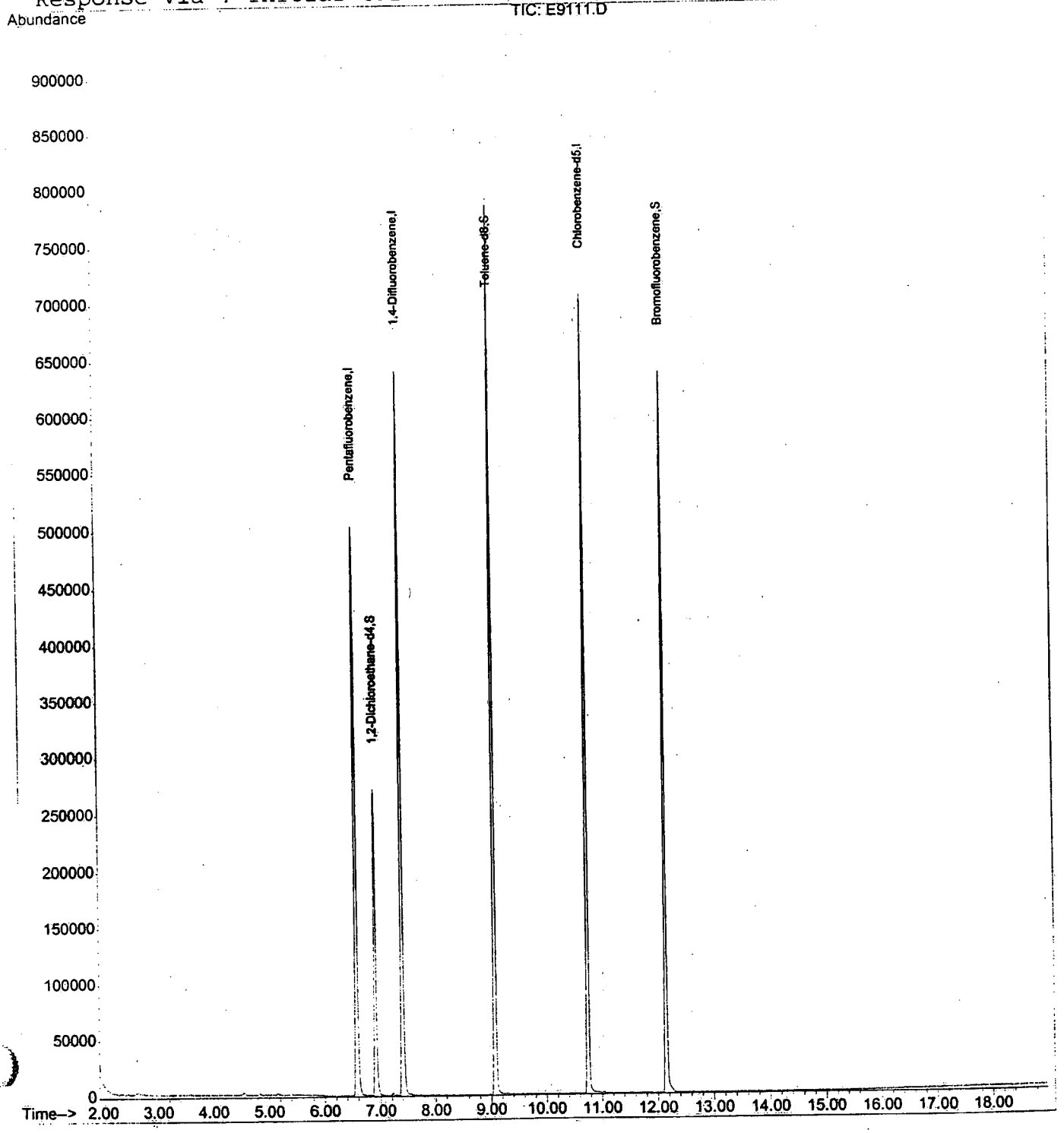
Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9111.D
Acq On : 10 May 2001 12:40 am
Sample : TB,2867-009,A,5mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
MS Integration Params: LSCINT.P
Quant Time: May 10 9:15 2001

Vial: 28
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Quant Results File: EA050901.RES

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration



3345

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9111.D
Acq On : 10 May 2001 12:40 am
Sample : TB,2867-009,A,5mL,100
Misc : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
Integration Params: LSCINT.P

Vial: 28
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
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	6.572	872	886	913	rBV	502753	1176386	71.38%	15.742%
2	6.912	939	951	973	rBV	270386	627819	38.09%	8.401%
3	7.399	1030	1044	1067	rBV	639816	1390135	84.35%	18.602%
4	9.072	1349	1364	1386	rBV2	790750	1648108	100.00%	22.054%
5	10.746	1672	1684	1707	rBV	705132	1402228	85.08%	18.764%
6	12.148	1941	1952	1985	rBV	636653	1228264	74.53%	16.436%

Sum of corrected areas: 7472940

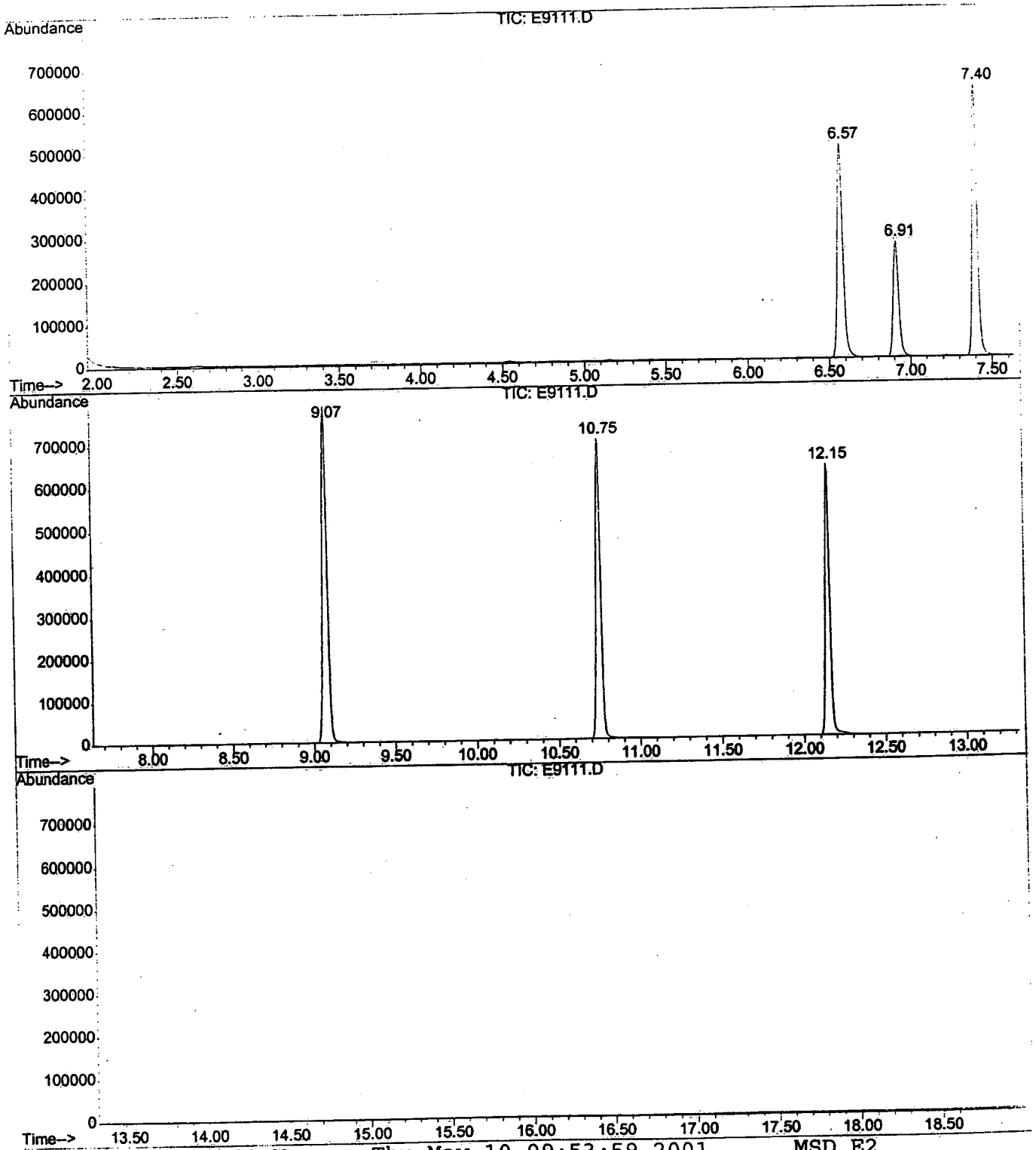
E9111.D EA050901.M Thu May 10 09:53:58 2001 MSD_E2

000177

3346

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-09-01\E9111.D
Operator : AMY
Acquired : 10 May 2001 12:40 am using AcqMethod EA042501
Instrument : MSD_E2
Sample Name: TB,2867-009,A,5mL,100
Misc Info : ENVTACT/444-ORBIS-NEWARK,5/02/01,5/03/01
Vial Number: 28
Quant File :EA050901.RES (RTE Integrator)



E9111.D EA050901.M Thu May 10 09:53:59 2001 MSD_E2

C00178

3347

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-09-01\E9089.D Vial: 6
Acq On : 9 May 2001 2:18 pm Operator: AMY
Sample : METHOD-BLK,METHOD-BLK,A,5mL,100 Inst : MSD_E2
Misc : NA,NA,NA Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 9 15:40 2001 Quant Results File: EA050901.RES

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration
DataAcq Meth : EA042501

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.57	168	464913	30.00	UG	0.00
31) 1,4-Difluorobenzene	7.40	114	657556	30.00	UG	0.00
50) Chlorobenzene-d5	10.75	117	506166	30.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.91	65	265001	30.40	UG	0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 101.33%			
41) Toluene-d8	9.07	98	653366	29.61	UG	0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 98.70%			
59) Bromofluorobenzene	12.15	95	301335	28.64	UG	0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 95.47%			

Target Compounds Qvalue

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

000179

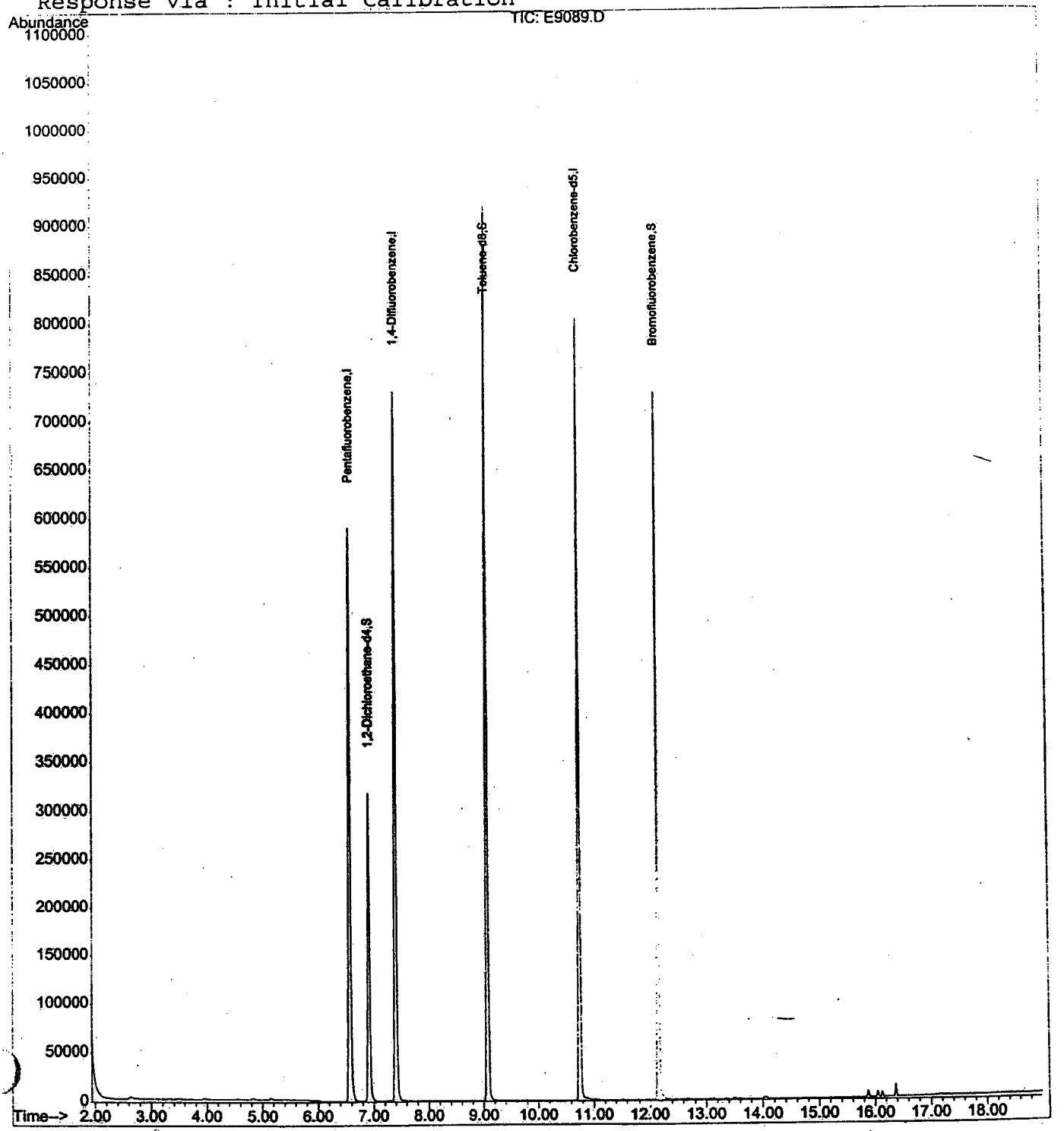
Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9089.D
Acq On : 9 May 2001 2:18 pm
Sample : METHOD-BLK,METHOD-BLK,A,5mL,100
Misc : NA,NA,NA
MS Integration Params: LSCINT.P
Quant Time: May 9 15:40 2001

Vial: 6
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Quant Results File: EA050901.RES

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration



C00130

3349

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-09-01\E9089.D
Acq On : 9 May 2001 2:18 pm
Sample : METHOD-BLK,METHOD-BLK,A,5mL,100
Misc : NA,NA,NA
MS Integration Params: LSCINT.P

Vial: 6
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
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	6.572	869	886	913	rBV	590053	1385717	73.57%	16.068%
2	6.912	940	951	974	rBV	317271	737644	39.16%	8.553%
3	7.399	1031	1044	1070	rBV	730147	1596022	84.74%	18.507%
4	9.072	1347	1364	1382	rBV2	920926	1883466	100.00%	21.840%
5	10.746	1672	1684	1709	rBV	803984	1600509	84.98%	18.559%
6	12.148	1941	1952	1984	rBV	727677	1398959	74.28%	16.222%
7	16.374	2753	2760	2768	rBV3	13020	21576	1.15%	0.250%

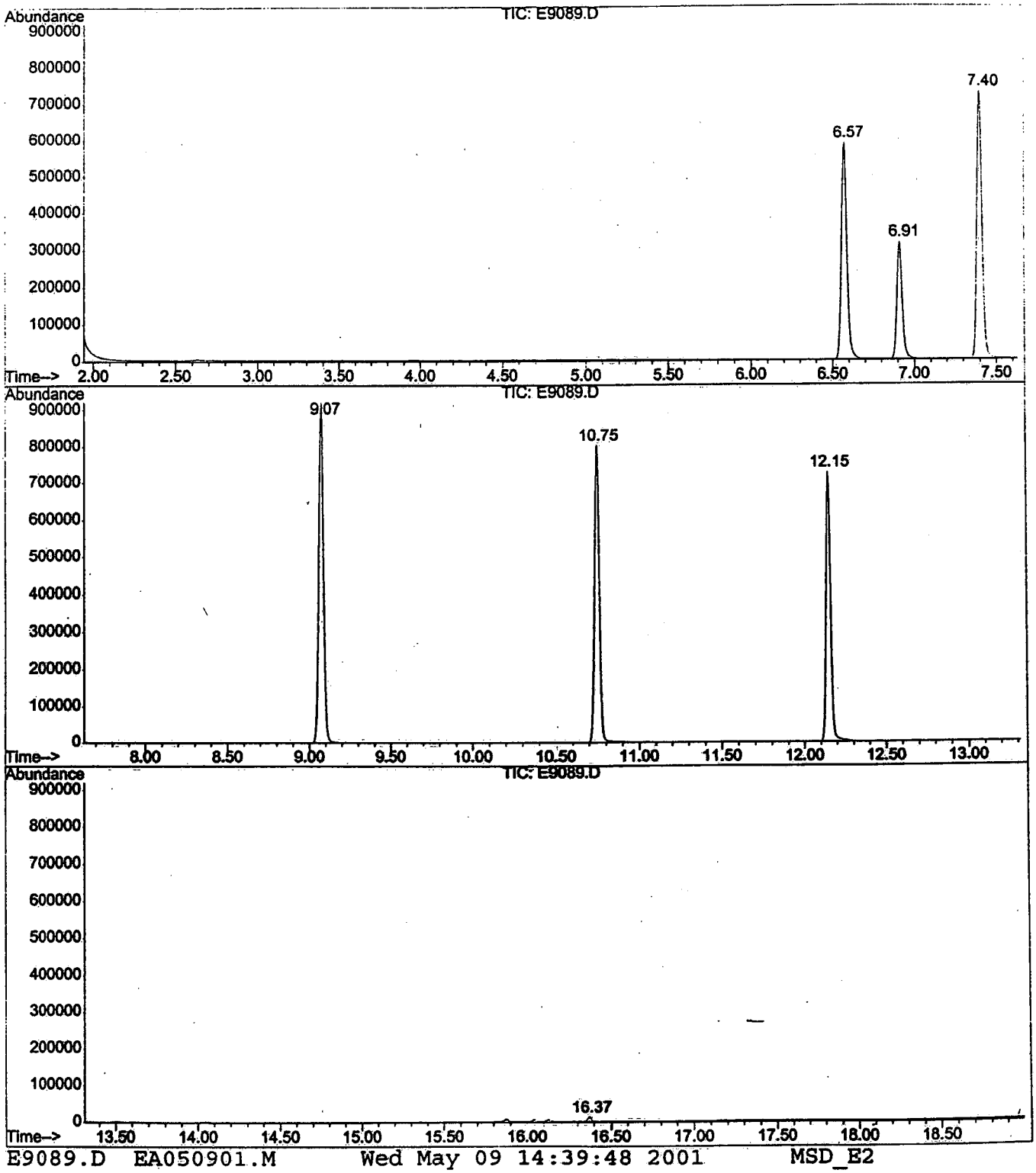
Sum of corrected areas: 8623893

E9089.D EA050901.M Wed May 09 14:39:47 2001 MSD_E2

000181

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-09-01\E9089.D
Operator : AMY
Acquired : 9 May 2001 2:18 pm using AcqMethod EA042501
Instrument : MSD_E2
Sample Name: METHOD-BLK,METHOD-BLK,A,5mL,100
Misc Info : NA,NA,NA
Vial Number: 6
Quant File :EA050901.RES (RTE Integrator)



E9089.D EA050901.M Wed May 09 14:39:48 2001 MSD_E2

C00182

3351

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-10-01\E9135.D Vial: 4
Acq On : 10 May 2001 12:48 pm Operator: AMY
Sample : METHOD-BLK,METHOD-BLK,A,5mL,100 Inst : MSD_E2
Misc : NA,NA,NA Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 13:21 2001 Quant Results File: EA050901.RES

Quant Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration
DataAcq Meth : EA042501

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.57	168	414189	30.00	UG	0.00
31) 1,4-Difluorobenzene	7.40	114	594706	30.00	UG	0.00
50) Chlorobenzene-d5	10.75	117	456932	30.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.91	65	213937	27.55	UG	0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 91.83%			
41) Toluene-d8	9.07	98	591178	29.63	UG	0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 98.77%			
59) Bromofluorobenzene	12.15	95	261686	27.55	UG	0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 91.83%			

Target Compounds Qvalue

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

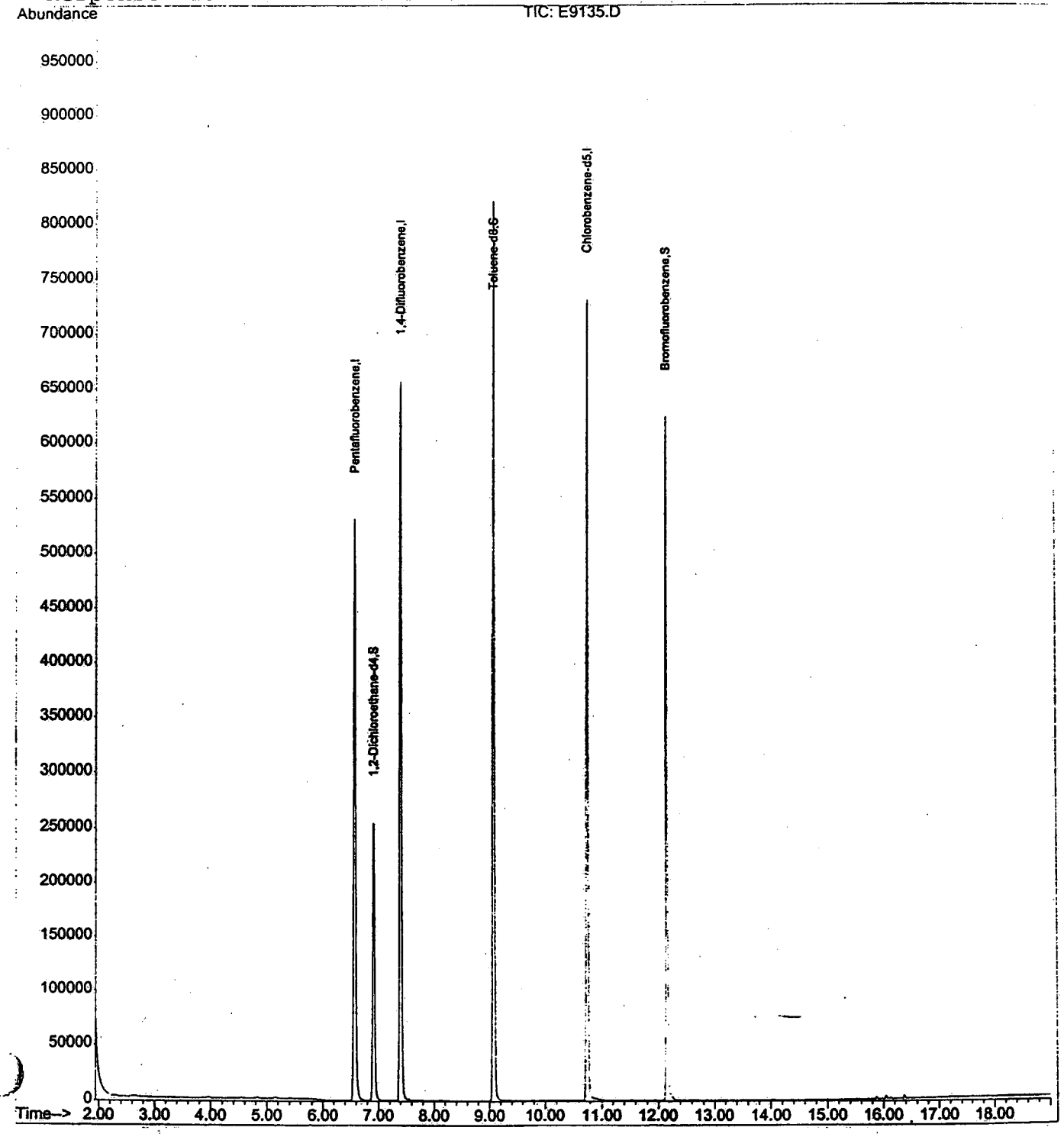
000183

3352

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-10-01\E9135.D Vial: 4
Acq On : 10 May 2001 12:48 pm Operator: AMY
Sample : METHOD-BLK,METHOD-BLK,A,5mL,100 Inst : MSD_E2
Misc : NA,NA,NA Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 10 13:21 2001 Quant Results File: EA050901.RES

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Wed May 09 13:20:33 2001
Response via : Initial Calibration



3353

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-10-01\E9135.D Vial: 4
Acq On : 10 May 2001 12:48 pm Operator: AMY
Sample : METHOD-BLK,METHOD-BLK,A,5mL,100 Inst : MSD_E2
Misc : NA,NA,NA Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\EA050901.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
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

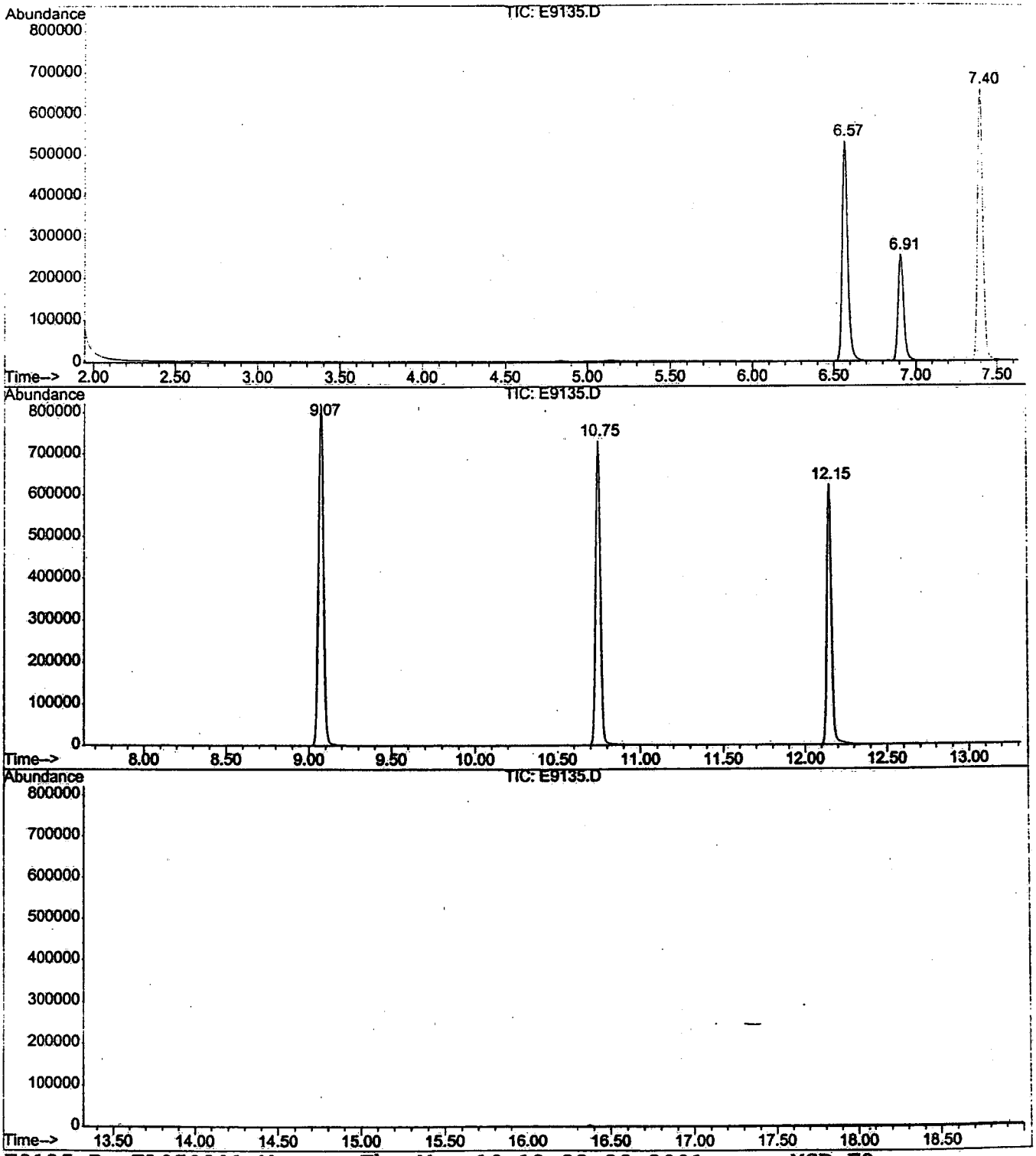
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.569	871	885	915	rBV	531171	1242748	72.67%	16.259%
2	6.909	939	950	975	rBV	253825	595319	34.81%	7.789%
3	7.401	1032	1044	1063	rBV	657119	1437951	84.09%	18.813%
4	9.069	1352	1363	1388	rBV	821862	1710049	100.00%	22.372%
5	10.748	1672	1684	1703	rBV	732135	1435900	83.97%	18.786%
6	12.150	1939	1952	1986	rBV2	624553	1221568	71.43%	15.982%

Sum of corrected areas: 7643535

E9135.D EA050901.M Thu May 10 13:22:28 2001 MSD_E2

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-10-01\E9135.D
Operator : AMY
Acquired : 10 May 2001 12:48 pm using AcqMethod EA042501
Instrument : MSD_E2
Sample Name: METHOD-BLK,METHOD-BLK,A,5mL,100
Misc Info : NA,NA,NA
Vial Number: 4
Quant File :EA050901.RES (RTE Integrator)



E9135.D EA050901.M Thu May 10 13:22:29 2001 MSD_E2

3355

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C9630.D DFTPP Injection Date : 04/30/2001

Inst ID: MSDC DFTPP Injection Time: 09:38

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	0.0	(	0.0	)1
69	Mass 69 relative abundance	42.5			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	53.6			
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	7.1			
275	10.0 - 30.0% of mass 198	23.6			
365	Greater than 1.0% of mass 198	4.4			
441	Present, but less than mass 443	12.83	(	62.1	)3
442	40.0 - 100.0% of mass 198	98.4			
443	17.0 - 23.0% of mass 442	20.7	(	21.0	)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
.	20-PPB-INJ-FOR-	C9631.D	04/30/2001	10:12
.	5-PPB-INJ-FOR-0	C9632.D	04/30/2001	10:37
.	80-PPB-INJ-FOR-	C9633.D	04/30/2001	11:02
.	10-PPB-INJ-FOR-	C9634.D	04/30/2001	11:28
.	50-PPB-INJ-FOR-	C9635.D	04/30/2001	11:53
.	Method-Blank	C9654.D	04/30/2001	20:44
.	DI-MS	C9655.D	04/30/2001	21:09
.	DI-MSD	C9656.D	04/30/2001	21:34
DMW20S-042501	2667-001	C9657.D	04/30/2001	21:59
DMW21S-042501	2667-002	C9658.D	04/30/2001	22:24
FB-042501	2667-003	C9659.D	04/30/2001	22:49
EFF-042501	2667-007	C9660.D	04/30/2001	23:14
TWP-1	2646-001	C9661.D	04/30/2001	23:39
FIELD	2646-003	C9662.D	05/01/2001	00:04
ROS-BS	2656-001	C9663.D	05/01/2001	00:29
FB	2656-002	C9664.D	05/01/2001	00:54
01	2675-001	C9665.D	05/01/2001	01:19
02	2663-002	C9666.D	05/01/2001	01:44
MW-14	2657-001	C9667.D	05/01/2001	02:09
.	Method-Blank	C9668.D	05/01/2001	02:34
.	DI-MS	C9669.D	05/01/2001	02:59
.	DI-MSD	C9670.D	05/01/2001	03:25
B1-042601-GW	2707-006	C9671.D	05/01/2001	03:50

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C9630.D

DFTPP Injection Date : 04/30/2001

Inst ID: MSDC

DFTPP Injection Time: 09:38

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	0.0	(	0.0	)1
69	Mass 69 relative abundance	42.5			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	53.6			
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	7.1			
275	10.0 - 30.0% of mass 198	23.6			
365	Greater than 1.0% of mass 198	4.4			
441	Present, but less than mass 443	12.8	(	62.1	)3
442	40.0 - 100.0% of mass 198	98.4			
443	17.0 - 23.0% of mass 442	20.7	(	21.0	)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
AQ-FB	2707-008	C9672.D	05/01/2001	04:15
4052-MW1	2743-001	C9674.D	05/01/2001	05:05
4052-MW2	2743-002	C9675.D	05/01/2001	05:30
MW-1	2687-001	C9676.D	05/01/2001	05:54
MW-2	2687-002	C9677.D	05/01/2001	06:19
MW-3	2687-003	C9678.D	05/01/2001	06:45
MW-4	2687-004	C9679.D	05/01/2001	07:09
MW-5	2687-005	C9680.D	05/01/2001	07:35
MW-6	2687-006	C9681.D	05/01/2001	08:00
MW-7	2687-007	C9682.D	05/01/2001	08:25
MW-8	2687-008	C9683.D	05/01/2001	08:50

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C9768.D DFTPP Injection Date : 05/04/2001

Inst ID: MSDC DFTPP Injection Time: 09:30

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	33.2			
68	Less than 2.0% of mass 69	0.0	(	0.0	)1
69	Mass 69 relative abundance	40.1			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	58.7			
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	21.7			
365	Greater than 1.0% of mass 198	5.2			
441	Present, but less than mass 443	17.67	(	84.9	)3
442	40.0 - 100.0% of mass 198	97.7			
443	17.0 - 23.0% of mass 442	20.8	(	21.3	)2

1-Value is % mass 69 2-Value is % mass 443 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
.	20-PPB-INJ-FOR-	C9770.D	05/04/2001	10:36
.	Method-Blank	C9771.D	05/04/2001	11:03
.	DI-MS	C9772.D	05/04/2001	11:29
.	DI-MSD	C9773.D	05/04/2001	11:54
MW-2	2796-001	C9774.D	05/04/2001	12:20
MW2	2860-002	C9775.D	05/04/2001	12:45
MW1	2861-001	C9776.D	05/04/2001	13:11
MW2	2861-002	C9777.D	05/04/2001	13:36
MW3	2861-003	C9778.D	05/04/2001	14:02
MW-1	2867-001	C9779.D	05/04/2001	14:27
MW-2	2867-002	C9780.D	05/04/2001	14:53
MW-3	2867-003	C9781.D	05/04/2001	15:18
MW-6	2867-005	C9782.D	05/04/2001	15:44
MW-5	2867-004	C9785.D	05/04/2001	17:00
MW-7	2867-006	C9786.D	05/04/2001	17:25
FB	2867-008	C9787.D	05/04/2001	17:50
MW-8	2867-007	C9788.D	05/04/2001	18:16

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C9791.D

DFTPP Injection Date : 05/07/2001

Inst ID: MSDC

DFTPP Injection Time: 09:45

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	30.1			
68	Less than 2.0% of mass 69	0.0	(	0.0	)1
69	Mass 69 relative abundance	43.2			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	56.9			
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	8.6			
275	10.0 - 30.0% of mass 198	26.1			
365	Greater than 1.0% of mass 198	4.0			
441	Present, but less than mass 443	14.06	(	63.9	)3
442	40.0 - 100.0% of mass 198	98.2			
443	17.0 - 23.0% of mass 442	22.0	(	22.4	)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
.	20-PPB-INJ-FOR-	C9792.D	05/07/2001	10:47
MW-8	2867-007DIL	C9795.D	05/07/2001	12:02
MW-5	2867-004DIL	C9796.D	05/07/2001	12:27
.	Method-blank	C9797.D	05/07/2001	12:53
.	DI-MS	C9798.D	05/07/2001	13:18
.	DI-MSD	C9799.D	05/07/2001	13:43
MW1	2511-015	C9800.D	05/07/2001	14:08
W2	2919-001	C9801.D	05/07/2001	14:33
W3	2919-002	C9802.D	05/07/2001	14:58
W4	2919-003	C9803.D	05/07/2001	15:24
W6	2919-004	C9804.D	05/07/2001	15:49
W7	2919-005	C9805.D	05/07/2001	16:14
W8	2919-006	C9806.D	05/07/2001	16:39
GW-1	2871-004	C9807.D	05/07/2001	17:04
FIELD-BLANK-AQ	2871-006	C9808.D	05/07/2001	17:29
HEFF050401	2893-001	C9809.D	05/07/2001	17:54
SUMP-1	2916-001	C9810.D	05/07/2001	18:19
EFF	2931-003	C9812.D	05/07/2001	19:09
4052-MW1	2743-001	C9813.D	05/07/2001	19:34
4052-MW2	2743-002	C9814.D	05/07/2001	19:59
MID	2931-002	C9815.D	05/08/2001	06:00

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: C9771.D

Instrument ID: MSDA

Date Extracted: 05/04/01

Matrix: AQUEOUS

Date Analyzed: 05/04/2001

Time Analyzed: 11:03

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
.	DI-MS	05/04/2001	11:29
.	DI-MSD	05/04/2001	11:54
MW-2	2796-001	05/04/2001	12:20
MW2	2860-002	05/04/2001	12:45
MW1	2861-001	05/04/2001	13:11
MW2	2861-002	05/04/2001	13:36
MW3	2861-003	05/04/2001	14:02
MW-1	2867-001	05/04/2001	14:27
MW-2	2867-002	05/04/2001	14:53
MW-3	2867-003	05/04/2001	15:18
MW-6	2867-005	05/04/2001	15:44
MW-5	2867-004	05/04/2001	17:00
MW-7	2867-006	05/04/2001	17:25
FB	2867-008	05/04/2001	17:50
MW-8	2867-007	05/04/2001	18:16
MW-8	2867-007DIL	05/07/2001	12:02
MW-5	2867-004DIL	05/07/2001	12:27

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9771.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		0.35
Phenol	ND		0.33
Aniline	ND		0.37
bis(2-Chloroethyl)ether	ND		0.36
2-Chlorophenol	ND		0.36
1,3-Dichlorobenzene	ND		0.37
1,4-Dichlorobenzene	ND		0.29
Benzyl alcohol	ND		0.46
1,2-Dichlorobenzene	ND		0.31
2-Methylphenol	ND		0.39
bis(2-chloroisopropyl)ether	ND		0.45
4-Methylphenol	ND		0.33
N-Nitroso-di-n-propylamine	ND		0.5
Hexachloroethane	ND		0.48
Nitrobenzene	ND		0.33
Isophorone	ND		0.1
2-Nitrophenol	ND		0.36
2,4-Dimethylphenol	ND		0.32
bis(2-Chloroethoxy)methane	ND		0.36
Benzoic acid	ND		0.49
2,4-Dichlorophenol	ND		0.48
1,2,4-Trichlorobenzene	ND		0.22
Naphthalene	ND		0.14
4-Chloroaniline	ND		0.9
Hexachlorobutadiene	ND		0.42
4-Chloro-3-methylphenol	ND		0.25
2-Methylnaphthalene	ND		0.18
Hexachlorocyclopentadiene	ND		0.47
2,4,6-Trichlorophenol	ND		0.64
2,4,5-Trichlorophenol	ND		0.51
2-Chloronaphthalene	ND		0.23
2-Nitroaniline	ND		0.33
Dimethylphthalate	ND		0.17
2,6-Dinitrotoluene	ND		0.36
Acenaphthylene	ND		0.15

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INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: N/A

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9771.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		0.52
Acenaphthene	ND		0.21
2,4-Dinitrophenol	ND		0.6
4-Nitrophenol	ND		0.87
2,4-Dinitrotoluene	ND		0.29
Dibenzofuran	ND		0.13
Diethylphthalate	ND		0.16
Fluorene	ND		0.18
4-Chlorophenyl-phenylether	ND		0.23
4-Nitroaniline	ND		0.66
4,6-Dinitro-2-methylphenol	ND		0.45
N-Nitrosodiphenylamine	ND		0.32
1,2-Diphenylhydrazine/Azobenzene	ND		0.31
4-Bromophenyl-phenylether	ND		0.31
Hexachlorobenzene	ND		0.29
Pentachlorophenol	ND		0.59
Phenanthrene	ND		0.26
Anthracene	ND		0.31
Carbazole	ND		0.21
Di-n-butylphthalate	ND		0.23
Fluoranthene	ND		0.18
Benzidine	ND		0.35
Pyrene	ND		0.16
3,3'-Dimethylbenzidine	ND		0.81
Butylbenzylphthalate	ND		0.41
3,3'-Dichlorobenzidine	ND		0.29
Benzo[a]anthracene	ND		0.15
Chrysene	ND		0.25
bis(2-Ethylhexyl)phthalate	ND		0.26
Di-n-octylphthalate	ND		0.19
Benzo[b]fluoranthene	ND		0.34
Benzo[k]fluoranthene	ND		0.25
Benzo[a]pyrene	ND		0.15
Indeno[1,2,3-cd]pyrene	ND		0.59
Dibenz[a,h]anthracene	ND		0.48
Benzo[g,h,i]perylene	ND		0.69

Total Target Compounds: 0

3362

000193

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: N/A

Lab ID: Method-Blank
Client ID:
Date Received: N/A
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9771.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

Response Factor Report MSD-C

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration

Calibration Files
5 =C9632.D 20 =C9631.D 50 =C9635.D
80 =C9633.D 10 =C9634.D

		Compound	5	20	50	80	10	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------						
2)	T	N-Nitrosodimethylamin	0.578	0.472	0.528	0.529	0.444	0.510	10.33
3)	T	Pyridine	0.376	0.410	0.477	0.454	0.401	0.424	9.65
4)	S	2-Fluorophenol	1.279	1.287	1.286	1.212	1.322	1.277	3.14
5)	T	Benzaldehyde	0.383	0.325	0.332	0.189	0.408	0.327	25.89
6)	S	Phenol-d5	1.307	1.268	1.259	1.172	1.338	1.269	4.93
7)	MC	Phenol	1.299	1.250	1.193	1.158	1.258	1.232	4.51
8)	T	Aniline	1.473	1.575	1.592	1.468	1.531	1.528	3.73
9)	T	bis(2-Chloroethyl)eth	1.011	1.053	1.057	1.045	1.021	1.037	1.96
10)	M	2-Chlorophenol	1.080	1.157	1.146	1.127	1.077	1.117	3.31
11)	T	1,3-Dichlorobenzene	1.251	1.376	1.433	1.395	1.297	1.350	5.52
12)	MC	1,4-Dichlorobenzene	1.360	1.430	1.469	1.405	1.356	1.404	3.39
13)	T	Benzyl alcohol	0.467	0.557	0.534	0.547	0.503	0.522	7.06
14)	T	1,2-Dichlorobenzene	1.197	1.279	1.290	1.278	1.199	1.249	3.71
15)	T	2-Methylphenol	0.870	0.916	0.880	0.844	0.868	0.875	2.96
16)	T	bis(2-chloroisopropyl	0.587	0.610	0.630	0.601	0.619	0.609	2.72
17)	T	4-Methylphenol	0.809	0.847	0.816	0.799	0.797	0.814	2.46
18)	MP	N-Nitroso-di-n-propyl	0.431	0.483	0.483	0.475	0.470	0.469	4.62
19)	T	Acetophenone	1.083	1.195	1.137	1.108	1.130	1.131	3.71
20)	T	2-Aminotoluene +4-Ami	1.756	1.828	1.654	1.345	1.769	1.670	11.52
21)	T	Hexachloroethane	0.485	0.543	0.557	0.539	0.491	0.523	6.27
22)	I	Naphthalene-d8	----------ISTD----------						
23)	S	Nitrobenzene-d5	0.313	0.290	0.289	0.290	0.304	0.297	3.72
24)	T	Nitrobenzene	0.286	0.280	0.290	0.278	0.284	0.284	1.66
25)	T	Isophorone	0.368	0.418	0.441	0.440	0.389	0.411	7.83
26)	TC	2-Nitrophenol	0.096	0.132	0.138	0.141	0.107	0.123	16.28
27)	T	2,4-Dimethylphenol	0.259	0.296	0.288	0.270	0.272	0.277	5.38
28)	T	bis(2-Chloroethoxy)me	0.300	0.325	0.326	0.316	0.298	0.313	4.31
29)	T	Benzoic acid	0.037	0.038	0.032	0.018	0.036	0.032	25.33
30)	T	2,4-Dimethylaniline	0.339	0.390	0.336	0.215	0.350	0.326	20.08
31)	TC	2,4-Dichlorophenol	0.184	0.218	0.207	0.212	0.186	0.201	7.78
32)	M	1,2,4-Trichlorobenzen	0.255	0.283	0.293	0.299	0.256	0.277	7.44
33)	T	Naphthalene	0.879	0.927	0.920	0.874	0.873	0.895	3.00
34)	T	4-Chloroaniline	0.276	0.296	0.242	0.305	0.275	0.279	8.64
35)	TC	Hexachlorobutadiene	0.147	0.163	0.179	0.183	0.152	0.165	9.73
36)	T	Caprolactam	0.019	0.030	0.031	0.036	0.023	0.028	23.57
37)	MC	4-Chloro-3-methylphen	0.146	0.165	0.159	0.166	0.146	0.156	6.37
38)	T	2-Methylnaphthalene	0.464	0.525	0.531	0.531	0.466	0.504	6.99
39)	I	Acenaphthene-d10	----------ISTD----------						
40)	TP	Hexachlorocyclopentad	0.161	0.158	0.191	0.225	0.103	0.168	26.87
41)	TC	2,4,6-Trichlorophenol	0.224	0.278	0.295	0.314	0.246	0.271	13.44
42)	T	2,4,5-Trichlorophenol	0.236	0.288	0.282	0.312	0.251	0.274	11.00
43)	S	2-Fluorobiphenyl	1.403	1.295	1.266	1.288	1.337	1.318	4.12
44)	T	1-1'-Biphenyl	1.397	1.473	1.543	1.564	1.380	1.471	5.63
45)	T	2-Chloronaphthalene	1.024	1.112	1.173	1.168	1.035	1.102	6.43
46)	T	2-Nitroaniline	0.110	0.166	0.182	0.192	0.132	0.157	22.03
47)	T	Dimethylphthalate	0.711	0.819	0.849	0.915	0.750	0.809	9.99

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48)	T	2,6-Dinitrotoluene	0.100	0.148	0.166	0.190	0.119	0.145	24.81
49)	T	Acenaphthylene	1.295	1.549	1.650	1.717	1.383	1.519	11.68
50)	T	3-Nitroaniline	0.091	0.142	0.127	0.081	0.111	0.110	22.79
51)	MC	Acenaphthene	0.935	0.988	1.031	1.036	0.904	0.979	5.96
52)	TP	2,4-Dinitrophenol	0.072	0.083	0.100	0.100	0.078	0.087	14.96
53)	MP	4-Nitrophenol	0.048	0.055	0.062	0.064	0.047	0.055	13.98
)	M	2,4-Dinitrotoluene	0.083	0.148	0.167	0.187	0.109	0.139	30.56
)	T	Dibenzofuran	1.099	1.198	1.232	1.282	1.101	1.182	6.83
56)	T	Diethylphthalate	0.561	0.720	0.769	0.843	0.614	0.701	16.30
57)	T	Fluorene	0.724	0.864	0.904	0.955	0.756	0.841	11.65
58)	T	4-Chlorophenyl-phenyl	0.333	0.369	0.389	0.428	0.324	0.369	11.56
59)	T	4-Nitroaniline	0.091	0.142	0.127	0.088	0.111	0.112	20.78
60)	I	Phenanthrene-d10	----------ISTD----------						
61)	T	4,6-Dinitro-2-methylp	0.026	0.029	0.041	0.049	0.030	0.035	26.91
62)	TC	N-Nitrosodiphenylamin	0.366	0.424	0.423	0.443	0.380	0.407	7.91
63)	T	1,2-Diphenylhydrazine	0.699	0.834	0.878	0.858	0.797	0.813	8.70
64)	S	2,4,6-Tribromophenol	0.101	0.108	0.099	0.092	0.103	0.101	5.84
65)	T	4-Bromophenyl-phenyle	0.156	0.169	0.184	0.197	0.157	0.173	10.44
66)	T	Hexachlorobenzene	0.172	0.220	0.232	0.249	0.196	0.214	14.10
67)	T	Atrazine	0.094	0.128	0.142	0.150	0.101	0.123	19.96
68)	MC	Pentachlorophenol	0.049	0.045	0.051	0.063	0.042	0.050	16.11
69)	T	Phenanthrene	0.783	0.854	0.881	0.910	0.794	0.844	6.50
70)	T	Anthracene	0.618	0.800	0.846	0.877	0.709	0.770	13.77
71)	T	Carbazole	0.471	0.562	0.529	0.514	0.494	0.514	6.72
72)	T	Di-n-butylphthalate	0.467	0.712	0.827	0.934	0.553	0.699	27.44
73)	TC	Fluoranthene	0.446	0.531	0.594	0.661	0.472	0.541	16.32
74)	T	Benzidine	0.044	0.065	0.030	0.041	0.034	0.043	31.57
75)	I	Chrysene-d12	----------ISTD----------						
76)	M	Pyrene	1.520	1.658	1.582	1.670	1.371	1.560	7.81
77)	S	Terphenyl-d14	1.214	1.194	1.043	1.072	1.120	1.129	6.58
)	T	3,3'-Dimethylbenzidin	0.271	0.215	0.202	0.202	0.259	0.230	14.21
79)	T	Butylbenzylphthalate	0.302	0.513	0.546	0.598	0.330	0.458	29.18
80)	T	3,3'-Dichlorobenzidin	0.176	0.207	0.185	0.116	0.182	0.173	19.64
81)	T	Benzo[a]anthracene	0.812	0.888	0.947	0.975	0.821	0.888	8.21
82)	T	Chrysene	0.853	0.868	0.898	0.907	0.845	0.874	3.12
83)	T	bis(2-Ethylhexyl)phth	0.436	0.632	0.786	0.806	0.436	0.619	29.12
84)	I	Perylene-d12	----------ISTD----------						
85)	TC	Di-n-octylphthalate	1.235	1.116	1.310	1.579	1.023	1.252	17.03
86)	T	Benzo[b]fluoranthene	0.943	1.029	1.111	1.133	0.982	1.040	7.85
87)	T	Benzo[k]fluoranthene	0.581	0.893	0.530	0.922	0.945	0.774	26.01
88)	TC	Benzo[a]pyrene	0.675	0.812	0.896	0.930	0.712	0.805	13.83
89)	T	Indeno[1,2,3-cd]pyren	0.678	0.745	0.830	0.847	0.708	0.762	9.76
90)	T	Dibenz[a,h]anthracene	0.536	0.656	0.690	0.705	0.575	0.632	11.65
91)	T	Benzo[g,h,i]perylene	0.708	0.660	0.690	0.699	0.559	0.663	9.18

(#) = Out of Range

CW0901.M Mon Apr 30 13:17:59 2001 MSD-C

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9770.D
Acq On : 4 May 2001 10:36
Sample : .,20-PPB-INJ-FOR-05/04/01
Misc : N/A,N/A,N/A,1
IS Integration Params: RTEINT.P

Vial: 2
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 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	93	-0.02
2	T	N-Nitrosodimethylamine	0.510	0.541	-6.1	106	-0.02
3	T	Pyridine	0.424	0.435	-2.6	98	-0.02
4	S	2-Fluorophenol	1.277	1.155	9.6	83	-0.02
5	T	Benzaldehyde	0.327	0.390	-19.3	111	-0.02
6	S	Phenol-d5	1.269	1.142	10.0	84	-0.02
7	MC	Phenol	1.232	1.323	-7.4	98	-0.02
8	T	Aniline	1.528	1.281	16.2	76	-0.02
9	T	bis(2-Chloroethyl)ether	1.037	0.943	9.1	83	-0.02
10	M	2-Chlorophenol	1.117	1.214	-8.7	97	-0.02
11	T	1,3-Dichlorobenzene	1.350	1.285	4.8	87	-0.01
12	MC	1,4-Dichlorobenzene	1.404	1.322	5.8	86	-0.01
13	T	Benzyl alcohol	0.522	0.472	9.6	79	-0.02
14	T	1,2-Dichlorobenzene	1.249	1.177	5.8	85	-0.02
[illegible]	T	2-Methylphenol	0.875	0.787	10.1	80	-0.02
[illegible]	T	bis(2-chloroisopropyl)ether	0.609	0.513	15.8	78	-0.02
17	T	4-Methylphenol	0.814	0.740	9.1	81	-0.02
18	MP	N-Nitroso-di-n-propylamine	0.469	0.395	15.8	76	-0.02
19	T	Acetophenone	1.131	1.087	3.9	84	-0.02
20	T	2-Aminotoluene +4-Aminotolu	1.670	1.417	15.1	72	-0.01
21	T	Hexachloroethane	0.523	0.509	2.7	87	-0.01
22	I	Naphthalene-d8	1.000	1.000	0.0	91	-0.01
23	S	Nitrobenzene-d5	0.297	0.262	11.8	83	-0.01
24	T	Nitrobenzene	0.284	0.246	13.4	80	-0.01
25	T	Isophorone	0.411	0.364	11.4	80	-0.02
26	TC	2-Nitrophenol	0.123	0.146	-18.7	101	-0.01
27	T	2,4-Dimethylphenol	0.277	0.303	-9.4	94	-0.01
28	T	bis(2-Chloroethoxy)methane	0.313	0.290	7.3	82	-0.01
29	T	Benzoic acid	0.032	0.026	18.8	64	-0.01
30	T	2,4-Dimethylaniline	0.326	0.262	19.6	61	-0.01
31	TC	2,4-Dichlorophenol	0.201	0.239	-18.9	100	-0.01
32	M	1,2,4-Trichlorobenzene	0.277	0.270	2.5	87	-0.01
33	T	Naphthalene	0.895	0.861	3.8	85	-0.01
34	T	4-Chloroaniline	0.279	0.234	16.1	72	-0.01
35	TC	Hexachlorobutadiene	0.165	0.169	-2.4	95	-0.01
36	T	Caprolactam	0.028	0.025	10.7	78	-0.02
37	MC	4-Chloro-3-methylphenol	0.156	0.176	-12.8	98	-0.01
38	T	2-Methylnaphthalene	0.504	0.477	5.4	83	-0.02
[illegible]	I	Acenaphthene-d10	1.000	1.000	0.0	95	-0.01
[illegible]	TP	Hexachlorocyclopentadiene	0.168	0.191	-13.7	115	-0.01
41	TC	2,4,6-Trichlorophenol	0.271	0.314	-15.9	108	-0.01
42	T	2,4,5-Trichlorophenol	0.274	0.269	1.8	89	-0.01
43	S	2-Fluorobiphenyl	1.318	1.276	3.2	94	-0.01
44	T	1-1'-Biphenyl	1.471	1.355	7.9	88	-0.01

45	T	2-Chloronaphthalene	1.102	1.005	8.8	86	-0.01
46	T	2-Nitroaniline	0.157	0.127	19.1	73	-0.01
47	T	Dimethylphthalate	0.809	0.755	6.7	88	-0.01
48	T	2,6-Dinitrotoluene	0.145	0.139	4.1	89	0.00
49	T	Acenaphthylene	1.519	1.423	6.3	88	0.00
50	T	3-Nitroaniline	0.110	0.125	-13.6	84	-0.01
	MC	Acenaphthene	0.979	0.917	6.3	89	0.00
	TP	2,4-Dinitrophenol	0.087	0.088	-1.1	101	-0.01
53	MP	4-Nitrophenol	0.055	0.052	5.5	90	0.00
54	M	2,4-Dinitrotoluene	0.139	0.134	3.6	87	-0.01
55	T	Dibenzofuran	1.182	1.118	5.4	89	0.00
56	T	Diethylphthalate	0.701	0.638	9.0	85	0.00
57	T	Fluorene	0.841	0.788	6.3	87	-0.01
58	T	4-Chlorophenyl-phenylether	0.369	0.360	2.4	93	0.00
59	T	4-Nitroaniline	0.112	0.125	-11.6	84	-0.01
60	I	Phenanthrene-d10	1.000	1.000	0.0	99	0.00
61	T	4,6-Dinitro-2-methylphenol	0.035	0.029	17.1	97	0.00
62	TC	N-Nitrosodiphenylamine	0.407	0.385	5.4	90	-0.01
63	T	1,2-Diphenylhydrazine/Azobe	0.813	0.701	13.8	83	-0.01
64	S	2,4,6-Tribromophenol	0.101	0.106	-5.0	96	-0.01
65	T	4-Bromophenyl-phenylether	0.173	0.172	0.6	100	0.00
66	T	Hexachlorobenzene	0.214	0.223	-4.2	101	0.00
67	T	Atrazine	0.123	0.126	-2.4	97	0.00
68	MC	Pentachlorophenol	0.050	0.047	6.0	105	0.00
69	T	Phenanthrene	0.844	0.785	7.0	91	0.00
70	T	Anthracene	0.770	0.734	4.7	91	0.00
71	T	Carbazole	0.514	0.552	-7.4	97	0.00
72	T	Di-n-butylphthalate	0.699	0.605	13.4	84	0.01
73	TC	Fluoranthene	0.541	0.528	2.4	98	0.04
74	T	Benzidine	0.043	0.047	-9.3	72	0.04
	I	Chrysene-d12	1.000	1.000	0.0	123	0.08
76	M	Pyrene	1.560	1.380	11.5	102	0.05
77	S	Terphenyl-d14	1.129	1.104	2.2	114	0.05
78	T	3,3'-Dimethylbenzidine	0.230	0.185	19.6	106	0.07
79	T	Butylbenzylphthalate	0.458	0.371	19.0	89	0.07
80	T	3,3'-Dichlorobenzidine	0.173	0.205	-18.5	122	0.08
81	T	Benzo[a]anthracene	0.888	0.875	1.5	121	0.08
82	T	Chrysene	0.874	0.853	2.4	121	0.08
83	T	bis(2-Ethylhexyl)phthalate	0.619	0.518	16.3	101	0.09
84	I	Perylene-d12	1.000	1.000	0.0	134	0.10
85	TC	Di-n-octylphthalate	1.252	1.030	17.7	123	0.11
86	T	Benzo[b]fluoranthene	1.040	1.058	-1.7	138	0.10
87	T	Benzo[k]fluoranthene	0.774	0.925	-19.5	139	0.10
88	TC	Benzo[a]pyrene	0.805	0.876	-8.8	144	0.10
89	T	Indeno[1,2,3-cd]pyrene	0.762	0.814	-6.8	146	0.10
90	T	Dibenz[a,h]anthracene	0.632	0.642	-1.6	131	0.11
91	T	Benzo[g,h,i]perylene	0.663	0.659	0.6	134	0.11

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

C9631.D CW0901.M Fri May 04 11:06:30 2001 MSD-C

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\05-07-01\C9792.D
Acq On : 7 May 2001 10:47
Sample : .,20-PPB-INJ-FOR-05/07/01
[redacted]sc : N/A,N/A,N/A,1
[redacted]S Integration Params: RTEINT.P

Vial: 2
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 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	80	-0.01
2	T	N-Nitrosodimethylamine	0.510	0.428	16.1	72	-0.02
3	T	Pyridine	0.424	0.380	10.4	74	-0.02
4	S	2-Fluorophenol	1.277	1.125	11.9	70	-0.01
5	T	Benzaldehyde	0.327	0.374	-14.4	92	-0.01
6	S	Phenol-d5	1.269	1.139	10.2	72	-0.01
7	MC	Phenol	1.232	1.309	-6.2	83	-0.01
8	T	Aniline	1.528	1.300	14.9	66	-0.01
9	T	bis(2-Chloroethyl)ether	1.037	0.938	9.5	71	-0.01
10	M	2-Chlorophenol	1.117	1.242	-11.2	86	-0.01
11	T	1,3-Dichlorobenzene	1.350	1.306	3.3	76	0.00
12	MC	1,4-Dichlorobenzene	1.404	1.360	3.1	76	0.00
13	T	Benzyl alcohol	0.522	0.491	5.9	70	-0.01
14	T	1,2-Dichlorobenzene	1.249	1.211	3.0	75	-0.01
[redacted]	T	2-Methylphenol	0.875	0.823	5.9	72	-0.01
[redacted]	T	bis(2-chloroisopropyl)ether	0.609	0.495	18.7	65	-0.01
17	T	4-Methylphenol	0.814	0.784	3.7	74	-0.01
18	MP	N-Nitroso-di-n-propylamine	0.469	0.384	18.1	63	-0.01
19	T	Acetophenone	1.131	1.096	3.1	73	-0.01
20	T	2-Aminotoluene +4-Aminotolu	1.670	1.457	12.8	63	0.00
21	T	Hexachloroethane	0.523	0.470	10.1	69	0.00
22	I	Naphthalene-d8	1.000	1.000	0.0	84	-0.01
23	S	Nitrobenzene-d5	0.297	0.241	18.9	70	0.00
24	T	Nitrobenzene	0.284	0.240	15.5	71	0.00
25	T	Isophorone	0.411	0.341	17.0	68	-0.01
26	TC	2-Nitrophenol	0.123	0.137	-11.4	86	0.00
27	T	2,4-Dimethylphenol	0.277	0.295	-6.5	83	0.00
28	T	bis(2-Chloroethoxy)methane	0.313	0.277	11.5	71	0.00
29	T	Benzoic acid	0.032	0.026	18.8	57	0.00
30	T	2,4-Dimethylaniline	0.326	0.286	12.3	61	0.00
31	TC	2,4-Dichlorophenol	0.201	0.236	-17.4	90	0.00
32	M	1,2,4-Trichlorobenzene	0.277	0.290	-4.7	86	0.00
33	T	Naphthalene	0.895	0.867	3.1	78	0.00
34	T	4-Chloroaniline	0.279	0.261	6.5	74	0.00
35	TC	Hexachlorobutadiene	0.165	0.175	-6.1	90	0.00
36	T	Caprolactam	0.028	0.023	17.9	65	-0.01
37	MC	4-Chloro-3-methylphenol	0.156	0.185	-18.6	94	0.00
38	T	2-Methylnaphthalene	0.504	0.513	-1.8	82	-0.01
[redacted]9	I	Acenaphthene-d10	1.000	1.000	0.0	99	0.00
[redacted]	TP	Hexachlorocyclopentadiene	0.168	0.189	-12.5	118	0.00
41	TC	2,4,6-Trichlorophenol	0.271	0.320	-18.1	114	0.00
42	T	2,4,5-Trichlorophenol	0.274	0.292	-6.6	101	0.00
43	S	2-Fluorobiphenyl	1.318	1.250	5.2	96	0.00
44	T	1-1'-Biphenyl	1.471	1.333	9.4	90	0.00

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45	T	2-Chloronaphthalene	1.102	1.039	5.7	93	0.00
46	T	2-Nitroaniline	0.157	0.132	15.9	79	0.00
47	T	Dimethylphthalate	0.809	0.804	0.6	97	0.00
48	T	2,6-Dinitrotoluene	0.145	0.154	-6.2	103	0.00
49	T	Acenaphthylene	1.519	1.461	3.8	93	0.00
50	T	3-Nitroaniline	0.110	0.125	-13.6	87	0.00
	MC	Acenaphthene	0.979	0.927	5.3	93	0.00
	TP	2,4-Dinitrophenol	0.087	0.086	1.1	102	0.00
53	MP	4-Nitrophenol	0.055	0.063	-14.5	113	0.00
54	M	2,4-Dinitrotoluene	0.139	0.153	-10.1	103	0.00
55	T	Dibenzofuran	1.182	1.192	-0.8	99	0.00
56	T	Diethylphthalate	0.701	0.683	2.6	94	0.00
57	T	Fluorene	0.841	0.879	-4.5	101	0.00
58	T	4-Chlorophenyl-phenylether	0.369	0.409	-10.8	110	0.00
59	T	4-Nitroaniline	0.112	0.124	-10.7	86	0.00
60	I	Phenanthrene-d10	1.000	1.000	0.0	115	0.00
61	T	4,6-Dinitro-2-methylphenol	0.035	0.030	14.3	118	0.00
62	TC	N-Nitrosodiphenylamine	0.407	0.399	2.0	108	0.00
63	T	1,2-Diphenylhydrazine/Azobe	0.813	0.720	11.4	99	0.00
64	S	2,4,6-Tribromophenol	0.101	0.108	-6.9	114	0.00
65	T	4-Bromophenyl-phenylether	0.173	0.182	-5.2	123	0.00
66	T	Hexachlorobenzene	0.214	0.232	-8.4	121	0.00
67	T	Atrazine	0.123	0.109	11.4	97	0.00
68	MC	Pentachlorophenol	0.050	0.052	-4.0	134	0.00
69	T	Phenanthrene	0.844	0.815	3.4	109	0.00
70	T	Anthracene	0.770	0.772	-0.3	111	0.00
71	T	Carbazole	0.514	0.549	-6.8	112	0.00
72	T	Di-n-butylphthalate	0.699	0.587	16.0	94	0.00
73	TC	Fluoranthene	0.541	0.530	2.0	114	0.00
74	T	Benzidine	0.043	0.051	-18.6	90	0.00
[illegible]	I	Chrysene-d12	1.000	1.000	0.0	128	0.00
[illegible]	M	Pyrene	1.560	1.458	6.5	112	0.00
77	S	Terphenyl-d14	1.129	1.229	-8.9	131	0.00
78	T	3,3'-Dimethylbenzidine	0.230	0.203	11.7	120	0.00
79	T	Butylbenzylphthalate	0.458	0.383	16.4	95	0.00
80	T	3,3'-Dichlorobenzidine	0.173	0.193	-11.6	119	0.00
81	T	Benzo[a]anthracene	0.888	0.862	2.9	124	0.00
82	T	Chrysene	0.874	0.884	-1.1	130	0.00
83	T	bis(2-Ethylhexyl)phthalate	0.619	0.517	16.5	104	0.00
84	I	Perylene-d12	1.000	1.000	0.0	135	0.00
85	TC	Di-n-octylphthalate	1.252	1.052	16.0	127	0.00
86	T	Benzo[b]fluoranthene	1.040	1.033	0.7	135	0.00
87	T	Benzo[k]fluoranthene	0.774	0.884	-14.2	133	0.00
88	TC	Benzo[a]pyrene	0.805	0.821	-2.0	136	0.00
89	T	Indeno[1,2,3-cd]pyrene	0.762	0.777	-2.0	140	-0.02
90	T	Dibenz[a,h]anthracene	0.632	0.668	-5.7	137	0.00
91	T	Benzo[g,h,i]perylene	0.663	0.669	-0.9	136	-0.01

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

C9631.D CW0901.M Mon May 07 11:20:41 2001 MSD-C

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 05/04/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
Method-Blank	AQUEOUS	C9771.D	70	81	62	75	89	85
DI-MS	AQUEOUS	C9772.D	62	66	59	76	93	88
DI-MSD	AQUEOUS	C9773.D	68	72	64	80	100	88
2796-001	AQUEOUS	C9774.D	71	76	63	79	80	91
2860-002	AQUEOUS	C9775.D	N/A	N/A	64	81	N/A	91
2861-001	AQUEOUS	C9776.D	N/A	N/A	63	80	N/A	98
2861-002	AQUEOUS	C9777.D	N/A	N/A	63	83	N/A	99
2861-003	AQUEOUS	C9778.D	N/A	N/A	63	82	N/A	98
2867-001	AQUEOUS	C9779.D	66	67	62	80	96	100
2867-002	AQUEOUS	C9780.D	48	54	57	57	65	77
2867-003	AQUEOUS	C9781.D	67	71	63	78	90	99
2867-005	AQUEOUS	C9782.D	67	67	64	76	90	91
2867-004	AQUEOUS	C9785.D	51	60	77	59	51	67
2867-006	AQUEOUS	C9786.D	57	60	60	76	108	102
2867-008	AQUEOUS	C9787.D	68	70	62	85	95	102
2867-007	AQUEOUS	C9788.D	60	60	61	73	58	77

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	41-99	42-95
S2 (PHL) = Phenol-d5	48-87	59-97
S3 (NBZ) = Nitrobenzene-d5	52-84	49-105
S4 (FBP) = 2-Fluorobiphenyl	61-102	54-110
S5 (TBP) = 2,4,6-Tribromophenol	68-105	48-126
S6 (TPH) = Terphenyl-d14	49-132	53-123

* Column to be used to flag recovery values

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 05/07/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
2867-007DIL	AQUEOUS	C9795.D	N/A	N/A	N/A	N/A	N/A	N/A
2867-004DIL	AQUEOUS	C9796.D	N/A	N/A	N/A	N/A	N/A	N/A
Method-blank	AQUEOUS	C9797.D	66	78	62	78	57	106
DI-MS	AQUEOUS	C9798.D	62	70	62	76	97	99
DI-MSD	AQUEOUS	C9799.D	66	72	66	81	97	101
2511-015	AQUEOUS	C9800.D	63	73	63	77	65	109
2919-001	AQUEOUS	C9801.D	N/A	N/A	70	82	N/A	107
2919-002	AQUEOUS	C9802.D	N/A	N/A	65	80	N/A	109
2919-003	AQUEOUS	C9803.D	N/A	N/A	64	78	N/A	103
2919-004	AQUEOUS	C9804.D	N/A	N/A	66	77	N/A	106
2919-005	AQUEOUS	C9805.D	N/A	N/A	70	78	N/A	113
2919-006	AQUEOUS	C9806.D	N/A	N/A	68	79	N/A	102
2871-004	AQUEOUS	C9807.D	N/A	N/A	66	82	N/A	119
2871-006	AQUEOUS	C9808.D	N/A	N/A	72	88	N/A	119
2893-001	AQUEOUS	C9809.D	N/A	N/A	69	84	N/A	110
2916-001	AQUEOUS	C9810.D	N/A	N/A	66	84	N/A	109
2931-003	AQUEOUS	C9812.D	73	80	71	83	77	112
2743-001	AQUEOUS	C9813.D	75	79	69	88	76	103
2743-002	AQUEOUS	C9814.D	72	82	66	84	74	121
2931-002	AQUEOUS	C9815.D	76	83	74	89	75	120

EPA CLP QC LIMITS FOR:	Soil	Aqueous
S1 (2FP) = 2-Fluorophenol	41-99	42-95
S2 (PHL) = Phenol-d5	48-87	59-97
S3 (NBZ) = Nitrobenzene-d5	52-84	49-105
S4 (FBP) = 2-Fluorobiphenyl	61-102	54-110
S5 (TBP) = 2,4,6-Tribromophenol	68-105	48-126
S6 (TPH) = Terphenyl-d14	49-132	53-123

* Column to be used to flag recovery values

AQUEOUS SEMIVOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: Method-B Batch No.: 050401W

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	30.0	0.0	19.0	63	48 - 95
2-Chlorophenol	30.0	0.0	18.8	63	46 - 90
1,4-Dichlorobenzene	30.0	0.0	18.5	62	49 - 84
N-Nitroso-di-n-propylamine	30.0	0.0	18.7	62	53 - 96
1,2,4-Trichlorobenzene	30.0	0.0	21.4	71	46 - 92
4-Chloro-3-methylphenol	30.0	0.0	22.8	76	41 - 113
Acenaphthene	30.0	0.0	23.1	77	59 - 98
4-Nitrophenol	30.0	0.0	17.9	60	30 - 139
2,4-Dinitrotoluene	30.0	0.0	26.2	87	31 - 138
Pentachlorophenol	30.0	0.0	15.5	52	25 - 105
Pyrene	30.0	0.0	21.7	72	49 - 110

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	0.0	20.3	68	8	8	48 - 95
2-Chlorophenol	0.0	19.4	65	3	7	46 - 90
1,4-Dichlorobenzene	0.0	19.0	63	2	6	49 - 84
N-Nitroso-di-n-propylamine	0.0	18.8	63	2	7	53 - 96
1,2,4-Trichlorobenzene	0.0	22.4	75	5	8	46 - 92
4-Chloro-3-methylphenol	0.0	23.4	78	3	12	41 - 113
Acenaphthene	0.0	24.4	81	5	7	59 - 98
4-Nitrophenol	0.0	19.0	63	5	22	30 - 139
2,4-Dinitrotoluene	0.0	26.9	90	3	18	31 - 138
Pentachlorophenol	0.0	15.2	51	2	15	25 - 105
Pyrene	0.0	23.6	79	9	10	49 - 110

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

CC0203

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INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9771.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	Sample	Conc. MSD	%Rec. MSD
N-Nitrosodimethylamine	30.0	0.0	20.1	67	0.0	21.4	71
Benzaldehyde	30.0	0.0	3.2	11	0.0	2.9	10
Phenol	30.0	0.0	19.0	63	0.0	20.3	68
Aniline	30.0	0.0	15.5	52	0.0	16.9	56
bis(2-Chloroethyl)ether	30.0	0.0	18.0	60	0.0	19.6	65
2-Chlorophenol	30.0	0.0	18.8	63	0.0	19.4	65
1,3-Dichlorobenzene	30.0	0.0	19.2	64	0.0	21.2	71
1,4-Dichlorobenzene	30.0	0.0	18.5	62	0.0	19.0	63
Benzyl alcohol	30.0	0.0	19.3	64	0.0	21.4	71
1,2-Dichlorobenzene	30.0	0.0	18.7	62	0.0	20.6	69
2-Methylphenol	30.0	0.0	18.8	63	0.0	20.3	68
bis(2-chloroisopropyl)ether	30.0	0.0	16.2	54	0.0	17.6	59
4-Methylphenol	30.0	0.0	19.6	65	0.0	21.4	71
N-Nitroso-di-n-propylamine	30.0	0.0	18.7	62	0.0	18.8	63
Acetophenone	30.0	0.0	18.5	62	0.0	20.8	69
2-Aminotoluene +4-Aminotoluene	30.0	0.0	45.4	151	0.0	49.6	165
Hexachloroethane	30.0	0.0	17.9	60	0.0	19.8	66
Nitrobenzene	30.0	0.0	17.1	57	0.0	18.8	63
Isophorone	30.0	0.0	18.1	60	0.0	19.8	66
2-Nitrophenol	30.0	0.0	19.9	66	0.0	21.7	72
2,4-Dimethylphenol	30.0	0.0	20.3	68	0.0	21.3	71
bis(2-Chloroethoxy)methane	30.0	0.0	19.7	66	0.0	21.1	70
Benzoic acid	30.0	0.0	28.7	96	0.0	28.7	96
2,4-Dimethylaniline	30.0	0.0	28.1	94	0.0	30.7	102
2,4-Dichlorophenol	30.0	0.0	21.4	71	0.0	23.7	79
1,2,4-Trichlorobenzene	30.0	0.0	21.4	71	0.0	22.4	75
Naphthalene	30.0	0.0	20.6	69	0.0	22.0	73
4-Chloroaniline	30.0	0.0	18.3	61	0.0	20.1	67
Hexachlorobutadiene	30.0	0.0	20.5	68	0.0	22.9	76
Caprolactam	30.0	0.0	20.5	68	0.0	20.6	69
4-Chloro-3-methylphenol	30.0	0.0	22.8	76	0.0	23.4	78
2-Methylnaphthalene	30.0	0.0	19.1	64	0.0	20.8	69
Hexachlorocyclopentadiene	30.0	0.0	20.1	67	0.0	23.7	79
2,4,6-Trichlorophenol	30.0	0.0	23.4	78	0.0	24.1	80
2,4,5-Trichlorophenol	30.0	0.0	23.4	78	0.0	24.9	83
1-1'-Biphenyl	30.0	0.0	21.8	73	0.0	23.1	77
2-Chloronaphthalene	30.0	0.0	21.7	72	0.0	23.1	77
2-Nitroaniline	30.0	0.0	20.8	69	0.0	20.8	69
Dimethylphthalate	30.0	0.0	20.8	69	0.0	20.8	69
2,6-Dinitrotoluene	30.0	0.0	20.8	69	0.0	20.8	69
Acenaphthylene	30.0	0.0	20.8	69	0.0	20.8	69

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: Method-Blank
Client ID:
Date Received: N/A
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: C9771.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Conc. Add			%Rec. MS			%Rec. MSD
3-Nitroaniline	30.0	0.0	29.6	99	0.0	29.2	97
Acenaphthene	30.0	0.0	23.1	77	0.0	24.4	81
2,4-Dinitrophenol	30.0	0.0	22.6	75	0.0	22.4	75
4-Nitrophenol	30.0	0.0	17.9	60	0.0	19.0	63
2,4-Dinitrotoluene	30.0	0.0	26.2	87	0.0	26.9	90
Dibenzofuran	30.0	0.0	24.1	80	0.0	24.7	82
Diethylphthalate	30.0	0.0	28.4	95	0.0	28.3	94
Fluorene	30.0	0.0	25.2	84	0.0	26.3	88
4-Chlorophenyl-phenylether	30.0	0.0	26.5	88	0.0	27.2	91
4-Nitroaniline	30.0	0.0	29.2	97	0.0	28.8	96
4,6-Dinitro-2-methylphenol	30.0	0.0	14.4	48	0.0	14.4	48
N-Nitrosodiphenylamine	30.0	0.0	27.1	90	0.0	29.5	98
1,2-Diphenylhydrazine/Azobenzene	30.0	0.0	20.2	67	0.0	21.5	72
4-Bromophenyl-phenylether	30.0	0.0	26.6	89	0.0	27.9	93
Hexachlorobenzene	30.0	0.0	27.0	90	0.0	29.4	98
Atrazine	30.0	0.0	17.3	58	0.0	19.2	64
Pentachlorophenol	30.0	0.0	15.5	52	0.0	15.2	51
Phenanthrene	30.0	0.0	25.3	84	0.0	26.4	88
Anthracene	30.0	0.0	25.9	86	0.0	27.3	91
Carbazole	30.0	0.0	31.6	105	0.0	32.8	109
Di-n-butylphthalate	30.0	0.0	27.7	92	0.0	28.7	96
Fluoranthene	30.0	0.0	32.6	109	0.0	32.3	108
Benzidine	30.0	0.0	28.8	96	0.0	27.3	91
Pyrene	30.0	0.0	21.7	72	0.0	23.6	79
3,3'-Dimethylbenzidine	30.0	0.0	16.0	53	0.0	15.9	53
Butylbenzylphthalate	30.0	0.0	21.0	70	0.0	20.8	69
3,3'-Dichlorobenzidine	30.0	0.0	33.4	111	0.0	34.0	113
Benzo[a]anthracene	30.0	0.0	28.5	95	0.0	28.6	95
Chrysene	30.0	0.0	27.6	92	0.0	29.0	97
bis(2-Ethylhexyl)phthalate	30.0	0.0	21.5	72	0.0	22.8	76
Di-n-octylphthalate	30.0	0.0	16.5	55	0.0	17.7	59
Benzo[b]fluoranthene	30.0	0.0	27.5	92	0.0	30.7	102
Benzo[k]fluoranthene	30.0	0.0	24.7	82	0.0	24.7	82
Benzo[a]pyrene	30.0	0.0	22.7	76	0.0	22.7	76
Indeno[1,2,3-cd]pyrene	30.0	0.0	27.6	92	0.0	27.6	92
Dibenz[a,h]anthracene	30.0	0.0	33.0	110	0.0	33.0	110
Benzo[g,h,i]perylene	30.0	0.0	33.0	110	0.0	33.0	110

000205

3374

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C9631.D

Date Analyzed: 04/30/2001

Instrument ID: MSDC

Time Analyzed: 10:12

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	24 HOUR STD	149742	6.20	438480	7.55	148956	9.19
	UPPER LIMIT	299484	6.70	876960	8.05	297912	9.69
	LOWER LIMIT	74871	5.70	219240	7.05	74478	8.69
	LAB SAMPLE ID						
01	5-PPB-INJ-FOR-04/30	148647	6.19	430880	7.55	139668	9.19
02	80-PPB-INJ-FOR-04/3	123830	6.20	348352	7.55	115406	9.19
03	10-PPB-INJ-FOR-04/3	143782	6.20	418709	7.55	136455	9.19
04	50-PPB-INJ-FOR-04/3	121249	6.20	337670	7.55	107865	9.19
05	Method-Blank	142774	6.20	420790	7.55	127603	9.19
06	DI-MS	138842	6.20	392114	7.55	120269	9.19
07	DI-MSD	148852	6.20	417777	7.55	128907	9.19
08	2667-001	150881	6.20	438676	7.55	133197	9.19
09	2667-002	150090	6.20	441583	7.55	137879	9.19
10	2667-003	148163	6.19	440834	7.55	134528	9.19
11	2667-007	151249	6.19	450280	7.55	139074	9.19
12	2646-001	142280	6.20	415562	7.55	120250	9.19
13	2646-003	145387	6.19	423820	7.55	128062	9.19
14	2656-001	155257	6.19	460764	7.55	142802	9.19
15	2656-002	145909	6.19	418609	7.55	122666	9.19
16	2675-001	145363	6.19	432268	7.55	130989	9.19
17	2663-002	131929	6.19	373314	7.55	107556	9.19
18	2657-001	129263	6.20	375774	7.55	122767	9.19
19	Method-Blank	143097	6.19	406967	7.55	122529	9.19
20	DI-MS	138475	6.19	379398	7.55	116080	9.19
21	DI-MSD	148625	6.19	423136	7.55	137322	9.19
22	2707-006	157804	6.19	451967	7.55	143013	9.19

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): C9631.D

Date Analyzed: 04/30/2001

Instrument ID: MSDC

Time Analyzed: 10:12

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	24 HOUR STD	149742	6.20	438480	7.55	148956	9.19
	UPPER LIMIT	299484	6.70	876960	8.05	297912	9.69
	LOWER LIMIT	74871	5.70	219240	7.05	74478	8.69
	LAB SAMPLE ID						
01	2707-008	143815	6.20	396512	7.55	113430	9.19
02	2743-001	154374	6.2	422620	7.55	135153	9.19
03	2743-002	154895	6.19	446595	7.55	141202	9.19
04	2687-001	220667	6.2	724560	7.55	296057	9.19
05	2687-002	156747	6.19	432980	7.55	136693	9.19
06	2687-003	149453	6.2	436437	7.55	143448	9.19
07	2687-004	167116	6.19	470899	7.55	148652	9.19
08	2687-005	140178	6.19	393398	7.55	120306	9.19
09	2687-006	179819	6.2	577993	7.55	216693	9.19
10	2687-007	166595	6.19	485792	7.55	163035	9.19
11	2687-008	169146	6.2	517437	7.55	178551	9.19
12							
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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.

FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C9631.D

Date Analyzed: 04/30/2001

Instrument ID: MSDC

Time Analyzed: 10:12

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	24 HOUR STD	141842	10.50	47538	12.95	29504	15.18
	UPPER LIMIT	283684	11.00	95076	13.45	59008	15.68
	LOWER LIMIT	70921	10.00	23769	12.45	14752	14.68
	LAB SAMPLE ID						
01	5-PPB-INJ-FOR-04/30	121444	10.49	38444	12.96	27033	15.19
02	80-PPB-INJ-FOR-04/3	118741	10.50	48680	12.97	31400	15.19
03	10-PPB-INJ-FOR-04/3	119931	10.50	42089	12.98	27922	15.20
04	50-PPB-INJ-FOR-04/3	104832	10.50	41420	12.98	28535	15.20
05	Method-Blank	97369	10.50	28158	12.93	17295	15.14
06	DI-MS	100909	10.50	33962	12.92	21809	15.14
07	DI-MSD	113733	10.50	36719	12.92	22732	15.14
08	2667-001	102381	10.50	28875	12.92	18807	15.13
09	2667-002	111263	10.50	31700	12.92	18913	15.14
10	2667-003	106526	10.50	31476	12.92	19491	15.13
11	2667-007	108324	10.50	32984	12.92	18638	15.14
12	2646-001	88044	10.50	23882	12.93	16244	15.14
13	2646-003	98318	10.49	29926	12.92	18484	15.14
14	2656-001	107087	10.49	28983	12.92	18469	15.14
15	2656-002	91239	10.49	28891	12.93	18106	15.14
16	2675-001	101688	10.49	29219	12.92	18682	15.14
17	2663-002	76049	10.49	25554	12.93	16927	15.14
18	2657-001	120406	10.50	44178	12.92	31025	15.15
19	Method-Blank	108112	10.50	37428	12.92	25172	15.13
20	DI-MS	105892	10.49	39821	12.93	25022	15.14
21	DI-MSD	116451	10.49	36709	12.93	23972	15.14
22	2707-006	115291	10.50	34797	12.92	22327	15.14

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): C9631.D

Date Analyzed: 04/30/2001

Instrument ID: MSDC

Time Analyzed: 10:12

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	24 HOUR STD	141842	10.50	47538	12.95	29504	15.18
	UPPER LIMIT	283684	11.00	95076	13.45	59008	15.68
	LOWER LIMIT	70921	10.00	23769	12.45	14752	14.68
	LAB SAMPLE ID						
01	2707-008	92101	10.50	31192	12.92	20092	15.14
02	2743-001	123992	10.49	41852	12.92	25112	15.13
03	2743-002	115752	10.49	36847	12.92	23106	15.13
04	2687-001	274367	10.49	78829	12.92	43773	15.14
05	2687-002	115409	10.49	41609	12.93	30181	15.14
06	2687-003	130245	10.50	47646	12.93	32148	15.16
07	2687-004	121395	10.49	41915	12.95	27492	15.16
08	2687-005	99257	10.49	37471	12.94	26319	15.17
09	2687-006	187080	10.50	51579	12.97	36396	15.19
10	2687-007	137949	10.50	44378	13.00	29715	15.24
11	2687-008	155602	10.49	48174	12.97	33796	15.21
12							
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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.

FORM VIII SV-2

000209

33796

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C9770.D

Date Analyzed: 05/04/2001

Instrument ID: MSDC

Time Analyzed: 10:36

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	24 HOUR STD	139050	6.18	400728	7.54	142159	9.18
	UPPER LIMIT	278100	6.68	801456	8.04	284318	9.68
	LOWER LIMIT	69525	5.68	200364	7.04	71080	8.68
	LAB SAMPLE ID						
01	Method-Blank	123828	6.18	361266	7.54	118545	9.18
02	DI-MS	111552	6.18	310584	7.54	104840	9.19
03	DI-MSD	119328	6.18	330227	7.54	111197	9.19
04	2796-001	128974	6.18	367822	7.54	126017	9.18
05	2860-002	130385	6.18	373397	7.54	129452	9.18
06	2861-001	126965	6.18	369071	7.54	130172	9.19
07	2861-002	126404	6.18	362633	7.54	124108	9.19
08	2861-003	137883	6.18	393522	7.54	133082	9.19
09	2867-001	121981	6.18	337515	7.54	126042	9.18
10	2867-002	133998	6.18	380798	7.54	138325	9.18
11	2867-003	131668	6.18	377632	7.54	133551	9.18
12	2867-005	128245	6.18	344497	7.54	120861	9.19
13	2867-004	170246	6.18	600688	7.54	192613	9.18
14	2867-006	146963	6.18	420309	7.54	160330	9.18
15	2867-008	149007	6.18	419913	7.54	146819	9.18
16	2867-007	154274	6.18	510457	7.54	151702	9.19
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.

FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C9770.D

Date Analyzed: 05/04/2001

Instrument ID: MSDC

Time Analyzed: 10:36

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	24 HOUR STD	140416	10.50	58543	13.03	39491	15.28
	UPPER LIMIT	280832	11.00	117086	13.53	78982	15.78
	LOWER LIMIT	70208	10.00	29272	12.53	19746	14.78
	LAB SAMPLE ID						
01	Method-Blank	105238	10.49	46730	13.03	33136	15.27
02	DI-MS	113383	10.49	55251	13.02	38075	15.26
03	DI-MSD	114531	10.49	54484	12.99	38130	15.22
04	2796-001	124567	10.49	51789	13.01	34489	15.24
05	2860-002	119711	10.49	47900	13.02	34173	15.26
06	2861-001	126764	10.49	50745	13.02	35800	15.26
07	2861-002	120032	10.49	50143	12.98	35256	15.21
08	2861-003	129380	10.49	52622	12.99	35426	15.22
09	2867-001	135764	10.49	59437	12.98	40028	15.21
10	2867-002	147307	10.49	61237	12.99	40270	15.22
11	2867-003	127834	10.49	52071	13.00	36452	15.24
12	2867-005	115366	10.49	51959	12.98	37277	15.21
13	2867-004	231083	10.49	97578	12.94	70060	15.15
14	2867-006	186571	10.49	87673	12.93	57225	15.15
15	2867-008	150315	10.49	66250	12.92	47320	15.13
16	2867-007	162188	10.49	78447	12.94	57376	15.15
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): C9792.D

Date Analyzed: 05/07/2001

Instrument ID: MSDC

Time Analyzed: 10:47

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	24 HOUR STD	119286	6.18	366407	7.54	147557	9.19
	UPPER LIMIT	238572	6.68	732814	8.04	295114	9.69
	LOWER LIMIT	59643	5.68	183204	7.04	73779	8.69
	LAB SAMPLE ID						
01	2867-007DIL	154098	6.18	469560	7.54	183305	9.19
02	2867-004DIL	141770	6.18	423466	7.55	177454	9.19
03	Method-blank	127844	6.19	393114	7.54	149345	9.19
04	DI-MS	116538	6.18	354248	7.54	144315	9.18
05	DI-MSD	123713	6.18	360700	7.54	138975	9.19
06	2511-015	140484	6.19	442076	7.54	177903	9.19
07	2919-001	112155	6.19	325337	7.54	135247	9.19
08	2919-002	125269	6.18	374161	7.54	152674	9.19
09	2919-003	123804	6.18	364625	7.54	136367	9.19
10	2919-004	103614	6.18	322036	7.54	135954	9.19
11	2919-005	108380	6.19	346492	7.54	155586	9.19
12	2919-006	117281	6.19	361238	7.54	151382	9.19
13	2871-004	115630	6.18	348172	7.54	135132	9.18
14	2871-006	111840	6.18	337150	7.54	128349	9.19
15	2893-001	102475	6.18	298042	7.55	109626	9.19
16	2916-001	98293	6.18	293211	7.55	113586	9.19
17	2931-003	111310	6.19	340845	7.54	132946	9.19
18	2743-001	114752	6.19	328705	7.54	120930	9.19
19	2743-002	107903	6.18	338214	7.55	127301	9.19
20	2931-002	110644	6.18	335955	7.54	142047	9.19
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): C9792.D

Date Analyzed: 05/07/2001

Instrument ID: MSDC

Time Analyzed: 10:47

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	24 HOUR STD	162492	10.49	60716	12.96	39692	15.18
	UPPER LIMIT	324984	10.99	121432	13.46	79384	15.68
	LOWER LIMIT	81246	9.99	30358	12.46	19846	14.68
	LAB SAMPLE ID						
01	2867-007DIL	187241	10.49	63653	12.96	43007	15.18
02	2867-004DIL	194429	10.49	54826	12.95	34721	15.18
03	Method-blank	145293	10.49	42663	12.97	29994	15.19
04	DI-MS	152303	10.49	58278	12.98	42307	15.21
05	DI-MSD	143135	10.49	55353	12.97	40492	15.20
06	2511-015	179178	10.49	58288	12.97	43219	15.20
07	2919-001	154380	10.49	63489	12.94	44737	15.15
08	2919-002	176146	10.49	71223	12.96	49633	15.19
09	2919-003	130639	10.49	48722	12.97	39783	15.20
10	2919-004	155975	10.49	60947	12.96	40576	15.18
11	2919-005	178470	10.49	65297	12.96	41666	15.18
12	2919-006	176029	10.49	72396	12.94	48110	15.16
13	2871-004	139786	10.49	46457	12.93	34463	15.15
14	2871-006	131569	10.49	44423	12.92	31849	15.13
15	2893-001	109398	10.49	39278	12.92	29149	15.13
16	2916-001	115882	10.49	43294	12.92	28402	15.13
17	2931-003	138034	10.49	47266	12.92	31658	15.13
18	2743-001	123708	10.49	49278	12.93	35253	15.14
19	2743-002	132188	10.49	40323	12.92	26563	15.14
20	2931-002	169237	10.49	58419	12.96	37289	15.18
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 Reviewed)

Data File : C:\HPCHEM\1\DATA\05-04-01\C9779.D Vial: 11
Acq On : 4 May 2001 14:27 Operator: DP
Sample : MW-1,2867-001,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 15:45 2001 Quant Results File: CW0901.RES

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration
DataAcq Meth : CW0901

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.18	152	121981	40.00	UG	-0.02
22) Naphthalene-d8	7.54	136	337515	40.00	UG	-0.02
39) Acenaphthene-d10	9.18	164	126042	40.00	UG	-0.01
60) Phenanthrene-d10	10.49	188	135764	40.00	UG	0.00
75) Chrysene-d12	12.98	240	59437	40.00	UG	0.03
84) Perylene-d12	15.21	264	40028	40.00	UG	0.03
System Monitoring Compounds						
4) 2-Fluorophenol	4.57	112	256284	65.81	UG	-0.02
Spiked Amount 100.000	Range 42 - 95		Recovery = 65.81%			
6) Phenol-d5	5.67	99	260752	67.39	UG	-0.02
Spiked Amount 100.000	Range 59 - 97		Recovery = 67.39%			
23) Nitrobenzene-d5	6.78	82	78243	31.20	UG	-0.01
Spiked Amount 50.000	Range 49 - 105		Recovery = 62.40%			
43) 2-Fluorobiphenyl	8.54	172	166507	40.10	UG	-0.01
Spiked Amount 50.000	Range 54 - 110		Recovery = 80.20%			
64) 2,4,6-Tribromophenol	9.88	330	32709	95.69	UG	0.00
Spiked Amount 100.000	Range 48 - 126		Recovery = 95.69%			
77) Terphenyl-d14	11.85	244	83702	49.90	UG	0.02
Spiked Amount 50.000	Range 53 - 123		Recovery = 99.80%			
Target Compounds						Qvalue
8) Aniline	5.79	93	34465	7.40	UG	# 88

(#) = qualifier out of range (m) = manual integration
C9779.D CW0901.M Fri May 04 15:45:56 2001 MSD-C

000214

3383

Quantitation Report

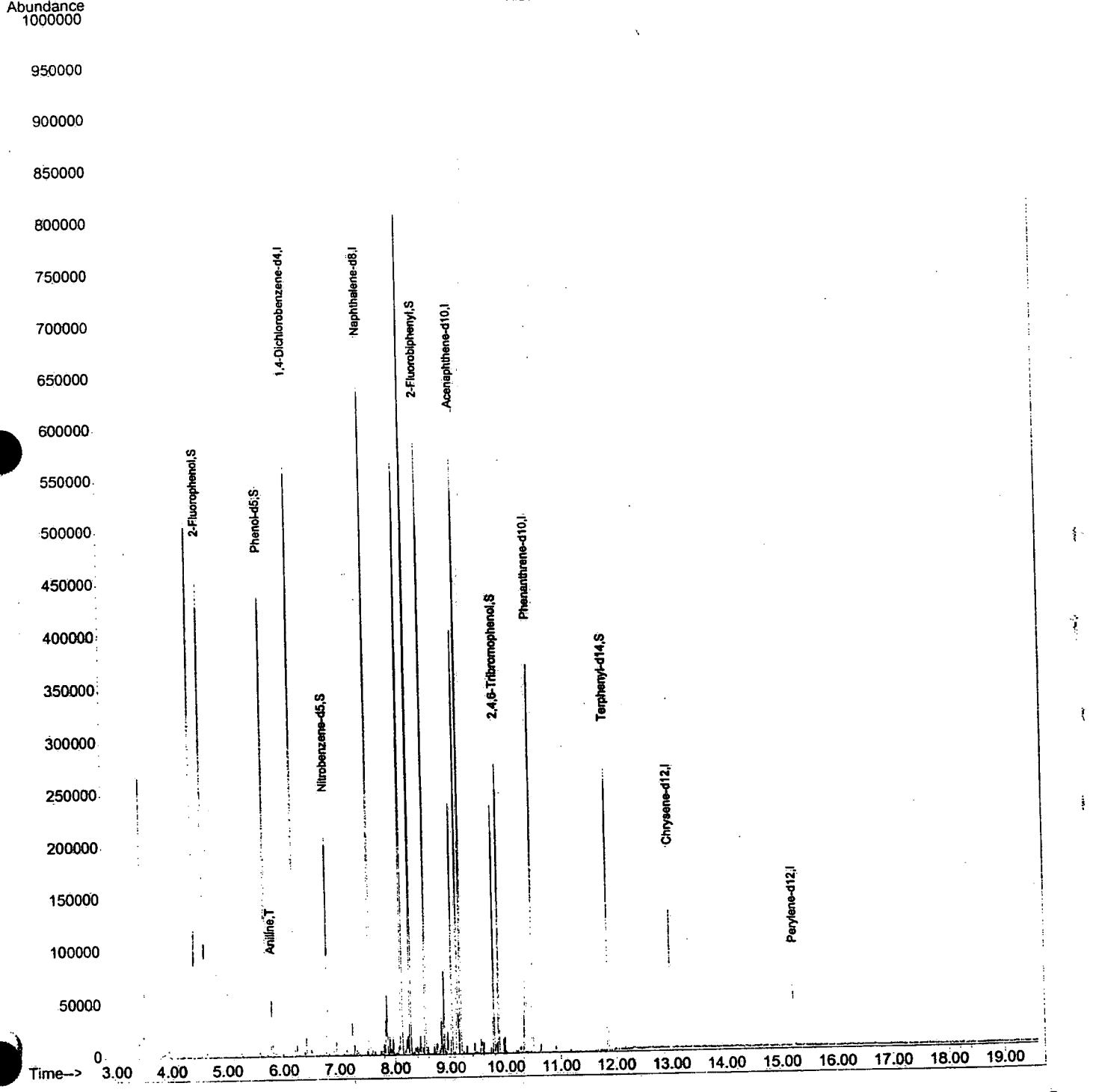
Data File : C:\HPCHEM\1\DATA\05-04-01\C9779.D
Acq On : 4 May 2001 14:27
Sample : MW-1,2867-001,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: RTEINT.P
Quant Time: May 4 15:45 2001

Vial: 11
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Results File: CW0901.RES

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration

TIC: C9779.D



CC0215

33804

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9779.D
Acq On : 4 May 2001 14:27
Sample : MW-1,2867-001,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
Vial: 11
Operator: DP
Inst : MSD-C
Multiplr: 1.00

'S Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 1.5
Stop Thrs : 1.5
Filtering: 5
Min Area: 0.5 % 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	3.462	120	126	133	rBV	272163	385027	53.20%	4.364%
2	3.515	133	136	142	rVB	63435	72328	9.99%	0.820%
3	3.900	204	208	214	rVB	26425	37944	5.24%	0.430%
4	4.380	292	298	302	rBV	529792	716532	99.01%	8.122%
5	4.413	302	304	310	rVB	125561	137732	19.03%	1.561%
6	4.567	328	333	337	rBV	453170	565233	78.10%	6.407%
7	4.594	337	338	351	rVB	112161	105874	14.63%	1.200%
8	5.668	534	539	547	rBV	437605	546161	75.47%	6.190%
9	5.785	557	561	570	rVB	55428	66031	9.12%	0.748%
10	6.181	630	635	643	rBB	608538	662418	91.53%	7.508%
11	6.245	644	647	651	rBB	11340	11147	1.54%	0.126%
12	6.405	674	677	681	rVB	18463	17329	2.39%	0.196%
13	6.784	743	748	752	rBV	208999	210188	29.04%	2.382%
14	6.950	776	779	781	rBV	13847	12124	1.68%	0.137%
15	7.233	829	832	836	rBB	31623	27047	3.74%	0.307%
16	7.271	837	839	845	rBB	10818	9170	1.27%	0.104%
17	7.538	885	889	897	rBV	647026	641110	88.59%	7.267%
18	7.799	936	938	941	rBV	11315	9387	1.30%	0.106%
19	7.832	941	944	946	rVV	34860	30157	4.17%	0.342%
20	7.853	946	948	951	rVB	67033	49415	6.83%	0.560%
21	7.901	954	957	960	rBV2	17669	14097	1.95%	0.160%
22	7.965	966	969	971	rVB	16808	11911	1.65%	0.135%
23	8.115	990	997	1007	rVB2	564991	704905	97.40%	7.990%
24	8.211	1012	1015	1016	rVV	14739	12857	1.78%	0.146%
25	8.238	1016	1020	1023	rVV3	17922	23409	3.23%	0.265%
26	8.275	1023	1027	1035	rVB	838329	723685	100.00%	8.203%
27	8.451	1058	1060	1063	rVB	18760	13885	1.92%	0.157%
28	8.542	1073	1077	1081	rBV	586129	464660	64.21%	5.267%
29	8.750	1114	1116	1121	rVB3	10929	13012	1.80%	0.147%
30	8.836	1128	1132	1135	rBV2	37007	29290	4.05%	0.332%
31	8.884	1138	1141	1145	rVB	85298	65733	9.08%	0.745%

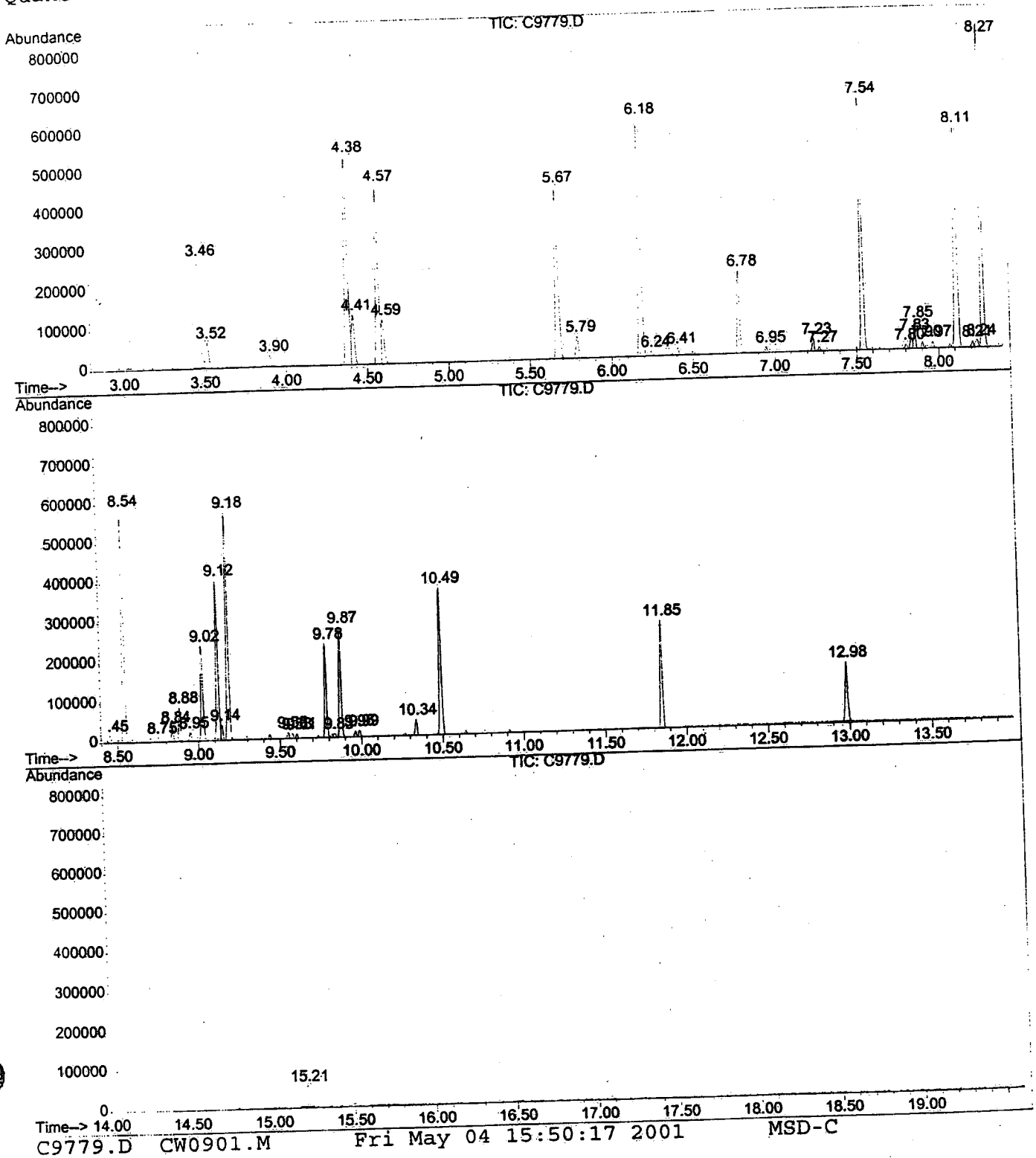
32	8.948	1150	1153	1158	rVB	22217	20406	2.82%	0.231%
33	9.023	1163	1167	1172	rBV	238309	217980	30.12%	2.471%
34	9.119	1181	1185	1188	rBV	398059	336867	46.55%	3.818%
35	9.140	1188	1189	1193	rVB	38772	28227	3.90%	0.320%
[redacted]	9.183	1193	1197	1202	rBV	575404	501183	69.25%	5.681%
[redacted]	9.552	1263	1266	1267	rBV	16052	11431	1.58%	0.130%
	9.578	1267	1271	1273	rVV4	12017	14590	2.02%	0.165%
39	9.605	1273	1276	1278	rVB	11282	8024	1.11%	0.091%
40	9.781	1306	1309	1313	rBV	235549	186949	25.83%	2.119%
41	9.835	1317	1319	1323	rVV	10120	8989	1.24%	0.102%
42	9.872	1323	1326	1332	rVB	276216	233684	32.29%	2.649%
43	9.963	1340	1343	1345	rBB	15876	10375	1.43%	0.118%
44	9.990	1345	1348	1350	rBV2	15991	12818	1.77%	0.145%
45	10.337	1409	1413	1416	rBB	41017	32601	4.50%	0.370%
46	10.492	1438	1442	1447	rVB	368994	342538	47.33%	3.882%
47	11.849	1692	1696	1700	rBV	269895	219650	30.35%	2.490%
48	12.981	1903	1908	1913	rBV	149412	154277	21.32%	1.749%
49	15.209	2319	2325	2333	rBB	54016	92267	12.75%	1.046%

Sum of corrected areas: 8822654

C9779.D CW0901.M Fri May 04 15:50:16 2001 MSD-C

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-04-01\C9779.D
Operator : DP
Acquired : 4 May 2001 14:27 using AcqMethod CW0901
Instrument : MSD-C
Sample Name: MW-1,2867-001,A,1000mL,100,05/04/01
Misc Info : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/04,1
Vial Number: 11
Quant File :CW0901.RES (RTE Integrator)



000218

3387

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9779.D
Acq On : 4 May 2001 14:27
Sample : MW-1,2867-001,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 11
Operator: DP
Inst : MSD-C
Multiplr: 1.00

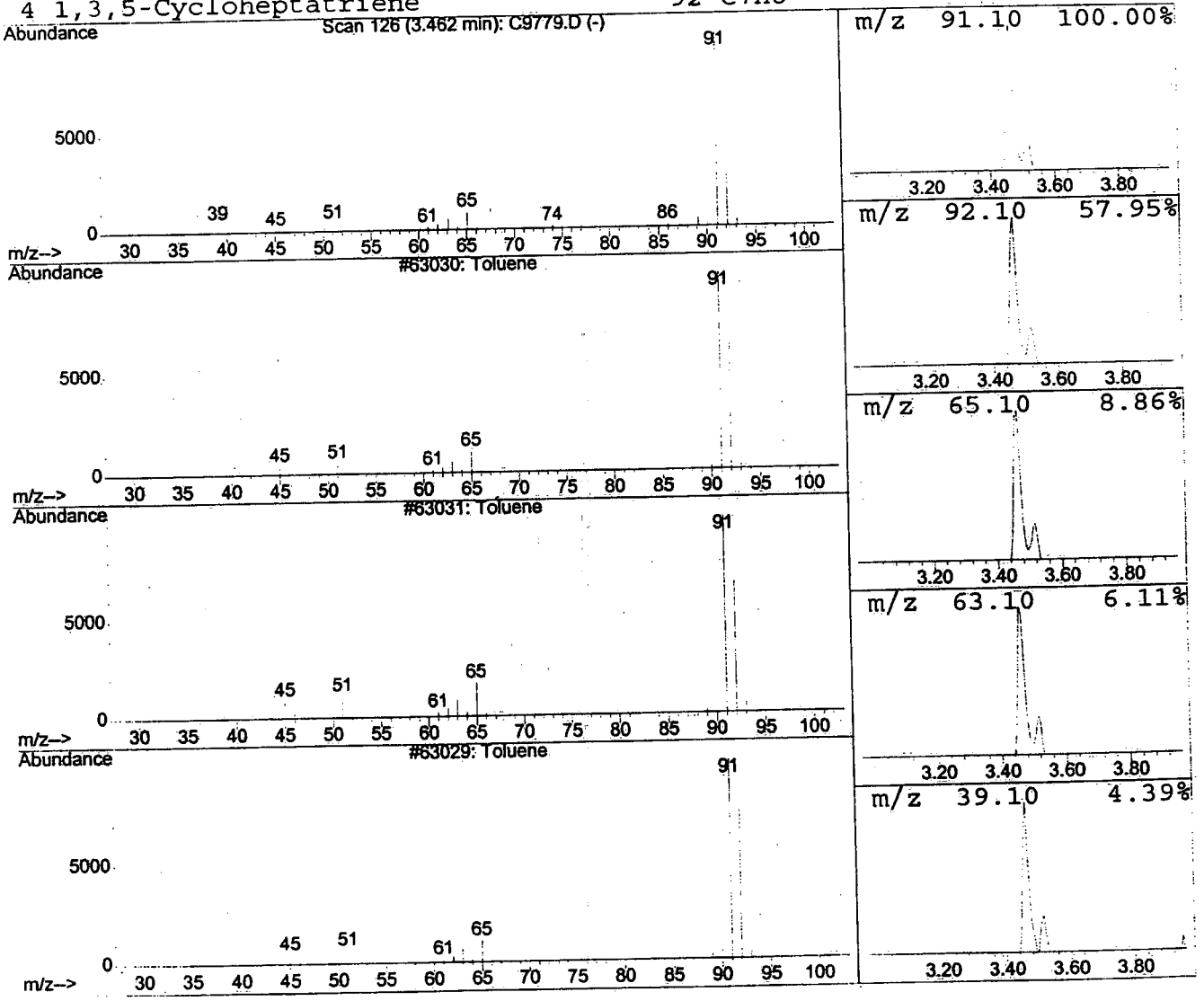
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Substituted benzene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.46	23.25 UG	385027	1,4-Dichlorobenzene-d4	6.18

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	Toluene	92	C7H8	000108-88-3	91
4	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	83



000219

33686

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9779.D
Acq On : 4 May 2001 14:27
Sample : MW-1,2867-001,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 11
Operator: DP
Inst : MSD-C
Multiplr: 1.00

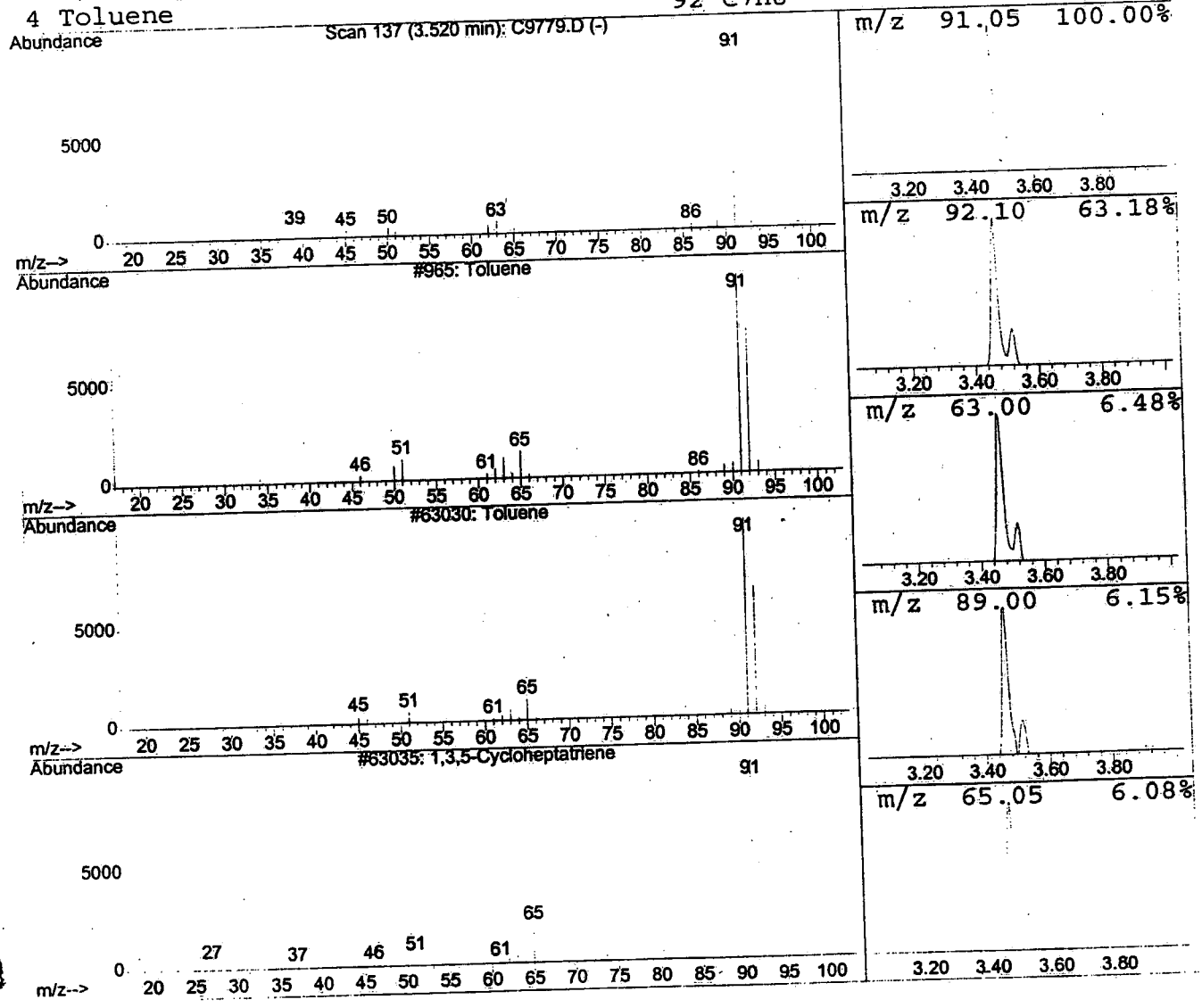
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Substituted benzene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.52	4.37 UG	72328	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Toluene	92	C7H8	000108-88-3	90
2	Toluene	92	C7H8	000108-88-3	86
3	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	80
4	Toluene	92	C7H8	000108-88-3	78



33589

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9779.D
Acq On : 4 May 2001 14:27
Sample : MW-1,2867-001,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 11
Operator: DP
Inst : MSD-C
Multiplr: 1.00

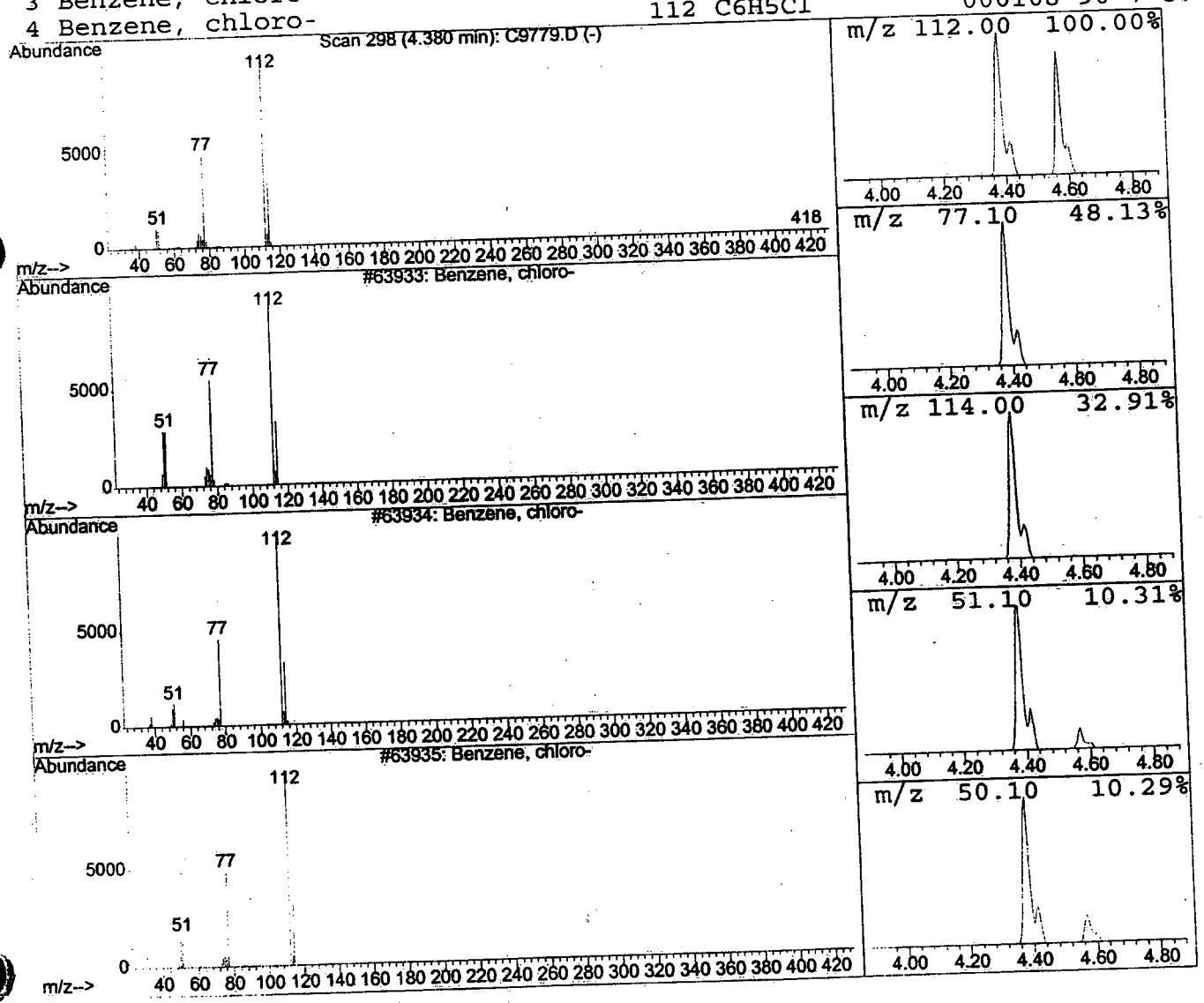
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.38	43.27 UG	716532	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, chloro-	112	C6H5Cl	000108-90-7	94
2	Benzene, chloro-	112	C6H5Cl	000108-90-7	91
3	Benzene, chloro-	112	C6H5Cl	000108-90-7	91
4	Benzene, chloro-	112	C6H5Cl	000108-90-7	87



3390

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9779.D
Acq On : 4 May 2001 14:27
Sample : MW-1,2867-001,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 11
Operator: DP
Inst : MSD-C
Multiplr: 1.00

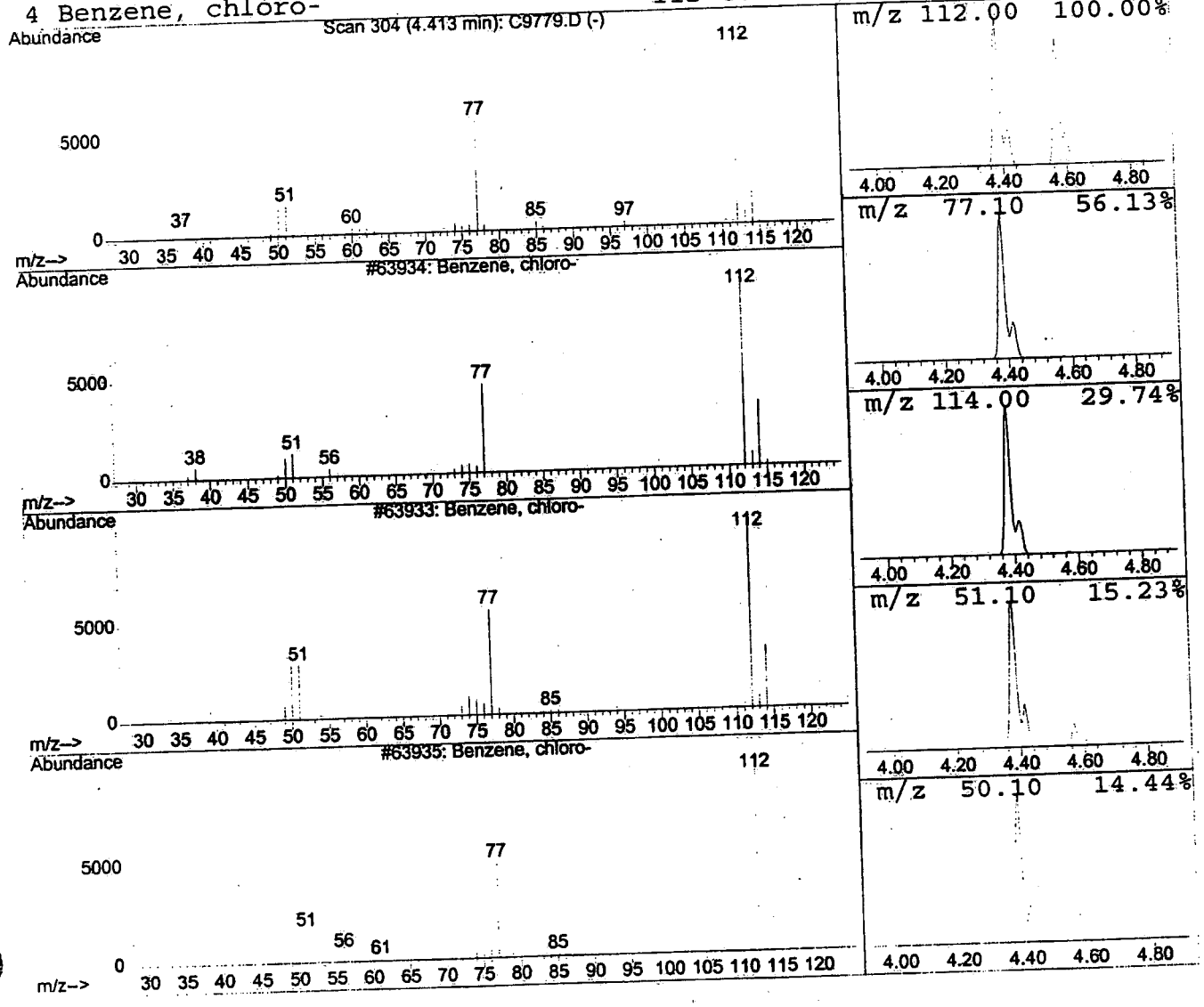
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Substituted benzene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.41	8.32 UG	137732	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, chloro-	112	C6H5Cl	000108-90-7	91
2	Benzene, chloro-	112	C6H5Cl	000108-90-7	83
3	Benzene, chloro-	112	C6H5Cl	000108-90-7	81
4	Benzene, chloro-	112	C6H5Cl	000108-90-7	72



CC03222

3391

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9779.D
Acq On : 4 May 2001 14:27
Sample : MW-1,2867-001,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 11
Operator: DP
Inst : MSD-C
Multiplr: 1.00

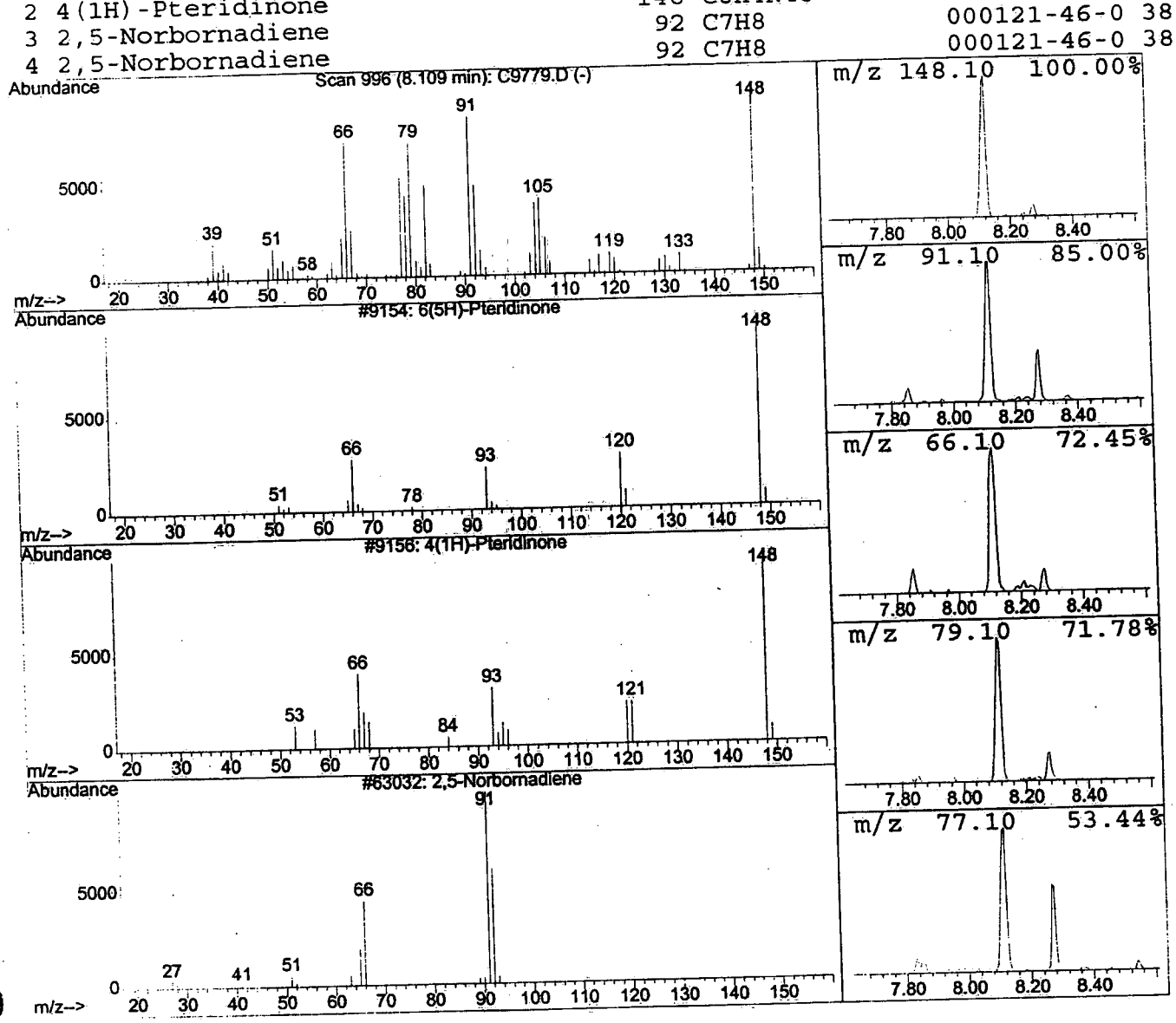
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 5 Unknown — Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.11	43.98 UG	704905	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	6(5H)-Pteridinone	148	C6H4N4O	002432-26-0	49
2	4(1H)-Pteridinone	148	C6H4N4O	000700-47-0	43
3	2,5-Norbornadiene	92	C7H8	000121-46-0	38
4	2,5-Norbornadiene	92	C7H8	000121-46-0	38



000223

3392

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9779.D
Acq On : 4 May 2001 14:27
Sample : MW-1,2867-001,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 11
Operator: DP
Inst : MSD-C
Multiplr: 1.00

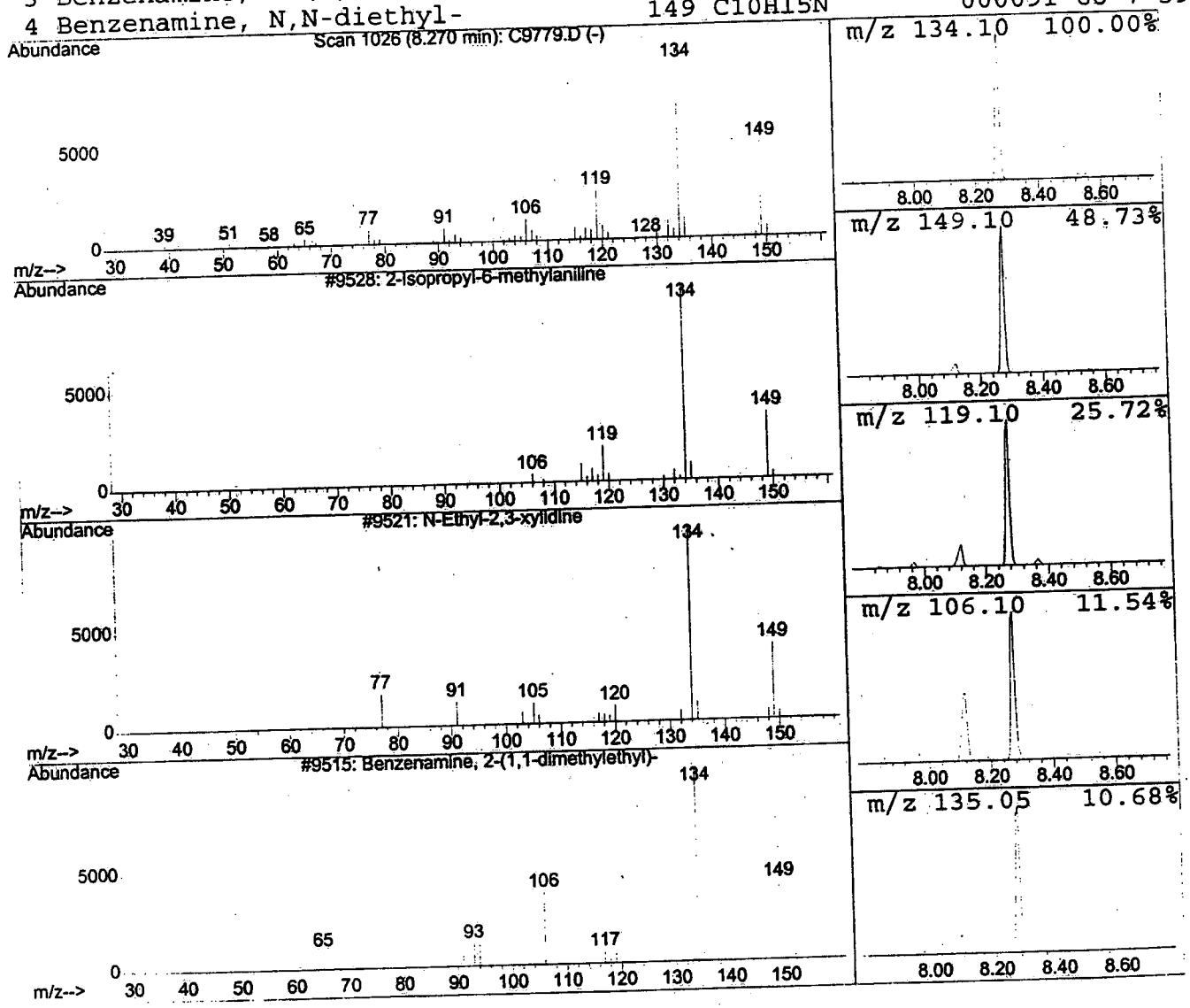
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 6 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.27	45.15 UG	723685	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Isopropyl-6-methylaniline	149	C10H15N	005266-85-3	91
2	N-Ethyl-2,3-xylidine	149	C10H15N	041115-23-5	80
3	Benzenamine, 2-(1,1-dimethylethyl)-	149	C10H15N	006310-21-0	64
4	Benzenamine, N,N-diethyl-	149	C10H15N	000091-66-7	59



C00224

3393

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9779.D
Acq On : 4 May 2001 14:27
Sample : MW-1,2867-001,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 11
Operator: DP
Inst : MSD-C
Multiplr: 1.00

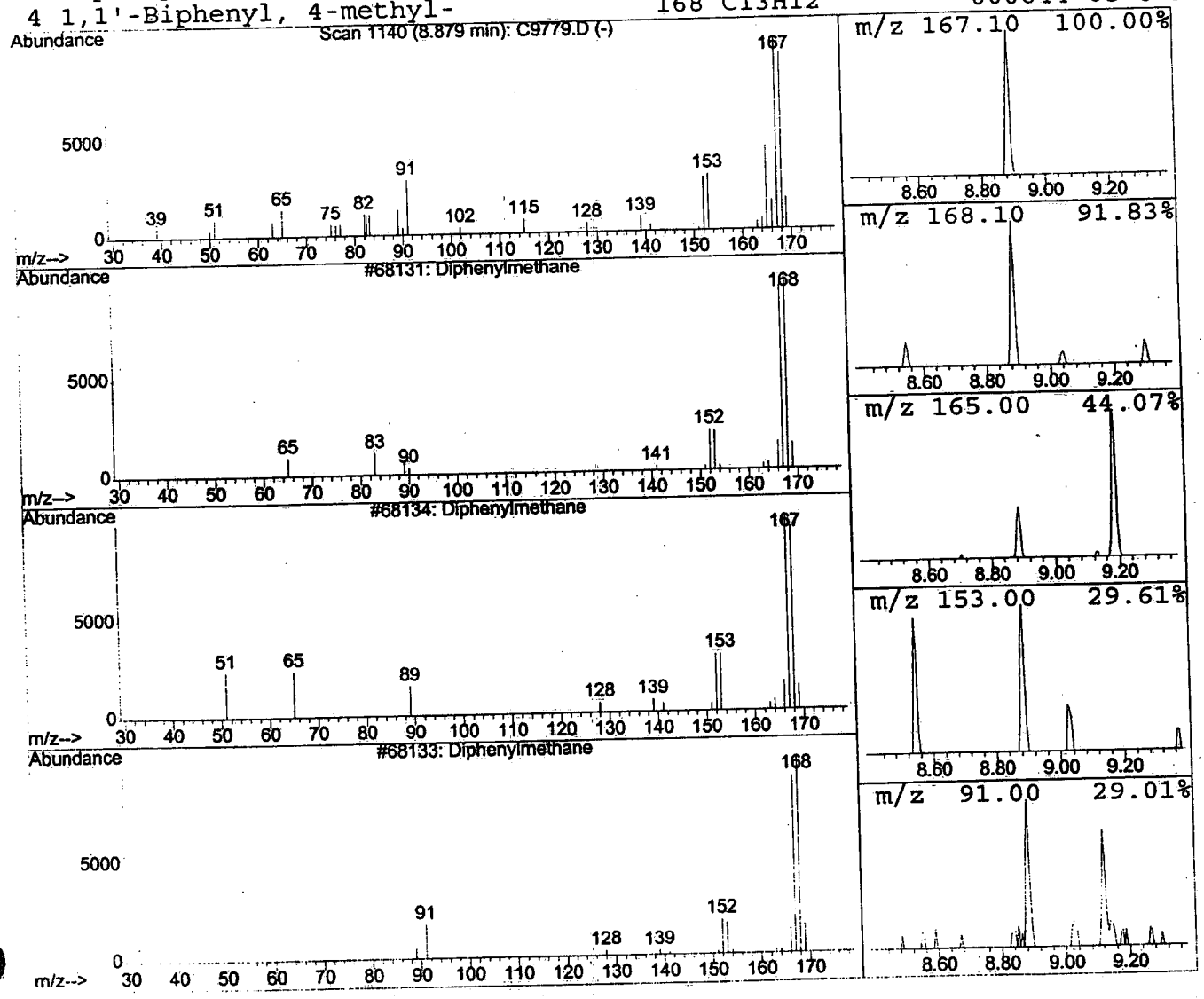
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 7 Substituted benzene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.88	5.25 UG	65733	Acenaphthene-d10	9.18

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	1,1'-Biphenyl, 4-methyl-	168	C13H12	000644-08-6	93



33954

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9779.D
Acq On : 4 May 2001 14:27
Sample : MW-1,2867-001,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 11
Operator: DP
Inst : MSD-C
Multiplr: 1.00

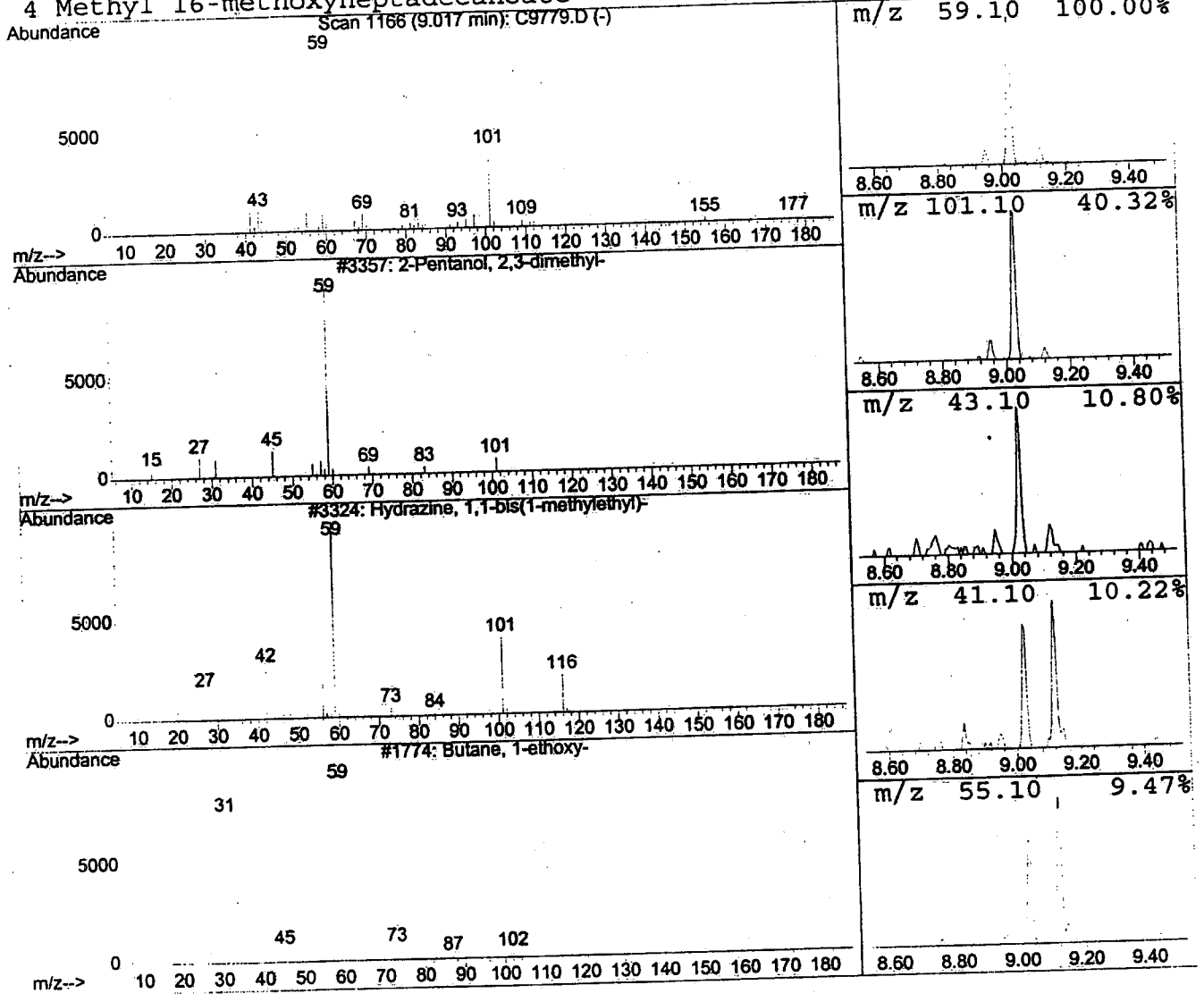
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 8 Unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.02	17.40 UG	217980	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanol, 2,3-dimethyl-	116	C7H16O	004911-70-0	50
2	Hydrazine, 1,1-bis(1-methylethyl)-	116	C6H16N2	000921-14-2	39
3	Butane, 1-ethoxy-	102	C6H14O	000628-81-9	37
4	Methyl 16-methoxyheptadecanoate	314	C19H38O3	000000-00-0	37



000226

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9779.D
Acq On : 4 May 2001 14:27
Sample : MW-1,2867-001,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 11
Operator: DP
Inst : MSD-C
Multiplr: 1.00

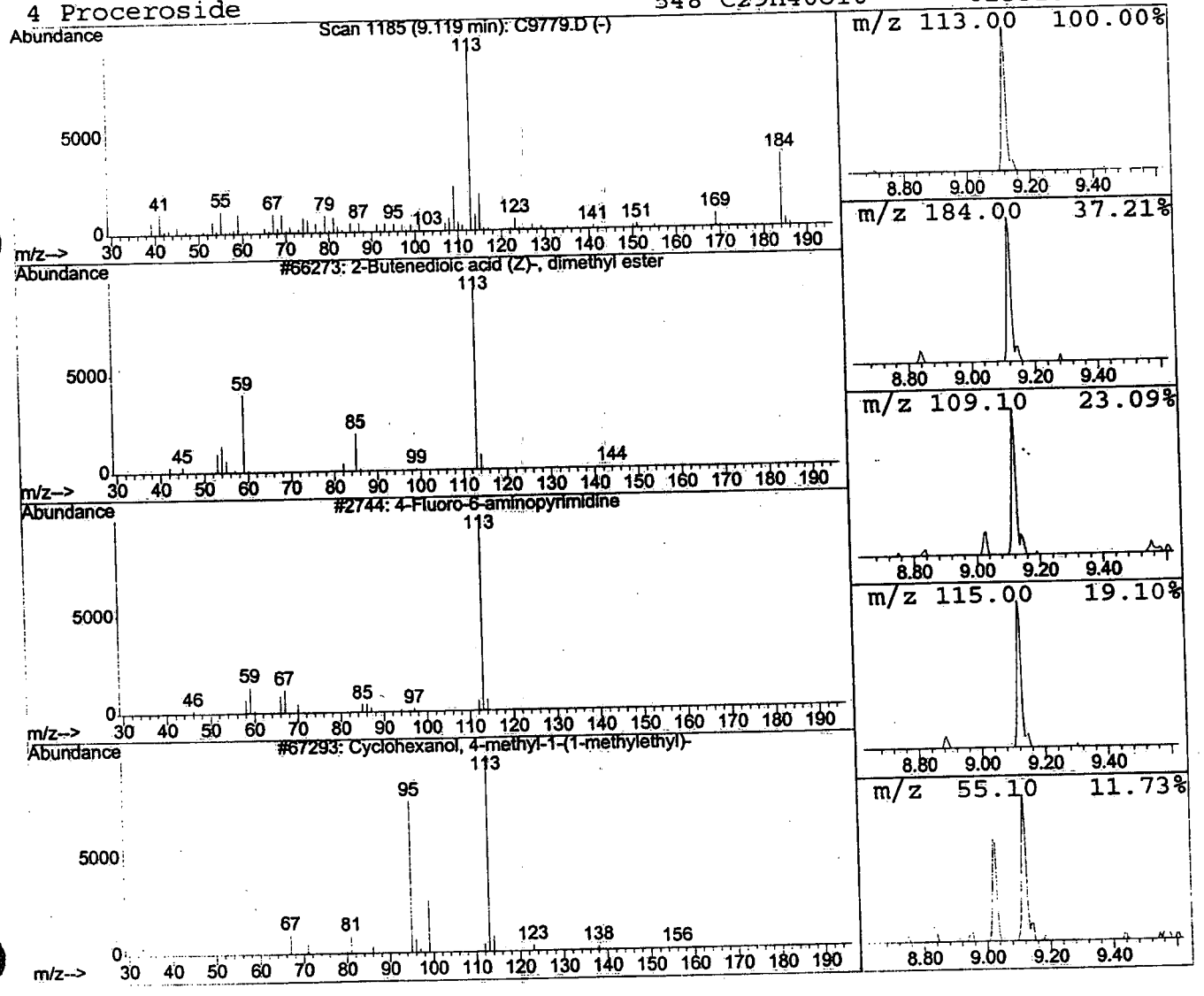
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 9 Unknown — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.12	26.89 UG	336867	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Butenedioic acid (Z)-, dimethyl e	144	C6H8O4	000624-48-6	37
2	4-Fluoro-6-aminopyrimidine	113	C4H4FN3	000000-00-0	37
3	Cyclohexanol, 4-methyl-1-(1-methyle	156	C10H20O	000470-65-5	32
4	Proceroside	548	C29H40O10	025323-74-4	25



000227

3396

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9779.D
Acq On : 4 May 2001 14:27
Sample : MW-1,2867-001,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 11
Operator: DP
Inst : MSD-C
Multiplr: 1.00

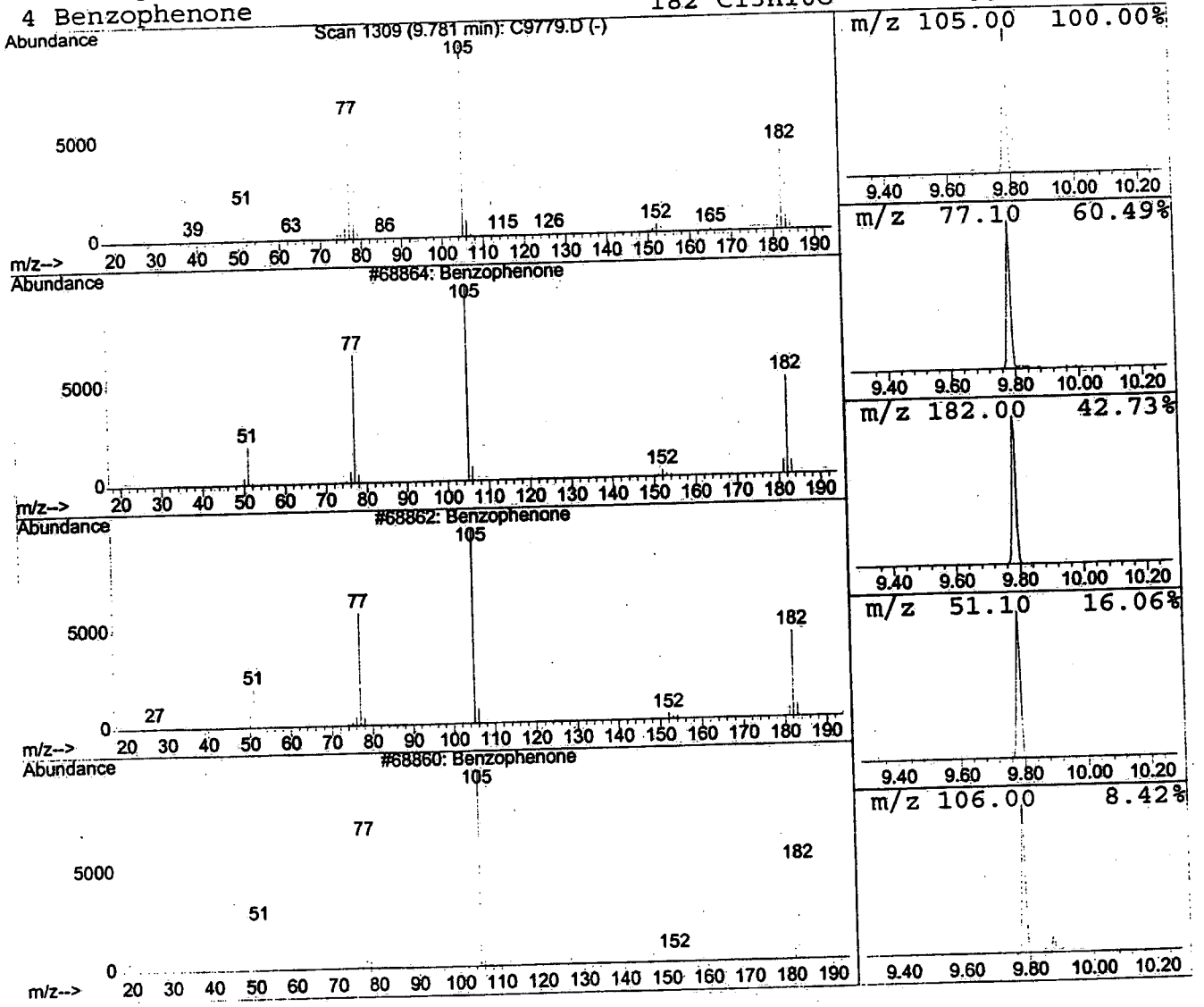
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 10 Substituted benzene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.78	14.92 UG	186949	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzophenone	182	C13H10O	000119-61-9	97
2	Benzophenone	182	C13H10O	000119-61-9	95
3	Benzophenone	182	C13H10O	000119-61-9	95
4	Benzophenone	182	C13H10O	000119-61-9	94



3397

Quantitation Report (LSC Reviewed)

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D Vial: 12
Acq On : 4 May 2001 14:53 Operator: DP
Sample : MW-2,2867-002,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
Integration Params: RTEINT.P
Quant Time: May 7 10:34 2001 Quant Results File: CW0901.RES

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration
DataAcq Meth : CW0901

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.18	152	118987m	40.00	UG	-0.02
22) Naphthalene-d8	7.54	136	380798	40.00	UG	-0.01
39) Acenaphthene-d10	9.18	164	138325	40.00	UG	-0.01
60) Phenanthrene-d10	10.49	188	147307	40.00	UG	0.00
75) Chrysene-d12	12.99	240	61237	40.00	UG	0.03
84) Perylene-d12	15.22	264	40270	40.00	UG	0.04
System Monitoring Compounds						
4) 2-Fluorophenol	4.57	112	204533	53.84	UG	-0.02
Spiked Amount 100.000	Range 42 - 95		Recovery = 53.84%			
6) Phenol-d5	5.67	99	225280m	59.69	UG	-0.02
Spiked Amount 100.000	Range 59 - 97		Recovery = 59.69%			
23) Nitrobenzene-d5	6.78	82	76378m	27.00	UG	-0.01
Spiked Amount 50.000	Range 49 - 105		Recovery = 54.00%			
43) 2-Fluorobiphenyl	8.54	172	128970	28.30	UG	-0.01
Spiked Amount 50.000	Range 54 - 110		Recovery = 56.60%			
64) 2,4,6-Tribromophenol	9.88	330	24001	64.71	UG	0.00
Spiked Amount 100.000	Range 48 - 126		Recovery = 64.71%			
77) Terphenyl-d14	11.85	244	66463	38.46	UG	0.02
Spiked Amount 50.000	Range 53 - 123		Recovery = 76.92%			

Target Compounds						Qvalue
8) Aniline	5.78	93	58478	12.87	UG	# 84
12) 1,4-Dichlorobenzene	6.20	146	5608	1.34	UG	# 72
14) 1,2-Dichlorobenzene	6.37	146	42441	11.43	UG	98
17) 4-Methylphenol	6.56	108	3359	1.39	UG	95
27) 2,4-Dimethylphenol	7.14	107	12738	4.84	UG	97
33) Naphthalene	7.56	128	8788	1.03	UG	# 91

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

Quantitation Report

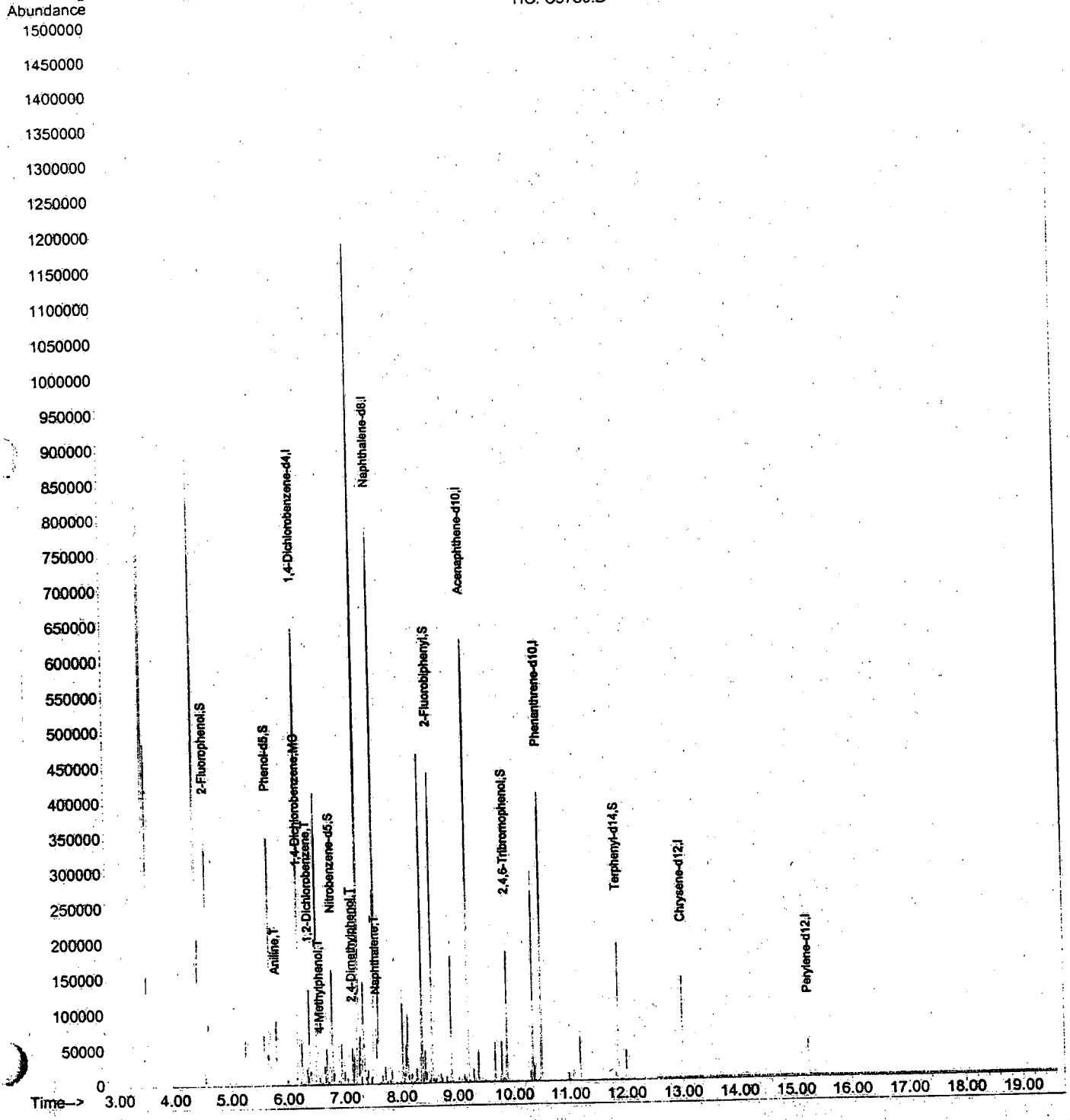
Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D
Acq On : 4 May 2001 14:53
Sample : MW-2,2867-002,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: RTEINT.P
Quant Time: May 7 10:34 2001

Vial: 12
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Results File: CW0901.RES

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration

TIC: C9780.D



LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D
Acq On : 4 May 2001 14:53
Sample : MW-2,2867-002,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
; Integration Params: LSCINT.P

Vial: 12
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 1.5
Stop Thrs : 1.5

Filtering: 5
Min Area: 0.5 % 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	3.461	120	126	132	rBV	1849022	2655763	100.00%	19.595%
2	3.514	132	136	144	rVB	484037	599677	22.58%	4.425%
3	3.899	204	208	214	rVB2	26943	38591	1.45%	0.285%
4	4.380	292	298	302	rBV	905179	1187198	44.70%	8.759%
5	4.412	302	304	312	rVB	209825	244635	9.21%	1.805%
6	4.567	329	333	337	rBV	347846	437693	16.48%	3.229%
7	5.245	456	460	468	rBB	68381	86892	3.27%	0.641%
8	5.577	518	522	530	rVB	72650	93203	3.51%	0.688%
9	5.641	530	534	536	rVV	44909	50008	1.88%	0.369%
10	5.667	536	539	548	rVB	353238	450160	16.95%	3.321%
11	5.785	557	561	568	rBV	94638	112848	4.25%	0.833%
12	6.180	631	635	643	rVB	646472	736929	27.75%	5.437%
13	6.244	643	647	653	rBB	65930	65629	2.47%	0.484%
14	6.373	668	671	675	rVV	137858	148101	5.58%	1.093%
15	6.511	691	697	702	rBV	413364	383791	14.45%	2.832%
16	6.650	719	723	727	rBV2	27095	28538	1.07%	0.211%
17	6.688	727	730	735	rVB	56973	52425	1.97%	0.387%
18	6.784	743	748	752	rBV	178924	176369	6.64%	1.301%
19	6.949	774	779	783	rBV	60066	57748	2.17%	0.426%
20	7.136	810	814	818	rBV	53113	49956	1.88%	0.369%
21	7.174	818	821	824	rVB	46040	36543	1.38%	0.270%
22	7.238	827	833	837	rBV	1266147	1185922	44.65%	8.750%
23	7.275	837	840	845	rVB2	75408	76516	2.88%	0.565%
24	7.329	845	850	853	rBV2	152459	183781	6.92%	1.356%
25	7.350	853	854	859	rVV	58374	48445	1.82%	0.357%
26	7.516	878	885	887	rBV	273822	268207	10.10%	1.979%
27	7.542	887	890	895	rVV	780153	776120	29.22%	5.726%
28	7.580	895	897	898	rVV	65574	55373	2.09%	0.409%
29	7.596	898	900	906	rVB	177291	148858	5.61%	1.098%
30	8.023	976	980	983	rBV	142600	108963	4.10%	0.804%
31	8.087	989	992	994	rBV	48146	39376	1.48%	0.291%

3400

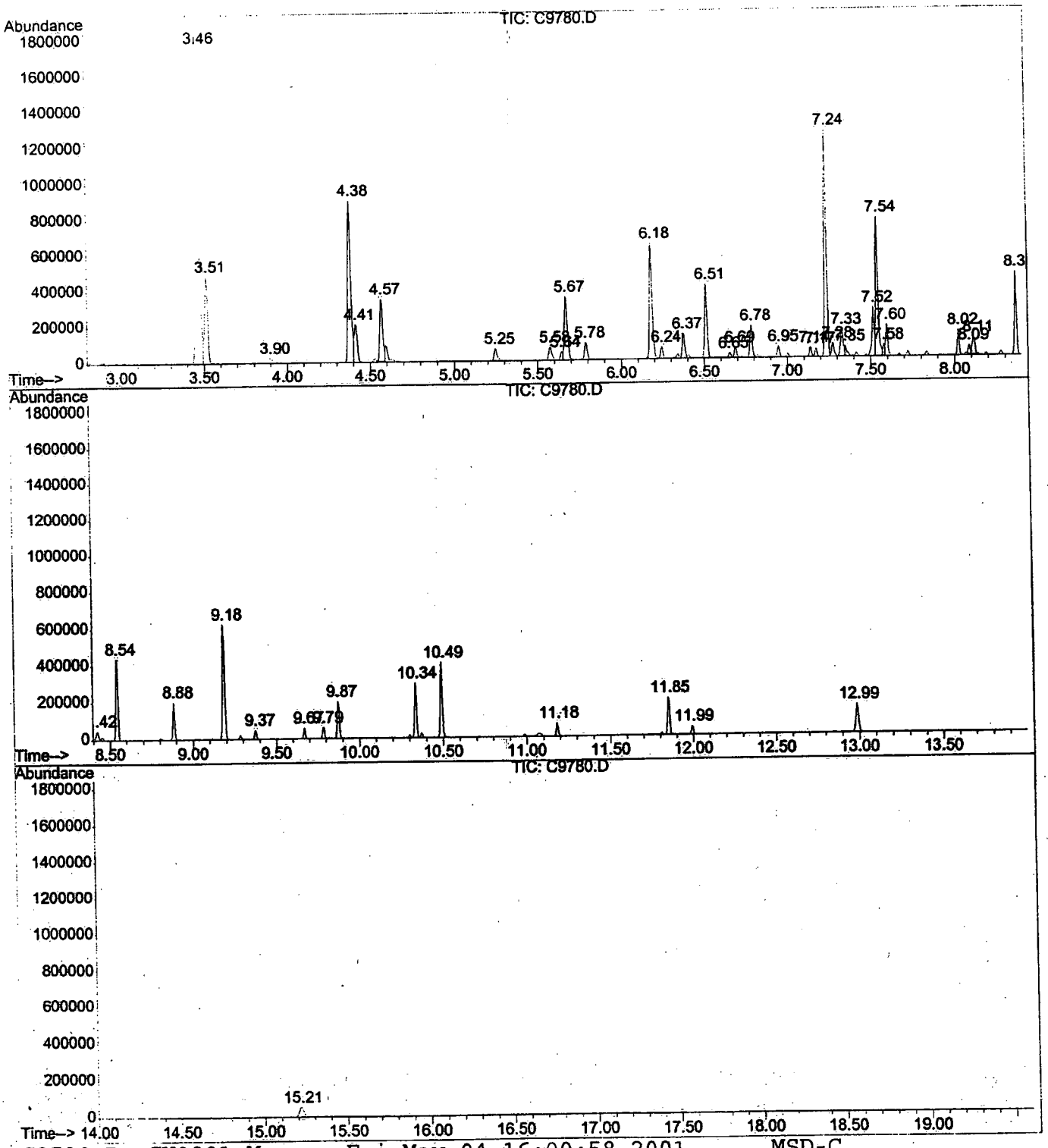
32	8.114	994	997	1001	rVB2	96525	106031	3.99%	0.782%
33	8.365	1039	1044	1048	rBV	466148	353304	13.30%	2.607%
34	8.424	1048	1055	1058	rBV3	46653	47267	1.78%	0.349%
35	8.541	1073	1077	1081	rBV	439677	356373	13.42%	2.629%
36	8.883	1138	1141	1145	rBV	201885	156506	5.89%	1.155%
	9.182	1193	1197	1202	rBV	626111	555644	20.92%	4.100%
38	9.375	1229	1233	1238	rBB2	46971	38114	1.44%	0.281%
39	9.669	1285	1288	1291	rVB	58251	39104	1.47%	0.289%
40	9.786	1306	1310	1313	rBV	58961	54518	2.05%	0.402%
41	9.872	1323	1326	1331	rBB	200116	165570	6.23%	1.222%
42	10.336	1409	1413	1417	rVV	296729	231413	8.71%	1.707%
43	10.491	1438	1442	1446	rBV	408652	341863	12.87%	2.522%
44	11.180	1568	1571	1577	rBB	72305	57938	2.18%	0.427%
45	11.848	1693	1696	1700	rBV	201403	168708	6.35%	1.245%
46	11.992	1719	1723	1727	rBV	45345	37577	1.41%	0.277%
47	12.986	1903	1909	1915	rBV	154526	161303	6.07%	1.190%
48	15.214	2319	2326	2335	rBV	51889	97894	3.69%	0.722%

Sum of corrected areas: 13553385

C9780.D CW0901.M Fri May 04 16:00:57 2001 MSD-C

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-04-01\C9780.D
Operator : DP
Acquired : 4 May 2001 14:53 using AcqMethod CW0901
Instrument : MSD-C
Sample Name: MW-2,2867-002,A,1000mL,100,05/04/01
Misc Info : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/01,1
Vial Number: 12
Quant File :CW0901.RES (RTE Integrator)



C9780.D CW0901.M Fri May 04 16:00:58 2001 MSD-C

340Z

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D
Acq On : 4 May 2001 14:53
Sample : MW-2,2867-002,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 12
Operator: DP
Inst : MSD-C
Multiplr: 1.00

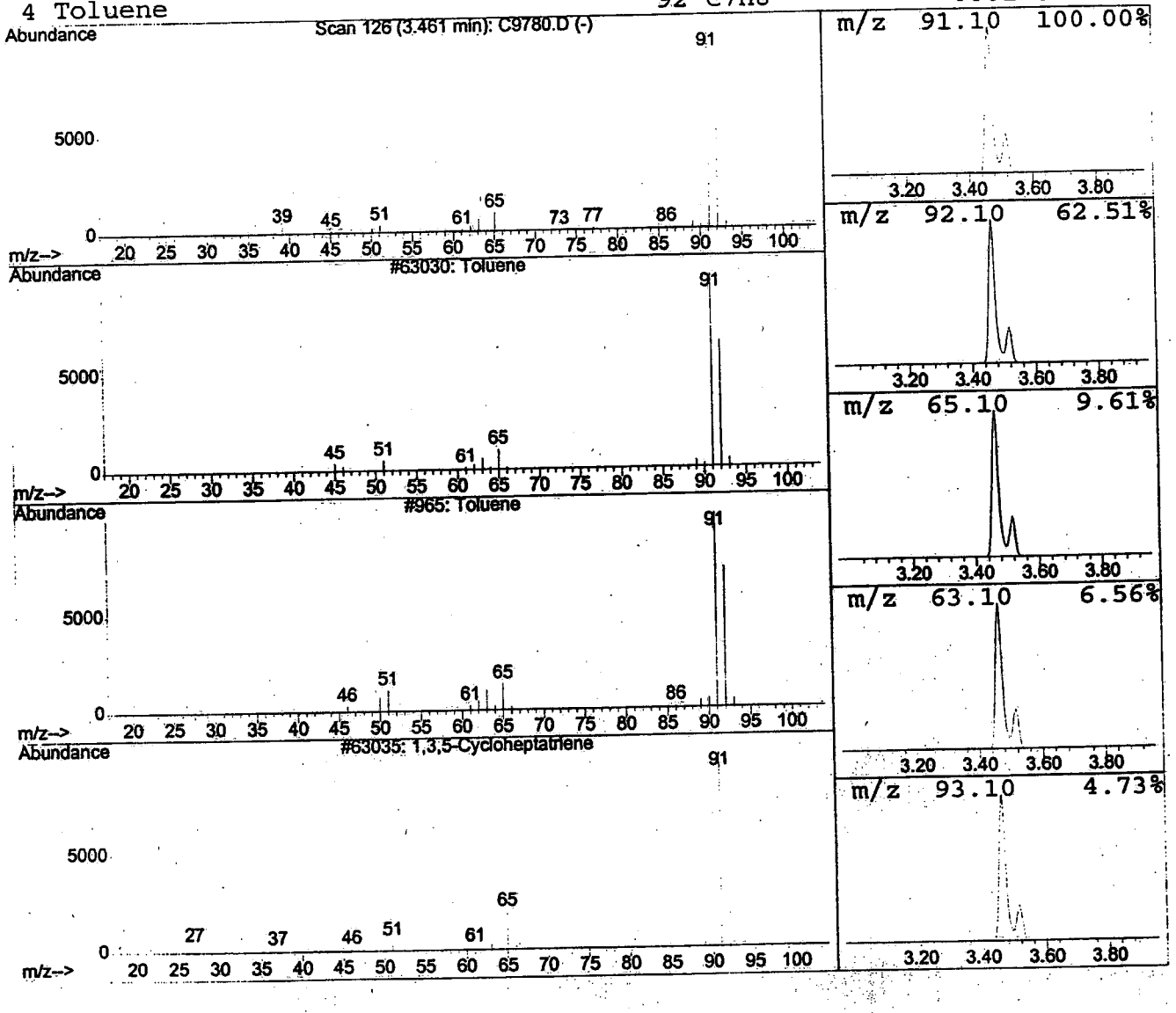
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.46	144.15 UG	2655760	1,4-Dichlorobenzene-d4	6.18

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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3403

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D
Acq On : 4 May 2001 14:53
Sample : MW-2,2867-002,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 12
Operator: DP
Inst : MSD-C
Multiplr: 1.00

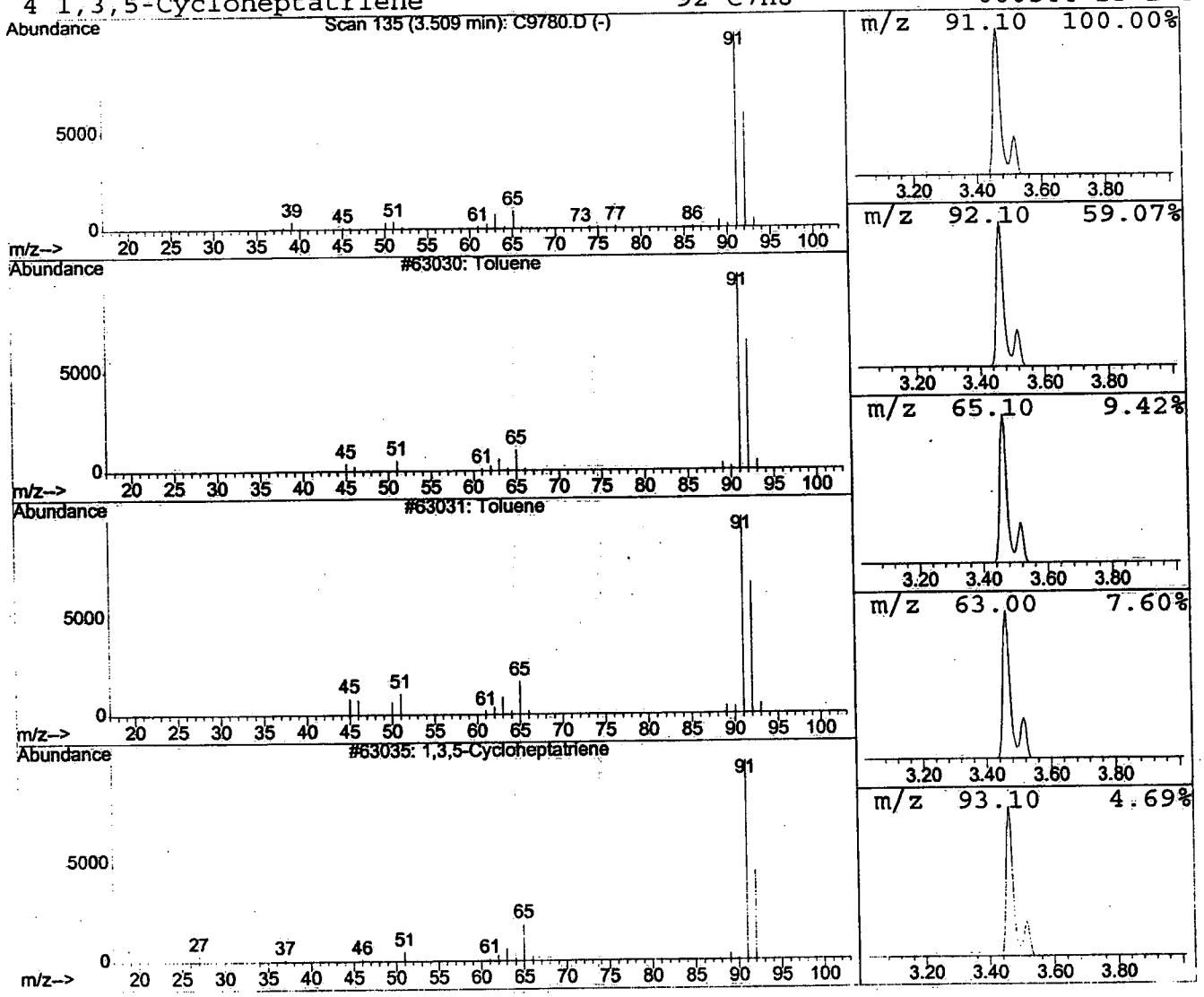
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Substituted benzene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.51	32.55 UG	599677	1,4-Dichlorobenzene-d4	6.18

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	87
4	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	87



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3404

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D
Acq On : 4 May 2001 14:53
Sample : MW-2,2867-002,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 12
Operator: DP
Inst : MSD-C
Multiplr: 1.00

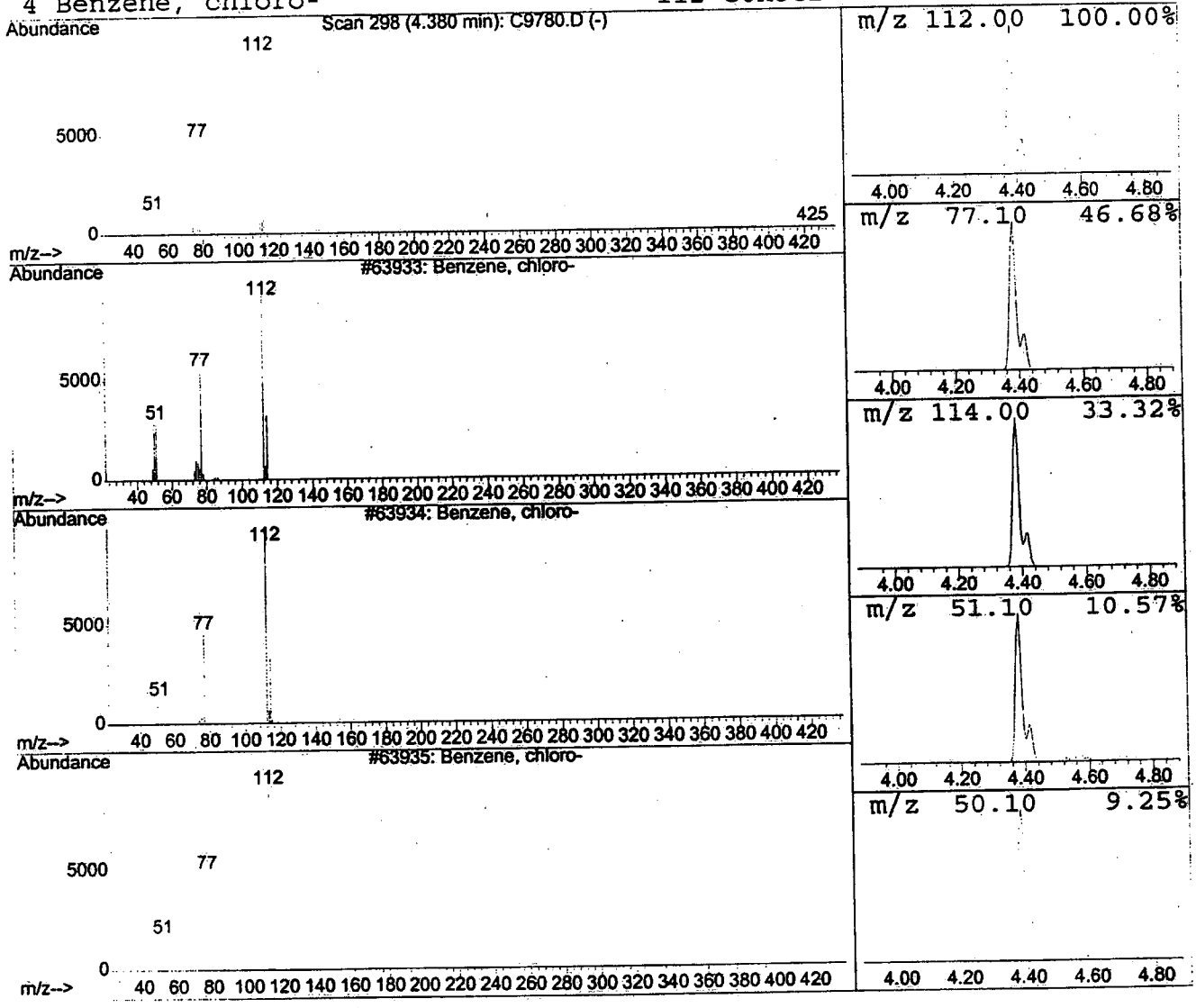
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Substituted benzene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.38	64.44 UG	1187200	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, chloro-	112	C6H5Cl	000108-90-7	94
2	Benzene, chloro-	112	C6H5Cl	000108-90-7	91
3	Benzene, chloro-	112	C6H5Cl	000108-90-7	91
4	Benzene, chloro-	112	C6H5Cl	000108-90-7	91



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3405

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D
Acq On : 4 May 2001 14:53
Sample : MW-2,2867-002,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 12
Operator: DP
Inst : MSD-C
Multiplr: 1.00

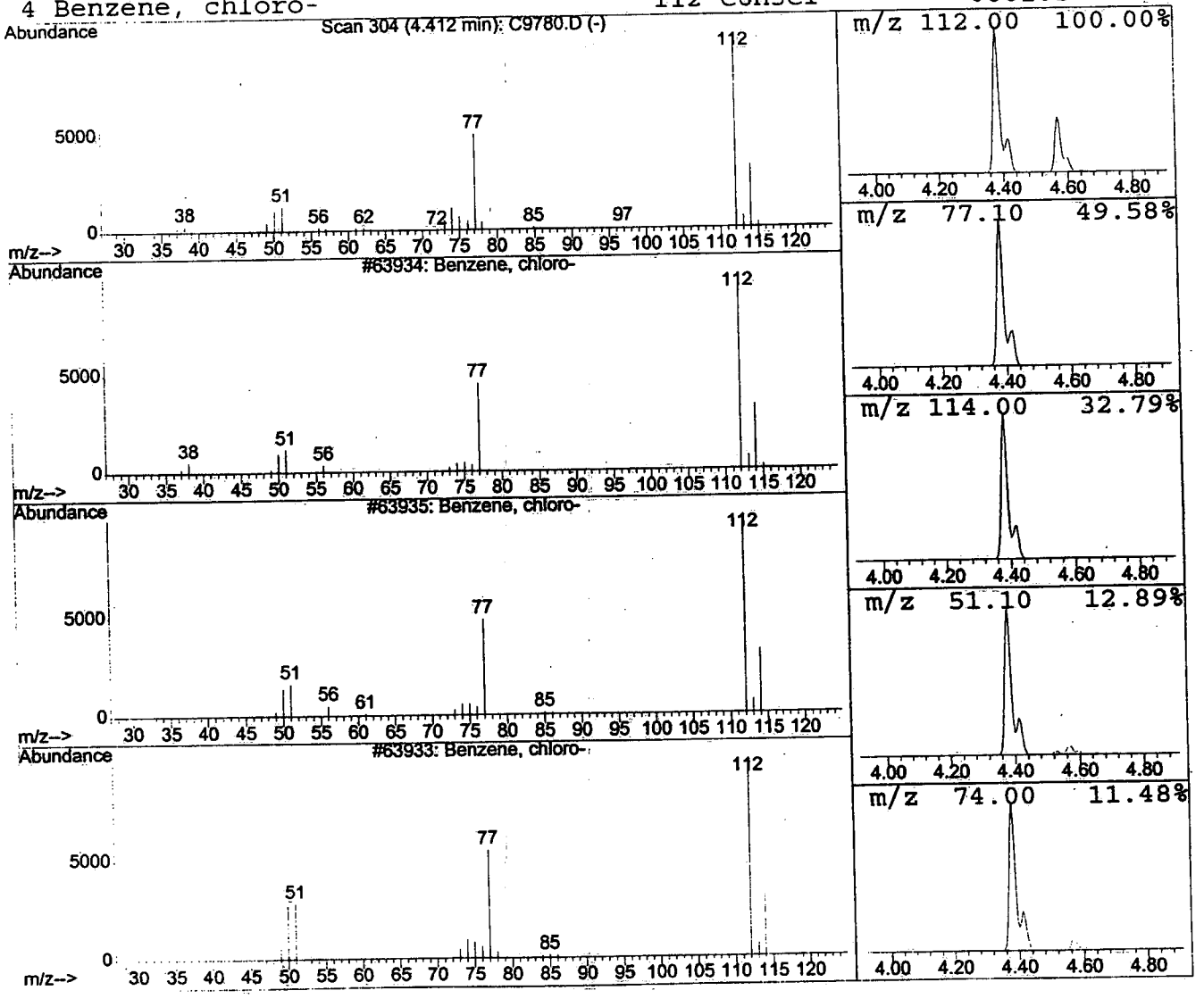
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Substituted benzene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.41	13.28 UG	244635	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, chloro-	112	C6H5Cl	000108-90-7	91
2	Benzene, chloro-	112	C6H5Cl	000108-90-7	91
3	Benzene, chloro-	112	C6H5Cl	000108-90-7	91
4	Benzene, chloro-	112	C6H5Cl	000108-90-7	83



CC0237

3406

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D
Acq On : 4 May 2001 14:53
Sample : MW-2,2867-002,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 12
Operator: DP
Inst : MSD-C
Multiplr: 1.00

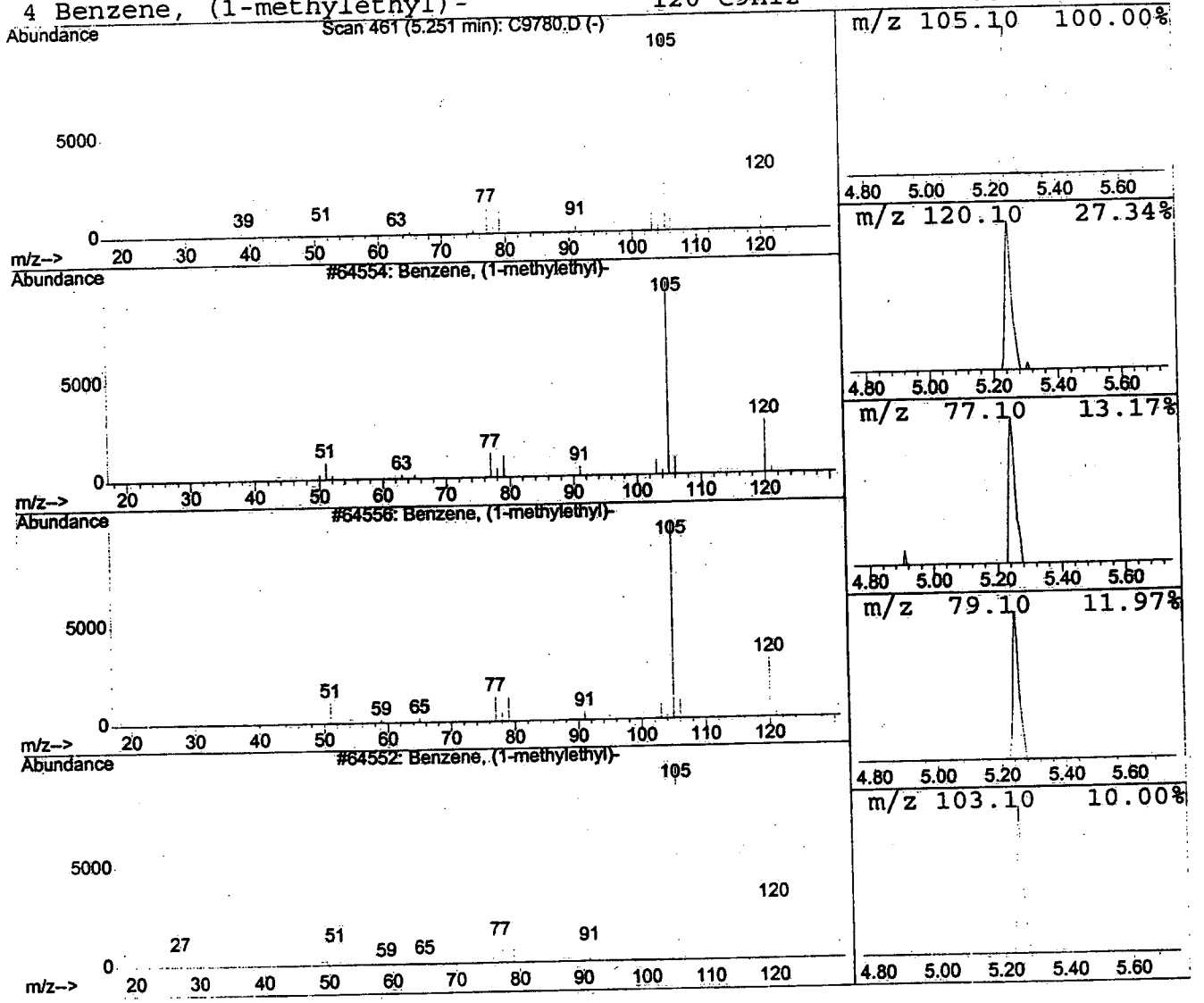
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 5 Substituted benzene Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.25	4.72 UG	86892	1,4-Dichlorobenzene-d4	6.18

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



3407

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D Vial: 12
Acq On : 4 May 2001 14:53 Operator: DP
Sample : MW-2,2867-002,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

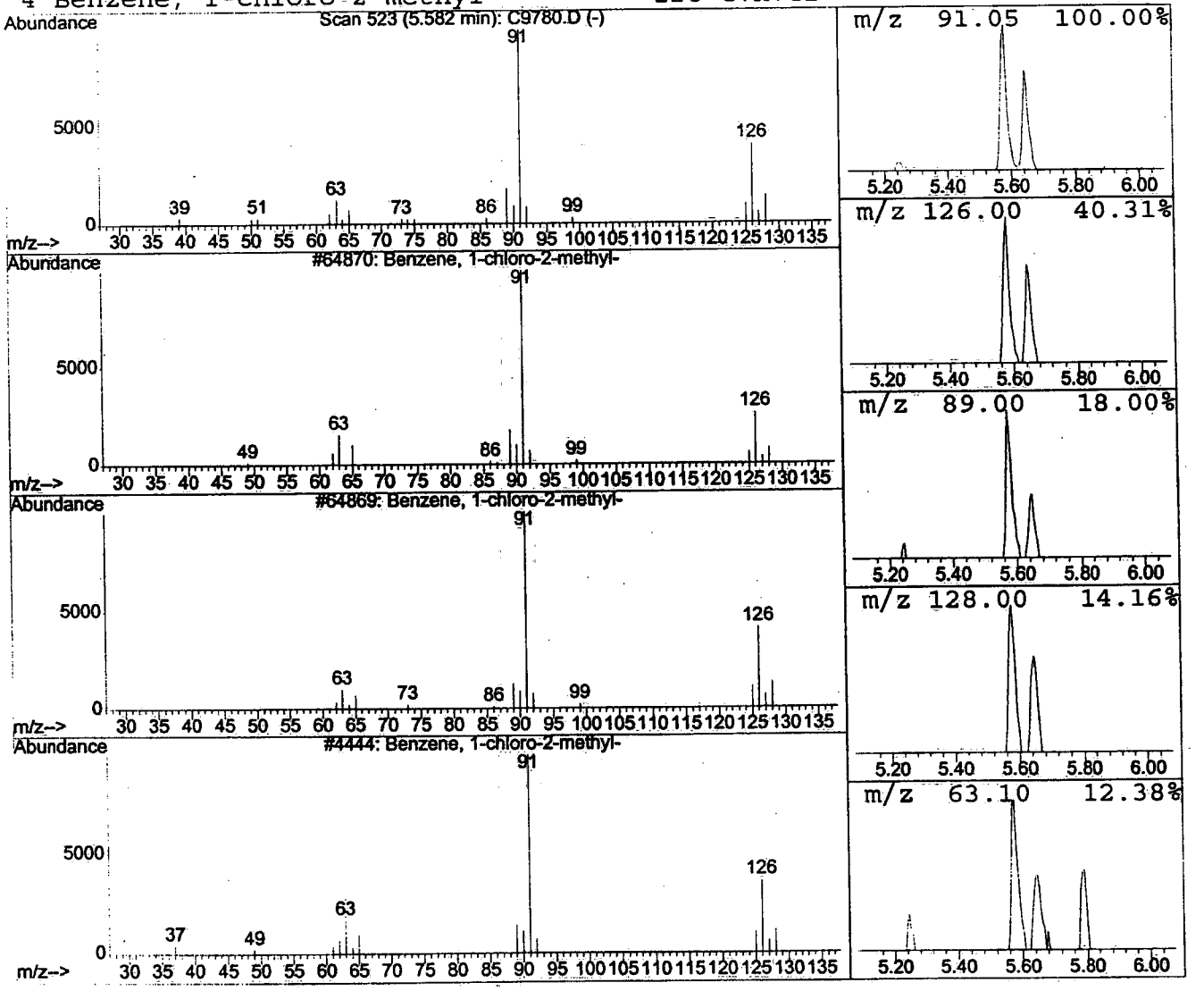
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 6 Substituted benzene Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.58	5.06 UG	93203	1,4-Dichlorobenzene-d4	6.18

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	94
3	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	94
4	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	93



34058

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D
Acq On : 4 May 2001 14:53
Sample : MW-2,2867-002,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 12
Operator: DP
Inst : MSD-C
Multiplr: 1.00

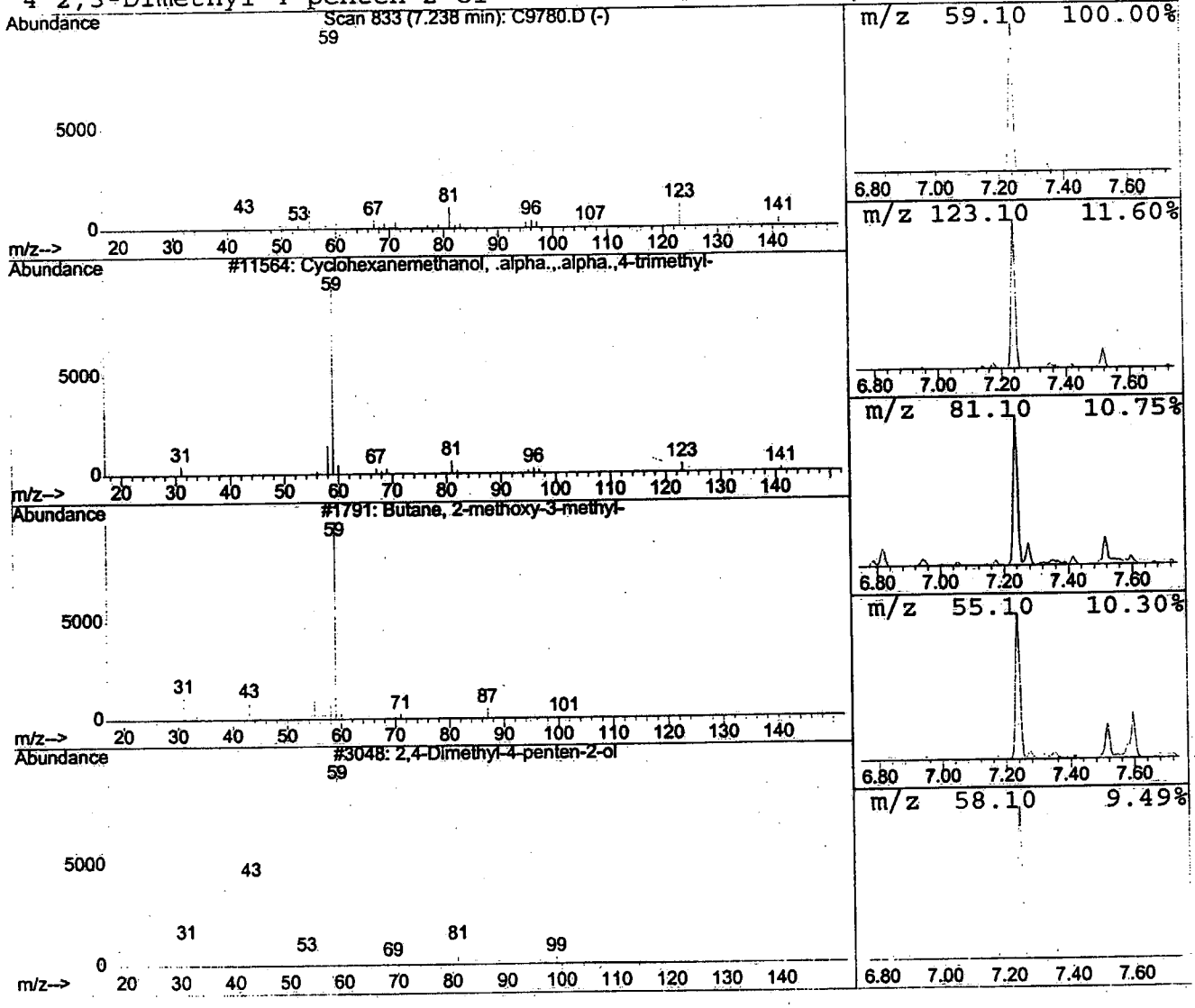
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 7 Unknown cyclic hydrocarbon Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.24	61.12 UG	1185920	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanemethanol, .alpha.,.alpha	156	C10H20O	000498-81-7	83
2	Butane, 2-methoxy-3-methyl-	102	C6H14O	062016-49-3	53
3	2,4-Dimethyl-4-penten-2-ol	114	C7H14O	019781-53-4	45
4	2,3-Dimethyl-4-penten-2-ol	114	C7H14O	019781-52-3	45



3409

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D Vial: 12
Acq On : 4 May 2001 14:53 Operator: DP
Sample : MW-2,2867-002,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

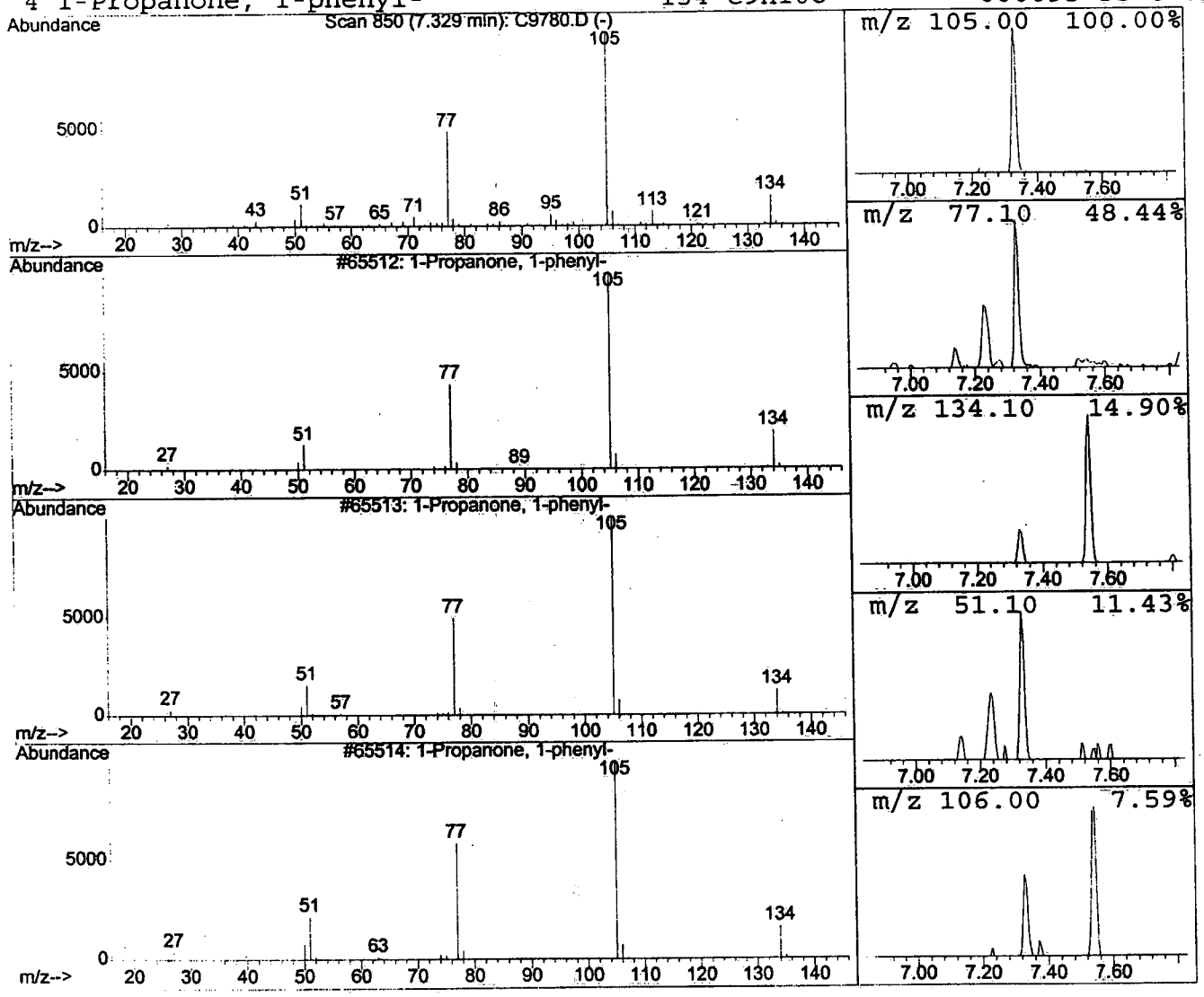
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 8 Unknown alkane Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.33	9.47 UG	183781	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propanone, 1-phenyl-	134	C9H10O	000093-55-0	87
2	1-Propanone, 1-phenyl-	134	C9H10O	000093-55-0	83
3	1-Propanone, 1-phenyl-	134	C9H10O	000093-55-0	83
4	1-Propanone, 1-phenyl-	134	C9H10O	000093-55-0	72



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3410

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D
Acq On : 4 May 2001 14:53
Sample : MW-2,2867-002,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 12
Operator: DP
Inst : MSD-C
Multiplr: 1.00

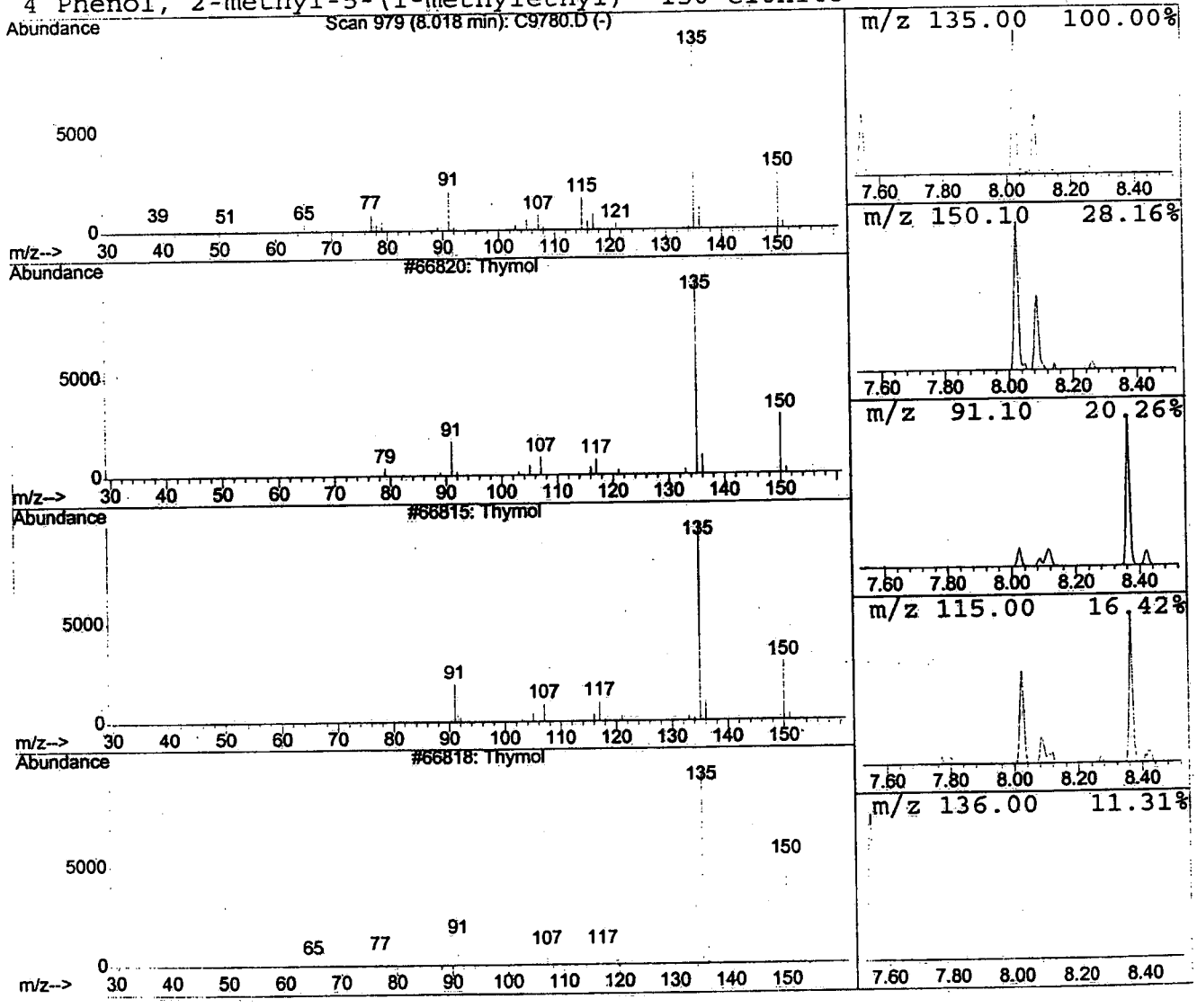
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 9 Substituted benzene Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.02	5.62 UG	108963	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Thymol	150	C10H14O	000089-83-8	95
2	Thymol	150	C10H14O	000089-83-8	93
3	Thymol	150	C10H14O	000089-83-8	90
4	Phenol, 2-methyl-5-(1-methylethyl)-	150	C10H14O	000499-75-2	90



000242

3411

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D
Acq On : 4 May 2001 14:53
Sample : MW-2,2867-002,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 12
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

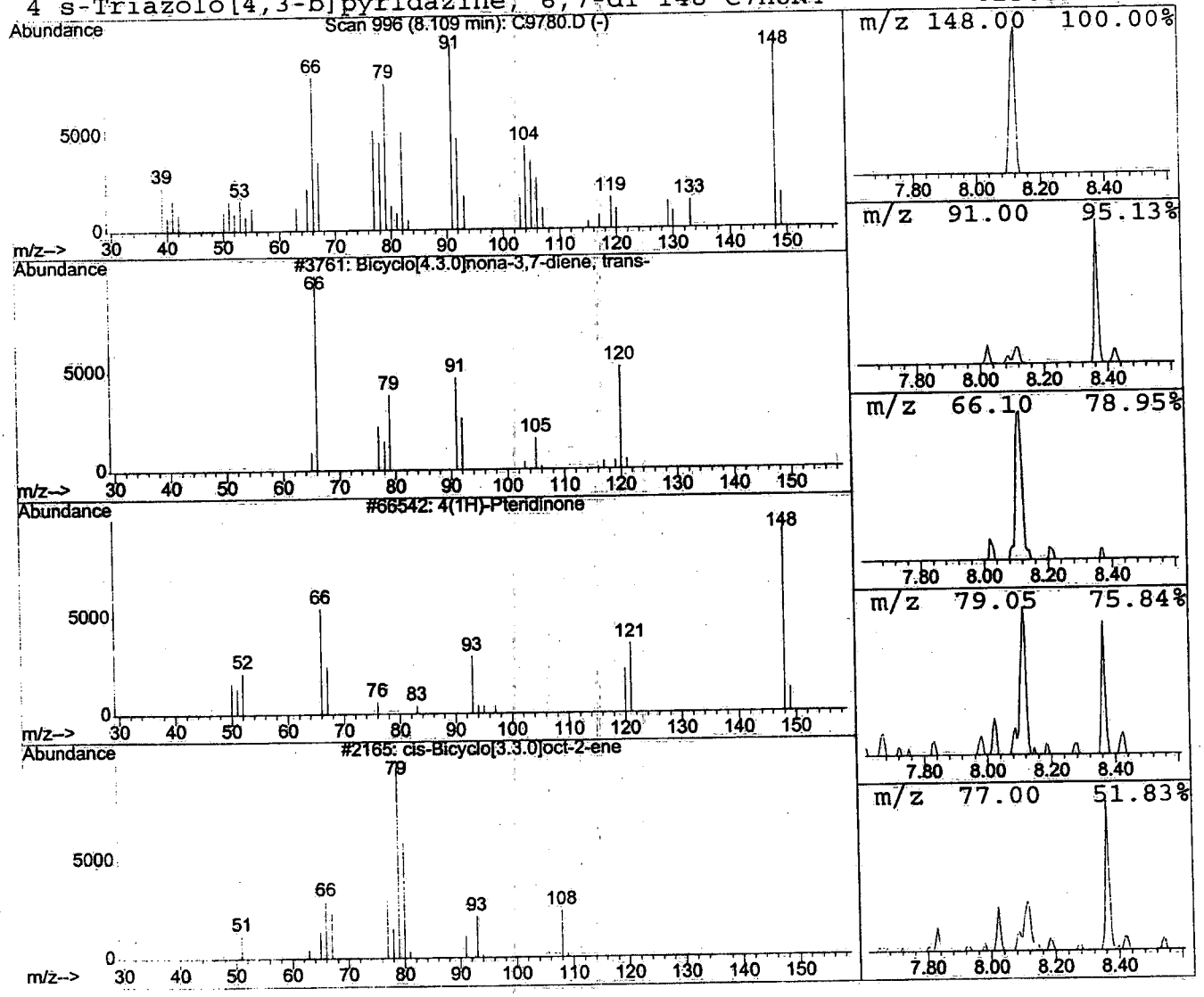
****

Peak Number 10 Unknown

Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.11	5.46 UG	106031	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[4.3.0]nona-3,7-diene, trans	120	C9H12	000000-00-0	50
2	4(1H)-Pteridinone	148	C6H4N4O	000700-47-0	43
3	cis-Bicyclo[3.3.0]oct-2-ene	108	C8H12	000930-99-4	38
4	s-Triazolo[4,3-b]pyridazine, 6,7-di	148	C7H8N4	023069-78-5	38



3412

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D
Acq On : 4 May 2001 14:53
Sample : MW-2,2867-002,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 12
Operator: DP
Inst : MSD-C
Multiplr: 1.00

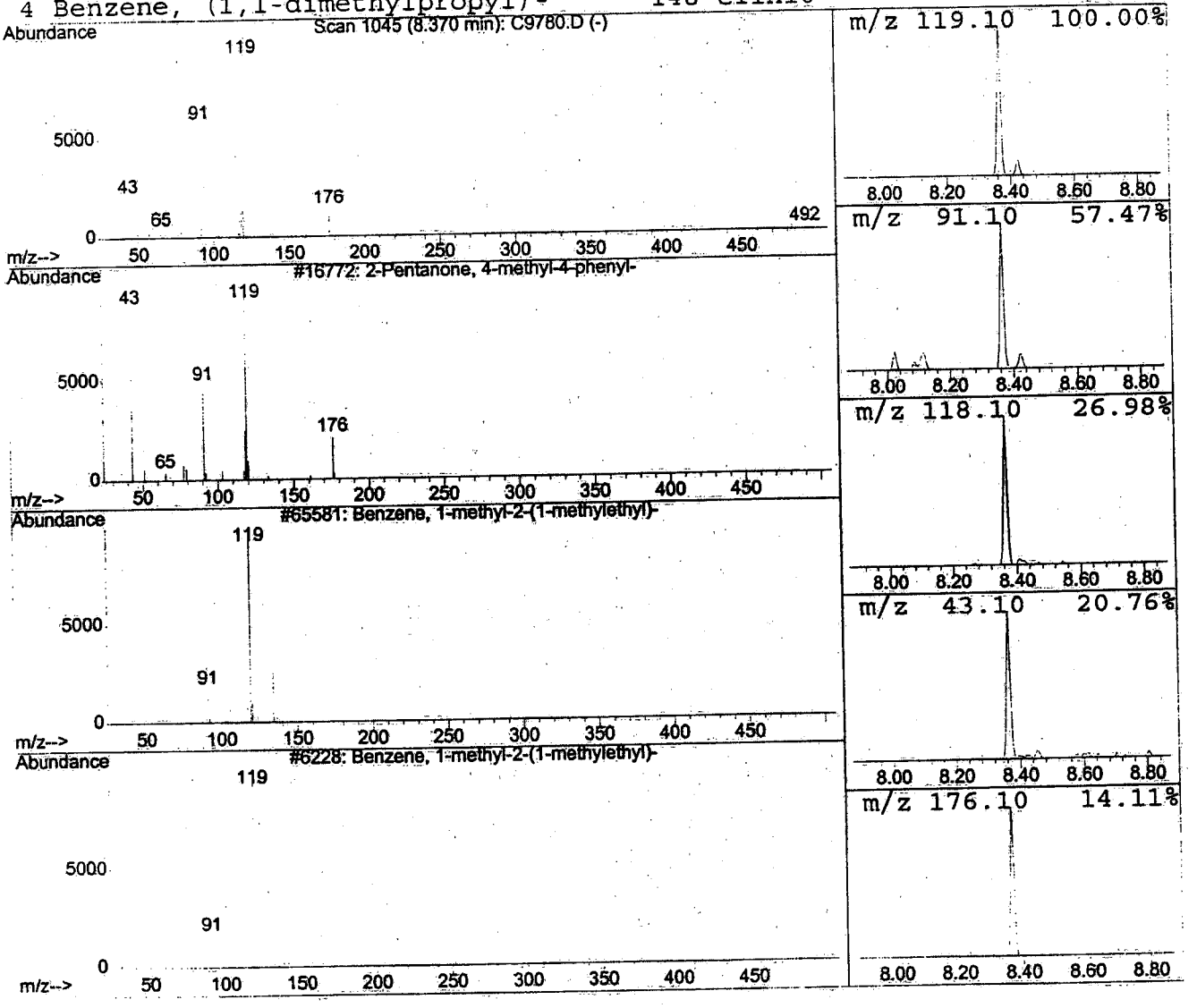
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 11 Substituted benzene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.37	25.43 UG	353304	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-methyl-4-phenyl-	176	C12H16O	007403-42-1	83
2	Benzene, 1-methyl-2-(1-methylethyl)	134	C10H14	000527-84-4	64
3	Benzene, 1-methyl-2-(1-methylethyl)	134	C10H14	000527-84-4	64
4	Benzene, (1,1-dimethylpropyl)-	148	C11H16	002049-95-8	59



C00244

3413

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D Vial: 12
Acq On : 4 May 2001 14:53 Operator: DP
Sample : MW-2,2867-002,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

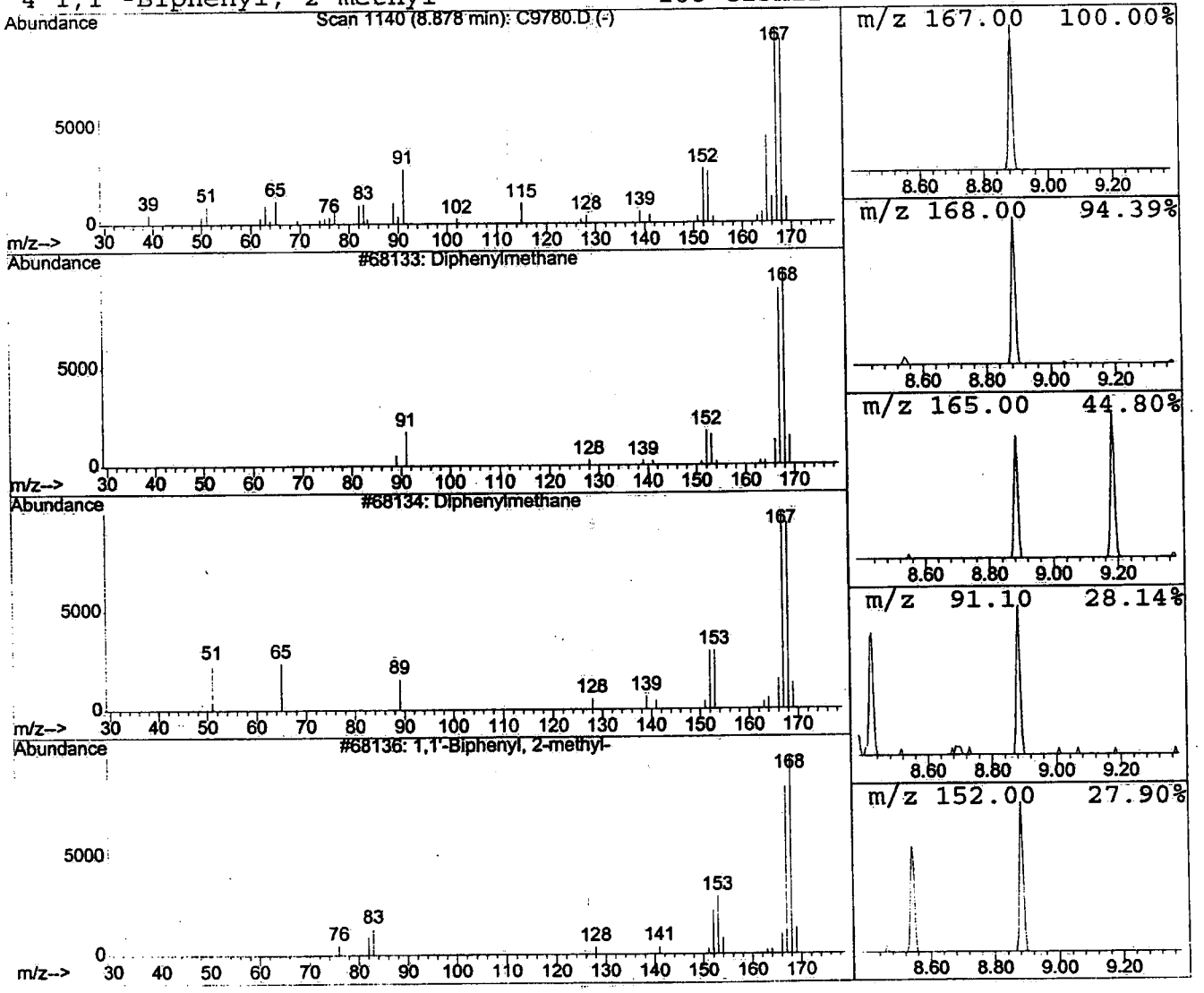
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 12 Substituted benzene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.88	11.27 UG	156506	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diphenylmethane	168	C13H12	000101-81-5	95
2	Diphenylmethane	168	C13H12	000101-81-5	91
3	1,1'-Biphenyl, 2-methyl-	168	C13H12	000643-58-3	90
4	1,1'-Biphenyl, 2-methyl-	168	C13H12	000643-58-3	89



3414

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D Vial: 12
Acq On : 4 May 2001 14:53 Operator: DP
Sample : MW-2,2867-002,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

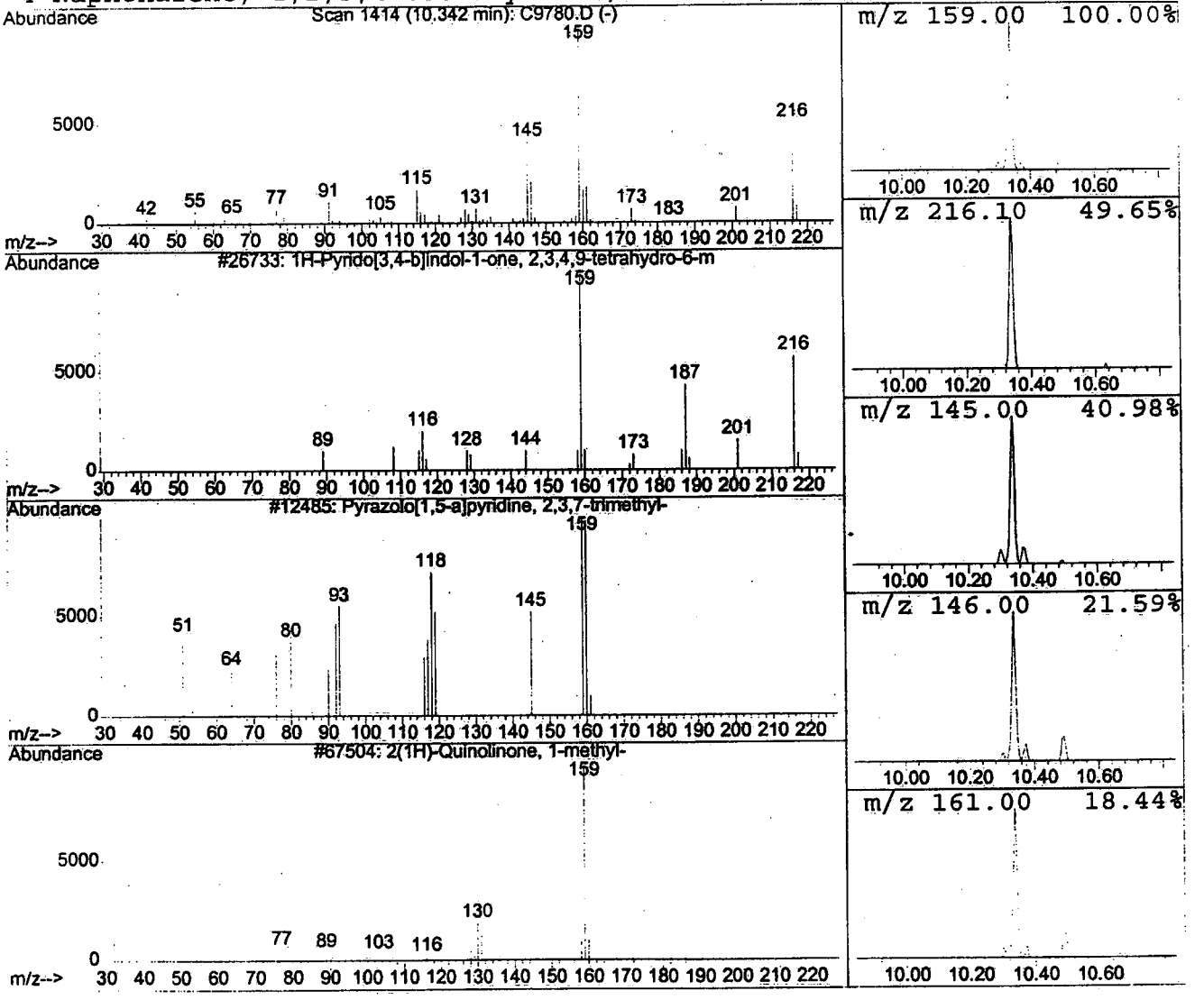
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 13 Unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.34	27.08 UG	231413	Phenanthrene-d10	10.49

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Pyrido[3,4-b]indol-1-one, 2,3,4,	216	C12H12N2O2	017952-87-3	40
2	Pyrazolo[1,5-a]pyridine, 2,3,7-trim	160	C10H12N2	017408-34-3	37
3	2(1H)-Quinolinone, 1-methyl-	159	C10H9NO	000606-43-9	35
4	Naphthalene, 1,2,3,4-tetrahydro-1,1	174	C13H18	000475-03-6	25



3415

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D Vial: 12
Acq On : 4 May 2001 14:53 Operator: DP
Sample : MW-2,2867-002,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

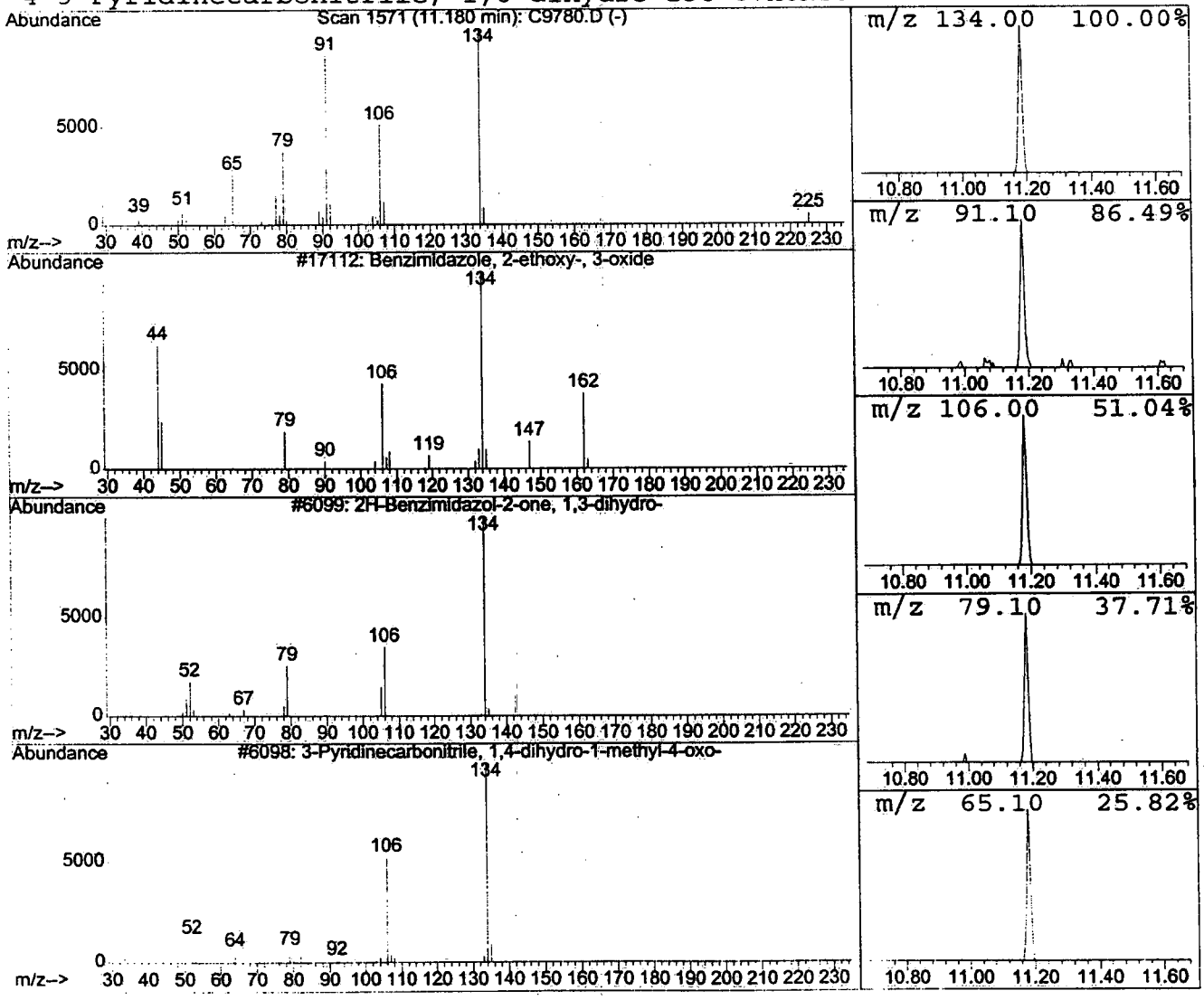
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 14 Unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.18	6.78 UG	57938	Phenanthrene-d10	10.49

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzimidazole, 2-ethoxy-, 3-oxide	178	C9H10N2O2	016007-57-1	53
2	2H-Benzimidazol-2-one, 1,3-dihydro-	134	C7H6N2O	000615-16-7	50
3	3-Pyridinecarbonitrile, 1,4-dihydro	134	C7H6N2O	000767-98-6	49
4	3-Pyridinecarbonitrile, 1,6-dihydro	134	C7H6N2O	000768-45-6	47



3416

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9780.D
Acq On : 4 May 2001 14:53
Sample : MW-2,2867-002,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 12
Operator: DP
Inst : MSD-C
Multiplr: 1.00

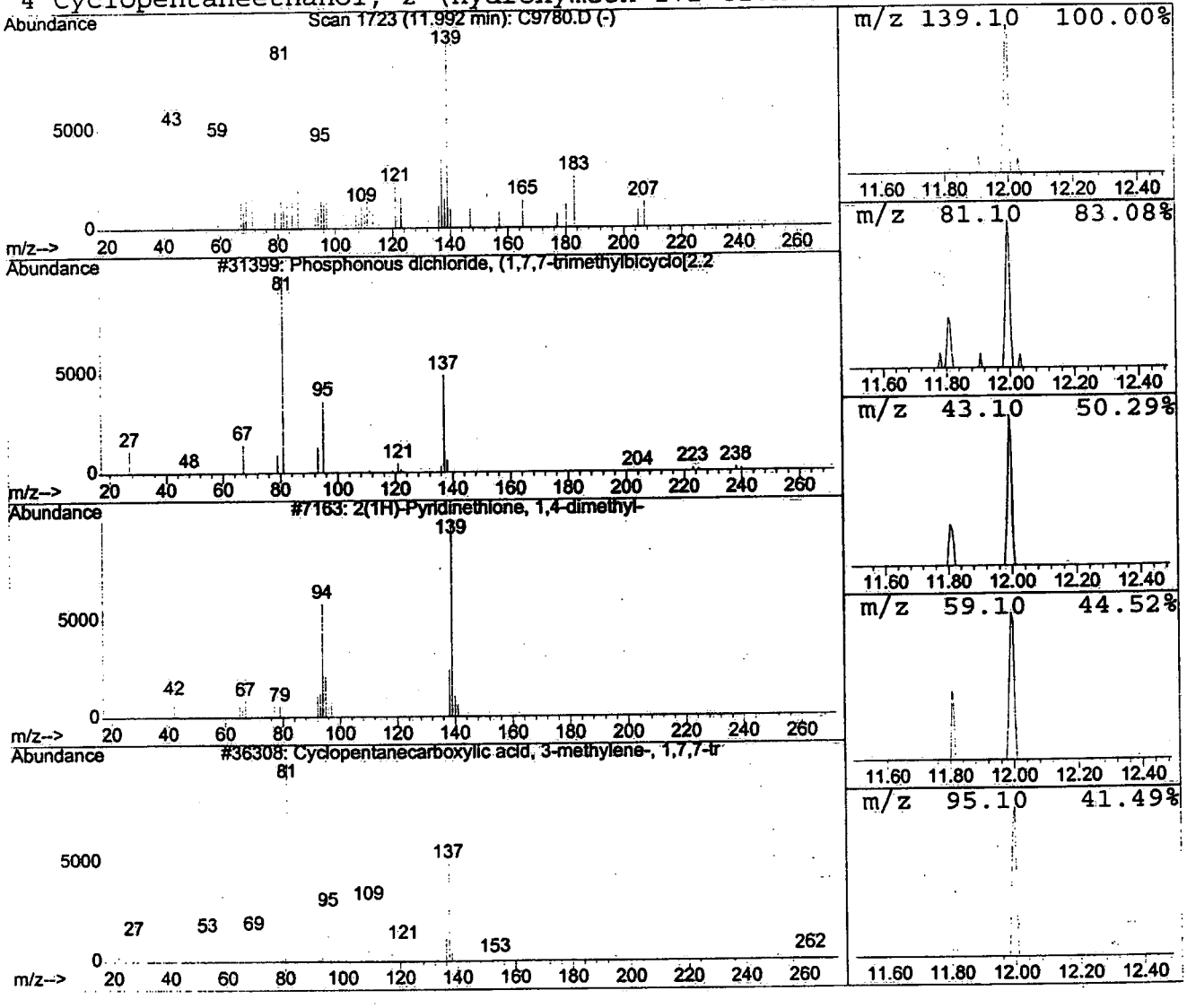
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 15 Unknown — Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.99	9.32 UG	37577	Chrysene-d12	12.99

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phosphonous dichloride, (1,7,7-trim	238	C10H17Cl2P	074630-16-3	16
2	2(1H)-Pyridinethione, 1,4-dimethyl-	139	C7H9NS	019006-67-8	14
3	Cyclopentanecarboxylic acid, 3-meth	262	C17H26O2	074793-59-2	12
4	Cyclopentaneethanol, 2-(hydroxymeth	172	C10H20O2	000485-42-7	12



3417

C09243

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-04-01\C9781.D Vial: 13
Acq On : 4 May 2001 15:18 Operator: DP
Sample : MW-3,2867-003,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 16:05 2001 Quant Results File: CW0901.RES

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration
DataAcq Meth : CW0901

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.18	152	131668	40.00	UG	-0.02
22) Naphthalene-d8	7.54	136	377632	40.00	UG	-0.01
39) Acenaphthene-d10	9.18	164	133551	40.00	UG	-0.01
60) Phenanthrene-d10	10.49	188	127834	40.00	UG	0.00
75) Chrysene-d12	13.00	240	52071	40.00	UG	0.04
84) Perylene-d12	15.24	264	36452	40.00	UG	0.06
System Monitoring Compounds						
4) 2-Fluorophenol	4.57	112	280671	66.76	UG	-0.02
Spiked Amount 100.000	Range 42 - 95		Recovery = 66.76%			
6) Phenol-d5	5.67	99	294544	70.53	UG	-0.02
Spiked Amount 100.000	Range 59 - 97		Recovery = 70.53%			
23) Nitrobenzene-d5	6.78	82	89074	31.75	UG	-0.01
Spiked Amount 50.000	Range 49 - 105		Recovery = 63.50%			
43) 2-Fluorobiphenyl	8.54	172	171834	39.05	UG	-0.01
Spiked Amount 50.000	Range 54 - 110		Recovery = 78.10%			
64) 2,4,6-Tribromophenol	9.87	330	28923	89.86	UG	-0.01
Spiked Amount 100.000	Range 48 - 126		Recovery = 89.86%			
77) Terphenyl-d14	11.86	244	72911	49.62	UG	0.03
Spiked Amount 50.000	Range 53 - 123		Recovery = 99.24%			
Target Compounds						Qvalue
7) Phenol	5.69	94	12979	3.20	UG	# 40
8) Aniline	5.79	93	36856	7.33	UG	# 85
12) 1,4-Dichlorobenzene	6.20	146	4393	0.95	UG	# 53
14) 1,2-Dichlorobenzene	6.38	146	14724	3.58	UG	97

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

C00249

34146

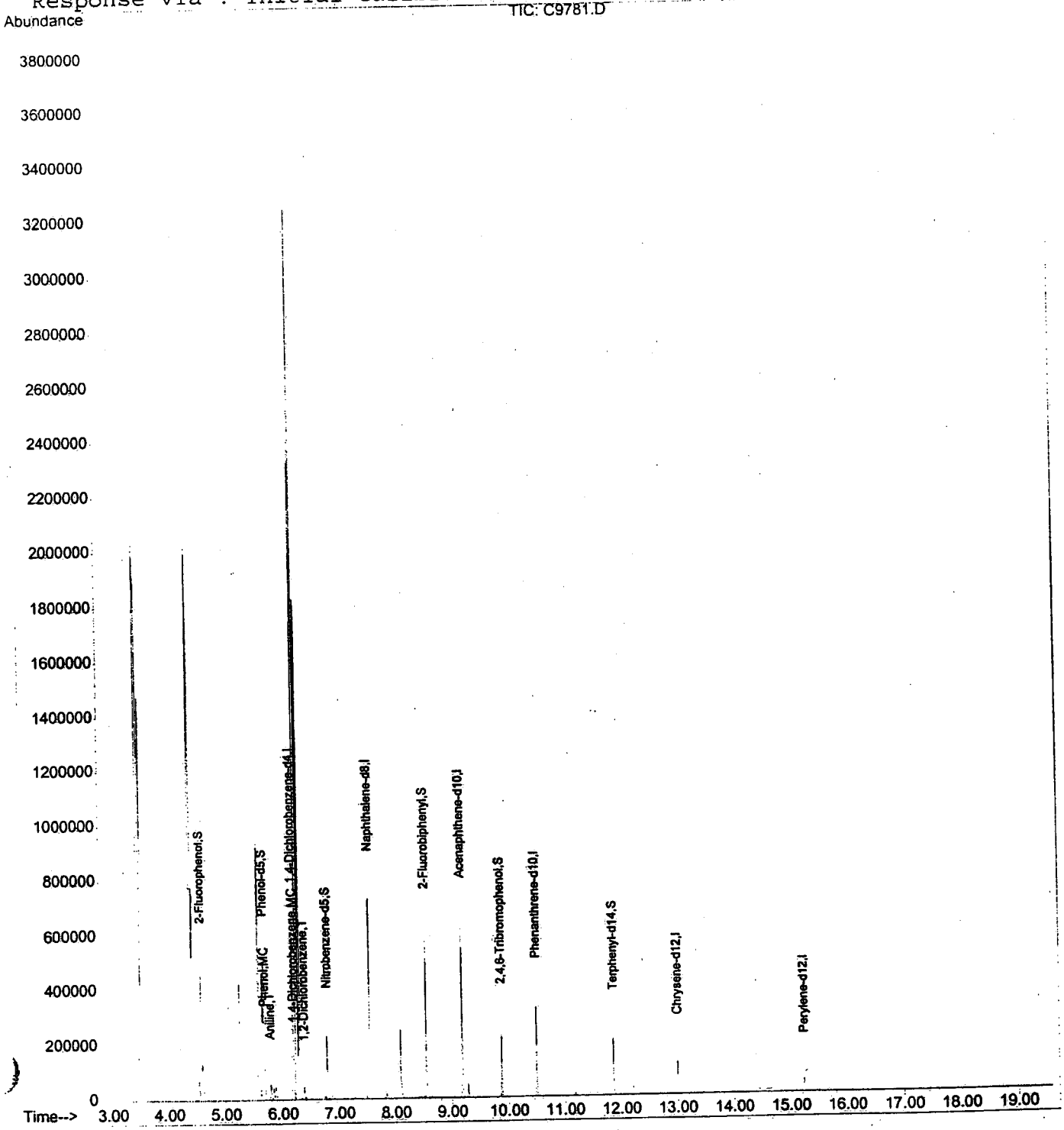
Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9781.D
Acq On : 4 May 2001 15:18
Sample : MW-3,2867-003,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: RTEINT.P
Quant Time: May 4 16:05 2001

Vial: 13
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Results File: CW0901.RES

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration



3419

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9781.D
Acq On : 4 May 2001 15:18
Sample : MW-3,2867-003,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
; Integration Params: LSCINT.P

Vial: 13
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 1.5
Stop Thrs : 1.5

Filtering: 5
Min Area: 0.5 % 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	3.456	120	125	127	rBV	2027868	2502069	43.98%	10.341%
2	3.515	132	136	144	rVB	1471625	1903524	33.46%	7.867%
3	4.380	292	298	302	rBV	2026805	3273924	57.54%	13.531%
4	4.412	302	304	313	rVB	776494	879090	15.45%	3.633%
5	4.530	321	326	329	rBV	76553	94095	1.65%	0.389%
6	4.567	329	333	337	rVV	483856	628684	11.05%	2.598%
	4.594	337	338	342	rVV	134138	120002	2.11%	0.496%
	4.626	342	344	356	rVB	36581	67068	1.18%	0.277%
	5.246	455	460	471	rBB	447657	594322	10.45%	2.456%
10	5.577	516	522	530	rBV	938933	1295053	22.76%	5.352%
11	5.641	530	534	537	rVV	462411	596324	10.48%	2.465%
12	5.668	537	539	548	rVB	505732	635732	11.17%	2.627%
13	5.785	557	561	567	rBV	58916	69482	1.22%	0.287%
14	5.876	575	578	590	rVB	48852	76287	1.34%	0.315%
15	6.181	630	635	642	rBV	623689	735216	12.92%	3.039%
16	6.255	642	649	653	rBV	3268338	5689724	100.00%	23.515%
17	6.293	653	656	661	rVB	1820191	1967068	34.57%	8.130%
18	6.784	744	748	752	rVB	239544	233306	4.10%	0.964%
19	7.543	885	890	894	rBV	735897	712880	12.53%	2.946%
20	8.093	989	993	996	rBV	255565	230235	4.05%	0.952%
21	8.542	1073	1077	1081	rBV	596086	468575	8.24%	1.937%
22	9.183	1193	1197	1201	rBV	633660	533980	9.38%	2.207%
23	9.872	1323	1326	1330	rBV	247299	196686	3.46%	0.813%
24	10.492	1438	1442	1446	rBV	341422	294307	5.17%	1.216%
25	11.859	1694	1698	1701	rVB	217665	181574	3.19%	0.750%
26	12.997	1906	1911	1917	rBV	122903	134929	2.37%	0.558%
27	15.230	2322	2329	2336	rBV3	47818	82145	1.44%	0.339%

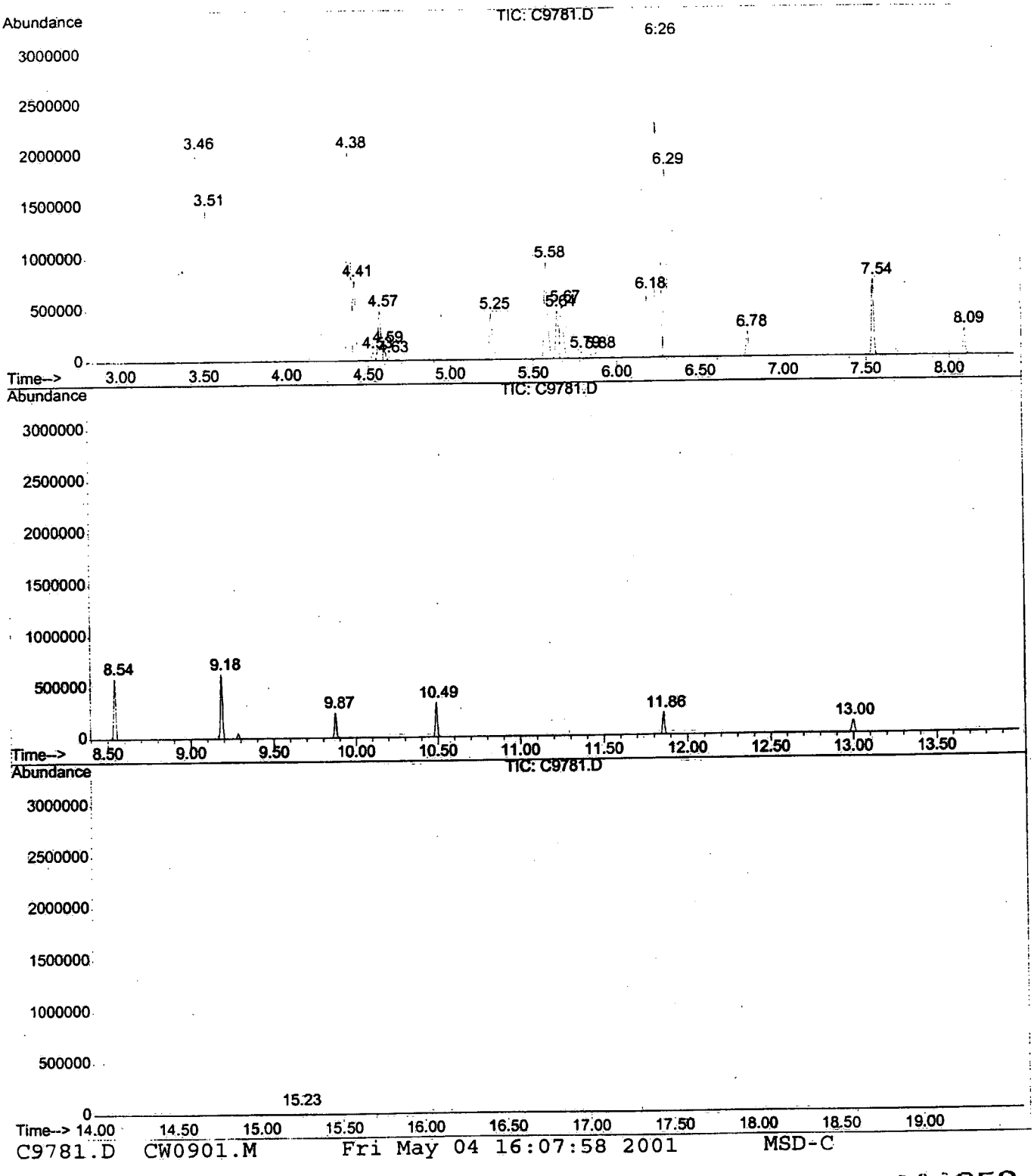
Sum of corrected areas: 24196281

C9781.D CW0901.M Fri May 04 16:07:57 2001 MSD-C

CC0251

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-04-01\C9781.D
Operator : DP
Acquired : 4 May 2001 15:18 using AcqMethod CW0901
Instrument : MSD-C
Sample Name: MW-3,2867-003,A,1000mL,100,05/04/01
Misc Info : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/01,1
Vial Number: 13
Quant File :CW0901.RES (RTE Integrator)



C9781.D CW0901.M Fri May 04 16:07:58 2001 MSD-C

000252

3421

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9781.D
Acq On : 4 May 2001 15:18
Sample : MW-3,2867-003,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 13
Operator: DP
Inst : MSD-C
Multiplr: 1.00

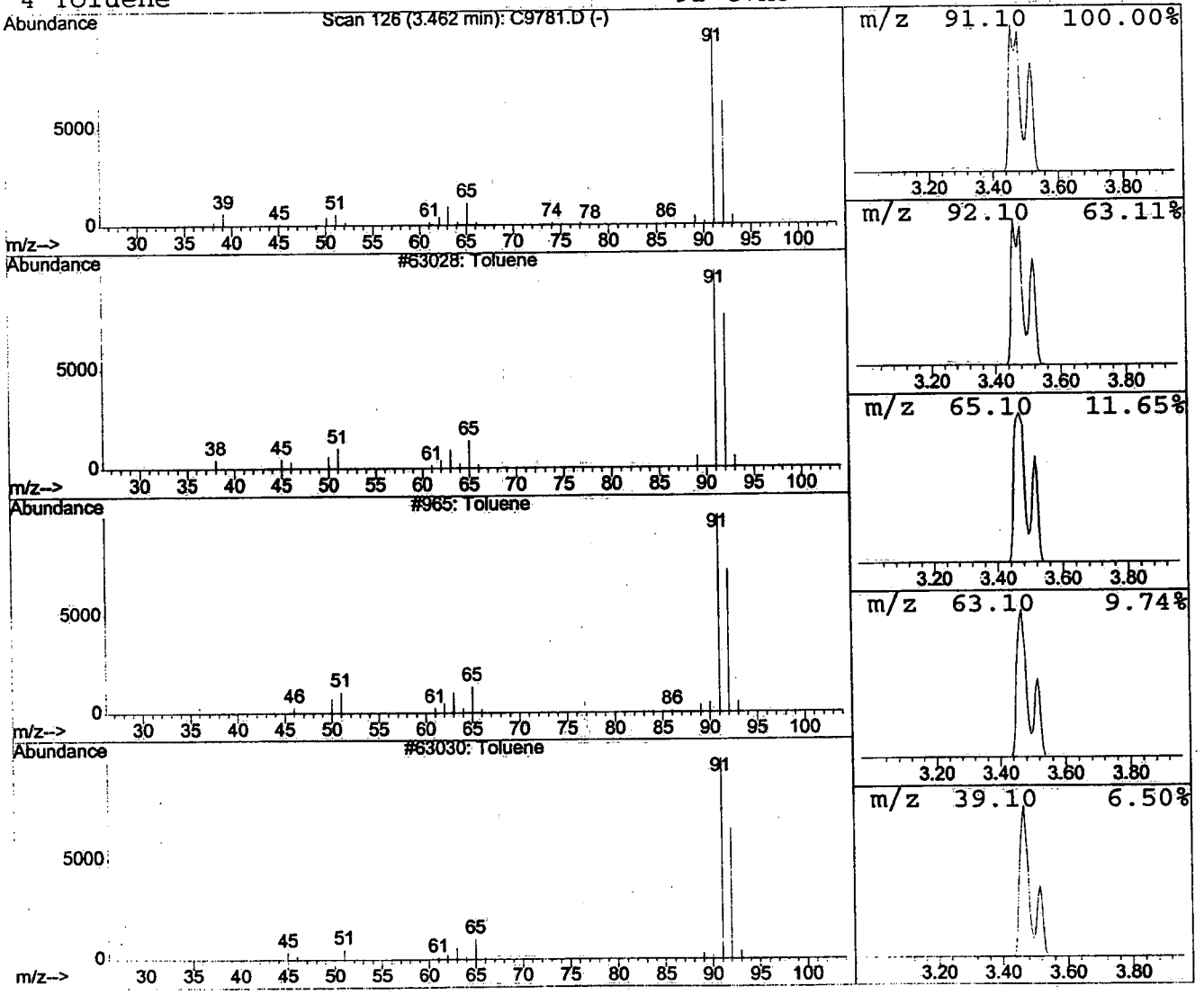
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.46	136.13 UG	2502070	1,4-Dichlorobenzene-d4	6.18

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	Toluene	92	C7H8	000108-88-3	91
4	Toluene	92	C7H8	000108-88-3	91



3422

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9781.D
Acq On : 4 May 2001 15:18
Sample : MW-3,2867-003,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 13
Operator: DP
Inst : MSD-C
Multiplr: 1.00

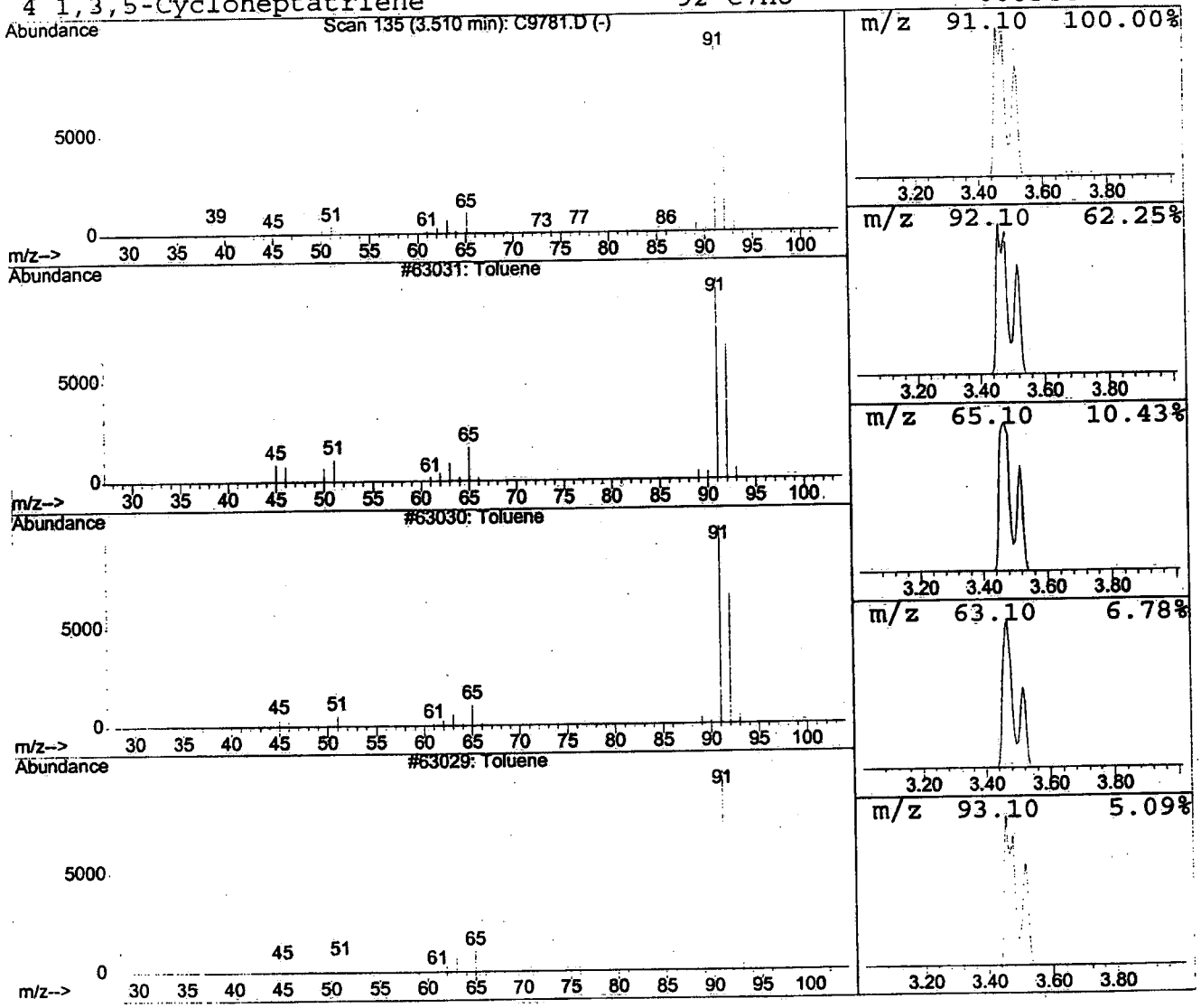
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Substituted benzene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.51	103.56 UG	1903520	1,4-Dichlorobenzene-d4	6.18

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	Toluene	92	C7H8	000108-88-3	90
4	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	90



3423

CC0254

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9781.D
Acq On : 4 May 2001 15:18
Sample : MW-3,2867-003,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 13
Operator: DP
Inst : MSD-C
Multiplr: 1.00

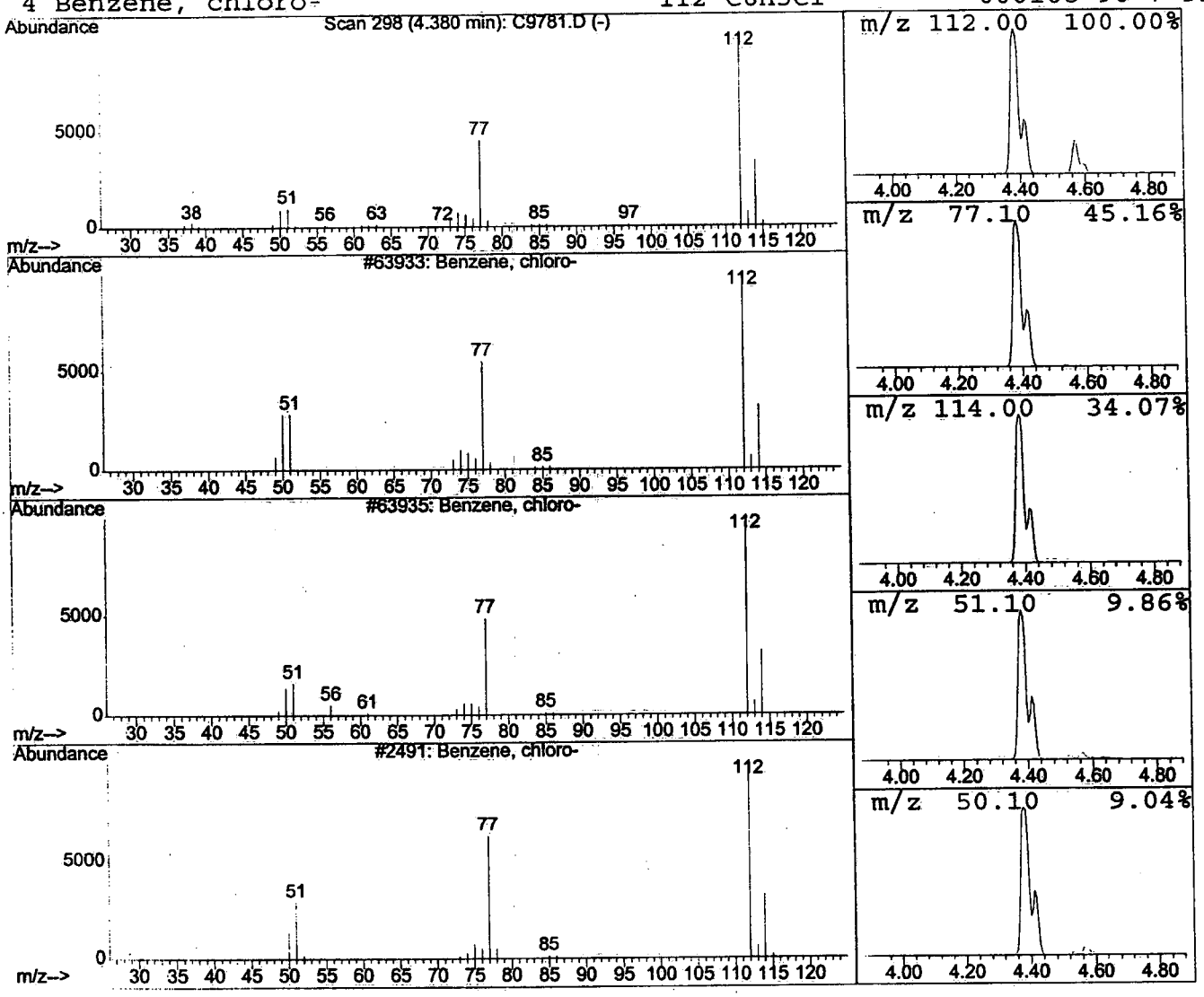
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Substituted benzene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.38	178.12 UG	3273920	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, chloro-	112	C6H5Cl	000108-90-7	94
2	Benzene, chloro-	112	C6H5Cl	000108-90-7	91
3	Benzene, chloro-	112	C6H5Cl	000108-90-7	91
4	Benzene, chloro-	112	C6H5Cl	000108-90-7	91



3424

CC0255

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9781.D
Acq On : 4 May 2001 15:18
Sample : MW-3,2867-003,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 13
Operator: DP
Inst : MSD-C
Multiplr: 1.00

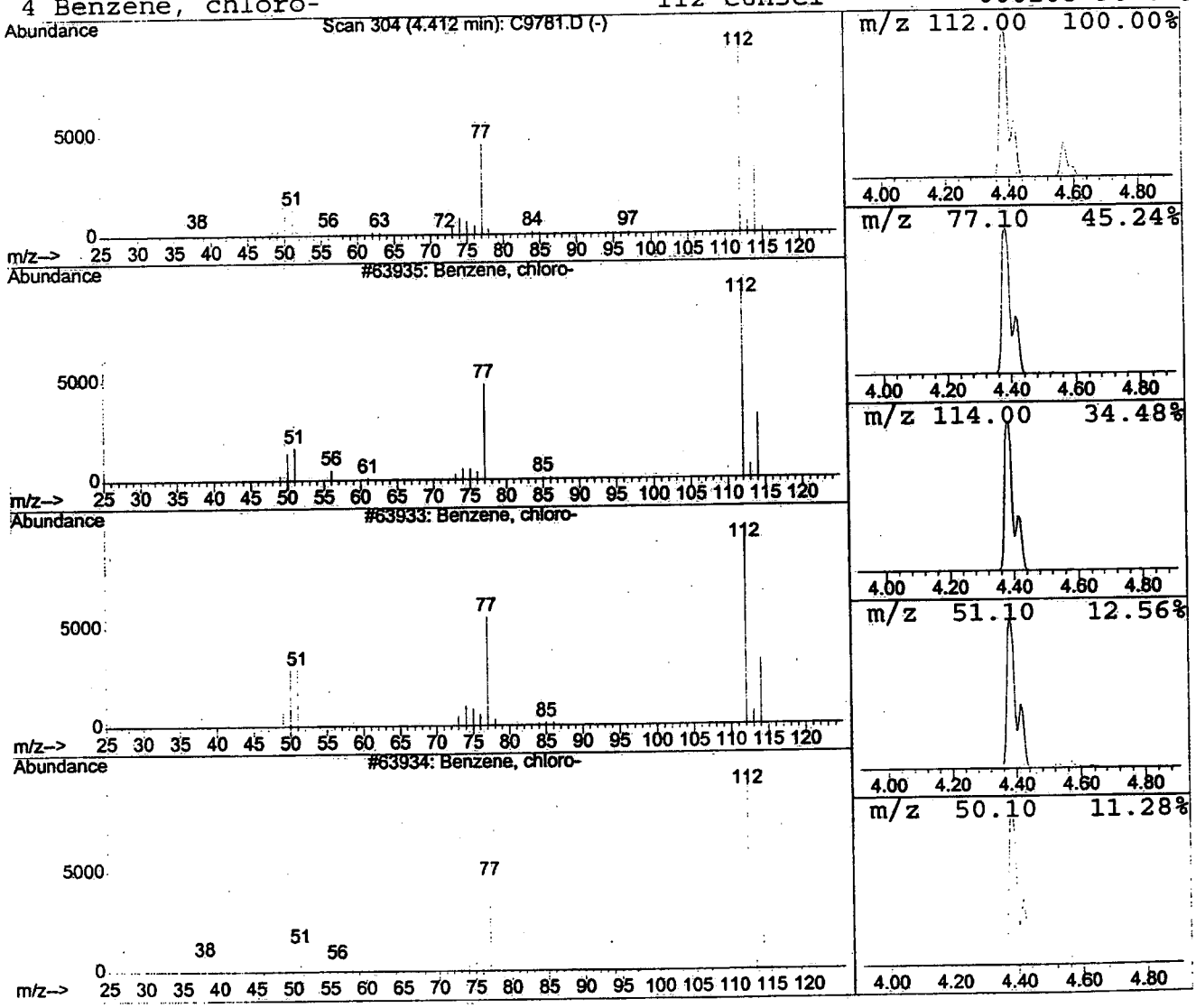
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Substituted benzene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.41	47.83 UG	879090	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, chloro-	112	C6H5Cl	000108-90-7	97
2	Benzene, chloro-	112	C6H5Cl	000108-90-7	94
3	Benzene, chloro-	112	C6H5Cl	000108-90-7	91
4	Benzene, chloro-	112	C6H5Cl	000108-90-7	91



3425

000256

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9781.D
Acq On : 4 May 2001 15:18
Sample : MW-3,2867-003,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 13
Operator: DP
Inst : MSD-C
Multiplr: 1.00

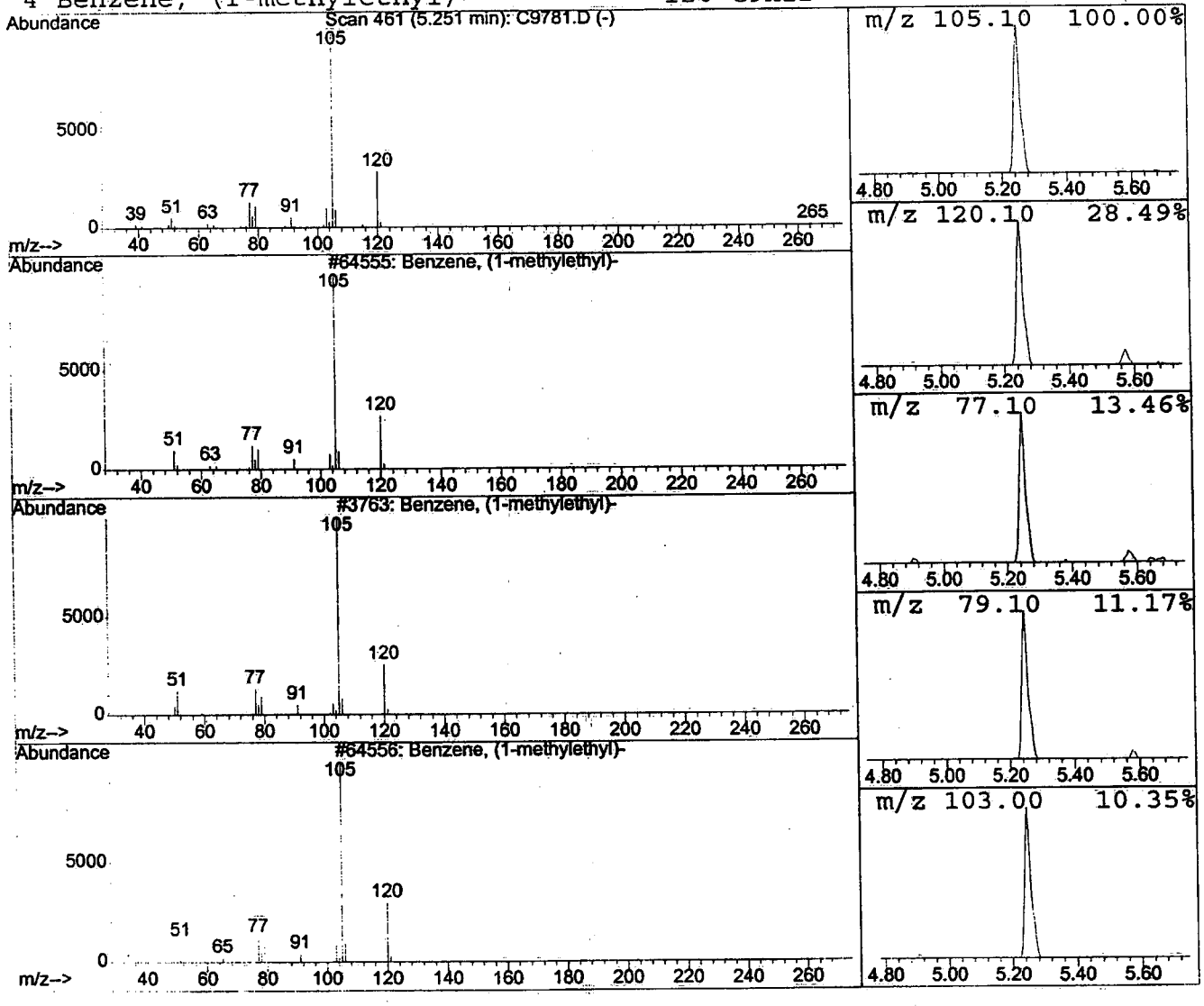
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 5 Substituted benzene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.25	32.33 UG	594322	1,4-Dichlorobenzene-d4	6.18

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



CC0257

3426

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9781.D
Acq On : 4 May 2001 15:18
Sample : MW-3,2867-003,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 13
Operator: DP
Inst : MSD-C
Multiplr: 1.00

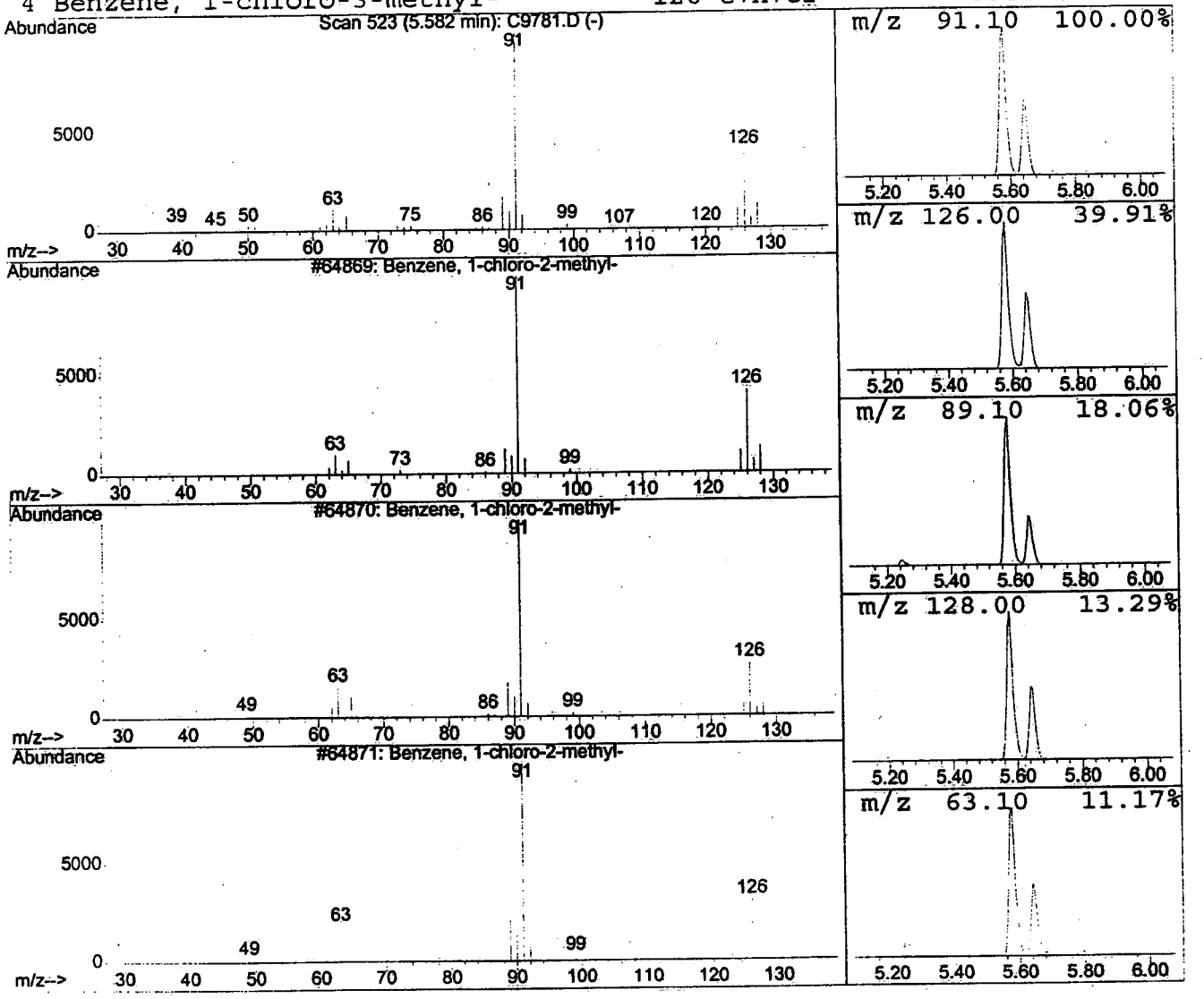
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 6 Substituted benzene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.58	70.46 UG	1295050	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	97
2	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	96
3	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	95
4	Benzene, 1-chloro-3-methyl-	126	C7H7Cl	000108-41-8	93



3427

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9781.D Vial: 13
Acq On : 4 May 2001 15:18 Operator: DP
Sample : MW-3,2867-003,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

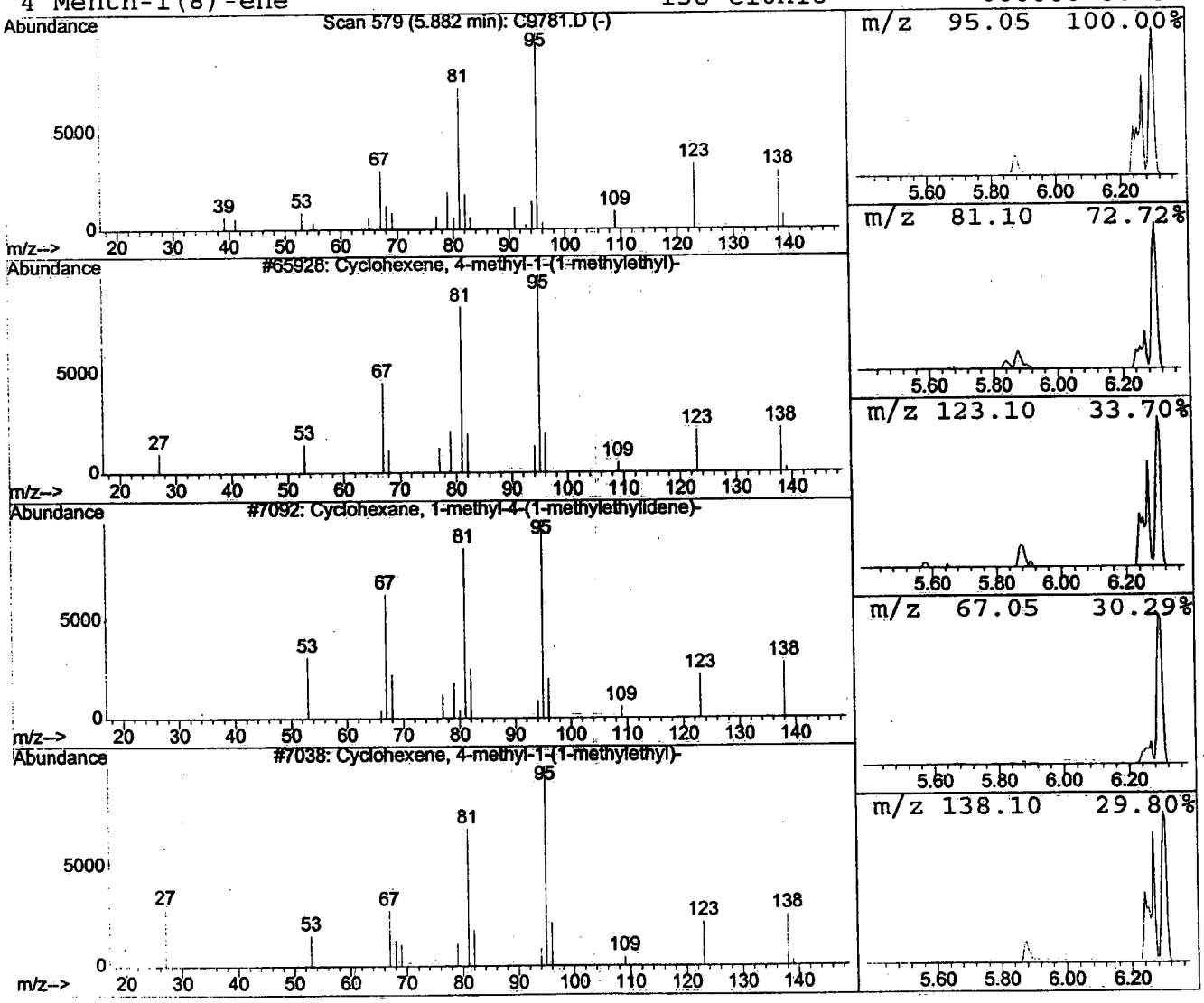
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 7 Unknown cyclic hydrocarbon Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.88	4.15 UG	76287	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 4-methyl-1-(1-methylet	138	C10H18	000500-00-5	90
2	Cyclohexane, 1-methyl-4-(1-methylet	138	C10H18	001124-27-2	83
3	Cyclohexene, 4-methyl-1-(1-methylet	138	C10H18	000500-00-5	74
4	Menth-1(8)-ene	138	C10H18	000000-00-0	74



3428

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9781.D Vial: 13
Acq On : 4 May 2001 15:18 Operator: DP
Sample : MW-3,2867-003,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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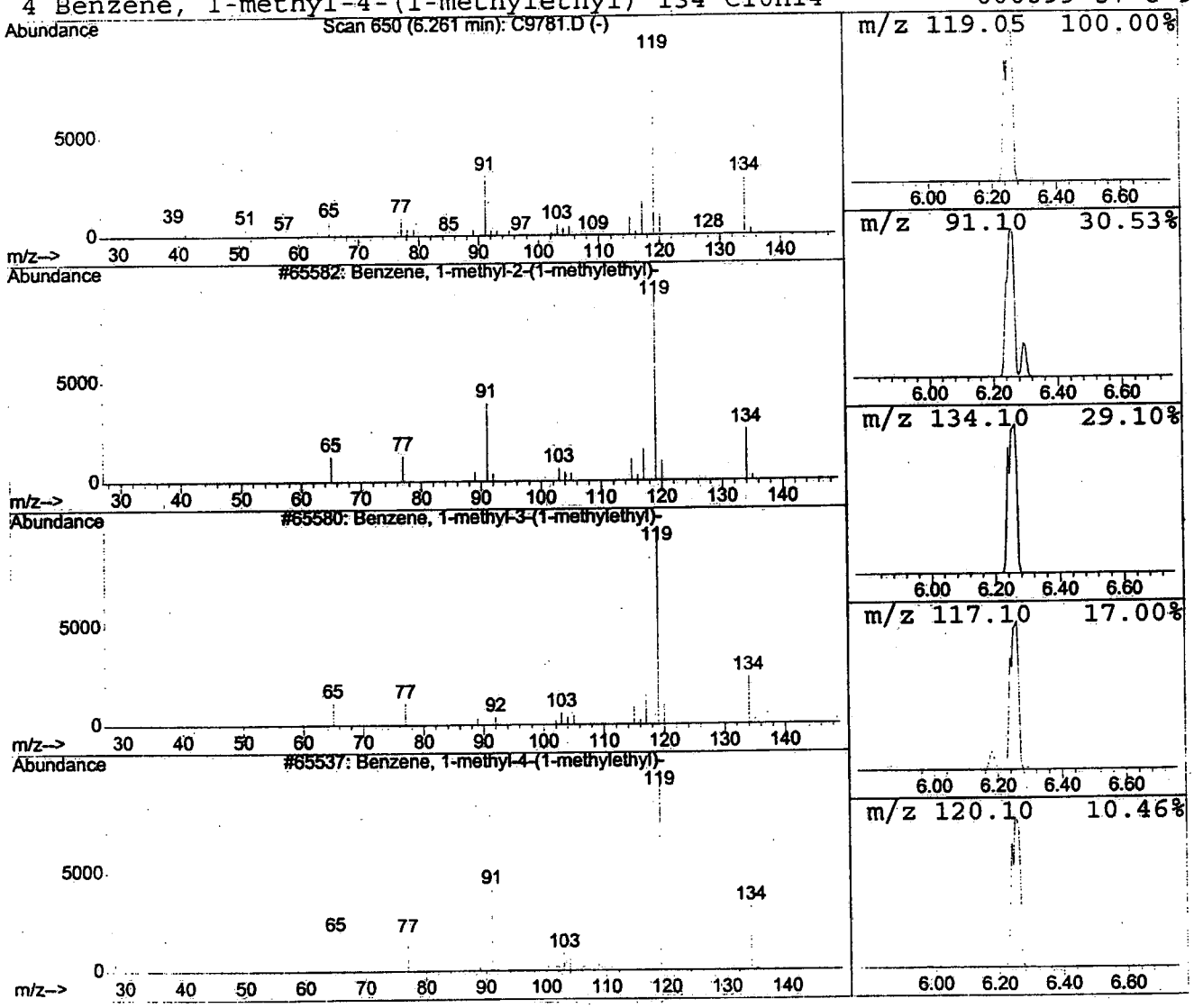
Peak Number 8 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.26	309.55 UG	5689720	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methylethyl)	134	C10H14	000527-84-4	96
2	Benzene, 1-methyl-3-(1-methylethyl)	134	C10H14	000535-77-3	95
3	Benzene, 1-methyl-4-(1-methylethyl)	134	C10H14	000099-87-6	95
4	Benzene, 1-methyl-4-(1-methylethyl)	134	C10H14	000099-87-6	95



CC0260

3429

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9781.D
Acq On : 4 May 2001 15:18 Vial: 13
Sample : MW-3,2867-003,A,1000mL,100,05/04/01 Operator: DP
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Inst : MSD-C
MS Integration Params: LSCINT.P Multiplr: 1.00

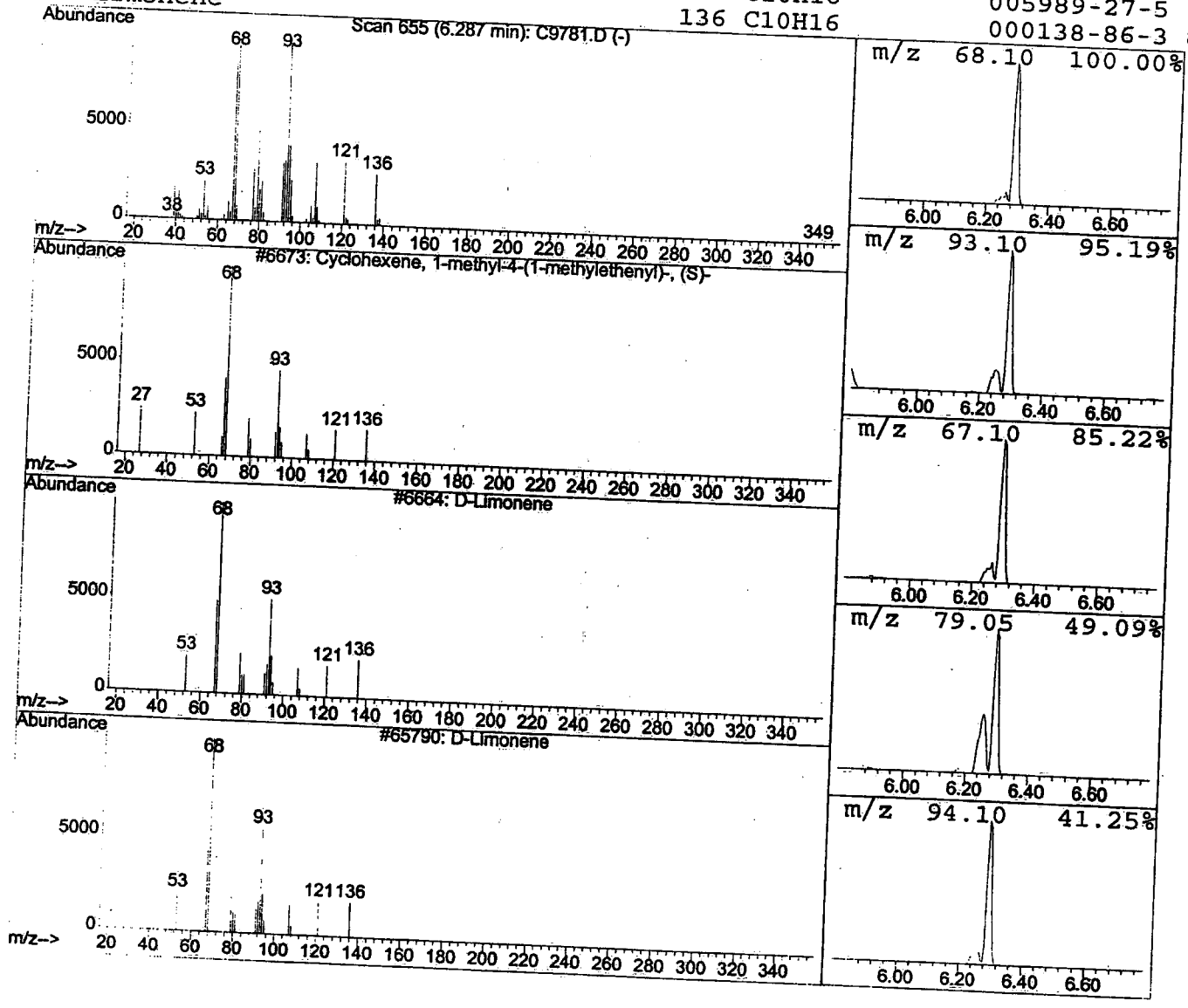
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 9 Unknown cyclic hydrocarbon Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.29	107.02 UG	1967070	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 1-methyl-4-(1-methylet	136	C10H16	005989-54-8	89
2	D-Limonene	136	C10H16	005989-27-5	89
3	D-Limonene	136	C10H16	005989-27-5	89
4	Limonene	136	C10H16	000138-86-3	87



3430

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9781.D
Acq On : 4 May 2001 15:18
Sample : MW-3,2867-003,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 13
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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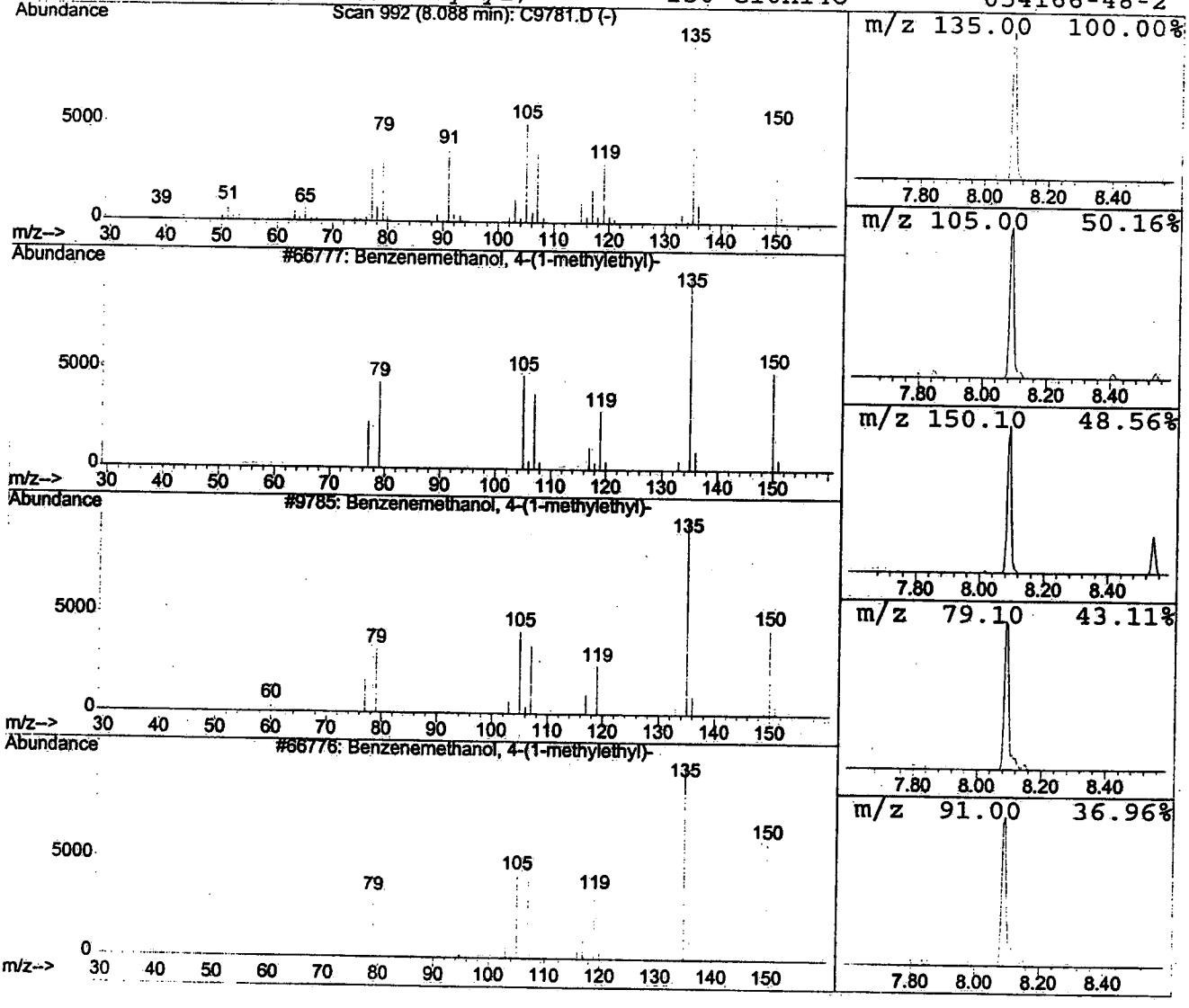
Peak Number 10 Substituted benzene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.09	12.92 UG	230235	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanol, 4-(1-methylethyl)-	150	C10H14O	000536-60-7	98
2	Benzenemethanol, 4-(1-methylethyl)-	150	C10H14O	000536-60-7	94
3	Benzenemethanol, 4-(1-methylethyl)-	150	C10H14O	000536-60-7	78
4	Cyclohexanone, 2-(2-butynyl)-	150	C10H14O	054166-48-2	72



3431

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
Integration Params: RTEINT.P
Quant Time: May 4 17:23 2001 Quant Results File: CW0901.RES

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration
DataAcq Meth : CW0901

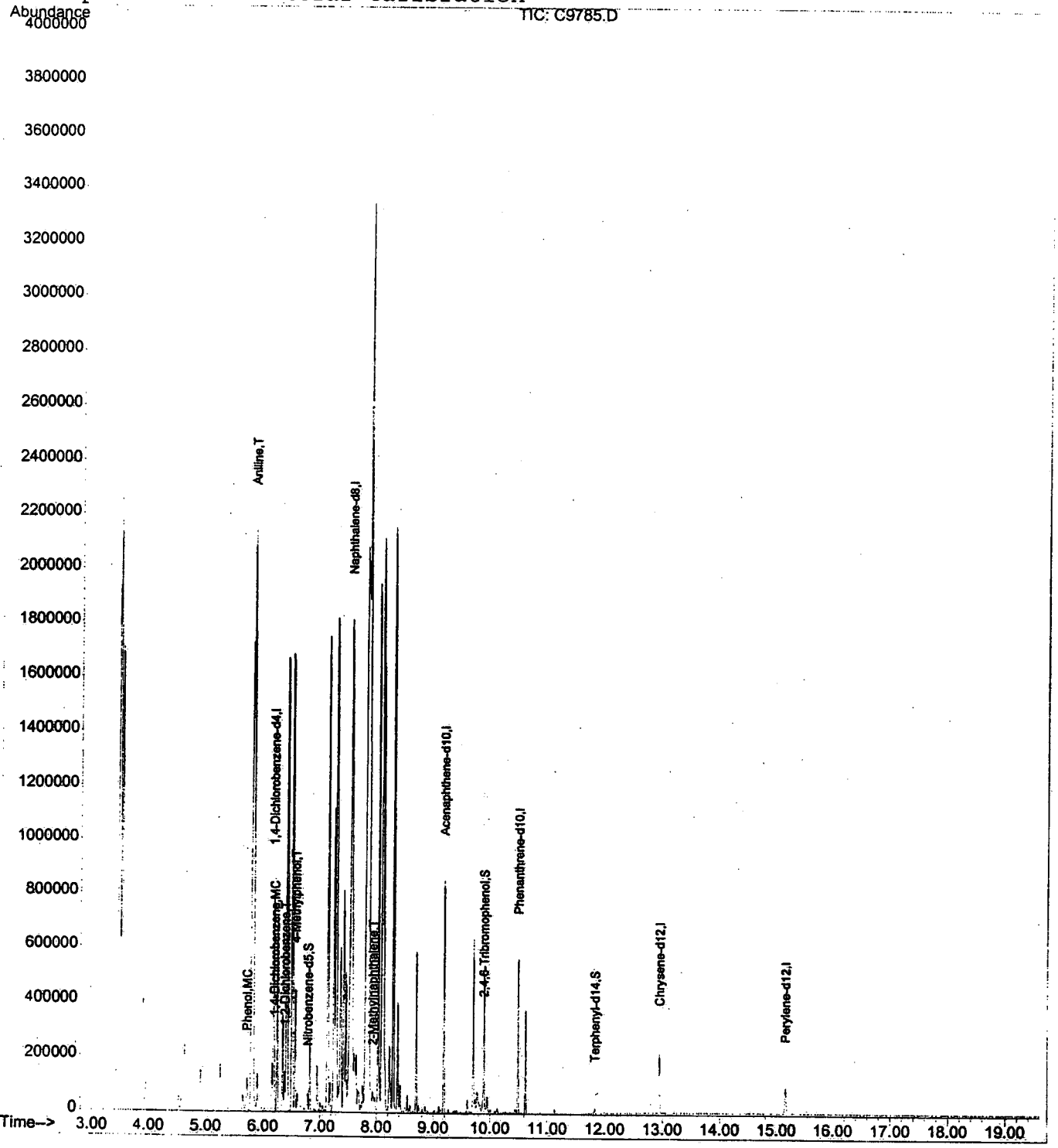
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.18	152	170246	40.00	UG	-0.02
22) Naphthalene-d8	7.54	136	600688	40.00	UG	-0.01
39) Acenaphthene-d10	9.18	164	192613	40.00	UG	-0.01
60) Phenanthrene-d10	10.49	188	231083	40.00	UG	0.00
75) Chrysene-d12	12.94	240	97578	40.00	UG	-0.01
84) Perylene-d12	15.15	264	70060	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	4.57	112	27585	5.07	UG	-0.02
Spiked Amount 100.000	Range 42 - 95		Recovery = 5.07%#			
6) Phenol-d5	5.70	99	32375m	6.00	UG	0.02
Spiked Amount 100.000	Range 59 - 97		Recovery = 6.00%#			
23) Nitrobenzene-d5	6.78	82	17191m	3.85	UG	-0.01
Spiked Amount 50.000	Range 49 - 105		Recovery = 7.70%#			
43) 2-Fluorobiphenyl	8.55	172	18630	2.94	UG	0.00
Spiked Amount 50.000	Range 54 - 110		Recovery = 5.88%#			
64) 2,4,6-Tribromophenol	9.88	330	2987	5.13	UG	0.00
Spiked Amount 100.000	Range 48 - 126		Recovery = 5.13%#			
77) Terphenyl-d14	11.82	244	9199	3.34	UG	-0.01
Spiked Amount 50.000	Range 53 - 123		Recovery = 6.68%#			
Target Compounds						Qvalue
7) Phenol	5.72	94	62620	11.95	UG	# 62
8) Aniline	5.82	93	2420486	372.28	UG	# 91
12) 1,4-Dichlorobenzene	6.20	146	2325	0.39	UG	# 1
14) 1,2-Dichlorobenzene	6.38	146	43428	8.17	UG	# 97
17) 4-Methylphenol	6.56	108	123301	35.61	UG	91
38) 2-Methylnaphthalene	7.93	142	7170	0.95	UG	# 54

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 17:23 2001 Quant Results File: CW0901.RES

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration



000264

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-07-01\C9796.D Vial: 4
Acq On : 7 May 2001 12:27 Operator: DP
Sample : MW-5,2867-004DIL,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWAR,05/02/01,05/03/0 Multiplr: 1.00
3 Integration Params: RTEINT.P
Quant Time: May 7 13:06 2001 Quant Results File: CW0901.RES

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration
DataAcq Meth : CW0901

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.18	152	141770	40.00	UG	-0.01
22) Naphthalene-d8	7.55	136	423466	40.00	UG	0.00
39) Acenaphthene-d10	9.19	164	177454	40.00	UG	0.00
60) Phenanthrene-d10	10.49	188	194429	40.00	UG	0.00
75) Chrysene-d12	12.95	240	54826	40.00	UG	0.00
84) Perylene-d12	15.18	264	34721	40.00	UG	0.00

System Monitoring Compounds					
4) 2-Fluorophenol	0.00	112	0d	0.00	UG
Spiked Amount 100.000	Range 42 - 95		Recovery = 0.00%#		
6) Phenol-d5	0.00	99	0d	0.00	UG
Spiked Amount 100.000	Range 59 - 97		Recovery = 0.00%#		
23) Nitrobenzene-d5	0.00	82	0d	0.00	UG
Spiked Amount 50.000	Range 49 - 105		Recovery = 0.00%#		
43) 2-Fluorobiphenyl	0.00	172	0d	0.00	UG
Spiked Amount 50.000	Range 54 - 110		Recovery = 0.00%#		
64) 2,4,6-Tribromophenol	0.00	330	0	0.00	UG
Spiked Amount 100.000	Range 48 - 126		Recovery = 0.00%#		
77) Terphenyl-d14	0.00	244	0	0.00	UG
Spiked Amount 50.000	Range 53 - 123		Recovery = 0.00%#		

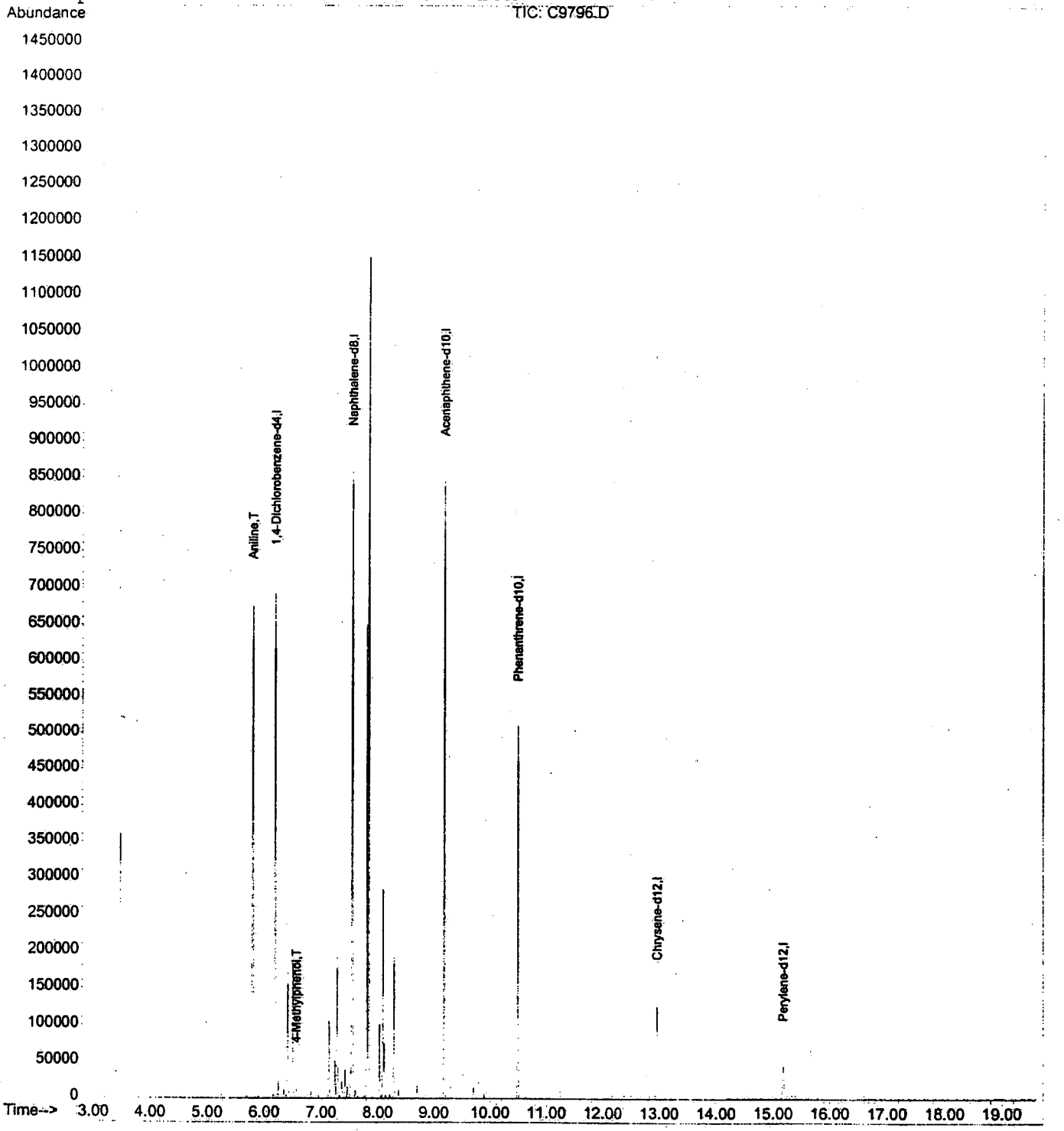
Target Compounds						Qvalue
8) Aniline	5.79	93	375839	69.42	UG	# 85
17) 4-Methylphenol	6.56	108	4780	1.66	UG	# 77

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-07-01\C9796.D Vial: 4
Acq On : 7 May 2001 12:27 Operator: DP
Sample : MW-5,2867-004DIL,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWAR,05/02/01,05/03/0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 13:06 2001 Quant Results File: CW0901.RES

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration



3435

C00266

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
3 Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 0.5 % of largest Peak
Start Thrs: 1.5 Max Peaks: 100
Stop Thrs : 1.5 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	3.199	73	77	86	rBV	42199	63644	1.35%	0.107%
2	3.450	120	124	125	rBV	1933270	1525451	32.27%	2.553%
3	3.466	125	127	133	rVV	2307460	3730040	78.90%	6.243%
4	3.514	133	136	142	rVB	1700862	2285675	48.35%	3.826%
5	3.899	202	208	214	rBV	435690	640660	13.55%	1.072%
6	3.947	214	217	223	rVB	102340	125425	2.65%	0.210%
[redacted]	4.529	321	326	329	rBV	57513	71891	1.52%	0.120%
[redacted]	4.567	329	333	338	rVV2	43246	64247	1.36%	0.108%
[redacted]	4.626	338	344	357	rVB	252597	510977	10.81%	0.855%
10	4.903	389	396	407	rBB	150071	235010	4.97%	0.393%
11	5.245	455	460	468	rBB	181578	244237	5.17%	0.409%
12	5.641	529	534	540	rBV	60971	90131	1.91%	0.151%
13	5.715	540	548	553	rVB2	122836	188974	4.00%	0.316%
14	5.790	556	562	564	rBV	1725297	2365878	50.05%	3.960%
15	5.822	565	568	572	rVB	2098231	2460368	52.04%	4.118%
16	5.897	578	582	591	rVB	137344	151853	3.21%	0.254%
17	6.153	625	630	632	rBV	175700	189427	4.01%	0.317%
18	6.180	632	635	642	rVV	810798	931662	19.71%	1.559%
19	6.244	642	647	653	rVB	691563	713643	15.10%	1.194%
20	6.340	661	665	669	rBV	360489	387494	8.20%	0.649%
21	6.378	669	672	674	rVV	145186	165979	3.51%	0.278%
22	6.410	674	678	686	rVV	1669042	2708888	57.30%	4.534%
23	6.501	690	695	702	rBV2	1686073	2587117	54.73%	4.330%
24	6.565	702	707	711	rVV	445932	482634	10.21%	0.808%
25	6.602	711	714	720	rVB3	67589	90895	1.92%	0.152%
26	6.784	745	748	751	rBV	73291	69611	1.47%	0.117%
27	6.821	751	755	760	rVB	269508	270027	5.71%	0.452%
28	6.949	775	779	784	rBV2	177151	199242	4.21%	0.333%
[redacted]	7.142	807	815	819	rBV	1746438	2265543	47.92%	3.792%
[redacted]	7.179	819	822	827	rVB	106313	108435	2.29%	0.181%
31	7.243	827	834	837	rBV	1118567	1340648	28.36%	2.244%

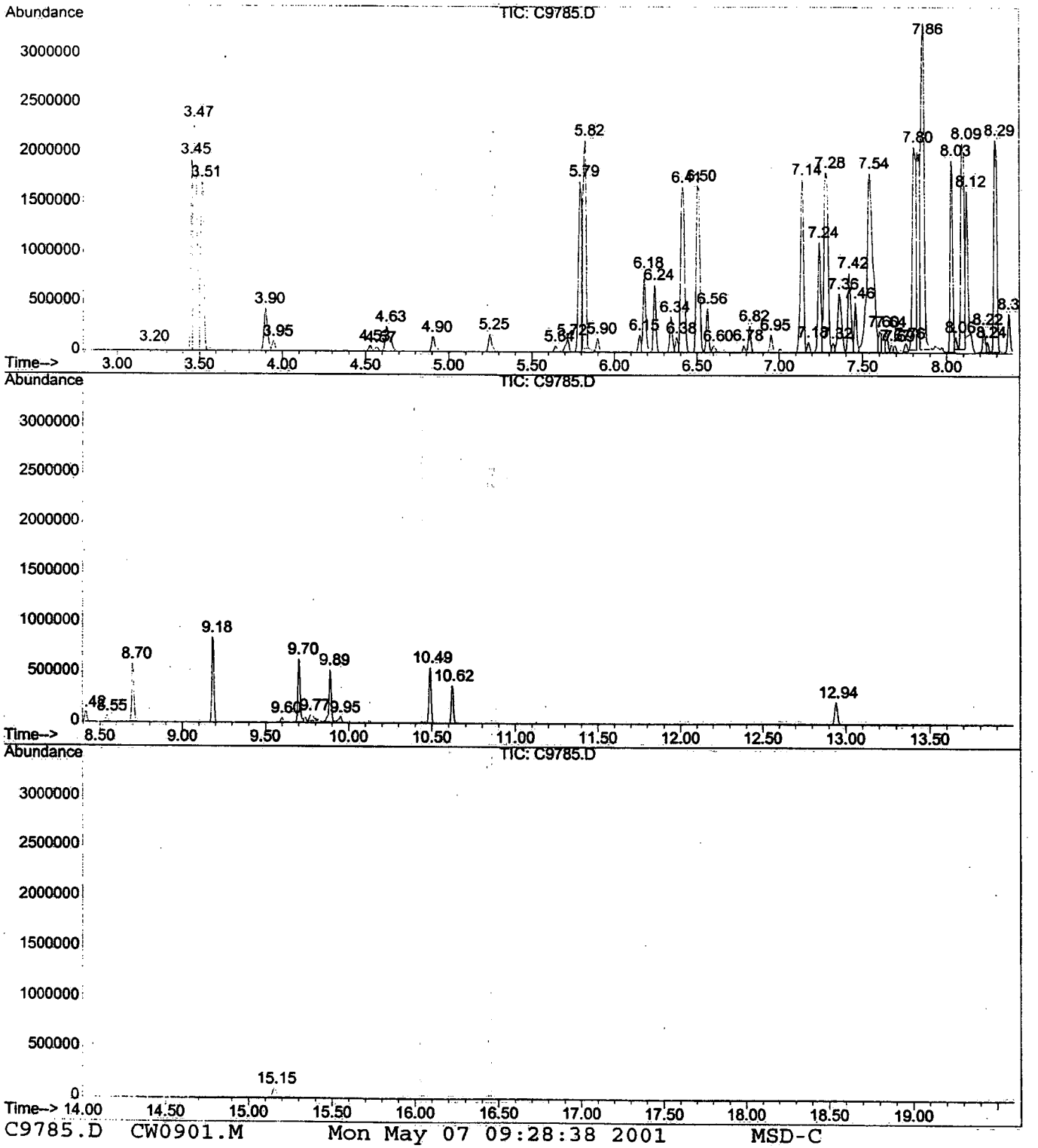
32	7.281	837	841	847	rVV3	1814392	3067768	64.89%	5.135%
33	7.323	847	849	851	rVV	91687	95917	2.03%	0.161%
34	7.361	851	856	863	rVV3	597187	965200	20.42%	1.615%
35	7.419	863	867	872	rVV	809817	1043368	22.07%	1.746%
36	7.457	872	874	878	rVV2	504611	485814	10.28%	0.813%
	7.542	878	890	899	rVV4	1808040	4652379	98.41%	7.787%
38	7.601	899	901	903	rVV	211152	240227	5.08%	0.402%
39	7.644	907	909	912	rVV	208896	181967	3.85%	0.305%
40	7.671	912	914	916	rVV2	74406	79906	1.69%	0.134%
41	7.692	916	918	921	rVB3	67732	65060	1.38%	0.109%
42	7.756	926	930	933	rBV2	81979	89144	1.89%	0.149%
43	7.804	933	939	942	rBV2	2050058	3252940	68.81%	5.445%
44	7.863	946	950	961	rVB	3306473	4727398	100.00%	7.912%
45	8.028	977	981	984	rBV	1938397	1884428	39.86%	3.154%
46	8.055	984	986	989	rVB	122939	88557	1.87%	0.148%
47	8.093	989	993	996	rBV2	2076361	2876558	60.85%	4.815%
48	8.119	996	998	1002	rVB	1451636	1310950	27.73%	2.194%
49	8.221	1013	1017	1020	rBV	236237	250386	5.30%	0.419%
50	8.242	1020	1021	1026	rVB2	101987	68325	1.45%	0.114%
51	8.290	1026	1030	1035	rBV	2140762	2648439	56.02%	4.433%
52	8.370	1041	1045	1051	rBV	391654	410604	8.69%	0.687%
53	8.418	1051	1054	1061	rVB2	97246	96630	2.04%	0.162%
54	8.547	1074	1078	1081	rVB	60731	55166	1.17%	0.092%
55	8.696	1103	1106	1111	rBV	584456	529708	11.21%	0.887%
56	9.182	1193	1197	1202	rVB	852312	755949	15.99%	1.265%
57	9.599	1272	1275	1283	rVB4	51980	58736	1.24%	0.098%
58	9.701	1290	1294	1299	rBV	634129	568268	12.02%	0.951%
59	9.770	1303	1307	1315	rVV7	60451	112228	2.37%	0.188%
60	9.888	1321	1329	1333	rBV	522718	477860	10.11%	0.800%
61	9.952	1336	1341	1346	rVB3	58204	75672	1.60%	0.127%
62	10.491	1438	1442	1446	rVB	561160	521278	11.03%	0.872%
63	10.619	1463	1466	1475	rVB	382063	327163	6.92%	0.548%
64	12.943	1896	1901	1906	rVB	221430	251859	5.33%	0.422%
65	15.155	2308	2315	2323	rBV	93508	165673	3.50%	0.277%

Sum of corrected areas: 59747231

C9785.D CW0901.M Mon May 07 09:28:37 2001 MSD-C

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-04-01\C9785.D
Operator : DP
Acquired : 4 May 2001 17:00 using AcqMethod CW0901
Instrument : MSD-C
Sample Name: MW-5,2867-004,A,1000mL,100,05/04/01
Misc Info : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/01,10
Vial Number: 15
Quant File :CW0901.RES (RTE Integrator)



C9785.D CW0901.M Mon May 07 09:28:38 2001 MSD-C

3438

000269

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

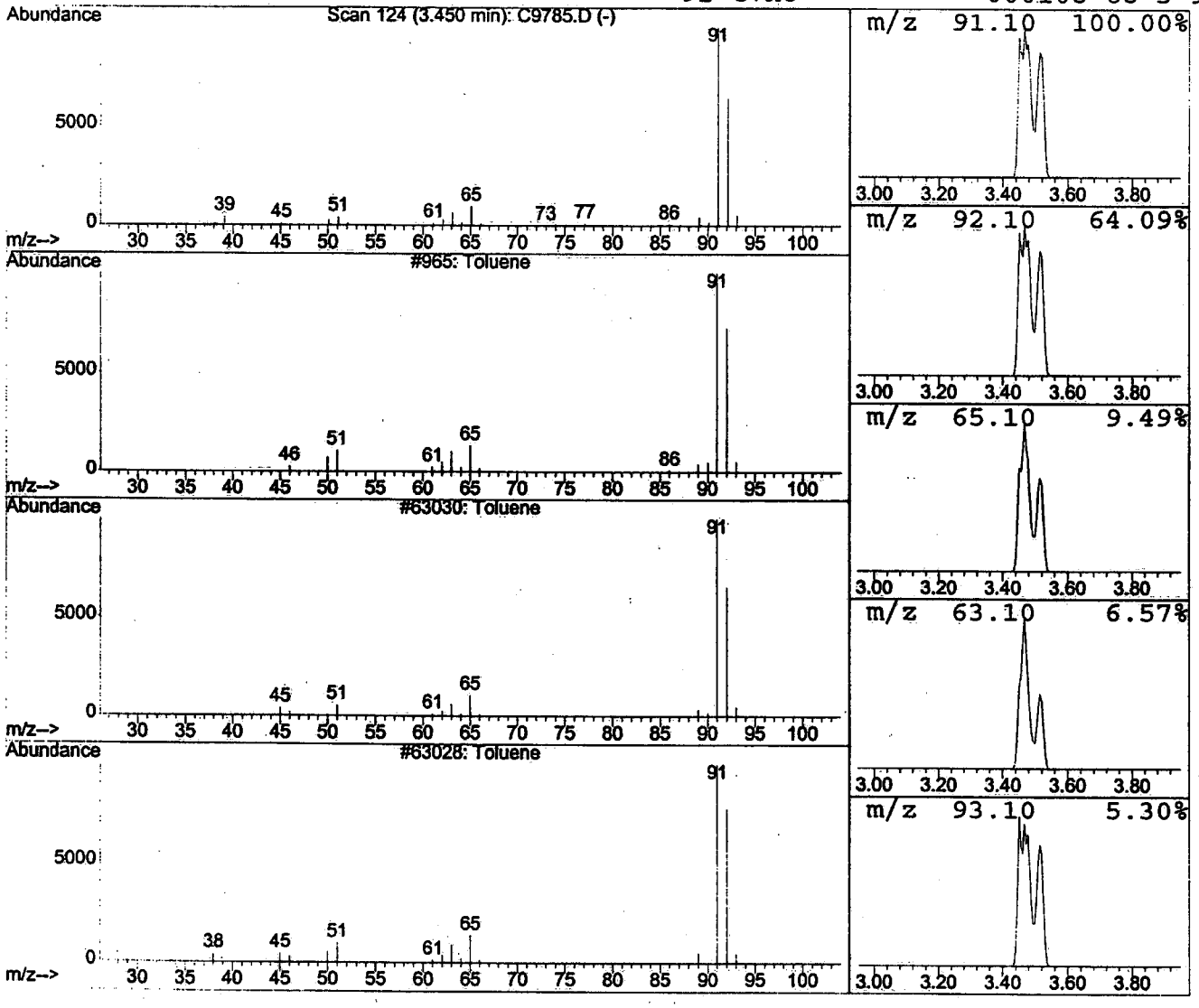
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Substituted benzene Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.45	65.49 UG	1525450	1,4-Dichlorobenzene-d4	6.18

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	Toluene	92	C7H8	000108-88-3	91
4	Toluene	92	C7H8	000108-88-3	91



24/29

CC0270

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
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Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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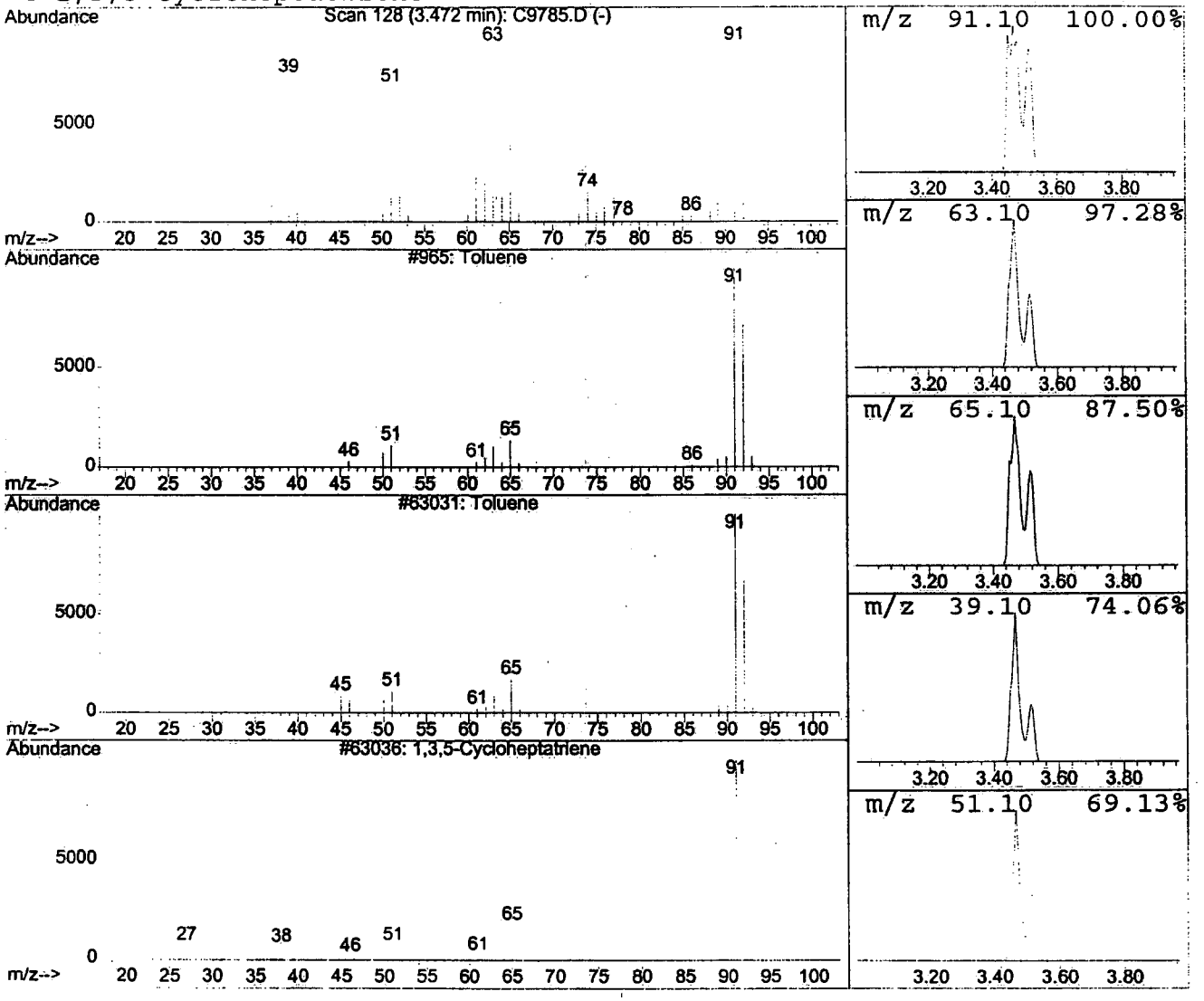
Peak Number 2 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.47	160.15 UG	3730040	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Toluene	92	C7H8	000108-88-3	91
2	Toluene	92	C7H8	000108-88-3	72
3	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	59
4	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	49



3440

000271

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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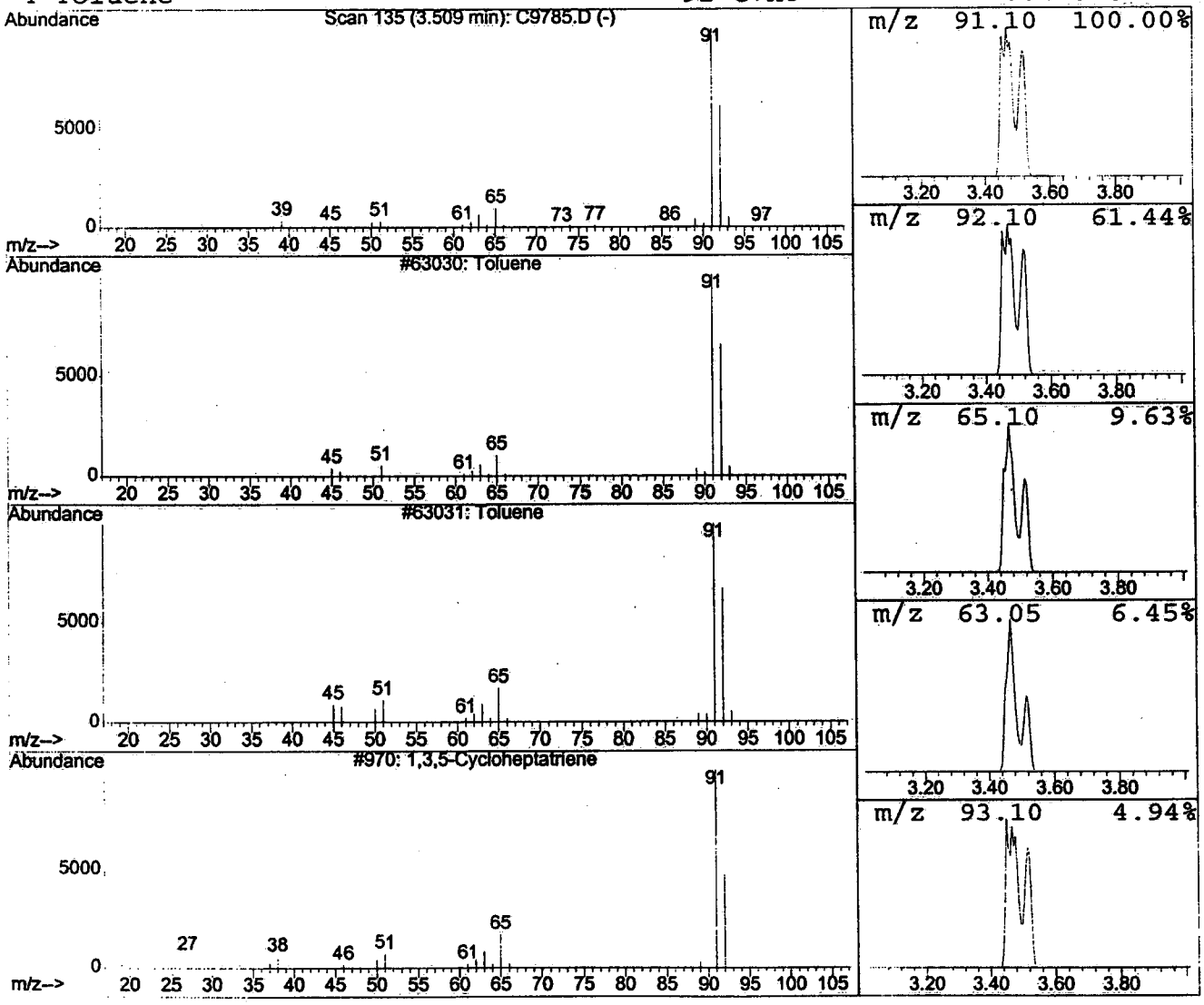
Peak Number 3 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.51	98.13 UG	2285680	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Toluene	92	C7H8	000108-88-3	91
2	Toluene	92	C7H8	000108-88-3	87
3	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	86
4	Toluene	92	C7H8	000108-88-3	83



3 of 4

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
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Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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Peak Number 4 Tetrachloroethylene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.90	27.51 UG	640660	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetrachloroethylene	164	C2Cl4	000127-18-4	97
2	Tetrachloroethylene	164	C2Cl4	000127-18-4	97
3	Tetrachloroethylene	164	C2Cl4	000127-18-4	97
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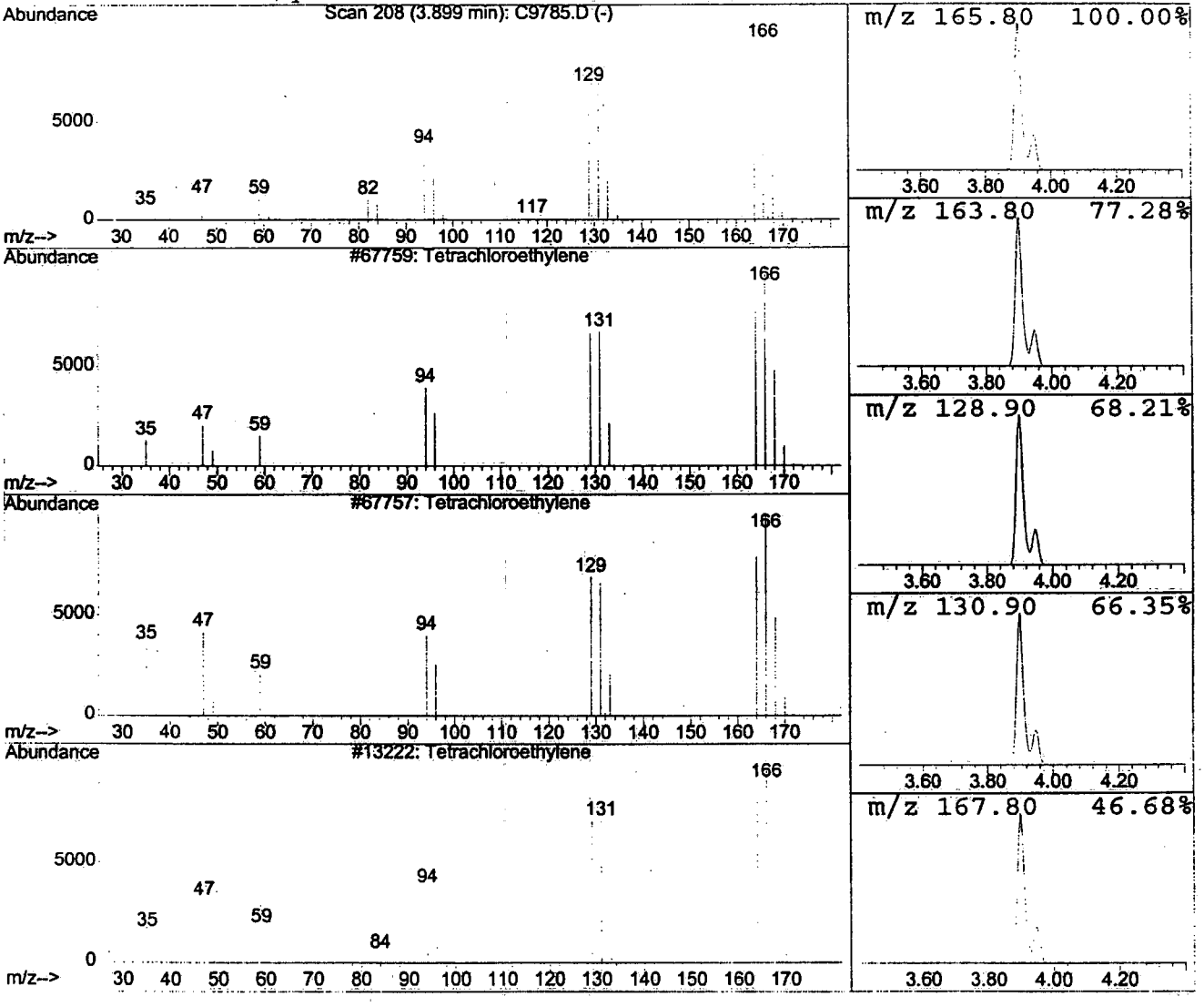

3447

CC03273

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
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Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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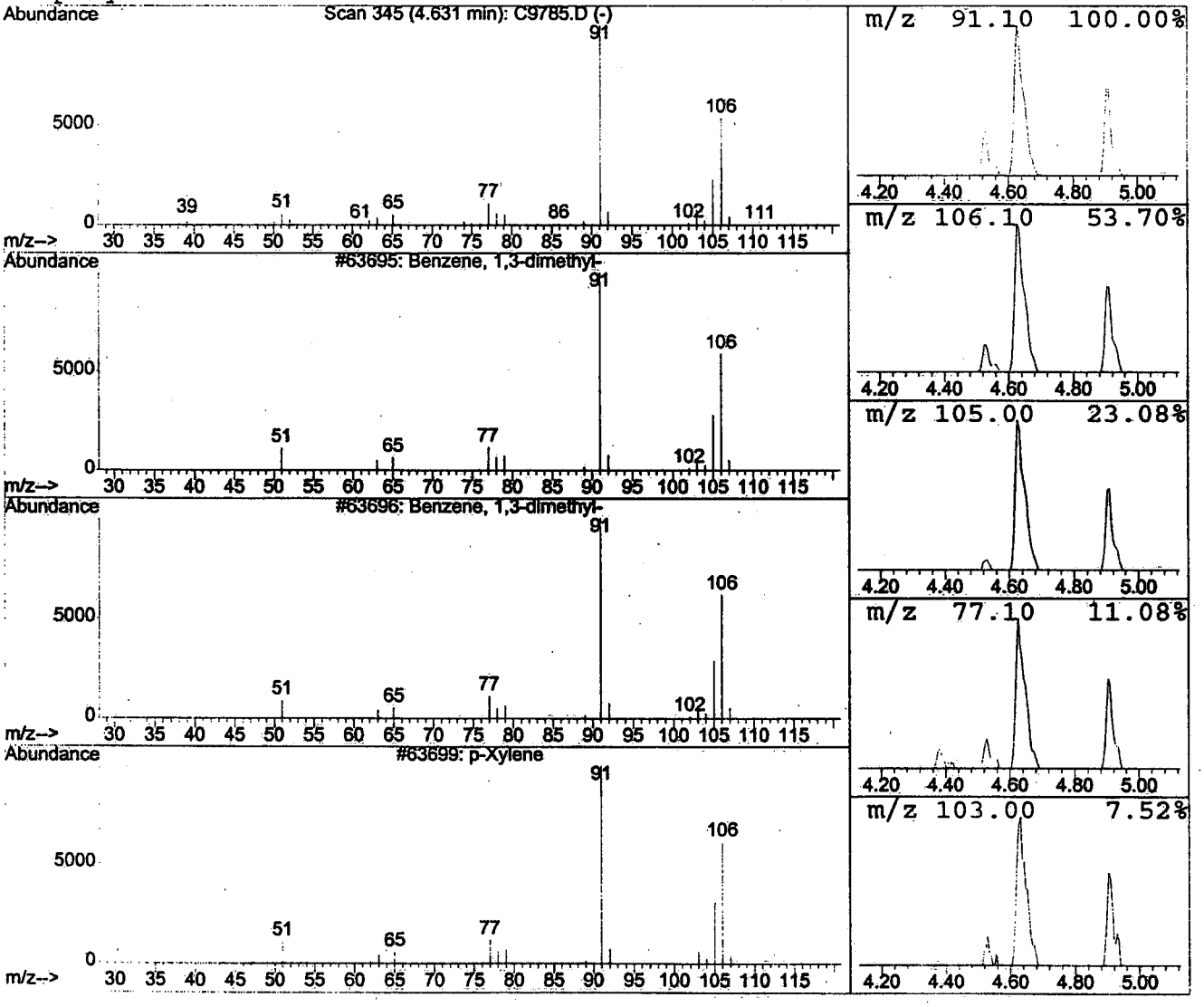
Peak Number 5 Substituted benzene Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.63	21.94 UG	510977	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3-dimethyl-	106	C8H10	000108-38-3	95
2	Benzene, 1,3-dimethyl-	106	C8H10	000108-38-3	95
3	p-Xylene	106	C8H10	000106-42-3	95
4	p-Xylene	106	C8H10	000106-42-3	94



3/4/12

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
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Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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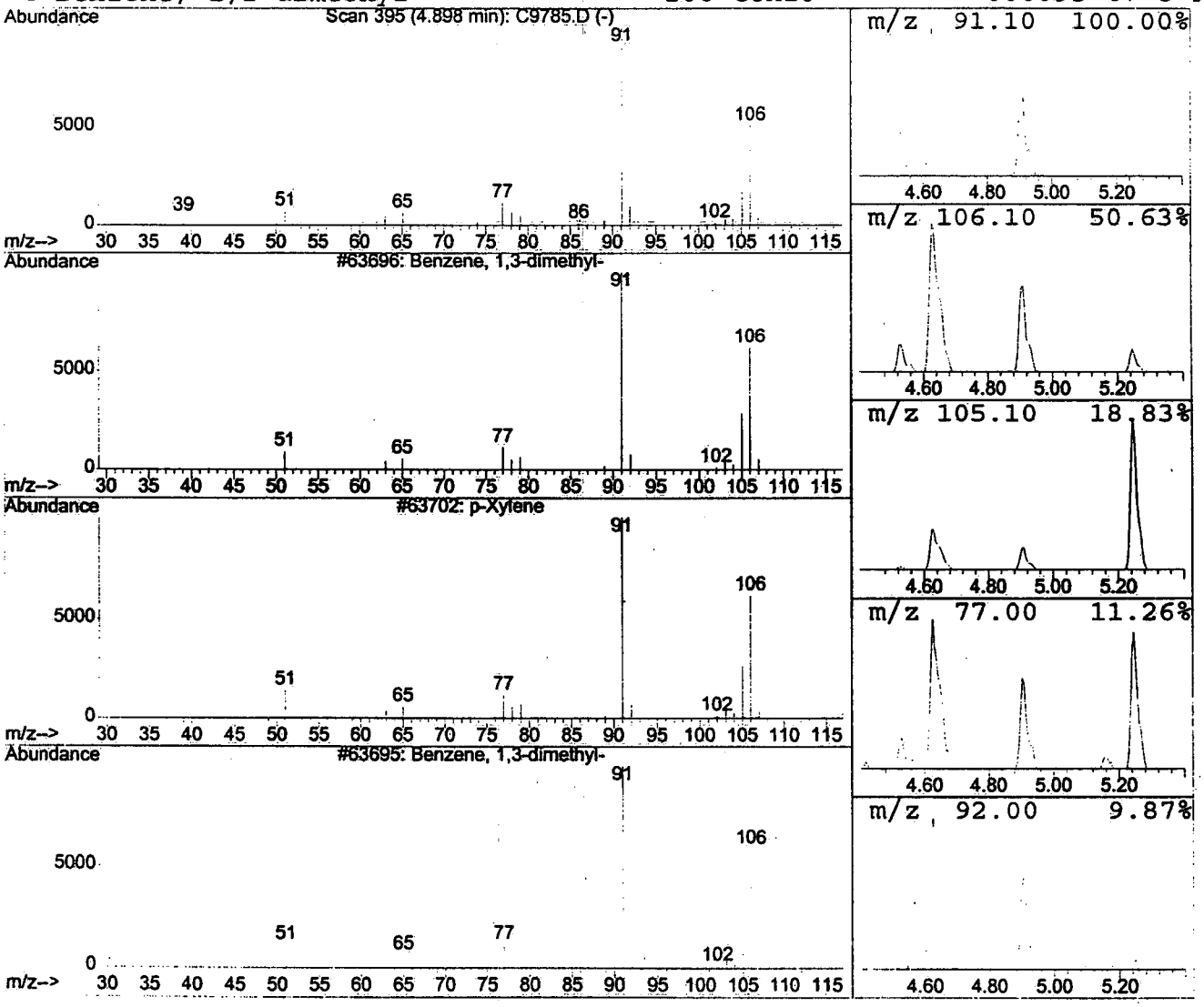
Peak Number 6 Substituted benzene Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.90	10.09 UG	235010	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3-dimethyl-	106	C8H10	000108-38-3	97
2	p-Xylene	106	C8H10	000106-42-3	95
3	Benzene, 1,3-dimethyl-	106	C8H10	000108-38-3	95
4	Benzene, 1,2-dimethyl-	106	C8H10	000095-47-6	95



3444

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
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Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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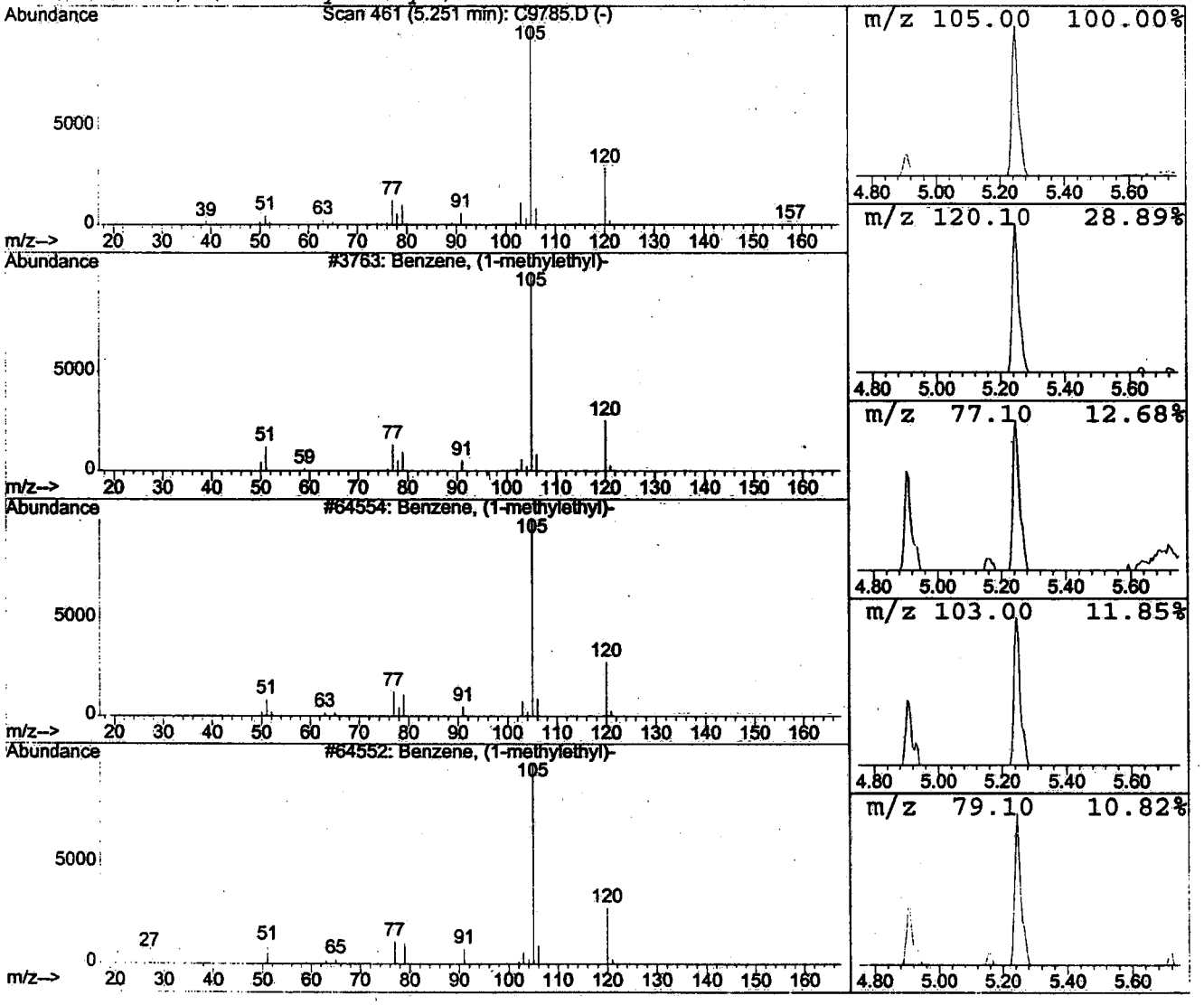
Peak Number 7 Substituted benzene Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.25	10.49 UG	244237	1,4-Dichlorobenzene-d4	6.18

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



3/145

C00276

Library Search Compound Report

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Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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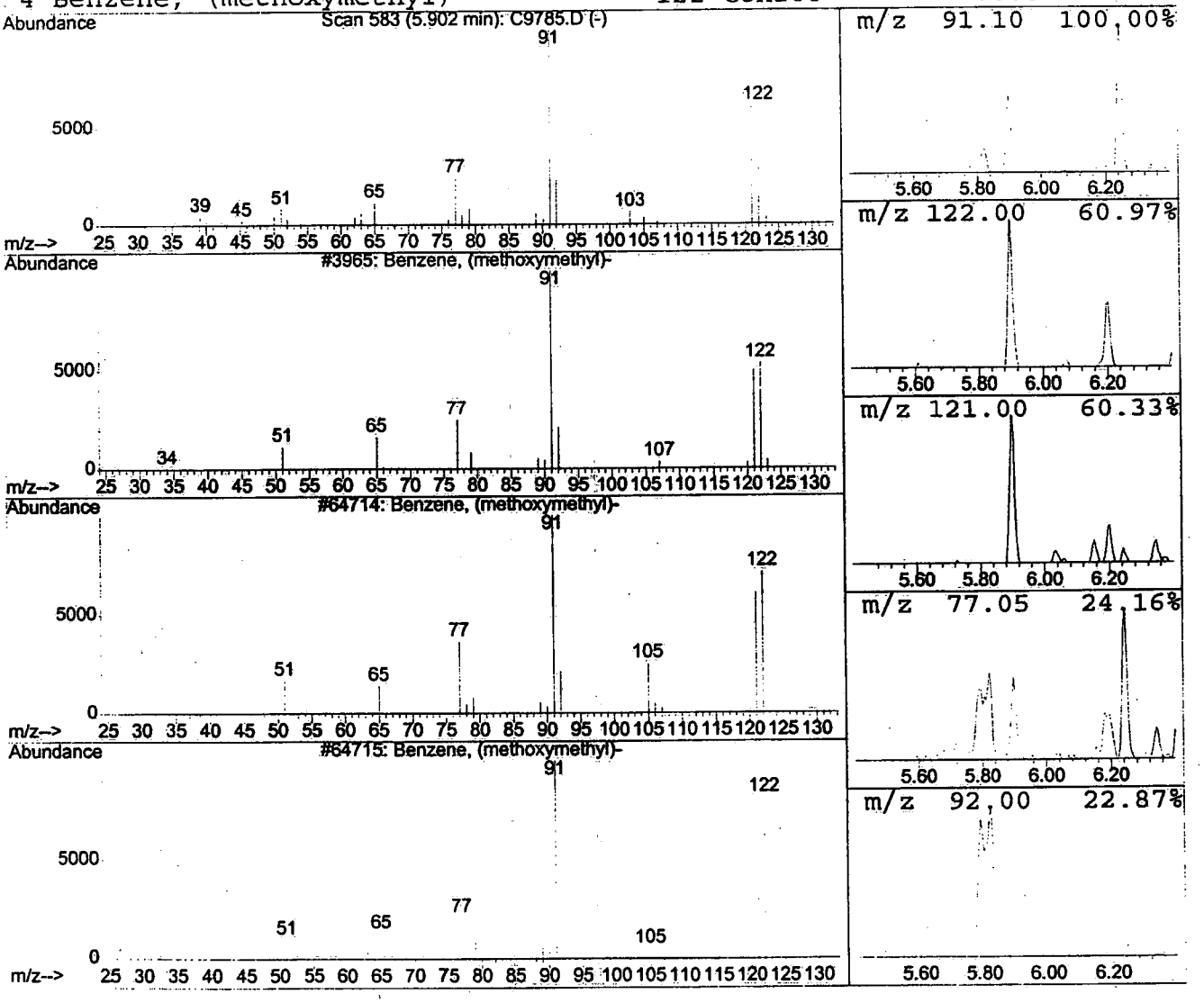
Peak Number 8 Substituted benzene Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.90	6.52 UG	151853	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (methoxymethyl)-	122	C8H10O	000538-86-3	90
2	Benzene, (methoxymethyl)-	122	C8H10O	000538-86-3	90
3	Benzene, (methoxymethyl)-	122	C8H10O	000538-86-3	81
4	Benzene, (methoxymethyl)-	122	C8H10O	000538-86-3	52



2441

CC03277

Library Search Compound Report

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Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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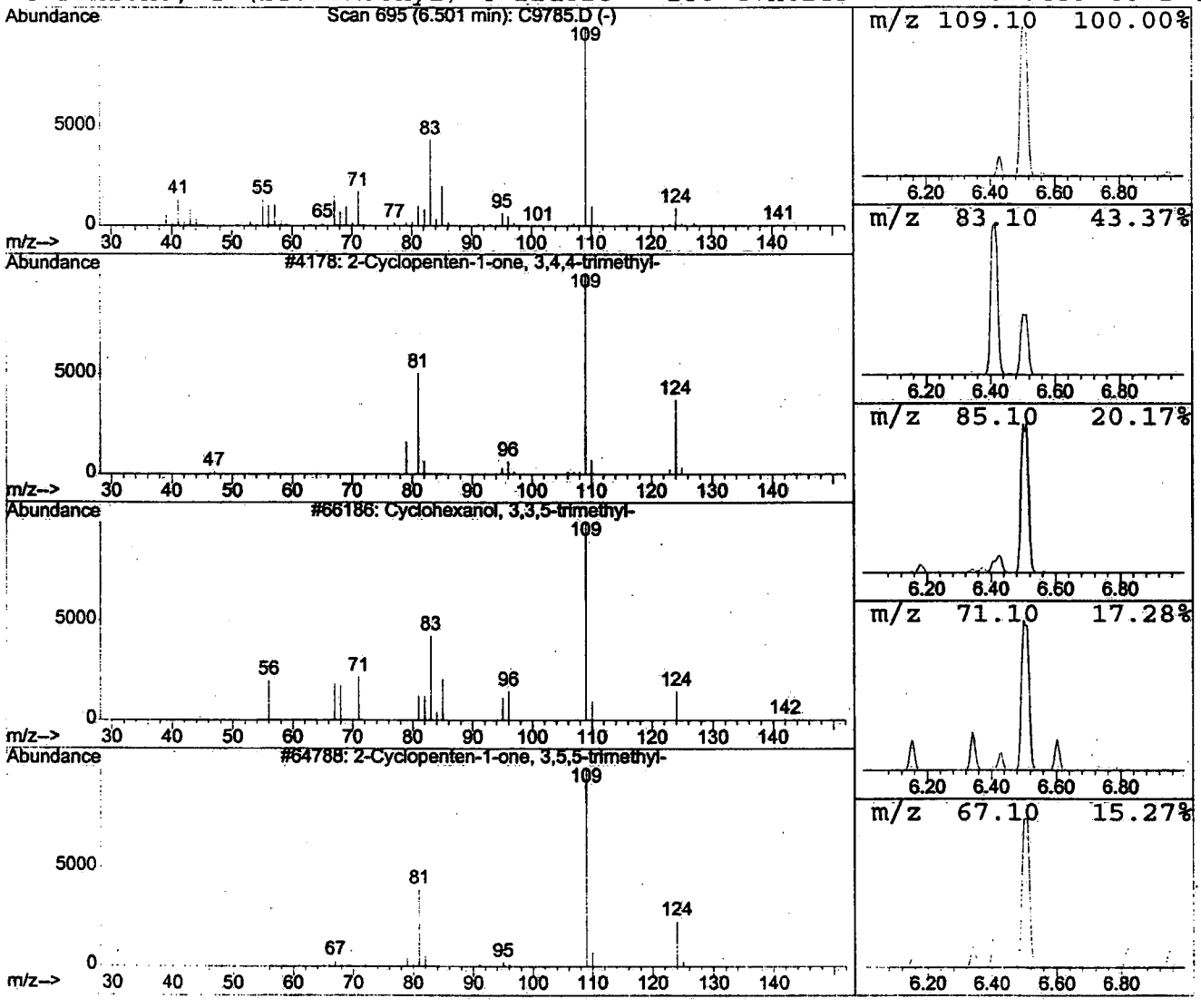
Peak Number 9 Unknown cyclic hydrocarbon Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.50	111.08 UG	2587120	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclopenten-1-one, 3,4,4-trimethy	124	C8H12O	030434-65-2	47
2	Cyclohexanol, 3,3,5-trimethyl-	142	C9H18O	000116-02-9	47
3	2-Cyclopenten-1-one, 3,5,5-trimethy	124	C8H12O	024156-95-4	46
4	Benzene, 1-(bromomethyl)-4-fluoro-	188	C7H6BrF	000459-46-1	40



Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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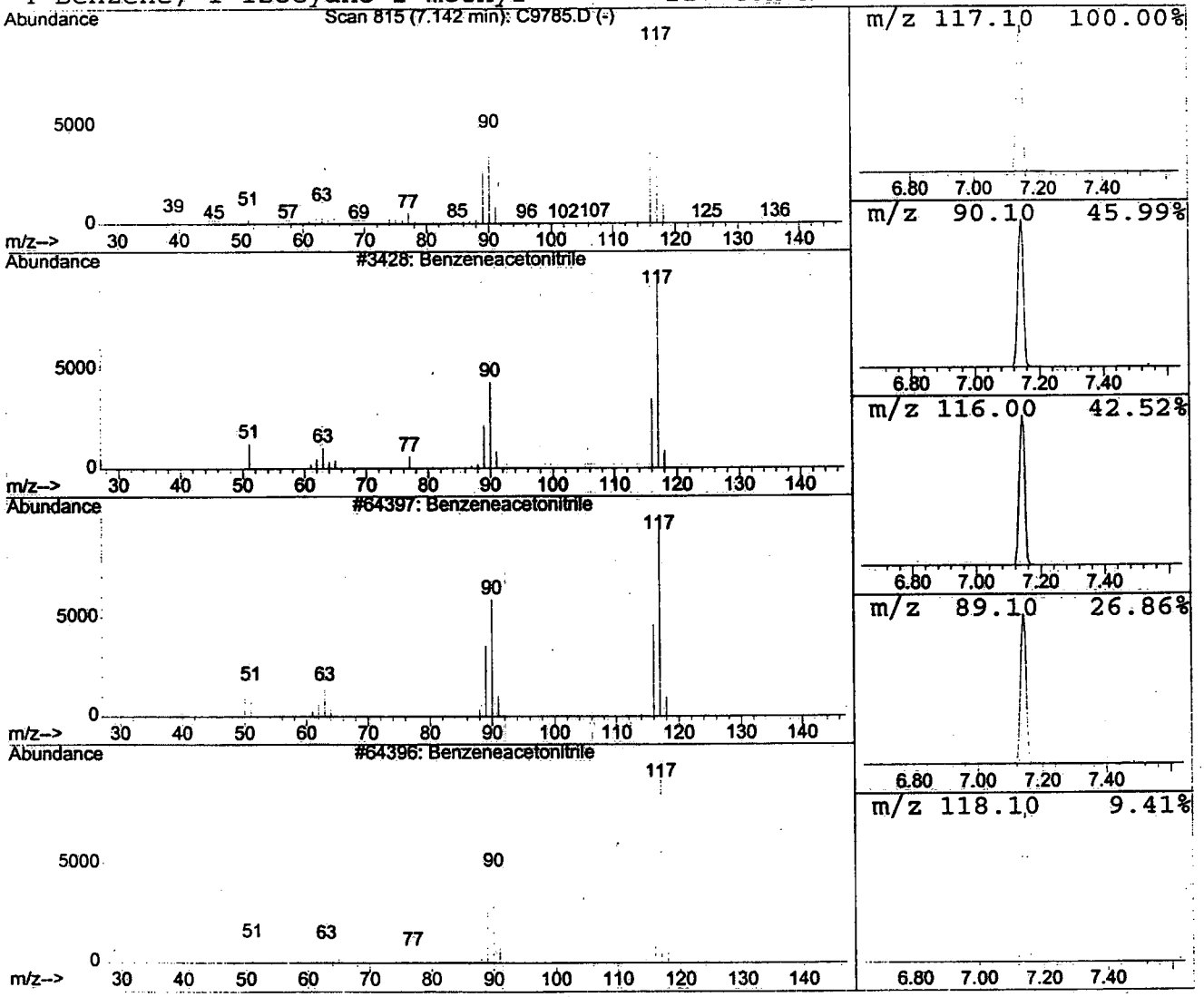
Peak Number 10 Substituted benzene Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.14	19.48 UG	2265540	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneacetonitrile	117	C8H7N	000140-29-4	95
2	Benzeneacetonitrile	117	C8H7N	000140-29-4	94
3	Benzeneacetonitrile	117	C8H7N	000140-29-4	93
4	Benzene, 1-isocyano-2-methyl-	117	C8H7N	010468-64-1	91



2/4/02

Library Search Compound Report

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Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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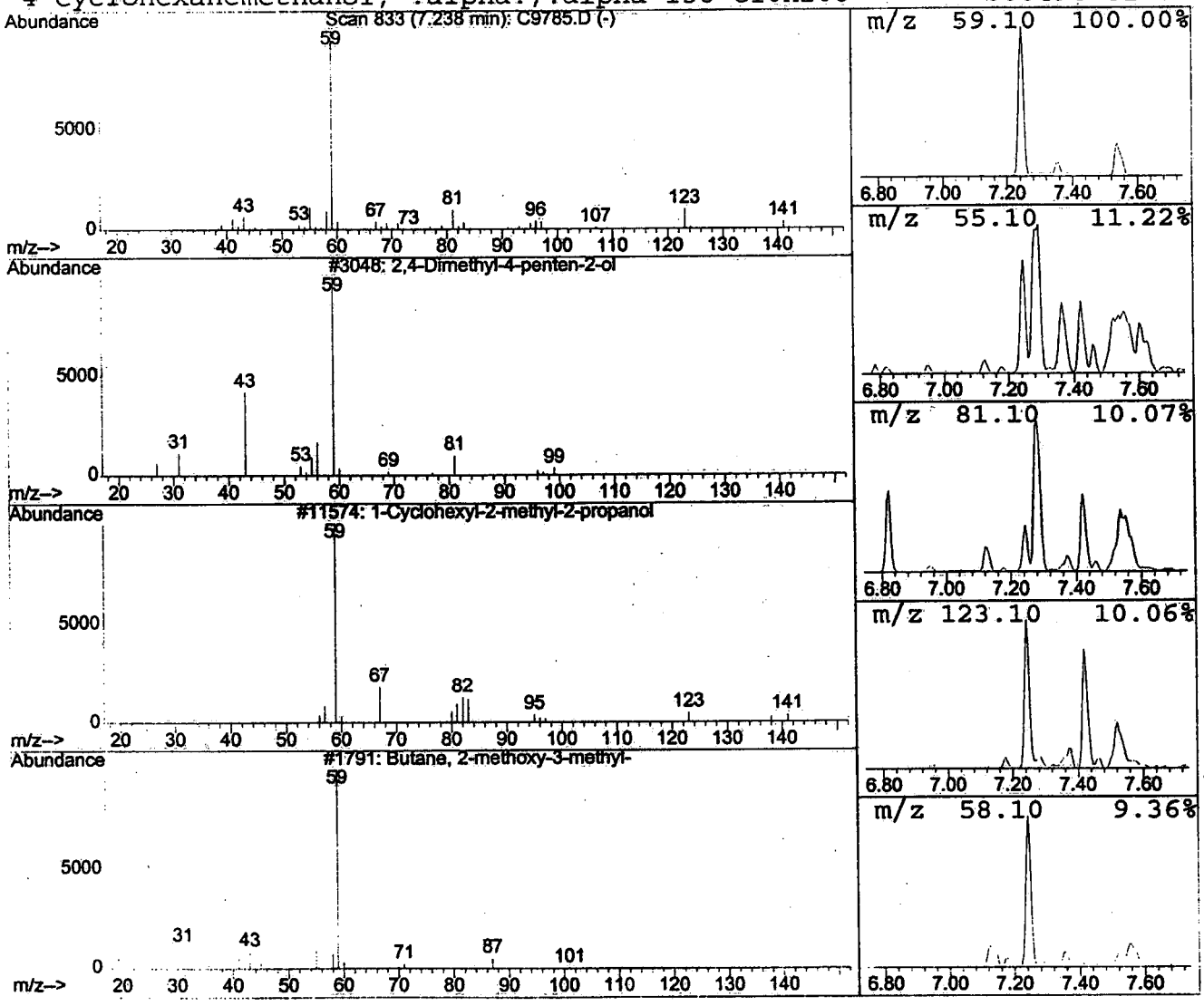
Peak Number 11 Unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.24	11.53 UG	1340650	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4-Dimethyl-4-penten-2-ol	114	C7H14O	019781-53-4	59
2	1-Cyclohexyl-2-methyl-2-propanol	156	C10H20O	005531-30-6	56
3	Butane, 2-methoxy-3-methyl-	102	C6H14O	062016-49-3	53
4	Cyclohexanemethanol, .alpha.,.alpha	156	C10H20O	000498-81-7	42



2449

CC03280

Library Search Compound Report

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Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 15
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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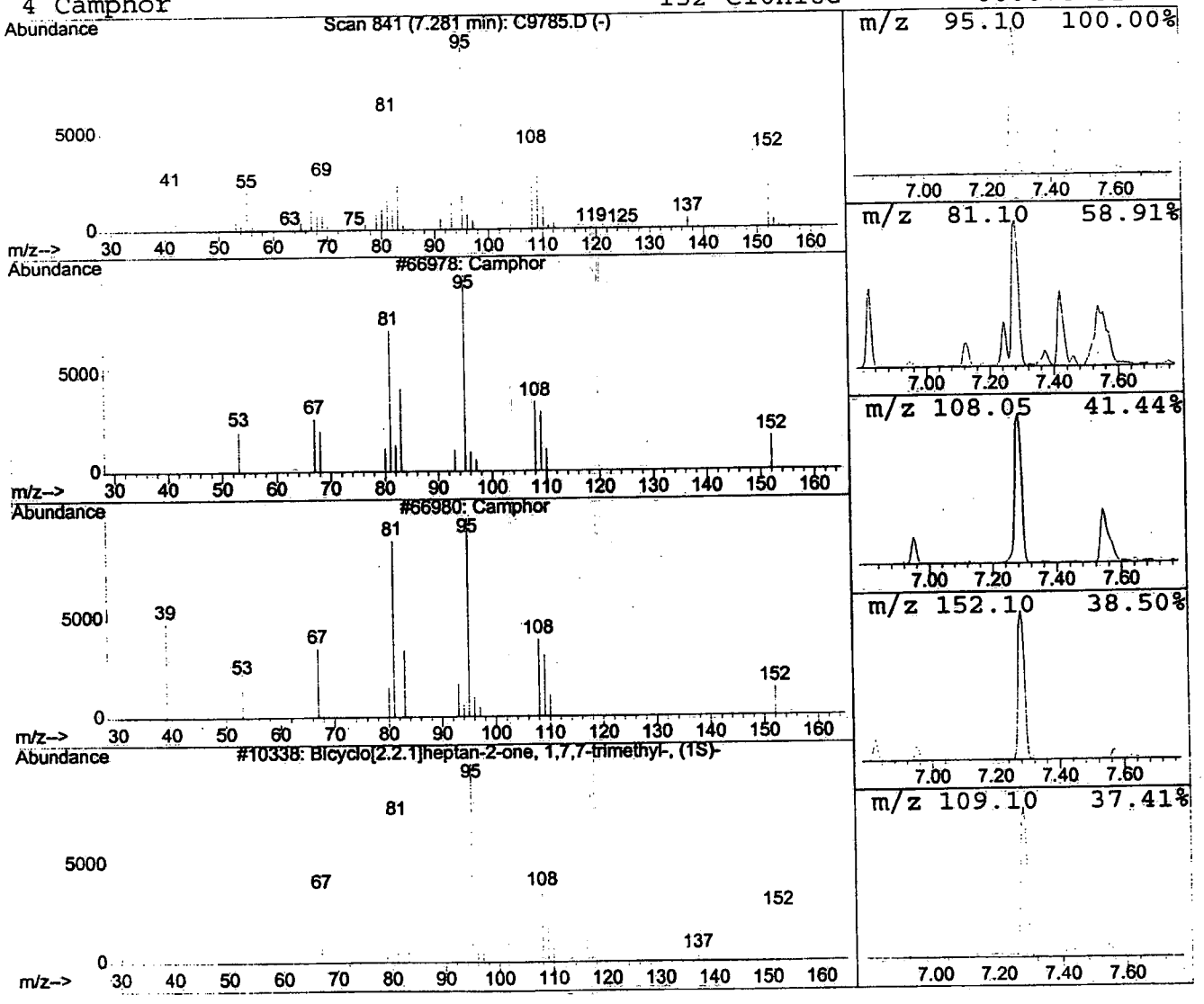
Peak Number 12 Unknown cyclic hydrocarbon Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.28	26.38 UG	3067770	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Camphor	152	C10H16O	000076-22-2	97
2	Camphor	152	C10H16O	000076-22-2	97
3	Bicyclo[2.2.1]heptan-2-one, 1,7,7-t	152	C10H16O	000464-48-2	96
4	Camphor	152	C10H16O	000076-22-2	96



3450

Library Search Compound Report

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Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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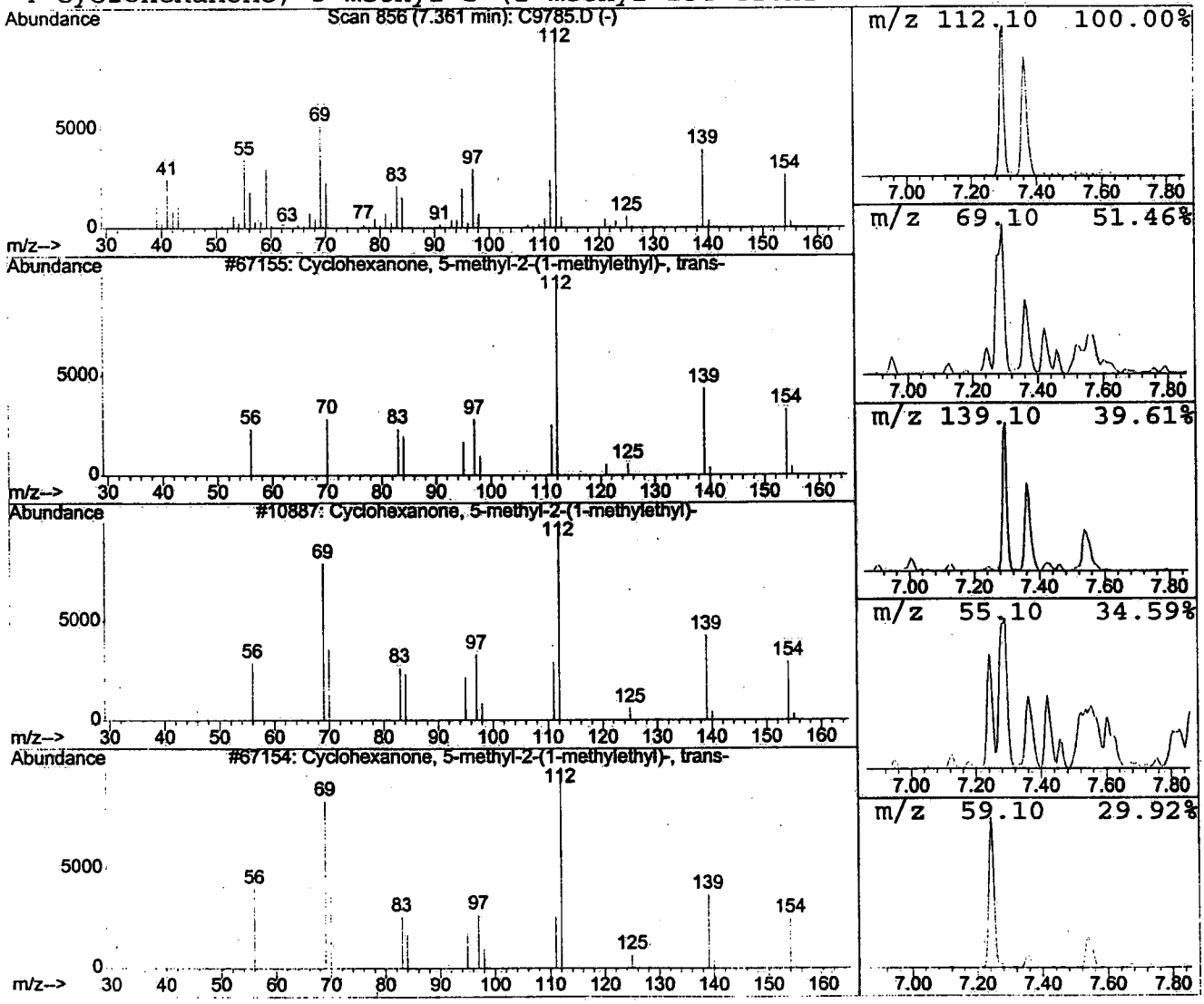
Peak Number 13 Unknown cyclic hydrocarbon Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.36	8.30 UG	965200	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanone, 5-methyl-2-(1-methyl	154	C10H18O	000089-80-5	98
2	Cyclohexanone, 5-methyl-2-(1-methyl	154	C10H18O	010458-14-7	98
3	Cyclohexanone, 5-methyl-2-(1-methyl	154	C10H18O	000089-80-5	93
4	Cyclohexanone, 5-methyl-2-(1-methyl	154	C10H18O	000491-07-6	93



C00282

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

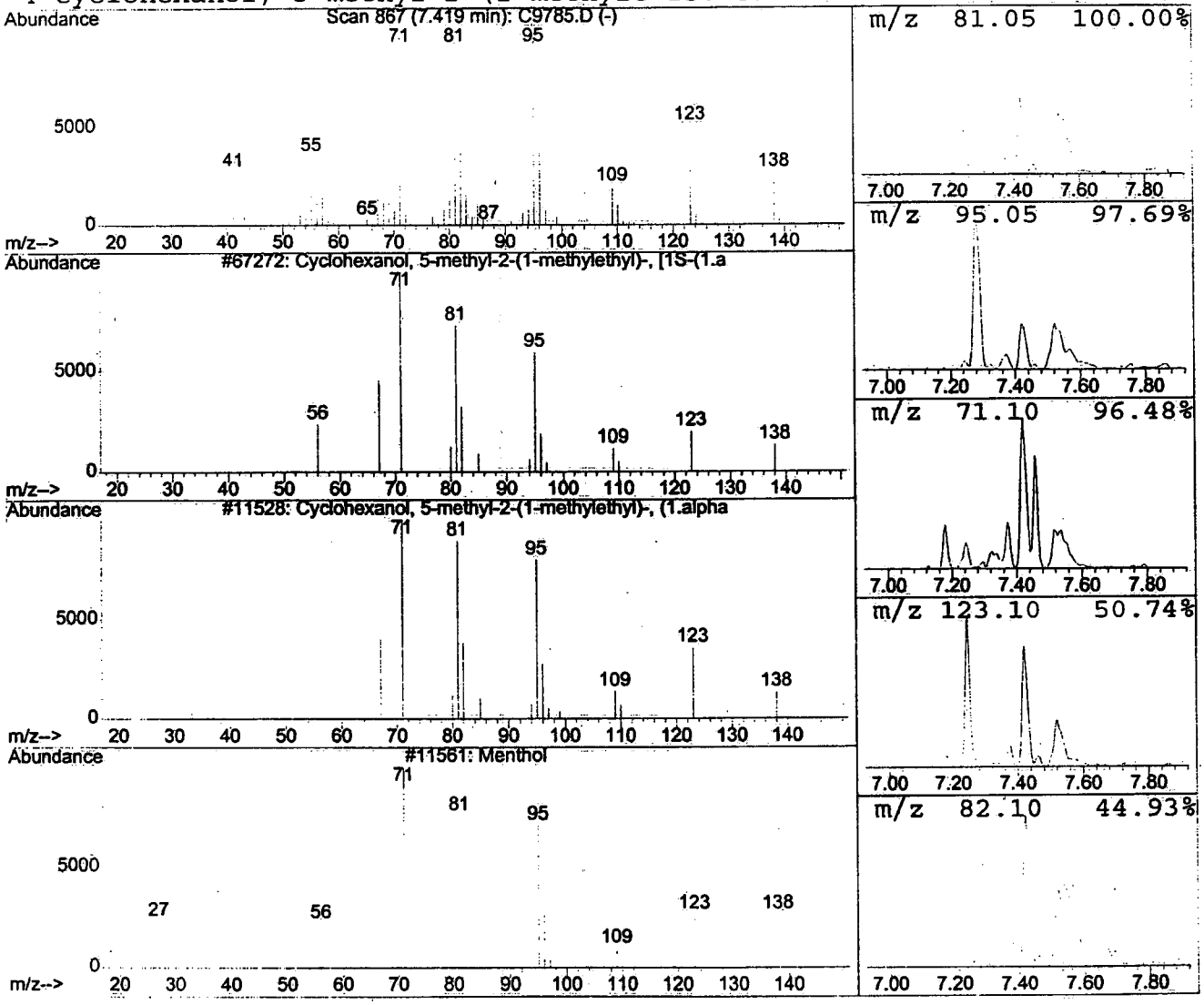
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 14 Unknown cyclic hydrocarbon Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.42	8.97 UG	1043370	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanol, 5-methyl-2-(1-methyle	156	C10H20O	023283-97-8	91
2	Cyclohexanol, 5-methyl-2-(1-methyle	156	C10H20O	015356-70-4	90
3	Menthol	156	C10H20O	001490-04-6	86
4	Cyclohexanol, 5-methyl-2-(1-methyle	156	C10H20O	000089-78-1	86



34/57

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

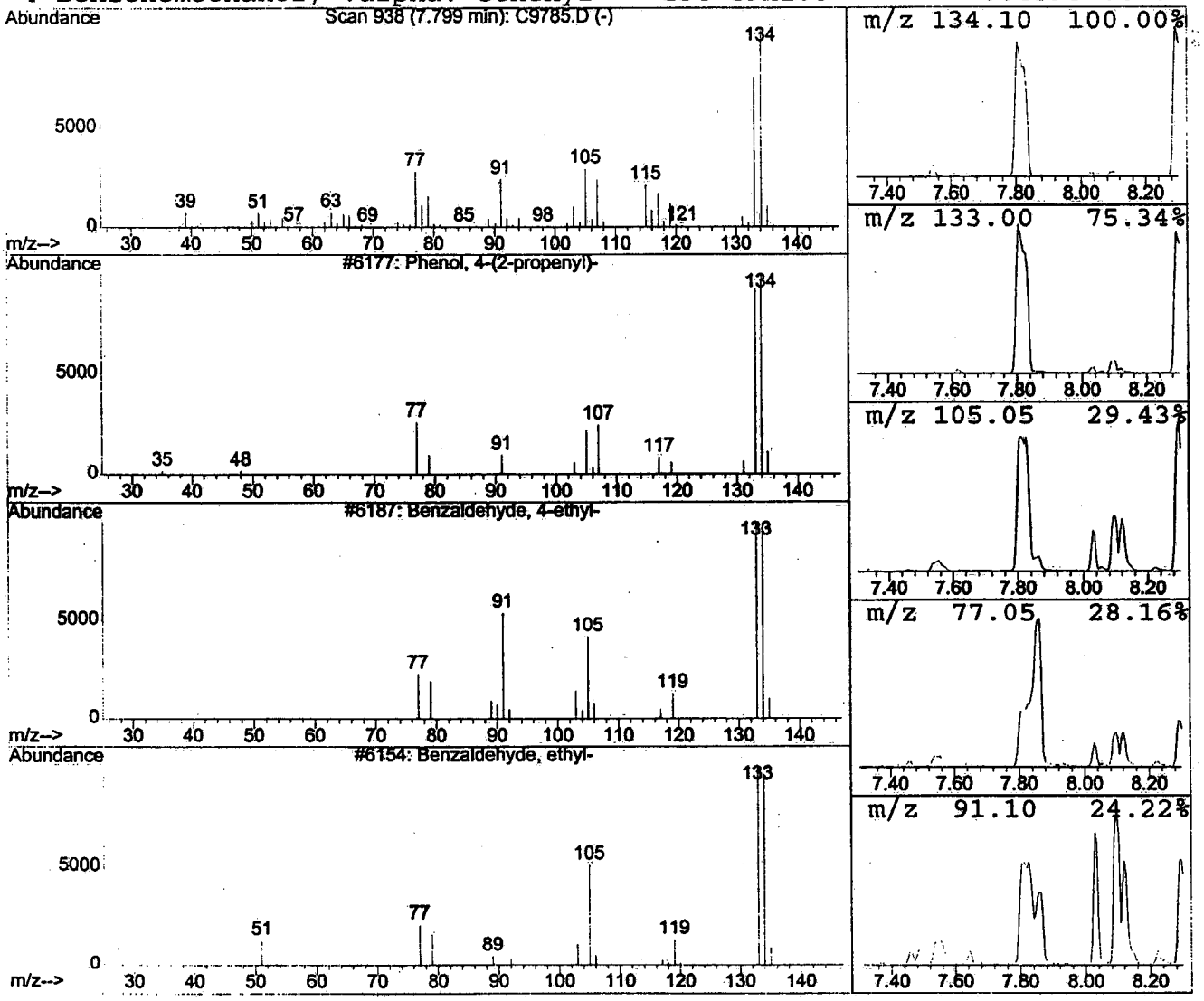
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 15 Substituted benzene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.80	27.97 UG	3252940	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 4-(2-propenyl)-	134	C9H10O	000501-92-8	87
2	Benzaldehyde, 4-ethyl-	134	C9H10O	004748-78-1	72
3	Benzaldehyde, ethyl-	134	C9H10O	053951-50-1	70
4	Benzenemethanol, .alpha.-ethenyl-	134	C9H10O	004393-06-0	64



3 of 3

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

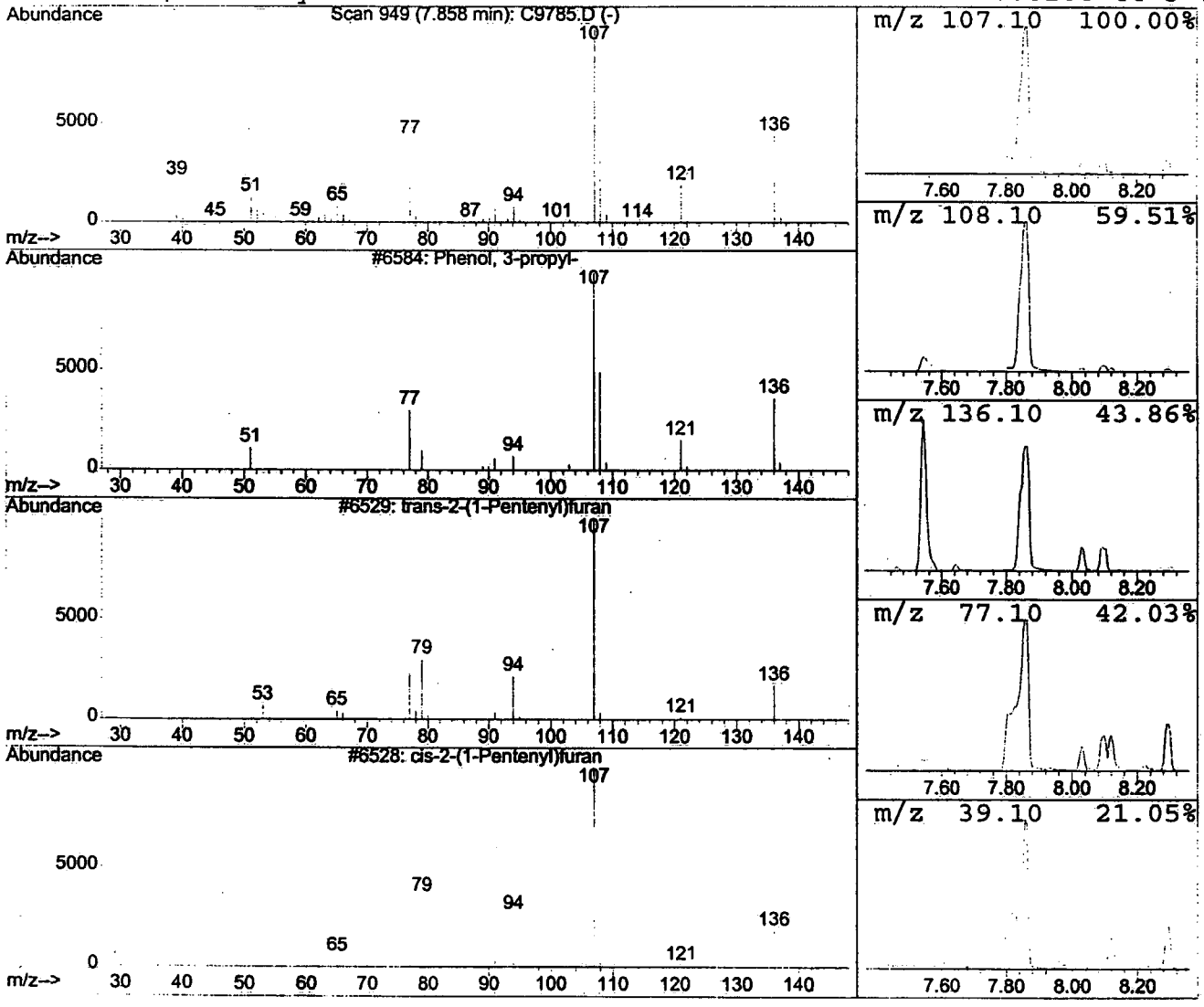
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 16 Substituted benzene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.86	40.65 UG	4727400	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 3-propyl-	136	C9H12O	000621-27-2	93
2	trans-2-(1-Pentenyl)furan	136	C9H12O	000000-00-0	49
3	cis-2-(1-Pentenyl)furan	136	C9H12O	000000-00-0	47
4	Phenol, 4-methyl-	108	C7H8O	000106-44-5	47



3454

CC03285

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

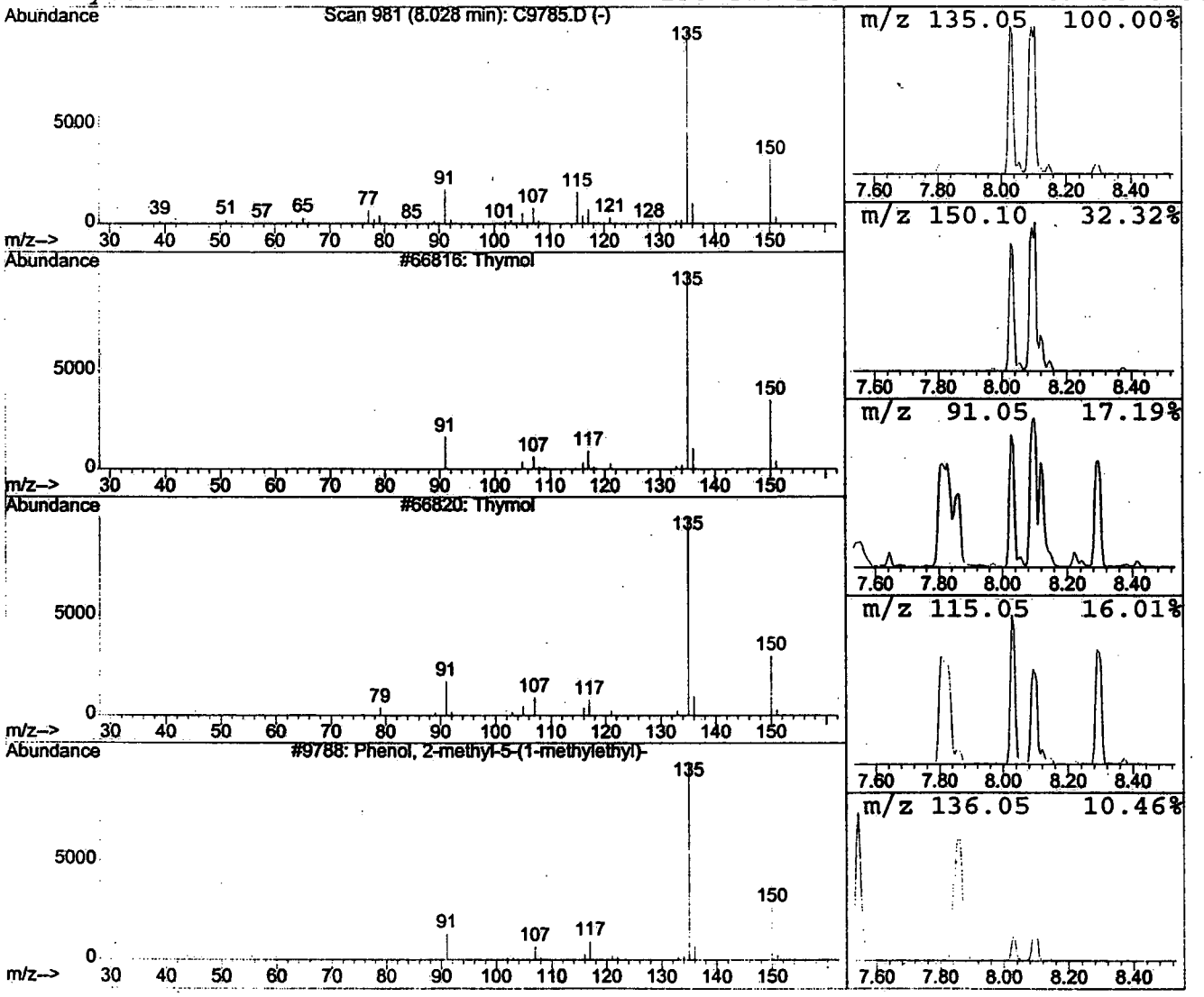
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 17 Substituted benzene Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.03	16.20 UG	1884430	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Thymol	150	C10H14O	000089-83-8	95
2	Thymol	150	C10H14O	000089-83-8	94
3	Phenol, 2-methyl-5-(1-methylethyl)-	150	C10H14O	000499-75-2	93
4	Thymol	150	C10H14O	000089-83-8	93



3455

CC0286

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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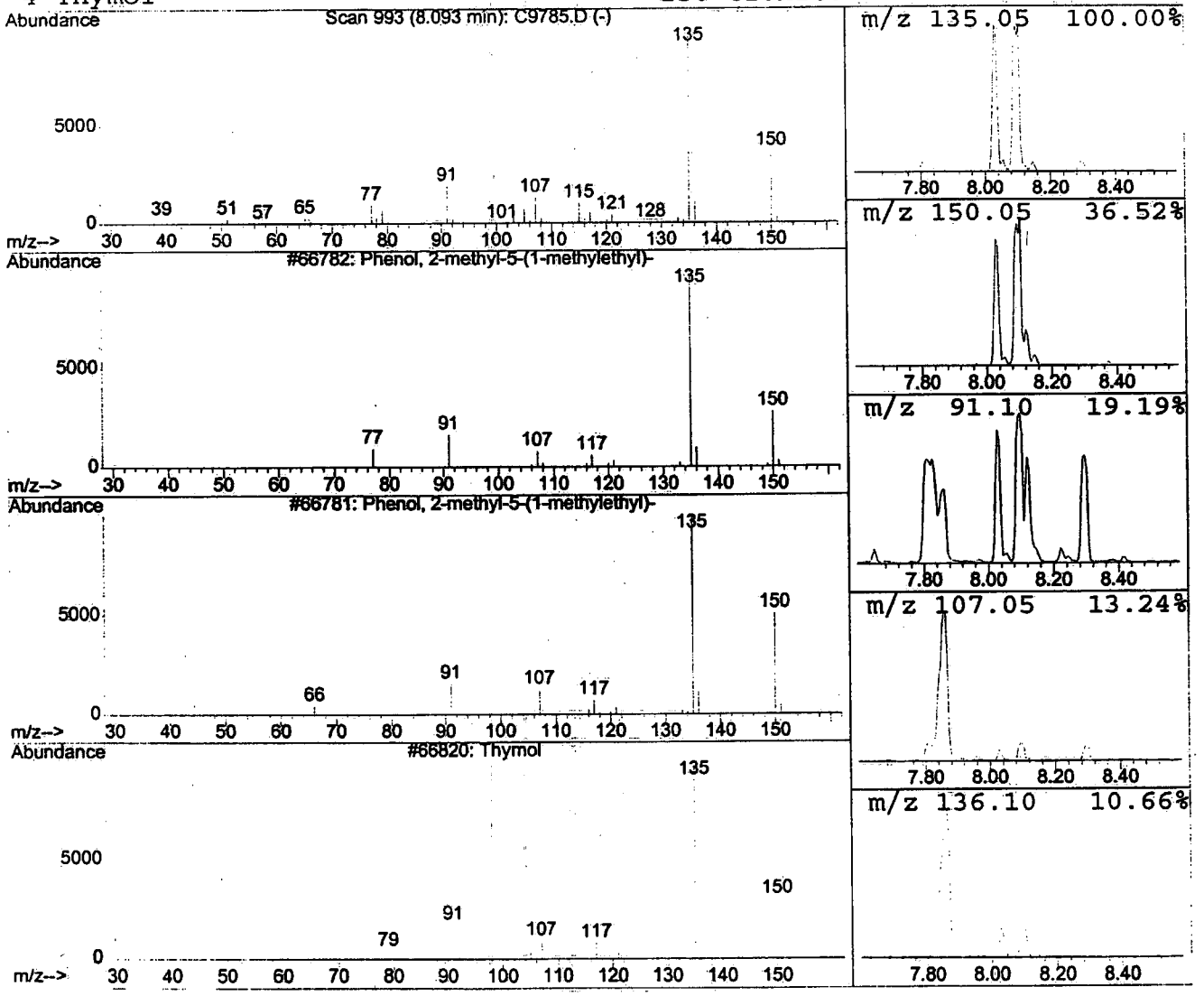
Peak Number 18 Substituted phenol Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.09	24.73 UG	2876560	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 2-methyl-5-(1-methylethyl)-	150	C10H14O	000499-75-2	95
2	Phenol, 2-methyl-5-(1-methylethyl)-	150	C10H14O	000499-75-2	91
3	Thymol	150	C10H14O	000089-83-8	90
4	Thymol	150	C10H14O	000089-83-8	87



3456

000237

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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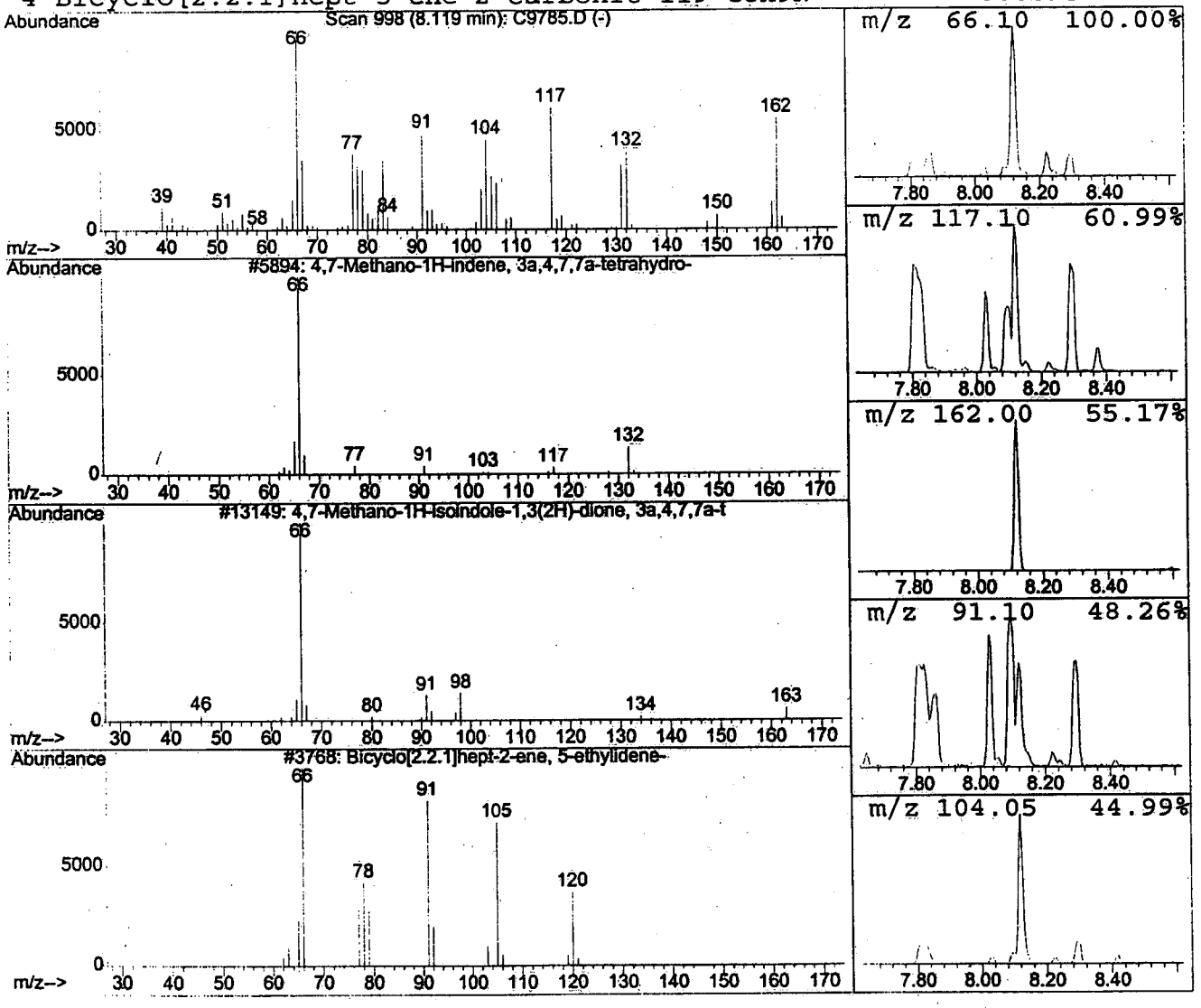
Peak Number 19 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.12	11.27 UG	1310950	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4,7-Methano-1H-indene, 3a,4,7,7a-te	132	C10H12	000077-73-6	53
2	4,7-Methano-1H-isoindole-1,3(2H)-di	163	C9H9NO2	006265-30-1	43
3	Bicyclo[2.2.1]hept-2-ene, 5-ethylid	120	C9H12	016219-75-3	38
4	Bicyclo[2.2.1]hept-5-ene-2-carbonit	119	C8H9N	000095-11-4	37



3457

000283

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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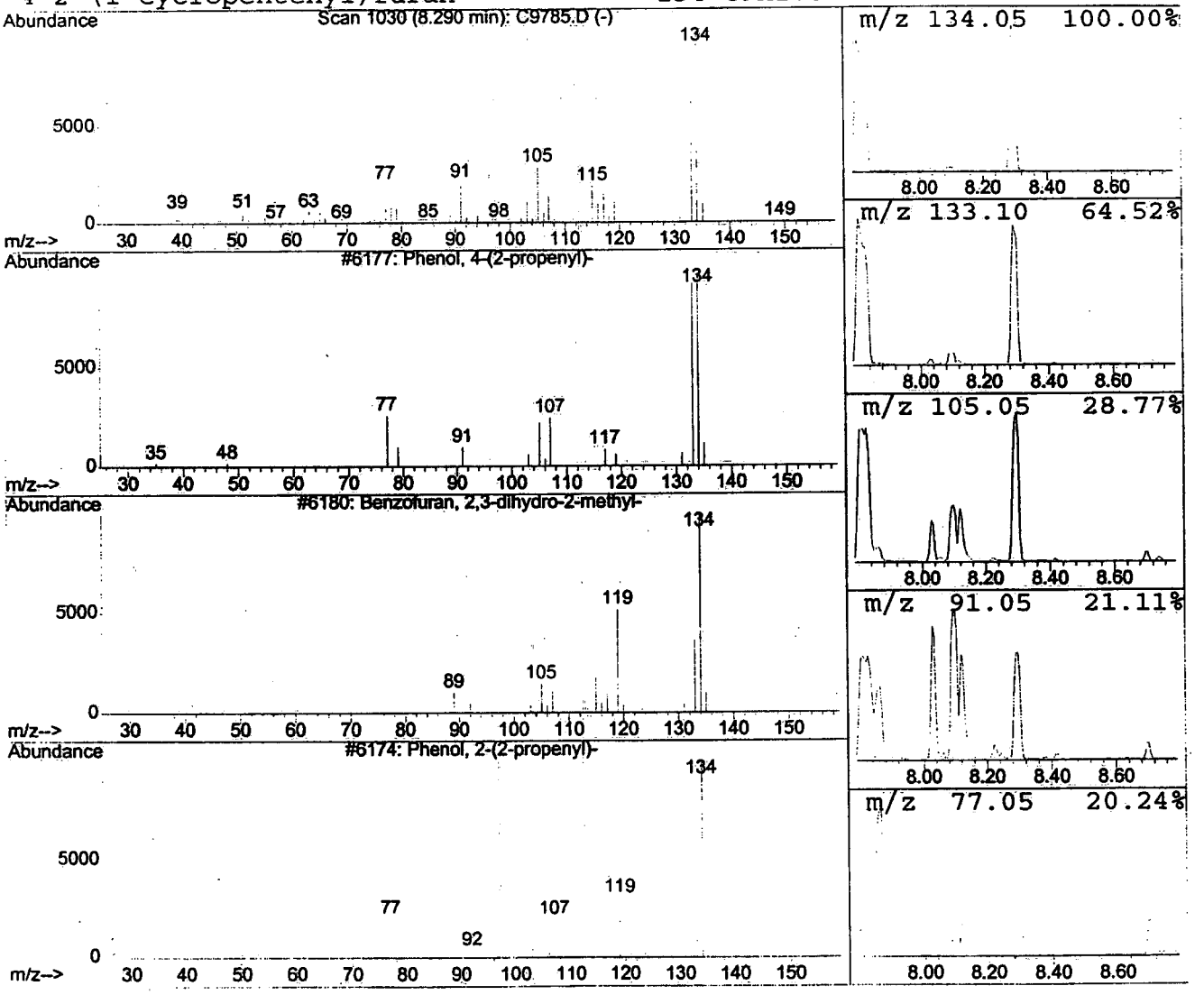
Peak Number 20 Substituted phenol Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.29	22.77 UG	2648440	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 4-(2-propenyl)-	134	C9H10O	000501-92-8	68
2	Benzofuran, 2,3-dihydro-2-methyl-	134	C9H10O	001746-11-8	64
3	Phenol, 2-(2-propenyl)-	134	C9H10O	001745-81-9	62
4	2-(1-Cyclopentenyl)furan	134	C9H10O	000000-00-0	58



3458

C005233

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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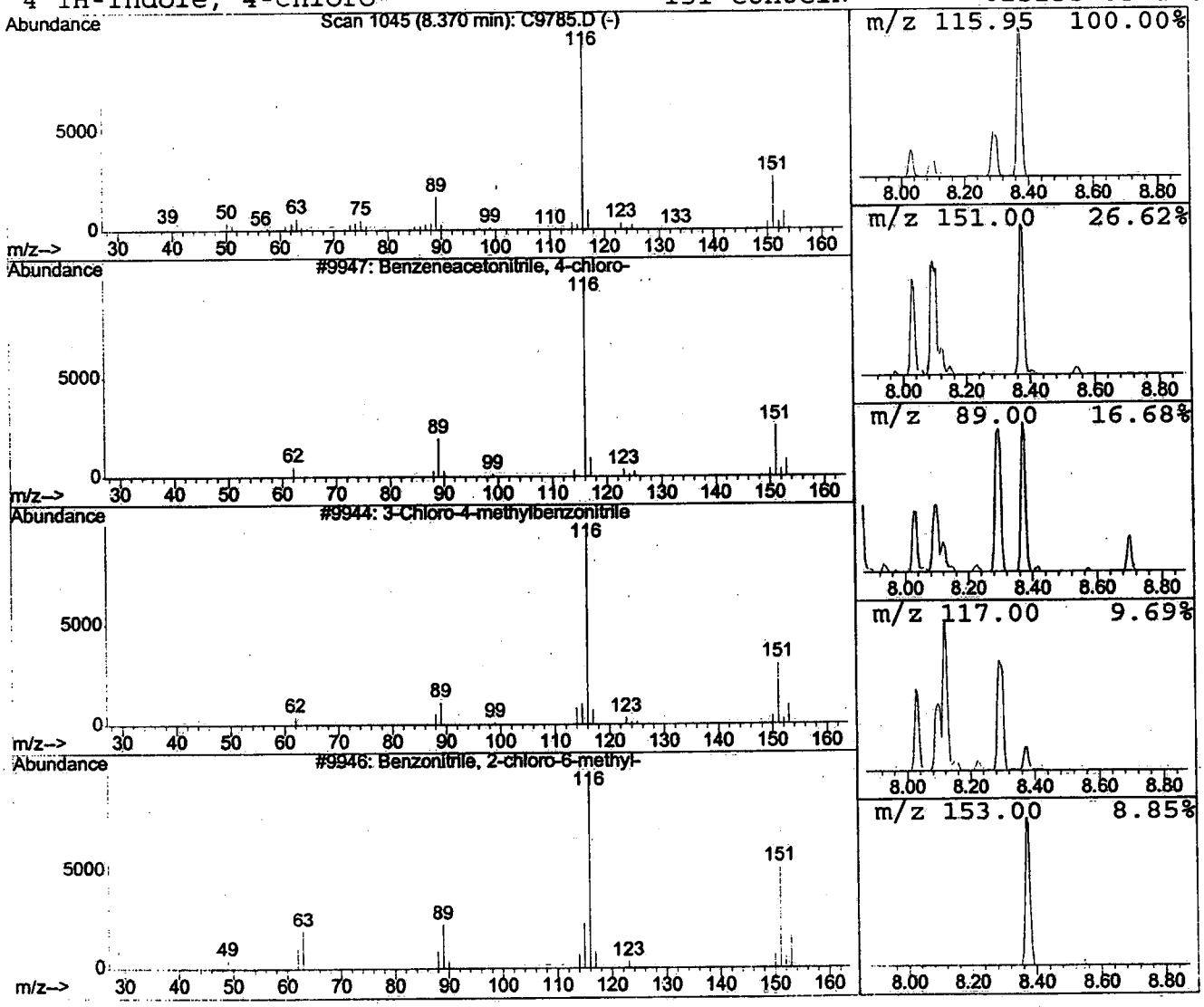
Peak Number 21 Substituted benzene Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.37	21.73 UG	410604	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneacetonitrile, 4-chloro-	151	C8H6ClN	000140-53-4	95
2	3-Chloro-4-methylbenzonitrile	151	C8H6ClN	021423-81-4	91
3	Benzonitrile, 2-chloro-6-methyl-	151	C8H6ClN	006575-09-3	86
4	1H-Indole, 4-chloro-	151	C8H6ClN	025235-85-2	80



ZLEC

000290

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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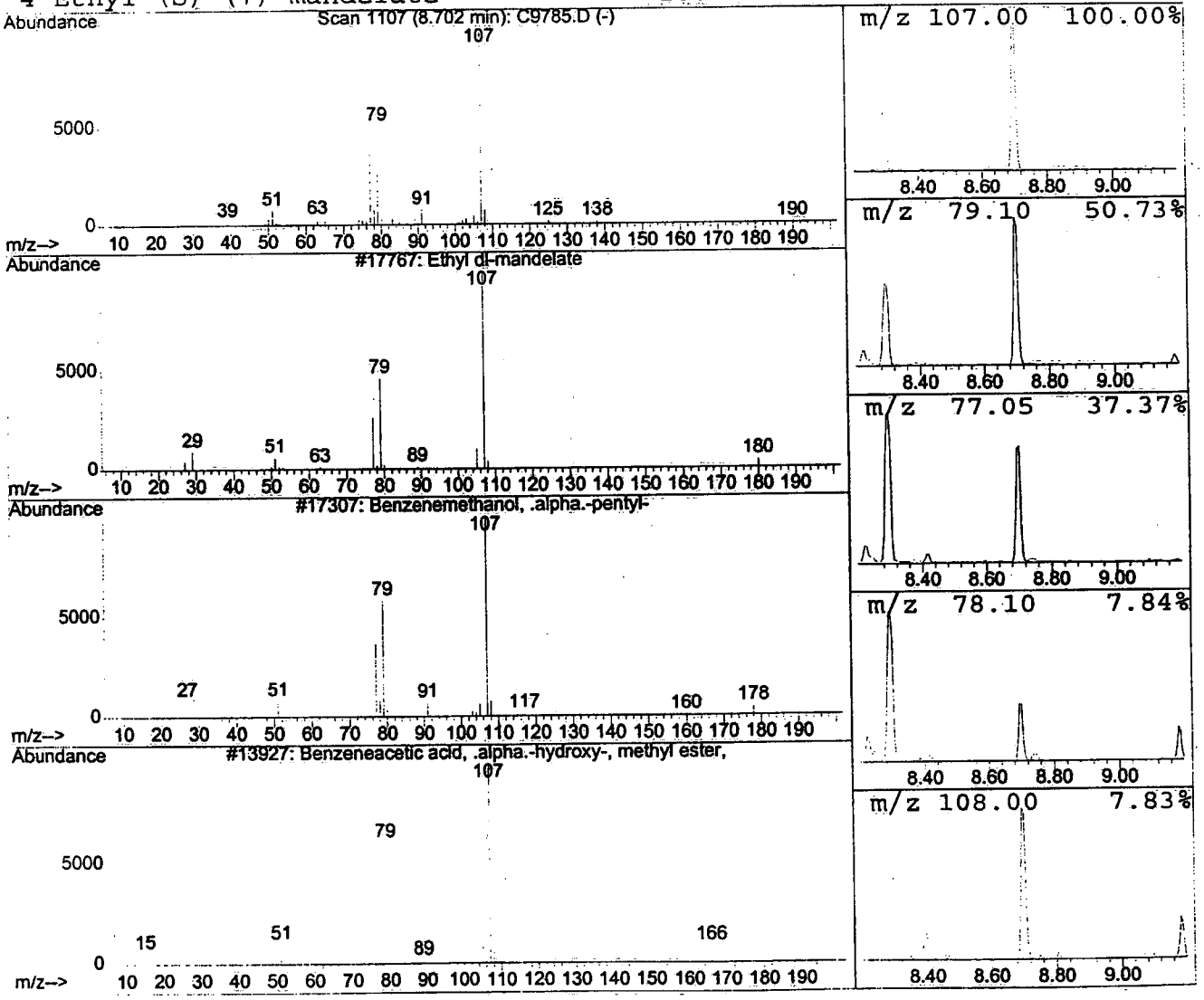
Peak Number 22 Unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.70	28.03 UG	529708	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethyl dl-mandelate	180	C10H12O3	004358-88-7	78
2	Benzenemethanol, .alpha.-pentyl-	178	C12H18O	004471-05-0	78
3	Benzeneacetic acid, .alpha.-hydroxy	166	C9H10O3	021210-43-5	78
4	Ethyl (S)-(+)-mandelate	180	C10H12O3	013704-09-1	78



3/16

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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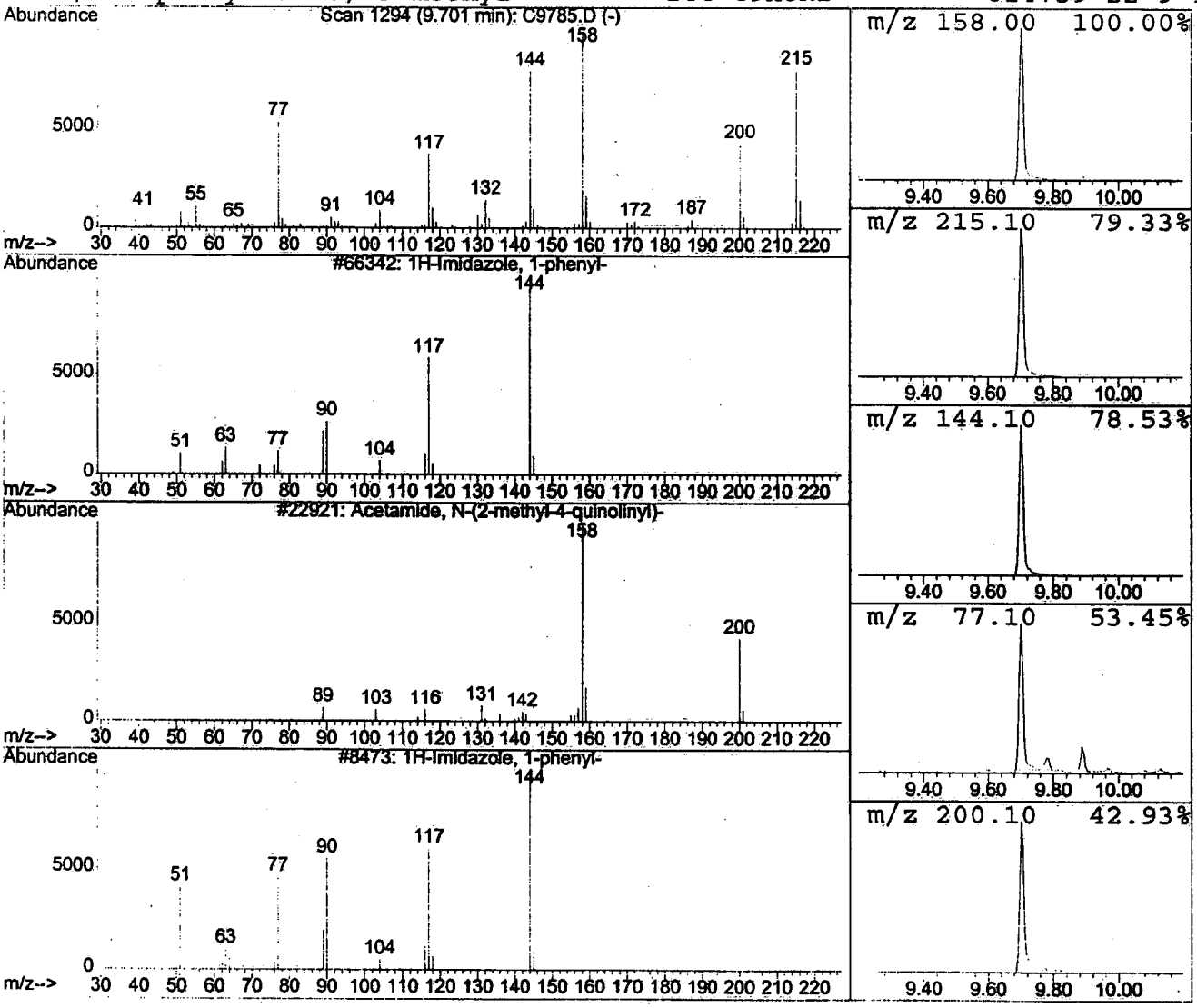
Peak Number 23 Unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.70	30.07 UG	568268	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Imidazole, 1-phenyl-	144	C9H8N2	007164-98-9	14
2	Acetamide, N-(2-methyl-4-quinolinyl	200	C12H12N2O	052101-48-1	12
3	1H-Imidazole, 1-phenyl-	144	C9H8N2	007164-98-9	10
4	1,8-Naphthyridine, 3-methyl-	144	C9H8N2	014759-22-9	10



Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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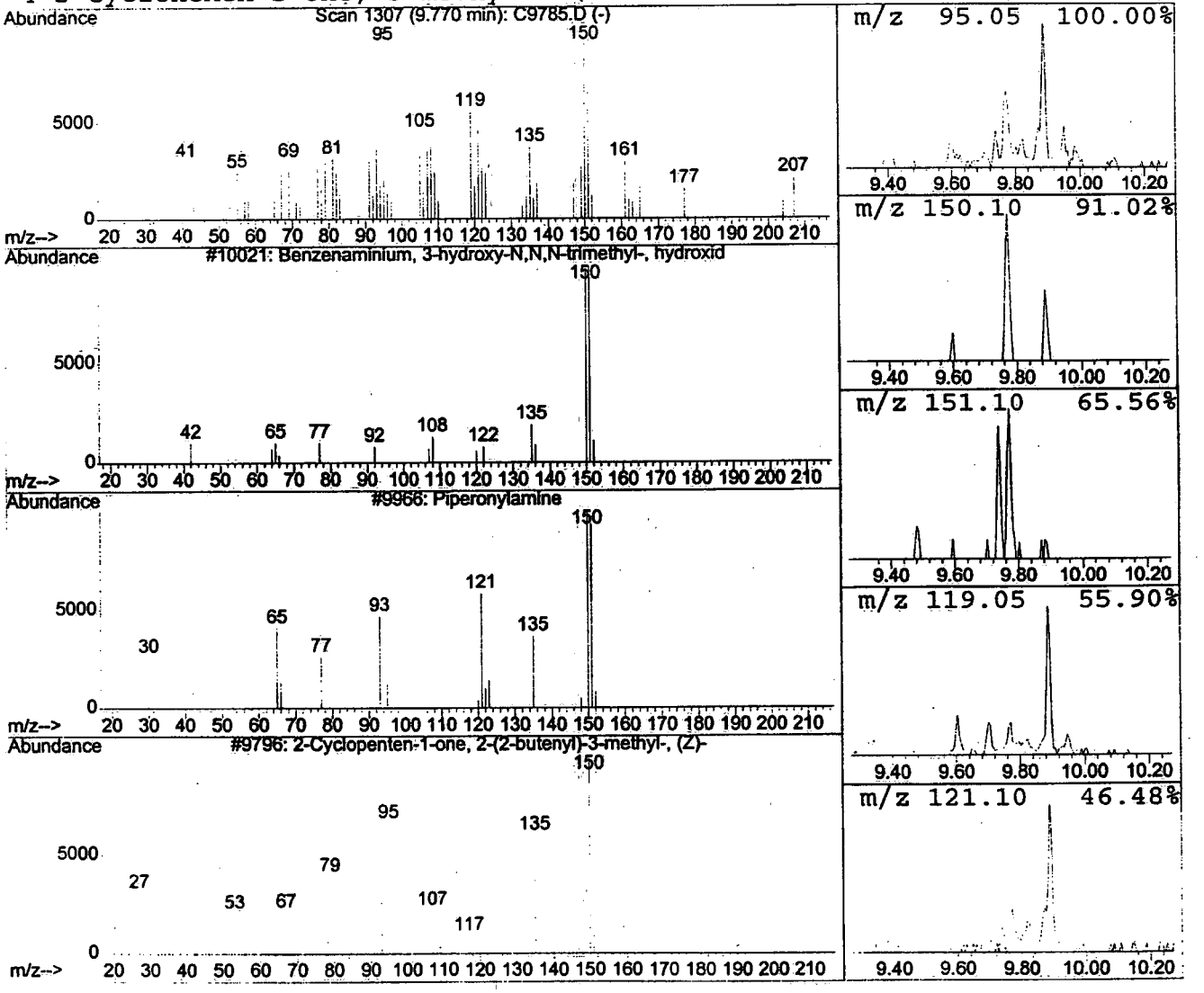
Peak Number 24 Unknown Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.77	5.94 UG	112228	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenaminium, 3-hydroxy-N,N,N-trim	151	C9H13NO	031061-59-3	35
2	Piperonylamine	151	C8H9NO2	002620-50-0	30
3	2-Cyclopenten-1-one, 2-(2-butenyl)-	150	C10H14O	017190-71-5	27
4	2-Cyclohexen-1-one, 3-methyl-6-(1-m	150	C10H14O	000491-09-8	18



Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9785.D Vial: 15
Acq On : 4 May 2001 17:00 Operator: DP
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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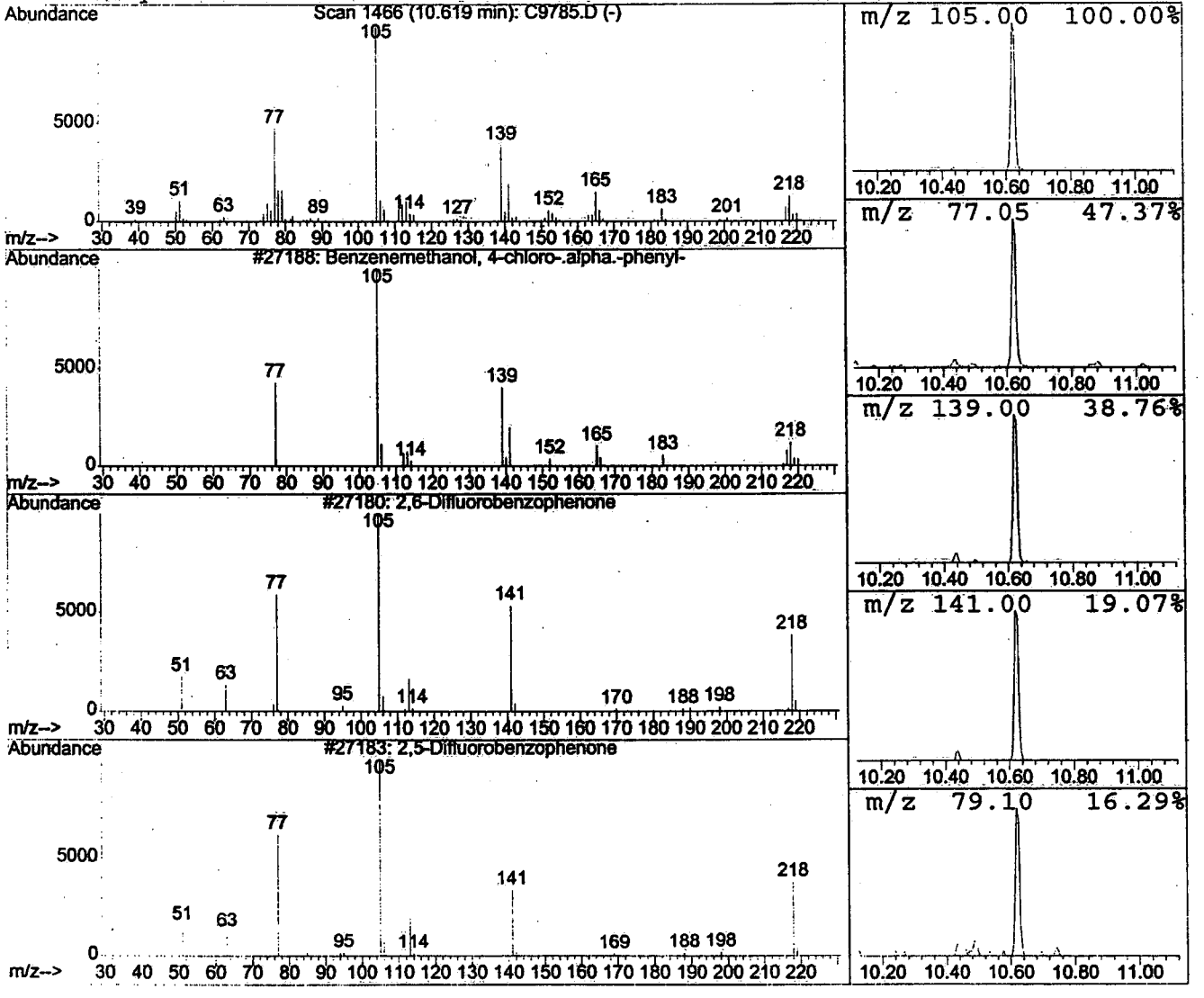
Peak Number 25 Substituted benzene Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.62	25.10 UG	327163	Phenanthrene-d10	10.49

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanol, 4-chloro-.alpha.-p	218	C13H11ClO	000119-56-2	98
2	2,6-Difluorobenzophenone	218	C13H8F2O	059189-51-4	27
3	2,5-Difluorobenzophenone	218	C13H8F2O	085068-36-6	25
4	Benzoylformic acid	150	C8H6O3	000611-73-4	14



3463

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-04-01\C9782.D Vial: 14
Acq On : 4 May 2001 15:44 Operator: DP
Sample : MW-6,2867-005,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
S Integration Params: RTEINT.P
Quant Time: May 4 16:09 2001 Quant Results File: CW0901.RES

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration
DataAcq Meth : CW0901

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.18	152	128245	40.00	UG	-0.02
22) Naphthalene-d8	7.54	136	344497	40.00	UG	-0.01
39) Acenaphthene-d10	9.19	164	120861	40.00	UG	0.00
60) Phenanthrene-d10	10.49	188	115366	40.00	UG	0.00
75) Chrysene-d12	12.98	240	51959	40.00	UG	0.02
84) Perylene-d12	15.21	264	37277	40.00	UG	0.03
System Monitoring Compounds						
4) 2-Fluorophenol	4.57	112	274508	67.04	UG	-0.02
Spiked Amount 100.000	Range 42 - 95		Recovery = 67.04%			
6) Phenol-d5	5.67	99	271508	66.75	UG	-0.02
Spiked Amount 100.000	Range 59 - 97		Recovery = 66.75%			
23) Nitrobenzene-d5	6.78	82	81670	31.91	UG	-0.01
Spiked Amount 50.000	Range 49 - 105		Recovery = 63.82%			
43) 2-Fluorobiphenyl	8.54	172	152060	38.19	UG	0.00
Spiked Amount 50.000	Range 54 - 110		Recovery = 76.38%			
64) 2,4,6-Tribromophenol	9.87	330	26109	89.88	UG	0.00
Spiked Amount 100.000	Range 48 - 126		Recovery = 89.88%			
77) Terphenyl-d14	11.85	244	66692	45.48	UG	0.01
Spiked Amount 50.000	Range 53 - 123		Recovery = 90.96%			

Target Compounds **Qvalue**

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

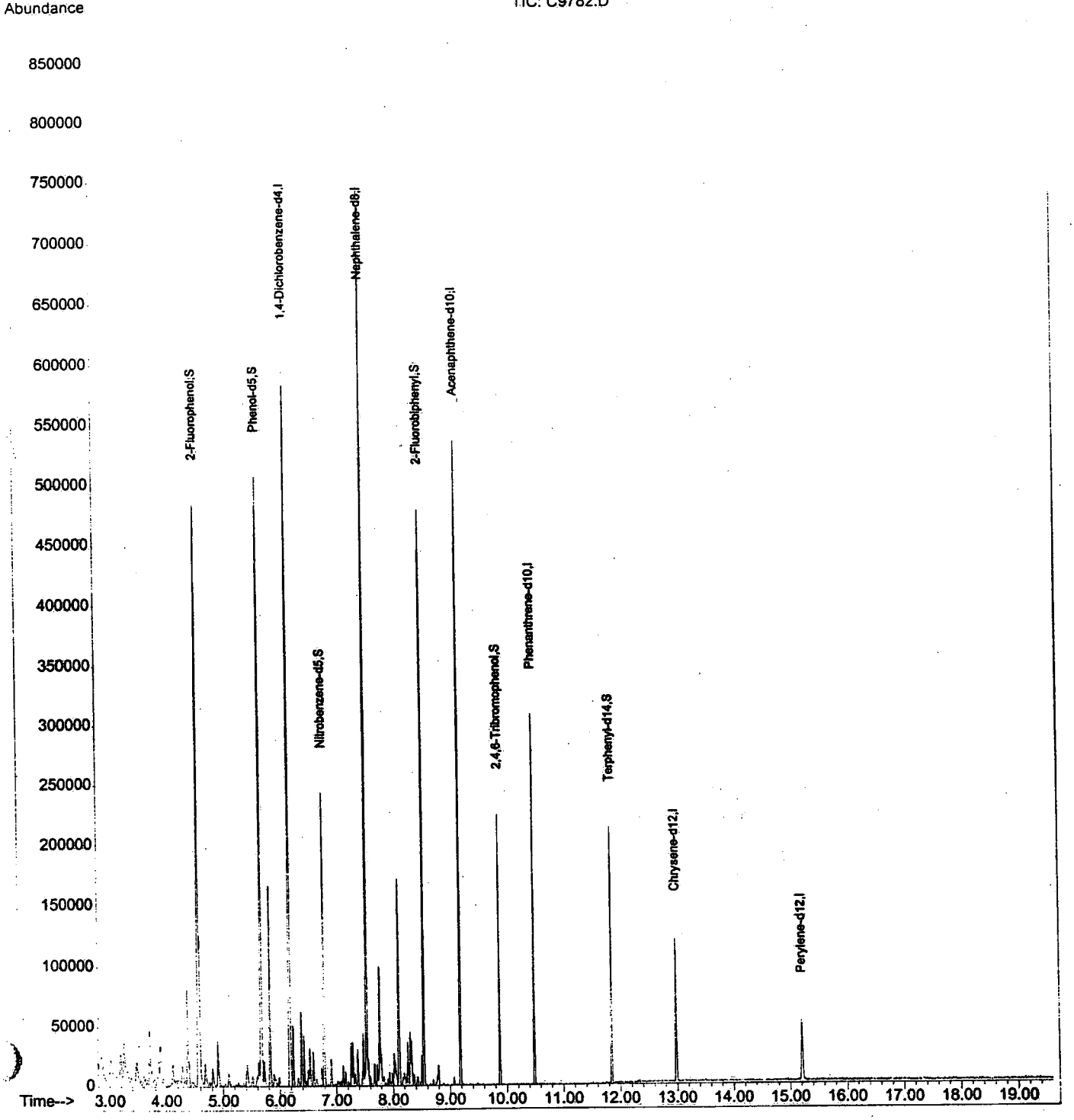
3444

C09295

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9782.D Vial: 14
Acq On : 4 May 2001 15:44 Operator: DP
Sample : MW-6,2867-005,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 16:09 2001 Quant Results File: CW0901.RES

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9782.D Vial: 14
Acq On : 4 May 2001 15:44 Operator: DP
Sample : MW-6,2867-005,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
G Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 0.5 % of largest Peak
Start Thrs: 1.5 Max Peaks: 100
Stop Thrs : 1.5 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	2.855	7	12	16	rBV3	16445	27333	3.79%	0.391%
2	2.882	16	17	23	rVB3	11534	10323	1.43%	0.148%
3	3.021	40	43	54	rVB2	18119	36715	5.09%	0.525%
4	3.106	57	59	66	rVB5	5067	8644	1.20%	0.124%
5	3.197	66	76	81	rBV6	24080	47251	6.55%	0.676%
6	3.256	81	87	94	rBV3	30465	50159	6.95%	0.717%
[illegible]	3.379	107	110	116	rVB4	5335	8313	1.15%	0.119%
[illegible]	3.464	122	126	127	rBV	12850	13319	1.85%	0.190%
	3.480	127	129	135	rVB	14710	17041	2.36%	0.244%
10	3.603	144	152	155	rBV4	7775	13814	1.91%	0.198%
11	3.710	167	172	176	rBV	47399	63208	8.76%	0.904%
12	3.742	176	178	181	rVB2	11154	9924	1.38%	0.142%
13	3.838	192	196	198	rBV3	7146	10660	1.48%	0.152%
14	3.870	198	202	204	rVV	20537	28604	3.97%	0.409%
15	3.902	204	208	214	rVV5	34017	56074	7.77%	0.802%
16	3.945	214	216	221	rVB2	6554	7378	1.02%	0.106%
17	4.111	244	247	251	rBV3	17622	21103	2.93%	0.302%
18	4.282	275	279	285	rVB5	14715	24649	3.42%	0.353%
19	4.372	291	296	299	rBV	84574	99183	13.75%	1.418%
20	4.447	305	310	313	rBV4	4440	7606	1.05%	0.109%
21	4.570	327	333	336	rBV	483393	619799	85.92%	8.864%
22	4.597	336	338	343	rVB2	121058	121418	16.83%	1.736%
23	4.688	351	355	364	rVB4	18771	29002	4.02%	0.415%
24	4.811	375	378	386	rBV3	14886	21262	2.95%	0.304%
25	4.907	392	396	406	rVB	41245	56724	7.86%	0.811%
26	5.094	427	431	438	rBB4	11493	16730	2.32%	0.239%
27	5.420	486	492	497	rBV5	18149	34959	4.85%	0.500%
28	5.510	503	509	513	rBB3	9280	12177	1.69%	0.174%
[illegible]	5.596	519	525	526	rBV3	8912	11252	1.56%	0.161%
[illegible]	5.623	526	530	533	rVV	20695	31078	4.31%	0.444%
31	5.671	533	539	545	rVV	506832	628249	87.09%	8.985%

3466

32	5.719	545	548	557	rVB2	22057	28547	3.96%	0.408%
33	5.826	563	568	574	rBB	166262	201090	27.87%	2.876%
34	5.895	578	581	584	rBV4	11017	14624	2.03%	0.209%
35	5.916	584	585	590	rVB2	6107	7359	1.02%	0.105%
36	5.986	595	598	602	rVB	8394	8142	1.13%	0.116%
	6.178	630	634	642	rBV	599541	721407	100.00%	10.317%
38	6.237	642	645	650	rVB	52351	56244	7.80%	0.804%
39	6.322	657	661	668	rBB2	7450	11645	1.61%	0.167%
40	6.386	668	673	677	rBB	63396	69075	9.58%	0.988%
41	6.429	677	681	686	rBV	43529	39949	5.54%	0.571%
42	6.504	692	695	698	rBV	14246	15907	2.20%	0.227%
43	6.536	698	701	708	rVB3	33368	38172	5.29%	0.546%
44	6.595	708	712	717	rBB	30441	31688	4.39%	0.453%
45	6.648	720	722	727	rBB2	6725	7512	1.04%	0.107%
46	6.739	736	739	743	rBV2	15937	13829	1.92%	0.198%
47	6.782	743	747	753	rVB2	242951	266156	36.89%	3.806%
48	6.910	767	771	775	rBB2	23628	26538	3.68%	0.380%
49	7.118	806	810	815	rVV	17653	15374	2.13%	0.220%
50	7.161	815	818	822	rVB2	12845	14409	2.00%	0.206%
51	7.263	834	837	840	rBV	37301	37241	5.16%	0.533%
52	7.289	840	842	846	rVV	37590	34653	4.80%	0.496%
53	7.327	846	849	856	rVB5	10515	11636	1.61%	0.166%
54	7.380	856	859	862	rBV2	32127	25530	3.54%	0.365%
55	7.466	868	875	876	rBV	12493	11429	1.58%	0.163%
56	7.482	876	878	881	rVV	44982	37130	5.15%	0.531%
57	7.514	881	884	885	rVV2	19750	19045	2.64%	0.272%
	7.540	885	889	893	rVV	742602	675499	93.64%	9.660%
	7.567	893	894	897	rVB	22279	14915	2.07%	0.213%
60	7.674	906	914	919	rBB5	19052	21476	2.98%	0.307%
61	7.727	920	924	926	rBV2	18579	18386	2.55%	0.263%
62	7.770	926	932	935	rVV3	99796	115391	16.00%	1.650%
63	7.797	935	937	941	rVV3	27429	28325	3.93%	0.405%
64	7.840	941	945	948	rVB2	8254	10747	1.49%	0.154%
65	7.930	960	962	967	rBV	11773	11660	1.62%	0.167%
66	7.978	967	971	975	rVB3	10962	11057	1.53%	0.158%
67	8.021	975	979	981	rBV2	27975	33020	4.58%	0.472%
68	8.043	981	983	986	rVV2	19382	19946	2.76%	0.285%
69	8.107	990	995	1001	rBV3	171147	214240	29.70%	3.064%
70	8.171	1004	1007	1009	rBV2	7456	7928	1.10%	0.113%
71	8.197	1009	1012	1017	rVB5	9240	11850	1.64%	0.169%
72	8.262	1022	1024	1028	rVV	36788	32112	4.45%	0.459%
73	8.304	1028	1032	1034	rVV2	45320	47121	6.53%	0.674%
74	8.326	1034	1036	1040	rVB	38699	31590	4.38%	0.452%
75	8.368	1040	1044	1047	rBB	9713	10021	1.39%	0.143%
76	8.427	1050	1055	1060	rBV3	7692	12093	1.68%	0.173%
77	8.502	1067	1069	1073	rVB	26290	20671	2.87%	0.296%
78	8.545	1073	1077	1081	rBV	478160	418681	58.04%	5.988%
79	8.796	1122	1124	1128	rVB	17378	13794	1.91%	0.197%
	9.186	1193	1197	1201	rBV	535311	474156	65.73%	6.781%
81	9.875	1322	1326	1330	rBV	224190	179099	24.83%	2.561%

C00233

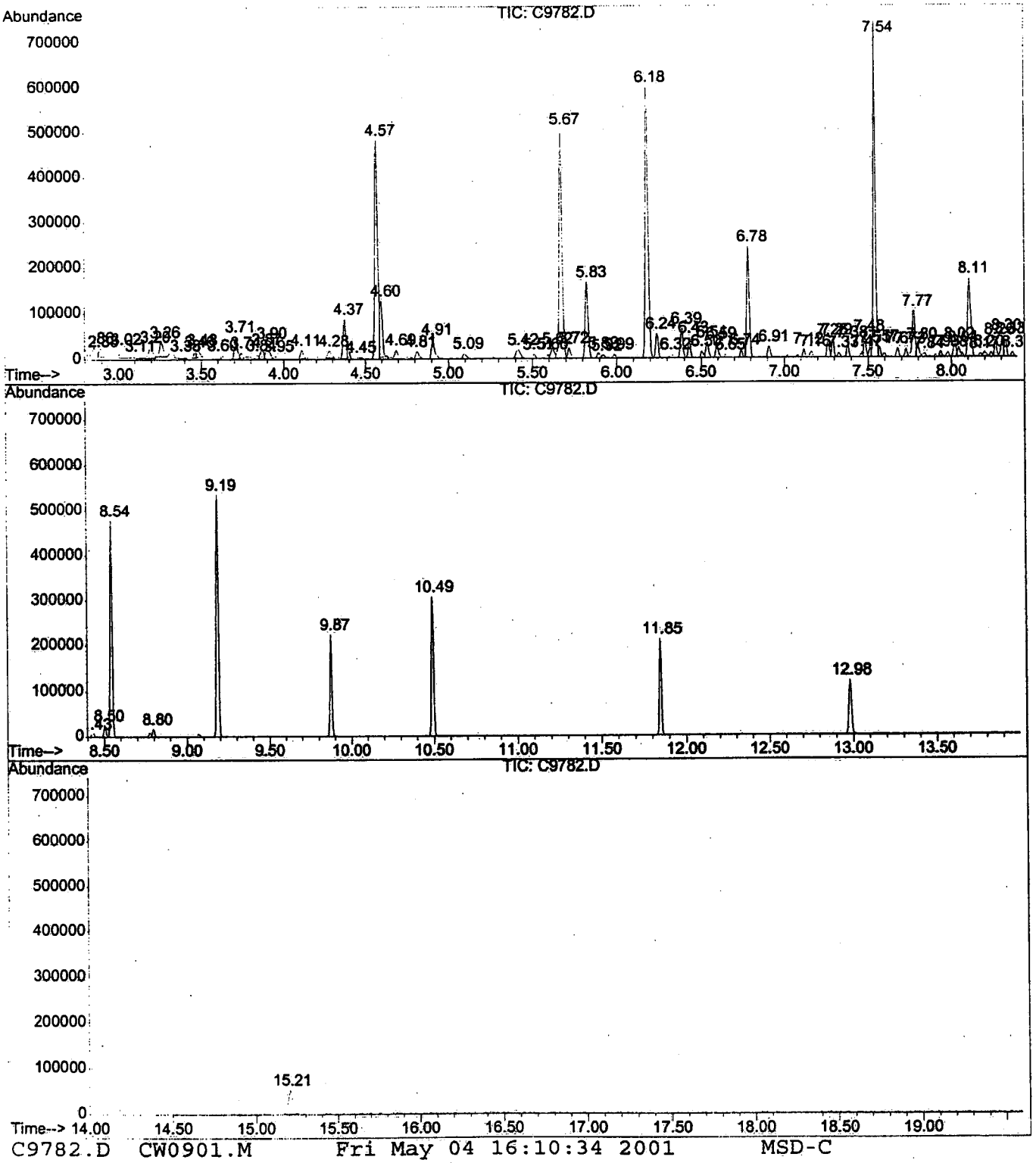
82	10.489	1437	1441	1445	rBV	307826	261495	36.25%	3.740%
83	11.846	1692	1695	1699	rBV	211837	166826	23.13%	2.386%
84	12.979	1902	1907	1915	rBV	119423	134091	18.59%	1.918%
85	15.206	2317	2324	2334	rBV	51725	87939	12.19%	1.258%

Sum of corrected areas: 6992411

C9782.D CW0901.M Fri May 04 16:10:33 2001 MSD-C

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-04-01\C9782.D
Operator : DP
Acquired : 4 May 2001 15:44 using AcqMethod CW0901
Instrument : MSD-C
Sample Name: MW-6,2867-005,A,1000mL,100,05/04/01
Misc Info : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/01,1
Vial Number: 14
Quant File :CW0901.RES (RTE Integrator)



C9782.D CW0901.M Fri May 04 16:10:34 2001 MSD-C

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9782.D
Acq On : 4 May 2001 15:44
Sample : MW-6,2867-005,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

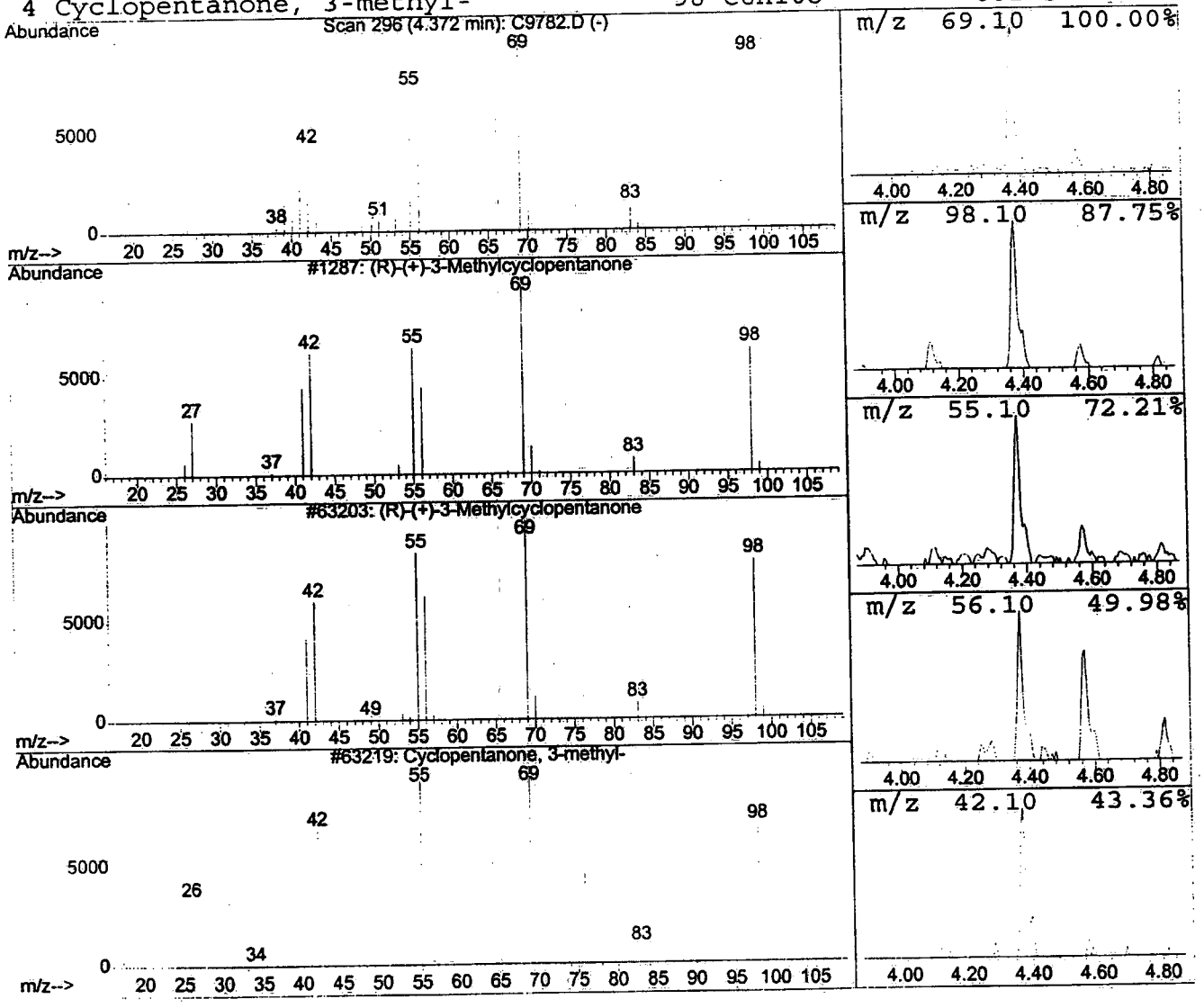
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Unknown cyclic hydrocarbon Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.37	5.50 UG	99183	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(R)-(+)-3-Methylcyclopentanone	98	C6H10O	006672-30-6	91
2	(R)-(+)-3-Methylcyclopentanone	98	C6H10O	006672-30-6	91
3	Cyclopentanone, 3-methyl-	98	C6H10O	001757-42-2	91
4	Cyclopentanone, 3-methyl-	98	C6H10O	001757-42-2	90



000301

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9782.D Vial: 14
Acq On : 4 May 2001 15:44 Operator: DP
Sample : MW-6,2867-005,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

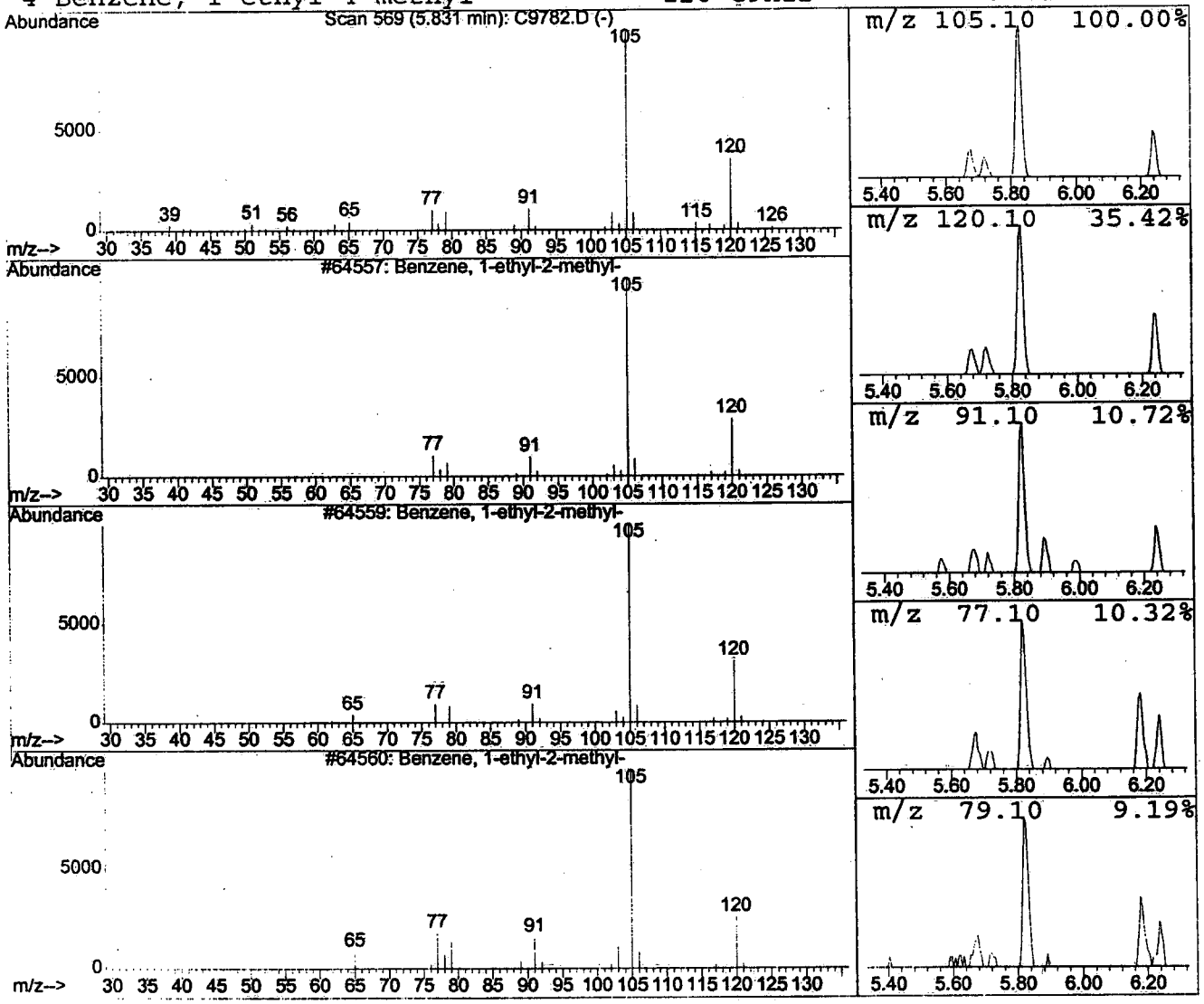
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Substituted benzene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.83	11.15 UG	201090	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	93
4	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	93



2471

CC0302

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9782.D Vial: 14
Acq On : 4 May 2001 15:44 Operator: DP
Sample : MW-6,2867-005,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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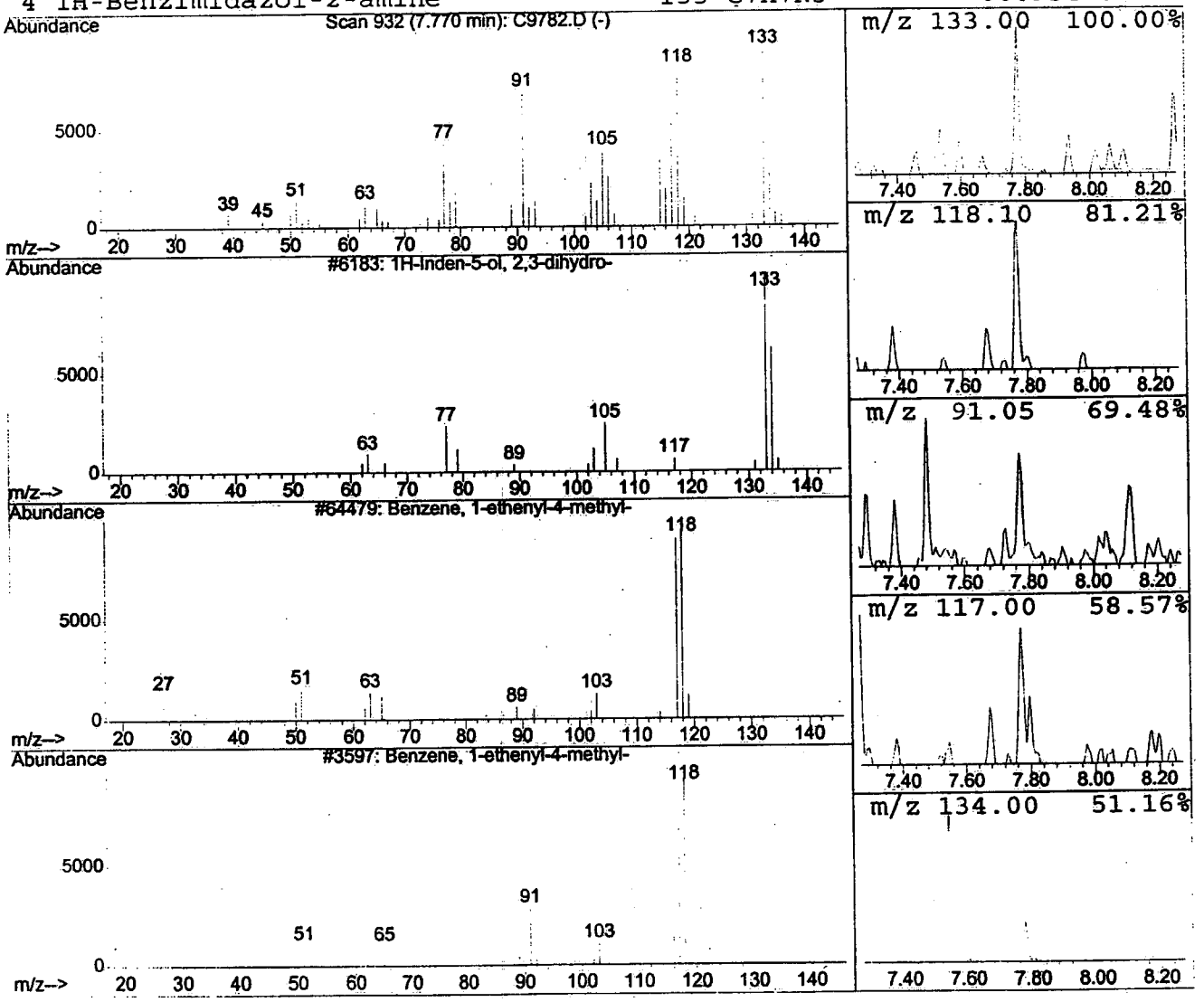
Peak Number 3 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.77	6.83 UG	115391	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Inden-5-ol, 2,3-dihydro-	134	C9H10O	001470-94-6	45
2	Benzene, 1-ethenyl-4-methyl-	118	C9H10	000622-97-9	38
3	Benzene, 1-ethenyl-4-methyl-	118	C9H10	000622-97-9	38
4	1H-Benzimidazol-2-amine	133	C7H7N3	000934-32-7	35



3477

000303

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9782.D Vial: 14
Acq On : 4 May 2001 15:44 Operator: DP
Sample : MW-6,2867-005,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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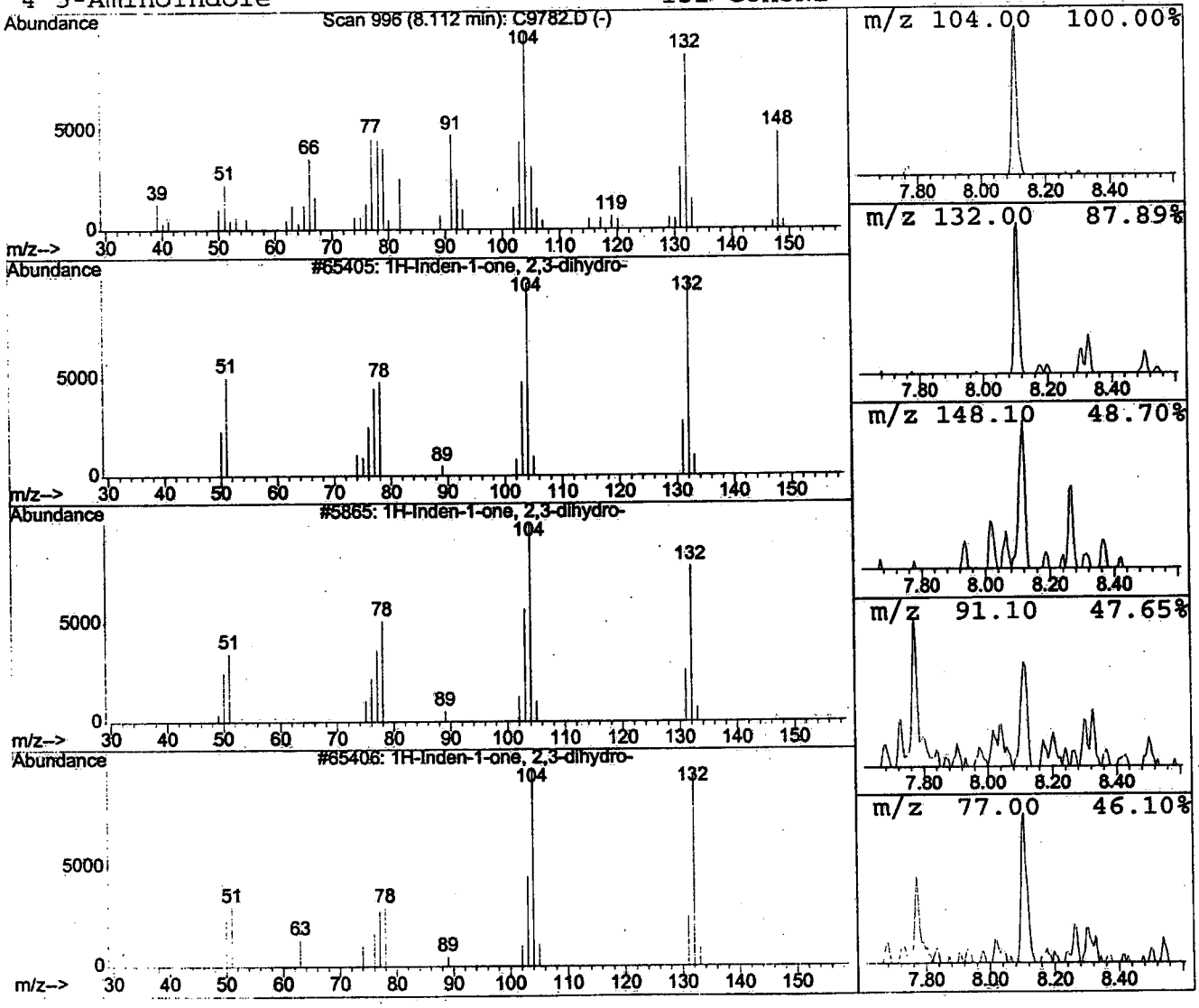
Peak Number 4 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.11	12.69 UG	214240	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	96
2	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	95
3	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	87
4	5-Aminoindole	132	C8H8N2	005192-03-0	72



2172

C00304

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D Vial: 17
Acq On : 4 May 2001 17:25 Operator: DP
Sample : MW-7,2867-006,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
B Integration Params: RTEINT.P
Quant Time: May 7 9:11 2001 Quant Results File: CW0901.RES

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration
DataAcq Meth : CW0901

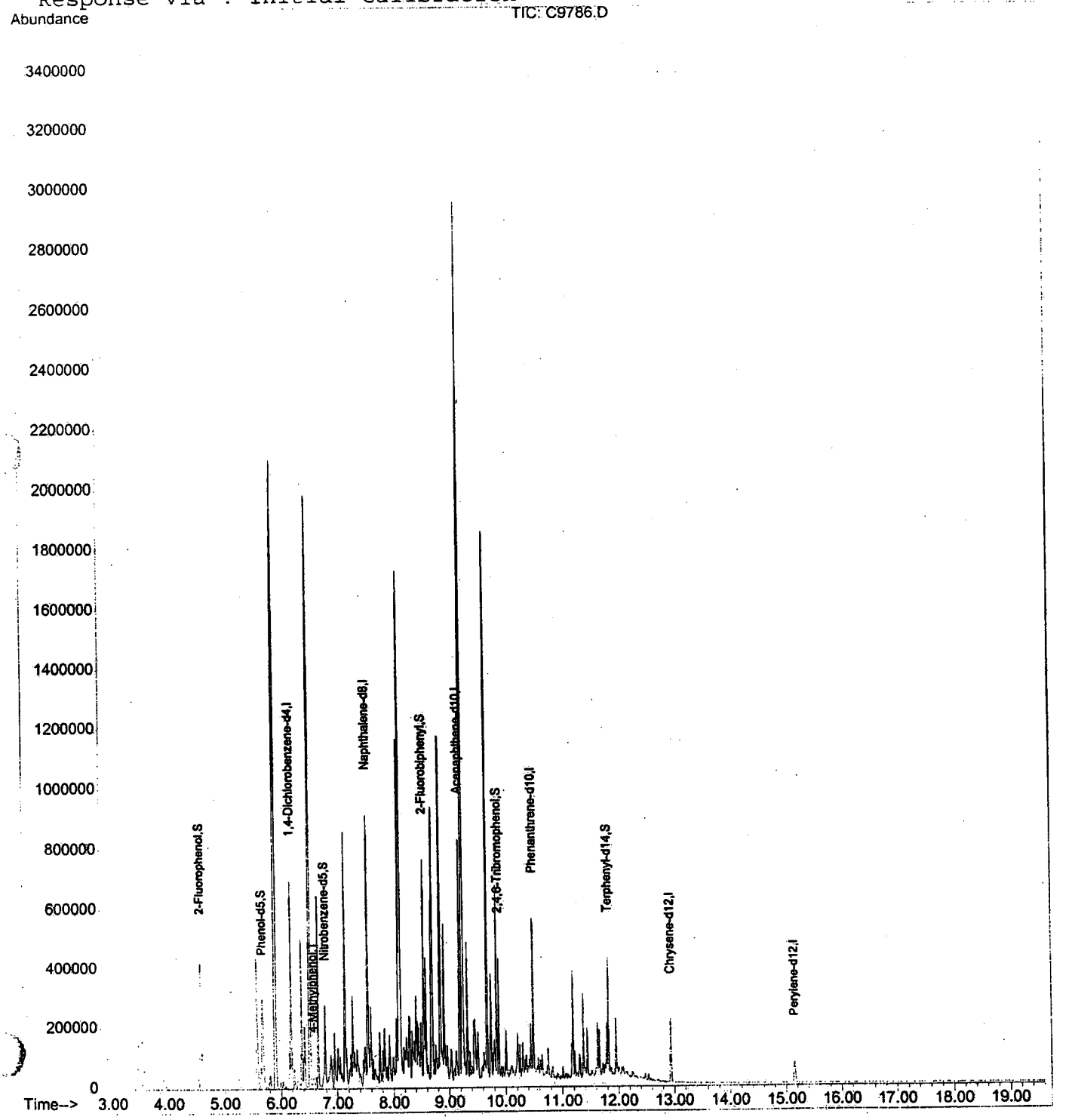
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.18	152	146963	40.00	UG	-0.02
22) Naphthalene-d8	7.54	136	420309	40.00	UG	-0.02
39) Acenaphthene-d10	9.18	164	160330	40.00	UG	-0.01
60) Phenanthrene-d10	10.49	188	186571	40.00	UG	-0.01
75) Chrysene-d12	12.93	240	87673	40.00	UG	-0.02
84) Perylene-d12	15.15	264	57225	40.00	UG	-0.03
System Monitoring Compounds						
4) 2-Fluorophenol	4.57	112	266031	56.70	UG	-0.02
Spiked Amount 100.000	Range 42 - 95		Recovery = 56.70%			
6) Phenol-d5	5.67	99	281882m	60.47	UG	-0.02
Spiked Amount 100.000	Range 59 - 97		Recovery = 60.47%			
23) Nitrobenzene-d5	6.78	82	93301	29.88	UG	-0.01
Spiked Amount 50.000	Range 49 - 105		Recovery = 59.76%			
43) 2-Fluorobiphenyl	8.54	172	200830	38.02	UG	-0.01
Spiked Amount 50.000	Range 54 - 110		Recovery = 76.04%			
64) 2,4,6-Tribromophenol	9.88	330	50593	107.70	UG	0.00
Spiked Amount 100.000	Range 48 - 126		Recovery = 107.70%			
77) Terphenyl-d14	11.82	244	126354	51.07	UG	-0.02
Spiked Amount 50.000	Range 53 - 123		Recovery = 102.14%			
Target Compounds						Qvalue
17) 4-Methylphenol	6.57	108	4722	1.58	UG	86

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D Vial: 17
Acq On : 4 May 2001 17:25 Operator: DP
Sample : MW-7,2867-006,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 9:11 2001 Quant Results File: CW0901.RES

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration



3475

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 1.5
Stop Thrs : 1.5

Filtering: 5
Min Area: 0.5 % 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	3.462	121	126	132	rBV	146221	202012	4.88%	0.547%
2	3.564	138	145	149	rVB3	57404	78248	1.89%	0.212%
3	4.568	328	333	337	rVV	436003	567891	13.72%	1.538%
4	4.600	337	339	347	rVB	117826	117287	2.83%	0.318%
5	5.572	516	521	529	rBV	436782	593636	14.34%	1.608%
6	5.642	529	534	536	rBV	72192	83936	2.03%	0.227%
[redacted]	5.674	536	540	551	rVB	296554	587899	14.20%	1.592%
[redacted]	5.807	559	565	572	rBB3	45855	76338	1.84%	0.207%
[redacted]	5.893	573	581	582	rBV	2007325	2051642	49.55%	5.557%
10	6.149	625	629	631	rBV	120131	119089	2.88%	0.323%
11	6.181	631	635	641	rVB	692556	780499	18.85%	2.114%
12	6.235	641	645	652	rVB3	66138	78622	1.90%	0.213%
13	6.368	665	670	674	rVV	500984	495616	11.97%	1.342%
14	6.406	674	677	678	rVV2	96878	97195	2.35%	0.263%
15	6.422	678	680	685	rVB	201769	196929	4.76%	0.533%
16	6.513	690	697	702	rVV	1979093	2536526	61.26%	6.871%
17	6.657	720	724	729	rBV	644079	656318	15.85%	1.778%
18	6.785	735	748	752	rBV3	274172	374525	9.05%	1.014%
19	6.886	764	767	773	rVB5	108472	167299	4.04%	0.453%
20	6.951	773	779	784	rBV2	182802	258054	6.23%	0.699%
21	7.015	786	791	796	rVV2	128007	208161	5.03%	0.564%
22	7.052	796	798	801	rVV2	96324	90484	2.19%	0.245%
23	7.138	807	814	817	rVV	846881	885639	21.39%	2.399%
24	7.164	817	819	823	rVV	122873	104920	2.53%	0.284%
25	7.218	823	829	831	rVV6	52846	75439	1.82%	0.204%
26	7.239	831	833	836	rVV	98544	95279	2.30%	0.258%
27	7.276	836	840	843	rVV2	293188	323732	7.82%	0.877%
28	7.309	843	846	851	rVV2	103796	173771	4.20%	0.471%
[redacted]	7.351	851	854	857	rVV2	113044	142409	3.44%	0.386%
[redacted]	7.399	861	863	870	rVB2	42161	66830	1.61%	0.181%
31	7.458	870	874	876	rBV2	88144	89572	2.16%	0.243%

32	7.495	876	881	883	rVV2	117093	178813	4.32%	0.484%
33	7.538	883	889	895	rVV	887610	1006317	24.31%	2.726%
34	7.597	895	900	905	rVV2	246765	314288	7.59%	0.851%
35	7.757	925	930	936	rBV3	173130	233197	5.63%	0.632%
36	7.811	936	940	943	rBV3	104678	116804	2.82%	0.316%
	7.843	943	946	950	rVB	168191	168399	4.07%	0.456%
38	7.928	956	962	968	rVB2	155827	206426	4.99%	0.559%
39	7.992	968	974	978	rBV3	81630	139932	3.38%	0.379%
40	8.051	982	985	989	rBV3	180543	199948	4.83%	0.542%
41	8.088	989	992	994	rBV	1072244	905092	21.86%	2.452%
42	8.120	994	998	1002	rVB2	1606309	2125666	51.34%	5.758%
43	8.185	1007	1010	1012	rBV4	87927	94293	2.28%	0.255%
44	8.227	1016	1018	1025	rVB4	101212	136254	3.29%	0.369%
45	8.281	1025	1028	1029	rBV	171314	138191	3.34%	0.374%
46	8.334	1034	1038	1041	rBV2	157121	203610	4.92%	0.552%
47	8.377	1044	1046	1048	rVV	106753	93596	2.26%	0.254%
48	8.409	1048	1052	1054	rVV	257164	266835	6.44%	0.723%
49	8.430	1054	1056	1058	rVV	170161	141773	3.42%	0.384%
50	8.452	1058	1060	1064	rVV3	147569	136770	3.30%	0.370%
51	8.494	1064	1068	1072	rVB3	177468	198067	4.78%	0.537%
52	8.543	1072	1077	1081	rBV	724731	708893	17.12%	1.920%
53	8.580	1081	1084	1089	rVB	388042	353006	8.53%	0.956%
54	8.681	1097	1103	1104	rBV2	599864	602568	14.55%	1.632%
55	8.703	1104	1107	1110	rVB	892868	849313	20.51%	2.301%
56	8.762	1114	1118	1122	rBV5	99719	135401	3.27%	0.367%
57	8.836	1128	1132	1136	rBV	1103461	1131496	27.33%	3.065%
	8.906	1142	1145	1148	rVV	477552	389445	9.41%	1.055%
	8.965	1154	1156	1160	rVB	112279	106857	2.58%	0.289%
60	9.034	1160	1169	1174	rVB4	104533	169544	4.10%	0.459%
61	9.119	1182	1185	1187	rBV2	83895	86361	2.09%	0.234%
62	9.184	1193	1197	1201	rBV	791272	728518	17.60%	1.973%
63	9.237	1201	1207	1213	rVV	2921963	4140257	100.00%	11.215%
64	9.280	1213	1215	1218	rVV2	78303	64538	1.56%	0.175%
65	9.322	1219	1223	1228	rVB	455184	396934	9.59%	1.075%
66	9.365	1228	1231	1236	rBV	84786	80145	1.94%	0.217%
67	9.440	1242	1245	1247	rVV	182411	181670	4.39%	0.492%
68	9.461	1247	1249	1253	rVV	184886	192975	4.66%	0.523%
69	9.509	1253	1258	1263	rVB2	154538	225821	5.45%	0.612%
70	9.616	1275	1278	1281	rVV4	71798	79134	1.91%	0.214%
71	9.670	1285	1288	1292	rVB	1810104	1651583	39.89%	4.474%
72	9.745	1295	1302	1306	rBV	348167	406131	9.81%	1.100%
73	9.782	1306	1309	1311	rBV	77076	82860	2.00%	0.224%
74	9.803	1311	1313	1317	rVV	109313	99868	2.41%	0.271%
75	9.841	1317	1320	1323	rVB2	631322	514878	12.44%	1.395%
76	9.878	1323	1327	1331	rVB	395995	359994	8.69%	0.975%
77	10.006	1345	1351	1354	rBV2	154307	160275	3.87%	0.434%
78	10.209	1380	1389	1394	rBV3	141439	224502	5.42%	0.608%
79	10.252	1394	1397	1400	rVB2	109907	91692	2.21%	0.248%
	10.300	1404	1406	1410	rVV	105150	85792	2.07%	0.232%
81	10.364	1416	1418	1422	rVB2	59452	59036	1.43%	0.160%

000308

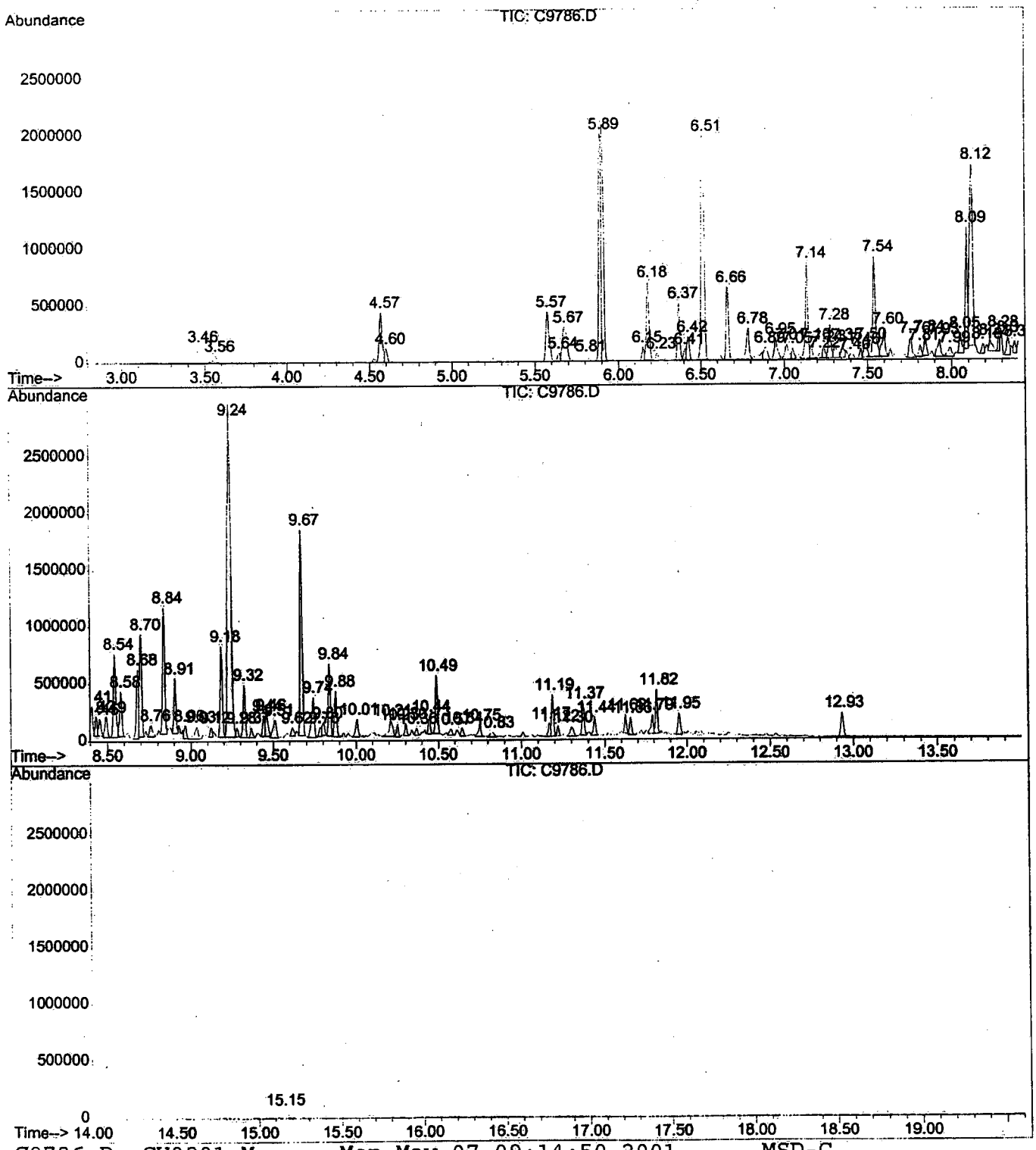
82	10.444	1430	1433	1436	rVB	153678	124870	3.02%	0.338%
83	10.487	1437	1441	1445	rVB	505923	453174	10.95%	1.228%
84	10.573	1454	1457	1462	rVB6	53197	62466	1.51%	0.169%
85	10.642	1468	1470	1474	rVB4	70498	67486	1.63%	0.183%
	10.749	1485	1490	1495	rVB3	98653	113981	2.75%	0.309%
[illegible]	10.829	1499	1505	1509	rVB6	39333	60805	1.47%	0.165%
	11.166	1563	1568	1570	rBV3	115897	128983	3.12%	0.349%
89	11.187	1570	1572	1575	rVV	360672	280966	6.79%	0.761%
90	11.219	1575	1578	1581	rVB2	86250	67427	1.63%	0.183%
91	11.299	1588	1593	1600	rVB4	80075	120619	2.91%	0.327%
92	11.369	1603	1606	1610	rBV	279081	236527	5.71%	0.641%
93	11.438	1615	1619	1623	rVB	158634	143059	3.46%	0.388%
94	11.625	1651	1654	1657	rBV	159192	132283	3.20%	0.358%
95	11.657	1657	1660	1664	rVB4	150599	127050	3.07%	0.344%
96	11.791	1680	1685	1687	rVV2	167027	166524	4.02%	0.451%
97	11.817	1687	1690	1693	rVB	384677	319333	7.71%	0.865%
98	11.951	1711	1715	1719	rBV2	188166	204861	4.95%	0.555%
99	12.934	1894	1899	1904	rVB	212749	233908	5.65%	0.634%
100	15.145	2306	2313	2322	rVB	70385	133866	3.23%	0.363%

Sum of corrected areas: 36917743

C9786.D CW0901.M Mon May 07 09:14:49 2001 MSD-C

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Operator : DP
Acquired : 4 May 2001 17:25 using AcqMethod CW0901
Instrument : MSD-C
Sample Name: MW-7,2867-006,A,1000mL,100,05/04/01
Misc Info : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/01,1
Vial Number: 17
Quant File :CW0901.RES (RTE Integrator)



C9786.D CW0901.M Mon May 07 09:14:50 2001 MSD-C

C00310

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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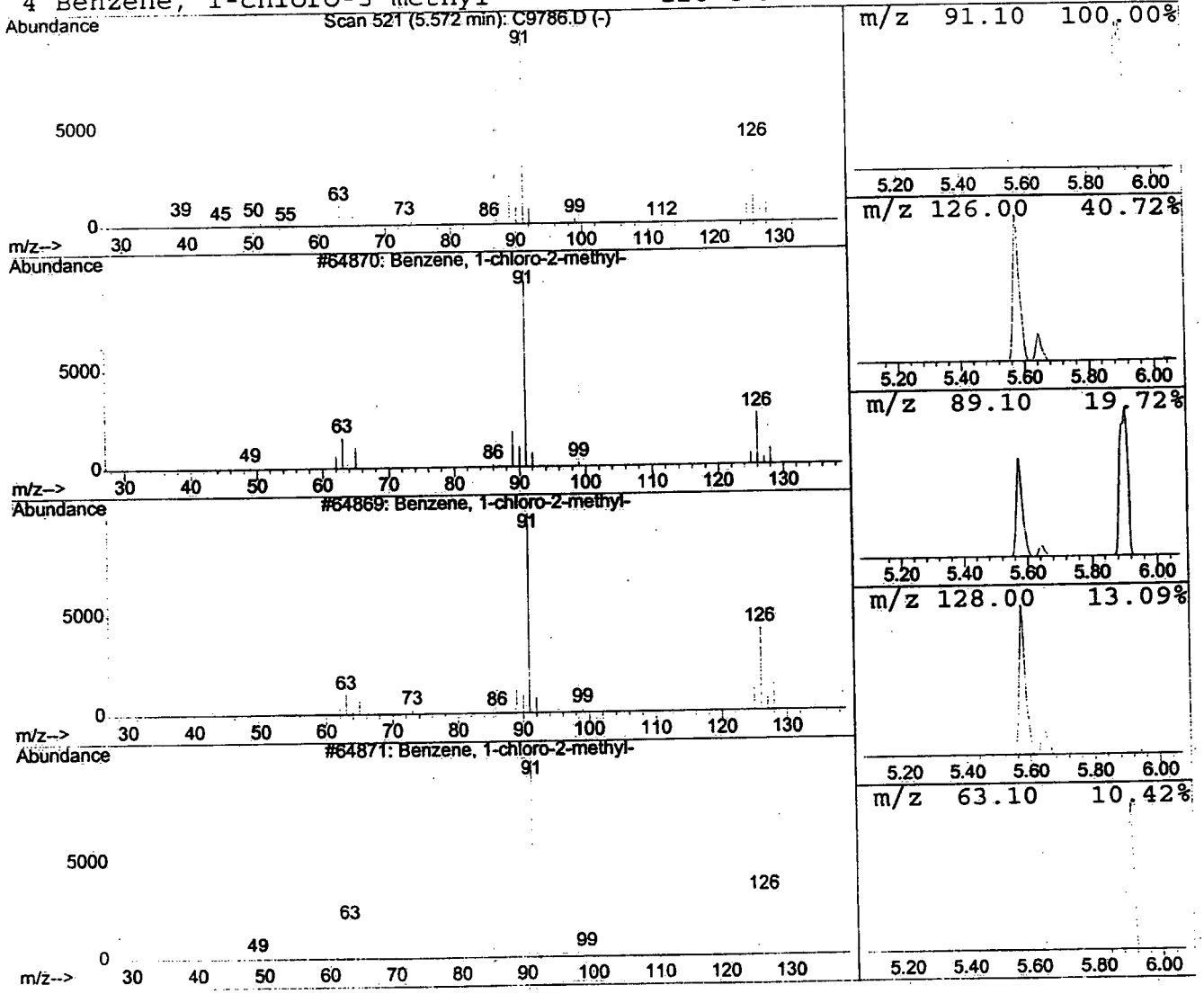
Peak Number 1 Substituted benzene Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.57	30.42 UG	593636	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	96
2	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	94
3	Benzene, 1-chloro-2-methyl-	126	C7H7Cl	000095-49-8	94
4	Benzene, 1-chloro-3-methyl-	126	C7H7Cl	000108-41-8	93



3160

C9031

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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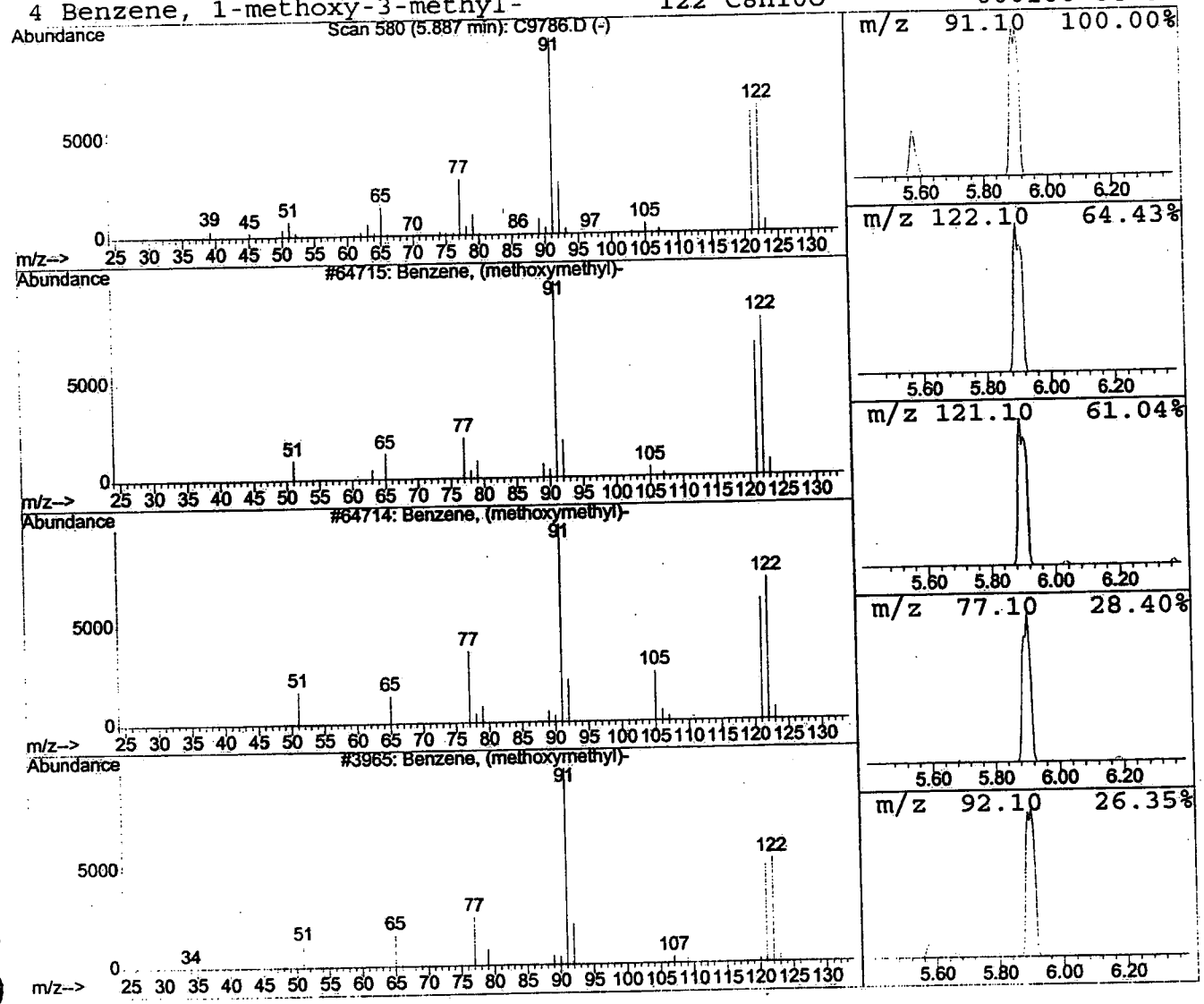
Peak Number 2 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.89	105.15 UG	2051640	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (methoxymethyl)-	122	C8H10O	000538-86-3	93
2	Benzene, (methoxymethyl)-	122	C8H10O	000538-86-3	90
3	Benzene, (methoxymethyl)-	122	C8H10O	000538-86-3	87
4	Benzene, 1-methoxy-3-methyl-	122	C8H10O	000100-84-5	59



C00312

3/4/1

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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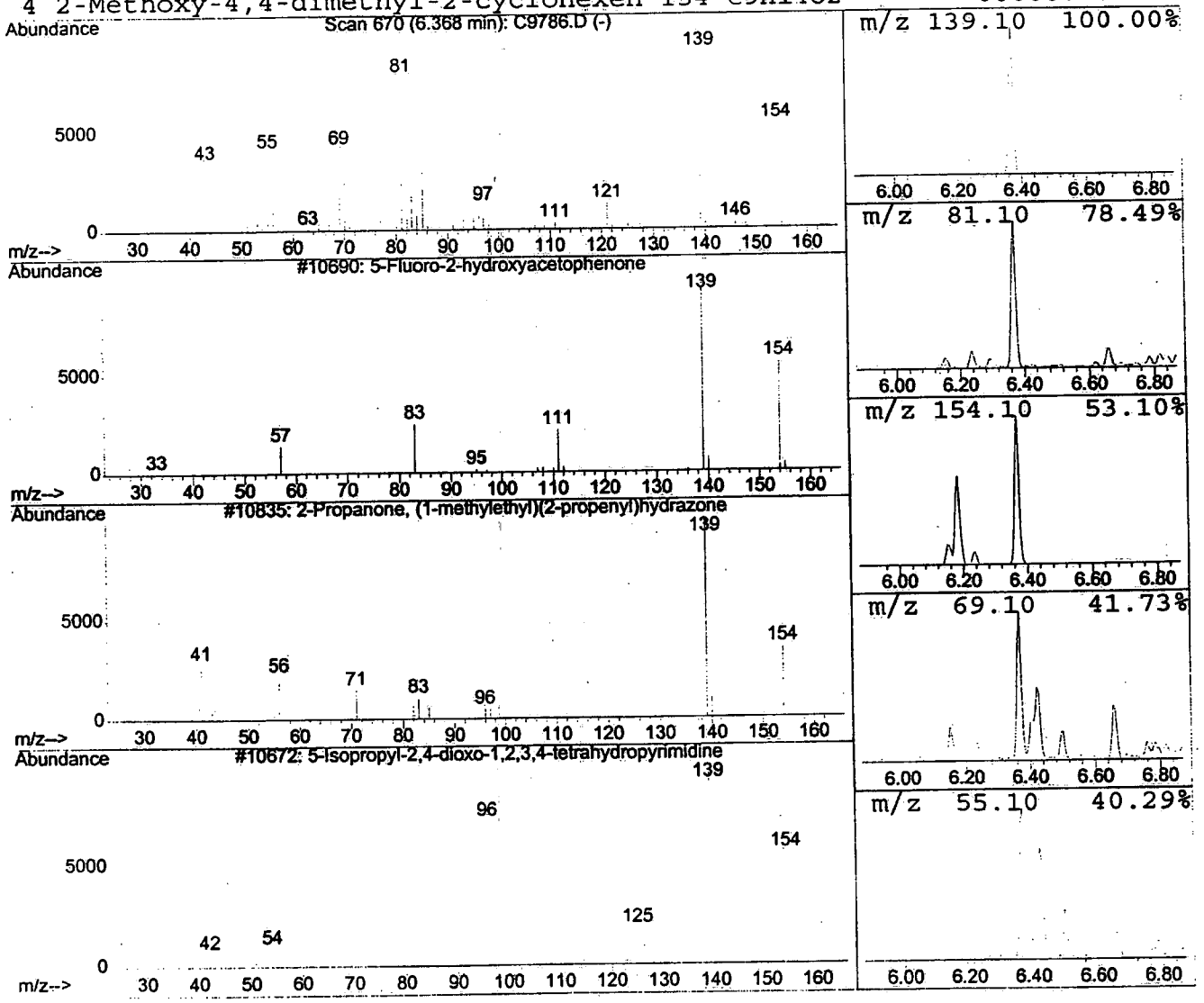
Peak Number 3 Unknown — Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.37	25.40 UG	495616	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Fluoro-2-hydroxyacetophenone	154	C8H7FO2	000394-32-1	43
2	2-Propanone, (1-methylethyl)(2-prop	154	C9H18N2	000000-00-0	35
3	5-Isopropyl-2,4-dioxo-1,2,3,4-tetra	154	C7H10N2O2	017432-95-0	35
4	2-Methoxy-4,4-dimethyl-2-cyclohexen	154	C9H14O2	000000-00-0	35



21/47

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D Vial: 17
Acq On : 4 May 2001 17:25 Operator: DP
Sample : MW-7,2867-006,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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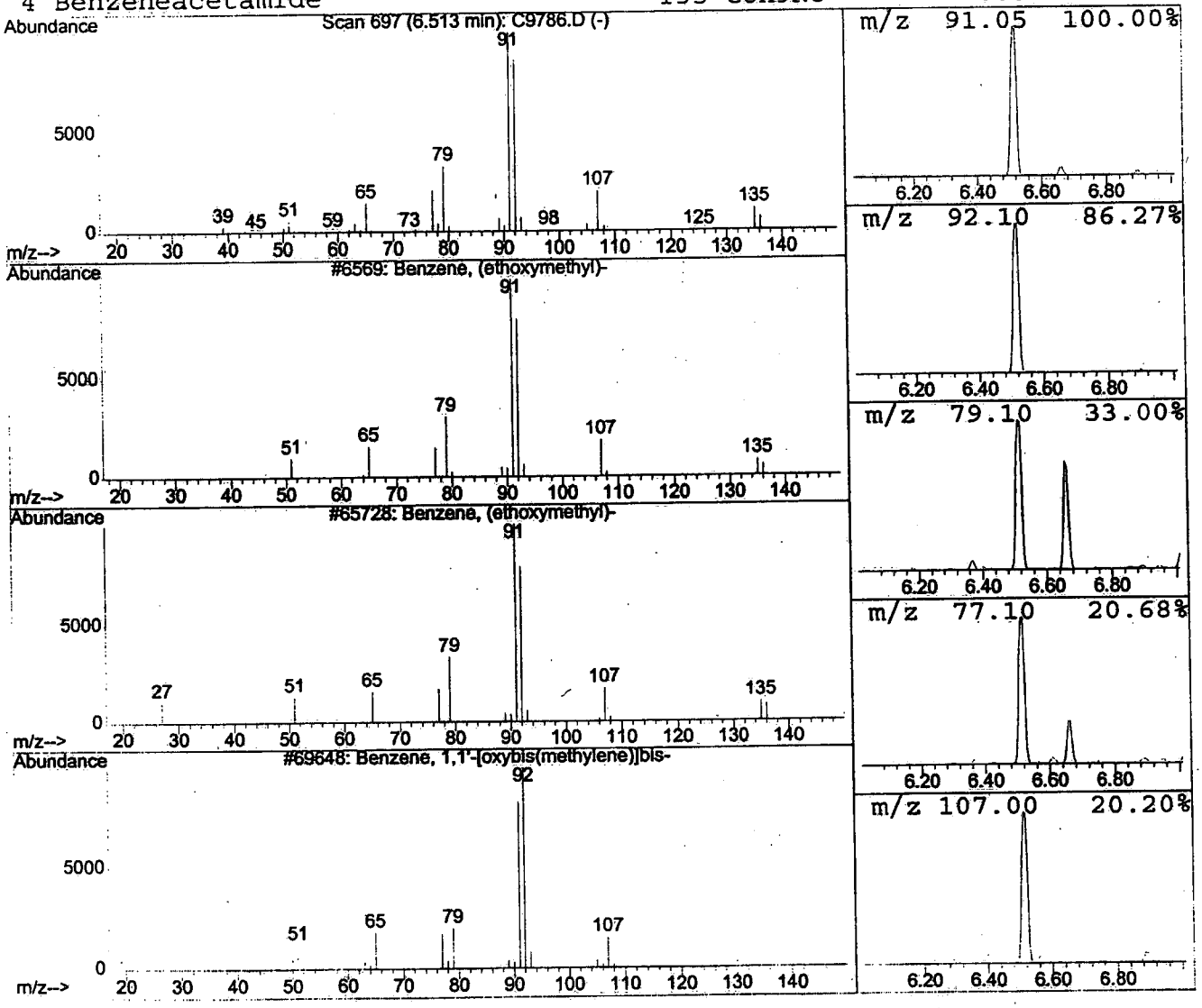
Peak Number 4 Substituted benzene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.51	130.00 UG	2536530	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (ethoxymethyl)-	136	C9H12O	000539-30-0	91
2	Benzene, (ethoxymethyl)-	136	C9H12O	000539-30-0	90
3	Benzene, 1,1'-[oxybis(methylene)]bi	198	C14H14O	000103-50-4	50
4	Benzeneacetamide	135	C8H9NO	000103-81-1	50



Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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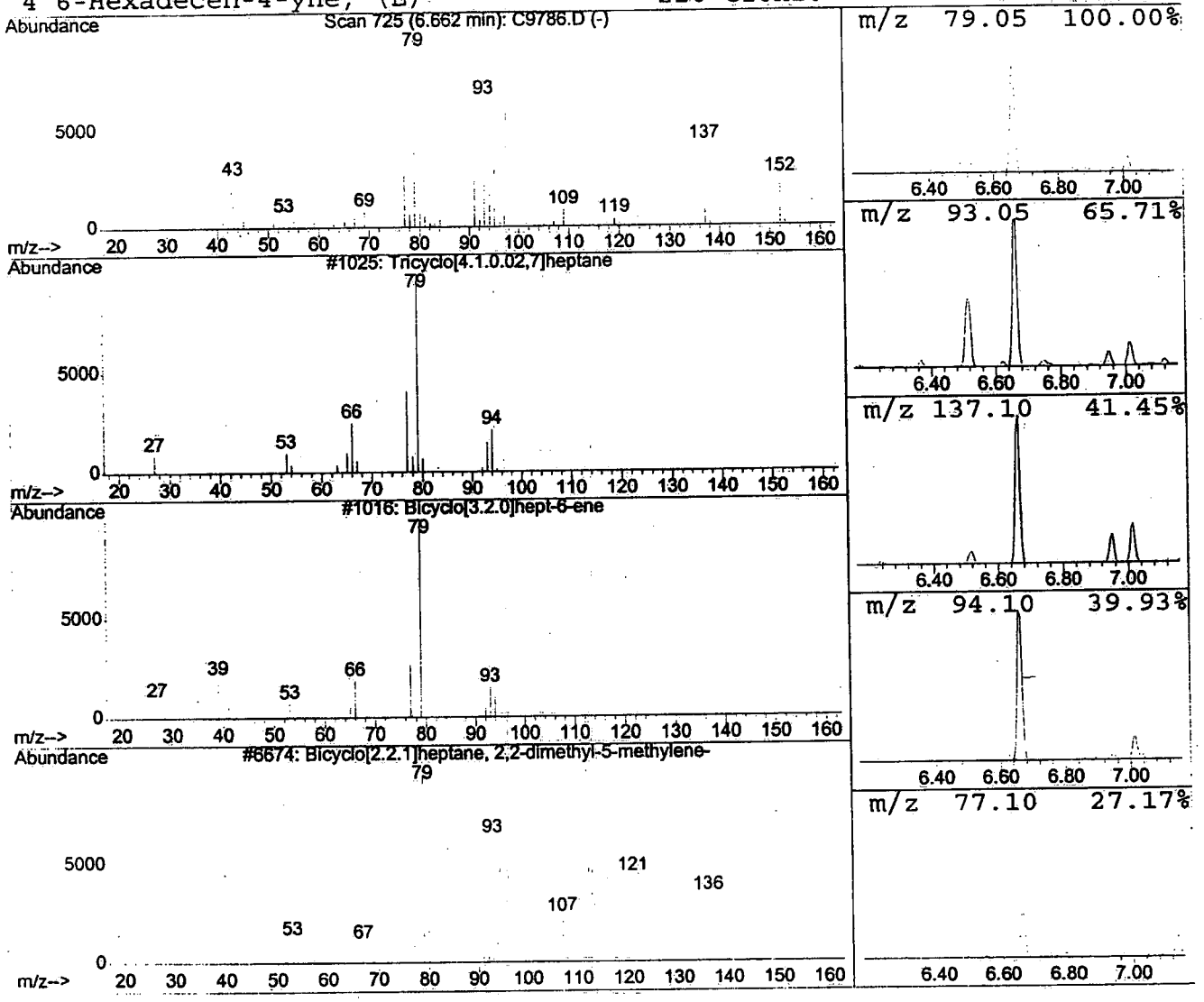
Peak Number 5 Unknown — Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.66	33.64 UG	656318	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tricyclo[4.1.0.02,7]heptane	94	C7H10	000287-13-8	43
2	Bicyclo[3.2.0]hept-6-ene	94	C7H10	004927-03-1	42
3	Bicyclo[2.2.1]heptane, 2,2-dimethyl	136	C10H16	000497-32-5	38
4	6-Hexadecen-4-yne, (E)-	220	C16H28	074744-52-8	36



3/4/04

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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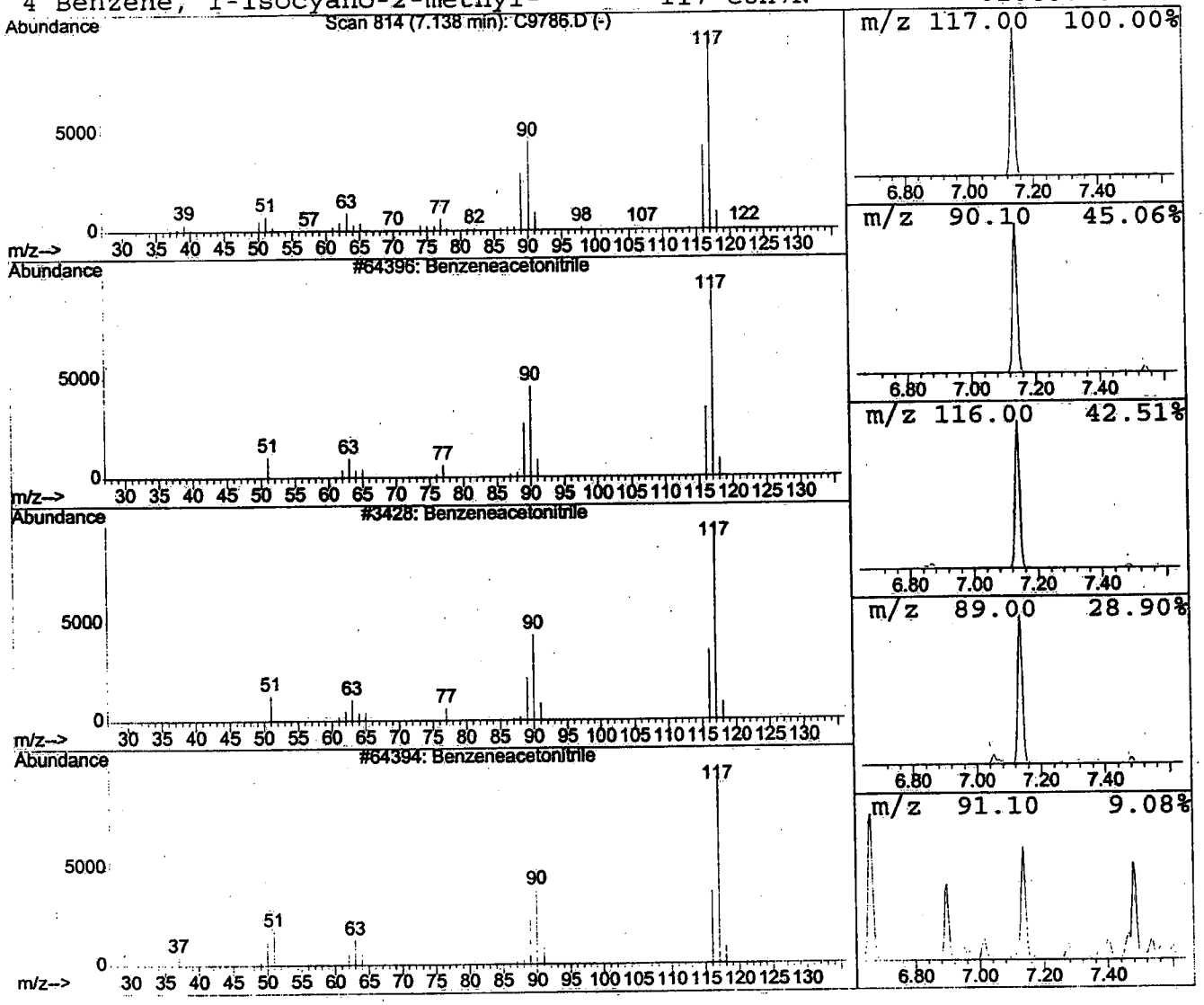
Peak Number 6 Substituted benzene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.14	35.20 UG	885639	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneacetonitrile	117	C8H7N	000140-29-4	95
2	Benzeneacetonitrile	117	C8H7N	000140-29-4	95
3	Benzeneacetonitrile	117	C8H7N	000140-29-4	91
4	Benzene, 1-isocyano-2-methyl-	117	C8H7N	010468-64-1	91



3485

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D Vial: 17
Acq On : 4 May 2001 17:25 Operator: DP
Sample : MW-7,2867-006,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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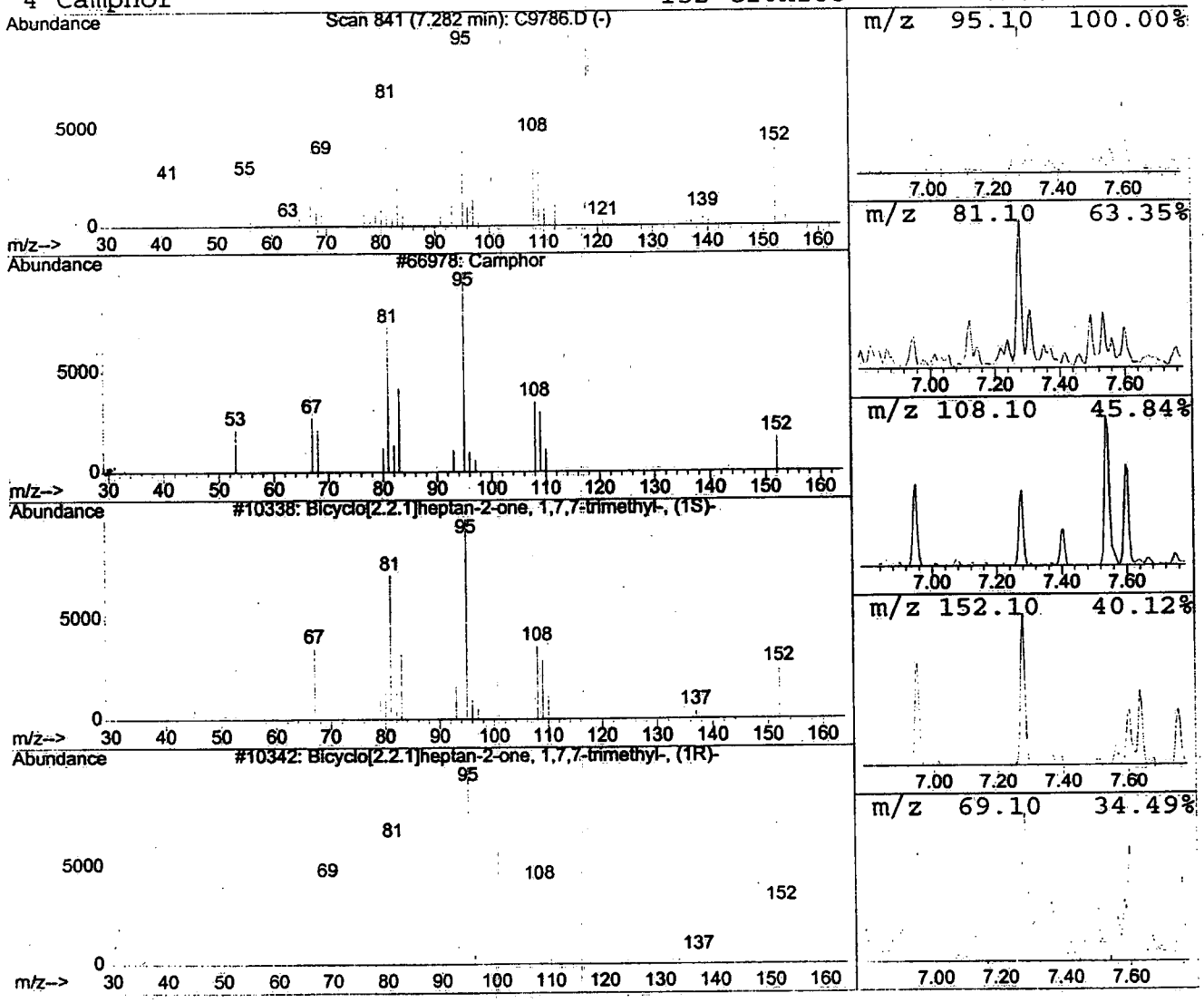
Peak Number 7 Unknown cyclic hydrocarbon Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.28	12.87 UG	323732	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Camphor	152	C10H16O	000076-22-2	97
2	Bicyclo[2.2.1]heptan-2-one, 1,7,7-t	152	C10H16O	000464-48-2	96
3	Bicyclo[2.2.1]heptan-2-one, 1,7,7-t	152	C10H16O	000464-49-3	96
4	Camphor	152	C10H16O	000076-22-2	95



34486

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D Vial: 17
Acq On : 4 May 2001 17:25 Operator: DP
Sample : MW-7,2867-006,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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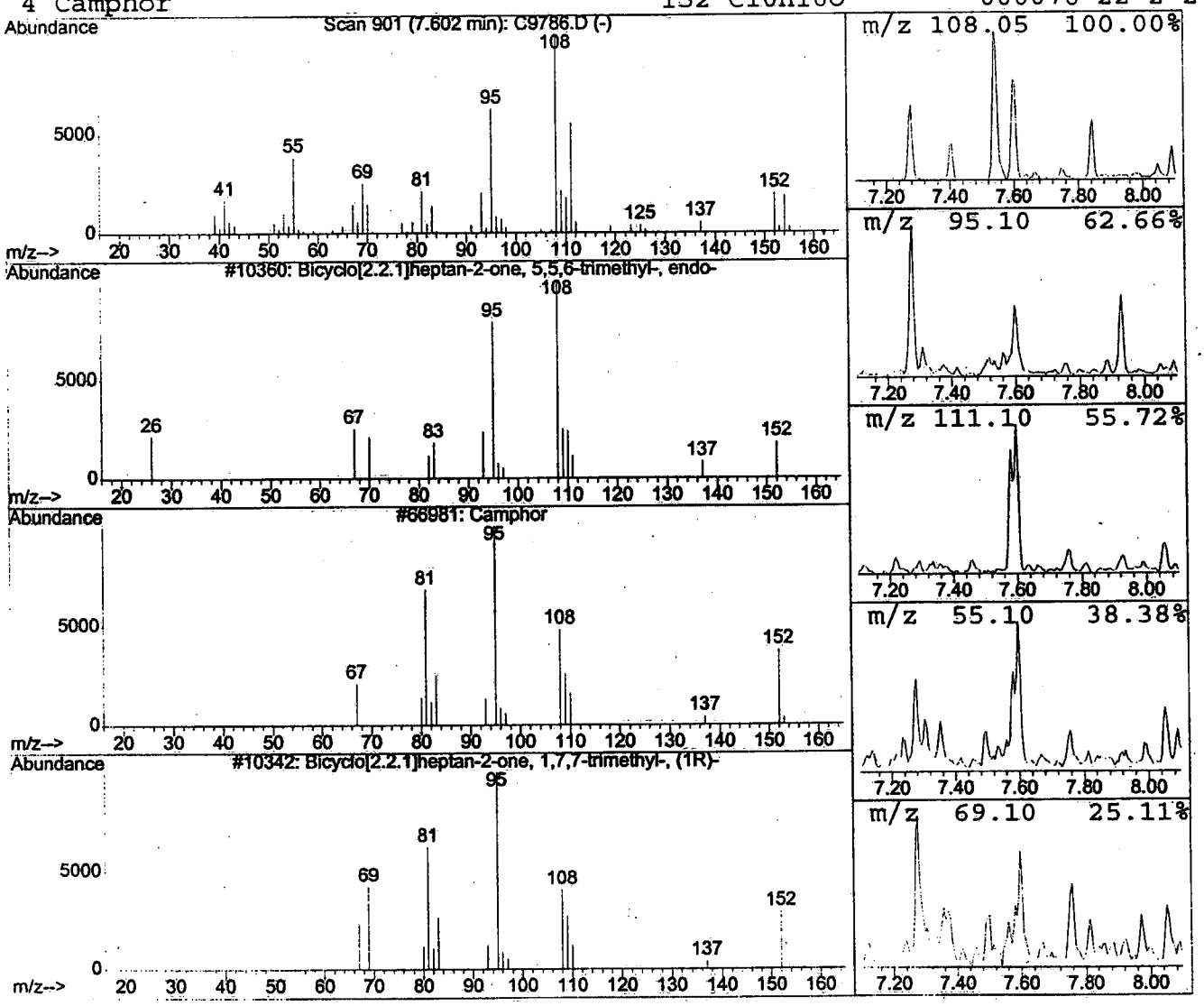
Peak Number 8 Unknown Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.60	12.49 UG	314288	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[2.2.1]heptan-2-one, 5,5,6-t	152	C10H16O	003767-44-0	50
2	Camphor	152	C10H16O	000076-22-2	46
3	Bicyclo[2.2.1]heptan-2-one, 1,7,7-t	152	C10H16O	000464-49-3	38
4	Camphor	152	C10H16O	000076-22-2	27



3487

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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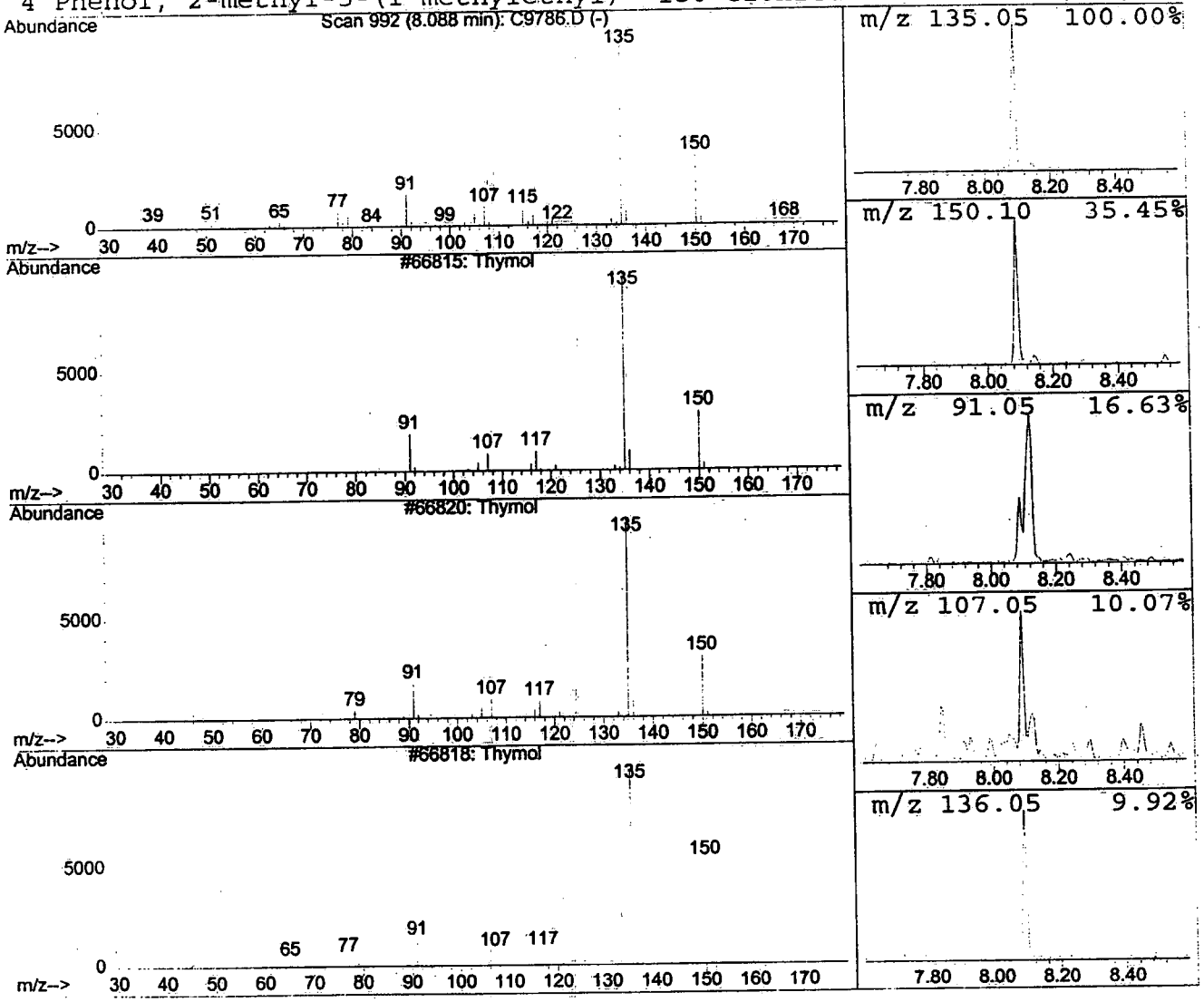
Peak Number 9 Substituted benzene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.09	35.98 UG	905092	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Thymol	150	C10H14O	000089-83-8	93
2	Thymol	150	C10H14O	000089-83-8	90
3	Thymol	150	C10H14O	000089-83-8	90
4	Phenol, 2-methyl-5-(1-methylethyl)-	150	C10H14O	000499-75-2	90



34488

C00319

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D Vial: 17
Acq On : 4 May 2001 17:25 Operator: DP
Sample : MW-7,2867-006,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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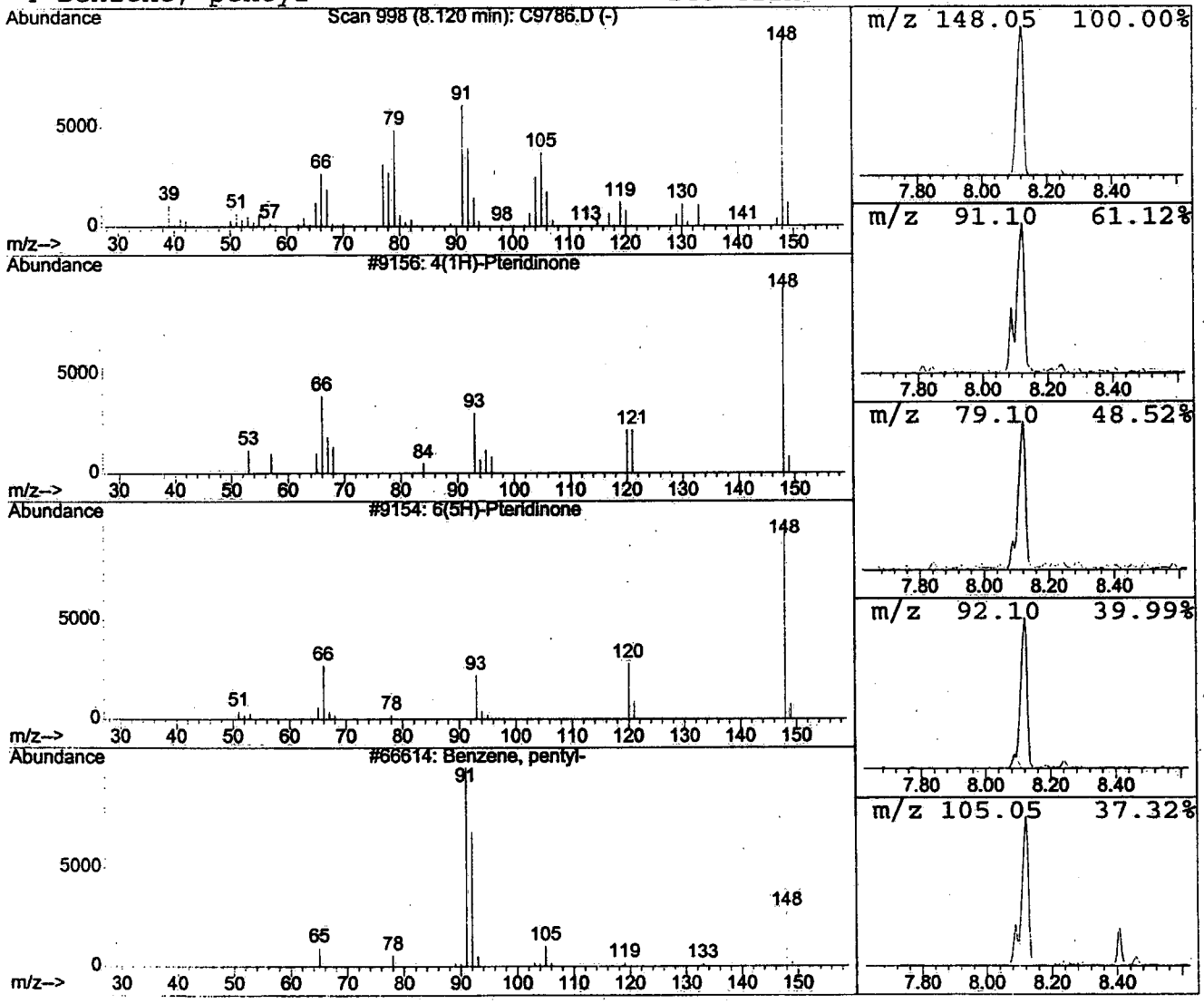
Peak Number 10 Unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.12	84.49 UG	2125670	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4(1H)-Pteridinone	148	C6H4N4O	000700-47-0	43
2	6(5H)-Pteridinone	148	C6H4N4O	002432-26-0	43
3	Benzene, pentyl-	148	C11H16	000538-68-1	38
4	Benzene, pentyl-	148	C11H16	000538-68-1	35



34/89

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

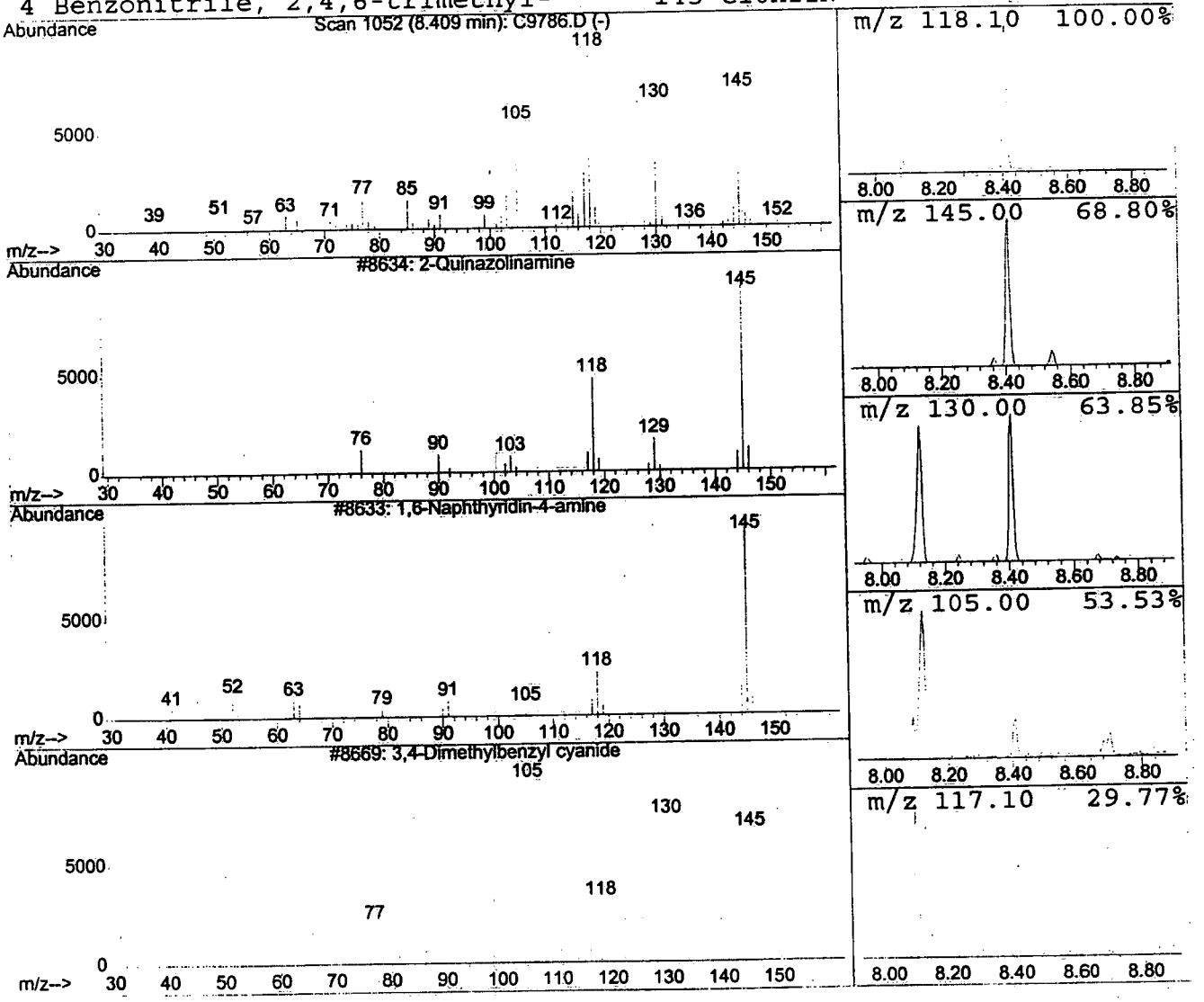
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 11 Unknown — Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.41	14.65 UG	266835	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Quinazolinamine	145	C8H7N3	001687-51-0	58
2	1,6-Naphthyridin-4-amine	145	C8H7N3	028593-08-0	47
3	3,4-Dimethylbenzyl cyanide	145	C10H11N	003020-06-2	38
4	Benzonitrile, 2,4,6-trimethyl-	145	C10H11N	002571-52-0	35



2W90

C09321

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D Vial: 17
Acq On : 4 May 2001 17:25 Operator: DP
Sample : MW-7,2867-006,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

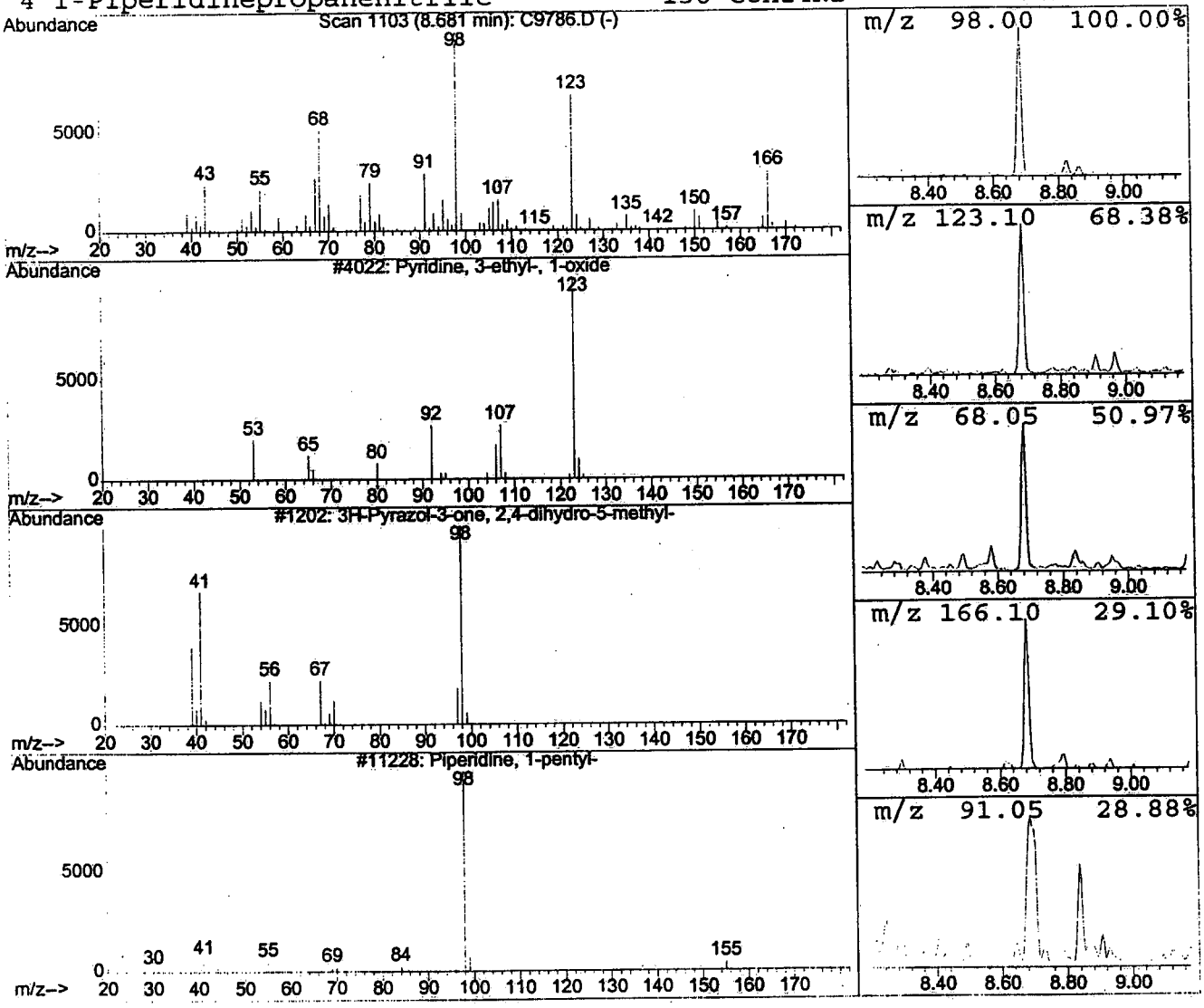
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 12 Unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.68	33.08 UG	602568	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyridine, 3-ethyl-, 1-oxide	123	C7H9NO	014906-62-8	25
2	3H-Pyrazol-3-one, 2,4-dihydro-5-met	98	C4H6N2O	000108-26-9	22
3	Piperidine, 1-pentyl-	155	C10H21N	010324-58-0	22
4	1-Piperidinepropanenitrile	138	C8H14N2	003088-41-3	22



34/91

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D Vial: 17
Acq On : 4 May 2001 17:25 Operator: DP
Sample : MW-7,2867-006,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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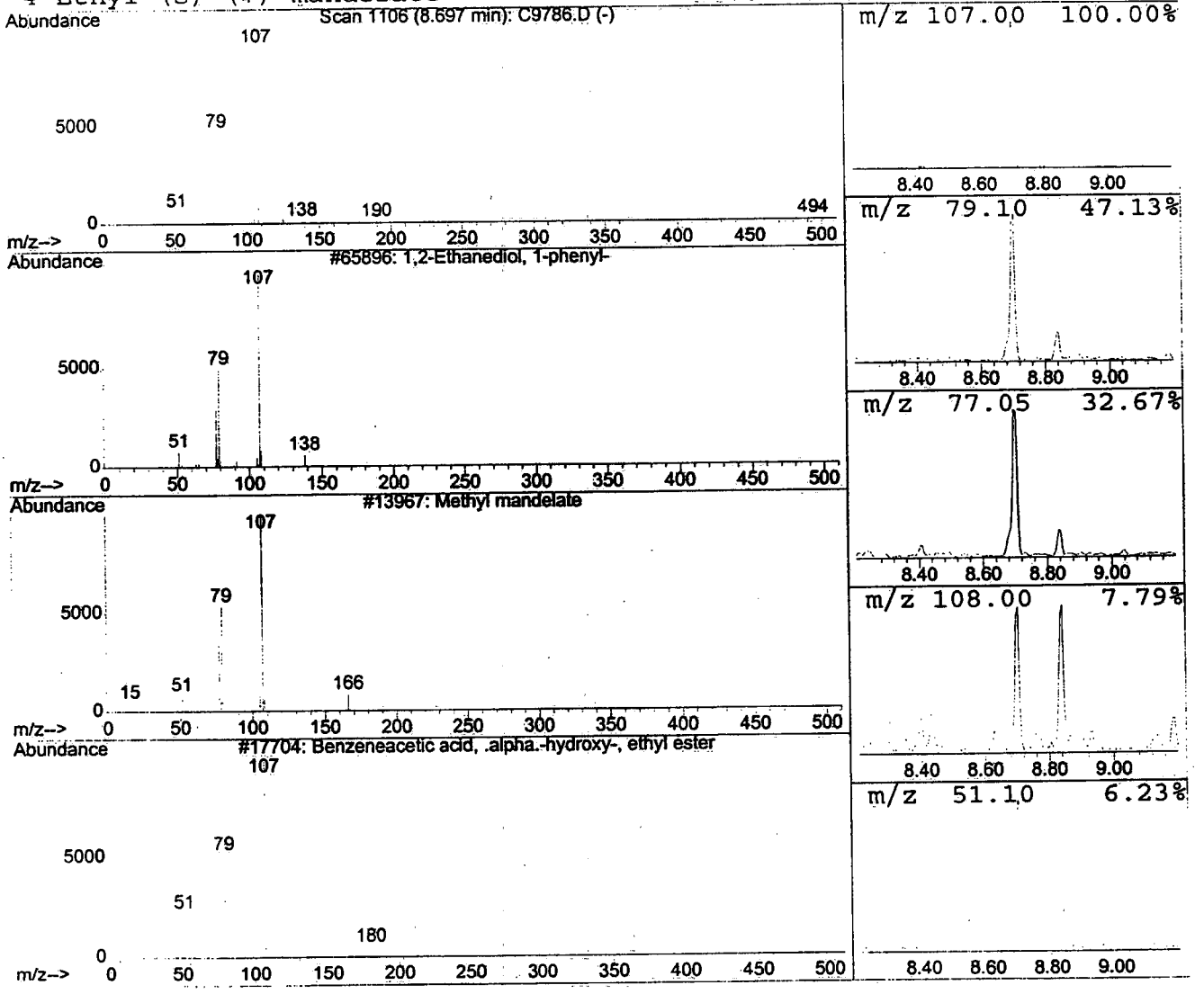
Peak Number 13 Unknown alkane Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.70	46.63 UG	849313	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2-Ethanediol, 1-phenyl-	138	C8H10O2	000093-56-1	78
2	Methyl mandelate	166	C9H10O3	004358-87-6	78
3	Benzeneacetic acid, .alpha.-hydroxy	180	C10H12O3	000774-40-3	78
4	Ethyl (S)-(+)-mandelate	180	C10H12O3	013704-09-1	78



3492

C003323

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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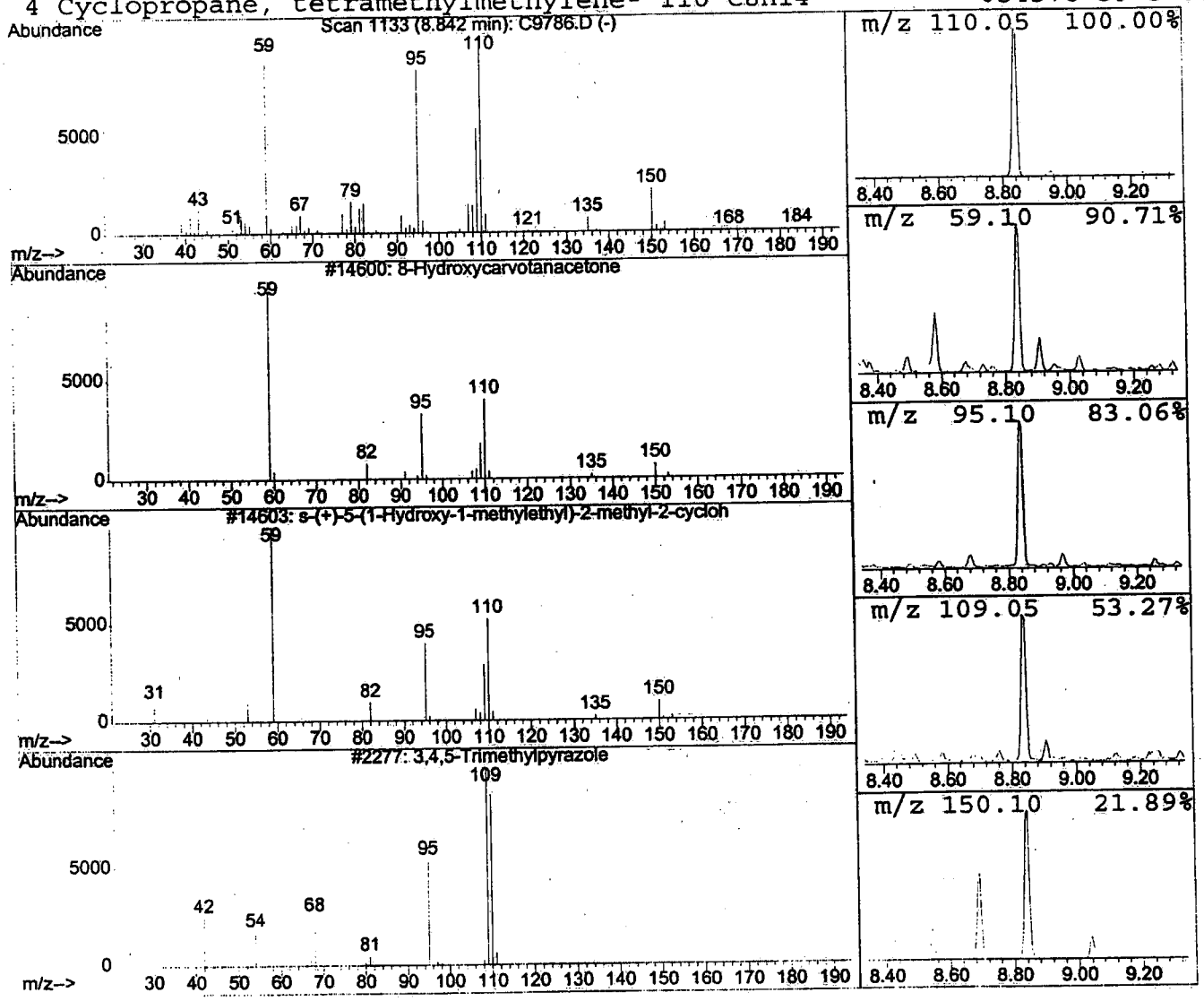
Peak Number 14 Unknown — Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.84	62.13 UG	1131500	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	8-Hydroxycarvotanacetone	168	C10H16O2	007712-46-1	91
2	s-(+)-5-(1-Hydroxy-1-methylethyl)-2	168	C10H16O2	060593-11-5	59
3	3,4,5-Trimethylpyrazole	110	C6H10N2	005519-42-6	38
4	Cyclopropane, tetramethylmethylene-	110	C8H14	054376-39-5	38



3493

CC0324

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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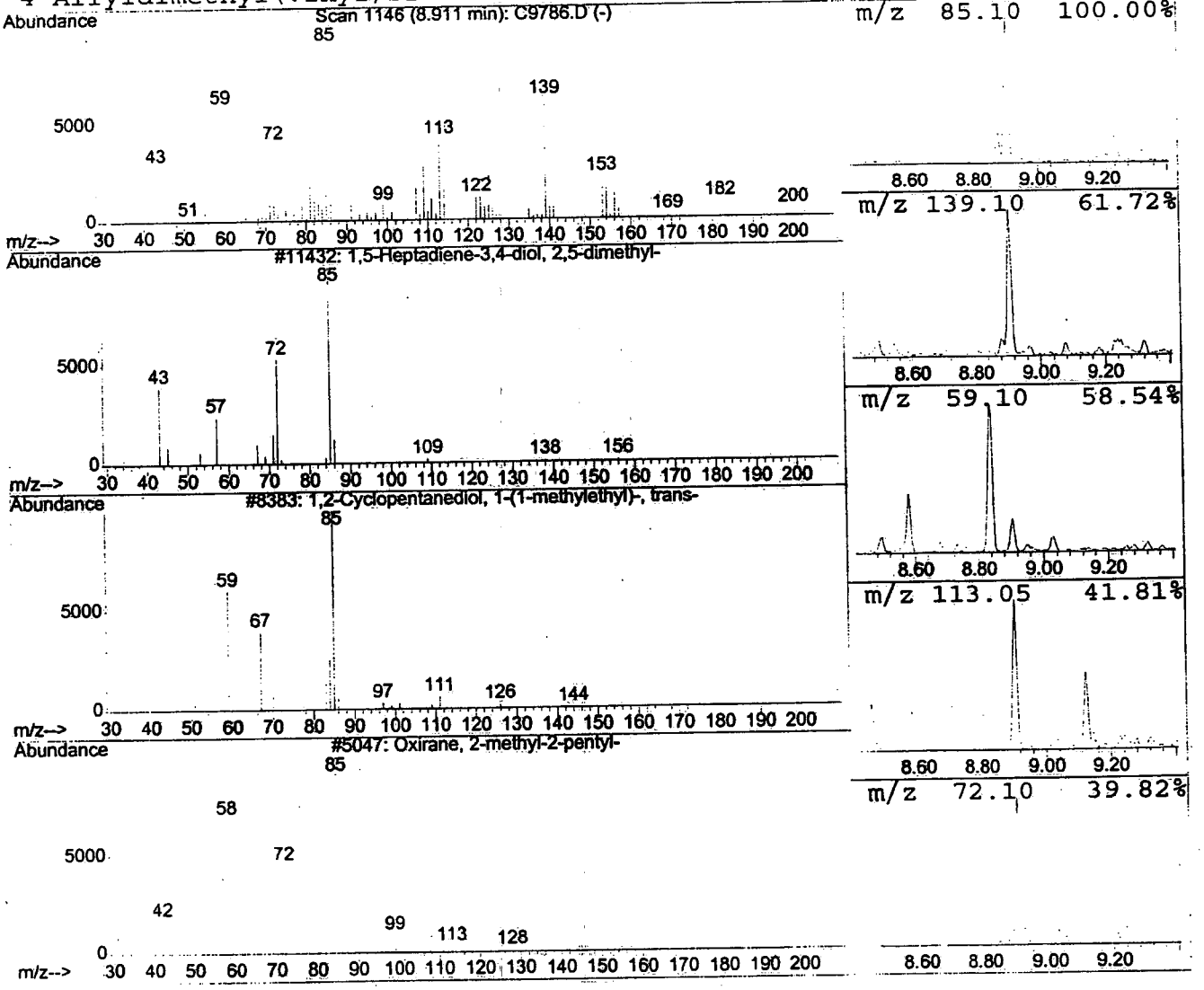
Peak Number 15 Unknown — Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.91	21.38 UG	389445	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,5-Heptadiene-3,4-diol, 2,5-dimeth	156	C9H16O2	022607-16-5	35
2	1,2-Cyclopentanediol, 1-(1-methylet	144	C8H16O2	056335-92-3	25
3	Oxirane, 2-methyl-2-pentyl-	128	C8H16O	053907-75-8	17
4	Allyldimethyl(vinyl)silane	126	C7H14Si	000000-00-0	16



3494

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D Vial: 17
Acq On : 4 May 2001 17:25 Operator: DP
Sample : MW-7,2867-006,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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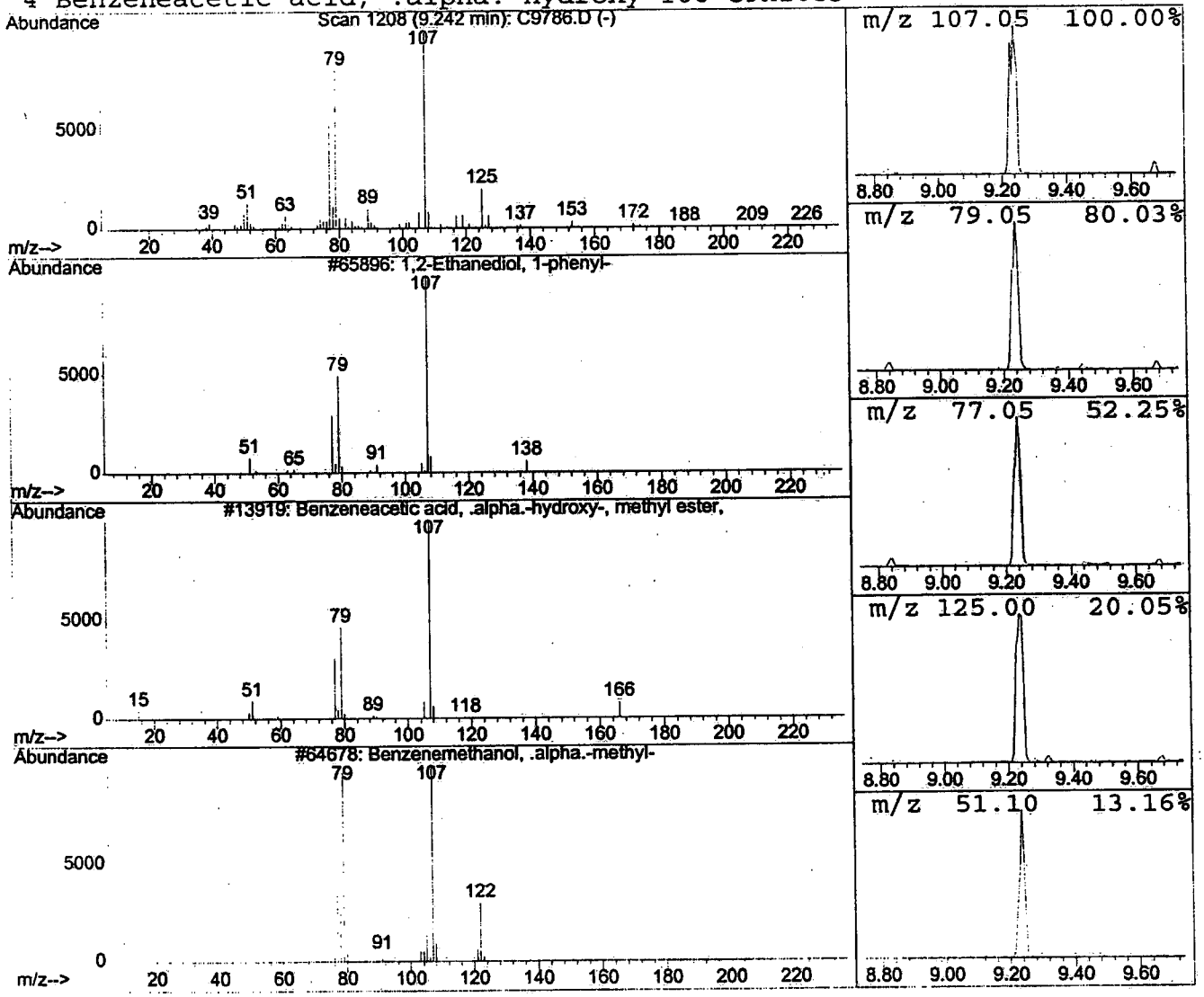
Peak Number 16 Unknown alkane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.24	227.32 UG	4140260	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2-Ethanediol, 1-phenyl-	138	C8H10O2	000093-56-1	80
2	Benzeneacetic acid, .alpha.-hydroxy	166	C9H10O3	020698-91-3	72
3	Benzenemethanol, .alpha.-methyl-	122	C8H10O	000098-85-1	72
4	Benzeneacetic acid, .alpha.-hydroxy	166	C9H10O3	021210-43-5	72



34/95

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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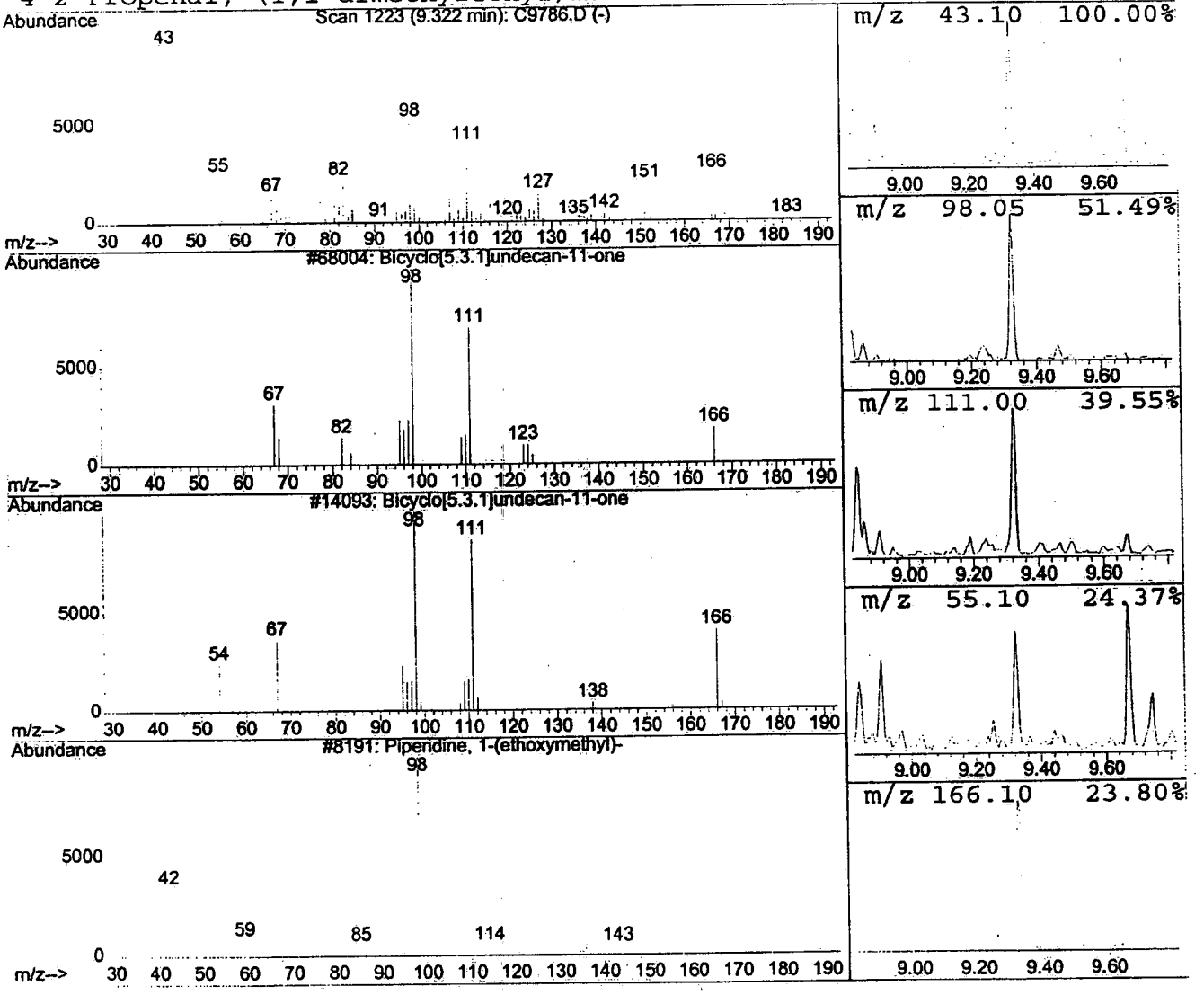
Peak Number 17 Unknown — Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.32	21.79 UG	396934	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[5.3.1]undecan-11-one	166	C11H18O	013348-11-3	37
2	Bicyclo[5.3.1]undecan-11-one	166	C11H18O	013348-11-3	32
3	Piperidine, 1-(ethoxymethyl)-	143	C8H17NO	003275-13-6	11
4	2-Propenal, (1,1-dimethylethyl)meth	126	C8H14O	072101-22-5	10



CC03567

3491

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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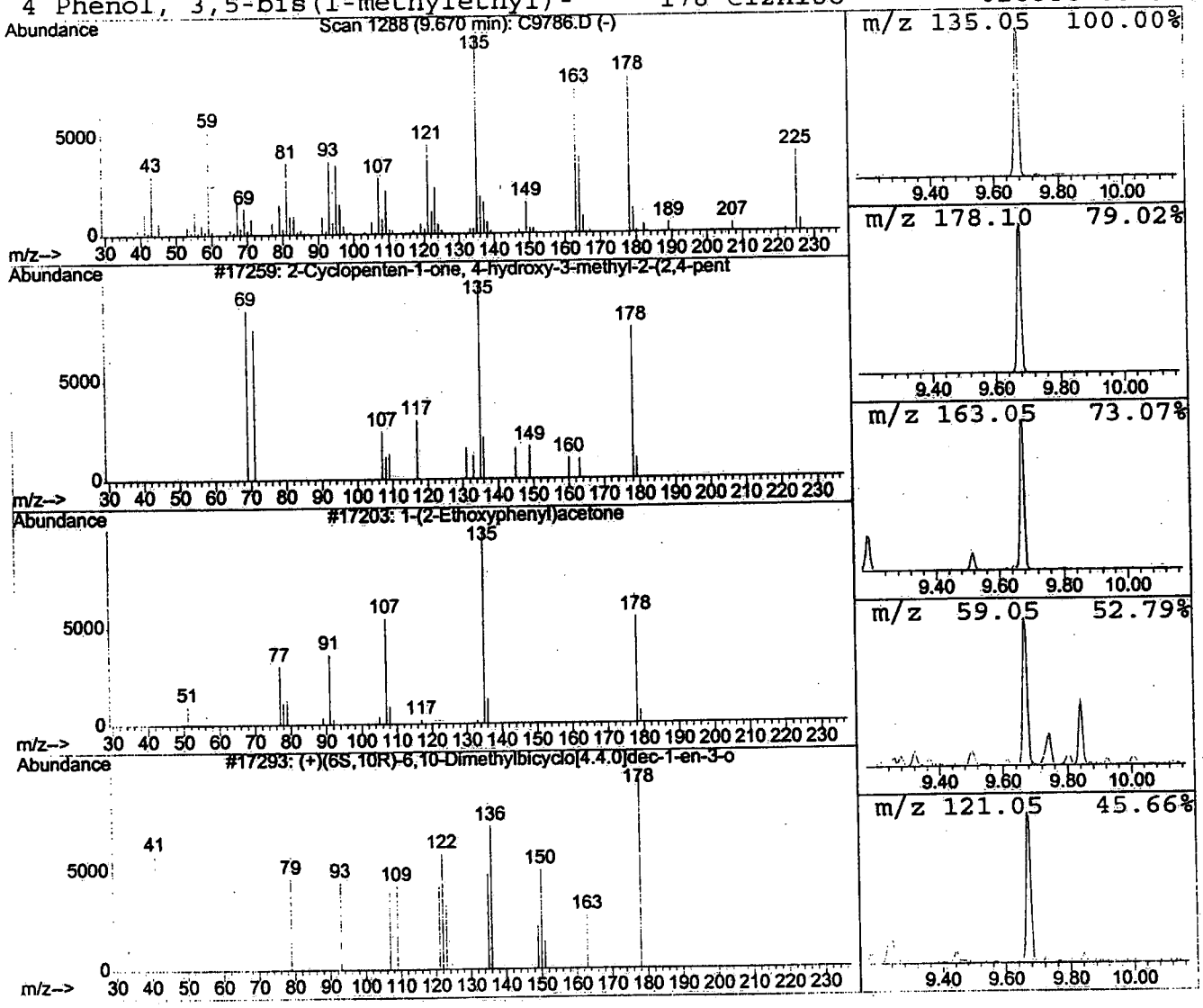
Peak Number 18 Unknown — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.67	90.68 UG	1651580	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclopenten-1-one, 4-hydroxy-3-me	178	C11H14O2	000487-67-2	38
2	1-(2-Ethoxyphenyl)acetone	178	C11H14O2	000000-00-0	30
3	(+)(6S,10R)-6,10-Dimethylbicyclo[4.	178	C12H18O	000000-00-0	27
4	Phenol, 3,5-bis(1-methylethyl)-	178	C12H18O	026886-05-5	25



34/97

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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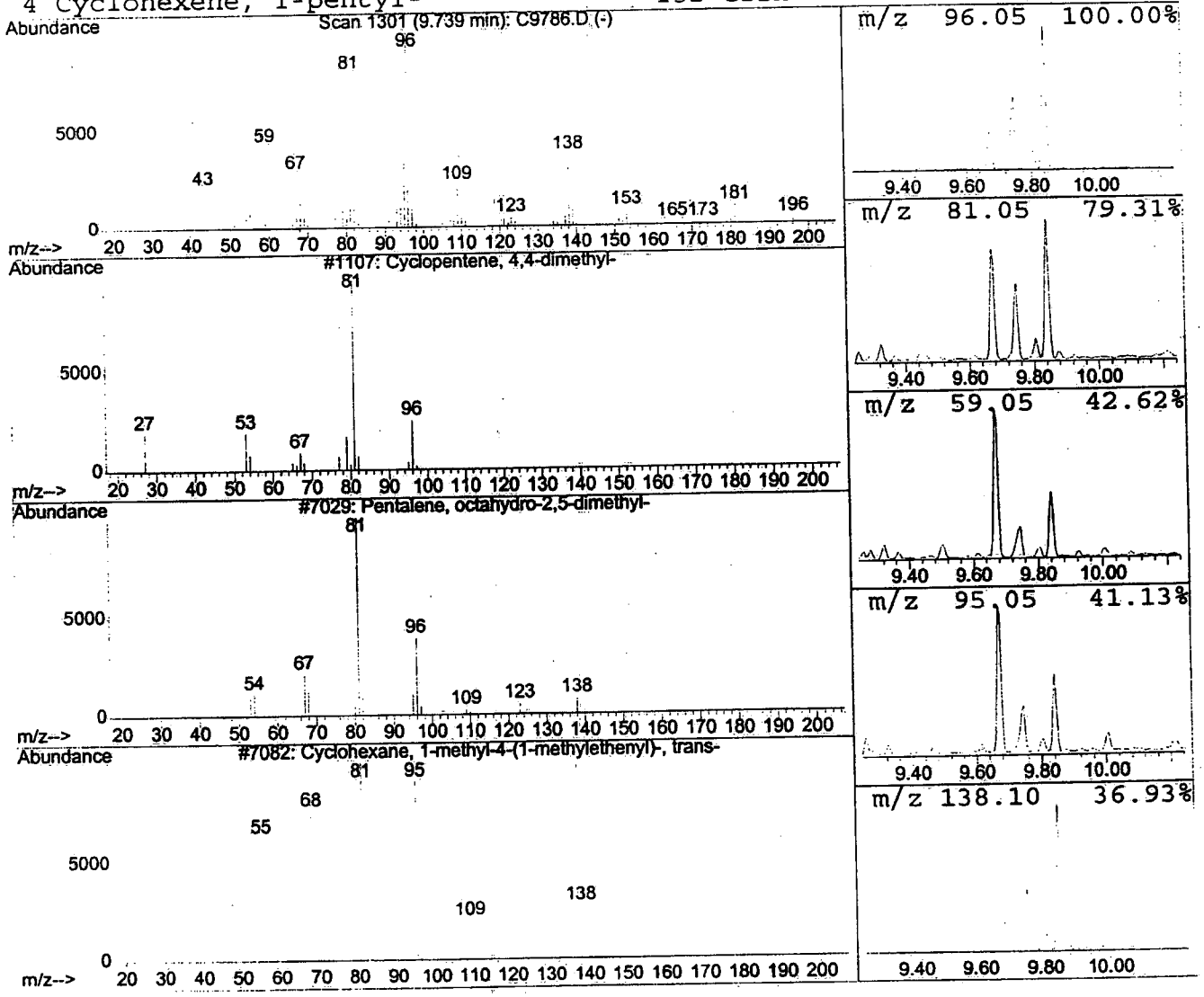
Peak Number 19 Unknown — Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.74	22.30 UG	406131	Acenaphthene-d10	9.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentene, 4,4-dimethyl-	96	C7H12	019037-72-0	47
2	Pentalene, octahydro-2,5-dimethyl-	138	C10H18	028588-55-8	47
3	Cyclohexane, 1-methyl-4-(1-methylet	138	C10H18	001124-25-0	43
4	Cyclohexene, 1-pentyl-	152	C11H20	015232-85-6	40



CC00329

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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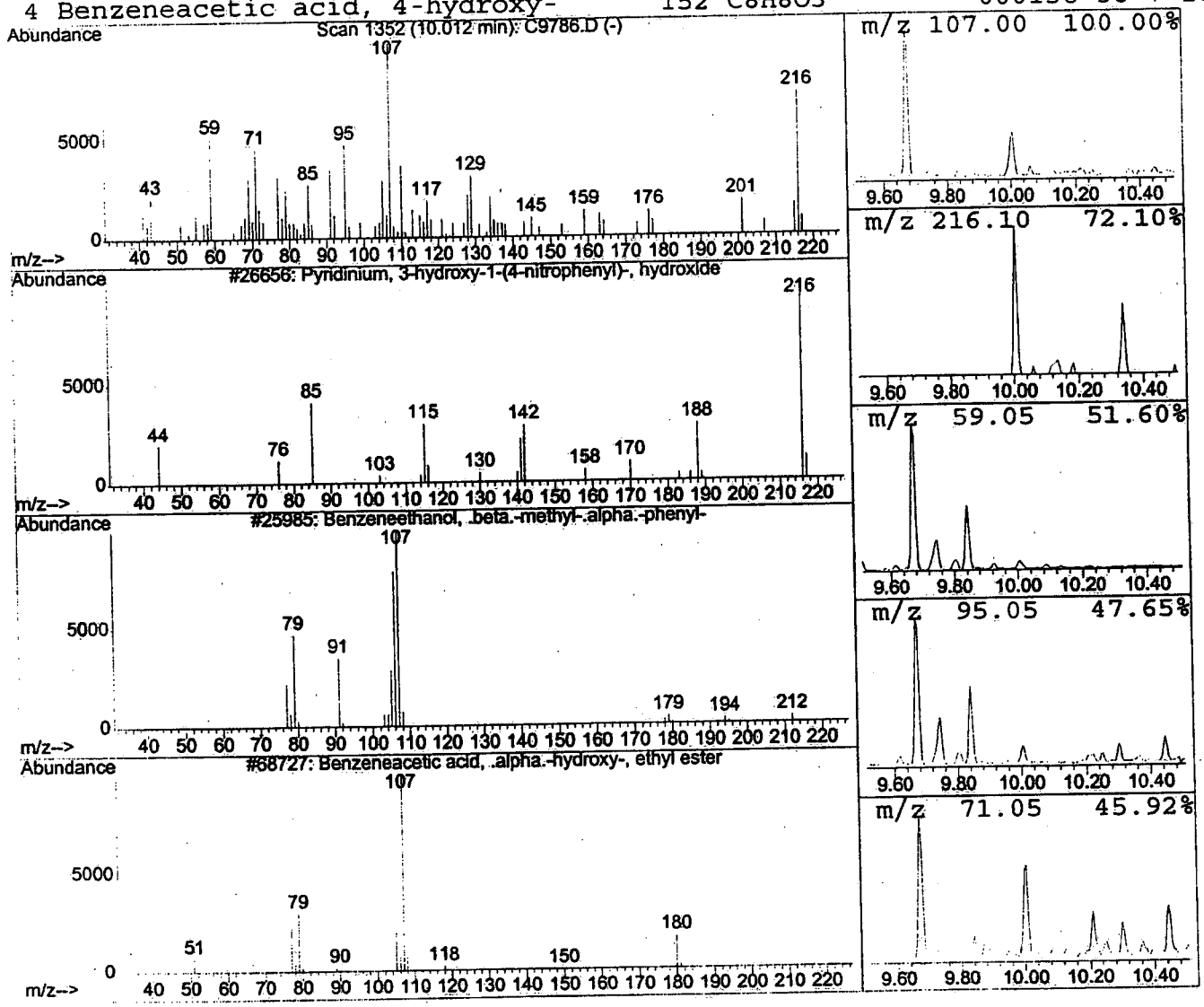
Peak Number 20 Unknown — Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.01	14.15 UG	160275	Phenanthrene-d10	10.49

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyridinium, 3-hydroxy-1-(4-nitrophe	216	C11H8N2O3	041880-33-5	11
2	Benzeneethanol, .beta.-methyl-.alph	212	C15H16O	028795-94-0	10
3	Benzeneacetic acid, .alpha.-hydroxy	180	C10H12O3	000774-40-3	10
4	Benzeneacetic acid, 4-hydroxy-	152	C8H8O3	000156-38-7	10



34/99

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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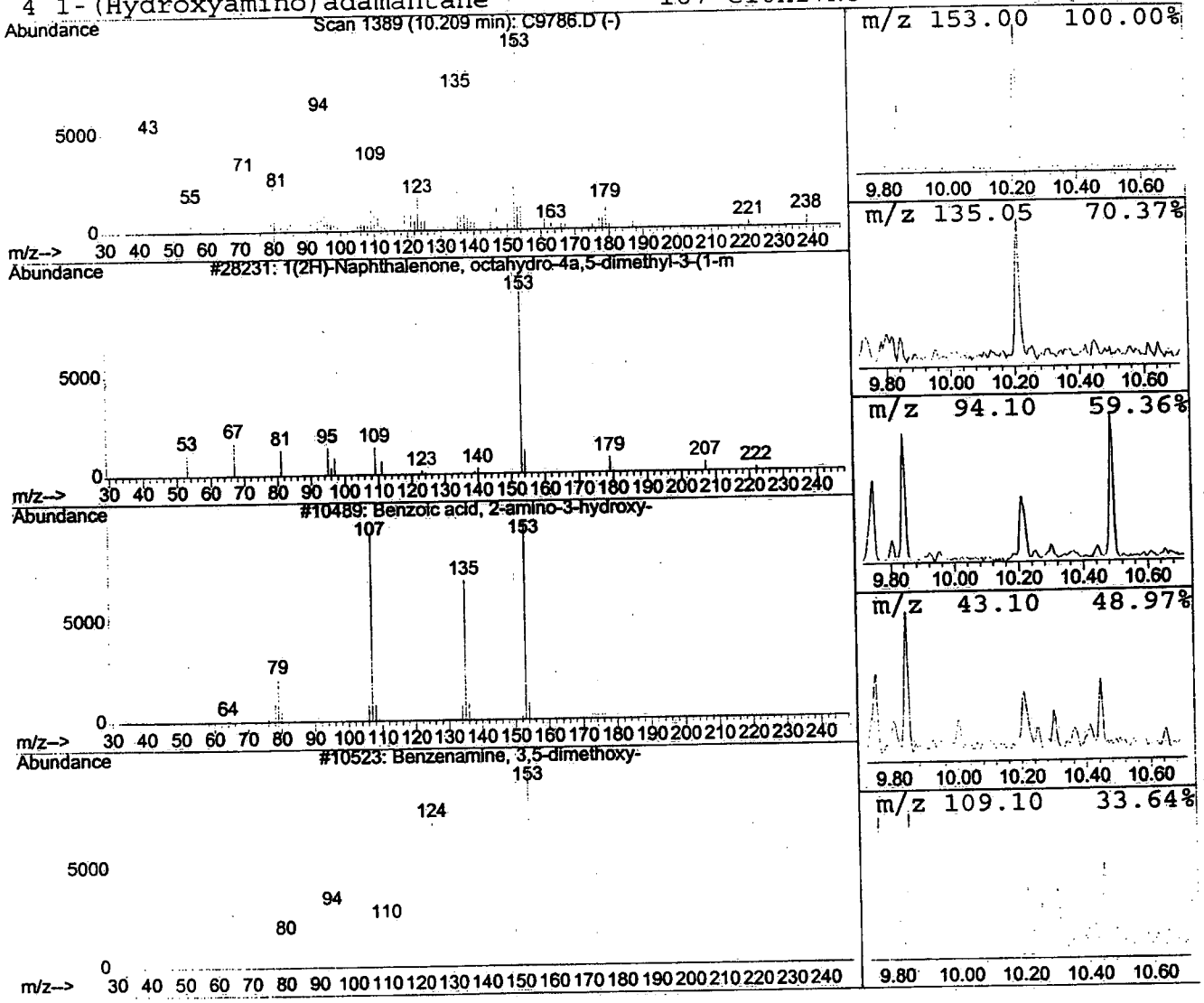
Peak Number 21 Unknown — Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.21	19.82 UG	224502	Phenanthrene-d10	10.49

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1(2H)-Naphthalenone, octahydro-4a,5	222	C15H26O	055332-02-0	27
2	Benzoic acid, 2-amino-3-hydroxy-	153	C7H7NO3	000548-93-6	25
3	Benzenamine, 3,5-dimethoxy-	153	C8H11NO2	010272-07-8	23
4	1-(Hydroxyamino)adamantane	167	C10H17NO	031463-23-7	20



C09331

3500

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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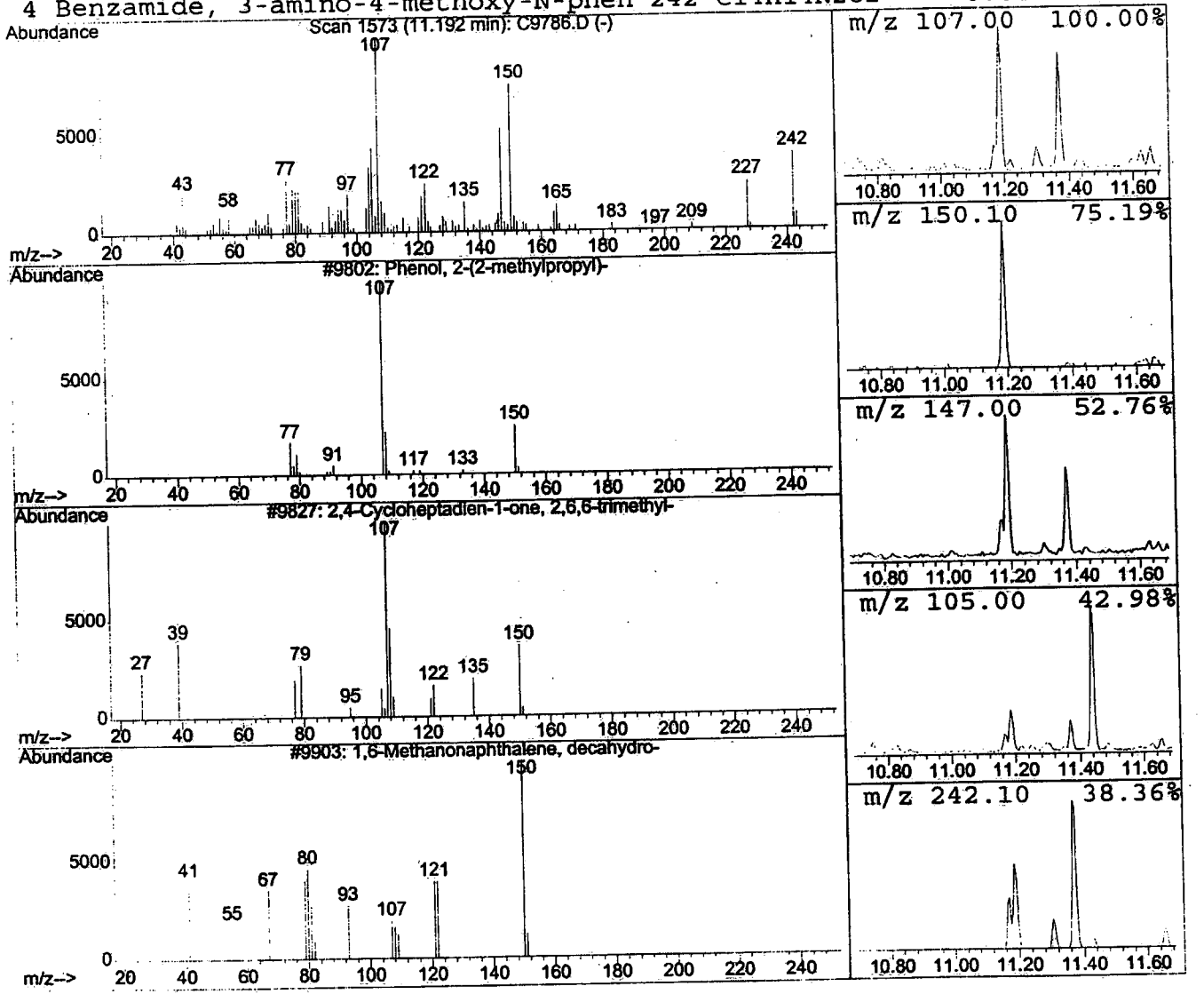
Peak Number 22 Unknown — Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.19	24.80 UG	280966	Phenanthrene-d10	10.49

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 2-(2-methylpropyl)-	150	C10H14O	004167-75-3	50
2	2,4-Cycloheptadien-1-one, 2,6,6-tri	150	C10H14O	000503-93-5	38
3	1,6-Methanonaphthalene, decahydro-	150	C11H18	043000-53-9	30
4	Benzamide, 3-amino-4-methoxy-N-phen	242	C14H14N2O2	000120-35-4	22



C09332

3501

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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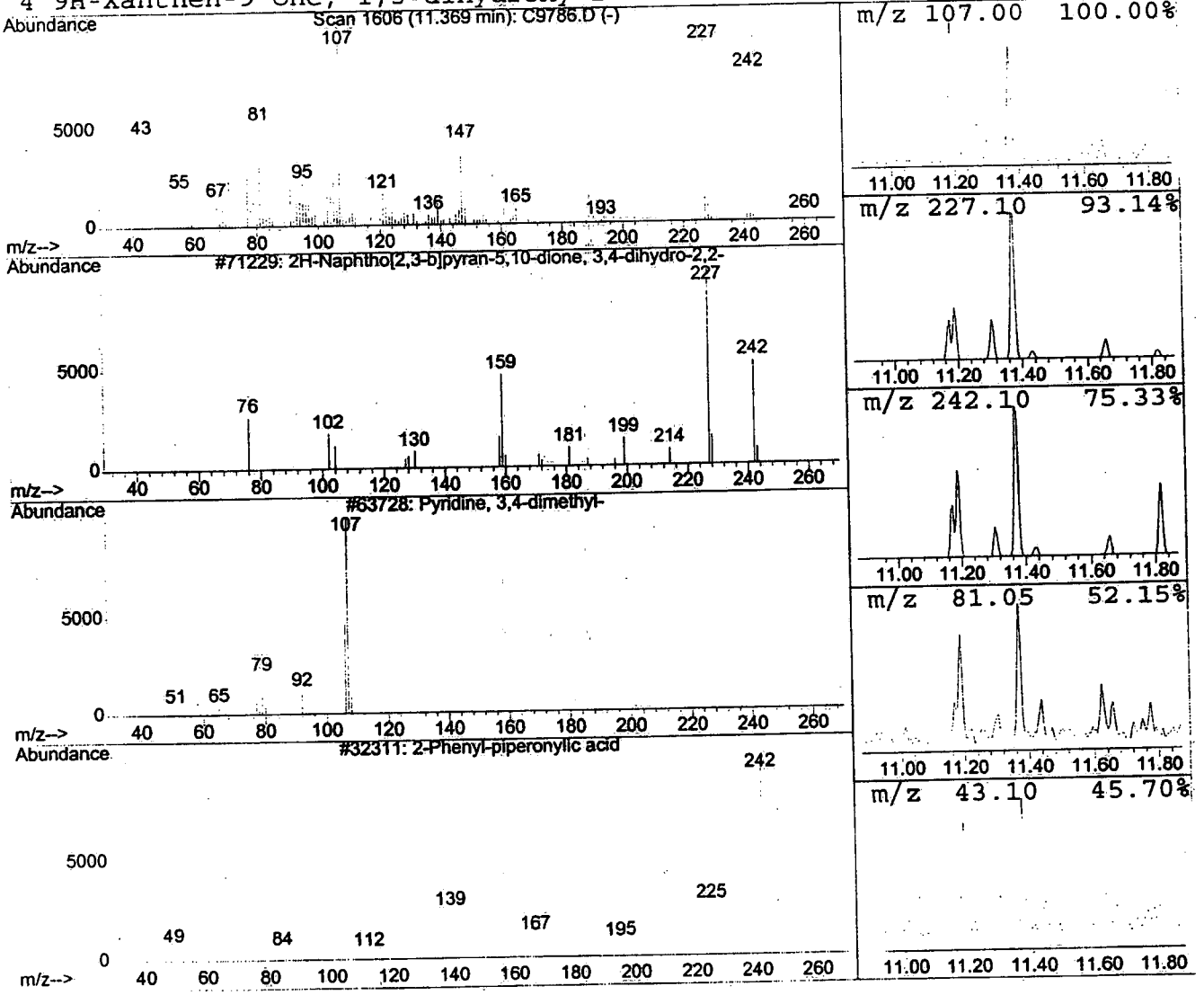
Peak Number 23 Unknown — Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.37	20.88 UG	236527	Phenanthrene-d10	10.49

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2H-Naphtho[2,3-b]pyran-5,10-dione,	242	C15H14O3	004707-33-9	35
2	Pyridine, 3,4-dimethyl-	107	C7H9N	000583-58-4	11
3	2-Phenyl-piperonylic acid	242	C14H10O4	000000-00-0	11
4	9H-Xanthen-9-one, 1,3-dihydroxy-2-m	242	C14H10O4	023366-99-6	11



3507

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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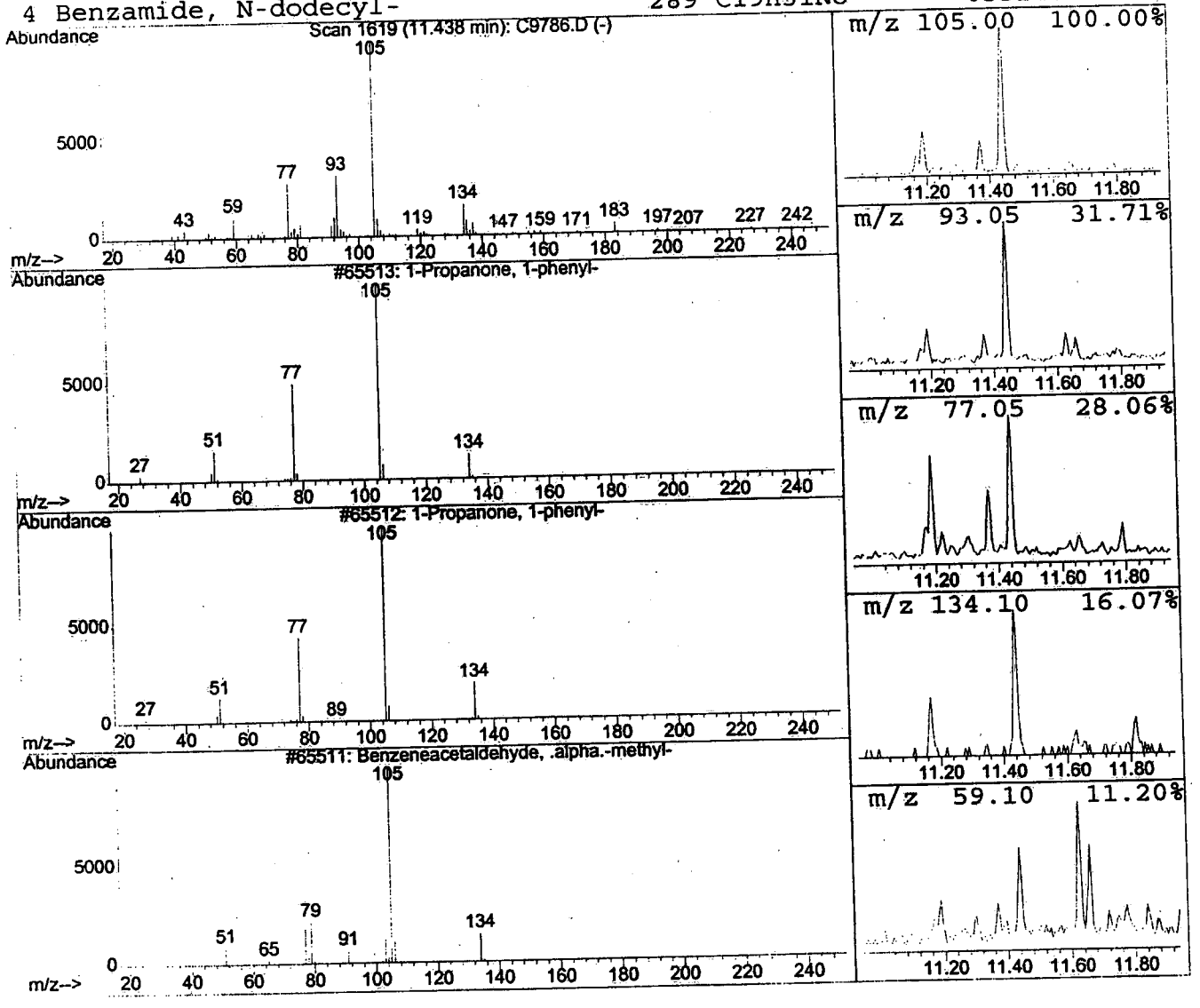
Peak Number 24 Unknown — Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.44	12.63 UG	143059	Phenanthrene-d10	10.49

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propanone, 1-phenyl-	134	C9H10O	000093-55-0	43
2	1-Propanone, 1-phenyl-	134	C9H10O	000093-55-0	35
3	Benzeneacetaldehyde, .alpha.-methyl	134	C9H10O	000093-53-8	35
4	Benzamide, N-dodecyl-	289	C19H31NO	033140-65-7	32



CC0334

3503

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9786.D
Acq On : 4 May 2001 17:25
Sample : MW-7,2867-006,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 17
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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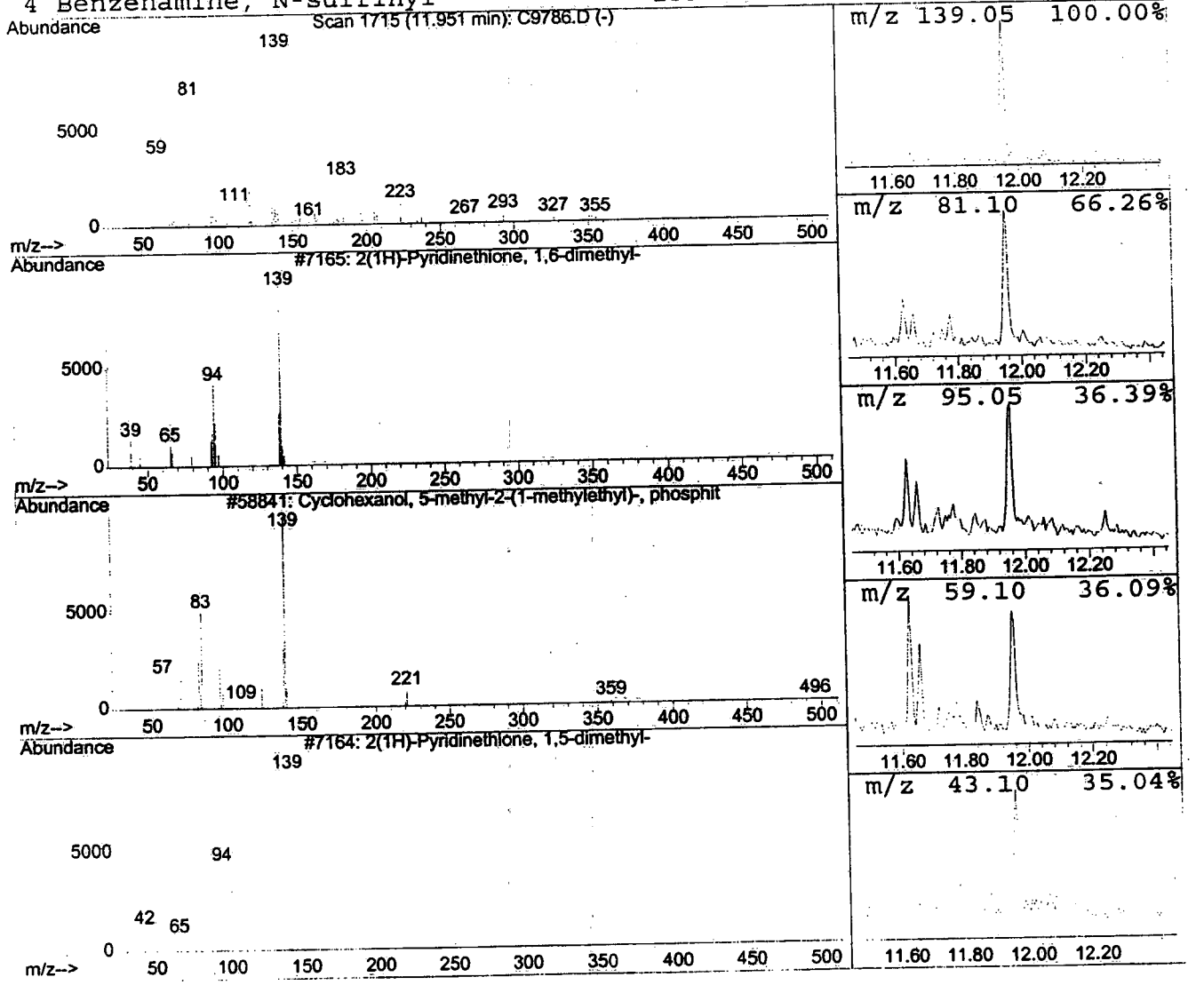
Peak Number 25 Unknown

Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.95	35.03 UG	204861	Chrysene-d12	12.93

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2(1H)-Pyridinethione, 1,6-dimethyl-	139	C7H9NS	019006-69-0	38
2	Cyclohexanol, 5-methyl-2-(1-methyle	496	C30H57O3P	074793-74-1	38
3	2(1H)-Pyridinethione, 1,5-dimethyl-	139	C7H9NS	019006-68-9	38
4	Benzenamine, N-sulfinyl-	139	C6H5NOS	001122-83-4	27



000335

3504

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D Vial: 16
Acq On : 4 May 2001 18:16 Operator: DP
Sample : MW-8,2867-007,A,500mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 9:20 2001 Quant Results File: CW0901.RES

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration
DataAcq Meth : CW0901

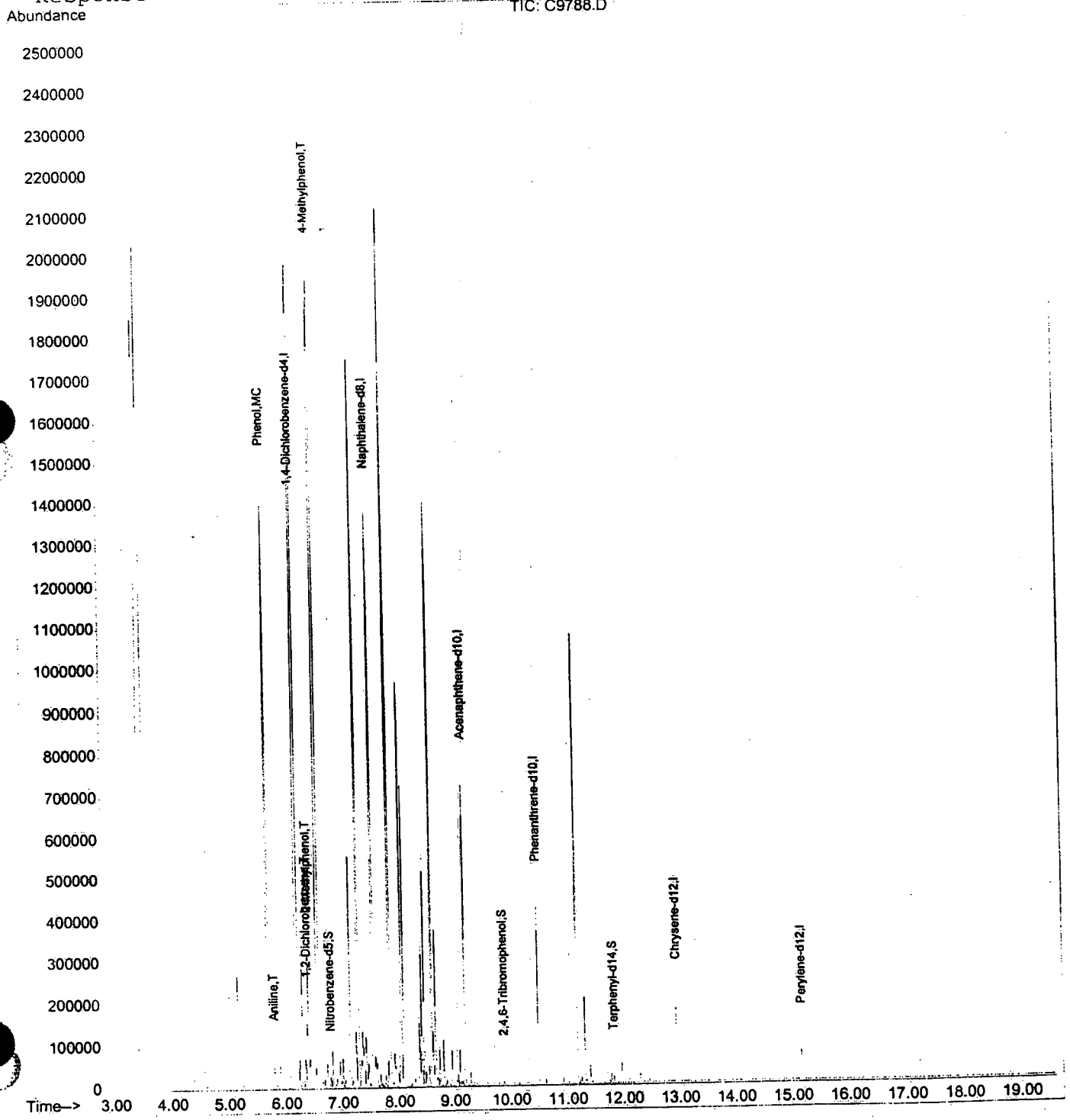
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.18	152	154274	40.00	UG	-0.01
22) Naphthalene-d8	7.54	136	510457	40.00	UG	-0.01
39) Acenaphthene-d10	9.19	164	151702	40.00	UG	0.00
60) Phenanthrene-d10	10.49	188	162188	40.00	UG	0.00
75) Chrysene-d12	12.94	240	78447	40.00	UG	-0.02
84) Perylene-d12	15.15	264	57376	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	4.57	112	29376	5.96	UG	-0.02
Spiked Amount 100.000	Range 42 - 95		Recovery = 5.96%#			
6) Phenol-d5	5.68	99	29353	6.00	UG	-0.01
Spiked Amount 100.000	Range 59 - 97		Recovery = 6.00%#			
23) Nitrobenzene-d5	6.79	82	11548m	3.04	UG	0.00
Spiked Amount 50.000	Range 49 - 105		Recovery = 6.08%#			
43) 2-Fluorobiphenyl	8.54	172	18236	3.65	UG	0.00
Spiked Amount 50.000	Range 54 - 110		Recovery = 7.30%#			
64) 2,4,6-Tribromophenol	9.87	330	2372	5.81	UG	0.00
Spiked Amount 100.000	Range 48 - 126		Recovery = 5.81%#			
77) Terphenyl-d14	11.82	244	8516	3.85	UG	-0.01
Spiked Amount 50.000	Range 53 - 123		Recovery = 7.70%#			
Target Compounds						Qvalue
7) Phenol	5.69	94	928394	195.45	UG	# 59
8) Aniline	5.79	93	32143	5.46	UG	# 87
14) 1,2-Dichlorobenzene	6.38	146	44605	9.26	UG	98
15) 2-Methylphenol	6.40	108	85683	25.38	UG	97
17) 4-Methylphenol	6.56	108	1177253	375.19	UG	95

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D Vial: 16
Acq On : 4 May 2001 18:16 Operator: DP
Sample : MW-8,2867-007,A,500mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 9:20 2001 Quant Results File: CW0901.RES

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration



3506

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-07-01\C9795.D Vial: 3
Acq On : 7 May 2001 12:02 Operator: DP
Sample : MW-8,2867-007DIL,A,500mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWAR,05/02/01,05/03/0 Multiplr: 1.00
3 Integration Params: RTEINT.P
Quant Time: May 7 12:25 2001 Quant Results File: CW0901.RES

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration
DataAcq Meth : CW0901

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.18	152	154098	40.00 UG	-0.02
22) Naphthalene-d8	7.54	136	469560	40.00 UG	0.00
39) Acenaphthene-d10	9.19	164	183305	40.00 UG	0.00
60) Phenanthrene-d10	10.49	188	187241	40.00 UG	0.00
75) Chrysene-d12	12.96	240	63653	40.00 UG	0.00
84) Perylene-d12	15.18	264	43007	40.00 UG	0.00

System Monitoring Compounds					
4) 2-Fluorophenol	0.00	112	0d	0.00 UG	
Spiked Amount 100.000	Range 42 - 95		Recovery =	0.00%#	
6) Phenol-d5	0.00	99	0d	0.00 UG	
Spiked Amount 100.000	Range 59 - 97		Recovery =	0.00%#	
23) Nitrobenzene-d5	0.00	82	0d	0.00 UG	
Spiked Amount 50.000	Range 49 - 105		Recovery =	0.00%#	
43) 2-Fluorobiphenyl	0.00	172	0d	0.00 UG	
Spiked Amount 50.000	Range 54 - 110		Recovery =	0.00%#	
64) 2,4,6-Tribromophenol	0.00	330	0	0.00 UG	
Spiked Amount 100.000	Range 48 - 126		Recovery =	0.00%#	
77) Terphenyl-d14	0.00	244	0	0.00 UG	
Spiked Amount 50.000	Range 53 - 123		Recovery =	0.00%#	

Target Compounds					Qvalue
7) Phenol	5.69	94	64688	13.63 UG	# 58
8) Aniline	5.79	93	5646	0.96 UG	# 78
15) 2-Methylphenol	6.40	108	4919	1.46 UG	90
17) 4-Methylphenol	6.56	108	221645	70.72 UG	98

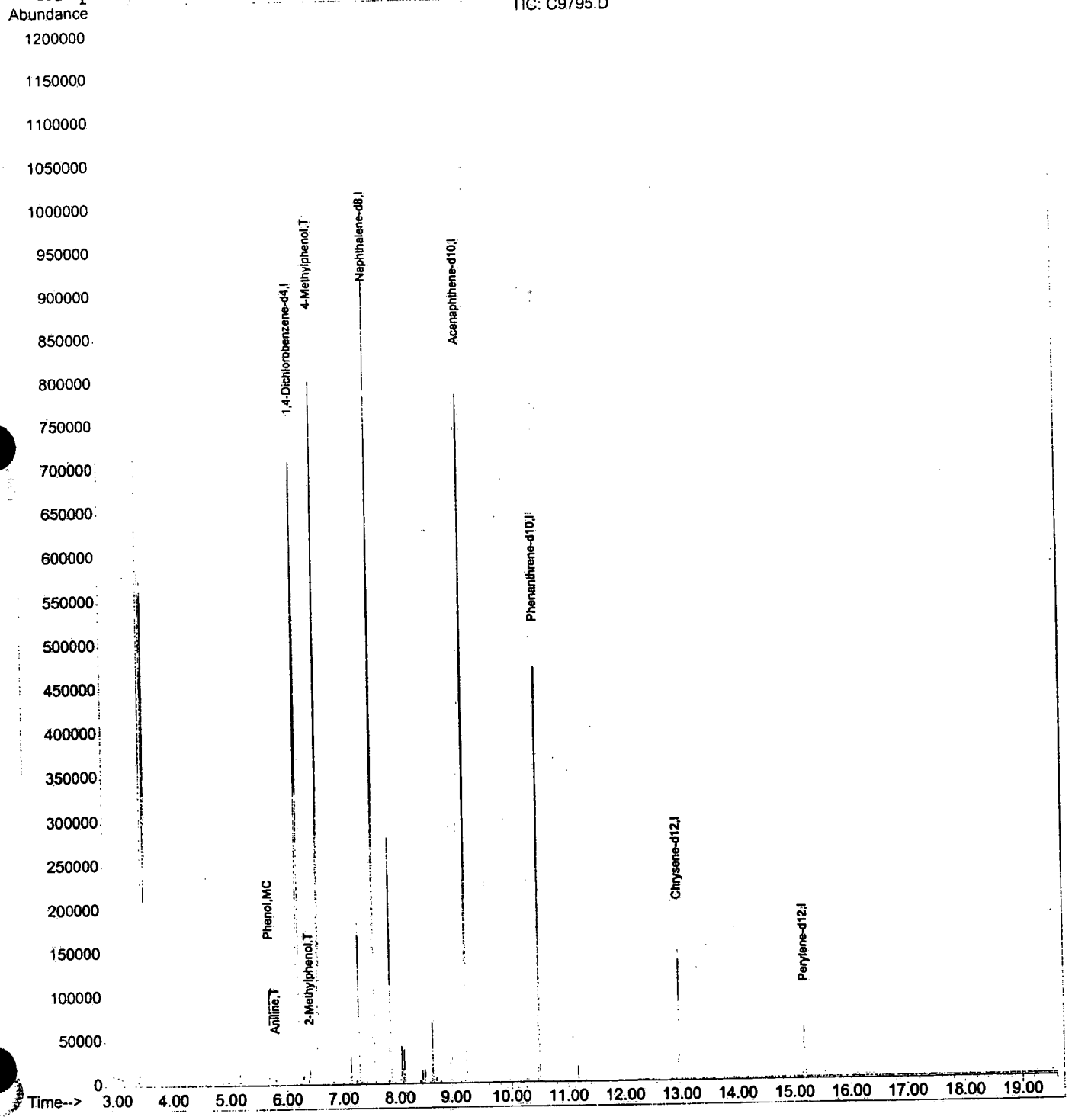
(#) = qualifier out of range (m) = manual integration

C09333

3507

Data File : C:\HPCHEM\1\DATA\05-07-01\C9795.D Vial: 3
Acq On : 7 May 2001 12:02 Operator: DP
Sample : MW-8,2867-007DIL,A,500mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWAR,05/02/01,05/03/0 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 12:25 2001 Quant Results File: CW0901.RES

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration



C03339

2504

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D Vial: 16
Acq On : 4 May 2001 18:16 Operator: DP
Sample : MW-8,2867-007,A,500mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
S Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 0.5 % of largest Peak
Start Thrs: 1.5 Max Peaks: 100
Stop Thrs : 1.5 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	3.021	36	43	55	rBV	54422	122910	4.10%	0.384%
2	3.448	119	123	124	rBV	1854627	1414874	47.16%	4.418%
3	3.469	124	127	130	rVV2	1904724	2999878	100.00%	9.366%
4	3.523	135	137	142	rVB	2923833	2992731	99.76%	9.344%
5	4.570	329	333	337	rBV	45836	56506	1.88%	0.176%
6	4.629	341	344	355	rVB	23446	42177	1.41%	0.132%
7	5.157	438	443	452	rBB	279331	401085	13.37%	1.252%
8	5.692	534	543	555	rBV	1434157	2008188	66.94%	6.270%
9	5.793	558	562	567	rBV	55508	62378	2.08%	0.195%
10	5.895	577	581	586	rVB2	58556	64366	2.15%	0.201%
11	6.071	611	614	619	rVB	35162	37731	1.26%	0.118%
12	6.194	630	637	638	rBV2	1975529	2321760	77.40%	7.249%
13	6.247	644	647	651	rVB	68468	69120	2.30%	0.216%
14	6.290	651	655	662	rVV3	299984	388196	12.94%	1.212%
15	6.343	662	665	668	rVV2	72048	82373	2.75%	0.257%
16	6.375	668	671	673	rVV	156923	177594	5.92%	0.554%
17	6.397	673	675	679	rVV	313428	335408	11.18%	1.047%
18	6.429	679	681	685	rVB	71556	60795	2.03%	0.190%
19	6.525	692	699	701	rBV	51084	62989	2.10%	0.197%
20	6.562	701	706	708	rBV	1918472	2575898	85.87%	8.042%
21	6.728	733	737	742	rVB	59773	63062	2.10%	0.197%
22	6.824	751	755	759	rVB	88818	84744	2.82%	0.265%
23	6.952	774	779	782	rBV2	71667	71181	2.37%	0.222%
24	7.006	786	789	793	rVB	73141	70167	2.34%	0.219%
25	7.134	807	813	818	rBV	558172	586310	19.54%	1.831%
26	7.241	826	833	836	rBV	140134	179548	5.99%	0.561%
27	7.278	836	840	845	rVB	1870722	2074617	69.16%	6.477%
28	7.332	845	850	852	rBV3	61843	84620	2.82%	0.264%
29	7.358	852	855	857	rVV2	119441	141278	4.71%	0.441%
30	7.380	857	859	863	rVB	93131	85852	2.86%	0.268%
31	7.417	863	866	870	rBV2	126232	139302	4.64%	0.435%

CW0340

32	7.455	870	873	876	rVB2	57440	56866	1.90%	0.178%
33	7.540	880	889	896	rBV2	1372377	2164301	72.15%	6.757%
34	7.615	901	903	906	rVB	64050	50215	1.67%	0.157%
[illegible]	7.802	935	938	940	rBV2	65675	59275	1.98%	0.185%
[illegible]6	7.834	940	944	950	rVB2	2134519	2706541	90.22%	8.450%
	7.925	957	961	970	rVB5	80294	141300	4.71%	0.441%
[illegible]	8.042	980	983	987	rVB	946676	845468	28.18%	2.640%
39	8.085	987	991	1008	rVB	723404	734831	24.50%	2.294%
40	8.368	1037	1044	1048	rBV2	167615	192475	6.42%	0.601%
41	8.405	1048	1051	1055	rVV	355754	301123	10.04%	0.940%
42	8.454	1056	1060	1063	rVB	567141	435191	14.51%	1.359%
43	8.544	1073	1077	1080	rBB	54185	45274	1.51%	0.141%
44	8.592	1082	1086	1089	rBV	1395016	1154442	38.48%	3.604%
45	8.619	1089	1091	1094	rVV2	123470	113375	3.78%	0.354%
46	8.657	1094	1098	1102	rVB	362218	343057	11.44%	1.071%
47	8.731	1109	1112	1118	rVB2	95061	87650	2.92%	0.274%
48	8.801	1122	1125	1129	rVB2	126836	100116	3.34%	0.313%
49	8.950	1150	1153	1157	rBV	97210	77925	2.60%	0.243%
50	9.095	1176	1180	1183	rBV	94783	77000	2.57%	0.240%
51	9.185	1192	1197	1201	rBV	722583	610508	20.35%	1.906%
52	10.489	1437	1441	1445	rBV	426712	364199	12.14%	1.137%
53	11.173	1565	1569	1573	rBV	1075342	918395	30.61%	2.867%
54	11.312	1591	1595	1598	rBV	227608	172945	5.77%	0.540%
55	11.402	1609	1612	1616	rBV	52534	39707	1.32%	0.124%
[illegible]6	11.958	1712	1716	1718	rBV	49424	39834	1.33%	0.124%
[illegible]	12.936	1894	1899	1905	rVB	180533	202122	6.74%	0.631%
[illegible]	15.153	2307	2314	2322	rVB2	71131	137048	4.57%	0.428%

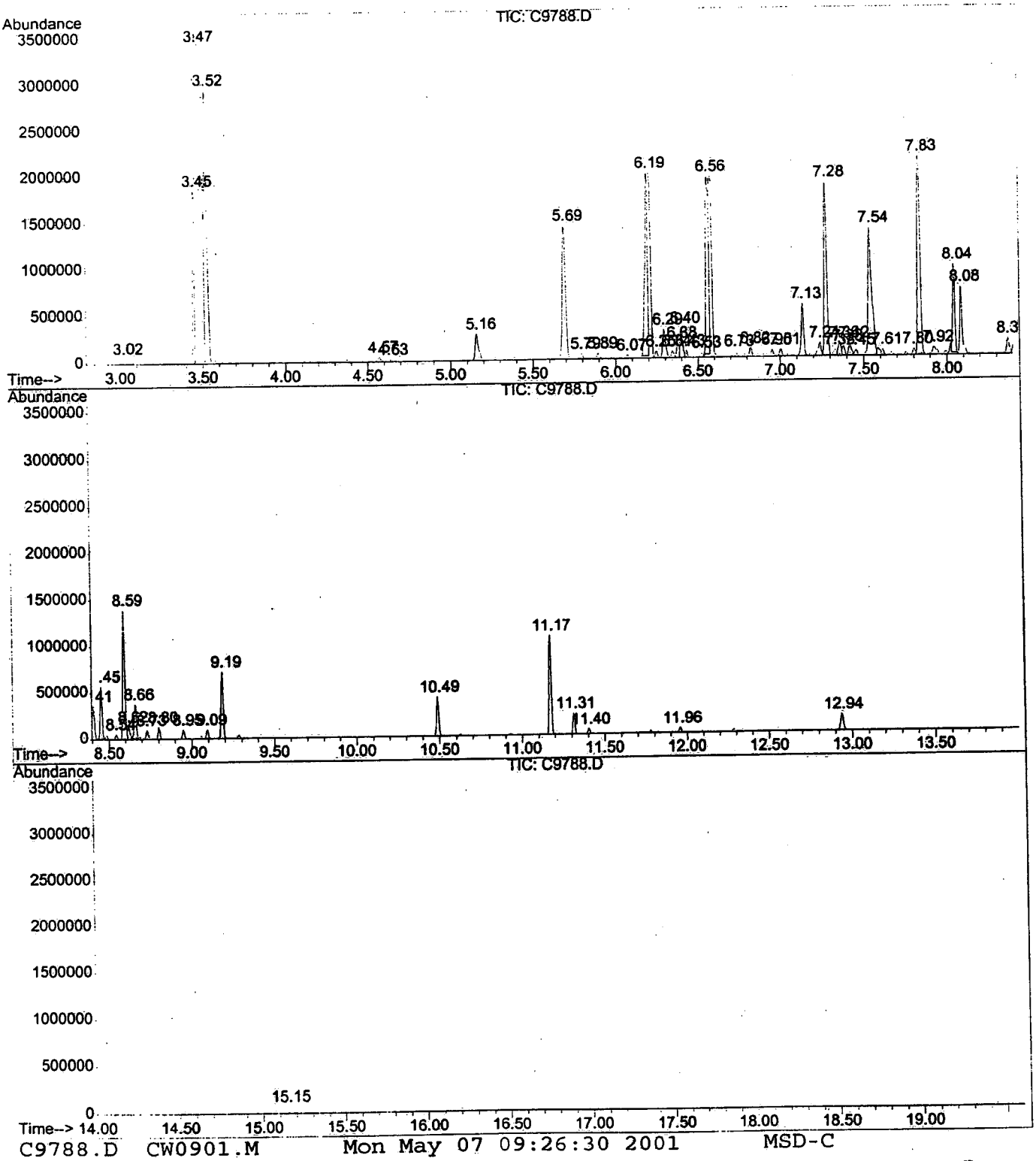
Sum of corrected areas: 32028821

C9788.D CW0901.M Mon May 07 09:26:30 2001 MSD-C

000341

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Operator : DP
Acquired : 4 May 2001 18:16 using AcqMethod CW0901
Instrument : MSD-C
Sample Name: MW-8,2867-007,A,500mL,100,05/04/01
Misc Info : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/01,10
Vial Number: 16
Quant File :CW0901.RES (RTE Integrator)



C9788.D CW0901.M Mon May 07 09:26:30 2001 MSD-C

000342

2511

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

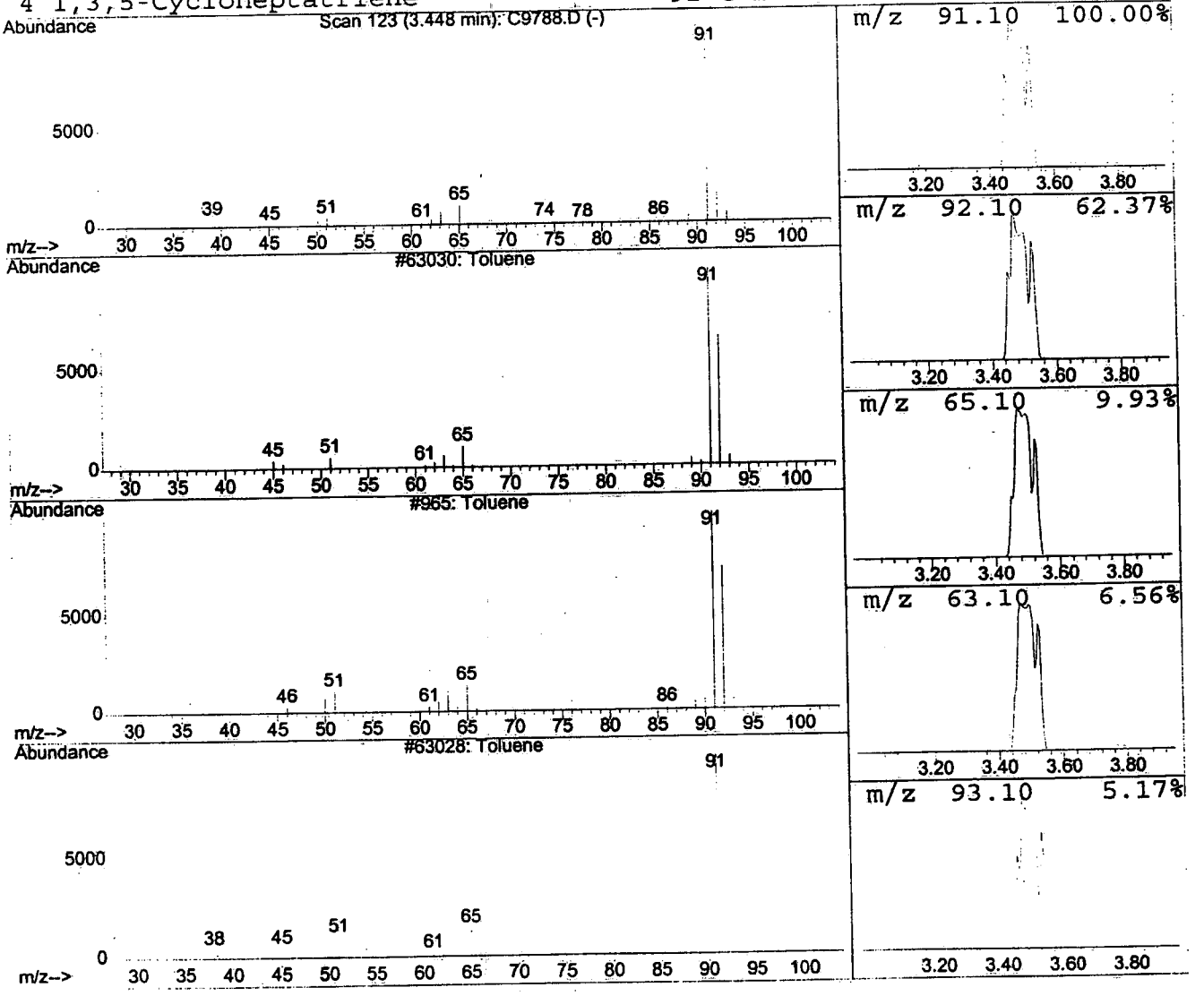
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Substituted benzene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.45	24.38 UG	1414870	1,4-Dichlorobenzene-d4	6.18

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	Toluene	92	C7H8	000108-88-3	91
4	1,3,5-Cycloheptatriene	92	C7H8	000544-25-2	91



3517

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

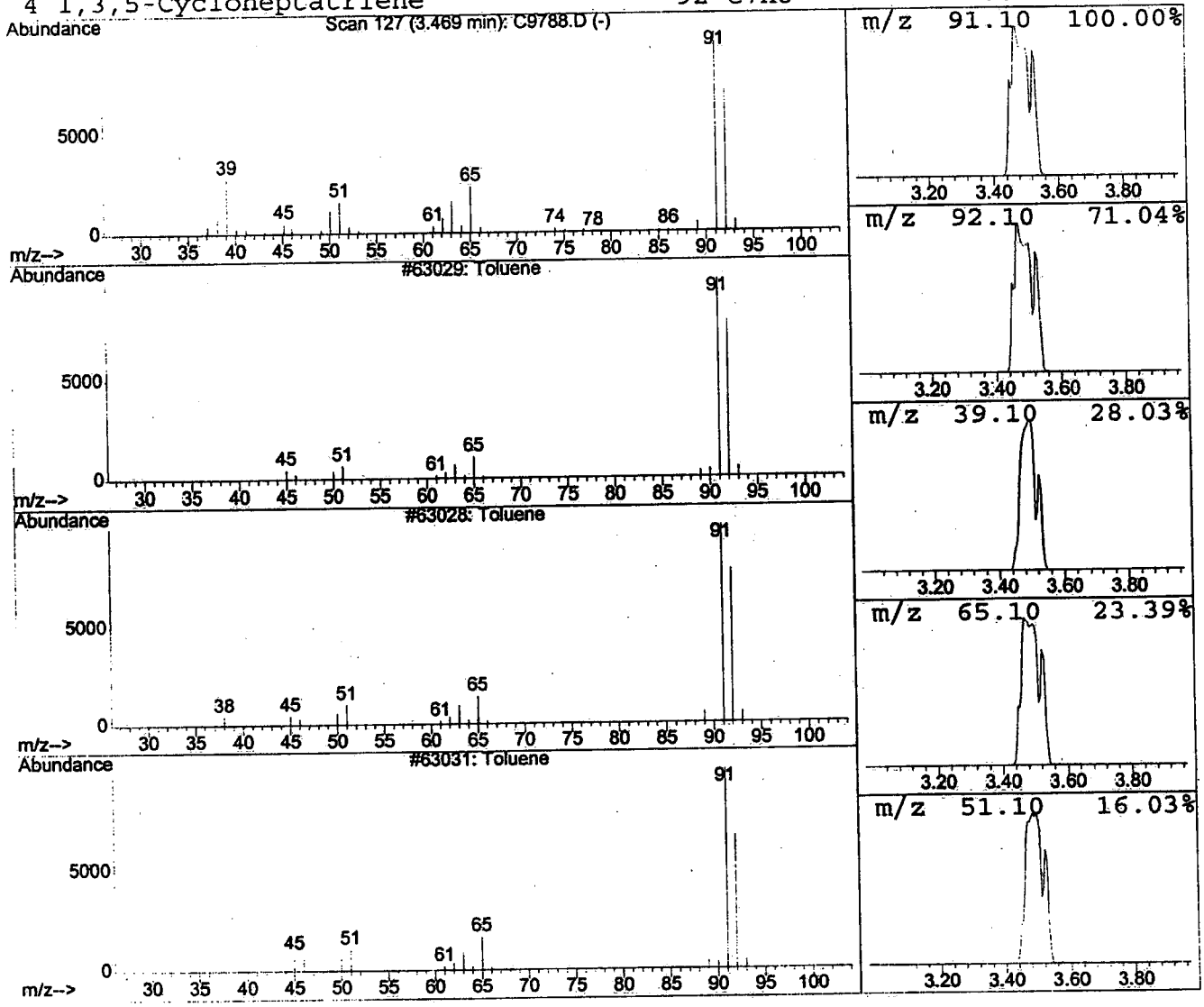
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Substituted benzene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.47	51.68 UG	2999880	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Toluene	92	C7H8	000108-88-3	94
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



000344

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

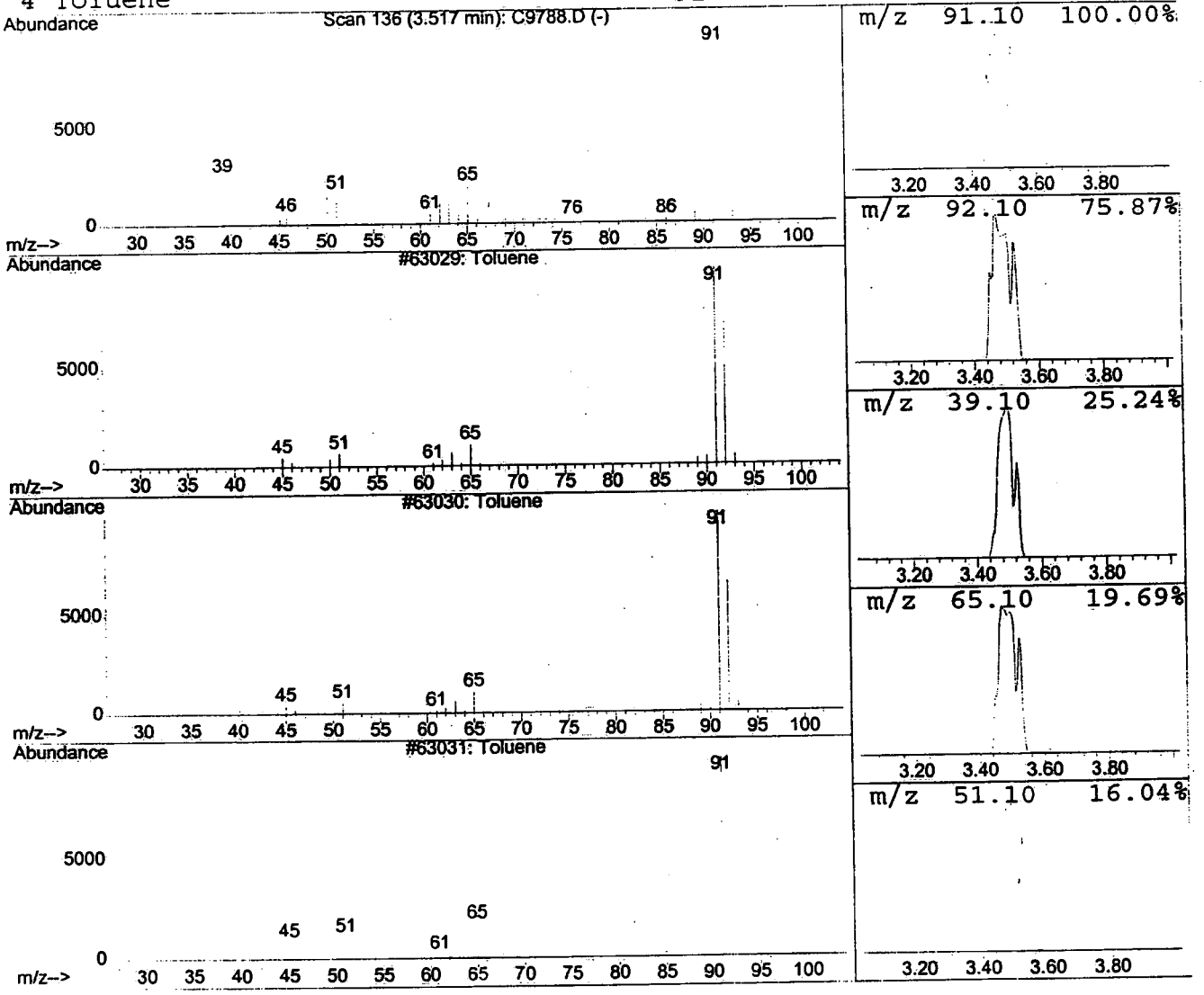
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.52	51.56 UG	2992730	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Toluene	92	C7H8	000108-88-3	94
2	Toluene	92	C7H8	000108-88-3	91
3	Toluene	92	C7H8	000108-88-3	91
4	Toluene	92	C7H8	000108-88-3	91



3514

000345

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D Vial: 16
Acq On : 4 May 2001 18:16 Operator: DP
Sample : MW-8,2867-007,A,500mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

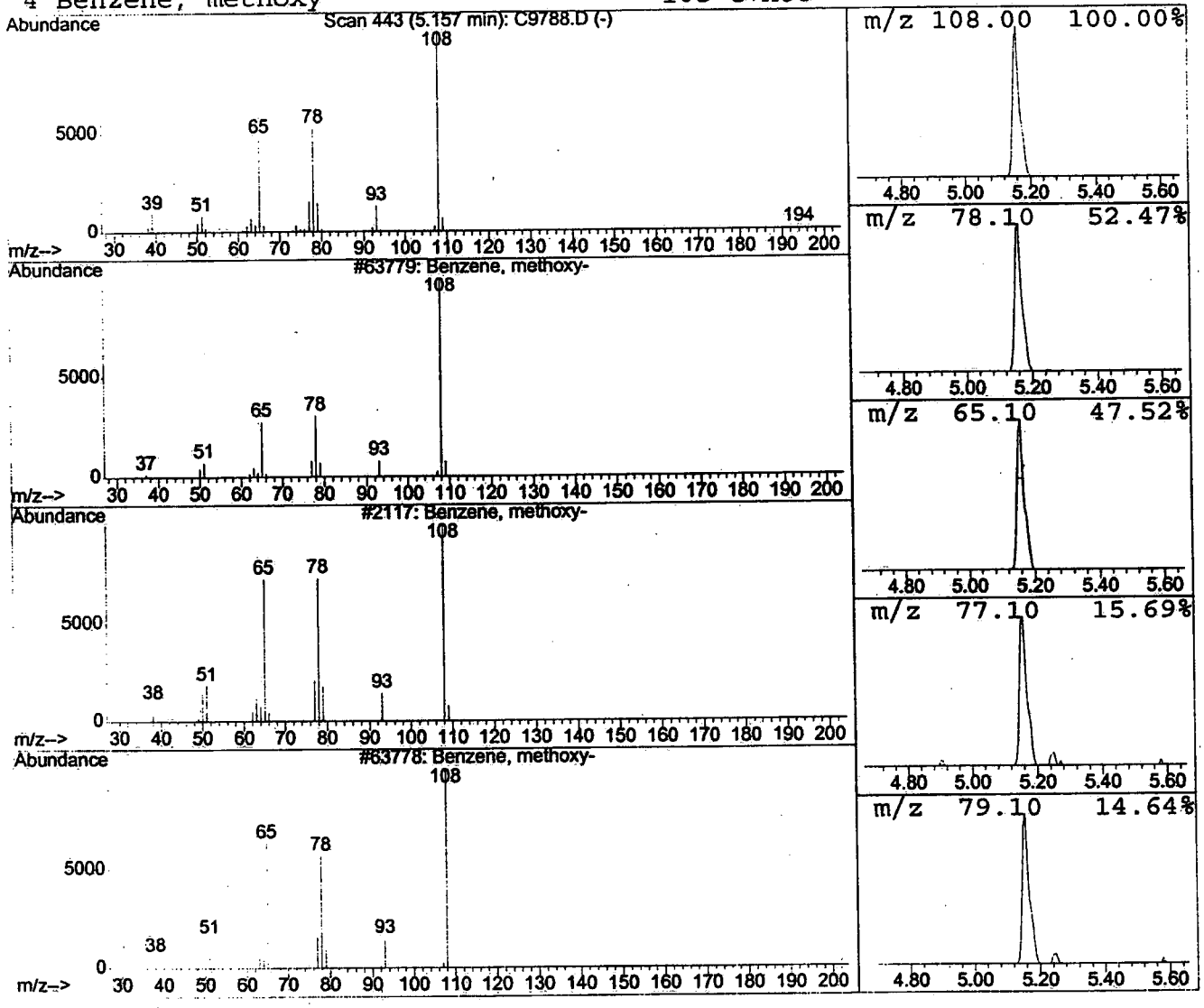
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Substituted benzene Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.16	6.91 UG	401085	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, methoxy-	108	C7H8O	000100-66-3	96
2	Benzene, methoxy-	108	C7H8O	000100-66-3	95
3	Benzene, methoxy-	108	C7H8O	000100-66-3	94
4	Benzene, methoxy-	108	C7H8O	000100-66-3	94



351

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

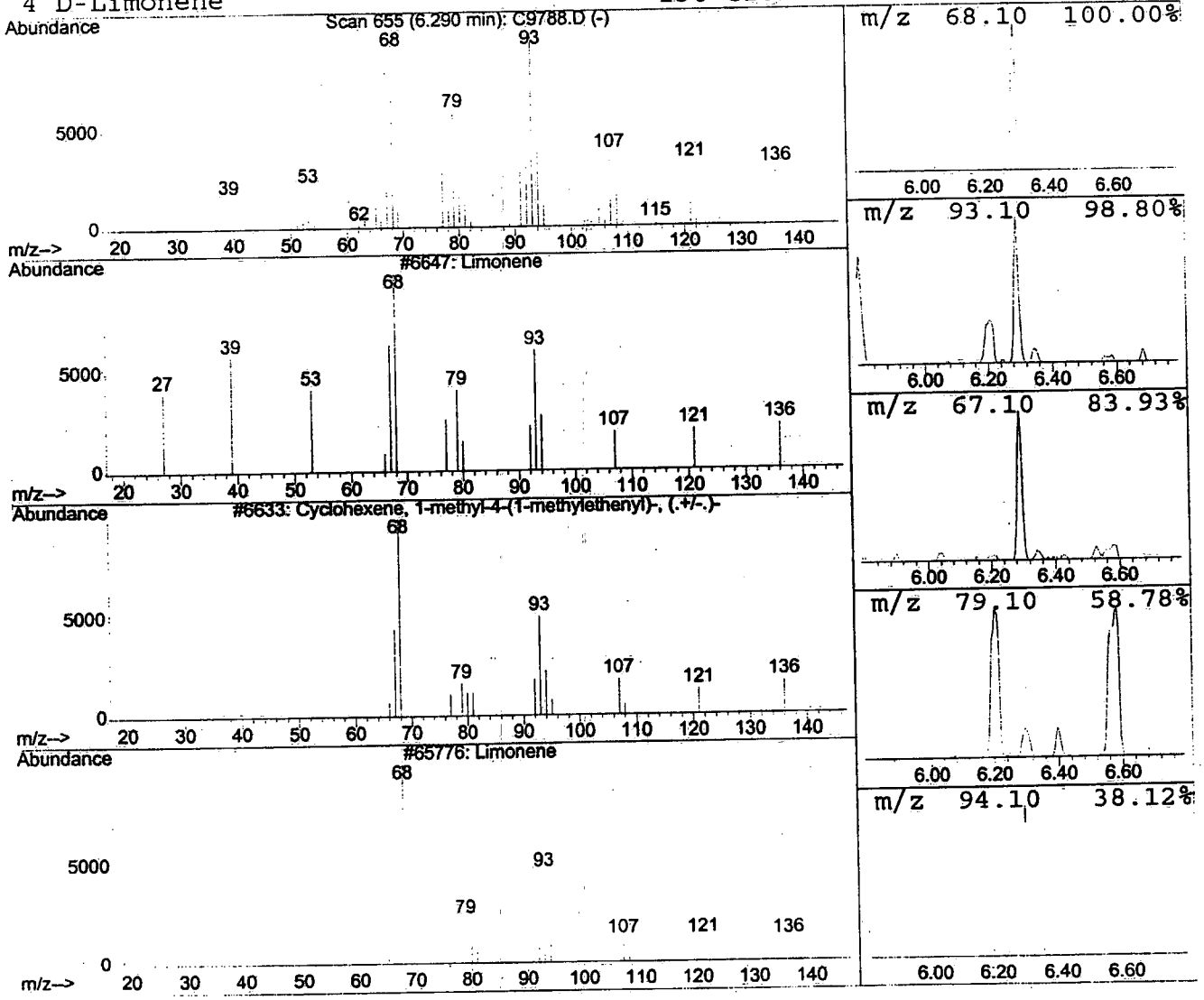
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 5 Unknown — Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.29	6.69 UG	388196	1,4-Dichlorobenzene-d4	6.18

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Limonene	136	C10H16	000138-86-3	94
2	Cyclohexene, 1-methyl-4-(1-methylet	136	C10H16	007705-14-8	87
3	Limonene	136	C10H16	000138-86-3	81
4	D-Limonene	136	C10H16	005989-27-5	81



3516

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D Vial: 16
Acq On : 4 May 2001 18:16 Operator: DP
Sample : MW-8,2867-007,A,500mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

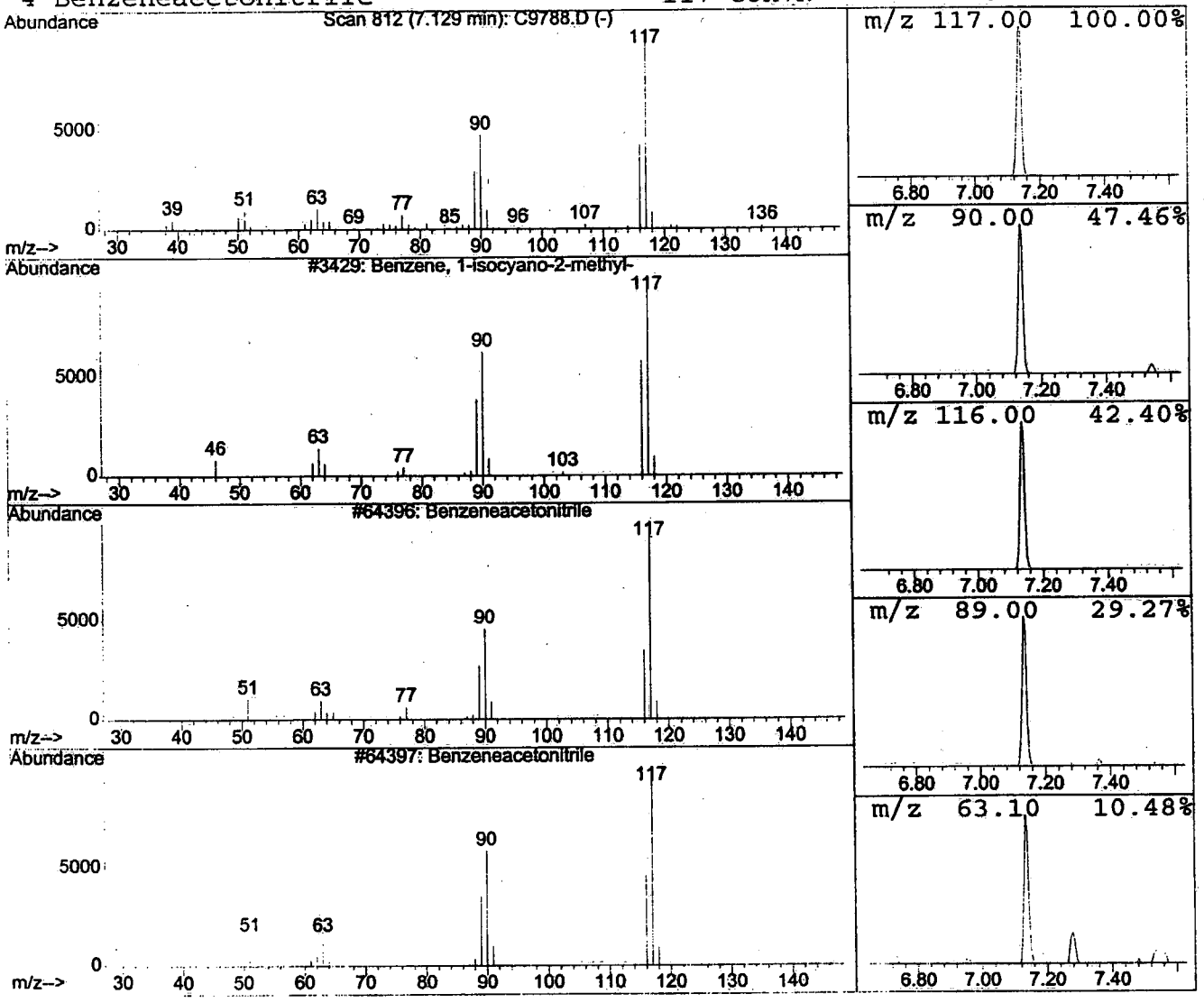
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 6 Substituted benzene Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.13	10.84 UG	586310	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-isocyano-2-methyl-	117	C8H7N	010468-64-1	95
2	Benzeneacetonitrile	117	C8H7N	000140-29-4	95
3	Benzeneacetonitrile	117	C8H7N	000140-29-4	95
4	Benzeneacetonitrile	117	C8H7N	000140-29-4	95



3512

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

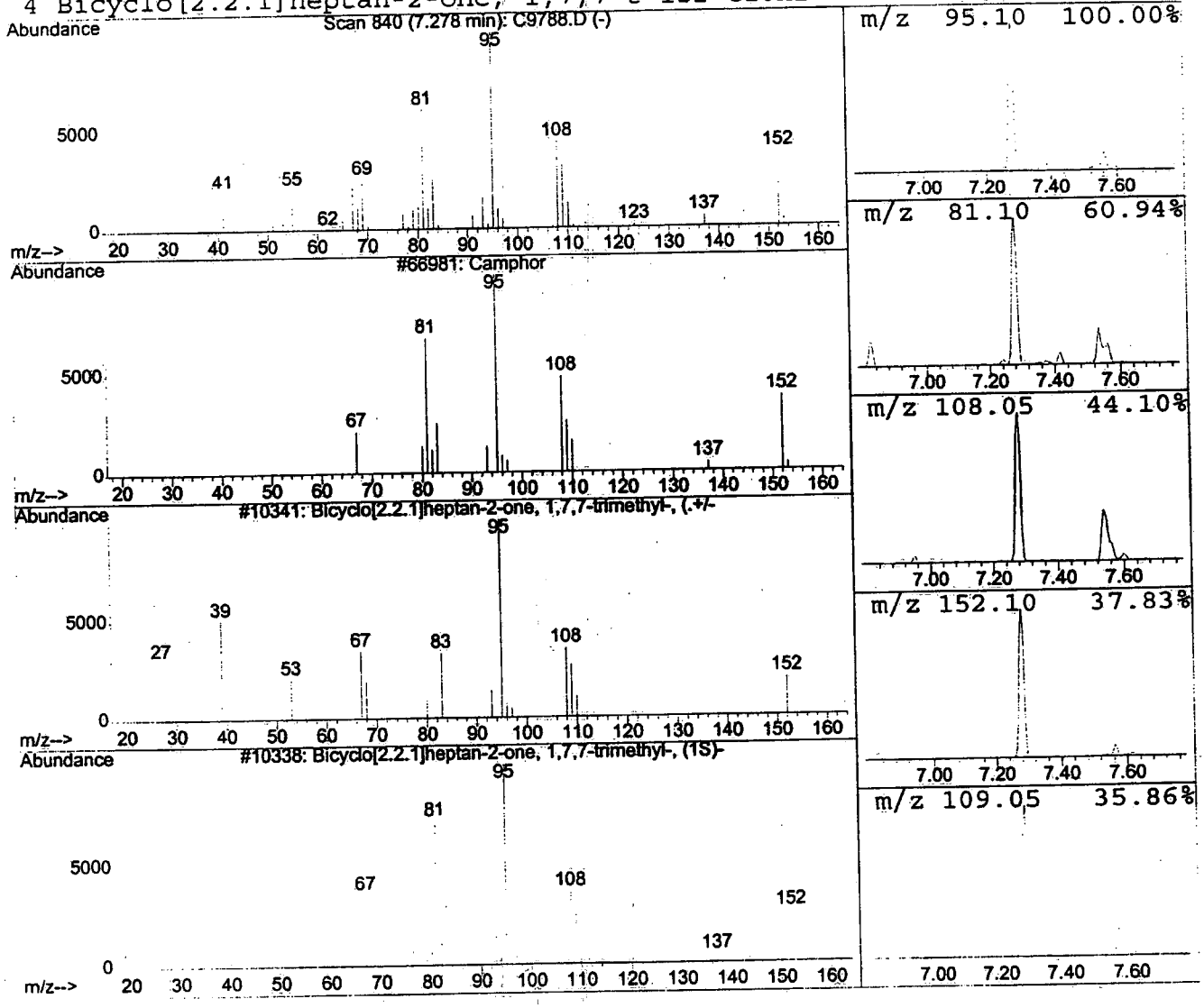
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 7 Unknown cyclic hydrocarbon Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.28	38.34 UG	2074620	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Camphor	152	C10H16O	000076-22-2	97
2	Bicyclo[2.2.1]heptan-2-one, 1,7,7-t	152	C10H16O	021368-68-3	97
3	Bicyclo[2.2.1]heptan-2-one, 1,7,7-t	152	C10H16O	000464-48-2	96
4	Bicyclo[2.2.1]heptan-2-one, 1,7,7-t	152	C10H16O	000464-49-3	95



3514

C000343

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D Vial: 16
Acq On : 4 May 2001 18:16 Operator: DP
Sample : MW-8,2867-007,A,500mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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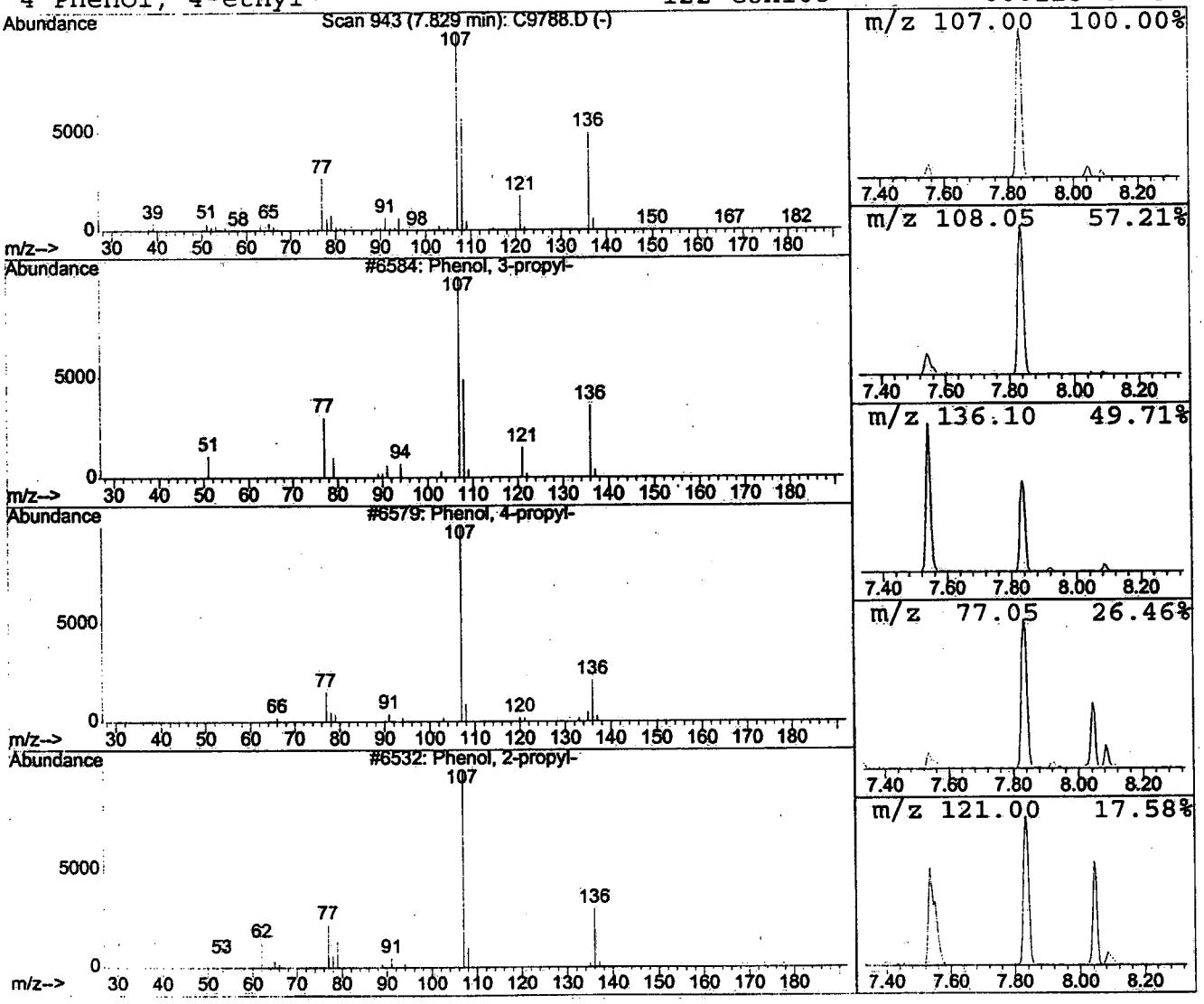
Peak Number 8 Substituted phenol Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.83	50.02 UG	2706540	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 3-propyl-	136	C9H12O	000621-27-2	90
2	Phenol, 4-propyl-	136	C9H12O	000645-56-7	59
3	Phenol, 2-propyl-	136	C9H12O	000644-35-9	53
4	Phenol, 4-ethyl-	122	C8H10O	000123-07-9	43



3519

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D Vial: 16
Acq On : 4 May 2001 18:16 Operator: DP
Sample : MW-8,2867-007,A,500mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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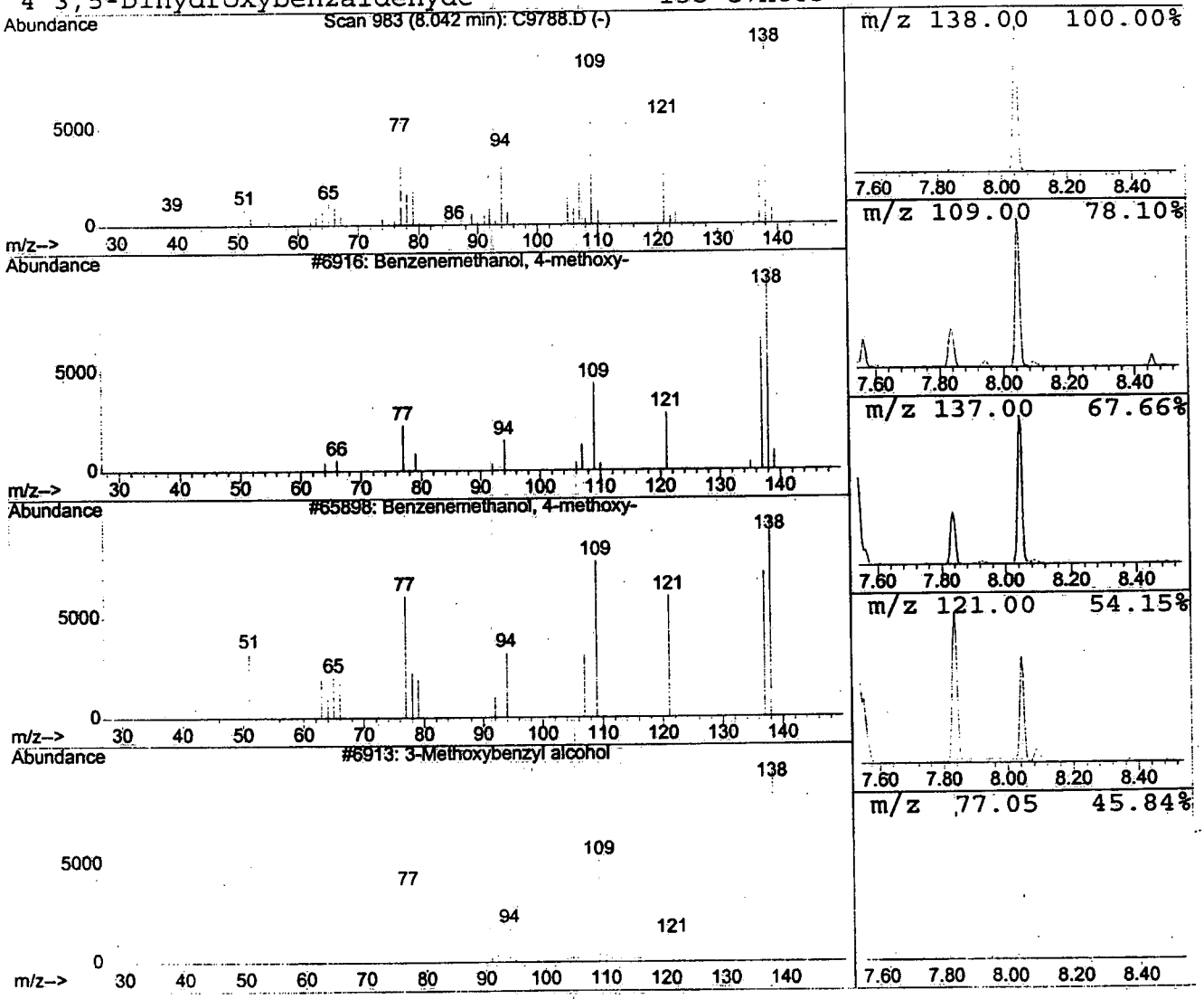
Peak Number 9 Substituted benzene Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.04	15.63 UG	845468	Naphthalene-d8	7.54

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanol, 4-methoxy-	138	C8H10O2	000105-13-5	97
2	Benzenemethanol, 4-methoxy-	138	C8H10O2	000105-13-5	96
3	3-Methoxybenzyl alcohol	138	C8H10O2	006971-51-3	72
4	3,5-Dihydroxybenzaldehyde	138	C7H6O3	000000-00-0	38



3520

C00351

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

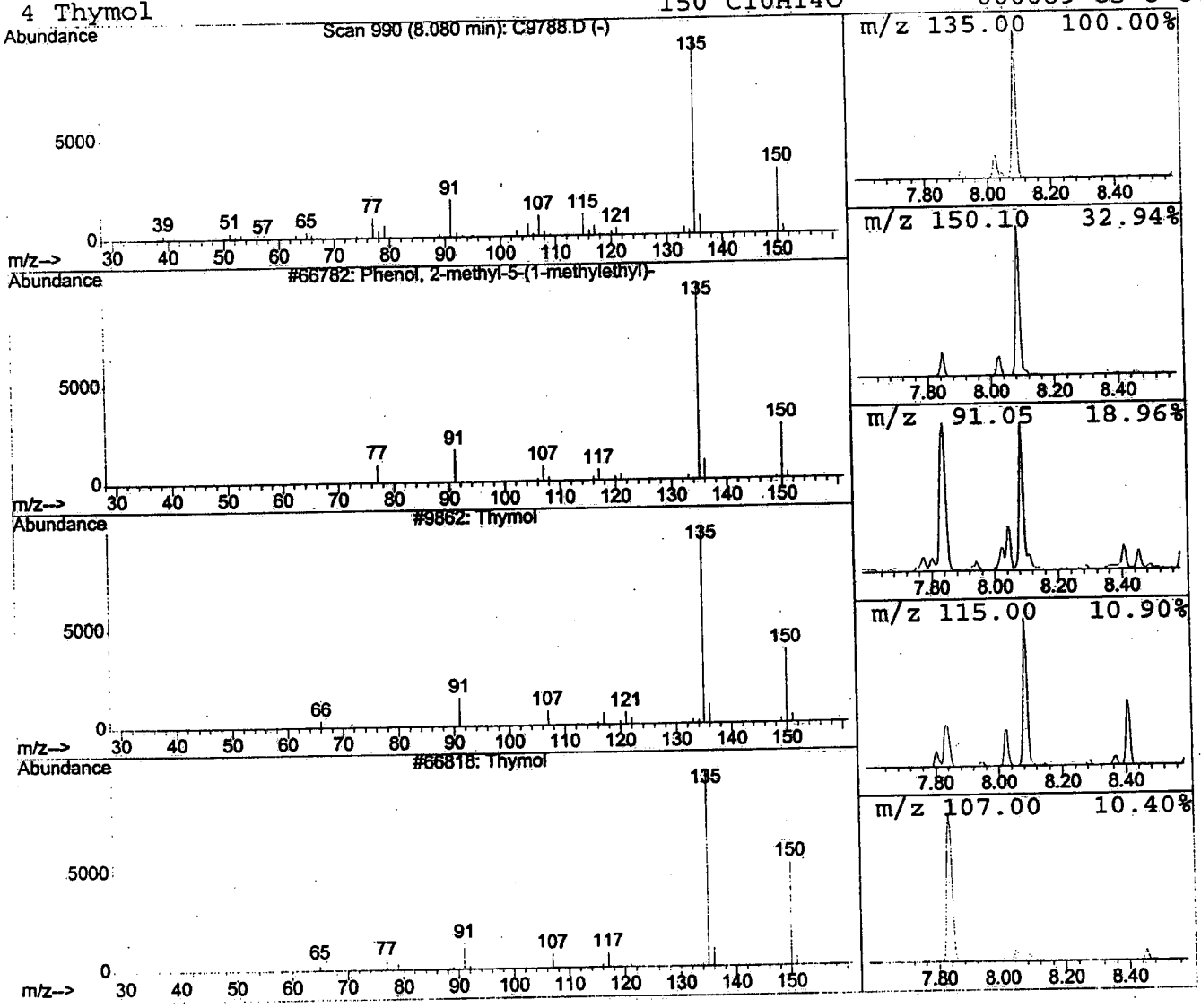
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 10 Unknown — Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.08	13.58 UG	734831	Naphthalene-d8	7.54

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	87
3	Thymol	150	C10H14O	000089-83-8	87
4	Thymol	150	C10H14O	000089-83-8	87



3521

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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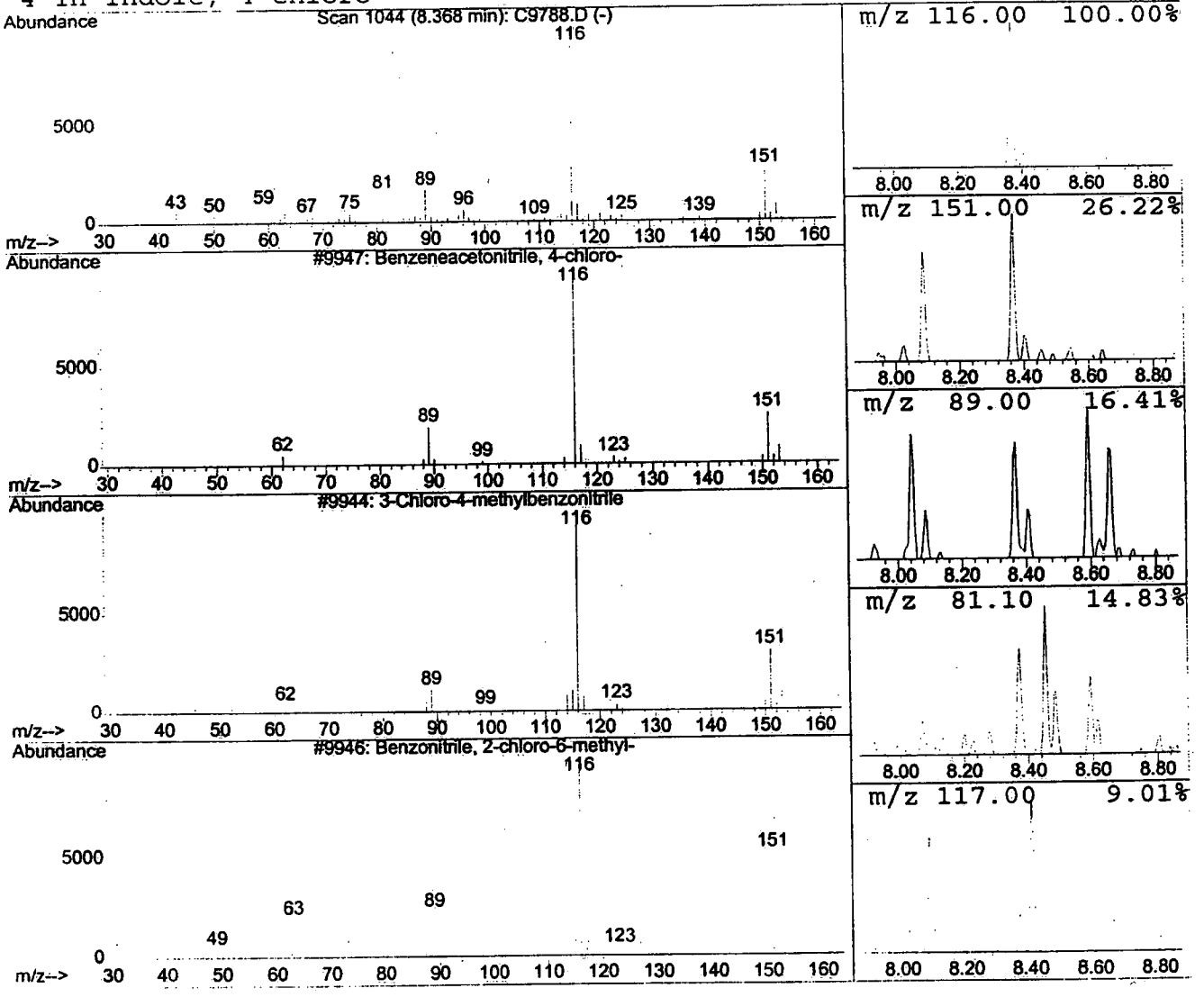
Peak Number 11 Substituted benzene Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.37	12.61 UG	192475	Acenaphthene-d10	9.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneacetonitrile, 4-chloro-	151	C8H6ClN	000140-53-4	93
2	3-Chloro-4-methylbenzonitrile	151	C8H6ClN	021423-81-4	90
3	Benzonitrile, 2-chloro-6-methyl-	151	C8H6ClN	006575-09-3	87
4	1H-Indole, 4-chloro-	151	C8H6ClN	025235-85-2	83



3522

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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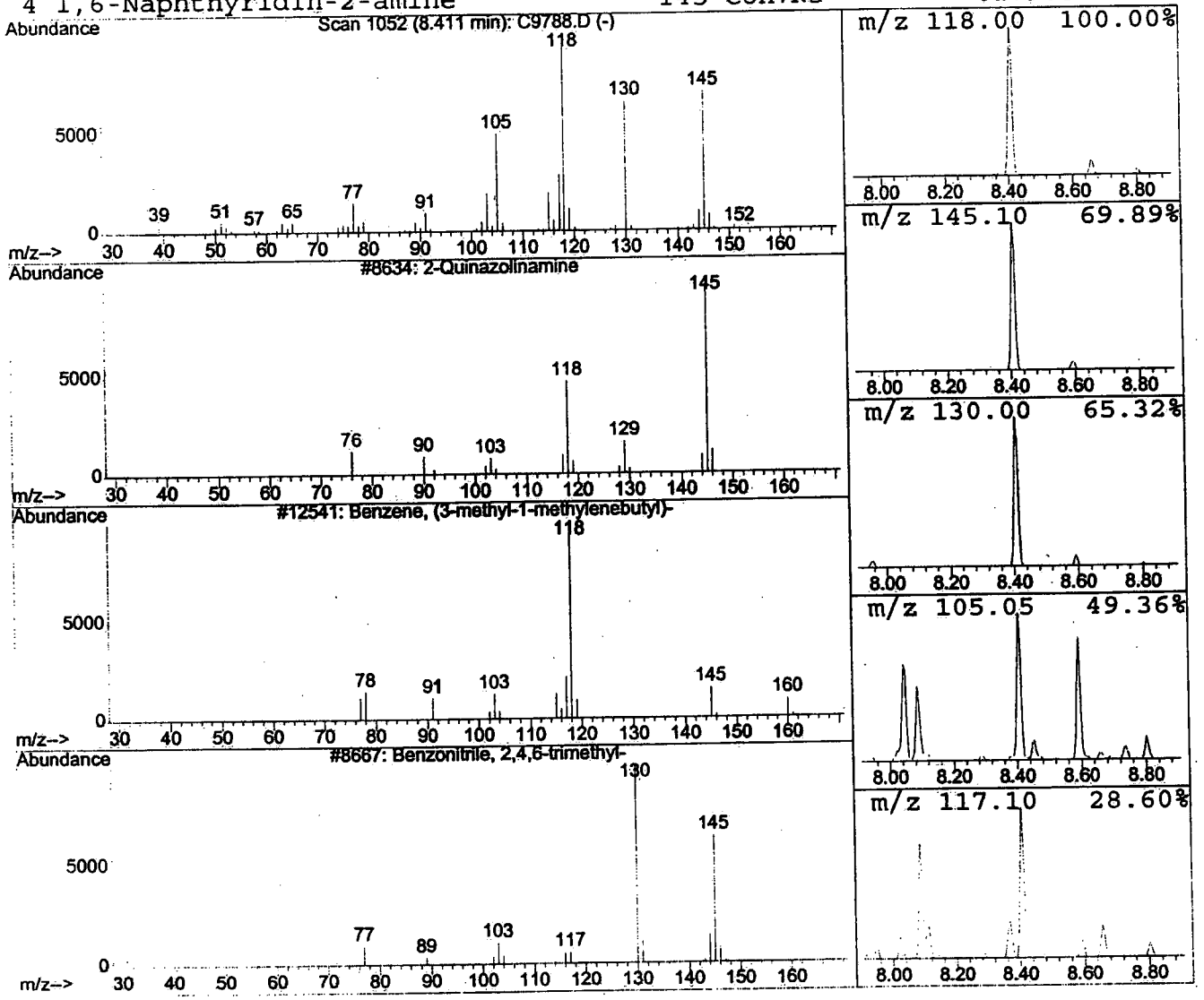
Peak Number 12 Unknown — Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.41	19.73 UG	301123	Acenaphthene-d10	9.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Quinazolinamine	145	C8H7N3	001687-51-0	72
2	Benzene, (3-methyl-1-methylenebutyl	160	C12H16	038212-14-5	47
3	Benzonitrile, 2,4,6-trimethyl-	145	C10H11N	002571-52-0	41
4	1,6-Naphthyridin-2-amine	145	C8H7N3	017965-81-0	35



3523

000054

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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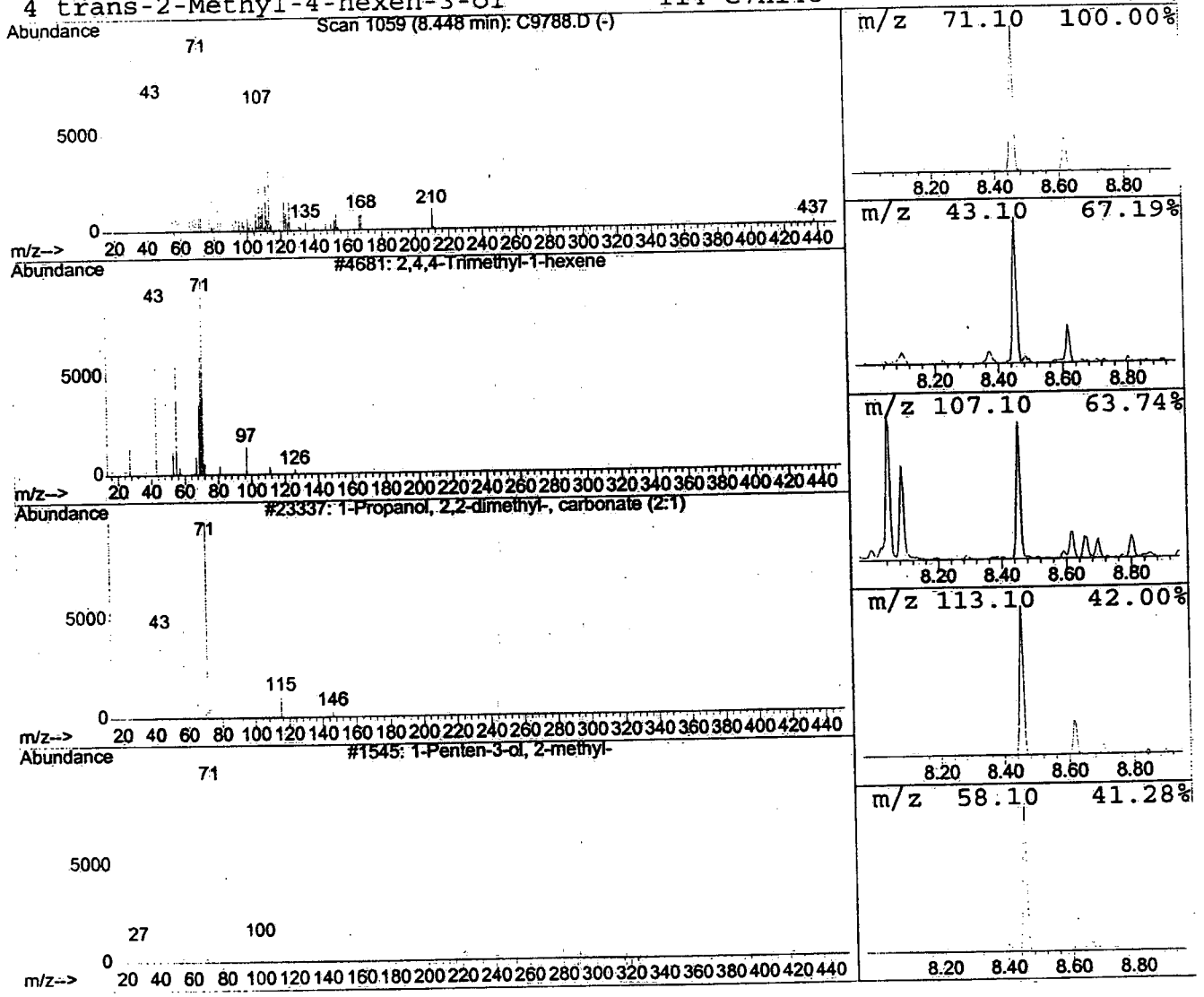
Peak Number 13 Unknown

Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.45	28.51 UG	435191	Acenaphthene-d10	9.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4,4-Trimethyl-1-hexene	126	C9H18	051174-12-0	22
2	1-Propanol, 2,2-dimethyl-, carbonat	202	C11H22O3	013183-14-7	14
3	1-Penten-3-ol, 2-methyl-	100	C6H12O	002088-07-5	14
4	trans-2-Methyl-4-hexen-3-ol	114	C7H14O	096346-76-8	14



3524

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D Vial: 16
Acq On : 4 May 2001 18:16 Operator: DP
Sample : MW-8,2867-007,A,500mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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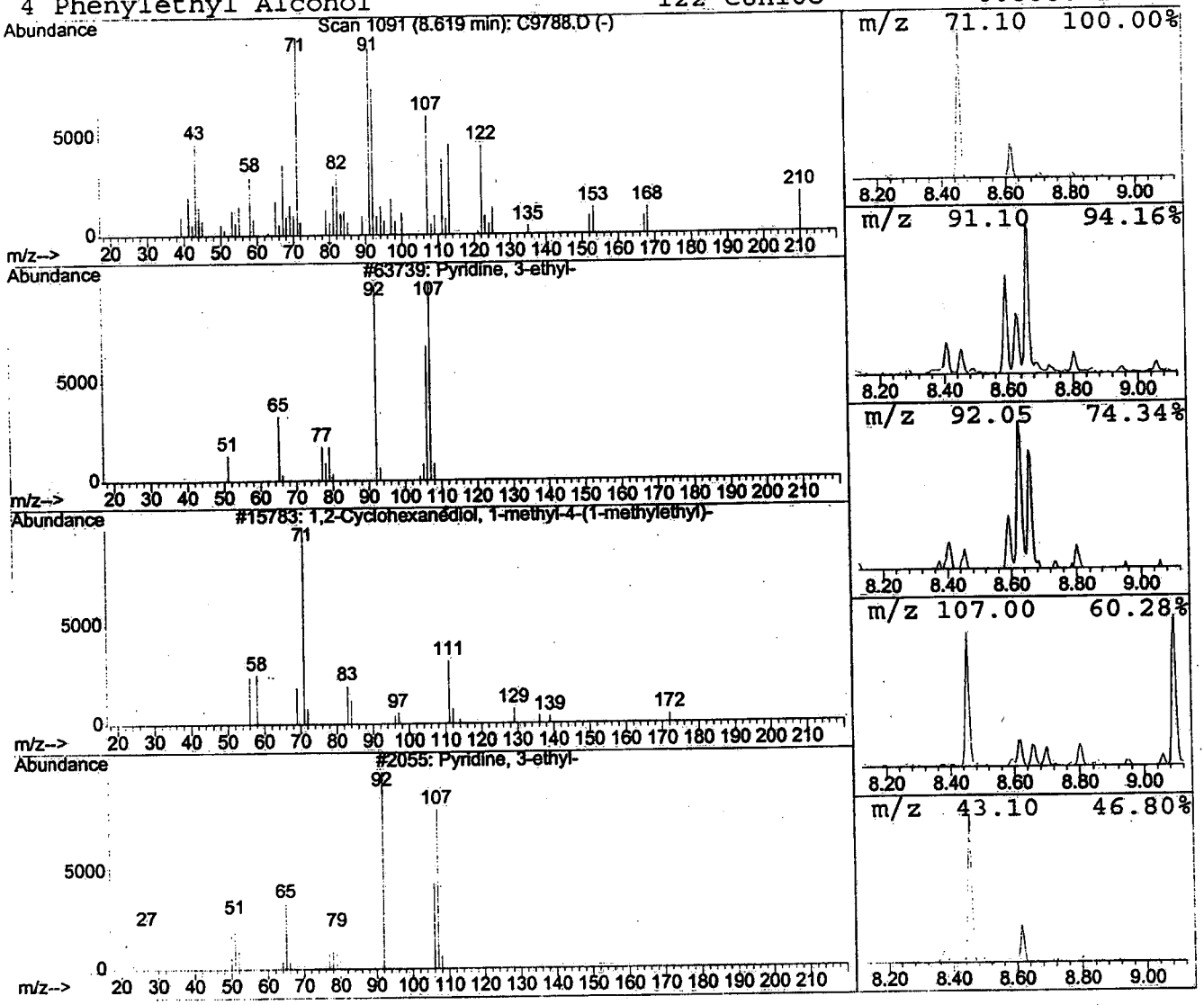
Peak Number 14 Unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.62	7.43 UG	113375	Acenaphthene-d10	9.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyridine, 3-ethyl-	107	C7H9N	000536-78-7	14
2	1,2-Cyclohexanediol, 1-methyl-4-(1-	172	C10H20O2	033669-76-0	14
3	Pyridine, 3-ethyl-	107	C7H9N	000536-78-7	14
4	Phenylethyl Alcohol	122	C8H10O	000060-12-8	14



3575

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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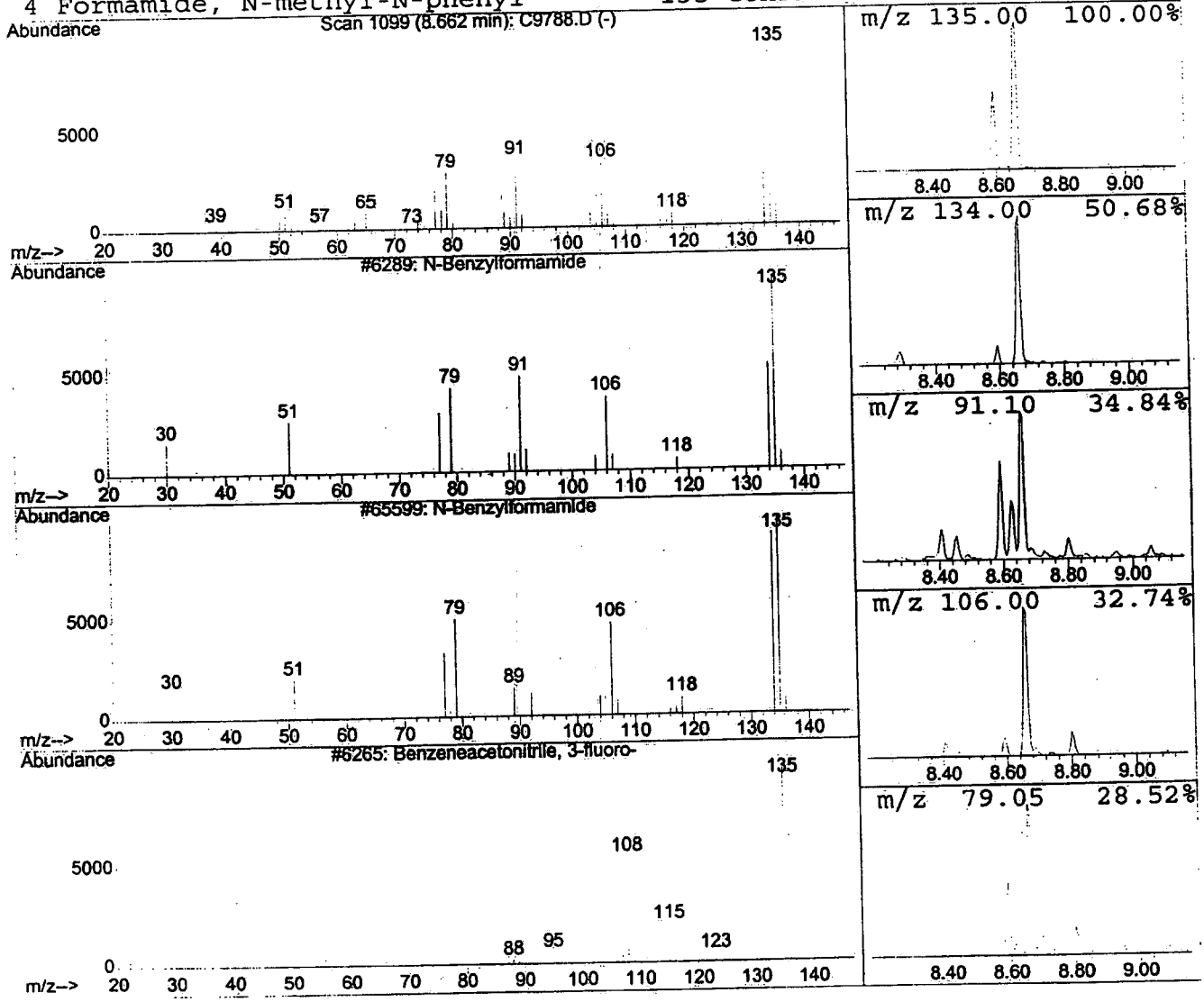
Peak Number 15 Substituted benzene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.66	22.48 UG	343057	Acenaphthene-d10	9.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	N-Benzylformamide	135	C8H9NO	006343-54-0	95
2	N-Benzylformamide	135	C8H9NO	006343-54-0	74
3	Benzeneacetonitrile, 3-fluoro-	135	C8H6FN	000501-00-8	47
4	Formamide, N-methyl-N-phenyl-	135	C8H9NO	000093-61-8	43



C00857

3526

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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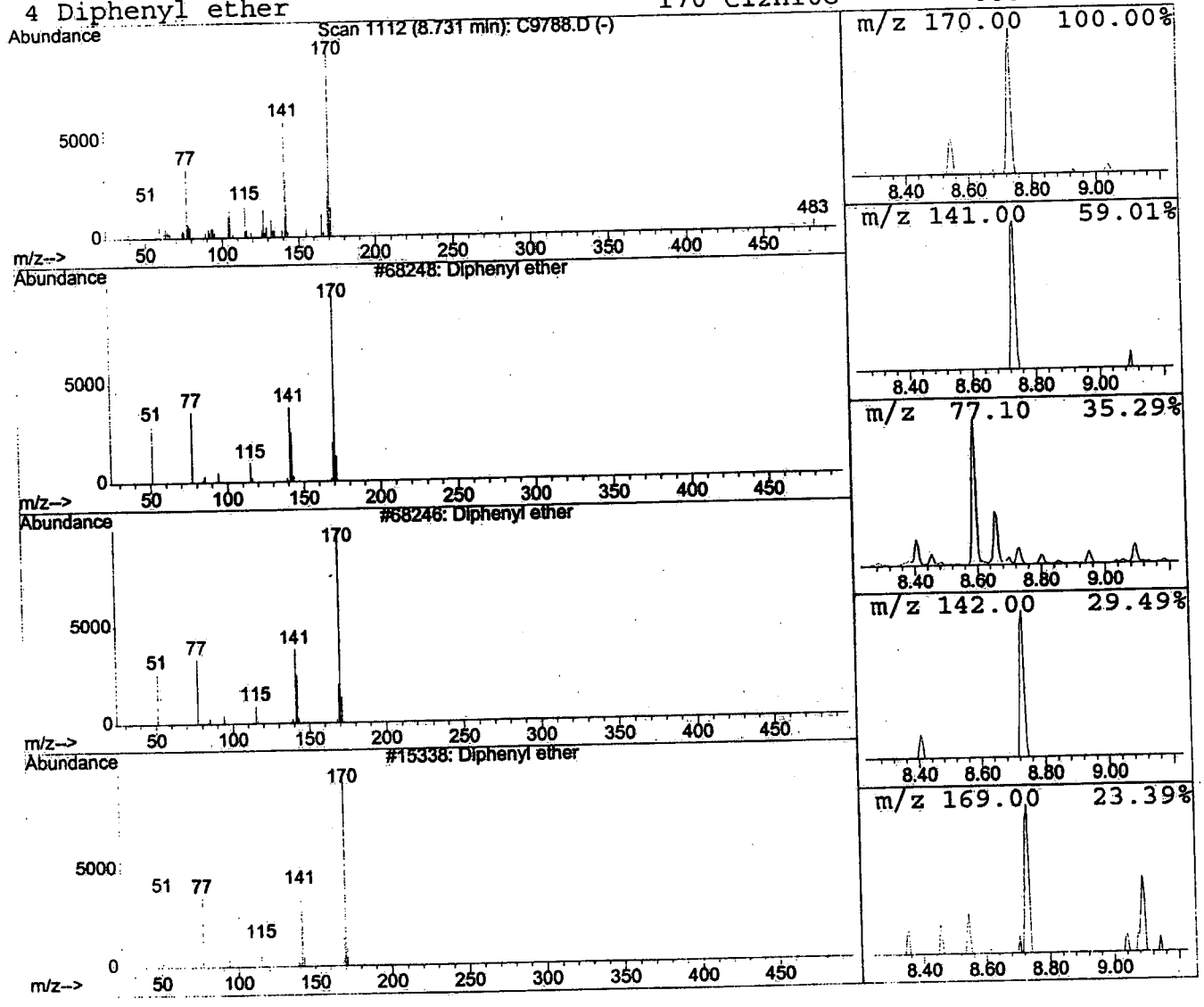
Peak Number 16 Substituted benzene Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.73	5.74 UG	87650	Acenaphthene-d10	9.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diphenyl ether	170	C12H10O	000101-84-8	87
2	Diphenyl ether	170	C12H10O	000101-84-8	87
3	Diphenyl ether	170	C12H10O	000101-84-8	64
4	Diphenyl ether	170	C12H10O	000101-84-8	52



C00358

3527

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D Vial: 16
Acq On : 4 May 2001 18:16 Operator: DP
Sample : MW-8,2867-007,A,500mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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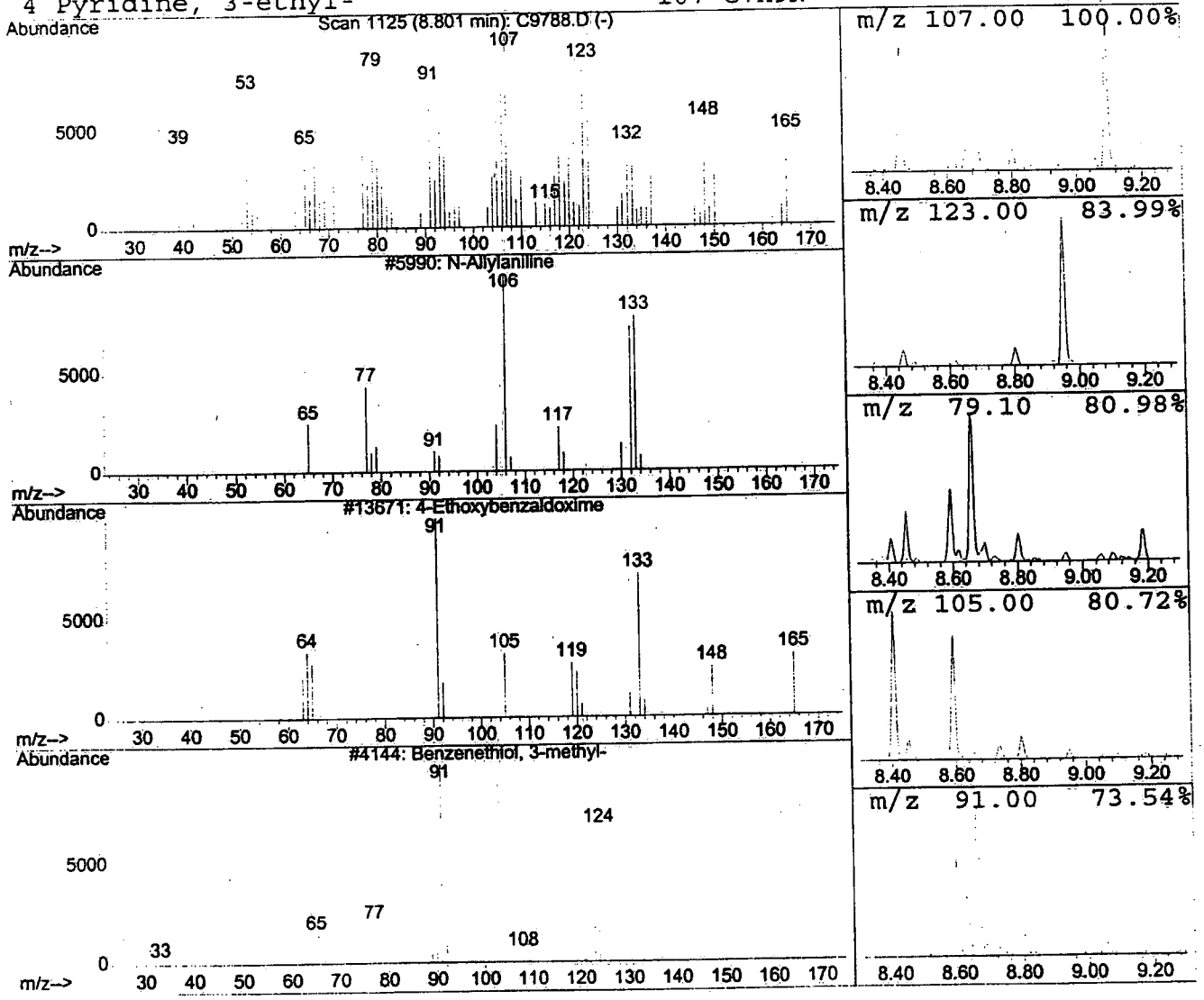
Peak Number 17 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.80	6.56 UG	100116	Acenaphthene-d10	9.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	N-Allylaniline	133	C9H11N	000589-09-3	22
2	4-Ethoxybenzaldoxime	165	C9H11NO2	000000-00-0	18
3	Benzenethiol, 3-methyl-	124	C7H8S	000108-40-7	18
4	Pyridine, 3-ethyl-	107	C7H9N	000536-78-7	16



3574

Library Search Compound Report

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Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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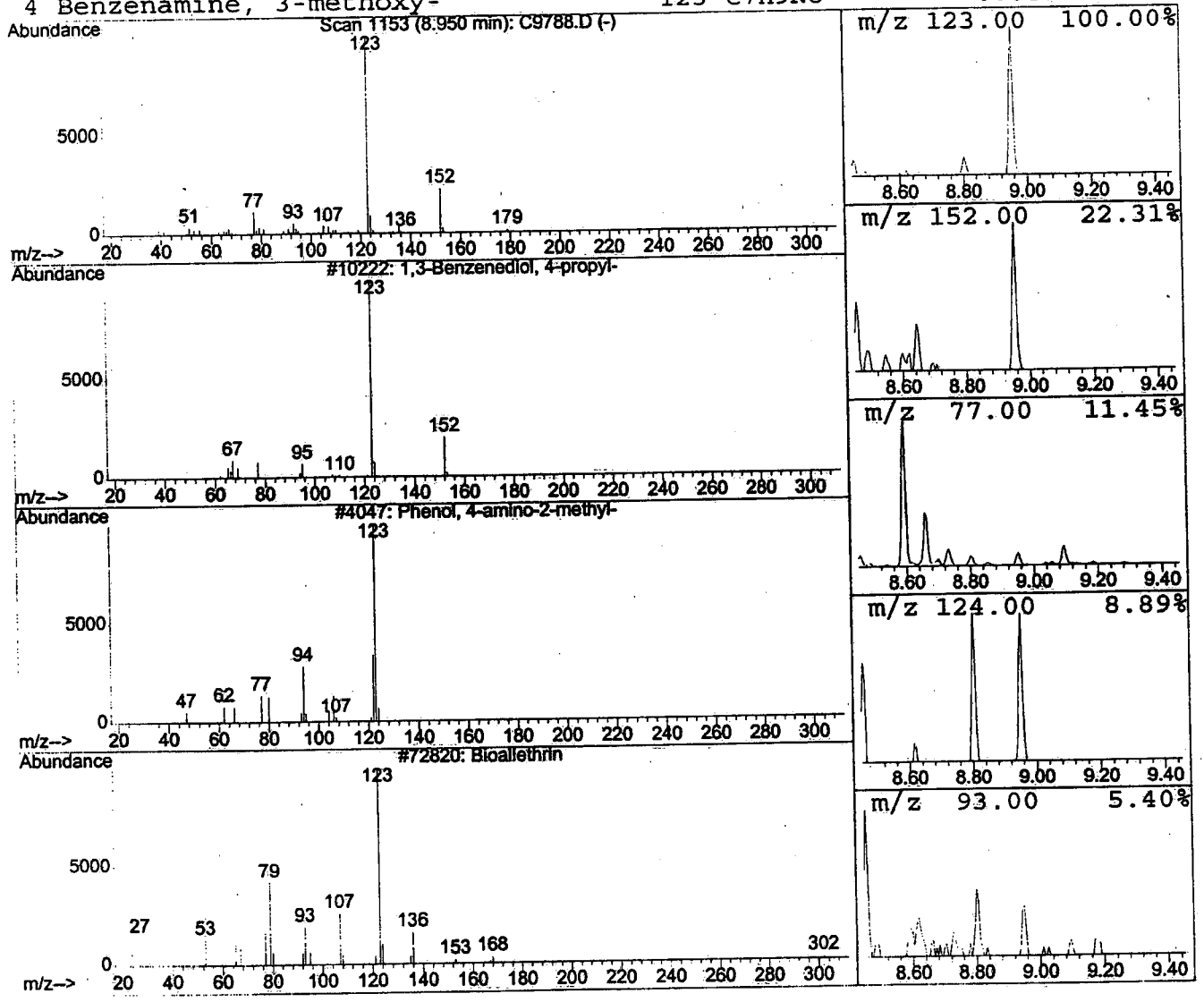
Peak Number 18 Substituted benzene Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.95	5.11 UG	77925	Acenaphthene-d10	9.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3-Benzenediol, 4-propyl-	152	C9H12O2	018979-60-7	72
2	Phenol, 4-amino-2-methyl-	123	C7H9NO	002835-96-3	38
3	Bioallethrin	302	C19H26O3	000584-79-2	38
4	Benzenamine, 3-methoxy-	123	C7H9NO	000536-90-3	9



3529

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
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Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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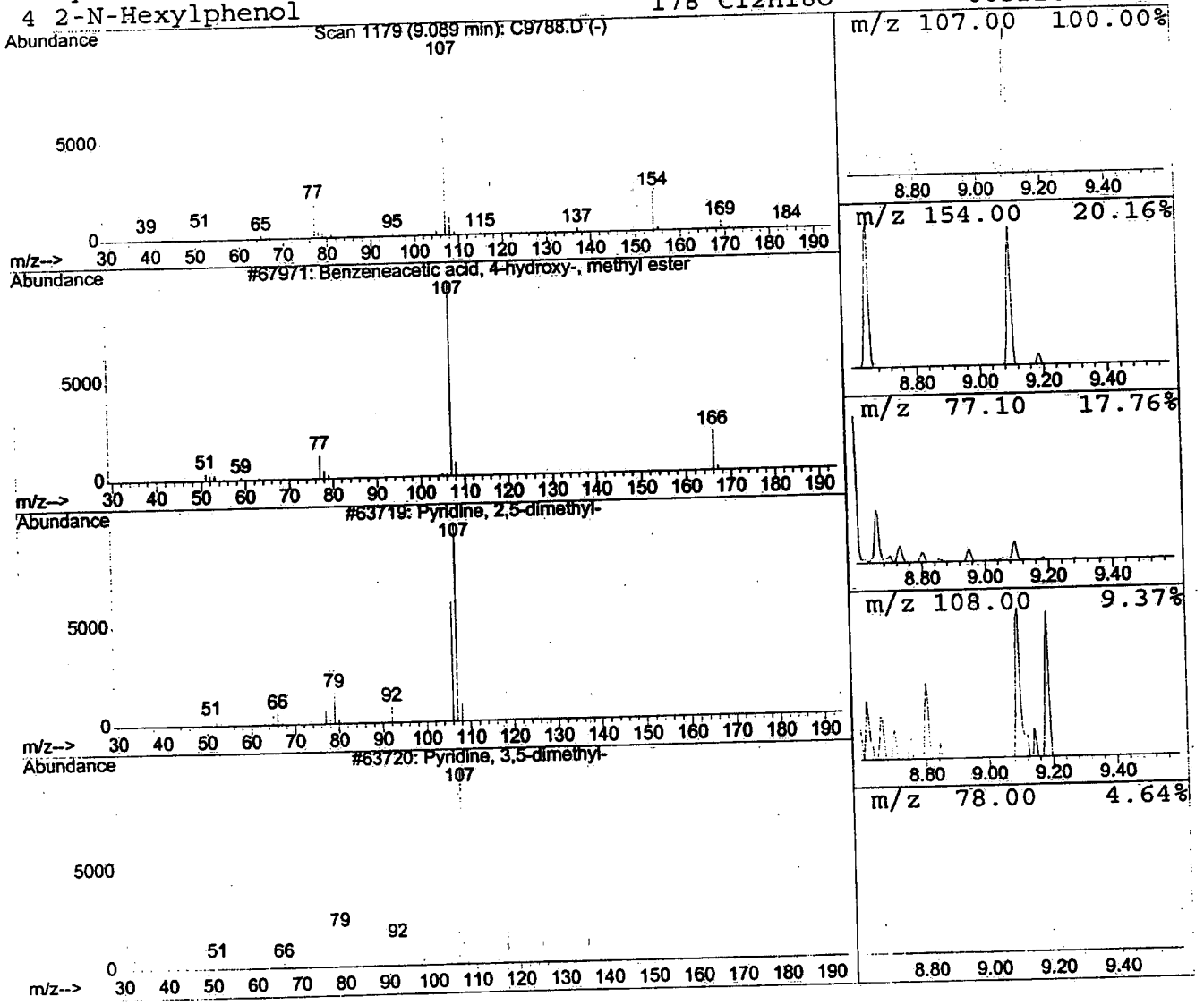
Peak Number 19 Unknown

Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.09	5.04 UG	77000	Acenaphthene-d10	9.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneacetic acid, 4-hydroxy-, met	166	C9H10O3	014199-15-6	53
2	Pyridine, 2,5-dimethyl-	107	C7H9N	000589-93-5	53
3	Pyridine, 3,5-dimethyl-	107	C7H9N	000591-22-0	53
4	2-N-Hexylphenol	178	C12H18O	003226-32-2	42



3530

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D Vial: 16
Acq On : 4 May 2001 18:16 Operator: DP
Sample : MW-8,2867-007,A,500mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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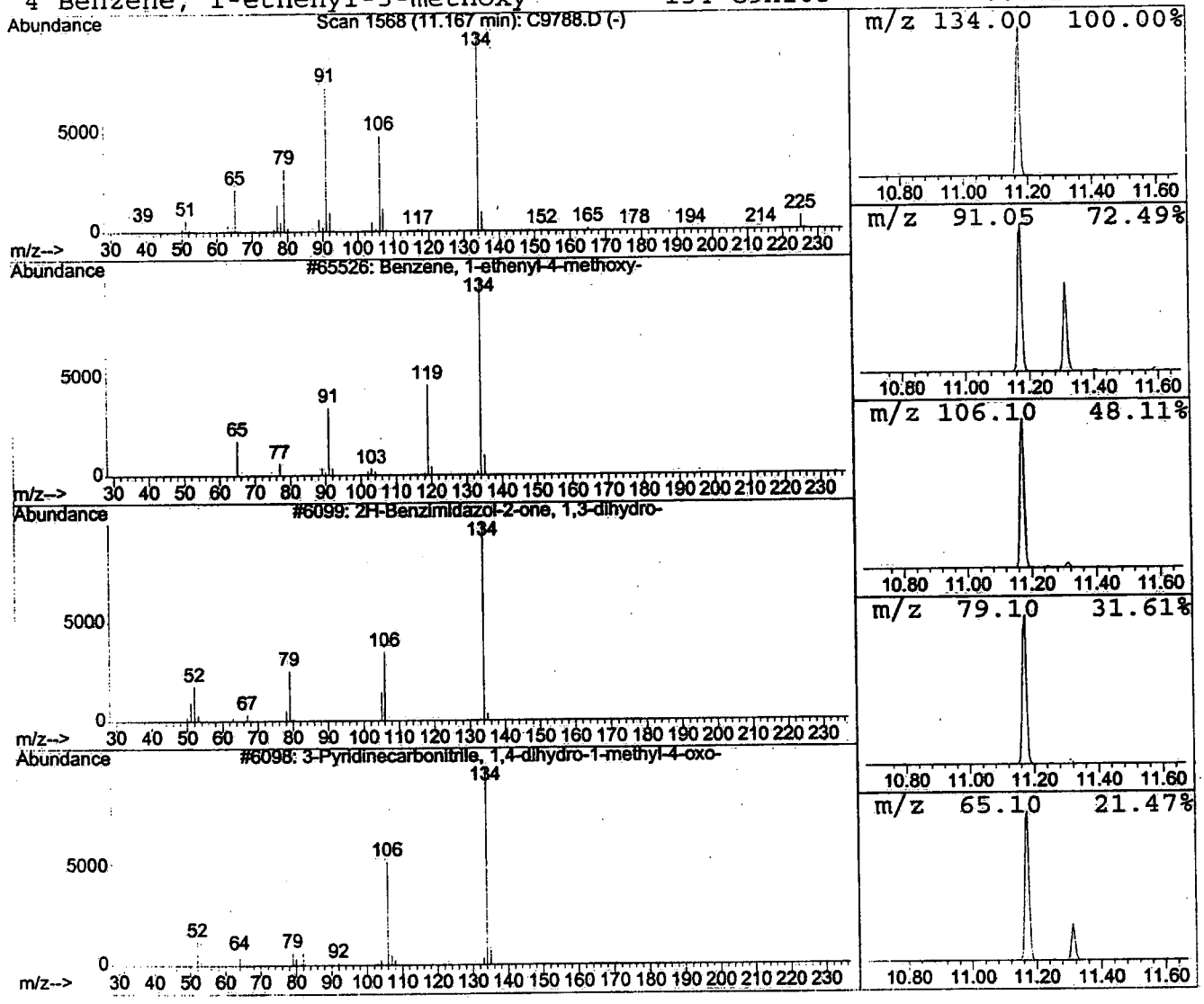
Peak Number 20 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.17	100.87 UG	918395	Phenanthrene-d10	10.49

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethenyl-4-methoxy-	134	C9H10O	000637-69-4	43
2	2H-Benzimidazol-2-one, 1,3-dihydro-	134	C7H6N2O	000615-16-7	42
3	3-Pyridinecarbonitrile, 1,4-dihydro	134	C7H6N2O	000767-98-6	38
4	Benzene, 1-ethenyl-3-methoxy-	134	C9H10O	000626-20-0	38



C00362

3531

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
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Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

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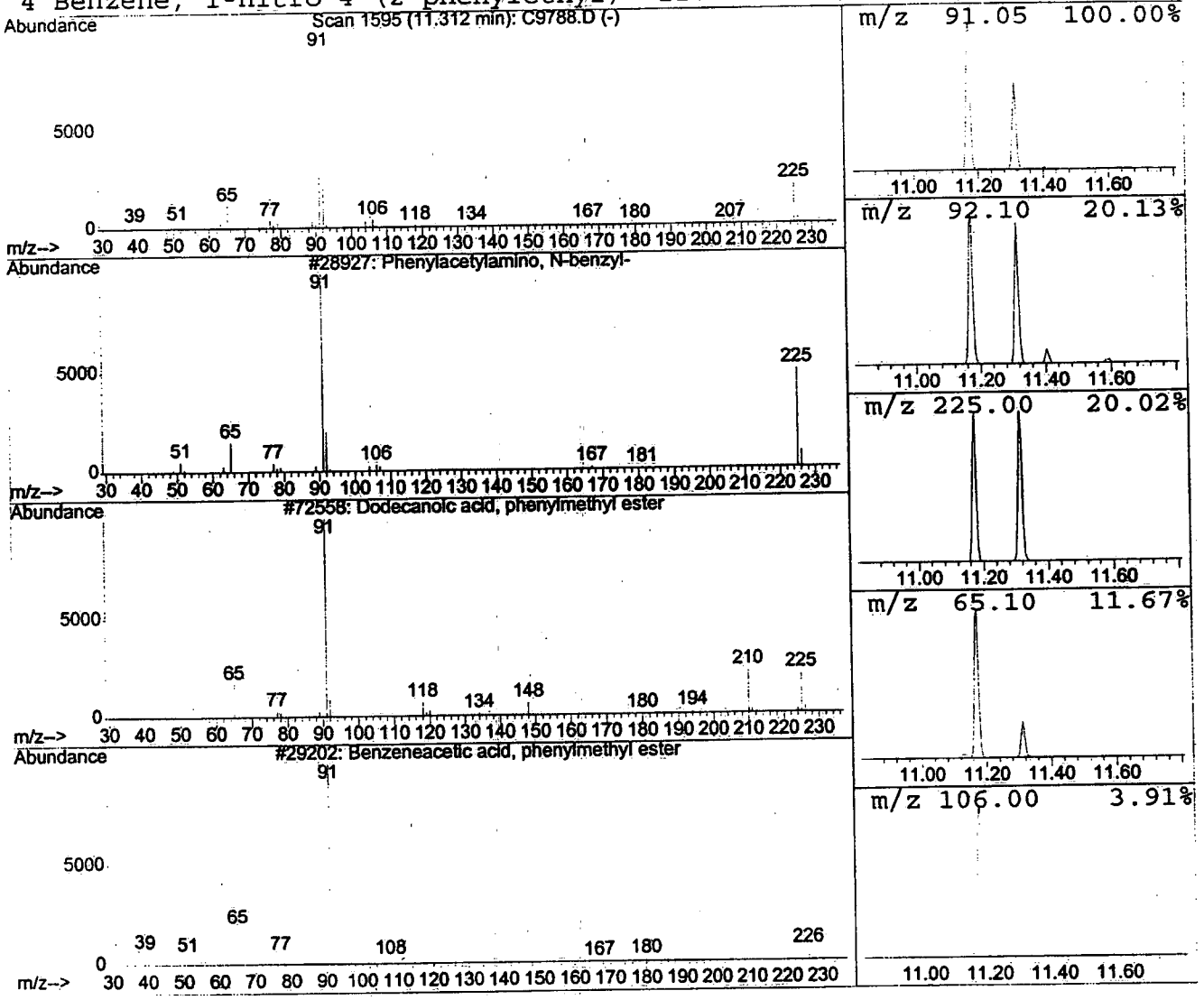
Peak Number 21 Substituted benzene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.31	18.99 UG	172945	Phenanthrene-d10	10.49

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenylacetylamino, N-benzyl-	225	C15H15NO	000000-00-0	91
2	Dodecanoic acid, phenylmethyl ester	290	C19H30O2	000140-25-0	42
3	Benzeneacetic acid, phenylmethyl es	226	C15H14O2	000102-16-9	35
4	Benzene, 1-nitro-4-(2-phenylethyl)-	227	C14H13NO2	014310-29-3	27



3437

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

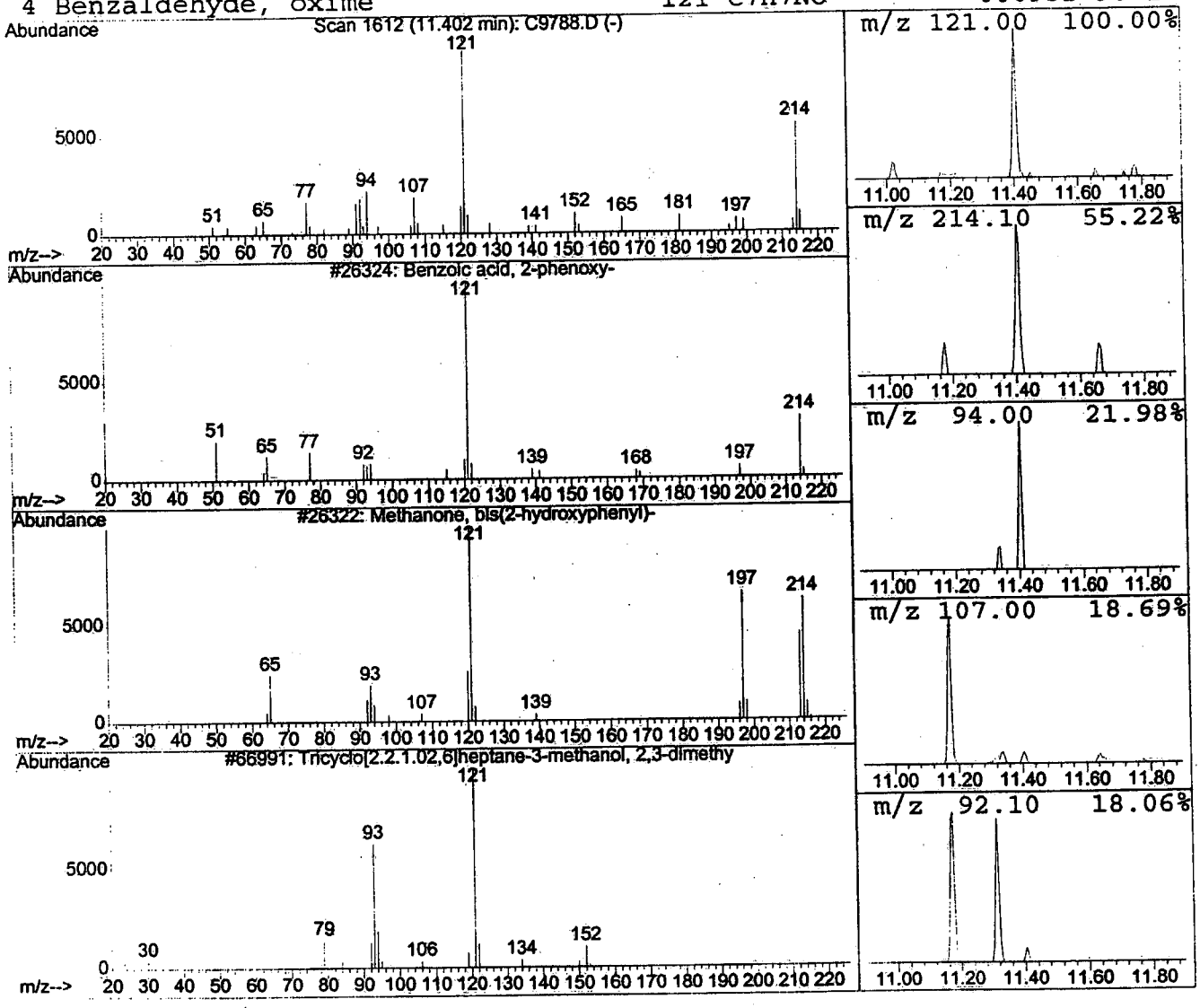
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 22 Substituted benzene Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.40	4.36 UG	39707	Phenanthrene-d10	10.49

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2-phenoxy-	214	C13H10O3	002243-42-7	64
2	Methanone, bis(2-hydroxyphenyl)-	214	C13H10O3	000835-11-0	59
3	Tricyclo[2.2.1.02,6]heptane-3-metha	152	C10H16O	029550-55-8	47
4	Benzaldehyde, oxime	121	C7H7NO	000932-90-1	47



3533

C00364

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9788.D
Acq On : 4 May 2001 18:16
Sample : MW-8,2867-007,A,500mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
MS Integration Params: LSCINT.P

Vial: 16
Operator: DP
Inst : MSD-C
Multiplr: 1.00

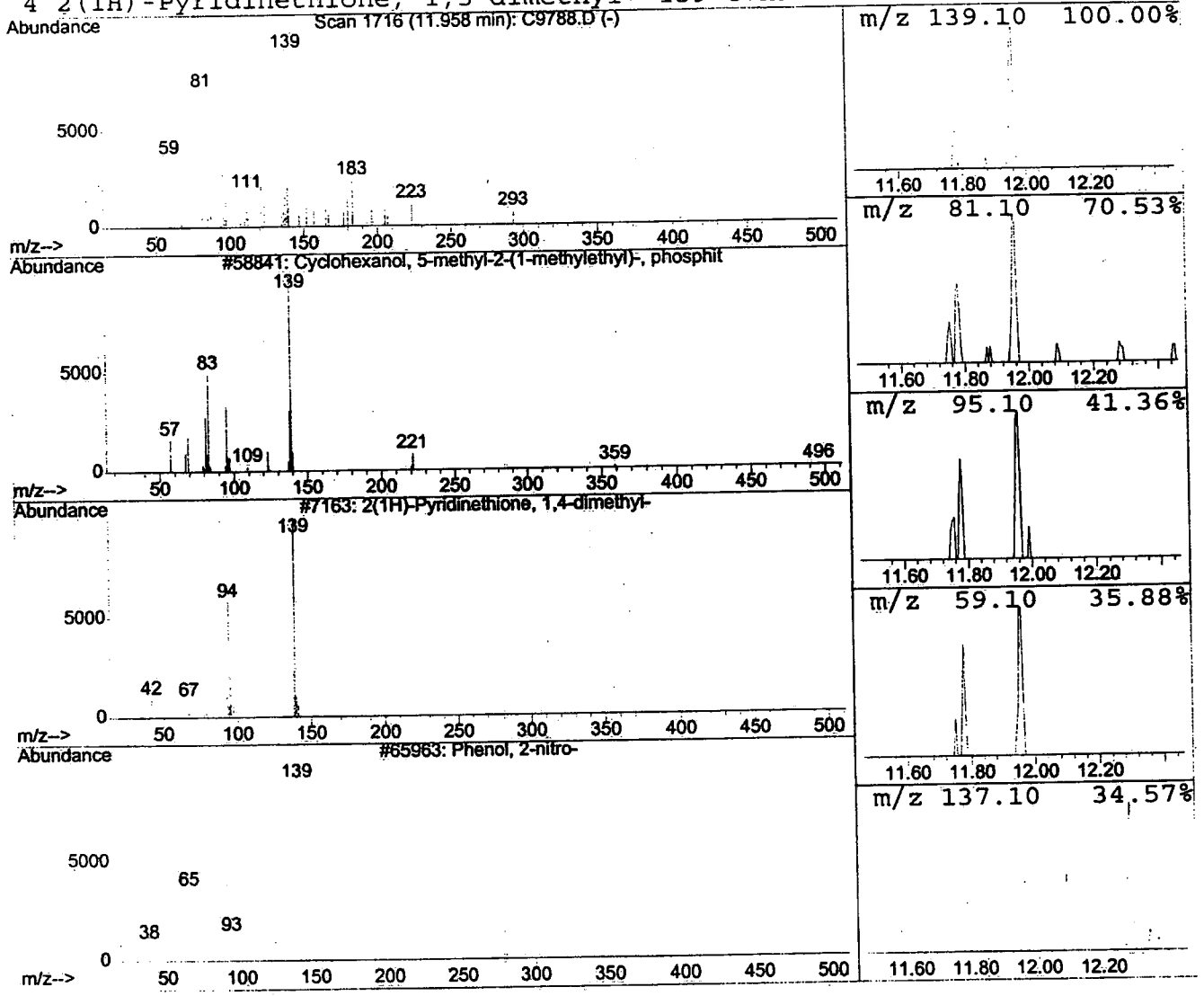
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 23 Unknown cyclic hydrocarbon Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.96	7.88 UG	39834	Chrysene-d12	12.94

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanol, 5-methyl-2-(1-methyle	496	C30H57O3P	074793-74-1	43
2	2(1H)-Pyridinethione, 1,4-dimethyl-	139	C7H9NS	019006-67-8	35
3	Phenol, 2-nitro-	139	C6H5NO3	000088-75-5	25
4	2(1H)-Pyridinethione, 1,5-dimethyl-	139	C7H9NS	019006-68-9	25



3534

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-04-01\C9787.D Vial: 18
Acq On : 4 May 2001 17:50 Operator: DP
Sample : FB,2867-008,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
G Integration Params: RTEINT.P
Quant Time: May 7 9:15 2001 Quant Results File: CW0901.RES

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration
DataAcq Meth : CW0901

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.18	152	149007	40.00	UG	-0.02
22) Naphthalene-d8	7.54	136	419913	40.00	UG	-0.01
39) Acenaphthene-d10	9.18	164	146819	40.00	UG	-0.01
60) Phenanthrene-d10	10.49	188	150315	40.00	UG	0.00
75) Chrysene-d12	12.92	240	66250	40.00	UG	-0.03
84) Perylene-d12	15.13	264	47320	40.00	UG	-0.04
System Monitoring Compounds						
4) 2-Fluorophenol	4.57	112	322929	67.88	UG	-0.02
Spiked Amount 100.000	Range 42 - 95		Recovery = 67.88%			
6) Phenol-d5	5.67	99	328913	69.59	UG	-0.02
Spiked Amount 100.000	Range 59 - 97		Recovery = 69.59%			
23) Nitrobenzene-d5	6.78	82	97302	31.19	UG	-0.01
Spiked Amount 50.000	Range 49 - 105		Recovery = 62.38%			
43) 2-Fluorobiphenyl	8.54	172	205860	42.56	UG	-0.01
Spiked Amount 50.000	Range 54 - 110		Recovery = 85.12%			
64) 2,4,6-Tribromophenol	9.88	330	35834	94.68	UG	0.00
Spiked Amount 100.000	Range 48 - 126		Recovery = 94.68%			
77) Terphenyl-d14	11.81	244	95220	50.93	UG	-0.03
Spiked Amount 50.000	Range 53 - 123		Recovery = 101.86%			

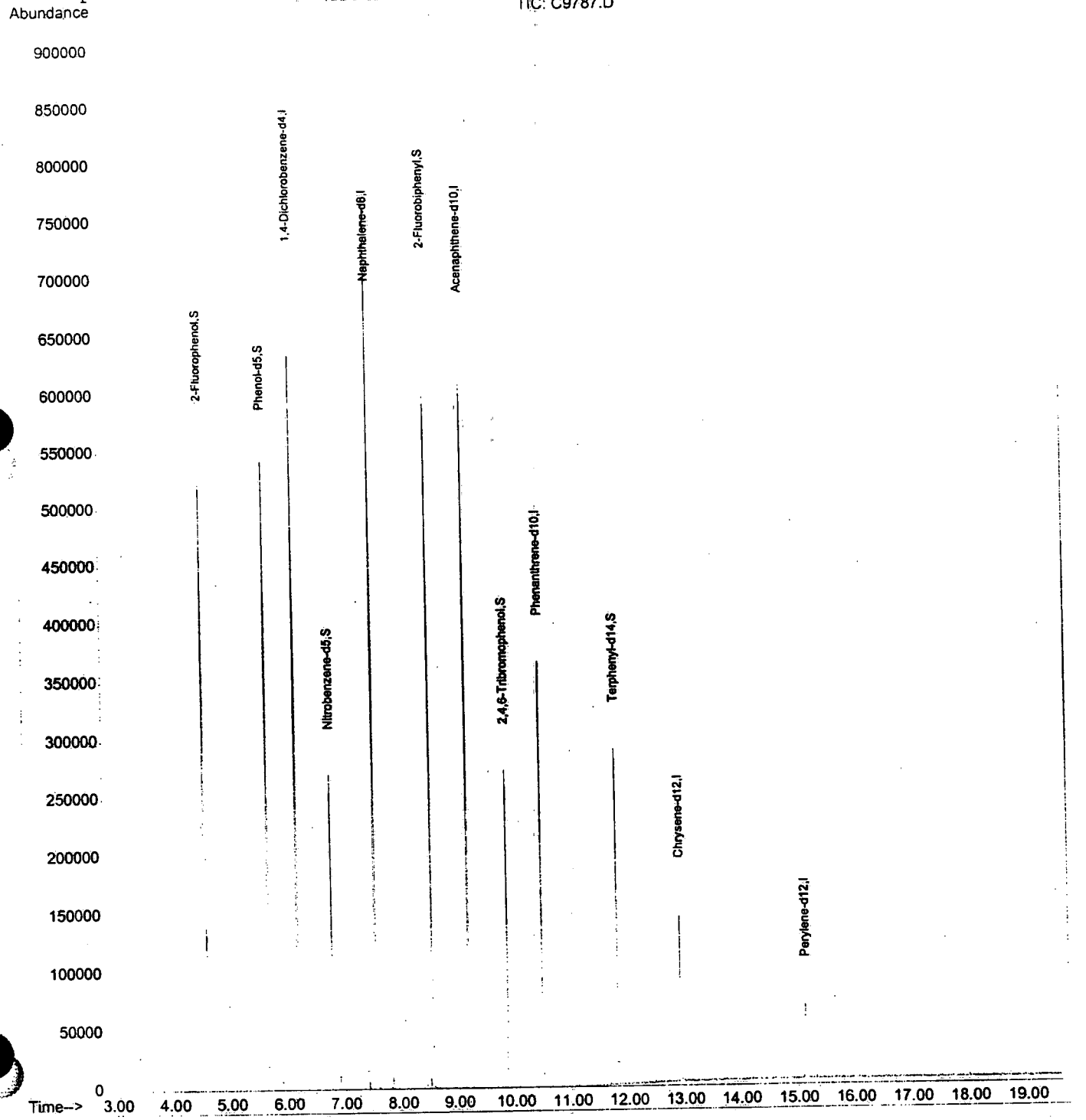
Target Compounds Qvalue

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9787.D Vial: 18
Acq On : 4 May 2001 17:50 Operator: DP
Sample : FB,2867-008,A,1000mL,100,05/04/01 Inst : MSD-C
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 9:15 2001 Quant Results File: CW0901.RES

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration



3536

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9787.D
Acq On : 4 May 2001 17:50
Sample : FB,2867-008,A,1000mL,100,05/04/01
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/
Vial: 18
Operator: DP
Inst : MSD-C
Multiplr: 1.00
'S Integration Params: LSCINT.P
uant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

No Library Search Compounds Detected

****
C9787.D CW0901.M Mon May 07 09:16:23 2001 MSD-C

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-04-01\C9771.D
Acq On : 4 May 2001 11:03
Sample : .,Method-Blank,A,1000mL,100,05/04/01
Misc : N/A,N/A,N/A,1
ALS Integration Params: RTEINT.P
Quant Time: May 4 12:43 2001

Vial: 3
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Results File: CW0901.RES

Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration
DataAcq Meth : CW0901

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.18	152	123828	40.00	UG	-0.02
22) Naphthalene-d8	7.54	136	361266	40.00	UG	-0.01
39) Acenaphthene-d10	9.18	164	118545	40.00	UG	0.00
60) Phenanthrene-d10	10.49	188	105238	40.00	UG	0.00
75) Chrysene-d12	13.03	240	46730	40.00	UG	0.07
84) Perylene-d12	15.27	264	33136	40.00	UG	0.09
System Monitoring Compounds						
4) 2-Fluorophenol	4.56	112	276290	69.88	UG	-0.03
Spiked Amount 100.000	Range 42 - 95		Recovery = 69.88%			
6) Phenol-d5	5.67	99	318277	81.04	UG	-0.02
Spiked Amount 100.000	Range 59 - 97		Recovery = 81.04%			
23) Nitrobenzene-d5	6.78	82	82662	30.80	UG	-0.01
Spiked Amount 50.000	Range 49 - 105		Recovery = 61.60%			
43) 2-Fluorobiphenyl	8.54	172	146604	37.54	UG	0.00
Spiked Amount 50.000	Range 54 - 110		Recovery = 75.08%			
64) 2,4,6-Tribromophenol	9.87	330	23507	88.71	UG	0.00
Spiked Amount 100.000	Range 48 - 126		Recovery = 88.71%			
77) Terphenyl-d14	11.88	244	56034	42.49	UG	0.05
Spiked Amount 50.000	Range 53 - 123		Recovery = 84.98%			

Target Compounds **Qvalue**

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

C00369

35346

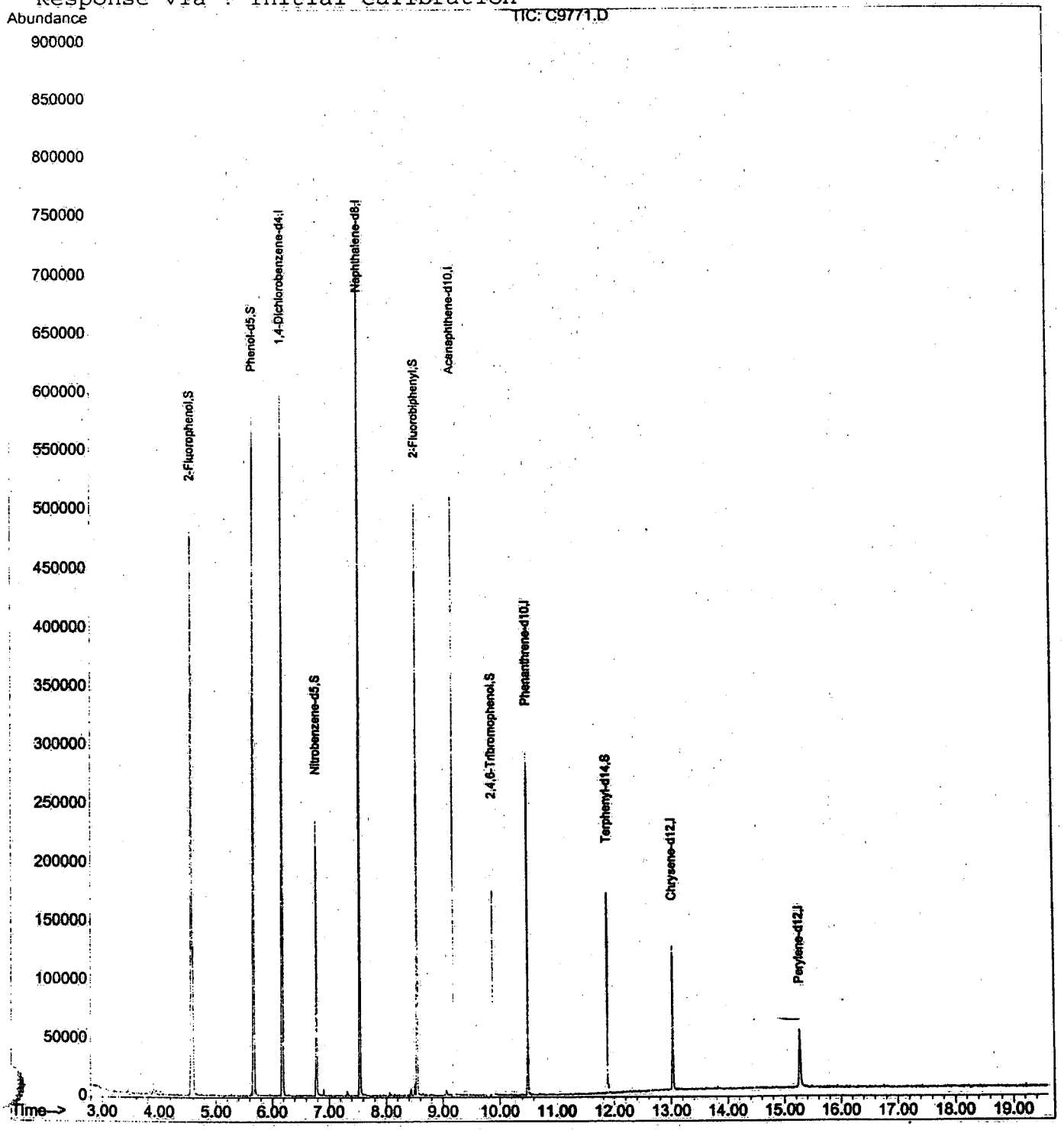
Quantitation Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9771.D
Acq On : 4 May 2001 11:03
Sample : .,Method-Blank,A,1000mL,100,05/04/01
Misc : N/A,N/A,N/A,1
MS Integration Params: RTEINT.P
Quant Time: May 4 12:43 2001

Vial: 3
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Results File: CW0901.RES

Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 30 13:17:45 2001
Response via : Initial Calibration



3539

CC0370

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\05-04-01\C9771.D
Acq On : 4 May 2001 11:03
Sample : .,Method-Blank,A,1000mL,100,05/04/01
Misc : N/A,N/A,N/A,1
IS Integration Params: LSCINT.P
Quant Method : C:\HPCHEM\1\METHODS\CW0901.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

Vial: 3
Operator: DP
Inst : MSD-C
Multiplr: 1.00

No Library Search Compounds Detected

****

C9771.D CW0901.M Fri May 04 12:43:51 2001 MSD-C

PCB METHOD BLANK SUMMARY

Lab File ID: V5488.D

Instrument ID: GC-V

Date Extracted: 05/02/2001

Matrix: AQUEOUS

Date Analyzed: 05/02/2001

Time Analyzed: 15:42

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
EXP_04/10/03	2750-001	05/02/2001	16:13
MW-2	2796-001	05/02/2001	16:44
GW-1	2774-001	05/02/2001	17:14
FB043001_AQ.	2774-003	05/02/2001	17:45
PCB	2774-003-MS1	05/02/2001	18:16
PCB	2774-003-MSD1	05/02/2001	18:46
PCB	PBW0502-MS1	05/02/2001	19:17

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0502-BLK1
Client ID: (2750.2796)
Date Received: NA
Date Extracted: 05/02/2001
Date Analyzed: 05/02/2001
Data file: V5488.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.2
Aroclor-1221	ND		0.2
Aroclor-1232	ND		0.2
Aroclor-1242	ND		0.2
Aroclor-1248	ND		0.2
Aroclor-1254	ND		0.2
Aroclor-1260	ND		0.2

3542

PCB METHOD BLANK SUMMARY

Lab File ID: V5531.D

Instrument ID: GC-V

Date Extracted: 05/04/2001

Matrix: AQUEOUS

Date Analyzed: 05/04/2001

Time Analyzed: 14:27

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
MW-1	2867-001	05/04/2001	14:57
MW-2	2867-002	05/04/2001	15:28
MW-3	2867-003	05/04/2001	15:59
MW-5	2867-004	05/04/2001	16:29
MW-6	2867-005	05/04/2001	17:00
MW-7	2867-006	05/04/2001	17:31
MW-8	2867-007	05/04/2001	18:02
FB	2867-008	05/04/2001	18:33
MW1	2861-001	05/04/2001	19:04
MW2	2861-002	05/04/2001	19:34
MW3	2861-003	05/04/2001	20:05
FIELD_BLANK	2823-013	05/04/2001	20:36
PCB	PBW0504-MS1	05/04/2001	21:06

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0504-BLK1
Client ID: (2823.2867)
Date Received: NA
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: V5531.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.2
Aroclor-1221	ND		0.2
Aroclor-1232	ND		0.2
Aroclor-1242	ND		0.2
Aroclor-1248	ND		0.2
Aroclor-1254	ND		0.2
Aroclor-1260	ND		0.2

3244

000375

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/16/2001

Instrument ID: Varian 3400

GC Column (1st): DB-5

Data File: V5203.D V5204.D V5205.D V5206.D V5207.D

Compound	RT OF STANDARDS 200	500	1000	2000	4000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	5.80	5.80	5.80	5.80	5.80	5.80	5.73	5.87
Aroclor-1016 {2}	6.89	6.89	6.89	6.89	6.89	6.89	6.82	6.96
Aroclor-1016 {3}	7.33	7.33	7.33	7.33	7.33	7.33	7.26	7.40
Aroclor-1016 {4}	9.21	9.21	9.21	9.20	9.21	9.21	9.14	9.28
Aroclor-1016 {5}	9.68	9.68	9.68	9.68	9.68	9.68	9.61	9.75
Aroclor-1221			3.83				3.76	3.90
Aroclor-1221 {2}			5.44				5.37	5.51
Aroclor-1221 {3}			5.67				5.60	5.74
Aroclor-1221 {4}			5.80				5.73	5.87
Aroclor-1221 {5}			6.89				6.82	6.96
Aroclor-1232			5.80				5.73	5.87
Aroclor-1232 {2}			6.84				6.77	6.91
Aroclor-1232 {3}			8.35				8.28	8.42
Aroclor-1232 {4}			9.20				9.13	9.27
Aroclor-1232 {5}			10.05				9.98	10.12
Aroclor-1242			7.33				7.26	7.40
Aroclor-1242 {2}			9.21				9.14	9.28
Aroclor-1242 {3}			9.78				9.71	9.85
Aroclor-1242 {4}			10.99				10.92	11.06
Aroclor-1242 {5}			11.51				11.44	11.58
Aroclor-1248			8.08				8.01	8.15
Aroclor-1248 {2}			9.20				9.13	9.27
Aroclor-1248 {3}			9.77				9.70	9.84
Aroclor-1248 {4}			10.98				10.91	11.05
Aroclor-1248 {5}			11.50				11.43	11.57
Aroclor-1254			11.74				11.67	11.81
Aroclor-1254 {2}			12.57				12.50	12.64
Aroclor-1254 {3}			13.72				13.65	13.79
Aroclor-1254 {4}			14.46				14.39	14.53
Aroclor-1254 {5}			15.34				15.27	15.41
Aroclor-1260	15.33	15.33	15.34	15.33	15.33	15.33	15.26	15.40
Aroclor-1260 {2}	15.90	15.89	15.90	15.90	15.90	15.90	15.83	15.97
Aroclor-1260 {3}	17.54	17.54	17.54	17.54	17.54	17.54	17.47	17.61
Aroclor-1260 {4}	18.47	18.46	18.47	18.47	18.47	18.47	18.40	18.54
Aroclor-1260 {5}	20.51	20.51	20.51	20.51	20.51	20.51	20.44	20.58

RKH

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/16/2001

Instrument ID: Varian 3400

GC Column (1st): DB-5

Data File: V5203.D V5204.D V5205.D V5206.D V5207.D

Compound	CALIBRATION FACTORS 200	500	1000	2000	4000	MEAN	%RSD
Aroclor-1016	6672	6307	6130	6299	5566	6195	6.51
Aroclor-1016 {2}	5181	5010	4852	4945	4423	4882	5.80
Aroclor-1016 {3}	9232	8669	8314	8453	7477	8429	7.56
Aroclor-1016 {4}	5490	5191	5025	5218	4606	5106	6.37
Aroclor-1016 {5}	7758	7309	7030	7223	6395	7143	6.94
Aroclor-1221			1844				
Aroclor-1221 {2}			3291				
Aroclor-1221 {3}			2993				
Aroclor-1221 {4}			8375				
Aroclor-1221 {5}			1162				
Aroclor-1232			5309				
Aroclor-1232 {2}			2669				
Aroclor-1232 {3}			3987				
Aroclor-1232 {4}			1884				
Aroclor-1232 {5}			3951				
Aroclor-1242			6113				
Aroclor-1242 {2}			3645				
Aroclor-1242 {3}			4399				
Aroclor-1242 {4}			8256				
Aroclor-1242 {5}			8426				
Aroclor-1248			10489				
Aroclor-1248 {2}			5622				
Aroclor-1248 {3}			5023				
Aroclor-1248 {4}			14680				
Aroclor-1248 {5}			14650				
Aroclor-1254			12476				
Aroclor-1254 {2}			10870				
Aroclor-1254 {3}			17457				
Aroclor-1254 {4}			11933				
Aroclor-1254 {5}			20494				
Aroclor-1260	29057	26240	25071	25765	23666	25960	7.65
Aroclor-1260 {2}	24814	23618	22739	23482	21470	23225	5.30
Aroclor-1260 {3}	55339	52397	51001	54829	54016	53517	3.35
Aroclor-1260 {4}	25301	23869	23282	24270	22182	23781	4.87
Aroclor-1260 {5}	14305	13588	13800	14493	13247	13887	3.69
					Average %RSD		5.80

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/16/2001

Instrument ID: Varian 3400

GC Column (2nd): DB-1701P

Data File: V5203.C V5204.C V5205.C V5206.C V5207.C

Compound	RT OF STANDARDS 200	500	1000	2000	4000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	6.35	6.35	6.35	6.35	6.35	6.35	6.28	6.42
Aroclor-1016 {2}	7.42	7.42	7.42	7.42	7.42	7.42	7.35	7.49
Aroclor-1016 {3}	8.78	8.78	8.78	8.78	8.78	8.78	8.71	8.85
Aroclor-1016 {4}	9.16	9.16	9.16	9.16	9.16	9.16	9.09	9.23
Aroclor-1016 {5}	9.48	9.48	9.48	9.48	9.48	9.48	9.41	9.55
Aroclor-1221			4.10				4.03	4.17
Aroclor-1221 {2}			5.80				5.73	5.87
Aroclor-1221 {3}			6.21				6.14	6.28
Aroclor-1221 {4}			6.37				6.30	6.44
Aroclor-1221 {5}			7.44				7.37	7.51
Aroclor-1232			6.35				6.28	6.42
Aroclor-1232 {2}			7.42				7.35	7.49
Aroclor-1232 {3}			8.78				8.71	8.85
Aroclor-1232 {4}			9.48				9.41	9.55
Aroclor-1232 {5}			10.59				10.52	10.66
Aroclor-1242			8.11				8.04	8.18
Aroclor-1242 {2}			9.48				9.41	9.55
Aroclor-1242 {3}			10.93				10.86	11.00
Aroclor-1242 {4}			11.92				11.85	11.99
Aroclor-1242 {5}			12.65				12.58	12.72
Aroclor-1248			8.77				8.70	8.84
Aroclor-1248 {2}			9.86				9.79	9.93
Aroclor-1248 {3}			10.58				10.51	10.65
Aroclor-1248 {4}			10.87				10.80	10.94
Aroclor-1248 {5}			11.52				11.45	11.59
Aroclor-1254			12.46				12.39	12.53
Aroclor-1254 {2}			13.57				13.50	13.64
Aroclor-1254 {3}			14.73				14.66	14.80
Aroclor-1254 {4}			15.17				15.10	15.24
Aroclor-1254 {5}			16.30				16.23	16.37
Aroclor-1260	15.17	15.17	15.17	15.17	15.17	15.17	15.10	15.24
Aroclor-1260 {2}	16.43	16.43	16.43	16.43	16.43	16.43	16.36	16.50
Aroclor-1260 {3}	17.44	17.44	17.44	17.45	17.44	17.44	17.37	17.51
Aroclor-1260 {4}	18.41	18.41	18.41	18.41	18.41	18.41	18.34	18.48
Aroclor-1260 {5}	20.69	20.69	20.69	20.70	20.69	20.69	20.62	20.76

3547

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/16/2001

Instrument ID: Varian 3400

GC Column (2nd): DB-1701P

Data File: V5203.C V5204.C V5205.C V5206.C V5207.C

Compound	CALIBRATION FACTORS 200	500	1000	2000	4000	MEAN	%RSD
Aroclor-1016	7071	6724	6455	6572	5807	6526	7.11
Aroclor-1016 {2}	13283	12580	11842	11866	10540	12022	8.48
Aroclor-1016 {3}	31330	29189	27508	28318	26189	28507	6.76
Aroclor-1016 {4}	9868	10089	9685	9900	8761	9661	5.41
Aroclor-1016 {5}	10786	10294	9833	10071	8942	9985	6.82
Aroclor-1221			2067				
Aroclor-1221 {2}			3581				
Aroclor-1221 {3}			2342				
Aroclor-1221 {4}			8585				
Aroclor-1221 {5}			801				
Aroclor-1232			5527				
Aroclor-1232 {2}			4402				
Aroclor-1232 {3}			10157				
Aroclor-1232 {4}			3612				
Aroclor-1232 {5}			4885				
Aroclor-1242			3862				
Aroclor-1242 {2}			7238				
Aroclor-1242 {3}			1451				
Aroclor-1242 {4}			7823				
Aroclor-1242 {5}			5547				
Aroclor-1248			17099				
Aroclor-1248 {2}			11598				
Aroclor-1248 {3}			13372				
Aroclor-1248 {4}			12977				
Aroclor-1248 {5}			8139				
Aroclor-1254			12042				
Aroclor-1254 {2}			10474				
Aroclor-1254 {3}			15053				
Aroclor-1254 {4}			8896				
Aroclor-1254 {5}			18847				
Aroclor-1260	21952	20003	18925	19075	17026	19396	9.24
Aroclor-1260 {2}	17259	16084	15299	15402	13659	15541	8.43
Aroclor-1260 {3}	20029	18317	17403	17583	15673	17801	8.87
Aroclor-1260 {4}	47361	44171	42059	43501	40664	43551	5.79
Aroclor-1260 {5}	5273	5335	5219	5517	4981	5265	3.69
					Average %RSD		7.06

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 05/04/2001 Instrument ID: Varian 3400

Data File: V5530.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.81	5.74	5.88	6195	6611	6.72
Aroclor-1016 {2}	6.90	6.83	6.97	4882	5137	5.22
Aroclor-1016 {3}	7.34	7.27	7.41	8429	8864	5.16
Aroclor-1016 {4}	9.21	9.14	9.28	5106	5325	4.29
Aroclor-1016 {5}	9.69	9.62	9.76	7143	7457	4.39
Aroclor-1260	15.34	15.27	15.41	25960	26577	2.38
Aroclor-1260 {2}	15.90	15.83	15.97	23225	24292	4.60
Aroclor-1260 {3}	17.54	17.47	17.61	53517	53736	0.41
Aroclor-1260 {4}	18.47	18.40	18.54	23781	24269	2.05
Aroclor-1260 {5}	20.52	20.45	20.59	13887	14231	2.48
					Average %D	3.77

Data File: V5530.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.34	6.27	6.41	6526	6728	3.09
Aroclor-1016 {2}	7.40	7.33	7.47	12022	12267	2.04
Aroclor-1016 {3}	8.76	8.69	8.83	28507	28692	0.65
Aroclor-1016 {4}	9.15	9.08	9.22	9661	10129	4.85
Aroclor-1016 {5}	9.47	9.40	9.54	9985	10294	3.09
Aroclor-1260	15.15	15.08	15.22	19396	19623	1.17
Aroclor-1260 {2}	16.41	16.34	16.48	15541	15797	1.65
Aroclor-1260 {3}	17.42	17.35	17.49	17801	18131	1.86
Aroclor-1260 {4}	18.38	18.31	18.45	43551	43052	1.15
Aroclor-1260 {5}	20.67	20.60	20.74	5265	5377	2.12
					Average %D	2.17

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 05/04/2001 Instrument ID: Varian 3400

Data File: V5545.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	5.80	5.73	5.87	6195	6222	0.44
Aroclor-1016 {2}	6.89	6.82	6.96	4882	4886	0.08
Aroclor-1016 {3}	7.33	7.26	7.40	8429	8488	0.69
Aroclor-1016 {4}	9.21	9.14	9.28	5106	5179	1.42
Aroclor-1016 {5}	9.68	9.61	9.75	7143	7287	2.01
Aroclor-1260	15.33	15.26	15.40	25960	26604	2.48
Aroclor-1260 {2}	15.90	15.83	15.97	23225	23956	3.15
Aroclor-1260 {3}	17.54	17.47	17.61	53517	53686	0.32
Aroclor-1260 {4}	18.46	18.39	18.53	23781	24784	4.22
Aroclor-1260 {5}	20.51	20.44	20.58	13887	14533	4.66
					Average %D	1.95

Data File: V5545.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	6.34	6.27	6.41	6526	6939	6.32
Aroclor-1016 {2}	7.40	7.33	7.47	12022	12654	5.26
Aroclor-1016 {3}	8.76	8.69	8.83	28507	29504	3.50
Aroclor-1016 {4}	9.14	9.07	9.21	9661	10464	8.32
Aroclor-1016 {5}	9.46	9.39	9.53	9985	10601	6.16
Aroclor-1260	15.14	15.07	15.21	19396	20493	5.65
Aroclor-1260 {2}	16.40	16.33	16.47	15541	16410	5.59
Aroclor-1260 {3}	17.41	17.34	17.48	17801	18976	6.60
Aroclor-1260 {4}	18.37	18.30	18.44	43551	45563	4.62
Aroclor-1260 {5}	20.66	20.59	20.73	5265	5789	9.95
					Average %D	6.20

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 05/04/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(2823:2867)	0504-BLK1	AQUEOUS	123		74		124		75	
MW-1	2867-001	AQUEOUS	81		69		84		71	
MW-2	2867-002	AQUEOUS	77		64		81		66	
MW-3	2867-003	AQUEOUS	87		67		90		69	
MW-5	2867-004	AQUEOUS	107		78		101		76	
MW-6	2867-005	AQUEOUS	70		60		79		66	
MW-7	2867-006	AQUEOUS	76		60		85		67	
MW-8	2867-007	AQUEOUS	82		50	*	91		59	*
FB	2867-008	AQUEOUS	88		55	*	100		61	
MW1	2861-001	AQUEOUS	96		77		109		84	
MW2	2861-002	AQUEOUS	94		75		107		81	
MW3	2861-003	AQUEOUS	96		76		108		82	
FIELD_BLANK	2823-013	AQUEOUS	99		57	*	110		62	
PCB	PBW0504-MS1	AQUEOUS	112		69		123		74	

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

AQUEOUS PCB MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2774-003-MSD1

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	5.0	0.0	6.4	128	52 - 141
Aroclor-1260	5.0	0.0	5.6	112	49 - 162

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	6.6	132	3	15	52 - 141
Aroclor-1260	0.0	6.0	120	7	19	49 - 162

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

AQUEOUS PCB BLANK SPIKE RECOVERY

Matrix spike Lab sample ID: PBW0504-MS1

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	5.0	0.0	5.9	118	52 - 141
Aroclor-1260	5.0	0.0	5.1	102	49 - 162

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-V **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 4.98 DCB 1 22.64 TCMX 2 4.83 DCB 2 22.77

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
(2823.2867)	0504-BLK1	05/04/2001	14:27	4.98		22.64		4.83		22.77	
MW-1	2867-001	05/04/2001	14:57	4.97		22.63		4.83		22.76	
MW-2	2867-002	05/04/2001	15:28	4.98		22.64		4.83		22.77	
MW-3	2867-003	05/04/2001	15:59	4.97		22.64		4.83		22.77	
MW-5	2867-004	05/04/2001	16:29	4.98		22.64		4.83		22.77	
MW-6	2867-005	05/04/2001	17:00	4.97		22.63		4.83		22.76	
MW-7	2867-006	05/04/2001	17:31	4.97		22.63		4.83		22.76	
MW-8	2867-007	05/04/2001	18:02	4.98		22.64		4.83		22.77	
FB	2867-008	05/04/2001	18:33	4.97		22.63		4.83		22.76	
MW1	2861-001	05/04/2001	19:04	4.97		22.63		4.83		22.76	
MW2	2861-002	05/04/2001	19:34	4.98		22.64		4.83		22.77	
MW3	2861-003	05/04/2001	20:05	4.98		22.64		4.83		22.77	
FIELD_BLANK	2823-013	05/04/2001	20:36	4.98		22.64		4.83		22.77	
PCB	PBW0504-MS1	05/04/2001	21:06	4.97		22.63		4.83		22.76	

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:\MSDCHEM\1\DATA\05-04-01\V5532.D\ADC1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5532.D\ADC1B.CH
Acq On : 4 May 2001 14:57 Operator: MJ
Sample : MW-1,2867-001,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 07 07:15:07 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

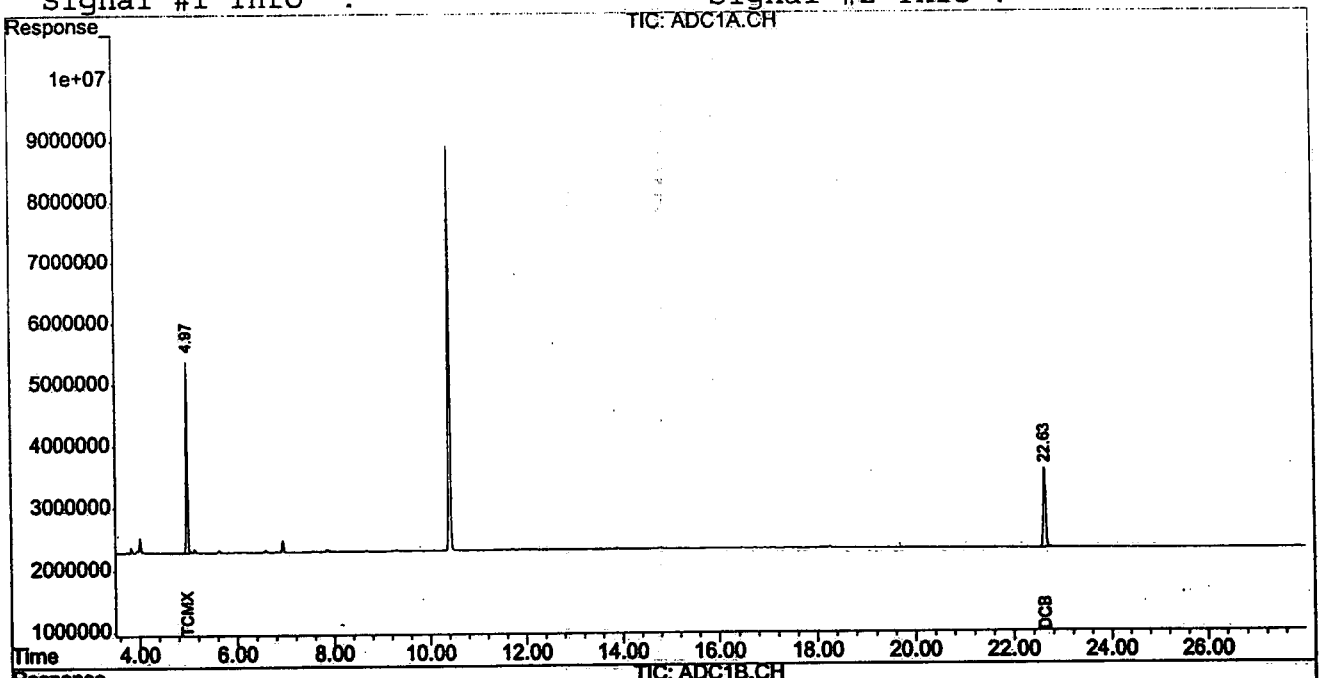
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	4.97	4.83	59140559	60238701	80.893	83.922
Spiked Amount 100.000			Recovery	=	80.89%	83.92%
2) S DCB	22.63	22.76	41167472	39464628	69.279	70.622
Spiked Amount 100.000			Recovery	=	69.28%	70.62%
Target Compounds						
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

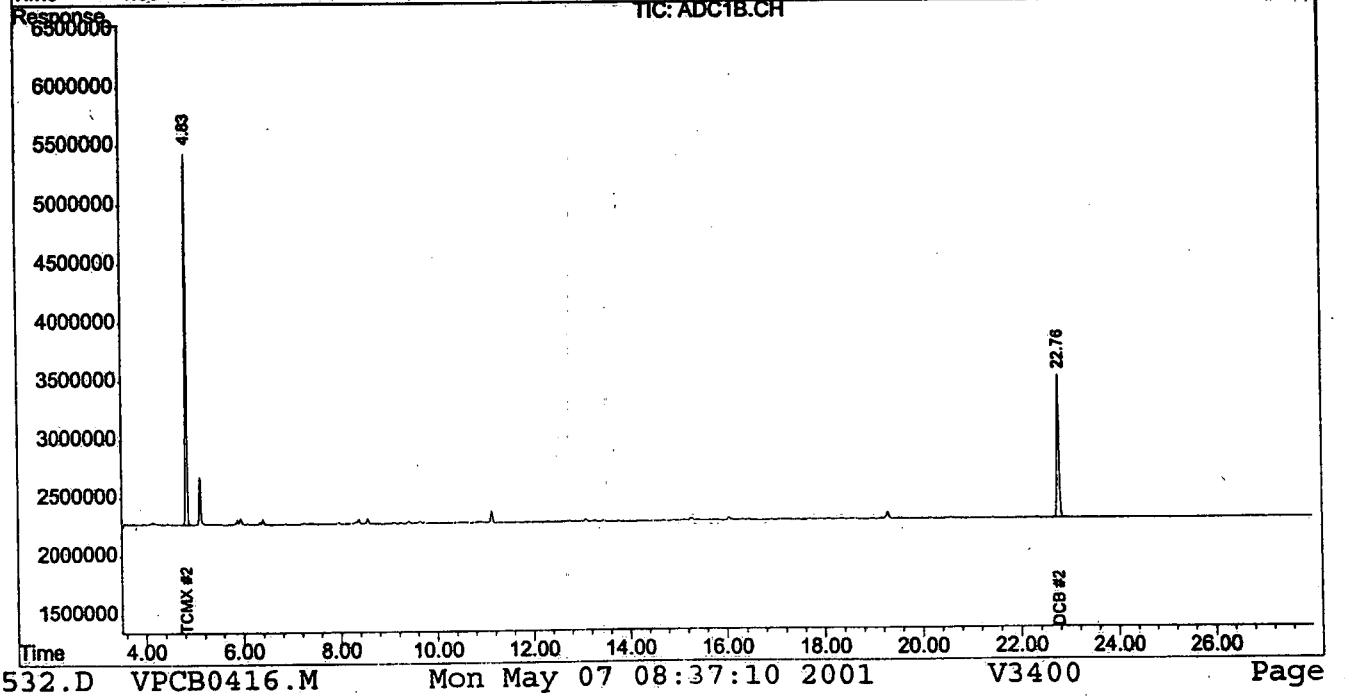
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5532.D\ADC1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5532.D\ADC1B.CH
Acq On : 4 May 2001 14:57 Operator: MJ
Sample : MW-1,2867-001,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 8:06 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.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\05-04-01\V5533.D\ADC1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5533.D\ADC1B.CH
Acq On : 4 May 2001 15:28 Operator: MJ
Sample : MW-2,2867-002,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 07 07:15:13 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.98	4.83	56572480	58030595	77.380	80.846
Spiked Amount 100.000			Recovery	=	77.38%	80.85%
2) S DCB	22.64	22.77	38107482	36644914	64.129	65.576
Spiked Amount 100.000			Recovery	=	64.13%	65.58%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
rage 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

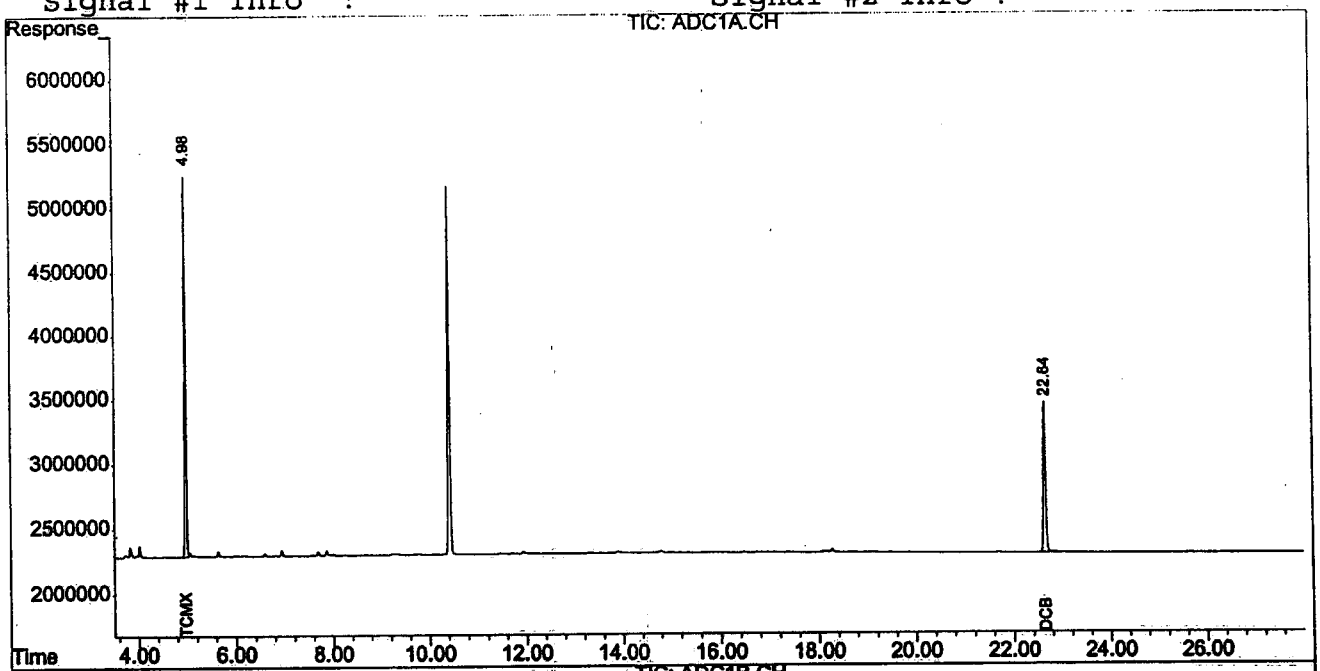
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

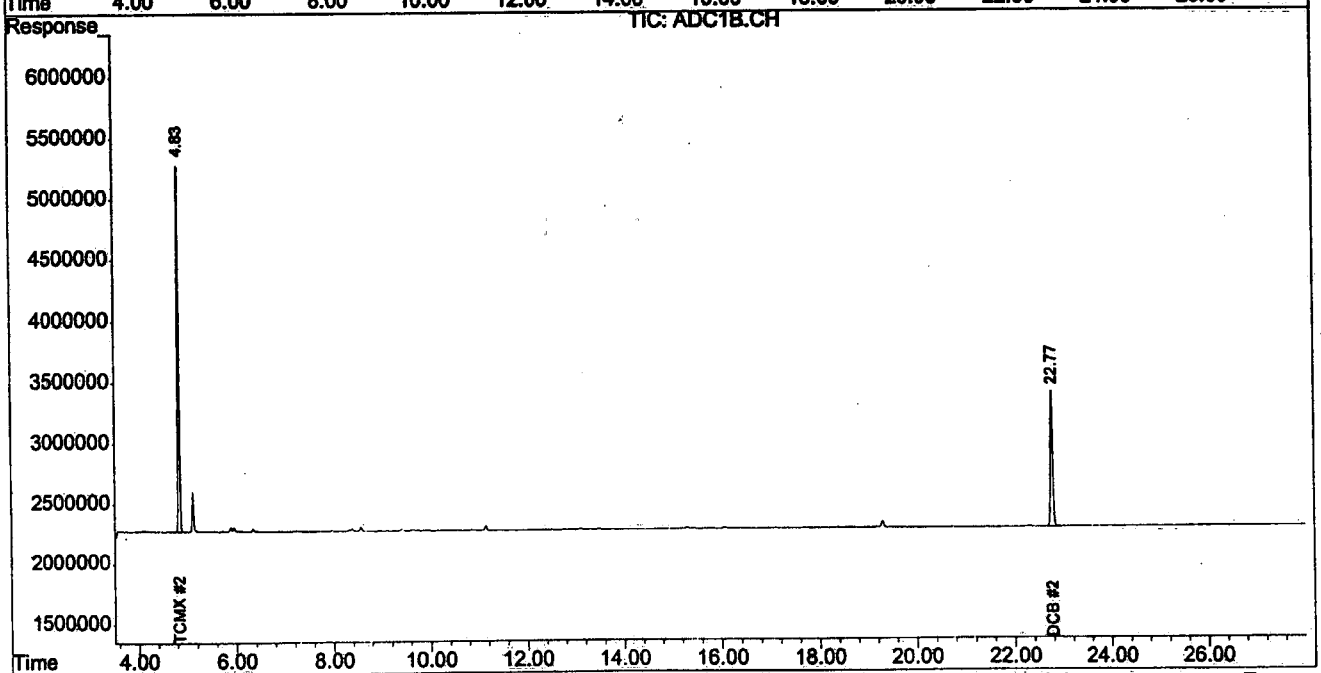
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5533.D\ADC1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5533.D\ADC1B.CH
Acq On : 4 May 2001 15:28 Operator: MJ
Sample : MW-2,2867-002,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 8:07 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.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\05-04-01\V5534.D\ADC1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5534.D\ADC1B.CH
Acq On : 4 May 2001 15:59 Operator: MJ
Sample : MW-3,2867-003,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 07 07:15:19 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.97	4.83	63406725	64444166	86.728	89.781
Spiked Amount 100.000			Recovery	=	86.73%	89.78%
2) S DCB	22.64	22.77	39960097	38290584	67.247	68.521
Spiked Amount 100.000			Recovery	=	67.25%	68.52%
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.

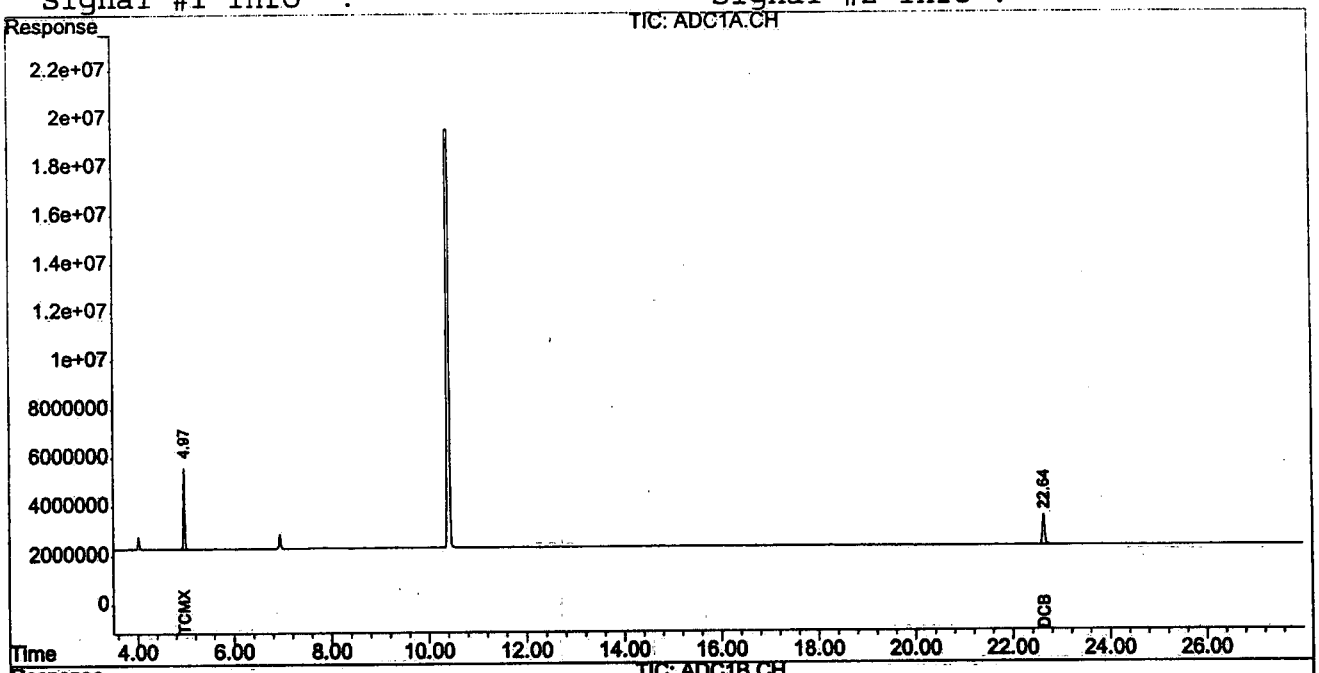
000390

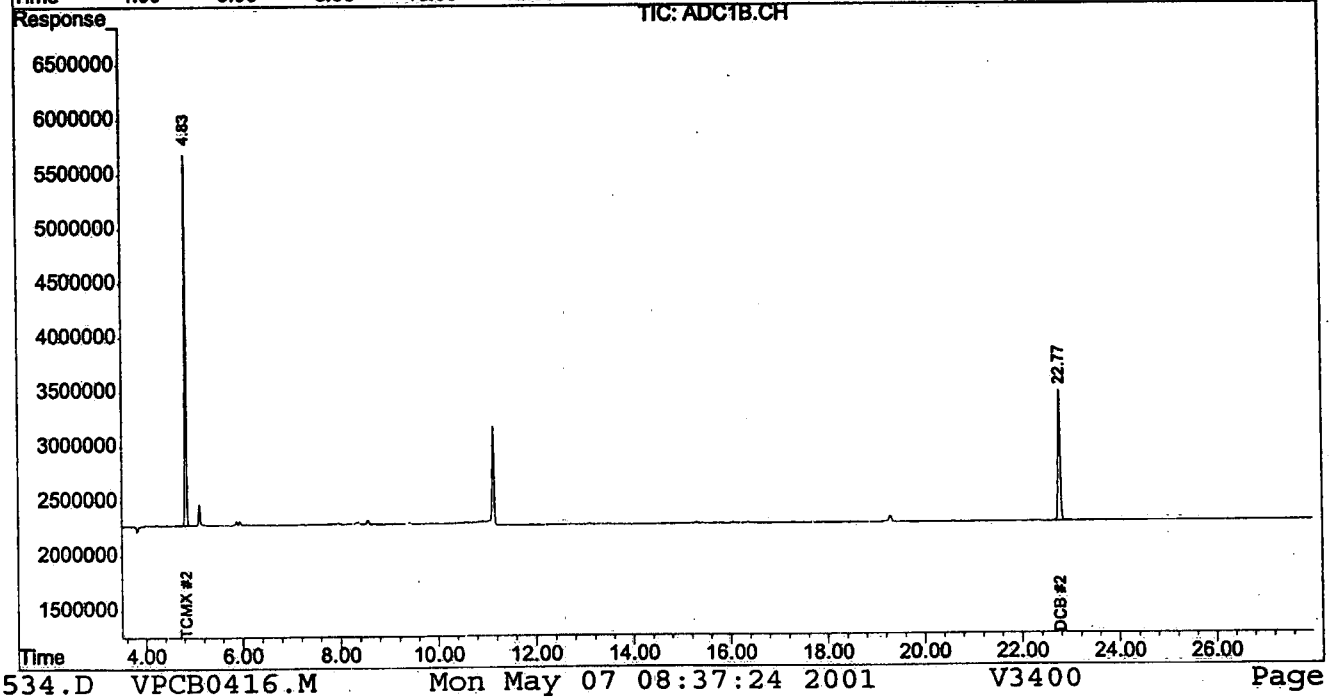
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5534.D\ADC1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5534.D\ADC1B.CH
Acq On : 4 May 2001 15:59 Operator: MJ
Sample : MW-3,2867-003,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 8:07 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000391

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5535.D\ADC1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5535.D\ADC1B.CH
Acq On : 4 May 2001 16:29 Operator: MJ
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 07 07:15:24 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.98	4.83	78384944	72743849	107.215	101.344
Spiked Amount 100.000			Recovery =		107.21%	101.34%
2) S DCB	22.64	22.77	46354598	42171233	78.008	75.465
Spiked Amount 100.000			Recovery =		78.01%	75.47%
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

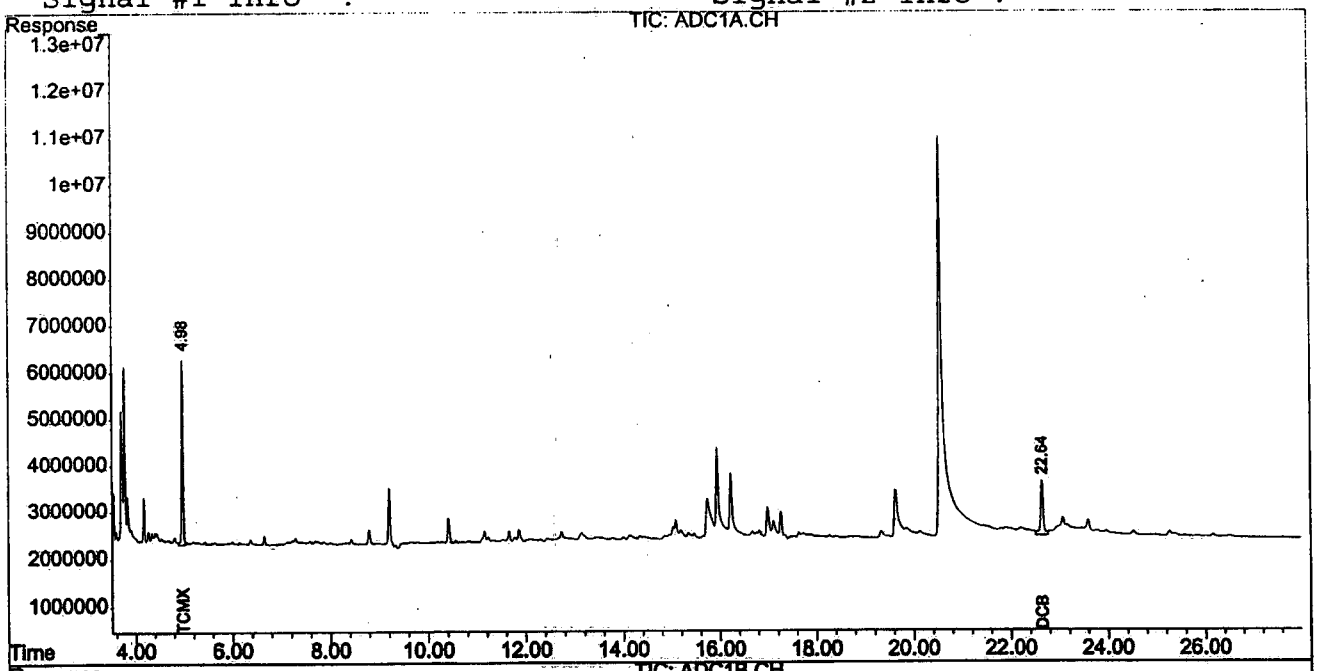
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

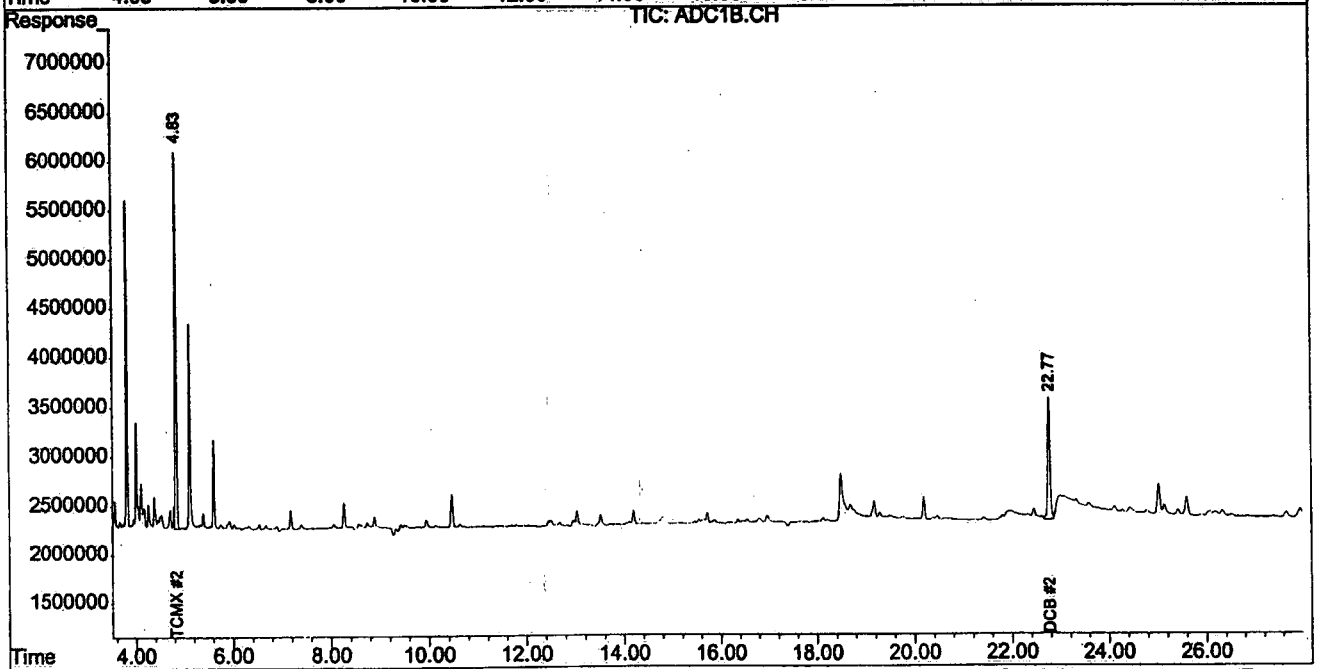
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5535.D\ADC1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5535.D\ADC1B.CH
Acq On : 4 May 2001 16:29 Operator: MJ
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 8:09 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000393

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5536.D\ADC1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5536.D\ADC1B.CH
Acq On : 4 May 2001 17:00 Operator: MJ
Sample : MW-6,2867-005,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 07 07:15:31 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.97	4.83	51326088	56507889	70.204	78.725
Spiked Amount 100.000			Recovery =		70.20%	78.72%
2) S DCB	22.63	22.76	35772129	36990215	60.199	66.194
Spiked Amount 100.000			Recovery =		60.20%	66.19%
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.

2563

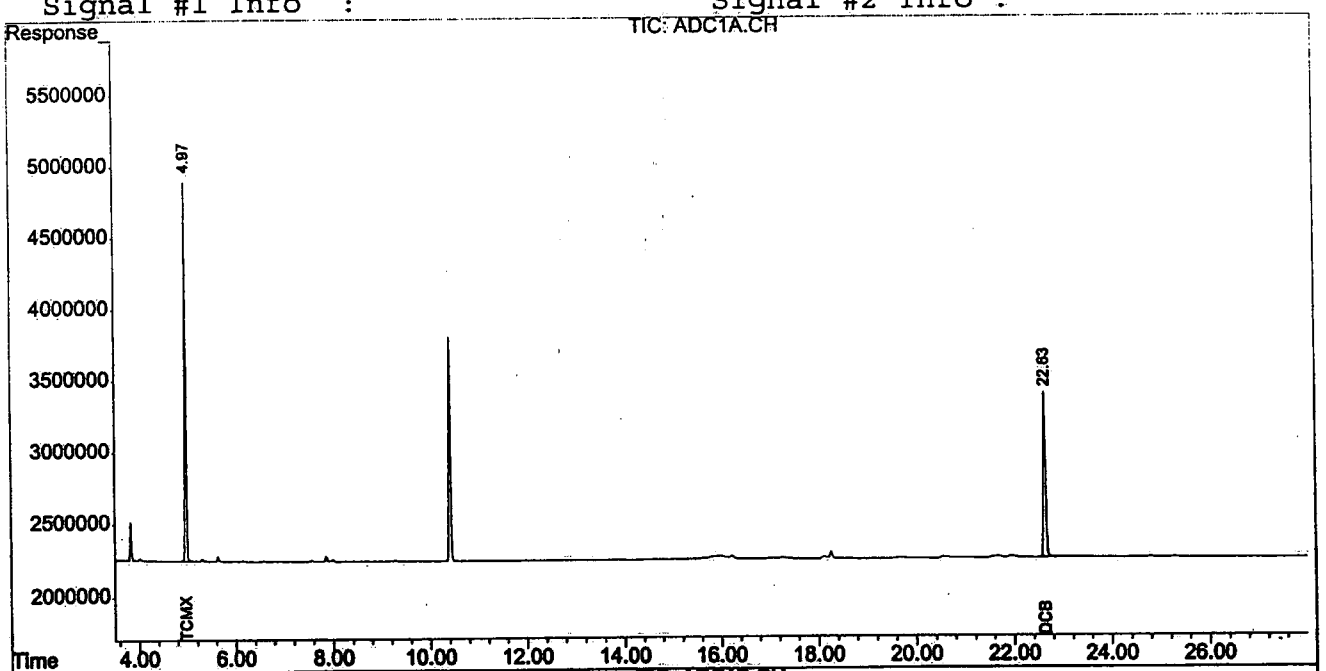
C00394

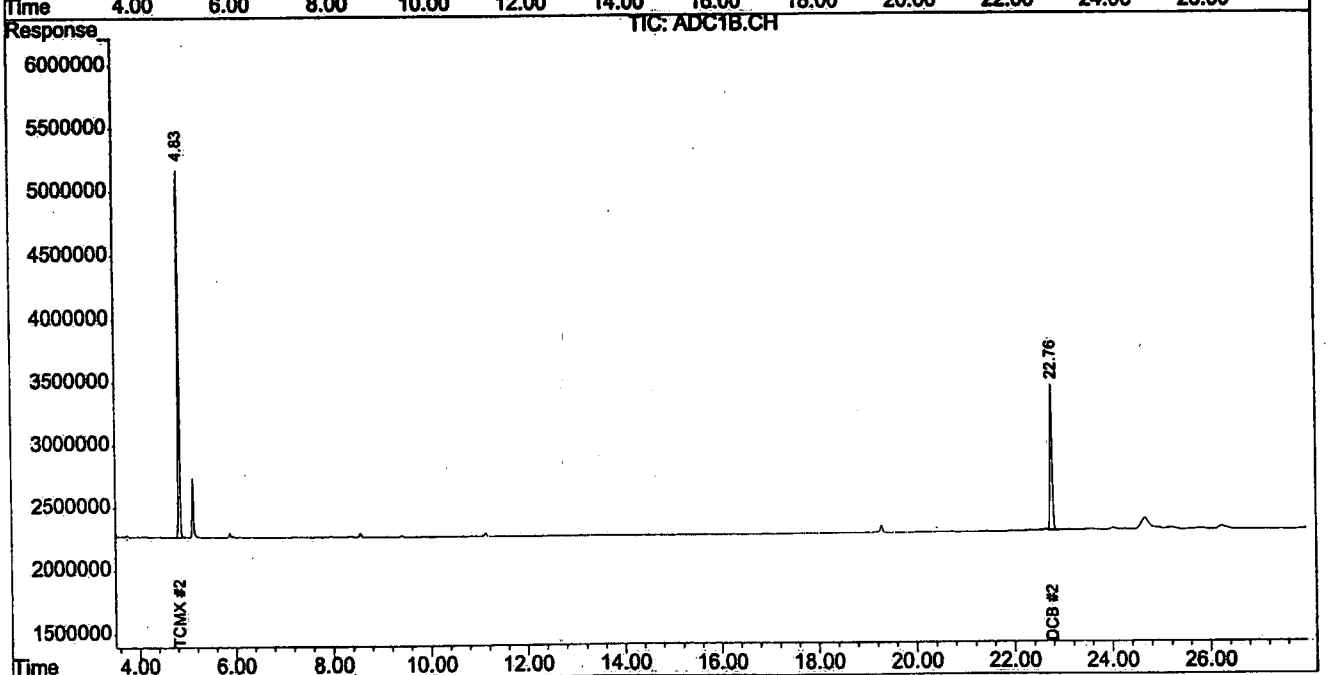
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5536.D\ADC1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5536.D\ADC1B.CH
Acq On : 4 May 2001 17:00 Operator: MJ
Sample : MW-6,2867-005,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 8:09 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2 of 11

000395

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5537.D\ADC1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5537.D\ADC1B.CH
Acq On : 4 May 2001 17:31 Operator: MJ
Sample : MW-7,2867-006,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 07 07:15:38 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.97	4.83	55788673	61235687	76.308	85.311
Spiked Amount 100.000			Recovery	=	76.31%	85.31%
2) S DCB	22.63	22.76	35708433	37232526	60.092	66.627
Spiked Amount 100.000			Recovery	=	60.09%	66.63%
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

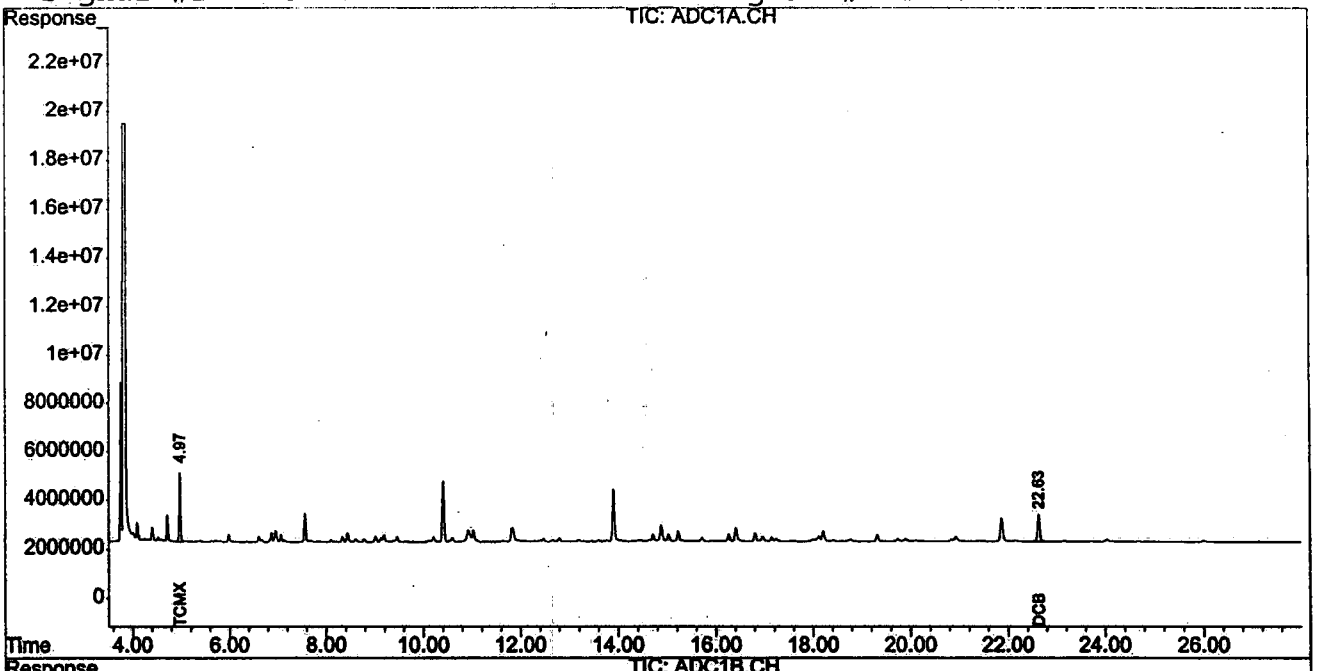
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
V5537.D VPCB0416.M Mon May 07 08:37:40 2001 V3400 Page 1

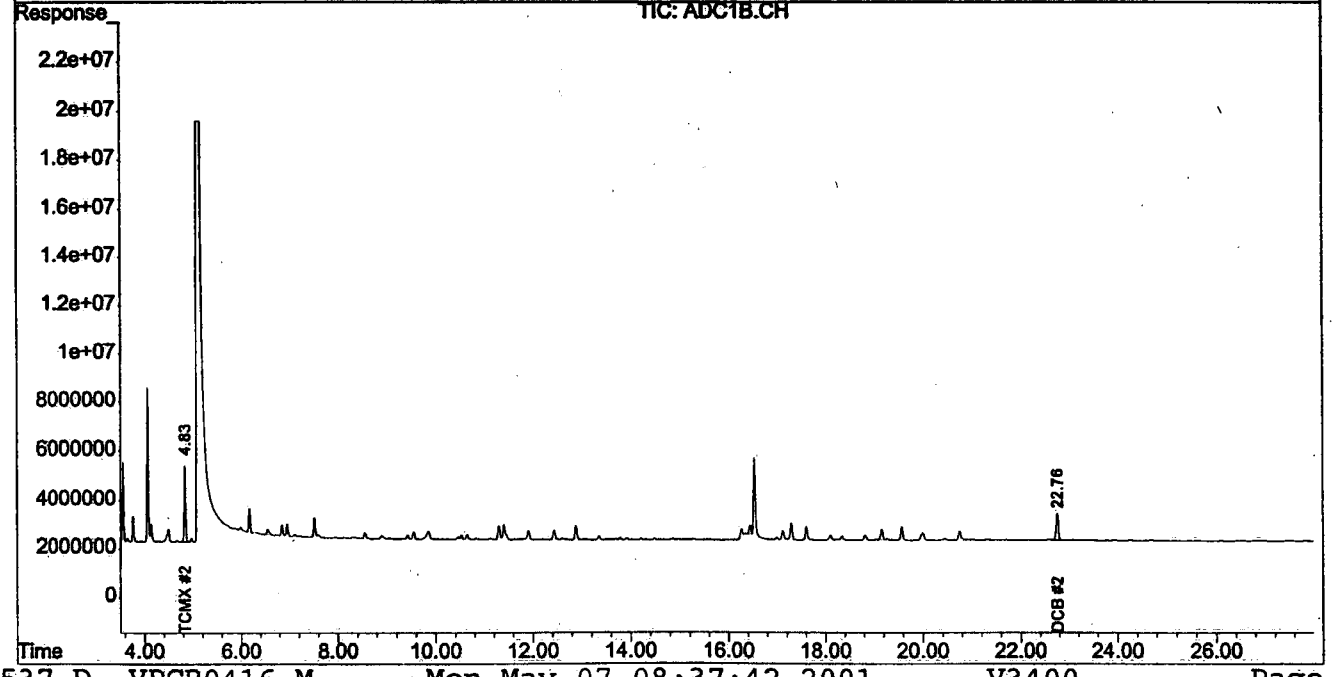
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5537.D\ADC1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5537.D\ADC1B.CH
Acq On : 4 May 2001 17:31 Operator: MJ
Sample : MW-7,2867-006,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 8:11 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





256

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5538.D\ADC1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5538.D\ADC1B.CH
Acq On : 4 May 2001 18:02 Operator: MJ
Sample : MW-8,2867-007,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 07 07:15:44 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.98	4.83	60078982	65478015	82.176	91.221
Spiked Amount 100.000			Recovery	=	82.18%	91.22%
2) S DCB	22.64	22.77	29787537	32979162	50.128	59.016
Spiked Amount 100.000			Recovery	=	50.13%	59.02%
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.

3567

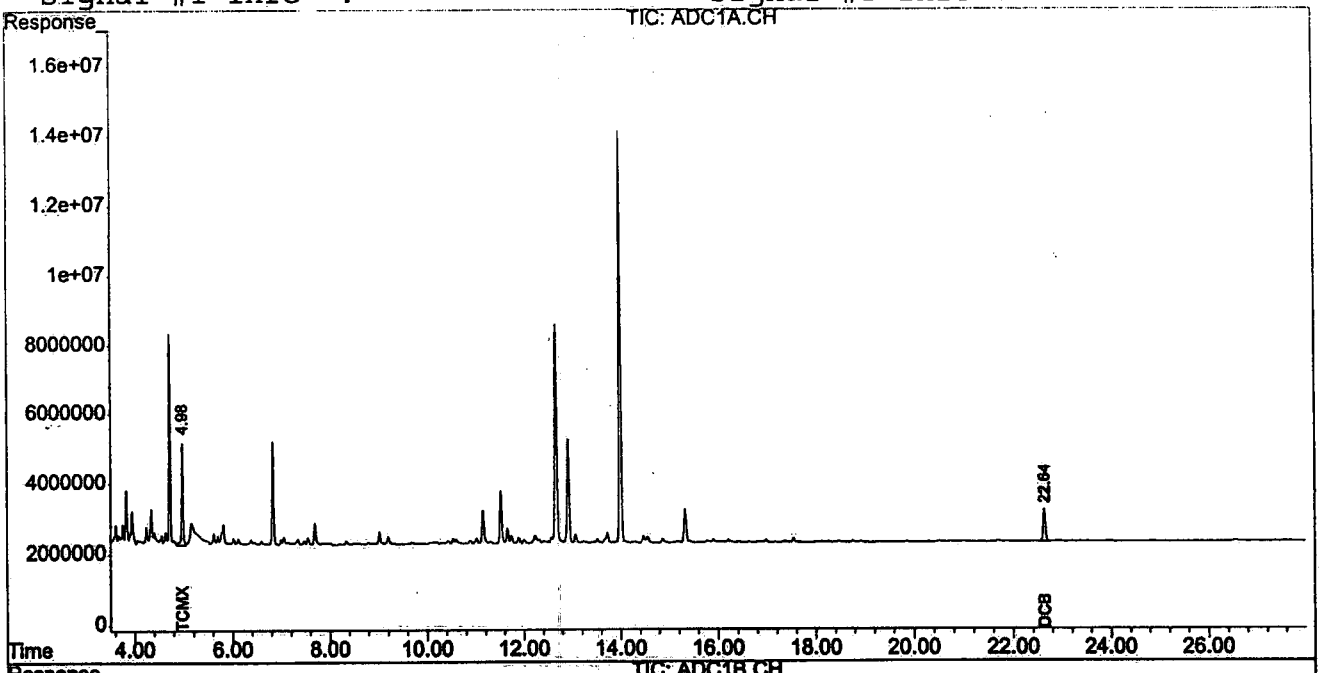
CC0393

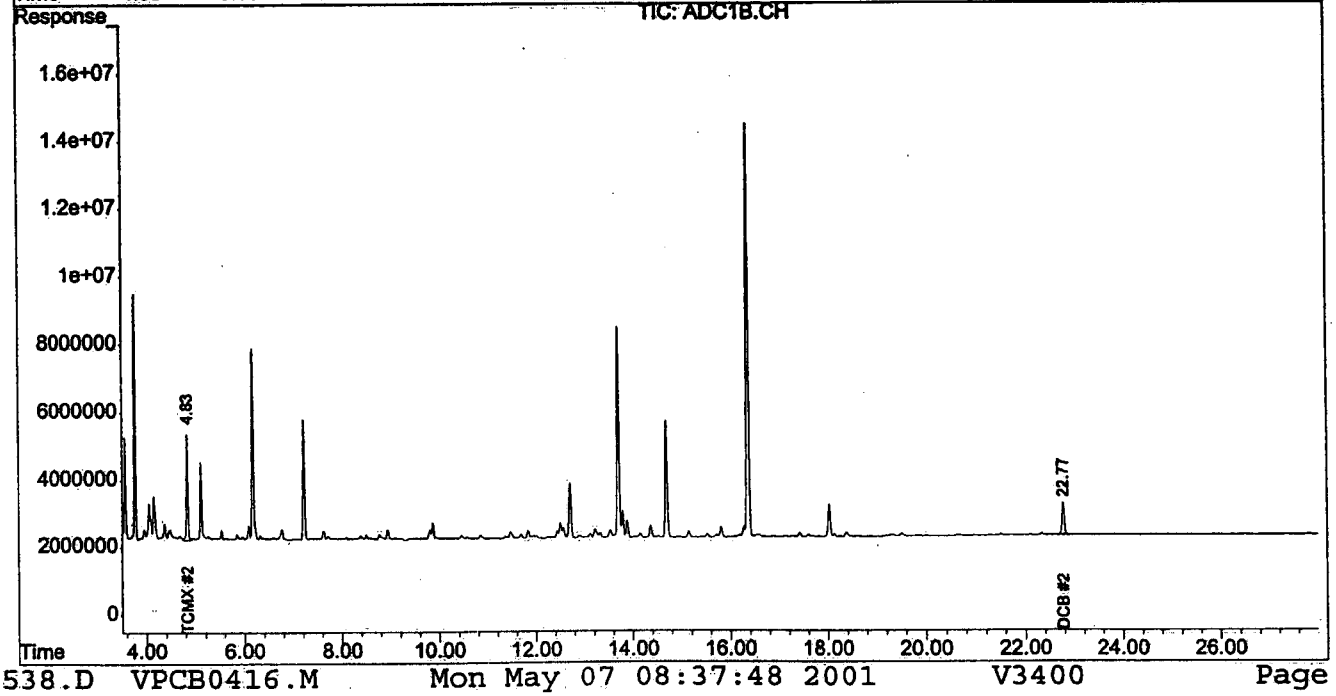
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5538.D\ADC1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5538.D\ADC1B.CH
Acq On : 4 May 2001 18:02 Operator: MJ
Sample : MW-8,2867-007,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 8:13 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.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\05-04-01\V5539.D\ADC1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5539.D\ADC1B.CH
Acq On : 4 May 2001 18:33 Operator: MJ
Sample : FB,2867-008,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 07 07:15:51 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.97	4.83	64161175	71612520	87.760	99.768
Spiked Amount 100.000			Recovery =		87.76%	99.77%
2) S DCB	22.63	22.76	32657695	33884578	54.958	60.636
Spiked Amount 100.000			Recovery =		54.96%	60.64%
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

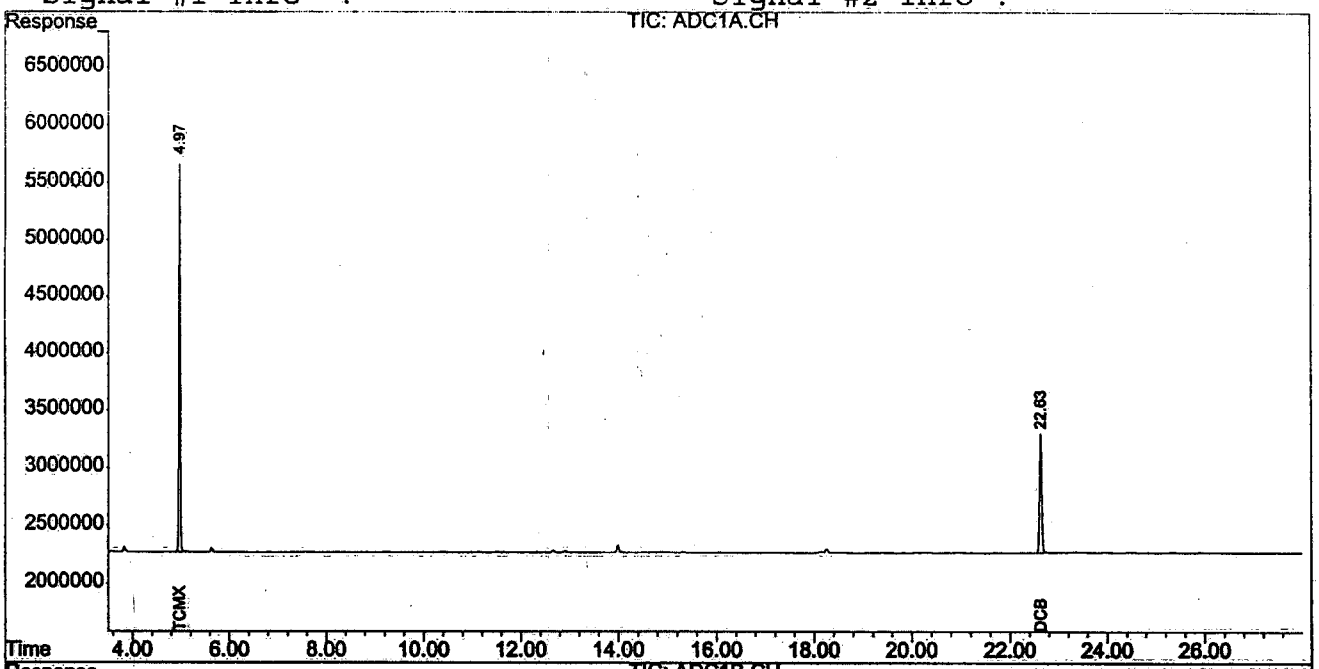
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
V5539.D VPCB0416.M Mon May 07 08:37:53 2001 V3400 Page 1

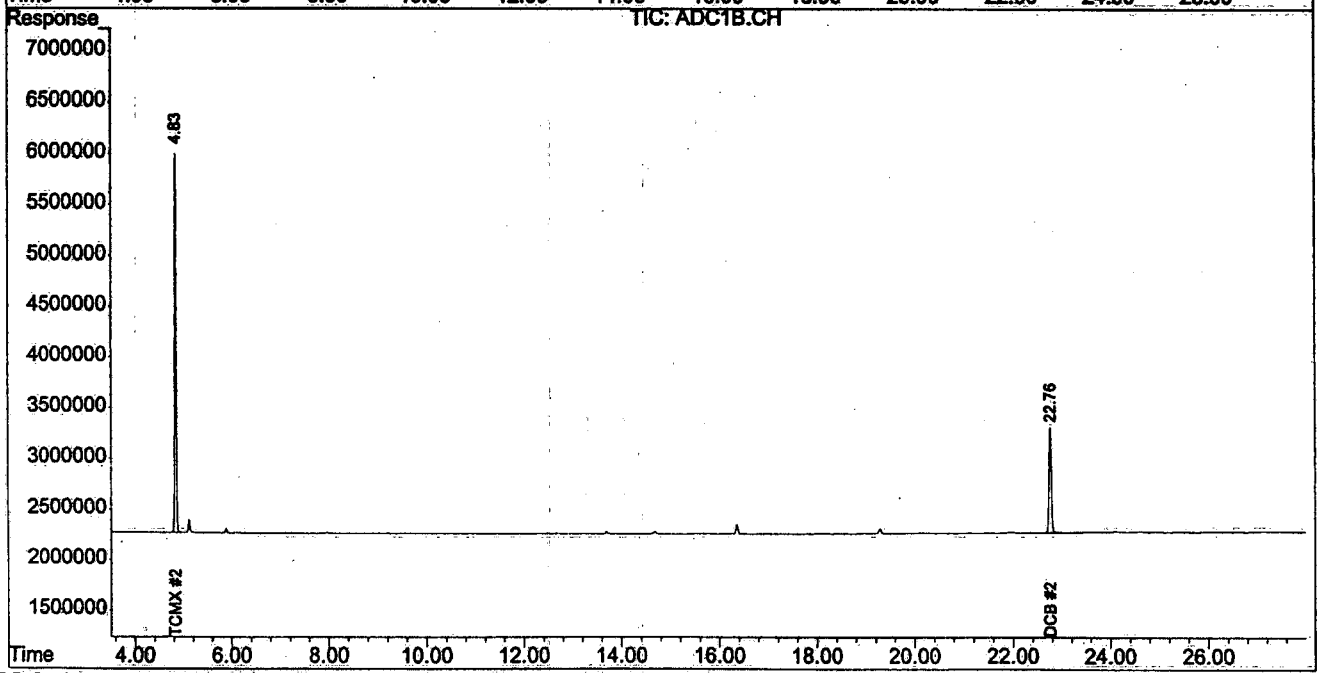
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5539.D\ADC1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5539.D\ADC1B.CH
Acq On : 4 May 2001 18:33 Operator: MJ
Sample : FB,2867-008,A,1000mL,100,05/04/01 Inst : V_3400
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 8:13 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.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\05-04-01\V5531.D\ADC1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5531.D\ADC1B.CH
Acq On : 4 May 2001 14:27 Operator: MJ
Sample : (2823.2867),0504-BLK1,A,1000mL,100,05/04 Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 07 07:15:01 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.98	4.83	89928875	88712680	123.005	123.591
Spiked Amount 100.000			Recovery	=	123.00%	123.59%
2) S DCB	22.64	22.77	44151816	41866200	74.301	74.919
Spiked Amount 100.000			Recovery	=	74.30%	74.92%
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.

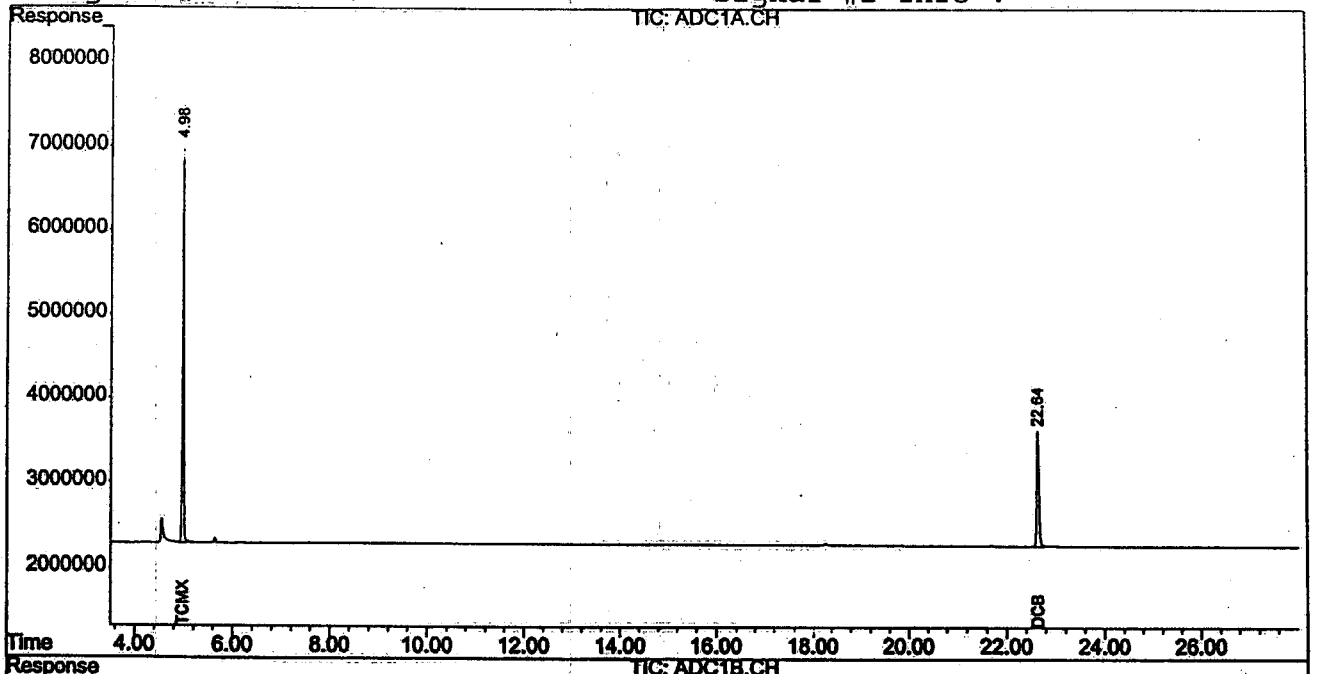
CC0402

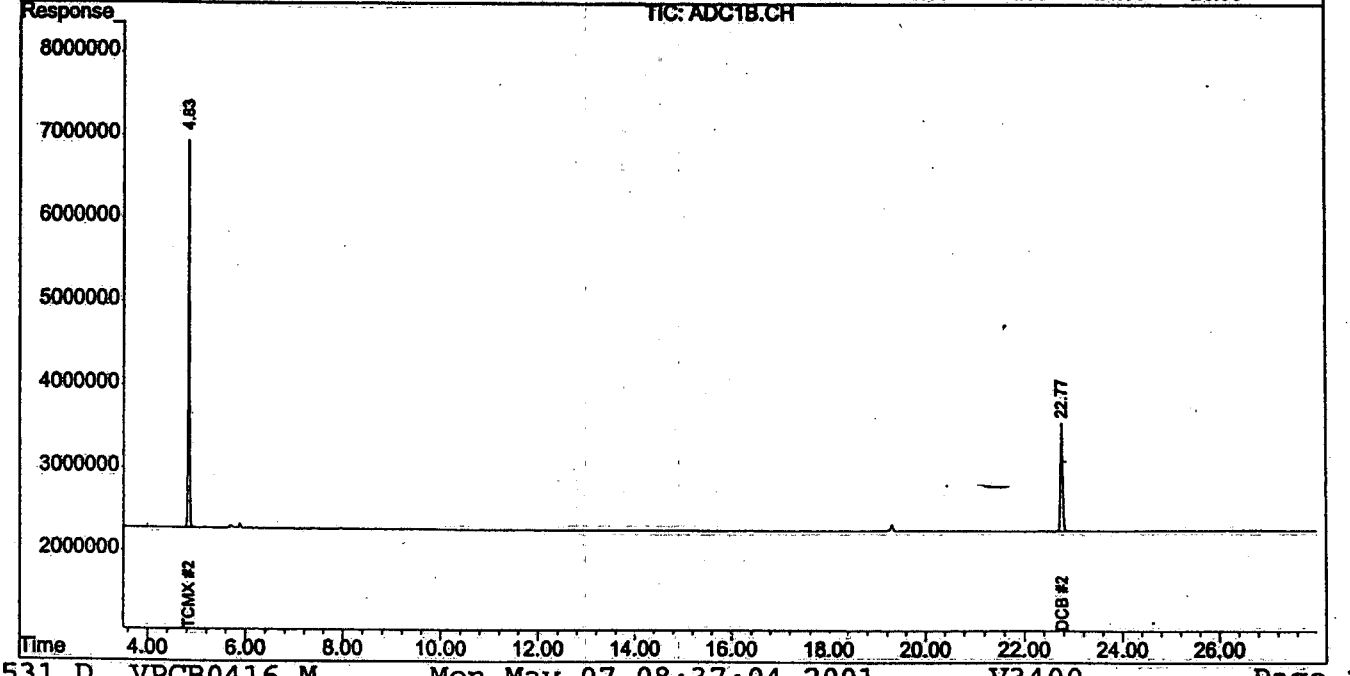
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5531.D\ADC1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5531.D\ADC1B.CH
Acq On : 4 May 2001 14:27 Operator: MJ
Sample : (2823.2867),0504-BLK1,A,1000mL,100,05/04 Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 8:04 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2577

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5530.D\ADC1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5530.D\ADC1B.CH
Acq On : 4 May 2001 13:25 Operator: MJ
Sample : 8082_C_IAS1483,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 07 07:14:53 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.97	4.83	73305564	72134593	100.267	100.495
Spiked Amount 100.000			Recovery =		100.27%	100.50%
2) S DCB	22.64	22.77	56848906	53296976	95.669	95.375
Spiked Amount 100.000			Recovery =		95.67%	95.38%
Target Compounds						
3) L2 Aroclor-1016	5.81	6.34	6610892	6727753	1067.178	1030.947
L2 Aroclor-1016 (2)	6.90	7.40	5136918	12267031	1052.157	1020.369
L2 Aroclor-1016 (3)	7.34	8.76	8864269	28692260	1051.609	1006.508
6) L2 Aroclor-1016 (4)	9.21	9.15	5324934	10129159	1042.886	1038.116
7) L2 Aroclor-1016 (5)	9.69	9.47	7456946	10293588	1043.924	1030.875
Sum Aroclor-1016			33393959	68109793	5257.754	5126.814
Average Aroclor-1016					1051.551	1025.363
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	15.34	15.15	26577099	19622929	1023.786	1011.696
34) L8 Aroclor-1260 (2)	15.90	16.41	24292115	15796837	1045.964	1016.479
35) L8 Aroclor-1260 (3)	17.54	17.42	53736015	18131444	1004.102	1018.569
36) L8 Aroclor-1260 (4)	18.47	18.38	24268510	43052076	1020.514	988.541
L8 Aroclor-1260 (5)	20.52	20.67	14231408	5376545	1024.833	1021.183
Sum Aroclor-1260			143.1E6	102.0E6	5119.199	5056.468
Average Aroclor-1260					1023.840	1011.294

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

3573

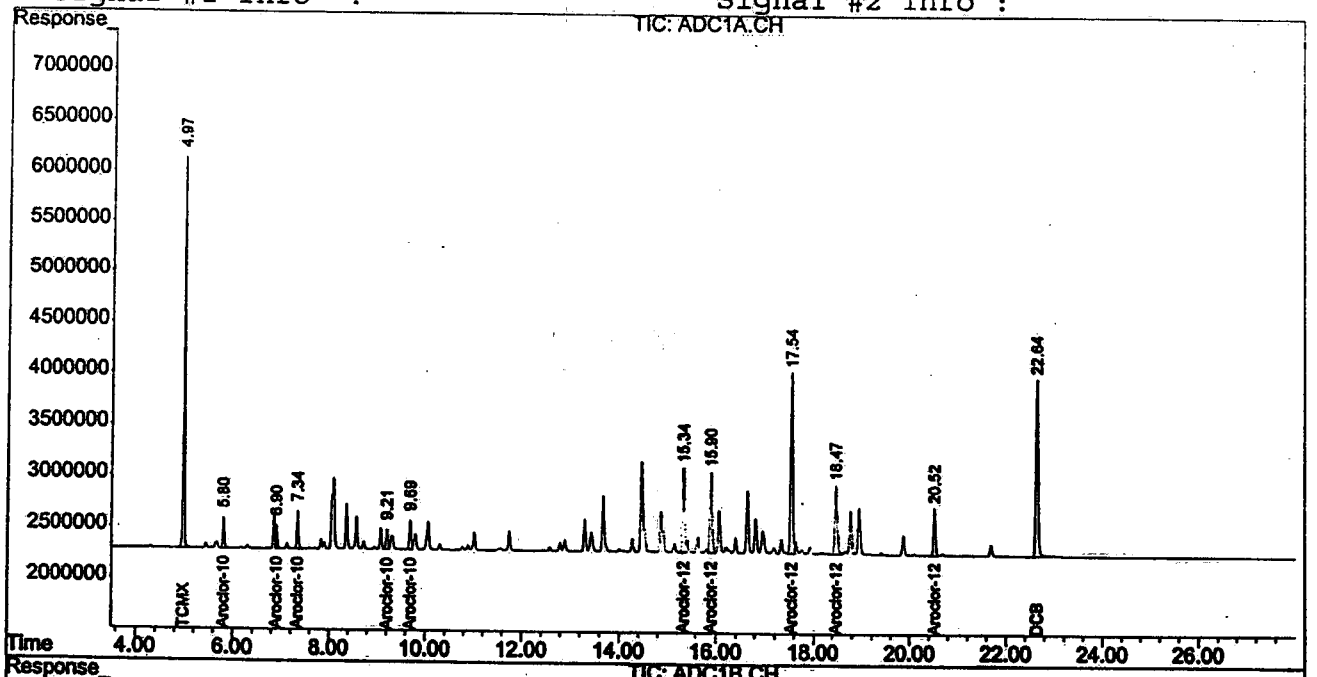
002404

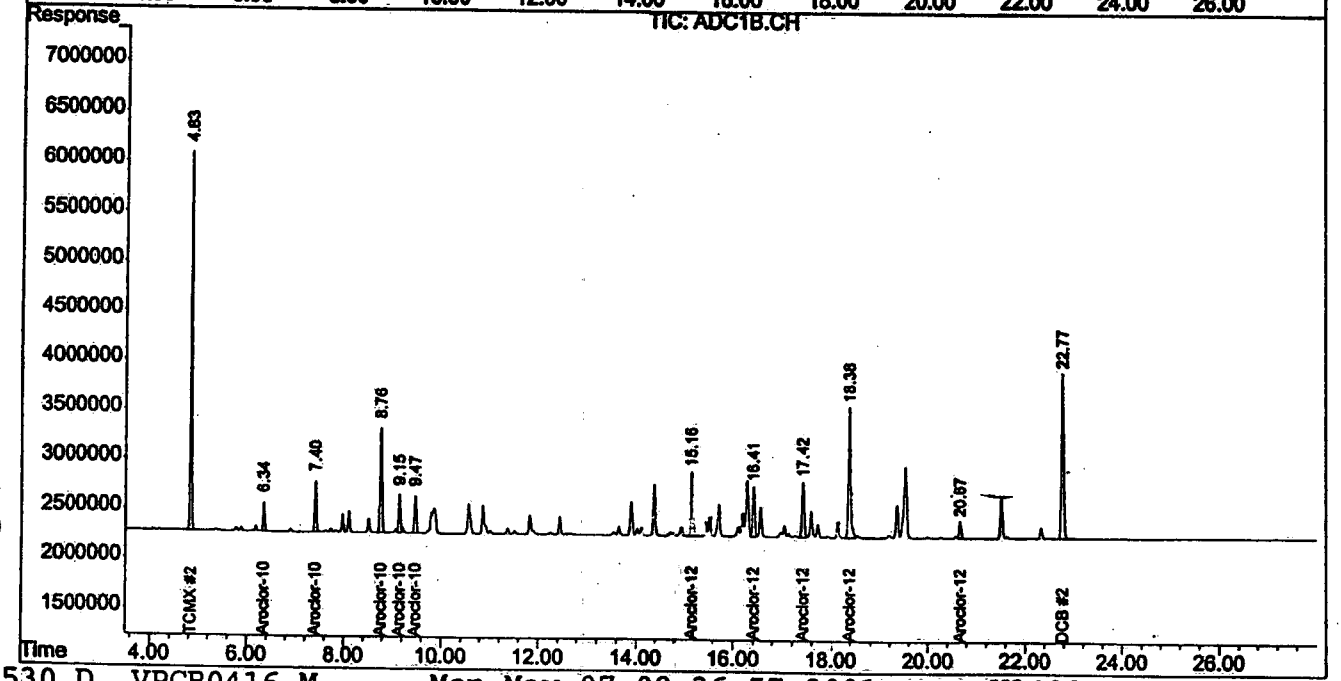
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5530.D\ADC1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5530.D\ADC1B.CH
Acq On : 4 May 2001 13:25 Operator: MJ
Sample : 8082_C_IAS1483,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 8:04 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





354

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5545.D\ADC1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5545.D\ADC1B.CH
Acq On : 4 May 2001 21:37 Operator: MJ
Sample : 8082_C_IAS1483,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 07 07:16:24 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0416.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	4.97	4.83	69503370	74684966	95.067	104.048
Spiked Amount 100.000			Recovery =		95.07%	104.05%
2) S DCB	22.63	22.76	57042745	56923496	95.995	101.864
Spiked Amount 100.000			Recovery =		96.00%	101.86%
Target Compounds						
3) L2 Aroclor-1016	5.80	6.34	6222067	6938553	1004.411	1063.250
L2 Aroclor-1016 {2}	6.89	7.40	4886247	12654306	1000.814	1052.582
L2 Aroclor-1016 {3}	7.33	8.76	8487650	29503538	1006.929	1034.967
6) L2 Aroclor-1016 {4}	9.21	9.14	5178615	10464488	1014.230	1072.483
7) L2 Aroclor-1016 {5}	9.68	9.46	7286955	10600669	1020.126	1061.628
Sum Aroclor-1016			32061534	70161554	5046.510	5284.910
Average Aroclor-1016					1009.302	1056.982
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	15.33	15.14	26604081	20492771	1024.825	1056.543
34) L8 Aroclor-1260 {2}	15.90	16.40	23956056	16409587	1031.494	1055.908
35) L8 Aroclor-1260 {3}	17.54	17.41	53685533	18976026	1003.158	1066.015
36) L8 Aroclor-1260 {4}	18.46	18.37	24783965	45562911	1042.190	1046.193
L8 Aroclor-1260 {5}	20.51	20.66	14533257	5789070	1046.570	1099.535
Sum Aroclor-1260			143.6E6	107.2E6	5148.237	5324.193
Average Aroclor-1260					1029.647	1064.839

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

2575

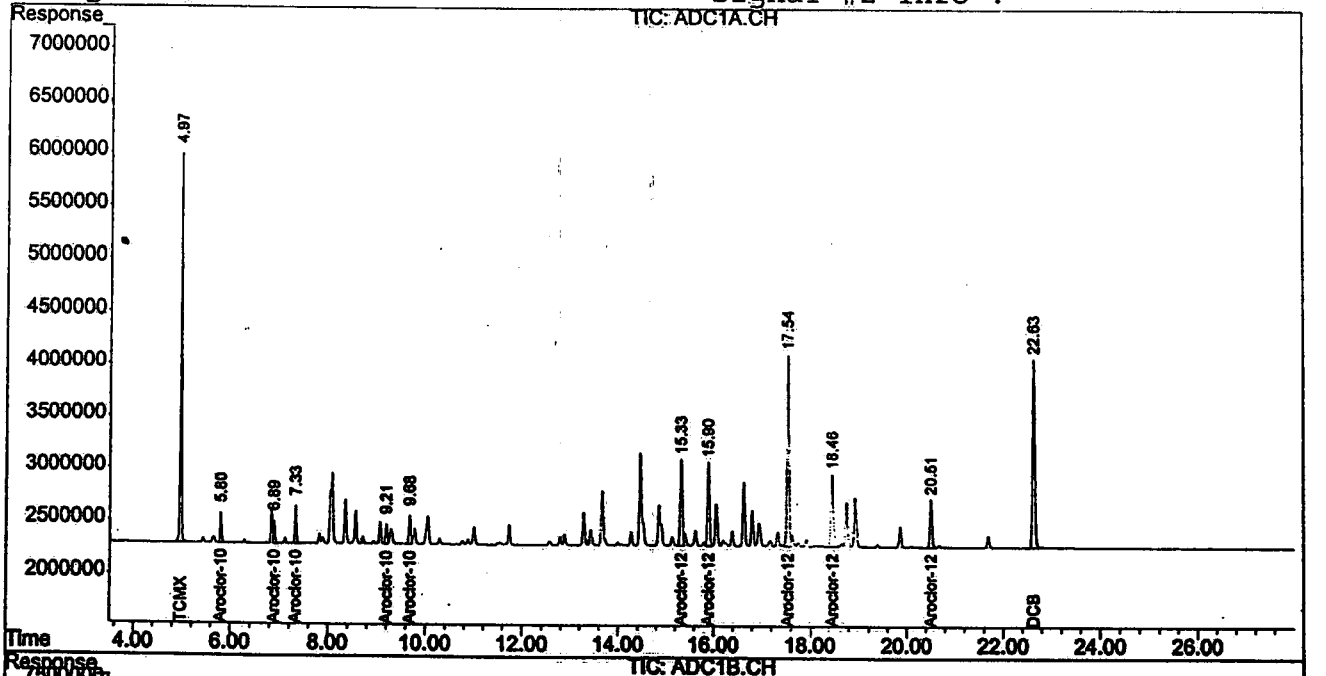
000406

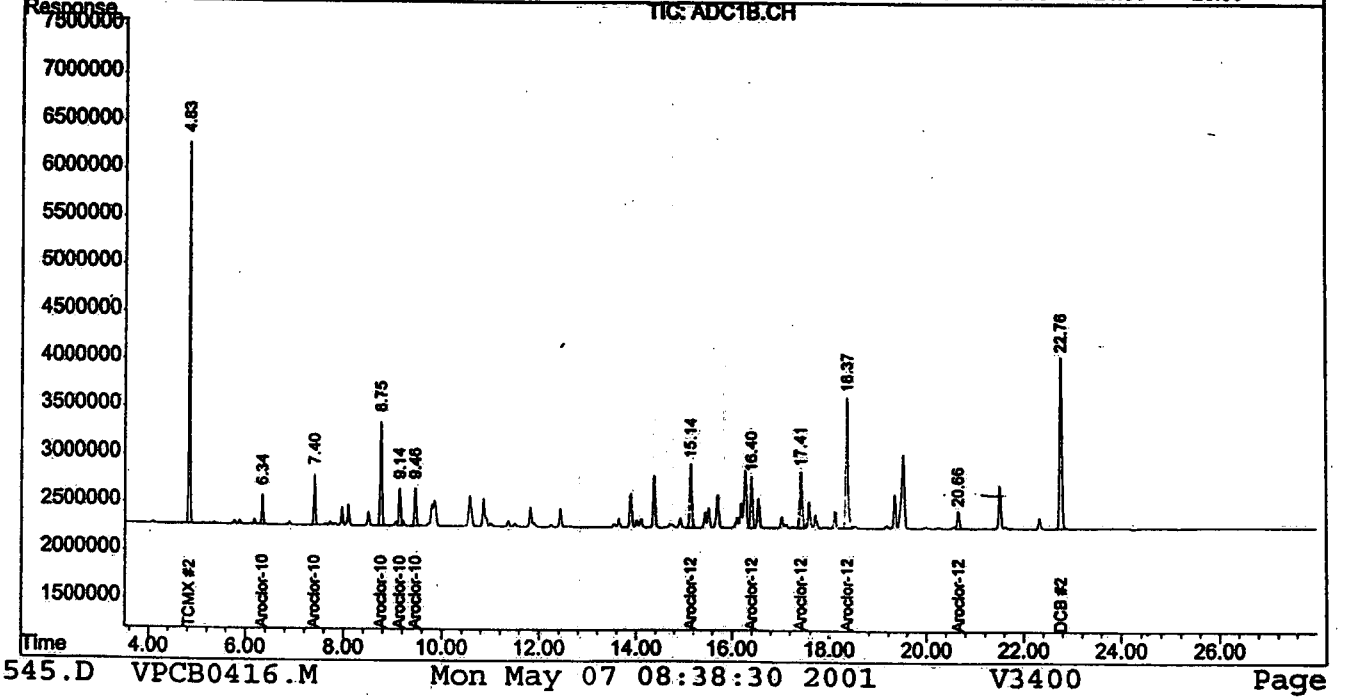
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\05-04-01\V5545.D\ADC1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\05-04-01\V5545.D\ADC1B.CH
Acq On : 4 May 2001 21:37 Operator: MJ
Sample : 8082_C_IAS1483,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 8:17 2001 Quant Results File: VPCB0416.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0416.M (Chemstation Integrator)
Title :
Last Update : Mon Apr 16 13:46:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0416.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PESTICIDE METHOD BLANK SUMMARY

Lab File ID: W6376.D

Instrument ID: GC-W

Date Extracted: 05/02/2001

Matrix: AQUEOUS

Date Analyzed: 05/02/2001

Time Analyzed: 13:36

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
EXP_04/10/03	2750-001	05/02/2001	14:14
MW-2	2796-001	05/02/2001	14:47
WC-1_COMP	2765-001	05/02/2001	15:12
PEST	2774-003-MS1	05/02/2001	15:37
PEST	2774-003-MSD1	05/02/2001	16:02
PEST	PBA0502-MS1	05/02/2001	16:27

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: NA

Lab ID: 0502-BK1
Client ID: (2750.2796)
Date Received: NA
Date Extracted: 05/02/2001
Date Analyzed: 05/02/2001
Data file: W6376.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.002
beta-BHC	ND		0.002
gamma-BHC	ND		0.002
delta-BHC	ND		0.002
Heptachlor	ND		0.002
Aldrin	ND		0.002
Heptachlor epoxide	ND		0.002
Endosulfan I	ND		0.002
4,4'-DDE	ND		0.002
Dieldrin	ND		0.002
Endrin	ND		0.002
Endosulfan II	ND		0.002
4,4'-DDD	ND		0.002
Endrin aldehyde	ND		0.002
Endosulfan sulfate	ND		0.002
4,4'-DDT	ND		0.002
Chlordane	ND		0.015
Toxaphene	ND		0.015

3574

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: W6400.D

Instrument ID: GC-W

Date Extracted: 05/04/2001

Matrix: AQUEOUS

Date Analyzed: 05/04/2001

Time Analyzed: 15:23

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
MW-1	2867-001	05/04/2001	15:48
MW-3	2867-003	05/04/2001	16:38
MW-6	2867-005	05/04/2001	17:28
MW-7	2867-006	05/04/2001	17:53
MW-8	2867-007	05/04/2001	18:18
FB	2867-008	05/04/2001	18:43
MW1	2860-001	05/04/2001	19:08
MW2	2860-002	05/04/2001	19:33
MW3	2860-003	05/04/2001	19:57
COMPOSITE_A	2828-006	05/04/2001	20:22
COMPOSITE_A	2827-006	05/04/2001	20:47
PEST	PBA0504-MS1	05/04/2001	21:12

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: NA

Lab ID: 0504-BK1
Client ID: (2828.2867)
Date Received: NA
Date Extracted: 05/04/2001
Date Analyzed: 05/04/2001
Data file: W6400.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.002
beta-BHC	ND		0.002
gamma-BHC	ND		0.002
delta-BHC	ND		0.002
Heptachlor	ND		0.002
Aldrin	ND		0.002
Heptachlor epoxide	ND		0.002
Endosulfan I	ND		0.002
4,4'-DDE	ND		0.002
Dieldrin	ND		0.002
Endrin	ND		0.002
Endosulfan II	ND		0.002
4,4'-DDD	ND		0.002
Endrin aldehyde	ND		0.002
Endosulfan sulfate	ND		0.002
4,4'-DDT	ND		0.002
Chlordane	ND		0.015
Toxaphene	ND		0.015

2560

000411

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: W6439.D

Instrument ID: GC-W

Date Extracted: 05/04/2001

Matrix: AQUEOUS

Date Analyzed: 05/07/2001

Time Analyzed: 21:36

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
MW-2	2867-002	05/07/2001	22:01
MW-5	2867-004	05/07/2001	22:26

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: NA

Lab ID: 0504-BK1
Client ID: (2828.2867)
Date Received: NA
Date Extracted: 05/04/2001
Date Analyzed: 05/07/2001
Data file: W6439.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.002
beta-BHC	ND		0.002
gamma-BHC	ND		0.002
delta-BHC	ND		0.002
Heptachlor	ND		0.002
Aldrin	ND		0.002
Heptachlor epoxide	ND		0.002
Endosulfan I	ND		0.002
4,4'-DDE	ND		0.002
Dieldrin	ND		0.002
Endrin	ND		0.002
Endosulfan II	ND		0.002
4,4'-DDD	ND		0.002
Endrin aldehyde	ND		0.002
Endosulfan sulfate	ND		0.002
4,4'-DDT	ND		0.002
Chlordane	ND		0.015
Toxaphene	ND		0.015

3582

000413

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 05/02/2001

Instrument ID: GC-W

GC Column (1st): DB-5

Data File: W6373.D W6372.D W6371.D W6370.D W6369.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	5.03	5.02	5.02	5.03	5.02	5.02	4.95	5.09
gamma-BHC	5.16	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	7.55	7.54	7.54	7.55	7.54	7.54	7.47	7.61
Heptachlor epoxide	8.56	8.55	8.55	8.56	8.55	8.55	8.48	8.62
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	10.16	10.17	10.16	10.16	10.09	10.23
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	11.35	11.36	11.36	11.35	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			13.16				13.09	13.23
Toxaphene {2}			13.29				13.22	13.36
Toxaphene {3}			13.58				13.51	13.65
Toxaphene {4}			14.04				13.97	14.11
Toxaphene {5}			14.54				14.47	14.61

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 05/02/2001

Instrument ID: GC-W

GC Column (1st): DB-5

Data File: W6373.D W6372.D W6371.D W6370.D W6369.D

Compound	CALIBRATION FACTORS 10	50	100	200	300	MEAN	%RSD
alpha-BHC	34682738	39337592	39600954	38847187	38123645	38118423	5.25
beta-BHC	14992170	14379699	14129597	13604712	13274226	14076081	4.76
gamma-BHC	31775557	35046138	35131961	34325097	33626423	33981035	4.05
delta-BHC	30253474	33879994	34366699	33812971	33438230	33150274	4.99
Heptachlor	27716307	28858992	28819190	27604053	26178538	27835416	3.95
Aldrin	30933742	33462656	33138818	31801433	30655180	31998366	3.96
Heptachlor epoxide	28390662	29560867	28817726	27102164	25836491	27941582	5.29
Endosulfan I	26923508	27851511	27170396	25504530	24379778	26365945	5.31
4,4'-DDE	27326159	29868920	29702613	28356708	27266324	28504145	4.38
Dieldrin	27480272	29314706	28836010	27288378	25953409	27774555	4.81
Endrin	25276781	26749020	26268668	24610875	23501071	25281283	5.14
Endosulfan II	25298393	25948428	25470448	23877388	22872746	24693481	5.17
4,4'-DDD	21804220	22861780	22667815	21570681	20402772	21861453	4.50
Endrin aldehyde	20062392	19367320	18819319	17528246	16431836	18441823	7.90
Endosulfan sulfate	21553436	22238645	22013782	20798020	20056267	21332030	4.22
4,4'-DDT	16894391	19047005	19628813	19170684	18753880	18698954	5.65
Endrin ketone	28622279	28222889	27012439	24824681	23381990	26412856	8.51
Methoxychlor	9455795	9501147	9318389	8642695	8167645	9017134	6.51
alpha-Chlordane	28810117	30130732	29866024	28735190	27764718	29061356	3.28
gamma-Chlordane	29213550	31479954	31433864	30292028	29294731	30342826	3.63
Chlordane 500 ppb			3436052				
Chlordane {2}			757841				
Chlordane {3}			3382701				
Chlordane {4}			1959281				
Chlordane {5}			913965				
Toxaphene 500 ppb			494501				
Toxaphene {2}			797753				
Toxaphene {3}			361415				
Toxaphene {4}			367560				
Toxaphene {5}			434229				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 05/02/2001

Instrument ID: GC-W

GC Column (2nd): DB-1701P

Data File: W6373.C W6372.C W6371.C W6370.C W6369.C

Compound	RT OF STANDARDS 10	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	5.58	5.57	5.57	5.58	5.59	5.58	5.51	5.65
beta-BHC	8.63	8.63	8.63	8.63	8.64	8.63	8.56	8.70
gamma-BHC	6.53	6.53	6.53	6.53	6.54	6.53	6.46	6.60
delta-BHC	9.20	9.20	9.20	9.20	9.21	9.20	9.13	9.27
Heptachlor	7.01	7.01	7.01	7.01	7.02	7.01	6.94	7.08
Aldrin	7.68	7.68	7.68	7.68	7.69	7.68	7.61	7.75
Heptachlor epoxide	9.52	9.52	9.52	9.53	9.53	9.53	9.46	9.60
Endosulfan I	10.21	10.21	10.21	10.21	10.22	10.21	10.14	10.28
4,4'-DDE	10.98	10.98	10.98	10.99	10.99	10.98	10.91	11.05
Dieldrin	11.25	11.25	11.25	11.25	11.25	11.25	11.18	11.32
Endrin	11.77	11.77	11.77	11.77	11.78	11.77	11.70	11.84
Endosulfan II	13.21	13.21	13.21	13.22	13.22	13.22	13.15	13.29
4,4'-DDD	13.21	13.21	13.21	13.22	13.22	13.22	13.15	13.29
Endrin aldehyde	14.35	14.35	14.35	14.36	14.36	14.36	14.29	14.43
Endosulfan sulfate	15.25	15.25	15.26	15.26	15.26	15.26	15.19	15.33
4,4'-DDT	13.67	13.66	13.67	13.67	13.67	13.67	13.60	13.74
Endrin ketone	16.28	16.28	16.28	16.28	16.29	16.28	16.21	16.35
Methoxychlor	15.53	15.53	15.53	15.53	15.53	15.53	15.46	15.60
alpha-Chlordane	10.60	10.60	10.60	10.60	10.61	10.60	10.53	10.67
gamma-Chlordane	10.45	10.45	10.45	10.45	10.46	10.45	10.38	10.52
Chlordane 500 ppb			8.37				8.30	8.44
Chlordane {2}			10.05				9.98	10.12
Chlordane {3}			10.45				10.38	10.52
Chlordane {4}			10.60				10.53	10.67
Chlordane {5}			10.66				10.59	10.73
Toxaphene 500 ppb			14.00				13.93	14.07
Toxaphene {2}			14.75				14.68	14.82
Toxaphene {3}			15.00				14.93	15.07
Toxaphene {4}			15.19				15.12	15.26
Toxaphene {5}			15.64				15.57	15.71

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 05/02/2001

Instrument ID: GC-W

GC Column (2nd): DB-1701P

Data File: W6373.C W6372.C W6371.C W6370.C W6369.C

Compound	CALIBRATION FACTORS 10	50	100	200	300	MEAN	%RSD
alpha-BHC	9014277	10241496	10691818	10896410	10977892	10364378	7.79
beta-BHC	4759057	4378138	4320832	4253787	4234538	4389271	4.88
gamma-BHC	8377191	9298876	9633210	9770265	9820057	9379920	6.36
delta-BHC	7902293	8772850	9190222	9343596	9436669	8929126	7.03
Heptachlor	7298996	7501003	7699503	7782074	7759055	7608126	2.70
Aldrin	8167657	8771769	9020242	9065380	9057145	8816438	4.34
Heptachlor epoxide	7796153	7971115	8075560	8022074	7997030	7972386	1.33
Endosulfan I	7391217	7540734	7629058	7569581	7554295	7536977	1.17
4,4'-DDE	7210562	7794957	8062625	8136744	8165183	7874014	5.06
Dieldrin	7577348	7995016	8209622	8223159	8246378	8050305	3.52
Endrin	7058912	7408688	7587012	7558748	7575553	7437783	3.01
Endosulfan II	13199476	13616812	13733929	13510342	13377534	13487619	1.54
4,4'-DDD	13199476	13616812	13733929	13510342	13377534	13487619	1.54
Endrin aldehyde	4703060	4885431	4918142	5329135	5248307	5016815	5.24
Endosulfan sulfate	5828077	5880290	5997769	5955769	6032660	5938913	1.42
4,4'-DDT	3284481	4332191	4733976	4979346	5224056	4510810	16.86
Endrin ketone	7308082	7393866	7385026	7226102	7213834	7305382	1.16
Methoxychlor	2267177	2560776	2601544	2585837	2625319	2528131	5.84
alpha-Chlordane	7885012	8045904	8196844	8187836	8188460	8100811	1.68
gamma-Chlordane	7826128	8135509	8360914	8421037	8461920	8241102	3.20
Chlordane 500 ppb			161552				
Chlordane {2}			209909				
Chlordane {3}			923226				
Chlordane {4}			835101				
Chlordane {5}			525747				
Toxaphene 500 ppb			190592				
Toxaphene {2}			143103				
Toxaphene {3}			190945				
Toxaphene {4}			116800				
Toxaphene {5}			89392				

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 05/04/2001 Instrument ID: GC-W

Data File: W6397.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	38118423	36703229	3.71
beta-BHC	5.02	4.95	5.09	14076081	12964026	7.90
gamma-BHC	5.15	5.08	5.22	33981035	32528347	4.27
delta-BHC	5.63	5.56	5.70	33150274	31731340	4.28
Heptachlor	6.73	6.66	6.80	27835416	25886624	7.00
Aldrin	7.54	7.47	7.61	31998366	30912274	3.39
Heptachlor epoxide	8.55	8.48	8.62	27941582	26523184	5.08
Endosulfan I	9.47	9.40	9.54	26365945	25057362	4.96
4,4'-DDE	10.24	10.17	10.31	28504145	27564236	3.30
Dieldrin	10.16	10.09	10.23	27774555	26070321	6.14
Endrin	10.72	10.65	10.79	25281283	23759839	6.02
Endosulfan II	10.97	10.90	11.04	24693481	23483982	4.90
4,4'-DDD	11.35	11.28	11.42	21861453	19920715	8.88
Endrin aldehyde	11.50	11.43	11.57	18441823	17091177	7.32
Endosulfan sulfate	12.15	12.08	12.22	21332030	20218009	5.22
4,4'-DDT	12.38	12.31	12.45	18698954	18165647	2.85
Endrin ketone	13.36	13.29	13.43	26412856	24607308	6.84
Methoxychlor	14.06	13.99	14.13	9017134	8293994	8.02
alpha-Chlordane	9.57	9.50	9.64	29061356	27813971	4.29
gamma-Chlordane	9.17	9.10	9.24	30342826	29159659	3.90
					Average %D	5.41
Chlordane 500 ppb	9.17	9.10	9.24	3436052	3244648	5.57
Chlordane {2}	9.37	9.30	9.44	757841	694961	8.30
Chlordane {3}	9.57	9.50	9.64	3382701	3202298	5.33
Chlordane {4}	9.72	9.65	9.79	1959281	1850356	5.56
Chlordane {5}	11.57	11.50	11.64	913965	862760	5.60
Toxaphene 500 ppb	13.16	13.09	13.23	494501	460661	6.84
Toxaphene {2}	13.29	13.22	13.36	797753	737016	7.61
Toxaphene {3}	13.58	13.51	13.65	361415	332894	7.89
Toxaphene {4}	14.04	13.97	14.11	367560	344103	6.38
Toxaphene {5}	14.54	14.47	14.61	434229	414337	4.58
					Average %D	6.37

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 05/04/2001 Instrument ID: GC-W

Data File: W6397.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	5.59	5.52	5.66	10364378	10204389	1.54
beta-BHC	8.64	8.57	8.71	4389271	4090267	6.81
gamma-BHC	6.54	6.47	6.61	9379920	9136557	2.59
delta-BHC	9.21	9.14	9.28	8929126	8710048	2.45
Heptachlor	7.02	6.95	7.09	7608126	7147210	6.06
Aldrin	7.69	7.62	7.76	8816438	8702881	1.29
Heptachlor epoxide	9.53	9.46	9.60	7972386	7710340	3.29
Endosulfan I	10.22	10.15	10.29	7536977	7322828	2.84
4,4'-DDE	10.99	10.92	11.06	7874014	7705389	2.14
Dieldrin	11.26	11.19	11.33	8050305	7857983	2.39
Endrin	11.78	11.71	11.85	7437783	7138650	4.02
Endosulfan II	13.22	13.15	13.29	13487619	12907569	4.30
4,4'-DDD	13.22	13.15	13.29	13487619	12907569	4.30
Endrin aldehyde	14.36	14.29	14.43	5016815	4846941	3.39
Endosulfan sulfate	15.26	15.19	15.33	5938913	5667180	4.58
4,4'-DDT	13.67	13.60	13.74	4510810	4589190	1.74
Endrin ketone	16.29	16.22	16.36	7305382	7032196	3.74
Methoxychlor	15.54	15.47	15.61	2528131	2478615	1.96
alpha-Chlordane	10.61	10.54	10.68	8100811	7878563	2.74
gamma-Chlordane	10.46	10.39	10.53	8241102	8028540	2.58
					Average %D	3.24
Chlordane 500 ppb	8.37	8.30	8.44	161552	153311	5.10
Chlordane {2}	10.05	9.98	10.12	209909	198447	5.46
Chlordane {3}	10.45	10.38	10.52	923226	899925	2.52
Chlordane {4}	10.60	10.53	10.67	835101	794952	4.81
Chlordane {5}	10.66	10.59	10.73	525747	499145	5.06
Toxaphene 500 ppb	14.00	13.93	14.07	190592	205069	7.60
Toxaphene {2}	14.75	14.68	14.82	143103	158959	11.08
Toxaphene {3}	15.00	14.93	15.07	190945	201165	5.35
Toxaphene {4}	15.20	15.13	15.27	116800	104653	10.40
Toxaphene {5}	15.64	15.57	15.71	89392	103570	15.86
					Average %D	7.32

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 05/04/2001 **Instrument ID:** GC-W

Data File: W6415.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	38118423	36711027	3.69
beta-BHC	5.02	4.95	5.09	14076081	13044672	7.33
gamma-BHC	5.15	5.08	5.22	33981035	32933947	3.08
delta-BHC	5.63	5.56	5.70	33150274	32464294	2.07
Heptachlor	6.73	6.66	6.80	27835416	27315616	1.87
Aldrin	7.54	7.47	7.61	31998366	31067602	2.91
Heptachlor epoxide	8.56	8.49	8.63	27941582	27222508	2.57
Endosulfan I	9.47	9.40	9.54	26365945	25528343	3.18
4,4'-DDE	10.24	10.17	10.31	28504145	27766923	2.59
Dieldrin	10.16	10.09	10.23	27774555	28054974	1.01
Endrin	10.72	10.65	10.79	25281283	25934130	2.58
Endosulfan II	10.97	10.90	11.04	24693481	23925134	3.11
4,4'-DDD	11.36	11.29	11.43	21861453	22951443	4.99
Endrin aldehyde	11.50	11.43	11.57	18441823	18470486	0.16
Endosulfan sulfate	12.15	12.08	12.22	21332030	21024192	1.44
4,4'-DDT	12.38	12.31	12.45	18698954	19363376	3.55
Endrin ketone	13.36	13.29	13.43	26412856	26483222	0.27
Methoxychlor	14.06	13.99	14.13	9017134	9509199	5.46
alpha-Chlordane	9.58	9.51	9.65	29061356	27988503	3.69
gamma-Chlordane	9.17	9.10	9.24	30342826	29400790	3.10
					Average %D	2.93

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 05/04/2001 Instrument ID: GC-W

Data File: W6415.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	5.57	5.50	5.64	10364378	10707411	3.31
beta-BHC	8.63	8.56	8.70	4389271	4287217	2.33
gamma-BHC	6.53	6.46	6.60	9379920	9683755	3.24
delta-BHC	9.20	9.13	9.27	8929126	9365647	4.89
Heptachlor	7.01	6.94	7.08	7608126	7657619	0.65
Aldrin	7.68	7.61	7.75	8816438	8973939	1.79
Heptachlor epoxide	9.52	9.45	9.59	7972386	8029623	0.72
Endosulfan I	10.21	10.14	10.28	7536977	7558739	0.29
4,4'-DDE	10.98	10.91	11.05	7874014	7966414	1.17
Dieldrin	11.25	11.18	11.32	8050305	8202750	1.89
Endrin	11.77	11.70	11.84	7437783	7735027	4.00
Endosulfan II	13.22	13.15	13.29	13487619	13903221	3.08
4,4'-DDD	13.22	13.15	13.29	13487619	13903221	3.08
Endrin aldehyde	14.36	14.29	14.43	5016815	5214633	3.94
Endosulfan sulfate	15.26	15.19	15.33	5938913	6044598	1.78
4,4'-DDT	13.67	13.60	13.74	4510810	4755986	5.44
Endrin ketone	16.28	16.21	16.35	7305382	7519193	2.93
Methoxychlor	15.53	15.46	15.60	2528131	2647039	4.70
alpha-Chlordane	10.60	10.53	10.67	8100811	8125783	0.31
gamma-Chlordane	10.45	10.38	10.52	8241102	8305220	0.78
					Average %D	2.52

000421

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 05/07/2001 **Instrument ID:** GC-W

Data File: W6420.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	38118423	34308153	10.00
beta-BHC	5.02	4.95	5.09	14076081	12354844	12.23
gamma-BHC	5.15	5.08	5.22	33981035	30883689	9.11
delta-BHC	5.63	5.56	5.70	33150274	27851702	15.98
Heptachlor	6.73	6.66	6.80	27835416	27664414	0.61
Aldrin	7.54	7.47	7.61	31998366	28488271	10.97
Heptachlor epoxide	8.55	8.48	8.62	27941582	25774334	7.76
Endosulfan I	9.47	9.40	9.54	26365945	23994573	8.99
4,4'-DDE	10.24	10.17	10.31	28504145	25122390	11.86
Dieldrin	10.16	10.09	10.23	27774555	26366782	5.07
Endrin	10.72	10.65	10.79	25281283	25186607	0.37
Endosulfan II	10.97	10.90	11.04	24693481	21936824	11.16
4,4'-DDD	11.35	11.28	11.42	21861453	20490674	6.27
Endrin aldehyde	11.49	11.42	11.56	18441823	16786544	8.98
Endosulfan sulfate	12.15	12.08	12.22	21332030	18704630	12.32
4,4'-DDT	12.38	12.31	12.45	18698954	19226737	2.82
Endrin ketone	13.36	13.29	13.43	26412856	23502223	11.02
Methoxychlor	14.05	13.98	14.12	9017134	9622689	6.72
alpha-Chlordane	9.58	9.51	9.65	29061356	25870361	10.98
gamma-Chlordane	9.17	9.10	9.24	30342826	27237443	10.23
					Average %D	8.67
Chlordane 500 ppb	9.17	9.10	9.24	3436052	3047175	11.32
Chlordane {2}	9.37	9.30	9.44	757841	665039	12.25
Chlordane {3}	9.57	9.50	9.64	3382701	3028806	10.46
Chlordane {4}	9.72	9.65	9.79	1959281	1741323	11.12
Chlordane {5}	11.57	11.50	11.64	913965	849706	7.03
Toxaphene 500 ppb	13.16	13.09	13.23	494501	467886	5.38
Toxaphene {2}	13.29	13.22	13.36	797753	735795	7.77
Toxaphene {3}	13.58	13.51	13.65	361415	379404	4.98
Toxaphene {4}	14.03	13.96	14.10	367560	337973	8.05
Toxaphene {5}	14.54	14.47	14.61	434229	394885	9.06
					Average %D	8.74

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 05/07/2001 Instrument ID: GC-W

Data File: W6420.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	10364378	10378813	0.14
beta-BHC	8.63	8.56	8.70	4389271	4107616	6.42
gamma-BHC	6.53	6.46	6.60	9379920	9356686	0.25
delta-BHC	9.20	9.13	9.27	8929126	8096839	9.32
Heptachlor	7.01	6.94	7.08	7608126	7787341	2.36
Aldrin	7.68	7.61	7.75	8816438	8548333	3.04
Heptachlor epoxide	9.52	9.45	9.59	7972386	7713784	3.24
Endosulfan I	10.21	10.14	10.28	7536977	7125337	5.46
4,4'-DDE	10.98	10.91	11.05	7874014	7331453	6.89
Dieldrin	11.25	11.18	11.32	8050305	7634862	5.16
Endrin	11.77	11.70	11.84	7437783	7522152	1.13
Endosulfan II	13.21	13.14	13.28	13487619	12885148	4.47
4,4'-DDD	13.21	13.14	13.28	13487619	12885148	4.47
Endrin aldehyde	14.35	14.28	14.42	5016815	4612940	8.05
Endosulfan sulfate	15.25	15.18	15.32	5938913	5573137	6.16
4,4'-DDT	13.67	13.60	13.74	4510810	4708407	4.38
Endrin ketone	16.28	16.21	16.35	7305382	6751542	7.58
Methoxychlor	15.53	15.46	15.60	2528131	2649116	4.79
alpha-Chlordane	10.60	10.53	10.67	8100811	7451664	8.01
gamma-Chlordane	10.45	10.38	10.52	8241102	7653332	7.13
					Average %D	4.92
Chlordane 500 ppb	8.37	8.30	8.44	161552	151525	6.21
Chlordane {2}	10.05	9.98	10.12	209909	194560	7.31
Chlordane {3}	10.45	10.38	10.52	923226	879261	4.76
Chlordane {4}	10.60	10.53	10.67	835101	791469	5.22
Chlordane {5}	10.66	10.59	10.73	525747	501301	4.65
Toxaphene 500 ppb	14.00	13.93	14.07	190592	215457	13.05
Toxaphene {2}	14.74	14.67	14.81	143103	157311	9.93
Toxaphene {3}	15.00	14.93	15.07	190945	204431	7.06
Toxaphene {4}	15.19	15.12	15.26	116800	100891	13.62
Toxaphene {5}	15.64	15.57	15.71	89392	111335	24.55
					Average %D	9.64

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 05/08/2001 **Instrument ID:** GC-W

Data File: W6445.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	38118423	34124528	10.48
beta-BHC	5.02	4.95	5.09	14076081	12253100	12.95
gamma-BHC	5.15	5.08	5.22	33981035	30795998	9.37
delta-BHC	5.63	5.56	5.70	33150274	29602978	10.70
Heptachlor	6.73	6.66	6.80	27835416	25766216	7.43
Aldrin	7.54	7.47	7.61	31998366	28484865	10.98
Heptachlor epoxide	8.55	8.48	8.62	27941582	25344264	9.30
Endosulfan I	9.47	9.40	9.54	26365945	23672688	10.21
4,4'-DDE	10.24	10.17	10.31	28504145	25529641	10.44
Dieldrin	10.16	10.09	10.23	27774555	26087069	6.08
Endrin	10.72	10.65	10.79	25281283	25156134	0.50
Endosulfan II	10.97	10.90	11.04	24693481	22082111	10.58
4,4'-DDD	11.35	11.28	11.42	21861453	20999437	3.94
Endrin aldehyde	11.49	11.42	11.56	18441823	17059517	7.50
Endosulfan sulfate	12.15	12.08	12.22	21332030	19090322	10.51
4,4'-DDT	12.38	12.31	12.45	18698954	18742251	0.23
Endrin ketone	13.36	13.29	13.43	26412856	22576348	14.53
Methoxychlor	14.05	13.98	14.12	9017134	8425320	6.56
alpha-Chlordane	9.58	9.51	9.65	29061356	25739102	11.43
gamma-Chlordane	9.17	9.10	9.24	30342826	27006024	11.00
					Average %D	8.74

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 05/08/2001 Instrument ID: GC-W

Data File: W6445.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	5.57	5.50	5.64	10364378	10875505	4.93
beta-BHC	8.63	8.56	8.70	4389271	4355737	0.76
gamma-BHC	6.53	6.46	6.60	9379920	9864636	5.17
delta-BHC	9.20	9.13	9.27	8929126	9247533	3.57
Heptachlor	7.01	6.94	7.08	7608126	7856115	3.26
Aldrin	7.68	7.61	7.75	8816438	8984792	1.91
Heptachlor epoxide	9.52	9.45	9.59	7972386	8132218	2.00
Endosulfan I	10.21	10.14	10.28	7536977	7625787	1.18
4,4'-DDE	10.98	10.91	11.05	7874014	8012667	1.76
Dieldrin	11.24	11.17	11.31	8050305	8303101	3.14
Endrin	11.77	11.70	11.84	7437783	8113182	9.08
Endosulfan II	13.21	13.14	13.28	13487619	14075464	4.36
4,4'-DDD	13.21	13.14	13.28	13487619	14075464	4.36
Endrin aldehyde	14.35	14.28	14.42	5016815	4975080	0.83
Endosulfan sulfate	15.25	15.18	15.32	5938913	5981965	0.72
4,4'-DDT	13.66	13.59	13.73	4510810	5033132	11.58
Endrin ketone	16.28	16.21	16.35	7305382	7387682	1.13
Methoxychlor	15.52	15.45	15.59	2528131	2775901	9.80
alpha-Chlordane	10.60	10.53	10.67	8100811	8136750	0.44
gamma-Chlordane	10.45	10.38	10.52	8241102	8326182	1.03
				Average %D		3.55

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 05/04/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(2828.2867)	0504-BK1	AQUEOUS	92		74		91		71	
MW-1	2867-001	AQUEOUS	43	*	60		60		64	
MW-3	2867-003	AQUEOUS	65		62		61		66	
MW-6	2867-005	AQUEOUS	M		M		59		62	
MW-7	2867-006	AQUEOUS	87		53	*	83		58	*
MW-8	2867-007	AQUEOUS	M		M		77		103	
FB	2867-008	AQUEOUS	69		47	*	65		54	*
MW1	2860-001	AQUEOUS	56	*	62		53	*	65	
MW2	2860-002	AQUEOUS	60		60		58	*	68	
MW3	2860-003	AQUEOUS	69		67		66		74	
COMPOSITE_A	2828-006	AQUEOUS	74		64		74		72	
COMPOSITE_A	2827-006	AQUEOUS	76		66		76		74	
PEST	PBA0504-MS1	AQUEOUS	84		66		84		69	

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: 05/07/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(2857)	0507-BK1	SOIL	80		61	*	84		65	
S-1	2857-001	SOIL	60		70		65		80	
S-2	2857-002	SOIL	60		65		65		80	
S-3	2857-003	SOIL	70		70		70		80	
S-4	2857-004	SOIL	70		75		75		85	
S-5	2857-005	SOIL	65		70		65		85	
S-6	2857-006	SOIL	65		75		70		80	
S-7	2857-007	SOIL	65		70		70		80	
S-8	2857-008	SOIL	60		65		70		75	
S-9	2857-009	SOIL	70		75		75		85	
S-10	2857-010	SOIL	65		75		70		85	
S-11	2857-011	SOIL	55	*	75		60		85	
PEST	2857-011-MS1	SOIL	76		71		80		76	
PEST	2857-011-MSD1	SOIL	77		62	*	83		76	
PEST	PBS0507-MS1	SOIL	87		60	*	94		72	
(2828.2867)	0504-BK1	AQUEOUS	88		71		96		76	
MW-2	2867-002	AQUEOUS	53	*	63		65		77	
MW-5	2867-004	AQUEOUS	61		51	*	220	*	76	

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

AQUEOUS PESTICIDES MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2774-003-MSD1

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
gamma-BHC	100.0	0.0	89.1	89	30 - 138
Heptachlor	100.0	0.0	94.7	95	42 - 137
Aldrin	100.0	0.0	92.0	92	32 - 147
Dieldrin	100.0	0.0	90.4	90	26 - 134
Endrin	100.0	0.0	92.3	92	22 - 164
4,4'-DDT	100.0	0.0	93.7	94	22 - 150

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC	0.0	93.0	93	4	14	30 - 138
Heptachlor	0.0	99.2	99	4	14	42 - 137
Aldrin	0.0	96.1	96	4	14	32 - 147
Dieldrin	0.0	94.7	95	5	14	26 - 134
Endrin	0.0	94.7	95	3	13	22 - 164
4,4'-DDT	0.0	97.3	97	3	16	22 - 150

 # 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

AQUEOUS PESTICIDES BLANK SPIKE RECOVERY

Matrix spike Lab sample ID: PBA0504-MS1

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
gamma-BHC	100.0	0.0	84.2	84	30 - 138
Heptachlor	100.0	0.0	88.2	88	42 - 137
Aldrin	100.0	0.0	87.5	88	32 - 147
Dieldrin	100.0	0.0	88.4	88	26 - 134
Endrin	100.0	0.0	94.2	94	22 - 164
4,4'-DDT	100.0	0.0	92.5	93	22 - 150

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 3.68 DCB 2 18.63

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
(2828.2867)	0504-BK1	05/04/2001	15:23	3.85		18.68		3.68		18.63	
MW-1	2867-001	05/04/2001	15:48	3.84		18.68		3.68		18.63	
MW-3	2867-003	05/04/2001	16:38	3.85		18.68		3.68		18.63	
MW-6	2867-005	05/04/2001	17:28	M		M		3.70		18.63	
MW-7	2867-006	05/04/2001	17:53	3.84		18.68		3.69		18.63	
MW-8	2867-007	05/04/2001	18:18	M		M		3.68		18.62	
FB	2867-008	05/04/2001	18:43	3.85		18.68		3.68		18.63	
MW1	2860-001	05/04/2001	19:08	3.85		18.68		3.68		18.63	
MW2	2860-002	05/04/2001	19:33	3.85		18.68		3.69		18.63	
MW3	2860-003	05/04/2001	19:57	3.85		18.68		3.69		18.63	
COMPOSITE_A	2828-006	05/04/2001	20:22	3.85		18.68		3.68		18.63	
COMPOSITE_A	2827-006	05/04/2001	20:47	3.85		18.68		3.68		18.63	
PEST	PBA0504-MS1	05/04/2001	21:12	3.85		18.68		3.68		18.63	

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

C00130

3599

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 18.67 TCMX 2 3.70 DCB 2 18.63

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
(2857)	0507-BK1	05/07/2001	14:57	3.85		18.67		3.70		18.63	
S-1	2857-001	05/07/2001	15:22	3.85		18.67		3.69		18.62	
S-2	2857-002	05/07/2001	15:47	3.86		18.67		3.69		18.62	
S-3	2857-003	05/07/2001	16:12	3.85		18.68		3.69		18.62	
S-4	2857-004	05/07/2001	16:37	3.86		18.67		3.69		18.62	
S-5	2857-005	05/07/2001	17:02	3.86		18.67		3.69		18.62	
S-6	2857-006	05/07/2001	17:27	3.86		18.67		3.69		18.62	
S-7	2857-007	05/07/2001	17:52	3.86		18.68		3.69		18.62	
S-8	2857-008	05/07/2001	18:17	3.85		18.67		3.69		18.62	
S-9	2857-009	05/07/2001	18:42	3.85		18.67		3.69		18.62	
S-10	2857-010	05/07/2001	19:07	3.86		18.67		3.69		18.62	
S-11	2857-011	05/07/2001	19:32	3.86		18.68		3.69		18.62	
PEST	2857-011-MS1	05/07/2001	19:57	3.86		18.67		3.69		18.62	
PEST	2857-011-MSD1	05/07/2001	20:22	3.85		18.67		3.69		18.62	
PEST	PBS0507-MS1	05/07/2001	20:47	3.86		18.68		3.69		18.62	
(2828.2867)	0504-BK1	05/07/2001	21:36	3.86		18.67		3.69		18.62	
MW-2	2867-002	05/07/2001	22:01	3.85		18.68		3.69		18.62	
MW-5	2867-004	05/07/2001	22:26	3.86		18.68		3.69		18.62	

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\05-04-01\W6401.D\ECD1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6401.D\ECD2A.CH
Acq On : 5-4-01 15:48:38 Operator: LAG
Sample : MW-1,2867-001,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 10:29 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	390.7E6	163.8E6	8.609m	11.872 #
Spiked Amount 100.000			Recovery =		8.61%	11.87%
2) S DCB	18.68	18.63	396.6E6	116.6E6	12.010m	12.787
Spiked Amount 100.000			Recovery =		12.01%	12.79%
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

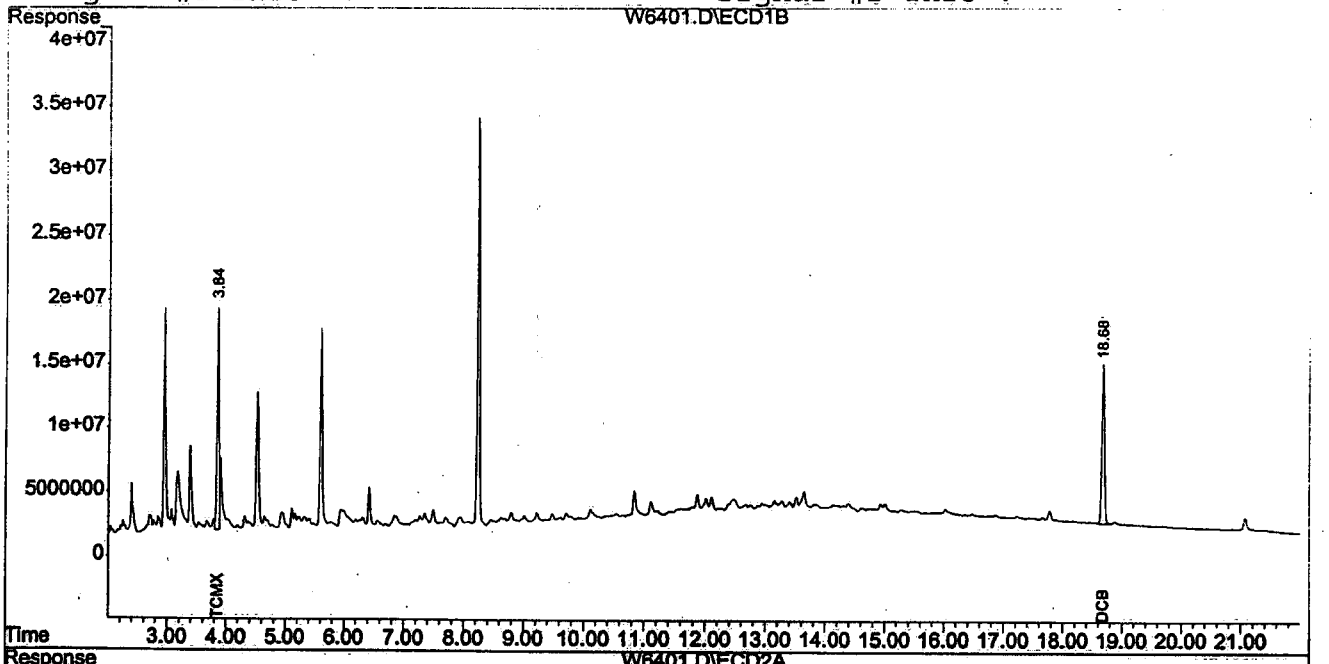
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W6401.D WPTC0502.M Mon May 07 10:37:21 2001 GC_W Page 1

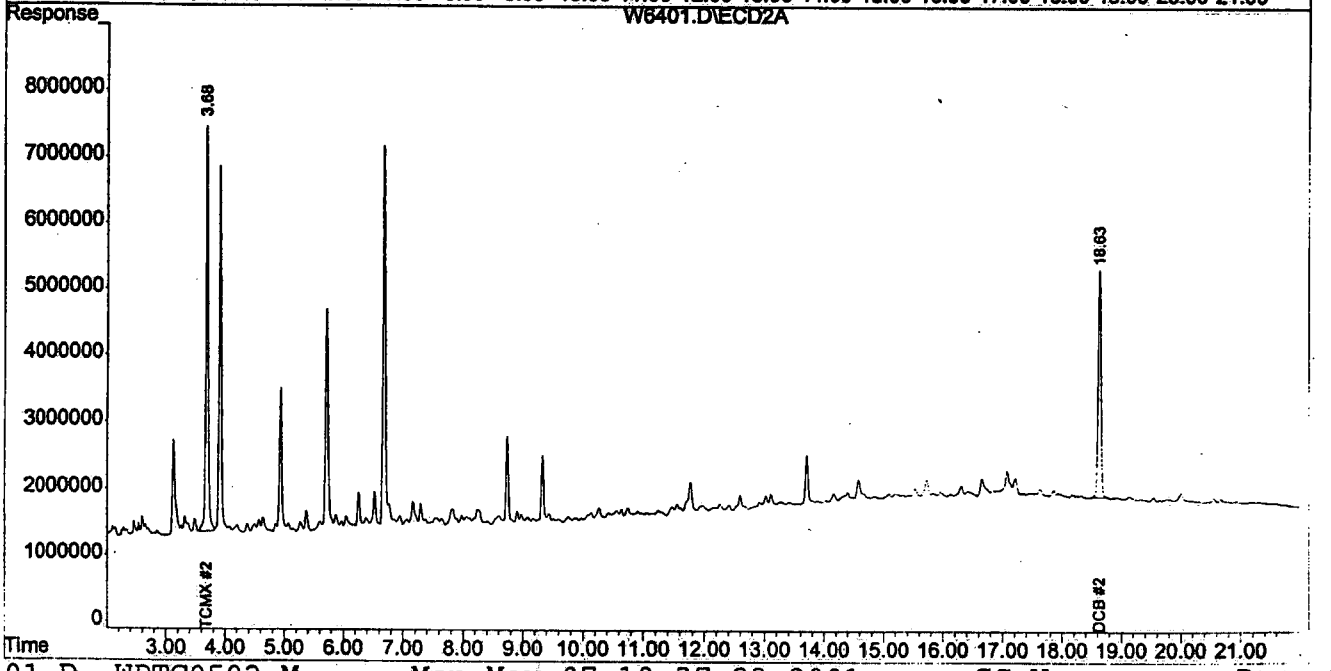
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6401.D\ECD1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6401.D\ECD2A.CH
Acq On : 5-4-01 15:48:38 Operator: LAG
Sample : MW-1,2867-001,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 10:29 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





3607

C09433

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6440.D\ECD1B.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6440.D\ECD2A.CH
Acq On : 5-7-01 22:01:47 Operator: LAG
Sample : MW-2,2867-002,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:09 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	479.0E6	179.7E6	10.556	13.028
Spiked Amount 100.000			Recovery =		10.56%	13.03%
2) S DCB	18.68	18.62	415.2E6	140.1E6	12.573	15.361
Spiked Amount 100.000			Recovery =		12.57%	15.36%
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.

3603

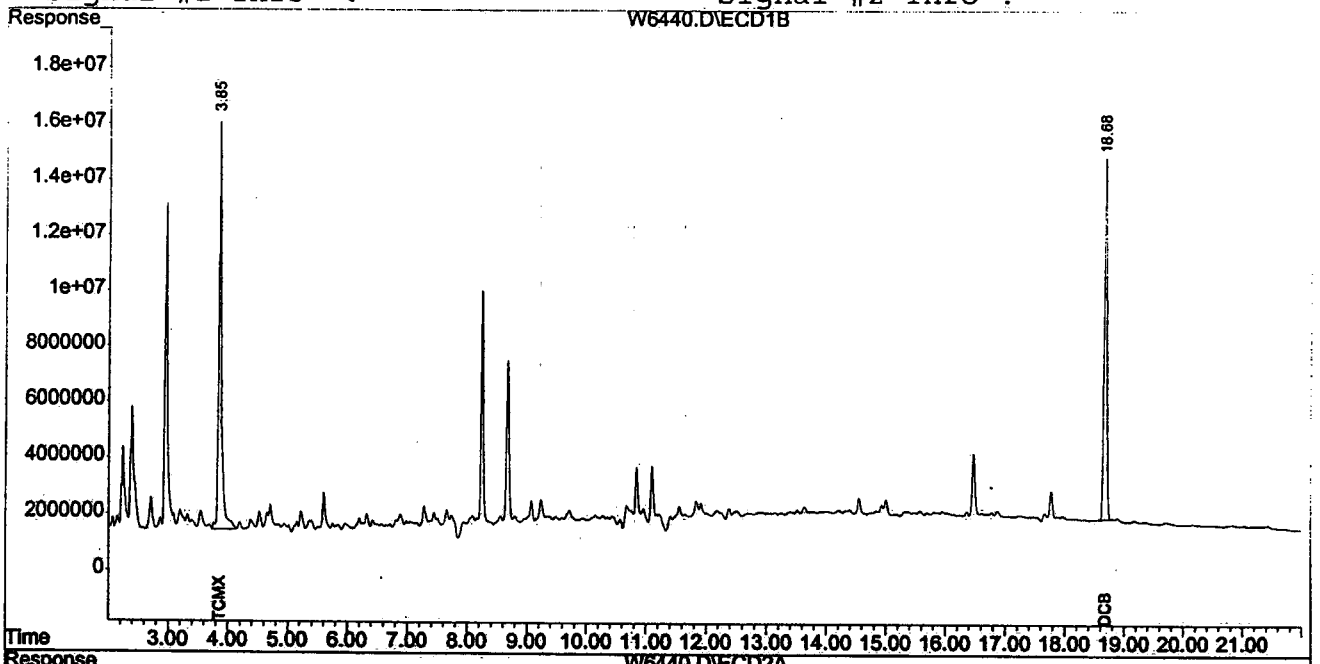
000434

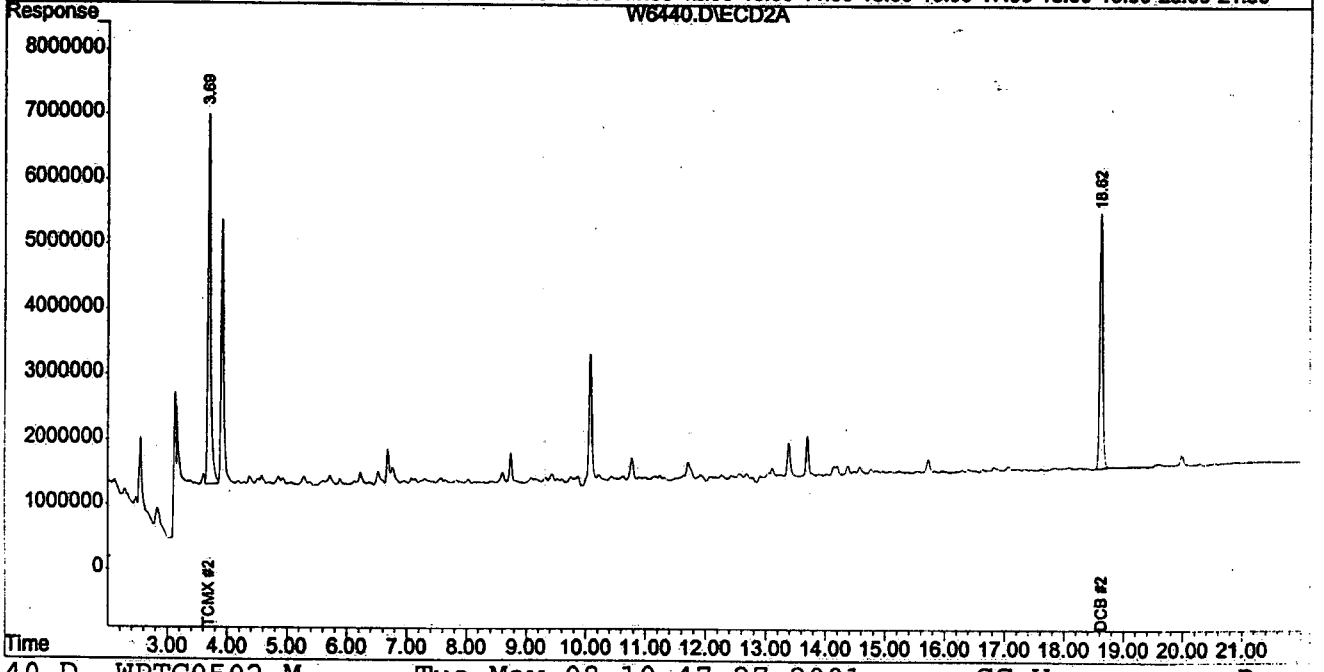
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6440.D\ECD1B.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6440.D\ECD2A.CH
Acq On : 5-7-01 22:01:47 Operator: LAG
Sample : MW-2,2867-002,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:09 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





3604

000435

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6403.D\ECD1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6403.D\ECD2A.CH
Acq On : 5-4-01 16:38:29 Operator: LAG
Sample : MW-3,2867-003,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 9:57 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	585.1E6	167.9E6	12.893	12.168
Spiked Amount 100.000			Recovery =		12.89%	12.17%
2) S DCB	18.68	18.63	409.7E6	120.5E6	12.406	13.214
Spiked Amount 100.000			Recovery =		12.41%	13.21%
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.
W6403.D WPTC0502.M Mon May 07 10:37:27 2001 GC_W Page 1

2 / 5

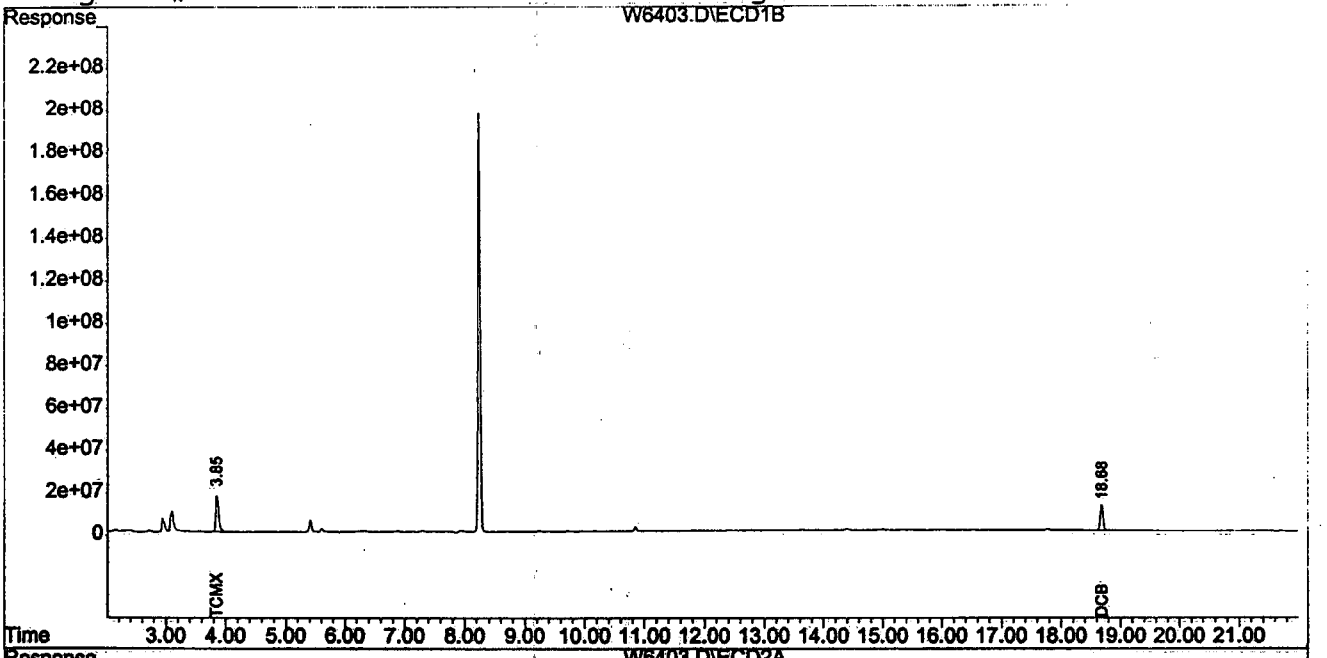
000436

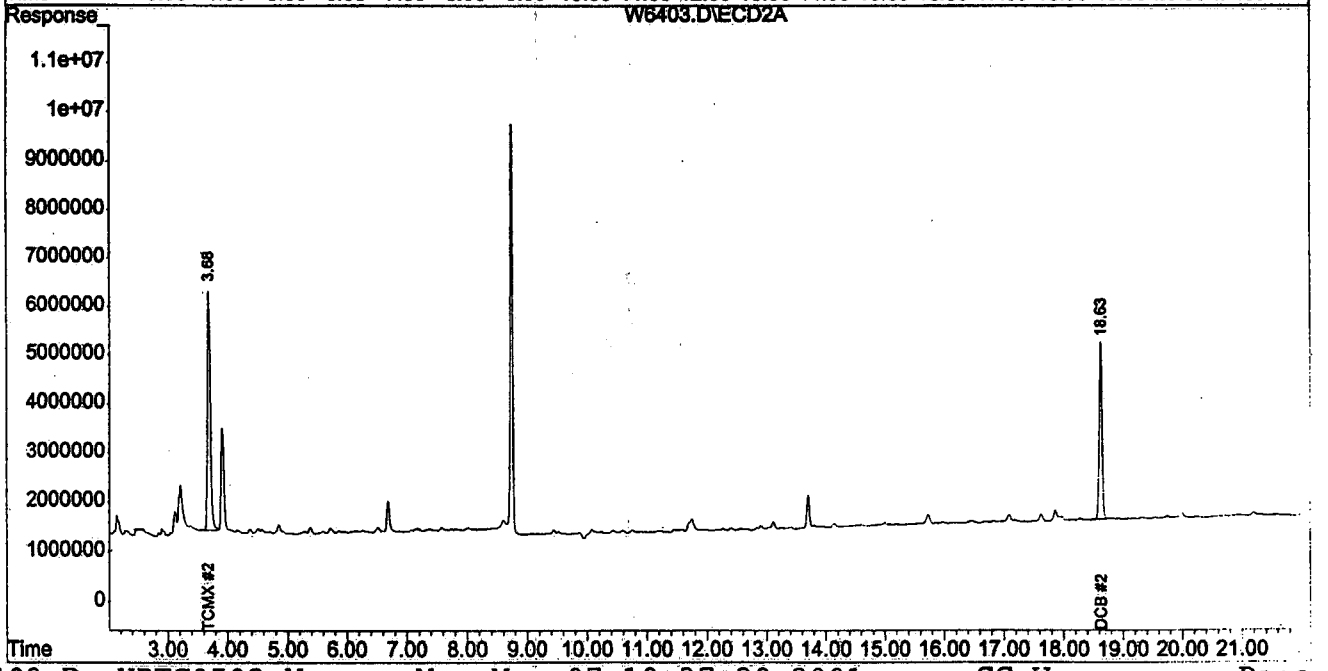
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6403.D\ECD1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6403.D\ECD2A.CH
Acq On : 5-4-01 16:38:29 Operator: LAG
Sample : MW-3,2867-003,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 9:57 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





3406

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6441.D\ECD1B.CH Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6441.D\ECD2A.CH
Acq On : 5-7-01 22:26:46 Operator: LAG
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:11 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	551.6E6	607.3E6	12.156m	44.016m#
Spiked Amount 100.000			Recovery =		12.16%	44.02%
2) S DCB	18.68	18.62	336.7E6	137.9E6	10.194m	15.123m#
Spiked Amount 100.000			Recovery =		10.19%	15.12%
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

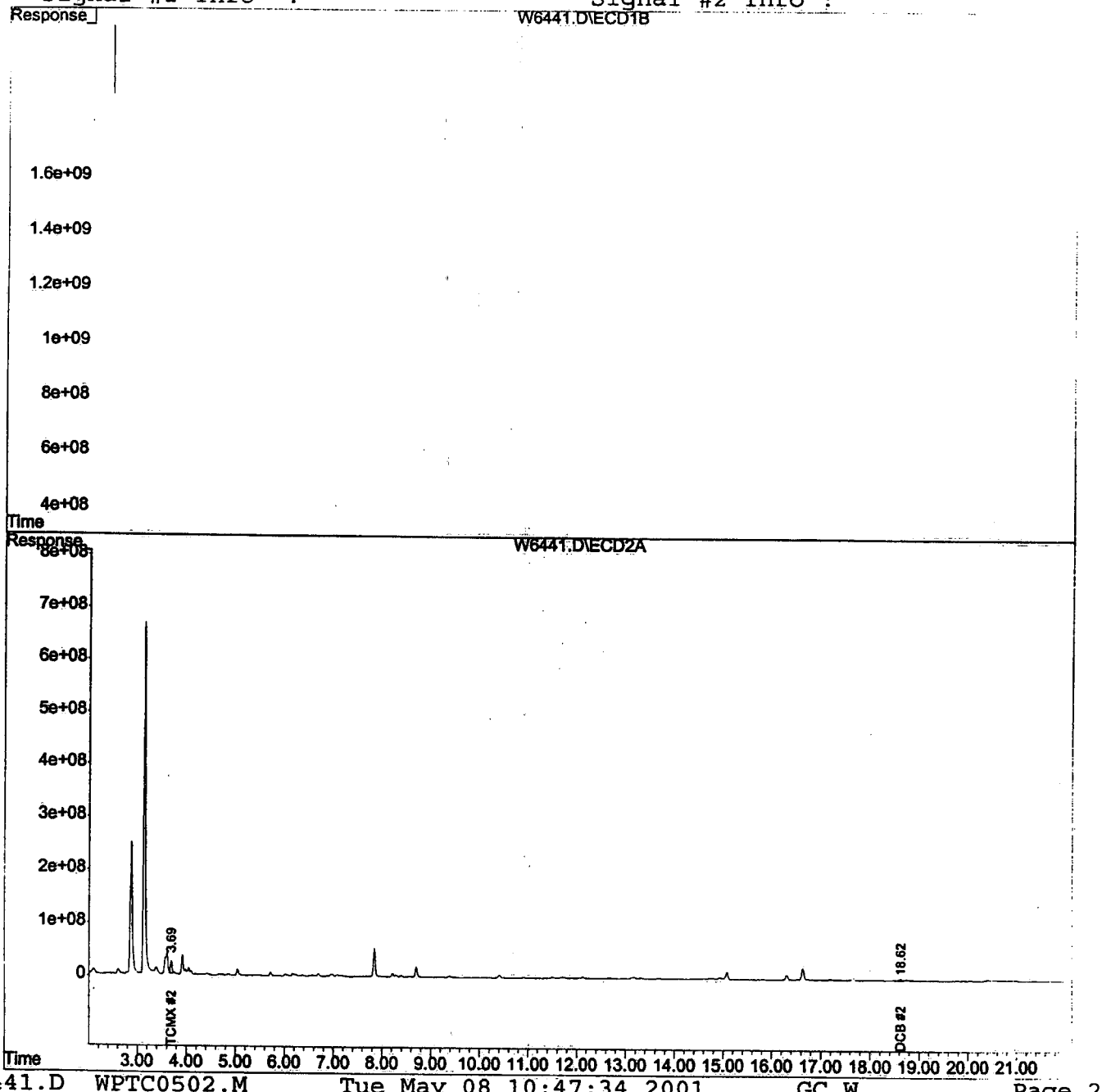
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W6441.D WPTC0502.M Tue May 08 10:47:32 2001 GC_W Page 1

3607

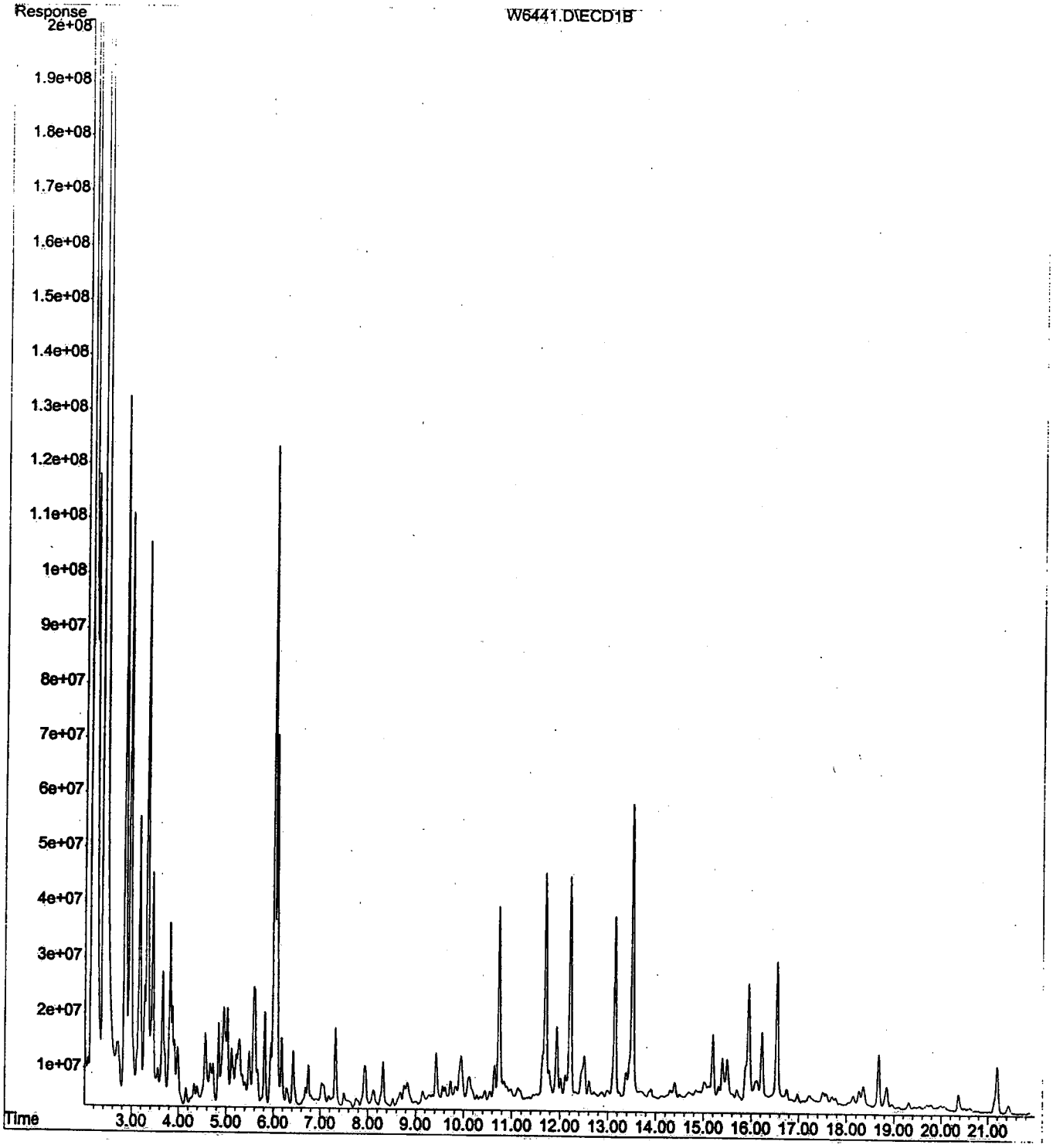
Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6441.D\ECD1B.CH Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6441.D\ECD2A.CH
Acq On : 5-7-01 22:26:46 Operator: LAG
Sample : MW-5,2867-004,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:11 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

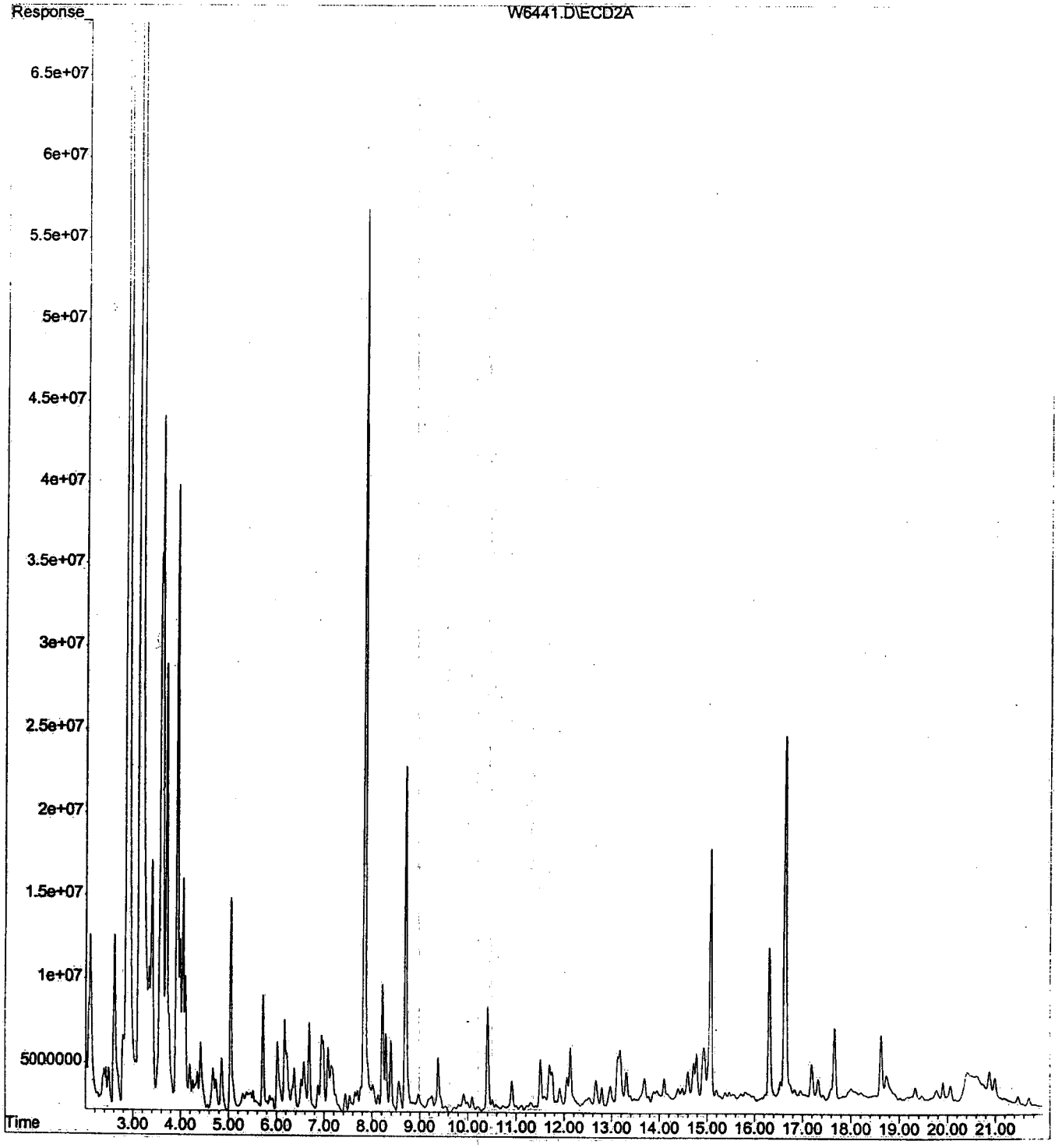
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



File : C:\HPCHEM\1\DATA\05-07-01\W6441.D
Operator : LAG
Acquired : 5-7-01 22:26:46 using AcqMethod WPTC0502.M
Instrument : GC_W
Sample Name: MW-5,2867-004,A,1000mL,100,05/04/01
Misc Info : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/01,5
Vial Number: 23



File : C:\HPCHEM\1\DATA\05-07-01\W6441.D
Operator : LAG
Acquired : 5-7-01 22:26:46 using AcqMethod WPTC0502.M
Instrument : GC_W
Sample Name: MW-5,2867-004,A,1000mL,100,05/04/01
Misc Info : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/01,5
Vial Number: 23



RKS

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6405.D\ECD1B.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6405.D\ECD2A.CH
Acq On : 5-4-01 17:28:19 Operator: LAG
Sample : MW-6,2867-005,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 10:00 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	460.0E6	163.0E6	10.136	11.814m
Spiked Amount 100.000			Recovery =		10.14%	11.81%
2) S DCB	18.68	18.63	362.3E6	112.2E6	10.972	12.300m
Spiked Amount 100.000			Recovery =		10.97%	12.30%
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

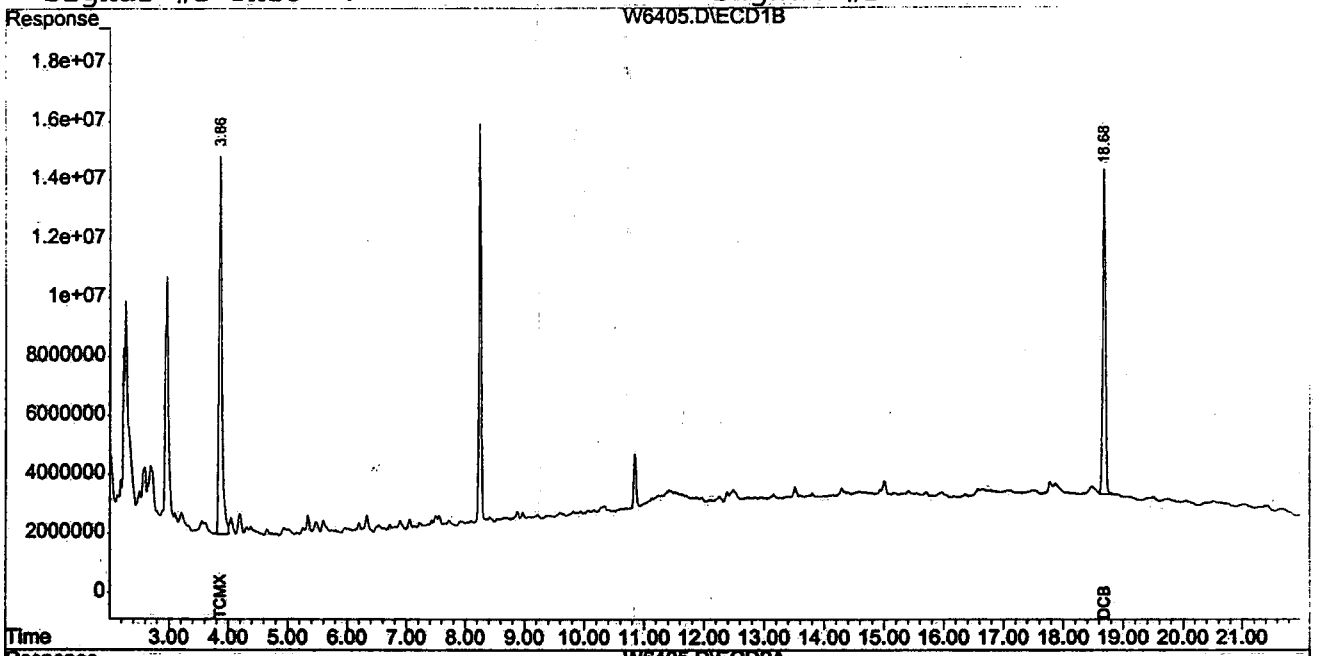
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

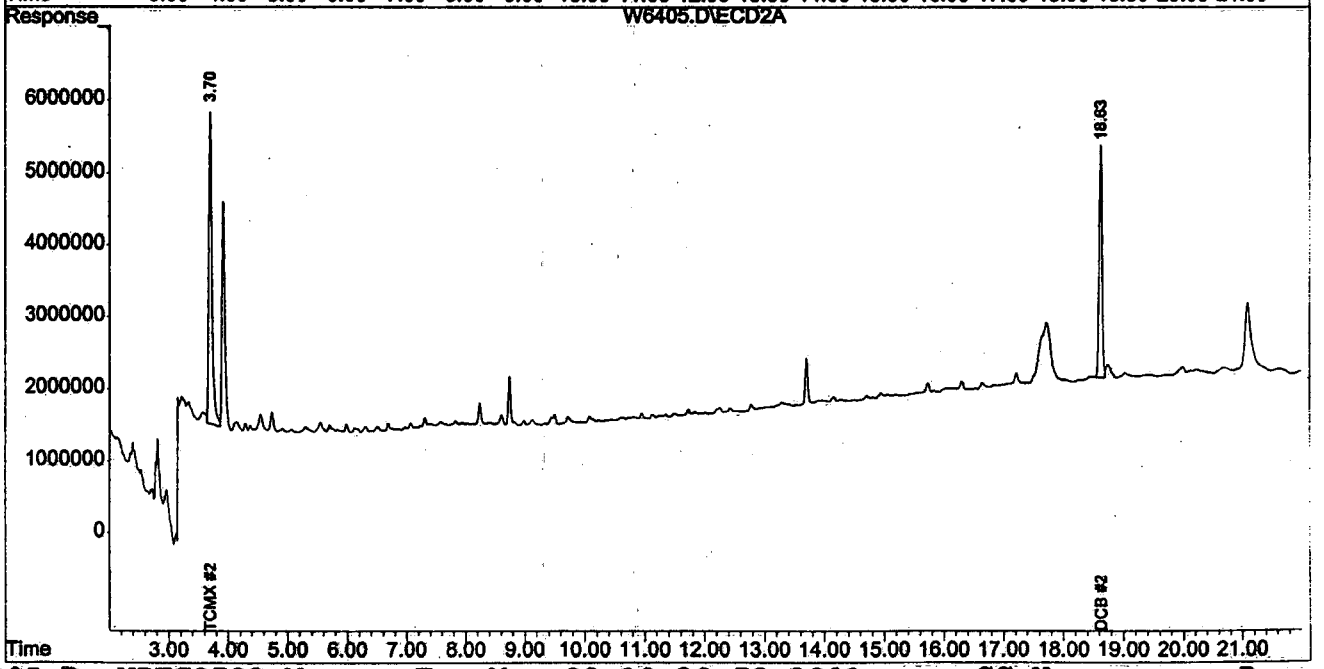
3411

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6405.D\ECD1B.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6405.D\ECD2A.CH
Acq On : 5-4-01 17:28:19 Operator: LAG
Sample : MW-6,2867-005,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 10:00 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





3612

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6442.D\ECD1B.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6442.D\ECD2A.CH
Acq On : 5-7-01 22:51:39 Operator: LAG
Sample : MW-6,2867-005,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:27 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.M

* Conf. of Surr. matrix interfa.
G.
5/8/01

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	461.9E6	173.1E6	10.178	12.550m
Spiked Amount 100.000			Recovery =		10.18%	12.55%
2) S DCB	18.67	18.62	366.6E6	120.8E6	11.102m	13.252m
Spiked Amount 100.000			Recovery =		11.10%	13.25%
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.
W6442.D WPTC0502.M Tue May 08 10:27:21 2001 GC_W Page 1

3 of 3

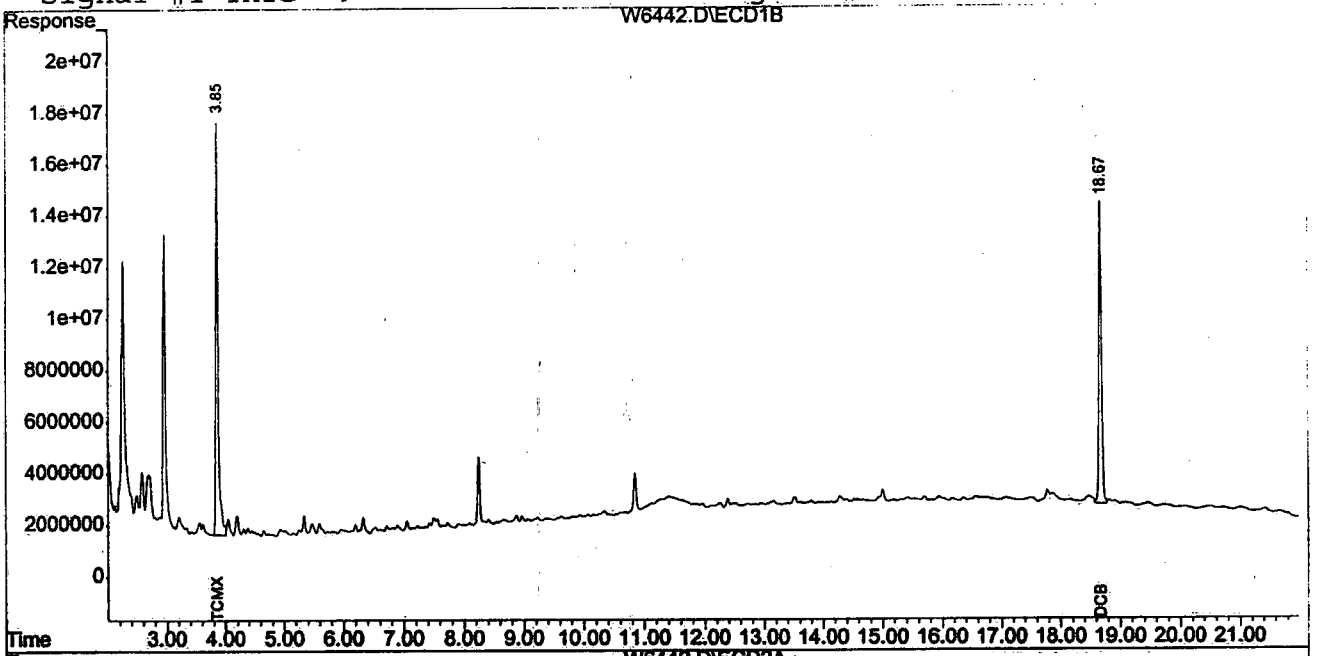
C00444

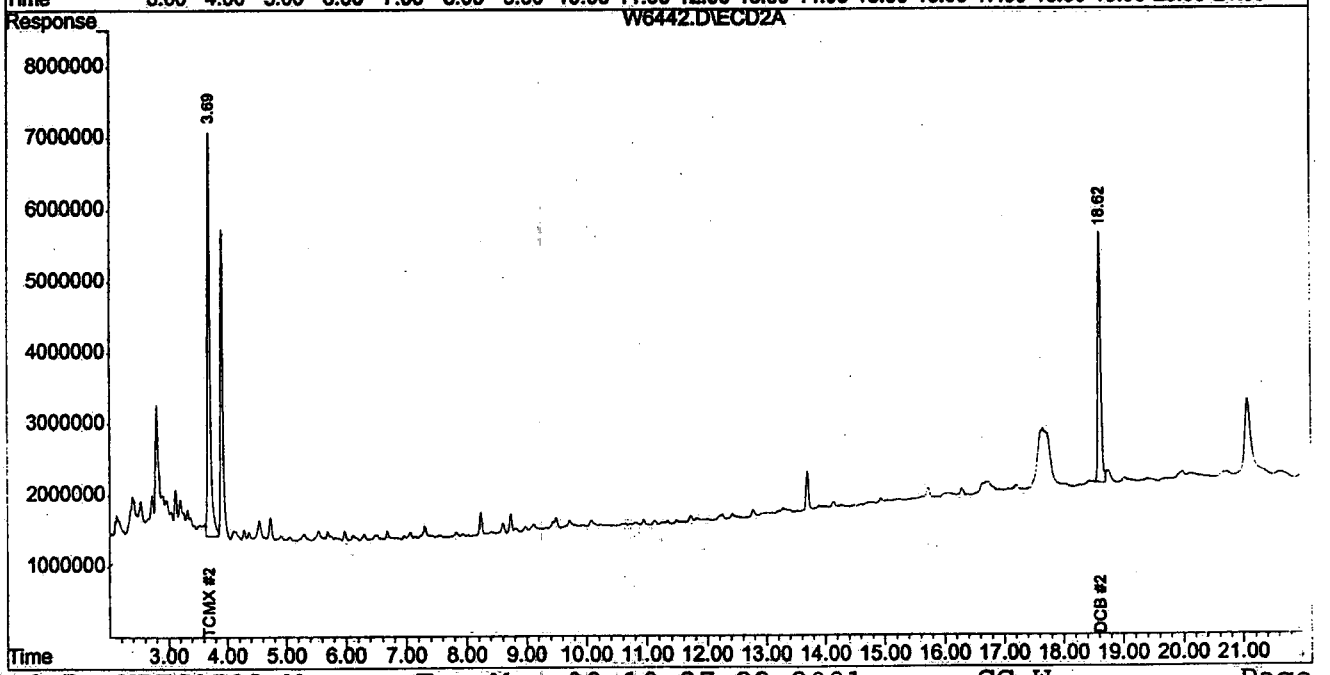
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6442.D\ECD1B.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6442.D\ECD2A.CH
Acq On : 5-7-01 22:51:39 Operator: LAG
Sample : MW-6,2867-005,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:27 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





3614 000445

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6406.D\ECD1B.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6406.D\ECD2A.CH
Acq On : 5-4-01 17:53:12 Operator: LAG
Sample : MW-7,2867-006,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 10:01 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	784.9E6	229.3E6	17.297m	16.621
Spiked Amount 100.000			Recovery =		17.30%	16.62%
2) S DCB	18.68	18.63	347.5E6	105.8E6	10.521	11.607m
Spiked Amount 100.000			Recovery =		10.52%	11.61%
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

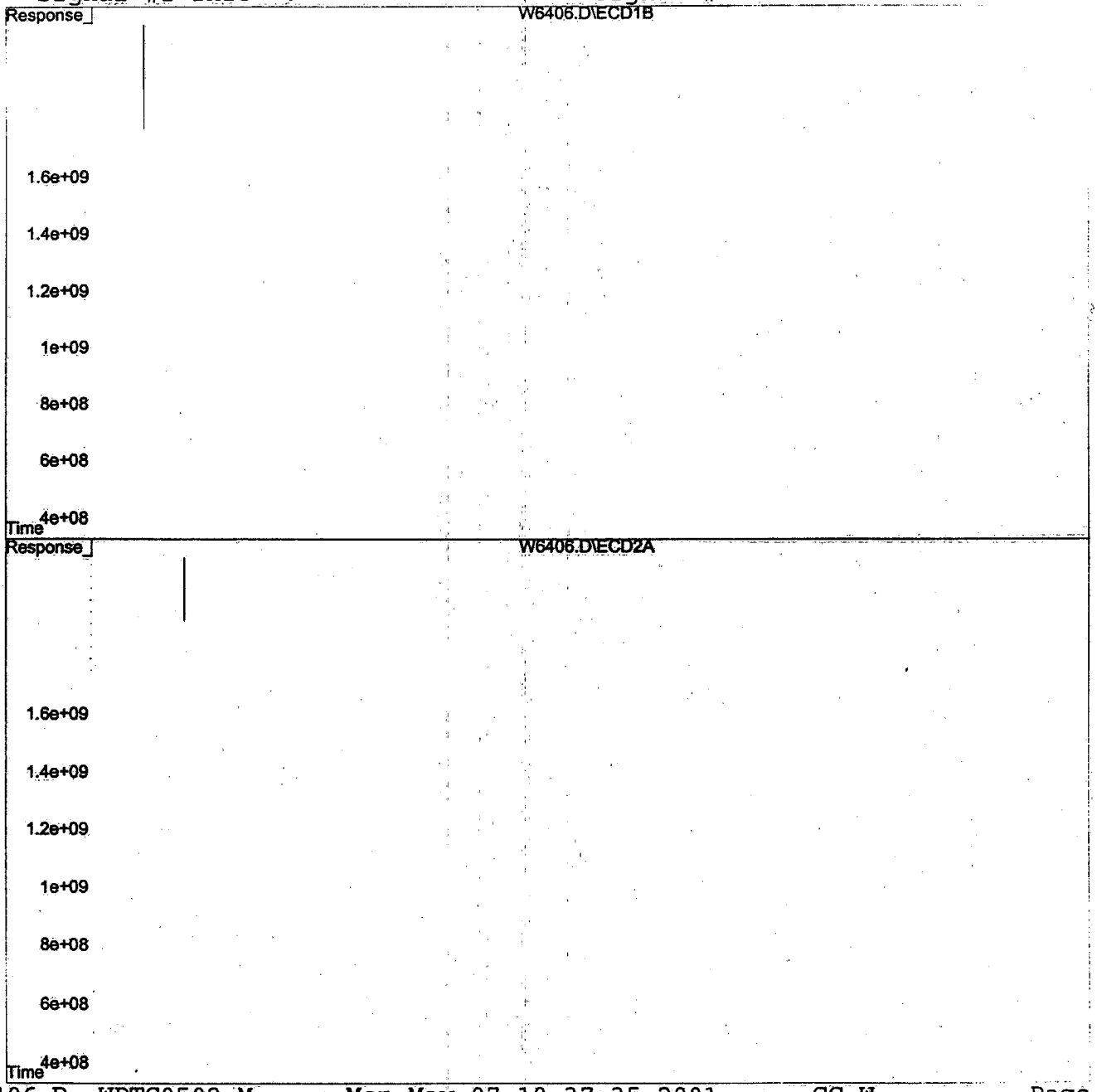
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6406.D\ECD1B.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6406.D\ECD2A.CH
Acq On : 5-4-01 17:53:12 Operator: LAG
Sample : MW-7,2867-006,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 10:01 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

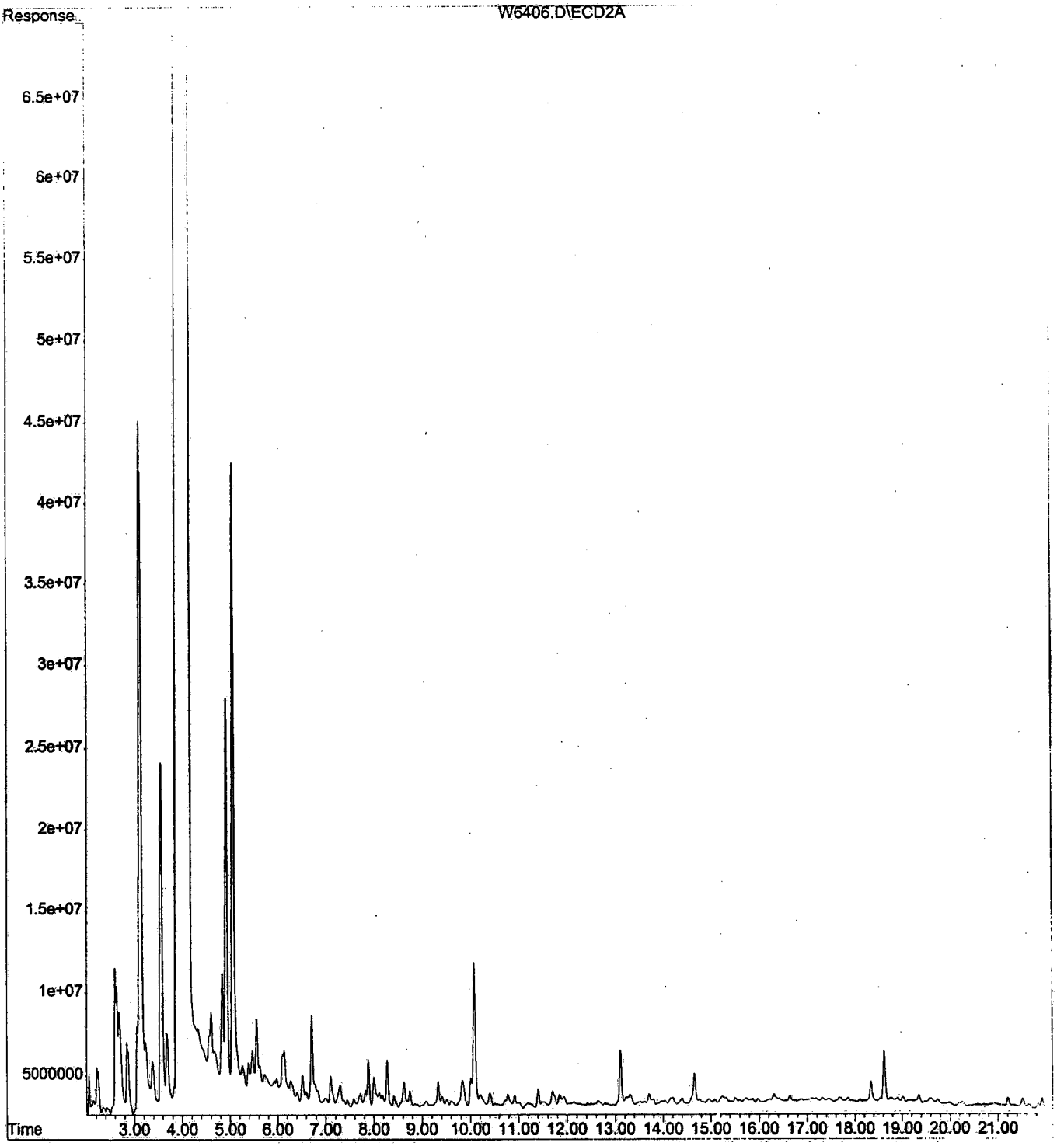
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



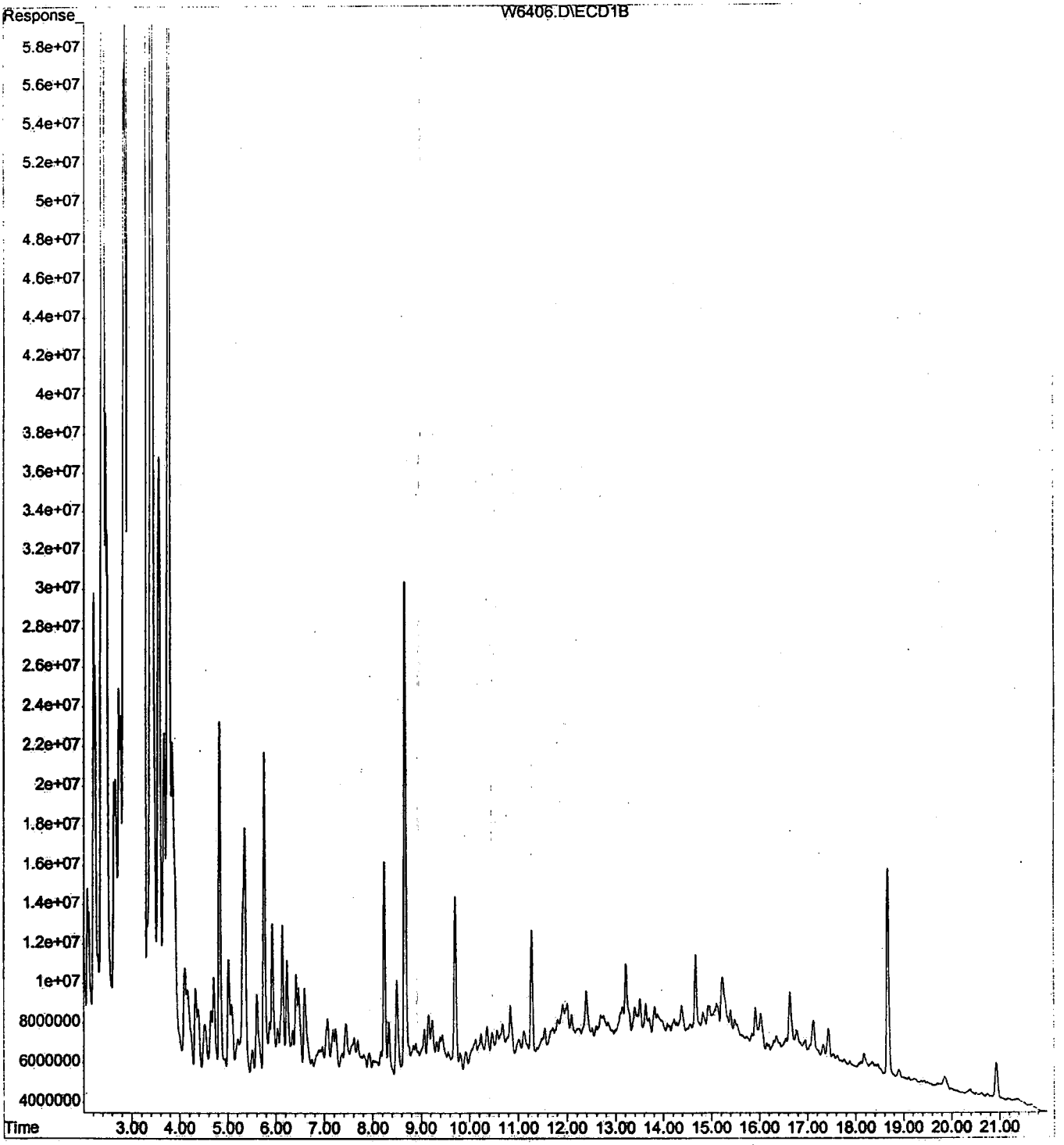
000447

2 / 4

File : C:\HPCHEM\1\DATA\05-04-01\W6406.D
Operator : LAG
Acquired : 5-4-01 17:53:12 using AcqMethod WPTC0502.M
Instrument : GC_W
Sample Name: MW-7,2867-006,A,1000mL,100,05/04/01
Misc Info : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/01,5
Vial Number: 11



File : C:\HPCHEM\1\DATA\05-04-01\W6406.D
Operator : LAG
Acquired : 5-4-01 17:53:12 using AcqMethod WPTC0502.M
Instrument : GC_W
Sample Name: MW-7,2867-006,A,1000mL,100,05/04/01
Misc Info : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/01,5
Vial Number: 11



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-04-01\W6407.D\ECD1B.CH Vial: 12
Acq On : 5-4-01 18:18:16 Operator: LAG
Sample : MW-8,2867-007,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\05-04-01\W6407.D\ECD2A.CH Vial: 12
Acq On : 5-4-01 18:18:15 Operator: LAG
Sample : MW-8,2867-007,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile : events2.e
Quant Time: May 7 10:04 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	3.68	1522.8E6	211.0E6	33.556m	15.297m#
	Spiked Amount 100.000			Recovery	=	33.56%	15.30%
2)	S DCB	18.68	18.62	1256.1E6	187.5E6	38.036m	20.561m#
	piked Amount 100.000			Recovery	=	38.04%	20.56%
	Target Compounds						
11)	T 4,4'-DDE	10.24	10.98	1535.6E6	559.8E6	53.872m	71.095 #
14)	T Endosulfan II	10.95	13.23	955.0E6	1429.4E6	38.675m	105.981m#
15)	T 4,4'-DDD	11.36	13.23	3631.7E6	1487.6E6	166.124m	110.297 #
	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.

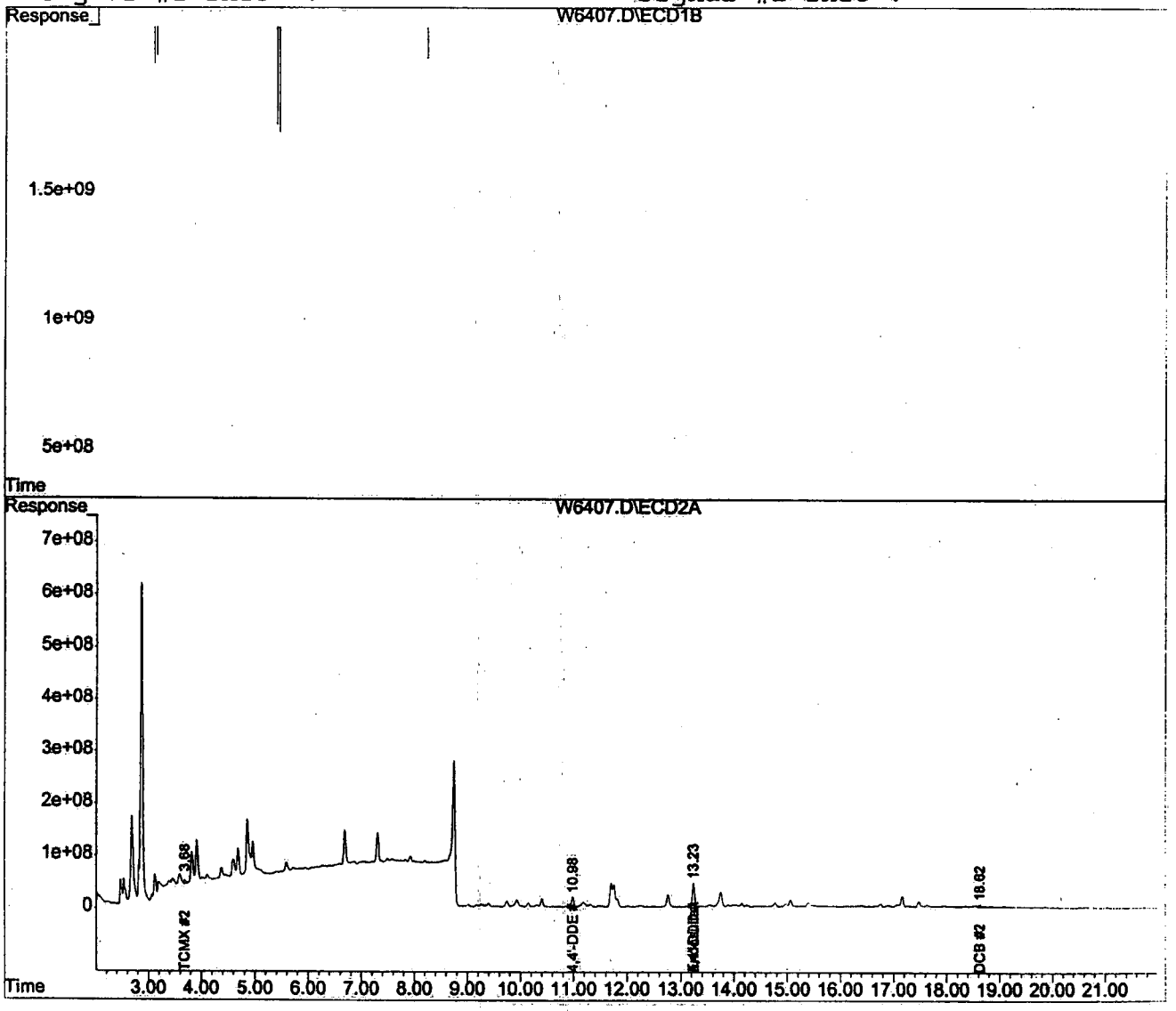
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-04-01\W6407.D\ECD1B.CH Vial: 12
Acq On : 5-4-01 18:18:16 Operator: LAG
Sample : MW-8,2867-007,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\05-04-01\W6407.D\ECD2A.CH Vial: 12
Acq On : 5-4-01 18:18:15 Operator: LAG
Sample : MW-8,2867-007,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile : events2.e
Quant Time: May 7 10:04 2001 Quant Results File: WPTC0502.RES

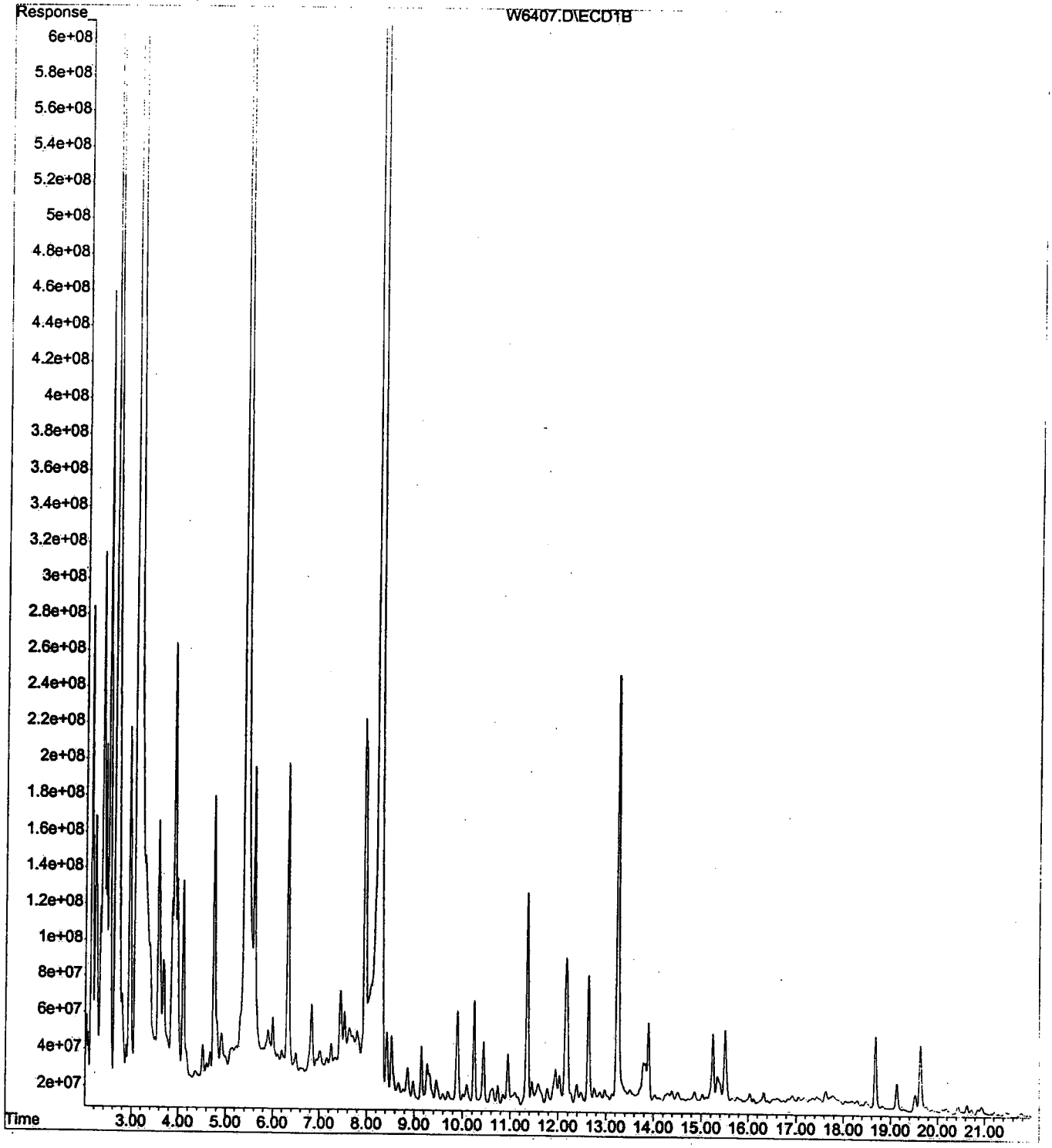
Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



CC0451

File : C:\HPCHEM\1\DATA\05-04-01\W6407.D
Operator : LAG
Acquired : 5-4-01 18:18:16 using AcqMethod WPTC0502.M
Instrument : GC_W
Sample Name: MW-8,2867-007,A,1000mL,100,05/04/01
Misc Info : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/01,5
Vial Number: 12



Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6443.D\ECD1B.CH Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6443.D\ECD2A.CH
Acq On : 5-7-01 23:16:33 Operator: LAG
Sample : MW-8,2867-007,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 11:22 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.M

*conf. of sum. matrix interfere
LB.
5/8/01

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	3.87	3.69	2590.0E6	253.4E6	57.076m	18.366m#
Spiked Amount 100.000			Recovery	=	57.08%	18.37%
2) S DCB	18.68	18.62	1225.3E6	204.1E6	37.104m	22.388m#
Spiked Amount 100.000			Recovery	=	37.10%	22.39%
Target Compounds						
11) T 4,4'-DDE	10.24	10.98	1903.4E6	706.3E6	66.775m	89.699 #
T Endosulfan II	10.95	13.23	1123.3E6	1770.7E6	45.492m	131.283m#
T 4,4'-DDD	11.36	13.23	4674.1E6	1819.7E6	213.806	134.915 #
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

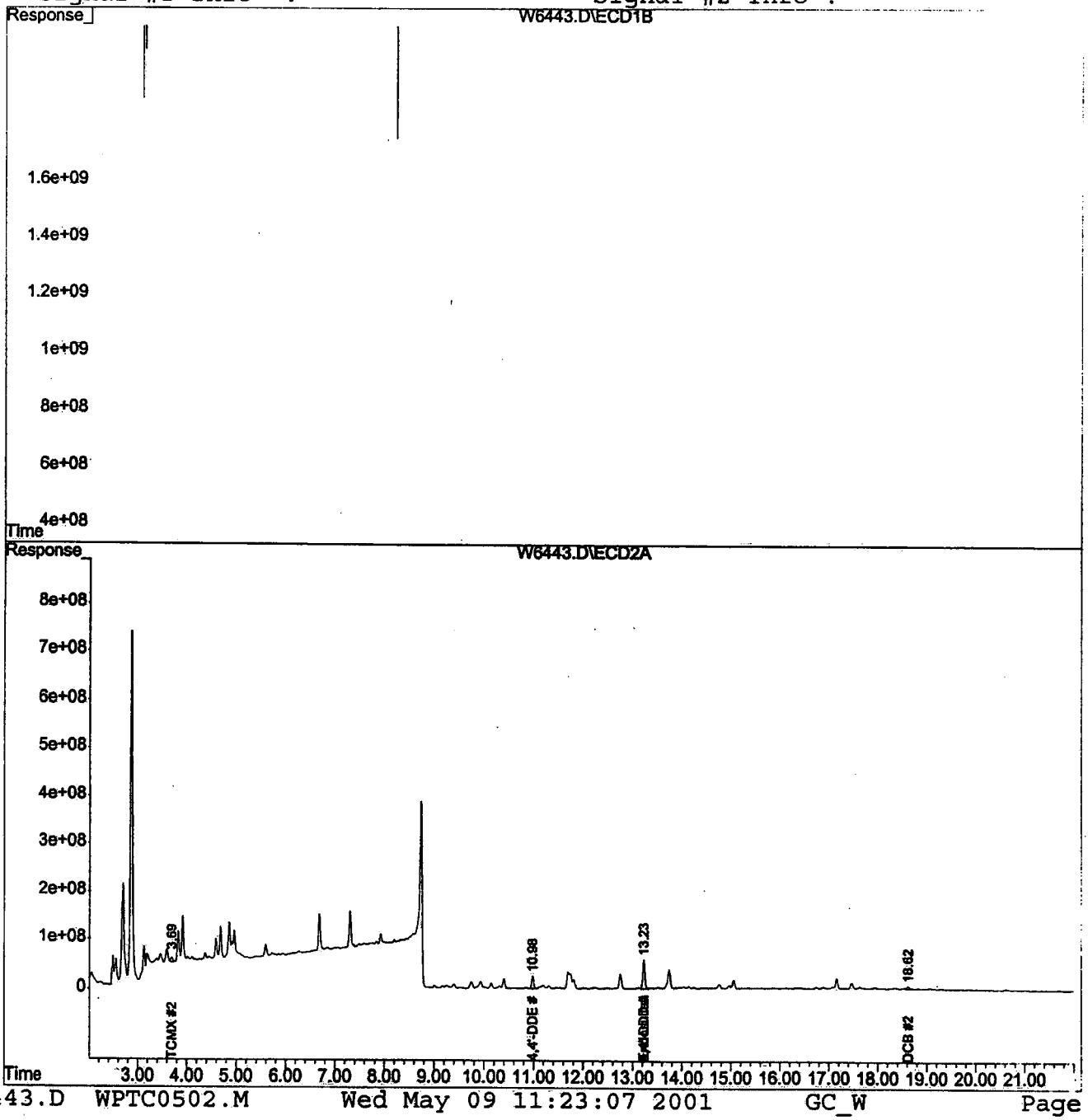
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6443.D\ECD1B.CH Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6443.D\ECD2A.CH
Acq On : 5-7-01 23:16:33 Operator: LAG
Sample : MW-8,2867-007,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 11:22 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

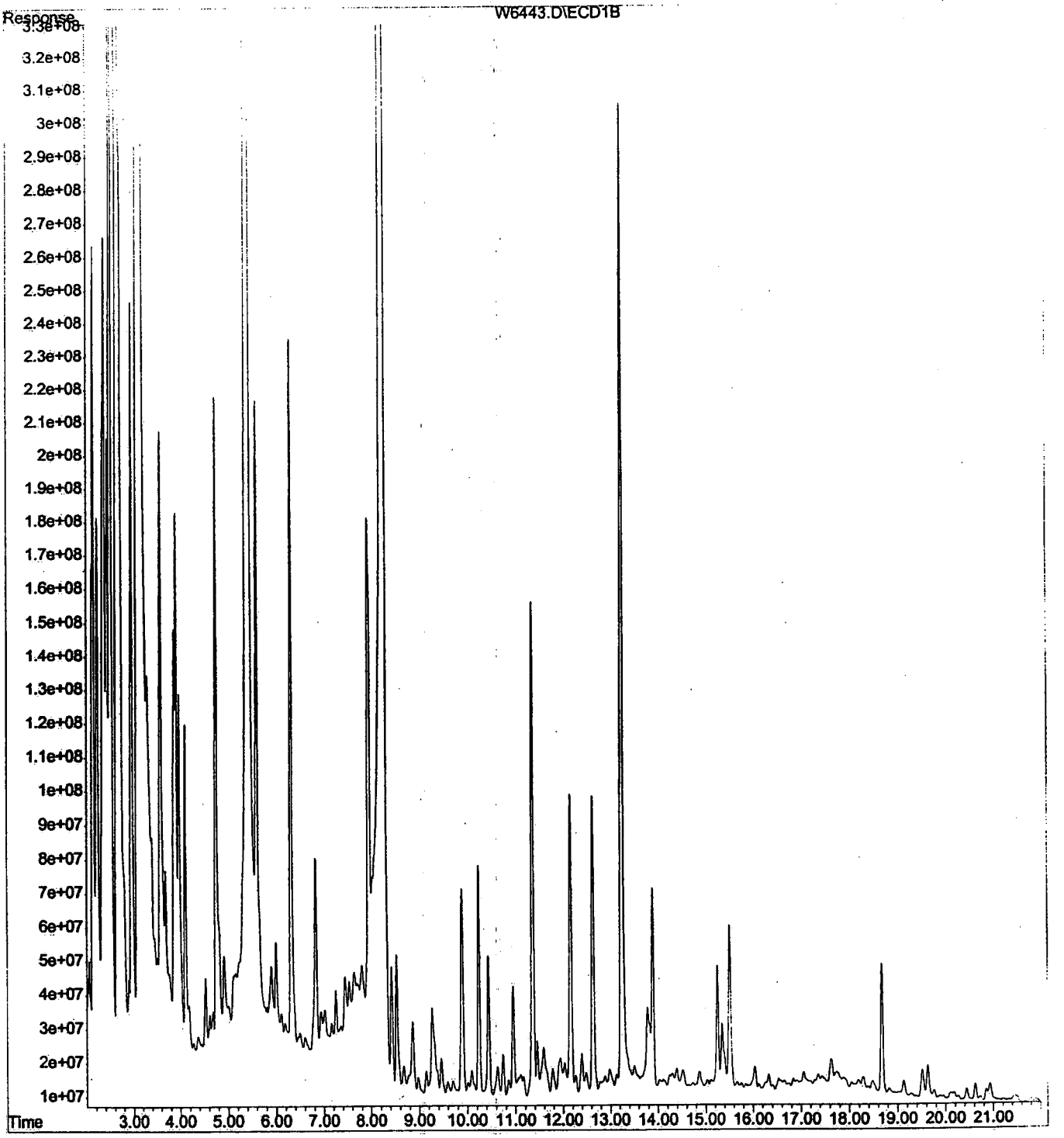
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



3423

000454

File : C:\HPCHEM\1\DATA\05-07-01\W6443.D
Operator : LAG
Acquired : 5-7-01 23:16:33 using AcqMethod WPTC0502.M
Instrument : GC_W
Sample Name: MW-8,2867-007,A,1000mL,100,05/04/01
Misc Info : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/01,5
Vial Number: 25



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\05-04-01\W6408.D\ECD1B.CH Vial: 13
Acq On : 5-4-01 18:43:09 Operator: LAG
Sample : FB,2867-008,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\05-04-01\W6408.D\ECD2A.CH Vial: 13
Acq On : 5-4-01 18:43:09 Operator: LAG
Sample : FB,2867-008,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile : events2.e
Quant Time: May 7 10:06 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	3138.3E6	891.0E6	69.157	64.582
Spiked Amount 100.000			Recovery =		69.16%	64.58%
2) S DCB	18.68	18.63	1565.0E6	495.6E6	47.389	54.354
Spiked Amount 100.000			Recovery =		47.39%	54.35%
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.
W6408.D WPTC0502.M Mon May 07 10:37:39 2001 GC_W Page 1

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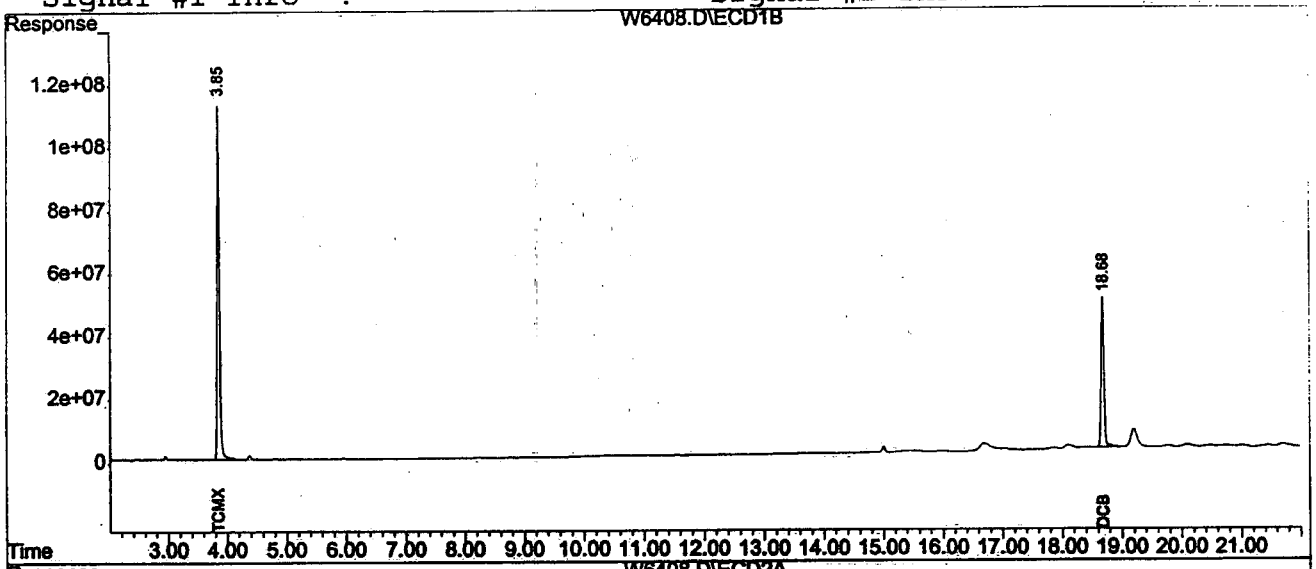
Quantitation Report (QT Reviewed)

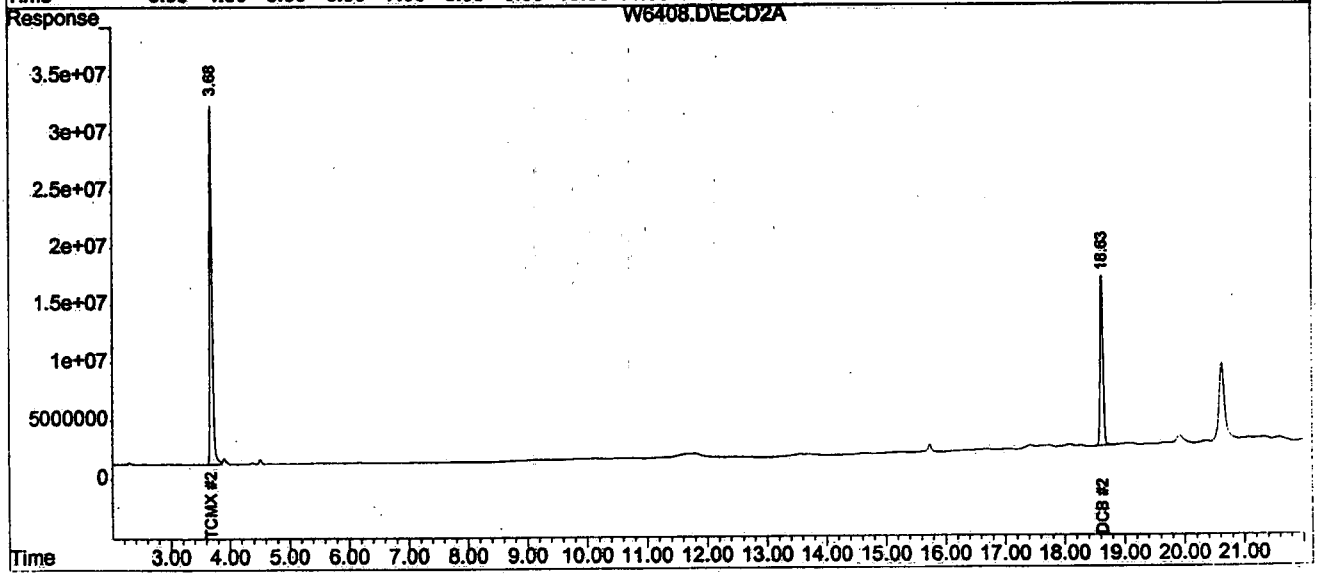
Data File : C:\HPCHEM\1\DATA\05-04-01\W6408.D\ECD1B.CH Vial: 13
Acq On : 5-4-01 18:43:09 Operator: LAG
Sample : FB,2867-008,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\05-04-01\W6408.D\ECD2A.CH Vial: 13
Acq On : 5-4-01 18:43:09 Operator: LAG
Sample : FB,2867-008,A,1000mL,100,05/04/01 Inst : GC_W
Misc : ENVTACT/444-ORBIS-NEWARK,05/02/01,05/03/ Multiplr: 1.00
IntFile : events2.e
Quant Time: May 7 10:06 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





3626

000457

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6400.D\ECD1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6400.D\ECD2A.CH
Acq On : 5-4-01 15:23:38 Operator: LAG
Sample : (2828.2867),0504-BK1,A,1000mL,100,05/04/ Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 9:54 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	4184.3E6	1252.1E6	92.208	90.760
Spiked Amount 100.000			Recovery	=	92.21%	90.76%
2) S DCB	18.68	18.63	2430.8E6	649.3E6	73.605	71.207
Spiked Amount 100.000			Recovery	=	73.61%	71.21%
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

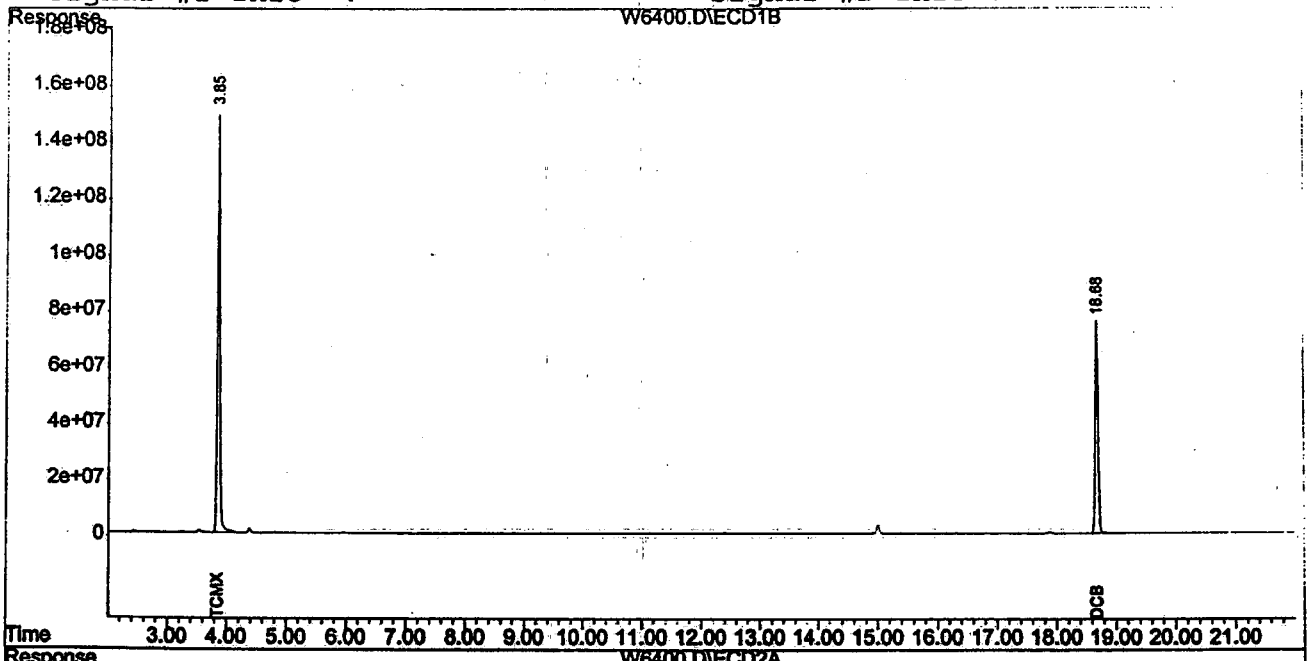
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

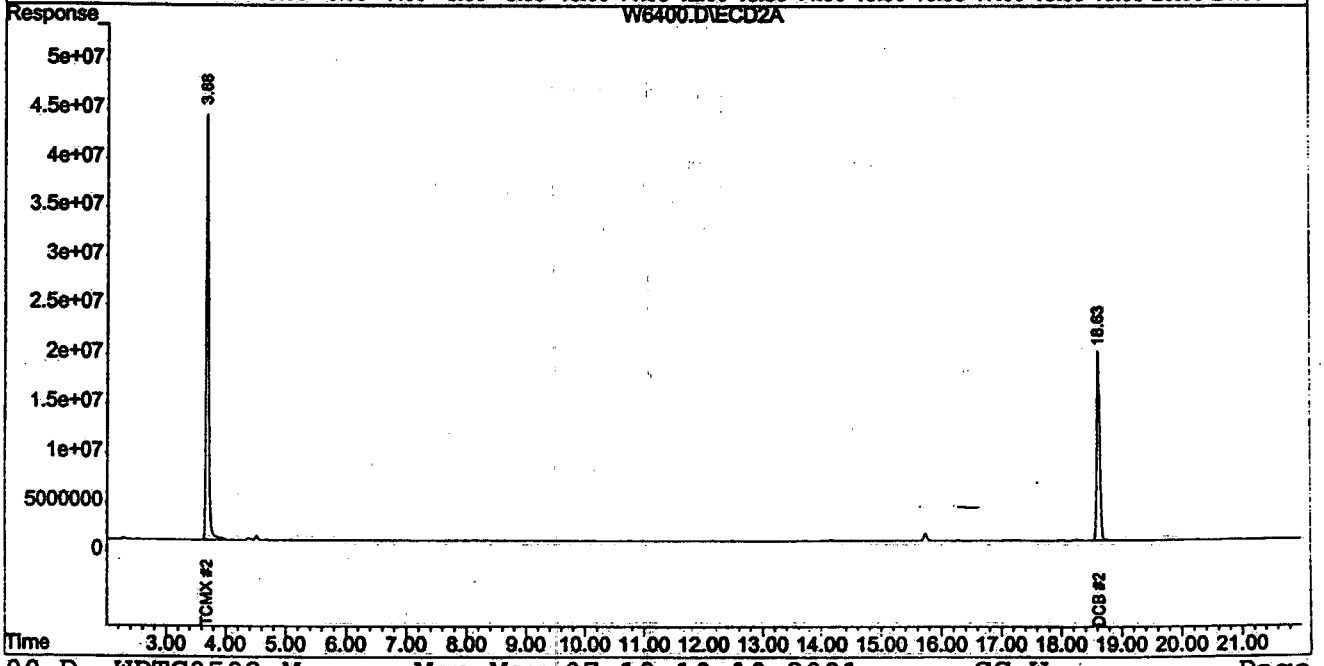
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6400.D\ECD1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6400.D\ECD2A.CH
Acq On : 5-4-01 15:23:38 Operator: LAG
Sample : (2828.2867),0504-BK1,A,1000mL,100,05/04/ Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 9:54 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000459

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6439.D\ECD1B.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6439.D\ECD2A.CH
Acq On : 5-7-01 21:36:54 Operator: LAG
Sample : (2828.2867),0504-BK1,A,1000mL,100,05/04/ Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:08 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	3996.1E6	1329.3E6	88.059	96.357
Spiked Amount 100.000			Recovery =		88.06%	96.36%
2) S DCB	18.67	18.62	2332.4E6	694.7E6	70.625	76.192
Spiked Amount 100.000			Recovery =		70.63%	76.19%
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.

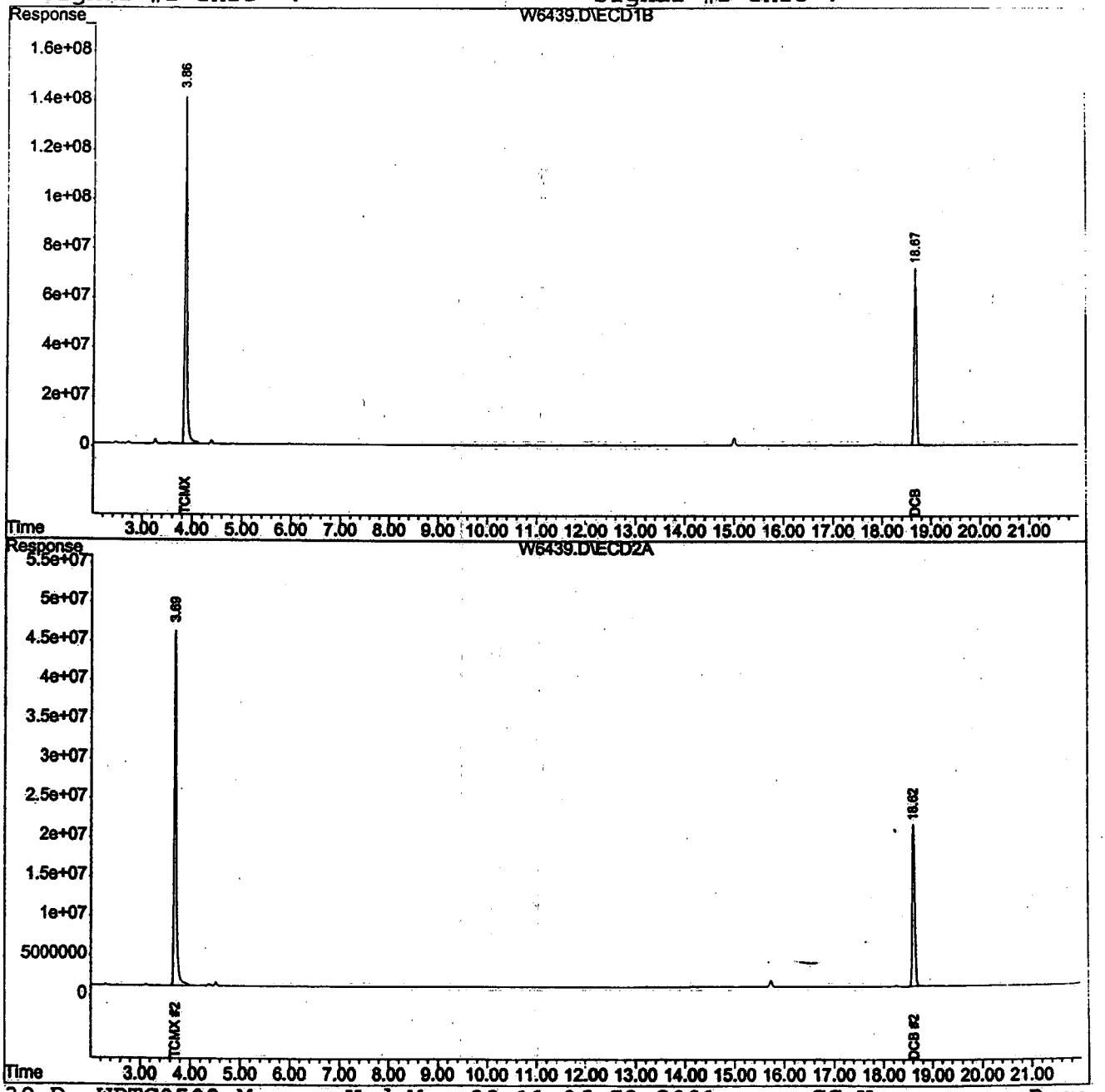
CC0460

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6439.D\ECD1B.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6439.D\ECD2A.CH
Acq On : 5-7-01 21:36:54 Operator: LAG
Sample : (2828.2867),0504-BK1,A,1000mL,100,05/04/ Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 10:08 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.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\05-04-01\W6397.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6397.D\ECD2A.CH
Acq On : 5-4-01 14:03:20 Operator: LAG
Sample : PEST_C_IAS_1494,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 9:38 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	4311.0E6	1342.8E6	94.999	97.333
Spiked Amount	100.000			Recovery	=	95.00%	97.33%
2) S	DCB	18.68	18.63	3065.7E6	870.7E6	92.829	95.496
Spiked Amount	100.000			Recovery	=	92.83%	95.50%
	Target Compounds						
3) T	alpha-BHC	4.53	5.59	3670.3E6	1020.4E6	96.287	98.456
4) T	beta-BHC	5.02	8.64	1296.4E6	409.0E6	92.100	93.188
T	gamma-BHC	5.15	6.54	3252.8E6	913.7E6	95.725	97.405
6) T	delta-BHC	5.63	9.21	3173.1E6	871.0E6	95.720	97.546
7) T	Heptachlor	6.73	7.02	2588.7E6	714.7E6	92.999	93.942
8) T	Aldrin	7.54	7.69	3091.2E6	870.3E6	96.606	98.712
9) T	Heptachlor epoxi	8.55	9.53	2652.3E6	771.0E6	94.924	96.713
10) T	Endosulfan I	9.47	10.22	2505.7E6	732.3E6	95.037	97.159
11) T	4,4'-DDE	10.24	10.99	2756.4E6	770.5E6	96.703	97.858
12) T	Dieldrin	10.16	11.26	2607.0E6	785.8E6	93.864	97.611
13) T	Endrin	10.72	11.78	2376.0E6	713.9E6	93.982	95.978
14) T	Endosulfan II	10.97	13.22	2348.4E6	1290.8E6	95.102	95.699
15) T	4,4'-DDD	11.35	13.22	1992.1E6	1290.8E6	91.123	95.699
16) T	Endrin aldehyde	11.50	14.36	1709.1E6	484.7E6	92.676	100.826
17) T	Endosulfan sulfa	12.15	15.26	2021.8E6	566.7E6	94.778	95.425
18) T	4,4'-DDT	12.38	13.67	1816.6E6	458.9E6	97.148	101.285
19) T	Endrin ketone	13.36	16.29	2460.7E6	703.2E6	93.164	96.260
20) T	Methoxychlor	14.06	15.54	829.4E6	247.9E6	91.980	98.041
21) T	alpha-Chlordane	9.57	10.61	2781.4E6	787.9E6	95.708	97.256
22) T	gamma-Chlordane	9.17	10.46	2916.0E6	802.9E6	96.101	97.421
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

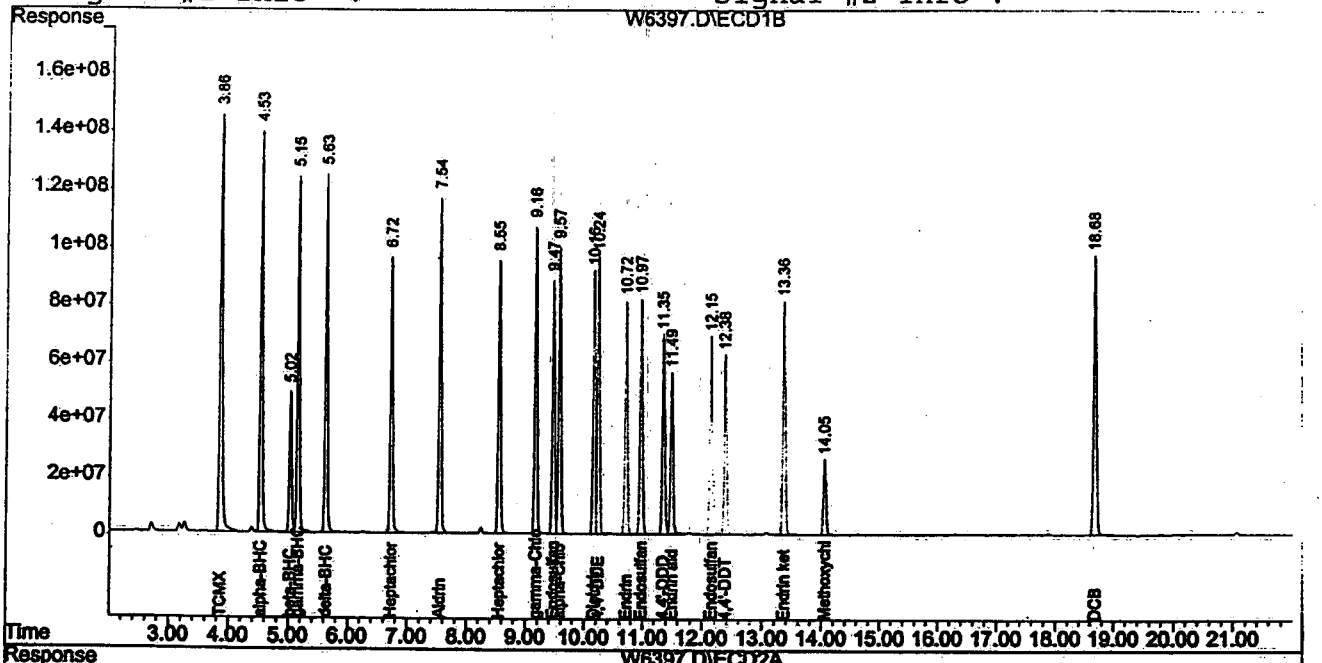
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

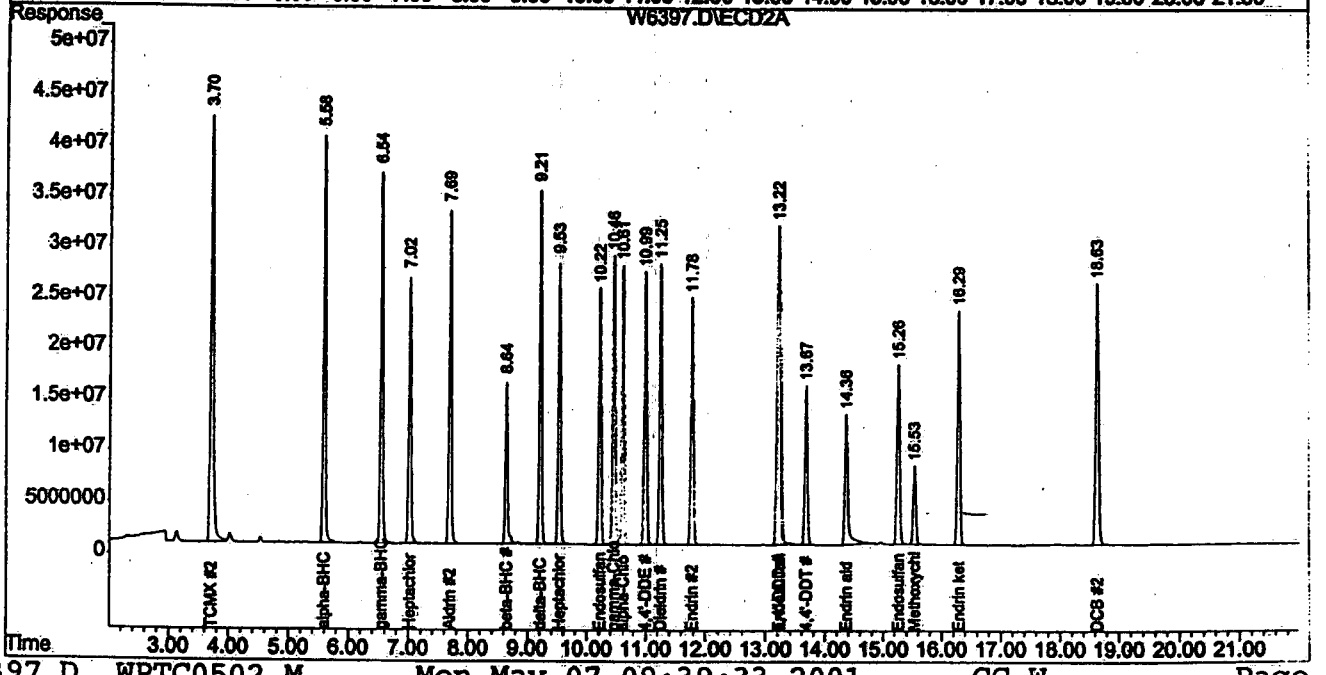
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6397.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6397.D\ECD2A.CH
Acq On : 5-4-01 14:03:20 Operator: LAG
Sample : PEST_C_IAS_1494,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 9:38 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.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\05-04-01\W6415.D\ECD1B.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6415.D\ECD2A.CH
Acq On : 5-4-01 21:37:35 Operator: LAG
Sample : PEST_C_IAS_1494,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 9:36 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	4297.2E6	1350.6E6	94.696	97.895
	Spiked Amount 100.000			Recovery	=	94.70%	97.89%
2) S	DCB	18.68	18.63	3086.5E6	894.9E6	93.462	98.146
	Spiked Amount 100.000			Recovery	=	93.46%	98.15%
	Target Compounds						
3) T	alpha-BHC	4.53	5.57	3671.1E6	1070.7E6	96.308	103.310
4) T	beta-BHC	5.02	8.63	1304.5E6	428.7E6	92.673	97.675
T	gamma-BHC	5.15	6.53	3293.4E6	968.4E6	96.919	103.239
T	delta-BHC	5.63	9.20	3246.4E6	936.6E6	97.931	104.889
7) T	Heptachlor	6.73	7.01	2731.6E6	765.8E6	98.133	100.651
8) T	Aldrin	7.54	7.68	3106.8E6	897.4E6	97.091	101.786
9) T	Heptachlor epoxi	8.56	9.52	2722.3E6	803.0E6	97.427	100.718
10) T	Endosulfan I	9.47	10.21	2552.8E6	755.9E6	96.823	100.289
11) T	4,4'-DDE	10.24	10.98	2776.7E6	796.6E6	97.414	101.173
12) T	Dieldrin	10.16	11.25	2805.5E6	820.3E6	101.010	101.894
13) T	Endrin	10.72	11.77	2593.4E6	773.5E6	102.582	103.996
14) T	Endosulfan II	10.97	13.22	2392.5E6	1390.3E6	96.888	103.081
15) T	4,4'-DDD	11.36	13.22	2295.1E6	1390.3E6	104.986	103.081
16) T	Endrin aldehyde	11.50	14.36	1847.0E6	521.5E6	100.155	108.475
17) T	Endosulfan sulfa	12.15	15.26	2102.4E6	604.5E6	98.557	101.780
18) T	4,4'-DDT	12.38	13.67	1936.3E6	475.6E6	103.553	104.966
19) T	Endrin ketone	13.36	16.28	2648.3E6	751.9E6	100.266	102.927
20) T	Methoxychlor	14.06	15.53	950.9E6	264.7E6	105.457	104.703
21) T	alpha-Chlordane	9.58	10.60	2798.9E6	812.6E6	96.308	100.308
22) T	gamma-Chlordane	9.17	10.45	2940.1E6	830.5E6	96.895	100.778
	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

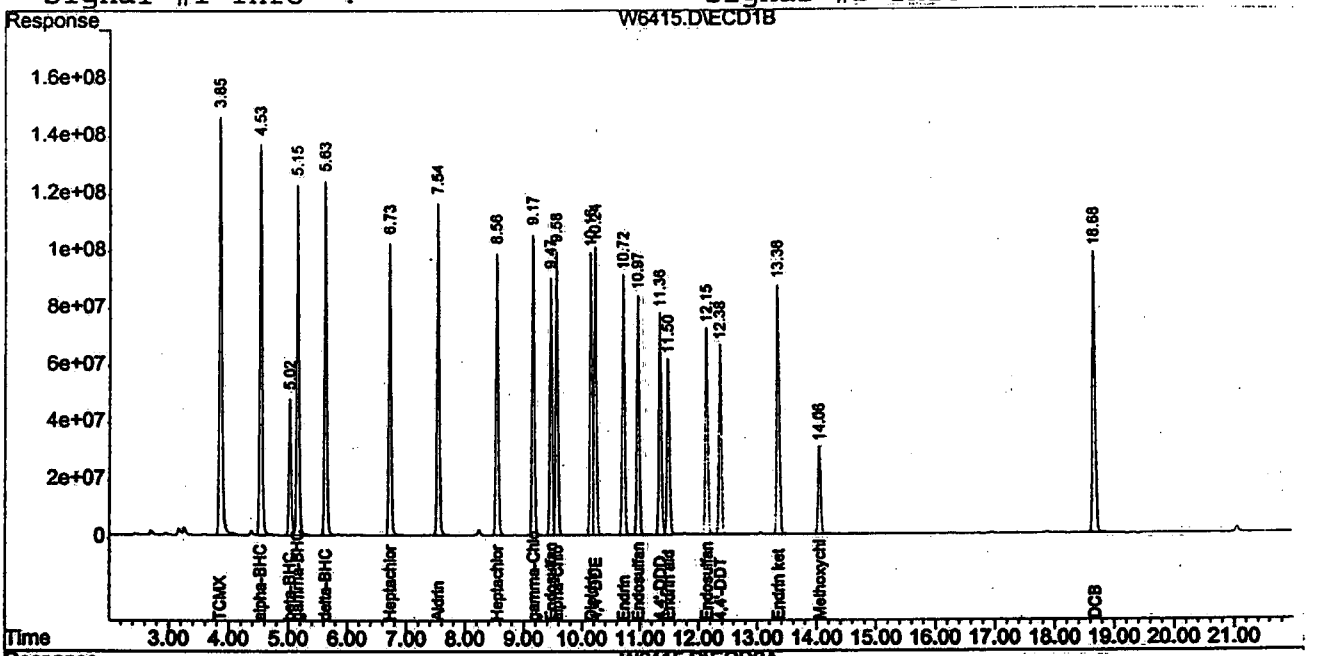
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

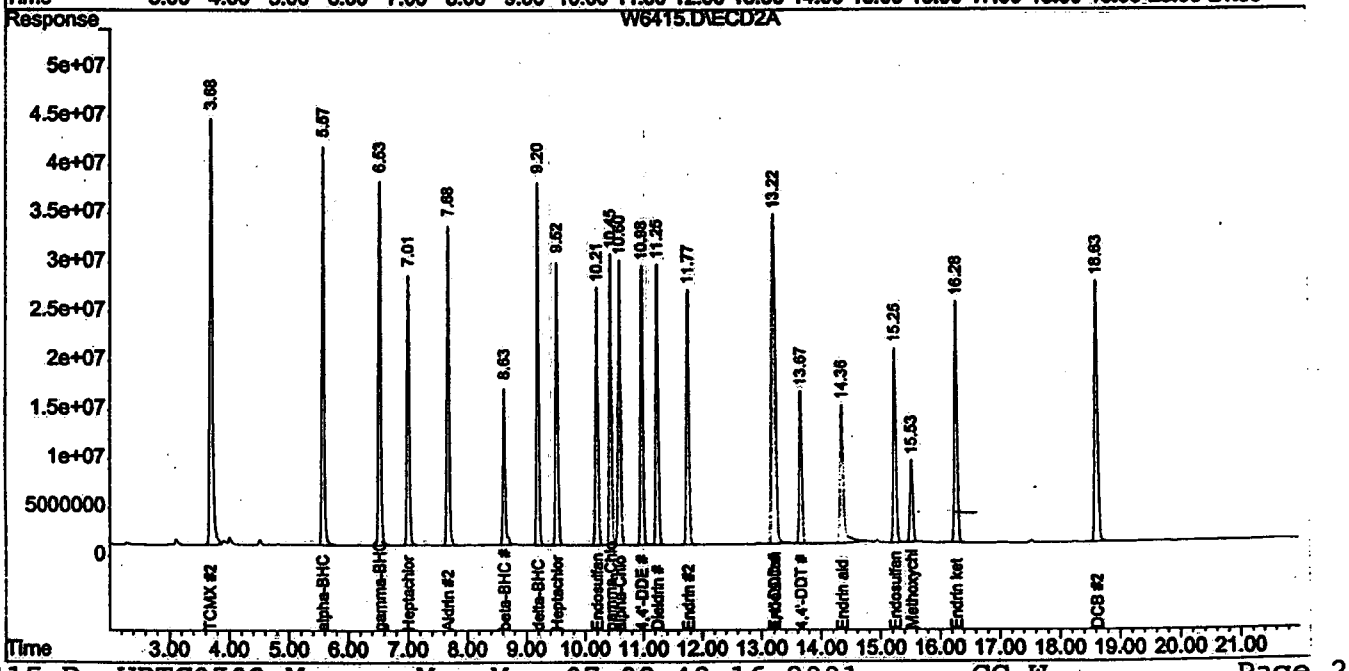
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6415.D\ECD1B.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6415.D\ECD2A.CH
Acq On : 5-4-01 21:37:35 Operator: LAG
Sample : PEST_C_IAS_1494,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 9:36 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





3634

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6398.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6398.D\ECD2A.CH
Acq On : 5-4-01 14:33:36 Operator: LAG
Sample : TOX_C_IAS_1490,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 9:48 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	4199.0E6	1287.2E6	92.531	93.302
Spiked Amount 100.000			Recovery	=	92.53%	93.30%
2) S DCB	18.68	18.63	3023.9E6	826.4E6	91.566m	90.634m
Spiked Amount 100.000			Recovery	=	91.57%	90.63%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
27) L2 Toxaphene	13.16	14.00	230.3E6	102.5E6	465.783	469.510
29) L2 Toxaphene {2}	13.29	14.75	368.5E6	79479393	461.932	483.749
30) L2 Toxaphene {3}	13.58	15.00	166.4E6	100.6E6	460.542	472.912
31) L2 Toxaphene {4}	14.04	15.20	172.1E6	52326682	468.091	494.859m
32) L2 Toxaphene {5}	14.54	15.64	207.2E6	51784936	477.095	482.478
Sum Toxaphene			1144.5E6	386.7E6	2333.443	2403.507
Average Toxaphene					466.689	480.701

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

CC0466

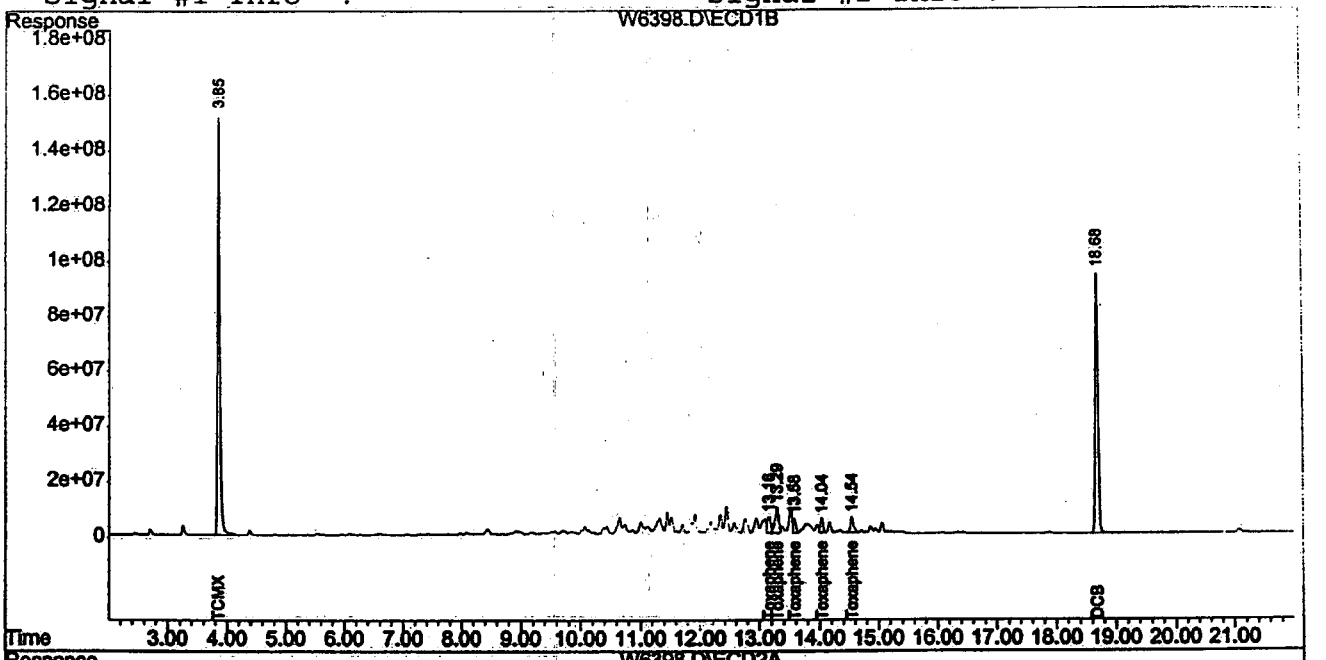
3635

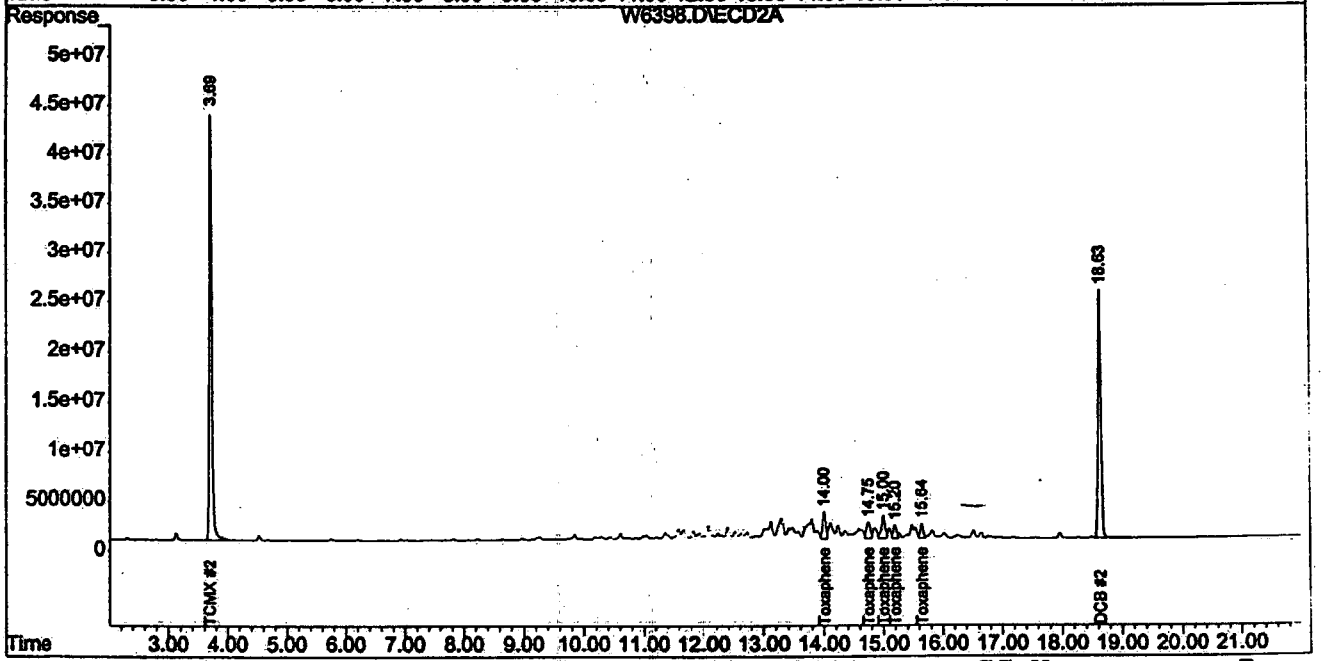
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6398.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6398.D\ECD2A.CH
Acq On : 5-4-01 14:33:36 Operator: LAG
Sample : TOX_C_IAS_1490,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 9:48 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





CC04G7

3126

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6399.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6399.D\ECD2A.CH
Acq On : 5-4-01 14:58:33 Operator: LAG
Sample : CHLOR_C_IAS_1491,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 9:47 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	4356.0E6	1399.4E6	95.991	101.437
Spiked Amount 100.000			Recovery =		95.99%	101.44%
2) S DCB	18.68	18.63	3286.8E6	880.4E6	99.527	96.560
Spiked Amount 100.000			Recovery =		99.53%	96.56%
Target Compounds						
23) L1 Chlordane	9.17	8.37	1622.3E6	76655685	472.148	474.496
24) L1 Chlordane {2}	9.37	10.05	347.5E6	99223520	458.514	472.698
25) L1 Chlordane {3}	9.57	10.45	1601.1E6	450.0E6	473.334	487.381
26) L1 Chlordane {4}	9.72	10.60	925.2E6	397.5E6	472.203	475.962
27) L1 Chlordane {5}	11.57	10.66	431.4E6	249.6E6	471.987	474.700
Sum Chlordane			4927.5E6	1272.9E6	2348.186	2385.237
Average Chlordane					469.637	477.047
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

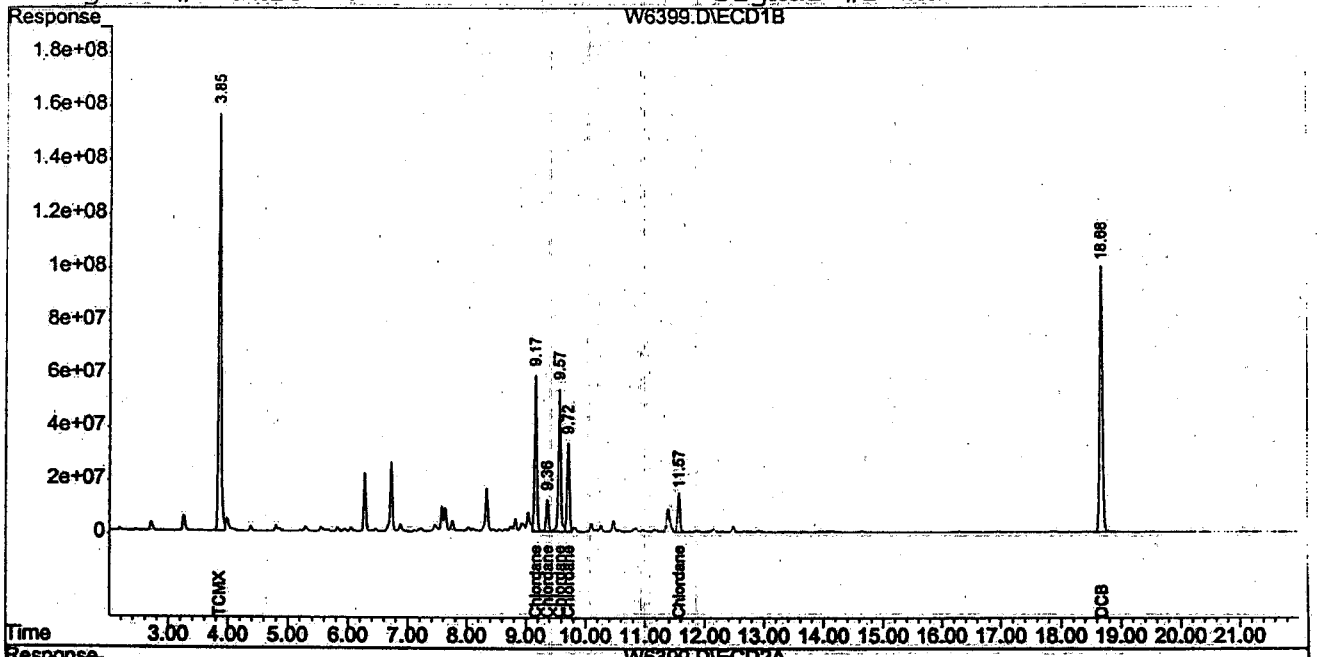
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W6399.D WPTC0502.M Mon May 07 09:47:20 2001 GC_W Page 1

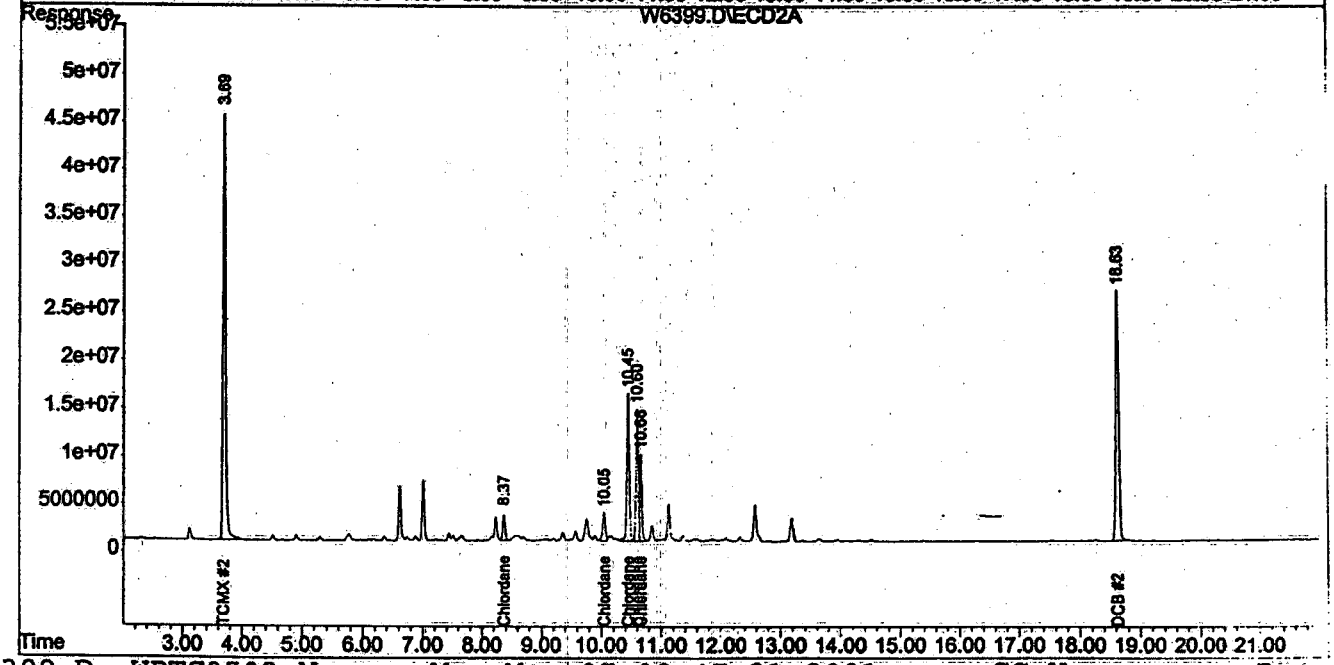
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-04-01\W6399.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\05-04-01\W6399.D\ECD2A.CH
Acq On : 5-4-01 14:58:33 Operator: LAG
Sample : CHLOR_C_IAS_1491,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 9:47 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.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\05-07-01\W6420.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6420.D\ECD2A.CH
Acq On : 5-7-01 13:35:17 Operator: LAG
Sample : PEST_C_IAS_1494,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 10:14 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	4007.0E6	1361.1E6	88.300	98.661
Spiked Amount	100.000			Recovery	=	88.30%	98.66%
2) S	DCB	18.67	18.62	2595.3E6	820.2E6	78.587	89.953
Spiked Amount	100.000			Recovery	=	78.59%	89.95%
	Target Compounds						
3) T	alpha-BHC	4.53	5.58	3430.8E6	1037.9E6	90.004	100.139
4) T	beta-BHC	5.02	8.63	1235.5E6	410.8E6	87.772	93.583
T	gamma-BHC	5.15	6.53	3088.4E6	935.7E6	90.885	99.752
T	delta-BHC	5.63	9.20	2785.2E6	809.7E6	84.017	90.679
7) T	Heptachlor	6.73	7.01	2766.4E6	778.7E6	99.386	102.356
8) T	Aldrin	7.54	7.68	2848.8E6	854.8E6	89.030	96.959
9) T	Heptachlor epoxi	8.55	9.52	2577.4E6	771.4E6	92.244	96.756
10) T	Endosulfan I	9.47	10.21	2399.5E6	712.5E6	91.006	94.538
11) T	4,4'-DDE	10.24	10.98	2512.2E6	733.1E6	88.136	93.109
12) T	Dieldrin	10.16	11.25	2636.7E6	763.5E6	94.931	94.839
13) T	Endrin	10.72	11.77	2518.7E6	752.2E6	99.626	101.134
14) T	Endosulfan II	10.97	13.21	2193.7E6	1288.5E6	88.837	95.533
15) T	4,4'-DDD	11.35	13.21	2049.1E6	1288.5E6	93.730	95.533
16) T	Endrin aldehyde	11.49	14.35	1678.7E6	461.3E6	91.024	95.959
17) T	Endosulfan sulfa	12.15	15.25	1870.5E6	557.3E6	87.683	93.841
18) T	4,4'-DDT	12.38	13.67	1922.7E6	470.8E6	102.823	103.916
19) T	Endrin ketone	13.36	16.28	2350.2E6	675.2E6	88.980	92.419
20) T	Methoxychlor	14.05	15.53	962.3E6	264.9E6	106.716	104.786
21) T	alpha-Chlordane	9.58	10.60	2587.0E6	745.2E6	89.020	91.987
22) T	gamma-Chlordane	9.17	10.45	2723.7E6	765.3E6	89.766	92.868
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.

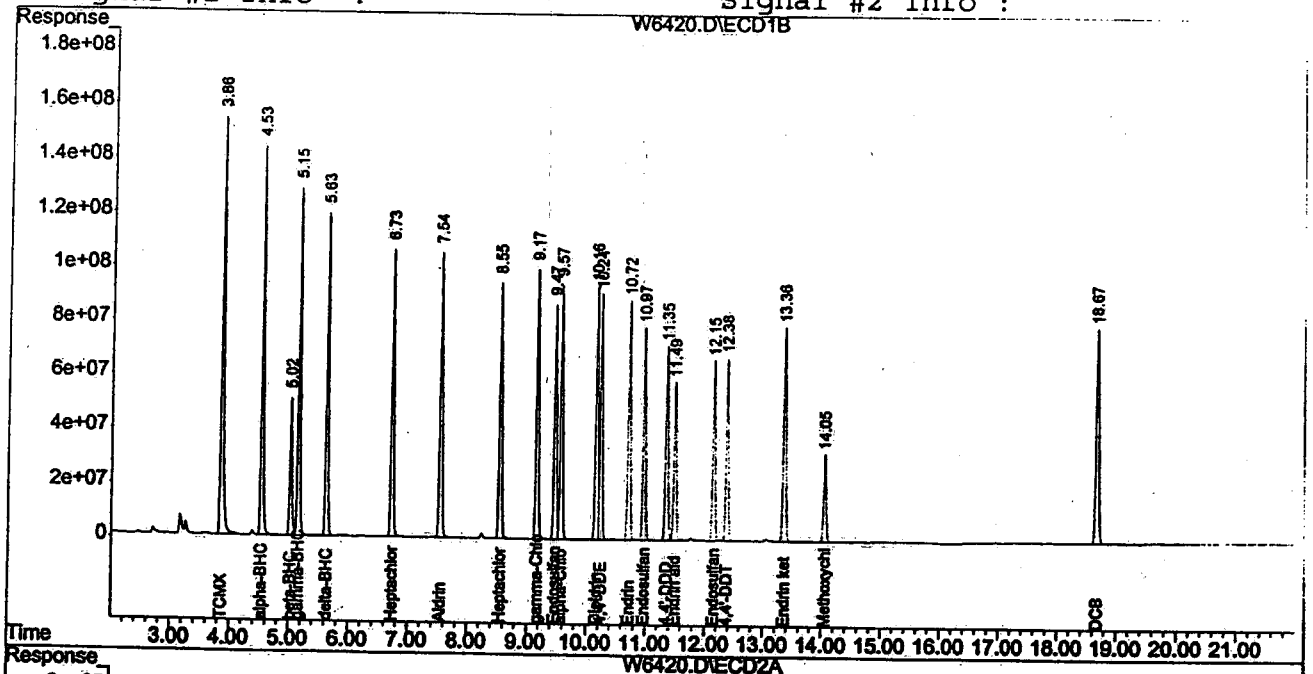
CC0470

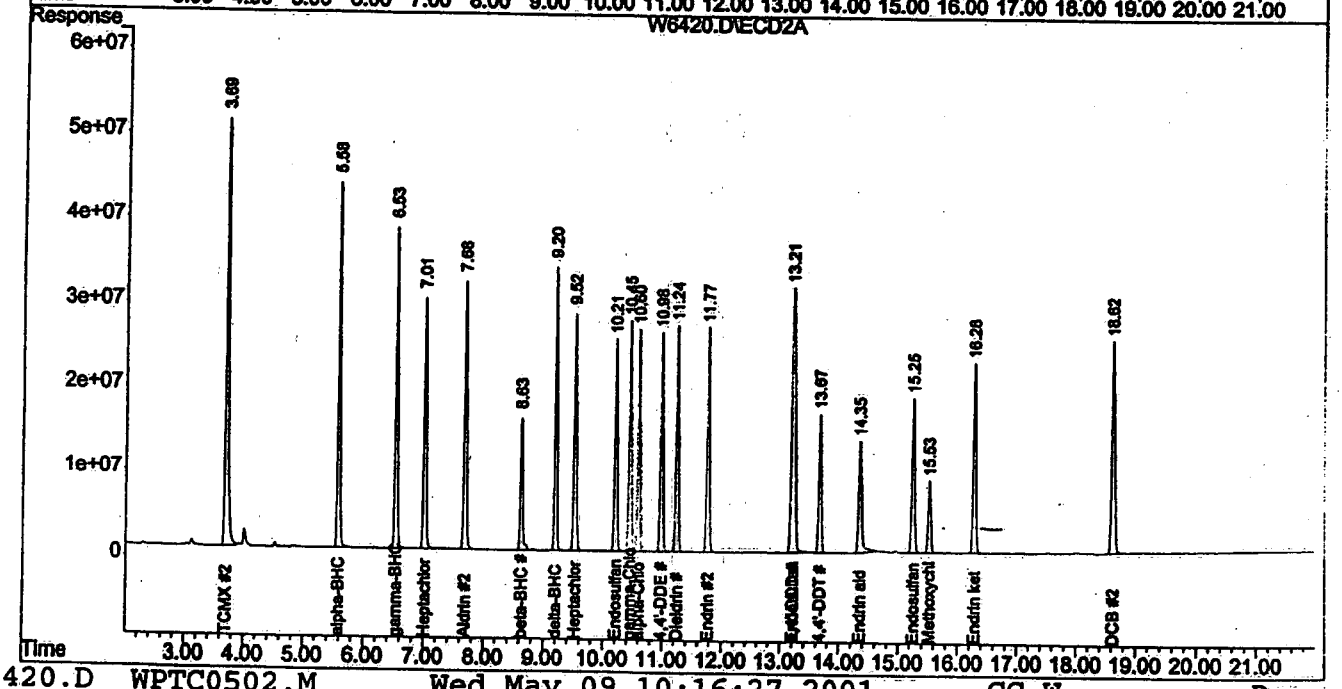
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6420.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6420.D\ECD2A.CH
Acq On : 5-7-01 13:35:17 Operator: LAG
Sample : PEST_C_IAS_1494,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 10:14 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





CC0471

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6445.D\ECD1B.CH Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6445.D\ECD2A.CH
Acq On : 5-8-01 00:06:25 Operator: LAG
Sample : PEST_C_IAS_1494,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 8:57 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	3964.2E6	1249.5E6	87.357	90.569
		Spiked Amount 100.000			Recovery	=	87.36%	90.57%
2)	S	DCB	18.67	18.62	2696.2E6	880.4E6	81.642	96.552
		Spiked Amount 100.000			Recovery	=	81.64%	96.55%
		Target Compounds						
3)	T	alpha-BHC	4.53	5.57	3412.5E6	1087.6E6	89.522	104.932
4)	T	beta-BHC	5.02	8.63	1225.3E6	435.6E6	87.049	99.236
	T	gamma-BHC	5.15	6.53	3079.6E6	986.5E6	90.627	105.168
	T	delta-BHC	5.63	9.20	2960.3E6	924.8E6	89.299	103.566
7)	T	Heptachlor	6.73	7.01	2576.6E6	785.6E6	92.566	103.260
8)	T	Aldrin	7.54	7.68	2848.5E6	898.5E6	89.020	101.910
9)	T	Heptachlor epoxi	8.55	9.52	2534.4E6	813.2E6	90.704	102.005
10)	T	Endosulfan I	9.47	10.21	2367.3E6	762.6E6	89.785	101.178
11)	T	4,4'-DDE	10.24	10.98	2553.0E6	801.3E6	89.565	101.761
12)	T	Dieldrin	10.16	11.24	2608.7E6	830.3E6	93.924	103.140
13)	T	Endrin	10.72	11.77	2515.6E6	811.3E6	99.505	109.081
14)	T	Endosulfan II	10.97	13.21	2208.2E6	1407.5E6	89.425	104.358
15)	T	4,4'-DDD	11.35	13.21	2099.9E6	1407.5E6	96.057	104.358
16)	T	Endrin aldehyde	11.49	14.35	1706.0E6	497.5E6	92.505	103.492
17)	T	Endosulfan sulfa	12.15	15.25	1909.0E6	598.2E6	89.491	100.725
18)	T	4,4'-DDT	12.38	13.66	1874.2E6	503.3E6	100.232	111.083
19)	T	Endrin ketone	13.36	16.28	2257.6E6	738.8E6	85.475	101.127
20)	T	Methoxychlor	14.05	15.52	842.5E6	277.6E6	93.437	109.801
21)	T	alpha-Chlordane	9.58	10.60	2573.9E6	813.7E6	88.568	100.444
22)	T	gamma-Chlordane	9.17	10.45	2700.6E6	832.6E6	89.003	101.032
	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.

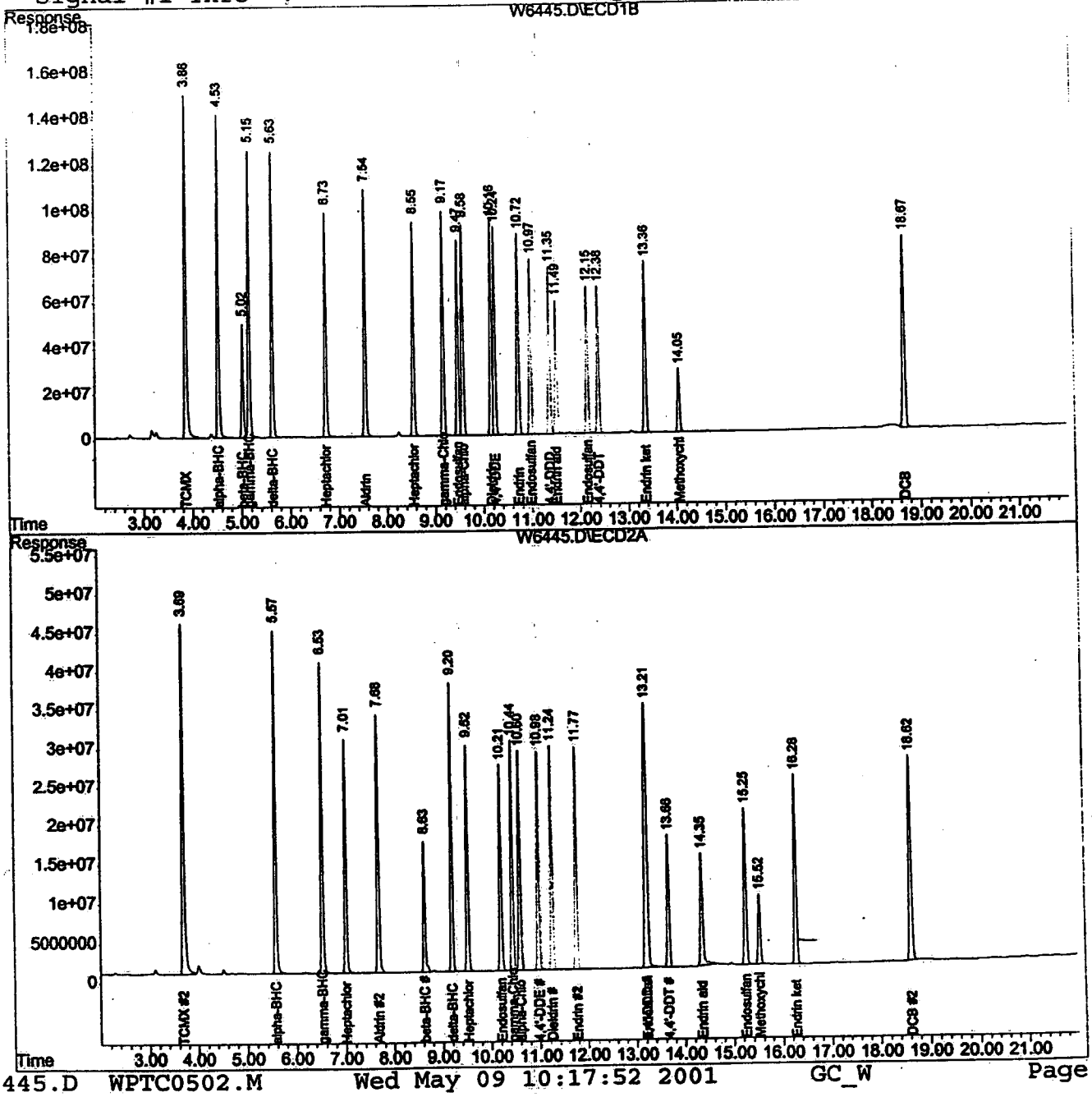
000472

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6445.D\ECD1B.CH Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6445.D\ECD2A.CH
Acq On : 5-8-01 00:06:25 Operator: LAG
Sample : PEST_C_IAS_1494,100_PPB Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 8 8:57 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



CC0473

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Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6421.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6421.D\ECD2A.CH
Acq On : 5-7-01 14:02:55 Operator: LAG
Sample : TOX_C_IAS_1490,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 7 14:26 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	3800.1E6	1264.2E6	83.740	91.638
Spiked Amount 100.000			Recovery	=	83.74%	91.64%
2) S DCB	18.67	18.62	2510.4E6	770.2E6	76.017m	84.471m
Spiked Amount 100.000			Recovery	=	76.02%	84.47%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
L2 Toxaphene	13.16	14.00	233.9E6	107.7E6	473.088	493.293
29) L2 Toxaphene {2}	13.29	14.74	367.9E6	78655747	461.167	478.736
30) L2 Toxaphene {3}	13.58	15.00	189.7E6	102.2E6	524.886	480.589
31) L2 Toxaphene {4}	14.03	15.19	169.0E6	50445501	459.752	477.069m
32) L2 Toxaphene {5}	14.54	15.64	197.4E6	55667670	454.696	518.653
Sum Toxaphene			1158.0E6	394.7E6	2373.590	2448.339
Average Toxaphene					474.718	489.668

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W6421.D WPTC0502.M Wed May 09 10:16:48 2001 GC_W Page 1

CC04774

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6422.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6422.D\ECD2A.CH
Acq On : 5-7-01 14:28:01 Operator: LAG
Sample : CHLOR_C_IAS_1491,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 10:16 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0502.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	4114.5E6	1402.1E6	90.670	101.629
Spiked Amount 100.000			Recovery =		90.67%	101.63%
2) S DCB	18.68	18.62	2804.2E6	852.3E6	84.911	93.468
Spiked Amount 100.000			Recovery =		84.91%	93.47%
Target Compounds						
22) L1 Chlordane	9.17	8.37	1523.6E6	75762404	443.412	468.967
L1 Chlordane {2}	9.37	10.05	332.5E6	97279952	438.772	463.439
L1 Chlordane {3}	9.57	10.45	1514.4E6	439.6E6	447.690	476.189
L1 Chlordane {4}	9.72	10.60	870.7E6	395.7E6	444.378	473.876
27) L1 Chlordane {5}	11.57	10.66	424.9E6	250.7E6	464.846	476.751
Sum Chlordane			4666.0E6	1259.1E6	2239.098	2359.222
Average Chlordane					447.820	471.844
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.
W6422.D WPTC0502.M Wed May 09 10:17:30 2001 GC_W Page 1

000476

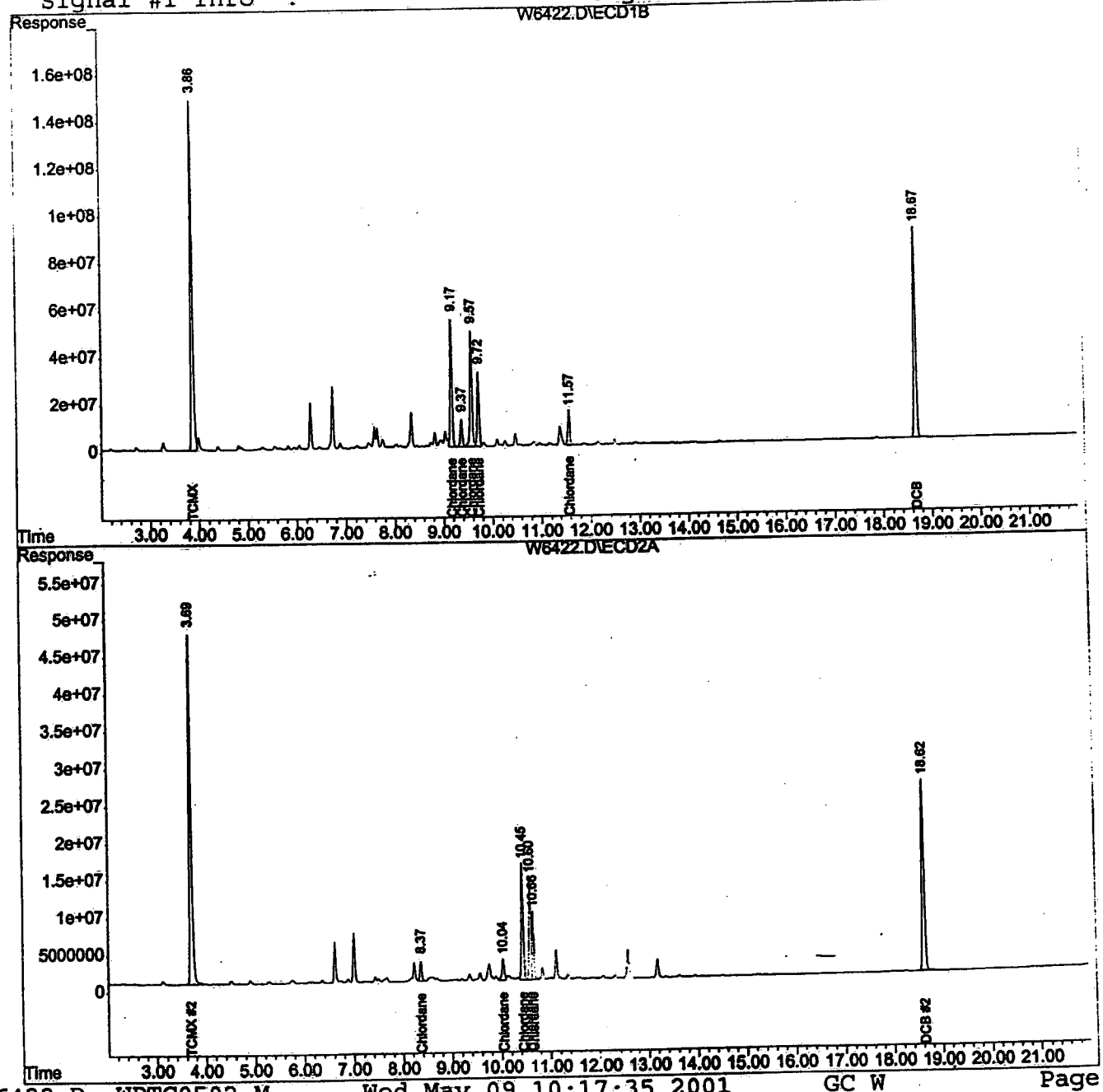
3445

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\05-07-01\W6422.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\05-07-01\W6422.D\ECD2A.CH
Acq On : 5-7-01 14:28:01 Operator: LAG
Sample : CHLOR_C_IAS_1491,0.5_PPM Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 10:16 2001 Quant Results File: WPTC0502.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0502.M (Chemstation Integrator)
Title :
Last Update : Wed May 02 13:58:57 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0502.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- 2657, 2773, 2799, 2848, 2860, 2861, 2867, 2871, 2893, 2907, 2911, 2912, 2924, 2931

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	INITIAL CALIBRATION	CONTINUING CALIBRATION 1	CONTINUING CALIBRATION 2	INST. MDL	REAGENT BLANK	MDL	IDL
Aluminum	ND	ND	ND	50.0	ND	100	
Antimony	ND	ND	ND	4.00	ND	8.00	
Arsenic	ND	ND	ND	2.00	ND	4.00	
Barium	ND	ND	ND	10.0	ND	20.0	
Beryllium	ND	ND	ND	2.00	ND	4.00	
Cadmium	ND	ND	ND	0.300	ND	0.600	
Calcium	ND	ND	ND	400	ND	800	
Chromium	ND	ND	ND	10.0	ND	20.0	
Cobalt	ND	ND	ND	20.0	ND	40.0	
Copper	ND	ND	ND	20.0	ND	40.0	
Iron	ND	ND	ND	50.0	ND	100	
Lead	ND	ND	ND	2.00	ND	4.00	
Magnesium	ND	ND	ND	100	ND	200	
Manganese	ND	ND	ND	5.00	ND	10.0	
Mercury	ND	ND	ND	0.250	ND	0.500	
Nickel	ND	ND	ND	10.0	ND	20.0	
Potassium	ND	ND	ND	100	ND	200	
Selenium	ND	ND	ND	4.00	ND	8.00	
Silver	ND	ND	ND	0.200	ND	0.400	
Sodium	ND	ND	ND	100	ND	200	
Thallium	ND	ND	ND	4.00	ND	8.00	
Vanadium	ND	ND	ND	15.0	ND	30.0	
Zinc	ND	ND	ND	10.0	ND	20.0	

This QC Blank applies to the following samples:

2657-01; 2773-01; 2799-03-05,010-012; 2848-01,02, 04,07-010,013,017,019-027; 2860-02; 2861-01-03; 2867-01-08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04-09,012; 2912-07; 2924-01-07; 2931-02,03

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Lab Case Number: E01- 2657, 2773, 2799, 2848, 2860, 2861, 2867, 2871, 2893, 2907, 2911, 2912, 2924, 2931

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	410	103	400	413	103	416	104	50.0	
Antimony	120	122	102	120	122	102	113	94.2	4.00	
Arsenic	20.0	20.0	100	20.0	19.5	97.5	20.1	101	2.00	
Barium	400	398	99.5	400	386	96.5	400	100	10.0	
Beryllium	10.0	9.62	96.2	10.0	9.13	91.3	10.3	103	2.00	
Cadmium	10.0	9.89	98.9	10.0	10.2	102	10.2	102	0.300	
Calcium	50.0	52.0	104	50.0	52.2	104	51.8	104	400	
Chromium	20.0	20.5	103	20.0	20.5	103	20.4	102	10.0	
Cobalt	100	97.9	97.9	100	95.8	95.8	99.9	99.9	20.0	
Copper	50.0	49.7	99.4	50.0	48.6	97.2	49.5	99.0	20.0	
Iron	1.00	1.02	102	1.00	1.04	104	1.06	106	50.0	
Lead	10.0	10.2	102	10.0	9.82	98.2	10.2	102	2.00	
Magnesium	50.0	51.6	103	50.0	52.9	106	50.9	102	100	
Manganese	30.0	29.6	98.7	30.0	29.3	97.7	30.9	103	5.00	
Mercury	5.00	5.15	103	5.00	5.23	105	5.05	101	0.250	
Nickel	80.0	78.7	98.4	80.0	77.2	96.5	78.2	97.8	10.0	
Potassium	10000	10200	102	10000	9720	97.2	9980	99.8	100	
Selenium	10.0	11.0	110	10.0	10.9	109	11.0	110	4.00	
Silver	20.0	19.9	99.5	20.0	19.1	95.5	19.5	97.5	0.200	
Sodium	50.0	50.7	101	50.0	51.4	103	50.8	102	100	
Thallium	20.0	20.4	102	20.0	19.8	99.0	20.5	103	4.00	
Vanadium	100	104	104	100	103	103	108	108	15.0	
Zinc	40.0	43.0	108	40.0	42.0	105	43.1	108	10.0	

(1) Control Limits: Mercury 80-120, Other Metals 90-110

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SPIKE SAMPLE RECOVERY

Lab Case Number: E01- 2657, 2773, 2799, 2848, 2860, 2861, 2867, 2871, 2893, 2907, 2911, 2912, 2924, 2931

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	472	ND	118	400	8800	7740	NC	400	70-130
Antimony	329	ND	82.3	400	357	ND	89.3	400	70-130
Arsenic	394	ND	98.5	400	415	16.0	99.8	400	70-130
Barium	379	ND	94.8	400	568	195	93.3	400	70-130
Beryllium	358	ND	89.5	400	353	ND	88.3	400	70-130
Cadmium	414	ND	104	400	387	2.00	96.3	400	70-130
Calcium	11100	2960	102	8000	300000	291000	113	8000	75-125
Chromium	402	ND	101	400	1010	592	105	400	70-130
Cobalt	381	ND	95.3	400	385	ND	96.3	400	70-130
Copper	378	ND	94.5	400	809	460	87.3	400	70-130
Iron	8630	417	103	8000	29800	21200	108	8000	75-125
Lead	360	ND	90.0	400	645	264	95.3	400	70-130
Magnesium	9420	874	107	8000	51000	42500	106	8000	75-125
Manganese	442	52.0	97.5	400	4090	3630	115	400	70-130
Mercury	9.60	ND	96.0	10.0					75-125
Nickel	381	ND	95.3	400	383	ND	95.8	400	70-130
Potassium	8900	1420	93.5	8000	13900	6050	98.1	8000	70-130
Selenium	419	ND	105	400	418	ND	105	400	70-130
Silver	369	ND	92.3	400	261	ND	65.3	400	70-130
Sodium	9820	1870	99.4	8000	129000	119000	125	8000	75-125
Thallium	360	ND	90.0	400	389	ND	97.3	400	70-130
Vanadium	392	ND	98.0	400	438	36.0	101	400	70-130
Zinc	422	ND	106	400	561	193	92.0	400	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 2860-002

QC Sample 1 for following samples:
2657-01; 2773-01; 2799-03~05,010~012; 2848-01,02, 04,07~010,013,017,019~027; 2860-02; 2861-01~03; 2867-01~08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04~09,012; 2912-07; 2924-01~07; 2931-02,03

QC Sample 2 2912-007

QC Sample 2 for following samples:
2657-01; 2773-01; 2799-03~05,010~012; 2848-01,02, 04,07~010,013,017,019~027; 2860-02; 2861-01~03; 2867-01~08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04~09,012; 2912-07; 2924-01~07; 2931-02,03

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SPIKE SAMPLE RECOVERY

Lab Case Number: E01- 2657, 2773, 2799, 2848, 2860, 2861, 2867, 2871, 2893, 2907, 2911, 2912, 2924, 2931

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	SSR3	SR3	%R3	SA3	SSR4	SR4	%R4	SA4	CONTROL LIMIT %R
Antimony	377	ND	94.3	400					70-130
Arsenic	417	6.00	103	400					70-130
Beryllium	372	ND	93.0	400					70-130
Cadmium	386	1.50	96.1	400					70-130
Chromium	406	ND	102	400					70-130
Copper	394	ND	98.5	400					70-130
Iron					9240	1280	99.5	8000	75-125
Lead	396	ND	99.0	400					70-130
Magnesium					19200	10600	108	8000	75-125
Manganese					491	149	85.5	400	70-130
Nickel	435	56.0	94.8	400					70-130
Selenium	424	ND	106	400					70-130
Silver	327	ND	81.8	400					70-130
Thallium	396	ND	99.0	400					70-130
Zinc	751	366	96.3	400					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 2867-002

QC Sample 3 for following samples:
2657-01; 2773-01; 2799-03~05,010~012; 2848-01,02, 04,07~010,013,017,019~027; 2860-02; 2861-01~03; 2867-01~08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04~09,012; 2912-07; 2924-01~07; 2931-02,03

QC Sample 4 2848-001

QC Sample 4 for following samples:
2657-01; 2773-01; 2799-03~05,010~012; 2848-01,02, 04,07~010,013,017,019~027; 2860-02; 2861-01~03; 2867-01~08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04~09,012; 2912-07; 2924-01~07; 2931-02,03

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INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SPIKE SAMPLE RECOVERY

Lab Case Number: E01- 2657, 2773, 2799, 2848, 2860, 2861, 2867, 2871, 2893, 2907, 2911, 2912, 2924, 2931

Matrix: Aqueous

Concentration/Units: ppb (µg/L)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Arsenic	644	254	97.5	400	347	15.0	83.0	400	70-130
Cadmium					342	ND	85.5	400	70-130
Lead	403	4.50	99.6	400					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 2893-001

QC Sample 1 for following samples:
2657-01; 2773-01; 2799-03~05,010~012; 2848-01,02, 04,07~010,013,017,019~027; 2860-02; 2861-01~03; 2867-01~08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04~09,012; 2912-07; 2924-01~07; 2931-02,03

QC Sample 2 2924-004

QC Sample 2 for following samples:
2657-01; 2773-01; 2799-03~05,010~012; 2848-01,02, 04,07~010,013,017,019~027; 2860-02; 2861-01~03; 2867-01~08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04~09,012; 2912-07; 2924-01~07; 2931-02,03

000482

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

DUPLICATE SAMPLE RECOVERY

Lab Case Number: E01- 2657, 2773, 2799, 2848, 2860, 2861, 2867, 2871, 2893, 2907, 2911, 2912, 2924, 2931

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Aluminum	NA	ND	ND	NC	20	7740	7840	1.28
Antimony	NA	ND	ND	NC	NA	ND	ND	NC
Arsenic	NA	ND	ND	NC	20	16.0	16.0	0
Barium	NA	ND	ND	NC	20	195	200	2.53
Beryllium	NA	ND	ND	NC	NA	ND	ND	NC
Cadmium	NA	ND	ND	NC	20	2.00	2.00	0
Calcium	20	2960	2470	18.0	20	291000	294000	1.03
Chromium	NA	ND	ND	NC	20	592	592	0
Cobalt	NA	ND	ND	NC	NA	ND	ND	NC
Copper	NA	ND	ND	NC	20	460	456	0.873
Iron	20	417	490	16.1	20	21200	21300	0.471
Lead	NA	ND	ND	NC	20	264	274	3.72
Magnesium	20	874	810	7.60	20	42500	42900	0.937
Manganese	20	52.0	52.0	0	20	3630	3650	0.549
Mercury	NA	ND	ND	NC				
Nickel	NA	ND	ND	NC	NA	ND	ND	NC
Potassium	20	1420	1390	2.14	20	6050	6280	3.73
Selenium	NA	ND	ND	NC	NA	ND	ND	NC
Silver	NA	ND	ND	NC	NA	ND	ND	NC
Sodium	20	1870	1850	1.08	20	119000	120000	0.837
Thallium	NA	ND	ND	NC	NA	ND	ND	NC
Vanadium	NA	ND	ND	NC	20	36.0	38.0	5.41
Zinc	NA	ND	ND	NC	20	193	198	2.56

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 2860-002

QC Sample 1 for following samples:
2657-01; 2773-01; 2799-03~05,010~012; 2848-01,02, 04,07~010,013,017,019~027; 2860-02; 2861-01~03; 2867-01~08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04~09,012; 2912-07; 2924-01~07; 2931-02,03

QC Sample 2 2912-007

QC Sample 2 for following samples:
2657-01; 2773-01; 2799-03~05,010~012; 2848-01,02, 04,07~010,013,017,019~027; 2860-02; 2861-01~03; 2867-01~08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04~09,012; 2912-07; 2924-01~07; 2931-02,03

2657

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

DUPLICATE SAMPLE RECOVERY

Lab Case Number: E01- 2657, 2773, 2799, 2848, 2860, 2861, 2867, 2871, 2893, 2907, 2911, 2912, 2924, 2931

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	CONTROL LIMIT 3	S3	D3	RPD3	CONTROL LIMIT 4	S4	D4	RPD4
Antimony	NA	ND	ND	NC				
Arsenic	20	6.00	5.80	3.39				
Beryllium	NA	ND	ND	NC				
Cadmium	20	1.50	1.50	0				
Chromium	NA	ND	ND	NC				
Copper	NA	ND	ND	NC				
Iron					20	1280	1280	0
Lead	NA	ND	ND	NC				
Magnesium					20	10600	10700	0.939
Manganese					20	149	152	1.99
Nickel	20	56.0	53.0	5.50				
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				
Thallium	NA	ND	ND	NC				
Zinc	20	366	352	3.90				

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 2867-002

QC Sample 3 for following samples:
2657-01; 2773-01; 2799-03~05,010~012; 2848-01,02, 04,07~010,013,017,019~027; 2860-02; 2861-01~03; 2867-01~08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04~09,012; 2912-07; 2924-01~07; 2931-02,03

QC Sample 4 2848-001

QC Sample 4 for following samples:
2657-01; 2773-01; 2799-03~05,010~012; 2848-01,02, 04,07~010,013,017,019~027; 2860-02; 2861-01~03; 2867-01~08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04~09,012; 2912-07; 2924-01~07; 2931-02,03

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

DUPLICATE SAMPLE RECOVERY

Lab Case Number: E01- 2657, 2773, 2799, 2848, 2860, 2861, 2867, 2871, 2893, 2907, 2911, 2912, 2924, 2931

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Arsenic	20	254	263	3.48	20	15.0	15.0	0
Cadmium					NA	ND	ND	NC
Lead	20	4.50	5.50	20.0				

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 2893-001

QC Sample 1 for following samples:
2657-01; 2773-01; 2799-03~05,010~012; 2848-01,02, 04,07~010,013,017,019~027; 2860-02; 2861-01~03; 2867-01~08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04~09,012; 2912-07; 2924-01~07; 2931-02,03

QC Sample 2 2924-004

QC Sample 2 for following samples:
2657-01; 2773-01; 2799-03~05,010~012; 2848-01,02, 04,07~010,013,017,019~027; 2860-02; 2861-01~03; 2867-01~08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04~09,012; 2912-07; 2924-01~07; 2931-02,03

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Lab Case Number: E01- 2657, 2773, 2799, 2848, 2860, 2861, 2867, 2871, 2893, 2907, 2911, 2912, 2924, 2931

ANALYTE	AQUEOUS (ug/L)			SOLID (mg/kg)			
	TRUE	FOUND	%R(1)	TRUE	FOUND	LIMITS	%R(2)
Aluminum	400	353	88.3				
Antimony	400	381	95.3				
Arsenic	400	374	93.5				
Barium	400	361	90.3				
Beryllium	400	353	88.3				
Cadmium	400	388	97.0				
Calcium	8000	8680	109				
Chromium	400	384	96.0				
Cobalt	400	367	91.8				
Copper	400	374	93.5				
Iron	8000	8030	100				
Lead	400	353	88.3				
Magnesium	8000	8390	105				
Manganese	400	373	93.3				
Mercury	10.0	10.5	105				
Nickel	400	372	93.0				
Potassium	8000	7380	92.3				
Selenium	400	388	97.0				
Silver	400	363	90.8				
Sodium	8000	7250	90.6				
Thallium	400	351	87.8				
Vanadium	400	377	94.3				
Zinc	400	383	95.8				

(1) Control Limits = 85-115%
(2)Manufacture's Recomended Limits

Aqueous LCS Source: MV Laboratories

Solid LCS Source: Environmental Resource Associates: PriorityPollutnT/CLP Inorganics Soils

METALS QUALITY CONTROL

SERIAL DILUTIONS & POST SPIKES

Lab Case Number: E01- 2657, 2773, 2799, 2848, 2860, 2861, 2867, 2871, 2893, 2907, 2911, 2912, 2924, 2931

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	SERIAL DILUTION		%	POST SPIKE		%
	SR	SDR	Difference	SPR	SA	Recovery
Aluminum	ND			469	400	117
Antimony	ND			377	400	94.3
Arsenic	ND			405	400	101
Barium	ND			395	400	98.8
Beryllium	ND			363	400	90.8
Cadmium	ND			424	400	106
Calcium	2960			12300	8000	117.0
Chromium	ND			409	400	102
Cobalt	ND			394	400	98.5
Copper	ND			389	400	97.3
Iron	417			8590	8000	102.0
Lead	ND			380	400	95.0
Magnesium	874			9420	8000	107.0
Manganese	52.0	51.0	1.94			
Mercury	ND			9.70	10.0	97.0
Nickel	ND			384	400	96.0
Potassium	1420			9130	8000	96.4
Selenium	ND			434	400	109
Silver	ND			388	400	97.0
Sodium	1870			9870	8000	100.0
Thallium	ND			381	400	95.3
Vanadium	ND			402	400	101
Zinc	ND			429	400	107

SR = Sample Result
SDR = Sample Dilution Result

SPR = Sample Post Spike Result
SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 75 - 125% Recovery

QC Sample : 2860-002

QC Sample for following samples:
2657-01; 2773-01; 2799-03~05,010~012; 2848-01,02, 04,07~010,013,017,019~027; 2860-02; 2861-01~03; 2867-01~08; 2871-05,06; 2893-01; 2907-02,03; 2911-01,04~09,012; 2912-07; 2924-01~07; 2931-02,03

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869
5/10/01

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Aqueous
Units: A-mg/L
Batch ID: AP013-0036

Blank

Parameter	Method Blank	MDL	Analysis Date
Total Cyanide	ND	0.020	05/10/2001

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
Total Cyanide	2867-001S	0.291	0.240	19	20

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
Total Cyanide	2867-001	0.024	0.250	0.291	107	75 - 125

The above blank result applies to the follow samples E01-

2867-001	2867-007
2867-001D	2867-008
2867-001S	2877-001
2867-001SD	2878-001
2867-002	2875-001
2867-003	2875-002
2867-004	2875-003
2867-005	2876-001
2867-006	2876-003

++ = 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
5/9/01

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Aqueous
Units: A-mg/L

Batch ID: AP024-0034

Blank

Parameter	Method Blank	MDL	Analysis Date
Total Recoverable Phenol	ND	0.050	05/09/2001

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
Total Recoverable Phenol	2867-001	0.232	0.230	1	20

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
Total Recoverable Phenol	2867-001	ND	0.250	0.232	92.8	75 - 125

The above blank result applies to the follow samples E01-

2867-001	2867-004
2867-001D	2867-005
2867-001S	2867-006
2867-001SD	2867-007
2867-002	2886-001
2867-003	2867-008

++ = 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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Phone # (973) 361-42[redacted]
Fax # (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES
CHAIN OF CUSTODY

[redacted] Franklin Rd
[redacted]869

CLIENT & PROJECT

Company Name: Envirotactics	
Address: 2517 Highway 35	
Bldg. D, Suite 202	
Manasquan, NJ 08736	
Telephone #: (732) 292-0100	
Fax #: (732) 292-2808	
Project Name: 444 - 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 wkl)

Other:

ANALYTICAL PARAMETERS / PRESERVATIVES

** Circle format required

Sample ID	Sample Description	Sampling Date	Sampling Time	am	pm	Matrix	# of Containers	Lab ID	PP+40	VOA10	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
MW-1		5/2/01	11:08	X		GW	7	01	X										
MW-2			12:52		X		7	2	X										
MW-3			13:50		X		7	3	X										
MW-5			11:50	X			7	4	X										
MW-6			7:55	X			7	5	X										
MW-7			8:40	X			7	6	X										
MW-8			15:10		X		7	7	X										
FB	Field Blank		7:40	X		A	7	8	X										
TB	Trip Blank					A	2	9		X									

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

Comments

Higher Concentrations Likely

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:	5/3/01	1400	Received by:
Relinquished by:	5/3/01	4:15	Received by: Paul Connista
Relinquished by:			Received by:
Relinquished by:			Received by:
Relinquished by:			Received by:

Comments:

Lab Case #
2867

PAGE: 1 OF 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

CHAIN OF CUSTODY

Case No.: E01-2867
Project : 444-ORBIS-NEWARK
Client/Project: ENVTACT/444-ORBIS-NEWARK
P.O. #: _____

Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736
Date Received: 05/03/01
Time Received: 16:15
Report Format: Reduced

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736
Verbal Due: May 17
Report Due: May 24

# of Containers	7	7	7	7	7	7
IAL ID #	2867-001	2867-002	2867-003	2867-004	2867-005	2867-006
Client ID #	MW-1	MW-2	MW-3	MW-5	MW-6	MW-7
Matrix	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Sample Date	05/02/01	05/02/01	05/02/01	05/02/01	05/02/01	05/02/01
Sample Time	11:08	12:52	13:50	11:50	07:55	08:40
VO+15, PP LIST	√	√	√	√	√	√
Pesticides	√	√	√	√	√	√
PCB	√	√	√	√	√	√
BNA + 25	√	√	√	√	√	√
PP Metals -LOW	√	√	√	√	√	√
Cyanide, Total	√	√	√	√	√	√
Phenols	√	√	√	√	√	√
Electronic Del.	√					

Comments: NOTE 1: AS PER COC, HIGH CONCENTRATIONS LIKELY IN SAMPLE #7.
NOTE 2: PLEASE MEET GROUNDWATER LIMITS FOR METALS.

CHAIN OF CUSTODY

Case No.: E01-2867
Project : 444-ORBIS-NEWARK
Client/Project: ENVTACT/444-ORBIS-NEWARK
P.O. #: _____

Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736

Date Received: 05/03/01
Time Received: 16:15
Report Format: Reduced

Verbal Due: May 17
Report Due: May 24

# of Containers	7	7	2
IAL ID #	2867-007	2867-008	2867-009
Client ID #	MW-8	FB	TB
Matrix	Aqueous	Aqueous	Aqueous
Sample Date	05/02/01	05/02/01	05/02/01
Sample Time	15:10	07:40	:
VO+15, PP LIST	√	√	
VO+10, PP LIST			√
Pesticides	√	√	
PCB	√	√	
BNA + 25	√	√	
PP Metals -LOW	√	√	
Cyanide, Total	√	√	
Phenols	√	√	

Comments: NOTE 1: AS PER COC, HIGH CONCENTRATIONS LIKELY IN SAMPLE #7.
NOTE 2: PLEASE MEET GROUNDWATER LIMITS FOR METALS.

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: 2867 CLIENT: Enviroptactics

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 edc DATE 5/3/01

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 [ ] DATE [ ]

000493

REV 10/00

Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-2867
Client : Envirotactics Inc.
Project : 444-ORBIS-NEWARK

	GC/MS V		EXTRACT DATE	EXTRACT TIME	EXTRACT INITIAL	ANALYSIS DATE	ANALYSIS TIME	ANALYSIS INITIAL
VO+15, PP LIST	2867-001	A				5/4 - 5/10/01		MAR
	2867-002	A						(MAR 5/18/01)
	2867-003	A						
	2867-004	A						
	2867-005	A						
	2867-006	A						
	2867-007	A						
	2867-008	A						
VO+10, PP LIST	2867-009	A						
	GC EX							
Pesticides	2867-001	A	5/4	900	30ml	5.4	900	LB
	2867-002	A				5.7	1000	LB
	2867-003	A				5.4	900	LB
	2867-004	A				5.7	1030	LB
	2867-005	A				5.4	1000	LB
	2867-006	A						
	2867-007	A						
	2867-008	A						
PCB	2867-001	A				5.4	400	H
	2867-002	A						
	2867-003	A						
	2867-004	A						
	2867-005	A						
	2867-006	A						
	2867-007	A						
	2867-008	A						
	GC/MS X							
BNA + 25	2867-001	A	5/4	7P-30	DL	5/4 - 5/7/01		P. Pei
	2867-002	A						
	2867-003	A						
	2867-004	A						
	2867-005	A						
	2867-006	A						
	2867-007	A						
	2867-008	A						
	METALS							
PP Metals -LOW	2867-001	A	5/8/01		JRL	5/8	1300	JL
	2867-002	A						
	2867-003	A						
	2867-004	A						
	2867-005	A						
	2867-006	A						
	2867-007	A						
	2867-008	A						

Integrated Analytical Laboratories, LLC.

Laboratory Custody Chronicle

Case No : E01-2867
Client : Envirotactics Inc.
Project : 444-ORBIS-NEWARK

	WETCHEM		EXTRACT DATE	EXTRACT TIME	EXTRACT INITIAL	ANALYSIS DATE	ANALYSIS TIME	ANALYSIS INITIAL
Cyanide, Total	2867-001	A	5/9	1000	ML	5/10/01	13:44	B
	2867-002	A						
	2867-003	A						
	2867-004	A						
	2867-005	A						
	2867-006	A						
	2867-007	A						
	2867-008	A						
Phenols	2867-001	A	5/7	800	DM	5/9	1200	DM
	2867-002	A						
	2867-003	A						
	2867-004	A						
	2867-005	A						
	2867-006	A						
	2867-007	A						
	2867-008	A						
	AIR							
Electronic Del.	2867-001	A						

REVIEW & APPROVAL: M Colatarco
REMARKS :

PAR/SIR/RIW

Orbis Products Corporation
55 Virginia Street
Newark, Essex County, NJ
Case #86-11-17-0100 Ref 15
Attachment 11
Groundwater Laboratory Reports
(2 of 3)

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: E01-2093
Date Report Prepared: April 11, 2001

CLIENT SAMPLE ID	LABORATORY SAMPLE ID
MW-4	2093-001

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 one (1) aqueous sample(s) from Envirotactics Inc. (Project: ORBIS - NEWARK - 444) on April 4, 2001 for the analysis of:

(1) Volatiles + 15
(1) Semivolatiles - BNA + 25
(1) PCB's
(1) Pesticides
(1) PP Metals
(1) Cyanide, Total
(1) Phenols

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

4/17/01
Date

INTEGRATED ANALYTICAL LABORATORIES, LLC.

LABORATORY DELIVERABLES CHECK LIST

Lab Case Number: E01-2093

		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

4/17/01
Date

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC/MS VOLATILE ANALYSIS

Lab Case Number: E01 - 2093

	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		NA
b. System Performance Check Compounds		NA
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

4/6/00
Date

rev 12/00

000001

3672

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC/MS SEMIVOLATILE ANALYSIS

Lab Case Number: E01- 2093

	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

4/9/01
Date

rev 01/01

3673

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC ANALYSIS - PCB'S, PESTICIDES, HERBICIDES

Lab Case Number: E01 - 2093

		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

04.06.2001
Date

rev 01/01

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3674

INTEGRATED ANALYTICAL LABORATORIES

METAL ANALYSIS CONFORMANCE/NONCONFORMANCE SUMMARY

Lab Case Number: E01 - 2093

	No	Yes
1. Calibration Summary Meet Criteria.		✓
2. ICP Interference Check Sample Results Meets Criteria (if applicable)		NA
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-Langenau
Inorganics Manager

04/09/01
Date

rev 01/01

000007

3675

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2093

	Lab ID:	2093-001	
	Client ID:	MW-4	
	Matrix:	Aqueous	
	Sampled Date:	4/4/2001	
PARAMETER(Units)	Conc	Q	MDL
Volatiles (ppb)			
Benzene	312		15
Toluene	2800		16.5
TOTAL VO's:	3112		
TOTAL TIC's:	ND		
TOTAL VO's & TIC's:	3112		
Semivolatiles - BNA (ppb)			
1,2-Dichlorobenzene	0.721		0.31
2-Methylphenol	11.7		0.39
4-Methylphenol	9.74		0.33
2,4-Dimethylphenol	1.81		0.32
Naphthalene	1.06		0.14
Acenaphthene	0.808		0.21
Fluorene	0.719		0.18
TOTAL BN'S:	26.558		
TOTAL TIC's:	979.6		
TOTAL BN'S & TIC's:	1006.16		
PCB's (ppb)	ND		0.2
Pesticides (ppb)			
alpha-BHC	ND		0.01
beta-BHC	ND		0.01
gamma-BHC	ND		0.01
delta-BHC	ND		0.01
Heptachlor	ND		0.01
Aldrin	ND		0.01
Heptachlor epoxide	ND		0.01
Endosulfan I	ND		0.01
4,4'-DDE	ND		0.01
Dieldrin	ND		0.01
Endrin	ND		0.01
Endosulfan II	ND		0.01
4,4'-DDD	ND		0.01
Endrin aldehyde	ND		0.01
Endosulfan sulfate	ND		0.01
4,4'-DDT	ND		0.01
Chlordane	ND		0.075
Toxaphene	ND		0.075

ND = Analyzed for but Not Detected at the MDL

000003

3676

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT

Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2093

	Lab ID:	2093-001		
	Client ID:	MW-4		
	Matrix:	Aqueous		
	Sampled Date:	4/4/2001		
PARAMETER(Units)		Conc	Q	MDL
Metals (ppm)				
Antimony		ND		0.008
Arsenic		0.00963		0.004
Beryllium		ND		0.004
Cadmium		ND		0.0006
Chromium		ND		0.020
Copper		ND		0.040
Lead		ND		0.004
Mercury		ND		0.0005
Nickel		ND		0.020
Selenium		ND		0.008
Silver		ND		0.0004
Thallium		ND		0.008
Zinc		0.0252		0.020
General Analytical				
Cyanide, Total (ppm)		ND		0.020
Phenol (ppm)		0.157		0.050

ND = Analyzed for but Not Detected at the MDL

000003

3677

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2093-001
Client ID: MW-4
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Data file: E8021.D

GC/MS Column: DB-624
Sample wt/vol: 0.1mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 50
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		30.5
Vinyl Chloride	ND		16.5
Bromomethane	ND		23.5
Chloroethane	ND		32.5
Trichlorofluoromethane	ND		19
Acrolein	ND		297
1,1-Dichloroethene	ND		25
Methylene Chloride	ND		95.5
Acrylonitrile	ND		63.5
trans-1,2-Dichloroethene	ND		19.5
1,1-Dichloroethane	ND		16.5
Chloroform	ND		15.5
1,1,1-Trichloroethane	ND		19
Carbon Tetrachloride	ND		19.5
1,2-Dichloroethane(EDC)	ND		17.5
Benzene	312		15
Trichloroethene	ND		18
1,2-Dichloropropane	ND		12.5
Bromodichloromethane	ND		12.5
2-Chloroethylvinyl Ether	ND		12.5
cis-1,3-Dichloropropene	ND		9.5
Toluene	2800		16.5
trans-1,3-Dichloropropene	ND		13.5
1,1,2-Trichloroethane	ND		15.5
Tetrachloroethene	ND		19
Dibromochloromethane	ND		15.5
Chlorobenzene	ND		14
Ethylbenzene	ND		15
Total Xylenes	ND		45
Bromoform	ND		14
1,1,2,2-Tetrachloroethane	ND		13.5
1,3-Dichlorobenzene	ND		11
1,4-Dichlorobenzene	ND		11
1,2-Dichlorobenzene	ND		9.5

Total Target Compounds: 3112

000019

3676

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2093-001
Client ID: MW-4
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Data file: E8021.D

GC/MS Column: DB-624
Sample wt/vol: 0.1mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 50
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2093-001
Client ID: MW-4
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: C9211.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		0.35
Phenol	ND		0.33
Aniline	ND		0.37
bis(2-Chloroethyl)ether	ND		0.36
2-Chlorophenol	ND		0.36
1,3-Dichlorobenzene	ND		0.37
1,4-Dichlorobenzene	ND		0.29
Benzyl alcohol	ND		0.46
1,2-Dichlorobenzene	0.721		0.31
2-Methylphenol	11.7		0.39
bis(2-chloroisopropyl)ether	ND		0.45
4-Methylphenol	9.74		0.33
N-Nitroso-di-n-propylamine	ND		0.5
Hexachloroethane	ND		0.48
Nitrobenzene	ND		0.33
Isophorone	ND		0.1
2-Nitrophenol	ND		0.36
2,4-Dimethylphenol	1.81		0.32
bis(2-Chloroethoxy)methane	ND		0.36
Benzoic acid	ND		0.49
2,4-Dichlorophenol	ND		0.48
1,2,4-Trichlorobenzene	ND		0.22
Naphthalene	1.06		0.14
4-Chloroaniline	ND		0.9
Hexachlorobutadiene	ND		0.42
4-Chloro-3-methylphenol	ND		0.25
2-Methylnaphthalene	ND		0.18
Hexachlorocyclopentadiene	ND		0.47
2,4,6-Trichlorophenol	ND		0.64
2,4,5-Trichlorophenol	ND		0.51
2-Chloronaphthalene	ND		0.23
2-Nitroaniline	ND		0.33
Dimethylphthalate	ND		0.17
2,6-Dinitrotoluene	ND		0.36
Acenaphthylene	ND		0.15

000013

3680

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS

Lab ID: 2093-001
Client ID: MW-4
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: C9211.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		0.52
Acenaphthene	0.808		0.21
2,4-Dinitrophenol	ND		0.6
4-Nitrophenol	ND		0.87
2,4-Dinitrotoluene	ND		0.29
Dibenzofuran	ND		0.13
Diethylphthalate	ND		0.16
Fluorene	0.719		0.18
4-Chlorophenyl-phenylether	ND		0.23
4-Nitroaniline	ND		0.66
4,6-Dinitro-2-methylphenol	ND		0.45
N-Nitrosodiphenylamine	ND		0.32
1,2-Diphenylhydrazine/Azobenzene	ND		0.31
4-Bromophenyl-phenylether	ND		0.31
Hexachlorobenzene	ND		0.29
Pentachlorophenol	ND		0.59
Phenanthrene	ND		0.26
Anthracene	ND		0.31
Carbazole	ND		0.21
Di-n-butylphthalate	ND		0.23
Fluoranthene	ND		0.18
Benzidine	ND		0.35
Pyrene	ND		0.16
3,3'-Dimethylbenzidine	ND		0.81
Butylbenzylphthalate	ND		0.41
3,3'-Dichlorobenzidine	ND		0.29
Benzo[a]anthracene	ND		0.15
Chrysene	ND		0.25
bis(2-Ethylhexyl)phthalate	ND		0.26
Di-n-octylphthalate	ND		0.19
Benzo[b]fluoranthene	ND		0.34
Benzo[k]fluoranthene	ND		0.25
Benzo[a]pyrene	ND		0.15
Indeno[1,2,3-cd]pyrene	ND		0.59
Dibenz[a,h]anthracene	ND		0.48
Benzo[g,h,i]perylene	ND		0.69

Total Target Compounds: 26.558

3661

000023

INTEGRATED ANALYTICAL LABORATORIES

SEMIVOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS

Lab ID: 2093-001
Client ID: MW-4
Date Received: 04/04/2001
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Date File: C9211.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	Substituted benzene	463	3.43
	Substituted benzene	102	3.47
	Substituted benzene	10.2	6.27
	Unknown	285	7.29
	Unknown	16.5	7.32
	Unknown	14.5	7.39
	Unknown	12.4	7.46
	Substituted benzene	11.2	8.07
	Substituted benzene	8.1	8.14
	Substituted naphthalene	4.3	8.37
	Unknown	13.4	8.50
	Unknown	8.8	8.86
	Substituted phenol	7.4	9.07
	Unknown alkane	22.8	12.57

Total TICs = 979.6

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2093-001
Client ID: MW-4
Date Received: 04/04/2001
Date Extracted: 04/05/2001
Date Analyzed: 04/06/2001
Data file: V4993.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.2
Aroclor-1221	ND		0.2
Aroclor-1232	ND		0.2
Aroclor-1242	ND		0.2
Aroclor-1248	ND		0.2
Aroclor-1254	ND		0.2
Aroclor-1260	ND		0.2

000015

3603

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: ENVTACT-ORBIS

Lab ID: 2093-001
Client ID: MW-4
Date Received: 04/04/2001
Date Extracted: 04/05/2001
Date Analyzed: 04/05/2001
Data file: W5742.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 5
% Moisture: 100

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.01
beta-BHC	ND		0.01
gamma-BHC	ND		0.01
delta-BHC	ND		0.01
Heptachlor	ND		0.01
Aldrin	ND		0.01
Heptachlor epoxide	ND		0.01
Endosulfan I	ND		0.01
4,4'-DDE	ND		0.01
Dieldrin	ND		0.01
Endrin	ND		0.01
Endosulfan II	ND		0.01
4,4'-DDD	ND		0.01
Endrin aldehyde	ND		0.01
Endosulfan sulfate	ND		0.01
4,4'-DDT	ND		0.01
Chlordane	ND		0.075
Toxaphene	ND		0.075

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

METALS

Client/Project: ENVTACT/ORBIS

Lab ID: 2093-001
Client ID: MW-4
Date Received: 4/4/01
Date Analyzed: 4/6/01
Matrix-Units: Aqueous-mg/L (ppm)
% Moisture: 100

Compound	Result	Q	DF	MDL
Antimony	ND		1	0.008
Arsenic	0.00963		1	0.004
Beryllium	ND		1	0.004
Cadmium	ND		1	0.0006
Chromium	ND		1	0.020
Copper	ND		1	0.040
Lead	ND		1	0.004
Mercury	ND		1	0.0005
Nickel	ND		1	0.020
Selenium	ND		1	0.008
Silver	ND		1	0.0004
Thallium	ND		1	0.008
Zinc	0.0252		1	0.020

INTEGRATED ANALYTICAL LABORATORIES, LLC.

GENERAL ANALYTICAL

Client/Project: ENVTACT/ORBIS

Lab ID: 2093-001
Client ID: MW-4
Date Received: 4/4/01
% Moisture: 100

Compound	Result	Q	Matrix Unit	DF	MDL	Date Analyzed
Cyanide, Total	ND		Aqueous-mg/L	1	0.020	4/6/01
Phenol	0.157		Aqueous-mg/L	1	0.050	4/5/01

INTEGRATED ANALYTICAL LABORATORIES, LLC.

METHODOLOGY SUMMARY

Analytical Parameter	Aqueous Samples Method #	Soil/Other Samples Method #
Volatiles + 15	EPA 624	NA
Semivolatiles - BNA + 25	EPA 625	NA
PCB's	EPA 8082	NA
Pesticides	EPA 8081A	NA
P.P. Metals	EPA 200.8	NA
Metals (Mercury)	EPA 245.2	NA
Cyanide, Total	EPA 335.2	NA
Phenols	EPA 420.2	NA

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: E7802.D

BFB Injection Date: 03/30/2001

Inst ID: MSD_E

BFB Injection Time: 9:50

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	23.8			
75	30.0 - 60.0% of mass 95	59.2			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	5.8			
173	Less than 2.0% of mass 174	0.8	(	1.0	)1
174	Great than 50.0% of mass 95	82.4			
175	5.0 - 9.0% of mass 174	4.4	(	5.4	)1
176	95.0 - 101.0% of mass 174	82.2	(	99.8	)1
177	5.0 - 9.0% of mass 176	5.8	(	7.0	)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
20-PPB-STD	20-PPB-STD	E7803.D	03/30/2001	10:26
5-PPB-STD	5-PPB-STD	E7804.D	03/30/2001	10:51
100-PPB-STD	100-PPB-STD	E7805.D	03/30/2001	11:16
METHOD-BLK	METHOD-BLK	E7807.D	03/30/2001	12:48
RW-6	1881-012DIL	E7808.D	03/30/2001	1:13
RW-6SC	1881-013DIL	E7809.D	03/30/2001	1:38
OW-31	1881-007	E7810.D	03/30/2001	2:02
1917-001MS	1917-001MS	E7811.D	03/30/2001	2:27
1917-001MSD	1917-001MSD	E7812.D	03/30/2001	2:52
CGW-3	1917-001	E7814.D	03/30/2001	4:18
SB10_GW	1914-005	E7815.D	03/30/2001	4:43
SB11_GW	1914-006	E7816.D	03/30/2001	5:07
SB12_GW	1914-007	E7817.D	03/30/2001	5:32
SB13_GW	1914-008	E7818.D	03/30/2001	5:57
MW2	1914-009	E7819.D	03/30/2001	6:21
MW3	1914-010	E7820.D	03/30/2001	6:46
DMW-2	1926-001	E7821.D	03/30/2001	7:11
DMW-1	1926-003	E7822.D	03/30/2001	7:35
FIELD	1926-004	E7823.D	03/30/2001	8:00
TRIP	1926-005	E7824.D	03/30/2001	8:25

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: E7996.D

BFB Injection Date: 04/05/2001

Inst ID: MSD_E

BFB Injection Time: 9:41

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	24.0			
75	30.0 - 60.0% of mass 95	58.5			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	5.3			
173	Less than 2.0% of mass 174	0.7	(	1.0	)1
174	Great than 50.0% of mass 95	73.3			
175	5.0 - 9.0% of mass 174	5.3	(	7.2	)1
176	95.0 - 101.0% of mass 174	73.5	(	100.3	)1
177	5.0 - 9.0% of mass 176	4.7	(	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
20-PPB-STD	20-PPB-STD	E7997.D	04/05/2001	10:13
METHOD-BLK	METHOD-BLK	E7999.D	04/05/2001	11:40
FB	1984-010	E8000.D	04/05/2001	12:04
PS4-4-3A	2049-001DIL	E8001.D	04/05/2001	12:29
2012-001MS	2012-001MS	E8002.D	04/05/2001	12:54
2012-001MSD	2012-001MSD	E8003.D	04/05/2001	1:19
3133-MW1	2012-001	E8005.D	04/05/2001	2:08
3133-MW2	2012-002	E8006.D	04/05/2001	2:33
3133-MW3	2012-003	E8007.D	04/05/2001	2:58
3133-MW4	2012-004	E8008.D	04/05/2001	3:23
3133-MW5	2012-005	E8009.D	04/05/2001	3:48
3133-MW6	2012-006	E8010.D	04/05/2001	4:12
3133-DB3GW	2013-008	E8011.D	04/05/2001	4:36
3133-DB4GW	2013-009	E8012.D	04/05/2001	5:01
3133-DB7GW	2013-010	E8013.D	04/05/2001	5:26
GW-8	2060-001	E8014.D	04/05/2001	5:50
GW-14	2060-002	E8015.D	04/05/2001	6:15
GW-16	2060-003	E8016.D	04/05/2001	6:40
GW-16D	2060-004	E8017.D	04/05/2001	7:05
TRIP_BLANK	2060-005	E8018.D	04/05/2001	7:30

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: E7996.D

BFB Injection Date : 04/05/200

Inst ID: MSD_E

BFB Injection Time: 9:41

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	24.0			
75	30.0 - 60.0% of mass 95	58.5			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	5.3			
173	Less than 2.0% of mass 174	0.7	(	1.0	)1
174	Great than 50.0% of mass 95	73.3			
175	5.0 - 9.0% of mass 174	5.3	(	7.2	)1
176	95.0 - 101.0% of mass 174	73.5	(	100.3	)1
177	5.0 - 9.0% of mass 176	4.7	(	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
01	2074-001	E8019.D	04/05/2001	7:55
MW-4	2093-001	E8021.D	04/05/2001	8:44
LFB	LFB	E8023.D	04/05/2001	9:34
3133-DB4GW	2013-009DIL	E8026.D	04/06/2001	8:38
GW-14	2060-002DIL	E8027.D	04/06/2001	9:03
GW-16	2060-003DIL	E8028.D	04/06/2001	9:27

VOLATILE METHOD BLANK SUMMARY

Lab File ID: E7999.D

Instrument ID: MSD_E

Date Analyzed: 04/05/2001

Time Analyzed: 11:40

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
FB	1984-010	04/05/2001	12:04
PS4-4-3A	2049-001DIL	04/05/2001	12:29
2012-001MS	2012-001MS	04/05/2001	12:54
2012-001MSD	2012-001MSD	04/05/2001	1:19
3133-MW1	2012-001	04/05/2001	2:08
3133-MW2	2012-002	04/05/2001	2:33
3133-MW3	2012-003	04/05/2001	2:58
3133-MW4	2012-004	04/05/2001	3:23
3133-MW5	2012-005	04/05/2001	3:48
3133-MW6	2012-006	04/05/2001	4:12
3133-DB3GW	2013-008	04/05/2001	4:36
3133-DB4GW	2013-009	04/05/2001	5:01
3133-DB7GW	2013-010	04/05/2001	5:26
GW-8	2060-001	04/05/2001	5:50
GW-14	2060-002	04/05/2001	6:15
GW-16	2060-003	04/05/2001	6:40
GW-16D	2060-004	04/05/2001	7:05
TRIP_BLANK	2060-005	04/05/2001	7:30
01	2074-001	04/05/2001	7:55
MW-4	2093-001	04/05/2001	8:44
LFB	LFB	04/05/2001	9:34
3133-DB4GW	2013-009DIL	04/06/2001	8:38
GW-14	2060-002DIL	04/06/2001	9:03
GW-16	2060-003DIL	04/06/2001	9:27

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: NA

Lab ID: METHOD-BLK
Client ID: METHOD-BLK
Date Received: NA
Date Analyzed: 04/05/2001
Data file: E7999.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		0.61
Vinyl Chloride	ND		0.33
Bromomethane	ND		0.47
Chloroethane	ND		0.65
Trichlorofluoromethane	ND		0.38
Acrolein	ND		5.94
1,1-Dichloroethene	ND		0.5
Methylene Chloride	ND		1.91
Acrylonitrile	ND		1.27
trans-1,2-Dichloroethene	ND		0.39
1,1-Dichloroethane	ND		0.33
Chloroform	ND		0.31
1,1,1-Trichloroethane	ND		0.38
Carbon Tetrachloride	ND		0.39
1,2-Dichloroethane(EDC)	ND		0.35
Benzene	ND		0.3
Trichloroethene	ND		0.36
1,2-Dichloropropane	ND		0.25
Bromodichloromethane	ND		0.25
2-Chloroethylvinyl Ether	ND		0.25
cis-1,3-Dichloropropene	ND		0.19
Toluene	ND		0.33
trans-1,3-Dichloropropene	ND		0.27
1,1,2-Trichloroethane	ND		0.31
Tetrachloroethene	ND		0.38
Dibromochloromethane	ND		0.31
Chlorobenzene	ND		0.28
Ethylbenzene	ND		0.3
Total Xylenes	ND		0.9
Bromoform	ND		0.28
1,1,2,2-Tetrachloroethane	ND		0.27
1,3-Dichlorobenzene	ND		0.22
1,4-Dichlorobenzene	ND		0.22
1,2-Dichlorobenzene	ND		0.19

Total Target Compounds: 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: NA

Lab ID: METHOD-BLK
Client ID: METHOD-BLK
Date Received: NA
Date Analyzed: 04/05/2001
Data file: E7999.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

3694

000025

Response Factor Report MSD_B2

Method : C:\HPCHEM\1\METHODS\EA033001.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Fri Mar 30 11:44:53 2001
Response via : Initial Calibration

Calibration Files
20 =E7803.D 5 =E7804.D 100 =E7805.D

		Compound	20	5	100	Avg	%RSD
			ISTD				
1)	I	Pentafluorobenzene					
2)	T	Dichlorodifluorometha	0.340	0.320	0.372	0.344	7.63
3)	P	Chloromethane	0.805	0.767	0.834	0.802	4.15
4)	C	Vinyl Chloride	0.523	0.500	0.579	0.534	7.58
5)	T	Bromomethane	0.302	0.309	0.270	0.294	7.18
6)	T	Chloroethane	0.356	0.341	0.346	0.348	2.18
7)	T	Trichlorofluoromethan	0.599	0.498	0.570	0.556	9.37
8)	T	Acrolein	0.057	0.054	0.058	0.056	4.15
9)	MC	1,1-Dichloroethene	0.301	0.285	0.317	0.301	5.30
10)	T	Acetone	0.154	0.178	0.151	0.161	9.27
11)	T	Carbon Disulfide	1.062	1.023	1.233	1.106	10.09
12)	T	Vinyl Acetate	1.968	1.778	1.909	1.885	5.17
13)	T	Methylene Chloride	0.462	0.466	0.446	0.458	2.32
14)	T	Acrylonitrile	0.145	0.139	0.152	0.145	4.48
15)	T	t-Butyl Alcohol(TBA)	0.042	0.041	0.045	0.042	5.00
16)	T	trans-1,2-Dichloroeth	0.412	0.350	0.445	0.402	11.97
17)	T	Methyl-t-Butyl Ether(	1.395	1.315	1.459	1.390	5.21
18)	P	1,1-Dichloroethane	1.176	1.081	1.193	1.150	5.26
19)	T	Diisopropyl Ether(DIP	2.703	2.332	2.742	2.592	8.72
20)	T	cis-1,2-Dichloroethen	0.524	0.442	0.552	0.506	11.27
21)	T	2,2-Dichloropropane	0.665	0.561	0.755	0.660	14.69
22)	T	2-Butanone(MEK)	0.258	0.228	0.264	0.250	7.59
23)	T	Bromochloromethane	0.225	0.211	0.232	0.223	4.74
25)	C	Chloroform	1.013	0.909	1.044	0.989	7.14
26)	T	1,1,1-Trichloroethane	0.727	0.651	0.847	0.742	13.32
27)	T	Carbon Tetrachloride	0.557	0.502	0.662	0.574	14.20
28)	T	1,1-Dichloropropene	0.642	0.515	0.731	0.630	17.23
29)	T	1,2-Dichloroethane(ED	0.997	0.926	1.019	0.981	4.95
30)	S	1,2-Dichloroethane-d4	0.763	0.772	0.776	0.770	0.91
			ISTD				
31)	I	1,4-Difluorobenzene					
32)	M	Benzene	1.565	1.443	1.505	1.504	4.04
33)	M	Trichloroethene	0.358	0.314	0.383	0.352	10.00
34)	C	1,2-Dichloropropane	0.486	0.435	0.468	0.463	5.51
35)	T	Dibromomethane	0.210	0.197	0.206	0.205	3.39
36)	T	1,4-Dioxane	0.003	0.003	0.003	0.003	2.78
37)	T	Bromodichloromethane	0.533	0.472	0.555	0.520	8.27
38)	T	2-Chloroethylvinyl Et	0.211	0.154	0.253	0.206	24.05
39)	T	cis-1,3-Dichloroprope	0.649	0.518	0.706	0.625	15.44
40)	T	4-Methyl-2-pentanone(	0.336	0.332	0.394	0.354	9.79
41)	S	Toluene-d8	1.294	1.269	1.309	1.291	1.55
42)	MC	Toluene	0.961	0.856	0.973	0.930	6.89
43)	T	trans-1,3-Dichloropro	0.590	0.472	0.661	0.574	16.57
44)	T	1,1,2-Trichloroethane	0.257	0.233	0.256	0.249	5.40
45)	T	Tetrachloroethene	0.340	0.289	0.331	0.320	8.45
46)	T	1,3-Dichloropropane	0.602	0.524	0.599	0.575	7.67
47)	T	2-Hexanone	0.229	0.178	0.280	0.229	22.22
48)	T	Dibromochloromethane	0.290	0.245	0.328	0.288	14.35
49)	T	1,2-Dibromoethane(EDB	0.274	0.229	0.294	0.266	12.45

50)	I	Chlorobenzene-d5	----------ISTD----------					
51)	MP	Chlorobenzene	1.290	1.180	1.216		1.228	4.57
52)	T	1,1,1,2-Tetrachloroet	0.441	0.395	0.433		0.423	5.84
53)	C	Ethylbenzene	2.323	1.864	2.310		2.165	12.06
5[redacted]	T	m,p-Xylene	0.870	0.738	0.805		0.804	8.23
5[redacted]	T	o-Xylene	0.866	0.691	0.811		0.789	11.35
	T	Styrene	1.483	1.161	1.374		1.339	12.20
57)	P	Bromoform	0.189	0.161	0.220		0.190	15.55
58)	T	Isopropylbenzene	2.060	1.830	2.147		2.013	8.14
59)	S	Bromofluorobenzene	0.655	0.641	0.661		0.652	1.58
60)	P	1,1,2,2-Tetrachloroet	0.433	0.382	0.421		0.412	6.37
61)	T	Bromobenzene	0.537	0.483	0.505		0.508	5.31
62)	T	1,2,3-Trichloropropan	0.484	0.447	0.480		0.470	4.29
63)	T	n-Propylbenzene	2.818	2.212	2.853		2.628	13.72
64)	T	2-Chlorotoluene	1.822	1.543	1.806		1.724	9.10
65)	T	1,3,5-Trimethylbenzen	2.038	1.628	2.049		1.905	12.60
66)	T	4-Chlorotoluene	2.250	1.975	2.175		2.134	6.67
67)	T	tert-Butylbenzene	1.603	1.123	1.673		1.467	20.42
68)	T	1,2,4-Trimethylbenzen	2.172	1.797	2.166		2.045	10.49
69)	T	sec-Butylbenzene	2.297	1.674	2.455		2.142	19.26
70)	T	1,3-Dichlorobenzene	1.102	0.967	1.034		1.034	6.53
71)	T	4-Isopropyltoluene	2.057	1.507	2.078		1.880	17.22
72)	T	1,4-Dichlorobenzene	1.131	1.024	1.099		1.085	5.08
73)	T	n-Butylbenzene	1.952	1.349	2.145		1.815	22.86
74)	T	1,2-Dichlorobenzene	1.040	0.947	0.995		0.994	4.70
75)	T	1,2-Dibromo-3-chlorop	0.066	0.059	0.082		0.069	16.90
76)	T	1,2,4-Trichlorobenzen	0.562	0.406	0.649		0.539	22.77
77)	T	Hexachlorobutadiene	0.313	0.305	0.328		0.316	3.68
78)	T	Naphthalene	0.889	0.600	1.097		0.862	28.97
79)	T	1,2,3-Trichlorobenzen	0.472	0.402	0.528		0.468	13.47
80)	T	Ethane,1,1,2-trichlor	0.229	0.219	0.246		0.231	5.81
[redacted]	T	Methyl Acetate	0.340	0.317	0.320		0.326	3.91
[redacted]	T	Cyclohexane	0.396	0.489	0.470		0.452	10.85
83)	T	Methyl Cyclohexane	0.507	0.412	0.571		0.496	16.05

(#) = Out of Range

EA033001.M Fri Mar 30 11:45:05 2001 MSD_E2

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\04-05-01\E7997.D
Acq On : 5 Apr 2001 10:13 am
Sample : 20-PPB-STD,20-PPB-STD,A,5mL,100
Misc : NA,NA,NA
S Integration Params: LSCINT.P

Vial: 3
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\EA033001.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Fri Mar 30 11:44:53 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 35% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	68	0.00
2	T	Dichlorodifluoromethane	0.344	0.410	-19.2	83	0.00
3	P	Chloromethane	0.802	0.944	-17.7	80	0.00
4	C	Vinyl Chloride	0.534	0.646	-21.0	85	0.00
5	T	Bromomethane	0.294	0.296	-0.7	67	0.00
6	T	Chloroethane	0.348	0.347	0.3	67	0.00
7	T	Trichlorofluoromethane	0.556	0.700	-25.9	80	0.00
8	T	Acrolein	0.056	0.046	17.9	56	0.00
9	MC	1,1-Dichloroethene	0.301	0.348	-15.6	79	0.00
10	T	Acetone	0.161	0.181	-12.4	81	0.00
11	T	Carbon Disulfide	1.106	1.414	-27.8	91	0.00
12	T	Vinyl Acetate	1.885	2.027	-7.5	71	0.00
13	T	Methylene Chloride	0.458	0.540	-17.9	80	0.00
14	T	Acrylonitrile	0.145	0.157	-8.3	74	0.00
15	T	t-Butyl Alcohol(TBA)	0.042	0.048	-14.3	79	0.00
16	T	trans-1,2-Dichloroethene	0.402	0.467	-16.2	78	0.00
17	T	Methyl-t-Butyl Ether(MTBE)	1.390	1.614	-16.1	79	0.00
18	P	1,1-Dichloroethane	1.150	1.261	-9.7	73	0.00
19	T	Diisopropyl Ether(DIPE)	2.592	2.899	-11.8	73	0.00
20	T	cis-1,2-Dichloroethene	0.506	0.519	-2.6	68	0.00
21	T	2,2-Dichloropropane	0.660	0.797	-20.8	82	0.00
22	T	2-Butanone(MEK)	0.250	0.261	-4.4	69	0.00
23	T	Bromochloromethane	0.223	0.226	-1.3	69	0.00
25	C	Chloroform	0.989	1.151	-16.4	78	0.00
26	T	1,1,1-Trichloroethane	0.742	0.907	-22.2	85	0.00
27	T	Carbon Tetrachloride	0.574	0.718	-25.1	88	0.00
28	T	1,1-Dichloropropene	0.630	0.740	-17.5	79	0.00
29	T	1,2-Dichloroethane(EDC)	0.981	1.184	-20.7	81	0.00
30	S	1,2-Dichloroethane-d4	0.770	0.900	-16.9	81	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	69	0.00
32	M	Benzene	1.504	1.648	-9.6	72	0.00
33	M	Trichloroethene	0.352	0.394	-11.9	75	0.00
34	C	1,2-Dichloropropane	0.463	0.515	-11.2	73	0.00
35	T	Dibromomethane	0.205	0.226	-10.2	74	0.00
36	T	1,4-Dioxane	0.003	0.002	33.3	65	0.00
37	T	Bromodichloromethane	0.520	0.609	-17.1	78	0.00
38	T	2-Chloroethylvinyl Ether	0.206	0.196	4.9	64	0.00
39	T	cis-1,3-Dichloropropene	0.625	0.711	-13.8	75	0.00
40	T	4-Methyl-2-pentanone(MIBK)	0.354	0.347	2.0	71	0.00
41	S	Toluene-d8	1.291	1.336	-3.5	71	0.00
42	MC	Toluene	0.930	1.007	-8.3	72	0.00
43	T	trans-1,3-Dichloropropene	0.574	0.656	-14.3	76	0.00
44	T	1,1,2-Trichloroethane	0.249	0.258	-3.6	69	0.00
45	T	Tetrachloroethene	0.320	0.354	-10.6	71	0.00

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46	T	1,3-Dichloropropane	0.575	0.625	-8.7	71	0.00
47	T	2-Hexanone	0.229	0.235	-2.6	70	0.00
48	T	Dibromochloromethane	0.288	0.314	-9.0	74	0.00
49	T	1,2-Dibromoethane(EDB)	0.266	0.276	-3.8	69	0.00
[redacted]		Chlorobenzene-d5	1.000	1.000	0.0	69	0.00
[redacted]	MP	Chlorobenzene	1.228	1.293	-5.3	69	0.00
	T	1,1,1,2-Tetrachloroethane	0.423	0.470	-11.1	74	0.00
53	C	Ethylbenzene	2.165	2.492	-15.1	74	0.00
54	T	m,p-Xylene	0.804	0.902	-12.2	72	0.00
55	T	o-Xylene	0.789	0.878	-11.3	70	0.00
56	T	Styrene	1.339	1.484	-10.8	69	0.00
57	P	Bromoform	0.190	0.201	-5.8	74	0.00
58	T	Isopropylbenzene	2.013	2.207	-9.6	74	0.00
59	S	Bromofluorobenzene	0.652	0.710	-8.9	75	0.00
60	P	1,1,2,2-Tetrachloroethane	0.412	0.440	-6.8	71	0.00
61	T	Bromobenzene	0.508	0.533	-4.9	69	0.00
62	T	1,2,3-Trichloropropane	0.470	0.518	-10.2	74	0.00
63	T	n-Propylbenzene	2.628	3.026	-15.1	74	0.00
64	T	2-Chlorotoluene	1.724	1.976	-14.6	75	0.00
65	T	1,3,5-Trimethylbenzene	1.905	2.230	-17.1	76	0.00
66	T	4-Chlorotoluene	2.134	2.457	-15.1	76	0.00
67	T	tert-Butylbenzene	1.467	1.749	-19.2	76	0.00
68	T	1,2,4-Trimethylbenzene	2.045	2.345	-14.7	75	0.00
69	T	sec-Butylbenzene	2.142	2.472	-15.4	75	0.00
70	T	1,3-Dichlorobenzene	1.034	1.110	-7.4	70	0.00
71	T	4-Isopropyltoluene	1.880	2.211	-17.6	74	0.00
72	T	1,4-Dichlorobenzene	1.085	1.144	-5.4	70	0.00
73	T	n-Butylbenzene	1.815	2.137	-17.7	76	0.00
74	T	1,2-Dichlorobenzene	0.994	1.031	-3.7	69	0.00
75	T	1,2-Dibromo-3-chloropropane	0.069	0.070	-1.4	73	0.00
[redacted]	T	1,2,4-Trichlorobenzene	0.539	0.490	9.1	60	0.00
[redacted]	T	Hexachlorobutadiene	0.316	0.322	-1.9	71	0.00
[redacted]	T	Naphthalene	0.862	0.722	16.2	56	0.00
79	T	1,2,3-Trichlorobenzene	0.468	0.390	16.7	57	0.00
80	T	Ethane,1,1,2-trichloro-1,2,	0.231	0.302	-30.7	91	0.00
81	T	Methyl Acetate	0.326	0.366	-12.3	74	0.00
82	T	Cyclohexane	0.452	0.453	-0.2	79	0.00
83	T	Methyl Cyclohexane	0.496	0.592	-19.4	81	0.00

(#) = Out of Range
E7803.D EA033001.M Thu Apr 05 09:35:46 2001 MSD_E2

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/05/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
METHOD-BLK	AQUEOUS	E7999.D	125	98	97
1984-010	AQUEOUS	E8000.D	129	97	96
2049-001DIL	AQUEOUS	E8001.D	126	98	98
2012-001MS	AQUEOUS	E8002.D	119	105	112
2012-001MSD	AQUEOUS	E8003.D	119	104	111
2012-001	AQUEOUS	E8005.D	121	95	96
2012-002	AQUEOUS	E8006.D	125	97	98
2012-003	AQUEOUS	E8007.D	123	96	95
2012-004	AQUEOUS	E8008.D	126	97	94
2012-005	AQUEOUS	E8009.D	128	97	95
2012-006	AQUEOUS	E8010.D	130	97	96
2013-008	AQUEOUS	E8011.D	131	101	110
2013-009	AQUEOUS	E8012.D	111	100	103
2013-010	AQUEOUS	E8013.D	111	98	103
2060-001	AQUEOUS	E8014.D	116	98	101
2060-002	AQUEOUS	E8015.D	120	96	103
2060-003	AQUEOUS	E8016.D	125	97	99
2060-004	AQUEOUS	E8017.D	129	96	96
2060-005	AQUEOUS	E8018.D	130	97	97
2074-001	AQUEOUS	E8019.D	126	100	108
2093-001	AQUEOUS	E8021.D	134	97	98
LFB	AQUEOUS	E8023.D	126	106	113
2013-009DIL	AQUEOUS	E8026.D	127	102	107
2060-002DIL	AQUEOUS	E8027.D	128	98	102

	Concentration	Aqueous
SMC1 = 1,2-Dichloroethane-d4	30 ppb	83-142
SMC2 = Toluene-d8	30 ppb	82-109
SMC3 = Bromofluorobenzene	30 ppb	80-115

Column to be used to flag recovery values

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/05/2001

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
2060-003DIL	AQUEOUS	E8028.D	134	99	99

	Concentration	Aqueous
SMC1 = 1,2-Dichloroethane-d4	30 ppb	83-142
SMC2 = Toluene-d8	30 ppb	82-109
SMC3 = Bromofluorobenzene	30 ppb	80-115

Column to be used to flag recovery values

AQUEOUS VOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2012-001

Batch No.: EA0112

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	20.0	0.0	24.2	121	49 - 168
Benzene	20.0	0.0	21.6	108	58 - 145
Trichloroethene	20.0	0.0	23.3	117	50 - 158
Toluene	20.0	0.0	21.1	106	58 - 147
Chlorobenzene	20.0	0.0	21.1	106	58 - 145

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD #	% REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	0.0	23.6		118	3	20	49 - 168
Benzene	0.0	21.8		109	1	14	58 - 145
Trichloroethene	0.0	23.8		119	2	18	50 - 158
Toluene	0.0	21.1		106	0	15	58 - 147
Chlorobenzene	0.0	21.0		105	1	14	58 - 145

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

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 2012-001MSD
Client ID: 2012-001MSD
Date Received: NA
Date Analyzed: 04/05/2001
Data file: E8003.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	Sample	Conc. MSD	%Rec. MSD
Chloromethane	20.0	0.0	22.3	112	0.0	23.6	118
Vinyl Chloride	20.0	0.0	23.2	116	0.0	25.6	128
Bromomethane	20.0	0.0	22.7	113	0.0	22.7	114
Chloroethane	20.0	0.0	21.1	105	0.0	23.6	118
Trichlorofluoromethane	20.0	0.0	25.0	125	0.0	25.8	129
Acrolein	20.0	0.0	0.0	0	0.0	0.0	0
1,1-Dichloroethene	20.0	0.0	24.2	121	0.0	23.6	118
Methylene Chloride	20.0	0.0	22.2	111	0.0	21.7	109
Acrylonitrile	20.0	0.0	0.0	0	0.0	0.0	0
trans-1,2-Dichloroethene	20.0	0.0	21.6	108	0.0	22.1	111
1,1-Dichloroethane	20.0	0.0	20.9	105	0.0	21.3	106
Chloroform	20.0	0.0	22.7	113	0.0	22.9	115
1,1,1-Trichloroethane	20.0	0.0	23.1	116	0.0	24.2	121
Carbon Tetrachloride	20.0	0.0	24.6	123	0.0	24.8	124
1,2-Dichloroethane(EDC)	20.0	0.0	23.4	117	0.0	23.7	118
Benzene	20.0	0.0	21.6	108	0.0	21.8	109
Trichloroethene	20.0	0.0	23.3	117	0.0	23.8	119
1,2-Dichloropropane	20.0	0.0	22.4	112	0.0	22.2	111
Bromodichloromethane	20.0	0.0	22.4	112	0.0	22.9	115
2-Chloroethylvinyl Ether	20.0	0.0	16.1	80	0.0	16.1	81
cis-1,3-Dichloropropene	20.0	0.0	22.5	112	0.0	22.5	112
Toluene	20.0	0.0	21.1	105	0.0	21.1	105
trans-1,3-Dichloropropene	20.0	0.0	23.2	116	0.0	23.8	119
1,1,2-Trichloroethane	20.0	0.0	20.4	102	0.0	20.8	104
Tetrachloroethene	20.0	0.0	22.8	114	0.0	22.5	112
Dibromochloromethane	20.0	0.0	21.3	106	0.0	21.8	109
Chlorobenzene	20.0	0.0	21.1	105	0.0	21.0	105
Ethylbenzene	20.0	0.0	23.7	119	0.0	23.8	119
total-Xylenes	60.0	0.0	45.6	76	0.0	45.9	76
Bromoform	20.0	0.0	20.1	100	0.0	20.8	104
1,1,2,2-Tetrachloroethane	20.0	0.0	20.4	102	0.0	20.2	101
1,3-Dichlorobenzene	20.0	0.0	21.6	108	0.0	21.4	107
1,4-Dichlorobenzene	20.0	0.0	21.1	105	0.0	21.1	105
1,2-Dichlorobenzene	20.0	0.0	20.3	101	0.0	20.0	100

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): E7803.D

Date Analyzed: 03/30/2001

Instrument ID: MSD_E

Time Analyzed: 10:26

	30UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	24 HOUR STD	345635		6.58		487245		7.41		397683		10.76	
	UPPER LIMIT	691270		7.08		974490		7.91		795366		11.26	
	LOWER LIMIT	172817.5		6.08		243622.5		6.91		198841.5		10.26	
	LAB SAMPLE ID												
01	5-PPB-STD	349671		6.58		490259		7.42		398647		10.76	
02	100-PPB-STD	364298		6.58		540745		7.41		450446		10.76	
03	METHOD-BLK	340951		6.58		486525		7.41		385641		10.76	
04	1881-012DIL	326179		6.59		466262		7.41		369047		10.76	
05	1881-013DIL	325739		6.59		462434		7.41		361291		10.77	
06	1881-007	319217		6.58		468907		7.42		373276		10.76	
07	1917-001MS	345427		6.59		490821		7.41		399347		10.76	
08	1917-001MSD	344773		6.58		483906		7.41		401730		10.76	
09	1917-001	323543		6.59		463400		7.41		366059		10.76	
10	1914-005	307886		6.59		456246		7.42		348503		10.76	
11	1914-006	300449		6.59		451469		7.41		344288		10.76	
12	1914-007	298002		6.59		450580		7.41		343221		10.77	
13	1914-008	298022		6.59		451121		7.41		341422		10.77	
14	1914-009	296026		6.59		450331		7.41		342067		10.76	
15	1914-010	305294		6.59		442608		7.42		372901		10.76	
16	1926-001	305856		6.58		441417		7.42		350755		10.76	
17	1926-003	301869		6.58		438652		7.41		350229		10.76	
18	1926-004	297935		6.58		429878		7.41		335609		10.76	
19	1926-005	291238		6.58		421286		7.41		334308		10.77	
20	1905-001	283322		6.58		417608		7.42		328918		10.76	
21	1906-001	283252		6.59		413635		7.41		334406		10.76	

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): E7997.D

Date Analyzed: 04/05/2001

Instrument ID: MSD_E

Time Analyzed: 10:13

	30UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	24 HOUR STD	236720	6.58	334058	7.41	275517	10.76
	UPPER LIMIT	473440	7.08	668116	7.91	551034	11.26
	LOWER LIMIT	118360	6.08	167029	6.91	137758.5	10.26
	LAB SAMPLE ID						
01	METHOD-BLK	227831	6.58	327546	7.42	258453	10.76
02	1984-010	219343	6.59	318557	7.41	251197	10.76
03	2049-001DIL	215715	6.59	315265	7.41	249299	10.77
04	2012-001MS	234169	6.59	327020	7.41	270647	10.76
05	2012-001MSD	241566	6.59	338584	7.41	276043	10.77
06	2012-001	216110	6.58	312733	7.42	244620	10.76
07	2012-002	214766	6.58	310575	7.42	246466	10.76
08	2012-003	216143	6.59	314219	7.42	245160	10.76
09	2012-004	231570	6.59	337197	7.42	256636	10.76
10	2012-005	211953	6.59	307872	7.42	244770	10.76
11	2012-006	211375	6.59	307517	7.42	241661	10.76
12	2013-008	212340	6.59	313705	7.42	258509	10.76
13	2013-009	263374	6.59	366036	7.41	309423	10.76
14	2013-010	274578	6.58	389678	7.42	305654	10.76
15	2060-001	252847	6.59	358850	7.41	279227	10.77
16	2060-002	237758	6.59	336792	7.42	258496	10.76
17	2060-003	229069	6.59	323467	7.42	250991	10.77
18	2060-004	233883	6.59	336498	7.42	260067	10.76
19	2060-005	212590	6.59	304898	7.41	239953	10.77
20	2074-001	213119	6.59	298996	7.41	235378	10.77
21	2093-001	202650	6.58	301866	7.42	236309	10.76
22	LFB	214435	6.58	303138	7.42	249494	10.76

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): E7997.D

Date Analyzed: 04/05/2001

Instrument ID: MSD_E

ime Analyzed: 10:13

	30UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	24 HOUR STD	236720	6.58	334058	7.41	275517	10.76
	UPPER LIMIT	473440	7.08	668116	7.91	551034	11.26
	LOWER LIMIT	118360	6.08	167029	6.91	137758.5	10.26
	LAB SAMPLE ID						
23	2013-009DIL	219790	6.58	311558	7.41	253764	10.76
24	2060-002DIL	219618	6.58	312365	7.41	241391	10.76
25	2060-003DIL	208119	6.59	295716	7.42	238045	10.76
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							

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.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\04-05-01\E8021.D
Acq On : 5 Apr 2001 8:44 pm
[redacted]ple : MW-4,2093-001,A,0.1mL,100
[redacted]c : ENVTACT/ORBIS,04/04/01,04/04/01
'S Integration Params: LSCINT.P
Quant Time: Apr 6 9:10 2001

Vial: 27
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Quant Results File: EA033001.RES

Quant Method : C:\HPCHEM\1\METHODS\EA033001.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Fri Mar 30 11:44:53 2001
Response via : Initial Calibration
DataAcq Meth : EA032601

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.58	168	202650	30.00	UG	0.00
31) 1,4-Difluorobenzene	7.42	114	301866	30.00	UG	0.00
50) Chlorobenzene-d5	10.76	117	236309	30.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.92	65	209727	40.30	UG	0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 134.33%			
41) Toluene-d8	9.08	98	376623	29.00	UG	0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 96.67%			
59) Bromofluorobenzene	12.17	95	150569	29.31	UG	0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 97.70%			
Target Compounds						Qvalue
32) Benzene	7.00	78	94544	6.25	UG	100
42) Toluene	9.16	92	523499	55.93	UG	100

(#) = qualifier out of range (m) = manual integration
E8021.D EA033001.M Fri Apr 06 08:30:47 2001 MSD_E2

3706

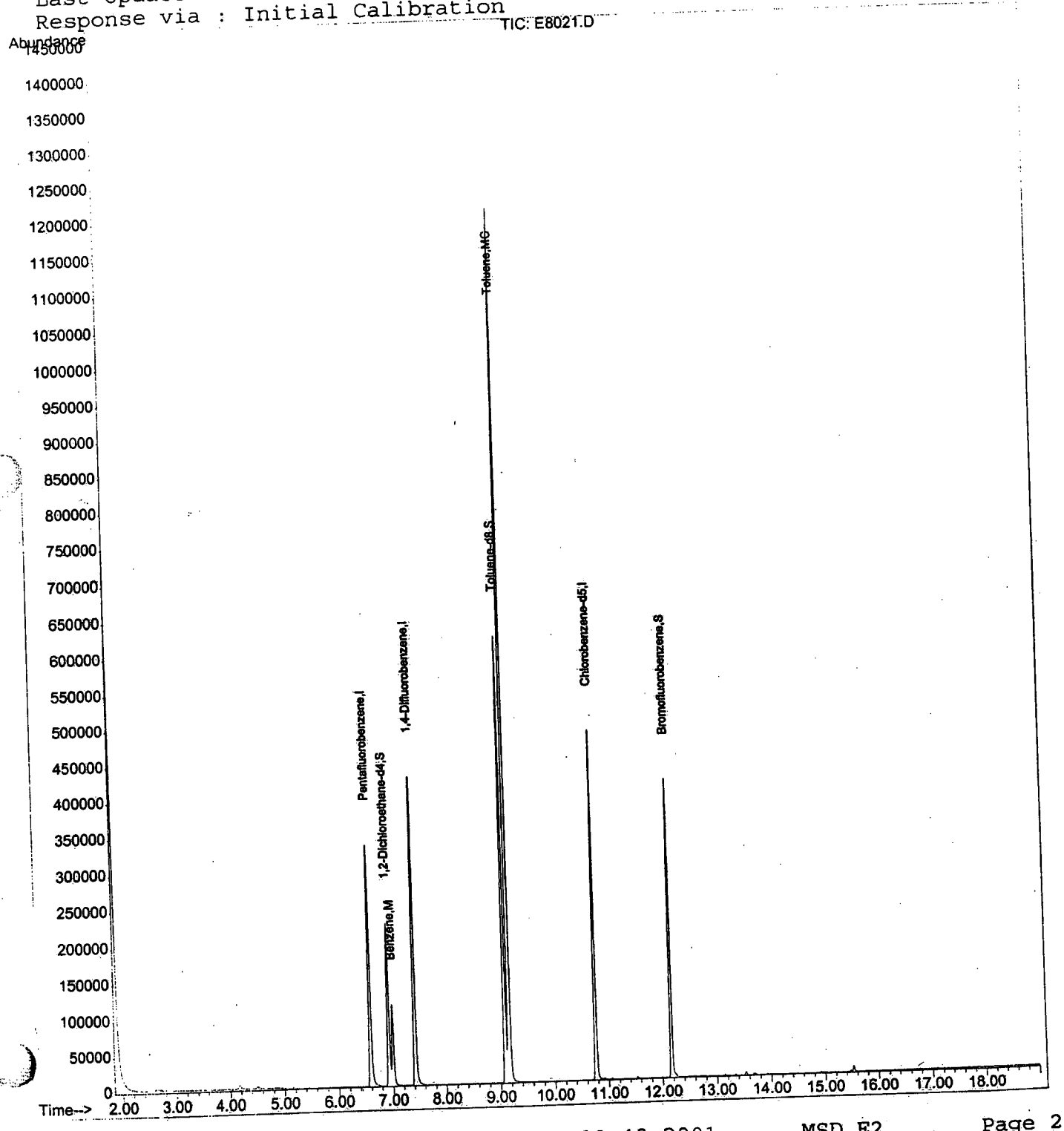
Quantitation Report

Data File : C:\HPCHEM\1\DATA\04-05-01\E8021.D
Acq On : 5 Apr 2001 8:44 pm
Sample : MW-4,2093-001,A,0.1mL,100
Misc : ENVTACT/ORBIS,04/04/01,04/04/01
MS Integration Params: LSCINT.P
Quant Time: Apr 6 9:10 2001

Vial: 27
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Quant Results File: EA033001.RES

Method : C:\HPCHEM\1\METHODS\EA033001.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Fri Mar 30 11:44:53 2001
Response via : Initial Calibration



3707

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\04-05-01\E8021.D
Acq On : 5 Apr 2001 8:44 pm
Sample : MW-4,2093-001,A,0.1mL,100
Misc : ENVTACT/ORBIS,04/04/01,04/04/01
Integration Params: LSCINT.P

Vial: 27
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\EA033001.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
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

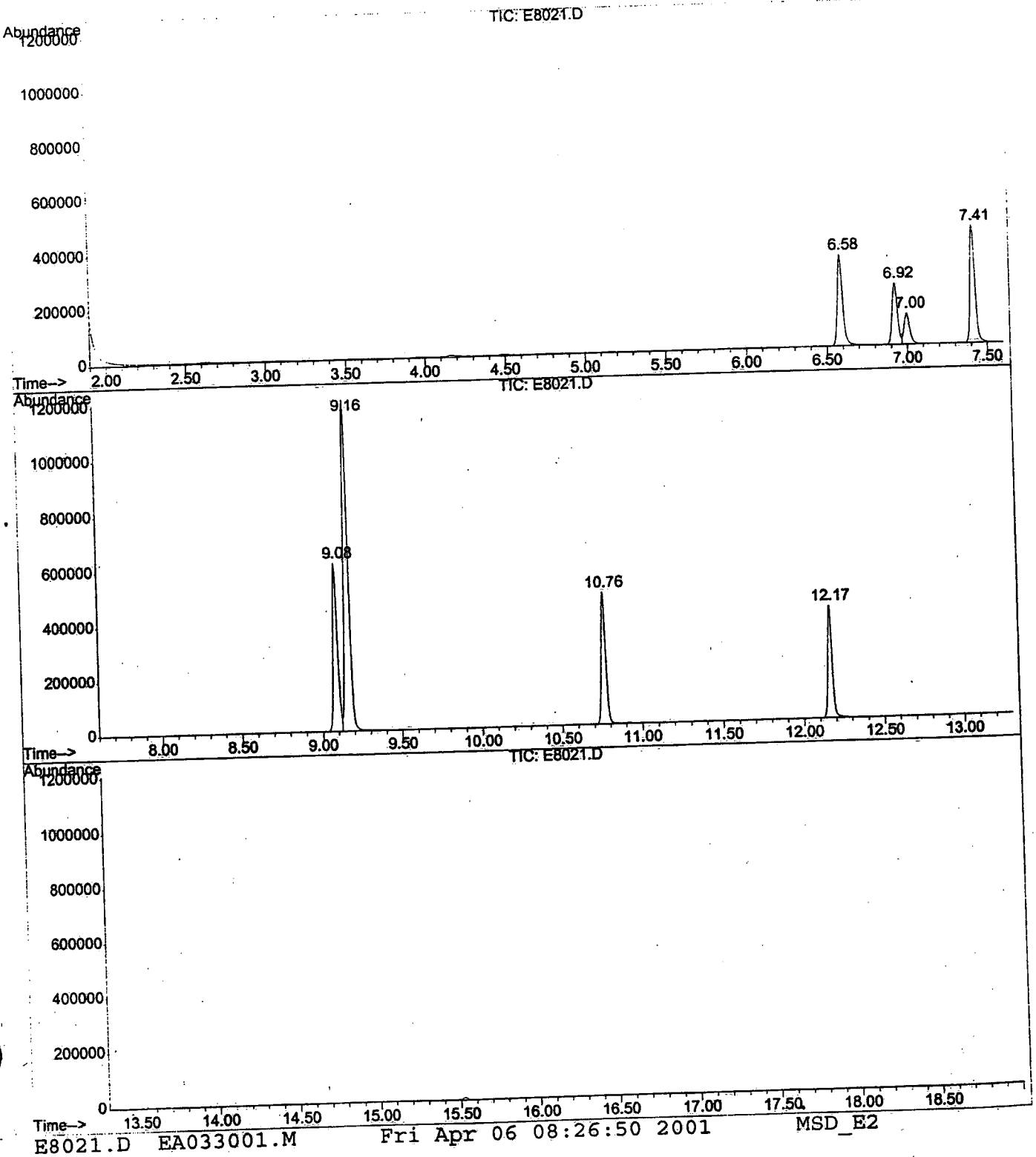
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.585	895	907	934	rBV	334666	761647	30.40%	9.697%
2	6.925	961	972	980	rBV	225566	512792	20.47%	6.529%
3	6.998	980	986	1011	rVB	114163	267466	10.68%	3.405%
4	7.411	1054	1065	1090	rBV	427334	926821	37.00%	11.800%
5	9.085	1372	1385	1392	rBV	618578	1187082	47.39%	15.114%
6	9.163	1392	1400	1427	rVB	1207725	2505157	100.00%	31.896%
7	10.763	1694	1706	1730	rBV	485039	932197	37.21%	11.869%
8	12.165	1962	1974	1998	rBV	413888	760937	30.37%	9.688%

Sum of corrected areas: 7854099

E8021.D EA033001.M Fri Apr 06 08:26:48 2001 MSD_E2

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\04-05-01\E8021.D
Operator : AMY
Acquired : 5 Apr 2001 8:44 pm using AcqMethod EA032601
Instrument : MSD_E2
Sample Name: MW-4,2093-001,A,0.1mL,100
Misc Info : ENVTACT/ORBIS,04/04/01,04/04/01
Vial Number: 27
Quant File :EA033001.RES (RTE Integrator)



E8021.D EA033001.M Fri Apr 06 08:26:50 2001 MSD_E2

3209

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\04-05-01\E7999.D
Acq On : 5 Apr 2001 11:40 am
Sample : METHOD-BLK,METHOD-BLK,A,5mL,100
Misc : NA,NA,NA
S Integration Params: LSCINT.P
Quant Time: Apr 5 12:06 2001

Vial: 5
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00

Quant Results File: EA033001.RES

Quant Method : C:\HPCHEM\1\METHODS\EA033001.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Fri Mar 30 11:44:53 2001
Response via : Initial Calibration
DataAcq Meth : EA032601

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.58	168	227831	30.00	UG	0.00
31) 1,4-Difluorobenzene	7.42	114	327546	30.00	UG	0.00
50) Chlorobenzene-d5	10.76	117	258453	30.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.92	65	218973	37.42	UG	0.00
Spiked Amount 30.000	Range 90 - 142		Recovery = 124.73%			
41) Toluene-d8	9.08	98	414033	29.38	UG	0.00
Spiked Amount 30.000	Range 90 - 100		Recovery = 97.93%			
59) Bromofluorobenzene	12.17	95	163256	29.05	UG	0.00
Spiked Amount 30.000	Range 75 - 106		Recovery = 96.83%			

Target Compounds Qvalue

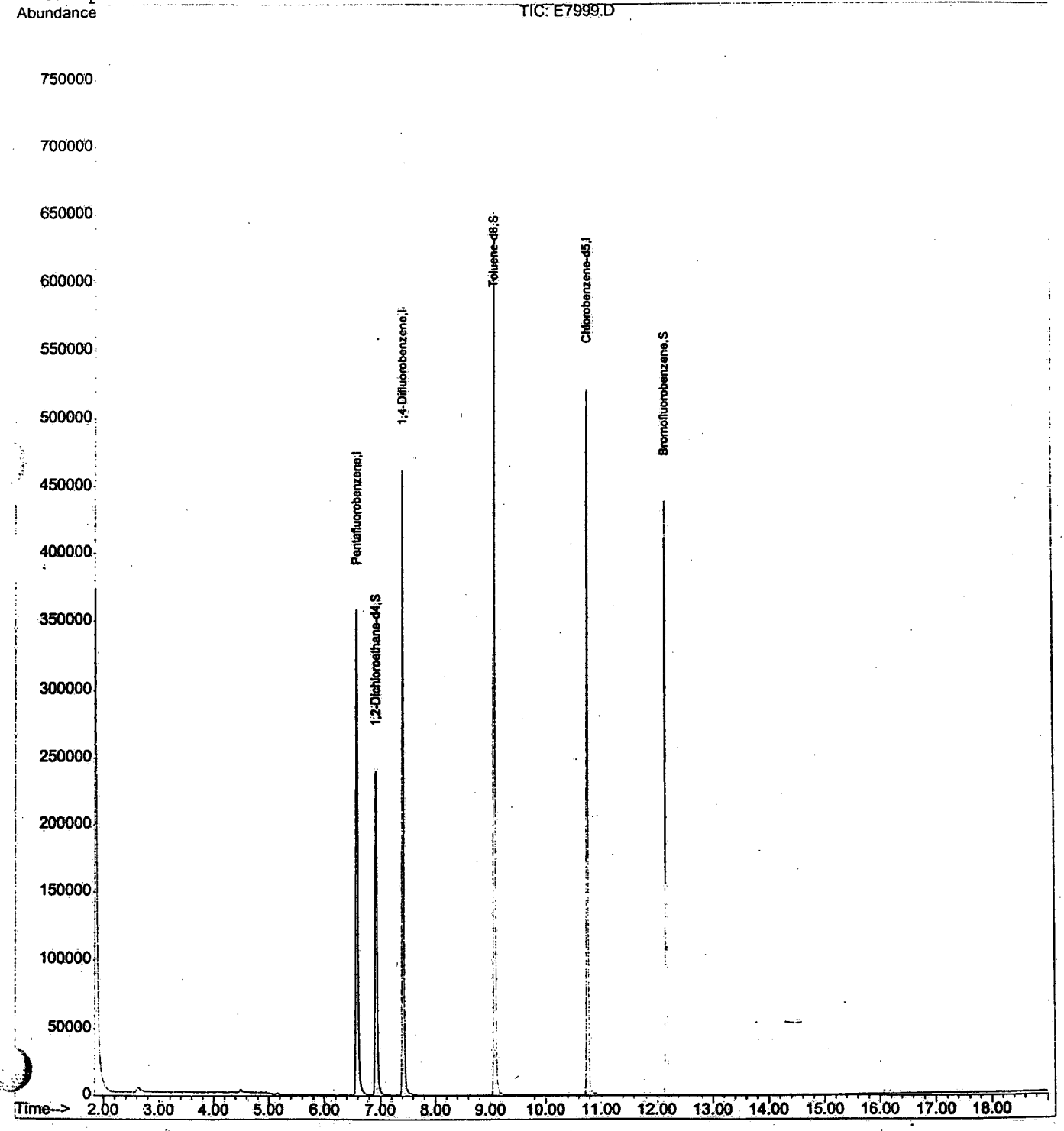
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\04-05-01\E7999.D
Acq On : 5 Apr 2001 11:40 am
Sample : METHOD-BLK,METHOD-BLK,A,5mL,100
Misc : NA,NA,NA
MS Integration Params: LSCINT.P
Quant Time: Apr 5 12:06 2001

Vial: 5
Operator: AMY
Inst : MSD_E2
Multiplr: 1.00
Quant Results File: EA033001.RES

Method : C:\HPCHEM\1\METHODS\EA033001.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
Last Update : Fri Mar 30 11:44:53 2001
Response via : Initial Calibration



3711

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\04-05-01\E7999.D Vial: 5
Acq On : 5 Apr 2001 11:40 am Operator: AMY
Sample : METHOD-BLK,METHOD-BLK,A,5mL,100 Inst : MSD_E2
Misc : NA,NA,NA Multiplr: 1.00
S Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\EA033001.M (RTE Integrator)
Title : VOLATILE ORGANICS BY EPA METHOD 624
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	6.585	895	907	939	rBV	358393	836608	63.58%	15.162%
2	6.924	961	972	1004	rBV	239945	553205	42.04%	10.026%
3	7.411	1054	1065	1090	rBV	461638	993771	75.52%	18.011%
4	9.085	1372	1385	1415	rBV2	662190	1315861	100.00%	23.848%
5	10.763	1695	1706	1727	rBV	521392	1003076	76.23%	18.179%
6	12.165	1962	1974	2004	rBV	438758	815204	61.95%	14.774%

Sum of corrected areas: 5517725

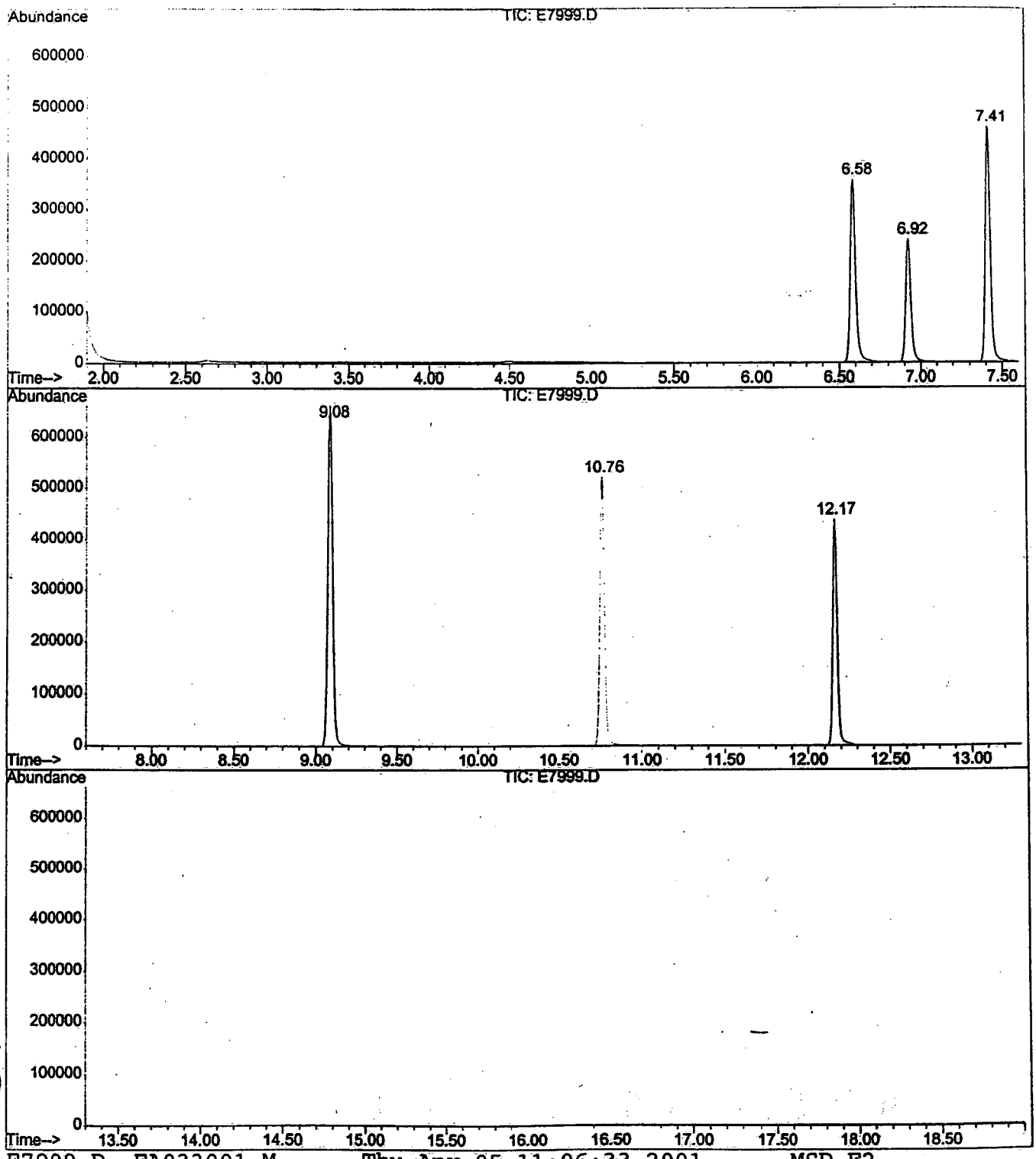
E7999.D EA033001.M Thu Apr 05 11:06:32 2001 MSD_E2

3712

000013

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\04-05-01\E7999.D
Operator : AMY
Acquired : 5 Apr 2001 11:40 am using AcqMethod EA032601
Instrument : MSD_E2
Sample Name: METHOD-BLK,METHOD-BLK,A,5mL,100
Misc Info : NA,NA,NA
Vial Number: 5
Quant File :EA033001.RES (RTE Integrator)



E7999.D EA033001.M Thu Apr 05 11:06:33 2001 MSD_E2

000011

3713

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C9153.D DFTPP Injection Date : 04/05/2001

Inst ID: MSDC DFTPP Injection Time: 12:18

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	47.7			
68	Less than 2.0% of mass 69	0.0	(	0.0	)1
69	Mass 69 relative abundance	37.8			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	40.3			
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	8.5			
275	10.0 - 30.0% of mass 198	25.6			
365	Greater than 1.0% of mass 198	3.6			
441	Present, but less than mass 443	13.60	(	79.7	)3
442	40.0 - 100.0% of mass 198	80.9			
443	17.0 - 23.0% of mass 442	17.1	(	21.1	)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
.	20-PPB-INJ-FOR-	C9154.D	04/05/2001	14:16
.	5-PPB-INJ-FOR-0	C9155.D	04/05/2001	14:41
.	80-PPB-INJ-FOR-	C9156.D	04/05/2001	15:06
.	10-PPB-INJ-FOR-	C9157.D	04/05/2001	15:31
.	50-PPB-INJ-FOR-	C9158.D	04/05/2001	15:56
.	Method-Blank	C9159.D	04/05/2001	16:43
.	DI-MS	C9160.D	04/05/2001	17:08
.	DI-MSD	C9161.D	04/05/2001	17:34
PS4-4-3A	2049-001	C9162.D	04/05/2001	17:59
FB1-4-3A	2049-003	C9163.D	04/05/2001	18:24
A1	2022-001	C9164.D	04/05/2001	18:50
INF-30	2025-001	C9165.D	04/05/2001	19:15
EFF-30	2025-002	C9166.D	04/05/2001	19:41
MW-1	2031-001	C9167.D	04/05/2001	20:06
MW-2	2031-002	C9168.D	04/05/2001	20:31
MW-3	2031-003	C9169.D	04/05/2001	20:57
MW-4	2031-004	C9170.D	04/05/2001	21:22
MW-5	2031-005	C9171.D	04/05/2001	21:47
MW-1B	2033-001	C9172.D	04/05/2001	22:12
FIELD-BLANK	2033-002	C9173.D	04/05/2001	22:37
A2	2023-001	C9174.D	04/05/2001	23:03
.	Method-Blank	C9175.D	04/05/2001	23:28
.	DI-MS	C9176.D	04/05/2001	23:53

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C9153.D DFTPP Injection Date : 04/05/2001

Inst ID: MSDC DFTPP Injection Time: 12:18

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	47.7			
68	Less than 2.0% of mass 69	0.0	(	0.0	)1
69	Mass 69 relative abundance	37.8			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	40.3			
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	8.5			
275	10.0 - 30.0% of mass 198	25.6			
365	Greater than 1.0% of mass 198	3.6			
441	Present, but less than mass 443	13.6	(	79.7	)3
442	40.0 - 100.0% of mass 198	80.9			
443	17.0 - 23.0% of mass 442	17.1	(	21.1	)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
O.S.#1	2051-001	C9178.D	04/06/2001	00:43
FIELD-BLANK	2051-002	C9179.D	04/06/2001	01:08
KGW-2	2052-001	C9180.D	04/06/2001	01:33
FIELD-BLANK	2066-002	C9181.D	04/06/2001	01:58
K-01	2066-004	C9182.D	04/06/2001	02:23
K-02	2066-005	C9183.D	04/06/2001	02:48
FIELD-BLANK	2067-002	C9184.D	04/06/2001	03:13
PW-1	2067-003	C9185.D	04/06/2001	03:38
DW-1	2108-001	C9186.D	04/06/2001	04:03
WW-1	2108-002	C9187.D	04/06/2001	04:28
MHR-1	2108-003	C9188.D	04/06/2001	04:53
RW-1	2066-003	C9190.D	04/06/2001	06:31
.	DI-MSD	C9191.D	04/06/2001	09:18
DETERGENT	2087-001	C9193.D	04/06/2001	10:21

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C9194.D DFTPP Injection Date : 04/06/2001

Inst ID: MSDC DFTPP Injection Time: 11:46

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	37.1			
68	Less than 2.0% of mass 69	0.0	(	0.0	)1
69	Mass 69 relative abundance	41.3			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	46.6			
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	7.2			
275	10.0 - 30.0% of mass 198	27.8			
365	Greater than 1.0% of mass 198	6.9			
441	Present, but less than mass 443	5.78	(	32.8	)3
442	40.0 - 100.0% of mass 198	86.4			
443	17.0 - 23.0% of mass 442	17.6	(	20.4	)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
.	20-PPB-INJ-FOR-	C9195.D	04/06/2001	12:28
.	Method-Blank	C9196.D	04/06/2001	13:18
.	DI-MS	C9197.D	04/06/2001	13:44
.	DI-MSD	C9198.D	04/06/2001	14:09
MW-8	2094-007	C9200.D	04/06/2001	15:00
MW-3	2094-008	C9201.D	04/06/2001	15:26
MW-5	2094-009	C9203.D	04/06/2001	16:16
MW-8	2094-007DIL	C9204.D	04/06/2001	16:41
MW-5	2094-009DIL	C9205.D	04/06/2001	17:06
FB	2094-001	C9206.D	04/06/2001	17:31
MW-1	2094-003	C9207.D	04/06/2001	17:57
MW-2	2094-004	C9208.D	04/06/2001	18:22
MW-7	2094-005	C9209.D	04/06/2001	18:47
MW-6	2094-006	C9210.D	04/06/2001	19:12
MW-4	2093-001	C9211.D	04/06/2001	19:37
04	2076-004	C9212.D	04/06/2001	20:02
04	2076-004	C9213.D	04/06/2001	20:27
.	DI-MS	C9215.D	04/06/2001	21:16
.	DI-MSD	C9216.D	04/06/2001	21:41
MW-34	2115-001	C9217.D	04/06/2001	22:06
MW-35	2115-002	C9218.D	04/06/2001	22:31
MW-19	2115-003	C9219.D	04/06/2001	22:56
MW-27	2115-004	C9220.D	04/06/2001	23:21

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: C9194.D DFTPP Injection Date : 04/06/2001

Inst ID: MSDC DFTPP Injection Time: 11:46

m/z	Ion Abudance Criteria	%Relative Abundance			
51	30.0 - 60.0% of mass 198	37.1			
68	Less than 2.0% of mass 69	0.0	(	0.0	)1
69	Mass 69 relative abundance	41.3			
70	Less than 2.0% of mass 69	0.0	(	0.0	)1
127	40.0 - 60.0% of mass 198	46.6			
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	7.2			
275	10.0 - 30.0% of mass 198	27.8			
365	Greater than 1.0% of mass 198	6.9			
441	Present, but less than mass 443	5.8	(	32.8	)3
442	40.0 - 100.0% of mass 198	86.4			
443	17.0 - 23.0% of mass 442	17.6	(	20.4	)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
MW-20	2115-005	C9221.D	04/06/2001	23:46
MW-16	2115-006	C9222.D	04/07/2001	00:11
MW-30	2115-007	C9223.D	04/07/2001	00:36
MW-15D	2115-008	C9224.D	04/07/2001	01:01
SW-2	2114-001	C9226.D	04/07/2001	01:51
SUMP-3	2114-002	C9227.D	04/07/2001	02:16
PHENOL-POOL	2114-003	C9228.D	04/07/2001	02:41
SUMP-1	2114-004	C9229.D	04/07/2001	03:06

SEMIVOLATILE METHOD BLANK SUMMARY

Lab File ID: C9196.D

Instrument ID: MSDA

Date Extracted: 04/06/01

Matrix: AQUEOUS

Date Analyzed: 04/06/2001

Time Analyzed: 13:18

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
.	DI-MS	04/06/2001	13:44
.	DI-MSD	04/06/2001	14:09
MW-8	2094-007	04/06/2001	15:00
MW-3	2094-008	04/06/2001	15:26
MW-5	2094-009	04/06/2001	16:16
MW-8	2094-007DIL	04/06/2001	16:41
MW-5	2094-009DIL	04/06/2001	17:06
FB	2094-001	04/06/2001	17:31
MW-1	2094-003	04/06/2001	17:57
MW-2	2094-004	04/06/2001	18:22
MW-7	2094-005	04/06/2001	18:47
MW-6	2094-006	04/06/2001	19:12
MW-4	2093-001	04/06/2001	19:37
04	2076-004	04/06/2001	20:02
04	2076-004	04/06/2001	20:27
SW-2	2114-001	04/07/2001	01:51
SUMP-3	2114-002	04/07/2001	02:16
PHENOL-POOL	2114-003	04/07/2001	02:41
SUMP-1	2114-004	04/07/2001	03:06

FORM IV SV

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: C9196.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
N-Nitrosodimethylamine	ND		0.35
Phenol	ND		0.33
Aniline	ND		0.37
bis(2-Chloroethyl)ether	ND		0.36
2-Chlorophenol	ND		0.36
1,3-Dichlorobenzene	ND		0.37
1,4-Dichlorobenzene	ND		0.29
Benzyl alcohol	ND		0.46
1,2-Dichlorobenzene	ND		0.31
2-Methylphenol	ND		0.39
bis(2-chloroisopropyl)ether	ND		0.45
4-Methylphenol	ND		0.33
N-Nitroso-di-n-propylamine	ND		0.5
Hexachloroethane	ND		0.48
Nitrobenzene	ND		0.33
Isophorone	ND		0.1
2-Nitrophenol	ND		0.36
2,4-Dimethylphenol	ND		0.32
bis(2-Chloroethoxy)methane	ND		0.36
Benzoic acid	ND		0.49
2,4-Dichlorophenol	ND		0.48
1,2,4-Trichlorobenzene	ND		0.22
Naphthalene	ND		0.14
4-Chloroaniline	ND		0.9
Hexachlorobutadiene	ND		0.42
4-Chloro-3-methylphenol	ND		0.25
2-Methylnaphthalene	ND		0.18
Hexachlorocyclopentadiene	ND		0.47
2,4,6-Trichlorophenol	ND		0.64
2,4,5-Trichlorophenol	ND		0.51
2-Chloronaphthalene	ND		0.23
2-Nitroaniline	ND		0.33
Dimethylphthalate	ND		0.17
2,6-Dinitrotoluene	ND		0.36
Acenaphthylene	ND		0.15

000059

3719

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: C9196.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
3-Nitroaniline	ND		0.52
Acenaphthene	ND		0.21
2,4-Dinitrophenol	ND		0.6
4-Nitrophenol	ND		0.87
2,4-Dinitrotoluene	ND		0.29
Dibenzofuran	ND		0.13
Diethylphthalate	ND		0.16
Fluorene	ND		0.18
4-Chlorophenyl-phenylether	ND		0.23
4-Nitroaniline	ND		0.66
4,6-Dinitro-2-methylphenol	ND		0.45
N-Nitrosodiphenylamine	ND		0.32
1,2-Diphenylhydrazine/Azobenzene	ND		0.31
4-Bromophenyl-phenylether	ND		0.31
Hexachlorobenzene	ND		0.29
Pentachlorophenol	ND		0.59
Phenanthrene	ND		0.26
Anthracene	ND		0.31
Carbazole	ND		0.21
Di-n-butylphthalate	ND		0.23
Fluoranthene	ND		0.18
Benzidine	ND		0.35
Pyrene	ND		0.16
3,3'-Dimethylbenzidine	ND		0.81
Butylbenzylphthalate	ND		0.41
3,3'-Dichlorobenzidine	ND		0.29
Benzo[a]anthracene	ND		0.15
Chrysene	ND		0.25
bis(2-Ethylhexyl)phthalate	ND		0.26
Di-n-octylphthalate	ND		0.19
Benzo[b]fluoranthene	ND		0.34
Benzo[k]fluoranthene	ND		0.25
Benzo[a]pyrene	ND		0.15
Indeno[1,2,3-cd]pyrene	ND		0.59
Dibenz[a,h]anthracene	ND		0.48
Benzo[g,h,i]perylene	ND		0.69

Total Target Compounds: 0

3720

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: C9196.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

Response Factor Report MSD-C

Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Thu Apr 05 15:19:01 2001
Response via : Initial Calibration

Calibration Files
5 =C9155.D 20 =C9154.D 50 =C9158.D
80 =C9156.D 10 =C9157.D

		Compound	5	20	50	80	10	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------						
2)	T	N-Nitrosodimethylamin	0.853	0.805	0.743	0.778	0.764	0.788	5.38
3)	T	Pyridine	1.068	0.776	0.918	0.942	0.921	0.925	11.21
4)	S	2-Fluorophenol	1.209	1.113	1.087	1.064	1.155	1.125	5.13
5)	T	Benzaldehyde	0.485	0.205	0.360	0.322	0.355	0.346	29.02
6)	S	Phenol-d5	1.214	1.066	1.057	1.019	1.125	1.096	6.92
7)	MC	Phenol	1.364	0.995	0.964	0.972	1.121	1.083	15.63
8)	T	Aniline	1.470	1.165	1.207	1.240	1.272	1.271	9.29
9)	T	bis(2-Chloroethyl)eth	0.995	0.782	0.788	0.822	0.883	0.854	10.36
10)	M	2-Chlorophenol	1.311	1.019	1.036	1.048	1.128	1.108	10.88
11)	T	1,3-Dichlorobenzene	1.682	1.320	1.392	1.468	1.475	1.468	9.23
12)	MC	1,4-Dichlorobenzene	1.717	1.347	1.410	1.494	1.477	1.489	9.42
13)	T	Benzyl alcohol	0.456	0.403	0.413	0.427	0.403	0.420	5.27
14)	T	1,2-Dichlorobenzene	1.616	1.204	1.220	1.315	1.343	1.340	12.35
15)	T	2-Methylphenol	0.907	0.684	0.662	0.669	0.790	0.742	14.19
16)	T	bis(2-chloroisopropyl	1.231	0.947	0.944	0.970	1.054	1.029	11.80
[illegible])	T	4-Methylphenol	0.823	0.647	0.647	0.661	0.713	0.698	10.74
[illegible])	MP	N-Nitroso-di-n-propyl	0.505	0.401	0.410	0.440	0.414	0.434	9.73
[illegible])	T	Acetophenone	1.080	0.923	0.892	0.956	0.982	0.967	7.46
20)	T	2-Aminotoluene +4-Ami	2.614	2.051	2.097	1.999	2.203	2.193	11.28
21)	T	Hexachloroethane	0.592	0.494	0.506	0.531	0.537	0.532	7.12
22)	I	Naphthalene-d8	----------ISTD----------						
23)	S	Nitrobenzene-d5	0.293	0.257	0.287	0.258	0.286	0.276	6.18
24)	T	Nitrobenzene	0.380	0.273	0.286	0.280	0.319	0.307	14.29
25)	T	Isophorone	0.396	0.359	0.382	0.412	0.357	0.381	6.29
26)	TC	2-Nitrophenol	0.149	0.137	0.172	0.184	0.138	0.156	13.38
27)	T	2,4-Dimethylphenol	0.328	0.263	0.288	0.283	0.291	0.291	8.13
28)	T	bis(2-Chloroethoxy)me	0.306	0.256	0.267	0.276	0.284	0.278	6.89
29)	T	Benzoic acid	0.044	0.042	0.043	0.035	0.042	0.041	8.51
30)	T	2,4-Dimethylaniline	0.455	0.427	0.430	0.340	0.429	0.416	10.53
31)	TC	2,4-Dichlorophenol	0.294	0.237	0.257	0.265	0.275	0.266	7.93
32)	M	1,2,4-Trichlorobenzen	0.452	0.360	0.389	0.403	0.400	0.401	8.29
33)	T	Naphthalene	1.048	0.864	0.941	0.870	0.985	0.942	8.30
34)	T	4-Chloroaniline	0.312	0.262	0.256	0.180	0.283	0.259	19.01
35)	TC	Hexachlorobutadiene	0.307	0.273	0.296	0.302	0.292	0.294	4.41
36)	T	Caprolactam	0.023	0.033	0.034	0.038	0.025	0.031	20.97
37)	MC	4-Chloro-3-methylphen	0.168	0.150	0.165	0.162	0.154	0.160	4.78
38)	T	2-Methylnaphthalene	0.644	0.520	0.571	0.584	0.547	0.573	8.11
39)	I	Acenaphthene-d10	----------ISTD----------						
40)	TP	Hexachlorocyclopentad	0.691	1.092	0.727	0.625	0.695	0.766	24.29
41)	TC	2,4,6-Trichlorophenol	0.331	0.338	0.367	0.381	0.348	0.353	5.96
[illegible])	T	2,4,5-Trichlorophenol	0.375	0.344	0.350	0.358	0.312	0.348	6.73
[illegible])	S	2-Fluorobiphenyl	1.459	1.354	1.415	1.323	1.411	1.392	3.86
44)	T	1-1'-Biphenyl	1.600	1.426	1.406	1.458	1.449	1.468	5.22
45)	T	2-Chloronaphthalene	1.453	1.108	1.184	1.183	1.200	1.226	10.78
46)	T	2-Nitroaniline	0.118	0.148	0.171	0.173	0.125	0.147	17.19
47)	T	Dimethylphthalate	0.908	0.875	0.925	0.953	0.863	0.905	4.04

48)	T	2,6-Dinitrotoluene	0.131	0.155	0.187	0.200	0.123	0.159	21.16
49)	T	Acenaphthylene	1.641	1.478	1.638	1.503	1.469	1.546	5.60
50)	T	3-Nitroaniline	0.108	0.112	0.124	0.090	0.100	0.107	12.08
51)	MC	Acenaphthene	1.153	0.915	0.990	0.929	1.044	1.006	9.61
52)	TP	2,4-Dinitrophenol	0.082	0.089	0.106	0.097	0.087	0.092	10.42
53)	MP	4-Nitrophenol	0.041	0.046	0.058	0.066	0.048	0.052	19.03
54)	M	2,4-Dinitrotoluene	0.102	0.148	0.184	0.151	0.108	0.138	24.61
55)	T	Dibenzofuran	1.531	1.250	1.325	1.326	1.271	1.340	8.33
56)	T	Diethylphthalate	0.668	0.694	0.784	0.815	0.704	0.733	8.59
57)	T	Fluorene	1.007	0.908	0.991	0.954	0.978	0.967	3.99
58)	T	4-Chlorophenyl-phenyl	0.602	0.515	0.526	0.543	0.527	0.542	6.40
59)	T	4-Nitroaniline	0.108	0.112	0.124	0.090	0.100	0.107	12.08
60)	I	Phenanthrene-d10	----------ISTD----------						
61)	T	4,6-Dinitro-2-methylp	0.041	0.044	0.039	0.050	0.043	0.043	9.67
62)	TC	N-Nitrosodiphenylamin	0.442	0.376	0.409	0.424	0.403	0.411	5.99
63)	T	1,2-Diphenylhydrazine	0.620	0.578	0.624	0.653	0.583	0.612	5.14
64)	S	2,4,6-Tribromophenol	0.128	0.141	0.140	0.153	0.121	0.137	9.07
65)	T	4-Bromophenyl-phenyle	0.294	0.243	0.261	0.277	0.276	0.270	7.05
66)	T	Hexachlorobenzene	0.427	0.306	0.318	0.341	0.364	0.351	13.58
67)	T	Atrazine	0.113	0.120	0.091	0.117	0.110	0.110	10.41
68)	MC	Pentachlorophenol	0.071	0.079	0.071	0.087	0.070	0.076	9.44
69)	T	Phenanthrene	1.033	0.816	0.882	0.822	0.949	0.900	10.18
70)	T	Anthracene	0.832	0.734	0.830	0.809	0.794	0.800	5.01
71)	T	Carbazole	0.542	0.471	0.467	0.464	0.538	0.497	7.98
72)	T	Di-n-butylphthalate	0.496	0.589	0.702	0.739	0.525	0.610	17.55
73)	TC	Fluoranthene	0.696	0.634	0.733	0.690	0.705	0.692	5.23
74)	T	Benzidine	0.099	0.084	0.070	0.052	0.097	0.080	24.62
75)	I	Chrysene-d12	----------ISTD----------						
76)	M	Pyrene	1.533	1.165	1.290	1.172	1.345	1.301	11.60
77)	S	Terphenyl-d14	1.151	0.996	1.107	0.989	1.097	1.068	6.71
78)	T	3,3'-Dimethylbenzidin	0.338	0.225	0.220	0.211	0.292	0.257	21.58
79)	T	Butylbenzylphthalate	0.223	0.267	0.328	0.341	0.218	0.275	20.92
80)	T	3,3'-Dichlorobenzidin	0.260	0.227	0.232	0.190	0.245	0.231	11.38
81)	T	Benzo[a]anthracene	1.030	0.837	0.938	0.853	0.971	0.926	8.77
82)	T	Chrysene	1.067	0.861	0.904	0.822	0.979	0.927	10.55
83)	T	bis(2-Ethylhexyl)phth	0.400	0.357	0.442	0.495	0.312	0.401	17.77
84)	I	Perylene-d12	----------ISTD----------						
85)	TC	Di-n-octylphthalate	0.569	0.537	0.663	0.723	0.519	0.602	14.49
86)	T	Benzo[b]fluoranthene	1.177	0.995	1.092	0.955	1.077	1.059	8.21
87)	T	Benzo[k]fluoranthene	1.143	1.018	0.969	0.831	0.817	0.956	14.23
88)	TC	Benzo[a]pyrene	0.916	0.797	0.872	0.820	0.807	0.842	5.94
89)	T	Indeno[1,2,3-cd]pyren	1.018	0.910	0.978	0.927	0.952	0.957	4.48
90)	T	Dibenz[a,h]anthracene	0.830	0.835	0.735	0.715	0.719	0.767	7.89
91)	T	Benzo[g,h,i]perylene	1.040	0.789	0.842	0.796	0.886	0.870	11.78

(#) = Out of Range

CW0501.M Thu Apr 05 15:19:13 2001 MSD-C

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9195.D
Acq On : 6 Apr 2001 12:28
Sample : .,20-PPB-INJ-FOR-04/06/01
Misc : N/A,N/A,N/A,1
MS Integration Params: RTEINT.P

Vial: 2
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Fri Apr 06 12:18:58 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	110	0.00
2	T	N-Nitrosodimethylamine	0.788	0.674	14.5	92	0.00
3	T	Pyridine	0.925	0.882	4.6	125	0.00
4	S	2-Fluorophenol	1.125	1.060	5.8	105	0.00
5	T	Benzaldehyde	0.346	0.355	-2.6	191	-0.12
6	S	Phenol-d5	1.096	1.097	-0.1	113	0.00
7	MC	Phenol	1.083	0.976	9.9	108	0.00
8	T	Aniline	1.271	1.242	2.3	118	0.00
9	T	bis(2-Chloroethyl)ether	0.854	0.802	6.1	113	0.00
10	M	2-Chlorophenol	1.108	0.992	10.5	107	0.00
11	T	1,3-Dichlorobenzene	1.468	1.322	9.9	110	0.00
12	MC	1,4-Dichlorobenzene	1.489	1.326	10.9	109	0.00
13	T	Benzyl alcohol	0.420	0.456	-8.6	124	0.00
14	T	1,2-Dichlorobenzene	1.340	1.202	10.3	110	0.00
15	T	2-Methylphenol	0.742	0.749	-0.9	121	0.00
16	T	bis(2-chloroisopropyl)ether	1.029	1.021	0.8	119	0.00
17	T	4-Methylphenol	0.698	0.693	0.7	118	0.00
18	MP	N-Nitroso-di-n-propylamine	0.434	0.473	-9.0	130	0.00
19	T	Acetophenone	0.967	1.045	-8.1	125	0.00
20	T	2-Aminotoluene +4-Aminotolu	2.193	2.285	-4.2	123	-0.01
21	T	Hexachloroethane	0.532	0.488	8.3	109	0.00
22	I	Naphthalene-d8	1.000	1.000	0.0	122	0.00
23	S	Nitrobenzene-d5	0.276	0.268	2.9	127	0.00
24	T	Nitrobenzene	0.307	0.274	10.7	122	0.00
25	T	Isophorone	0.381	0.409	-7.3	139	0.00
26	TC	2-Nitrophenol	0.156	0.145	7.1	128	0.00
27	T	2,4-Dimethylphenol	0.291	0.276	5.2	128	0.00
28	T	bis(2-Chloroethoxy)methane	0.278	0.260	6.5	124	0.00
29	T	Benzoic acid	0.041	0.041	0.0	121	0.00
30	T	2,4-Dimethylaniline	0.416	0.432	-3.8	123	0.00
31	TC	2,4-Dichlorophenol	0.266	0.247	7.1	127	0.00
32	M	1,2,4-Trichlorobenzene	0.401	0.356	11.2	121	0.00
33	T	Naphthalene	0.942	0.861	8.6	122	0.00
34	T	4-Chloroaniline	0.259	0.271	-4.6	126	0.00
35	TC	Hexachlorobutadiene	0.294	0.260	11.6	116	0.00
36	T	Caprolactam	0.031	0.036	-16.1	135	0.00
37	MC	4-Chloro-3-methylphenol	0.160	0.160	0.0	130	0.00
38	T	2-Methylnaphthalene	0.573	0.557	= 2.8	131	0.00
39	I	Acenaphthene-d10	1.000	1.000	0.0	145	0.00
40	TP	Hexachlorocyclopentadiene	0.766	0.898	-17.2	119	0.00
41	TC	2,4,6-Trichlorophenol	0.353	0.346	2.0	149	0.00
42	T	2,4,5-Trichlorophenol	0.348	0.345	0.9	145	0.00
43	S	2-Fluorobiphenyl	1.392	1.284	7.8	138	0.00
44	T	1-1'-Biphenyl	1.468	1.333	9.2	136	0.00

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45	T	2-Chloronaphthalene	1.226	1.038	15.3	136	0.00
46	T	2-Nitroaniline	0.147	0.155	-5.4	153	0.00
47	T	Dimethylphthalate	0.905	0.889	1.8	147	0.00
48	T	2,6-Dinitrotoluene	0.159	0.171	-7.5	160	0.00
49	T	Acenaphthylene	1.546	1.411	8.7	138	0.00
0	T	3-Nitroaniline	0.107	0.126	-17.8	164	0.00
1	MC	Acenaphthene	1.006	0.877	12.8	139	0.00
52	TP	2,4-Dinitrophenol	0.092	0.089	3.3	145	0.00
53	MP	4-Nitrophenol	0.052	0.056	-7.7	176	0.00
54	M	2,4-Dinitrotoluene	0.138	0.158	-14.5	155	0.00
55	T	Dibenzofuran	1.340	1.228	8.4	143	0.00
56	T	Diethylphthalate	0.733	0.746	-1.8	156	0.00
57	T	Fluorene	0.967	0.936	3.2	149	0.00
58	T	4-Chlorophenyl-phenylether	0.542	0.495	8.7	140	0.00
59	T	4-Nitroaniline	0.107	0.126	-17.8	164	0.00
60	I	Phenanthrene-d10	1.000	1.000	0.0	151	0.00
61	T	4,6-Dinitro-2-methylphenol	0.043	0.039	9.3	137	0.00
62	TC	N-Nitrosodiphenylamine	0.411	0.410	0.2	165	0.00
63	T	1,2-Diphenylhydrazine/Azobe	0.612	0.591	3.4	154	0.00
64	S	2,4,6-Tribromophenol	0.137	0.161	-17.5	173	0.00
65	T	4-Bromophenyl-phenylether	0.270	0.248	8.1	154	0.00
66	T	Hexachlorobenzene	0.351	0.293	16.5	144	0.00
67	T	Atrazine	0.110	0.119	-8.2	150	0.00
68	MC	Pentachlorophenol	0.076	0.069	9.2	132	0.00
69	T	Phenanthrene	0.900	0.821	8.8	152	0.00
70	T	Anthracene	0.800	0.781	2.4	161	0.00
71	T	Carbazole	0.497	0.486	2.2	156	0.00
72	T	Di-n-butylphthalate	0.610	0.605	0.8	155	0.00
73	TC	Fluoranthene	0.692	0.630	9.0	150	0.00
74	T	Benzidine	0.080	0.072	10.0	130	0.00
5	I	Chrysene-d12	1.000	1.000	0.0	113	0.00
76	M	Pyrene	1.301	1.468	-12.8	142	0.00
77	S	Terphenyl-d14	1.068	1.270	-18.9	144	0.00
78	T	3,3'-Dimethylbenzidine	0.257	0.225	12.5	113	0.00
79	T	Butylbenzylphthalate	0.275	0.308	-12.0	130	0.00
80	T	3,3'-Dichlorobenzidine	0.231	0.206	10.8	102	0.00
81	T	Benzo[a]anthracene	0.926	0.888	4.1	120	0.00
82	T	Chrysene	0.927	0.854	7.9	112	0.00
83	T	bis(2-Ethylhexyl)phthalate	0.401	0.376	6.2	119	0.00
84	I	Perylene-d12	1.000	1.000	0.0	77	0.00
85	TC	Di-n-octylphthalate	0.602	0.631	-4.8	91	0.00
86	T	Benzo[b]fluoranthene	1.059	1.142	-7.8	89	0.00
87	T	Benzo[k]fluoranthene	0.956	1.120	-17.2	85	0.00
88	TC	Benzo[a]pyrene	0.842	0.838	0.5	81	0.00
89	T	Indeno[1,2,3-cd]pyrene	0.957	0.896	6.4	76	0.00
90	T	Dibenz[a,h]anthracene	0.767	0.839	-9.4	78	0.00
91	T	Benzo[g,h,i]perylene	0.870	0.741	14.8	73	0.00

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

C9154.D CW0501.M Fri Apr 06 12:22:06 2001 MSD-C

SEMIVOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/06/2001

Lab Sample ID	Matrix	File ID	S1	S2	S3	S4	S5	S6
Method-Blank	AQUEOUS	C9196.D	55	70	71	63	74	120
DI-MS	AQUEOUS	C9197.D	46	59	55	56	89	99
DI-MSD	AQUEOUS	C9198.D	49	61	55	59	85	99
2094-007	AQUEOUS	C9200.D	45	61	66	59	68	100
2094-008	AQUEOUS	C9201.D	60	74	64	66	88	111
2094-009	AQUEOUS	C9203.D	56	63	77	61	59	106
2094-007DIL	AQUEOUS	C9204.D	N/A	N/A	N/A	N/A	N/A	N/A
2094-009DIL	AQUEOUS	C9205.D	N/A	N/A	N/A	N/A	N/A	N/A
2094-001	AQUEOUS	C9206.D	56	64	56	60	63	97
2094-003	AQUEOUS	C9207.D	52	60	56	58	77	111
2094-004	AQUEOUS	C9208.D	49	59	53	56	57	116
2094-005	AQUEOUS	C9209.D	49	75	56	60	83	100
2094-006	AQUEOUS	C9210.D	51	62	61	63	82	111
2093-001	AQUEOUS	C9211.D	49	61	52	57	95	95
2076-004	AQUEOUS	C9212.D	N/A	N/A	64	68	N/A	87
2076-004	AQUEOUS	C9213.D	55	59	N/A	N/A	79	N/A
DI-MS	AQUEOUS	C9215.D	49	61	55	60	83	90
DI-MSD	AQUEOUS	C9216.D	48	59	57	59	81	103
2115-001	AQUEOUS	C9217.D	63	74	N/A	N/A	75	N/A
2115-002	AQUEOUS	C9218.D	62	68	N/A	N/A	63	N/A
2115-003	AQUEOUS	C9219.D	56	64	N/A	N/A	60	N/A
2115-004	AQUEOUS	C9220.D	61	67	N/A	N/A	72	N/A
2115-005	AQUEOUS	C9221.D	58	66	N/A	N/A	59	N/A

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
2115-006	AQUEOUS	C9222.D	57	66	N/A	N/A	61	N/A
2115-007	AQUEOUS	C9223.D	60	71	N/A	N/A	77	N/A
2115-008	AQUEOUS	C9224.D	60	70	N/A	N/A	65	N/A
2114-001	AQUEOUS	C9226.D	57	66	N/A	N/A	57	N/A
2114-002	AQUEOUS	C9227.D	57	66	N/A	N/A	63	N/A
2114-003	AQUEOUS	C9228.D	50	60	N/A	N/A	63	N/A
2114-004	AQUEOUS	C9229.D	54	59	N/A	N/A	60	N/A

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

AQUEOUS SEMIVOLATILE MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: Method-B Batch No.: 040601W

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	30.0	0.0	19.0	63	48 - 95
2-Chlorophenol	30.0	0.0	18.2	61	46 - 90
1,4-Dichlorobenzene	30.0	0.0	15.7	52	49 - 84
N-Nitroso-di-n-propylamine	30.0	0.0	23.3	78	53 - 96
1,2,4-Trichlorobenzene	30.0	0.0	16.4	55	46 - 92
4-Chloro-3-methylphenol	30.0	0.0	27.3	91	41 - 113
Acenaphthene	30.0	0.0	20.1	67	59 - 98
4-Nitrophenol	30.0	0.0	26.8	89	30 - 139
2,4-Dinitrotoluene	30.0	0.0	33.3	111	31 - 138
Pentachlorophenol	30.0	0.0	21.7	72	25 - 105
Pyrene	30.0	0.0	32.1	107	49 - 110

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	0.0	19.1	64	2	8	48 - 95
2-Chlorophenol	0.0	18.2	61	0	7	46 - 90
1,4-Dichlorobenzene	0.0	16.0	53	2	6	49 - 84
N-Nitroso-di-n-propylamine	0.0	22.5	75	4	7	53 - 96
1,2,4-Trichlorobenzene	0.0	17.0	57	4	8	46 - 92
4-Chloro-3-methylphenol	0.0	25.6	85	7	12	41 - 113
Acenaphthene	0.0	21.3	71	6	7	59 - 98
4-Nitrophenol	0.0	27.8	93	4	22	30 - 139
2,4-Dinitrotoluene	0.0	32.8	109	2	18	31 - 138
Pentachlorophenol	0.0	19.5	65	10	15	25 - 105
Pyrene	0.0	32.1	107	0	10	49 - 110

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

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INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: C9196.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	Sample	Conc. MSD	%Rec. MSD
N-Nitrosodimethylamine	30.0	0.0	11.6	39	0.0	11.2	37
Benzaldehyde	30.0	0.0	0.0	0	0.0	0.0	0
Phenol	30.0	0.0	19.0	63	0.0	19.1	64
Aniline	30.0	0.0	21.8	73	0.0	21.5	72
bis(2-Chloroethyl)ether	30.0	0.0	17.3	58	0.0	17.6	59
2-Chlorophenol	30.0	0.0	18.2	61	0.0	18.2	61
1,3-Dichlorobenzene	30.0	0.0	16.2	54	0.0	16.7	56
1,4-Dichlorobenzene	30.0	0.0	15.7	52	0.0	16.0	53
Benzyl alcohol	30.0	0.0	23.9	80	0.0	23.0	77
1,2-Dichlorobenzene	30.0	0.0	16.3	54	0.0	16.7	56
2-Methylphenol	30.0	0.0	20.2	67	0.0	19.9	66
bis(2-chloroisopropyl)ether	30.0	0.0	18.9	63	0.0	18.9	63
4-Methylphenol	30.0	0.0	22.6	75	0.0	22.3	74
N-Nitroso-di-n-propylamine	30.0	0.0	23.3	78	0.0	22.5	75
Acetophenone	30.0	0.0	1.3	4	0.0	1.1	4
2-Aminotoluene +4-Aminotoluene	30.0	0.0	41.7	139	0.0	39.8	133
Hexachloroethane	30.0	0.0	15.4	51	0.0	16.9	56
Nitrobenzene	30.0	0.0	17.1	57	0.0	17.4	58
Isophorone	30.0	0.0	21.5	72	0.0	20.7	69
2-Nitrophenol	30.0	0.0	18.7	62	0.0	18.6	62
2,4-Dimethylphenol	30.0	0.0	21.5	72	0.0	20.7	69
bis(2-Chloroethoxy)methane	30.0	0.0	19.5	65	0.0	18.8	63
Benzoic acid	30.0	0.0	20.0	67	0.0	20.5	68
2,4-Dimethylaniline	30.0	0.0	21.1	70	0.0	21.0	70
2,4-Dichlorophenol	30.0	0.0	19.8	66	0.0	20.2	67
1,2,4-Trichlorobenzene	30.0	0.0	16.4	55	0.0	17.0	57
Naphthalene	30.0	0.0	17.7	59	0.0	18.1	60
4-Chloroaniline	30.0	0.0	23.0	77	0.0	22.9	76
Hexachlorobutadiene	30.0	0.0	16.1	54	0.0	17.1	57
Caprolactam	30.0	0.0	0.0	0	0.0	0.0	0
4-Chloro-3-methylphenol	30.0	0.0	27.3	91	0.0	25.6	85
2-Methylnaphthalene	30.0	0.0	19.8	66	0.0	18.9	63
Hexachlorocyclopentadiene	30.0	0.0	7.7	26	0.0	7.6	25
2,4,6-Trichlorophenol	30.0	0.0	23.1	77	0.0	23.1	77
2,4,5-Trichlorophenol	30.0	0.0	23.6	79	0.0	24.2	81
1-1'-Biphenyl	30.0	0.0	1.2	4	0.0	1.2	4
2-Chloronaphthalene	30.0	0.0	18.5	62	0.0	19.5	65
2-Nitroaniline	30.0	0.0	20.8	69	0.0	20.8	69
Dimethylphthalate	30.0	0.0	20.8	69	0.0	20.8	69
2,6-Dinitrotoluene	30.0	0.0	20.8	69	0.0	20.8	69
Acenaphthylene	30.0	0.0	20.8	69	0.0	20.8	69

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INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: Method-Blank
Client ID: .
Date Received: N/A
Date Extracted: 04/06/2001
Date Analyzed: 04/06/2001
Data file: C9196.D

GC/MS Column: DB-5
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Conc. Add		%Rec. MS			%Rec. MSD	
3-Nitroaniline	30.0	0.0	31.5	105	0.0	30.4	101
Acenaphthene	30.0	0.0	20.1	67	0.0	21.3	71
2,4-Dinitrophenol	30.0	0.0	22.0	73	0.0	23.2	77
4-Nitrophenol	30.0	0.0	26.8	89	0.0	27.8	93
2,4-Dinitrotoluene	30.0	0.0	33.3	111	0.0	32.8	109
Dibenzofuran	30.0	0.0	21.6	72	0.0	22.2	74
Diethylphthalate	30.0	0.0	27.8	93	0.0	27.9	93
Fluorene	30.0	0.0	22.4	75	0.0	23.1	77
4-Chlorophenyl-phenylether	30.0	0.0	23.1	77	0.0	23.0	77
4-Nitroaniline	30.0	0.0	31.5	105	0.0	30.4	101
4,6-Dinitro-2-methylphenol	30.0	0.0	17.0	57	0.0	15.4	51
N-Nitrosodiphenylamine	30.0	0.0	27.5	92	0.0	27.9	93
1,2-Diphenylhydrazine/Azobenzene	30.0	0.0	23.4	78	0.0	23.1	77
4-Bromophenyl-phenylether	30.0	0.0	24.3	81	0.0	23.9	80
Hexachlorobenzene	30.0	0.0	22.8	76	0.0	22.3	74
Atrazine	30.0	0.0	0.0	0	0.0	0.0	0
Pentachlorophenol	30.0	0.0	21.7	72	0.0	19.5	65
Phenanthrene	30.0	0.0	24.1	80	0.0	24.7	82
Anthracene	30.0	0.0	25.4	85	0.0	26.0	87
Carbazole	30.0	0.0	29.9	100	0.0	30.5	102
Di-n-butylphthalate	30.0	0.0	27.6	92	0.0	29.1	97
Fluoranthene	30.0	0.0	25.4	85	0.0	27.8	93
Benzidine	30.0	0.0	27.9	93	0.0	34.0	113
Pyrene	30.0	0.0	32.1	107	0.0	32.1	107
3,3'-Dimethylbenzidine	30.0	0.0	31.2	104	0.0	33.9	113
Butylbenzylphthalate	30.0	0.0	32.3	108	0.0	33.2	111
3,3'-Dichlorobenzidine	30.0	0.0	30.5	102	0.0	27.0	90
Benzo[a]anthracene	30.0	0.0	27.2	91	0.0	27.0	90
Chrysene	30.0	0.0	25.4	85	0.0	25.7	86
bis(2-Ethylhexyl)phthalate	30.0	0.0	25.3	84	0.0	24.5	82
Di-n-octylphthalate	30.0	0.0	29.9	100	0.0	29.3	98
Benzo[b]fluoranthene	30.0	0.0	31.8	106	0.0	29.2	97
Benzo[k]fluoranthene	30.0	0.0	24.7	82	0.0	24.7	82
Benzo[a]pyrene	30.0	0.0	22.7	76	0.0	22.7	76
Indeno[1,2,3-cd]pyrene	30.0	0.0	27.6	92	0.0	27.6	92
Dibenz[a,h]anthracene	30.0	0.0	33.0	110	0.0	33.0	110
Benzo[g,h,i]perylene	30.0	0.0	33.0	110	0.0	33.0	110

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SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C9154.D

Date Analyzed: 04/05/2001

Instrument ID: MSDC

Time Analyzed: 14:16

	40UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	24 HOUR STD	116961		6.21		305012		7.59		116166		9.24	
	UPPER LIMIT	233922		6.71		610024		8.09		232332		9.74	
	LOWER LIMIT	58481		5.71		152506		7.09		58083		8.74	
	LAB SAMPLE ID												
01	5-PPB-INJ-FOR-04/05	128770		6.21		348809		7.59		131206		9.24	
02	80-PPB-INJ-FOR-04/0	100725		6.20		263622		7.59		106938		9.24	
03	10-PPB-INJ-FOR-04/0	111035		6.21		291441		7.58		110650		9.24	
04	50-PPB-INJ-FOR-04/0	113446		6.21		283424		7.59		112595		9.24	
05	Method-Blank	139071		6.20		369286		7.59		128181		9.24	
06	DI-MS	115728		6.21		296025		7.59		109920		9.24	
07	DI-MSD	115644		6.21		303502		7.59		116553		9.24	
08	2049-001	126701		6.21		323002		7.59		113505		9.24	
09	2049-003	149835		6.21		391079		7.59		138836		9.24	
10	2022-001	121840		6.21		311879		7.59		114395		9.24	
11	2025-001	133913		6.21		361550		7.59		141011		9.24	
12	2025-002	121035		6.21		312712		7.59		113371		9.24	
13	2031-001	117115		6.21		287341		7.59		103736		9.24	
14	2031-002	148331		6.20		370182		7.59		132284		9.24	
15	2031-003	120902		6.21		304346		7.59		116481		9.24	
16	2031-004	119567		6.21		307560		7.59		108728		9.24	
17	2031-005	121293		6.21		300066		7.59		105391		9.24	
18	2033-001	129899		6.21		319445		7.59		123218		9.24	
19	2033-002	144788		6.21		358721		7.59		128138		9.24	
20	2023-001	138834		6.21		330399		7.59		110369		9.24	
21	Method-Blank	100553		6.21		254123		7.59		86935		9.24	
22	DI-MS	93814		6.21		228167		7.59		83282		9.24	

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): C9154.D

Date Analyzed: 04/05/2001

Instrument ID: MSDC

Time Analyzed: 14:16

	40UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	24 HOUR STD	116961	6.21	305012	7.59	116166	9.24
	UPPER LIMIT	233922	6.71	610024	8.09	232332	9.74
	LOWER LIMIT	58481	5.71	152506	7.09	58083	8.74
	LAB SAMPLE ID						
01	2051-001	102208	6.21	262434	7.59	97352	9.24
02	2051-002	103465	6.21	258488	7.59	91703	9.24
03	2052-001	123932	6.21	312388	7.59	114422	9.24
04	2066-002	103380	6.21	257786	7.59	86667	9.24
05	2066-004	125903	6.2	310946	7.59	103997	9.24
06	2066-005	99860	6.2	253131	7.59	91074	9.24
07	2067-002	97261	6.21	244087	7.59	85353	9.24
08	2067-003	98308	6.21	245072	7.58	85213	9.24
09	2108-001	93364	6.21	241557	7.58	89131	9.24
10	2108-002	84777	6.2	236320	7.59	83540	9.24
11	2108-003	98347	6.2	241397	7.59	85913	9.24
12	2066-003	90858	6.2	244942	7.59	105980	9.25
13	DI-MSD	101089	6.2	239721	7.59	86178	9.24
14	2087-001	96372	6.2	247885	7.59	100214	9.24
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): C9154.D

Date Analyzed: 04/05/2001

Instrument ID: MSDC

Time Analyzed: 14:16

	40UG/L	IS4 AREA	#	RT	#	IS5 AREA	#	RT	#	IS6 AREA	#	RT	#
	24 HOUR STD	134474		10.55		78486		12.98		66824		15.16	
	UPPER LIMIT	268948		11.05		156972		13.48		133648		15.66	
	LOWER LIMIT	67237		10.05		39243		12.48		33412		14.66	
	LAB SAMPLE ID												
01	5-PPB-INJ-FOR-04/05	129199		10.55		65533		12.97		57060		15.15	
02	80-PPB-INJ-FOR-04/0	126765		10.55		78020		12.97		68824		15.14	
03	10-PPB-INJ-FOR-04/0	118039		10.54		69089		12.96		56040		15.14	
04	50-PPB-INJ-FOR-04/0	134023		10.55		79580		12.97		66868		15.14	
05	Method-Blank	114924		10.55		71989		12.96		59404		15.14	
06	DI-MS	116582		10.55		67307		12.97		51487		15.14	
07	DI-MSD	127801		10.55		76129		12.96		57742		15.14	
08	2049-001	109338		10.55		58391		12.96		49914		15.13	
09	2049-003	146784		10.55		77479		12.96		63838		15.14	
10	2022-001	114659		10.54		63039		12.96		50941		15.13	
11	2025-001	151627		10.55		78431		12.96		67146		15.14	
12	2025-002	115120		10.55		63060		12.97		48402		15.14	
13	2031-001	110786		10.55		66527		12.96		53066		15.13	
14	2031-002	132576		10.55		73235		12.96		61914		15.13	
15	2031-003	119724		10.54		65942		12.96		49898		15.13	
16	2031-004	110416		10.55		62230		12.96		47292		15.13	
17	2031-005	109397		10.55		61464		12.96		44690		15.13	
18	2033-001	132042		10.55		82210		12.96		67113		15.13	
19	2033-002	119650		10.55		63847		12.96		54948		15.13	
20	2023-001	108046		10.54		68362		12.96		56747		15.13	
21	Method-Blank	85460		10.55		50049		12.96		37745		15.13	
22	DI-MS	89022		10.55		57233		12.96		47363		15.13	

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): C9154.D Date Analyzed: 04/05/2001

Instrument ID: MSDC Time Analyzed: 14:16

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	24 HOUR STD	134474	10.55	78486	12.98	66824	15.16
	UPPER LIMIT	268948	11.05	156972	13.48	133648	15.66
	LOWER LIMIT	67237	10.05	39243	12.48	33412	14.66
	LAB SAMPLE ID						
01	2051-001	100842	10.55	55604	12.96	40158	15.13
02	2051-002	92233	10.55	48636	12.96	36406	15.13
03	2052-001	116042	10.54	59772	12.96	49010	15.13
04	2066-002	84620	10.55	45315	12.96	35036	15.13
05	2066-004	104014	10.55	59264	12.96	48502	15.13
06	2066-005	89448	10.55	48031	12.96	33868	15.13
07	2067-002	87775	10.54	52505	12.96	37914	15.13
08	2067-003	86241	10.54	48715	12.96	37619	15.13
09	2108-001	95460	10.54	52378	12.96	41003	15.13
10	2108-002	90240	10.55	52748	12.96	46114	15.13
11	2108-003	94554	10.54	54002	12.96	43905	15.13
12	2066-003	146907	10.56	107334	12.99	68210	15.18
13	DI-MSD	100117	10.55	63186	13.00	51076	15.18
14	2087-001	115101	10.55	67909	12.98	49289	15.16
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): C9195.D

Date Analyzed: 04/06/2001

Instrument ID: MSDC

Time Analyzed: 12:28

	40UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	24 HOUR STD	128875		6.20		371866		7.58		168425		9.24	
	UPPER LIMIT	257750		6.70		743732		8.08		336850		9.74	
	LOWER LIMIT	64438		5.70		185933		7.08		84213		8.74	
	LAB SAMPLE ID												
01	Method-Blank	151557		6.20		390527		7.58		178698		9.24	
02	DI-MS	159577		6.20		477756		7.59		220952		9.24	
03	DI-MSD	138233		6.20		395702		7.59		169015		9.24	
04	2094-007	157820		6.20		612788		7.59		212724		9.24	
05	2094-008	142080		6.20		444629		7.59		206877		9.24	
06	2094-009	145680		6.20		637057		7.59		212991		9.24	
07	2094-007DIL	189329		6.20		493214		7.59		223125		9.24	
08	2094-009DIL	181724		6.20		547143		7.59		229891		9.24	
09	2094-001	163918		6.20		475888		7.59		205143		9.24	
10	2094-003	147219		6.20		438625		7.58		202256		9.24	
11	2094-004	151795		6.20		476836		7.59		203174		9.24	
12	2094-005	135837		6.20		388456		7.58		178102		9.24	
13	2094-006	155207		6.20		454359		7.59		197016		9.24	
14	2093-001	154818		6.20		464977		7.59		202747		9.24	
15	2076-004	128140		6.20		328012		7.58		132255		9.24	
16	2076-004	119002		6.20		308094		7.58		118448		9.24	
17	DI-MS	153694		6.20		442878		7.59		182951		9.24	
18	DI-MSD	161990		6.20		475558		7.59		208023		9.24	
19	2115-001	163590		6.20		493376		7.59		211575		9.24	
20	2115-002	143948		6.20		411969		7.59		163036		9.24	
21	2115-003	144844		6.20		416848		7.58		176791		9.24	
22	2115-004	152214		6.20		429438		7.59		175369		9.24	

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): C9195.D

Date Analyzed: 04/06/2001

Instrument ID: MSDC

Time Analyzed: 12:28

	40UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	24 HOUR STD	128875		6.20		371866		7.58		168425		9.24	
	UPPER LIMIT	257750		6.70		743732		8.08		336850		9.74	
	LOWER LIMIT	64438		5.70		185933		7.08		84213		8.74	
	LAB SAMPLE ID												
01	2115-005	145043		6.20		439887		7.58		188989		9.24	
02	2115-006	146326		6.2		445016		7.58		188106		9.24	
03	2115-007	154337		6.2		470960		7.59		217997		9.24	
04	2115-008	146656		6.2		436836		7.58		188607		9.24	
05	2114-001	147964		6.2		431415		7.59		179402		9.24	
06	2114-002	142175		6.2		437283		7.58		196483		9.24	
07	2114-003	151250		6.2		440486		7.58		195680		9.24	
08	2114-004	129505		6.2		357652		7.59		145771		9.24	
09													
10													
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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): C9195.D

Date Analyzed: 04/06/2001

Instrument ID: MSDC

Time Analyzed: 12:28

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	24 HOUR STD	203058	10.54	88428	12.97	51612	15.14
	UPPER LIMIT	406116	11.04	176856	13.47	103224	15.64
	LOWER LIMIT	101529	10.04	44214	12.47	25806	14.64
	LAB SAMPLE ID						
01	Method-Blank	212615	10.54	80599	12.97	38788	15.15
02	DI-MS	259913	10.55	107261	12.97	61140	15.14
03	DI-MSD	207761	10.55	96375	12.97	54733	15.15
04	2094-007	258825	10.55	100999	12.97	60769	15.14
05	2094-008	245836	10.55	90916	12.97	52927	15.14
06	2094-009	278604	10.55	107626	12.96	62962	15.13
07	2094-007DIL	277463	10.55	108883	12.96	53701	15.13
08	2094-009DIL	242004	10.55	99086	12.96	61613	15.13
09	2094-001	261984	10.55	138230	12.96	66420	15.12
10	2094-003	241822	10.54	92440	12.96	53860	15.12
11	2094-004	227244	10.55	83034	12.96	46670	15.12
12	2094-005	209473	10.54	99928	12.95	65201	15.12
13	2094-006	222087	10.54	89716	12.96	52652	15.12
14	2093-001	237274	10.55	99451	12.95	64823	15.12
15	2076-004	155440	10.54	78024	12.95	64587	15.12
16	2076-004	134260	10.54	63061	12.96	54082	15.13
17	DI-MS	202150	10.54	101703	12.95	67658	15.12
18	DI-MSD	249251	10.54	99827	12.95	59748	15.12
19	2115-001	228444	10.54	82386	12.95	51473	15.12
20	2115-002	193065	10.54	73422	12.95	45056	15.12
21	2115-003	205576	10.55	77232	12.95	42415	15.12
22	2115-004	178562	10.54	68965	12.95	44663	15.12

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.

000033

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): C9195.D

Date Analyzed: 04/06/2001

Instrument ID: MSDC

Time Analyzed: 12:28

	40UG/L	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	24 HOUR STD	203058	10.54	88428	12.97	51612	15.14
	UPPER LIMIT	406116	11.04	176856	13.47	103224	15.64
	LOWER LIMIT	101529	10.04	44214	12.47	25806	14.64
	LAB SAMPLE ID						
01	2115-005	216778	10.54	84276	12.95	45117	15.12
02	2115-006	213741	10.54	74141	12.96	39823	15.12
03	2115-007	239025	10.55	73560	12.95	42535	15.12
04	2115-008	215713	10.54	70987	12.95	39158	15.12
05	2114-001	188784	10.54	77767	12.95	46688	15.12
06	2114-002	250928	10.54	97125	12.95	51035	15.12
07	2114-003	216036	10.54	77710	12.95	45143	15.12
08	2114-004	159205	10.54	69890	12.95	40232	15.12
09							
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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 (LSC Reviewed)

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
Integration Params: RTEINT.P
Quant Time: Apr 9 13:45 2001

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Results File: CW0501.RES

Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Fri Apr 06 12:18:58 2001
Response via : Initial Calibration
DataAcq Meth : CW0501

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.20	152	154818	40.00	UG	0.00
22) Naphthalene-d8	7.59	136	464977	40.00	UG	0.00
39) Acenaphthene-d10	9.24	164	202747	40.00	UG	0.00
60) Phenanthrene-d10	10.55	188	237274	40.00	UG	0.00
75) Chrysene-d12	12.95	240	99451	40.00	UG	-0.01
84) Perylene-d12	15.12	264	64823	40.00	UG	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	4.55	112	214063	49.14	UG	0.00
Spiked Amount 100.000	Range 42 - 95		Recovery = 49.14%			
6) Phenol-d5	5.68	99	259026m	61.05	UG	0.00
Spiked Amount 100.000	Range 59 - 97		Recovery = 61.05%			
23) Nitrobenzene-d5	6.82	82	82856	25.80	UG	0.00
Spiked Amount 50.000	Range 49 - 105		Recovery = 51.60%			
43) 2-Fluorobiphenyl	8.60	172	200802	28.45	UG	0.00
Spiked Amount 50.000	Range 54 - 110		Recovery = 56.90%			
64) 2,4,6-Tribromophenol	9.93	330	77209	95.27	UG	0.00
Spiked Amount 100.000	Range 48 - 126		Recovery = 95.27%			
77) Terphenyl-d14	11.86	244	125673	47.33	UG	0.00
Spiked Amount 50.000	Range 53 - 123		Recovery = 94.66%			
Target Compounds						Qvalue
14) 1,2-Dichlorobenzene	6.40	146	3740	0.72	UG	# 98
15) 2-Methylphenol	6.43	108	33545	11.67	UG	98
17) 4-Methylphenol	6.59	108	26327	9.74	UG	94
27) 2,4-Dimethylphenol	7.19	107	6104	1.81	UG	91
33) Naphthalene	7.61	128	11645	1.06	UG	# 83
51) Acenaphthene	9.27	153	4119	0.81	UG	# 88
57) Fluorene	9.72	166	3528	0.72	UG	# 64

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

3739

Quantitation Report

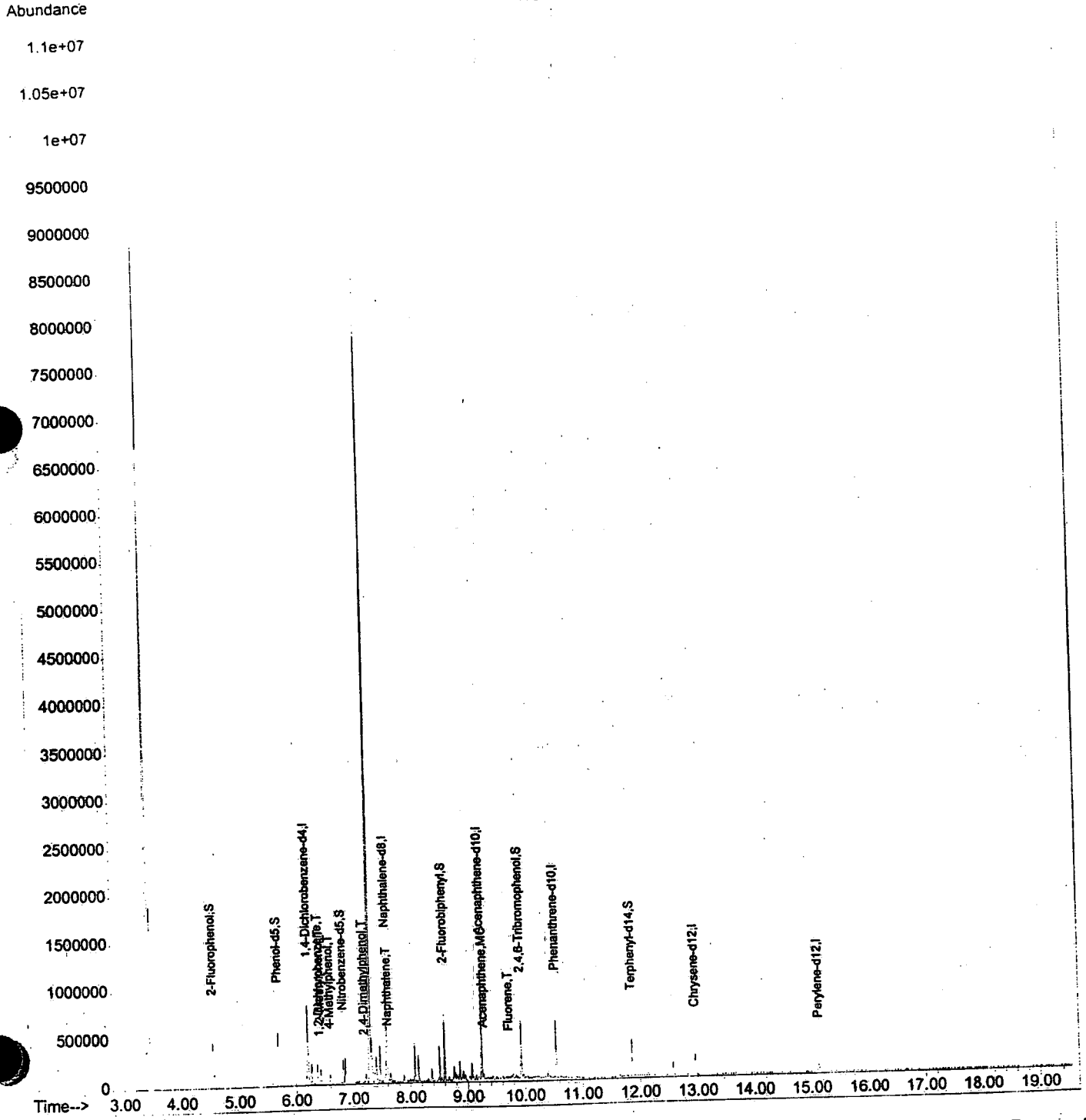
Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: RTEINT.P
Quant Time: Apr 9 13:45 2001

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Results File: CW0501.RES

Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Mon Apr 09 12:02:57 2001
Response via : Initial Calibration

TIC: C9211.D



3740

LSC Area Percent Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Smoothing : ON
Sampling : 1
Start Thrs: 1.2
Stop Thrs : 1.2

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

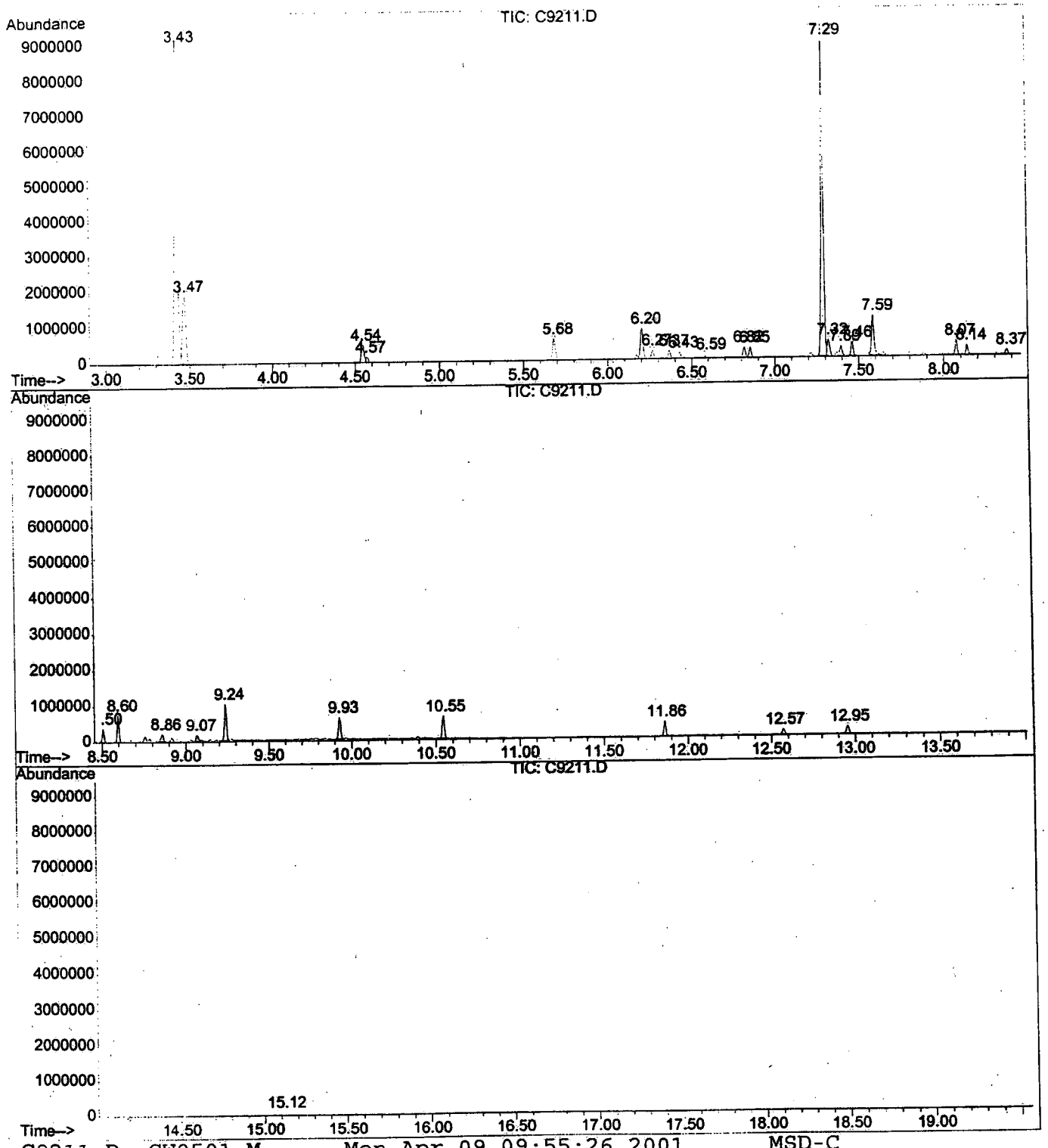
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.430	112	120	124	rBV	9231161	10981341	100.00%	33.596%
2	3.473	124	128	133	rVB	1894639	2416851	22.01%	7.394%
3	4.541	323	328	332	rBV	484452	602223	5.48%	1.842%
4	4.568	332	333	338	rVB	140582	120730	1.10%	0.369%
5	5.679	537	541	548	rVB	598138	716191	6.52%	2.191%
6	6.202	635	639	646	rVB	857335	948698	8.64%	2.902%
7	6.267	646	651	656	rBB	238391	242677	2.21%	0.742%
8	6.368	664	670	674	rBV	217295	225758	2.06%	0.691%
9	6.427	674	681	685	rVV2	163197	208965	1.90%	0.639%
10	6.592	708	712	717	rVB	109814	117549	1.07%	0.360%
11	6.817	750	754	757	rBV	294495	284707	2.59%	0.871%
12	6.854	757	761	767	rVB	289075	272950	2.49%	0.835%
13	7.292	837	843	846	rVV	9430463	8402369	76.51%	25.706%
14	7.319	846	848	853	rVB2	478625	487404	4.44%	1.491%
15	7.394	853	862	865	rBV	297736	428471	3.90%	1.311%
16	7.463	871	875	879	rBV	393268	366945	3.34%	1.123%
17	7.586	894	898	906	rVB	1122815	1180828	10.75%	3.613%
18	8.072	985	989	993	rVB	410783	331561	3.02%	1.014%
19	8.136	998	1001	1010	rBV	278674	239073	2.18%	0.731%
20	8.371	1040	1045	1049	rBV	140573	127104	1.16%	0.389%
21	8.505	1067	1070	1073	rVB	379493	283618	2.58%	0.868%
22	8.596	1083	1087	1091	rBV	748680	582063	5.30%	1.781%
23	8.858	1132	1136	1139	rVB2	193498	185762	1.69%	0.568%
24	9.066	1172	1175	1179	rBV	170319	156442	1.42%	0.479%
25	9.237	1202	1207	1211	rBV	1025132	844727	7.69%	2.584%
26	9.926	1332	1336	1341	rBV2	610473	540012	4.92%	1.652%
27	10.546	1448	1452	1456	rVB	630323	553047	5.04%	1.692%
28	11.860	1695	1698	1702	rBV	412635	325475	2.96%	0.996%
29	12.570	1827	1831	1835	rVB	154000	134532	1.23%	0.412%
30	12.955	1898	1903	1908	rBV	221482	235610	2.15%	0.721%
31	15.118	2300	2308	2316	rBV	78779	143106	1.30%	0.438%

Sum of corrected areas: 32686789

211.D CW0501.M Mon Apr 09 09:55:26 2001 MSD-C

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Operator : DP
Acquired : 6 Apr 2001 19:37 using AcqMethod CW0501
Instrument : MSD-C
Sample Name: MW-4,2093-001,A,1000mL,100,04/06/01
Misc Info : ENVTACT/ORBIS,04/04/01,04/04/01,1
Vial Number: 14
Quant File :CW0501.RES (RTE Integrator)



000071

3743

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

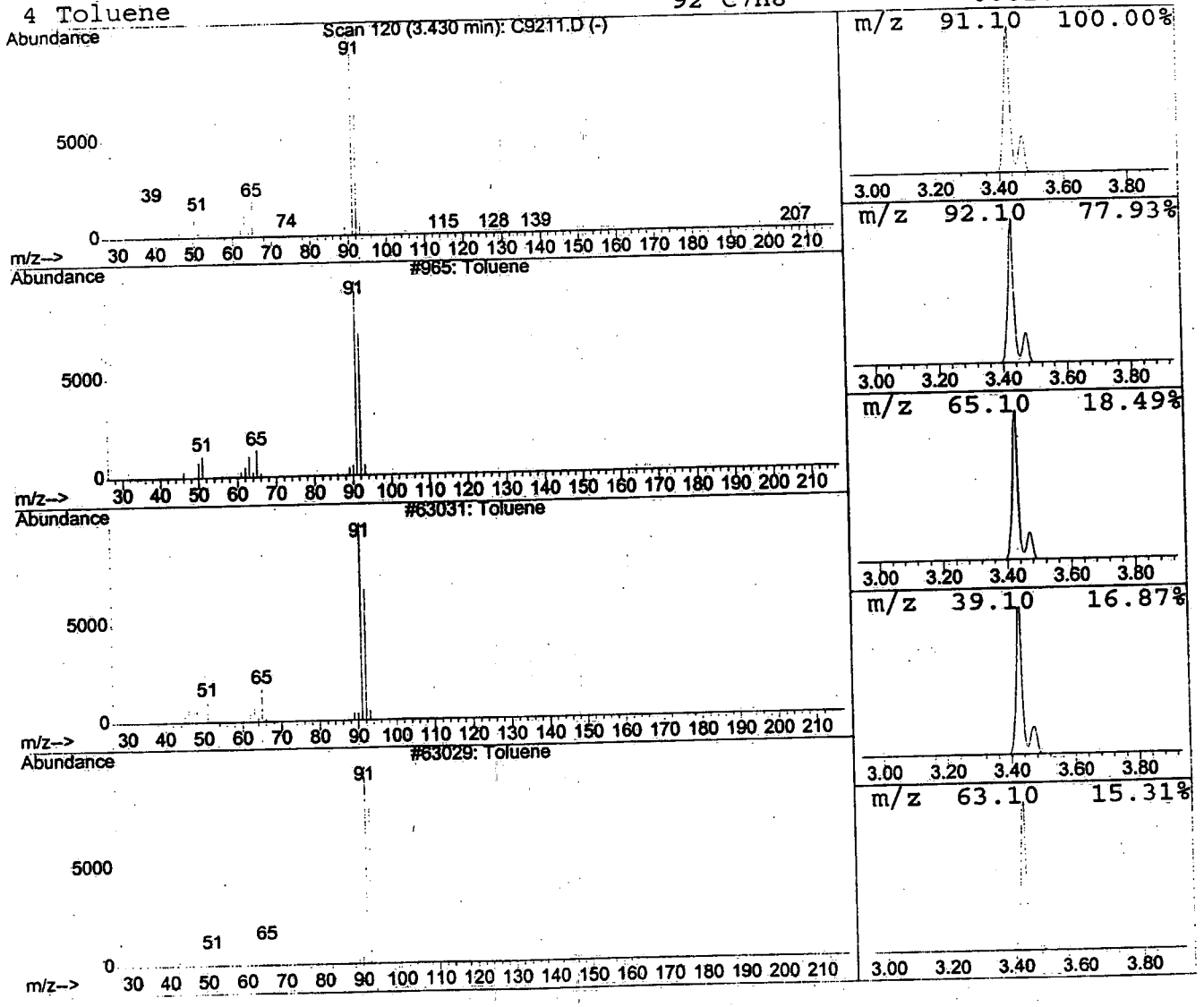
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 1 Substituted benzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.43	463.01 UG	10981300	1,4-Dichlorobenzene-d4	6.20

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Toluene	92	C7H8	000108-88-3	94
2	Toluene	92	C7H8	000108-88-3	91
3	Toluene	92	C7H8	000108-88-3	91
4	Toluene	92	C7H8	000108-88-3	91



3744

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

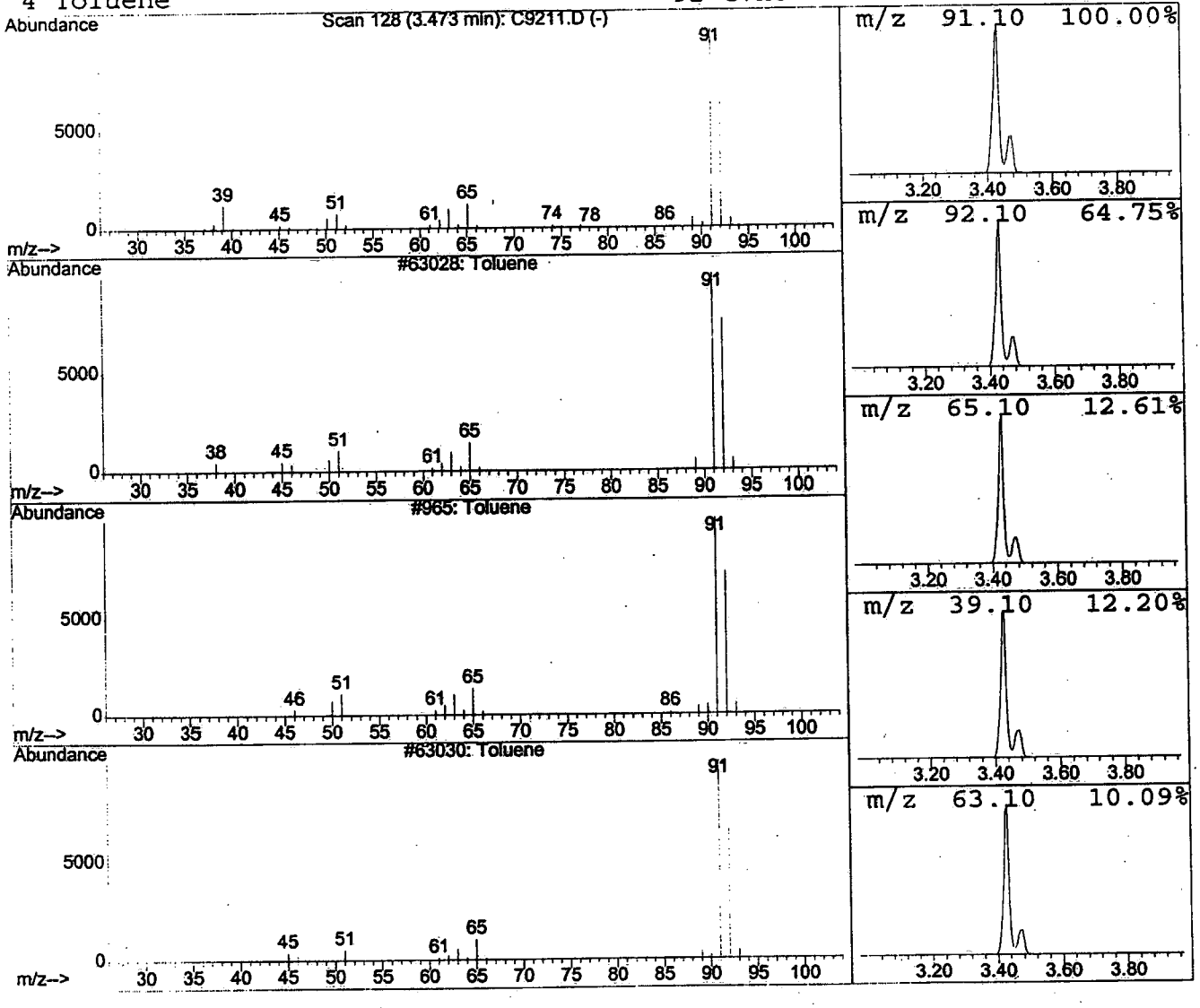
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 2 Substituted benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.47	101.90 UG	2416850	1,4-Dichlorobenzene-d4	6.20

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	Toluene	92	C7H8	000108-88-3	91
4	Toluene	92	C7H8	000108-88-3	91



3745

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

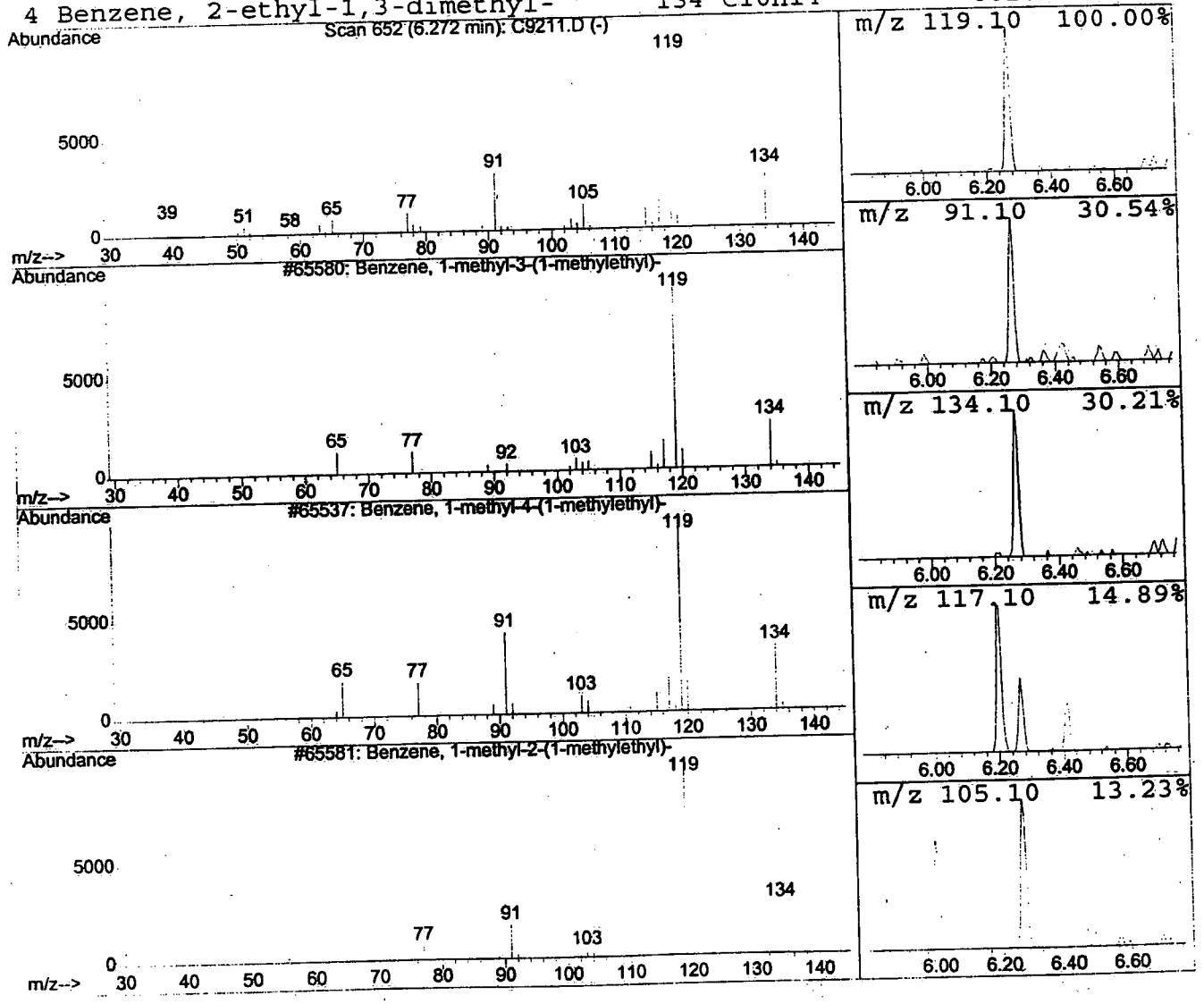
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 3 Substituted benzene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.27	10.23 UG	242677	1,4-Dichlorobenzene-d4	6.20

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-(1-methylethyl)	134	C10H14	000535-77-3	94
2	Benzene, 1-methyl-4-(1-methylethyl)	134	C10H14	000099-87-6	93
3	Benzene, 1-methyl-2-(1-methylethyl)	134	C10H14	000527-84-4	93
4	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	93



3746

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

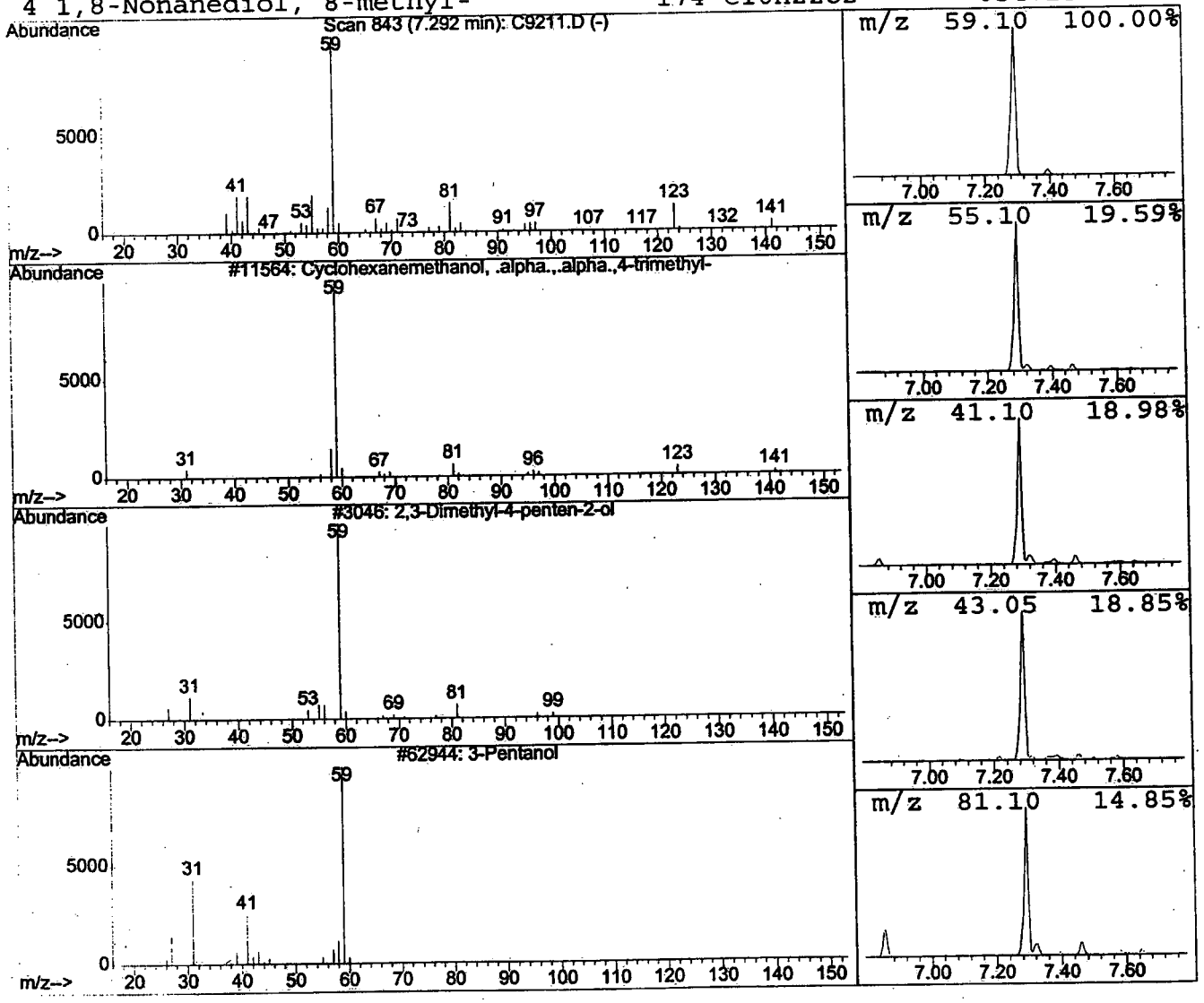
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 4 Unknown — Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.29	284.63 UG	8402370	Naphthalene-d8	7.59

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanemethanol, .alpha.,.alpha	156	C10H20O	000498-81-7	83
2	2,3-Dimethyl-4-penten-2-ol	114	C7H14O	019781-52-3	42
3	3-Pentanol	88	C5H12O	000584-02-1	36
4	1,8-Nonanediol, 8-methyl-	174	C10H22O2	054725-73-4	36



3747

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

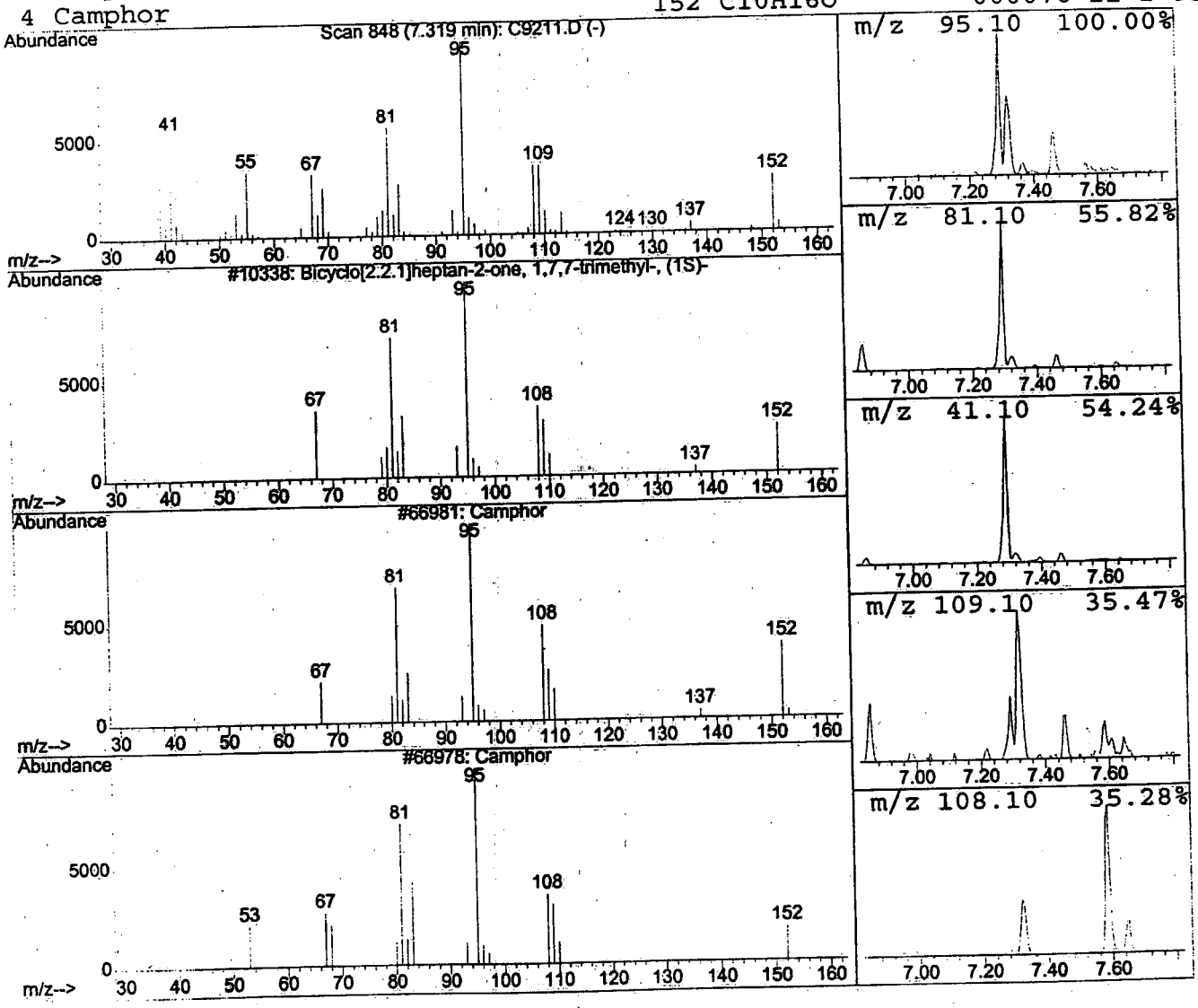
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 5 Unknown — Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.32	16.51 UG	487404	Naphthalene-d8	7.59

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[2.2.1]heptan-2-one, 1,7,7-t	152	C10H16O	000464-48-2	97
2	Camphor	152	C10H16O	000076-22-2	96
3	Camphor	152	C10H16O	000076-22-2	95
4	Camphor	152	C10H16O	000076-22-2	93



3748

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

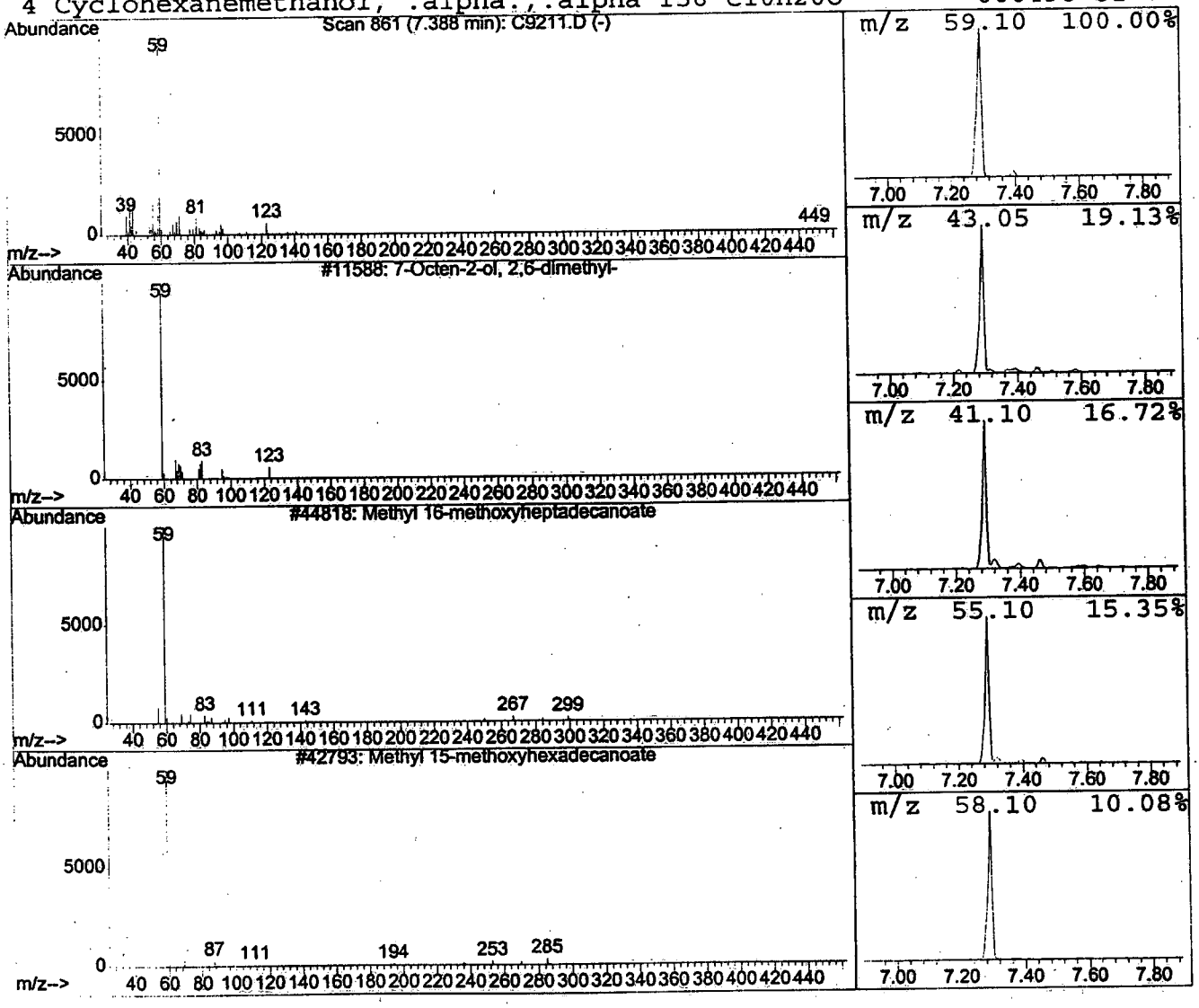
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 6 Unknown — Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.39	14.51 UG	428471	Naphthalene-d8	7.59

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	7-Octen-2-ol, 2,6-dimethyl-	156	C10H20O	018479-58-8	64
2	Methyl 16-methoxyheptadecanoate	314	C19H38O3	000000-00-0	59
3	Methyl 15-methoxyhexadecanoate	300	C18H36O3	000000-00-0	50
4	Cyclohexanemethanol, .alpha.,.alpha	156	C10H20O	000498-81-7	47



3749

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

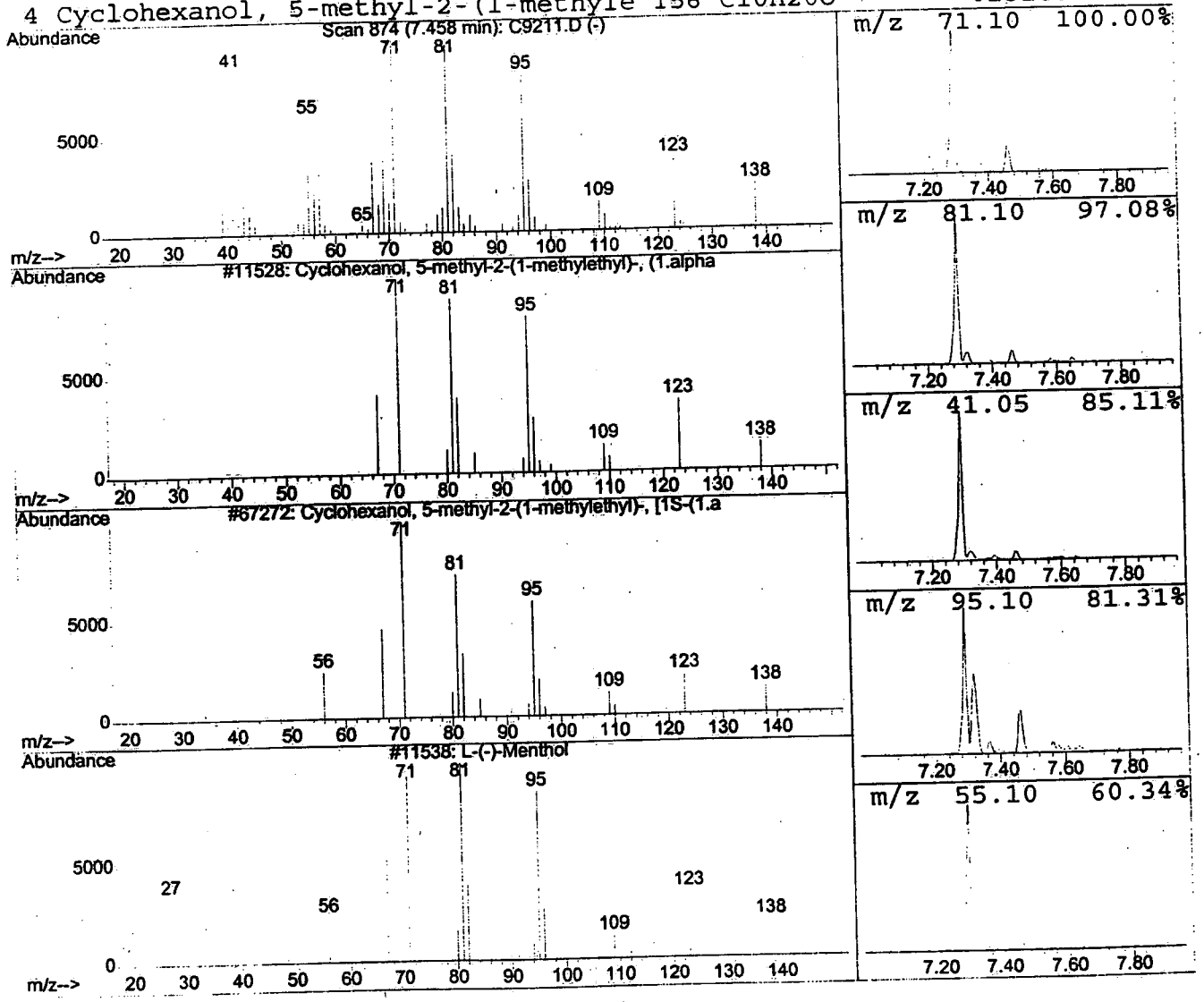
****

Peak Number 7 Unknown

Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.46	12.43 UG	366945	Naphthalene-d8	7.59

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanol, 5-methyl-2-(1-methyle	156	C10H20O	015356-70-4	91
2	Cyclohexanol, 5-methyl-2-(1-methyle	156	C10H20O	023283-97-8	90
3	L-(-)-Menthol	156	C10H20O	002216-51-5	86
4	Cyclohexanol, 5-methyl-2-(1-methyle	156	C10H20O	023283-97-8	83



3750

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

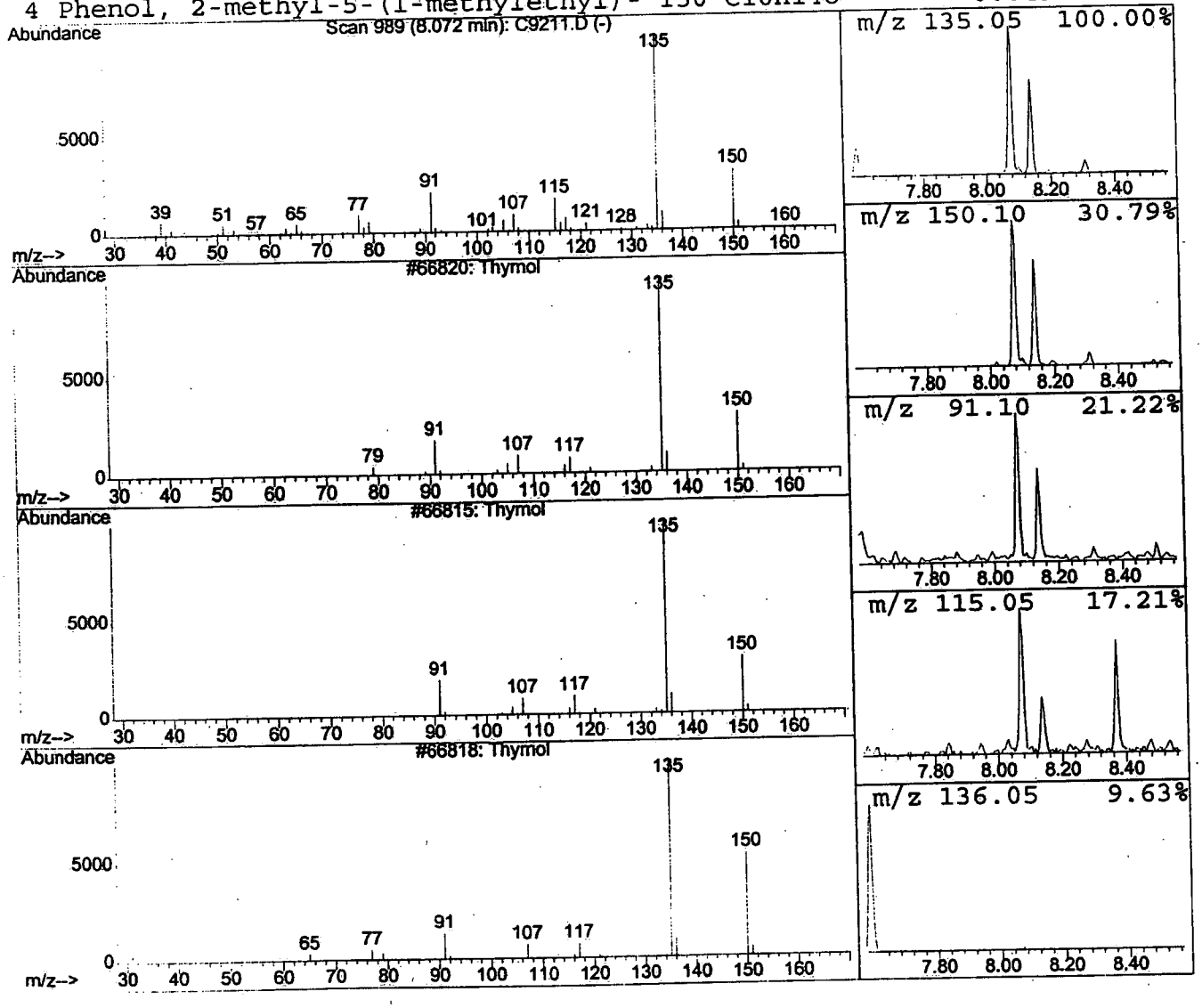
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 8 Substituted benzene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.07	11.23 UG	331561	Naphthalene-d8	7.59

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Thymol	150	C10H14O	000089-83-8	95
2	Thymol	150	C10H14O	000089-83-8	93
3	Thymol	150	C10H14O	000089-83-8	90
4	Phenol, 2-methyl-5-(1-methylethyl)-	150	C10H14O	000499-75-2	90



000003

3751

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

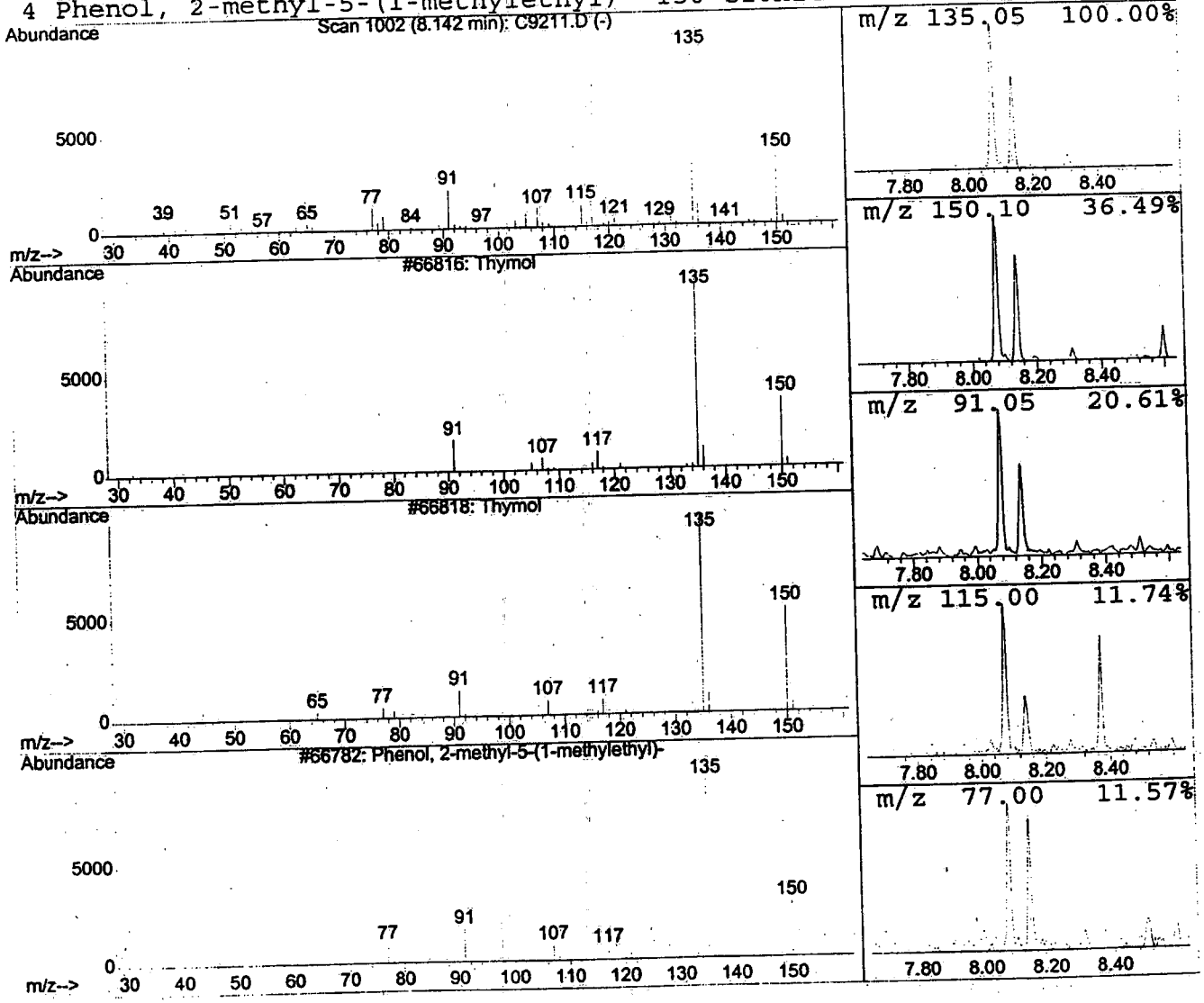
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 9 Substituted benzene Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.14	8.10 UG	239073	Naphthalene-d8	7.59

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Thymol	150	C10H14O	000089-83-8	90
2	Thymol	150	C10H14O	000089-83-8	87
3	Phenol, 2-methyl-5-(1-methylethyl)-	150	C10H14O	000499-75-2	87
4	Phenol, 2-methyl-5-(1-methylethyl)-	150	C10H14O	000499-75-2	83



3752

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

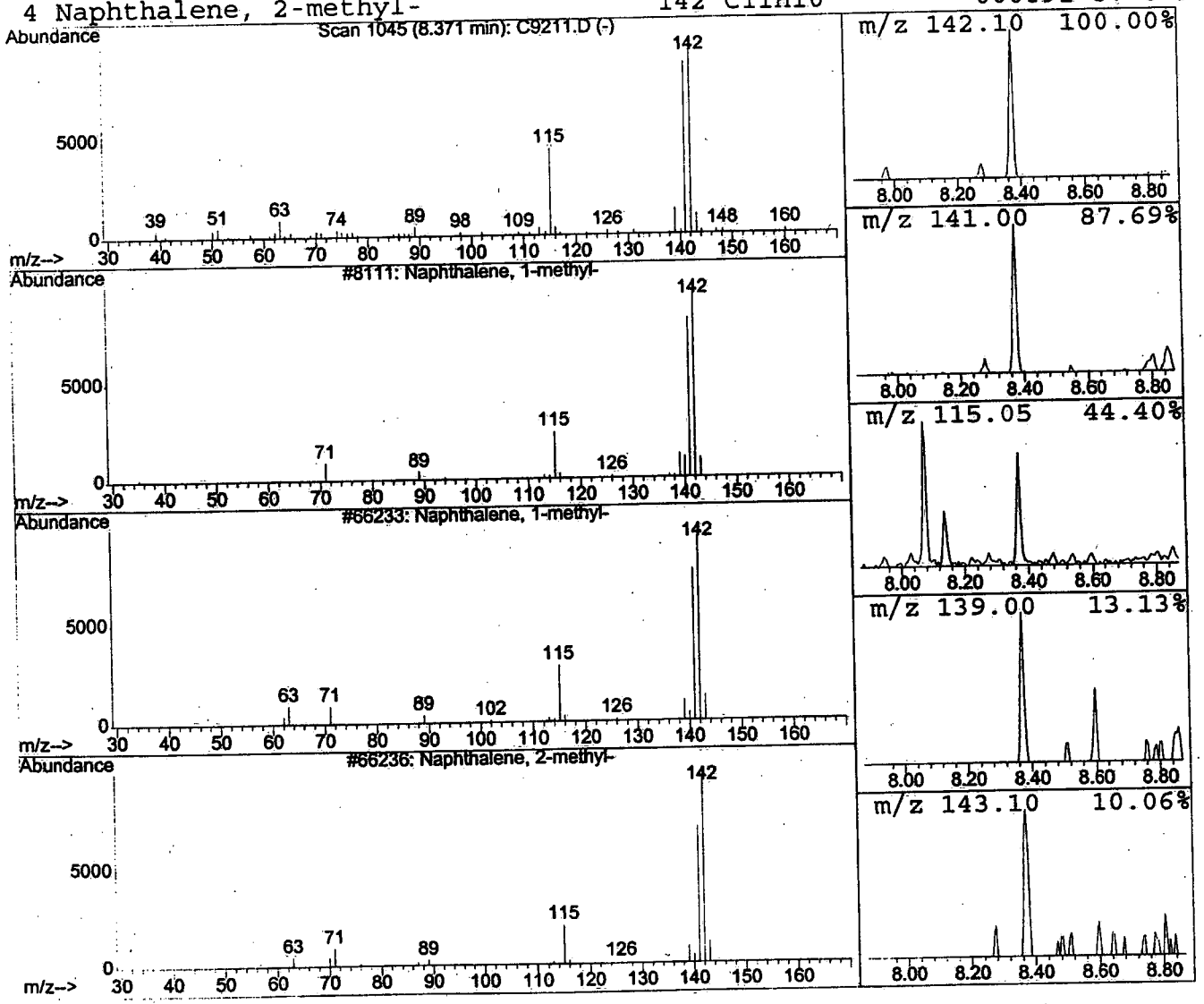
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 10 Substituted naphthalene Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.37	4.31 UG	127104	Naphthalene-d8	7.59

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91
2	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91
3	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	91
4	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	91



3753

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

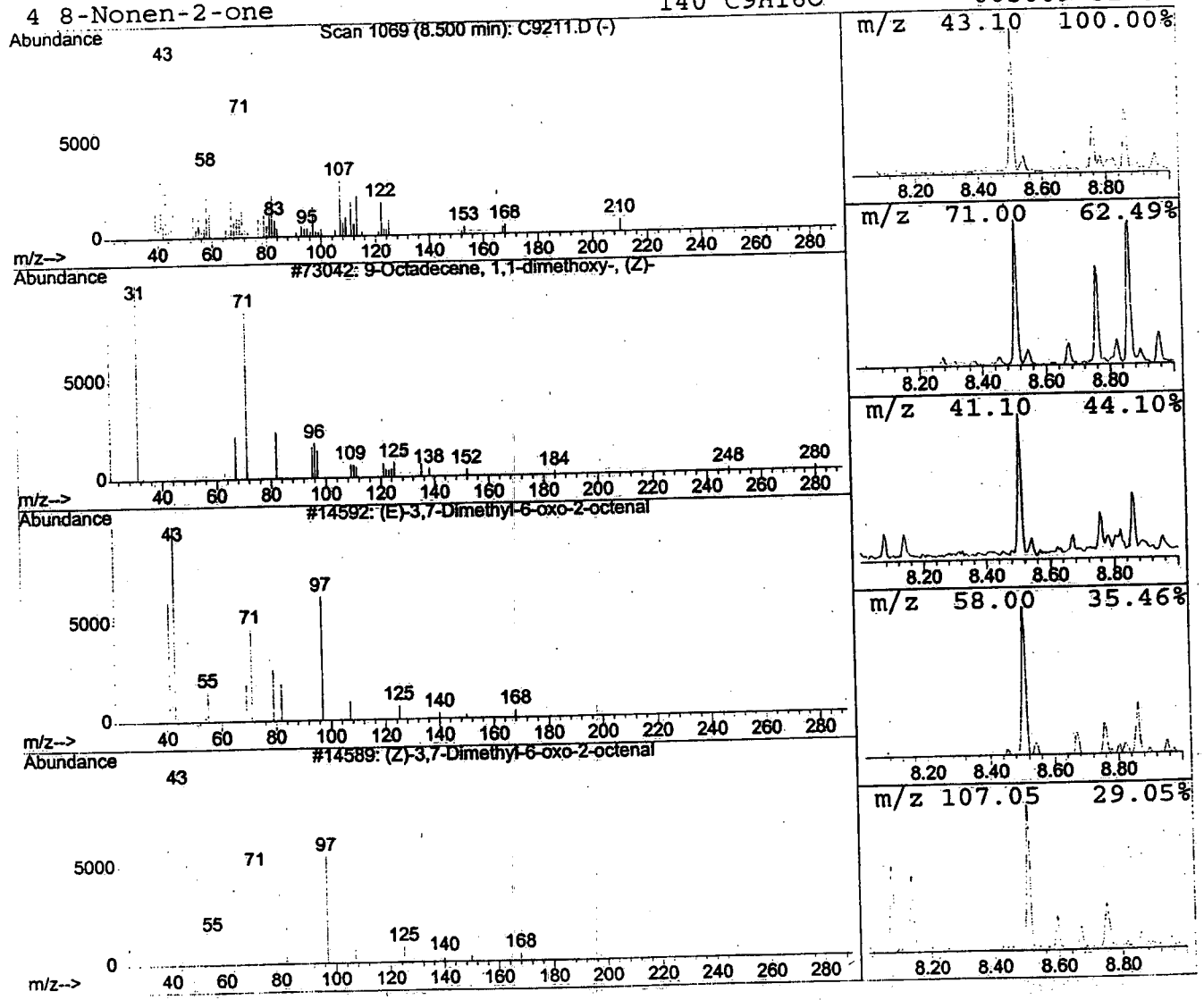
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 11 Unknown — Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.50	13.43 UG	283618	Acenaphthene-d10	9.24

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecene, 1,1-dimethoxy-, (Z)-	312	C20H40O2	015677-71-1	32
2	(E)-3,7-Dimethyl-6-oxo-2-octenal	168	C10H16O2	070856-12-1	27
3	(Z)-3,7-Dimethyl-6-oxo-2-octenal	168	C10H16O2	070856-11-0	27
4	8-Nonen-2-one	140	C9H16O	005009-32-5	18



3754

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

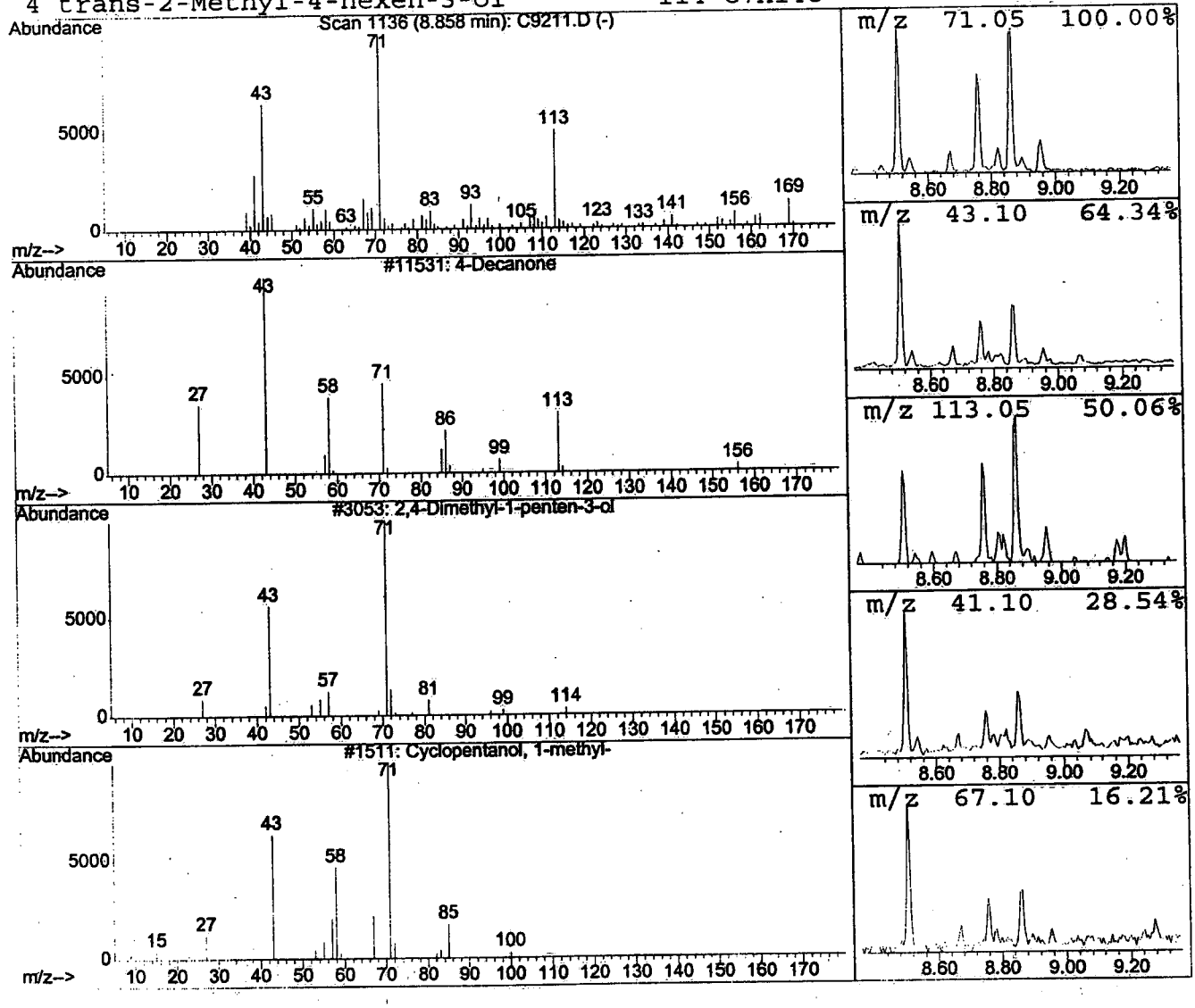
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 12 Unknown — Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.86	8.80 UG	185762	Acenaphthene-d10	9.24

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Decanone	156	C10H20O	000624-16-8	64
2	2,4-Dimethyl-1-penten-3-ol	114	C7H14O	019781-54-5	43
3	Cyclopentanol, 1-methyl-	100	C6H12O	001462-03-9	43
4	trans-2-Methyl-4-hexen-3-ol	114	C7H14O	096346-76-8	43



3755

000033

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

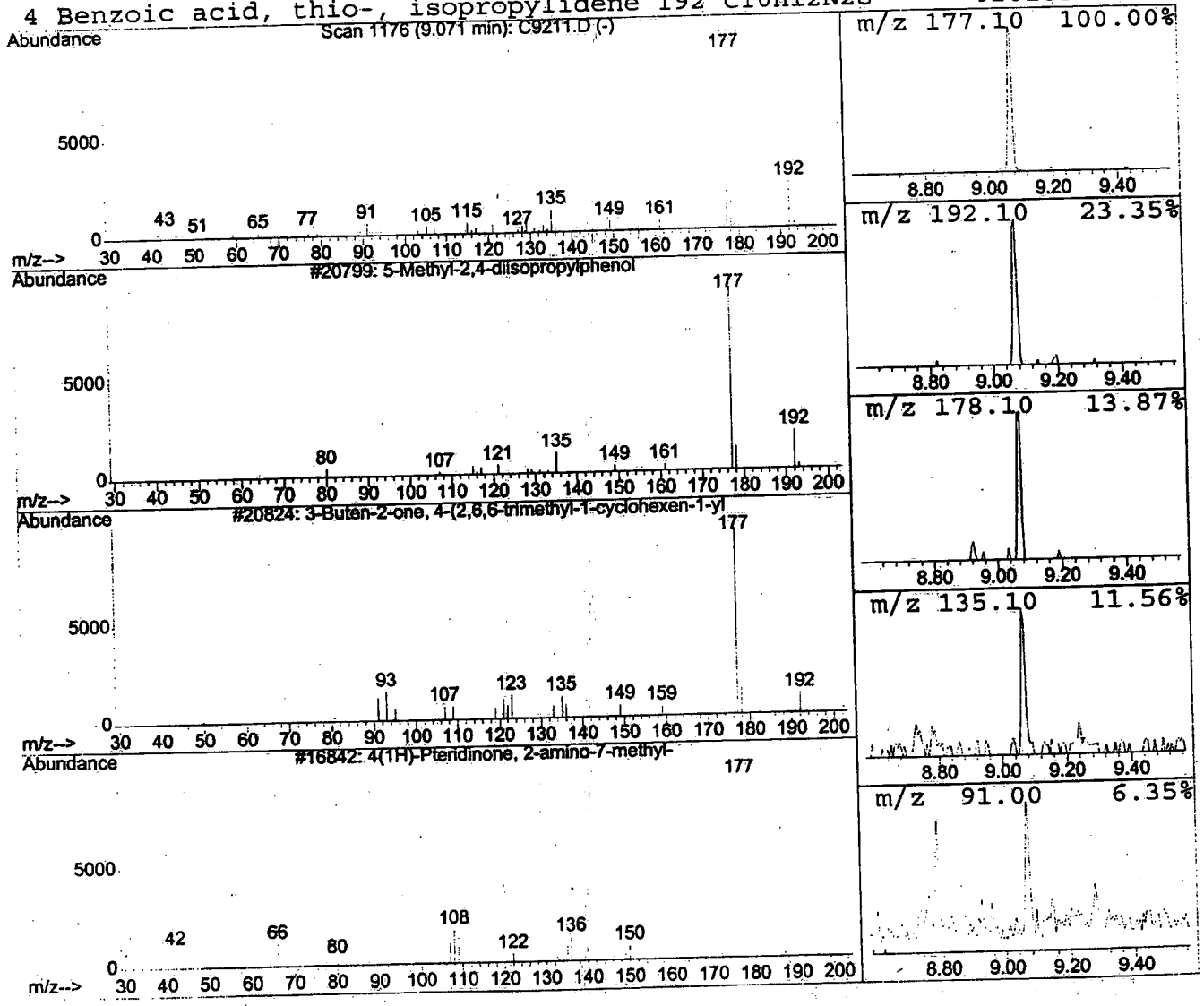
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 13 Substituted phenol — Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.07	7.41 UG	156442	Acenaphthene-d10	9.24

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Methyl-2,4-diisopropylphenol	192	C13H20O	000000-00-0	94
2	3-Buten-2-one, 4-(2,6,6-trimethyl-1	192	C13H20O	000079-77-6	53
3	4(1H)-Pteridinone, 2-amino-7-methyl	177	C7H7N5O	013040-58-9	53
4	Benzoic acid, thio-, isopropylidene	192	C10H12N2S	020185-02-8	45



3756

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9211.D
Acq On : 6 Apr 2001 19:37
Sample : MW-4,2093-001,A,1000mL,100,04/06/01
Misc : ENVTACT/ORBIS,04/04/01,04/04/01,1
MS Integration Params: LSCINT.P

Vial: 14
Operator: DP
Inst : MSD-C
Multiplr: 1.00

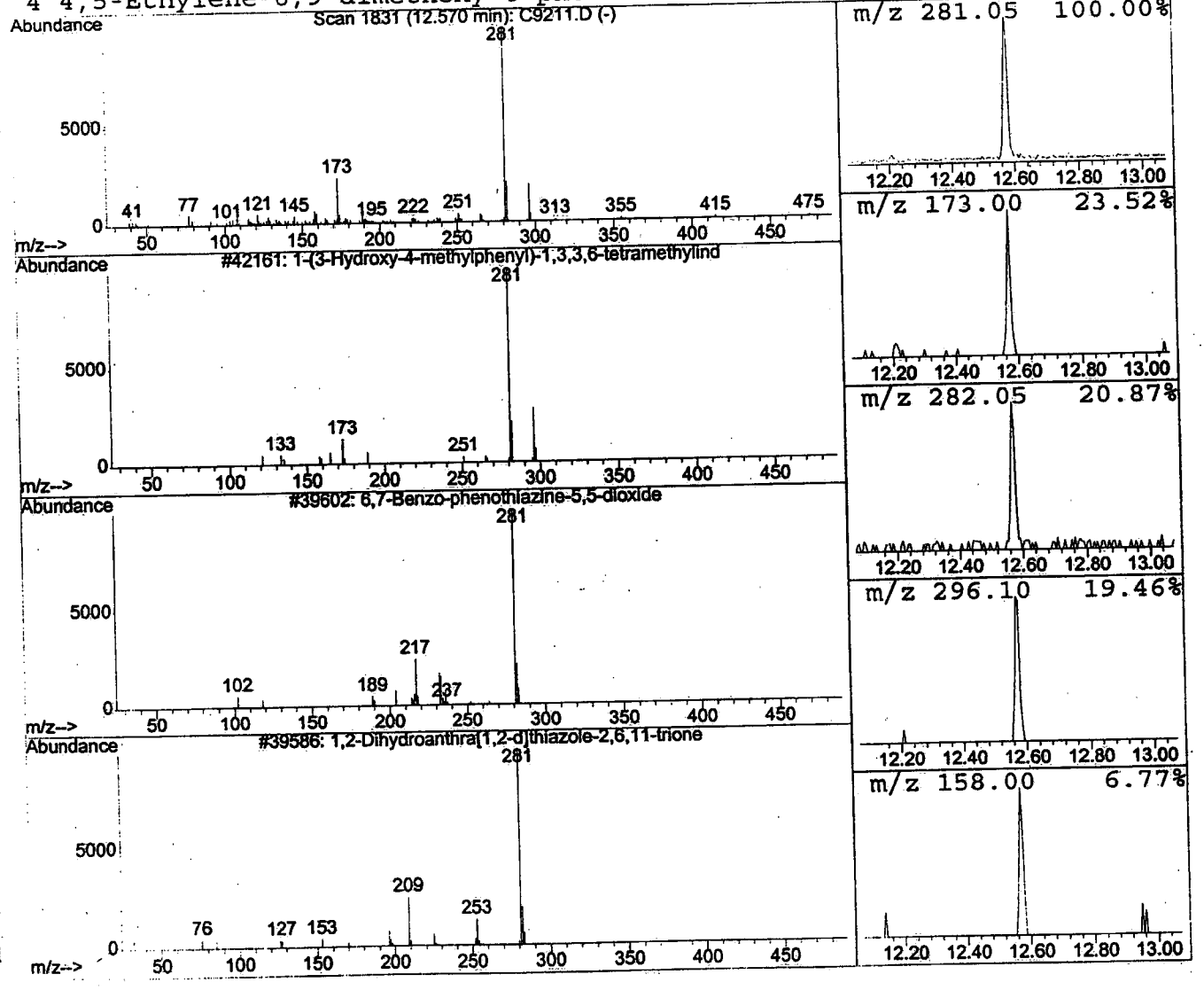
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

****

Peak Number 14 Unknown alkane — Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.57	22.84 UG	134532	Chrysene-d12	12.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-(3-Hydroxy-4-methylphenyl)-1,3,3,	296	C20H24O2	000000-00-0	93
2	6,7-Benzo-phenothiazine-5,5-dioxide	281	C16H11NO2S	000000-00-0	49
3	1,2-Dihydroanthra[1,2-d]thiazole-2,	281	C15H7NO3S	000000-00-0	38
4	4,5-Ethylene-8,9-dimethoxy-6-phenan	281	C17H15NO3	000000-00-0	38



000033

3757

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\04-06-01\C9196.D Vial: 3
Acq On : 6 Apr 2001 13:18 Operator: DP
Sample : .,Method-Blank,A,1000mL,100,04/06/01 Inst : MSD-C
Misc : N/A,N/A,N/A,1 Multiplr: 1.00
IS Integration Params: RTEINT.P
Quant Time: Apr 6 13:50 2001 Quant Results File: CW0501.RES

Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Fri Apr 06 12:18:58 2001
Response via : Initial Calibration
DataAcq Meth : CW0501

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.20	152	151557	40.00	UG	0.00
22) Naphthalene-d8	7.58	136	390527	40.00	UG	0.00
39) Acenaphthene-d10	9.24	164	178698	40.00	UG	0.00
60) Phenanthrene-d10	10.54	188	212615	40.00	UG	0.00
75) Chrysene-d12	12.97	240	80599	40.00	UG	0.00
84) Perylene-d12	15.15	264	38788	40.00	UG	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	4.54	112	234651	55.03	UG	0.00
Spiked Amount 100.000	Range 42 - 95		Recovery = 55.03%			
6) Phenol-d5	5.68	99	289884	69.80	UG	0.00
Spiked Amount 100.000	Range 59 - 97		Recovery = 69.80%			
23) Nitrobenzene-d5	6.81	82	95414	35.38	UG	-0.01
Spiked Amount 50.000	Range 49 - 105		Recovery = 70.76%			
43) 2-Fluorobiphenyl	8.60	172	194542	31.28	UG	0.00
Spiked Amount 50.000	Range 54 - 110		Recovery = 62.56%			
64) 2,4,6-Tribromophenol	9.93	330	53788	74.07	UG	0.00
Spiked Amount 100.000	Range 48 - 126		Recovery = 74.07%			
77) Terphenyl-d14	11.87	244	129461m	60.16	UG	0.00
Spiked Amount 50.000	Range 53 - 123		Recovery = 120.32%			

Target Compounds **Qvalue**

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

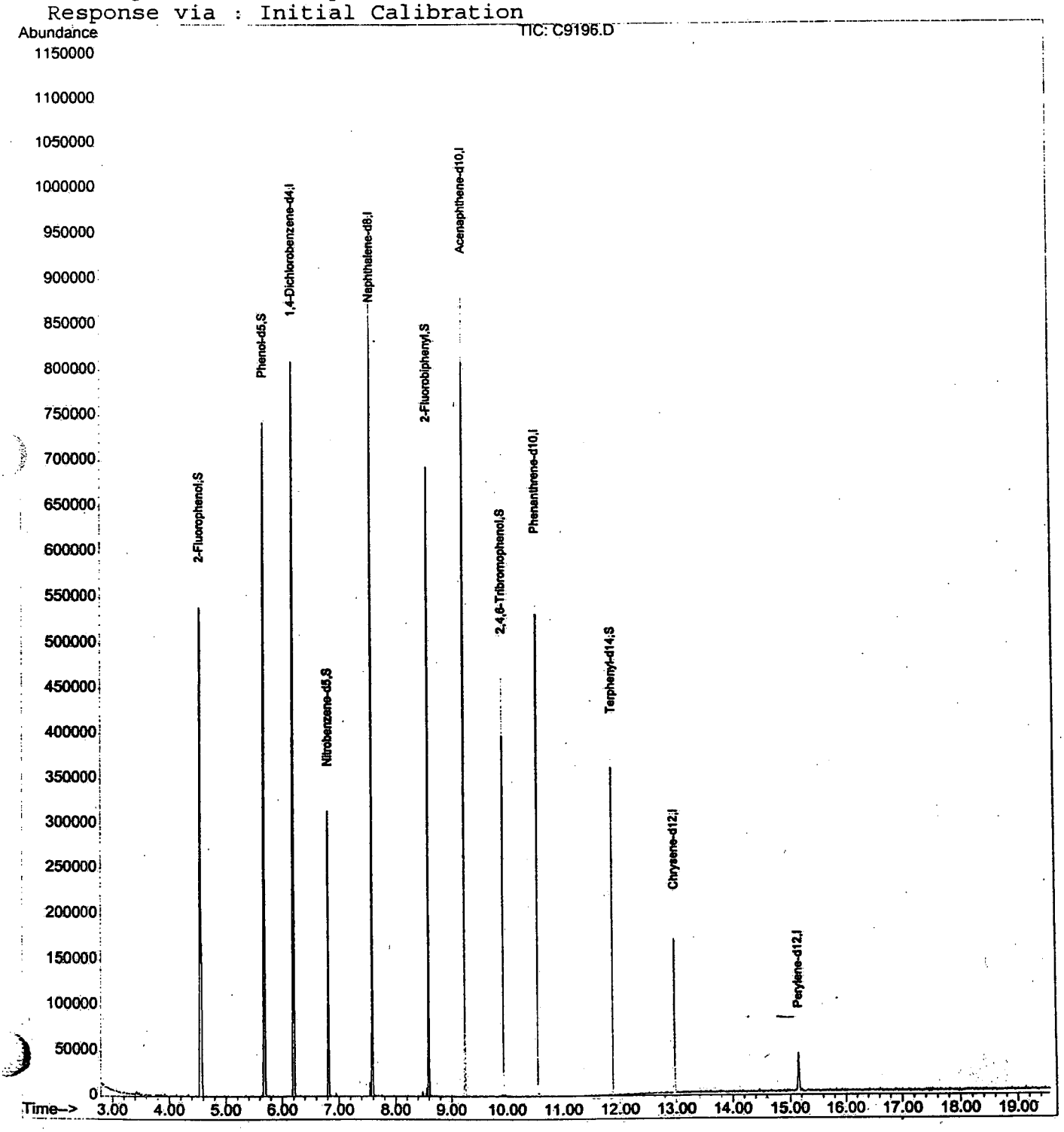
3758

000039

Quantitation Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9196.D Vial: 3
Acq On : 6 Apr 2001 13:18 Operator: DP
Sample : .,Method-Blank,A,1000mL,100,04/06/01 Inst : MSD-C
Misc : N/A,N/A,N/A,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 6 13:50 2001 Quant Results File: CW0501.RES

Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Last Update : Fri Apr 06 12:18:58 2001
Response via : Initial Calibration



000093

Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\04-06-01\C9196.D Vial: 3
Acq On : 6 Apr 2001 13:18 Operator: DP
Sample : .,Method-Blank,A,1000mL,100,04/06/01 Inst : MSD-C
Misc : N/A,N/A,N/A,1 Multiplr: 1.00
LS Integration Params: LSCINT.P
Quant Method : C:\HPCHEM\1\METHODS\CW0501.M (RTE Integrator)
Title : BNA CALIBRATION METHOD
Library : C:\DATABASE\NBS75K.L

No Library Search Compounds Detected

****

C9196.D CW0501.M Fri Apr 06 12:49:29 2001 MSD-C

000091

PCB METHOD BLANK SUMMARY

Lab File ID: V4941.D

Instrument ID: GC-V

Date Extracted: 04/04/2001

Matrix: AQUEOUS

Date Analyzed: 04/04/2001

Time Analyzed: 20:30

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PS4-4-3A	2049-001	04/04/2001	21:00
FB1-4-3A	2049-003	04/04/2001	21:31
PCB	2049-001-MSD2	04/04/2001	22:33
PCB	PBW0404-MS2	04/04/2001	23:03
PS4-4-3S	2049-002	04/05/2001	09:34
PCB	2049-001-MS2	04/05/2001	10:05

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0404-BLK2
Client ID: (2049)
Date Received: NA
Date Extracted: 04/04/2001
Date Analyzed: 04/04/2001
Data file: V4941.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.2
Aroclor-1221	ND		0.2
Aroclor-1232	ND		0.2
Aroclor-1242	ND		0.2
Aroclor-1248	ND		0.2
Aroclor-1254	ND		0.2
Aroclor-1260	ND		0.2

3762

PCB METHOD BLANK SUMMARY

Lab File ID: V4957.D

Instrument ID: GC-V

Date Extracted: 04/05/2001

Matrix: AQUEOUS

Date Analyzed: 04/05/2001

Time Analyzed: 15:21

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
DW-1	2108-001	04/05/2001	15:52
WW-1	2108-002	04/05/2001	16:23
MHR-1	2108-003	04/05/2001	16:53
FB	2094-001	04/05/2001	17:24
MW-1	2094-003	04/05/2001	17:55
MW-2	2094-004	04/05/2001	18:26
MW-7	2094-005	04/05/2001	18:56
MW-6	2094-006	04/05/2001	19:27
MW-8	2094-007	04/05/2001	19:58
MW-3	2094-008	04/05/2001	20:29
MW-5	2094-009	04/05/2001	20:59
PCB	PBW0405-MS2	04/05/2001	22:01
MW-4	2093-001	04/06/2001	09:48

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Client/Project: NA

Lab ID: 0405-BLK2
Client ID: (2093.2108)
Date Received: NA
Date Extracted: 04/05/2001
Date Analyzed: 04/05/2001
Data file: V4957.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Aroclor-1016	ND		0.2
Aroclor-1221	ND		0.2
Aroclor-1232	ND		0.2
Aroclor-1242	ND		0.2
Aroclor-1248	ND		0.2
Aroclor-1254	ND		0.2
Aroclor-1260	ND		0.2

000035

3764

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/29/2001

Instrument ID: Varian 3400

GC Column (1st): DB-5

Data File: V4879.D V4880.D V4881.D V4882.D V4883.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	200	500	1000	2000	4000	RT	FROM	TO
Aroclor-1016	5.80	5.80	5.80	5.80	5.80	5.80	5.73	5.87
Aroclor-1016 {2}	6.89	6.89	6.89	6.89	6.89	6.89	6.82	6.96
Aroclor-1016 {3}	7.33	7.33	7.33	7.33	7.33	7.33	7.26	7.40
Aroclor-1016 {4}	9.20	9.20	9.20	9.20	9.20	9.20	9.13	9.27
Aroclor-1016 {5}	9.68	9.68	9.68	9.68	9.68	9.68	9.61	9.75
Aroclor-1221			3.83				3.76	3.90
Aroclor-1221 {2}			5.44				5.37	5.51
Aroclor-1221 {3}			5.67				5.60	5.74
Aroclor-1221 {4}			5.80				5.73	5.87
Aroclor-1221 {5}			6.90				6.83	6.97
Aroclor-1232			5.80				5.73	5.87
Aroclor-1232 {2}			6.83				6.76	6.90
Aroclor-1232 {3}			8.35				8.28	8.42
Aroclor-1232 {4}			9.20				9.13	9.27
Aroclor-1232 {5}			10.05				9.98	10.12
Aroclor-1242			7.33				7.26	7.40
Aroclor-1242 {2}			9.20				9.13	9.27
Aroclor-1242 {3}			9.78				9.71	9.85
Aroclor-1242 {4}			10.99				10.92	11.06
Aroclor-1242 {5}			11.51				11.44	11.58
Aroclor-1248			8.07				8.00	8.14
Aroclor-1248 {2}			9.19				9.12	9.26
Aroclor-1248 {3}			9.77				9.70	9.84
Aroclor-1248 {4}			10.98				10.91	11.05
Aroclor-1248 {5}			11.49				11.42	11.56
Aroclor-1254			11.74				11.67	11.81
Aroclor-1254 {2}			12.56				12.49	12.63
Aroclor-1254 {3}			13.72				13.65	13.79
Aroclor-1254 {4}			14.46				14.39	14.53
Aroclor-1254 {5}			15.33				15.26	15.40
Aroclor-1260	15.33	15.33	15.33	15.33	15.33	15.33	15.26	15.40
Aroclor-1260 {2}	15.89	15.89	15.89	15.89	15.89	15.89	15.82	15.96
Aroclor-1260 {3}	17.54	17.53	17.54	17.54	17.53	17.53	17.46	17.60
Aroclor-1260 {4}	18.46	18.46	18.46	18.46	18.46	18.46	18.39	18.53
Aroclor-1260 {5}	20.51	20.51	20.51	20.51	20.51	20.51	20.44	20.58

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/29/2001 **Instrument ID:** Varian 3400

GC Column (1st): DB-5

Data File: V4879.D V4880.D V4881.D V4882.D V4883.D

Compound	CALIBRATION FACTORS 200	500	1000	2000	4000	MEAN	%RSD
Aroclor-1016	6227	6407	6117	6380	5357	6098	7.06
Aroclor-1016 {2}	4874	5091	4819	5117	4301	4840	6.79
Aroclor-1016 {3}	8659	8707	8314	8610	7218	8302	7.52
Aroclor-1016 {4}	5050	5220	5024	5286	4392	4994	7.10
Aroclor-1016 {5}	7280	7405	7017	7300	6087	7018	7.69
Aroclor-1221			2100				
Aroclor-1221 {2}			3561				
Aroclor-1221 {3}			3370				
Aroclor-1221 {4}			8799				
Aroclor-1221 {5}			1175				
Aroclor-1232			5822				
Aroclor-1232 {2}			2891				
Aroclor-1232 {3}			4281				
Aroclor-1232 {4}			2035				
Aroclor-1232 {5}			4343				
Aroclor-1242			5779				
Aroclor-1242 {2}			3374				
Aroclor-1242 {3}			4066				
Aroclor-1242 {4}			7465				
Aroclor-1242 {5}			7715				
Aroclor-1248			11196				
Aroclor-1248 {2}			5874				
Aroclor-1248 {3}			5151				
Aroclor-1248 {4}			15157				
Aroclor-1248 {5}			15014				
Aroclor-1254			14779				
Aroclor-1254 {2}			13098				
Aroclor-1254 {3}			20763				
Aroclor-1254 {4}			13828				
Aroclor-1254 {5}			23989				
Aroclor-1260	26817	26595	24956	26238	22357	25393	7.26
Aroclor-1260 {2}	23479	23313	22286	23486	19993	22511	6.63
Aroclor-1260 {3}	53488	53166	50012	55452	51067	52637	4.06
Aroclor-1260 {4}	24143	24378	23286	24540	21175	23504	5.91
Aroclor-1260 {5}	13746	13823	13823	14518	12773	13737	4.54
					Average %RSD		6.46

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/29/2001

Instrument ID: Varian 3400

GC Column (2nd): DB-1701P

Data File: V4879.C V4880.C V4881.C V4882.C V4883.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	200	500	1000	2000	4000	RT	FROM	TO
Aroclor-1016	6.37	6.37	6.37	6.37	6.37	6.37	6.30	6.44
Aroclor-1016 {2}	7.44	7.44	7.44	7.44	7.44	7.44	7.37	7.51
Aroclor-1016 {3}	8.80	8.80	8.80	8.80	8.80	8.80	8.73	8.87
Aroclor-1016 {4}	9.19	9.19	9.19	9.19	9.19	9.19	9.12	9.26
Aroclor-1016 {5}	9.51	9.51	9.51	9.51	9.51	9.51	9.44	9.58
Aroclor-1221			4.11				4.04	4.18
Aroclor-1221 {2}			5.81				5.74	5.88
Aroclor-1221 {3}			6.23				6.16	6.30
Aroclor-1221 {4}			6.39				6.32	6.46
Aroclor-1221 {5}			7.46				7.39	7.53
Aroclor-1232			6.37				6.30	6.44
Aroclor-1232 {2}			7.44				7.37	7.51
Aroclor-1232 {3}			8.80				8.73	8.87
Aroclor-1232 {4}			9.51				9.44	9.58
Aroclor-1232 {5}			10.62				10.55	10.69
Aroclor-1242			8.14				8.07	8.21
Aroclor-1242 {2}			9.51				9.44	9.58
Aroclor-1242 {3}			10.96				10.89	11.03
Aroclor-1242 {4}			11.95				11.88	12.02
Aroclor-1242 {5}			12.69				12.62	12.76
Aroclor-1248			8.79				8.72	8.86
Aroclor-1248 {2}			9.89				9.82	9.96
Aroclor-1248 {3}			10.61				10.54	10.68
Aroclor-1248 {4}			10.90				10.83	10.97
Aroclor-1248 {5}			11.55				11.48	11.62
Aroclor-1254			12.49				12.42	12.56
Aroclor-1254 {2}			13.60				13.53	13.67
Aroclor-1254 {3}			14.77				14.70	14.84
Aroclor-1254 {4}			15.21				15.14	15.28
Aroclor-1254 {5}			16.34				16.27	16.41
Aroclor-1260	15.21	15.21	15.21	15.21	15.21	15.21	15.14	15.28
Aroclor-1260 {2}	16.47	16.47	16.47	16.47	16.47	16.47	16.40	16.54
Aroclor-1260 {3}	17.48	17.48	17.48	17.48	17.48	17.48	17.41	17.55
Aroclor-1260 {4}	18.45	18.45	18.45	18.45	18.45	18.45	18.38	18.52
Aroclor-1260 {5}	20.74	20.74	20.73	20.74	20.73	20.74	20.67	20.81

PCB INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/29/2001

Instrument ID: Varian 3400

GC Column (2nd): DB-1701P

Data File: V4879.C V4880.C V4881.C V4882.C V4883.C

Compound	CALIBRATION FACTORS 200	500	1000	2000	4000	MEAN	%RSD
Aroclor-1016	7118	7192	6869	7111	5969	6852	7.42
Aroclor-1016 {2}	13249	13189	12403	12915	10800	12511	8.10
Aroclor-1016 {3}	31360	30917	29095	30687	26753	29762	6.34
Aroclor-1016 {4}	10575	10712	10190	10632	8893	10200	7.43
Aroclor-1016 {5}	10858	10867	10407	10885	9077	10419	7.45
Aroclor-1221			2407				
Aroclor-1221 {2}			4276				
Aroclor-1221 {3}			2616				
Aroclor-1221 {4}			9610				
Aroclor-1221 {5}			814				
Aroclor-1232			6285				
Aroclor-1232 {2}			4891				
Aroclor-1232 {3}			11395				
Aroclor-1232 {4}			4013				
Aroclor-1232 {5}			5432				
Aroclor-1242			3856				
Aroclor-1242 {2}			7021				
Aroclor-1242 {3}			1402				
Aroclor-1242 {4}			7636				
Aroclor-1242 {5}			5413				
Aroclor-1248			18813				
Aroclor-1248 {2}			12765				
Aroclor-1248 {3}			14673				
Aroclor-1248 {4}			14201				
Aroclor-1248 {5}			8924				
Aroclor-1254			15038				
Aroclor-1254 {2}			13092				
Aroclor-1254 {3}			18915				
Aroclor-1254 {4}			11076				
Aroclor-1254 {5}			23553				
Aroclor-1260	22062	21873	20369	21104	17700	20621	8.56
Aroclor-1260 {2}	17535	17596	16506	17108	14273	16603	8.27
Aroclor-1260 {3}	19980	19847	18510	19225	16217	18756	8.18
Aroclor-1260 {4}	47968	48199	45069	48097	42661	46399	5.31
Aroclor-1260 {5}	5472	5619	5418	5793	5071	5475	4.90
					Average %RSD		7.20

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/05/2001 Instrument ID: Varian 3400

Data File: V4956.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.80	5.73	5.87	6098	5887	3.46
Aroclor-1016 {2}	6.89	6.82	6.96	4840	4609	4.79
Aroclor-1016 {3}	7.33	7.26	7.40	8302	7919	4.60
Aroclor-1016 {4}	9.20	9.13	9.27	4994	4802	3.85
Aroclor-1016 {5}	9.68	9.61	9.75	7018	6748	3.84
Aroclor-1260	15.33	15.26	15.40	25393	24867	2.07
Aroclor-1260 {2}	15.89	15.82	15.96	22511	22030	2.14
Aroclor-1260 {3}	17.53	17.46	17.60	52637	50733	3.62
Aroclor-1260 {4}	18.46	18.39	18.53	23504	23297	0.88
Aroclor-1260 {5}	20.50	20.43	20.57	13737	13806	0.51
					Average %D	2.98

Data File: V4956.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.36	6.29	6.43	6852	6193	9.62
Aroclor-1016 {2}	7.43	7.36	7.50	12511	11280	9.84
Aroclor-1016 {3}	8.79	8.72	8.86	29762	26311	11.60
Aroclor-1016 {4}	9.18	9.11	9.25	10200	9352	8.32
Aroclor-1016 {5}	9.50	9.43	9.57	10419	9482	8.99
Aroclor-1260	15.19	15.12	15.26	20621	18895	8.37
Aroclor-1260 {2}	16.45	16.38	16.52	16603	15420	7.13
Aroclor-1260 {3}	17.47	17.40	17.54	18756	17391	7.28
Aroclor-1260 {4}	18.43	18.36	18.50	46399	42246	8.95
Aroclor-1260 {5}	20.72	20.65	20.79	5475	5309	3.03
					Average %D	8.31

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/05/2001 Instrument ID: Varian 3400

Data File: V4971.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.80	5.73	5.87	6098	5515	9.55
Aroclor-1016 {2}	6.88	6.81	6.95	4840	4289	11.39
Aroclor-1016 {3}	7.32	7.25	7.39	8302	7412	10.72
Aroclor-1016 {4}	9.19	9.12	9.26	4994	4508	9.75
Aroclor-1016 {5}	9.67	9.60	9.74	7018	6349	9.53
Aroclor-1260	15.32	15.25	15.39	25393	23760	6.43
Aroclor-1260 {2}	15.88	15.81	15.95	22511	20969	6.85
Aroclor-1260 {3}	17.53	17.46	17.60	52637	48710	7.46
Aroclor-1260 {4}	18.45	18.38	18.52	23504	22352	4.90
Aroclor-1260 {5}	20.50	20.43	20.57	13737	13326	2.99
					Average %D	7.96

Data File: V4971.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.36	6.29	6.43	6852	6190	9.65
Aroclor-1016 {2}	7.43	7.36	7.50	12511	11355	9.24
Aroclor-1016 {3}	8.79	8.72	8.86	29762	26554	10.78
Aroclor-1016 {4}	9.17	9.10	9.24	10200	9419	7.66
Aroclor-1016 {5}	9.49	9.42	9.56	10419	9576	8.09
Aroclor-1260	15.18	15.11	15.25	20621	19347	6.18
Aroclor-1260 {2}	16.44	16.37	16.51	16603	15738	5.21
Aroclor-1260 {3}	17.45	17.38	17.52	18756	17823	4.97
Aroclor-1260 {4}	18.42	18.35	18.49	46399	43633	5.96
Aroclor-1260 {5}	20.71	20.64	20.78	5475	5390	1.54
					Average %D	6.93

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PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/06/2001 Instrument ID: Varian 3400

Data File: V4990.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.80	5.73	5.87	6098	5644	7.44
Aroclor-1016 {2}	6.89	6.82	6.96	4840	4477	7.50
Aroclor-1016 {3}	7.33	7.26	7.40	8302	7643	7.93
Aroclor-1016 {4}	9.20	9.13	9.27	4994	4672	6.46
Aroclor-1016 {5}	9.68	9.61	9.75	7018	6540	6.80
Aroclor-1260	15.32	15.25	15.39	25393	23945	5.70
Aroclor-1260 {2}	15.89	15.82	15.96	22511	21238	5.66
Aroclor-1260 {3}	17.53	17.46	17.60	52637	48768	7.35
Aroclor-1260 {4}	18.46	18.39	18.53	23504	22335	4.97
Aroclor-1260 {5}	20.50	20.43	20.57	13737	13412	2.36
					Average %D	6.22

Data File: V4990.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.36	6.29	6.43	6852	6093	11.08
Aroclor-1016 {2}	7.43	7.36	7.50	12511	11131	11.03
Aroclor-1016 {3}	8.79	8.72	8.86	29762	25914	12.93
Aroclor-1016 {4}	9.17	9.10	9.24	10200	9185	9.96
Aroclor-1016 {5}	9.50	9.43	9.57	10419	9333	10.42
Aroclor-1260	15.19	15.12	15.26	20621	18669	9.47
Aroclor-1260 {2}	16.45	16.38	16.52	16603	15270	8.03
Aroclor-1260 {3}	17.46	17.39	17.53	18756	17110	8.77
Aroclor-1260 {4}	18.42	18.35	18.49	46399	41217	11.17
Aroclor-1260 {5}	20.71	20.64	20.78	5475	5178	5.41
					Average %D	9.83

PCB CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 04/06/2001 Instrument ID: Varian 3400

Data File: V4995.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	5.80	5.73	5.87	6098	5900	3.24
Aroclor-1016 {2}	6.89	6.82	6.96	4840	4718	2.52
Aroclor-1016 {3}	7.33	7.26	7.40	8302	7887	5.00
Aroclor-1016 {4}	9.21	9.14	9.28	4994	4822	3.46
Aroclor-1016 {5}	9.68	9.61	9.75	7018	6793	3.21
Aroclor-1260	15.33	15.26	15.40	25393	25958	2.23
Aroclor-1260 {2}	15.90	15.83	15.97	22511	21992	2.31
Aroclor-1260 {3}	17.54	17.47	17.61	52637	50988	3.13
Aroclor-1260 {4}	18.47	18.40	18.54	23504	23312	0.82
Aroclor-1260 {5}	20.51	20.44	20.58	13737	13858	0.89
					Average %D	2.68

Data File: V4995.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	6.37	6.30	6.44	6852	6645	3.02
Aroclor-1016 {2}	7.43	7.36	7.50	12511	12049	3.69
Aroclor-1016 {3}	8.79	8.72	8.86	29762	28031	5.82
Aroclor-1016 {4}	9.18	9.11	9.25	10200	9920	2.75
Aroclor-1016 {5}	9.50	9.43	9.57	10419	10125	2.82
Aroclor-1260	15.19	15.12	15.26	20621	20108	2.49
Aroclor-1260 {2}	16.46	16.39	16.53	16603	16425	1.08
Aroclor-1260 {3}	17.47	17.40	17.54	18756	18441	1.68
Aroclor-1260 {4}	18.43	18.36	18.50	46399	44168	4.81
Aroclor-1260 {5}	20.72	20.65	20.79	5475	5613	2.53
					Average %D	3.07

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/05/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(2093.2108)	0405-BLK2	AQUEOUS	101		87		98		86	
DW-1	2108-001	AQUEOUS	94		85		94		85	
WW-1	2108-002	AQUEOUS	79		75		83		79	
MHR-1	2108-003	AQUEOUS	84		83		86		84	
FB	2094-001	AQUEOUS	88		78		89		78	
MW-1	2094-003	AQUEOUS	84		89		85		89	
MW-2	2094-004	AQUEOUS	78		79		78		79	
MW-7	2094-005	AQUEOUS	84		69		83		69	
MW-6	2094-006	AQUEOUS	92		88		94		89	
MW-8	2094-007	AQUEOUS	109		85		106		90	
MW-3	2094-008	AQUEOUS	90		86		87		91	
MW-5	2094-009	AQUEOUS	100		84		99		87	
PCB	PBW0405-MS2	AQUEOUS	95		82		98		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

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/05/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
MW-4	2093-001	AQUEOUS	94		91		98		95	
S-55	2092-011	SOIL	96		128		106		154	

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

000105

AQUEOUS PCB MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2049-001-MSD2

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	10.0	0.0	11.3	113	35 - 161
Aroclor-1260	10.0	0.0	10.8	108	53 - 192

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	11.2	112	1	21	35 - 161
Aroclor-1260	0.0	10.7	107	1	23	53 - 192

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

AQUEOUS PCB BLANK SPIKE RECOVERY

Matrix spike Lab sample ID: PBW0405-MS2

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
Aroclor-1016	10.0	0.0	11.2	112	35 - 161
Aroclor-1260	10.0	0.0	10.6	106	53 - 192

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-V **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 4.97 DCB 1 22.63 TCMX 2 4.85 DCB 2 22.82

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
(2093.2108)	0405-BLK2	04/05/2001	15:21	4.97		22.63		4.85		22.82	
DW-1	2108-001	04/05/2001	15:52	4.97		22.63		4.85		22.82	
WW-1	2108-002	04/05/2001	16:23	4.97		22.63		4.85		22.82	
MHR-1	2108-003	04/05/2001	16:53	4.96		22.62		4.84		22.81	
FB	2094-001	04/05/2001	17:24	4.97		22.63		4.85		22.83	
MW-1	2094-003	04/05/2001	17:55	4.97		22.63		4.85		22.82	
MW-2	2094-004	04/05/2001	18:26	4.97		22.63		4.85		22.83	
MW-7	2094-005	04/05/2001	18:56	4.97		22.63		4.85		22.82	
MW-6	2094-006	04/05/2001	19:27	4.97		22.62		4.85		22.81	
MW-8	2094-007	04/05/2001	19:58	4.97		22.62		4.84		22.81	
MW-3	2094-008	04/05/2001	20:29	4.97		22.63		4.85		22.82	
MW-5	2094-009	04/05/2001	20:59	4.97		22.63		4.85		22.82	
PCB	PBW0405-MS2	04/05/2001	22:01	4.97		22.62		4.85		22.82	

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-V **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 4.97 **DCB 1** 22.62 **TCMX 2** 4.84 **DCB 2** 22.81

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
MW-4	2093-001	04/06/2001	09:48	4.97		22.62		4.84		22.82	
S-55	2092-011	04/06/2001	10:19	4.97		22.64		4.85		22.83	

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:\MSDCHEM\1\DATA\04-05-01\V4993.D\ADC1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4993.D\ADC1B.CH
Acq On : 6 Apr 2001 9:48 Operator:
Sample : MW-4,2093-001,A,1000mL,100,04/05/01 Inst : V_3400
Misc : ENVTACT/ORBIS_-_NEWARK,04/04/01,04/04/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 06 09:13:28 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.97	4.84	81346963	90111635	93.967	98.203
Spiked Amount 100.000			Recovery	=	93.97%	98.20%
2) S DCB	22.62	22.82	79708060	80267823	90.609	94.585
Spiked Amount 100.000			Recovery	=	90.61%	94.58%
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.
V4993.D VPCB0329.M Fri Apr 06 09:49:41 2001 V3400

000103

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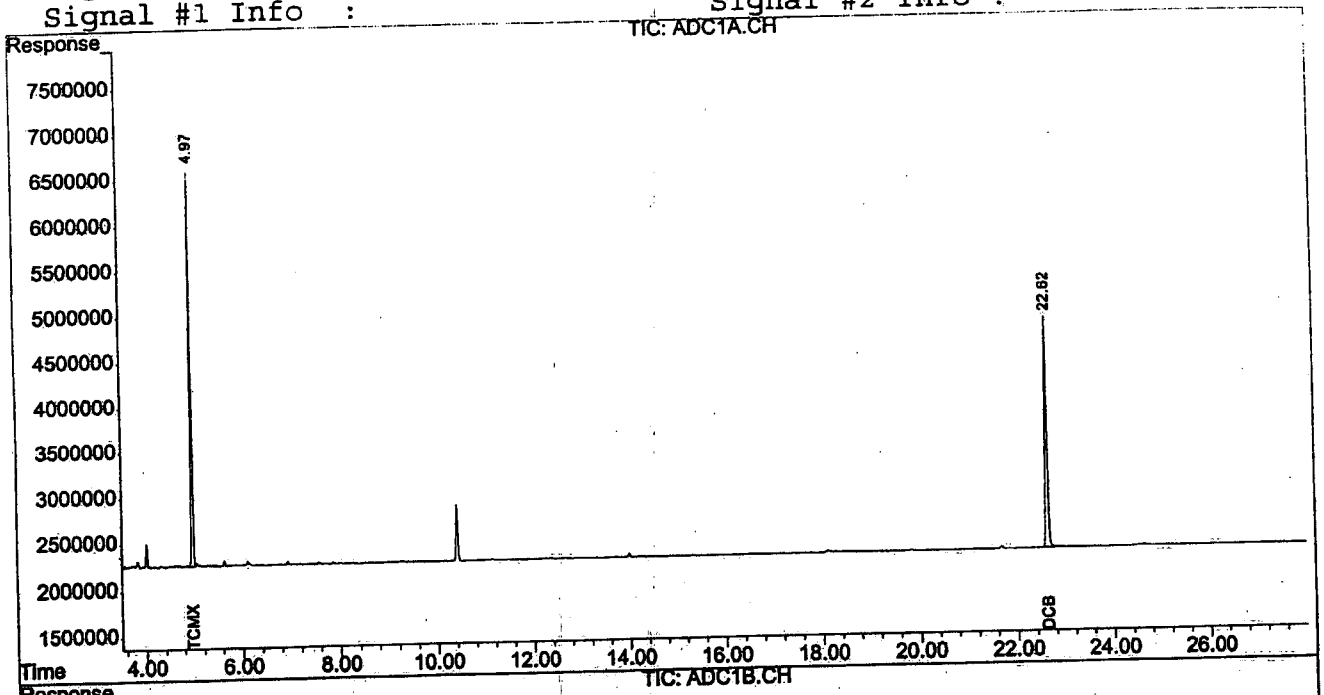
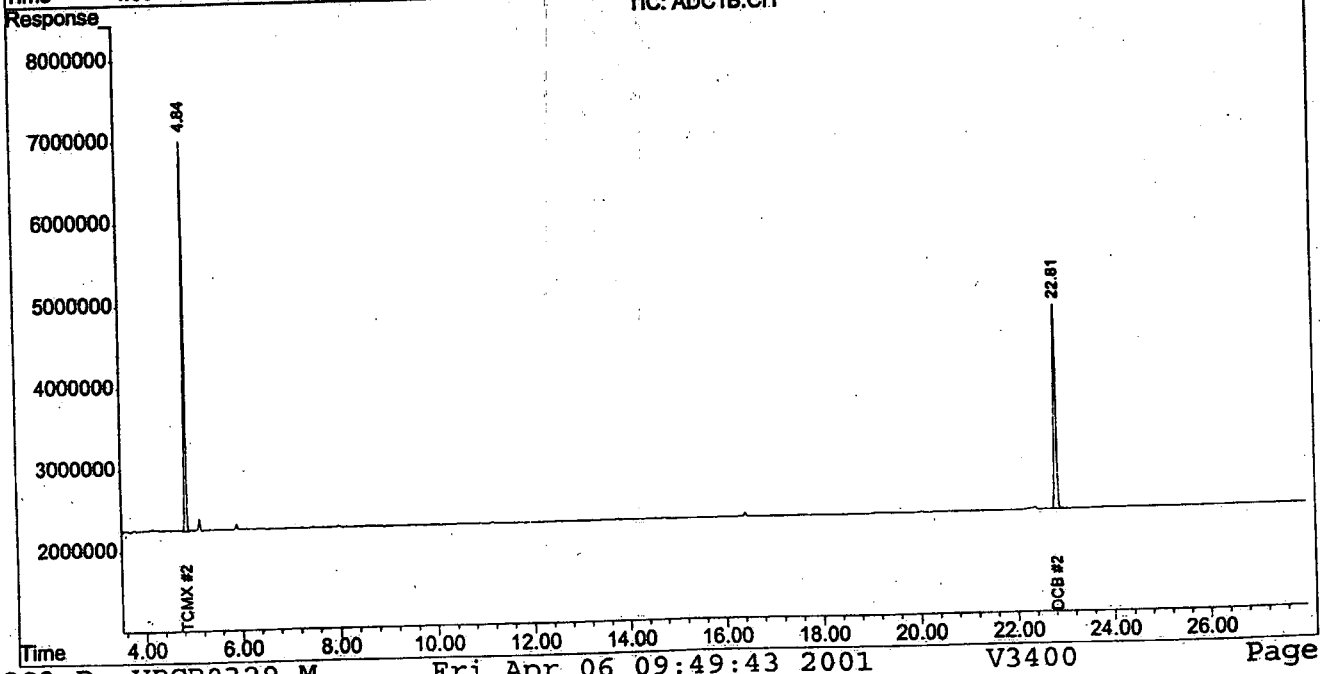
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4993.D\ADC1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4993.D\ADC1B.CH
Acq On : 6 Apr 2001 9:48 Operator:
Sample : MW-4,2093-001,A,1000mL,100,04/05/01 Inst : V_3400
Misc : ENVTACT/ORBIS_-_NEWARK,04/04/01,04/04/01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 10:14 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





3780

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4957.D\ADC1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4957.D\ADC1B.CH
Acq On : 5 Apr 2001 15:21 Operator:
Sample : (2053.2108),0405-BLK2,A,1000mL,100,04/05 Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 06 05:57:56 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.97	4.85	86985421	89808744	100.480	97.873
Spiked Amount 100.000			Recovery =		100.48%	97.87%
2) S DCB	22.63	22.82	76371796	72535047	86.817	85.473
Spiked Amount 100.000			Recovery =		86.82%	85.47%
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.
V4957.D VPCB0329.M Fri Apr 06 09:34:24 2001 V3400 Page 1

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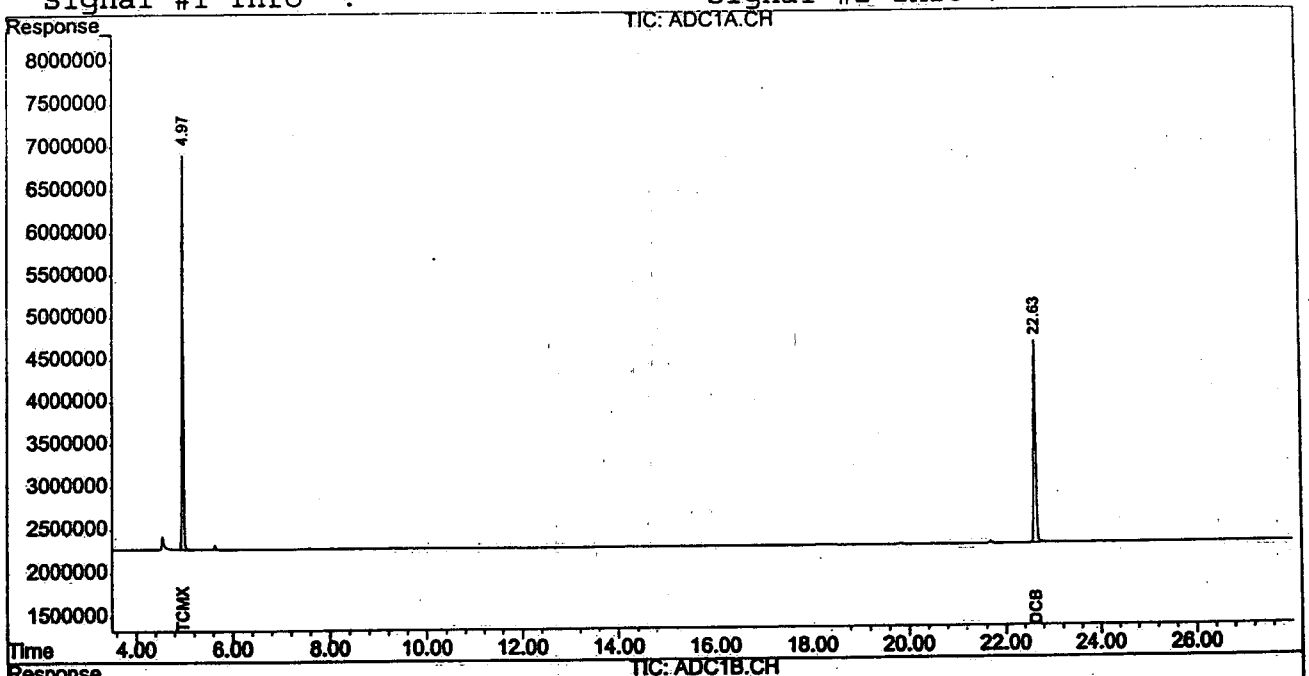
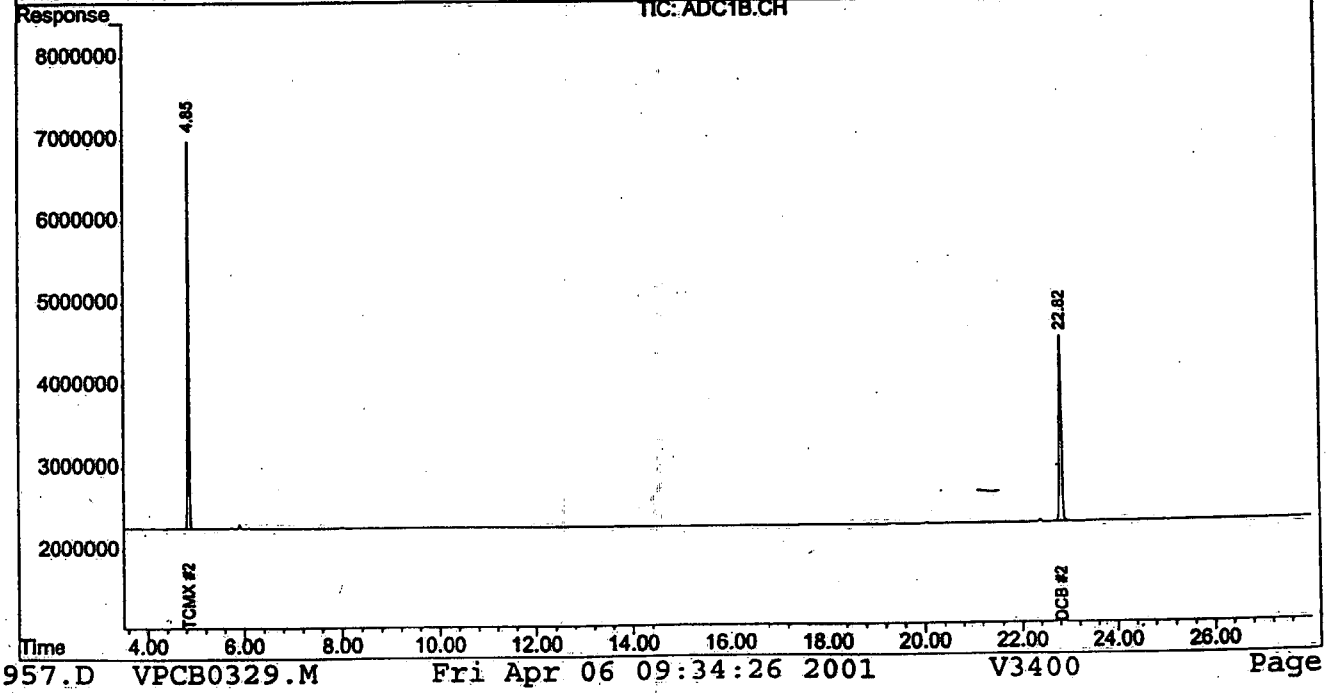
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4957.D\ADC1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4957.D\ADC1B.CH
Acq On : 5 Apr 2001 15:21 Operator:
Sample : (2093.2108),0405-BLK2,A,1.000ML,100,04/05 Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 7:01 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





3762

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4956.D\ADC1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4956.D\ADC1B.CH
Acq On : 5 Apr 2001 14:50 Operator:
Sample : 8082_C_IAS1432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 06 05:57:50 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.97	4.84	77807699	79147973	89.878	86.255
Spiked Amount 100.000			Recovery =		89.88%	86.25%
2) S DCB	22.63	22.82	80943318	76008413	92.014	89.566
Spiked Amount 100.000			Recovery =		92.01%	89.57%
Target Compounds						
3) L2 Aroclor-1016	5.80	6.36	5886670	6192659	965.389	903.825
L2 Aroclor-1016 {2}	6.89	7.43	4608596	11279629	952.118	901.566
L2 Aroclor-1016 {3}	7.33	8.79	7919449	26311230	953.950	884.041
6) L2 Aroclor-1016 {4}	9.20	9.18	4802108	9351584	961.490	916.793
7) L2 Aroclor-1016 {5}	9.68	9.50	6748119	9482413	961.592	910.127
Sum Aroclor-1016			29964942	62617515	4794.540	4516.352
Average Aroclor-1016					958.908	903.270
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	15.33	15.19	24866907	18895475	979.297	916.306
34) L8 Aroclor-1260 {2}	15.89	16.45	22029873	15420092	978.613	928.729
35) L8 Aroclor-1260 {3}	17.53	17.47	50732631	17391022	963.824	927.235
36) L8 Aroclor-1260 {4}	18.46	18.43	23297039	42246464	991.182	910.510
37) L8 Aroclor-1260 {5}	20.50	20.72	13806063	5308938	1005.061	969.719
Sum Aroclor-1260			134.7E6	99261991	4917.976	4652.500
Average Aroclor-1260					983.595	930.500

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

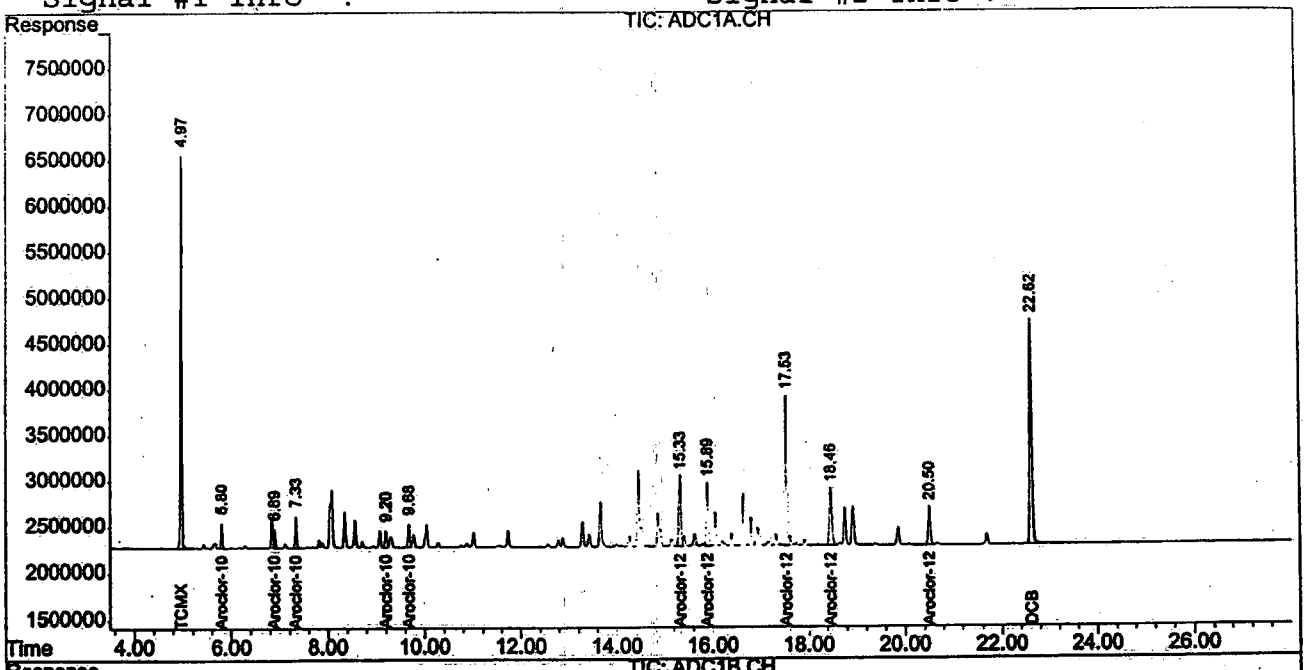
37983

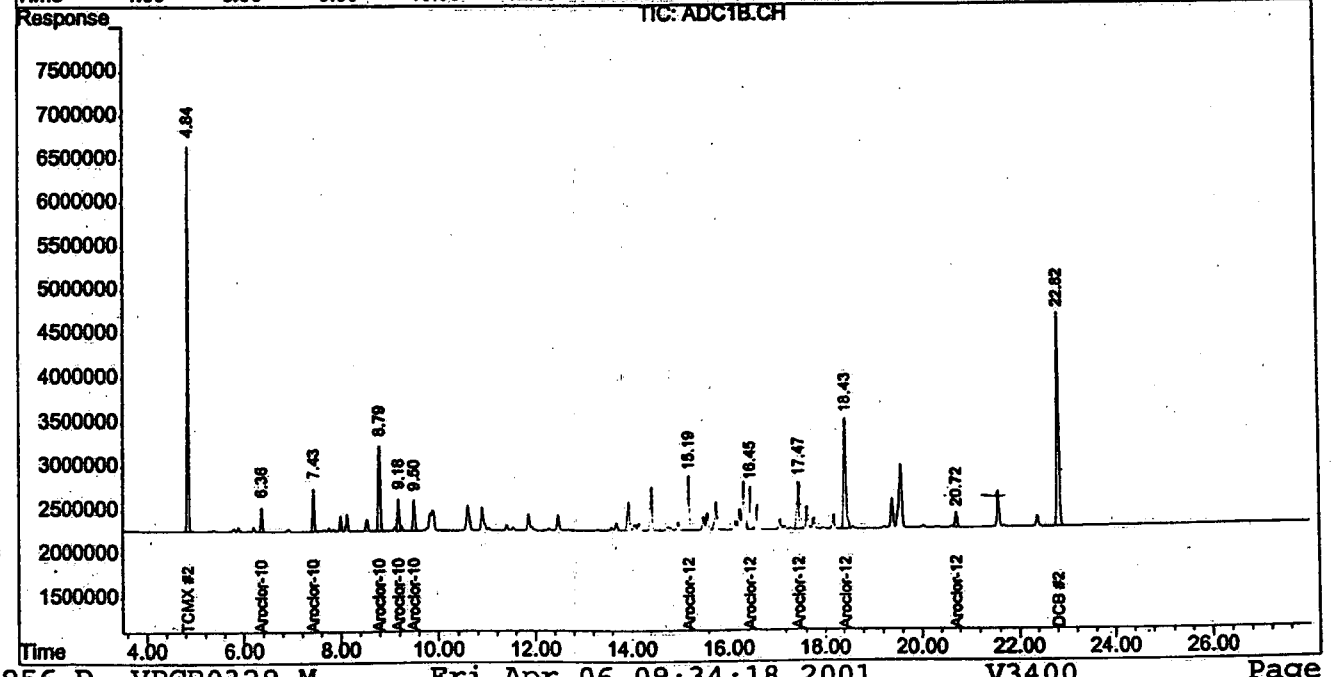
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4956.D\ADC1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4956.D\ADC1B.CH
Acq On : 5 Apr 2001 14:50 Operator:
Sample : 5002_C_1AS1432,1_PPM Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 7:01 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





37964

000113

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4971.D\ADC1A.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4971.D\ADC1B.CH
Acq On : 5 Apr 2001 22:32 Operator:
Sample : [illegible] Inst : V3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 06 05:59:17 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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		4.96	4.84	72485553	80134794	83.731	87.331
Spiked Amount 100.000				Recovery =		83.73%	87.33%
2) S DCB		22.62	22.81	77490723	79132276	88.089	93.247
Spiked Amount 100.000				Recovery =		88.09%	93.25%
Target Compounds							
3) L2 Aroclor-1016		5.80	6.36	5515484	6190447	904.516	903.502
4) L2 Aroclor-1016	(2)	6.88	7.43	4289279	11354694	886.149	907.566
5) L2 Aroclor-1016	(3)	7.32	8.79	7412150	26554056	892.843	892.199
6) L2 Aroclor-1016	(4)	9.19	9.17	4507655	9418870	902.534	923.389
7) L2 Aroclor-1016	(5)	9.67	9.49	6348625	9575582	904.665	919.069
Sum Aroclor-1016				28073193	63093648	4490.706	4545.726
Average Aroclor-1016						898.141	909.145
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		15.32	15.18	23759630	19346758	935.691	938.191
34) L8 Aroclor-1260	(2)	15.88	16.44	20968563	15737822	931.467	947.866
35) L8 Aroclor-1260	(3)	17.53	17.45	48709728	17823487	925.392	950.292
36) L8 Aroclor-1260	(4)	18.45	18.42	22351885	43632607	950.970	940.385
37) L8 Aroclor-1260	(5)	20.50	20.71	13325825	5390433	970.101	984.605
Sum Aroclor-1260				129.1E6	101.9E6	4713.621	4761.338
Average Aroclor-1260						942.724	952.268

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

00012

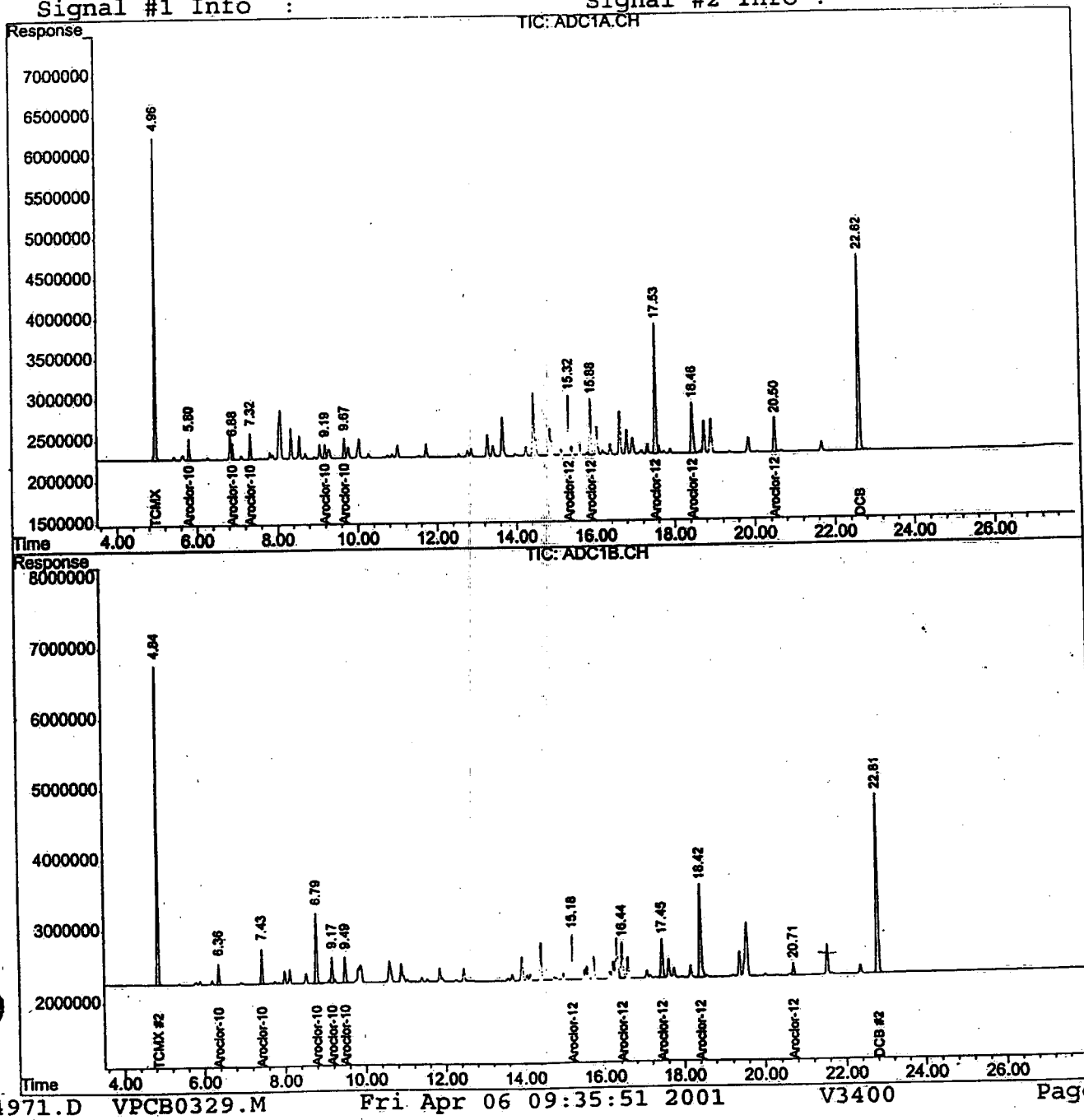
3785

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4971.D\ADC1A.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4971.D\ADC1B.CH
Acq On : 5 Apr 2001 22:32 Operator:
Sample : [illegible] Inst :
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 7:13 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



3786

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\04-05-01\V4990.D\ADC1A.CH Trial: 36
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4990.D\ADC1B.CH
Acq On : 6 Apr 2001 8:16 Operator:
Sample : [illegible] Inst : V3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 06 07:54:52 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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	4.97	4.85	74853722	78288088	86.466	85.318
Spiked Amount 100.000			Recovery =		86.47%	85.32%
2) S DCB	22.62	22.82	79046063	76483966	89.857	90.127
Spiked Amount 100.000			Recovery =		89.86%	90.13%
Target Compounds						
3) L2 Aroclor-1016	5.80	6.36	5643873	6092792	925.571	889.249
L2 Aroclor-1016 {2}	6.89	7.43	4477347	11131021	925.003	889.688
L2 Aroclor-1016 {3}	7.33	8.79	7643029	25914165	920.654	870.700
6) L2 Aroclor-1016 {4}	9.20	9.17	4671589	9184682	935.357	900.431
7) L2 Aroclor-1016 {5}	9.68	9.50	6540369	9333404	931.988	895.825
Sum Aroclor-1016			28976207	61656064	4638.573	4445.892
Average Aroclor-1016					927.715	889.178
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	15.32	15.19	23944728	18669150	942.980	905.331
34) L8 Aroclor-1260 {2}	15.89	16.45	21237513	15269877	943.415	919.682
35) L8 Aroclor-1260 {3}	17.53	17.46	48768042	17110455	926.500	912.276
36) L8 Aroclor-1260 {4}	18.46	18.42	22335010	41217059	950.252	888.324
3[illegible] L8 Aroclor-1260 {5}	20.50	20.71	13412211	5178417	976.389	945.879
Sum Aroclor-1260			129.7E6	97444959	4739.536	4571.492
Average Aroclor-1260					947.907	914.298

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

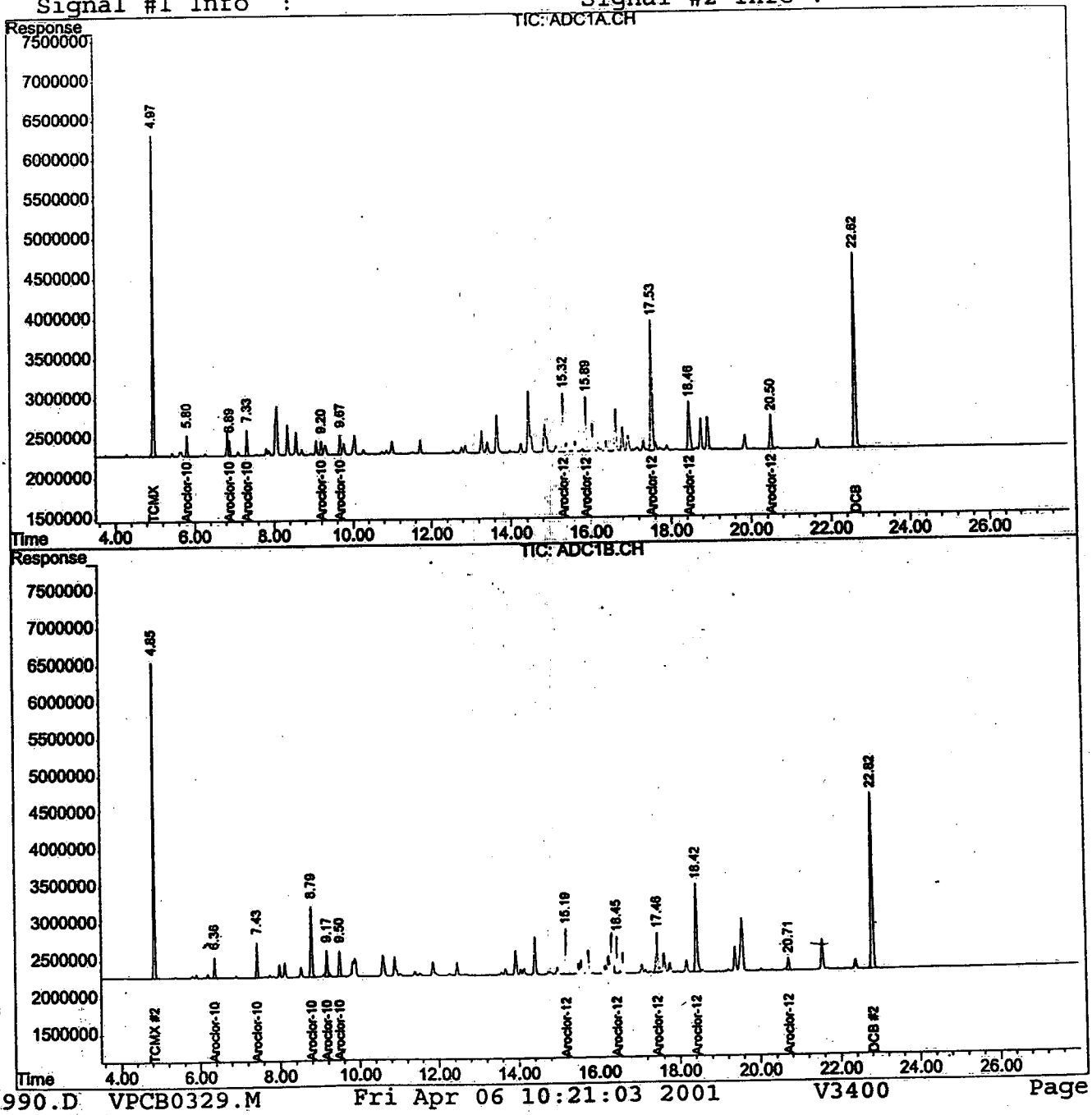
3787

Quantitation Report (Not Reviewed)

Data : :\MSDCHEM\1\DATA\04-05-01\V4990.D\ADC1A.CH Vial: 36
Signal #2 : C:\MSDCHEM\1\DATA\04-05-01\V4990.D\ADC1B.CH
Acq On 6 Apr 2001 8:16 Operator:
[illegible] Inst :
Multiplr: 1.00
Misc : NA,NA,NA,1
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 10:19 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



37486

Quantitation Report (QT Reviewed)

Sig: 1 1 : C:\MSDCHEM\1\DATA\04-05-01\V4995.D\ADC1A.CH Vial: 30
Signal : 2 : C:\MSDCHEM\1\DATA\04-05-01\V4995.D\ADC1B.CH
Acq On : 6 Apr 2001 10:50 Operator:
[illegible] : [illegible] [illegible]
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 06 10:12:17 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Initial Calibration
DataAcq Meth : VPCB0329.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		4.97	4.85	78961105	86153031	91.211	93.889
Spiked Amount 100.000				Recovery	=	91.21%	93.89%
2) S DCB		22.64	22.83	81238879	81800950	92.350	96.392
Spiked Amount 100.000				Recovery	=	92.35%	96.39%
Target Compounds							
3) L2 Aroclor-1016		5.80	6.37	5900002	6644725	967.575	969.804
L2 Aroclor-1016	(2)	6.89	7.43	4718434	12049292	974.810	963.084
L2 Aroclor-1016	(3)	7.33	8.79	7886567	28030597	949.989	941.810
6) L2 Aroclor-1016	(4)	9.21	9.18	4821884	9920177	965.450	972.536
7) L2 Aroclor-1016	(5)	9.68	9.50	6792734	10125110	967.950	971.813
Sum Aroclor-1016				30119620	66769902	4825.774	4819.048
Average Aroclor-1016						965.155	963.810
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		15.33	15.19	25958195	20107935	1022.273	975.103
34) L8 Aroclor-1260	(2)	15.90	16.46	21991994	16424688	976.930	989.235
35) L8 Aroclor-1260	(3)	17.54	17.47	50987744	18441096	968.670	983.221
36) L8 Aroclor-1260	(4)	18.47	18.43	23312302	44168403	991.831	951.933
3[illegible] L8 Aroclor-1260	(5)	20.51	20.72	13858330	5613061	1008.866	1025.270
Sum Aroclor-1260				136.1E6	104.8E6	4968.571	4924.761
Average Aroclor-1260						993.714	984.952

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

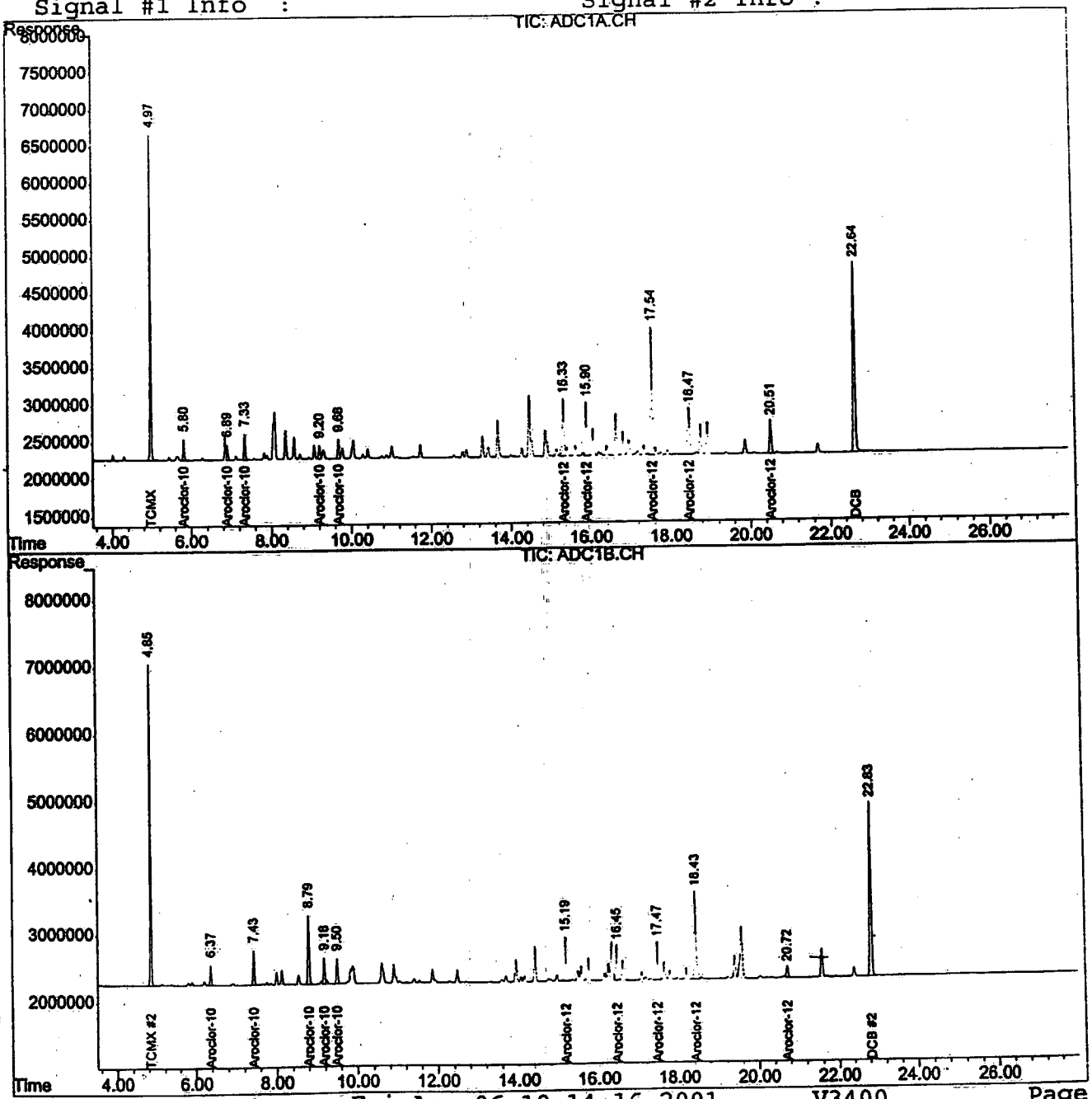
3089

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\04-05-01\V4995.D\ADC1A.CH Vial: 36
Signal : C:\MSDCHEM\1\DATA\04-05-01\V4995.D\ADC1B.CH
Acq On : 6 Apr 2001 10:50 Operator:
Sample : [illegible] Inst : V_3400
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 11:12 2001 Quant Results File: VPCB0329.RES

Quant Method : C:\MSDCHEM\1\METHODS\VPCB0329.M (Chemstation Integrator)
Title :
Last Update : Fri Mar 30 10:12:22 2001
Response via : Multiple Level Calibration
DataAcq Meth : VPCB0329.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



000113

3990

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: W5730.D

Instrument ID: GC-W

Date Extracted: 04/05/2001

Matrix: AQUEOUS

Date Analyzed: 04/05/2001

Time Analyzed: 15:21

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

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
DW-1	2108-001	04/05/2001	15:47
WW-1	2108-002	04/05/2001	16:12
MHR-1	2108-003	04/05/2001	16:37
FB	2094-001	04/05/2001	17:02
MW-1	2094-003	04/05/2001	17:26
MW-2	2094-004	04/05/2001	17:51
MW-7	2094-005	04/05/2001	18:16
MW-6	2094-006	04/05/2001	18:41
MW-8	2094-007	04/05/2001	19:06
MW-3	2094-008	04/05/2001	19:31
MW-5	2094-009	04/05/2001	19:56
MW-4	2093-001	04/05/2001	20:21
PEST	2094-001-MS2	04/05/2001	20:46
PEST	2094-001-MSD2	04/05/2001	21:11
PEST	PBA0405-MS2	04/05/2001	21:36

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Client/Project: NA

Lab ID: 0405-BK2
Client ID: (2093.2108)
Date Received: NA
Date Extracted: 04/05/2001
Date Analyzed: 04/05/2001
Data file: W5730.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
alpha-BHC	ND		0.002
beta-BHC	ND		0.002
gamma-BHC	ND		0.002
delta-BHC	ND		0.002
Heptachlor	ND		0.002
Aldrin	ND		0.002
Heptachlor epoxide	ND		0.002
Endosulfan I	ND		0.002
4,4'-DDE	ND		0.002
Dieldrin	ND		0.002
Endrin	ND		0.002
Endosulfan II	ND		0.002
4,4'-DDD	ND		0.002
Endrin aldehyde	ND		0.002
Endosulfan sulfate	ND		0.002
4,4'-DDT	ND		0.002
Chlordane	ND		0.015
Toxaphene	ND		0.015

3792

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/04/2001

Instrument ID: GC-W

GC Column (1st): DB-5

Data File: W5678.D W5677.D W5676.D W5675.D W5674.D

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	100	200	300	RT	FROM	TO
alpha-BHC	4.54	4.55	4.55	4.54	4.54	4.54	4.47	4.61
beta-BHC	5.03	5.04	5.04	5.04	5.03	5.03	4.96	5.10
gamma-BHC	5.16	5.17	5.17	5.17	5.16	5.17	5.10	5.24
delta-BHC	5.63	5.64	5.64	5.64	5.64	5.64	5.57	5.71
Heptachlor	6.74	6.74	6.74	6.74	6.74	6.74	6.67	6.81
Aldrin	7.55	7.56	7.55	7.55	7.55	7.55	7.48	7.62
Heptachlor epoxide	8.56	8.56	8.56	8.56	8.56	8.56	8.49	8.63
Endosulfan I	9.48	9.48	9.48	9.48	9.48	9.48	9.41	9.55
4,4'-DDE	10.24	10.24	10.24	10.24	10.24	10.24	10.17	10.31
Dieldrin	10.17	10.17	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	10.98	10.98	10.98	10.97	10.98	10.91	11.05
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	9.18	9.17	9.18	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}			9.73				9.66	9.80
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: 04/04/2001 **Instrument ID:** GC-W

GC Column (1st): DB-5

Data File: W5678.D W5677.D W5676.D W5675.D W5674.D

Compound	CALIBRATION FACTORS 10	50	100	200	300	MEAN	%RSD
alpha-BHC	43496018	51170957	49291118	47524273	47662802	47829033	5.93
beta-BHC	18379609	19277612	18501314	17677343	17555823	18278340	3.81
gamma-BHC	40045540	45325231	43082664	40199962	39527082	41636096	5.97
delta-BHC	40914451	48513538	47243350	45719049	45763654	45630808	6.31
Heptachlor	34644486	39338425	38059323	36218756	35623323	36776863	5.16
Aldrin	38758408	44513217	42707366	40124672	39339496	41088632	5.93
Heptachlor epoxide	36135554	40003569	37832970	35121001	34216539	36661926	6.27
Endosulfan I	34135461	37496038	35435124	32853490	32002469	34384516	6.32
4,4'-DDE	34724674	39844061	38069279	35332573	34323622	36458842	6.56
Dieldrin	35895317	40429747	38456802	35942974	35003112	37145590	6.04
Endrin	30458379	34225195	33620271	32100741	31808532	32442624	4.63
Endosulfan II	32609352	34728562	32929131	30749858	30017892	32206959	5.80
4,4'-DDD	29633107	33219385	31721240	29744902	28793473	30622422	5.90
Endrin aldehyde	26777455	25431810	22822188	20072796	18946470	22810144	14.71
Endosulfan sulfate	30412382	31815282	30166743	28239588	27760800	29678959	5.61
4,4'-DDT	22004160	25643431	25690156	25182990	25266456	24757439	6.28
Endrin ketone	38876117	39251084	36105496	33001829	31789758	35804857	9.41
Methoxychlor	12205036	12527666	12023670	11346612	11057470	11832091	5.17
alpha-Chlordane	36258643	39925308	38229893	35913807	35107802	37087090	5.28
gamma-Chlordane	36790210	41895938	40307468	37944294	37106290	38808840	5.69
Chlordane 500 ppb			4097171				
Chlordane {2}			749336				
Chlordane {3}			3905814				
Chlordane {4}			1816015				
Chlordane {5}			1251816				
Toxaphene 500 ppb			743270				
Toxaphene {2}			582289				
Toxaphene {3}			434018				
Toxaphene {4}			509494				
Toxaphene {5}			747359				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/04/2001

Instrument ID: GC-W

GC Column (2nd): DB-1701P

Data File: W5678.C W5677.C W5676.C W5675.C W5674.C

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	100	200	300	RT	FROM	TO
alpha-BHC	5.59	5.60	5.59	5.59	5.60	5.60	5.53	5.67
beta-BHC	8.65	8.65	8.65	8.65	8.66	8.65	8.58	8.72
gamma-BHC	6.54	6.55	6.55	6.55	6.56	6.55	6.48	6.62
delta-BHC	9.21	9.22	9.21	9.22	9.22	9.22	9.15	9.29
Heptachlor	7.02	7.03	7.03	7.03	7.04	7.03	6.96	7.10
Aldrin	7.69	7.70	7.70	7.70	7.71	7.70	7.63	7.77
Heptachlor epoxide	9.54	9.54	9.54	9.54	9.55	9.54	9.47	9.61
Endosulfan I	10.22	10.22	10.22	10.23	10.23	10.23	10.16	10.30
4,4'-DDE	10.99	11.00	11.00	11.00	11.00	11.00	10.93	11.07
Dieldrin	11.26	11.26	11.26	11.26	11.27	11.26	11.19	11.33
Endrin	11.78	11.79	11.78	11.79	11.79	11.79	11.72	11.86
Endosulfan II	13.23	13.23	13.23	13.23	13.24	13.23	13.16	13.30
4,4'-DDD	13.23	13.23	13.23	13.23	13.24	13.23	13.16	13.30
Endrin aldehyde	14.37	14.37	14.37	14.37	14.38	14.37	14.30	14.44
Endosulfan sulfate	15.27	15.27	15.27	15.27	15.28	15.27	15.20	15.34
4,4'-DDT	13.68	13.68	13.68	13.68	13.69	13.68	13.61	13.75
Endrin ketone	16.30	16.30	16.30	16.30	16.30	16.30	16.23	16.37
Methoxychlor	15.54	15.54	15.55	15.54	15.55	15.55	15.48	15.62
alpha-Chlordane	10.61	10.62	10.62	10.62	10.62	10.62	10.55	10.69
gamma-Chlordane	10.46	10.46	10.46	10.46	10.47	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}			14.74				14.67	14.81
Toxaphene {3}			15.01				14.94	15.08
Toxaphene {4}			15.21				15.14	15.28
Toxaphene {5}			15.65				15.58	15.72

CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/05/2001 Instrument ID: GC-W

Data File: W5724.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	4.53	4.46	4.60	47829033	45997237	3.83
beta-BHC	5.03	4.96	5.10	18278340	17002014	6.98
gamma-BHC	5.16	5.09	5.23	41636096	39786723	4.44
delta-BHC	5.63	5.56	5.70	45630808	43411960	4.86
Heptachlor	6.73	6.66	6.80	36776863	37407989	1.72
Aldrin	7.55	7.48	7.62	41088632	38808244	5.55
Heptachlor epoxide	8.56	8.49	8.63	36661926	35079442	4.32
Endosulfan I	9.48	9.41	9.55	34384516	32706339	4.88
4,4'-DDE	10.24	10.17	10.31	36458842	34242111	6.08
Dieldrin	10.17	10.10	10.24	37145590	35879555	3.41
Endrin	10.72	10.65	10.79	32442624	33954566	4.66
Endosulfan II	10.98	10.91	11.05	32206959	30323531	5.85
4,4'-DDD	11.36	11.29	11.43	30622422	29898465	2.36
Endrin aldehyde	11.50	11.43	11.57	22810144	21402217	6.17
Endosulfan sulfate	12.15	12.08	12.22	29678959	27835747	6.21
4,4'-DDT	12.38	12.31	12.45	24757439	24932047	0.71
Endrin ketone	13.36	13.29	13.43	35804857	33137345	7.45
Methoxychlor	14.06	13.99	14.13	11832091	11939987	0.91
alpha-Chlordane	9.58	9.51	9.65	37087090	35181553	5.14
gamma-Chlordane	9.17	9.10	9.24	38808840	36993427	4.68
				Average %D		4.51
Chlordane 500 ppb	9.17	9.10	9.24	4097171	3776639	7.82
Chlordane {2}	9.37	9.30	9.44	749336	703451	6.12
Chlordane {3}	9.58	9.51	9.65	3905814	3510204	10.13
Chlordane {4}	9.72	9.65	9.79	1816015	1668085	8.15
Chlordane {5}	11.57	11.50	11.64	1251816	1166549	6.81
Toxaphene 500 ppb	13.17	13.10	13.24	743270	699493	5.89
Toxaphene {2}	13.30	13.23	13.37	582289	547730	5.94
Toxaphene {3}	13.58	13.51	13.65	434018	438313	0.99
Toxaphene {4}	14.04	13.97	14.11	509494	497572	2.34
Toxaphene {5}	14.55	14.48	14.62	747359	731468	2.13
				Average %D		5.63

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 04/04/2001

Instrument ID: GC-W

GC Column (2nd): DB-1701P

Data File: W5678.C W5677.C W5676.C W5675.C W5674.C

Compound	CALIBRATION FACTORS 10	50	100	200	300	MEAN	%RSD
alpha-BHC	16266826	19149062	18605696	17564240	17287592	17774683	6.37
beta-BHC	7942657	7943298	7481243	7090968	6987221	7489077	6.05
gamma-BHC	15127810	17497955	16945614	16091904	15851957	16303048	5.71
delta-BHC	15165845	17371079	16750362	15788933	15524212	16120086	5.67
Heptachlor	12357525	13909417	13588439	13014982	12871445	13148362	4.65
Aldrin	14391927	16085789	15479618	14526297	14189048	14934536	5.44
Heptachlor epoxide	13725987	14718751	14083021	13211469	12913067	13730459	5.20
Endosulfan I	12951743	13873605	13269538	12431470	12108840	12927039	5.37
4,4'-DDE	12883890	14586842	14144720	13369646	13079023	13612824	5.33
Dieldrin	13589397	14989333	14500314	13704447	13406520	14038002	4.82
Endrin	11722912	12941585	12894910	12428421	12325063	12462578	3.98
Endosulfan II	24292009	25559807	24109684	22199289	21560826	23544323	6.94
4,4'-DDD	24292009	25559807	24109684	22199289	21560826	23544323	6.94
Endrin aldehyde	10606465	10053544	9325317	8654912	8451933	9418434	9.70
Endosulfan sulfate	11463120	11771686	11324902	10775192	10588835	11184747	4.39
4,4'-DDT	6489752	8524503	8881304	9006263	9224500	8425265	13.19
Endrin ketone	13781060	14056856	13201403	12347065	11963048	13069887	6.89
Methoxychlor	4378096	4723661	4666903	4601910	4626684	4599451	2.87
alpha-Chlordane	13792467	14746277	14184308	13334259	13009350	13813332	4.97
gamma-Chlordane	13785876	15099925	14592419	13785917	13490456	14150919	4.74
Chlordane 500 ppb			293988				
Chlordane {2}			337784				
Chlordane {3}			1484430				
Chlordane {4}			1348231				
Chlordane {5}			653044				
Toxaphene 500 ppb			280637				
Toxaphene {2}			243713				
Toxaphene {3}			193089				
Toxaphene {4}			149865				
Toxaphene {5}			217517				

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/05/2001 Instrument ID: GC-W

Data File: W5724.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	5.59	5.52	5.66	17774683	17370066	2.28
beta-BHC	8.65	8.58	8.72	7489077	6944657	7.27
gamma-BHC	6.54	6.47	6.61	16303048	15877099	2.61
delta-BHC	9.21	9.14	9.28	16120086	15603121	3.21
Heptachlor	7.02	6.95	7.09	13148362	13257243	0.83
Aldrin	7.69	7.62	7.76	14934536	14313631	4.16
Heptachlor epoxide	9.54	9.47	9.61	13730459	13188608	3.95
Endosulfan I	10.22	10.15	10.29	12927039	12348853	4.47
4,4'-DDE	11.00	10.93	11.07	13612824	12980071	4.65
Dieldrin	11.26	11.19	11.33	14038002	13559538	3.41
Endrin	11.79	11.72	11.86	12462578	12967072	4.05
Endosulfan II	13.23	13.16	13.30	23544323	22807649	3.13
4,4'-DDD	13.23	13.16	13.30	23544323	22807649	3.13
Endrin aldehyde	14.37	14.30	14.44	9418434	8273106	12.16
Endosulfan sulfate	15.27	15.20	15.34	11184747	10409725	6.93
4,4'-DDT	13.68	13.61	13.75	8425265	8033273	4.65
Endrin ketone	16.30	16.23	16.37	13069887	11914868	8.84
Methoxychlor	15.55	15.48	15.62	4599451	4330920	5.84
alpha-Chlordane	10.62	10.55	10.69	13813332	13149906	4.80
gamma-Chlordane	10.46	10.39	10.53	14150919	13549085	4.25
					Average %D	4.73
Chlordane 500 ppb	8.38	8.31	8.45	293988	271683	7.59
Chlordane {2}	10.06	9.99	10.13	337784	302089	10.57
Chlordane {3}	10.46	10.39	10.53	1484430	1377036	7.23
Chlordane {4}	10.62	10.55	10.69	1348231	1258079	6.69
Chlordane {5}	10.67	10.60	10.74	653044	590759	9.54
Toxaphene 500 ppb	14.02	13.95	14.09	280637	254136	9.44
Toxaphene {2}	14.75	14.68	14.82	243713	216652	11.10
Toxaphene {3}	15.02	14.95	15.09	193089	167802	13.10
Toxaphene {4}	15.21	15.14	15.28	149865	130694	12.79
Toxaphene {5}	15.66	15.59	15.73	217517	191503	11.96
					Average %D	10.00

37598

[illegible] CALIBRATION VERIF[illegible] SUMMARY

Date Analyzed: 04/05/2001 Instrument ID: GC-W

Data File: W5746.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	4.53	4.46	4.60	47829033	46543839	2.69
beta-BHC	5.03	4.96	5.10	18278340	17317139	5.26
gamma-BHC	5.16	5.09	5.23	41636096	40268616	3.28
delta-BHC	5.63	5.56	5.70	45630808	44515144	2.44
Heptachlor	6.73	6.66	6.80	36776863	36432762	0.94
Aldrin	7.55	7.48	7.62	41088632	39906402	2.88
Heptachlor epoxide	8.56	8.49	8.63	36661926	35527854	3.09
Endosulfan I	9.48	9.41	9.55	34384516	33313203	3.12
4,4'-DDE	10.24	10.17	10.31	36458842	35731203	2.00
Dieldrin	10.17	10.10	10.24	37145590	36730586	1.12
Endrin	10.72	10.65	10.79	32442624	34692284	6.93
Endosulfan II	10.98	10.91	11.05	32206959	31331147	2.72
4,4'-DDD	11.36	11.29	11.43	30622422	31647631	3.35
Endrin aldehyde	11.50	11.43	11.57	22810144	22185049	2.74
Endosulfan sulfate	12.15	12.08	12.22	29678959	29047058	2.13
4,4'-DDT	12.38	12.31	12.45	24757439	24684019	0.30
Endrin ketone	13.36	13.29	13.43	35804857	34464606	3.74
Methoxychlor	14.06	13.99	14.13	11832091	11933059	0.85
alpha-Chlordane	9.58	9.51	9.65	37087090	36068879	2.75
gamma-Chlordane	9.17	9.10	9.24	38808840	37864988	2.43
					Average %D	2.74

3799

000123

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 04/05/2001 **Instrument ID:** GC-W

Data File: W5746.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	17774683	17518196	1.44
beta-BHC	8.64	8.57	8.71	7489077	7003044	6.49
gamma-BHC	6.54	6.47	6.61	16303048	15991257	1.91
delta-BHC	9.21	9.14	9.28	16120086	15895939	1.39
Heptachlor	7.02	6.95	7.09	13148362	12885076	2.00
Aldrin	7.69	7.62	7.76	14934536	14506725	2.86
Heptachlor epoxide	9.54	9.47	9.61	13730459	13273989	3.32
Endosulfan I	10.22	10.15	10.29	12927039	12439596	3.77
4,4'-DDE	11.00	10.93	11.07	13612824	13271021	2.51
Dieldrin	11.26	11.19	11.33	14038002	13710942	2.33
Endrin	11.78	11.71	11.85	12462578	13112377	5.21
Endosulfan II	13.23	13.16	13.30	23544323	23362732	0.77
4,4'-DDD	13.23	13.16	13.30	23544323	23362732	0.77
Endrin aldehyde	14.37	14.30	14.44	9418434	8622648	8.45
Endosulfan sulfate	15.27	15.20	15.34	11184747	10715214	4.20
4,4'-DDT	13.68	13.61	13.75	8425265	7916213	6.04
Endrin ketone	16.30	16.23	16.37	13069887	12317447	5.76
Methoxychlor	15.54	15.47	15.61	4599451	4357758	5.25
alpha-Chlordane	10.61	10.54	10.68	13813332	13304610	3.68
gamma-Chlordane	10.46	10.39	10.53	14150919	13712796	3.10
					Average %D	3.56

000129

3000

SW8081 SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 04/05/2001

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
(2044.2061)	0404-BK1	SOIL	94		90		89		90	
AC-27_10.5-11'	2044-001	SOIL	65		90		65		100	
(2093.2108)	0405-BK2	AQUEOUS	89		87		85		86	
DW-1	2108-001	AQUEOUS	66		85		75		92	
WW-1	2108-002	AQUEOUS	53	*	67		61		77	
MHR-1	2108-003	AQUEOUS	61		79		68		80	
FB	2094-001	AQUEOUS	80		74		76		75	
MW-1	2094-003	AQUEOUS	58	*	79		63		83	
MW-2	2094-004	AQUEOUS	60		76		59		78	
MW-7	2094-005	AQUEOUS	51	*	75		82		77	
MW-6	2094-006	AQUEOUS	73		90		75		94	
MW-8	2094-007	AQUEOUS	76		108		60		96	
MW-3	2094-008	AQUEOUS	74		84		62		90	
MW-5	2094-009	AQUEOUS	59		73		M		87	
MW-4	2093-001	AQUEOUS	74		77		68		87	
PEST	2094-001-MS2	AQUEOUS	87		82		80		83	
PEST	2094-001-MSD2	AQUEOUS	87		85		80		84	
PEST	PBA0405-MS2	AQUEOUS	90		88		82		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

AQUEOUS PESTICIDES MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Matrix spike Lab sample ID: 2094-001-MSD2

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
gamma-BHC	100.0	0.0	98.4	98	30 - 138
Heptachlor	100.0	0.0	88.5	89	42 - 137
Aldrin	100.0	0.0	91.9	92	32 - 147
Dieldrin	100.0	0.0	91.1	91	26 - 134
Endrin	100.0	0.0	99.2	99	22 - 164
4,4'-DDT	100.0	0.0	90.3	90	22 - 150

Compound	SAMPLE CONC. (ug/L)	MSD CONC. (ug/L)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC	0.0	106.9	107	9	14	30 - 138
Heptachlor	0.0	97.6	98	10	14	42 - 137
Aldrin	0.0	99.7	100	8	14	32 - 147
Dieldrin	0.0	99.2	99	8	14	26 - 134
Endrin	0.0	107.4	107	8	13	22 - 164
4,4'-DDT	0.0	99.9	100	11	16	22 - 150

 # 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

000131

3802

AQUEOUS PESTICIDES BLANK SPIKE RECOVERY

Matrix spike Lab sample ID: PBA0405-MS2

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS % REC #	QC LIMITS REC.
gamma-BHC	100.0	0.0	104.7	105	30 - 138
Heptachlor	100.0	0.0	96.7	97	42 - 137
Aldrin	100.0	0.0	97.6	98	32 - 147
Dieldrin	100.0	0.0	97.2	97	26 - 134
Endrin	100.0	0.0	105.1	105	22 - 164
4,4'-DDT	100.0	0.0	99.6	100	22 - 150

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 3.86 DCB 1 18.68 TCMX 2 3.70 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	#
(2044.2061)	0404-BK1	04/05/2001	13:51	3.86		18.68		3.70		18.64	
AC-27_10.5-11'	2044-001	04/05/2001	14:16	3.86		18.68		3.69		18.64	
(2093.2108)	0405-BK2	04/05/2001	15:21	3.85		18.68		3.70		18.65	
DW-1	2108-001	04/05/2001	15:47	3.86		18.69		3.70		18.64	
WW-1	2108-002	04/05/2001	16:12	3.86		18.68		3.69		18.64	
MHR-1	2108-003	04/05/2001	16:37	3.86		18.68		3.70		18.64	
FB	2094-001	04/05/2001	17:02	3.86		18.68		3.69		18.64	
MW-1	2094-003	04/05/2001	17:26	3.85		18.68		3.69		18.64	
MW-2	2094-004	04/05/2001	17:51	3.86		18.68		3.70		18.64	
MW-7	2094-005	04/05/2001	18:16	3.85		18.68		3.69		18.64	
MW-6	2094-006	04/05/2001	18:41	3.86		18.68		3.69		18.64	
MW-8	2094-007	04/05/2001	19:06	3.87		18.68		3.70		18.64	
MW-3	2094-008	04/05/2001	19:31	3.86		18.68		3.69		18.64	
MW-5	2094-009	04/05/2001	19:56	3.86		18.68		3.70		18.64	
MW-4	2093-001	04/05/2001	20:21	3.85		18.68		3.69		18.64	
PEST	2094-001-MS2	04/05/2001	20:46	3.86		18.68		3.69		18.64	
PEST	2094-001-MSD2	04/05/2001	21:11	3.86		18.68		3.69		18.64	
PEST	PBA0405-MS2	04/05/2001	21:36	3.86		18.69		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

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-05-01\W5742.D\ECD1B.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\04-05-01\W5742.D\ECD2A.CH
Acq On : 4-5-01 20:21:20 Operator:
Sample : MW-4,2093-001,A,1000mL,100,04/05/01 Inst : GC_W
Misc : ENVTACT-ORBIS,04/04/01,04/04/01,5 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 11:04 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	3.85	3.69	689.2E6	257.8E6	14.655m	13.480m
Spiked Amount 100.000			Recovery =		14.65%	13.48%
2) S DCB	18.68	18.64	689.4E6	275.0E6	15.399	17.380m
Spiked Amount 100.000			Recovery =		15.40%	17.38%
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.
W5742.D WPTC0404.M Fri Apr 06 10:18:36 2001 GC_W

000131

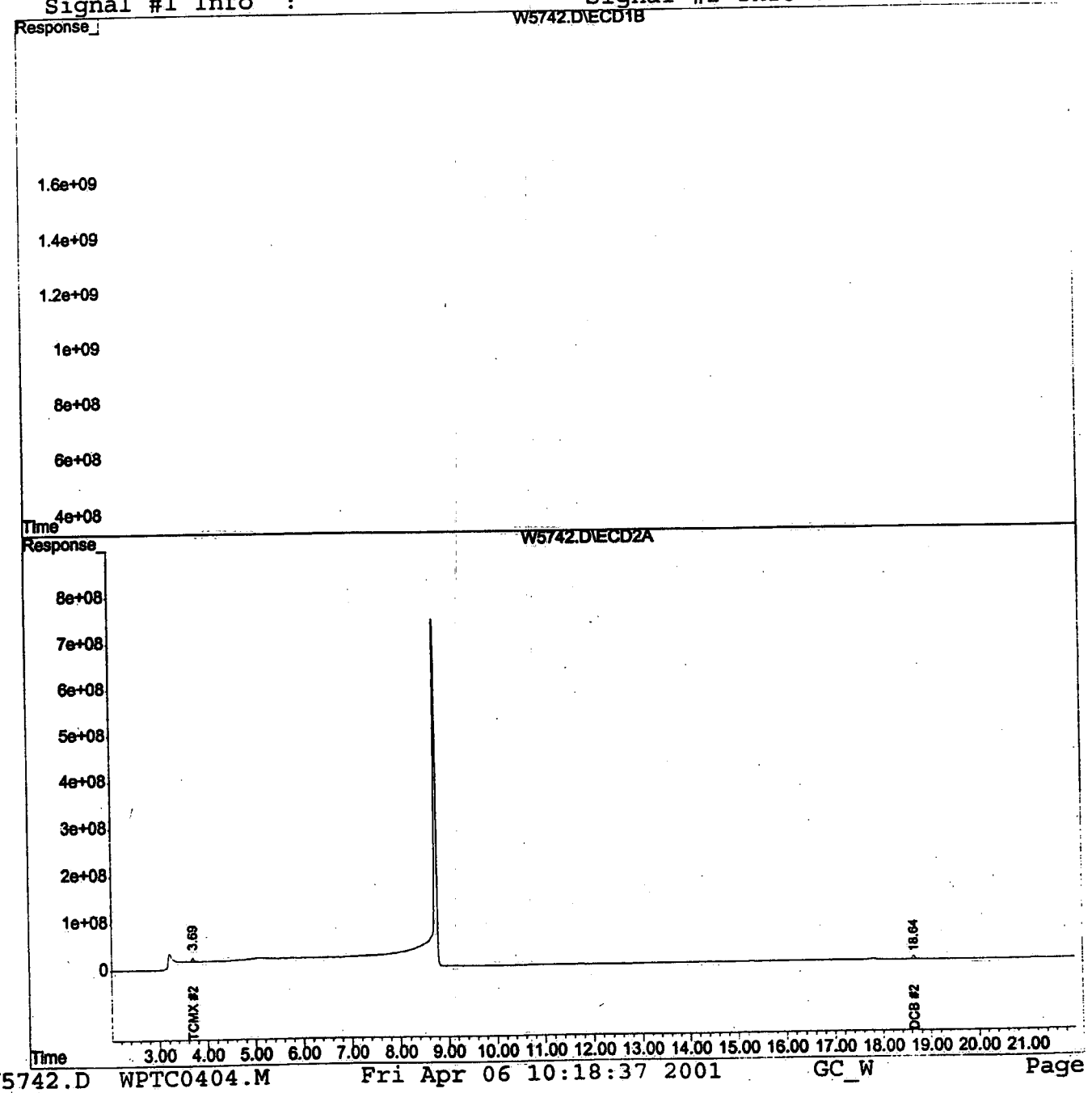
3405

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-05-01\W5742.D\ECD1B.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\04-05-01\W5742.D\ECD2A.CH
Acq On : 4-5-01 20:21:20 Operator:
Sample : MW-4,2093-001,A,1000mL,100,04/05/01 Inst : GC_W
Misc : ENVTACT-ORBIS,04/04/01,04/04/01,5 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 11:04 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



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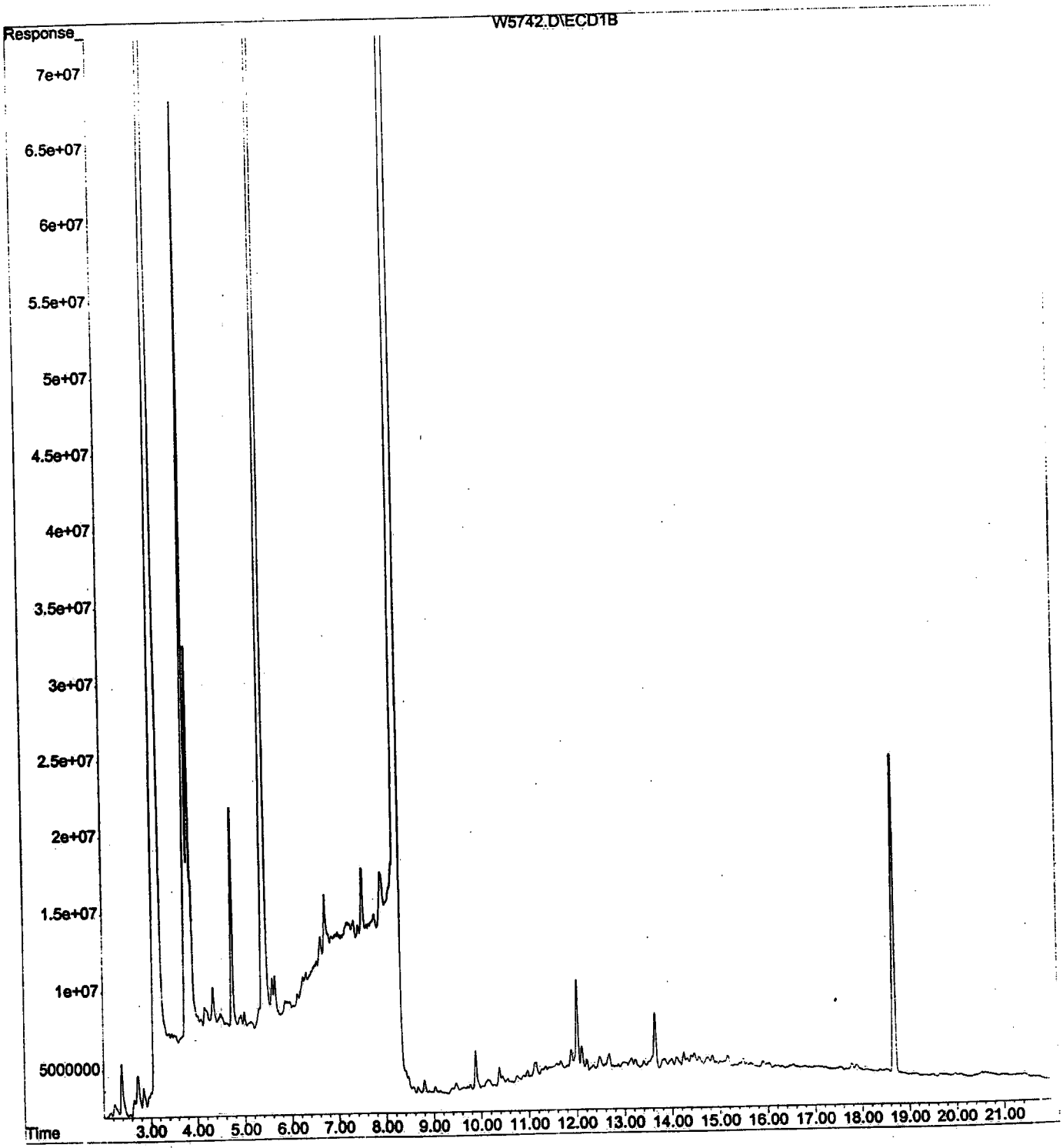
3906

File : C:\HPCHEM\1\DATA\04-05-01\W5742.D
Operator :
Acquired : 4-5-01 20:21:20 using AcqMethod WPTC0404.M
Instrument : GC_W
Sample Name: MW-4,2093-001,A,1000mL,100,04/05/01
Misc Info : ENVTACT-ORBIS,04/04/01,04/04/01,5
Vial Number: 20



Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-05-01\W5730.D\ECD1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\04-05-01\W5730.D\ECD2A.CH
Acq On : 4-5-01 15:21:29 Operator:
Sample : (2933.2108),0405-1X2,A,1000ml,100,04/05/ Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 10:17 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	3.70	4183.6E6	1619.3E6	88.955	84.658
Spiked Amount 100.000			Recovery =		88.95%	84.66%
2) S DCB	18.68	18.65	3883.6E6	1366.7E6	86.754	86.395
Spiked Amount 100.000			Recovery =		86.75%	86.39%
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

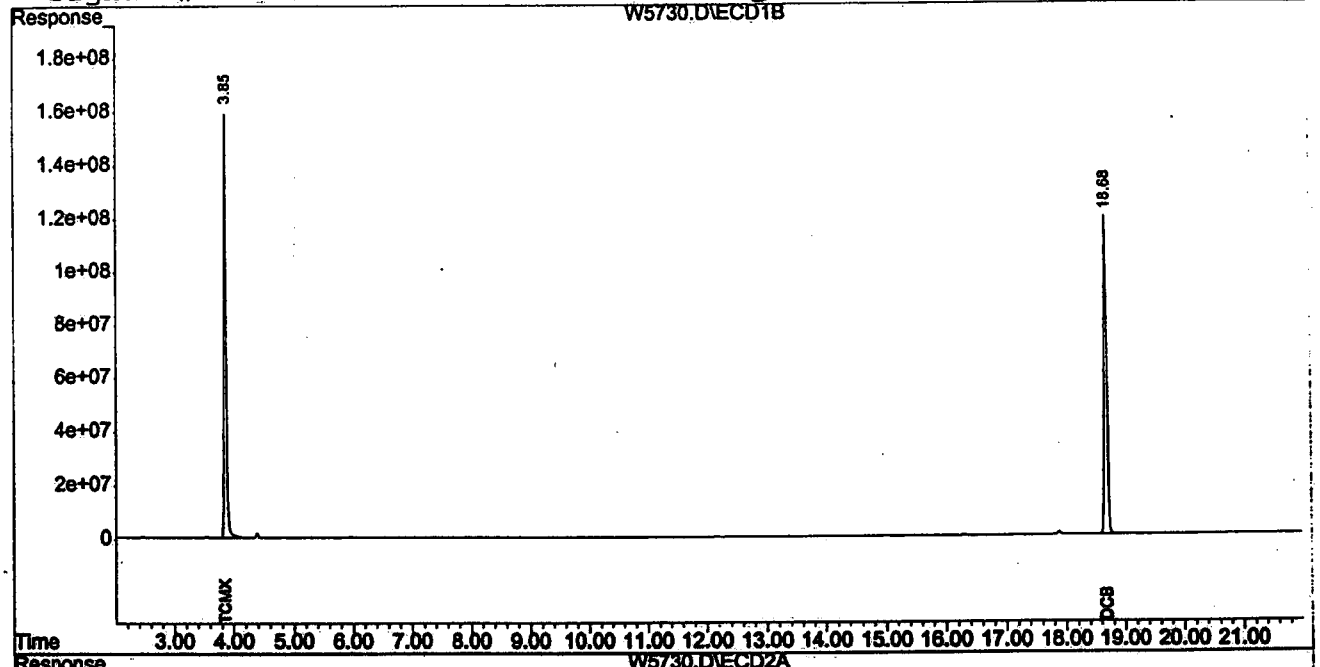
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5730.D WPTC0404.M Fri Apr 06 09:41:11 2001 GC_W Page 1

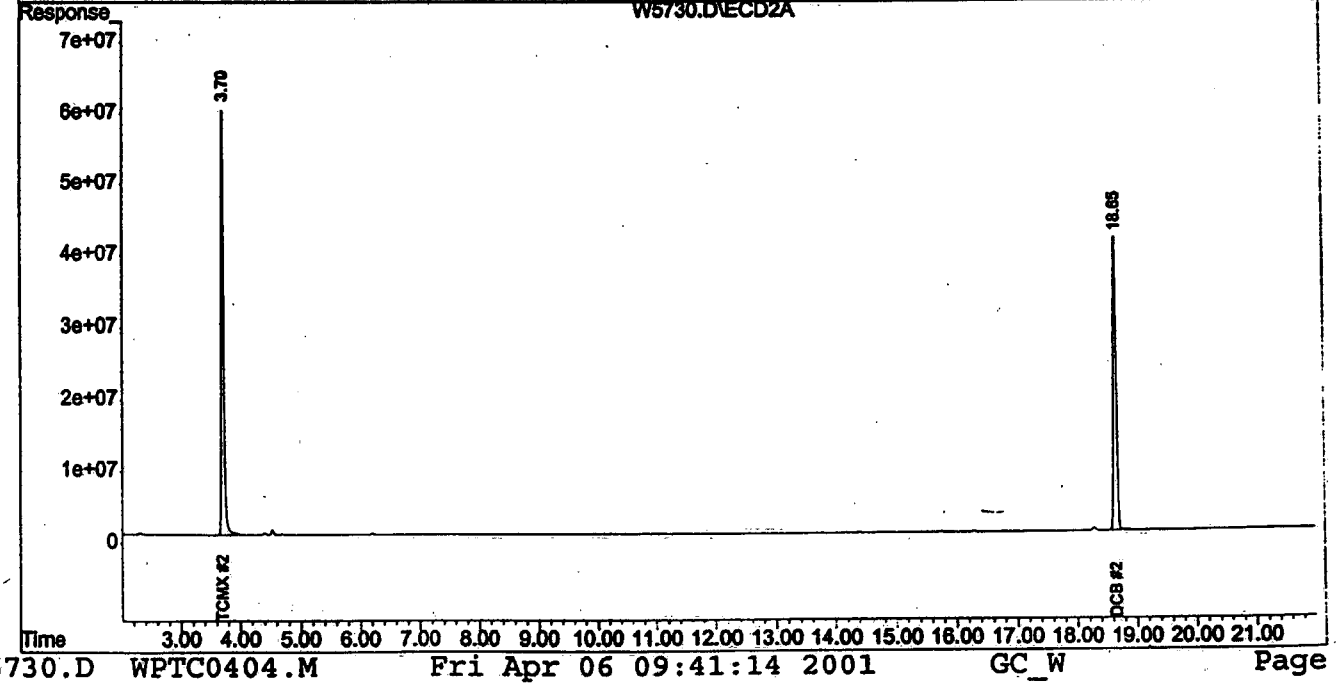
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-05-01\W5730.D\ECD1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\04-05-01\W5730.D\ECD2A.CH
Acq On : 4-5-01 15:21:29 Operator:
[illegible] : [illegible],A,1000mL,100,04/[illegible] Inst : [illegible]
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 10:17 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.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:\HPCHEM\1\DATA\04-05-01\W5724.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\04-05-01\W5724.D\ECD2A.CH
Acq On : 4-5-01 12:22:35 Operator:
Sample : PEST STD 1441,300 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 5 13:41 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

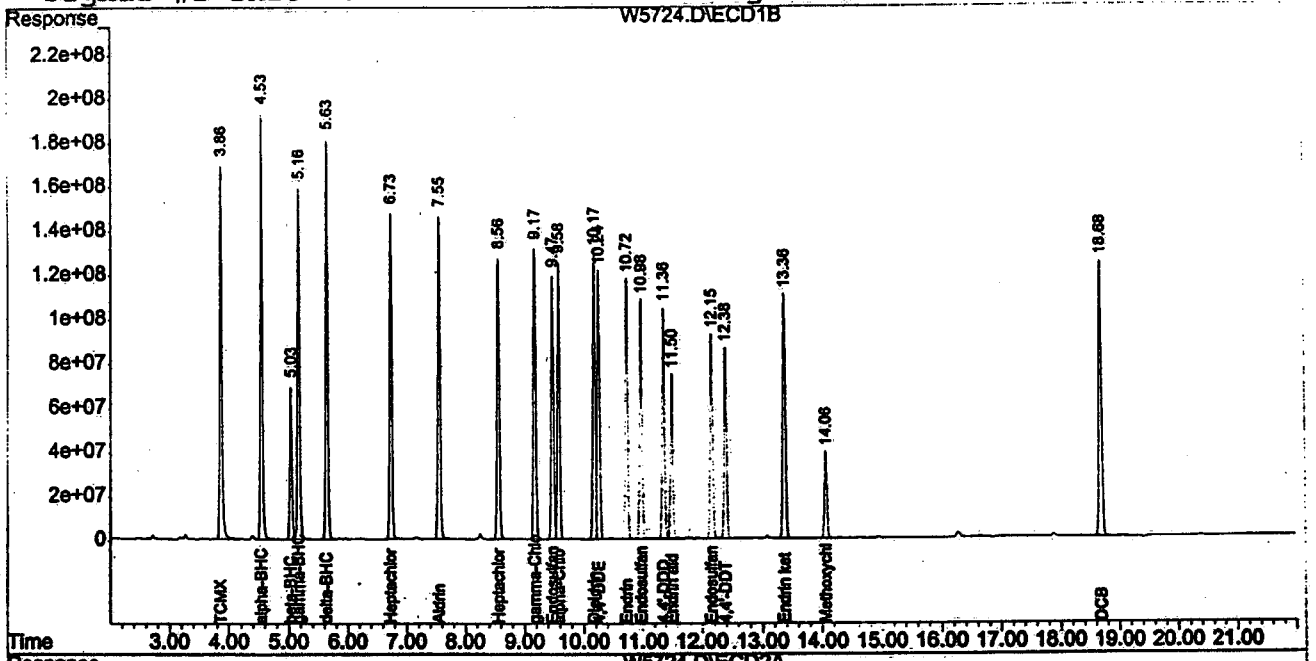
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2	
		System Monitoring Compounds							
1)	S	TCMX	3.86	3.70	4349.7E6	1722.0E6	92.487	90.029	
		Spiked Amount 100.000			Recovery =		92.49%	90.03%	
2)	S	DCB	18.68	18.64	4038.6E6	1476.2E6	90.217	93.314	
		Spiked Amount 100.000			Recovery =		90.22%	93.31%	
		Target Compounds							
3)	T	alpha-BHC	4.53	5.59	4599.7E6	1737.0E6	96.170	97.724	
	T	beta-BHC	5.03	8.65	1700.2E6	694.5E6	93.017	92.730	
	T	gamma-BHC	5.16	6.54	3978.7E6	1587.7E6	95.558	97.387	
	T	delta-BHC	5.63	9.21	4341.2E6	1560.3E6	95.137	96.793	
7)	T	Heptachlor	6.73	7.02	3740.8E6	1325.7E6	101.716	100.828	
8)	T	Aldrin	7.55	7.69	3880.8E6	1431.4E6	94.450	95.842	
9)	T	Heptachlor epoxi	8.56	9.54	3507.9E6	1318.9E6	95.684	96.054	
10)	T	Endosulfan I	9.48	10.22	3270.6E6	1234.9E6	95.119	95.527	
11)	T	4,4'-DDE	10.24	11.00	3424.2E6	1298.0E6	93.920	95.352	
12)	T	Dieldrin	10.17	11.26	3588.0E6	1356.0E6	96.592	96.592	
13)	T	Endrin	10.72	11.79	3395.5E6	1296.7E6	104.660	104.048	
14)	T	Endosulfan II	10.98	13.23	3032.4E6	2280.8E6	94.152	193.742	#
15)	T	4,4'-DDD	11.36	13.23	2989.8E6	2280.8E6	97.636	193.742	#
16)	T	Endrin aldehyde	11.50	14.37	2140.2E6	827.3E6	93.828	87.840	
17)	T	Endosulfan sulfa	12.15	15.27	2783.6E6	1041.0E6	93.789	93.071	
18)	T	4,4'-DDT	12.38	13.68	2493.2E6	803.3E6	100.705	95.347	
19)	T	Endrin ketone	13.36	16.30	3313.7E6	1191.5E6	92.550	91.163	
20)	T	Methoxychlor	14.06	15.55	1194.0E6	433.1E6	100.912	94.162	
21)	T	alpha-Chlordane	9.58	10.62	3518.2E6	1315.0E6	94.862	95.197	
22)	T	gamma-Chlordane	9.17	10.46	3699.3E6	1354.9E6	95.322	95.747	
		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	

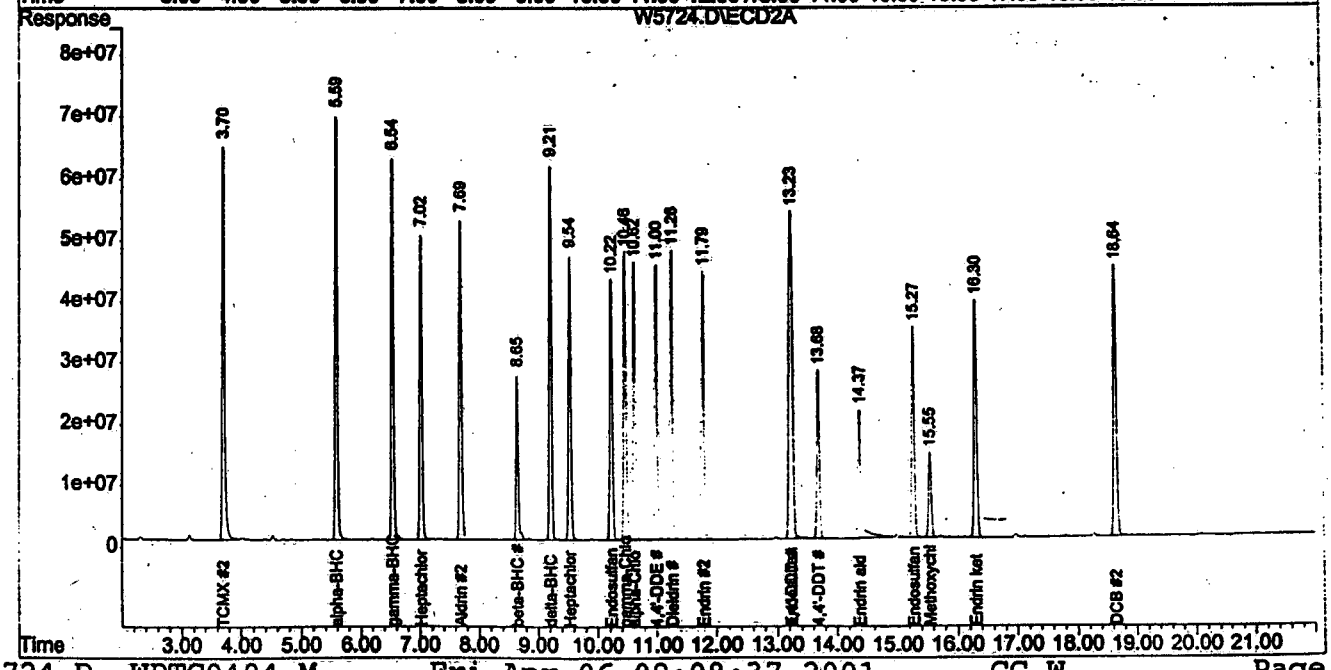
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\HPCHEM\1\DATA\04-05-01\W5724.D\ECD1B.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\04-05-01\W5724.D\ECD2A.CH
Acq On : 4-5-01 12:22:35 Operator:
Sample : [illegible] ppb Inst :
Misc : NA,NA,NA,1 Multipir: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 5 13:41 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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3911

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-05-01\W5746.D\ECD1B.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\04-05-01\W5746.D\ECD2A.CH
Acq On : 4-5-01 22:00:52 Operator:
Sample : [illegible] Inst :
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 9:26 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Initial Calibration
DataAcq Meth : WPTC0404.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	4434.5E6	1729.1E6	94.290	90.399	
	Spiked Amount	100.000			Recovery	=	94.29%	90.40%	
2)	S	DCB	18.68	18.64	4343.7E6	1522.0E6	97.034	96.210	
	Spiked Amount	100.000			Recovery	=	97.03%	96.21%	
	Target Compounds								
3)	T	alpha-BHC	4.53	5.58	4654.4E6	1751.8E6	97.313	98.557	
4)	T	beta-BHC	5.03	8.64	1731.7E6	700.3E6	94.741	93.510	
5)	T	gamma-BHC	5.16	6.54	4026.9E6	1599.1E6	96.716	98.088	
6)	T	delta-BHC	5.63	9.21	4451.5E6	1589.6E6	97.555	98.610	
7)	T	Heptachlor	6.73	7.02	3643.3E6	1288.5E6	99.064	97.998	
8)	T	Aldrin	7.55	7.69	3990.6E6	1450.7E6	97.123	97.135	
9)	T	Heptachlor epoxi	8.56	9.54	3552.8E6	1327.4E6	96.907	96.675	
10)	T	Endosulfan I	9.48	10.22	3331.3E6	1244.0E6	96.884	96.229	
11)	T	4,4'-DDE	10.24	11.00	3573.1E6	1327.1E6	98.004	97.489	
12)	T	Dieldrin	10.17	11.26	3673.1E6	1371.1E6	98.883	97.670	
13)	T	Endrin	10.72	11.78	3469.2E6	1311.2E6	106.934	105.214	
14)	T	Endosulfan II	10.98	13.23	3133.1E6	2336.3E6	97.281	198.457	#
15)	T	4,4'-DDD	11.36	13.23	3164.8E6	2336.3E6	103.348	198.457	#
16)	T	Endrin aldehyde	11.50	14.37	2218.5E6	862.3E6	97.260	91.551	
17)	T	Endosulfan sulfa	12.15	15.27	2904.7E6	1071.5E6	97.871	95.802	
18)	T	4,4'-DDT	12.38	13.68	2468.4E6	791.6E6	99.703	93.958	
19)	T	Endrin ketone	13.36	16.30	3446.5E6	1231.7E6	96.257	94.243	
20)	T	Methoxychlor	14.06	15.54	1193.3E6	435.8E6	100.853	94.745	
21)	T	alpha-Chlordane	9.58	10.61	3606.9E6	1330.5E6	97.255	96.317	
22)	T	gamma-Chlordane	9.17	10.46	3786.5E6	1371.3E6	97.568	96.904	
	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.

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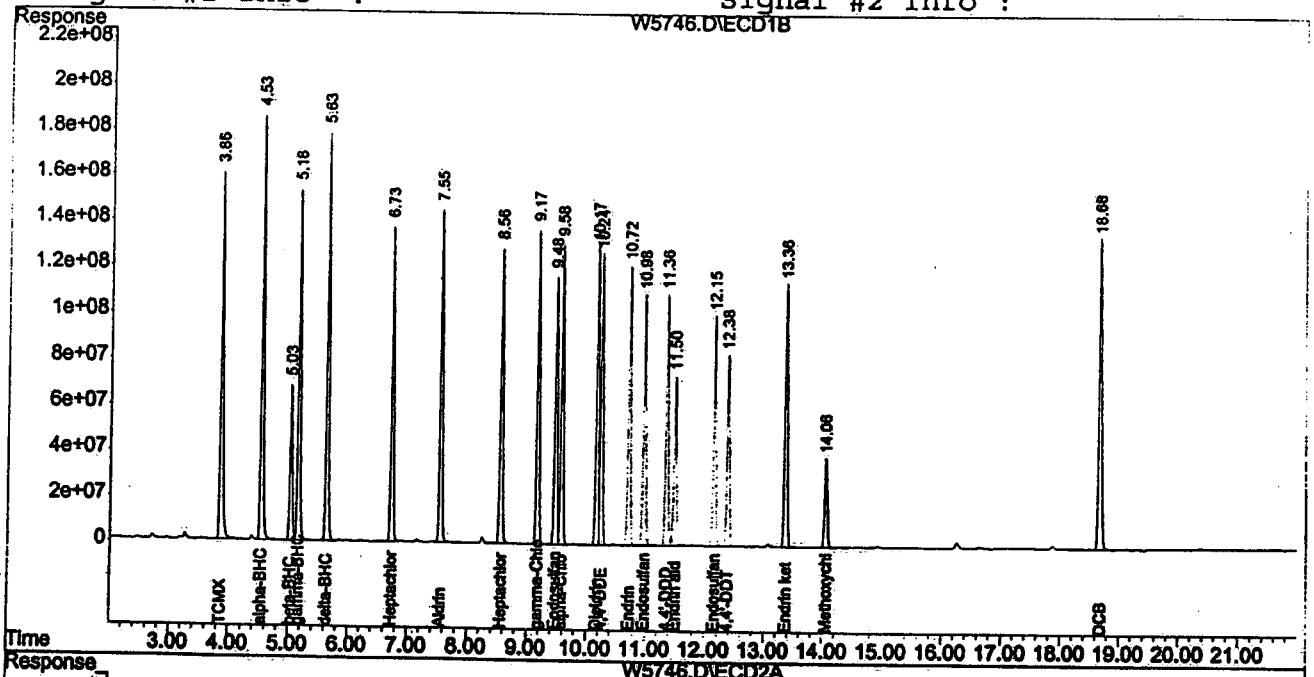
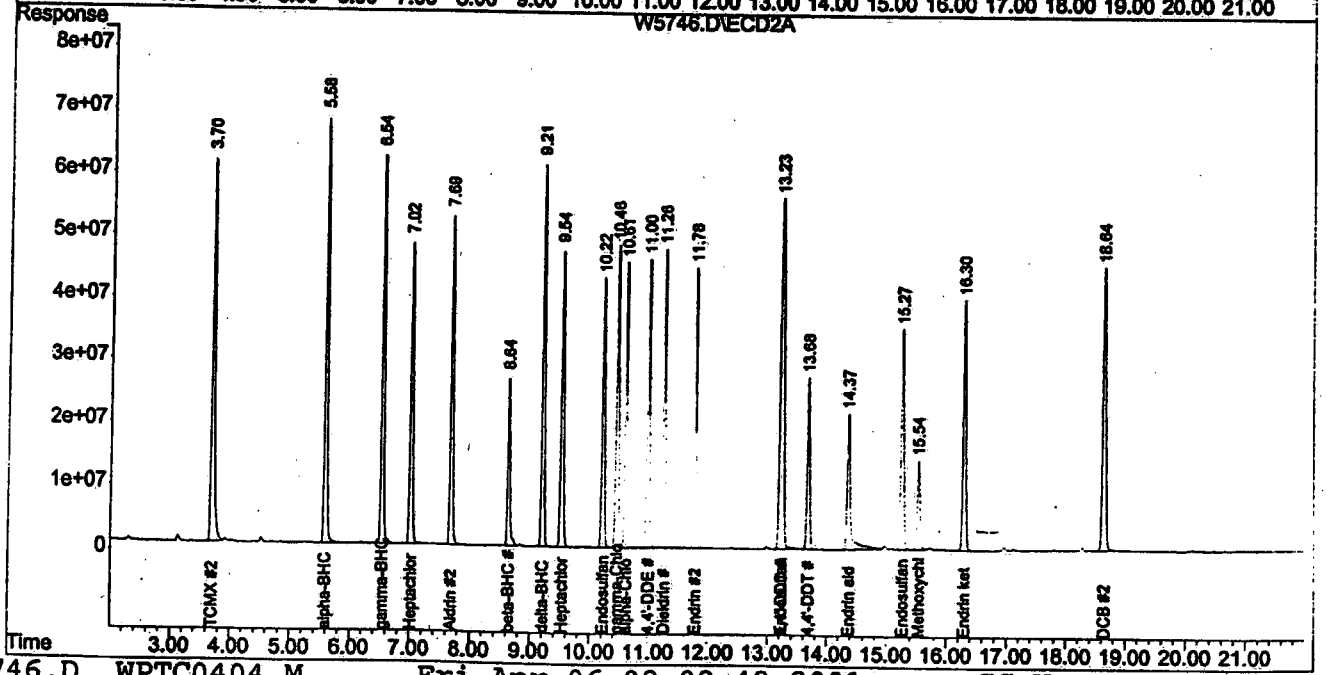
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-05-01\W5746.D\ECD1B.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\04-05-01\W5746.D\ECD2A.CH
Acq On : 4-5-01 22:00:52 Operator:
Sample : [illegible] Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 9:26 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0404.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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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: E01-2094
Date Report Prepared: April 16, 2001

CLIENT SAMPLE ID	LABORATORY SAMPLE ID
FB	2094-001
TB	2094-002
MW-1	2094-003
MW-2	2094-004
MW-7	2094-005
MW-6	2094-006
MW-8	2094-007
MW-3	2094-008
MW-5	2094-009

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.

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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.

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

CONFORMANCE / NONCONFORMANCE SUMMARY

Integrated Analytical Laboratories, LLC. received nine (9) aqueous sample(s) from Envirotactics Inc. (Project: ORBIS - NEWARK - 444) on April 4, 2001 for the analysis of:

(8) Volatiles + 15
(1) Volatiles + 10
(8) Semivolatiles - BNA + 25
(8) PCB's
(8) Pesticides
(8) PP Metals
(8) Cyanide, Total
(8) Phenols

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

4/16/01
Date

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30146

INTEGRATED ANALYTICAL LABORATORIES, LLC.

LABORATORY DELIVERABLES CHECK LIST

Lab Case Number: E01-2094

		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

4/16/01
Date

3819

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC/MS VOLATILE ANALYSIS

Lab Case Number: E01 - 2014

	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		NA
b. System Performance Check Compounds		NA
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

4/11/01
Date

rev 12/00

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INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC/MS SEMIVOLATILE ANALYSIS

Lab Case Number: E01 - 2094

	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

6/9/01 Date

rev 01/01

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3621

INTEGRATED ANALYTICAL LABORATORIES
CONFORMANCE/NONCONFORMANCE SUMMARY
GC ANALYSIS - PCB'S, PESTICIDES, HERBICIDES

Lab Case Number: EO1 - 2094

		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

04.06.2001
Date

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rev 01/01

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INTEGRATED ANALYTICAL LABORATORIES

METAL ANALYSIS CONFORMANCE/NONCONFORMANCE SUMMARY

Lab Case Number: E01 - 2094

	No	Yes
1. Calibration Summary Meet Criteria.		✓
2. ICP Interference Check Sample Results Meets Criteria (if applicable)		NA
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. Falck-Lorenzen
Inorganics Manager

04/09/01
Date

rev 01/01

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3623

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2094

Lab ID:	2094-001			2094-002			2094-003			2094-004		
Client ID:	FB			TB			MW-1			MW-2		
Matrix:	Aqueous			Aqueous			Aqueous			Aqueous		
Sampled Date:	4/3/2001			4/2/2001			4/3/2001			4/3/2001		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (ppb)												
Chloroform	ND		0.37	ND		0.37	0.999		0.37	0.483		0.37
Benzene	ND		0.28	ND		0.28	10.3		0.28	0.357		0.28
Chlorobenzene	ND		0.37	ND		0.37	76.4		0.37	ND		0.37
1,2-Dichlorobenzene	ND		0.39	ND		0.39	0.537		0.39	ND		0.39
TOTAL VO's:	ND			ND			88.236			0.84		
TOTAL TIC's:	ND			ND			ND			ND		
TOTAL VO's & TIC's:	ND			ND			88.236			0.84		
Semivolatiles - BNA (ppb)												
4-Methylphenol	ND		0.33	~		~	ND		0.33	2.68		0.33
TOTAL BNA'S:	ND			~			ND			2.68		
TOTAL TIC's:	ND			~		~	86.4			146.4		
TOTAL BNA'S & TIC's:	ND			~		~	86.4			149.08		
PCB's (ppb)	ND		0.2	~		~	ND		0.2	ND		0.2
Pesticides (ppb)	ND		0.002	~		~	ND		0.01	ND		0.01
Metals (ppm)												
Antimony	ND		0.008	~		~	ND		0.008	ND		0.008
Arsenic	ND		0.004	~		~	0.00415		0.004	ND		0.004
Beryllium	ND		0.004	~		~	ND		0.004	ND		0.004
Cadmium	ND		0.0006	~		~	ND		0.0006	0.000812		0.0006
Chromium	ND		0.020	~		~	ND		0.020	ND		0.020
Copper	ND		0.040	~		~	ND		0.040	ND		0.040
Lead	ND		0.004	~		~	ND		0.004	ND		0.004
Mercury	ND		0.0005	~		~	ND		0.0005	ND		0.0005
Nickel	ND		0.020	~		~	ND		0.020	ND		0.020
Selenium	ND		0.008	~		~	ND		0.008	ND		0.008
Silver	ND		0.0004	~		~	ND		0.0004	ND		0.0004
Thallium	ND		0.008	~		~	ND		0.008	ND		0.008
Zinc	ND		0.020	~		~	ND		0.020	0.529		0.020
General Analytical												
Cyanide, Total (ppm)	ND		0.020	~		~	ND		0.020	ND		0.020
Phenol (ppm)	ND		0.050	~		~	ND		0.050	ND		0.050

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

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2094

Lab ID:	2094-005			2094-006			2094-007			2094-008		
Client ID:	MW-7			MW-6			MW-8			MW-3		
Matrix:	Aqueous			Aqueous			Aqueous			Aqueous		
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)												
Chloroform	669	D	3.7	62.4		3.7	ND		1850	ND		740
Carbon Tetrachloride	ND		0.37	5.83		3.7	ND		1850	ND		740
1,2-Dichloroethane(EDC)	ND		0.42	ND		4.2	7300		2100	ND		840
Benzene	55.2		0.28	ND		2.8	340000		1400	125000		560
Trichloroethene	ND		0.59	96.8		5.9	ND		2950	ND		1180
Toluene	16		0.34	44.6		3.4	254000		1700	3350		680
1,1,2-Trichloroethane	14.8		0.39	ND		3.9	ND		1950	ND		780
Tetrachloroethene	8.75		0.31	4.34		3.1	ND		1550	ND		620
Chlorobenzene	2.37		0.37	ND		3.7	ND		1850	1180		740
Ethylbenzene	2.13		0.2	532		2	ND		1000	ND		400
Total Xylenes	1.06		0.79	855		7.9	ND		3950	ND		1580
1,2-Dichlorobenzene	0.996		0.39	ND		3.9	ND		1950	ND		780
TOTAL VO's:	770.306			1600.97			601300			129530		
TOTAL TIC's:	378.2			7794			ND			ND		
TOTAL VO's & TIC's:	1148.51			9394.97			601300			129530		
Semivolatiles - BNA (ppb)												
Phenol	ND		0.33	ND		0.33	1640	D	66	3.28		0.33
Aniline	ND		0.37	ND		0.37	ND		3.7	2.18		0.37
1,4-Dichlorobenzene	ND		0.29	ND		0.29	ND		2.9	1.09		0.29
1,2-Dichlorobenzene	ND		0.31	ND		0.31	71.4		3.1	3.64		0.31
4-Methylphenol	2.61		0.33	1.32		0.33	12000	D	66	ND		0.33
Naphthalene	ND		0.14	42.7		0.14	ND		1.4	ND		0.14
2-Methylnaphthalene	ND		0.18	21.4		0.18	ND		1.8	ND		0.18
TOTAL BNA'S:	2.61			65.42			13711.4			10.19		
TOTAL TIC's:	1041.1			772.7			4207			3334.9		
TOTAL BNA'S & TIC's:	1043.71			838.12			17918.4			3345.09		
PCB's (ppb)	ND		0.2	ND		0.2	ND		0.2	ND		0.2

ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Envirotactics Inc.
Project: ORBIS - NEWARK - 444
Lab Case No.: E01-2094

	Lab ID:	2094-005		2094-006		2094-007		2094-008	
	Client ID:	MW-7		MW-6		MW-8		MW-3	
	Matrix:	Aqueous		Aqueous		Aqueous		Aqueous	
	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	0.01	ND	0.01	ND	0.01	ND	0.01
beta-BHC		ND	0.01	ND	0.01	ND	0.01	ND	0.01
gamma-BHC		ND	0.01	ND	0.01	ND	0.01	ND	0.01
delta-BHC		ND	0.01	ND	0.01	ND	0.01	ND	0.01
Heptachlor		ND	0.01	ND	0.01	ND	0.01	ND	0.01
Aldrin		ND	0.01	ND	0.01	ND	0.01	ND	0.01
Heptachlor epoxide		ND	0.01	ND	0.01	ND	0.01	ND	0.01
Endosulfan I		ND	0.01	ND	0.01	ND	0.01	ND	0.01
4,4'-DDE		ND	0.01	ND	0.01	0.342	0.01	ND	0.01
Dieldrin		ND	0.01	ND	0.01	ND	0.01	ND	0.01
Endrin		ND	0.01	ND	0.01	ND	0.01	ND	0.01
Endosulfan II		ND	0.01	ND	0.01	ND	0.01	ND	0.01
4,4'-DDD		ND	0.01	ND	0.01	0.821	0.01	ND	0.01
Endrin aldehyde		ND	0.01	ND	0.01	ND	0.01	ND	0.01
Endosulfan sulfate		ND	0.01	ND	0.01	ND	0.01	ND	0.01
4,4'-DDT		ND	0.01	ND	0.01	ND	0.01	ND	0.01
Chlordane		ND	0.075	ND	0.075	ND	0.075	ND	0.075
Toxaphene		ND	0.075	ND	0.075	ND	0.075	ND	0.075
Metals (ppm)									
Antimony		ND	0.008	ND	0.008	ND	0.008	ND	0.008
Arsenic		ND	0.004	ND	0.004	0.00879	0.004	ND	0.004
Beryllium		ND	0.004	ND	0.004	ND	0.004	ND	0.004
Cadmium		0.00177	0.0006	ND	0.0006	ND	0.0006	ND	0.0006
Chromium		ND	0.020	ND	0.020	0.0389	0.020	ND	0.020
Copper		0.0411	0.040	ND	0.040	ND	0.040	ND	0.040
Lead		0.00638	0.004	ND	0.004	ND	0.004	ND	0.004
Mercury		ND	0.0005	ND	0.0005	ND	0.0005	ND	0.0005
Nickel		ND	0.020	ND	0.020	ND	0.020	ND	0.020
Selenium		ND	0.008	ND	0.008	ND	0.008	ND	0.008
Silver		ND	0.0004	ND	0.0004	ND	0.0004	ND	0.0004
Thallium		ND	0.008	ND	0.008	ND	0.008	ND	0.008
Zinc		0.0568	0.020	ND	0.020	ND	0.020	0.0237	0.020
General Analytical									
Cyanide, Total (ppm)		ND	0.020	ND	0.020	ND	0.020	ND	0.020
Phenol (ppm)		ND	0.050	0.0563	0.050	34.3	0.050	0.090	0.050

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.: E01-2094

	Lab ID:	2094-009		
	Client ID:	MW-5		
	Matrix:	Aqueous		
	Sampled Date:	4/3/2001		
PARAMETER(Units)		Conc	Q	MDL
Volatiles (ppb)				
Chloroform		416		185
Benzene		7070		140
Toluene		35600		170
Tetrachloroethene		2420		155
Ethylbenzene		132		100
Total Xylenes		675		395
1,2-Dichlorobenzene		223		195
TOTAL VO's:		46536		
TOTAL TIC's:		9950		
TOTAL VO's & TIC's:		56486		
Semivolatiles - BNA (ppb)				
Phenol		102		3.3
Aniline		8580	D	74
1,2-Dichlorobenzene		83.6		3.1
4-Methylphenol		86.8		3.3
TOTAL BNA'S:		8852.4		
TOTAL TIC's:		19941		
TOTAL BNA'S & TIC's:		28793.4		
PCB's (ppb)		ND		0.2
Pesticides (ppb)		ND		0.01
Metals (ppm)				
Antimony		ND		0.008
Arsenic		0.0305		0.004
Beryllium		ND		0.004
Cadmium		ND		0.0006
Chromium		ND		0.020
Copper		ND		0.040
Lead		0.00906		0.004
Mercury		ND		0.0005
Nickel		0.166		0.020
Selenium		ND		0.008
Silver		ND		0.0004
Thallium		ND		0.008
Zinc		0.351		0.020
General Analytical				
Cyanide, Total (ppm)		ND		0.020
Phenol (ppm)		25.5		0.050

ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

000011

3827

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-001
Client ID: FB
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Data file: G9541.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		0.9
Vinyl Chloride	ND		1.11
Bromomethane	ND		0.93
Chloroethane	ND		1.47
Trichlorofluoromethane	ND		1.71
Acrolein	ND		13
1,1-Dichloroethene	ND		0.99
Methylene Chloride	ND		1.93
Acrylonitrile	ND		2.23
trans-1,2-Dichloroethene	ND		0.34
1,1-Dichloroethane	ND		0.31
Chloroform	ND		0.37
1,1,1-Trichloroethane	ND		0.23
Carbon Tetrachloride	ND		0.37
1,2-Dichloroethane(EDC)	ND		0.42
Benzene	ND		0.28
Trichloroethene	ND		0.59
1,2-Dichloropropane	ND		0.28
Bromodichloromethane	ND		0.28
2-Chloroethylvinyl Ether	ND		0.34
cis-1,3-Dichloropropene	ND		0.23
Toluene	ND		0.34
trans-1,3-Dichloropropene	ND		0.14
1,1,2-Trichloroethane	ND		0.39
Tetrachloroethene	ND		0.31
Dibromochloromethane	ND		0.23
Chlorobenzene	ND		0.37
Ethylbenzene	ND		0.2
Total Xylenes	ND		0.79
Bromoform	ND		0.25
1,1,2,2-Tetrachloroethane	ND		0.39
1,3-Dichlorobenzene	ND		0.25
1,4-Dichlorobenzene	ND		0.25
1,2-Dichlorobenzene	ND		0.39

Total Target Compounds: 0

000012

34256

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-001
Client ID: FB
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Data file: G9541.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time

No peaks detected

Total TICs = 0

000013

3829

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-002
Client ID: TB
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Data file: G9534.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		0.9
Vinyl Chloride	ND		1.11
Bromomethane	ND		0.93
Chloroethane	ND		1.47
Trichlorofluoromethane	ND		1.71
Acrolein	ND		13
1,1-Dichloroethene	ND		0.99
Methylene Chloride	ND		1.93
Acrylonitrile	ND		2.23
trans-1,2-Dichloroethene	ND		0.34
1,1-Dichloroethane	ND		0.31
Chloroform	ND		0.37
1,1,1-Trichloroethane	ND		0.23
Carbon Tetrachloride	ND		0.37
1,2-Dichloroethane(EDC)	ND		0.42
Benzene	ND		0.28
Trichloroethene	ND		0.59
1,2-Dichloropropane	ND		0.28
Bromodichloromethane	ND		0.28
2-Chloroethylvinyl Ether	ND		0.34
cis-1,3-Dichloropropene	ND		0.23
Toluene	ND		0.34
trans-1,3-Dichloropropene	ND		0.14
1,1,2-Trichloroethane	ND		0.39
Tetrachloroethene	ND		0.31
Dibromochloromethane	ND		0.23
Chlorobenzene	ND		0.37
Ethylbenzene	ND		0.2
Total Xylenes	ND		0.79
Bromoform	ND		0.25
1,1,2,2-Tetrachloroethane	ND		0.39
1,3-Dichlorobenzene	ND		0.25
1,4-Dichlorobenzene	ND		0.25
1,2-Dichlorobenzene	ND		0.39

Total Target Compounds: 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-002
Client ID: TB
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Data file: G9534.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

000015

3531

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-003
Client ID: MW-1
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Data file: G9525.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		0.9
Vinyl Chloride	ND		1.11
Bromomethane	ND		0.93
Chloroethane	ND		1.47
Trichlorofluoromethane	ND		1.71
Acrolein	ND		13
1,1-Dichloroethene	ND		0.99
Methylene Chloride	ND		1.93
Acrylonitrile	ND		2.23
trans-1,2-Dichloroethene	ND		0.34
1,1-Dichloroethane	ND		0.31
Chloroform	0.999		0.37
1,1,1-Trichloroethane	ND		0.23
Carbon Tetrachloride	ND		0.37
1,2-Dichloroethane(EDC)	ND		0.42
Benzene	10.3		0.28
Trichloroethene	ND		0.59
1,2-Dichloropropane	ND		0.28
Bromodichloromethane	ND		0.28
2-Chloroethylvinyl Ether	ND		0.34
cis-1,3-Dichloropropene	ND		0.23
Toluene	ND		0.34
trans-1,3-Dichloropropene	ND		0.14
1,1,2-Trichloroethane	ND		0.39
Tetrachloroethene	ND		0.31
Dibromochloromethane	ND		0.23
Chlorobenzene	76.4		0.37
Ethylbenzene	ND		0.2
Total Xylenes	ND		0.79
Bromoform	ND		0.25
1,1,2,2-Tetrachloroethane	ND		0.39
1,3-Dichlorobenzene	ND		0.25
1,4-Dichlorobenzene	ND		0.25
1,2-Dichlorobenzene	0.537		0.39
Total Target Compounds:	88.236		

000016

3432

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-003
Client ID: MW-1
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Date File: G9525.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-004
Client ID: MW-2
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Data file: G9526.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		0.9
Vinyl Chloride	ND		1.11
Bromomethane	ND		0.93
Chloroethane	ND		1.47
Trichlorofluoromethane	ND		1.71
Acrolein	ND		13
1,1-Dichloroethene	ND		0.99
Methylene Chloride	ND		1.93
Acrylonitrile	ND		2.23
trans-1,2-Dichloroethene	ND		0.34
1,1-Dichloroethane	ND		0.31
Chloroform	0.483		0.37
1,1,1-Trichloroethane	ND		0.23
Carbon Tetrachloride	ND		0.37
1,2-Dichloroethane(EDC)	ND		0.42
Benzene	0.357		0.28
Trichloroethene	ND		0.59
1,2-Dichloropropane	ND		0.28
Bromodichloromethane	ND		0.28
2-Chloroethylvinyl Ether	ND		0.34
cis-1,3-Dichloropropene	ND		0.23
Toluene	ND		0.34
trans-1,3-Dichloropropene	ND		0.14
1,1,2-Trichloroethane	ND		0.39
Tetrachloroethene	ND		0.31
Dibromochloromethane	ND		0.23
Chlorobenzene	ND		0.37
Ethylbenzene	ND		0.2
Total Xylenes	ND		0.79
Bromoform	ND		0.25
1,1,2,2-Tetrachloroethane	ND		0.39
1,3-Dichlorobenzene	ND		0.25
1,4-Dichlorobenzene	ND		0.25
1,2-Dichlorobenzene	ND		0.39

Total Target Compounds: 0.84

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-004
Client ID: MW-2
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Date File: G9526.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

000013

34635

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-005
Client ID: MW-7
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Data file: G9527.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		0.9
Vinyl Chloride	ND		1.11
Bromomethane	ND		0.93
Chloroethane	ND		1.47
Trichlorofluoromethane	ND		1.71
Acrolein	ND		13
1,1-Dichloroethene	ND		0.99
Methylene Chloride	ND		1.93
Acrylonitrile	ND		2.23
trans-1,2-Dichloroethene	ND		0.34
1,1-Dichloroethane	ND		0.31
Chloroform	473	E	0.37
1,1,1-Trichloroethane	ND		0.23
Carbon Tetrachloride	ND		0.37
1,2-Dichloroethane(EDC)	ND		0.42
Benzene	55.2		0.28
Trichloroethene	ND		0.59
1,2-Dichloropropane	ND		0.28
Bromodichloromethane	ND		0.28
2-Chloroethylvinyl Ether	ND		0.34
cis-1,3-Dichloropropene	ND		0.23
Toluene	16		0.34
trans-1,3-Dichloropropene	ND		0.14
1,1,2-Trichloroethane	14.8		0.39
Tetrachloroethene	8.75		0.31
Dibromochloromethane	ND		0.23
Chlorobenzene	2.37		0.37
Ethylbenzene	2.13		0.2
Total Xylenes	1.06		0.79
Bromoform	ND		0.25
1,1,2,2-Tetrachloroethane	ND		0.39
1,3-Dichlorobenzene	ND		0.25
1,4-Dichlorobenzene	ND		0.25
1,2-Dichlorobenzene	0.996		0.39
Total Target Compounds:	574.306	E	

000020

3536

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-005DIL
Client ID: MW-7
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Data file: G9542.D

GC/MS Column: DB-624
Sample wt/vol: 0.5mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 10
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		9
Vinyl Chloride	ND		11.1
Bromomethane	ND		9.3
Chloroethane	ND		14.7
Trichlorofluoromethane	ND		17.1
Acrolein	ND		130
1,1-Dichloroethene	ND		9.9
Methylene Chloride	ND		19.3
Acrylonitrile	ND		22.3
trans-1,2-Dichloroethene	ND		3.4
1,1-Dichloroethane	ND		3.1
Chloroform	669		3.7
1,1,1-Trichloroethane	ND		2.3
Carbon Tetrachloride	ND		3.7
1,2-Dichloroethane(EDC)	ND		4.2
Benzene	54		2.8
Trichloroethene	ND		5.9
1,2-Dichloropropane	ND		2.8
Bromodichloromethane	ND		2.8
2-Chloroethylvinyl Ether	ND		3.4
cis-1,3-Dichloropropene	ND		2.3
Toluene	13.4		3.4
trans-1,3-Dichloropropene	ND		1.4
1,1,2-Trichloroethane	10.6		3.9
Tetrachloroethene	6.38		3.1
Dibromochloromethane	ND		2.3
Chlorobenzene	ND		3.7
Ethylbenzene	ND		2
Total Xylenes	ND		7.9
Bromoform	ND		2.5
1,1,2,2-Tetrachloroethane	ND		3.9
1,3-Dichlorobenzene	ND		2.5
1,4-Dichlorobenzene	ND		2.5
1,2-Dichlorobenzene	ND		3.9

Total Target Compounds: 753.38

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-005
Client ID: MW-7
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Date File: G9527.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown	41.6	9.02
000095-49-8	Benzene, 1-chloro-2-methyl-	54.8	11.95
	Unknown	14.7	12.69
	Unknown	76.2	13.08
	Substituted benzene	88	13.50
	Unknown	17.9	13.63
	Substituted benzene	14.7	14.44
	Unknown	43.1	14.80
	Unknown	14.3	15.03
	Unknown	12.9	17.64

Total TICs = 378.2

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-006
Client ID: MW-6
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Data file: G9529.D

GC/MS Column: DB-624
Sample wt/vol: 0.5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 10
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		9
Vinyl Chloride	ND		11.1
Bromomethane	ND		9.3
Chloroethane	ND		14.7
Trichlorofluoromethane	ND		17.1
Acrolein	ND		130
1,1-Dichloroethene	ND		9.9
Methylene Chloride	ND		19.3
Acrylonitrile	ND		22.3
trans-1,2-Dichloroethene	ND		3.4
1,1-Dichloroethane	ND		3.1
Chloroform	62.4		3.7
1,1,1-Trichloroethane	ND		2.3
Carbon Tetrachloride	5.83		3.7
1,2-Dichloroethane(EDC)	ND		4.2
Benzene	ND		2.8
Trichloroethene	96.8		5.9
1,2-Dichloropropane	ND		2.8
Bromodichloromethane	ND		2.8
2-Chloroethylvinyl Ether	ND		3.4
cis-1,3-Dichloropropene	ND		2.3
Toluene	44.6		3.4
trans-1,3-Dichloropropene	ND		1.4
1,1,2-Trichloroethane	ND		3.9
Tetrachloroethene	4.34		3.1
Dibromochloromethane	ND		2.3
Chlorobenzene	ND		3.7
Ethylbenzene	532		2
Total Xylenes	855		7.9
Bromoform	ND		2.5
1,1,2,2-Tetrachloroethane	ND		3.9
1,3-Dichlorobenzene	ND		2.5
1,4-Dichlorobenzene	ND		2.5
1,2-Dichlorobenzene	ND		3.9

Total Target Compounds: 1600.97

000023

3839

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-006
Client ID: MW-6
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Date File: G9529.D

GC/MS Column: DB-624
Sample wt/vol: 0.5mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 10
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	Unknown alkane	324	4.21
000103-65-1	Benzene, propyl-	380	11.82
	Substituted benzene	1580	11.92
	Substituted benzene	671	12.02
	Substituted benzene	610	12.29
	Substituted benzene	2420	12.50
	Substituted benzene	578	13.01
	Unknown	668	13.25
	Substituted benzene	297	13.31
	Unknown aromatic	266	14.77

Total TICs = 7794

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-007
Client ID: MW-8
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Data file: G9531.D

GC/MS Column: DB-624
Sample wt/vol: 0.001mL
Matrix-Units: Aqueous-µg/L (ppb)
Dilution Factor: 5000
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		4500
Vinyl Chloride	ND		5550
Bromomethane	ND		4650
Chloroethane	ND		7350
Trichlorofluoromethane	ND		8550
Acrolein	ND		65200
1,1-Dichloroethene	ND		4950
Methylene Chloride	ND		9650
Acrylonitrile	ND		11200
trans-1,2-Dichloroethene	ND		1700
1,1-Dichloroethane	ND		1550
Chloroform	ND		1850
1,1,1-Trichloroethane	ND		1150
Carbon Tetrachloride	ND		1850
1,2-Dichloroethane(EDC)	7300		2100
Benzene	340000		1400
Trichloroethene	ND		2950
1,2-Dichloropropane	ND		1400
Bromodichloromethane	ND		1400
2-Chloroethylvinyl Ether	ND		1700
cis-1,3-Dichloropropene	ND		1150
Toluene	254000		1700
trans-1,3-Dichloropropene	ND		700
1,1,2-Trichloroethane	ND		1950
Tetrachloroethene	ND		1550
Dibromochloromethane	ND		1150
Chlorobenzene	ND		1850
Ethylbenzene	ND		1000
Total Xylenes	ND		3950
Bromoform	ND		1250
1,1,2,2-Tetrachloroethane	ND		1950
1,3-Dichlorobenzene	ND		1250
1,4-Dichlorobenzene	ND		1250
1,2-Dichlorobenzene	ND		1950

Total Target Compounds: 601300

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-007
Client ID: MW-8
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Date File: G9531.D

GC/MS Column: DB-624
Sample wt/vol: 0.001mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 5000
% Moisture: 100

CAS #	Compound	Estimated Concentration	Retention Time
	No peaks detected		

Total TICs = 0

000026

3842

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Client/Project: ENVTACT/ORBIS - NEWARK

Lab ID: 2094-008
Client ID: MW-3
Date Received: 04/04/2001
Date Analyzed: 04/05/2001
Data file: G9543.D

GC/MS Column: DB-624
Sample wt/vol: 0.0025mL
Matrix-Units: Aqueous-μg/L (ppb)
Dilution Factor: 2000
% Moisture: 100

Compound	Concentration	Q	MDL
Chloromethane	ND		1800
Vinyl Chloride	ND		2220
Bromomethane	ND		1860
Chloroethane	ND		2940
Trichlorofluoromethane	ND		3420
Acrolein	ND		26100
1,1-Dichloroethene	ND		1980
Methylene Chloride	ND		3860
Acrylonitrile	ND		4460
trans-1,2-Dichloroethene	ND		680
1,1-Dichloroethane	ND		620
Chloroform	ND		740
1,1,1-Trichloroethane	ND		460
Carbon Tetrachloride	ND		740
1,2-Dichloroethane(EDC)	ND		840
Benzene	125000		560
Trichloroethene	ND		1180
1,2-Dichloropropane	ND		560
Bromodichloromethane	ND		560
2-Chloroethylvinyl Ether	ND		680
cis-1,3-Dichloropropene	ND		460
Toluene	3350		680
trans-1,3-Dichloropropene	ND		280
1,1,2-Trichloroethane	ND		780
Tetrachloroethene	ND		620
Dibromochloromethane	ND		460
Chlorobenzene	1180		740
Ethylbenzene	ND		400
Total Xylenes	ND		1580
Bromoform	ND		500
1,1,2,2-Tetrachloroethane	ND		780
1,3-Dichlorobenzene	ND		500
1,4-Dichlorobenzene	ND		500
1,2-Dichlorobenzene	ND		780

Total Target Compounds: 129530

000027

3843

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-05-01\W5725.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\04-05-01\W5725.D\ECD2A.CH
Acq On : 4-5-01 12:55:58 Operator:
Sample : TOX C 1A0 1436,0.5 PPM Inst
Misc : NA,NA,NA,1 Multipl: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 5 13:40 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 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	4639.5E6	1820.6E6	98.648	95.182
Spiked Amount 100.000			Recovery	=	98.65%	95.18%
2) S DCB	18.68	18.65	4119.1E6	1497.4E6	92.016	94.652
Spiked Amount 100.000			Recovery	=	92.02%	94.65%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
2[illegible] L2 Toxaphene	13.17	14.02	349.7E6	127.1E6	470.551	452.783m
29) L2 Toxaphene {2}	13.30	14.75	273.9E6	108.3E6	470.324	444.482m
30) L2 Toxaphene {3}	13.58	15.02	219.2E6	83900780	504.948	434.519m
31) L2 Toxaphene {4}	14.04	15.21	248.8E6	65346786	488.300	428.098m
32) L2 Toxaphene {5}	14.55	15.66	365.7E6	95751726	489.368	440.204m
Sum Toxaphene			1457.3E6	480.4E6	2423.491	2200.086
Average Toxaphene					484.698	440.017

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
W5725.D WPTC0404.M Fri Apr 06 09:08:43 2001 GC_W Page 1

000143

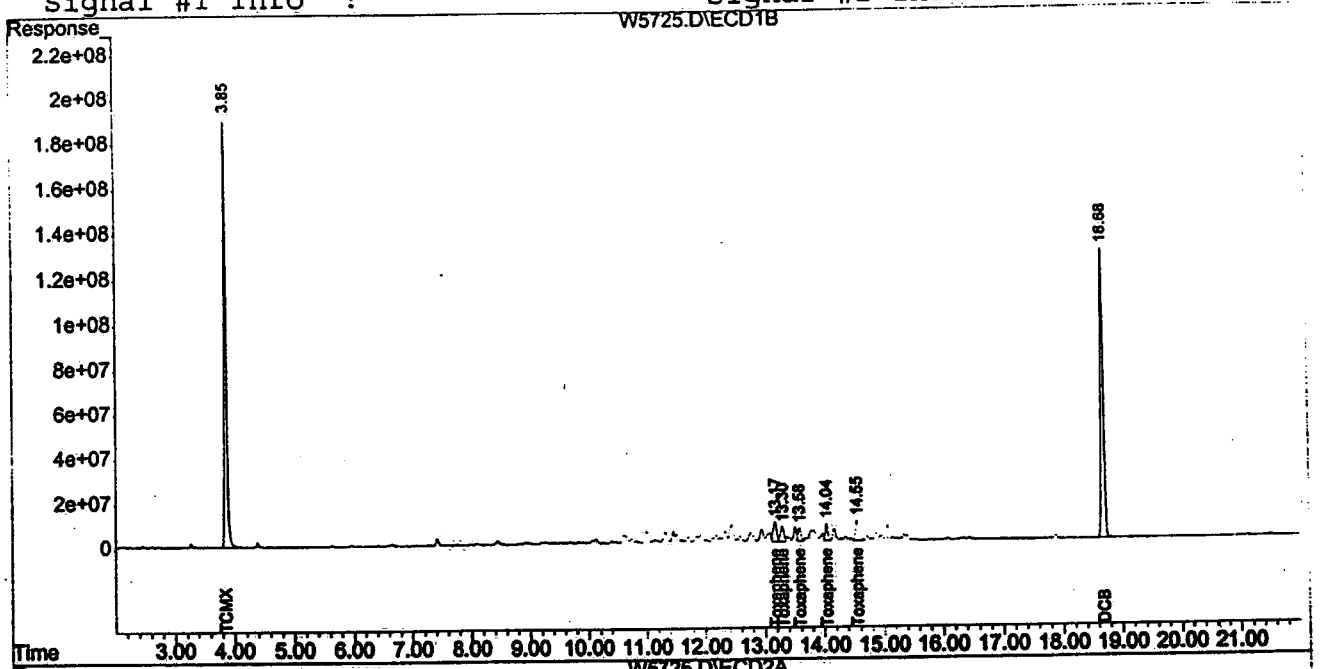
3844

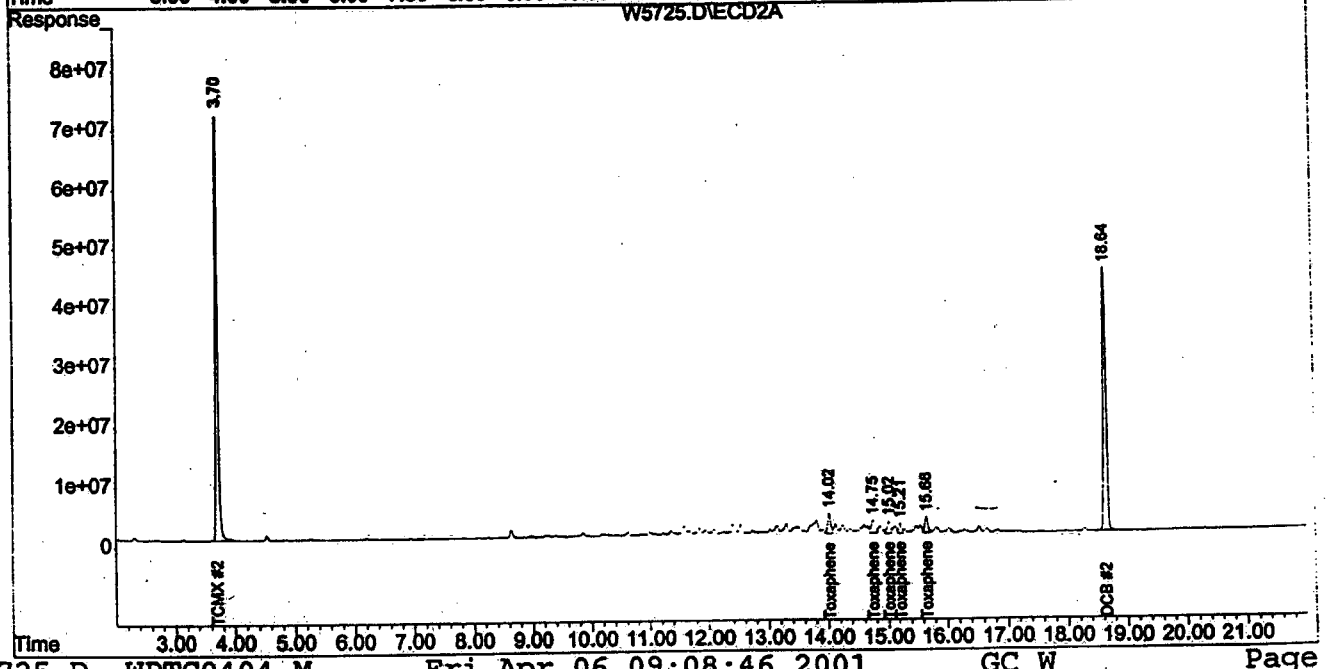
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-05-01\W5725.D\ECD1B.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\04-05-01\W5725.D\ECD2A.CH
Acq On : 4-5-01 12:55:58 Operator:
Sample : [illegible]_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 5 13:40 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





000111

3845

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-05-01\W5726.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\04-05-01\W5726.D\ECD2A.CH
Acq On : 4-5-01 13:21:00 Operator:
Sample : [illegible] Inst : GC_W
Misc : NA,NA,NA,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Apr 6 10:09 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 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	4164.4E6	1680.0E6	88.548	87.833
Spiked Amount 100.000			Recovery	=	88.55%	87.83%
2) S DCB	18.68	18.64	3818.3E6	1372.0E6	85.295	86.727
Spiked Amount 100.000			Recovery	=	85.30%	86.73%
Target Compounds						
23) L1 Chlordane	9.17	8.38	1888.3E6	135.8E6	460.884	462.065
24) L1 Chlordane {2}	9.37	10.06	351.7E6	151.0E6	469.383	447.163
25) L1 Chlordane {3}	9.58	10.46	1755.1E6	688.5E6	449.356	463.826
26) L1 Chlordane {4}	9.72	10.62	834.0E6	629.0E6	459.271	466.566
27) L1 Chlordane {5}	11.57	10.67	583.3E6	295.4E6	465.943	452.312
Sum Chlordane			5412.5E6	1899.8E6	2304.837	2291.933
Average Chlordane					460.967	458.387
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.
W5726.D WPTC0404.M Fri Apr 06 09:09:25 2001 GC_W Page 1

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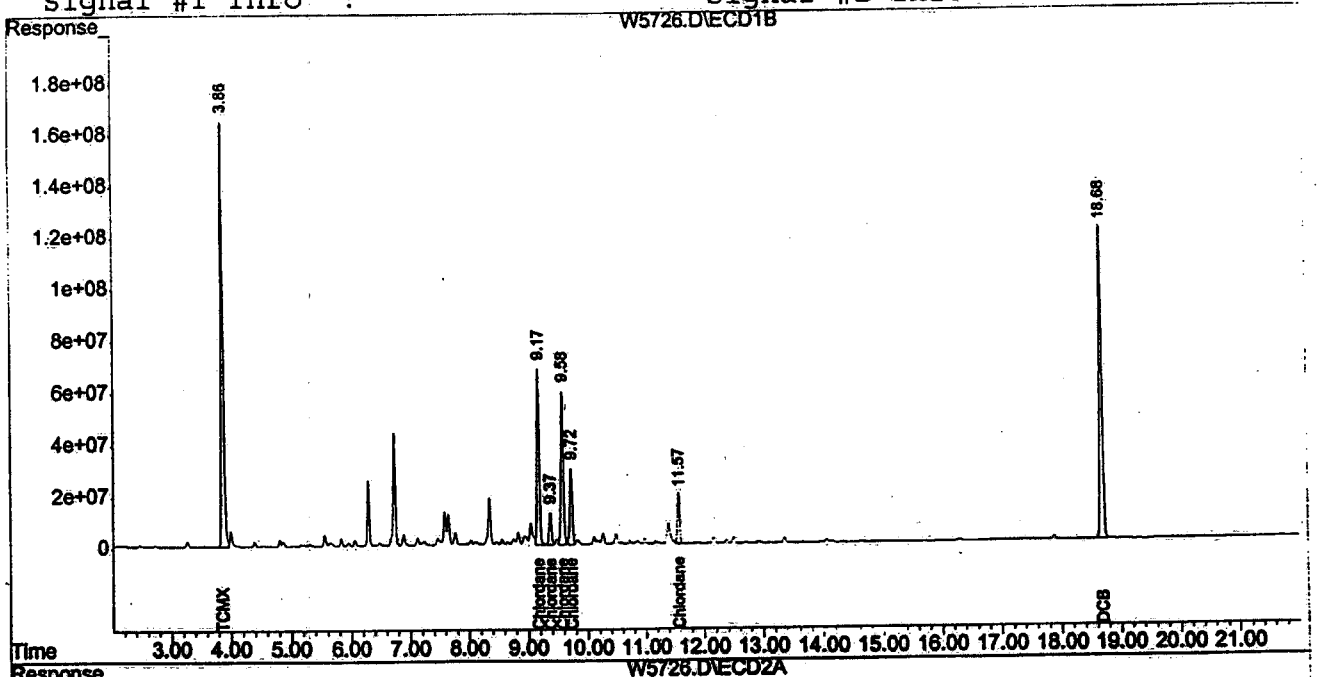
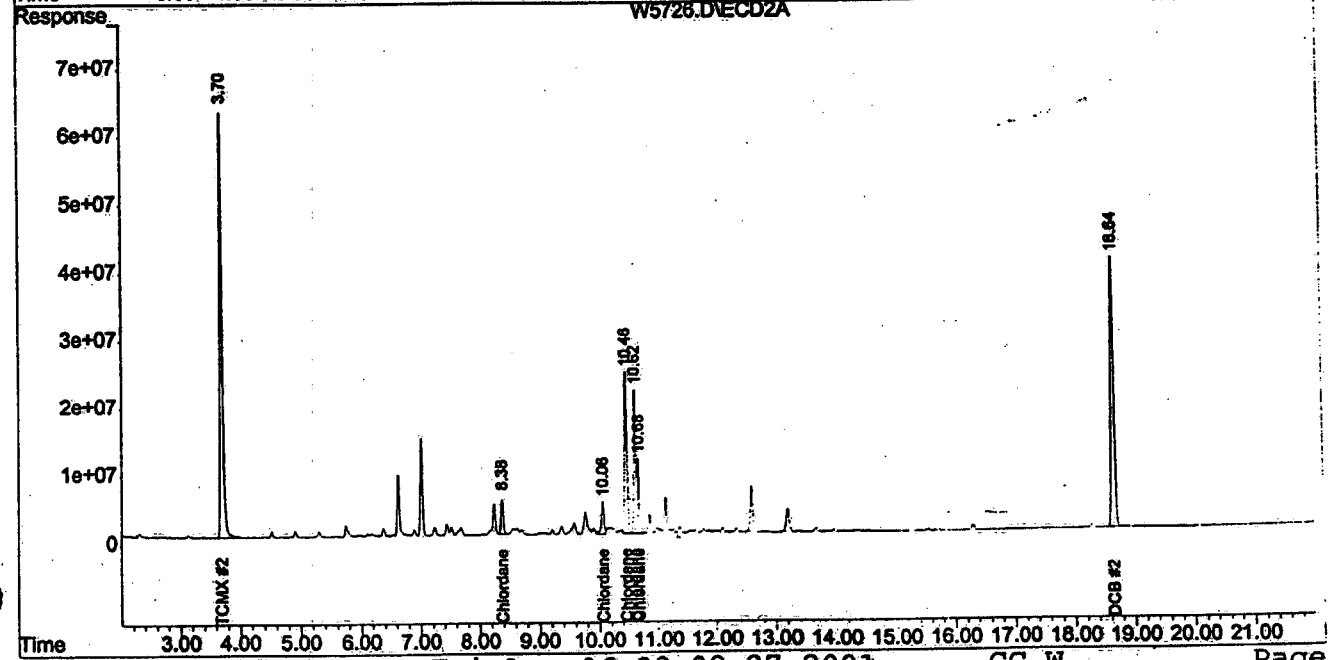
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\04-05-01\W5726.D\ECD1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\04-05-01\W5726.D\ECD2A.CH
Acq On : 4-5-01 13:21:00 Operator:
Sample : [illegible],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 6 10:09 2001 Quant Results File: WPTC0404.RES

Quant Method : C:\HPCHEM\1\METHODS\WPTC0404.M (Chemstation Integrator)
Title :
Last Update : Wed Apr 04 12:42:19 2001
Response via : Multiple Level Calibration
DataAcq Meth : WPTC0402.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





3047

000116

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

BLANK RESULTS SUMMARY

Lab Case Number: E01- 2093, 2094, 2106, 2108, 2112, 2118, 2124, 2133, 2134

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	INITIAL CALIBRATION	CONTINUING CALIBRATION 1	CONTINUING CALIBRATION 2	INST. MDL	REAGENT BLANK	MDL	IDL
Aluminum	ND	ND	ND	50.0	ND	100	
Antimony	ND	ND	ND	4.00	ND	8.00	
Arsenic	ND	ND	ND	2.00	ND	4.00	
Barium	ND	ND	ND	10.0	ND	20.0	
Beryllium	ND	ND	ND	2.00	ND	4.00	
Cadmium	ND	ND	ND	0.300	ND	0.600	
Calcium	ND	ND	ND	400	ND	800	
Chromium	ND	ND	ND	10.0	ND	20.0	
Cobalt	ND	ND	ND	20.0	ND	40.0	
Copper	ND	ND	ND	20.0	ND	40.0	
Iron	ND	ND	ND	50.0	ND	100	
Lead	ND	ND	ND	2.00	ND	4.00	
Magnesium	ND	ND	ND	100	ND	200	
Manganese	ND	ND	ND	5.00	ND	10.0	
Mercury	ND	ND	ND	0.250	ND	0.500	
Nickel	ND	ND	ND	10.0	ND	20.0	
Potassium	ND	ND	ND	100	ND	200	
Selenium	ND	ND	ND	4.00	ND	8.00	
Silver	ND	ND	ND	0.200	ND	0.400	
Sodium	ND	ND	ND	1000	ND	2000	
Thallium	ND	ND	ND	4.00	ND	8.00	
Vanadium	ND	ND	ND	15.0	ND	30.0	
Zinc	ND	ND	ND	10.0	ND	20.0	

This QC Blank applies to the following samples:

2093-001; 2094-001,003~009; 2106-008~011;
2108-001~003; 2112-007; 2118-005~007; 2124-001;
2133-001,003,005,007,010; 2134-001~005

000217

3648

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

INITIAL & CONTINUING CALIBRATION VERIFICATION

Lab Case Number: E01- 2093, 2094, 2106, 2108, 2112, 2118, 2124, 2133, 2134

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	401	100	400	394	98.5	408	102	50.0	
Antimony	120	126	105	120	120	100	118	98.3	4.00	
Arsenic	20.0	19.4	97.0	20.0	19.4	97.0	19.6	98.0	2.00	
Barium	400	410	103	400	409	102	413	103	10.0	
Beryllium	10.0	10.6	106	10.0	10.1	101	10.3	103	2.00	
Cadmium	10.0	9.44	94.4	10.0	9.17	91.7	9.76	97.6	0.300	
Calcium	250000	250000	100	250000	248000	99.2	242000	96.8	400	
Chromium	20.0	19.5	97.5	20.0	19.0	95.0	19.1	95.5	10.0	
Cobalt	100	99.2	99.2	100	99.5	99.5	100	100	20.0	
Copper	50.0	50.6	101	50.0	50.2	100	50.8	102	20.0	
Iron	5000	4920	98.4	5000	4930	98.6	4960	99.2	50.0	
Lead	10.0	10.2	102	10.0	10.2	102	10.3	103	2.00	
Magnesium	250000	241000	96.4	250000	246000	98.4	238000	95.2	100	
Manganese	30.0	29.5	98.3	30.0	29.1	97.0	29.3	97.7	5.00	
Mercury	5.00	5.02	100	5.00	4.99	99.8	4.99	99.8	0.250	
Nickel	80.0	49.8	62.3	80.0	77.1	96.4	78.0	97.5	10.0	
Potassium	10000	9930	99.3	10000	9580	95.8	9490	94.9	100	
Selenium	10.0	10.1	101	10.0	10.1	101	10.1	101	4.00	
Silver	20.0	19.8	99.0	20.0	19.5	97.5	20.0	100	0.200	
Sodium	250000	270000	108	250000	271000	108	259000	104	1000	
Thallium	20.0	20.8	104	20.0	20.8	104	20.8	104	4.00	
Vanadium	100	101	101	100	98.1	98.1	97.2	97.2	15.0	
Zinc	40.0	42.3	106	40.0	42.1	105	43.3	108	10.0	

(1) Control Limits: Mercury 80-120, Other Metals 90-110

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3849

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SPIKE SAMPLE RECOVERY

Lab Case Number: E01- 2093, 2094, 2106, 2108, 2112, 2118, 2124, 2133, 2134

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Aluminum	649	268	95.3	400					75-125
Antimony	407	ND	102	400	406	ND	102	400	75-125
Arsenic	464	47.0	104	400	417	ND	104	400	75-125
Barium	433	23.0	103	400					75-125
Beryllium	414	ND	104	400	414	ND	104	400	75-125
Cadmium	378	ND	94.5	400	384	0.800	95.8	400	75-125
Calcium	39400	34800	NC	8000					75-125
Chromium	382	ND	95.5	400	383	ND	95.8	400	75-125
Cobalt	393	ND	98.3	400					75-125
Copper	410000	ND	103000	400	411	ND	103	400	75-125
Iron	9360	1130	103	8000					75-125
Lead	420	10.0	103	400	404	ND	101	400	75-125
Magnesium	12500	4720	97.3	8000					75-125
Manganese	452	68.0	96.0	400					75-125
Mercury	10.2	ND	102	10.0					75-125
Nickel	385	ND	96.3	400	401	ND	100	400	75-125
Potassium	13600	6330	90.9	8000					75-125
Selenium	422	ND	106	400	429	ND	107	400	75-125
Silver	396	ND	99.0	400	404	ND	101	400	75-125
Sodium	60400	57000	NC	8000					75-125
Thallium	412	ND	103	400	409	ND	102	400	75-125
Vanadium	385	ND	96.3	400					75-125
Zinc	558	149	102	400	952	529	106	400	75-125

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 2108-001

QC Sample 1 for following samples:
2093-001; 2094-001,003~009; 2106-008~011;
2108-001~003; 2112-007; 2118-005~007; 2124-001;
2133-001,003,005,007,010; 2134-001~005

QC Sample 2 2094-004

QC Sample 2 for following samples:
2093-001; 2094-001,003~009; 2106-008~011;
2108-001~003; 2112-007; 2118-005~007; 2124-001;
2133-001,003,005,007,010; 2134-001~005

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SPIKE SAMPLE RECOVERY

Lab Case Number: E01- 2093, 2094, 2106, 2108, 2112, 2118, 2124, 2133, 2134

Matrix: Aqueous

Concentration/Units: ppb (µg/L)

ANALYTE	SSR3	SR3	%R3	SA3	SSR4	SR4	%R4	SA4	CONTROL LIMIT %R
Arsenic	445	19.0	107	400					75-125
Lead	401	ND	100	400		ND		400	75-125

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 2106-009

QC Sample 3 for following samples:
2093-001; 2094-001,003~009; 2106-008~011;
2108-001~003; 2112-007; 2118-005~007; 2124-001;
2133-001,003,005,007,010; 2134-001~005

QC Sample 4 2124-001

QC Sample 4 for following samples:
2093-001; 2094-001,003~009; 2106-008~011;
2108-001~003; 2112-007; 2118-005~007; 2124-001;
2133-001,003,005,007,010; 2134-001~005

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

DUPLICATE SAMPLE RECOVERY

Lab Case Number: E01- 2093, 2094, 2106, 2108, 2112, 2118, 2124, 2133, 2134

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Aluminum	20	268	255	4.97				
Antimony	NA	ND	ND	NC	NA	ND	ND	NC
Arsenic	20	47.0	46.0	2.15	NA	ND	ND	NC
Barium	20	23.0	22.0	4.44				
Beryllium	NA	ND	ND	NC	NA	ND	ND	NC
Cadmium	NA	ND	ND	NC	20	0.800	0.800	0
Calcium	20	34800	33700	3.21				
Chromium	NA	ND	ND	NC	NA	ND	ND	NC
Cobalt	NA	ND	ND	NC				
Copper	NA	ND	ND	NC	NA	ND	ND	NC
Iron	20	1130	1110	1.79				
Lead	20	10.0	11.0	9.52	NA	ND	ND	NC
Magnesium	20	4720	4700	0.425				
Manganese	20	68.0	66.0	2.99				
Mercury	NA	ND	ND	NC				
Nickel	NA	ND	ND	NC	NA	ND	ND	NC
Potassium	20	6330	6160	2.72				
Selenium	NA	ND	ND	NC	NA	ND	ND	NC
Silver	NA	ND	ND	NC	NA	ND	ND	NC
Sodium	20	57000	56000	1.77				
Thallium	NA	ND	ND	NC	NA	ND	ND	NC
Vanadium	NA	ND	ND	NC				
Zinc	20	149	142	4.81	20	529	531	0.377

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 2108-001

QC Sample 1 for following samples:
2093-001; 2094-001,003 – 009; 2106-008 – 011;
2108-001 – 003; 2112-007; 2118-005 – 007; 2124-001;
2133-001,003,005,007,010; 2134-001 – 005

QC Sample 2 2094-004

QC Sample 2 for following samples:
2093-001; 2094-001,003 – 009; 2106-008 – 011;
2108-001 – 003; 2112-007; 2118-005 – 007; 2124-001;
2133-001,003,005,007,010; 2134-001 – 005

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

DUPLICATE SAMPLE RECOVERY

Lab Case Number: E01- 2093, 2094, 2106, 2108, 2112, 2118, 2124, 2133, 2134

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	CONTROL LIMIT 3	S3	D3	RPD3	CONTROL LIMIT 4	S4	D4	RPD4
Arsenic	20	19.0	19.0	0				
Lead	NA	ND	ND	NC	NA	ND	ND	NC

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 2106-009

QC Sample 3 for following samples:
2093-001; 2094-001,003~009; 2106-008~011; 2108-001~003; 2112-007; 2118-005~007; 2124-001; 2133-001,003,005,007,010; 2134-001~005

QC Sample 4 2124-001

QC Sample 4 for following samples:
2093-001; 2094-001,003~009; 2106-008~011; 2108-001~003; 2112-007; 2118-005~007; 2124-001; 2133-001,003,005,007,010; 2134-001~005

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

LABORATORY CONTROL SAMPLE

Lab Case Number: E01- 2093, 2094, 2106, 2108, 2112, 2118, 2124, 2133, 2134

ANALYTE	AQUEOUS (ug/L)			SOLID (mg/kg)			
	TRUE	FOUND	%R(1)	TRUE	FOUND	LIMITS	%R(2)
Aluminum	400	408	102				
Antimony	400	383	95.8				
Arsenic	400	408	102				
Barium	400	417	104				
Beryllium	400	433	108				
Cadmium	400	380	95.0				
Calcium	8000	8310	104				
Chromium	400	389	97.3				
Cobalt	400	406	102				
Copper	400	407	102				
Iron	8000	9040	113				
Lead	400	405	101				
Magnesium	8000	8960	112				
Manganese	400	396	99.0				
Mercury	10.0	10.8	108				
Nickel	400	396	99.0				
Potassium	8000	7410	92.6				
Selenium	400	409	102				
Silver	400	404	101				
Sodium	8000	9180	115				
Thallium	400	407	102				
Vanadium	400	384	96.0				
Zinc	400	417	104				

(1) Control Limits = 85-115%
(2)Manufacture's Recomended Limits

Aqueous LCS Source: MV Laboratories

Solid LCS Source: Environmental Resource Associates: PriorityPollumT/CLP Inorganics Soils

INTEGRATED ANALYTICAL LABORATORIES

METALS QUALITY CONTROL

SERIAL DILUTIONS & POST SPIKES

Lab Case Number: E01- 2093, 2094, 2106, 2108, 2112, 2118, 2124, 2133, 2134

Matrix: Aqueous Concentration/Units: ppb (µg/L)

ANALYTE	SERIAL DILUTION		%	POST SPIKE		%
	SR	SDR	Difference	SPR	SA	Recovery
Aluminum	268			658	400	97.5
Antimony	ND			416	400	104
Arsenic	47.0			462	400	104.0
Barium	23.0			437	400	103.0
Beryllium	ND			428	400	107
Cadmium	ND			370	400	92.5
Calcium	34800	34200	1.74			
Chromium	ND			380	400	95.0
Cobalt	ND			394	400	98.5
Copper	ND			421	400	105
Iron	1130	1240	9.28			
Lead	10.0			420	400	102.0
Magnesium	4720	4790	1.47			
Manganese	68.0	68.0	0			
Mercury	ND			10.6	10.0	106
Nickel	ND			383	400	95.8
Potassium	6330	6130	3.21			
Selenium	ND			420	400	105
Silver	ND			412	400	103
Sodium	57000	59600	4.46			
Thallium	ND			412	400	103
Vanadium	ND			380	400	95.0
Zinc	149	150	0.669			

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 : 2108-001

QC Sample for following samples:
2093-001; 2094-001,003~009; 2106-008~011;
2108-001~003; 2112-007; 2118-005~007; 2124-001;
2133-001,003,005,007,010; 2134-001~005

000251

3855

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869
4/6/01

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Aqueous
Units: A-mg/L

Batch ID: AP013-0017

Blank

Parameter	Method Blank	MDL	Analysis Date
Total Cyanide	ND	0.020	04/06/01

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
Total Cyanide	2108-001S	0.208	0.206	1	20

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
Total Cyanide	2108-001	ND	0.250	0.208	83.2	75 - 125

The above blank result applies to the follow samples E01-

2108-001
2108-001S
2108-001SD
2108-002
2108-003
2076-001
2076-003
2088-002
2093-001
2097-001
2094-001
2094-003
2094-004
2094-005
2094-006
2094-007
2094-008
2094-009
2116-005

++ = 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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000155

3656

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869
4/5/01

Certified for NJDEP, NY(DOH)
NJ ID#14751
NY ID#11402

General Chemistry Quality Control

Matrix: Aqueous
Units: A-mg/L

Batch ID: AP024-0020

Blank

Parameter	Method Blank	MDL	Analysis Date
Total Recoverable Phenols	ND	0.050	04/05/01

Duplicate Recovery

Parameter	QC Sample	Result	Duplicate Result	RPD	RPD Limits
Total Recoverable Phenols	2040-001S	0.357	0.349	2	20

Spike Recovery

Parameter	QC Sample	Result	Spike Added	Spike Result	%Spike Recovery	%Rec. Limits
Total Recoverable Phenols	2040-001	0.127	.250	0.357	92	75 - 125

The above blank result applies to the follow samples E01-

2040-001
2040-001S
2040-001SD
2080-002
2094-003
2094-004
2094-005
2094-006
2094-001
2094-007
2094-008
2094-009
2088-001
2093-001

++ = 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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Phone # (973) 361-42[redacted]
Fax # (973) 989-5288

INTEGRATED ANALYT[redacted]LABORATORIES
CHAIN OF [redacted]ODY

[redacted]nklin Rd
[redacted]7869

CLIENT & PROJECT

Company Name:	ENVIROTALTICS INC
Address:	2517 HWY 35
	BLD D SUITE 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 wkl
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 5 °C

SAMPLE INFORMATION

Sample ID	Sample Description	Sampling Date	Sampling Time	am	pm	Matrix	# of Containers	Lab ID	PP+40	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	Comments
MW-4		4/4/01	8:40	X		S	8	01	✓			nec.	water	samples					

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]	4/4/01	11:00	Received by:	[signature]
Relinquished by:	[signature]	4-4-01	1300	Received by:	Jean Cornista
Relinquished by:				Received by:	
Relinquished by:				Received by:	
Relinquished by:				Received by:	

Comments:

Lab Case # 2093

PAGE: 1 OF 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

3858

CHAIN OF CUSTODY

Case No.: E01-2093
Project : ORBIS - NEWARK - 444
Client/Project: ENVTACT/ORBIS
Client Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 202
Manasquan, NJ 08736
Date Received: 04/04/01
Time Received: 13:00
Report Format: Reduced

P.O. #: _____

Billing Address:
Envirotactics Inc.
2517 Route 35
Building D, Suite 20
Manasquan, NJ 08736
Verbal Due: Apr 18
Report Due: Apr 25

# of Containers	8
IAL ID #	2093-001
Client ID #	MW-4
Matrix	Aqueous
Sample Date	04/04/01
Sample Time	08:40
VO+15, PP LIST	√
Pesticides	√
PCB	√
BNA + 25	√
PP Metals -LOW	√
Cyanide, Total	√
Phenols	√
Electronic Del.	√

Comments: NOTE 1: PLEASE MEET GROUNDWATER LIMITS FOR METALS.

000153

3659