

Data Validation Checklist
Semivolatile Organic Analyses

Project: 35TH Avenue Superfund Site
 Laboratory: Spectrum Analytical, Inc., Tampa, FL
 Method: SW-846 8270D SIM (PAH) & Full scan (TCL SVOC)
 Matrix: Soil
 Reviewer: Nicole Lancaster
 Concurrence¹: Martha Meyers-Lee

Project No: 15268508.20000
 SDG No.: 3507616
 Associated Samples: Refer to Attachment A (Sample Summary)
 Samples Collected: 11/14/2012
 Date: 01/04/12
 Date: 01/09/12

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Were holding times met (8270: ≤7 and 14 days from collection to extraction for aqueous and solid samples, respectively; ≤40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	✓				
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?		✓		Spectrum does not analyze a low calibration standard at the requested reporting limit for all target analytes. According to the Case Narrative associated with the SW-846 8270D Full Scan analyses, the low calibration standard for 4,6-dinitro-2-methylphenol is 500 µg/Kg.	
8. Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.		✓		Analyte concentrations that are greater than the calibration range of the instrument, which are presented in the laboratory report with an E-flag, are not as accurate as those results obtained from a more diluted analysis and fall within the calibration range of the instrument. Less accurate sample results (i.e., E-flagged and over-diluted sample results) have been R-flagged in all samples, except FM0126C-GS-SP	J, R

¹ Independent technical reviewer

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
				(3507616-13). Sample FM0126C-GS-SP was not reanalyzed for PAHs at a higher dilution; therefore, all E-flag PAH data for sample FM0126C-GS-SP has been qualified as estimated (J-flag).	
9. Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10. Were target analytes detected in the method blank?		✓			
11. Were target analytes detected in equipment/rinsate blanks?		✓		Target analytes were not detected during the analysis of rinsate blank RB-11-13-12 (3507601-11).	
12. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.	✓			A rinsate blank (RB-11-13-12) was collected during the week of 11/12/12. The rinsate blank was analyzed under SDG 3507601.	
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)			✓	Blank contamination does not exist.	
14. Is a field duplicate associated with this SDG?		✓			
15. Was precision deemed acceptable as defined by the project plans?			✓		
16. Were DFTPP ion abundance criteria (i.e., CLP SOM01.2) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? <ul style="list-style-type: none"> • Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. • An initial calibration is to be associated with each sample analysis. • A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument. 	✓			<ul style="list-style-type: none"> • 8270D SIM: <ul style="list-style-type: none"> ◦ ICAL: 11/20/12, Instrument SMSD03 ◦ ICV: 11/20/12 @ 20:13 ◦ CCV: 11/21/12 @ 19:01 ◦ CCV: 11/26/12 @ 18:16 • ICAL: 11/14/12, Instrument SMSD04 <ul style="list-style-type: none"> ◦ ICV: 11/14/12 @ 22:19 ◦ CCV: 11/26/12 @ 16:44 • 8270D Full scan: <ul style="list-style-type: none"> ◦ ICAL: 11/14/12-11/15/12, Instrument SMSD04 ◦ ICV: 11/15/12 @ 01:07, 09:04, and 11:51 ◦ CCV: 11/26/12 @ 17:04, 17:25, and 17:46 	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
19. Were calibration results within laboratory/project specifications? <ul style="list-style-type: none"> • ICAL (Criteria: ≤ 15 mean %RSD with no individual CCC %RSD ≤ 30 ($\leq 50\%$ for poor performers), Or $r \geq 0.995$, Or $r^2 \geq 0.99$, and RRF ≥ 0.050 (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> ◦ If %RSD > 15 ($> 50\%$ for poor performers), or $r < 0.995$, or $r^2 < 0.995$, then J-flag positive results and UJ-flag non-detects ◦ If mean RRF < 0.050 (< 0.010 for poor performers), then J-flag positive results and R-flag non-detects • ICV and CCV (Criteria: $\leq 20\%$D ($\leq 50\%$ for poor performers) and RF ≥ 0.050 (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> ◦ If %D > 20 ($> 50\%$ for poor performers), then J-flag positive results and UJ-flag non-detects ◦ If RF < 0.050 (< 0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds 	✓			<ul style="list-style-type: none"> • 8270D SIM: <ul style="list-style-type: none"> ◦ ICAL of 11/20/12, Instrument SMSD03: Benzo(k)fluoranthene @18.3%RSD (Lab/Project: ≤ 15). J-flag results in associated samples². ◦ CCV: 11/26/12 @ 18:16, Instrument SMSD03. <ul style="list-style-type: none"> ▪ Indeno(1,2,3-cd)pyrene @39.8%D (Lab/Project: ≤ 20). ▪ Dibenzo(a,h)anthracene @50.8%D (Lab/Project: ≤ 20). ▪ Benzo(g,h,i)perylene @38.6%D (Lab/Project: ≤ 20). Results for indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, & benzo(g,h,i)perylene have previously been R-flagged in associated samples³, because more accurate data were available from the undiluted sample analysis; further qualification of data is not warranted. ◦ ICV of 11/14/12 @ 22:19, Instrument SMSD04: 2-Methylnaphthalene @21.1%D (Lab/Project: ≤ 20). J/UJ-flag results in associated samples⁴. • 8270D SIM: <ul style="list-style-type: none"> ◦ ICV of 11/15/12 @ 01:07, Instrument SMSD04: 4-Nitroaniline @21.3%D (Lab: ≤ 20, Project: ≤ 50). Qualification of data in associated samples² is not warranted, as 4-nitroaniline is a poor performer and the %D is less than 50. 	J, UJ
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J-flag positive results when %R > UCL and J/R-flag results when %R < LCL	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J-flag positive results and UJ-flag non-detects			✓	LCS only	
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓			<ul style="list-style-type: none"> • 8270D SIM, Prep Batch 11607: 3507616-03 (CV0043A-CS) • 8270D Full scan, Prep Batch 11608: 3507616-13 	

² All samples, except 3507616-05 and -13³ Laboratory Sample IDs 3507616-08DL, -09DL, -10DL, -15DL, and -19DL⁴ Laboratory Sample IDs 3507616-05 and -13

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
				(FM0126C-GS-SP)	
24. Is the MS/MSD parent sample a project-specific sample?	✓				
25. Were MS/MSD recoveries within laboratory/project specifications? <i>Only QC results for project samples are evaluated.</i> <ul style="list-style-type: none"> If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If either MS or MSD recovery meets control limits, qualification of data is not warranted. MS and MSD %R<10: J and R Flag positive and ND results, respectively MS and MSD %R >10 and <LCL: J-Flag positive and UJ-flag non-detect results MS and MSD R% >UCL (or 140): J-Flag positive results 		✓		Refer to Attachment B	J
26. Were laboratory criteria met for precision during the MS/MSD analysis? <i>Only QC results for project samples are evaluated.</i> <ul style="list-style-type: none"> If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If %RPD > UCL, J-flag positive result and UJ-flag non-detect result 		✓		Refer to Attachment B	J
27. Were surrogate recoveries within lab/project specifications? <ul style="list-style-type: none"> If %R for 1 Acid or BN surrogates <10, then J-flag positive and R-flag non-detect associated sample results If 2 or more Acid or BN %R >UCL, then J-flag positive results If 2 or more Acid or BN %R ≥10%, but <LL, then J-flag positive and UJ-flag non-detect results If 2 or more Acid or BN, with 1 %R >UL and 1 %R ≥10%, but <LL, then J-flag positive and UJ-flag non-detect results 		✓		<p>8270D SIM: Benzo(e)pyrene-d12 was recovered low, outside of laboratory control limits of 50-140%R for soil samples CV0192B-CS (3507616-06), FM0263C-CS-SP (3507616-10), CV0699C-CS (3507616-16), FM0210A-CS (3507616-17), FM0210B-CS (3507616-18) and all diluted samples (Refer to Attachment C). Results for undiluted soil samples are estimated (J/UJ), because a low surrogate recovery is indicative of a negative bias. Qualification of data for the diluted samples is not necessary, because the surrogate was diluted out of the sample.</p> <p>The retention time (i.e., 0) reported on Form 8 for FM0263A-CS-SPDL1 (3507616-08DL1), FM0263B-CS-SPDL1 (3507616-09DL1), FM0263C-CS-SPDL1 (3507616-10DL1), CV0699B-CSDL1 (3507616-15DL1), and FM0210C-CSDL1 (3507616-19DL1) was outside of the retention time window of 12.02-13.22</p>	J/UJ

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
				minutes. Qualification of data for the diluted samples is not necessary, because the surrogate was not recovered due to sample dilution.	
28. Were internal standard (IS) results within lab/project specifications? <ul style="list-style-type: none"> • If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results • If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results • If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect results • If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R-flag associated data. • The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met. 	✓				
29. Were lab comments included in report?	✓			Refer to Attachment D (Case Narratives)	

Comments: The data validation was conducted in accordance with the *Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1* (OTIE, October 2012). The data review process was modeled after the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review* (EPA, October 1999) and *USEPA CLP NFG for Low Concentration Organic Methods Data Review* (EPA, June 2001). Sample results have been qualified based on the results of the data review process (**Attachment E**). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.

DV Flag Definitions:

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- R The sample results are unusable. The analyte may or may not be present in the sample.
- U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
- UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A

SAMPLE SUMMARY

SEMI-VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc.

Contract: 35th Avenue Removal Site 2005148

Lab Code : PEL

Case No. _____

SAS No: _____

SDG No.: 3507616

Method: 8270 SIM

EPA Sample No	Lab Sample ID
CV0041A-CS	350761601
CV0041B-CS	350761602
CV0043A-CS	350761603
CV0043B-CS	350761604
CV0043C-CS	350761605
CV0192A-CS	350761606
CV0192B-CS	350761607
FM0263A-CS-SP	350761608
FM0263A-CS-SPDL1	350761608DL1
FM0263B-CS-SP	350761609
FM0263B-CS-SPDL1	350761609DL1
FM0263C-CS-SP	350761610
FM0263C-CS-SPDL1	350761610DL1
FM0126A-CS-SP	350761611
FM0126B-CS-SP	350761612
FM0126C-GS-SP	350761613
CV0699A-CS	350761614
CV0699B-CS	350761615
CV0699B-CSDL1	350761615DL1
CV0699C-CS	350761616
FM0210A-CS	350761617
FM0210B-CS	350761618
FM0210C-CS	350761619
FM0210C-CSDL1	350761619DL1
CV0362A-CS	350761620

EPA Sample No	Lab Sample ID
CV0041A-CS	350761601
CV0041B-CS	350761602
CV0043A-CS	350761603
CV0043B-CS	350761604
CV0043C-CS	350761605
CV0192A-CS	350761606
CV0192B-CS	350761607
FM0263A-CS-SP	350761608
FM0263A-CS-SPDL1	350761608DL1
FM0263B-CS-SP	350761609
FM0263B-CS-SPDL1	350761609DL1
FM0263C-CS-SP	350761610
FM0263C-CS-SPDL1	350761610DL1
FM0126A-CS-SP	350761611
FM0126B-CS-SP	350761612
FM0126C-GS-SP	350761613
CV0699A-CS	350761614
CV0699B-CS	350761615
CV0699B-CSDL1	350761615DL1
CV0699C-CS	350761616
FM0210A-CS	350761617
FM0210B-CS	350761618
FM0210C-CS	350761619
FM0210C-CSDL1	350761619DL1
CV0362A-CS	350761620

SEMI-VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148
Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Method: 8270

EPA Sample No	Lab Sample ID
<u>CV0043C-CS</u>	<u>350761605</u>
<u>FM0126C-GS-SP</u>	<u>350761613</u>

ATTACHMENT B

MATRIX SPIKE & MATRIX SPIKE DUPLICATE RESULTS

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal CV0043A-CSMS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

COMPOUND	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC #	QC LIMITS REC.
Naphthalene	26	90	99	35.5*	59 - 111
2-Methylnaphthalene	26	89	100	51.2*	54 - 145
1-Methylnaphthalene	26	54	74	80.9	71 - 132
Acenaphthylene	26	16	170	615.0*	54 - 115
Acenaphthene	26	5.9	30	94.1	57 - 119
Fluorene	26	6.4	140	541.0*	59 - 118
Phenanthrene	26	100	1500	5383.0*	54 - 112
Anthracene	26	20	270	988.0*	40 - 138
Fluoranthene	26	170	2100	7383.0*	55 - 132
Pyrene	26	150	1400	5094.0*	55 - 123
Benzo(a)anthracene	26	130	1400	5113.0*	53 - 119
Chrysene	26	140	960	3219.0*	34 - 140
Benzo(b)fluoranthene	26	230	760	2047.0*	50 - 171
Benzo(k)fluoranthene	26	79	710	2474.0*	32 - 158
Benzo(a)pyrene	26	120	740	2414.0*	20 - 120
Indeno(1,2,3-cd)pyrene	26	75	440	1415.0*	19 - 122
Dibenzo(a,h)anthracene	26	27	220	755.0*	41 - 114
Benzo(g,h,i)perylene	26	95	410	1241.0*	50 - 150

Spike Recovery: 16 out of 18 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Remo	EPA Sample No.	CV0043A-CSMSD
Lab Code :	PEL	Case No.	SAS No:	SDG No.:	3507616

COMPOUND	SPIKE ADDED ug/Kg	MSD CONCENTRATION ug/Kg	MSD % REC #	% RPD #	QC LIMITS		Action
					RPD	REC.	
Naphthalene	26	83	0.0*	17.2	30	59 - 111	J-Flag
2-Methylnaphthalene	26	92	13.3*	10.0	30	54 - 145	J-Flag
1-Methylnaphthalene	26	66	48.4*	11.8	30	71 - 132	None (1)
Acenaphthylene	26	40	97.7	124.1 *	30	54 - 115	J-Flag
Acenaphthene	26	27	81.2	11.6	30	57 - 119	None (2)
Fluorene	26	29	86.7	134.1 *	30	59 - 118	J-Flag
Phenanthrene	26	110	15.6*	173.3 *	30	54 - 112	↓
Anthracene	26	41	80.5	148.1 *	30	40 - 138	None (3)
Fluoranthene	26	180	23.4*	168.5 *	30	55 - 132	↓
Pyrene	26	150	27.3*	161.8 *	30	55 - 123	J-Flag
Benzo(a)anthracene	26	170	164.0*	157.1 *	30	53 - 119	↓
Chrysene	26	160	62.5	144.3 *	30	34 - 140	None (3)
Benzo(b)fluoranthene	26	160	0.0*	131.2 *	30	50 - 171	J-Flag
Benzo(k)fluoranthene	26	170	369.0*	121.8 *	30	32 - 158	↓
Benzo(a)pyrene	26	160	141.0*	129.9 *	30	20 - 120	None (3)
Indeno(1,2,3-cd)pyrene	26	120	169.0*	115.0 *	30	19 - 122	J-Flag
Dibenzo(a,h)anthracene	26	73	180.0*	100.5 *	30	41 - 114	↓
Benzo(g,h,i)perylene	26	130	128.0	105.4 *	30	50 - 150	

RPD: 14 out of 18 outside limits

Spike Recovery: 12 out of 18 outside limits

(1) Qualification of data is not required, because the matrix spike recovery met laboratory control limits.

(2) MS and MSD criteria met.

(3) Evaluation of matrix interference is not possible, because the native sample concentration is greater than four times the spiking level.

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

ATTACHMENT C

SW-846 8270D-SIM SURROGATE RECOVERIES

2A

SOIL SEMI-VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20Lab Code : PEL Case No. SAS No: SDG NO.: 3507616Column(1): HPMS-5 ID: 0.25 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
154206MB	100.0						0
154207LCS	111.0						0
CV0041A-CS	66.1						0
CV0041B-CS	58.9						0
CV0043A-CS	66.8						0
CV0043B-CS	61.7						0
CV0043C-CS	61.2						0
CV0192A-CS	50.0						0
CV0192B-CS	46.7 *						1
CV0362A-CS	54.5						0
CV0699A-CS	57.1						0
CV0699B-CS	56.7						0
CV0699B-CSDL1	0.0 D						0
CV0699C-CS	27.4 *						1
FM0126A-CS-SP	53.2						0
FM0126B-CS-SP	56.1						0
FM0126C-GS-SP	57.0						0
FM0210A-CS	16.9 *						1
FM0210B-CS	41.9 *						1
FM0210C-CS	71.2						0
FM0210C-CSDL1	0.0 D						0
FM0263A-CS-SP	58.4						0
FM0263A-CS-SPDL1	0.0 D						0
FM0263B-CS-SP	60.4						0

Control Limits

S1 = Benzo(e)pyrene-d12

50 - 140

- # Column to be used to flag recovery values
- * Values outside of contract required QC limits
- D Surrogates diluted out
- Control limit source: (lab/method) METHOD

Form II

3011121330

2A

SOIL SEMI-VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20Lab Code : PEL Case No. SAS No: SDG NO.: 3507616Column(1): HPMS-5 ID: 0.25 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
FM0263B-CS-SPDL1	0.0 D						0
FM0263C-CS-SP	37.3 *						1
FM0263C-CS-SPDL1	0.0 D						0

Control Limits

S1 = Benzo(e)pyrene-d12

50 - 140

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

Control limit source: (lab/method) METHOD

Form II

301112 1330

ATTACHMENT D
CASE NARRATIVES

CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8270D-SIM

IV. PREPARATION

Soil samples were prepared by SW846 EPA 3545 for 8270 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met with the exception of:

Note that the Continuing Calibration Verification sample CCV1136644 analyzed on 11/26/12 exceeded the 40% Maximum Difference criteria for Dibenzo(a,h) anthracene at -50.8%. However this CCV was only associated with the two samples which required a dilution for compounds other than Dibenzo(a,h) anthracene. No further action was taken.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met with the exception of:

Sample CV0192B-CS was recovered below criteria for the following surrogate: Benzo(e)pyrene-d12 at 46.7 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

Sample CV0699C-CS was recovered below criteria for the following surrogate: Benzo(e)pyrene-d12 at 27.4 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

Sample FM0210A-CS was recovered below criteria for the following surrogate: Benzo(e)pyrene-d12 at 16.9 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

Sample FM0210B-CS was recovered below criteria for the following surrogate: Benzo(e)pyrene-d12 at 41.9 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Sample FM0263C-CS-SP was recovered below criteria for the following surrogate: Benzo(e)pyrene-d12 at 37.3 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

Sample CV0043A-CSMSD was recovered below criteria for the following surrogate(s): Benzo(e)pyrene-d12 at 0 % with criteria of (50-140).

Samples coded accordingly.

The following samples had surrogates that were diluted out: CV0699B-CSDL1, FM0210C-CSDL1, FM0263A-CS-SPDL1, FM0263B-CS-SPDL1, FM0263C-CS-SPDL1.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

A client requested MS/SD set was analyzed.

All percent recovery and relative percent difference (RPD) criteria were met with the exception of:

MS - CV0043A-CSMS was analyzed with the soil samples extracted on 04/26/00. The following analyte(s) were recovered below criteria: 2-Methylnaphthalene at 51.2 % with criteria of (54-145), Naphthalene at 35.5 % with criteria of (59-111) and the following analyte(s) were recovered above criteria: Acenaphthylene at 615 % with criteria of (54-115), Anthracene at 988 % with criteria of (40-138), Benzo(a)anthracene at 5113 % with criteria of (53-119), Benzo(a)pyrene at 2414 % with criteria of (20-120), Benzo(b)fluoranthene at 2047 % with criteria of (50-171), Benzo(g,h,i)perylene at 1241 % with criteria of (50-150), Benzo(k)fluoranthene at 2474 % with criteria of (32-158), Chrysene at 3219 % with criteria of (34-140), Dibenzo(a,h)anthracene at 755 % with criteria of (41-114), Fluoranthene at 7383 % with criteria of (55-132), Fluorene at 541 % with criteria of (59-118), Indeno(1,2,3-cd)pyrene at 1415 % with criteria of (19-122), Phenanthrene at 5383 % with criteria of (54-112), Pyrene at 5094 % with criteria of (55-123).

SD - CV0043A-CSMSD was analyzed with the soil samples extracted on 04/26/00. The following analyte(s) were recovered below criteria: 1-Methylnaphthalene at 48.4 % with criteria of (71-132), 2-Methylnaphthalene at 13.3 % with criteria of (54-145), Benzo(b)fluoranthene at 0 % with criteria of (50-171), Fluoranthene at 23.4 % with criteria of (55-132), Naphthalene at 0 % with criteria of (59-111), Phenanthrene at 15.6 % with criteria of (54-112), Pyrene at 27.3 % with criteria of (55-123) and the following analyte(s) were recovered above criteria: Benzo(a)anthracene at 164 % with criteria of (53-119), Benzo(a)pyrene at 141 % with criteria of (20-120), Benzo(k)fluoranthene at 369 % with criteria of (32-158), Dibenzo(a,h)anthracene at 180 % with criteria of (41-114), Indeno(1,2,3-cd)pyrene at 169 % with criteria of (19-122). The following analyte(s) exceeded RPD criteria: Acenaphthylene at 124.1 % with criteria of (30), Anthracene at 148.1 % with criteria of (30), Benzo(a)anthracene at 157.1 % with criteria of (30), Benzo(a)pyrene at 129.9 % with criteria of (30), Benzo(b)fluoranthene at 131.2 % with criteria of (30), Benzo(g,h,i)perylene at 105.4 % with criteria of (30), Benzo(k)fluoranthene at 121.8 % with criteria of (30), Chrysene at 144.3 % with criteria of (30), Dibenzo(a,h)anthracene at 100.5 % with criteria of (30), Fluoranthene at 168.5 % with criteria of (30), Fluorene at 134.1 % with criteria of (30),

CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Indeno(1,2,3-cd)pyrene at 115 % with criteria of (30), Phenanthrene at 173.3 % with criteria of (30), Pyrene at 161.8 % with criteria of (30).

Samples coded accordingly.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

Sample CV0699B-CS required a 20X dilution due to high concentration of the following analytes: Benzo(a)anthracene, Benzo(b)fluoranthene, Chrysene, Fluoranthene, Pyrene. Both full and diluted runs are reported.

Sample FM0210C-CS required a 20X dilution due to high concentration of the following analyte: Fluoranthene. Both full and diluted runs are reported.

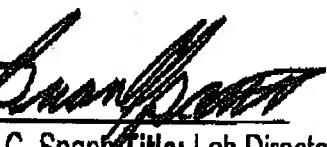
Sample FM0263A-CS-SP required a 20X dilution due to high concentration of the following analytes: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Chrysene, Fluoranthene, Phenanthrene, Pyrene. Both full and diluted runs are reported.

Sample FM0263B-CS-SP required a 20X dilution due to high concentration of the following analytes: Benzo(a)anthracene, Benzo(b)fluoranthene, Chrysene, Fluoranthene, Phenanthrene, Pyrene. Both full and diluted runs are reported.

Sample FM0263C-CS-SP required a 20X dilution due to high concentration of the following analytes: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Chrysene, Fluoranthene, Phenanthrene, Pyrene. Both full and diluted runs are reported.

Note that sample FM0126C-GS-SP also had analytes present in the 8270SIM analysis that were above the high calibration of the 8270SIM method. However, the sample was also analyzed using the SW8270 method. The SW8270 method has a higher calibration range than the 8270SIM method, and the analytes that were high in the 8270SIM method were within the calibration range for the SW8270 method. Therefore no dilution was performed on the sample.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Signature: 
Name: Brian C. Spann **Title:** Lab Director

SIGNED:

DATE: 12/17/2012

CASE NARRATIVE

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

MANUAL INTEGRATION SUMMARY

The following analytes were manually integrated by the chemist.

Sample: CV0041A-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: CV0041A-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: CV0041B-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: CV0041B-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: CV0043A-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: CV0043A-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: CV0043B-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: CV0043B-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: CV0043C-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: CV0043C-CS Analyte: Benzo(e)pyrene-d12
Reason: Target peak was not properly identified, more than one peak in retention time window
Sample: CV0043C-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: CV0192A-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: CV0192A-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: CV0192B-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: CV0192B-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: CV0362A-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: CV0362A-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: CV0699A-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: CV0699A-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: CV0699B-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: CV0699B-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: CV0699B-CSLD1 Analyte: Benzo(b)fluoranthene

CASE NARRATIVE

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Reason: Split Peak
Sample: CV0699B-CSDL1 Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: CV0699C-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: CV0699C-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0126A-CS-SP Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0126A-CS-SP Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0126B-CS-SP Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0126C-GS-SP Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0126C-GS-SP Analyte: Benzo(e)pyrene-d12
Reason: Target peak was not properly identified, more than one peak in retention time window
Sample: FM0126C-GS-SP Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0210A-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0210A-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0210B-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0210B-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0210C-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0210C-CSDL1 Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0210C-CSDL1 Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0263A-CS-SP Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0263A-CS-SP Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0263A-CS-SPDL1 Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0263A-CS-SPDL1 Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0263B-CS-SP Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0263B-CS-SP Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0263B-CS-SPDL1 Analyte: Benzo(b)fluoranthene
Reason: Split Peak

CASE NARRATIVE

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Sample: FM0263B-CS-SPDL1 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: FM0263C-CS-SP Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: FM0263C-CS-SP Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: FM0263C-CS-SPDL1 Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: FM0263C-CS-SPDL1 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: SSC1135488 Analyte: Acenaphthylene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Anthracene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Benzo(a)anthracene

Reason: Split Peak

Calibration Sample: SSC1135488 Analyte: Benzo(a)pyrene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Benzo(e)pyrene-d12(SURR)

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Benzo(g,h,i)perylene

Reason: Target peak was not integrated automatically by software generator

Calibration Sample: SSC1135488 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: SSC1135488 Analyte: Chrysene

Reason: Split Peak

Calibration Sample: SSC1135488 Analyte: Dibenzo(a,h)anthracene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Fluoranthene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Indeno(1,2,3-cd)pyrene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Naphthalene

Reason: Target peak was not integrated automatically by software generator

Calibration Sample: SSC1135488 Analyte: Phenanthrene

Reason: Target peak was not integrated automatically by software generator

Calibration Sample: SSC1135488 Analyte: Pyrene

Reason: Target peak was not integrated automatically by software generator

Calibration Sample: STD1135465 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135466 Analyte: Benzo(k)fluoranthene

CASE NARRATIVE

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Reason: Split Peak

Calibration Sample: STD1135469 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135472 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135474 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135478 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

These manual integrations have been reviewed and meet all criteria in accordance with Spectrum Analytical Inc.'s SOP regarding manual integration.

Signature: 
Name: Mark Jacobs Title: Chemist

CHEMIST:

DATE: 11/30/2012

Signature: 
Name: Brian C. Span Title: Lab Director

SECTION LEADER:

DATE: 11/30/2012

CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8270D

IV. PREPARATION

Soil samples were prepared by SW846 EPA 3545 for 8270 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met. Spectrum Analytical Inc. does not analyze a low calibration standard at the requested RL for all analytes. The low calibration standard is 500 ug/Kg for the following analyte(s): 4,6-Dinitro-2-methylphenol.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

**CASE NARRATIVE
Semi-Volatile Organic**

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

A client requested MS/SD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Signature: 
Name: Brian C. Spanier **Title:** Lab Director

SIGNED:

DATE: 12/17/2012

CASE NARRATIVE

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

MANUAL INTEGRATION SUMMARY

The following analytes were manually integrated by the chemist.

Sample: 154211LCS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: 154211LCS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: 154211LCS Analyte: N-Nitroso-di-n-propylamine

Reason: Baseline integration, needs re-enforced due to interference on target peak

Sample: CV0043C-CS Analyte: Benzo(a)pyrene

Reason: Target peak was not properly identified, more than one peak in retention time window

Sample: CV0043C-CS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: CV0043C-CS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: FM0126C-GS-SP Analyte: Benzo(a)pyrene

Reason: Target peak was not properly identified, more than one peak in retention time window

Sample: FM0126C-GS-SP Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: FM0126C-GS-SP Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: CCV1137614 Analyte: 2,4-Dimethylphenol

Reason: Baseline integration, needs re-enforced due to interference on target peak

Calibration Sample: CCV1137614 Analyte: N-Nitroso-di-n-propylamine

Reason: Baseline integration, needs re-enforced due to interference on target peak

Calibration Sample: CCV1137619 Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Calibration Sample: CCV1137619 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: SSC1135505 Analyte: Anthracene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135505 Analyte: Benzo(a)pyrene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135505 Analyte: Butylbenzylphthalate

Reason: Baseline integration, needs re-enforced due to interference on target peak

Calibration Sample: SSC1135505 Analyte: Carbazole

Reason: Baseline integration, needs re-enforced due to interference on target peak

Calibration Sample: SSC1135505 Analyte: Chrysene-d12

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135505 Analyte: N-Nitroso-di-n-propylamine

Reason: Baseline integration, needs re-enforced due to interference on target peak

Calibration Sample: STD1135497 Analyte: Benzo(b)fluoranthene

CASE NARRATIVE

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Reason: Split Peak

Calibration Sample: STD1135497 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135497 Analyte: Hexachlorocyclopentadiene

Reason: Baseline integration, needs re-enforced due to interference on target peak

Calibration Sample: STD1135498 Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135498 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135498 Analyte: Naphthalene

Reason: Baseline integration, needs re-enforced due to interference on target peak

Calibration Sample: STD1135500 Analyte: N-Nitroso-di-n-propylamine

Reason: Split Peak

Calibration Sample: STD1135502 Analyte: N-Nitroso-di-n-propylamine

Reason: Split Peak

These manual integrations have been reviewed and meet all criteria in accordance with Spectrum Analytical Inc.'s SOP regarding manual integration.

Signature: 
Name: Mark Jacobs Title: Chemist

CHEMIST:

DATE: 11/29/2012

Signature: 
Name: Brian C. Spanier Title: Lab Director

SECTION LEADER:

DATE: 11/30/2012

Organic Data Qualifiers

- U** Indicates the analyte was analyzed for but not detected. The number adjacent to the "U" qualifier indicates the reporting limit for that analyte. The reporting limit can vary from sample to sample depending on dilution factors or the percent moisture adjustment when indicated.
- J** Indicates estimated value. It is used when the data indicates the presence of an analyte above the method detection limit (MDL) yet lower than the reporting limit.
- B** Indicates the analyte was found in the associated blank as well as in the sample. The notation indicates possible contamination of the sample.
- E** Indicates the value reported is above the highest calibration standard for that analyte. The sample should be analyzed at an appropriate dilution. "E" qualified values are estimations and the diluted result may be reported on another Form 1.
- D** Indicates the analyte has been identified in a dilution reanalysis. "D" qualifiers are used for samples that have been analyzed at a lesser dilution than required for accurate quantitation.
- C** The "C" qualifier indicates the presence of this analyte has been confirmed by GC/MS analysis.
- P** This qualifier is used for pesticide / Aroclor target analytes where there is greater than 25% difference for the detected concentration between the two GC columns.
- N** This qualifier indicates presumptive evidence of an analyte. This qualifier is only used for tentatively identified compounds (TIC), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the "N" qualifier is not used.
- A** This qualifier indicates that a TIC is a suspected aldol-condensation product.
- X** Data flagged as rejected by analyst utilizing analytical judgement.

Organic Sample ID Qualifiers

The qualifiers that may be appended to the lab sample ID and/or the client sample ID for organic analysis are defined below:

- DL** Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds that exceeded the calibration range. The sample was diluted and reanalyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted reanalysis may be reported.
- R** Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.
- RE** Re-extracted. The extract was reanalyzed with re-extraction. May be followed by a digit to indicate multiple re-extraction of the same sample at the same dilution.
- MS** Matrix spike (may be followed by a digit to indicate multiple matrix within a sample set).
- SD** Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spike duplicate within a sample set).

ATTACHMENT E

QUALIFIED SAMPLE RESULTS

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	CV0041A-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID:	350761601 Lab File ID: 616-01.D
Sample wt/vol:	25.14	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/21/12 Time: 1944
Percent Solids:	79.1	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	48.1		1.4	3.3
91-57-6	2-Methylnaphthalene	53.2		1.3	3.3
90-12-0	1-Methylnaphthalene	44		1.3	3.3
208-96-8	Acenaphthylene	10.4		1.3	3.3
83-32-9	Acenaphthene	7.5		1.3	3.3
86-73-7	Fluorene	7.2		1.3	3.3
85-01-8	Phenanthrene	126		1.3	3.3
120-12-7	Anthracene	21.4		1.3	3.3
206-44-0	Fluoranthene	234		1.3	3.3
129-00-0	Pyrene	186		1.3	3.3
56-55-3	Benzo(a)anthracene	155		1.4	3.3
218-01-9	Chrysene	173		1.3	3.3
205-99-2	Benzo(b)fluoranthene	245		1.9	3.3
207-08-9	Benzo(k)fluoranthene	71.5	J	2.1	3.3
50-32-8	Benzo(a)pyrene	132		1.8	3.3
193-39-5	Indeno(1,2,3-cd)pyrene	71		3	3.3
53-70-3	Dibenz(a,h)anthracene	25.1		2.6	3.3
191-24-2	Benzo(g,h,i)perylene	94.6		3.1	3.3

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	EPA Sample No.	CV0041B-CS
Lab Code :	PEL	Case No.		SAS No:	SDG No.: 3507616
Matrix:	SOIL			Lab Sample ID: 350761602	Lab File ID: 616-02.D
Sample wt/vol:	25.31	Units:	G	Date Received:	11/16/12
Concentrated Extract Volume:	1			Date Extracted:	11/20/12
Level:(low/med)	LOW			Date Analyzed:	11/21/12
Percent Solids:	83.7	decanted :		Dilution Factor:	1
Extraction:	OTHER			Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:			
Column(1):	HPMS-5	ID:	0.25 (mm)		
CONCENTRATION UNITS: UG/KG					

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	45.1		1.3	3.1
91-57-6	2-Methylnaphthalene	49.6		1.2	3.1
90-12-0	1-Methylnaphthalene	37.9		1.2	3.1
208-96-8	Acenaphthylene	9.5		1.2	3.1
83-32-9	Acenaphthene	5.5		1.2	3.1
86-73-7	Fluorene	6.3		1.2	3.1
85-01-8	Phenanthrene	77.4		1.2	3.1
120-12-7	Anthracene	13.9		1.2	3.1
206-44-0	Fluoranthene	132		1.2	3.1
129-00-0	Pyrene	107		1.2	3.1
56-55-3	Benzo(a)anthracene	100		1.3	3.1
218-01-9	Chrysene	113		1.2	3.1
205-99-2	Benzo(b)fluoranthene	167		1.8	3.1
207-08-9	Benzo(k)fluoranthene	49.4	J	2	3.1
50-32-8	Benzo(a)pyrene	84		1.7	3.1
193-39-5	Indeno(1,2,3-cd)pyrene	50.8		2.8	3.1
53-70-3	Dibenzo(a,h)anthracene	16.3		2.4	3.1
191-24-2	Benzo(g,h,i)perylene	67.3		2.9	3.1

1
SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	CV0043A-CS
Lab Code :	PEL	Case No.	SAS No: SDG No.: 3507616	
Matrix:	SOIL		Lab Sample ID: 350761603	Lab File ID: 616-03.D
Sample wt/vol:	25.06	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/21/12
Percent Solids:	78	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	89.9	J	1.4	3.4
91-57-6	2-Methylnaphthalene	88.9	J	1.4	3.4
90-12-0	1-Methylnaphthalene	53.7		1.4	3.4
208-96-8	Acenaphthylene	15.5	J	1.4	3.4
83-32-9	Acenaphthene	5.9		1.4	3.4
86-73-7	Fluorene	6.4	J	1.4	3.4
85-01-8	Phenanthrene	102	J	1.4	3.4
120-12-7	Anthracene	20.1	J	1.4	3.4
206-44-0	Fluoranthene	170		1.4	3.4
129-00-0	Pyrene	146		1.4	3.4
56-55-3	Benzo(a)anthracene	131		1.4	3.4
218-01-9	Chrysene	140		1.3	3.4
205-99-2	Benzo(b)fluoranthene	232		1.9	3.4
207-08-9	Benzo(k)fluoranthene	78.6	J	2.1	3.4
50-32-8	Benzo(a)pyrene	121		1.8	3.4
193-39-5	Indeno(1,2,3-cd)pyrene	74.8	J	3.1	3.4
53-70-3	Dibenzo(a,h)anthracene	26.8	J	2.7	3.4
191-24-2	Benzo(g,h,i)perylene	95.3	J	3.2	3.4

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	CV0043B-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761604	Lab File ID: 616-04.D
Sample wt/vol:	25.08	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/21/12
Percent Solids:	75.6	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	30		1.5	3.5
91-57-6	2-Methylnaphthalene	26.9		1.4	3.5
90-12-0	1-Methylnaphthalene	19.7		1.4	3.5
208-96-8	Acenaphthylene	4.2		1.4	3.5
83-32-9	Acenaphthene	3.5	U	1.4	3.5
86-73-7	Fluorene	3.9		1.4	3.5
85-01-8	Phenanthrene	51		1.4	3.5
120-12-7	Anthracene	7.6		1.4	3.5
206-44-0	Fluoranthene	90.5		1.4	3.5
129-00-0	Pyrene	66.9		1.4	3.5
56-55-3	Benzo(a)anthracene	53.9		1.5	3.5
218-01-9	Chrysene	61.4		1.4	3.5
205-99-2	Benzo(b)fluoranthene	105		2	3.5
207-08-9	Benzo(k)fluoranthene	30.3	J	2.2	3.5
50-32-8	Benzo(a)pyrene	53.4		1.9	3.5
193-39-5	Indeno(1,2,3-cd)pyrene	30		3.2	3.5
53-70-3	Dibenzo(a,h)anthracene	7.4		2.7	3.5
191-24-2	Benzo(g,h,i)perylene	42.3		3.3	3.5

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	CV0043C-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761605	Lab File ID: 616-05.d
Sample wt/vol:	25.33	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/26/12
Percent Solids:	76.6	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	23.3		1.4	3.4
91-57-6	2-Methylnaphthalene	24.6	uJ	1.4	3.4
90-12-0	1-Methylnaphthalene	15.9		1.4	3.4
208-96-8	Acenaphthylene	4.5		1.4	3.4
83-32-9	Acenaphthene	3.4	U	1.4	3.4
86-73-7	Fluorene	3.4	U	1.4	3.4
85-01-8	Phenanthrene	45.5		1.4	3.4
120-12-7	Anthracene	8.4		1.4	3.4
206-44-0	Fluoranthene	77.1		1.4	3.4
129-00-0	Pyrene	65.1		1.4	3.4
56-55-3	Benzo(a)anthracene	61.8		1.4	3.4
218-01-9	Chrysene	63.4		1.3	3.4
205-99-2	Benzo(b)fluoranthene	68.9		2	3.4
207-08-9	Benzo(k)fluoranthene	58.9	S ①	2.2	3.4
50-32-8	Benzo(a)pyrene	62.2		1.8	3.4
193-39-5	Indeno(1,2,3-cd)pyrene	44.5		3.1	3.4
53-70-3	Dibenzo(a,h)anthracene	22.1		2.7	3.4
191-24-2	Benzo(g,h,i)perylene	51.5		3.2	3.4

⊕ Flagging error, M Neyshee 1/9/2013

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	CV0192A-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761606	Lab File ID: 616-06.D
Sample wt/vol:	25.03	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/21/12
Percent Solids:	82	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	194	J	1.4	3.2
91-57-6	2-Methylnaphthalene	349		1.3	3.2
90-12-0	1-Methylnaphthalene	292		1.3	3.2
208-96-8	Acenaphthylene	13.8		1.3	3.2
83-32-9	Acenaphthene	14.4		1.3	3.2
86-73-7	Fluorene	15.4		1.3	3.2
85-01-8	Phenanthrene	215		1.3	3.2
120-12-7	Anthracene	14.9		1.3	3.2
206-44-0	Fluoranthene	108		1.3	3.2
129-00-0	Pyrene	99.8		1.3	3.2
56-55-3	Benzo(a)anthracene	92.4		1.4	3.2
218-01-9	Chrysene	111		1.3	3.2
205-99-2	Benzo(b)fluoranthene	122		1.8	3.2
207-08-9	Benzo(k)fluoranthene	40		2	3.2
50-32-8	Benzo(a)pyrene	66		1.8	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	30.2		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	11.2		2.5	3.2
191-24-2	Benzo(g,h,i)perylene	45	J	3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	CV0192B-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID:	350761607
Sample wt/vol:	25.27	Units:	G	Lab File ID: 616-07.D
Concentrated Extract Volume:	1		Date Received:	11/16/12
Level:(low/med)	LOW		Date Extracted:	11/20/12
Percent Solids:	82.4	decanted :		Date Analyzed: 11/21/12 Time: 2142
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID:	0.25	(mm)
CONCENTRATION UNITS:	UG/KG			

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	80.6		1.3	3.2
91-57-6	2-Methylnaphthalene	107		1.3	3.2
90-12-0	1-Methylnaphthalene	84.8		1.3	3.2
208-96-8	Acenaphthylene	41.7		1.3	3.2
83-32-9	Acenaphthene	25.4		1.3	3.2
86-73-7	Fluorene	22.8		1.3	3.2
85-01-8	Phenanthrene	238		1.3	3.2
120-12-7	Anthracene	58.7		1.3	3.2
206-44-0	Fluoranthene	296		1.3	3.2
129-00-0	Pyrene	231		1.3	3.2
56-55-3	Benzo(a)anthracene	216		1.3	3.2
218-01-9	Chrysene	213		1.2	3.2
205-99-2	Benzo(b)fluoranthene	364		1.8	3.2
207-08-9	Benzo(k)fluoranthene	120	J	2	3.2
50-32-8	Benzo(a)pyrene	169		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	95.2		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	39.1		2.5	3.2
191-24-2	Benzo(g,h,i)perylene	125		3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0263A-CS-SP
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761608	Lab File ID: 616-08.D
Sample wt/vol:	25.21	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/21/12
Percent Solids:	79.2	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	62.1		1.4	3.3
91-57-6	2-Methylnaphthalene	44.7		1.3	3.3
90-12-0	1-Methylnaphthalene	37.1		1.3	3.3
208-96-8	Acenaphthylene	21.2		1.3	3.3
83-32-9	Acenaphthene	87.5		1.3	3.3
86-73-7	Fluorene	79.6		1.3	3.3
85-01-8	Phenanthrene	676	E R	1.3	3.3
120-12-7	Anthracene	204		1.3	3.3
206-44-0	Fluoranthene	969	E R	1.3	3.3
129-00-0	Pyrene	785	E	1.3	3.3
56-55-3	Benzo(a)anthracene	620	E	1.4	3.3
218-01-9	Chrysene	554	E	1.3	3.3
205-99-2	Benzo(b)fluoranthene	990	E	1.0	3.3
207-08-9	Benzo(k)fluoranthene	281	J	2.1	3.3
50-32-8	Benzo(a)pyrene	594	E R	1.8	3.3
193-39-5	Indeno(1,2,3-cd)pyrene	221		3	3.3
53-70-3	Dibenzo(a,h)anthracene	93.2		2.6	3.3
191-24-2	Benzo(g,h,i)perylene	256		3.1	3.3

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0263A-CS-SPDL1
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761608DL1	Lab File ID: 61608D20.D
Sample wt/vol:	25.21	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/26/12
Percent Solids:	79.2	decanted :	Dilution Factor:	20
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS:	UG/KG			

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	66.9	R	28	66.7
91-57-6	2-Methylnaphthalene	66.7	U	26.6	66.7
90-12-0	1-Methylnaphthalene	66.7	U	26.6	66.7
208-96-8	Acenaphthylene	66.7	U	26.6	66.7
83-32-9	Acenaphthene	102		26.6	66.7
86-73-7	Fluorene	84.5	V	26.6	66.7
85-01-8	Phenanthrene	818		26.6	66.7
120-12-7	Anthracene	220	R	26.6	66.7
206-44-0	Fluoranthene	1300		26.6	66.7
129-00-0	Pyrene	928		26.6	66.7
56-55-3	Benzo(a)anthracene	677		28	66.7
218-01-9	Chrysene	672		26	66.7
205-99-2	Benzo(b)fluoranthene	834		38.1	66.7
207-08-9	Benzo(k)fluoranthene	344	R	42.1	66.7
50-32-8	Benzo(a)pyrene	499		36.1	66.7
193-39-5	Indeno(1,2,3-cd)pyrene	208	R	60.1	66.7
53-70-3	Dibenzo(a,h)anthracene	66.7	U	52.1	66.7
191-24-2	Benzo(g,h,i)perylene	274	V	62.1	66.7

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0263B-CS-SP
Lab Code :	PEL	Case No.		SAS No.: SDG No.: 3507616
Matrix:	SOIL			Lab Sample ID: 350761609 Lab File ID: 616-09.D
Sample wt/vol:	25.29	Units:	G	Date Received: 11/16/12
Concentrated Extract Volume:	1			Date Extracted: 11/20/12
Level:(low/med)	LOW			Date Analyzed: 11/21/12 Time: 2229
Percent Solids:	82.5	decanted :		Dilution Factor: 1
Extraction:	OTHER			Station ID: Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID:	0.25 (mm)	
CONCENTRATION UNITS:	UG/KG			

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	53.4		1.3	3.2
91-57-6	2-Methylnaphthalene	57.1		1.3	3.2
90-12-0	1-Methylnaphthalene	48.7		1.3	3.2
208-96-8	Acenaphthylene	14.2		1.3	3.2
83-32-9	Acenaphthene	73.8		1.3	3.2
86-73-7	Fluorene	61.2		1.3	3.2
85-01-8	Phenanthrene	746 E R		4.3	3.2
120-12-7	Anthracene	123		1.3	3.2
206-44-0	Fluoranthene	892 E R		1.3	3.2
129-00-0	Pyrene	792 E		1.3	3.2
56-55-3	Benzo(a)anthracene	536 E		1.3	3.2
218-01-9	Chrysene	550 E		1.2	3.2
205-99-2	Benzo(b)fluoranthene	662 E		1.8	3.2
207-08-9	Benzo(k)fluoranthene	267 J		2	3.2
50-32-8	Benzo(a)pyrene	408		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	175		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	68.3		2.5	3.2
191-24-2	Benzo(g,h,i)perylene	208		3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0263B-CS-SPDL1
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761609DL1	Lab File ID: 61609D20.D
Sample wt/vol:	25.29	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/26/12
Percent Solids:	82.5	decanted :	Dilution Factor:	20
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	63.8	U	26.8	63.8
91-57-6	2-Methylnaphthalene	63.8	U	25.5	63.8
90-12-0	1-Methylnaphthalene	63.8	U	25.5	63.8
208-96-8	Acenaphthylene	63.8	U	25.5	63.8
83-32-9	Acenaphthene	88.9		25.5	63.8
86-73-7	Fluorene	74		25.5	63.8
85-01-8	Phenanthrene	1060		25.5	63.8
120-12-7	Anthracene	179	R	25.5	63.8
206-44-0	Fluoranthene	1240		25.5	63.8
129-00-0	Pyrene	1060		25.5	63.8
56-55-3	Benzo(a)anthracene	487		26.8	63.8
218-01-9	Chrysene	551		24.9	63.8
205-99-2	Benzo(b)fluoranthene	624		36.4	63.8
207-08-9	Benzo(k)fluoranthene	246	R	40.3	63.8
50-32-8	Benzo(a)pyrene	399		34.5	63.8
193-39-5	Indeno(1,2,3-cd)pyrene	172		57.5	63.8
53-70-3	Dibenzo(a,h)anthracene	63.8	U	49.6	63.8
191-24-2	Benzo(g,h,i)perylene	226		59.4	63.8

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0263C-CS-SP
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761610	Lab File ID: 616-10.D
Sample wt/vol:	25.79	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/21/12
Percent Solids:	77.9	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	148	J	1.4	3.3
91-57-6	2-Methylnaphthalene	78.2		1.3	3.3
90-12-0	1-Methylnaphthalene	57		1.3	3.3
208-96-8	Acenaphthylene	23.2		1.3	3.3
83-32-9	Acenaphthene	176		1.3	3.3
86-73-7	Fluorene	156		1.3	3.3
85-01-8	Phenanthrene	1210 E	R	1.3	3.3
120-12-7	Anthracene	281 J		1.3	3.3
206-44-0	Fluoranthene	1420 E	R	1.3	3.3
129-00-0	Pyrene	1060 E		1.3	3.3
56-55-3	Benzo(a)anthracene	814 E		1.4	3.3
218-01-9	Chrysene	780 E		1.3	3.3
205-99-2	Benzo(b)fluoranthene	1490 E		1.0	3.3
207-08-9	Benzo(k)fluoranthene	455 J		2.1	3.3
50-32-8	Benzo(a)pyrene	615 E	R	1.8	3.3
193-39-5	Indeno(1,2,3-cd)pyrene	276 J		3	3.3
53-70-3	Dibenzo(a,h)anthracene	115		2.6	3.3
191-24-2	Benzo(g,h,i)perylene	362		3.1	3.3

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0263C-CS-SPDL1
Lab Code :	PEL	Case No.		SAS No: SDG No.: 3507616
Matrix:	SOIL			Lab Sample ID: 350761610DL1 Lab File ID: 61610D20.D
Sample wt/vol:	25.79	Units:	G	Date Received: 11/16/12
Concentrated Extract Volume:	1			Date Extracted: 11/20/12
Level:(low/med)	LOW			Date Analyzed: 11/26/12 Time: 2329
Percent Solids:	77.9	decanted :		Dilution Factor: 20
Extraction:	OTHER			Station ID: Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID:	0.25 (mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	156	R	27.9	66.3
91-57-6	2-Methylnaphthalene	76.1		26.5	66.3
90-12-0	1-Methylnaphthalene	66.3	U	26.5	66.3
208-96-8	Acenaphthylene	66.3	U	26.5	66.3
83-32-9	Acenaphthene	224		26.5	66.3
86-73-7	Fluorene	166		26.5	66.3
85-01-8	Phenanthrene	1990		26.5	66.3
120-12-7	Anthracene	386	R	26.5	66.3
206-44-0	Fluoranthene	2120		26.5	66.3
129-00-0	Pyrene	1500		26.5	66.3
56-55-3	Benzo(a)anthracene	951		27.9	66.3
218-01-9	Chrysene	943		25.9	66.3
205-99-2	Benzo(b)fluoranthene	1280		37.8	66.3
207-08-9	Benzo(k)fluoranthene	465	R	44.9	66.3
50-32-8	Benzo(a)pyrene	722		35.8	66.3
193-39-5	Indeno(1,2,3-cd)pyrene	286	R	59.7	66.3
53-70-3	Dibenzo(a,h)anthracene	66.3	U	51.8	66.3
191-24-2	Benzo(g,h,i)perylene	357		61.7	66.3

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0126A-CS-SP
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761611	Lab File ID: 616-11.D
Sample wt/vol:	25.77	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/21/12
Percent Solids:	81.7	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	31.7		1.3	3.2
91-57-6	2-Methylnaphthalene	22.2		1.3	3.2
90-12-0	1-Methylnaphthalene	15.3		1.3	3.2
208-96-8	Acenaphthylene	4.1		1.3	3.2
83-32-9	Acenaphthene	7		1.3	3.2
86-73-7	Fluorene	6.4		1.3	3.2
85-01-8	Phenanthrene	76		1.3	3.2
120-12-7	Anthracene	13.7		1.3	3.2
206-44-0	Fluoranthene	109		1.3	3.2
129-00-0	Pyrene	84.8		1.3	3.2
56-55-3	Benzo(a)anthracene	62.9		1.3	3.2
218-01-9	Chrysene	65.5		1.2	3.2
205-99-2	Benzo(b)fluoranthene	93.7		1.8	3.2
207-08-9	Benzo(k)fluoranthene	30.6	J	2	3.2
50-32-8	Benzo(a)pyrene	52.4		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	24.6		2.8	3.2
53-70-3	Dibenzo(a,h)anthracene	4		2.5	3.2
191-24-2	Benzo(g,h,i)perylene	28		2.9	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0126B-CS-SP
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761612	Lab File ID: 616-12.D
Sample wt/vol:	25.61	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/21/12
Percent Solids:	79.4	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	47.4		1.4	3.3
91-57-6	2-Methylnaphthalene	52.8		1.3	3.3
90-12-0	1-Methylnaphthalene	34.1		1.3	3.3
208-96-8	Acenaphthylene	3.7		1.3	3.3
83-32-9	Acenaphthene	3.3		1.3	3.3
86-73-7	Fluorene	3.7		1.3	3.3
85-01-8	Phenanthrene	69.5		1.3	3.3
120-12-7	Anthracene	8.2		1.3	3.3
206-44-0	Fluoranthene	76.6		1.3	3.3
129-00-0	Pyrene	59.1		1.3	3.3
56-55-3	Benzo(a)anthracene	50.1		1.4	3.3
218-01-9	Chrysene	61.2		1.3	3.3
205-99-2	Benzo(b)fluoranthene	83.6		1.9	3.3
207-08-9	Benzo(k)fluoranthene	28	J	2.1	3.3
50-32-8	Benzo(a)pyrene	41.6		1.8	3.3
193-39-5	Indeno(1,2,3-cd)pyrene	20.2		3	3.3
53-70-3	Dibenzo(a,h)anthracene	3.3	U	2.6	3.3
191-24-2	Benzo(g,h,i)perylene	23.8		3	3.3

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0126C-GS-SP
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761613	Lab File ID: 616-13.d
Sample wt/vol:	25.6	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/26/12
Percent Solids:	71.8	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	158		1.5	3.6
91-57-6	2-Methylnaphthalene	89.5	✓ J	1.4	3.6
90-12-0	1-Methylnaphthalene	52.6		1.4	3.6
208-96-8	Acenaphthylene	11.3		1.4	3.6
83-32-9	Acenaphthene	120		1.4	3.6
86-73-7	Fluorene	110		1.4	3.6
85-01-8	Phenanthrene	735	✓ J	1.4	3.6
120-12-7	Anthracene	214		1.4	3.6
206-44-0	Fluoranthene	841	✓ J	1.4	3.6
129-00-0	Pyrene	636	✓ J	1.4	3.6
56-55-3	Benzo(a)anthracene	584	✓ J	1.5	3.6
218-01-9	Chrysene	579	✓ J	1.4	3.6
205-99-2	Benzo(b)fluoranthene	487		2.1	3.6
207-08-9	Benzo(k)fluoranthene	543		2.3	3.6
50-32-8	Benzo(a)pyrene	510		2	3.6
193-39-5	Indeno(1,2,3-cd)pyrene	288		3.3	3.6
53-70-3	Dibenzo(a,h)anthracene	175		2.8	3.6
191-24-2	Benzo(g,h,i)perylene	304		3.4	3.6

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	EPA Sample No.	CV0699A-CS
Lab Code :	PEL	Case No.		SAS No:	SDG No.: 3507616
Matrix:	SOIL			Lab Sample ID: 350761614	Lab File ID: 616-14.D
Sample wt/vol:	25.02	Units:	G	Date Received:	11/16/12
Concentrated Extract Volume:	1			Date Extracted:	11/20/12
Level:(low/med)	LOW			Date Analyzed:	11/22/12
Percent Solids:	83.2	decanted :		Time:	0004
Extraction:	OTHER			Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:			
Column(1):	HPMS-5	ID:	0.25 (mm)		
CONCENTRATION UNITS: UG/KG					

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	44.7		1.3	3.2
91-57-6	2-Methylnaphthalene	47.2		1.3	3.2
90-12-0	1-Methylnaphthalene	33.4		1.3	3.2
208-96-8	Acenaphthylene	8.7		1.3	3.2
83-32-9	Acenaphthene	7.3		1.3	3.2
86-73-7	Fluorene	7.9		1.3	3.2
85-01-8	Phenanthrene	106		1.3	3.2
120-12-7	Anthracene	19.4		1.3	3.2
206-44-0	Fluoranthene	143		1.3	3.2
129-00-0	Pyrene	119		1.3	3.2
56-55-3	Benzo(a)anthracene	132		1.3	3.2
218-01-9	Chrysene	129		1.2	3.2
205-99-2	Benzo(b)fluoranthene	204		1.8	3.2
207-08-9	Benzo(k)fluoranthene	52.1	J	2	3.2
50-32-8	Benzo(a)pyrene	117		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	51		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	16.4		2.5	3.2
191-24-2	Benzo(g,h,i)perylene	60.4		3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0699B-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761615 Lab File ID: 616-15.D

Sample wt/vol: 25.01 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/22/12 Time: 0027

Percent Solids: 80.8 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	36.3		1.4	3.3
91-57-6	2-Methylnaphthalene	32.1		1.3	3.3
90-12-0	1-Methylnaphthalene	24.9		1.3	3.3
208-96-8	Acenaphthylene	8.2		1.3	3.3
83-32-9	Acenaphthene	24.7		1.3	3.3
86-73-7	Fluorene	17.2		1.3	3.3
85-01-8	Phenanthrene	328		1.3	3.3
120-12-7	Anthracene	98.2		1.3	3.3
206-44-0	Fluoranthene	884	E	1.3	3.3
129-00-0	Pyrene	855	E	1.3	3.3
56-55-3	Benzo(a)anthracene	633	E	1.4	3.3
218-01-9	Chrysene	534	E	1.3	3.3
205-99-2	Benzo(b)fluoranthene	874	E	1.9	3.3
207-08-9	Benzo(k)fluoranthene	278	J	2.1	3.3
50-32-8	Benzo(a)pyrene	466		1.8	3.3
193-39-5	Indeno(1,2,3-cd)pyrene	171		3	3.3
53-70-3	Dibenzo(a,h)anthracene	73.6		2.6	3.3
191-24-2	Benzo(g,h,i)perylene	186		3.1	3.3

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	CV0699B-CSDL1
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761615DL1	Lab File ID: 61615D20.D
Sample wt/vol:	25.01	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/26/12
Percent Solids:	80.8	decanted :	Dilution Factor:	20
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	65.9	U	27.7	65.9
91-57-6	2-Methylnaphthalene	65.9	U	26.3	65.9
90-12-0	1-Methylnaphthalene	65.9	U	26.3	65.9
208-96-8	Acenaphthylene	65.9	U	26.3	65.9
83-32-9	Acenaphthene	65.9	U	26.3	65.9
86-73-7	Fluorene	65.9	U	26.3	65.9
85-01-8	Phenanthrene	440		26.3	65.9
120-12-7	Anthracene	131		26.3	65.9
206-44-0	Fluoranthene	1270		26.3	65.9
129-00-0	Pyrene	1120		26.3	65.9
56-55-3	Benz(a)anthracene	667		27.7	65.9
218-01-9	Chrysene	623		25.7	65.9
205-99-2	Benz(b)fluoranthene	765		37.6	65.9
207-08-9	Benz(k)fluoranthene	341	R	41.6	65.9
50-32-8	Benz(a)pyrene	485		35.6	65.9
193-39-5	Indeno(1,2,3-cd)pyrene	171		59.4	65.9
53-70-3	Dibenzo(a,h)anthracene	65.9	U	51.5	65.9
191-24-2	Benzo(g,h,i)perylene	210		61.4	65.9

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	CV0699C-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761616	Lab File ID: 616-16.D
Sample wt/vol:	25.3	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/22/12
Percent Solids:	82	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	48.6	1	1.3	3.2
91-57-6	2-Methylnaphthalene	45.6		1.3	3.2
90-12-0	1-Methylnaphthalene	33.4		1.3	3.2
208-96-8	Acenaphthylene	6.2		1.3	3.2
83-32-9	Acenaphthene	12		1.3	3.2
86-73-7	Fluorene	12.6		1.3	3.2
85-01-8	Phenanthrene	113		1.3	3.2
120-12-7	Anthracene	25.2		1.3	3.2
206-44-0	Fluoranthene	148		1.3	3.2
129-00-0	Pyrene	112		1.3	3.2
56-55-3	Benzo(a)anthracene	109		1.3	3.2
218-01-9	Chrysene	106		1.2	3.2
205-99-2	Benzo(b)fluoranthene	168		1.8	3.2
207-08-9	Benzo(k)fluoranthene	58.8		2	3.2
50-32-8	Benzo(a)pyrene	92.7		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	37.8		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	12		2.5	3.2
191-24-2	Benzo(g,h,i)perylene	50.6	1	3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0210A-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761617	Lab File ID: 616-17.D
Sample wt/vol:	25.2	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/22/12
Percent Solids:	82	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	21.6	U	1.4	3.2
91-57-6	2-Methylnaphthalene	16.2		1.3	3.2
90-12-0	1-Methylnaphthalene	11.8	J	1.3	3.2
208-96-8	Acenaphthylene	3.2	U J	1.3	3.2
83-32-9	Acenaphthene	3.2	U	1.3	3.2
86-73-7	Fluorene	3.2	U	1.3	3.2
85-01-8	Phenanthrene	24.3	J	1.3	3.2
120-12-7	Anthracene	3.5		1.3	3.2
206-44-0	Fluoranthene	33		1.3	3.2
129-00-0	Pyrene	26.6		1.3	3.2
56-55-3	Benzo(a)anthracene	24		1.4	3.2
218-01-9	Chrysene	26.7		1.2	3.2
205-99-2	Benzo(b)fluoranthene	33		1.8	3.2
207-08-9	Benzo(k)fluoranthene	11.9	U	2	3.2
50-32-8	Benzo(a)pyrene	19.3		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	8.4		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	3.2	U J	2.5	3.2
191-24-2	Benzo(g,h,i)perylene	10.6	J	3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	EPA Sample No. FM0210B-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761618	Lab File ID: 616-18.D
Sample wt/vol:	25.08	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/22/12
Percent Solids:	82.7	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	42.6	J	1.4	3.2
91-57-6	2-Methylnaphthalene	41.8		1.3	3.2
90-12-0	1-Methylnaphthalene	33.1		1.3	3.2
208-96-8	Acenaphthylene	4.9		1.3	3.2
83-32-9	Acenaphthene	5.6		1.3	3.2
86-73-7	Fluorene	6.3		1.3	3.2
85-01-8	Phenanthrene	85.8		1.3	3.2
120-12-7	Anthracene	10.3		1.3	3.2
206-44-0	Fluoranthene	85.9		1.3	3.2
129-00-0	Pyrene	76		1.3	3.2
56-55-3	Benzo(a)anthracene	56.2		1.4	3.2
218-01-9	Chrysene	67.4		1.2	3.2
205-99-2	Benzo(b)fluoranthene	74.8		1.8	3.2
207-08-9	Benzo(k)fluoranthene	25		2	3.2
50-32-8	Benzo(a)pyrene	39.6		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	16		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	3.2		2.5	3.2
191-24-2	Benzo(g,h,i)perylene	22.1	J	3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0210C-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761619	Lab File ID: 616-19.D
Sample wt/vol:	25.06	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/22/12
Percent Solids:	84.5	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	48.8		1.3	3.1
91-57-6	2-Methylnaphthalene	49.8		1.2	3.1
90-12-0	1-Methylnaphthalene	43.7		1.2	3.1
208-96-8	Acenaphthylene	12.2		1.2	3.1
83-32-9	Acenaphthene	31.8		1.2	3.1
86-73-7	Fluorene	23.9		1.2	3.1
85-01-8	Phenanthrene	382		1.2	3.1
120-12-7	Anthracene	63.4		1.2	3.1
206-44-0	Fluoranthene	577	E R	1.2	3.1
129-00-0	Pyrene	440		1.2	3.1
56-55-3	Benzo(a)anthracene	290		1.3	3.1
218-01-9	Chrysene	280		1.2	3.1
205-99-2	Benzo(b)fluoranthene	403		1.8	3.1
207-08-9	Benzo(k)fluoranthene	142	J	2	3.1
50-32-8	Benzo(a)pyrene	196		1.7	3.1
193-39-5	Indeno(1,2,3-cd)pyrene	77.2		2.8	3.1
53-70-3	Dibenzo(a,h)anthracene	27.9		2.4	3.1
191-24-2	Benzo(g,h,i)perylene	96.8		2.9	3.1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0210C-CSDL1
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID:	350761619DL1
Sample wt/vol:	25.06	Units:	G	Date Received: 11/16/12
Concentrated Extract Volume:	1			Date Extracted: 11/20/12
Level:(low/med)	LOW			Date Analyzed: 11/27/12 Time: 0016
Percent Solids:	84.5	decanted :		Dilution Factor: 20
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID:	0.25 (mm)	
CONCENTRATION UNITS:	UG/KG			

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	62.9	U	26.4	62.9
91-57-6	2-Methylnaphthalene	62.9	U	25.1	62.9
90-12-0	1-Methylnaphthalene	62.9	U	25.1	62.9
208-96-8	Acenaphthylene	62.9	U	25.1	62.9
83-32-9	Acenaphthene	62.9	U	25.1	62.9
86-73-7	Fluorene	62.9	U	25.1	62.9
85-01-8	Phenanthrene	455		25.1	62.9
120-12-7	Anthracene	76.4		25.1	62.9
206-44-0	Fluoranthene	658		25.1	62.9
129-00-0	Pyrene	493	R	25.1	62.9
56-55-3	Benzo(a)anthracene	250		26.4	62.9
218-01-9	Chrysene	275		24.6	62.9
205-99-2	Benzo(b)fluoranthene	261		35.9	62.9
207-08-9	Benzo(k)fluoranthene	131		39.7	62.9
50-32-8	Benzo(a)pyrene	183		34	62.9
193-39-5	Indeno(1,2,3-cd)pyrene	83.1		56.7	62.9
53-70-3	Dibenzo(a,h)anthracene	62.9	U	49.1	62.9
191-24-2	Benzo(g,h,i)perylene	103		58.8	62.9

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	CV0362A-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761620	Lab File ID: 616-20.D
Sample wt/vol:	25.08	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/22/12
Percent Solids:	78.9	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	43.7		1.4	3.4
91-57-6	2-Methylnaphthalene	45.9		1.3	3.4
90-12-0	1-Methylnaphthalene	38.8		1.3	3.4
208-96-8	Acenaphthylene	28.7		1.3	3.4
83-32-9	Acenaphthene	19.9		1.3	3.4
86-73-7	Fluorene	16.9		1.3	3.4
85-01-8	Phenanthrene	223		1.3	3.4
120-12-7	Anthracene	51.7		1.3	3.4
206-44-0	Fluoranthene	400		1.3	3.4
129-00-0	Pyrene	326		1.3	3.4
56-55-3	Benzo(a)anthracene	354		1.4	3.4
218-01-9	Chrysene	293		1.3	3.4
205-99-2	Benzo(b)fluoranthene	386		1.9	3.4
207-08-9	Benzo(k)fluoranthene	154	J	2.1	3.4
50-32-8	Benzo(a)pyrene	228		1.8	3.4
193-39-5	Indeno(1,2,3-cd)pyrene	86.8		3	3.4
53-70-3	Dibenzo(a,h)anthracene	35		2.6	3.4
191-24-2	Benzo(g,h,i)perylene	109		3.1	3.4

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	CV0043C-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761605	Lab File ID: 616-05.d
Sample wt/vol:	25.11	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/26/12
PercentSolids:	76.6	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
111-44-4	Bis(2-chloroethyl)ether	281	U	69.7	281
108-95-2	Phenol	1390	U	67.6	1390
95-57-8	2-Chlorophenol	281	U	71.7	281
108-60-1	2,2'-Oxybis(1-chloropropane)	281	U	229	281
95-48-7	2-Methylphenol	278	U	99.8	278
67-72-1	Hexachloroethane	281	U	52	281
621-64-7	N-Nitroso-di-n-propylamine	281	U	63.4	281
106-44-5	4-Methylphenol	281	U	61.3	281
98-95-3	Nitrobenzene	281	U	62.4	281
78-59-1	Isophorone	281	U	61.3	281
88-75-5	2-Nitrophenol	281	U	74.9	281
105-67-9	2,4-Dimethylphenol	278	U	59.3	278
111-91-1	Bis(2-chloroethoxy)methane	278	U	59.3	278
120-83-2	2,4-Dichlorophenol	278	U	78	278
91-20-3	Naphthalene	281	U	66.5	281
106-47-8	4-Chloroaniline	281	U	65.5	281
91-57-6	2-Methylnaphthalene	281	U	60.3	281
87-68-3	Hexachlorobutadiene	281	U	60.3	281
59-50-7	4-Chloro-3-methylphenol	281	U	58.2	281
90-12-0	1-Methylnaphthalene	281	U	64.5	281
77-47-4	Hexachlorocyclopentadiene	694	U	156	694
88-06-2	2,4,6-Trichlorophenol	278	U	70.7	278
95-95-4	2,4,5-Trichlorophenol	278	U	76.9	278
91-58-7	2-Chloronaphthalene	281	U	69.4	281
88-74-4	2-Nitroaniline	281	U	59.3	281
208-96-8	Acenaphthylene	281	U	57.2	281

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	CV0043C-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761605	Lab File ID: 616-05.d
Sample wt/vol:	25.11	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/26/12
PercentSolids:	76.6	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
131-11-3	Dimethylphthalate	281	U	61.3	281
606-20-2	2,6-Dinitrotoluene	281	U	52	281
83-32-9	Acenaphthene	281	U	50.9	281
99-09-2	3-Nitroaniline	278	U	83.2	278
51-28-5	2,4-Dinitrophenol	1390	U	229	1390
132-64-9	Dibenzofuran	281	U	56.1	281
121-14-2	2,4-Dinitrotoluene	281	U	50.9	281
100-02-7	4-Nitrophenol	694	U	55.1	694
86-73-7	Fluorene	281	U	53	281
7005-72-3	4-Chlorophenyl-phenylether	281	U	53	281
84-66-2	Diethylphthalate	281	U	53	281
100-01-6	4-Nitroaniline	278	U	91.5	278
534-52-1	4,6-Dinitro-2-methylphenol	281	U	276	281
86-30-6	N-Nitrosodiphenylamine	278	U	65.5	278
101-55-3	4-Bromophenyl-phenylether	281	U	50.9	281
118-74-1	Hexachlorobenzene	278	U	55.1	278
87-86-5	Pentachlorophenol	281	U	138	281
85-01-8	Phenanthrene	281	U	58.2	281
120-12-7	Anthracene	281	U	62.4	281
84-74-2	Di-n-butylphthalate	281	U	45.8	281
206-44-0	Fluoranthene	281	U	49.9	281
129-00-0	Pyrene	281	U	95.7	281
85-68-7	Butylbenzylphthalate	281	U	65.5	281
91-94-1	3,3'-Dichlorobenzidine	281	U	61.3	281
56-55-3	Benzo(a)anthracene	281	U	59.3	281
218-01-9	Chrysene	278	U	35.4	278

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	CV0043C-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761605	Lab File ID: 616-05.d
Sample wt/vol:	25.11	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/26/12
Percent Solids:	76.6	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
117-81-7	Bis(2-ethylhexyl)phthalate	281	U	86.3	281
117-84-0	Di-n-octylphthalate	281	U	60.3	281
205-99-2	Benzo(b)fluoranthene	281	U	65.5	281
207-08-9	Benzo(k)fluoranthene	281	U	59.3	281
50-32-8	Benzo(a)pyrene	281	U	44.7	281
193-39-5	Indeno(1,2,3-cd)pyrene	281	U	54.1	281
53-70-3	Dibenzo(a,h)anthracene	281	U	42.6	281
191-24-2	Benzo(g,h,i)perylene	281	U	41.6	281
98-86-2	Acetophenone	281	U	104	281
95-94-3	1,2,4,5-Tetrachlorobenzene	281	U	48.9	281
86-74-8	Carbazole	281	U	56.1	281
105-60-2	Caprolactam	281	U	146	281
92-52-4	1,1'-Biphenyl	281	U	63.4	281
1912-24-9	Atrazine	281	U	82.1	281
100-52-7	Benzaldehyde	281	U	46.8	281

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0126C-GS-SP
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761613	Lab File ID: 616-13.d
Sample wt/vol:	25.41	Units:	G	Date Received: 11/16/12
Concentrated Extract Volume:	1			Date Extracted: 11/20/12
Level:(low/med)	LOW			Date Analyzed: 11/26/12 Time: 1948
Percent Solids:	71.8	decanted :		Dilution Factor: 1
Extraction:	OTHER		Station ID:	Method: 8270
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID:	0.25 (mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
111-44-4	Bis(2-chloroethyl)ether	296	U	73.4	296
108-95-2	Phenol	1460	U	71.2	1460
95-57-8	2-Chlorophenol	296	U	75.6	296
108-60-1	2,2'-Oxybis(1-chloropropane)	296	U	241	296
95-48-7	2-Methylphenol	293	U	105	293
67-72-1	Hexachloroethane	296	U	54.8	296
621-64-7	N-Nitroso-di-n-propylamine	296	U	66.9	296
106-44-5	4-Methylphenol	296	U	64.7	296
98-95-3	Nitrobenzene	296	U	65.8	296
78-59-1	Isophorone	296	U	64.7	296
88-75-5	2-Nitrophenol	296	U	78.9	296
105-67-9	2,4-Dimethylphenol	293	U	62.5	293
111-91-1	Bis(2-chloroethoxy)methane	293	U	62.5	293
120-83-2	2,4-Dichlorophenol	293	U	82.2	293
91-20-3	Naphthalene	296	U	70.2	296
106-47-8	4-Chloroaniline	296	U	69.1	296
91-57-6	2-Methylnaphthalene	296	U	63.6	296
87-68-3	Hexachlorobutadiene	296	U	63.6	296
59-50-7	4-Chloro-3-methylphenol	296	U	61.4	296
90-12-0	1-Methylnaphthalene	296	U	68	296
77-47-4	Hexachlorocyclopentadiene	731	U	164	731
88-06-2	2,4,6-Trichlorophenol	293	U	74.5	293
95-95-4	2,4,5-Trichlorophenol	293	U	81.1	293
91-58-7	2-Chloronaphthalene	296	U	73.1	296
88-74-4	2-Nitroaniline	296	U	62.5	296
208-96-8	Acenaphthylene	296	U	60.3	296

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0126C-GS-SP
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761613	Lab File ID: 616-13.d
Sample wt/vol:	25.41	Units:	G	Date Received: 11/16/12
Concentrated Extract Volume:	1			Date Extracted: 11/20/12
Level:(low/med)	LOW			Date Analyzed: 11/26/12 Time: 1948
Percent Solids:	71.8	decanted :		Dilution Factor: 1
Extraction:	OTHER		Station ID:	Method: 8270
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID:	0.25 (mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
131-11-3	Dimethylphthalate	296	U	64.7	296
606-20-2	2,6-Dinitrotoluene	296	U	54.8	296
83-32-9	Acenaphthene	296	U	53.7	296
99-09-2	3-Nitroaniline	293	U	87.7	293
51-28-5	2,4-Dinitrophenol	1470	U	241	1470
132-64-9	Dibenzofuran	296	U	59.2	296
121-14-2	2,4-Dinitrotoluene	296	U	53.7	296
100-02-7	4-Nitrophenol	731	U	58.1	731
86-73-7	Fluorene	296	U	55.9	296
7005-72-3	4-Chlorophenyl-phenylether	296	U	55.9	296
84-66-2	Diethylphthalate	296	U	55.9	296
100-01-6	4-Nitroaniline	293	U	96.5	293
534-52-1	4,6-Dinitro-2-methylphenol	296	U	292	296
86-30-6	N-Nitrosodiphenylamine	293	U	69.1	293
101-55-3	4-Bromophenyl-phenylether	296	U	53.7	296
118-74-1	Hexachlorobenzene	293	U	58.1	293
87-86-5	Pentachlorophenol	296	U	146	296
85-01-8	Phenanthrene	766		61.4	296
120-12-7	Anthracene	296	U	65.8	296
84-74-2	Di-n-butylphthalate	296	U	48.2	296
206-44-0	Fluoranthene	889		52.6	296
129-00-0	Pyrene	716		101	296
85-68-7	Butylbenzylphthalate	296	U	69.1	296
91-94-1	3,3'-Dichlorobenzidine	296	U	64.7	296
56-55-3	Benzo(a)anthracene	523		62.5	296
218-01-9	Chrysene	596		37.3	293

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	FM0126C-GS-SP
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761613	Lab File ID: 616-13.d
Sample wt/vol:	25.41	Units:	G	Date Received: 11/16/12
Concentrated Extract Volume:	1			Date Extracted: 11/20/12
Level:(low/med)	LOW			Date Analyzed: 11/26/12 Time: 1948
Percent Solids:	71.8	decanted :		Dilution Factor: 1
Extraction:	OTHER		Station ID:	Method: 8270
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID:	0.25 (mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
117-81-7	Bis(2-ethylhexyl)phthalate	296	U	91	296
117-84-0	Di-n-octylphthalate	296	U	63.6	296
205-99-2	Benzo(b)fluoranthene	598		69.1	296
207-08-9	Benzo(k)fluoranthene	430		62.5	296
50-32-8	Benzo(a)pyrene	472		47.1	296
193-39-5	Indeno(1,2,3-cd)pyrene	296	U	57	296
53-70-3	Dibenzo(a,h)anthracene	296	U	44.9	296
191-24-2	Benzo(g,h,i)perylene	322		43.8	296
98-86-2	Acetophenone	296	U	110	296
95-94-3	1,2,4,5-Tetrachlorobenzene	296	U	51.5	296
86-74-8	Carbazole	296	U	59.2	296
105-60-2	Caprolactam	296	U	153	296
92-52-4	1,1'-Biphenyl	296	U	66.9	296
1912-24-9	Atrazine	296	U	86.6	296
100-52-7	Benzaldehyde	296	U	49.3	296

Data Validation Checklist
Inorganic Analyses

Project: 35TH Avenue Superfund Site
 Laboratory: Spectrum Analytical, Inc., Tampa, FL
 Method: SW-846 6010B and 7471A
 Matrix: Soil
 Reviewer: Nicole Lancaster
 Concurrence¹: Martha Meyers-Lee

Project No: 15268508.20000
 SDG No.: 3507616
 Associated Samples: Refer to **Attachment A** (Sample Summary)
 Samples Collected: 11/14/12
 Date: 01/04/2013
 Date: 01/09/2013

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample preservation requirements met? If pH of aqueous sample >2 and was not adjusted by laboratory prior to analysis, J- flag positive results and R- flag non-detect results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil/sediment samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Have any technical holding times, determined from date of collection to date of analysis, been exceeded? (Hg: ≤28 days, other metals: ≤6 months). If not, then J- flag positive results and R- flag non-detect aqueous results.		✓			
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8. Were method blank (MB) prepared at the appropriate frequency (one per 20 samples, batch, matrix, and level)?	✓				
9. Was a calibration blank (ICB/CCB) analyzed at the beginning, after every 10 th sample, and at the end of each analytical run?	✓				
10. Were target analytes detected in the method and/or calibration blanks?		✓			
11. Were target analytes reported in equipment blank analyses above the DL?		✓		Target analytes were not detected during the analysis of the rinsate blank RB-11-13-12 (3507601-11), which was collected during the week of 11/12/12 and analyzed under SDG No. 3507601.	
12. Were contaminants detected in samples below the blank			✓	Blank contamination does not exist.	

¹ Independent technical reviewer

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
contamination action level? <ul style="list-style-type: none"> ○ If blank result > RL, <ul style="list-style-type: none"> • Flag sample results \leq RL with a U • Flag positive sample results > RL and \leq10x blank result , as J+ positive results ○ If blank result \leqRL, <ul style="list-style-type: none"> • Flag sample results \leq RL with a U • Flag positive sample results > RL and \leq10x blank result , as J+ positive results 					
13. Are there negative laboratory blank results with the absolute value \leq RL? If yes, then flag positive and non-detect sample results that are < 10x absolute blank value as J- and UJ, respectively.		✓			
14. Was a field duplicate analyzed?		✓			
15. Was precision deemed acceptable as defined by the project plans?			✓		
16. Were initial and continuing calibration standards analyzed at the lab/project-specified frequency for each instrument? <ul style="list-style-type: none"> ○ 6010B: <ul style="list-style-type: none"> • ICAL: Blank and one standard • ICV initially, and CCV every 10th sample and at the end of the analytical run ○ 7470A/7471A: <ul style="list-style-type: none"> • ICAL: Blank and five standards • ICV initially, and CCV every 10th sample and at the end of the analytical run 	✓			<ul style="list-style-type: none"> • 6010B: 11/21/12. Six (6) Initial calibration standards. ICV initially, and CCV every 10 samples and at end of run • 7471A: 11/21/12. 6-Point ICAL. ICV initially, CCV every 10 samples and at end of run 	
17. Were these results within lab/project specifications? <ul style="list-style-type: none"> ○ 6010B (ICV/CCV Criteria: 90-110%R): <ul style="list-style-type: none"> • If %R <75, then J- flag positive results and R-flag non-detects • If 75-89%R, then J- flag positive results and UJ flag non-detects • If 111-125%R, then J flag positive results • If >125%R, then J+ flag positive results • If >160%R, then R flag positive results ○ 7470A/7471A: <ul style="list-style-type: none"> • If correlation coefficients <0.995, then J and UJ flag positive and non-detect results. • If %R <65, then J- flag positive results and R-flag non-detects • If 65-79%R, then J- flag positive results and UJ flag non- 	✓			<p>Mercury correlation coefficients (raw data):</p> <ul style="list-style-type: none"> • 7471A: ICAL of 11/21/12. 0.99959 (page 2588) 	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
detects <ul style="list-style-type: none"> • If 121-135%R, then J flag positive results • If >135%R, then J+ flag positive results • If >170%R, then R flag positive results 					
18. Was the interference check sample (ICS) analyzed at the beginning of each ICP analytical run?	✓				
19. Are ICS recoveries within 80-120% of the true value? If not, qualify data as follows when native Al, Fe, Ca, and Mg sample concentrations are equal to or greater than the ICS spiking level: <ul style="list-style-type: none"> ○ If >120%R (or >true value plus 2x CRQL), J+ flag positive results ○ If 50-79%R (or less than true value – 2x the CRQL), J- flag positive results and UJ flag non-detects ○ If <50%R, J- flag positive results and R-flag non-detects 	✓				
20. Was a LCS analyzed for each preparation batch (one per 20 samples per matrix and level)?	✓				
21. Did LCS recoveries meet laboratory/project (80-120%R) specifications? <ul style="list-style-type: none"> ○ Soil: <ul style="list-style-type: none"> • LCS result > Upper control limit (UCL): J+ flag positive results • LCS result < Lower control limit (LCL): J- flag positive results and UJ flag non-detects ○ Aqueous: <ul style="list-style-type: none"> • If <50%R, then J- and R flag positive and ND results, respectively • If 50-LCL%R, J- and UJ flag positive and ND results, respectively • >UCL: J+ Flag positive results • >150%R: R Flag results 	✓				
22. Was the RPD between LCS and LCSD results within laboratory /project control limits ($\leq 20\%$ RPD)? If not, J and UJ flag positive and non-detect results, respectively	✓				
23. Was a Matrix Spike (MS) and Matrix Spike Duplicate (MSD) analyzed once per preparation batch?	✓			According to the Preparation Logs (Form 13), a LCS and LCSD were prepared for all methods, instead of a MS and MSD. Form 5A was not included in the data package. The following MS and MSD samples were identified during the review of Analysis Run Logs (Form 14) and raw data:	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
				<ul style="list-style-type: none"> • 6010B: 3507600-07 (Batch) • 7471A: 3507622-01 (Batch) 	
24. Is the MS and MSD parent sample a project-specific sample?		✓			
25. Was a post-digestion spike (PDS) analysis conducted when MS and/or MSD results did not meet control limits (Note: PDS is not required for silver)?	✓			<p>A summary of PDS results were reported on Form 5B of the data package for the following samples:</p> <ul style="list-style-type: none"> • 6010B: 3507600-07 (Batch) & 3507618-01 (Batch) • 7471A: 3507622-01 (Batch) 	
26. For all analytes with sample concentration < 4 x spike concentration, are spike recoveries within laboratory/project control limits (MS, MSD, and PDS: 75-125%R)? <i>Only QC results for project samples are evaluated.</i> If not, <ul style="list-style-type: none"> ○ 6010B: <ul style="list-style-type: none"> • If MS %R <30 and PDS %R <75, then J- and R Flag positive and ND results, respectively • If MS %R <30 and PDS %R >75, then J flag positive and UJ flag non-detect results • If MS and MSD %R 30-74 and PDS%R <75, then J- flag positive and UJ flag non-detect results • If MS and MSD %R 30-74 and PDS%R ≥75, then J flag positive and UJ flag non-detect results • If MS, MSD, and PDS %R >125, J+ flag positive results • If MS and MSD %R >125 and PDS %R ≤125, then J flag positive results • If MS and MSD %R <30 and no PDS, then J- flag positive and R-flag non-detect results • If MS and MSD %R 30-74 and no PDS, then J- and UJ flag positive and non-detect results, respectively • If MS and MSD %R >125 and no PDS, then J+ flag positive results ○ 7470A/7471A: <ul style="list-style-type: none"> • If MS %R <30, then J- and R Flag positive and ND results, respectively • If MS and MSD %R 30-74, then J- flag positive and UJ flag non-detect results • If MS and MSD %R >125, then J+ flag positive results 	✓				
27. Were laboratory/project ($\leq 20\%$ RPD) criteria met for precision during the MS and MSD analysis? <i>Only QC results for project samples are evaluated.</i> <ul style="list-style-type: none"> ○ If RPD >20%, J and UJ flag positive and non-detect results. 			✓		

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
28. Was a serial dilution conducted for 6010B?	✓			A summary of serial dilution results were reported on Form 9 of the data package for the following samples: • 6010B: 3507616-02 (CV0041B-CS) & 3507618-01 (Batch) • 7471A: 3507622-01 (Batch)	
29. Is the serial dilution parent sample a project-specific sample?	✓	✓			
30. Is the percent difference between the serially diluted result and undiluted result less than 10% (for those analytes with native concentrations greater than 50x the DL)? <i>Only QC results for project samples are evaluated.</i> ○ If %D > 10, J and UJ flag positive and non-detect results, respectively.		✓		CV0041B-CS (3507616-02), 6010B: Lead @ 14%D (≤ 10). J-flag due to significant chemical and matrix interference.	J
31. Was a laboratory duplicate analyzed?		✓		Laboratory duplicate sample analyses were not conducted. An evaluation of precision was based on the results of the LCS and LCSD results.	
32. Was the lab duplicate analysis conducted on a project-specific sample?			✓		
33. Were criteria for laboratory/project precision met? <i>Only QC results for project samples are evaluated.</i> ○ If RPD values > 20% (35% for soil/sediment) or absolute difference > RL (2x RL for soil/sediment), then J and UJ flag positive and non-detect results, respectively			✓		
34. Were lab comments included in report? If yes, summarize contents or attach a copy of the narrative.	✓			Refer to Attachment B (Case Narratives)	

Comments: The data validation was conducted in accordance with the *Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1* (OTIE, October 2012). The data review process was modeled after the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Inorganic Data Review* (EPA 540-R-04-004, October 2004). Sample results have been qualified based on the results of the data review process (**Attachment C**). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment

DV Flag Definitions:

- J- The result is an estimated quantity, but the result may be biased low.
- J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ The result is an estimated quantity, but the result may be biased high.
- R The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
- U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
- UJ The analyte was analyzed for, but was not detected. The reported limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A
SAMPLE SUMMARY

U.S. EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site
Lab Code : PEL Case No.: SDG No.: 3507616
SOW No.:

EPA Sample No	Lab Sample ID	
CV0041B-CS	350761602	
CV0043C-CS	350761605	
FM0263C-CS-SP	350761610	
FM0126C-GS-SP	350761613	
FM0126C-GS-SPDL1	350761613DL1	
CV0699B-CS	350761615	

Were ICP interelement corrections applied? Yes/No Yes

Were ICP background corrections applied? Yes/No Yes

If yes - were raw data generated before application of background corrections? Yes/No No

Comments:

ATTACHMENT B

CASE NARRATIVE

CASE NARRATIVE
Inorganic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHOD

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW6010B

IV. PREPARATION

Soil samples were prepared according to Spectrum Analytical Inc. Laboratory's Standard Operating Procedures and EPA Method 3050B.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met.

2. Method Blanks:

All acceptance criteria were met.

C. Spikes:

1. Laboratory Control Spikes (LCS):

CASE NARRATIVE
Inorganic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

An LCS/LCSD set was analyzed. All percent recovery and relative percent difference (RPD) criteria were met.

2. Post Digestion Spike:

All acceptance criteria were met with the exception of:

Post Digestion Spike 350761801A was analyzed with the soil samples on 11/28/12. The following analyte(s) were recovered below criteria: Lead at 55.4 % with criteria of (80-120).

Post Digestion Spike 350760007A was analyzed with the soil samples on 11/21/12. The following analyte(s) were recovered below criteria: Lead at 77.2 % with criteria of (80-120).

The PDS are associated with the QC of a different SDG. The LCS/LCSD pass all quality control criteria. No further action was taken.

3. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD):

No spikes requested by client.

D. Duplicate:

No sample duplicates are reported with this method. (Spike duplicates are referenced above in section C. Spikes.)

E. Serial Dilution:

All acceptance criteria were met with the exception of:

Serial Dilution 350761602L was analyzed with the soil samples on 11/21/12. The following analyte(s) exceeded criteria: Lead at 14 % with criteria of (10). Samples coded accordingly.

The most probable cause for the Serial Dilution exceeding limits is sample matrix due to the fact that the LCS/LCSD pass all quality control criteria. No further action was taken.

F. ICP Interference Check Samples:

All acceptance criteria were met.

G. Samples:

Sample analysis proceeded normally.

CASE NARRATIVE
Inorganic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Sample FM0126C-GS-SP required a 2X dilution due to high concentration of the following analyte(s): Lead.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Signature:



Troy L. Roberts

Name: Troy L. Roberts Title: Inorg. Manager

SIGNED:

DATE: 11/29/2012

CASE NARRATIVE
Inorganic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHOD

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW7471A

IV. PREPARATION

Soil samples were prepared according to Spectrum Analytical Inc. Laboratory's Standard Operating Procedures and EPA Method 7471A.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met.

2. Method Blanks:

All acceptance criteria were met.

C. Spikes:

1. Laboratory Control Spikes (LCS):

CASE NARRATIVE
Inorganic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

An LCS/LCSD set was analyzed. All percent recovery and relative percent difference (RPD) criteria were met.

2. Post Digestion Spike:

All acceptance criteria were met.

3. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD):

No spikes requested by client.

D. Duplicate:

No sample duplicates are reported with this method. (Spike duplicates are referenced above in section C. Spikes.)

E. Serial Dilution:

All acceptance criteria were met.

F. ICP Interference Check Samples:

All acceptance criteria were met.

G. Samples:

Sample analysis proceeded normally.

Sample CV0362B-CS required a 2X dilution due to high concentration of the following analyte(s): Mercury.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

CASE NARRATIVE
Inorganic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Signature: 
Name: Troy L. Roberts Title: Inorg. Manager

SIGNED:

DATE: 11/29/2012

Inorganic Data Qualifiers

C (Concentration) Qualifier - Entries and their meanings are:

- B** The reported value obtained was less than the RL but greater than or equal to the MDL.
- E** The reported value obtained was over calibration or linear range.
- U** The reported value obtained was less than the MDL or was not detected.

Q Qualifier - Entries and their meanings are:

- U** The reported value is estimated because of interference. An explanatory comment must be included under "Comments" on the Cover Page if the problem applies to all samples in this data package or on the individual FORM 1 if it is an isolated problem.
- M** Duplicate injection precision was not met (two analyses of the same sample did not agree).
- N** Spiked sample recovery not within control limits.
- E** Serial Dilution percent difference not within control limits.
- S** The reported value was determined by the Method of Standard Additions (MSA).
- W** Post-digestion spike for Furnace AA analysis is out of control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.
 - * Duplicate analysis not within control limits.
 - + Correlation coefficient for the MSA is less than 0.995.
- X** The data is flagged as rejected by analyst utilizing analytical judgement.

Entering "S", "W", or "+" is mutually exclusive. No combination of these qualifiers can appear in the same field.

M (Method) Qualifier - Enter one of the following:

- P** ICP
- A** Flame AA
- F** Furnace AA
- CV** Manual Cold Vapor AA
- TC** Total Organic Carbon
- AS** Semi-Automated Spectrophotometric
- CA** Midi-Distillation Spectrophotometric
- T** Titrimetric
- C** Manual Spectrophotometric
- GR** Gravimetric
- NR** Analyte was not required by your lab

Inorganic Sample ID Qualifiers

The qualifiers that may be appended to the lab sample ID and/or the client sample ID for inorganic analysis are defined below:

- DL** Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds that exceeded the calibration range. The sample was diluted and reanalyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted reanalysis may be reported.
- R** Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.
- RE** Re-extracted. The extract was reanalyzed with re-extraction. May be followed by a digit to indicate multiple re-extraction of the same sample at the same dilution.
- MS** Matrix spike (may be followed by a digit to indicate multiple matrix within a sample set).
- SD** Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spike duplicate within a sample set).
- A** Post Digestion Spike.
- L** Serial Dilution.

ATTACHMENT C

QUALIFIED SAMPLE RESULTS

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

CV0041B-CS

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761602

Level:(low/med) LOW Date Received: 11/16/2012

PercentSolids: 83.7 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-38-2	Arsenic	12.7		P			0.38	0.761
7440-39-3	Barium	127		P			0.122	7.61
7440-43-9	Cadmium	0.632		P			0.038	0.38
7440-47-3	Chromium	21.3		P			0.122	0.761
7439-92-1	Lead	183		JF	P		0.259	0.609
7439-97-6	Mercury	0.119			CV		0.00392	0.035
7782-49-2	Selenium	7.72		P			0.304	1.52
7440-22-4	Silver	1.14	U		P		0.122	1.14

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

301112 1331

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

CV0043C-CS

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005

Lab Code : PEL Case No.: _____

SAS No: _____

SDG No.: 3507616

Matrix: SOIL

Lab Sample ID: 350761605

Level:(low/med) LOW

Date Received: 11/16/2012

PercentSolids: 76.6

Station ID: _____

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-38-2	Arsenic	12.9			P		0.558	1.12
7440-39-3	Barium	87			P		0.178	11.2
7440-43-9	Cadmium	0.822			P		0.0558	0.558
7440-47-3	Chromium	30.3			P		0.178	1.12
7439-92-1	Lead	117			P		0.379	0.893
7439-97-6	Mercury	0.101			CV		0.0043	0.0383
7782-49-2	Selenium	2.23	U		P		0.446	2.23
7440-22-4	Silver	1.67	U		P		0.178	1.67

Color Before: _____

Clarity Before: _____

Texture : _____

Color After : _____

Clarity After: _____

Artifacts:_____

Comments:

301112 1331

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

FM0263C-CS-SP

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761610

Level:(low/med) LOW Date Received: 11/16/2012

PercentSolids: 77.9 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-38-2	Arsenic	18.2			P		0.637	1.27
7440-39-3	Barium	189			P		0.204	12.7
7440-43-9	Cadmium	0.637	U		P		0.0637	0.637
7440-47-3	Chromium	31.6			P		0.204	1.27
7439-92-1	Lead	166			P		0.433	1.02
7439-97-6	Mercury	0.166			CV		0.00418	0.0373
7782-49-2	Selenium	2.55	U		P		0.509	2.55
7440-22-4	Silver	1.91	U		P		0.204	1.91

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

301112 1331

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

FM0126C-GS-SP

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005

Lab Code : PEL Case No.: _____

SAS No: _____

SDG No.: 3507616

Matrix: SOIL

Lab Sample ID: 350761613

Level:(low/med) LOW

Date Received: 11/16/2012

PercentSolids: 71.8

Station ID: _____

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-38-2	Arsenic	12.1			P		0.63	1.26
7440-39-3	Barium	95.4			P		0.201	12.6
7440-43-9	Cadmium	1.41			P		0.063	0.63
7440-47-3	Chromium	29.3			P		0.201	1.26
7439-97-6	Mercury	0.121			CV		0.00404	0.036
7782-49-2	Selenium	2.52	U		P		0.504	2.52
7440-22-4	Silver	1.89	U		P		0.201	1.89

Color Before: _____

Clarity Before: _____

Texture : _____

Color After : _____

Clarity After: _____

Artifacts:_____

Comments:

301112 1331

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

FM0126C-GS-SPDL1

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761613DL1

Level:(low/med) LOW Date Received: 11/16/2012

PercentSolids: 71.8 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7439-92-1	Lead	712		P			0.856	2.01

Color Before: _____

Clarity Before: _____

Texture : _____

Color After : _____

Clarity After: _____

Artifacts: _____

Comments:

301112 1331

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

CV0699B-CS

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005

Lab Code : PEL Case No.: _____

SAS No: _____

SDG No.: 3507616

Matrix: SOIL

Lab Sample ID: 350761615

Level:(low/med) LOW

Date Received: 11/16/2012

PercentSolids: 80.8

Station ID: _____

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-38-2	Arsenic	12.4			P		0.514	1.03
7440-39-3	Barium	89.7			P		0.164	10.3
7440-43-9	Cadmium	0.514	U		P		0.0514	0.514
7440-47-3	Chromium	55.6			P		0.164	1.03
7439-92-1	Lead	63.8			P		0.349	0.822
7439-97-6	Mercury	0.12			CV		0.00393	0.0351
7782-49-2	Selenium	2.06	U		P		0.411	2.06
7440-22-4	Silver	1.54	U		P		0.164	1.54

Color Before: _____

Clarity Before: _____

Texture : _____

Color After : _____

Clarity After: _____

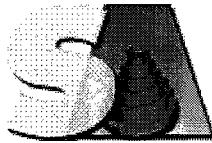
Artifacts: _____

Comments:

301112 1331

Date Reported:

19-Dec-12



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

Laboratory Report

Final Report

Re-Issued Report

Revised Report

Oneida Total Integrated Enterprises
1220 Kennestone Circle, Suite 106
Marietta, GA 30066

Project # 3507616 R1

Project: 35th Avenue Removal Site 2005148 1356

Attn: Limari Krebs

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
350761601	CV0041A-CS	S	14-Nov-12 10:25	16-Nov-12 10:02
350761602	CV0041B-CS	S	14-Nov-12 10:45	16-Nov-12 10:02
350761603	CV0043A-CS	S	14-Nov-12 11:25	16-Nov-12 10:02
350761604	CV0043B-CS	S	14-Nov-12 11:50	16-Nov-12 10:02
350761605	CV0043C-CS	S	14-Nov-12 12:25	16-Nov-12 10:02
350761606	CV0192A-CS	S	14-Nov-12 9:00	16-Nov-12 10:02
350761607	CV0192B-CS	S	14-Nov-12 9:30	16-Nov-12 10:02
350761608	FM0263A-CS-SP	S	14-Nov-12 9:32	16-Nov-12 10:02
350761609	FM0263B-CS-SP	S	14-Nov-12 10:25	16-Nov-12 10:02
350761610	FM0263C-CS-SP	S	14-Nov-12 10:56	16-Nov-12 10:02
350761611	FM0126A-CS-SP	S	14-Nov-12 11:53	16-Nov-12 10:02
350761612	FM0126B-CS-SP	S	14-Nov-12 12:14	16-Nov-12 10:02
350761613	FM0126C-GS-SP	S	14-Nov-12 12:08	16-Nov-12 10:02
350761614	CV0699A-CS	S	14-Nov-12 11:30	16-Nov-12 10:02
350761615	CV0699B-CS	S	14-Nov-12 12:05	16-Nov-12 10:02
350761616	CV0699C-CS	S	14-Nov-12 12:27	16-Nov-12 10:02
350761617	FM0210A-CS	S	14-Nov-12 9:19	16-Nov-12 10:02
350761618	FM0210B-CS	S	14-Nov-12 9:50	16-Nov-12 10:02
350761619	FM0210C-CS	S	14-Nov-12 10:15	16-Nov-12 10:02
350761620	CV0362A-CS	S	14-Nov-12 15:30	16-Nov-12 10:02

Date Reported:
19-Dec-12



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

Laboratory Report

- Final Report
 Re-Issued Report
 Revised Report

Oneida Total Integrated Enterprises
1220 Kennestone Circle, Suite 106
Marietta, GA 30066

Project # 3507616 R1
Project: 35th Avenue Removal Site 2005148 1356

Attn: Limari Krebs

Soil samples are reported on dry weight basis, unless otherwise noted.

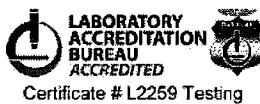
Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis.

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

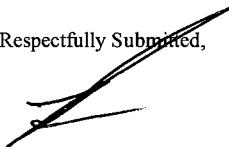
All applicable NELAC or USEPA CLP requirements have been met unless noted in the case narrative.

Please contact the laboratory at 813-888-9507 with any questions regarding the data contained in the laboratory report.

Florida	E84207
Texas	T104704408-12-4
South Carolina	96011001
North Dakota	R-178
California	07253CA
Louisiana	02025
Kansas	E-10385
Arkansas	11-036-1



Respectfully Submitted,


Brian Spann
Laboratory Director
Spectrum Analytical, Inc. Florida Division



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY
Florida Division

Report Revision LOG

SDG: 3507616

Revision	Reason
R1	Revised to include the SDG specific MS/MSD summary forms (8270 and 8270SIM). Case narratives were revised. The raw data for the MS/MSD runs are added at the end of the respective raw data sections. See the Addendum for additional details.

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EXECUTIVE SUMMARY - Detection Highlights

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SAMPLE ID: CV0041A-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	44.0	3.3	UG/KG	SW8270D-SIM
2-Methylnaphthalene	53.2	3.3	UG/KG	SW8270D-SIM
Acenaphthene	7.50	3.3	UG/KG	SW8270D-SIM
Acenaphthylene	10.4	3.3	UG/KG	SW8270D-SIM
Anthracene	21.4	3.3	UG/KG	SW8270D-SIM
Benzo(a)anthracene	155	3.3	UG/KG	SW8270D-SIM
Benzo(a)pyrene	132	3.3	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	245	3.3	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	94.6	3.3	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	71.5	3.3	UG/KG	SW8270D-SIM
Chrysene	173	3.3	UG/KG	SW8270D-SIM
Dibenzo(a,h)anthracene	25.1	3.3	UG/KG	SW8270D-SIM
Fluoranthene	234	3.3	UG/KG	SW8270D-SIM
Fluorene	7.20	3.3	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	71.0	3.3	UG/KG	SW8270D-SIM
Naphthalene	48.1	3.3	UG/KG	SW8270D-SIM
Phenanthrene	126	3.3	UG/KG	SW8270D-SIM
Pyrene	186	3.3	UG/KG	SW8270D-SIM

SAMPLE ID: CV0041B-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Arsenic	12.7	0.761	MG/KG	SW6010B
Barium	127	7.61	MG/KG	SW6010B
Cadmium	0.632	0.380	MG/KG	SW6010B
Chromium	21.3	0.761	MG/KG	SW6010B
Lead	183 E	0.609	MG/KG	SW6010B
Selenium	7.72	1.52	MG/KG	SW6010B
Mercury	0.119	0.0350	MG/KG	SW7471A
1-Methylnaphthalene	37.9	3.1	UG/KG	SW8270D-SIM
2-Methylnaphthalene	49.6	3.1	UG/KG	SW8270D-SIM
Acenaphthene	5.50	3.1	UG/KG	SW8270D-SIM
Acenaphthylene	9.50	3.1	UG/KG	SW8270D-SIM
Anthracene	13.9	3.1	UG/KG	SW8270D-SIM
Benzo(a)anthracene	100	3.1	UG/KG	SW8270D-SIM

EXECUTIVE SUMMARY - Detection Highlights

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Benzo(a)pyrene	84.0	3.1	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	167	3.1	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	67.3	3.1	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	49.4	3.1	UG/KG	SW8270D-SIM
Chrysene	113	3.1	UG/KG	SW8270D-SIM
Dibenz(a,h)anthracene	16.3	3.1	UG/KG	SW8270D-SIM
Fluoranthene	132	3.1	UG/KG	SW8270D-SIM
Fluorene	6.30	3.1	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	50.8	3.1	UG/KG	SW8270D-SIM
Naphthalene	45.1	3.1	UG/KG	SW8270D-SIM
Phenanthrene	77.4	3.1	UG/KG	SW8270D-SIM
Pyrene	107	3.1	UG/KG	SW8270D-SIM

SAMPLE ID: CV0043A-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	53.7	3.4	UG/KG	SW8270D-SIM
2-Methylnaphthalene	88.9	3.4	UG/KG	SW8270D-SIM
Acenaphthene	5.90	3.4	UG/KG	SW8270D-SIM
Acenaphthylene	15.5	3.4	UG/KG	SW8270D-SIM
Anthracene	20.1	3.4	UG/KG	SW8270D-SIM
Benzo(a)anthracene	131	3.4	UG/KG	SW8270D-SIM
Benzo(a)pyrene	121	3.4	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	232	3.4	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	95.3	3.4	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	78.6	3.4	UG/KG	SW8270D-SIM
Chrysene	140	3.4	UG/KG	SW8270D-SIM
Dibenz(a,h)anthracene	26.8	3.4	UG/KG	SW8270D-SIM
Fluoranthene	170	3.4	UG/KG	SW8270D-SIM
Fluorene	6.40	3.4	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	74.8	3.4	UG/KG	SW8270D-SIM
Naphthalene	89.9	3.4	UG/KG	SW8270D-SIM
Phenanthrene	102	3.4	UG/KG	SW8270D-SIM
Pyrene	146	3.4	UG/KG	SW8270D-SIM

EXECUTIVE SUMMARY - Detection Highlights

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SAMPLE ID: CV0043B-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	19.7	3.5	UG/KG	SW8270D-SIM
2-Methylnaphthalene	26.9	3.5	UG/KG	SW8270D-SIM
Acenaphthylene	4.20	3.5	UG/KG	SW8270D-SIM
Anthracene	7.60	3.5	UG/KG	SW8270D-SIM
Benzo(a)anthracene	53.9	3.5	UG/KG	SW8270D-SIM
Benzo(a)pyrene	53.4	3.5	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	105	3.5	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	42.3	3.5	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	30.3	3.5	UG/KG	SW8270D-SIM
Chrysene	61.4	3.5	UG/KG	SW8270D-SIM
Dibenz(a,h)anthracene	7.40	3.5	UG/KG	SW8270D-SIM
Fluoranthene	90.5	3.5	UG/KG	SW8270D-SIM
Fluorene	3.90	3.5	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	30.0	3.5	UG/KG	SW8270D-SIM
Naphthalene	30.0	3.5	UG/KG	SW8270D-SIM
Phenanthrene	51.0	3.5	UG/KG	SW8270D-SIM
Pyrene	66.9	3.5	UG/KG	SW8270D-SIM

SAMPLE ID: CV0043C-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Arsenic	12.9	1.12	MG/KG	SW6010B
Barium	87.0	11.2	MG/KG	SW6010B
Cadmium	0.822	0.558	MG/KG	SW6010B
Chromium	30.3	1.12	MG/KG	SW6010B
Lead	117	0.893	MG/KG	SW6010B
Mercury	0.101	0.0383	MG/KG	SW7471A
1-Methylnaphthalene	15.9	3.4	UG/KG	SW8270D-SIM
2-Methylnaphthalene	24.6	3.4	UG/KG	SW8270D-SIM
Acenaphthylene	4.50	3.4	UG/KG	SW8270D-SIM
Anthracene	8.40	3.4	UG/KG	SW8270D-SIM
Benzo(a)anthracene	61.8	3.4	UG/KG	SW8270D-SIM
Benzo(a)pyrene	62.2	3.4	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	68.9	3.4	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	51.5	3.4	UG/KG	SW8270D-SIM

EXECUTIVE SUMMARY - Detection Highlights

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Benzo(k)fluoranthene	58.9	3.4	UG/KG	SW8270D-SIM
Chrysene	63.4	3.4	UG/KG	SW8270D-SIM
Dibenzo(a,h)anthracene	22.1	3.4	UG/KG	SW8270D-SIM
Fluoranthene	77.1	3.4	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	44.5	3.4	UG/KG	SW8270D-SIM
Naphthalene	23.3	3.4	UG/KG	SW8270D-SIM
Phenanthrene	45.5	3.4	UG/KG	SW8270D-SIM
Pyrene	65.1	3.4	UG/KG	SW8270D-SIM

SAMPLE ID: CV0192A-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	292	3.2	UG/KG	SW8270D-SIM
2-Methylnaphthalene	349	3.2	UG/KG	SW8270D-SIM
Acenaphthene	14.4	3.2	UG/KG	SW8270D-SIM
Acenaphthylene	13.8	3.2	UG/KG	SW8270D-SIM
Anthracene	14.9	3.2	UG/KG	SW8270D-SIM
Benzo(a)anthracene	92.4	3.2	UG/KG	SW8270D-SIM
Benzo(a)pyrene	66.0	3.2	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	122	3.2	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	45.0	3.2	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	40.0	3.2	UG/KG	SW8270D-SIM
Chrysene	111	3.2	UG/KG	SW8270D-SIM
Dibenzo(a,h)anthracene	11.2	3.2	UG/KG	SW8270D-SIM
Fluoranthene	108	3.2	UG/KG	SW8270D-SIM
Fluorene	15.4	3.2	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	30.2	3.2	UG/KG	SW8270D-SIM
Naphthalene	194	3.2	UG/KG	SW8270D-SIM
Phenanthrene	215	3.2	UG/KG	SW8270D-SIM
Pyrene	99.8	3.2	UG/KG	SW8270D-SIM

SAMPLE ID: CV0192B-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	84.8	3.2	UG/KG	SW8270D-SIM
2-Methylnaphthalene	107	3.2	UG/KG	SW8270D-SIM
Acenaphthene	25.4	3.2	UG/KG	SW8270D-SIM

EXECUTIVE SUMMARY - Detection Highlights

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Acenaphthylene	41.7	3.2	UG/KG	SW8270D-SIM
Anthracene	58.7	3.2	UG/KG	SW8270D-SIM
Benzo(a)anthracene	216	3.2	UG/KG	SW8270D-SIM
Benzo(a)pyrene	169	3.2	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	364	3.2	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	125	3.2	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	120	3.2	UG/KG	SW8270D-SIM
Chrysene	213	3.2	UG/KG	SW8270D-SIM
Dibenzo(a,h)anthracene	39.1	3.2	UG/KG	SW8270D-SIM
Fluoranthene	296	3.2	UG/KG	SW8270D-SIM
Fluorene	22.8	3.2	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	95.2	3.2	UG/KG	SW8270D-SIM
Naphthalene	80.6	3.2	UG/KG	SW8270D-SIM
Phenanthrene	238	3.2	UG/KG	SW8270D-SIM
Pyrene	231	3.2	UG/KG	SW8270D-SIM

SAMPLE ID: CV0362A-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	38.8	3.4	UG/KG	SW8270D-SIM
2-Methylnaphthalene	45.9	3.4	UG/KG	SW8270D-SIM
Acenaphthene	19.9	3.4	UG/KG	SW8270D-SIM
Acenaphthylene	28.7	3.4	UG/KG	SW8270D-SIM
Anthracene	51.7	3.4	UG/KG	SW8270D-SIM
Benzo(a)anthracene	354	3.4	UG/KG	SW8270D-SIM
Benzo(a)pyrene	228	3.4	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	386	3.4	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	109	3.4	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	154	3.4	UG/KG	SW8270D-SIM
Chrysene	293	3.4	UG/KG	SW8270D-SIM
Dibenzo(a,h)anthracene	35.0	3.4	UG/KG	SW8270D-SIM
Fluoranthene	400	3.4	UG/KG	SW8270D-SIM
Fluorene	16.9	3.4	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	86.8	3.4	UG/KG	SW8270D-SIM
Naphthalene	43.7	3.4	UG/KG	SW8270D-SIM
Phenanthrene	223	3.4	UG/KG	SW8270D-SIM
Pyrene	326	3.4	UG/KG	SW8270D-SIM

EXECUTIVE SUMMARY - Detection Highlights

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SAMPLE ID: CV0699A-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	33.4	3.2	UG/KG	SW8270D-SIM
2-Methylnaphthalene	47.2	3.2	UG/KG	SW8270D-SIM
Acenaphthene	7.30	3.2	UG/KG	SW8270D-SIM
Acenaphthylene	8.70	3.2	UG/KG	SW8270D-SIM
Anthracene	19.4	3.2	UG/KG	SW8270D-SIM
Benzo(a)anthracene	132	3.2	UG/KG	SW8270D-SIM
Benzo(a)pyrene	117	3.2	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	204	3.2	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	60.4	3.2	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	52.1	3.2	UG/KG	SW8270D-SIM
Chrysene	129	3.2	UG/KG	SW8270D-SIM
Dibenzo(a,h)anthracene	16.4	3.2	UG/KG	SW8270D-SIM
Fluoranthene	143	3.2	UG/KG	SW8270D-SIM
Fluorene	7.90	3.2	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	51.0	3.2	UG/KG	SW8270D-SIM
Naphthalene	44.7	3.2	UG/KG	SW8270D-SIM
Phenanthrene	106	3.2	UG/KG	SW8270D-SIM
Pyrene	119	3.2	UG/KG	SW8270D-SIM

SAMPLE ID: CV0699B-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Arsenic	12.4	1.03	MG/KG	SW6010B
Barium	89.7	10.3	MG/KG	SW6010B
Chromium	55.6	1.03	MG/KG	SW6010B
Lead	63.8	0.822	MG/KG	SW6010B
Mercury	0.120	0.0351	MG/KG	SW7471A
1-Methylnaphthalene	24.9	3.3	UG/KG	SW8270D-SIM
2-Methylnaphthalene	32.1	3.3	UG/KG	SW8270D-SIM
Acenaphthene	24.7	3.3	UG/KG	SW8270D-SIM
Acenaphthylene	8.20	3.3	UG/KG	SW8270D-SIM
Anthracene	98.2	3.3	UG/KG	SW8270D-SIM
Benzo(a)pyrene	466	3.3	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	186	3.3	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	278	3.3	UG/KG	SW8270D-SIM

EXECUTIVE SUMMARY - Detection Highlights

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Dibenzo(a,h)anthracene	73.6	3.3	UG/KG	SW8270D-SIM
Fluorene	17.2	3.3	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	171	3.3	UG/KG	SW8270D-SIM
Naphthalene	36.3	3.3	UG/KG	SW8270D-SIM
Phenanthrene	328	3.3	UG/KG	SW8270D-SIM

SAMPLE ID: CV0699B-CSDL1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Benzo(a)anthracene	667	66	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	765	66	UG/KG	SW8270D-SIM
Chrysene	623	66	UG/KG	SW8270D-SIM
Fluoranthene	1270	66	UG/KG	SW8270D-SIM
Pyrene	1120	66	UG/KG	SW8270D-SIM

SAMPLE ID: CV0699C-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	33.4	3.2	UG/KG	SW8270D-SIM
2-Methylnaphthalene	45.6	3.2	UG/KG	SW8270D-SIM
Acenaphthene	12.0	3.2	UG/KG	SW8270D-SIM
Acenaphthylene	6.20	3.2	UG/KG	SW8270D-SIM
Anthracene	25.2	3.2	UG/KG	SW8270D-SIM
Benzo(a)anthracene	109	3.2	UG/KG	SW8270D-SIM
Benzo(a)pyrene	92.7	3.2	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	168	3.2	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	50.6	3.2	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	58.8	3.2	UG/KG	SW8270D-SIM
Chrysene	106	3.2	UG/KG	SW8270D-SIM
Dibenzo(a,h)anthracene	12.0	3.2	UG/KG	SW8270D-SIM
Fluoranthene	148	3.2	UG/KG	SW8270D-SIM
Fluorene	12.6	3.2	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	37.8	3.2	UG/KG	SW8270D-SIM
Naphthalene	48.6	3.2	UG/KG	SW8270D-SIM
Phenanthrene	113	3.2	UG/KG	SW8270D-SIM
Pyrene	112	3.2	UG/KG	SW8270D-SIM

EXECUTIVE SUMMARY - Detection Highlights

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SAMPLE ID: FM0126A-CS-SP

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	15.3	3.2	UG/KG	SW8270D-SIM
2-Methylnaphthalene	22.2	3.2	UG/KG	SW8270D-SIM
Acenaphthene	7.00	3.2	UG/KG	SW8270D-SIM
Acenaphthylene	4.10	3.2	UG/KG	SW8270D-SIM
Anthracene	13.7	3.2	UG/KG	SW8270D-SIM
Benzo(a)anthracene	62.9	3.2	UG/KG	SW8270D-SIM
Benzo(a)pyrene	52.4	3.2	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	93.7	3.2	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	28.0	3.2	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	30.6	3.2	UG/KG	SW8270D-SIM
Chrysene	65.5	3.2	UG/KG	SW8270D-SIM
Dibenzo(a,h)anthracene	4.00	3.2	UG/KG	SW8270D-SIM
Fluoranthene	109	3.2	UG/KG	SW8270D-SIM
Fluorene	6.40	3.2	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	24.6	3.2	UG/KG	SW8270D-SIM
Naphthalene	31.7	3.2	UG/KG	SW8270D-SIM
Phenanthrene	76.0	3.2	UG/KG	SW8270D-SIM
Pyrene	84.8	3.2	UG/KG	SW8270D-SIM

SAMPLE ID: FM0126B-CS-SP

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	34.1	3.3	UG/KG	SW8270D-SIM
2-Methylnaphthalene	52.8	3.3	UG/KG	SW8270D-SIM
Acenaphthene	3.30	3.3	UG/KG	SW8270D-SIM
Acenaphthylene	3.70	3.3	UG/KG	SW8270D-SIM
Anthracene	8.20	3.3	UG/KG	SW8270D-SIM
Benzo(a)anthracene	50.1	3.3	UG/KG	SW8270D-SIM
Benzo(a)pyrene	41.6	3.3	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	83.6	3.3	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	23.8	3.3	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	28.0	3.3	UG/KG	SW8270D-SIM
Chrysene	61.2	3.3	UG/KG	SW8270D-SIM

EXECUTIVE SUMMARY - Detection Highlights

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Fluoranthene	76.6	3.3	UG/KG	SW8270D-SIM
Fluorene	3.70	3.3	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	20.2	3.3	UG/KG	SW8270D-SIM
Naphthalene	47.4	3.3	UG/KG	SW8270D-SIM
Phenanthrene	69.5	3.3	UG/KG	SW8270D-SIM
Pyrene	59.1	3.3	UG/KG	SW8270D-SIM

SAMPLE ID: FM0126C-GS-SP

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Arsenic	12.1	1.26	MG/KG	SW6010B
Barium	95.4	12.6	MG/KG	SW6010B
Cadmium	1.41	0.630	MG/KG	SW6010B
Chromium	29.3	1.26	MG/KG	SW6010B
Mercury	0.121	0.0360	MG/KG	SW7471A
Benzo(a)anthracene	523	300	UG/KG	SW8270D
Benzo(a)pyrene	472	300	UG/KG	SW8270D
Benzo(b)fluoranthene	598	300	UG/KG	SW8270D
Benzo(g,h,i)perylene	322	300	UG/KG	SW8270D
Benzo(k)fluoranthene	430	300	UG/KG	SW8270D
Chrysene	596	290	UG/KG	SW8270D
Fluoranthene	889	300	UG/KG	SW8270D
Phenanthrene	766	300	UG/KG	SW8270D
Pyrene	716	300	UG/KG	SW8270D
1-Methylnaphthalene	52.6	3.6	UG/KG	SW8270D-SIM
2-Methylnaphthalene	89.5	3.6	UG/KG	SW8270D-SIM
Acenaphthene	120	3.6	UG/KG	SW8270D-SIM
Acenaphthylene	11.3	3.6	UG/KG	SW8270D-SIM
Anthracene	214	3.6	UG/KG	SW8270D-SIM
Benzo(a)anthracene	584 E	3.6	UG/KG	SW8270D-SIM
Benzo(a)pyrene	510	3.6	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	487	3.6	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	304	3.6	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	543	3.6	UG/KG	SW8270D-SIM
Chrysene	579 E	3.6	UG/KG	SW8270D-SIM
Dibeno(a,h)anthracene	175	3.6	UG/KG	SW8270D-SIM
Fluoranthene	841 E	3.6	UG/KG	SW8270D-SIM
Fluorene	110	3.6	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	288	3.6	UG/KG	SW8270D-SIM
Naphthalene	158	3.6	UG/KG	SW8270D-SIM

EXECUTIVE SUMMARY - Detection Highlights

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Phenanthrene	735 E	3.6	UG/KG	SW8270D-SIM
Pyrene	636 E	3.6	UG/KG	SW8270D-SIM

SAMPLE ID: FM0126C-GS-SPDL1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Lead	712	2.01	MG/KG	SW6010B

SAMPLE ID: FM0210A-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	11.8	3.2	UG/KG	SW8270D-SIM
2-Methylnaphthalene	16.2	3.2	UG/KG	SW8270D-SIM
Anthracene	3.50	3.2	UG/KG	SW8270D-SIM
Benzo(a)anthracene	24.0	3.2	UG/KG	SW8270D-SIM
Benzo(a)pyrene	19.3	3.2	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	33.0	3.2	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	10.6	3.2	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	11.9	3.2	UG/KG	SW8270D-SIM
Chrysene	26.7	3.2	UG/KG	SW8270D-SIM
Fluoranthene	33.0	3.2	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	8.40	3.2	UG/KG	SW8270D-SIM
Naphthalene	21.6	3.2	UG/KG	SW8270D-SIM
Phenanthrene	24.3	3.2	UG/KG	SW8270D-SIM
Pyrene	26.6	3.2	UG/KG	SW8270D-SIM

SAMPLE ID: FM0210B-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	33.1	3.2	UG/KG	SW8270D-SIM
2-Methylnaphthalene	41.8	3.2	UG/KG	SW8270D-SIM
Acenaphthene	5.60	3.2	UG/KG	SW8270D-SIM
Acenaphthylene	4.90	3.2	UG/KG	SW8270D-SIM

EXECUTIVE SUMMARY - Detection Highlights

3507616

Anthracene	10.3	3.2	UG/KG	SW8270D-SIM
Benzo(a)anthracene	56.2	3.2	UG/KG	SW8270D-SIM
Benzo(a)pyrene	39.6	3.2	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	74.8	3.2	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	22.1	3.2	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	25.0	3.2	UG/KG	SW8270D-SIM
Chrysene	67.4	3.2	UG/KG	SW8270D-SIM
Fluoranthene	85.9	3.2	UG/KG	SW8270D-SIM
Fluorene	6.30	3.2	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	16.0	3.2	UG/KG	SW8270D-SIM
Naphthalene	42.6	3.2	UG/KG	SW8270D-SIM
Phenanthrene	85.8	3.2	UG/KG	SW8270D-SIM
Pyrene	76.0	3.2	UG/KG	SW8270D-SIM

SAMPLE ID: FM0210C-CS

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	43.7	3.1	UG/KG	SW8270D-SIM
2-Methylnaphthalene	49.8	3.1	UG/KG	SW8270D-SIM
Acenaphthene	31.8	3.1	UG/KG	SW8270D-SIM
Acenaphthylene	12.2	3.1	UG/KG	SW8270D-SIM
Anthracene	63.4	3.1	UG/KG	SW8270D-SIM
Benzo(a)anthracene	290	3.1	UG/KG	SW8270D-SIM
Benzo(a)pyrene	196	3.1	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	403	3.1	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	96.8	3.1	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	142	3.1	UG/KG	SW8270D-SIM
Chrysene	280	3.1	UG/KG	SW8270D-SIM
Dibenz(a,h)anthracene	27.9	3.1	UG/KG	SW8270D-SIM
Fluorene	23.9	3.1	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	77.2	3.1	UG/KG	SW8270D-SIM
Naphthalene	48.8	3.1	UG/KG	SW8270D-SIM
Phenanthrene	382	3.1	UG/KG	SW8270D-SIM
Pyrene	440	3.1	UG/KG	SW8270D-SIM

EXECUTIVE SUMMARY - Detection Highlights

3507616

SAMPLE ID: FM0210C-CSDL1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Fluoranthene	658	63	UG/KG	SW8270D-SIM

SAMPLE ID: FM0263A-CS-SP

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	37.1	3.3	UG/KG	SW8270D-SIM
2-Methylnaphthalene	44.7	3.3	UG/KG	SW8270D-SIM
Acenaphthene	87.5	3.3	UG/KG	SW8270D-SIM
Acenaphthylene	21.2	3.3	UG/KG	SW8270D-SIM
Anthracene	204	3.3	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	256	3.3	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	281	3.3	UG/KG	SW8270D-SIM
Dibenz(a,h)anthracene	93.2	3.3	UG/KG	SW8270D-SIM
Fluorene	79.6	3.3	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	221	3.3	UG/KG	SW8270D-SIM
Naphthalene	62.1	3.3	UG/KG	SW8270D-SIM

SAMPLE ID: FM0263A-CS-SPDL1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Benzo(a)anthracene	677	67	UG/KG	SW8270D-SIM
Benzo(a)pyrene	499	67	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	834	67	UG/KG	SW8270D-SIM
Chrysene	672	67	UG/KG	SW8270D-SIM
Fluoranthene	1300	67	UG/KG	SW8270D-SIM
Phenanthrene	818	67	UG/KG	SW8270D-SIM
Pyrene	928	67	UG/KG	SW8270D-SIM

EXECUTIVE SUMMARY - Detection Highlights

3507616

SAMPLE ID: FM0263B-CS-SP

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1-Methylnaphthalene	48.7	3.2	UG/KG	SW8270D-SIM
2-Methylnaphthalene	57.1	3.2	UG/KG	SW8270D-SIM
Acenaphthene	73.8	3.2	UG/KG	SW8270D-SIM
Acenaphthylene	14.2	3.2	UG/KG	SW8270D-SIM
Anthracene	123	3.2	UG/KG	SW8270D-SIM
Benzo(a)pyrene	408	3.2	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	208	3.2	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	267	3.2	UG/KG	SW8270D-SIM
Dibenz(a,h)anthracene	68.3	3.2	UG/KG	SW8270D-SIM
Fluorene	61.2	3.2	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	175	3.2	UG/KG	SW8270D-SIM
Naphthalene	53.4	3.2	UG/KG	SW8270D-SIM

SAMPLE ID: FM0263B-CS-SPDL1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Benzo(a)anthracene	487	64	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	624	64	UG/KG	SW8270D-SIM
Chrysene	551	64	UG/KG	SW8270D-SIM
Fluoranthene	1240	64	UG/KG	SW8270D-SIM
Phenanthrene	1060	64	UG/KG	SW8270D-SIM
Pyrene	1060	64	UG/KG	SW8270D-SIM

SAMPLE ID: FM0263C-CS-SP

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Arsenic	18.2	1.27	MG/KG	SW6010B
Barium	189	12.7	MG/KG	SW6010B
Chromium	31.6	1.27	MG/KG	SW6010B
Lead	166	1.02	MG/KG	SW6010B
Mercury	0.166	0.0373	MG/KG	SW7471A
1-Methylnaphthalene	57.0	3.3	UG/KG	SW8270D-SIM

EXECUTIVE SUMMARY - Detection Highlights

3507616

2-Methylnaphthalene	78.2	3.3	UG/KG	SW8270D-SIM
Acenaphthene	176	3.3	UG/KG	SW8270D-SIM
Acenaphthylene	23.2	3.3	UG/KG	SW8270D-SIM
Anthracene	281	3.3	UG/KG	SW8270D-SIM
Benzo(g,h,i)perylene	362	3.3	UG/KG	SW8270D-SIM
Benzo(k)fluoranthene	455	3.3	UG/KG	SW8270D-SIM
Dibenzo(a,h)anthracene	115	3.3	UG/KG	SW8270D-SIM
Fluorene	156	3.3	UG/KG	SW8270D-SIM
Indeno(1,2,3-cd)pyrene	276	3.3	UG/KG	SW8270D-SIM
Naphthalene	148	3.3	UG/KG	SW8270D-SIM

SAMPLE ID: FM0263C-CS-SPDL1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
Benzo(a)anthracene	951	66	UG/KG	SW8270D-SIM
Benzo(a)pyrene	722	66	UG/KG	SW8270D-SIM
Benzo(b)fluoranthene	1280	66	UG/KG	SW8270D-SIM
Chrysene	943	66	UG/KG	SW8270D-SIM
Fluoranthene	2120	66	UG/KG	SW8270D-SIM
Phenanthrene	1990	66	UG/KG	SW8270D-SIM
Pyrene	1500	66	UG/KG	SW8270D-SIM

Organics

Organic Data Qualifiers

- U** Indicates the analyte was analyzed for but not detected. The number adjacent to the "U" qualifier indicates the reporting limit for that analyte. The reporting limit can vary from sample to sample depending on dilution factors or the percent moisture adjustment when indicated.
- J** Indicates estimated value. It is used when the data indicates the presence of an analyte above the method detection limit (MDL) yet lower than the reporting limit.
- B** Indicates the analyte was found in the associated blank as well as in the sample. The notation indicates possible contamination of the sample.
- E** Indicates the value reported is above the highest calibration standard for that analyte. The sample should be analyzed at an appropriate dilution. "E" qualified values are estimations and the diluted result may be reported on another Form 1.
- D** Indicates the analyte has been identified in a dilution reanalysis. "D" qualifiers are used for samples that have been analyzed at a lesser dilution than required for accurate quantitation.
- C** The "C" qualifier indicates the presence of this analyte has been confirmed by GC/MS analysis.
- P** This qualifier is used for pesticide / Aroclor target analytes where there is greater than 25% difference for the detected concentration between the two GC columns.
- N** This qualifier indicates presumptive evidence of an analyte. This qualifier is only used for tentatively identified compounds (TIC), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the "N" qualifier is not used.
- A** This qualifier indicates that a TIC is a suspected aldol-condensation product.
- X** Data flagged as rejected by analyst utilizing analytical judgement.

Organic Sample ID Qualifiers

The qualifiers that may be appended to the lab sample ID and/or the client sample ID for organic analysis are defined below:

- DL** Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds that exceeded the calibration range. The sample was diluted and reanalyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted reanalysis may be reported.
- R** Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.
- RE** Re-extracted. The extract was reanalyzed with re-extraction. May be followed by a digit to indicate multiple re-extraction of the same sample at the same dilution.
- MS** Matrix spike (may be followed by a digit to indicate multiple matrix within a sample set).
- SD** Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spike duplicate within a sample set).

8270 SIM Semi-Volatile Organics

CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

- A. Sample Preparation:
All holding times were met.
- B. Sample Analysis:
All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8270D-SIM

IV. PREPARATION

Soil samples were prepared by SW846 EPA 3545 for 8270 semi-volatile analysis.

V. ANALYSIS

- A. Calibration:
All acceptance criteria were met with the exception of:

Note that the Continuing Calibration Verification sample CCV1136644 analyzed on 11/26/12 exceeded the 40% Maximum Difference criteria for Dibenzo(a,h) anthracene at -50.8%. However this CCV was only associated with the two samples which required a dilution for compounds other than Dibenzo(a,h) anthracene. No further action was taken.

- B. Blanks:
All acceptance criteria were met.

- C. Surrogates:
All acceptance criteria were met with the exception of:

Sample CV0192B-CS was recovered below criteria for the following surrogate: Benzo(e)pyrene-d12 at 46.7 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

Sample CV0699C-CS was recovered below criteria for the following surrogate: Benzo(e)pyrene-d12 at 27.4 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

Sample FM0210A-CS was recovered below criteria for the following surrogate: Benzo(e)pyrene-d12 at 16.9 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

Sample FM0210B-CS was recovered below criteria for the following surrogate: Benzo(e)pyrene-d12 at 41.9 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Sample FM0263C-CS-SP was recovered below criteria for the following surrogate: Benzo(e)pyrene-d12 at 37.3 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

Sample CV0043A-CSMSD was recovered below criteria for the following surrogate(s): Benzo(e)pyrene-d12 at 0 % with criteria of (50-140).

Samples coded accordingly.

The following samples had surrogates that were diluted out: CV0699B-CSDL1, FM0210C-CSDL1, FM0263A-CS-SPDL1, FM0263B-CS-SPDL1, FM0263C-CS-SPDL1.

D. Spikes:

1. Laboratory Control Spikes (LCS)
All acceptance criteria were met.
2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)
A client requested MS/SD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met with the exception of:

MS - CV0043A-CSMS was analyzed with the soil samples extracted on 04/26/00. The following analyte(s) were recovered below criteria: 2-Methylnaphthalene at 51.2 % with criteria of (54-145), Naphthalene at 35.5 % with criteria of (59-111) and the following analyte(s) were recovered above criteria: Acenaphthylene at 615 % with criteria of (54-115), Anthracene at 988 % with criteria of (40-138), Benzo(a)anthracene at 5113 % with criteria of (53-119), Benzo(a)pyrene at 2414 % with criteria of (20-120), Benzo(b)fluoranthene at 2047 % with criteria of (50-171), Benzo(g,h,i)perylene at 1241 % with criteria of (50-150), Benzo(k)fluoranthene at 2474 % with criteria of (32-158), Chrysene at 3219 % with criteria of (34-140), Dibenzo(a,h)anthracene at 755 % with criteria of (41-114), Fluoranthene at 7383 % with criteria of (55-132), Fluorene at 541 % with criteria of (59-118), Indeno(1,2,3-cd)pyrene at 1415 % with criteria of (19-122), Phenanthrene at 5383 % with criteria of (54-112), Pyrene at 5094 % with criteria of (55-123).

SD - CV0043A-CSMSD was analyzed with the soil samples extracted on 04/26/00. The following analyte(s) were recovered below criteria: 1-Methylnaphthalene at 48.4 % with criteria of (71-132), 2-Methylnaphthalene at 13.3 % with criteria of (54-145), Benzo(b)fluoranthene at 0 % with criteria of (50-171), Fluoranthene at 23.4 % with criteria of (55-132), Naphthalene at 0 % with criteria of (59-111), Phenanthrene at 15.6 % with criteria of (54-112), Pyrene at 27.3 % with criteria of (55-123) and the following analyte(s) were recovered above criteria: Benzo(a)anthracene at 164 % with criteria of (53-119), Benzo(a)pyrene at 141 % with criteria of (20-120), Benzo(k)fluoranthene at 369 % with criteria of (32-158), Dibenzo(a,h)anthracene at 180 % with criteria of (41-114), Indeno(1,2,3-cd)pyrene at 169 % with criteria of (19-122). The following analyte(s) exceeded RPD criteria: Acenaphthylene at 124.1 % with criteria of (30), Anthracene at 148.1 % with criteria of (30), Benzo(a)anthracene at 157.1 % with criteria of (30), Benzo(a)pyrene at 129.9 % with criteria of (30), Benzo(b)fluoranthene at 131.2 % with criteria of (30), Benzo(g,h,i)perylene at 105.4 % with criteria of (30), Benzo(k)fluoranthene at 121.8 % with criteria of (30), Chrysene at 144.3 % with criteria of (30), Dibenzo(a,h)anthracene at 100.5 % with criteria of (30), Fluoranthene at 168.5 % with criteria of (30), Fluorene at 134.1 % with criteria of (30),

CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Indeno(1,2,3-cd)pyrene at 115 % with criteria of (30), Phenanthrene at 173.3 % with criteria of (30), Pyrene at 161.8 % with criteria of (30).

Samples coded accordingly.

E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

Sample CV0699B-CS required a 20X dilution due to high concentration of the following analytes: Benzo(a)anthracene, Benzo(b)fluoranthene, Chrysene, Fluoranthene, Pyrene. Both full and diluted runs are reported.

Sample FM0210C-CS required a 20X dilution due to high concentration of the following analyte: Fluoranthene. Both full and diluted runs are reported.

Sample FM0263A-CS-SP required a 20X dilution due to high concentration of the following analytes: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Chrysene, Fluoranthene, Phenanthrene, Pyrene. Both full and diluted runs are reported.

Sample FM0263B-CS-SP required a 20X dilution due to high concentration of the following analytes: Benzo(a)anthracene, Benzo(b)fluoranthene, Chrysene, Fluoranthene, Phenanthrene, Pyrene. Both full and diluted runs are reported.

Sample FM0263C-CS-SP required a 20X dilution due to high concentration of the following analytes: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Chrysene, Fluoranthene, Phenanthrene, Pyrene. Both full and diluted runs are reported.

Note that sample FM0126C-CS-SP also had analytes present in the 8270SIM analysis that were above the high calibration of the 8270SIM method. However, the sample was also analyzed using the SW8270 method. The SW8270 method has a higher calibration range than the 8270SIM method, and the analytes that were high in the 8270SIM method were within the calibration range for the SW8270 method. Therefore no dilution was performed on the sample.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.


Signature:
Name: Brian C. Spanh Title: Lab Director

SIGNED:

DATE: 12/17/2012

CASE NARRATIVE

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

MANUAL INTEGRATION SUMMARY

The following analytes were manually integrated by the chemist.

Sample: CV0041A-CS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: CV0041A-CS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: CV0041B-CS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: CV0041B-CS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: CV0043A-CS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: CV0043A-CS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: CV0043B-CS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: CV0043B-CS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: CV0043C-CS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: CV0043C-CS Analyte: Benzo(e)pyrene-d12

Reason: Target peak was not properly identified, more than one peak in retention time window

Sample: CV0043C-CS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: CV0192A-CS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: CV0192A-CS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: CV0192B-CS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: CV0192B-CS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: CV0362A-CS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: CV0362A-CS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: CV0699A-CS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: CV0699A-CS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: CV0699B-CS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: CV0699B-CS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: CV0699B-CSDL1 Analyte: Benzo(b)fluoranthene

CASE NARRATIVE

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Reason: Split Peak
Sample: CV0699B-CSDL1 Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: CV0699C-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: CV0699C-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0126A-CS-SP Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0126A-CS-SP Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0126B-CS-SP Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0126C-GS-SP Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0126C-GS-SP Analyte: Benzo(e)pyrene-d12
Reason: Target peak was not properly identified, more than one peak in retention time window
Sample: FM0126C-GS-SP Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0210A-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0210A-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0210B-CS Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0210B-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0210C-CS Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0210C-CSDL1 Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0210C-CSDL1 Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0263A-CS-SP Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0263A-CS-SP Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0263A-CS-SPDL1 Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0263A-CS-SPDL1 Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0263B-CS-SP Analyte: Benzo(b)fluoranthene
Reason: Split Peak
Sample: FM0263B-CS-SP Analyte: Benzo(k)fluoranthene
Reason: Split Peak
Sample: FM0263B-CS-SPDL1 Analyte: Benzo(b)fluoranthene
Reason: Split Peak

CASE NARRATIVE

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Sample: FM0263B-CS-SPDL1 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: FM0263C-CS-SP Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: FM0263C-CS-SP Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: FM0263C-CS-SPDL1 Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: FM0263C-CS-SPDL1 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: SSC1135488 Analyte: Acenaphthylene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Anthracene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Benzo(a)anthracene

Reason: Split Peak

Calibration Sample: SSC1135488 Analyte: Benzo(a)pyrene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Benzo(e)pyrene-d12(SURR)

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Benzo(g,h,i)perylene

Reason: Target peak was not integrated automatically by software generator

Calibration Sample: SSC1135488 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: SSC1135488 Analyte: Chrysene

Reason: Split Peak

Calibration Sample: SSC1135488 Analyte: Dibenzo(a,h)anthracene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Fluoranthene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Indeno(1,2,3-cd)pyrene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135488 Analyte: Naphthalene

Reason: Target peak was not integrated automatically by software generator

Calibration Sample: SSC1135488 Analyte: Phenanthrene

Reason: Target peak was not integrated automatically by software generator

Calibration Sample: SSC1135488 Analyte: Pyrene

Reason: Target peak was not integrated automatically by software generator

Calibration Sample: STD1135465 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135466 Analyte: Benzo(k)fluoranthene

CASE NARRATIVE

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Reason: Split Peak

Calibration Sample: STD1135469 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135472 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135474 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

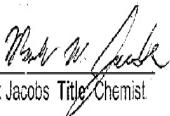
Calibration Sample: STD1135478 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135478 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

These manual integrations have been reviewed and meet all criteria in accordance with Spectrum Analytical Inc.'s SOP regarding manual integration.

Signature: 
Name: Mark Jacobs Title: Chemist

CHEMIST:

DATE: 11/30/2012

Signature: 
Name: Brian C. Spann Title: Lab Director

SECTION LEADER:

DATE: 11/30/2012

SEMI-VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc.

Contract: 35th Avenue Removal Site 2005148

Lab Code : PEL

Case No.

SAS No:

SDG No.: 3507616

Method: 8270 SIM

EPA Sample No

Lab Sample ID

CV0041A-CS	350761601
CV0041B-CS	350761602
CV0043A-CS	350761603
CV0043B-CS	350761604
CV0043C-CS	350761605
CV0192A-CS	350761606
CV0192B-CS	350761607
FM0263A-CS-SP	350761608
FM0263A-CS-SPDL1	350761608DL1
FM0263B-CS-SP	350761609
FM0263B-CS-SPDL1	350761609DL1
FM0263C-CS-SP	350761610
FM0263C-CS-SPDL1	350761610DL1
FM0126A-CS-SP	350761611
FM0126B-CS-SP	350761612
FM0126C-GS-SP	350761613
CV0699A-CS	350761614
CV0699B-CS	350761615
CV0699B-CSDL1	350761615DL1
CV0699C-CS	350761616
FM0210A-CS	350761617
FM0210B-CS	350761618
FM0210C-CS	350761619
FM0210C-CSDL1	350761619DL1
CV0362A-CS	350761620

8270 SIM Sample Data

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0041A-CS
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616
 Matrix: SOIL Lab Sample ID: 350761601 Lab File ID: 616-01.D
 Sample wt/vol: 25.14 Units: G Date Received: 11/16/12
 Concentrated Extract Volume: 1 Date Extracted: 11/20/12
 Level:(low/med) LOW Date Analyzed: 11/21/12 Time: 1944
 PercentSolids: 79.1 decanted : Dilution Factor: 1
 Extraction: OTHER Station ID: Method: 8270 SIM
 GPC Cleanup : (Y/N) N pH: _____
 Column(1): HPMS-5 ID: 0.25 (mm)
 CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	48.1		1.4	3.3
91-57-6	2-Methylnaphthalene	53.2		1.3	3.3
90-12-0	1-Methylnaphthalene	44		1.3	3.3
208-96-8	Acenaphthylene	10.4		1.3	3.3
83-32-9	Acenaphthene	7.5		1.3	3.3
86-73-7	Fluorene	7.2		1.3	3.3
85-01-8	Phenanthrene	126		1.3	3.3
120-12-7	Anthracene	21.4		1.3	3.3
206-44-0	Fluoranthene	234		1.3	3.3
129-00-0	Pyrene	186		1.3	3.3
56-55-3	Benzo(a)anthracene	155		1.4	3.3
218-01-9	Chrysene	173		1.3	3.3
205-99-2	Benzo(b)fluoranthene	245		1.9	3.3
207-08-9	Benzo(k)fluoranthene	71.5		2.1	3.3
50-32-8	Benzo(a)pyrene	132		1.8	3.3
193-39-5	Indeno(1,2,3-cd)pyrene	71		3	3.3
53-70-3	Dibenzo(a,h)anthracene	25.1		2.6	3.3
191-24-2	Benzo(g,h,i)perylene	94.6		3.1	3.3

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0041B-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761602 Lab File ID: 616-02.D

Sample wt/vol: 25.31 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/21/12 Time: 2008

Percent Solids: 83.7 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	45.1		1.3	3.1
91-57-6	2-Methylnaphthalene	49.6		1.2	3.1
90-12-0	1-Methylnaphthalene	37.9		1.2	3.1
208-96-8	Acenaphthylene	9.5		1.2	3.1
83-32-9	Acenaphthene	5.5		1.2	3.1
86-73-7	Fluorene	6.3		1.2	3.1
85-01-8	Phenanthrene	77.4		1.2	3.1
120-12-7	Anthracene	13.9		1.2	3.1
206-44-0	Fluoranthene	132		1.2	3.1
129-00-0	Pyrene	107		1.2	3.1
56-55-3	Benzo(a)anthracene	100		1.3	3.1
218-01-9	Chrysene	113		1.2	3.1
205-99-2	Benzo(b)fluoranthene	167		1.8	3.1
207-08-9	Benzo(k)fluoranthene	49.4		2	3.1
50-32-8	Benzo(a)pyrene	84		1.7	3.1
193-39-5	Indeno(1,2,3-cd)pyrene	50.8		2.8	3.1
53-70-3	Dibenzo(a,h)anthracene	16.3		2.4	3.1
191-24-2	Benzo(g,h,i)perylene	67.3		2.9	3.1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0043A-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761603 Lab File ID: 616-03.D

Sample wt/vol: 25.06 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/21/12 Time: 2031

Percent Solids: 78 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	89.9		1.4	3.4
91-57-6	2-Methylnaphthalene	88.9		1.4	3.4
90-12-0	1-Methylnaphthalene	53.7		1.4	3.4
208-96-8	Acenaphthylene	15.5		1.4	3.4
83-32-9	Acenaphthene	5.9		1.4	3.4
86-73-7	Fluorene	6.4		1.4	3.4
85-01-8	Phenanthrene	102		1.4	3.4
120-12-7	Anthracene	20.1		1.4	3.4
206-44-0	Fluoranthene	170		1.4	3.4
129-00-0	Pyrene	146		1.4	3.4
56-55-3	Benzo(a)anthracene	131		1.4	3.4
218-01-9	Chrysene	140		1.3	3.4
205-99-2	Benzo(b)fluoranthene	232		1.9	3.4
207-08-9	Benzo(k)fluoranthene	78.6		2.1	3.4
50-32-8	Benzo(a)pyrene	121		1.8	3.4
193-39-5	Indeno(1,2,3-cd)pyrene	74.8		3.1	3.4
53-70-3	Dibenzo(a,h)anthracene	26.8		2.7	3.4
191-24-2	Benzo(g,h,i)perylene	95.3		3.2	3.4

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0043B-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761604 Lab File ID: 616-04.D

Sample wt/vol: 25.08 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/21/12 Time: 2055

Percent Solids: 75.6 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	30		1.5	3.5
91-57-6	2-Methylnaphthalene	26.9		1.4	3.5
90-12-0	1-Methylnaphthalene	19.7		1.4	3.5
208-96-8	Acenaphthylene	4.2		1.4	3.5
83-32-9	Acenaphthene	3.5	U	1.4	3.5
86-73-7	Fluorene	3.9		1.4	3.5
85-01-8	Phenanthrene	51		1.4	3.5
120-12-7	Anthracene	7.6		1.4	3.5
206-44-0	Fluoranthene	90.5		1.4	3.5
129-00-0	Pyrene	66.9		1.4	3.5
56-55-3	Benzo(a)anthracene	53.9		1.5	3.5
218-01-9	Chrysene	61.4		1.4	3.5
205-99-2	Benzo(b)fluoranthene	105		2	3.5
207-08-9	Benzo(k)fluoranthene	30.3		2.2	3.5
50-32-8	Benzo(a)pyrene	53.4		1.9	3.5
193-39-5	Indeno(1,2,3-cd)pyrene	30		3.2	3.5
53-70-3	Dibenzo(a,h)anthracene	7.4		2.7	3.5
191-24-2	Benzo(g,h,i)perylene	42.3		3.3	3.5

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0043C-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761605 Lab File ID: 616-05.d

Sample wt/vol: 25.33 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/26/12 Time: 1928

Percent Solids: 76.6 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	23.3		1.4	3.4
91-57-6	2-Methylnaphthalene	24.6		1.4	3.4
90-12-0	1-Methylnaphthalene	15.9		1.4	3.4
208-96-8	Acenaphthylene	4.5		1.4	3.4
83-32-9	Acenaphthene	3.4	U	1.4	3.4
86-73-7	Fluorene	3.4	U	1.4	3.4
85-01-8	Phenanthrene	45.5		1.4	3.4
120-12-7	Anthracene	8.4		1.4	3.4
206-44-0	Fluoranthene	77.1		1.4	3.4
129-00-0	Pyrene	65.1		1.4	3.4
56-55-3	Benzo(a)anthracene	61.8		1.4	3.4
218-01-9	Chrysene	63.4		1.3	3.4
205-99-2	Benzo(b)fluoranthene	68.9		2	3.4
207-08-9	Benzo(k)fluoranthene	58.9		2.2	3.4
50-32-8	Benzo(a)pyrene	62.2		1.8	3.4
193-39-5	Indeno(1,2,3-cd)pyrene	44.5		3.1	3.4
53-70-3	Dibenzo(a,h)anthracene	22.1		2.7	3.4
191-24-2	Benzo(g,h,i)perylene	51.5		3.2	3.4

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	EPA Sample No. CV0192A-CS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761606	Lab File ID: 616-06.D
Sample wt/vol:	25.03	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/21/12
Percent Solids:	82	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	194		1.4	3.2
91-57-6	2-Methylnaphthalene	349		1.3	3.2
90-12-0	1-Methylnaphthalene	292		1.3	3.2
208-96-8	Acenaphthylene	13.8		1.3	3.2
83-32-9	Acenaphthene	14.4		1.3	3.2
86-73-7	Fluorene	15.4		1.3	3.2
85-01-8	Phenanthrene	215		1.3	3.2
120-12-7	Anthracene	14.9		1.3	3.2
206-44-0	Fluoranthene	108		1.3	3.2
129-00-0	Pyrene	99.8		1.3	3.2
56-55-3	Benzo(a)anthracene	92.4		1.4	3.2
218-01-9	Chrysene	111		1.3	3.2
205-99-2	Benzo(b)fluoranthene	122		1.8	3.2
207-08-9	Benzo(k)fluoranthene	40		2	3.2
50-32-8	Benzo(a)pyrene	66		1.8	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	30.2		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	11.2		2.5	3.2
191-24-2	Benzo(g,h,i)perylene	45		3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0192B-CS
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616
 Matrix: SOIL Lab Sample ID: 350761607 Lab File ID: 616-07.D
 Sample wt/vol: 25.27 Units: G Date Received: 11/16/12
 Concentrated Extract Volume: 1 Date Extracted: 11/20/12
 Level:(low/med) LOW Date Analyzed: 11/21/12 Time: 2142
 PercentSolids: 82.4 decanted : Dilution Factor: 1
 Extraction: OTHER Station ID: Method: 8270 SIM
 GPC Cleanup : (Y/N) N pH: _____
 Column(1): HPMS-5 ID: 0.25 (mm)
 CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	80.6		1.3	3.2
91-57-6	2-Methylnaphthalene	107		1.3	3.2
90-12-0	1-Methylnaphthalene	84.8		1.3	3.2
208-96-8	Acenaphthylene	41.7		1.3	3.2
83-32-9	Acenaphthene	25.4		1.3	3.2
86-73-7	Fluorene	22.8		1.3	3.2
85-01-8	Phenanthrene	238		1.3	3.2
120-12-7	Anthracene	58.7		1.3	3.2
206-44-0	Fluoranthene	296		1.3	3.2
129-00-0	Pyrene	231		1.3	3.2
56-55-3	Benzo(a)anthracene	216		1.3	3.2
218-01-9	Chrysene	213		1.2	3.2
205-99-2	Benzo(b)fluoranthene	364		1.8	3.2
207-08-9	Benzo(k)fluoranthene	120		2	3.2
50-32-8	Benzo(a)pyrene	169		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	95.2		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	39.1		2.5	3.2
191-24-2	Benzo(g,h,i)perylene	125		3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 FM0263A-CS-SP

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761608 Lab File ID: 616-08.D

Sample wt/vol: 25.21 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/21/12 Time: 2205

Percent Solids: 79.2 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	62.1		1.4	3.3
91-57-6	2-Methylnaphthalene	44.7		1.3	3.3
90-12-0	1-Methylnaphthalene	37.1		1.3	3.3
208-96-8	Acenaphthylene	21.2		1.3	3.3
83-32-9	Acenaphthene	87.5		1.3	3.3
86-73-7	Fluorene	79.6		1.3	3.3
85-01-8	Phenanthrene	676	E	1.3	3.3
120-12-7	Anthracene	204		1.3	3.3
206-44-0	Fluoranthene	969	E	1.3	3.3
129-00-0	Pyrene	785	E	1.3	3.3
56-55-3	Benzo(a)anthracene	620	E	1.4	3.3
218-01-9	Chrysene	554	E	1.3	3.3
205-99-2	Benzo(b)fluoranthene	900	E	1.9	3.3
207-08-9	Benzo(k)fluoranthene	281		2.1	3.3
50-32-8	Benzo(a)pyrene	534	E	1.8	3.3
193-39-5	Indeno(1,2,3-cd)pyrene	221		3	3.3
53-70-3	Dibenzo(a,h)anthracene	93.2		2.6	3.3
191-24-2	Benzo(g,h,i)perylene	256		3.1	3.3

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 FM0263A-CS-SPDL1

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761608DL1 Lab File ID: 61608D20.D

Sample wt/vol: 25.21 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/26/12 Time: 2242

PercentSolids: 79.2 decanted : Dilution Factor: 20

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	66.9		28	66.7
91-57-6	2-Methylnaphthalene	66.7	U	26.6	66.7
90-12-0	1-Methylnaphthalene	66.7	U	26.6	66.7
208-96-8	Acenaphthylene	66.7	U	26.6	66.7
83-32-9	Acenaphthene	102		26.6	66.7
86-73-7	Fluorene	84.5		26.6	66.7
85-01-8	Phenanthrene	818		26.6	66.7
120-12-7	Anthracene	220		26.6	66.7
206-44-0	Fluoranthene	1300		26.6	66.7
129-00-0	Pyrene	928		26.6	66.7
56-55-3	Benzo(a)anthracene	677		28	66.7
218-01-9	Chrysene	672		26	66.7
205-99-2	Benzo(b)fluoranthene	834		38.1	66.7
207-08-9	Benzo(k)fluoranthene	314		42.1	66.7
50-32-8	Benzo(a)pyrene	499		36.1	66.7
193-39-5	Indeno(1,2,3-cd)pyrene	208		60.1	66.7
53-70-3	Dibenzo(a,h)anthracene	66.7	U	52.1	66.7
191-24-2	Benzo(g,h,i)perylene	271		62.1	66.7

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200	EPA Sample No. FM0263B-CS-SP
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 350761609	Lab File ID: 616-09.D
Sample wt/vol:	25.29	Units: G	Date Received:	11/16/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/21/12
Percent Solids:	82.5	decanted :	Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270 SIM
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25	(mm)	
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	53.4		1.3	3.2
91-57-6	2-Methylnaphthalene	57.1		1.3	3.2
90-12-0	1-Methylnaphthalene	48.7		1.3	3.2
208-96-8	Acenaphthylene	14.2		1.3	3.2
83-32-9	Acenaphthene	73.8		1.3	3.2
86-73-7	Fluorene	61.2		1.3	3.2
85-01-8	Phenanthrene	746	E	1.3	3.2
120-12-7	Anthracene	123		1.3	3.2
206-44-0	Fluoranthene	892	E	1.3	3.2
129-00-0	Pyrene	792	E	1.3	3.2
56-55-3	Benzo(a)anthracene	536	E	1.3	3.2
218-01-9	Chrysene	550	E	1.2	3.2
205-99-2	Benzo(b)fluoranthene	652	E	1.8	3.2
207-08-9	Benzo(k)fluoranthene	267		2	3.2
50-32-8	Benzo(a)pyrene	408		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	175		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	68.3		2.5	3.2
191-24-2	Benzo(g,h,i)perylene	208		3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 FM0263B-CS-SPDL1

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761609DL1 Lab File ID: 61609D20.D

Sample wt/vol: 25.29 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/26/12 Time: 2305

Percent Solids: 82.5 decanted : Dilution Factor: 20

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	63.8	U	26.8	63.8
91-57-6	2-Methylnaphthalene	63.8	U	25.5	63.8
90-12-0	1-Methylnaphthalene	63.8	U	25.5	63.8
208-96-8	Acenaphthylene	63.8	U	25.5	63.8
83-32-9	Acenaphthene	88.9		25.5	63.8
86-73-7	Fluorene	71		25.5	63.8
85-01-8	Phenanthrene	1060		25.5	63.8
120-12-7	Anthracene	179		25.5	63.8
206-44-0	Fluoranthene	1240		25.5	63.8
129-00-0	Pyrene	1060		25.5	63.8
56-55-3	Benzo(a)anthracene	487		26.8	63.8
218-01-9	Chrysene	551		24.9	63.8
205-99-2	Benzo(b)fluoranthene	624		36.4	63.8
207-08-9	Benzo(k)fluoranthene	246		40.3	63.8
50-32-8	Benzo(a)pyrene	399		34.5	63.8
193-39-5	Indeno(1,2,3-cd)pyrene	172		57.5	63.8
53-70-3	Dibenzo(a,h)anthracene	63.8	U	49.8	63.8
191-24-2	Benzo(g,h,i)perylene	226		59.4	63.8

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 FM0263C-CS-SP

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761610 Lab File ID: 616-10.D

Sample wt/vol: 25.79 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/21/12 Time: 2253

Percent Solids: 77.9 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	148		1.4	3.3
91-57-6	2-Methylnaphthalene	78.2		1.3	3.3
90-12-0	1-Methylnaphthalene	57		1.3	3.3
208-96-8	Acenaphthylene	23.2		1.3	3.3
83-32-9	Acenaphthene	176		1.3	3.3
86-73-7	Fluorene	156		1.3	3.3
85-01-8	Phenanthrene	1210	E	1.3	3.3
120-12-7	Anthracene	281		1.3	3.3
206-44-0	Fluoranthene	1420	E	1.3	3.3
129-00-0	Pyrene	1060	E	1.3	3.3
56-55-3	Benzo(a)anthracene	814	E	1.4	3.3
218-01-9	Chrysene	780	E	1.3	3.3
205-99-2	Benzo(b)fluoranthene	1190	E	1.9	3.3
207-08-9	Benzo(k)fluoranthene	455		2.1	3.3
50-32-8	Benzo(a)pyrene	615	E	1.8	3.3
193-39-5	Indeno(1,2,3-cd)pyrene	276		3	3.3
53-70-3	Dibenzo(a,h)anthracene	115		2.6	3.3
191-24-2	Benzo(g,h,i)perylene	362		3.1	3.3

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 FM0263C-CS-SPDL1

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761610DL1 Lab File ID: 61610D20.D

Sample wt/vol: 25.79 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/26/12 Time: 2329

PercentSolids: 77.9 decanted : Dilution Factor: 20

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	156		27.9	66.3
91-57-6	2-Methylnaphthalene	76.1		26.5	66.3
90-12-0	1-Methylnaphthalene	66.3	U	26.5	66.3
208-96-8	Acenaphthylene	66.3	U	26.5	66.3
83-32-9	Acenaphthene	224		26.5	66.3
86-73-7	Fluorene	166		26.5	66.3
85-01-8	Phenanthrene	1990		26.5	66.3
120-12-7	Anthracene	386		26.5	66.3
206-44-0	Fluoranthene	2120		26.5	66.3
129-00-0	Pyrene	1500		26.5	66.3
56-55-3	Benzo(a)anthracene	951		27.9	66.3
218-01-9	Chrysene	943		25.9	66.3
205-99-2	Benzo(b)fluoranthene	1280		37.8	66.3
207-08-9	Benzo(k)fluoranthene	465		41.8	66.3
50-32-8	Benzo(a)pyrene	722		35.8	66.3
193-39-5	Indeno(1,2,3-cd)pyrene	286		59.7	66.3
53-70-3	Dibenzo(a,h)anthracene	66.3	U	51.8	66.3
191-24-2	Benzo(g,h,i)perylene	357		61.7	66.3

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 EPA Sample No. FM0126A-CS-SP

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761611 Lab File ID: 616-11.D

Sample wt/vol: 25.77 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/21/12 Time: 2316

Percent Solids: 81.7 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	31.7		1.3	3.2
91-57-6	2-Methylnaphthalene	22.2		1.3	3.2
90-12-0	1-Methylnaphthalene	15.3		1.3	3.2
208-96-8	Acenaphthylene	4.1		1.3	3.2
83-32-9	Acenaphthene	7		1.3	3.2
86-73-7	Fluorene	6.4		1.3	3.2
85-01-8	Phenanthrene	76		1.3	3.2
120-12-7	Anthracene	13.7		1.3	3.2
206-44-0	Fluoranthene	109		1.3	3.2
129-00-0	Pyrene	84.8		1.3	3.2
56-55-3	Benzo(a)anthracene	62.9		1.3	3.2
218-01-9	Chrysene	65.5		1.2	3.2
205-99-2	Benzo(b)fluoranthene	93.7		1.8	3.2
207-08-9	Benzo(k)fluoranthene	30.6		2	3.2
50-32-8	Benzo(a)pyrene	52.4		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	24.6		2.8	3.2
53-70-3	Dibenzo(a,h)anthracene	4		2.5	3.2
191-24-2	Benzo(g,h,i)perylene	28		2.9	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 EPA Sample No. FM0126B-CS-SP

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761612 Lab File ID: 616-12.D

Sample wt/vol: 25.61 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/21/12 Time: 2340

Percent Solids: 79.4 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	47.4		1.4	3.3
91-57-6	2-Methylnaphthalene	52.8		1.3	3.3
90-12-0	1-Methylnaphthalene	34.1		1.3	3.3
208-96-8	Acenaphthylene	3.7		1.3	3.3
83-32-9	Acenaphthene	3.3		1.3	3.3
86-73-7	Fluorene	3.7		1.3	3.3
85-01-8	Phenanthrene	69.5		1.3	3.3
120-12-7	Anthracene	8.2		1.3	3.3
206-44-0	Fluoranthene	76.6		1.3	3.3
129-00-0	Pyrene	59.1		1.3	3.3
56-55-3	Benzo(a)anthracene	50.1		1.4	3.3
218-01-9	Chrysene	61.2		1.3	3.3
205-99-2	Benzo(b)fluoranthene	83.6		1.9	3.3
207-08-9	Benzo(k)fluoranthene	28		2.1	3.3
50-32-8	Benzo(a)pyrene	41.6		1.8	3.3
193-39-5	Indeno(1,2,3-cd)pyrene	20.2		3	3.3
53-70-3	Dibenzo(a,h)anthracene	3.3	U	2.6	3.3
191-24-2	Benzo(g,h,i)perylene	23.8		3	3.3

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 EPA Sample No. FM0126C-GS-SP

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761613 Lab File ID: 616-13.d

Sample wt/vol: 25.6 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/26/12 Time: 1948

Percent Solids: 71.8 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	158		1.5	3.6
91-57-6	2-Methylnaphthalene	89.5		1.4	3.6
90-12-0	1-Methylnaphthalene	52.6		1.4	3.6
208-96-8	Acenaphthylene	11.3		1.4	3.6
83-32-9	Acenaphthene	120		1.4	3.6
86-73-7	Fluorene	110		1.4	3.6
85-01-8	Phenanthrene	735	E	1.4	3.6
120-12-7	Anthracene	214		1.4	3.6
206-44-0	Fluoranthene	841	E	1.4	3.6
129-00-0	Pyrene	636	E	1.4	3.6
56-55-3	Benzo(a)anthracene	584	E	1.5	3.6
218-01-9	Chrysene	579	E	1.4	3.6
205-99-2	Benzo(b)fluoranthene	487		2.1	3.6
207-08-9	Benzo(k)fluoranthene	543		2.3	3.6
50-32-8	Benzo(a)pyrene	510		2	3.6
193-39-5	Indeno(1,2,3-cd)pyrene	288		3.3	3.6
53-70-3	Dibenzo(a,h)anthracene	175		2.8	3.6
191-24-2	Benzo(g,h,i)perylene	304		3.4	3.6

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0699A-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761614 Lab File ID: 616-14.D

Sample wt/vol: 25.02 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/22/12 Time: 0004

Percent Solids: 83.2 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	44.7		1.3	3.2
91-57-6	2-Methylnaphthalene	47.2		1.3	3.2
90-12-0	1-Methylnaphthalene	33.4		1.3	3.2
208-96-8	Acenaphthylene	8.7		1.3	3.2
83-32-9	Acenaphthene	7.3		1.3	3.2
86-73-7	Fluorene	7.9		1.3	3.2
85-01-8	Phenanthrene	106		1.3	3.2
120-12-7	Anthracene	19.4		1.3	3.2
206-44-0	Fluoranthene	143		1.3	3.2
129-00-0	Pyrene	119		1.3	3.2
56-55-3	Benzo(a)anthracene	132		1.3	3.2
218-01-9	Chrysene	129		1.2	3.2
205-99-2	Benzo(b)fluoranthene	204		1.8	3.2
207-08-9	Benzo(k)fluoranthene	52.1		2	3.2
50-32-8	Benzo(a)pyrene	117		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	51		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	16.4		2.5	3.2
191-24-2	Benzo(g,h,i)perylene	60.4		3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0699B-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761615 Lab File ID: 616-15.D

Sample wt/vol: 25.01 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/22/12 Time: 0027

PercentSolids: 80.8 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	36.3		1.4	3.3
91-57-6	2-Methylnaphthalene	32.1		1.3	3.3
90-12-0	1-Methylnaphthalene	24.9		1.3	3.3
208-96-8	Acenaphthylene	8.2		1.3	3.3
83-32-9	Acenaphthene	24.7		1.3	3.3
86-73-7	Fluorene	17.2		1.3	3.3
85-01-8	Phenanthrene	328		1.3	3.3
120-12-7	Anthracene	98.2		1.3	3.3
206-44-0	Fluoranthene	884	E	1.3	3.3
129-00-0	Pyrene	855	E	1.3	3.3
56-55-3	Benzo(a)anthracene	633	E	1.4	3.3
218-01-9	Chrysene	534	E	1.3	3.3
205-99-2	Benzo(b)fluoranthene	874	E	1.9	3.3
207-08-9	Benzo(k)fluoranthene	278		2.1	3.3
50-32-8	Benzo(a)pyrene	466		1.8	3.3
193-39-5	Indeno(1,2,3-cd)pyrene	171		3	3.3
53-70-3	Dibenzo(a,h)anthracene	73.6		2.6	3.3
191-24-2	Benzo(g,h,i)perylene	186		3.1	3.3

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0699B-CSDL1

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761615DL1 Lab File ID: 61615D20.D

Sample wt/vol: 25.01 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/26/12 Time: 2352

PercentSolids: 80.8 decanted : Dilution Factor: 20

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	65.9	U	27.7	65.9
91-57-6	2-Methylnaphthalene	65.9	U	26.3	65.9
90-12-0	1-Methylnaphthalene	65.9	U	26.3	65.9
208-96-8	Acenaphthylene	65.9	U	26.3	65.9
83-32-9	Acenaphthene	65.9	U	26.3	65.9
86-73-7	Fluorene	65.9	U	26.3	65.9
85-01-8	Phenanthrene	440		26.3	65.9
120-12-7	Anthracene	131		26.3	65.9
206-44-0	Fluoranthene	1270		26.3	65.9
129-00-0	Pyrene	1120		26.3	65.9
56-55-3	Benzo(a)anthracene	667		27.7	65.9
218-01-9	Chrysene	623		25.7	65.9
205-99-2	Benzo(b)fluoranthene	765		37.6	65.9
207-08-9	Benzo(k)fluoranthene	341		41.6	65.9
50-32-8	Benzo(a)pyrene	485		35.6	65.9
193-39-5	Indeno(1,2,3-cd)pyrene	171		59.4	65.9
53-70-3	Dibenzo(a,h)anthracene	65.9	U	51.5	65.9
191-24-2	Benzo(g,h,i)perylene	210		61.4	65.9

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0699C-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761616 Lab File ID: 616-16.D

Sample wt/vol: 25.3 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/22/12 Time: 0051

PercentSolids: 82 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	48.6		1.3	3.2
91-57-6	2-Methylnaphthalene	45.6		1.3	3.2
90-12-0	1-Methylnaphthalene	33.4		1.3	3.2
208-96-8	Acenaphthylene	6.2		1.3	3.2
83-32-9	Acenaphthene	12		1.3	3.2
86-73-7	Fluorene	12.6		1.3	3.2
85-01-8	Phenanthrene	113		1.3	3.2
120-12-7	Anthracene	25.2		1.3	3.2
206-44-0	Fluoranthene	148		1.3	3.2
129-00-0	Pyrene	112		1.3	3.2
56-55-3	Benzo(a)anthracene	109		1.3	3.2
218-01-9	Chrysene	106		1.2	3.2
205-99-2	Benzo(b)fluoranthene	168		1.8	3.2
207-08-9	Benzo(k)fluoranthene	58.8		2	3.2
50-32-8	Benzo(a)pyrene	92.7		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	37.8		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	12		2.5	3.2
191-24-2	Benzo(g,h,i)perylene	50.6		3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 FM0210A-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761617 Lab File ID: 616-17.D

Sample wt/vol: 25.2 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/22/12 Time: 0114

Percent Solids: 82 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	21.6		1.4	3.2
91-57-6	2-Methylnaphthalene	16.2		1.3	3.2
90-12-0	1-Methylnaphthalene	11.8		1.3	3.2
208-96-8	Acenaphthylene	3.2	U	1.3	3.2
83-32-9	Acenaphthene	3.2	U	1.3	3.2
86-73-7	Fluorene	3.2	U	1.3	3.2
85-01-8	Phenanthrene	24.3		1.3	3.2
120-12-7	Anthracene	3.5		1.3	3.2
206-44-0	Fluoranthene	33		1.3	3.2
129-00-0	Pyrene	26.6		1.3	3.2
56-55-3	Benzo(a)anthracene	24		1.4	3.2
218-01-9	Chrysene	26.7		1.2	3.2
205-99-2	Benzo(b)fluoranthene	33		1.8	3.2
207-08-9	Benzo(k)fluoranthene	11.9		2	3.2
50-32-8	Benzo(a)pyrene	19.3		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	8.4		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	3.2	U	2.5	3.2
191-24-2	Benzo(g,h,i)perylene	10.6		3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 FM0210B-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761618 Lab File ID: 616-18.D

Sample wt/vol: 25.08 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/22/12 Time: 0138

Percent Solids: 82.7 decanted: Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	42.6		1.4	3.2
91-57-6	2-Methylnaphthalene	41.8		1.3	3.2
90-12-0	1-Methylnaphthalene	33.1		1.3	3.2
208-96-8	Acenaphthylene	4.9		1.3	3.2
83-32-9	Acenaphthene	5.6		1.3	3.2
86-73-7	Fluorene	6.3		1.3	3.2
85-01-8	Phenanthrene	85.8		1.3	3.2
120-12-7	Anthracene	10.3		1.3	3.2
206-44-0	Fluoranthene	85.9		1.3	3.2
129-00-0	Pyrene	76		1.3	3.2
56-55-3	Benzo(a)anthracene	56.2		1.4	3.2
218-01-9	Chrysene	67.4		1.2	3.2
205-99-2	Benzo(b)fluoranthene	74.8		1.8	3.2
207-08-9	Benzo(k)fluoranthene	25		2	3.2
50-32-8	Benzo(a)pyrene	39.6		1.7	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	16		2.9	3.2
53-70-3	Dibenzo(a,h)anthracene	3.2	U	2.5	3.2
191-24-2	Benzo(g,h,i)perylene	22.1		3	3.2

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 EPA Sample No. FM0210C-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761619 Lab File ID: 616-19.D

Sample wt/vol: 25.06 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/22/12 Time: 0201

Percent Solids: 84.5 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	48.8		1.3	3.1
91-57-6	2-Methylnaphthalene	49.8		1.2	3.1
90-12-0	1-Methylnaphthalene	43.7		1.2	3.1
208-96-8	Acenaphthylene	12.2		1.2	3.1
83-32-9	Acenaphthene	31.8		1.2	3.1
86-73-7	Fluorene	23.9		1.2	3.1
85-01-8	Phenanthrene	382		1.2	3.1
120-12-7	Anthracene	63.4		1.2	3.1
206-44-0	Fluoranthene	577	E	1.2	3.1
129-00-0	Pyrene	440		1.2	3.1
56-55-3	Benzo(a)anthracene	290		1.3	3.1
218-01-9	Chrysene	280		1.2	3.1
205-99-2	Benzo(b)fluoranthene	403		1.8	3.1
207-08-9	Benzo(k)fluoranthene	142		2	3.1
50-32-8	Benzo(a)pyrene	196		1.7	3.1
193-39-5	Indeno(1,2,3-cd)pyrene	77.2		2.8	3.1
53-70-3	Dibenzo(a,h)anthracene	27.9		2.4	3.1
191-24-2	Benzo(g,h,i)perylene	96.8		2.9	3.1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 EPA Sample No. FM0210C-CSDL1

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761619DL1 Lab File ID: 61619D20.D

Sample wt/vol: 25.06 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/27/12 Time: 0016

Percent Solids: 84.5 decanted : Dilution Factor: 20

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	62.9	U	26.4	62.9
91-57-6	2-Methylnaphthalene	62.9	U	25.1	62.9
90-12-0	1-Methylnaphthalene	62.9	U	25.1	62.9
208-96-8	Acenaphthylene	62.9	U	25.1	62.9
83-32-9	Acenaphthene	62.9	U	25.1	62.9
86-73-7	Fluorene	62.9	U	25.1	62.9
85-01-8	Phenanthrene	455		25.1	62.9
120-12-7	Anthracene	73.4		25.1	62.9
206-44-0	Fluoranthene	658		25.1	62.9
129-00-0	Pyrene	493		25.1	62.9
56-55-3	Benzo(a)anthracene	250		26.4	62.9
218-01-9	Chrysene	275		24.6	62.9
205-99-2	Benzo(b)fluoranthene	261		35.9	62.9
207-08-9	Benzo(k)fluoranthene	131		39.7	62.9
50-32-8	Benzo(a)pyrene	183		34	62.9
193-39-5	Indeno(1,2,3-cd)pyrene	83.1		56.7	62.9
53-70-3	Dibenzo(a,h)anthracene	62.9	U	49.1	62.9
191-24-2	Benzo(g,h,i)perylene	103		58.6	62.9

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 EPA Sample No. CV0362A-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761620 Lab File ID: 616-20.D

Sample wt/vol: 25.08 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/22/12 Time: 0225

Percent Solids: 78.9 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	43.7		1.4	3.4
91-57-6	2-Methylnaphthalene	45.9		1.3	3.4
90-12-0	1-Methylnaphthalene	38.8		1.3	3.4
208-96-8	Acenaphthylene	28.7		1.3	3.4
83-32-9	Acenaphthene	19.9		1.3	3.4
86-73-7	Fluorene	16.9		1.3	3.4
85-01-8	Phenanthrene	223		1.3	3.4
120-12-7	Anthracene	51.7		1.3	3.4
206-44-0	Fluoranthene	400		1.3	3.4
129-00-0	Pyrene	326		1.3	3.4
56-55-3	Benzo(a)anthracene	354		1.4	3.4
218-01-9	Chrysene	293		1.3	3.4
205-99-2	Benzo(b)fluoranthene	386		1.9	3.4
207-08-9	Benzo(k)fluoranthene	154		2.1	3.4
50-32-8	Benzo(a)pyrene	228		1.8	3.4
193-39-5	Indeno(1,2,3-cd)pyrene	86.8		3	3.4
53-70-3	Dibenzo(a,h)anthracene	35		2.6	3.4
191-24-2	Benzo(g,h,i)perylene	109		3.1	3.4

8270 SIM QC Summary

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200514 154206MB
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Matrix: SOIL Lab Sample ID: 154206MB Lab File ID: 11607MB.d
 Sample wt/vol: 20.19 Units: G Date Received: 11/20/12
 Concentrated Extract Volume: 1 Date Extracted: 11/20/12
 Level:(low/med) LOW Date Analyzed: 11/28/12 Time: 1754
 Percent Solids: 100 decanted : (Dilution Factor: 1
 Extraction: OTHER Station ID: Method: 8270 SIM
 GPC Cleanup : (Y/N) N pH:
 Column(1): HPMS-5 ID: 0.25 (mm)
 CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
91-20-3	Naphthalene	3.3	U	1.4	3.3
91-57-6	2-Methylnaphthalene	3.3	U	1.3	3.3
90-12-0	1-Methylnaphthalene	3.3	U	1.3	3.3
208-96-8	Acenaphthylene	3.3	U	1.3	3.3
83-32-9	Acenaphthene	3.3	U	1.3	3.3
86-73-7	Fluorene	3.3	U	1.3	3.3
85-01-8	Phenanthrene	3.3	U	1.3	3.3
120-12-7	Anthracene	3.3	U	1.3	3.3
206-44-0	Fluoranthene	3.3	U	1.3	3.3
129-00-0	Pyrene	3.3	U	1.3	3.3
56-55-3	Benzo(a)anthracene	3.3	U	1.4	3.3
218-01-9	Chrysene	3.3	U	1.3	3.3
205-99-2	Benzo(b)fluoranthene	3.3	U	1.9	3.3
207-08-9	Benzo(k)fluoranthene	3.3	U	2.1	3.3
50-32-8	Benzo(a)pyrene	3.3	U	1.8	3.3
193-39-5	Indeno(1,2,3-cd)pyrene	3.3	U	3	3.3
53-70-3	Dibenzo(a,h)anthracene	3.3	U	2.6	3.3
191-24-2	Benzo(g,h,i)perylene	3.3	U	3.1	3.3

SEMI-VOLATILE ORGANIC METHOD BLANK SUMMARY

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc	Contract:	35th Avenue Removal Site 2005148	154206MB
Lab Code :	PEL	Case No.:	SAS No:	SDG No.: 3507616
Lab File ID:	11607MB.d		Lab Sample ID:	154206MB
Instrument ID:	SMSD04		Date Extracted:	11/20/12
Matrix:	SOIL		Date Analyzed:	11/28/12
Level:(low/med)	LOW		Time Analyzed:	1754

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CV0041A-CS	350761601	616-01.D	11/21/12	1944
2	CV0041B-CS	350761602	616-02.D	11/21/12	2008
3	CV0043A-CS	350761603	616-03.D	11/21/12	2031
4	CV0043B-CS	350761604	616-04.D	11/21/12	2055
5	CV0192A-CS	350761606	616-06.D	11/21/12	2118
6	CV0192B-CS	350761607	616-07.D	11/21/12	2142
7	FM0263A-CS-SP	350761608	616-08.D	11/21/12	2205
8	FM0263B-CS-SP	350761609	616-09.D	11/21/12	2229
9	FM0263C-CS-SP	350761610	616-10.D	11/21/12	2253
10	FM0126A-CS-SP	350761611	616-11.D	11/21/12	2316
11	FM0126B-CS-SP	350761612	616-12.D	11/21/12	2340
12	CV0699A-CS	350761614	616-14.D	11/22/12	0004
13	CV0699B-CS	350761615	616-15.D	11/22/12	0027
14	CV0699C-CS	350761616	616-16.D	11/22/12	0051
15	FM0210A-CS	350761617	616-17.D	11/22/12	0114
16	FM0210B-CS	350761618	616-18.D	11/22/12	0138
17	FM0210C-CS	350761619	616-19.D	11/22/12	0201
18	CV0362A-CS	350761620	616-20.D	11/22/12	0225
19	CV0043C-CS	350761605	616-05.d	11/26/12	1928
20	FM0126C-GS-SP	350761613	616-13.d	11/26/12	1948
21	FM0263A-CS-SPDL1	350761608DL1	61608D20.D	11/26/12	2242
22	FM0263B-CS-SPDL1	350761609DL1	61609D20.D	11/26/12	2305
23	FM0263C-CS-SPDL1	350761610DL1	61610D20.D	11/26/12	2329
24	CV0699B-CSDL1	350761615DL1	61615D20.D	11/26/12	2352
25	FM0210C-CSDL1	350761619DL1	61619D20.D	11/27/12	0016
26	154207LCS	154207LCS	11607LCS.d	11/28/12	1815

COMMENTS:

2A

SOIL SEMI-VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20

Lab Code : PEL Case No. SAS No: SDG NO.: 3507616

Column(1): HPMS-5 ID: 0.25 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
154206MB	100.0						0
154207LCS	111.0						0
CV0041A-CS	66.1						0
CV0041B-CS	58.9						0
CV0043A-CS	66.8						0
CV0043B-CS	61.7						0
CV0043C-CS	61.2						0
CV0192A-CS	50.0						0
CV0192B-CS	46.7 *						1
CV0362A-CS	54.5						0
CV0699A-CS	57.1						0
CV0699B-CS	56.7						0
CV0699B-CSDL1	0.0 D						0
CV0699C-CS	27.4 *						1
FM0126A-CS-SP	53.2						0
FM0126B-CS-SP	56.1						0
FM0126C-GS-SP	57.0						0
FM0210A-CS	16.9 *						1
FM0210B-CS	41.9 *						1
FM0210C-CS	71.2						0
FM0210C-CSDL1	0.0 D						0
FM0263A-CS-SP	58.4						0
FM0263A-CS-SPDL1	0.0 D						0
FM0263B-CS-SP	60.4						0

Control Limits

S1 = Benzo(e)pyrene-d12

50 - 140

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

Control limit source: (lab/method) METHOD

Form II

2A**SOIL SEMI-VOLATILE ORGANIC SURROGATE RECOVERY**Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20Lab Code : PEL Case No. SAS No: SDG NO.: 3507616Column(1): HPMS-5 ID: 0.25 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
FM0263B-CS-SPDL1	0.0 D						0
FM0263C-CS-SP	37.3 *						1
FM0263C-CS-SPDL1	0.0 D						0

Control Limits

S1 = Benzo(e)pyrene-d12 50 - 140

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

Control limit source: (lab/method) METHOD

Form II

301112 1330

**SEMICVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION -
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148Lab Code : PELCase No. SAS No: SDG No.: 3507616Lab File ID: DFTPP1.DDFTPP Injection Date: 11/20/12Instrument ID: SMSD03DFTPP Injection Time: 1650GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	25.6
68	Less than 2.0% of mass 69	0 (0)1
69	Mass 69 relative abundance	31.9
70	Less than 2.0% of mass 69	0 (0)1
127	10.0 - 80.0% of mass 198	43.8
197	Less than 2.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	25.4
365	Greater than 1.0% of mass 198	2.6
441	0.0 - 24.0% of mass 442	13.6 (14.06)2
442	Greater than 50.0% of mass 198	96.5
443	15.0 - 24.0% of mass 442	19.1 (19.83)2

1-Value is % of mass 69

2-Value is % of 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
1	STD1135485	47785	SSCAL4.D	11/20/12	1727
2	STD1135483	47782	SSCAL7.D	11/20/12	1752
3	STD1135480	47783	SSCAL6.D	11/20/12	1815
4	STD1135477	47784	SSCAL5.D	11/20/12	1839
5	STD1135471	47786	SSCAL3.D	11/20/12	1902
6	STD1135468	47787	SSCAL2.D	11/20/12	1926
7	STD1135465	47788	SSCAL1.D	11/20/12	1950
8	SSC1135487	47789	SSSEC.D	11/20/12	2013

**SEMICVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION -
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148Lab Code : PEL Case No. SAS No: SDG No.: 3507616Lab File ID: DFTPP2.DDFTPP Injection Date: 11/14/12Instrument ID: SMSD04DFTPP Injection Time: 1935GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	39.3
68	Less than 2.0% of mass 69	0 (0)1
69	Mass 69 relative abundance	50.1
70	Less than 2.0% of mass 69	0 (0)1
127	10.0 - 80.0% of mass 198	47.4
197	Less than 2.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	7
275	10.0 - 60.0% of mass 198	25.5
365	Greater than 1.0% of mass 198	3.5
441	0.0 - 24.0% of mass 442	13.5 (16.9)2
442	Greater than 50.0% of mass 198	79.8
443	15.0 - 24.0% of mass 442	16.1 (20.21)2

1-Value is % of mass 69

2-Value is % of 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
1 STD1135484	47782	SSCAL7.d	11/14/12	1953
2 STD1135481	47783	SSCAL6.d	11/14/12	2014
3 STD1135478	47784	SSCAL5.d	11/14/12	2035
4 STD1135474	47785	SSCAL4.d	11/14/12	2056
5 STD1135472	47786	SSCAL3.d	11/14/12	2117
6 STD1135469	47787	SSCAL2.d	11/14/12	2138
7 STD1135466	47788	SSCAL1.d	11/14/12	2158
8 SSC1135488	47789	SSSEC.d	11/14/12	2219

**SEMOVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION -
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148Lab Code : PEL Case No. SAS No: SDG No.: 3507616Lab File ID: DFTPP2.DDFTPP Injection Date: 11/26/12Instrument ID: SMSD03DFTPP Injection Time: 1756GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	27.1
68	Less than 2.0% of mass 69	0.1 (0.32)1
69	Mass 69 relative abundance	34
70	Less than 2.0% of mass 69	0 (0)1
127	10.0 - 80.0% of mass 198	45.2
197	Less than 2.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	24.9
365	Greater than 1.0% of mass 198	2.4
441	0.0 - 24.0% of mass 442	12.6 (14.34)2
442	Greater than 50.0% of mass 198	87.9
443	15.0 - 24.0% of mass 442	17.3 (19.73)2

1-Value is % of mass 69

2-Value is % of 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
1 CCV1136644	47785	SSCCV1.D	11/26/12	1816
2 FM0263A-CS-SPDL1	350761608	61608D20.D	11/26/12	2242
3 FM0263B-CS-SPDL1	350761609	61609D20.D	11/26/12	2305
4 FM0263C-CS-SPDL1	350761610	61610D20.D	11/26/12	2329
5 CV0699B-CSDL1	350761615	61615D20.D	11/26/12	2352
6 FM0210C-CSDL1	350761619	61619D20.D	11/27/12	0016

**SEMICVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION -
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616
 Lab File ID: DFTPP2.d DFTPP Injection Date: 11/26/12
 Instrument ID: SMSD04 DFTPP Injection Time: 1626
 GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	41.9
68	Less than 2.0% of mass 69	0 (0)1
69	Mass 69 relative abundance	53.2
70	Less than 2.0% of mass 69	0.3 (0.55)1
127	10.0 - 80.0% of mass 198	47.4
197	Less than 2.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	7
275	10.0 - 60.0% of mass 198	24.3
365	Greater than 1.0% of mass 198	3.5
441	0.0 - 24.0% of mass 442	13.7 (17.16)2
442	Greater than 50.0% of mass 198	80
443	15.0 - 24.0% of mass 442	15.7 (19.63)2

1-Value is % of mass 69

2-Value is % of 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
1 CCV1136643	47785	SSCAL4.d	11/26/12	1644
2 CV0043C-CS	350761605	616-05.d	11/26/12	1928
3 FM0126C-GS-SP	350761613	616-13.d	11/26/12	1948

**SEMICVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION -
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148Lab Code : PEL Case No. SAS No: SDG No.: 3507616Lab File ID: 112812DFTPP1.dDFTPP Injection Date: 11/28/12Instrument ID: SMSD04DFTPP Injection Time: 1454GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	42
68	Less than 2.0% of mass 69	0 (0)1
69	Mass 69 relative abundance	53.8
70	Less than 2.0% of mass 69	0 (0)1
127	10.0 - 80.0% of mass 198	49.4
197	Less than 2.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	25.1
365	Greater than 1.0% of mass 198	3.1
441	0.0 - 24.0% of mass 442	13.6 (17.5)2
442	Greater than 50.0% of mass 198	77.5
443	15.0 - 24.0% of mass 442	14.8 (19.11)2

1-Value is % of mass 69

2-Value is % of 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
1 CCV1137596	47785	SSCCV1.d	11/28/12	1713
2 154206MB	154206MB	11607MB.d	11/28/12	1754
3 154207LCS	154207LCS	11607LCS.d	11/28/12	1815

**SEMICVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION -
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148Lab Code : PEL Case No. SAS No: SDG No.: 3507616Lab File ID: DFTPP2.DDFTPP Injection Date: 11/21/12Instrument ID: SMSD03DFTPP Injection Time: 1818GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	27.8
68	Less than 2.0% of mass 69	0.5 (1.42)1
69	Mass 69 relative abundance	35.2
70	Less than 2.0% of mass 69	0 (0)1
127	10.0 - 80.0% of mass 198	45.8
197	Less than 2.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	24.5
365	Greater than 1.0% of mass 198	2.6
441	0.0 - 24.0% of mass 442	12.2 (14.19)2
442	Greater than 50.0% of mass 198	86.2
443	15.0 - 24.0% of mass 442	17.3 (20.03)2

1-Value is % of mass 69

2-Value is % of 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
1	CCV1137703	47785	SSCCV2.D	11/21/12	1901
2	CV0041A-CS	350761601	616-01.D	11/21/12	1944
3	CV0041B-CS	350761602	616-02.D	11/21/12	2008
4	CV0043A-CS	350761603	616-03.D	11/21/12	2031
5	CV0043B-CS	350761604	616-04.D	11/21/12	2055
6	CV0192A-CS	350761606	616-06.D	11/21/12	2118
7	CV0192B-CS	350761607	616-07.D	11/21/12	2142
8	FM0263A-CS-SP	350761608	616-08.D	11/21/12	2205
9	FM0263B-CS-SP	350761609	616-09.D	11/21/12	2229
10	FM0263C-CS-SP	350761610	616-10.D	11/21/12	2253
11	FM0126A-CS-SP	350761611	616-11.D	11/21/12	2316
12	FM0126B-CS-SP	350761612	616-12.D	11/21/12	2340
13	CV0699A-CS	350761614	616-14.D	11/22/12	0004
14	CV0699B-CS	350761615	616-15.D	11/22/12	0027
15	CV0699C-CS	350761616	616-16.D	11/22/12	0051
16	FM0210A-CS	350761617	616-17.D	11/22/12	0114
17	FM0210B-CS	350761618	616-18.D	11/22/12	0138
18	FM0210C-CS	350761619	616-19.D	11/22/12	0201
19	CV0362A-CS	350761620	616-20.D	11/22/12	0225

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Lab File ID (Standard): SSCAL4.D Date Analyzed: 11/20/2012
 Instrument ID: SMSD03 Time Analyzed: 17:27
 GC Column: HPMS-5 ID: 0.25 (mm)

	IS1 AREA #	RT	IS2 AREA #	RT	IS3 AREA #	RT
MID CAL STD	35031	9.99				
UPPER LIMIT	70062	10.49				
LOWER LIMIT	17515.5	9.49				
EPA SAMPLE NO.						
1 CV0041A-CS	41389	10.00				
2 CV0041B-CS	44422	10.00				
3 CV0043A-CS	38222	10.00				
4 CV0043B-CS	42471	10.00				
5 CV0192A-CS	45961	10.00				
6 CV0192B-CS	44089	10.00				
7 FM0263A-CS-SP	39464	10.00				
8 FM0263B-CS-SP	39470	10.00				
9 FM0263C-CS-SP	37710	10.00				
10 FM0126A-CS-SP	40128	10.00				
11 FM0126B-CS-SP	33654	10.00				
12 CV0699A-CS	37744	10.00				
13 CV0699B-CS	38428	10.00				
14 CV0699C-CS	32896	10.00				
15 FM0210A-CS	39398	10.00				
16 FM0210B-CS	35762	10.00				
17 FM0210C-CS	37018	10.00				
18 CV0362A-CS	33449	10.00				
19 FM0263A-CS-SPDL1	44627	10.00				
20 FM0263B-CS-SPDL1	42128	10.00				
21 FM0263C-CS-SPDL1	37161	10.00				
22 CV0699B-CSDL1	39134	10.00				
23 FM0210C-CSDL1	43605	10.00				

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Lab File ID (Standard): SSCAL4.D Date Analyzed: 11/20/2012
 Instrument ID: SMSD03 Time Analyzed: 17:27
 GC Column: HPMS-5 ID: 0.25 (mm)

	IS1 AREA #	RT	IS2 AREA #	RT	IS3 AREA #	RT
MID CAL STD	35031	9.99				
UPPER LIMIT	70062	10.49				
LOWER LIMIT	17515.5	9.49				
EPA SAMPLE NO.						

IS1 = Fluoranthene-d10

UPPER LIMIT = +100%

of internal standard area.

LOWER LIMIT = -50%

of internal standard area

Column used to flag internal standard area values with an asterisk

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Lab File ID (Standard): SSCAL4.d Date Analyzed: 11/14/2012
 Instrument ID: SMSD04 Time Analyzed: 20:56
 GC Column: HPMS-5 ID: 0.25 (mm)

	IS1 AREA #	RT	IS2 AREA #	RT	IS3 AREA #	RT
MID CAL STD	9469	9.78				
UPPER LIMIT	18938	10.28				
LOWER LIMIT	4734.5	9.28				
EPA SAMPLE NO.						
1 CV0043C-CS	8676	9.76				
2 FM0126C-GS-SP	7371	9.76				
3 154206MB	6767	9.76				
4 154207LCS	6151	9.76				

IS1 = Fluoranthene-d10

UPPER LIMIT = +100%
 of internal standard area.
 LOWER LIMIT = -50%
 of internal standard area

Column used to flag internal standard area values with an asterisk

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616
 GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 11/14/12
 Instrument ID: SMSD04

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION					S1	S2	S3	S4	
	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #	RT #	RT #
1	DFTPP2	47137	DFTPP2.D	11/14/12	1935				
2	STD1135484	47782	SSCAL7.d	11/14/12	1953	12.42			
3	STD1135481	47783	SSCAL6.d	11/14/12	2014	12.42			
4	STD1135478	47784	SSCAL5.d	11/14/12	2035	12.41			
5	STD1135474	47785	SSCAL4.d	11/14/12	2056	12.41			
6	STD1135472	47786	SSCAL3.d	11/14/12	2117	12.41			
7	STD1135469	47787	SSCAL2.d	11/14/12	2138	12.41			
8	STD1135466	47788	SSCAL1.d	11/14/12	2158	12.41			
9	SSC1135488	47789	SSSEC.d	11/14/12	2219	12.41			
10	DFTPP2	47137	DFTPP2.d	11/26/12	1626				
11	CCV1136643	47785	SSCAL4.d	11/26/12	1644	12.39			
12	CV0043C-CS	350761605	616-05.d	11/26/12	1928	12.38			
13	FM0126C-GS-SP	350761613	616-13.d	11/26/12	1948	12.38			
14	ZZZZZ	ZZZZZ	ZZZZZ	11/26/12	2049				
15	ZZZZZ	ZZZZZ	ZZZZZ	11/26/12	2109				
16	112812DFTPP1	47137	112812DFTPP1.d	11/28/12	1454				
17	CCV1137596	47785	SSCCV1.d	11/28/12	1713	12.39			
18	154206MB	154206MB	11607MB.d	11/28/12	1754	12.39			
19	154207LCS	154207LCS	11607LCS.d	11/28/12	1815	12.39			

QC LIMITS

S1 = Benzo(e)pyrene-d12

(+/- 0.59 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616
 GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 11/20/12
 Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION					S1	S2	S3	S4
	S1 :	S2 :	S3 :	S4 :	RT #	RT #	RT #	RT #
1	DFTPP1	47701	DFTPP1.D	11/20/12	1650			
2	STD1135485	47785	SSCAL4.D	11/20/12	1727	12.62		
3	STD1135483	47782	SSCAL7.D	11/20/12	1752	12.62		
4	STD1135480	47783	SSCAL6.D	11/20/12	1815	12.62		
5	STD1135477	47784	SSCAL5.D	11/20/12	1839	12.62		
6	STD1135471	47786	SSCAL3.D	11/20/12	1902	12.62		
7	STD1135468	47787	SSCAL2.D	11/20/12	1926	12.62		
8	STD1135465	47788	SSCAL1.D	11/20/12	1950	12.62		
9	SSC1135487	47789	SSSEC.D	11/20/12	2013	12.62		
10	DFTPP1	47701	DFTPP2.D	11/21/12	1818			
11	CCV1137703	47785	SSCCV2.D	11/21/12	1901	12.62		
12	CV0041A-CS	350761601	616-01.D	11/21/12	1944	12.62		
13	CV0041B-CS	350761602	616-02.D	11/21/12	2008	12.62		
14	CV0043A-CS	350761603	616-03.D	11/21/12	2031	12.63		
15	CV0043B-CS	350761604	616-04.D	11/21/12	2055	12.62		
16	CV0192A-CS	350761606	616-06.D	11/21/12	2118	12.63		
17	CV0192B-CS	350761607	616-07.D	11/21/12	2142	12.63		
18	FM0263A-CS-SP	350761608	616-08.D	11/21/12	2205	12.63		
19	FM0263B-CS-SP	350761609	616-09.D	11/21/12	2229	12.63		
20	FM0263C-CS-SP	350761610	616-10.D	11/21/12	2253	12.63		
21	FM0126A-CS-SP	350761611	616-11.D	11/21/12	2316	12.63		
22	FM0126B-CS-SP	350761612	616-12.D	11/21/12	2340	12.63		
23	CV0699A-CS	350761614	616-14.D	11/22/12	0004	12.63		
24	CV0699B-CS	350761615	616-15.D	11/22/12	0027	12.63		
25	CV0699C-CS	350761616	616-16.D	11/22/12	0051	12.63		
26	FM0210A-CS	350761617	616-17.D	11/22/12	0114	12.63		

QC LIMITS

S1 = Benzo(e)pyrene-d12 (+/- 0.6 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
Lab Code : PEL Case No. SAS No: SDG No.: 3507616
GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 11/20/12
Instrument ID: SMSD03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION								
S1 :	S2 :	S3 :	S4 :					
CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #	S3 RT #	S4 RT #
FM0210B-CS	350761618	616-18.D	11/22/12	0138	12.63			
FM0210C-CS	350761619	616-19.D	11/22/12	0201	12.63			
CV0362A-CS	350761620	616-20.D	11/22/12	0225	12.63			
DFTPP2	47701	DFTPP2.D	11/26/12	1756				
CCV1136644	47785	SSCCV1.D	11/26/12	1816	12.63			
FM0263A-CS-SPDL1	350761608DL1	61608D20.D	11/26/12	2242	0 *			
FM0263B-CS-SPDL1	350761609DL1	61609D20.D	11/26/12	2305	0 *			
FM0263C-CS-SPDL1	350761610DL1	61610D20.D	11/26/12	2329	0 *			
CV0699B-CSDL1	350761615DL1	61615D20.D	11/26/12	2352	0 *			
FM0210C-CSDL1	350761619DL1	61619D20.D	11/27/12	0016	0 *			

QC LIMITS

S1 = Benzo(e)pyrene-d12 (+/- 0.6 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20

154207LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

COMPOUND	SPIKE ADDED ug/Kg	LCS CONCENTRATION ug/Kg	LCS % REC #	LCS % RPD	QC LIMITS	
					RPD	REC.
Naphthalene	24.7	15.6	63.2			44 - 140
2-Methylnaphthalene	24.7	15.1	61.1			31 - 149
1-Methylnaphthalene	24.7	15.4	62.3			49 - 127
Acenaphthylene	24.7	16.6	67.2			45 - 129
Acenaphthene	24.7	15.7	63.6			47 - 127
Fluorene	24.7	16.1	65.2			52 - 125
Phenanthrene	24.7	16.4	66.4			48 - 131
Anthracene	24.7	18	72.9			56 - 123
Fluoranthene	24.7	17.7	71.7			46 - 135
Pyrene	24.7	17.9	72.5			45 - 133
Benzo(a)anthracene	24.7	20.4	82.6			39 - 140
Chrysene	24.7	18.9	76.5			50 - 132
Benzo(b)fluoranthene	24.7	20.1	81.4			40 - 143
Benzo(k)fluoranthene	24.7	20.3	82.2			49 - 131
Benzo(a)pyrene	24.7	21.1	85.4			52 - 130
Indeno(1,2,3-cd)pyrene	24.7	21.1	85.4			48 - 135
Dibenzo(a,h)anthracene	24.7	21	85.0			51 - 130
Benzo(g,h,i)perylene	24.7	20.8	84.2			48 - 133

Spike Recovery: 0 out of 18 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal CV0043A-CSMS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

COMPOUND	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC #	QC LIMITS REC.
Naphthalene	26	90	99	35.5 *	59 - 111
2-Methylnaphthalene	26	89	100	51.2 *	54 - 145
1-Methylnaphthalene	26	54	74	80.9	71 - 132
Acenaphthylene	26	16	170	615.0 *	54 - 115
Acenaphthene	26	5.9	30	94.1	57 - 119
Fluorene	26	6.4	140	541.0 *	59 - 118
Phenanthrene	26	100	1500	5383.0 *	54 - 112
Anthracene	26	20	270	988.0 *	40 - 138
Fluoranthene	26	170	2100	7383.0 *	55 - 132
Pyrene	26	150	1400	5094.0 *	55 - 123
Benzo(a)anthracene	26	130	1400	5113.0 *	53 - 119
Chrysene	26	140	960	3219.0 *	34 - 140
Benzo(b)fluoranthene	26	230	760	2047.0 *	50 - 171
Benzo(k)fluoranthene	26	79	710	2474.0 *	32 - 158
Benzo(a)pyrene	26	120	740	2414.0 *	20 - 120
Indeno(1,2,3-cd)pyrene	26	75	440	1415.0 *	19 - 122
Dibenzo(a,h)anthracene	26	27	220	755.0 *	41 - 114
Benzo(g,h,i)perylene	26	95	410	1241.0 *	50 - 150

Spike Recovery: 16 out of 18 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Remo	CV0043A-CSMSD
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616

COMPOUND	SPIKE ADDED ug/Kg	MSD CONCENTRATION ug/Kg	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Naphthalene	26	83	0.0 *	17.2	30	59 - 111
2-Methylnaphthalene	26	92	13.3 *	10.0	30	54 - 145
1-Methylnaphthalene	26	66	48.4 *	11.8	30	71 - 132
Acenaphthylene	26	40	97.7	124.1 *	30	54 - 115
Acenaphthene	26	27	81.2	11.6	30	57 - 119
Fluorene	26	29	86.7	134.1 *	30	59 - 118
Phenanthrene	26	110	15.6 *	173.3 *	30	54 - 112
Anthracene	26	41	80.5	148.1 *	30	40 - 138
Fluoranthene	26	180	23.4 *	168.5 *	30	55 - 132
Pyrene	26	150	27.3 *	161.8 *	30	55 - 123
Benzo(a)anthracene	26	170	164.0 *	157.1 *	30	53 - 119
Chrysene	26	160	62.5	144.3 *	30	34 - 140
Benzo(b)fluoranthene	26	160	0.0 *	131.2 *	30	50 - 171
Benzo(k)fluoranthene	26	170	369.0 *	121.8 *	30	32 - 158
Benzo(a)pyrene	26	160	141.0 *	129.9 *	30	20 - 120
Indeno(1,2,3-cd)pyrene	26	120	169.0 *	115.0 *	30	19 - 122
Dibenzo(a,h)anthracene	26	73	180.0 *	100.5 *	30	41 - 114
Benzo(g,h,i)perylene	26	130	128.0	105.4 *	30	50 - 150

RPD: 14 out of 18 outside limits

Spike Recovery: 12 out of 18 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

8270 SIM Standards Data

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc.

Contract: 35th Avenue Removal Site 2005148 1

Lab Code : PEL

Case No. _____

SAS No: _____

SDG No.: 3507616

Instrument ID: SMSD03

Calibration Date Begin: 11/20/12 End: 11/20/12

GC Column: HPMS-5 ID: 0.25 (mm)

Calibration Time Begin: 1727 End: 1950

Min RRF for SPCC(#) = N/A

Max %RSD for CCC(*) = 15 %

LAB FILE ID:		RRF0.02 =SSCAL1.D		RRF0.05 =SSCAL2.D					
RRF0.1 =SSCAL3.D		RRF0.5 =SSCAL4.D		RRF1 =SSCAL5.D					
COMPOUND		RRF0.02	RRF0.05	RRF0.1	RRF0.5	RRF1	RRF	%RSD OR R^2	RSD
Naphthalene		1.825	1.716	1.766	1.671	1.477			
2-Methylnaphthalene		1.236	1.168	1.142	1.067	1.071			
1-Methylnaphthalene		1.211	1.058	1.155	0.989	0.926			
Acenaphthylene		1.871	1.732	1.842	1.630	1.500			
Acenaphthene	*	1.142	1.074	1.107	1.020	0.929		*	
Fluorene		1.343	1.156	1.247	1.167	1.066			
Phenanthrene		1.289	1.143	1.173	1.021	0.969			
Anthracene		1.162	1.086	1.136	1.065	0.967			
Fluoranthene	*	1.349	1.267	1.188	1.178	1.161		*	
Pyrene		1.478	1.326	1.357	1.185	1.192			
Benzo(a)anthracene		0.320	0.327	0.303	0.288	0.282			
Chrysene		0.363	0.360	0.339	0.314	0.307			
Benzo(b)fluoranthene		1.357	1.161	1.172	1.132	0.946			
Benzo(k)fluoranthene		1.444	1.659	1.370	1.199	1.251			
Benzo(a)pyrene	*	1.224	1.083	1.175	1.045	0.969		*	
Indeno(1,2,3-cd)pyrene		1.490	1.190	1.208	1.371	1.269			
Dibenzo(a,h)anthracene		1.262	0.972	1.014	1.115	1.052			
Benzo(g,h,i)perylene		1.173	1.077	1.039	1.066	0.970			
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Benzo(e)pyrene-d12(SURR)		1.287	1.214	1.162	1.183	1.035			

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Instrument ID: SMSD03 Calibration Date Begin: 11/20/12 End: 11/20/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 1727 End: 1950

Min RRF for SPCC(#) = N/A Max %RSD for CCC(*) = 15 %

LAB FILE ID:	RRF5 =SSCAL6.D			RRF10 =SSCAL7.D			%RSD OR R^2	RSD
COMPOUND	RRF5	RRF10				RRF		
Naphthalene	1.491	1.339				1.61225	11.1	
2-Methylnaphthalene	1.037	0.956				1.09659	8.5	
1-Methylnaphthalene	0.975	0.914				1.03255	11	
Acenaphthylene	1.505	1.387				1.63799	11.3	
Acenaphthene	* 0.973	0.889				1.01916	9.2	*
Fluorene	1.163	1.048				1.17002	8.7	
Phenanthrene	1.038	0.826				1.06562	14.2	
Anthracene	1.036	0.826				1.03982	10.9	
Fluoranthene	* 1.036	1.026				1.17212	9.9	*
Pyrene	1.248	1.074				1.26586	10.5	
Benzo(a)anthracene	0.282	0.278				0.29698	0.99996	
Chrysene	0.318	0.304				0.32947	7.5	
Benzo(b)fluoranthene	1.046	0.859				1.09609	0.99047	
Benzo(k)fluoranthene	1.089	0.955				1.28104	18.3	<-
Benzo(a)pyrene	* 1.005	0.830				1.04744	12.5	*
Indeno(1,2,3-cd)pyrene	1.170	1.010				1.24389	12.3	
Dibenzo(a,h)anthracene	0.967	0.843				1.03219	0.99536	
Benzo(g,h,i)perylene	0.987	0.875				1.02683	9.2	
<hr/>								
Benzo(e)pyrene-d12(SURR)	1.087	0.885				1.1219	11.8	

Average Used: 9.5

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 Calibration Date Begin: 11/14/12 End: 11/14/12
 GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 1953 End: 2158
 Min RRF for SPCC(#) = N/A Max %RSD for CCC(*) = 15 %

LAB FILE ID:	RRF0.02 =SSCAL1.d			RRF0.05 =SSCAL2.d				
	RRF0.1 =SSCAL3.d			RRF0.5 =SSCAL4.d			RRF1 =SSCAL5.d	
COMPOUND	RRF0.02	RRF0.05	RRF0.1	RRF0.5	RRF1	RRF	%RSD OR R^2	RSD
Naphthalene	1.042	1.050	0.933	0.879	0.933			
2-Methylnaphthalene	1.200	1.158	1.131	1.100	1.098			
1-Methylnaphthalene	1.133	1.053	1.040	1.006	1.011			
Acenaphthylene	1.603	1.567	1.557	1.584	1.606			
Acenaphthene	* 1.150	1.105	1.127	1.097	1.102		*	
Fluorene	1.377	1.292	1.327	1.309	1.283			
Phenanthrene	1.258	1.163	1.113	1.068	1.097			
Anthracene	1.051	1.018	0.980	0.929	0.980			
Fluoranthene	* 1.454	1.254	1.265	1.202	1.186		*	
Pyrene	1.459	1.322	1.253	1.225	1.234			
Benzo(a)anthracene	0.270	0.269	0.269	0.281	0.283			
Chrysene	0.349	0.339	0.328	0.339	0.319			
Benzo(b)fluoranthene	1.204	1.143	1.122	1.199	1.162			
Benzo(k)fluoranthene	1.405	1.389	1.262	1.304	1.286			
Benzo(a)pyrene	* 0.973	0.991	0.928	0.971	0.973		*	
Indeno(1,2,3-cd)pyrene	1.169	1.185	1.080	1.088	1.077			
Dibenzo(a,h)anthracene	0.968	0.949	0.884	0.890	0.887			
Benzo(g,h,i)perylene	1.115	1.102	0.917	0.914	0.932			
===== Benzo(e)pyrene-d12(SURR)	1.086	1.141	1.069	1.087	1.040			

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Instrument ID: SMSD04 Calibration Date Begin: 11/14/12 End: 11/14/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 1953 End: 2158

Min RRF for SPCC(#) = N/A Max %RSD for CCC(*) = 15 %

LAB FILE ID:	RRF5 =SSCAL6.d			RRF10 =SSCAL7.d			%RSD OR R^2	RSD
COMPOUND	RRF5	RRF10				RRF		
Naphthalene	1.024	1.010				0.98138	6.7	
2-Methylnaphthalene	1.136	1.153				1.13946	3.1	
1-Methylnaphthalene	1.033	1.042				1.04572	4	
Acenaphthylene	1.722	1.779				1.63114	5.2	
Acenaphthene	* 1.110	1.136				1.11822	1.8 *	
Fluorene	1.315	1.364				1.32378	2.7	
Phenanthrene	1.162	1.172				1.14751	5.4	
Anthracene	1.112	1.135				1.02939	7.3	
Fluoranthene	* 1.250	1.290				1.27177	6.9 *	
Pyrene	1.302	1.333				1.3039	6.2	
Benzo(a)anthracene	0.313	0.327				0.28776	8.1	
Chrysene	0.348	0.364				0.34066	4.3	
Benzo(b)fluoranthene	1.169	1.487				1.21207	10.3	
Benzo(k)fluoranthene	1.589	1.344				1.36855	8.1	
Benzo(a)pyrene	* 1.090	1.160				1.01221	8.1 *	
Indeno(1,2,3-cd)pyrene	1.233	1.328				1.16586	8	
Dibenzo(a,h)anthracene	1.009	1.088				0.95363	8	
Benzo(g,h,i)perylene	1.046	1.108				1.01921	9.3	
=====	=====	=====	=====	=====	=====	=====	=====	=====
Benzo(e)pyrene-d12(SURR)	1.141	1.175				1.1056	4.3	

7SSC
SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
Instrument ID: SMSD04 CalibrationDate: 11/14/12 Time: 2219
CCV ID: SSC1135488 Lab File ID: SSSEC.d Init. Calib. Date Begin: 11/14/12 End: 11/14/12
GC Column: HPMS-5 ID: 0.25 (mm)
Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Naphthalene	0.98138	0.95507	2.7	AVRG	
2-Methylnaphthalene	1.13946	0.89939	21.1	AVRG	
1-Methylnaphthalene	1.04572	0.93207	10.9	AVRG	
Acenaphthylene	1.63114	1.534	6.0	AVRG	
Acenaphthene	*	1.11822	1.022	8.6	AVRG*
Fluorene	1.32378	1.309	1.1	AVRG	
Phenanthrene	1.14751	1.281	11.6	AVRG	
Anthracene	1.02939	0.91559	11.1	AVRG	
Fluoranthene	*	1.27177	1.254	1.4	AVRG*
Pyrene	1.3039	1.149	11.9	AVRG	
Benzo(a)anthracene	0.28776	0.24852	13.6	AVRG	
Chrysene	0.34066	0.32201	5.5	AVRG	
Benzo(b)fluoranthene	1.21207	1.101	9.2	AVRG	
Benzo(k)fluoranthene	1.36855	1.218	11.0	AVRG	
Benzo(a)pyrene	*	1.01221	0.89322	11.8	AVRG*
Indeno(1,2,3-cd)pyrene	1.16586	0.97949	16.0	AVRG	
Dibenzo(a,h)anthracene	0.95363	0.94206	1.2	AVRG	
Benzo(g,h,i)perylene	1.01921	0.90509	11.2	AVRG	
===== Benzo(e)pyrene-d12(SURR)	1.1056	1.205	9.0	AVRG	

Average Used: 9.2

7SSC
SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD03 CalibrationDate: 11/20/12 Time: 2013
 CCV ID: SSC1135487 Lab File ID: SSSEC.D Init. Calib. Date Begin: 11/20/12 End: 11/20/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Naphthalene	1.61225	1.756	8.9	AVRG	
2-Methylnaphthalene	1.09659	1.047	4.5	AVRG	
1-Methylnaphthalene	1.03255	1.084	5.0	AVRG	
Acenaphthylene	1.63799	1.813	10.7	AVRG	
Acenaphthene	*	1.01916	1.047	2.7	AVRG*
Fluorene	1.17002	1.17	0.0	AVRG	
Phenanthrene	1.06562	1.145	7.4	AVRG	
Anthracene	1.03982	1.011	2.8	AVRG	
Fluoranthene	*	1.17212	1.259	7.4	AVRG*
Pyrene	1.26586	1.313	3.7	AVRG	
Benzo(a)anthracene	0.5	0.525	5.0	LINR	
Chrysene	0.32947	0.34035	3.3	AVRG	
Benzo(b)fluoranthene	0.5	0.533	6.6	LINR	
Benzo(k)fluoranthene	1.28104	1.359	6.1	AVRG	
Benzo(a)pyrene	*	1.04744	1.119	6.8	AVRG*
Indeno(1,2,3-cd)pyrene	1.24389	1.36	9.3	AVRG	
Dibenzo(a,h)anthracene	0.5	0.533	6.6	LINR	
Benzo(g,h,i)perylene	1.02683	1.174	14.3	AVRG	
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Benzo(e)pyrene-d12(SURR)	1.1219	1.211	7.9	AVRG	

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD03 CalibrationDate: 11/21/12 Time: 1901
 CCV ID: CCV1137703 Lab File ID: SSCCV2.D Init. Calib. Date Begin: 11/20/12 End: 11/20/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Naphthalene	1.61225	1.686	4.6	AVRG	
2-Methylnaphthalene	1.09659	1.063	3.1	AVRG	
1-Methylnaphthalene	1.03255	1.052	1.9	AVRG	
Acenaphthylene	1.63799	1.704	4.0	AVRG	
Acenaphthene	*	1.01916	1.038	1.8	AVRG*
Fluorene	1.17002	1.262	7.9	AVRG	
Phenanthrene	1.06562	0.91611	14.0	AVRG	
Anthracene	1.03982	1.004	3.4	AVRG	
Fluoranthene	*	1.17212	1.146	2.2	AVRG*
Pyrene	1.26586	1.195	5.6	AVRG	
Benzo(a)anthracene	0.5	0.473	5.4	LINR	
Chrysene	0.32947	0.30245	8.2	AVRG	
Benzo(b)fluoranthene	0.5	0.511	2.2	LINR	
Benzo(k)fluoranthene	1.28104	1.138	11.2	AVRG	
Benzo(a)pyrene	*	1.04744	1.008	3.8	AVRG*
Indeno(1,2,3-cd)pyrene	1.24389	1.107	11.0	AVRG	
Dibenzo(a,h)anthracene	0.5	0.399	20.2	LINR	
Benzo(g,h,i)perylene	1.02683	0.94165	8.3	AVRG	
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Benzo(e)pyrene-d12(SURR)	1.1219	1.094	2.5	AVRG	

Average Used: 6.4

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 CalibrationDate: 11/26/12 Time: 1644
 CCV ID: CCV1136643 Lab File ID: SSCAL4.d Init. Calib. Date Begin: 11/14/12 End: 11/14/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Naphthalene	0.98138	0.87119	11.2	AVRG	
2-Methylnaphthalene	1.13946	1.093	4.1	AVRG	
1-Methylnaphthalene	1.04572	1.008	3.6	AVRG	
Acenaphthylene	1.63114	1.655	1.5	AVRG	
Acenaphthene	*	1.11822	1.086	2.9	AVRG*
Fluorene	1.32378	1.281	3.2	AVRG	
Phenanthrene	1.14751	1.031	10.2	AVRG	
Anthracene	1.02939	1.008	2.1	AVRG	
Fluoranthene	*	1.27177	1.161	8.7	AVRG*
Pyrene	1.3039	1.213	7.0	AVRG	
Benzo(a)anthracene	0.28776	0.30326	5.4	AVRG	
Chrysene	0.34066	0.32752	3.9	AVRG	
Benzo(b)fluoranthene	1.21207	1.4	15.5	AVRG	
Benzo(k)fluoranthene	1.36855	1.298	5.2	AVRG	
Benzo(a)pyrene	*	1.01221	1.105	9.2	AVRG*
Indeno(1,2,3-cd)pyrene	1.16586	1.239	6.3	AVRG	
Dibenzo(a,h)anthracene	0.95363	1.011	6.0	AVRG	
Benzo(g,h,i)perylene	1.01921	1.068	4.8	AVRG	
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Benzo(e)pyrene-d12(SURR)	1.1056	1.107	0.1	AVRG	

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD03 CalibrationDate: 11/26/12 Time: 1816
 CCV ID: CCV1136644 Lab File ID: SSCCV1.D Init. Calib. Date Begin: 11/20/12 End: 11/20/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Naphthalene	1.61225	1.647	2.2	AVRG	
2-Methylnaphthalene	1.09659	1.056	3.7	AVRG	
1-Methylnaphthalene	1.03255	1.066	3.2	AVRG	
Acenaphthylene	1.63799	1.625	0.8	AVRG	
Acenaphthene	*	1.01916	1.033	1.4	AVRG*
Fluorene	1.17002	1.163	0.6	AVRG	
Phenanthrrene	1.06562	0.96901	9.1	AVRG	
Anthracene	1.03982	0.98207	5.6	AVRG	
Fluoranthene	*	1.17212	1.142	2.6	AVRG*
Pyrene	1.26586	1.204	4.9	AVRG	
Benzo(a)anthracene	0.5	0.488	2.4	LINR	
Chrysene	0.32947	0.30862	6.3	AVRG	
Benzo(b)fluoranthene	0.5	0.435	13.0	LINR	
Benzo(k)fluoranthene	1.28104	1.176	8.2	AVRG	
Benzo(a)pyrene	*	1.04744	0.90578	13.5	AVRG*
Indeno(1,2,3-cd)pyrene	1.24389	0.74832	39.8	AVRG	
Dibenzo(a,h)anthracene	0.5	0.246	50.8	LINR	
Benzo(g,h,i)perylene	1.02683	0.63055	38.6	AVRG	
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Benzo(e)pyrene-d12(SURR)	1.1219	0.99835	11.0	AVRG	

Average Used: 11.5

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 CalibrationDate: 11/28/12 Time: 1713
 CCV ID: CCV1137596 Lab File ID: SSCCV1.d Init. Calib. Date Begin: 11/14/12 End: 11/14/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = N/A Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Naphthalene	0.98138	0.85247	13.1	AVRG	
2-Methylnaphthalene	1.13946	1.045	8.3	AVRG	
1-Methylnaphthalene	1.04572	1.004	4.0	AVRG	
Acenaphthylene	1.63114	1.649	1.1	AVRG	
Acenaphthene	*	1.11822	1.055	5.7	AVRG*
Fluorene	1.32378	1.259	4.9	AVRG	
Phenanthrene	1.14751	0.9574	16.6	AVRG	
Anthracene	1.02939	1.019	1.0	AVRG	
Fluoranthene	*	1.27177	1.187	6.7	AVRG*
Pyrene	1.3039	1.251	4.1	AVRG	
Benzo(a)anthracene	0.28776	0.30584	6.3	AVRG	
Chrysene	0.34066	0.34486	1.2	AVRG	
Benzo(b)fluoranthene	1.21207	1.264	4.3	AVRG	
Benzo(k)fluoranthene	1.36855	1.54	12.5	AVRG	
Benzo(a)pyrene	*	1.01221	1.156	14.2	AVRG*
Indeno(1,2,3-cd)pyrene	1.16586	1.321	13.3	AVRG	
Dibenzo(a,h)anthracene	0.95363	1.094	14.7	AVRG	
Benzo(g,h,i)perylene	1.01921	1.136	11.5	AVRG	
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Benzo(e)pyrene-d12(SURR)	1.1056	1.191	7.7	AVRG	

8270 Semi-Volatile Organics

CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHODS

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW8270D

IV. PREPARATION

Soil samples were prepared by SW846 EPA 3545 for 8270 semi-volatile analysis.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met. Spectrum Analytical Inc. does not analyze a low calibration standard at the requested RL for all analytes. The low calibration standard is 500 ug/Kg for the following analyte(s): 4,6-Dinitro-2-methylphenol.

B. Blanks:

All acceptance criteria were met.

C. Surrogates:

All acceptance criteria were met.

D. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

CASE NARRATIVE
Semi-Volatile Organic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

A client requested MS/SD set was analyzed.
All percent recovery and relative percent difference (RPD) criteria were met.

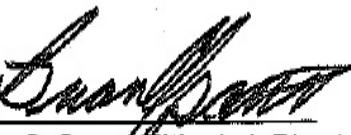
E. Internal Standards:

All acceptance criteria were met.

F. Samples:

Sample analysis proceeded normally.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.


Signature: Brian C. Spanier
Name: Brian C. Spanier Title: Lab Director

SIGNED:

DATE: 12/17/2012

CASE NARRATIVE

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

MANUAL INTEGRATION SUMMARY

The following analytes were manually integrated by the chemist.

Sample: 154211LCS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: 154211LCS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: 154211LCS Analyte: N-Nitroso-di-n-propylamine

Reason: Baseline integration, needs re-enforced due to interference on target peak

Sample: CV0043C-CS Analyte: Benzo(a)pyrene

Reason: Target peak was not properly identified, more than one peak in retention time window

Sample: CV0043C-CS Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: CV0043C-CS Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Sample: FM0126C-GS-SP Analyte: Benzo(a)pyrene

Reason: Target peak was not properly identified, more than one peak in retention time window

Sample: FM0126C-GS-SP Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Sample: FM0126C-GS-SP Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: CCV1137614 Analyte: 2,4-Dimethylphenol

Reason: Baseline integration, needs re-enforced due to interference on target peak

Calibration Sample: CCV1137614 Analyte: N-Nitroso-di-n-propylamine

Reason: Baseline integration, needs re-enforced due to interference on target peak

Calibration Sample: CCV1137619 Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Calibration Sample: CCV1137619 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: SSC1135505 Analyte: Anthracene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135505 Analyte: Benzo(a)pyrene

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135505 Analyte: Butylbenzylphthalate

Reason: Baseline integration, needs re-enforced due to interference on target peak

Calibration Sample: SSC1135505 Analyte: Carbazole

Reason: Baseline integration, needs re-enforced due to interference on target peak

Calibration Sample: SSC1135505 Analyte: Chrysene-d12

Reason: Target peak was not properly identified, more than one peak in retention time window

Calibration Sample: SSC1135505 Analyte: N-Nitroso-di-n-propylamine

Reason: Baseline integration, needs re-enforced due to interference on target peak

Calibration Sample: STD1135497 Analyte: Benzo(b)fluoranthene

CASE NARRATIVE

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Reason: Split Peak

Calibration Sample: STD1135497 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135497 Analyte: Hexachlorocyclopentadiene

Reason: Baseline integration, needs re-enforced due to interference on target peak

Calibration Sample: STD1135498 Analyte: Benzo(b)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135498 Analyte: Benzo(k)fluoranthene

Reason: Split Peak

Calibration Sample: STD1135498 Analyte: Naphthalene

Reason: Baseline integration, needs re-enforced due to interference on target peak

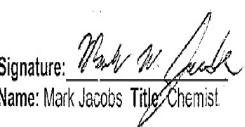
Calibration Sample: STD1135500 Analyte: N-Nitroso-di-n-propylamine

Reason: Split Peak

Calibration Sample: STD1135502 Analyte: N-Nitroso-di-n-propylamine

Reason: Split Peak

These manual integrations have been reviewed and meet all criteria in accordance with Spectrum Analytical Inc.'s SOP regarding manual integration.

Signature: 
Name: Mark Jacobs Title: Chemist

CHEMIST:

DATE: 11/29/2012

Signature: 
Name: Brian C. Spanier Title: Lab Director

SECTION LEADER:

DATE: 11/30/2012

SEMI-VOLATILE ORGANIC CROSS REFERENCE TABLE

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148
Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Method: 8270

EPA Sample No	Lab Sample ID
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<u>CV0043C-CS</u>	<u>350761605</u>
<u>FM0126C-GS-SP</u>	<u>350761613</u>

8270 Sample Data

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0043C-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761605 Lab File ID: 616-05.d

Sample wt/vol: 25.11 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/26/12 Time: 1928

PercentSolids: 76.6 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
111-44-4	Bis(2-chloroethyl)ether	281	U	69.7	281
108-95-2	Phenol	1390	U	67.6	1390
95-57-8	2-Chlorophenol	281	U	71.7	281
108-60-1	2,2'-Oxybis(1-chloropropane)	281	U	229	281
95-48-7	2-Methylphenol	278	U	99.8	278
67-72-1	Hexachloroethane	281	U	52	281
621-64-7	N-Nitroso-di-n-propylamine	281	U	63.4	281
106-44-5	4-Methylphenol	281	U	61.3	281
98-95-3	Nitrobenzene	281	U	62.4	281
78-59-1	Isophorone	281	U	61.3	281
88-75-5	2-Nitrophenol	281	U	74.9	281
105-67-9	2,4-Dimethylphenol	278	U	59.3	278
111-91-1	Bis(2-chloroethoxy)methane	278	U	59.3	278
120-83-2	2,4-Dichlorophenol	278	U	78	278
91-20-3	Naphthalene	281	U	66.5	281
106-47-8	4-Chloroaniline	281	U	65.5	281
91-57-6	2-Methylnaphthalene	281	U	60.3	281
87-68-3	Hexachlorobutadiene	281	U	60.3	281
59-50-7	4-Chloro-3-methylphenol	281	U	58.2	281
90-12-0	1-Methylnaphthalene	281	U	64.5	281
77-47-4	Hexachlorocyclopentadiene	694	U	156	694
88-06-2	2,4,6-Trichlorophenol	278	U	70.7	278
95-95-4	2,4,5-Trichlorophenol	278	U	76.9	278
91-58-7	2-Chloronaphthalene	281	U	69.4	281
88-74-4	2-Nitroaniline	281	U	59.3	281
208-96-8	Acenaphthylene	281	U	57.2	281

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0043C-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761605 Lab File ID: 616-05.d

Sample wt/vol: 25.11 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/26/12 Time: 1928

PercentSolids: 76.6 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
131-11-3	Dimethylphthalate	281	U	61.3	281
606-20-2	2,6-Dinitrotoluene	281	U	52	281
83-32-9	Acenaphthene	281	U	50.9	281
99-09-2	3-Nitroaniline	278	U	83.2	278
51-28-5	2,4-Dinitrophenol	1390	U	229	1390
132-64-9	Dibenzofuran	281	U	56.1	281
121-14-2	2,4-Dinitrotoluene	281	U	50.9	281
100-02-7	4-Nitrophenol	694	U	55.1	694
86-73-7	Fluorene	281	U	53	281
7005-72-3	4-Chlorophenyl-phenylether	281	U	53	281
84-66-2	Diethylphthalate	281	U	53	281
100-01-6	4-Nitroaniline	278	U	91.5	278
534-52-1	4,6-Dinitro-2-methylphenol	281	U	276	281
86-30-6	N-Nitrosodiphenylamine	278	U	65.5	278
101-55-3	4-Bromophenyl-phenylether	281	U	50.9	281
118-74-1	Hexachlorobenzene	278	U	55.1	278
87-86-5	Pentachlorophenol	281	U	138	281
85-01-8	Phenanthrene	281	U	58.2	281
120-12-7	Anthracene	281	U	62.4	281
84-74-2	Di-n-butylphthalate	281	U	45.8	281
206-44-0	Fluoranthene	281	U	49.9	281
129-00-0	Pyrene	281	U	95.7	281
85-68-7	Butylbenzylphthalate	281	U	65.5	281
91-94-1	3,3'-Dichlorobenzidine	281	U	61.3	281
56-55-3	Benzo(a)anthracene	281	U	59.3	281
218-01-9	Chrysene	278	U	35.4	278

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 CV0043C-CS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761605 Lab File ID: 616-05.d

Sample wt/vol: 25.11 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/26/12 Time: 1928

Percent Solids: 76.6 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
117-81-7	Bis(2-ethylhexyl)phthalate	281	U	86.3	281
117-84-0	Di-n-octylphthalate	281	U	60.3	281
205-99-2	Benzo(b)fluoranthene	281	U	65.5	281
207-08-9	Benzo(k)fluoranthene	281	U	59.3	281
50-32-8	Benzo(a)pyrene	281	U	44.7	281
193-39-5	Indeno(1,2,3-cd)pyrene	281	U	54.1	281
53-70-3	Dibenzo(a,h)anthracene	281	U	42.6	281
191-24-2	Benzo(g,h,i)perylene	281	U	41.6	281
98-86-2	Acetophenone	281	U	104	281
95-94-3	1,2,4,5-Tetrachlorobenzene	281	U	48.9	281
86-74-8	Carbazole	281	U	56.1	281
105-60-2	Caprolactam	281	U	146	281
92-52-4	1,1'-Biphenyl	281	U	63.4	281
1912-24-9	Atrazine	281	U	82.1	281
100-52-7	Benzaldehyde	281	U	46.8	281

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 FM0126C-GS-SP

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761613 Lab File ID: 616-13.d

Sample wt/vol: 25.41 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/26/12 Time: 1948

Percent Solids: 71.8 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
111-44-4	Bis(2-chloroethyl)ether	296	U	73.4	296
108-95-2	Phenol	1460	U	71.2	1460
95-57-8	2-Chlorophenol	296	U	75.6	296
108-60-1	2,2'-Oxybis(1-chloropropane)	296	U	241	296
95-48-7	2-Methylphenol	293	U	105	293
67-72-1	Hexachloroethane	296	U	54.8	296
621-64-7	N-Nitroso-di-n-propylamine	296	U	66.9	296
106-44-5	4-Methylphenol	296	U	64.7	296
98-95-3	Nitrobenzene	296	U	65.8	296
78-59-1	Isophorone	296	U	64.7	296
88-75-5	2-Nitrophenol	296	U	78.9	296
105-67-9	2,4-Dimethylphenol	293	U	62.5	293
111-91-1	Bis(2-chloroethoxy)methane	293	U	62.5	293
120-83-2	2,4-Dichlorophenol	293	U	82.2	293
91-20-3	Naphthalene	296	U	70.2	296
106-47-8	4-Chloroaniline	296	U	69.1	296
91-57-6	2-Methylnaphthalene	296	U	63.6	296
87-68-3	Hexachlorobutadiene	296	U	63.6	296
59-50-7	4-Chloro-3-methylphenol	296	U	61.4	296
90-12-0	1-Methylnaphthalene	296	U	68	296
77-47-4	Hexachlorocyclopentadiene	731	U	164	731
88-06-2	2,4,6-Trichlorophenol	293	U	74.5	293
95-95-4	2,4,5-Trichlorophenol	293	U	81.1	293
91-58-7	2-Chloronaphthalene	296	U	73.1	296
88-74-4	2-Nitroaniline	296	U	62.5	296
208-96-8	Acenaphthylene	296	U	60.3	296

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 FM0126C-GS-SP

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761613 Lab File ID: 616-13.d

Sample wt/vol: 25.41 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/26/12 Time: 1948

Percent Solids: 71.8 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
131-11-3	Dimethylphthalate	296	U	64.7	296
606-20-2	2,6-Dinitrotoluene	296	U	54.8	296
83-32-9	Acenaphthene	296	U	53.7	296
99-09-2	3-Nitroaniline	293	U	87.7	293
51-28-5	2,4-Dinitrophenol	1470	U	241	1470
132-64-9	Dibenzofuran	296	U	59.2	296
121-14-2	2,4-Dinitrotoluene	296	U	53.7	296
100-02-7	4-Nitrophenol	731	U	58.1	731
86-73-7	Fluorene	296	U	55.9	296
7005-72-3	4-Chlorophenyl-phenylether	296	U	55.9	296
84-66-2	Diethylphthalate	296	U	55.9	296
100-01-6	4-Nitroaniline	293	U	96.5	293
534-52-1	4,6-Dinitro-2-methylphenol	296	U	292	296
86-30-6	N-Nitrosodiphenylamine	293	U	69.1	293
101-55-3	4-Bromophenyl-phenylether	296	U	53.7	296
118-74-1	Hexachlorobenzene	293	U	58.1	293
87-86-5	Pentachlorophenol	296	U	146	296
85-01-8	Phenanthrene	766		61.4	296
120-12-7	Anthracene	296	U	65.8	296
84-74-2	Di-n-butylphthalate	296	U	48.2	296
206-44-0	Fluoranthene	889		52.6	296
129-00-0	Pyrene	716		101	296
85-68-7	Butylbenzylphthalate	296	U	69.1	296
91-94-1	3,3'-Dichlorobenzidine	296	U	64.7	296
56-55-3	Benzo(a)anthracene	523		62.5	296
218-01-9	Chrysene	596		37.3	293

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200 FM0126C-GS-SP

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761613 Lab File ID: 616-13.d

Sample wt/vol: 25.41 Units: G Date Received: 11/16/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/26/12 Time: 1948

Percent Solids: 71.8 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
117-81-7	Bis(2-ethylhexyl)phthalate	296	U	91	296
117-84-0	Di-n-octylphthalate	296	U	63.6	296
205-99-2	Benzo(b)fluoranthene	598		69.1	296
207-08-9	Benzo(k)fluoranthene	430		62.5	296
50-32-8	Benzo(a)pyrene	472		47.1	296
193-39-5	Indeno(1,2,3-cd)pyrene	296	U	57	296
53-70-3	Dibenzo(a,h)anthracene	296	U	44.9	296
191-24-2	Benzo(g,h,i)perylene	322		43.8	296
98-86-2	Acetophenone	296	U	110	296
95-94-3	1,2,4,5-Tetrachlorobenzene	296	U	51.5	296
86-74-8	Carbazole	296	U	59.2	296
105-60-2	Caprolactam	296	U	153	296
92-52-4	1,1'-Biphenyl	296	U	66.9	296
1912-24-9	Atrazine	296	U	86.6	296
100-52-7	Benzaldehyde	296	U	49.3	296

8270 QC Summary

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 200514	EPA Sample No. 154210MB
Lab Code :	PEL	Case No.:	SAS No:	SDG No.: 3507616
Matrix:	SOIL		Lab Sample ID: 154210MB	Lab File ID: 11608MB.d
Sample wt/vol:	20.22	Units: G	Date Received:	11/20/12
Concentrated Extract Volume:	1		Date Extracted:	11/20/12
Level:(low/med)	LOW		Date Analyzed:	11/20/12 Time: 1822
Percent Solids:	100	decanted : (Dilution Factor:	1
Extraction:	OTHER		Station ID:	Method: 8270
GPC Cleanup : (Y/N)	N	pH:		
Column(1):	HPMS-5	ID: 0.25 (mm)		
CONCENTRATION UNITS: UG/KG				

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
111-44-4	Bis(2-chloroethyl)ether	267	U	66.3	267
108-95-2	Phenol	1320	U	64.3	1320
95-57-8	2-Chlorophenol	267	U	68.2	267
108-60-1	2,2'-Oxybis(1-chloropropane)	267	U	218	267
95-48-7	2-Methylphenol	264	U	95	264
67-72-1	Hexachloroethane	267	U	49.4	267
621-64-7	N-Nitroso-di-n-propylamine	267	U	60.3	267
106-44-5	4-Methylphenol	267	U	58.4	267
98-95-3	Nitrobenzene	267	U	59.3	267
78-59-1	Isophorone	267	U	58.4	267
88-75-5	2-Nitrophenol	267	U	71.2	267
105-67-9	2,4-Dimethylphenol	264	U	56.4	264
111-91-1	Bis(2-chloroethoxy)methane	264	U	56.4	264
120-83-2	2,4-Dichlorophenol	264	U	74.2	264
91-20-3	Naphthalene	267	U	63.3	267
106-47-8	4-Chloroaniline	267	U	62.3	267
91-57-6	2-Methylnaphthalene	267	U	57.4	267
87-68-3	Hexachlorobutadiene	267	U	57.4	267
59-50-7	4-Chloro-3-methylphenol	267	U	55.4	267
90-12-0	1-Methylnaphthalene	267	U	61.3	267
77-47-4	Hexachlorocyclopentadiene	660	U	148	660
88-06-2	2,4,6-Trichlorophenol	264	U	67.2	264
95-95-4	2,4,5-Trichlorophenol	264	U	73.2	264
91-58-7	2-Chloronaphthalene	267	U	66	267
88-74-4	2-Nitroaniline	267	U	56.4	267
208-96-8	Acenaphthylene	267	U	54.4	267
131-11-3	Dimethylphthalate	267	U	58.4	267

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200514 154210MB
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Matrix: SOIL Lab Sample ID: 154210MB Lab File ID: 11608MB.d
 Sample wt/vol: 20.22 Units: G Date Received: 11/20/12
 Concentrated Extract Volume: 1 Date Extracted: 11/20/12
 Level:(low/med) LOW Date Analyzed: 11/20/12 Time: 1822
 PercentSolids: 100 decanted : (Dilution Factor: 1
 Extraction: OTHER Station ID: Method: 8270
 GPC Cleanup : (Y/N) N pH:
 Column(1): HPMS-5 ID: 0.25 (mm)
 CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
606-20-2	2,6-Dinitrotoluene	267	U	49.4	267
83-32-9	Acenaphthene	267	U	48.5	267
99-09-2	3-Nitroaniline	264	U	79.1	264
51-28-5	2,4-Dinitrophenol	1320	U	218	1320
132-64-9	Dibenzofuran	267	U	53.4	267
121-14-2	2,4-Dinitrotoluene	267	U	48.5	267
100-02-7	4-Nitrophenol	660	U	52.4	660
86-73-7	Fluorene	267	U	50.4	267
7005-72-3	4-Chlorophenyl-phenylether	267	U	50.4	267
84-66-2	Diethylphthalate	267	U	50.4	267
100-01-6	4-Nitroaniline	264	U	87	264
534-52-1	4,6-Dinitro-2-methylphenol	267	U	263	267
86-30-6	N-Nitrosodiphenylamine	264	U	62.3	264
101-55-3	4-Bromophenyl-phenylether	267	U	48.5	267
118-74-1	Hexachlorobenzene	264	U	52.4	264
87-86-5	Pentachlorophenol	267	U	132	267
85-01-8	Phenanthrene	267	U	55.4	267
120-12-7	Anthracene	267	U	59.3	267
84-74-2	Di-n-butylphthalate	267	U	43.5	267
206-44-0	Fluoranthene	267	U	47.5	267
129-00-0	Pyrene	267	U	91	267
85-68-7	Butylbenzylphthalate	267	U	62.3	267
91-94-1	3,3'-Dichlorobenzidine	267	U	58.4	267
56-55-3	Benzo(a)anthracene	267	U	56.4	267
218-01-9	Chrysene	264	U	33.6	264
117-81-7	Bis(2-ethylhexyl)phthalate	267	U	82.1	267
117-84-0	Di-n-octylphthalate	267	U	57.4	267

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200514 154210MB

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 154210MB Lab File ID: 11608MB.d

Sample wt/vol: 20.22 Units: G Date Received: 11/20/12

Concentrated Extract Volume: 1 Date Extracted: 11/20/12

Level:(low/med) LOW Date Analyzed: 11/20/12 Time: 1822

Percent Solids: 100 decanted : (Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	ANALYTE	RESULT	Q	MDL	RL
205-99-2	Benzo(b)fluoranthene	267	U	62.3	267
207-08-9	Benzo(k)fluoranthene	267	U	56.4	267
50-32-8	Benzo(a)pyrene	267	U	42.5	267
193-39-5	Indeno(1,2,3-cd)pyrene	267	U	51.4	267
53-70-3	Dibenzo(a,h)anthracene	267	U	40.6	267
191-24-2	Benzo(g,h,i)perylene	267	U	39.6	267
98-86-2	Acetophenone	267	U	98.9	267
95-94-3	1,2,4,5-Tetrachlorobenzene	267	U	46.5	267
86-74-8	Carbazole	267	U	53.4	267
105-60-2	Caprolactam	267	U	138	267
92-52-4	1,1'-Biphenyl	267	U	60.3	267
1912-24-9	Atrazine	267	U	78.1	267
100-52-7	Benzaldehyde	267	U	44.5	267

SEMI-VOLATILE ORGANIC METHOD BLANK SUMMARY

Lab Name:	Spectrum Analytical, Inc	Contract:	35th Avenue Removal Site 2005148	EPA Sample No.
Lab Code :	PEL	Case No.:		154210MB
Lab File ID:	11608MB.d		Lab Sample ID:	154210MB
Instrument ID:	SMSD04		Date Extracted:	11/20/12
Matrix:	SOIL		Date Analyzed:	11/20/12
Level:(low/med)	LOW		Time Analyzed:	1822

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	154211LCS	154211LCS	11608LCS.d	11/20/12	1842
2	CV0043C-CS	350761605	616-05.d	11/26/12	1928
3	FM0126C-GS-SP	350761613	616-13.d	11/26/12	1948

COMMENTS:

Page 1 of 1

2A

SOIL SEMI-VOLATILE ORGANIC SURROGATE RECOVERY

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20

Lab Code : PEL Case No. SAS No: SDG NO.: 3507616

Column(1): HPMS-5 ID: 0.25 (mm)

EPA Sample NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
154210MB	81.2	82.8	77.7	76.9	86.8	76.1	0
154211LCS	83.4	82.4	80.2	80.6	89.1	79.0	0
CV0043C-CS	76.3	77.1	78.1	75.0	88.3	76.9	0
FM0126C-GS-SP	66.1	69.3	67.9	71.2	85.2	72.6	0

Control Limits

S1 = 2-Fluorophenol	25 - 121
S2 = Phenol-d5	24 - 113
S3 = Nitrobenzene-d5	23 - 120
S4 = 2-Fluorobiphenyl	30 - 115
S5 = 2,4,6-Tribromophenol	19 - 122
S6 = p-Terphenyl-d14	18 - 137

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

Control limit source: (lab/method) METHOD

**SEMICVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION -
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148Lab Code : PEL Case No. SAS No: SDG No.: 3507616Lab File ID: DFTPP2.dDFTPP Injection Date: 11/20/12Instrument ID: SMSD04DFTPP Injection Time: 1552GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	44.8
68	Less than 2.0% of mass 69	0 (0)1
69	Mass 69 relative abundance	56.8
70	Less than 2.0% of mass 69	0.2 (0.28)1
127	10.0 - 80.0% of mass 198	49.7
197	Less than 2.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	23.6
365	Greater than 1.0% of mass 198	3.1
441	0.0 - 24.0% of mass 442	11.6 (17.49)2
442	Greater than 50.0% of mass 198	66.4
443	15.0 - 24.0% of mass 442	13.3 (20.08)2

1-Value is % of mass 69

2-Value is % of 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
1 CCV1136491	47766	8270CAL4.d	11/20/12	1630
2 CCV1136493	47965	BSCAL4.d	11/20/12	1653
3 CCV1136492	47936	AP9CAL4.d	11/20/12	1714
4 154210MB	154210MB	11608MB.d	11/20/12	1822
5 154211LCS	154211LCS	11608LCS.d	11/20/12	1842

**SEMICVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION -
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616
 Lab File ID: DFTPP4.d DFTPP Injection Date: 11/15/12
 Instrument ID: SMSD04 DFTPP Injection Time: 0143
 GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	43.2
68	Less than 2.0% of mass 69	0 (0)1
69	Mass 69 relative abundance	55.1
70	Less than 2.0% of mass 69	0 (0)1
127	10.0 - 80.0% of mass 198	49.5
197	Less than 2.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	24.9
365	Greater than 1.0% of mass 198	3
441	0.0 - 24.0% of mass 442	12.4 (17.08)2
442	Greater than 50.0% of mass 198	72.9
443	15.0 - 24.0% of mass 442	14.5 (19.87)2

1-Value is % of mass 69

2-Value is % of 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
1 STD1135522	47885	BSCAL7.d	11/15/12	0201
2 STD1135521	47962	BSCAL6.d	11/15/12	0222
3 STD1135520	47964	BSCAL5.d	11/15/12	0243

**SEMOVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION -
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616
 Lab File ID: DFTPP6.d DFTPP Injection Date: 11/15/12
 Instrument ID: SMSD04 DFTPP Injection Time: 0722
 GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	44.2
68	Less than 2.0% of mass 69	0 (0)1
69	Mass 69 relative abundance	55.3
70	Less than 2.0% of mass 69	0.1 (0.21)1
127	10.0 - 80.0% of mass 198	49.3
197	Less than 2.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	6.6
275	10.0 - 60.0% of mass 198	23.4
365	Greater than 1.0% of mass 198	3
441	0.0 - 24.0% of mass 442	11.2 (17.16)2
442	Greater than 50.0% of mass 198	65.5
443	15.0 - 24.0% of mass 442	12.9 (19.62)2

1-Value is % of mass 69

2-Value is % of 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
1	STD1135518	47965	BSCAL4.d	11/15/12	0740
2	STD1135517	47966	BSCAL3.d	11/15/12	0801
3	STD1135516	47967	BSCAL2.d	11/15/12	0822
4	STD1135515	47968	BSCAL1.d	11/15/12	0843
5	SSC1135523	47969	BSSEC.d	11/15/12	0904
6	STD1135513	47933	AP9CAL7.d	11/15/12	0925
7	STD1135512	47934	AP9CAL6.d	11/15/12	0946
8	STD1135511	47935	AP9CAL5.d	11/15/12	1007
9	STD1135509	47936	AP9CAL4.d	11/15/12	1028
10	STD1135508	47937	AP9CAL3.d	11/15/12	1049
11	STD1135507	47938	AP9CAL2.d	11/15/12	1109
12	STD1135506	47939	AP9CAL1.d	11/15/12	1130
13	SSC1135514	47943	AP9SEC.d	11/15/12	1151

**SEMOVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION -
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148Lab Code : PEL Case No. SAS No: SDG No.: 3507616Lab File ID: DFTPP2.DDFTPP Injection Date: 11/14/12Instrument ID: SMSD04DFTPP Injection Time: 1935GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	39.3
68	Less than 2.0% of mass 69	0 (0)1
69	Mass 69 relative abundance	50.1
70	Less than 2.0% of mass 69	0 (0)1
127	10.0 - 80.0% of mass 198	47.4
197	Less than 2.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	7
275	10.0 - 60.0% of mass 198	25.5
365	Greater than 1.0% of mass 198	3.5
441	0.0 - 24.0% of mass 442	13.5 (16.9)2
442	Greater than 50.0% of mass 198	79.8
443	15.0 - 24.0% of mass 442	16.1 (20.21)2

1-Value is % of mass 69

2-Value is % of 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
1	STD1135504	47763	8270CAL7.d	11/14/12	2240
2	STD1135503	47764	8270CAL6.d	11/14/12	2301
3	STD1135502	47765	8270CAL5.d	11/14/12	2322
4	STD1135500	47766	8270CAL4.d	11/14/12	2343
5	STD1135499	47767	8270CAL3.d	11/15/12	0004
6	STD1135498	47768	8270CAL2.d	11/15/12	0025
7	STD1135497	47769	8270CAL1.d	11/15/12	0046
8	SSC1135505	47770	8270SEC.d	11/15/12	0107

**SEMICVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION -
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148Lab Code : PEL Case No. SAS No: SDG No.: 3507616Lab File ID: DFTPP2.dDFTPP Injection Date: 11/26/12Instrument ID: SMSD04DFTPP Injection Time: 1626GC Column: HPMS-5 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	41.9
68	Less than 2.0% of mass 69	0 (0)1
69	Mass 69 relative abundance	53.2
70	Less than 2.0% of mass 69	0.3 (0.55)1
127	10.0 - 80.0% of mass 198	47.4
197	Less than 2.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 - 9.0% of mass 198	7
275	10.0 - 60.0% of mass 198	24.3
365	Greater than 1.0% of mass 198	3.5
441	0.0 - 24.0% of mass 442	13.7 (17.16)2
442	Greater than 50.0% of mass 198	80
443	15.0 - 24.0% of mass 442	15.7 (19.63)2

1-Value is % of mass 69

2-Value is % of 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
1 CCV1137614	47766	8270CAL4.d	11/26/12	1704
2 CCV1137617	47965	BSCAL4.d	11/26/12	1725
3 CCV1137615	47936	AP9CAL4.d	11/26/12	1746
4 CV0043C-CS	350761605	616-05.d	11/26/12	1928
5 FM0126C-GS-SP	350761613	616-13.d	11/26/12	1948

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Lab File ID (Standard): 8270CAL4.d Date Analyzed: 11/14/2012
 Instrument ID: SMSD04 Time Analyzed: 23:43
 GC Column: HPMS-5 ID: 0.25 (mm)

	IS1 AREA #	RT	IS2 AREA #	RT	IS3 AREA #	RT
MID CAL STD	99413	4.30	328158	5.47	204923	7.17
UPPER LIMIT	198826	4.80	656316	5.97	409846	7.67
LOWER LIMIT	49706.5	3.80	164079	4.97	102461.5	6.67
EPA SAMPLE NO.						
1 154210MB	83791	4.28	282070	5.45	182800	7.16
2 154211LCS	89360	4.29	290694	5.45	186432	7.16
3 CV0043C-CS	98786	4.28	323574	5.45	206015	7.15
4 FM0126C-GS-SP	77009	4.28	257101	5.45	165611	7.15

IS1 = 1,4-Dichlorobenzene-d4

IS2 = Naphthalene-d8

IS3 = Acenaphthene-d10

UPPER LIMIT = +100%

of internal standard area.

LOWER LIMIT = -50%

of internal standard area

Column used to flag internal standard area values with an asterisk

SEMI-VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Lab File ID (Standard): 8270CAL4.d Date Analyzed: 11/14/2012
 Instrument ID: SMSD04 Time Analyzed: 23:43
 GC Column: HPMS-5 ID: 0.25 (mm)

	IS4 AREA #	RT	IS5 AREA #	RT	IS6 AREA #	RT
MID CAL STD	343898	8.60	389232	11.21	344421	12.53
UPPER LIMIT	687796	9.10	778464	11.71	688842	13.03
LOWER LIMIT	171949	8.10	194616	10.71	172210.5	12.03
EPA SAMPLE NO.						
1 154210MB	325306	8.59	382286	11.20	359967	12.52
2 154211LCS	328976	8.59	394282	11.20	359920	12.51
3 CV0043C-CS	378531	8.58	418171	11.19	389785	12.51
4 FM0126C-GS-SP	303166	8.58	334481	11.19	317232	12.51

IS4 = Phenanthrene-d10

IS5 = Chrysene-d12

IS6 = Perylene-d12

UPPER LIMIT = +100%

of internal standard area.

LOWER LIMIT = -50%

of internal standard area

Column used to flag internal standard area values with an asterisk

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616
 GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 11/15/12
 Instrument ID: SMSD04

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION					S1 RT #	S2 RT #	S3 RT #	S4 RT #
	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED			
1	DFTPP2	47137	DFTPP2.D	11/14/12	1935			
2	STD1135504	47763	8270CAL7.d	11/14/12	2240	3.25	4.02	4.82
3	STD1135503	47764	8270CAL6.d	11/14/12	2301	3.25	4.01	4.82
4	STD1135502	47765	8270CAL5.d	11/14/12	2322	3.25	4.01	4.82
5	STD1135500	47766	8270CAL4.d	11/14/12	2343	3.25	4.01	4.82
6	STD1135499	47767	8270CAL3.d	11/15/12	0004	3.25	4	4.82
7	STD1135498	47768	8270CAL2.d	11/15/12	0025	3.25	4	4.82
8	STD1135497	47769	8270CAL1.d	11/15/12	0046	3.25	4	4.81
9	SSC1135505	47770	8270SEC.d	11/15/12	0107	3.25	4.01	4.82
10	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/15/12	0127			
11	DFTPP4	47137	DFTPP4.d	11/15/12	0143			
12	STD1135522	47885	BSCAL7.d	11/15/12	0201			
13	STD1135521	47962	BSCAL6.d	11/15/12	0222			
14	STD1135520	47964	BSCAL5.d	11/15/12	0243			
15	DFTPP6	47137	DFTPP6.d	11/15/12	0722			
16	STD1135518	47965	BSCAL4.d	11/15/12	0740			
17	STD1135517	47966	BSCAL3.d	11/15/12	0801			
18	STD1135516	47967	BSCAL2.d	11/15/12	0822			
19	STD1135515	47968	BSCAL1.d	11/15/12	0843			
20	SSC1135523	47969	BSSEC.d	11/15/12	0904			
21	STD1135513	47933	AP9CAL7.d	11/15/12	0925			
22	STD1135512	47934	AP9CAL6.d	11/15/12	0946			
23	STD1135511	47935	AP9CAL5.d	11/15/12	1007			
24	STD1135509	47936	AP9CAL4.d	11/15/12	1028			
25	STD1135508	47937	AP9CAL3.d	11/15/12	1049			
26	STD1135507	47938	AP9CAL2.d	11/15/12	1109			

QC LIMITS

S1	=	2-Fluorophenol	(+/- 0.26 MINUTES)
S2	=	Phenol-d5	(+/- 0.26 MINUTES)
S3	=	Nitrobenzene-d5	(+/- 0.33 MINUTES)
S4	=	2-Fluorobiphenyl	(+/- 0.43 MINUTES)
S5	=	2,4,6-Tribromophenol	(+/- 0.43 MINUTES)
S6	=	p-Terphenyl-d14	(+/- 0.68 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616
 GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 11/15/12
 Instrument ID: SMSD04

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION					S1	S2	S3	S4	
	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #	RT #	RT #
27	STD1135506	47939	AP9CAL1.d	11/15/12	1130				
28	SSC1135514	47943	AP9SEC.d	11/15/12	1151				
29	DFTPP2	47137	DFTPP2.d	11/20/12	1552				
30	CCV1136491	47766	8270CAL4.d	11/20/12	1630	3.24	3.99	4.8	6.5
31	CCV1136493	47965	BSCAL4.d	11/20/12	1653				
32	CCV1136492	47936	AP9CAL4.d	11/20/12	1714				
33	154210MB	154210MB	11608MB.d	11/20/12	1822	3.23	3.99	4.8	6.5
34	154211LCS	154211LCS	11608LCS.d	11/20/12	1842	3.24	4	4.81	6.5
35	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/20/12	2013				
36	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/20/12	2033				
37	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/20/12	2053				
38	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/20/12	2153				
39	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/20/12	2213				
40	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/20/12	2234				
41	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/20/12	2314				
42	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/20/12	2334				
43	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/20/12	2354				
44	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/21/12	0014				
45	DFTPP2	47137	DFTPP2.d	11/26/12	1626				
46	CCV1137614	47766	8270CAL4.d	11/26/12	1704	3.24	3.99	4.8	6.5
47	CCV1137617	47965	BSCAL4.d	11/26/12	1725				
48	CCV1137615	47936	AP9CAL4.d	11/26/12	1746				
49	CV0043C-CS	350761605	616-05.d	11/26/12	1928	3.24	3.99	4.8	6.5
50	FM0126C-GS-SP	350761613	616-13.d	11/26/12	1948	3.24	3.99	4.8	6.5
51	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/29/12	1133				
52	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/29/12	1151				

QC LIMITS

- S1 = 2-Fluorophenol (+/- 0.26 MINUTES)
 S2 = Phenol-d5 (+/- 0.26 MINUTES)
 S3 = Nitrobenzene-d5 (+/- 0.33 MINUTES)
 S4 = 2-Fluorobiphenyl (+/- 0.43 MINUTES)
 S5 = 2,4,6-Tribromophenol (+/- 0.43 MINUTES)
 S6 = p-Terphenyl-d14 (+/- 0.68 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

SEMI-VOLATILE ORGANIC ANALYTICAL SEQUENCE

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616
 GC Column: HPMS-5 ID: 0.25 (mm) Init. Calib. Date: 11/15/12
 Instrument ID: SMSD04

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
 SAMPLES, AND STANDARDS IS GIVEN BELOW:

MIDCAL SURROGATE RT FROM INITIAL CALIBRATION					S1	S2	S3	S4	
	CLIENT SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #	RT #	RT #
53	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/29/12	1212				
54	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/29/12	1233				
55	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/29/12	1551				
56	ZZZZZZ	ZZZZZZ	ZZZZZZ	11/29/12	1611				

QC LIMITS

S1	=	2-Fluorophenol	(+/- 0.26 MINUTES)
S2	=	Phenol-d5	(+/- 0.26 MINUTES)
S3	=	Nitrobenzene-d5	(+/- 0.33 MINUTES)
S4	=	2-Fluorobiphenyl	(+/- 0.43 MINUTES)
S5	=	2,4,6-Tribromophenol	(+/- 0.43 MINUTES)
S6	=	p-Terphenyl-d14	(+/- 0.68 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20

154211LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

COMPOUND	SPIKE ADDED ug/Kg	LCS CONCENTRATION ug/Kg	LCS % REC #	LCS % RPD	QC LIMITS	
					RPD	REC.
Bis(2-chloroethyl)ether	1980	1850	93.4			57 - 113
Phenol	1980	1890	95.5			57 - 103
2-Chlorophenol	1980	1730	87.4			57 - 100
2,2'-Oxybis(1-chloropropane)	1980	1660	83.8			46 - 107
2-Methylphenol	1980	1760	88.9			55 - 100
Hexachloroethane	1980	1610	81.3			49 - 110
N-Nitroso-di-n-propylamine	1980	1810	91.4			54 - 112
4-Methylphenol	1980	1850	93.4			54 - 104
Nitrobenzene	1980	1670	84.3			53 - 99
Isophorone	1980	1590	80.3			54 - 112
2-Nitrophenol	1980	1840	92.9			54 - 107
2,4-Dimethylphenol	1980	2050	104.0			56 - 123
Bis(2-chloroethoxy)methane	1980	2360	119.0			51 - 127
2,4-Dichlorophenol	1980	1840	92.9			56 - 101
Naphthalene	1980	1790	90.4			58 - 102
4-Chloroaniline	1980	1760	88.9			53 - 106
2-Methylnaphthalene	1980	1770	89.4			57 - 99
Hexachlorobutadiene	1980	1840	92.9			56 - 108
4-Chloro-3-methylphenol	1980	1830	92.4			64 - 105
1-Methylnaphthalene	1980	1700	85.9			51 - 111
Hexachlorocyclopentadiene	1980	1410	71.2			18 - 110
2,4,6-Trichlorophenol	1980	1840	92.9			60 - 105
2,4,5-Trichlorophenol	1980	1910	96.5			59 - 103
2-Chloronaphthalene	1980	1770	89.4			56 - 103
2-Nitroaniline	1980	1800	90.9			56 - 113
Acenaphthylene	1980	1830	92.4			60 - 105
Dimethylphthalate	1980	1880	94.9			63 - 108
2,6-Dinitrotoluene	1980	1880	94.9			59 - 109
Acenaphthene	1980	1770	89.4			57 - 105
3-Nitroaniline	1980	1900	96.0			51 - 118
2,4-Dinitrophenol	3960	3950	99.7			5 - 117
Dibenzofuran	1980	1840	92.9			61 - 103

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20

154211LCS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

COMPOUND	SPIKE ADDED ug/Kg	LCS CONCENTRATION ug/Kg	LCS % REC #	LCS % RPD	QC LIMITS	
					RPD	REC.
2,4-Dinitrotoluene	1980	1940	98.0			59 - 109
4-Nitrophenol	1980	2000	101.0			49 - 117
Fluorene	1980	1800	90.9			60 - 105
4-Chlorophenyl-phenylether	1980	1780	89.9			58 - 103
Diethylphthalate	1980	1880	94.9			61 - 109
4-Nitroaniline	1980	2050	104.0			48 - 130
4,6-Dinitro-2-methylphenol	1980	1960	99.0			41 - 101
N-Nitrosodiphenylamine	1980	1960	99.0			61 - 112
4-Bromophenyl-phenylether	1980	1930	97.5			62 - 104
Hexachlorobenzene	1980	1820	91.9			60 - 102
Pentachlorophenol	1980	2020	102.0			39 - 123
Phenanthrene	1980	1870	94.4			63 - 106
Anthracene	1980	2140	108.0			62 - 108
Di-n-butylphthalate	1980	1980	100.0			62 - 110
Fluoranthene	1980	1940	98.0			62 - 113
Pyrene	1980	1910	96.5			58 - 121
Butylbenzylphthalate	1980	2070	104.0			64 - 128
3,3'-Dichlorobenzidine	3960	3620	91.4			50 - 104
Benzo(a)anthracene	1980	1980	100.0			63 - 117
Chrysene	1980	1890	95.5			62 - 113
Bis(2-ethylhexyl)phthalate	1980	2000	101.0			59 - 128
Di-n-octylphthalate	1980	1810	91.4			61 - 126
Benzo(b)fluoranthene	1980	2140	108.0			57 - 125
Benzo(k)fluoranthene	1980	2050	104.0			58 - 112
Benzo(a)pyrene	1980	1960	99.0			59 - 114
Indeno(1,2,3-cd)pyrene	1980	1930	97.5			55 - 115
Dibenzo(a,h)anthracene	1980	1930	97.5			50 - 113
Benzo(g,h,i)perylene	1980	1990	100.0			50 - 112
Acetophenone	3960	3150	79.5			50 - 107
1,2,4,5-Tetrachlorobenzene	1980	1590	80.3			50 - 114
Carbazole	1980	1920	97.0			68 - 114
Caprolactam	1980	1760	88.9			29 - 142

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

SEMI-VOLATILE ORGANIC LAB CONTROL SAMPLE RECOVERY

				EPA Sample No.
Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 20	154211LCS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616

COMPOUND	SPIKE ADDED ug/Kg	LCS CONCENTRATION ug/Kg	LCS	LCS	QC LIMITS	
			% REC #	% RPD	RPD	REC.
1,1'-Biphenyl	1980	1540	77.8			47 - 106
Atrazine	1980	1660	83.8			50 - 110
Benzaldehyde	1980	1150	58.1			27 - 111

Spike Recovery: 0 out of 67 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal

FM0126C-GS-SPMS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

COMPOUND	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC #	QC LIMITS REC.
Bis(2-chloroethyl)ether	2200	0	1600	73.3	30 - 126
Phenol	2200	0	1600	71.9	30 - 129
2-Chlorophenol	2200	0	1500	69.2	16 - 113
2,2'-Oxybis(1-chloropropane)	2200	0	1500	66.1	20 - 123
2-Methylphenol	2200	0	1500	68.3	27 - 117
Hexachloroethane	2200	0	1500	66.1	24 - 120
N-Nitroso-di-n-propylamine	2200	0	1600	71.5	22 - 128
4-Methylphenol	2200	0	1600	70.6	30 - 150
Nitrobenzene	2200	0	1500	68.3	14 - 129
Isophorone	2200	0	1400	65.6	35 - 144
2-Nitrophenol	2200	0	1600	72.9	14 - 113
2,4-Dimethylphenol	2200	0	1600	74.2	30 - 110
Bis(2-chloroethoxy)methane	2200	0	2100	94.6	31 - 126
2,4-Dichlorophenol	2200	0	1600	71.5	18 - 115
Naphthalene	2200	0	1600	72.4	29 - 119
4-Chloroaniline	2200	0	1400	64.7	30 - 143
2-Methylnaphthalene	2200	0	1600	73.3	33 - 120
Hexachlorobutadiene	2200	0	1600	72.4	32 - 120
4-Chloro-3-methylphenol	2200	0	1800	80.5	30 - 123
1-Methylnaphthalene	2200	0	1500	69.2	24 - 118
Hexachlorocyclopentadiene	2200	0	330	14.8	10 - 119
2,4,6-Trichlorophenol	2200	0	1700	76.0	14 - 118
2,4,5-Trichlorophenol	2200	0	1800	79.6	29 - 125
2-Chloronaphthalene	2200	0	1600	73.3	31 - 118
2-Nitroaniline	2200	0	1700	78.7	22 - 134
Acenaphthylene	2200	0	1700	75.6	26 - 123
Dimethylphthalate	2200	0	1800	82.4	33 - 127
2,6-Dinitrotoluene	2200	0	1800	82.8	26 - 123
Acenaphthene	2200	0	1700	75.1	30 - 135
3-Nitroaniline	2200	0	1700	76.9	20 - 125

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal	FM0126C-GS-SPMS
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616

COMPOUND	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC #	QC LIMITS REC.
2,4-Dinitrophenol	4400	0	3400	77.8	15 - 150
Dibenzofuran	2200	0	1800	79.2	31 - 123
2,4-Dinitrotoluene	2200	0	1900	85.1	17 - 127
4-Nitrophenol	2200	0	2000	91.4	30 - 135
Fluorene	2200	0	1700	76.9	25 - 120
4-Chlorophenyl-phenylether	2200	0	1700	77.4	10 - 119
Diethylphthalate	2200	0	1800	82.4	30 - 127
4-Nitroaniline	2200	0	2000	88.2	10 - 150
4,6-Dinitro-2-methylphenol	2200	0	1800	79.6	40 - 130
N-Nitrosodiphenylamine	2200	0	1800	81.9	31 - 137
4-Bromophenyl-phenylether	2200	0	1800	81.9	31 - 129
Hexachlorobenzene	2200	0	1800	79.2	30 - 118
Pentachlorophenol	2200	0	2000	91.9	30 - 113
Phenanthrene	2200	770	1800	48.1	28 - 121
Anthracene	2200	0	2000	92.3	31 - 121
Di-n-butylphthalate	2200	0	1900	85.1	34 - 132
Fluoranthene	2200	890	2000	49.4	29 - 125
Pyrene	2200	720	1900	51.8	31 - 125
Butylbenzylphthalate	2200	0	2000	91.0	29 - 149
3,3'-Dichlorobenzidine	4400	0	2800	64.3	20 - 110
Benzo(a)anthracene	2200	520	2000	65.0	30 - 117
Chrysene	2200	600	1900	59.9	32 - 115
Bis(2-ethylhexyl)phthalate	2200	0	2200	98.2	32 - 138
Di-n-octylphthalate	2200	0	1700	78.7	30 - 150
Benzo(b)fluoranthene	2200	600	2200	71.1	23 - 128
Benzo(k)fluoranthene	2200	430	1900	67.9	31 - 120
Benzo(a)pyrene	2200	470	1900	62.8	31 - 121
Indeno(1,2,3-cd)pyrene	2200	0	2000	88.2	28 - 118
Dibenzo(a,h)anthracene	2200	0	2000	89.1	28 - 118
Benzo(g,h,i)perylene	2200	320	2000	74.6	28 - 120

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal

FM0126C-GS-SPMS

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

COMPOUND	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC #	QC LIMITS REC.
Acetophenone	4400	0	3000	67.4	27 - 112
1,2,4,5-Tetrachlorobenzene	2200	0	1500	67.4	47 - 110
Carbazole	2200	0	1900	84.2	34 - 133
Caprolactam	2200	0	2000	88.2	10 - 150
1,1'-Biphenyl	2200	0	1500	68.8	30 - 152
Atrazine	2200	0	1500	68.8	10 - 149
Benzaldehyde	2200	0	960	43.7	10 - 140

Spike Recovery: 0 out of 67 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS:

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Remo	FM0126C-GS-SPMSD
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616

COMPOUND	SPIKE ADDED ug/Kg	MSD CONCENTRATION ug/Kg	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Bis(2-chloroethyl)ether	2200	1800	81.9	8.8	30	30 - 126
Phenol	2200	1700	77.8	5.5	30	30 - 129
2-Chlorophenol	2200	1600	75.9	6.9	30	16 - 113
2,2'-Oxybis(1-chloropropane)	2200	1500	69.9	3.4	30	20 - 123
2-Methylphenol	2200	1600	72.2	3.3	30	27 - 117
Hexachloroethane	2200	1500	71.3	5.3	30	24 - 120
N-Nitroso-di-n-propylamine	2200	1700	79.6	8.5	30	22 - 128
4-Methylphenol	2200	1600	74.5	3.2	30	30 - 150
Nitrobenzene	2200	1600	73.1	4.5	30	14 - 129
Isophorone	2200	1500	69.9	4.1	30	35 - 144
2-Nitrophenol	2200	1800	81.5	8.9	30	14 - 113
2,4-Dimethylphenol	2200	1700	78.7	3.6	30	30 - 110
Bis(2-chloroethoxy)methane	2200	2300	106.0	9.6	30	31 - 126
2,4-Dichlorophenol	2200	1700	78.7	7.3	30	18 - 115
Naphthalene	2200	1800	82.4	10.7	30	29 - 119
4-Chloroaniline	2200	1400	66.7	0.7	30	30 - 143
2-Methylnaphthalene	2200	1700	78.7	4.8	30	33 - 120
Hexachlorobutadiene	2200	1800	83.3	11.8	30	32 - 120
4-Chloro-3-methylphenol	2200	1700	80.1	2.8	30	30 - 123
1-Methylnaphthalene	2200	1600	75.5	6.3	30	24 - 118
Hexachlorocyclopentadiene	2200	370	17.3	13.1	30	10 - 119
2,4,6-Trichlorophenol	2200	1800	81.0	4.1	30	14 - 118
2,4,5-Trichlorophenol	2200	1700	80.6	1.1	30	29 - 125
2-Chloronaphthalene	2200	1700	78.7	4.8	30	31 - 118
2-Nitroaniline	2200	1700	78.2	2.9	30	22 - 134
Acenaphthylene	2200	1700	79.6	2.9	30	26 - 123
Dimethylphthalate	2200	1800	84.3	0.0	30	33 - 127
2,6-Dinitrotoluene	2200	1700	80.6	5.0	30	26 - 123
Acenaphthene	2200	1700	79.2	3.0	30	30 - 135
3-Nitroaniline	2200	1700	79.6	1.2	30	20 - 125

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Remo	FM0126C-GS-SPMSD
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616

COMPOUND	SPIKE ADDED ug/Kg	MSD CONCENTRATION ug/Kg	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
2,4-Dinitrophenol	4300	3200	75.2	6.0	30	15 - 150
Dibenzofuran	2200	1800	81.0	0.0	30	31 - 123
2,4-Dinitrotoluene	2200	1800	84.3	3.2	30	17 - 127
4-Nitrophenol	2200	1900	88.9	5.1	30	30 - 135
Fluorene	2200	1700	78.2	0.6	30	25 - 120
4-Chlorophenyl-phenylether	2200	1700	77.8	1.8	30	10 - 119
Diethylphthalate	2200	1800	81.5	3.4	30	30 - 127
4-Nitroaniline	2200	1800	85.2	5.8	30	10 - 150
4,6-Dinitro-2-methylphenol	2200	1700	80.1	1.7	30	40 - 130
N-Nitrosodiphenylamine	2200	1900	87.0	3.8	30	31 - 137
4-Bromophenyl-phenylether	2200	1800	85.6	2.2	30	31 - 129
Hexachlorobenzene	2200	1800	81.5	0.6	30	30 - 118
Pentachlorophenol	2200	2100	97.2	3.4	30	30 - 113
Phenanthrene	2200	2100	63.6	15.6	30	28 - 121
Anthracene	2200	2100	96.3	1.9	30	31 - 121
Di-n-butylphthalate	2200	1900	88.9	2.1	30	34 - 132
Fluoranthene	2200	2200	60.2	10.1	30	29 - 125
Pyrene	2200	2100	64.1	12.1	30	31 - 125
Butylbenzylphthalate	2200	2000	94.0	1.0	30	29 - 149
3,3'-Dichlorobenzidine	4300	2700	62.9	4.7	30	20 - 110
Benzo(a)anthracene	2200	2100	73.5	7.4	30	30 - 117
Chrysene	2200	2000	66.9	6.1	30	32 - 115
Bis(2-ethylhexyl)phthalate	2200	2300	105.0	4.1	30	32 - 138
Di-n-octylphthalate	2200	1800	81.0	0.6	30	30 - 150
Benzo(b)fluoranthene	2200	2100	67.7	5.2	30	23 - 128
Benzo(k)fluoranthene	2200	2300	87.5	18.4	30	31 - 120
Benzo(a)pyrene	2200	2200	81.4	18.1	30	31 - 121
Indeno(1,2,3-cd)pyrene	2200	2000	93.1	3.0	30	28 - 118
Dibenzo(a,h)anthracene	2200	2000	92.1	1.0	30	28 - 118
Benzo(g,h,i)perylene	2200	2000	77.7	1.5	30	28 - 120

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

SEMI-VOLATILE ORGANIC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Remo	FM0126C-GS-SPMSD
Lab Code :	PEL	Case No.	SAS No:	SDG No.: 3507616

COMPOUND	SPIKE ADDED ug/Kg	MSD CONCENTRATION ug/Kg	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acetophenone	4300	3300	76.8	10.5	30	27 - 112
1,2,4,5-Tetrachlorobenzene	2200	1700	77.3	11.4	30	47 - 110
Carbazole	2200	1900	87.0	1.1	30	34 - 133
Caprolactam	2200	1900	86.1	4.7	30	10 - 150
1,1'-Biphenyl	2200	1600	75.0	6.4	30	30 - 152
Atrazine	2200	1500	67.6	4.0	30	10 - 149
Benzaldehyde	2200	980	45.5	1.7	30	10 - 140

RPD: 0 out of 67 outside limits

Spike Recovery: 0 out of 67 outside limits

Column to be used to flag recovery values with an asterisk

* Values outside QC limits

Control limit source: (lab/method) METHOD

COMMENTS: _____

8270 Standards Data

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 Calibration Date Begin: 11/14/12 End: 11/15/12
 GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2240 End: 1130
 Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

COMPOUND	RRF4	RRF10	RRF20	RRF45	RRF60	<u>RRF</u>	%RSD OR R^2	RSD
Bis(2-chloroethyl)ether	1.139	1.254	1.275	1.310	1.289			
Phenol	* 1.542	1.726	1.818	1.893	1.905		*	
2-Chlorophenol	1.155	1.262	1.217	1.246	1.257			
2,2'-Oxybis(1-chloropropane)	1.556	1.679	1.651	1.629	1.645			
2-Methylphenol	0.942	1.038	0.988	1.004	1.026			
Hexachloroethane	0.581	0.672	0.640	0.662	0.661			
N-Nitroso-di-n-propylamine	# 0.945	1.076	1.051	1.092	1.123		#	
4-Methylphenol	1.367	1.494	1.460	1.504	1.547			
Nitrobenzene	0.494	0.506	0.506	0.507	0.504			
Isophorone	0.740	0.838	0.832	0.863	0.879			
2-Nitrophenol	* 0.175	0.199	0.197	0.210	0.212		*	
2,4-Dimethylphenol	0.250	0.271	0.288	0.320	0.314			
Bis(2-chloroethoxy)methane	0.467	0.480	0.486	0.499	0.499			
2,4-Dichlorophenol	* 0.314	0.321	0.342	0.355	0.359		*	
Naphthalene	1.020	1.041	1.036	1.075	1.061			
4-Chloroaniline	0.396	0.425	0.426	0.447	0.442			
2-Methylnaphthalene	0.653	0.697	0.703	0.707	0.733			
Hexachlorobutadiene	* 0.267	0.274	0.279	0.285	0.279		*	
4-Chloro-3-methylphenol	* 0.343	0.360	0.357	0.372	0.386		*	
1-Methylnaphthalene	0.624	0.636	0.630	0.652	0.670			
Hexachlorocyclopentadiene	# 0.216	0.287	0.352	0.433	0.423		#	
2,4,6-Trichlorophenol	* 0.385	0.424	0.421	0.423	0.428		*	
2,4,5-Trichlorophenol	0.415	0.440	0.441	0.464	0.469			
2-Chloronaphthalene	1.126	1.155	1.160	1.210	1.197			
2-Nitroaniline	0.347	0.398	0.414	0.426	0.438			
Acenaphthylene	1.728	1.757	1.801	1.854	1.921			
Dimethylphthalate	1.324	1.401	1.398	1.403	1.442			
2,6-Dinitrotoluene	0.247	0.301	0.316	0.331	0.346			
Acenaphthene	* 1.009	1.043	1.049	1.076	1.084		*	
3-Nitroaniline	0.253	0.307	0.307	0.304	0.312			
2,4-Dinitrophenol	# 0.107	0.139	0.179	0.198			#	
Dibenzofuran	1.543	1.579	1.615	1.640	1.683			
2,4-Dinitrotoluene	0.344	0.396	0.419	0.398	0.419			
4-Nitrophenol	# 0.175	0.241	0.249	0.254	0.282		#	

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Instrument ID: SMSD04 Calibration Date Begin: 11/14/12 End: 11/15/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2240 End: 1130

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

COMPOUND	RRF4	RRF10	RRF20	RRF45	RRF60	<u>RRF</u>	%RSD OR R^2	RSD
Fluorene	1.301	1.357	1.391	1.433	1.512			
4-Chlorophenyl-phenylether	0.684	0.704	0.727	0.766	0.791			
Diethylphthalate	1.313	1.354	1.363	1.340	1.408			
4-Nitroaniline	0.258	0.261	0.256	0.271	0.293			
4,6-Dinitro-2-methylphenol		0.122	0.131	0.162	0.166			
N-Nitrosodiphenylamine	* 0.489	0.507	0.509	0.531	0.517		*	
4-Bromophenyl-phenylether	0.224	0.235	0.241	0.262	0.254			
Hexachlorobenzene	0.264	0.252	0.270	0.290	0.291			
Pentachlorophenol	* 0.102	0.121	0.143	0.173	0.185		*	
Phanthrene	1.063	1.079	1.053	1.106	1.110			
Anthracene	0.946	0.942	0.937	0.984	0.992			
Di-n-butylphthalate	1.108	1.236	1.263	1.381	1.400			
Fluoranthene	* 1.093	1.142	1.155	1.240	1.275		*	
Pyrene	1.015	1.019	1.053	1.096	1.071			
Butylbenzylphthalate	0.416	0.468	0.491	0.539	0.545			
3,3'-Dichlorobenzidine	0.347	0.396	0.403	0.433	0.444			
Benzo(a)anthracene	0.973	0.984	1.014	1.060	1.094			
Chrysene	0.982	0.991	1.009	1.037	1.054			
Bis(2-ethylhexyl)phthalate	0.587	0.638	0.674	0.730	0.749			
Di-n-octylphthalate	* 0.972	1.177	1.253	1.440	1.499		*	
Benzo(b)fluoranthene	0.961	1.415	1.043	1.102	1.162			
Benzo(k)fluoranthene	1.341	1.470	1.071	1.196	1.213			
Benzo(a)pyrene	* 0.942	0.994	0.984	1.056	1.086		*	
Indeno(1,2,3-cd)pyrene	1.049	1.115	1.130	1.223	1.195			
Dibenzo(a,h)anthracene	0.840	0.946	0.945	1.022	1.017			
Benzo(g,h,i)perylene	0.914	0.927	0.926	0.972	0.935			
Acetophenone	0.635	0.593	0.580	0.615	0.589			
1,2,4,5-Tetrachlorobenzene	0.621	0.651	0.645	0.664	0.682			
Carbazole	0.903	0.948	0.914	1.009	1.001			
Caprolactam	0.132	0.141	0.162	0.182	0.170			
1,1'-Biphenyl	1.363	1.459	1.445	1.488	1.509			
Atrazine	0.190	0.198	0.211	0.235	0.233			
Benzaldehyde	1.151	1.256	1.234	1.266	1.282			
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SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc.

Contract: 35th Avenue Removal Site 2005148 1

Lab Code : PEL

Case No. _____

SAS No: _____

SDG No.: 3507616

Instrument ID: SMSD04

Calibration Date Begin: 11/14/12 End: 11/15/12

GC Column: HPMS-5 ID: 0.25 (mm)

Calibration Time Begin: 2240 End: 1130

Min RRF for SPCC(#) = 0.05

Max %RSD for CCC(*) = 30 %

LAB FILE ID: RRF4 =8270CAL1.d RRF20 =8270CAL3.d	RRF10 =8270CAL2.d RRF45 =8270CAL4.d	RRF60 =8270CAL5.d
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COMPOUND	RRF4	RRF10	RRF20	RRF45	RRF60	RRF	%RSD OR R^2	RSD
2-Fluorophenol(SURR)	1.138	1.261	1.234	1.306	1.296			
Phenol-d5(SURR)	1.476	1.574	1.542	1.632	1.644			
Nitrobenzene-d5(SURR)	0.466	0.509	0.495	0.510	0.504			
2-Fluorobiphenyl(SURR)	1.365	1.409	1.395	1.459	1.447			
2,4,6-Tribromophenol(SURR)	0.213	0.225	0.236	0.248	0.264			
p-Terphenyl-d14(SURR)	0.778	0.765	0.801	0.853	0.832			

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Instrument ID: SMSD04 Calibration Date Begin: 11/14/12 End: 11/15/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2240 End: 1130

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

COMPOUND	RRF75	RRF100				<u>RRF</u>	%RSD OR R^2	RSD
Bis(2-chloroethyl)ether	1.283	1.309				1.26557	4.7	
Phenol	* 1.946	1.985				1.8307	8.4	*
2-Chlorophenol	1.269	1.280				1.24099	3.5	
2,2'-Oxybis(1-chloropropane)	1.617	1.639				1.63082	2.3	
2-Methylphenol	1.037	1.055				1.0129	3.8	
Hexachloroethane	0.663	0.662				0.64881	4.8	
N-Nitroso-di-n-propylamine	# 1.101	1.110				1.07132	5.7	#
4-Methylphenol	1.562	1.609				1.50631	5.2	
Nitrobenzene	0.495	0.505				0.50245	1.1	
Isophorone	0.862	0.881				0.84206	5.8	
2-Nitrophenol	* 0.213	0.213				0.20284	7	*
2,4-Dimethylphenol	0.317	0.315				0.29643	9.3	
Bis(2-chloroethoxy)methane	0.502	0.508				0.49157	3	
2,4-Dichlorophenol	* 0.360	0.372				0.34613	6.2	*
Naphthalene	1.066	1.100				1.05678	2.5	
4-Chloroaniline	0.442	0.450				0.43264	4.3	
2-Methylnaphthalene	0.733	0.756				0.71176	4.7	
Hexachlorobutadiene	* 0.281	0.292				0.27961	2.8	*
4-Chloro-3-methylphenol	* 0.382	0.403				0.37178	5.4	*
1-Methylnaphthalene	0.674	0.700				0.65552	4.2	
Hexachlorocyclopentadiene	# 0.438	0.472				0.37449	0.99668	# 25.01117
2,4,6-Trichlorophenol	* 0.424	0.438				0.42048	4	*
2,4,5-Trichlorophenol	0.476	0.481				0.45505	5.3	
2-Chloronaphthalene	1.186	1.233				1.1811	3.1	
2-Nitroaniline	0.421	0.432				0.41099	7.5	
Acenaphthylene	1.896	1.982				1.84838	5	
Dimethylphthalate	1.384	1.415				1.39542	2.6	
2,6-Dinitrotoluene	0.333	0.344				0.31685	10.9	
Acenaphthene	* 1.077	1.123				1.06595	3.4	*
3-Nitroaniline	0.301	0.315				0.2999	7.1	
2,4-Dinitrophenol	# 0.198	0.215				0.17241	0.99685	# 23.96072
Dibenzofuran	1.655	1.723				1.63391	3.8	
2,4-Dinitrotoluene	0.409	0.427				0.40146	7	
4-Nitrophenol	# 0.278	0.282				0.25167	15	#

SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Instrument ID: SMSD04 Calibration Date Begin: 11/14/12 End: 11/15/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2240 End: 1130

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

COMPOUND	RRF75	RRF100			<u>RRF</u>	%RSD OR R^2	RSD
Fluorene	1.495	1.577			1.43792	6.7	
4-Chlorophenyl-phenylether	0.780	0.835			0.75525	7	
Diethylphthalate	1.374	1.445			1.37106	3.2	
4-Nitroaniline	0.281	0.287			0.27236	5.5	
4,6-Dinitro-2-methylphenol	0.168	0.170			0.15321	13.6	
N-Nitrosodiphenylamine	* 0.520	0.531			0.51495	2.9 *	
4-Bromophenyl-phenylether	0.257	0.265			0.24814	6.1	
Hexachlorobenzene	0.293	0.299			0.27955	6.4	
Pentachlorophenol	* 0.187	0.195			0.1581	0.99813 * 22.98399	
Phenanthrene	1.126	1.138			1.09648	2.9	
Anthracene	1.007	1.022			0.97596	3.5	
Di-n-butylphthalate	1.379	1.380			1.3067	8.3	
Fluoranthene	* 1.253	1.250			1.20121	5.8 *	
Pyrene	1.074	1.083			1.05858	3	
Butylbenzylphthalate	0.539	0.557			0.50783	10.2	
3,3'-Dichlorobenzidine	0.455	0.468			0.42076	9.9	
Benzo(a)anthracene	1.085	1.117			1.04684	5.4	
Chrysene	1.057	1.095			1.03234	3.9	
Bis(2-ethylhexyl)phthalate	0.750	0.775			0.70042	9.9	
Di-n-octylphthalate	* 1.484	1.646			1.35296	0.99485 * 17.00891	
Benzo(b)fluoranthene	1.197	1.097			1.13969	12.6	
Benzo(k)fluoranthene	1.203	1.431			1.27504	11.3	
Benzo(a)pyrene	* 1.098	1.149			1.04394	7 *	
Indeno(1,2,3-cd)pyrene	1.241	1.248			1.17169	6.4	
Dibenzo(a,h)anthracene	1.056	1.086			0.98759	8.4	
Benzo(g,h,i)perylene	0.957	0.900			0.93301	2.6	
Acetophenone	0.591	0.606			0.60121	3.1	
1,2,4,5-Tetrachlorobenzene	0.675	0.697			0.66217	3.9	
Carbazole	1.000	1.000			0.96763	4.7	
Caprolactam	0.175	0.184			0.16349	12.4	
1,1'-Biphenyl	1.577	1.572			1.48772	5	
Atrazine	0.235	0.241			0.22031	9.3	
Benzaldehyde	1.283	1.272			1.24922	3.7	
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SEMI-VOLATILE ORGANIC INITIAL CALIBRATION DATA

Lab Name: PEL, Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1

Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Instrument ID: SMSD04 Calibration Date Begin: 11/14/12 End: 11/15/12

GC Column: HPMS-5 ID: 0.25 (mm) Calibration Time Begin: 2240 End: 1130

Min RRF for SPCC(#) = 0.05 Max %RSD for CCC(*) = 30 %

LAB FILE ID:		RRF75 =8270CAL6.d			RRF100 =8270CAL7.d				
COMPOUND		RRF75	RRF100				RRF	%RSD OR R^2	RSD
2-Fluorophenol(SURR)		1.316	1.364				1.27354	5.7	
Phenol-d5(SURR)		1.682	1.737				1.61238	5.5	
Nitrobenzene-d5(SURR)		0.509	0.518				0.5015	3.4	
2-Fluorobiphenyl(SURR)		1.453	1.478				1.42929	2.8	
2,4,6-Tribromophenol(SURR)		0.262	0.282				0.24715	9.8	
p-Terphenyl-d14(SURR)		0.853	0.875				0.82253	5.1	

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SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 CalibrationDate: 11/15/12 Time: 0107
 CCV ID: SSC1135505 Lab File ID: 8270SEC.d Init. Calib. Date Begin: 11/14/12 End: 11/15/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Bis(2-chloroethyl)ether	1.26557	1.496	18.2	AVRG	
Phenol	* 1.8307	2.022	10.4	AVRG*	
2-Chlorophenol	1.24099	1.317	6.1	AVRG	
2,2'-Oxybis(1-chloropropane)	1.63082	1.782	9.3	AVRG	
2-Methylphenol	1.0129	1.076	6.2	AVRG	
Hexachloroethane	0.64881	0.69259	6.7	AVRG	
N-Nitroso-di-n-propylamine	# 1.07132	1.195	11.5	AVRG#	
4-Methylphenol	1.50631	1.618	7.4	AVRG	
Nitrobenzene	0.50245	0.52285	4.1	AVRG	
Isophorone	0.84206	0.84341	0.2	AVRG	
2-Nitrophenol	* 0.20284	0.21757	7.3	AVRG*	
2,4-Dimethylphenol	0.29643	0.35293	19.1	AVRG	
Bis(2-chloroethoxy)methane	0.49157	0.55058	12.0	AVRG	
2,4-Dichlorophenol	* 0.34613	0.36031	4.1	AVRG*	
Naphthalene	1.05678	1.149	8.7	AVRG	
4-Chloroaniline	0.43264	0.455	5.2	AVRG	
2-Methylnaphthalene	0.71176	0.76819	7.9	AVRG	
Hexachlorobutadiene	* 0.27961	0.31269	11.8	AVRG*	
4-Chloro-3-methylphenol	* 0.37178	0.38871	4.6	AVRG*	
1-Methylnaphthalene	0.6552	0.6561	0.1	AVRG	
Hexachlorocyclopentadiene	# 45	45.4	0.9	LINR # 0.43671	
2,4,6-Trichlorophenol	* 0.42048	0.44526	5.9	AVRG*	
2,4,5-Trichlorophenol	0.45505	0.49391	8.5	AVRG	
2-Chloronaphthalene	1.1811	1.268	7.4	AVRG	
2-Nitroaniline	0.41099	0.48684	18.5	AVRG	
Acenaphthylene	1.84838	2.015	9.0	AVRG	
Dimethylphthalate	1.39542	1.527	9.4	AVRG	
2,6-Dinitrotoluene	0.31685	0.35253	11.3	AVRG	
Acenaphthene	* 1.06595	1.128	5.8	AVRG*	
3-Nitroaniline	0.2999	0.35108	17.1	AVRG	
2,4-Dinitrophenol	# 45	52.3	16.2	LINR # 0.2254	
Dibenzofuran	1.63391	1.805	10.5	AVRG	
2,4-Dinitrotoluene	0.40146	0.4444	10.7	AVRG	
4-Nitrophenol	# 0.25167	0.28483	13.2	AVRG#	
Fluorene	1.43792	1.571	9.3	AVRG	
4-Chlorophenyl-phenylether	0.75525	0.7991	5.8	AVRG	

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SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 Calibration Date: 11/15/12 Time: 0107
 CCV ID: SSC1135505 Lab File ID: 8270SEC.d Init. Calib. Date Begin: 11/14/12 End: 11/15/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Diethylphthalate	1.37106	1.464	6.8	AVRG	
4-Nitroaniline	0.27236	0.33041	21.3	AVRG	
4,6-Dinitro-2-methylphenol	0.15321	0.16471	7.5	AVRG	
N-Nitrosodiphenylamine	*	0.51495	0.58056	AVRG*	
4-Bromophenyl-phenylether	0.24814	0.27323	10.1	AVRG	
Hexachlorobenzene	0.27955	0.30199	8.0	AVRG	
Pentachlorophenol	*	45	46.3	LINR	* 0.18719
Phanthrene	1.09648	1.185	8.1	AVRG	
Anthracene	0.97596	1.155	18.3	AVRG	
Di-n-butylphthalate	1.3067	1.459	11.7	AVRG	
Fluoranthene	*	1.20121	1.344	AVRG*	
Pyrene	1.05858	1.183	11.8	AVRG	
Butylbenzylphthalate	0.50783	0.60969	20.1	AVRG	
Benzo(a)anthracene	1.04684	1.183	13.0	AVRG	
Chrysene	1.03234	1.121	8.6	AVRG	
Bis(2-ethylhexyl)phthalate	0.70042	0.78939	12.7	AVRG	
Di-n-octylphthalate	*	45	49.5	LINR	* 1.668
Benzo(b)fluoranthene	1.13969	1.222	7.2	AVRG	
Benzo(k)fluoranthene	1.27504	1.351	6.0	AVRG	
Benzo(a)pyrene	*	1.04394	1.156	AVRG*	
Indeno(1,2,3-cd)pyrene	1.17169	1.324	13.0	AVRG	
Dibenzo(a,h)anthracene	0.98759	1.109	12.3	AVRG	
Benzo(g,h,i)perylene	0.93301	1.041	11.6	AVRG	
Carbazole	0.96763	1.164	20.3	AVRG	
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2-Fluorophenol(SURR)	1.27354	1.393	9.4	AVRG	
Phenol-d5(SURR)	1.61238	1.665	3.3	AVRG	
Nitrobenzene-d5(SURR)	0.5015	0.50179	0.1	AVRG	
2-Fluorobiphenyl(SURR)	1.42929	1.455	1.8	AVRG	
2,4,6-Tribromophenol(SURR)	0.24715	0.26016	5.3	AVRG	
p-Terphenyl-d14(SURR)	0.82253	0.8252	0.3	AVRG	

Average Used: 9.4

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SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 CalibrationDate: 11/15/12 Time: 0904
 CCV ID: SSC1135523 Lab File ID: BSSEC.d Init. Calib. Date Begin: 11/14/12 End: 11/15/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
3,3'-Dichlorobenzidine	0.42076	0.47062	11.8	AVRG	
Acetophenone	0.60121	0.60342	0.4	AVRG	
Caprolactam	0.16349	0.1768	8.1	AVRG	
1,1'-Biphenyl	1.48772	1.6	7.5	AVRG	
Atrazine	0.22031	0.24171	9.7	AVRG	
Benzaldehyde	1.24922	1.337	7.0	AVRG	

7SSC
SEMI-VOLATILE ORGANIC SECONDARY SOURCE CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 CalibrationDate: 11/15/12 Time: 1151
 CCV ID: SSC1135514 Lab File ID: AP9SEC.d Init. Calib. Date Begin: 11/14/12 End: 11/15/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Acetophenone	0.60121	0.60879	1.3	AVRG	
1,2,4,5-Tetrachlorobenzene	0.66217	0.6741	1.8	AVRG	

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 CalibrationDate: 11/20/12 Time: 1630
 CCV ID: CCV1136491 Lab File ID: 8270CAL4.d Init. Calib. Date Begin: 11/14/12 End: 11/15/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Bis(2-chloroethyl)ether	1.26557	1.242	1.9	AVRG	
Phenol	*	1.8307	1.818	0.7	AVRG*
2-Chlorophenol	1.24099	1.219	1.8	AVRG	
2,2'-Oxybis(1-chloropropane)	1.63082	1.545	5.3	AVRG	
2-Methylphenol	1.0129	0.98595	2.7	AVRG	
Hexachloroethane	0.64881	0.66098	1.9	AVRG	
N-Nitroso-di-n-propylamine	#	1.07132	1.055	1.5	AVRG#
4-Methylphenol	1.50631	1.431	5.0	AVRG	
Nitrobenzene	0.50245	0.49338	1.8	AVRG	
Isophorone	0.84206	0.84285	0.1	AVRG	
2-Nitrophenol	*	0.20284	0.21262	4.8	AVRG*
2,4-Dimethylphenol	0.29643	0.28734	3.1	AVRG	
Bis(2-chloroethoxy)methane	0.49157	0.48796	0.7	AVRG	
2,4-Dichlorophenol	*	0.34613	0.35287	1.9	AVRG*
Naphthalene	1.05678	1.045	1.1	AVRG	
4-Chloroaniline	0.43264	0.42264	2.3	AVRG	
2-Methylnaphthalene	0.71176	0.69968	1.7	AVRG	
Hexachlorobutadiene	*	0.27961	0.27962	0.0	AVRG*
4-Chloro-3-methylphenol	*	0.37178	0.36933	0.7	AVRG*
1-Methylnaphthalene	0.6552	0.65429	0.1	AVRG	
Hexachlorocyclopentadiene	#	45	54.7	21.6	LINR # 0.53569
2,4,6-Trichlorophenol	*	0.42048	0.43954	4.5	AVRG*
2,4,5-Trichlorophenol	0.45505	0.4768	4.8	AVRG	
2-Chloronaphthalene	1.1811	1.206	2.1	AVRG	
2-Nitroaniline	0.41099	0.4164	1.3	AVRG	
Acenaphthylene	1.84838	1.899	2.7	AVRG	
Dimethylphthalate	1.39542	1.451	4.0	AVRG	
2,6-Dinitrotoluene	0.31685	0.33168	4.7	AVRG	
Acenaphthene	*	1.06595	1.091	2.4	AVRG*
3-Nitroaniline	0.2999	0.30706	2.4	AVRG	
2,4-Dinitrophenol	#	45	48	6.7	LINR # 0.20403
Dibenzofuran	1.63391	1.667	2.0	AVRG	
2,4-Dinitrotoluene	0.40146	0.41798	4.1	AVRG	
4-Nitrophenol	#	0.25167	0.26762	6.3	AVRG#
Fluorene	1.43792	1.47	2.2	AVRG	
4-Chlorophenyl-phenylether	0.75525	0.78188	3.5	AVRG	

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 CalibrationDate: 11/20/12 Time: 1630
 CCV ID: CCV1136491 Lab File ID: 8270CAL4.d Init. Calib. Date Begin: 11/14/12 End: 11/15/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Diethylphthalate	1.37106	1.391	1.5	AVRG	
4-Nitroaniline	0.27236	0.29104	6.9	AVRG	
4,6-Dinitro-2-methylphenol	0.15321	0.16615	8.4	AVRG	
N-Nitrosodiphenylamine	*	0.51495	0.51336	0.3	AVRG*
4-Bromophenyl-phenylether	0.24814	0.25683	3.5	AVRG	
Hexachlorobenzene	0.27955	0.29348	5.0	AVRG	
Pentachlorophenol	*	45	43.4	3.6	LINR * 0.17444
Phanthrene	1.09648	1.098	0.1	AVRG	
Anthracene	0.97596	0.9817	0.6	AVRG	
Di-n-butylphthalate	1.3067	1.396	6.8	AVRG	
Fluoranthene	*	1.20121	1.257	4.6	AVRG*
Pyrene	1.05858	1.041	1.7	AVRG	
Butylbenzylphthalate	0.50783	0.53407	5.2	AVRG	
Benzo(a)anthracene	1.04684	1.058	1.1	AVRG	
Chrysene	1.03234	1.04	0.7	AVRG	
Bis(2-ethylhexyl)phthalate	0.70042	0.75023	7.1	AVRG	
Di-n-octylphthalate	*	45	43	4.4	LINR * 1.428
Benzo(b)fluoranthene	1.13969	1.149	0.8	AVRG	
Benzo(k)fluoranthene	1.27504	1.163	8.8	AVRG	
Benzo(a)pyrene	*	1.04394	1.071	2.6	AVRG*
Indeno(1,2,3-cd)pyrene	1.17169	1.227	4.7	AVRG	
Dibenzo(a,h)anthracene	0.98759	1.039	5.2	AVRG	
Benzo(g,h,i)perylene	0.93301	0.96128	3.0	AVRG	
Carbazole	0.96763	0.99255	2.6	AVRG	
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2-Fluorophenol(SURR)	1.27354	1.252	1.7	AVRG	
Phenol-d5(SURR)	1.61238	1.564	3.0	AVRG	
Nitrobenzene-d5(SURR)	0.5015	0.49431	1.4	AVRG	
2-Fluorobiphenyl(SURR)	1.42929	1.457	1.9	AVRG	
2,4,6-Tribromophenol(SURR)	0.24715	0.25547	3.4	AVRG	
p-Terphenyl-d14(SURR)	0.82253	0.8059	2.0	AVRG	

Average Used: 3.3

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 CalibrationDate: 11/20/12 Time: 1653
 CCV ID: CCV1136493 Lab File ID: BSCAL4.d Init. Calib. Date Begin: 11/14/12 End: 11/15/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
3,3'-Dichlorobenzidine	0.42076	0.47049	11.8	AVRG	
Acetophenone	0.60121	0.57093	5.0	AVRG	
Caprolactam	0.16349	0.16839	3.0	AVRG	
1,1'-Biphenyl	1.48772	1.5	0.8	AVRG	
Atrazine	0.22031	0.23403	6.2	AVRG	
Benzaldehyde	1.24922	1.243	0.5	AVRG	

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 CalibrationDate: 11/20/12 Time: 1714
 CCV ID: CCV1136492 Lab File ID: AP9CAL4.d Init. Calib. Date Begin: 11/14/12 End: 11/15/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Acetophenone	0.60121	0.60657	0.9	AVRG	
1,2,4,5-Tetrachlorobenzene	0.66217	0.66143	0.1	AVRG	

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 CalibrationDate: 11/26/12 Time: 1704
 CCV ID: CCV1137614 Lab File ID: 8270CAL4.d Init. Calib. Date Begin: 11/14/12 End: 11/15/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Bis(2-chloroethyl)ether	1.26557	1.27	0.4	AVRG	
Phenol	*	1.8307	1.863	1.8	AVRG*
2-Chlorophenol	1.24099	1.254	1.0	AVRG	
2,2'-Oxybis(1-chloropropane)	1.63082	1.534	5.9	AVRG	
2-Methylphenol	1.0129	1.007	0.6	AVRG	
Hexachloroethane	0.64881	0.69258	6.7	AVRG	
N-Nitroso-di-n-propylamine	#	1.07132	1.048	2.2	AVRG#
4-Methylphenol	1.50631	1.504	0.2	AVRG	
Nitrobenzene	0.50245	0.49673	1.1	AVRG	
Isophorone	0.84206	0.84426	0.3	AVRG	
2-Nitrophenol	*	0.20284	0.21163	4.3	AVRG*
2,4-Dimethylphenol	0.29643	0.29673	0.1	AVRG	
Bis(2-chloroethoxy)methane	0.49157	0.49441	0.6	AVRG	
2,4-Dichlorophenol	*	0.34613	0.34974	1.0	AVRG*
Naphthalene	1.05678	1.051	0.5	AVRG	
4-Chloroaniline	0.43264	0.43055	0.5	AVRG	
2-Methylnaphthalene	0.71176	0.70873	0.4	AVRG	
Hexachlorobutadiene	*	0.27961	0.27903	0.2	AVRG*
4-Chloro-3-methylphenol	*	0.37178	0.35965	3.3	AVRG*
1-Methylnaphthalene	0.6552	0.6456	1.5	AVRG	
Hexachlorocyclopentadiene	#	45	53	17.8	LINR # 0.51808
2,4,6-Trichlorophenol	*	0.42048	0.41809	0.6	AVRG*
2,4,5-Trichlorophenol	0.45505	0.47168	3.7	AVRG	
2-Chloronaphthalene	1.1811	1.168	1.1	AVRG	
2-Nitroaniline	0.41099	0.40725	0.9	AVRG	
Acenaphthylene	1.84838	1.818	1.6	AVRG	
Dimethylphthalate	1.39542	1.407	0.8	AVRG	
2,6-Dinitrotoluene	0.31685	0.33125	4.5	AVRG	
Acenaphthene	*	1.06595	1.047	1.8	AVRG*
3-Nitroaniline	0.2999	0.30806	2.7	AVRG	
2,4-Dinitrophenol	#	45	46.1	2.4	LINR # 0.19417
Dibenzofuran	1.63391	1.63	0.2	AVRG	
2,4-Dinitrotoluene	0.40146	0.41203	2.6	AVRG	
4-Nitrophenol	#	0.25167	0.26201	4.1	AVRG#
Fluorene	1.43792	1.439	0.1	AVRG	
4-Chlorophenyl-phenylether	0.75525	0.74802	1.0	AVRG	

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 Calibration Date: 11/26/12 Time: 1704
 CCV ID: CCV1137614 Lab File ID: 8270CAL4.d Init. Calib. Date Begin: 11/14/12 End: 11/15/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Diethylphthalate	1.37106	1.356	1.1	AVRG	
4-Nitroaniline	0.27236	0.29475	8.2	AVRG	
4,6-Dinitro-2-methylphenol	0.15321	0.16308	6.4	AVRG	
N-Nitrosodiphenylamine	*	0.51495	0.51571	0.1	AVRG*
4-Bromophenyl-phenylether	0.24814	0.25118	1.2	AVRG	
Hexachlorobenzene	0.27955	0.28682	2.6	AVRG	
Pentachlorophenol	*	45	44.2	1.8	LINR * 0.1779
Phanthrene	1.09648	1.093	0.3	AVRG	
Anthracene	0.97596	0.97478	0.1	AVRG	
Di-n-butylphthalate	1.3067	1.364	4.4	AVRG	
Fluoranthene	*	1.20121	1.237	3.0	AVRG*
Pyrene	1.05858	1.073	1.4	AVRG	
Butylbenzylphthalate	0.50783	0.53366	5.1	AVRG	
Benzo(a)anthracene	1.04684	1.064	1.6	AVRG	
Chrysene	1.03234	1.053	2.0	AVRG	
Bis(2-ethylhexyl)phthalate	0.70042	0.73274	4.6	AVRG	
Di-n-octylphthalate	*	45	42.3	6.0	LINR * 1.403
Benzo(b)fluoranthene	1.13969	1.165	2.2	AVRG	
Benzo(k)fluoranthene	1.27504	1.142	10.4	AVRG	
Benzo(a)pyrene	*	1.04394	1.084	3.8	AVRG*
Indeno(1,2,3-cd)pyrene	1.17169	1.235	5.4	AVRG	
Dibenzo(a,h)anthracene	0.98759	1.037	5.0	AVRG	
Benzo(g,h,i)perylene	0.93301	0.97633	4.6	AVRG	
Carbazole	0.96763	1.003	3.7	AVRG	
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2-Fluorophenol(SURR)	1.27354	1.278	0.4	AVRG	
Phenol-d5(SURR)	1.61238	1.58	2.0	AVRG	
Nitrobenzene-d5(SURR)	0.5015	0.49444	1.4	AVRG	
2-Fluorobiphenyl(SURR)	1.42929	1.43	0.0	AVRG	
2,4,6-Tribromophenol(SURR)	0.24715	0.24384	1.3	AVRG	
p-Terphenyl-d14(SURR)	0.82253	0.81285	1.2	AVRG	

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 CalibrationDate: 11/26/12 Time: 1725
 CCV ID: CCV1137617 Lab File ID: BSCAL4.d Init. Calib. Date Begin: 11/14/12 End: 11/15/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
3,3'-Dichlorobenzidine	0.42076	0.47532	13.0	AVRG	
Acetophenone	0.60121	0.5766	4.1	AVRG	
Caprolactam	0.16349	0.16338	0.1	AVRG	
1,1'-Biphenyl	1.48772	1.489	0.1	AVRG	
Atrazine	0.22031	0.22707	3.1	AVRG	
Benzaldehyde	1.24922	1.234	1.2	AVRG	

SEMI-VOLATILE ORGANIC CONTINUING CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 Instrument ID: SMSD04 CalibrationDate: 11/26/12 Time: 1746
 CCV ID: CCV1137615 Lab File ID: AP9CAL4.d Init. Calib. Date Begin: 11/14/12 End: 11/15/12
 GC Column: HPMS-5 ID: 0.25 (mm)
 Min RRF for SPCC(#) = 0.05 Max %D for CCC(*) = 20 %

COMPOUND	Expected	Found	%D / %Drift	Curve Type	RRF
Acetophenone	0.60121	0.61097	1.6	AVRG	
1,2,4,5-Tetrachlorobenzene	0.66217	0.66051	0.3	AVRG	

Inorganics

Inorganic Data Qualifiers

C (Concentration) Qualifier - Entries and their meanings are:

- B** The reported value obtained was less than the RL but greater than or equal to the MDL.
- E** The reported value obtained was over calibration or linear range.
- U** The reported value obtained was less than the MDL or was not detected.

Q Qualifier - Entries and their meanings are:

- U** The reported value is estimated because of interference. An explanatory comment must be included under "Comments" on the Cover Page if the problem applies to all samples in this data package or on the individual FORM 1 if it is an isolated problem.
- M** Duplicate injection precision was not met (two analyses of the same sample did not agree).
- N** Spiked sample recovery not within control limits.
- E** Serial Dilution percent difference not within control limits.
- S** The reported value was determined by the Method of Standard Additions (MSA).
- W** Post-digestion spike for Furnace AA analysis is out of control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.
 - * Duplicate analysis not within control limits.
 - + Correlation coefficient for the MSA is less than 0.995.
- X** The data is flagged as rejected by analyst utilizing analytical judgement.

Entering "S", "W", or "+" is mutually exclusive. No combination of these qualifiers can appear in the same field.

M (Method) Qualifier - Enter one of the following:

- P** ICP
- A** Flame AA
- F** Furnace AA
- CV** Manual Cold Vapor AA
- TC** Total Organic Carbon
- AS** Semi-Automated Spectrophotometric
- CA** Midi-Distillation Spectrophotometric
- T** Titrimetric
- C** Manual Spectrophotometric
- GR** Gravimetric
- NR** Analyte was not required by your lab

Inorganic Sample ID Qualifiers

The qualifiers that may be appended to the lab sample ID and/or the client sample ID for inorganic analysis are defined below:

- DL** Diluted reanalysis. Indicates that the results of the original analysis of the sample contained compounds that exceeded the calibration range. The sample was diluted and reanalyzed. May be followed by a digit to indicate multiple dilutions of the sample. The results of more than one diluted reanalysis may be reported.
- R** Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.
- RE** Re-extracted. The extract was reanalyzed with re-extraction. May be followed by a digit to indicate multiple re-extraction of the same sample at the same dilution.
- MS** Matrix spike (may be followed by a digit to indicate multiple matrix within a sample set).
- SD** Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spike duplicate within a sample set).
- A** Post Digestion Spike.
- L** Serial Dilution.

Metals Data Package

CASE NARRATIVE
Inorganic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHOD

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW6010B

IV. PREPARATION

Soil samples were prepared according to Spectrum Analytical Inc. Laboratory's Standard Operating Procedures and EPA Method 3050B.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met.

2. Method Blanks:

All acceptance criteria were met.

C. Spikes:

1. Laboratory Control Spikes (LCS):

CASE NARRATIVE
Inorganic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

An LCS/LCSD set was analyzed. All percent recovery and relative percent difference (RPD) criteria were met.

2. Post Digestion Spike:

All acceptance criteria were met with the exception of:

Post Digestion Spike 350761801A was analyzed with the soil samples on 11/28/12. The following analyte(s) were recovered below criteria: Lead at 55.4 % with criteria of (80-120).

Post Digestion Spike 350760007A was analyzed with the soil samples on 11/21/12. The following analyte(s) were recovered below criteria: Lead at 77.2 % with criteria of (80-120).

The PDS are associated with the QC of a different SDG. The LCS/LCSD pass all quality control criteria. No further action was taken.

3. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD):

No spikes requested by client.

D. Duplicate:

No sample duplicates are reported with this method. (Spike duplicates are referenced above in section C. Spikes.)

E. Serial Dilution:

All acceptance criteria were met with the exception of:

Serial Dilution 350761602L was analyzed with the soil samples on 11/21/12. The following analyte(s) exceeded criteria: Lead at 14 % with criteria of (10). Samples coded accordingly.

The most probable cause for the Serial Dilution exceeding limits is sample matrix due to the fact that the LCS/LCSD pass all quality control criteria. No further action was taken.

F. ICP Interference Check Samples:

All acceptance criteria were met.

G. Samples:

Sample analysis proceeded normally.

CASE NARRATIVE
Inorganic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Sample FM0126C-GS-SP required a 2X dilution due to high concentration of the following analyte(s): Lead.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

Signature:



Troy L. Roberts

Name: Troy L. Roberts Title: Inorg. Manager

SIGNED:

DATE: 11/29/2012

CASE NARRATIVE
Inorganic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All holding times were met.

B. Sample Analysis:

All holding times were met.

III. METHOD

Samples were analyzed according to Spectrum Analytical's Standard Operating Procedures and Method SW7471A

IV. PREPARATION

Soil samples were prepared according to Spectrum Analytical Inc. Laboratory's Standard Operating Procedures and EPA Method 7471A.

V. ANALYSIS

A. Calibration:

All acceptance criteria were met.

B. Blanks:

1. Calibration Blanks:

All acceptance criteria were met.

2. Method Blanks:

All acceptance criteria were met.

C. Spikes:

1. Laboratory Control Spikes (LCS):

CASE NARRATIVE
Inorganic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

An LCS/LCSD set was analyzed. All percent recovery and relative percent difference (RPD) criteria were met.

2. Post Digestion Spike:

All acceptance criteria were met.

3. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD):

No spikes requested by client.

D. Duplicate:

No sample duplicates are reported with this method. (Spike duplicates are referenced above in section C. Spikes.)

E. Serial Dilution:

All acceptance criteria were met.

F. ICP Interference Check Samples:

All acceptance criteria were met.

G. Samples:

Sample analysis proceeded normally.

Sample CV0362B-CS required a 2X dilution due to high concentration of the following analyte(s): Mercury.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum Analytical Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as, verified by the following signature.

CASE NARRATIVE
Inorganic

Spectrum Analytical Inc. Lab Reference No./SDG: 3507616

Client: OTIE

Signature: 
Name: Troy L. Roberts Title: Inorg. Manager

SIGNED:

DATE: 11/29/2012

U.S. EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site
Lab Code : PEL Case No.: SDG No.: 3507616
SOW No.:

EPA Sample No	Lab Sample ID	
CV0041B-CS	350761602	
CV0043C-CS	350761605	
FM0263C-CS-SP	350761610	
FM0126C-GS-SP	350761613	
FM0126C-GS-SPDL1	350761613DL1	
CV0699B-CS	350761615	

Were ICP interelement corrections applied? Yes/No Yes

Were ICP background corrections applied? Yes/No Yes

If yes - were raw data generated before application of background corrections? Yes/No No

Comments:

Metals Inorganic Sample Data

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

CV0041B-CS

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761602

Level:(low/med) LOW Date Received: 11/16/2012

PercentSolids: 83.7 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-38-2	Arsenic	12.7		P			0.38	0.761
7440-39-3	Barium	127		P			0.122	7.61
7440-43-9	Cadmium	0.632		P			0.038	0.38
7440-47-3	Chromium	21.3		P			0.122	0.761
7439-92-1	Lead	183	E	P			0.259	0.609
7439-97-6	Mercury	0.119		CV			0.00392	0.035
7782-49-2	Selenium	7.72		P			0.304	1.52
7440-22-4	Silver	1.14	U	P			0.122	1.14

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

CV0043C-CS

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761605

Level:(low/med) LOW Date Received: 11/16/2012

PercentSolids: 76.6 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-38-2	Arsenic	12.9			P		0.558	1.12
7440-39-3	Barium	87			P		0.178	11.2
7440-43-9	Cadmium	0.822			P		0.0558	0.558
7440-47-3	Chromium	30.3			P		0.178	1.12
7439-92-1	Lead	117			P		0.379	0.893
7439-97-6	Mercury	0.101			CV		0.0043	0.0383
7782-49-2	Selenium	2.23	U		P		0.446	2.23
7440-22-4	Silver	1.67	U		P		0.178	1.67

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

FM0263C-CS-SP

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761610

Level:(low/med) LOW Date Received: 11/16/2012

PercentSolids: 77.9 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-38-2	Arsenic	18.2			P		0.637	1.27
7440-39-3	Barium	189			P		0.204	12.7
7440-43-9	Cadmium	0.637	U		P		0.0637	0.637
7440-47-3	Chromium	31.6			P		0.204	1.27
7439-92-1	Lead	166			P		0.433	1.02
7439-97-6	Mercury	0.166			CV		0.00418	0.0373
7782-49-2	Selenium	2.55	U		P		0.509	2.55
7440-22-4	Silver	1.91	U		P		0.204	1.91

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

FM0126C-GS-SP

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005

Lab Code : PEL Case No.: _____

SAS No: _____

SDG No.: 3507616

Matrix: SOIL

Lab Sample ID: 350761613

Level:(low/med) LOW

Date Received: 11/16/2012

PercentSolids: 71.8

Station ID: _____

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-38-2	Arsenic	12.1			P		0.63	1.26
7440-39-3	Barium	95.4			P		0.201	12.6
7440-43-9	Cadmium	1.41			P		0.063	0.63
7440-47-3	Chromium	29.3			P		0.201	1.26
7439-97-6	Mercury	0.121			CV		0.00404	0.036
7782-49-2	Selenium	2.52	U		P		0.504	2.52
7440-22-4	Silver	1.89	U		P		0.201	1.89

Color Before: _____

Clarity Before: _____

Texture : _____

Color After : _____

Clarity After: _____

Artifacts:_____

Comments:

301112 1331

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

FM0126C-GS-SPDL1

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761613DL1

Level:(low/med) LOW Date Received: 11/16/2012

PercentSolids: 71.8 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7439-92-1	Lead	712		P			0.856	2.01

Color Before: _____

Clarity Before: _____

Texture : _____

Color After : _____

Clarity After: _____

Artifacts:_____

Comments:

301112 1331

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

CV0699B-CS

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 350761615

Level:(low/med) LOW Date Received: 11/16/2012

PercentSolids: 80.8 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-38-2	Arsenic	12.4			P		0.514	1.03
7440-39-3	Barium	89.7			P		0.164	10.3
7440-43-9	Cadmium	0.514	U		P		0.0514	0.514
7440-47-3	Chromium	55.6			P		0.164	1.03
7439-92-1	Lead	63.8			P		0.349	0.822
7439-97-6	Mercury	0.12			CV		0.00393	0.0351
7782-49-2	Selenium	2.06	U		P		0.411	2.06
7440-22-4	Silver	1.54	U		P		0.164	1.54

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

Metals Inorganic QC Summary Data

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1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005 154331MB

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 154331MB

Level:(low/med) LOW Date Received: 11/20/2012

PercentSolids: 100 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-38-2	Arsenic	0.982	U		P		0.491	0.982
7440-39-3	Barium	9.82	U		P		0.157	9.82
7440-43-9	Cadmium	0.491	U		P		0.0491	0.491
7440-47-3	Chromium	0.982	U		P		0.157	0.982
7439-92-1	Lead	0.786	U		P		0.334	0.786
7782-49-2	Selenium	1.96	U		P		0.393	1.96
7440-22-4	Silver	1.47	U		P		0.157	1.47

Color Before: _____

Clarity Before: _____

Texture : _____

Color After : _____

Clarity After: _____

Artifacts:_____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005 154431MB

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 154431MB

Level:(low/med) LOW Date Received: 11/20/2012

PercentSolids: 100 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7439-97-6	Mercury	0.0327	U		CV		0.00367	0.0327

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

301112 1331

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005 154939MB

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 154939MB

Level:(low/med) LOW Date Received: 11/27/2012

PercentSolids: 100 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-38-2	Arsenic	0.988	U		P		0.494	0.988
7440-39-3	Barium	9.88	U		P		0.158	9.88
7440-43-9	Cadmium	0.494	U		P		0.0494	0.494
7440-47-3	Chromium	0.988	U		P		0.158	0.988
7439-92-1	Lead	0.79	U		P		0.336	0.79
7782-49-2	Selenium	1.98	U		P		0.395	1.98
7440-22-4	Silver	1.48	U		P		0.158	1.48

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

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1

INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005 155043MB

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: SOIL Lab Sample ID: 155043MB

Level:(low/med) LOW Date Received: 11/28/2012

PercentSolids: 100 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7439-97-6	Mercury	0.0325	U		CV		0.00364	0.0325

Color Before: _____

Clarity Before: _____

Texture : _____

Color After : _____

Clarity After: _____

Artifacts:_____

Comments:

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Initial Calibration Source: 47360
47792

Continuing Calibration Source: 47359
48348

Concentration Units: (ug/L)

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	
Arsenic	400	414.000	103.5	500	516.000	103.2	504.000	100.8	P
Barium	1200	1200.000	100.0	500	510.000	102.0	505.000	101.0	P
Cadmium	400	384.000	96.0	500	509.000	101.8	486.000	97.2	P
Chromium	400	401.000	100.2	500	512.000	102.4	505.000	101.0	P
Lead	400	401.000	100.2	500	516.000	103.2	500.000	100.0	P
Mercury	3	3.110	103.7	5	4.740	94.8	4.460	89.2	CV
Selenium	400	422.000	105.5	500	528.000	105.6	515.000	103.0	P
Silver	160	167.000	104.4	500	522.000	104.4	510.000	102.0	P

ICV IDs: CV= ICV1135933, P= ICV1135363

CCV1 IDs: CV= CCV1135935, P= CCV1135368

CCV2 IDs: CV= CCV1135947, P= CCV1135392

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

301112 1331

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Initial Calibration Source:

Continuing Calibration Source: 47359
 48348

Concentration Units: (ug/L)

Analyte	Initial Calibration			Continuing Calibration				M
	True	Found	%R (1)	True	Found	%R (1)	Found	
Arsenic				500	500.000	100.0	506.000	101.2
Barium				500	499.000	99.8	507.000	101.4
Cadmium				500	485.000	97.0	489.000	97.8
Chromium				500	497.000	99.4	507.000	101.4
Lead				500	498.000	99.6	500.000	100.0
Mercury				5	5.540	110.8	5.330	106.6
Selenium				500	512.000	102.4	516.000	103.2
Silver				500	502.000	100.4	520.000	104.0

ICV IDs:

CCV1 IDs: CV= CCV1135979, P= CCV1135404

CCV2 IDs: CV= CCV1135987, P= CCV1135416

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

301112 1331

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Initial Calibration Source: 47360

Continuing Calibration Source: 47359
48348

Concentration Units: (ug/L)

Analyte	Initial Calibration			Continuing Calibration				M
	True	Found	%R (1)	True	Found	%R (1)	Found	
Arsenic				500	506.000	101.2		P
Barium				500	509.000	101.8		P
Cadmium				500	479.000	95.8		P
Chromium				500	508.000	101.6		P
Lead				500	503.000	100.6		P
Mercury	3	3.130	104.3	5	5.190	103.8	5.260	105.2
Selenium				500	524.000	104.8		P
Silver				500	517.000	103.4		P

ICV IDs: CV= ICV1137190

CCV1 IDs: CV= CCV1137192, P= CCV1135428

CCV2 IDs: CV= CCV1137204

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

301112 1331

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Initial Calibration Source: 47792

Continuing Calibration Source: 47359
48348

Concentration Units: (ug/L)

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	
Arsenic									P
Barium									P
Cadmium									P
Chromium									P
Lead	400	398.000	99.5	500	499.000	99.8	494.000	98.8	P
Mercury				5	5.110	102.2	5.270	105.4	CV
Selenium									P
Silver									P

ICV IDs: P= ICV1136309

CCV1 IDs: CV= CCV1137216, P= CCV1136314

CCV2 IDs: CV= CCV1137223, P= CCV1136332

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

301112 1331

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Initial Calibration Source:

Continuing Calibration Source: 47359
 48348

Concentration Units: (ug/L)

Analyte	Initial Calibration			Continuing Calibration				M
	True	Found	%R (1)	True	Found	%R (1)	Found	
Arsenic								P
Barium								P
Cadmium								P
Chromium								P
Lead				500	500.000	100.0		P
Mercury				5	5.210	104.2	5.120	102.4
Selenium								P
Silver								P

ICV IDs:

CCV1 IDs: CV= CCV1137225, P= CCV1136344

CCV2 IDs: CV= CCV1137233

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

301112 1331

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Initial Calibration Source: 47792

Continuing Calibration Source: 48348

Concentration Units: (ug/L)

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	
Arsenic	400	398.000	99.5	500	497.000	99.4	503.000	100.6	P
Barium	1200	1170.000	97.5	500	501.000	100.2	508.000	101.6	P
Cadmium	400	367.000	91.8	500	490.000	98.0	499.000	99.8	P
Chromium	400	389.000	97.2	500	503.000	100.6	509.000	101.8	P
Lead	400	382.000	95.5	500	493.000	98.6	496.000	99.2	P
Mercury									CV
Selenium	400	421.000	105.2	500	527.000	105.4	534.000	106.8	P
Silver	160	157.000	98.1	500	503.000	100.6	504.000	100.8	P

ICV IDs: P= ICV1137112

CCV1 IDs: P= CCV1137117

CCV2 IDs: P= CCV1137124

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

301112 1331

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Initial Calibration Source:

Continuing Calibration Source: 48348

Concentration Units: (ug/L)

Analyte	Initial Calibration			Continuing Calibration				M
	True	Found	%R (1)	True	Found	%R (1)	Found	
Arsenic				500	503.000	100.6		P
Barium				500	506.000	101.2		P
Cadmium				500	475.000	95.0		P
Chromium				500	506.000	101.2		P
Lead				500	489.000	97.8		P
Mercury								CV
Selenium				500	533.000	106.6		P
Silver				500	511.000	102.2		P

ICV IDs:

CCV1 IDs: P= CCV1137136

CCV2 IDs:

(1) Control Limits: Mercury 80-120; Cyanide 85-115; Other Metals 90-110

ICV is Second Source

301112 1331

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BLANKS

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 1356Lab Code : PEL

Case No. _____

SAS No: _____

SDG No.: 3507616Preparation Blank Matrix (water/soil): SOILPreparation Blank Concentration Units (ug/L or mg/Kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
	C	C	C	C	C	C	C	C	C	C	
Arsenic	10.08	U	10.08	U	10.08	U	10.08	U	0.982	U	P
Barium	100.8	U	100.8	U	100.8	U	100.8	U	9.82	U	P
Cadmium	5.04	U	5.04	U	5.04	U	5.04	U	0.491	U	P
Chromium	10.08	U	10.08	U	10.08	U	10.08	U	0.982	U	P
Lead	8.064	U	8.064	U	8.064	U	8.064	U	0.786	U	P
Mercury	0.3326	U	0.3326	U	0.3326	U	0.3326	U	0.0327	U	CV
Selenium	20.16	U	20.16	U	20.16	U	20.16	U	1.96	U	P
Silver	15.12	U	15.12	U	15.12	U	15.12	U	1.47	U	P

ICB IDs: CV= ICB1135934, P= ICB1135364

CCB1 IDs: CV= CCB1135936, P= CCB1135369

CCB2 IDs: CV= CCB1135948, P= CCB1135393

CCB3 IDs: CV= CCB1135980, P= CCB1135405

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BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356
 Lab Code : PEL Case No. SAS No: SDG No.: 3507616

Preparation Blank Matrix (water/soil): SOILPreparation Blank Concentration Units (ug/L or mg/Kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
	C	C	C	C	C	C	C	C	C	C	
Arsenic		10.08	U	10.08	U				0.988	U	P
Barium		100.8	U	100.8	U				9.88	U	P
Cadmium		5.04	U	5.04	U				0.494	U	P
Chromium		10.08	U	10.08	U				0.988	U	P
Lead		8.064	U	8.064	U				0.79	U	P
Mercury		0.3326	U						0.0325	U	CV
Selenium		20.16	U	20.16	U				1.98	U	P
Silver		15.12	U	15.12	U				1.48	U	P

ICB IDs:

CCB1 IDs: CV= CCB1135988, P= CCB1135417

CCB2 IDs: P= CCB1135429

CCB3 IDs:

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BLANKS

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 1356Lab Code : PEL

Case No. _____

SAS No: _____

SDG No.: 3507616

Preparation Blank Matrix (water/soil):

Preparation Blank Concentration Units (ug/L or mg/Kg):

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration		
	C		C	C	C	C	C	Blank	C	M	
Arsenic											P
Barium											P
Cadmium											P
Chromium											P
Lead	8.064	U	8.064	U	8.064	U	8.064	U			P
Mercury	0.3326	U	0.3326	U	0.3326	U	0.3326	U			CV
Selenium											P
Silver											P

ICB IDs: CV= ICB1137191, P= ICB1136310

CCB1 IDs: CV= CCB1137193, P= CCB1136315

CCB2 IDs: CV= CCB1137205, P= CCB1136333

CCB3 IDs: CV= CCB1137217, P= CCB1136345

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3

BLANKS

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 1356Lab Code : PEL

Case No. _____

SAS No: _____

SDG No.: 3507616

Preparation Blank Matrix (water/soil):

Preparation Blank Concentration Units (ug/L or mg/Kg):

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration			M
	C		C	C	C	C	C	Blank	C			
Arsenic	10.08	U	10.08	U	10.08	U	10.08	U				P
Barium	100.8	U	100.8	U	100.8	U	100.8	U				P
Cadmium	5.04	U	5.04	U	5.04	U	5.04	U				P
Chromium	10.08	U	10.08	U	10.08	U	10.08	U				P
Lead	8.064	U	8.064	U	8.064	U	8.064	U				P
Mercury			0.3326	U	0.3326	U	0.3326	U				CV
Selenium	20.16	U	20.16	U	20.16	U	20.16	U				P
Silver	15.12	U	15.12	U	15.12	U	15.12	U				P

ICB IDs: P= ICB1137113

CCB1 IDs: CV= CCB1137224, P= CCB1137118

CCB2 IDs: CV= CCB1137226, P= CCB1137125

CCB3 IDs: CV= CCB1137234, P= CCB1137137

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ICP INTERFERENCE CHECK SAMPLE

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 200514Lab Code : PELCase No.: SAS No: SDG No.: 3507616ICP ID#: ICAP2ICSA Source: 48344ICSAB Source: 48606Concentration Units: UG/L

Analyte	True		Initial Found			Final Found		
	Sol.	Sol.	Sol.	Sol.	%R	Sol.	Sol.	%R
	A	AB	A	AB		A	AB	
Arsenic	0	100	2.066	104.477	104.5			
Barium	0	500	-0.101	467.667	93.5			
Cadmium	0	1000	0.032	892.71	89.3			
Chromium	0	500	-0.035	470.659	94.1			
Lead	0	50	6.036	51.21	102.4			
Selenium	0	50	-0.063	57.751	115.5			
Silver	0	200	-0.028	200.331	100.2			

ICSA: ICS1135366ICSAB: ICS1135367

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4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 200514Lab Code : PELCase No.: SAS No: SDG No.: 3507616ICP ID#: ICAP2ICSA Source: 48344ICSAB Source: 48606Concentration Units: UG/L

Analyte	True		Initial Found			Final Found		
	Sol.	Sol.	Sol.	Sol.	%R	Sol.	Sol.	%R
	A	AB	A	AB		A	AB	
Arsenic	0	100	-1.4	97.649	97.6			
Barium	0	500	1.011	484.394	96.9			
Cadmium	0	1000	0.049	872.222	87.2			
Chromium	0	500	0.917	481.003	96.2			
Lead	0	50	0.066	45.588	91.2			
Selenium	0	50	0.431	54.629	109.3			
Silver	0	200	1.1	207.34	103.7			

ICSA: ICS1136312ICSAB: ICS1136313

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ICP INTERFERENCE CHECK SAMPLE

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 200514Lab Code : PELCase No.: SAS No: SDG No.: 3507616ICP ID#: ICAP2ICSA Source: 48344ICSAB Source: 48606Concentration Units: UG/L

Analyte	True		Initial Found			Final Found		
	Sol.	Sol.	Sol.	Sol.	%R	Sol.	Sol.	%R
	A	AB	A	AB		A	AB	
Arsenic	0	100	0.402	98.276	98.3			
Barium	0	500	0.467	477.372	95.5			
Cadmium	0	1000	-0.106	878.91	87.9			
Chromium	0	500	0.534	477.977	95.6			
Lead	0	50	-1.384	45.84	91.7			
Selenium	0	50	5.861	42.975	86.0			
Silver	0	200	-0.041	199.711	99.9			

ICSA: ICS1137115ICSAB: ICS1137116

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5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20 350760007A

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: Soil Level:(low/med) LOW

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Control Limit %R	Spiked Sample C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Arsenic	80 - 120	728.00	226.23	500	100.4		P
Barium	80 - 120	3800.00	2430.53	1500	91.2		P
Cadmium	80 - 120	472.00	8.88	500	92.6		P
Chromium	80 - 120	824.00	342.98	500	96.2		P
Lead	80 - 120	3330.00	2946.40	500	77.2		P
Selenium	80 - 120	534.00		U	500	106.8	P
Silver	80 - 120	212.00		U	200	105.8	P

Comments:

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 20	EPA Sample No.	350761801A
Lab Code :	PEL	Case No.:	SAS No:	SDG No.:	3507616
Matrix:	Soil			Level:(low/med)	LOW

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Control Limit %R	Spiked Sample		Sample Result (SR)		Spike Added (SA)	%R	Q	M
		C	C	C	C				
Arsenic	80 - 120	738.00		226.94		500	102.2		P
Barium	80 - 120	4800.00		3483.55		1500	87.4		P
Cadmium	80 - 120	498.00		32.80		500	93.1		P
Chromium	80 - 120	865.00		374.19		500	98.2		P
Lead	80 - 120	3220.00		2948.17		500	55.4		P
Mercury	-	10.60		10.93		6	0.0		CV
Selenium	80 - 120	569.00			U	500	113.8		P
Silver	80 - 120	219.00			U	200	109.5		P

Comments:

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20 350762201A

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Matrix: Soil Level:(low/med) LOW

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Control Limit %R	Spiked Sample C		Sample Result (SR) C		Spike Added (SA)	%R	Q	M
Mercury	-	3.22			U	3	107.2		CV

Comments:

U.S. EPA - CLP

6

DUPLICATES

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 2005	EPA Sample No.	154333LCSD
Lab Code :	PEL	Case No.:	SAS No:	SDG No.:	3507616
Matrix:	SOIL			Level:(low/med)	LOW
% Solids for Sample:	100			% Solids for Duplicate:	100

Concentration Units (mg/L or mg/kg): mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Arsenic	20	51.1		48.9		4.4		P
Barium	20	149		144		3.4		P
Cadmium	20	48.3		46.5		3.8		P
Chromium	20	50.5		48.4		4.2		P
Lead	20	49.4		47.5		3.9		P
Selenium	20	51.7		50		3.3		P
Silver	20	20.2		19.6		3.0		P

Comments:

U.S. EPA - CLP

6

DUPLICATES

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 2005	EPA Sample No.	154433LCSD
Lab Code :	PEL	Case No.:	SAS No:	SDG No.:	3507616
Matrix:	SOIL			Level:(low/med)	LOW
% Solids for Sample:	100			% Solids for Duplicate:	100

Concentration Units (mg/L or mg/kg): mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury	20	0.299		0.311		3.9		CV

Comments:

U.S. EPA - CLP

6

DUPLICATES

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 2005	EPA Sample No.	154941LCSD
Lab Code :	PEL	Case No.:	SAS No:	SDG No.:	3507616
Matrix:	SOIL			Level:(low/med)	LOW
% Solids for Sample:	100			% Solids for Duplicate:	100

Concentration Units (mg/L or mg/kg): mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Arsenic	20	47.1		49.8		5.6		P
Barium	20	141		148		4.8		P
Cadmium	20	43.8		46.1		5.1		P
Chromium	20	47.4		50		5.3		P
Lead	20	45.3		47.4		4.5		P
Selenium	20	50.6		52.3		3.3		P
Silver	20	19.2		20.1		4.6		P

Comments:

U.S. EPA - CLP

6

DUPLICATES

EPA Sample No.

Lab Name:	Spectrum Analytical, Inc.	Contract:	35th Avenue Removal Site 2005	EPA Sample No.	155045LCSD
Lab Code :	PEL	Case No.:	SAS No:	SDG No.:	3507616
Matrix:	SOIL			Level:(low/med)	LOW
% Solids for Sample:	100			% Solids for Duplicate:	100

Concentration Units (mg/L or mg/kg): mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury	20	0.297		0.311		4.6		CV

Comments:

301112 1331

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20 154332LCS

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Solid LCS Source: 48292, 48316, 47580,

Aqueous LCS Source:

Analyte	Aqueous			Solid (mg/Kg)				
	True	Found	%R	True	Found	C	Limits	%R
Arsenic				49.8	51.1		80 - 120	102.6
Barium				149	149		80 - 120	100.0
Cadmium				49.8	48.3		80 - 120	97.0
Chromium				49.8	50.5		80 - 120	101.4
Lead				49.8	49.4		80 - 120	99.2
Selenium				49.8	51.7		80 - 120	103.8
Silver				19.9	20.2		80 - 120	101.5

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20

154333LCSD

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Solid LCS Source: 48292, 48316, 47580,

Aqueous LCS Source:

Analyte	Aqueous			Solid (mg/Kg)				
	True	Found	%R	True	Found	C	Limits	%R
Arsenic				49.4	48.9		80 - 120	99.0
Barium				148	144		80 - 120	97.3
Cadmium				49.4	46.5		80 - 120	94.1
Chromium				49.4	48.4		80 - 120	98.0
Lead				49.4	47.5		80 - 120	96.2
Selenium				49.4	50		80 - 120	101.2
Silver				19.8	19.6		80 - 120	99.0

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20

154432LCS

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Solid LCS Source: 47360

Aqueous LCS Source:

Analyte	Aqueous			Solid (mg/Kg)				
	True	Found	%R	True	Found	C	Limits	%R
Mercury				0.293	0.299		80 - 120	102.0

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20

154433LCSD

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Solid LCS Source: 47360

Aqueous LCS Source:

Analyte	Aqueous			Solid (mg/Kg)				
	True	Found	%R	True	Found	C	Limits	%R
Mercury				0.299	0.311		80 - 120	104.0

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20 154940LCS

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Solid LCS Source: 48292, 48316, 47580,

Aqueous LCS Source:

Analyte	Aqueous			Solid (mg/Kg)				
	True	Found	%R	True	Found	C	Limits	%R
Arsenic				48.6	47.1		80 - 120	96.9
Barium				146	141		80 - 120	96.6
Cadmium				48.6	43.8		80 - 120	90.1
Chromium				48.6	47.4		80 - 120	97.5
Lead				48.6	45.3		80 - 120	93.2
Selenium				48.6	50.6		80 - 120	104.1
Silver				19.4	19.2		80 - 120	99.0

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20 154941LCSD

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Solid LCS Source: 48292, 48316, 47580,

Aqueous LCS Source:

Analyte	Aqueous			Solid (mg/Kg)				
	True	Found	%R	True	Found	C	Limits	%R
Arsenic				49.1	49.8		80 - 120	101.4
Barium				147	148		80 - 120	100.7
Cadmium				49.1	46.1		80 - 120	93.9
Chromium				49.1	50		80 - 120	101.8
Lead				49.1	47.4		80 - 120	96.5
Selenium				49.1	52.3		80 - 120	106.5
Silver				19.6	20.1		80 - 120	102.6

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20 155044LCS

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Solid LCS Source: 47360

Aqueous LCS Source:

Analyte	Aqueous			Solid (mg/Kg)				
	True	Found	%R	True	Found	C	Limits	%R
Mercury				0.29	0.297		80 - 120	102.4

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 20

155045LCSD

Lab Code : PEL Case No.: SAS No: SDG No.: 3507616

Solid LCS Source: 47360

Aqueous LCS Source:

Analyte	Aqueous			Solid (mg/Kg)				
	True	Found	%R	True	Found	C	Limits	%R
Mercury				0.298	0.311		80 - 120	104.4

U.S. EPA - CLP

9

SERIAL DILUTIONS

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200350761602LLab Code : PEL Case No.: SAS No: SDG No.: 3507616Matrix: Soil Level:(low/med) LOW

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ- ence		
						Q	M
Arsenic	167.51		190.00		13		P
Barium	1669.69		1790.00		7.2		P
Cadmium	8.31			U			P
Chromium	280.47		304.00		8.4		P
Lead	2401.57		2750.00		14	E	P
Selenium	101.51			U			P
Silver		U		U			P

Comments:

U.S. EPA - CLP

9

SERIAL DILUTIONS

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200350761801LLab Code : PEL Case No.: SAS No: SDG No.: 3507616Matrix: Soil Level:(low/med) LOW

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Sample Result (I)	Serial Dilution Result (S)		% Differ- ence	Q	M
		C	C			
Arsenic	226.94		241.00	6.2		P
Barium	3483.55		3600.00	3.3		P
Cadmium	32.80		32.10	2.1		P
Chromium	374.19		385.00	2.9		P
Lead	2948.17		3130.00	6.2		P
Mercury	10.93		10.90	0.26		CV
Selenium		U		U		P
Silver		U		U		P

Comments:

U.S. EPA - CLP

9

SERIAL DILUTIONS

EPA Sample No.

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200350762201LLab Code : PEL Case No.: SAS No: SDG No.: 3507616Matrix: Soil Level:(low/med) LOWConcentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Differ- ence		Q	M
	C	U	C	U	Q	CV		
Mercury								

Comments:

U.S. EPA - CLP

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METHOD DETECTION LIMITS

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 13Lab Code : PEL

Case No.: _____

SAS No: _____ SDG No.: 3507616ICP ID Number : ICAP2

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Raw MDL (UG/L)	CRDL (mg/Kg)	MDL (mg/Kg)	Verification Date	M
Arsenic	188.979	5.53	1	0.5	7/13/2012	P
Barium	233.527	1.7696	10	0.16	7/13/2012	P
Cadmium	226.502	0.553	0.5	0.05	7/13/2012	P
Chromium	267.716	1.7696	1	0.16	7/13/2012	P
Lead	220.353	3.7604	0.8	0.34	7/13/2012	P
Selenium	196.026	4.424	2	0.4	7/13/2012	P
Silver	328.068	1.7696	1.5	0.16	7/13/2012	P

Comments:

301112 1332

U.S. EPA - CLP

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METHOD DETECTION LIMITS

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 13Lab Code : PEL

Case No.: _____

SAS No: _____

SDG No.: 3507616

ICP ID Number : _____

Furnace AA ID Number : FIMS

Analyte	Wave-length (nm)	Raw MDL (UG/L)	CRDL (mg/Kg)	MDL (mg/Kg)	Verification Date	M
Mercury	253.7	0.037148	0.033	0.0037	10/17/2012	CV

Comments:

301112 1332

U.S. EPA - CLP

11A

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356Lab Code : PEL Case No.: _____ SAS No.: _____ SDG No.: 3507616ICP ID Number : ICAP2 Date: 3/20/2010

Analyte	Wave-length	Interelement Correction Factors for:													
		Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li	Mg
Barium	233.527		32.186100												
Chromium	267.716						44.618000								

Comments:

U.S. EPA - CLP

11A

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 2005148 1356Lab Code : PEL Case No.: _____ SAS No.: _____ SDG No.: 3507616ICP ID Number : ICAP2 Date: 3/20/2010

Analyte	Wave-length	Interelement Correction Factors for:												
		Mn	Mo	Na	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	V	Zn
Barium	233.527													
Chromium	267.716						14.340200							

Comments:

U.S. EPA - CLP

12

ICP LINEAR RANGES (SEMI-ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 35th Avenue Removal Site 200514
 Lab Code : PEL Case No.: SAS No: SDG No.: 3507616
 ICP ID NUMBER : ICAP2 DATE : 12/8/2009

Analyte	Integ. Time (sec.)	Concentration UG/L	M
Arsenic	1	5000	P
Barium	1	5000	P
Cadmium	1	5000	P
Chromium	1	5000	P
Lead	1	5000	P
Selenium	1	5000	P
Silver	1	500	P

Comments:

301112 1332

U.S. EPA - CLP

13

PREPARATION LOG

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 1356Lab Code : PEL

Case No.: _____

SAS No: _____

SDG No.: 3507616Method : 6010

EPA Sample No:	Preparation Date	Weight (gram)	Volume (mL)
154331MB	20 Nov 12	0.509	
154332LCS	20 Nov 12	0.502	
154333LCSD	20 Nov 12	0.506	
CV0041B-CS	20 Nov 12	0.785	
CV0043C-CS	20 Nov 12	0.585	
CV0699B-CS	20 Nov 12	0.602	
FM0126C-GS-SP	20 Nov 12	0.553	

U.S. EPA - CLP

13

PREPARATION LOG

Lab Name: Spectrum Analytical, Inc.

Contract: 35th Avenue Removal Site 2005148 1356

Lab Code : PEL

Case No.: _____

SAS No: _____ SDG No.: 3507616

Method : 6010

EPA Sample No:	Preparation Date	Weight (gram)	Volume (mL)
154939MB	27 Nov 12	0.506	
154940LCS	27 Nov 12	0.514	
154941LCSD	27 Nov 12	0.509	
FM0263C-CS-SP	27 Nov 12	0.504	

U.S. EPA - CLP

13

PREPARATION LOG

Lab Name: Spectrum Analytical, Inc.

Contract: 35th Avenue Removal Site 2005148 1356

Lab Code : PEL

Case No.: _____

SAS No: _____ SDG No.: 3507616

Method : 7471

EPA Sample No:	Preparation Date	Weight (gram)	Volume (mL)
154431MB	20 Nov 12	0.252	
154432LCS	20 Nov 12	0.256	
154433LCSD	20 Nov 12	0.251	
CV0041B-CS	20 Nov 12	0.282	
CV0043C-CS	20 Nov 12	0.281	
CV0699B-CS	20 Nov 12	0.291	
FM0126C-GS-SP	20 Nov 12	0.319	

U.S. EPA - CLP

13

PREPARATION LOG

Lab Name: Spectrum Analytical, Inc.

Contract: 35th Avenue Removal Site 2005148 1356

Lab Code : PEL

Case No.: _____

SAS No: _____ SDG No.: 3507616

Method : 7471

EPA Sample No:	Preparation Date	Weight (gram)	Volume (mL)
155043MB	28 Nov 12	0.254	
155044LCS	28 Nov 12	0.259	
155045LCSD	28 Nov 12	0.252	
FM0263C-CS-SP	28 Nov 12	0.284	

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14

ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 13Lab Code : PELCase No.: SAS No: SDG No.: 3507616Instrument ID Number : ICAP2Method : PStart Date : 11/21/2012End Date : 11/28/2012

EPA Sample No.	D/F	Time	%R	Analytes																								
				A G	A L	A S	B A	B E	B D	C N	C O	C R	C U	C E	F G	H I	K G	L N	M G	M O	M A	N I	P B	S B	S E	S N	T R	T I
CAL01	1	0:02		X		X			X		X												X	X				
CAL02	1	0:08							X		X																	
CAL03	1	0:14		X		X				X		X												X	X			
CAL04	1	0:20		X		X		X		X		X												X	X			
CAL05	1	0:25		X		X		X		X		X												X	X			
CAL06	1	0:31				X	X			X		X												X	X			
ICV1135363	1	0:55		X		X		X		X		X												X	X			
ICB1135364	1	1:01		X		X		X		X		X												X	X			
ZZZZZZ	1	1:07																										
ICS1135366	1	1:13		X		X			X		X													X	X			
ICS1135367	1	1:18		X		X		X		X		X												X	X			
CCV1135368	1	1:24		X		X		X		X		X												X	X			
CCB1135369	1	1:29		X		X		X		X		X												X	X			
ZZZZZZ	1	1:45																										
ZZZZZZ	1	1:51																										
ZZZZZZ	1	1:57																										
ZZZZZZ	1	2:02																										
ZZZZZZ	5	2:08																										
ZZZZZZ	1	2:15																										
ZZZZZZ	1	2:20																										
ZZZZZZ	1	2:25																										
ZZZZZZ	1	2:31																										
ZZZZZZ	1	2:37																										
ZZZZZZ	1	2:42																										
ZZZZZZ	1	2:47																										
ZZZZZZ	1	2:53																										
ZZZZZZ	1	2:59																										
ZZZZZZ	1	3:04																										
ZZZZZZ	1	3:09																										
ZZZZZZ	1	3:15																										
ZZZZZZ	1	3:21																										
ZZZZZZ	1	3:26																										
ZZZZZZ	5	3:31																										
ZZZZZZ	1	3:37																										

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc.

Contract: 35th Avenue Removal Site 2005148 13

Lab Code : PEL

Case No.: _____

SAS No: _____

SDG No.: 3507616

Instrument ID Number : ICAP2

Method : P

Start Date : 11/21/2012

End Date : 11/28/2012

EPA Sample No.	D/F	Time	%R	Analytes																						
				A G	A L	A S	B A	B E	B D	C N	C O	C R	C E	F G	H I	K G	L N	M G	M N	N O	P A	S B	S B	S E	S N	S R
ZZZZZZ	1	3:42																								
CCV1135392	1	3:47		X		X		X		X		X										X	X			
CCB1135393	1	3:53		X		X		X		X		X										X	X			
ZZZZZZ	1	3:59																								
ZZZZZZ	1	4:04																								
ZZZZZZ	5	4:09																								
ZZZZZZ	1	4:15																								
ZZZZZZ	1	4:20																								
ZZZZZZ	1	4:25																								
ZZZZZZ	1	4:30																								
154331MB	1	4:36		X		X		X		X		X										X	X			
154332LCS	1	4:42		X		X		X		X		X										X	X			
154333LCSD	1	4:47		X		X		X		X		X										X	X			
CCV1135404	1	4:53		X		X		X		X		X										X	X			
CCB1135405	1	4:58		X		X		X		X		X										X	X			
ZZZZZZ	1	5:04																								
ZZZZZZ	5	5:09																								
ZZZZZZ	1	5:15																								
ZZZZZZ	1	5:20																								
350760007A	1	5:26		X		X		X		X		X										X	X			
ZZZZZZ	1	5:31																								
ZZZZZZ	1	5:36																								
ZZZZZZ	1	5:42																								
ZZZZZZ	5	5:47																								
ZZZZZZ	1	5:53																								
CCV1135416	1	5:58		X		X		X		X		X										X	X			
CCB1135417	1	6:03		X		X		X		X		X										X	X			
ZZZZZZ	1	6:09																								
ZZZZZZ	1	6:15																								
ZZZZZZ	1	6:20																								
CV0041B-CS	1	6:26		X		X		X		X		X										X	X			
350761602L	5	6:31		X		X		X		X		X										X	X			
CV0043C-CS	1	6:37		X		X		X		X		X										X	X			
FM0126C-GS-SP	1	6:42		X		X		X		X		X										X				

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 13Lab Code : PELCase No.: SAS No: SDG No.: 3507616Instrument ID Number : ICAP2Method : PStart Date : 11/21/2012End Date : 11/28/2012

EPA Sample No.	D/F	Time	%R	Analytes																								
				A G	A L	A S	B A	B E	B D	C N	C O	C R	C U	C E	F G	H I	K G	L N	M G	M N	N O	P A	S B	S B	S E	S N	T R	T I
CV0699B-CS	1	6:47		X		X		X		X													X	X				
ZZZZZZ	1	6:53																										
ZZZZZZ	1	6:58																										
CCV1135428	1	7:03		X		X		X		X														X	X			
CCB1135429	1	7:09		X		X		X		X														X	X			
CAL01	1	11:08		X		X		X		X														X	X			
CAL02	1	11:14							X		X																	
CAL03	1	11:20		X		X		X		X														X	X			
CAL04	1	11:27		X		X		X		X														X	X			
CAL05	1	11:32		X		X		X		X														X	X			
CAL06	1	11:37				X		X		X														X	X			
ICV1136309	1	12:04		X		X		X		X														X	X			
ICB1136310	1	12:09		X		X		X		X														X	X			
ZZZZZZ	1	12:15																										
ICS1136312	1	12:22		X		X		X		X														X	X			
ICS1136313	1	12:27		X		X		X		X														X	X			
CCV1136314	1	12:32		X		X		X		X														X	X			
CCB1136315	1	12:42		X		X		X		X														X	X			
ZZZZZZ	1	13:09																										
ZZZZZZ	1	13:15																							X	X		
ZZZZZZ	1	13:20																							X	X		
ZZZZZZ	1	13:23																							X	X		
ZZZZZZ	1	13:28																							X	X		
ZZZZZZ	1	13:34																							X	X		
ZZZZZZ	1	13:40																							X	X		
ZZZZZZ	5	13:46																							X	X		
ZZZZZZ	1	13:52																							X	X		
ZZZZZZ	1	13:58																							X	X		
ZZZZZZ	1	14:03																							X	X		
ZZZZZZ	1	14:09																							X	X		
ZZZZZZ	1	14:15																							X	X		
ZZZZZZ	1	14:20																							X	X		
ZZZZZZ	1	14:26																							X	X		
ZZZZZZ	1	14:33																							X	X		

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 13Lab Code : PELCase No.: SAS No: SDG No.: 3507616Instrument ID Number : ICAP2Method : PStart Date : 11/21/2012End Date : 11/28/2012

EPA Sample No.	D/F	Time	%R	Analytes																								
				A G	A L	A S	B A	B E	B D	C N	C O	C R	C U	C E	F G	H I	K G	L N	M G	M N	N O	P A	S B	S B	S E	S N	S R	T I
CCV1136332	1	14:35		X		X	X			X		X											X	X				
CCB1136333	1	14:41		X		X	X			X		X											X	X				
ZZZZZZZ	1	14:47																										
ZZZZZZZ	1	14:53																										
FM0126C-GS-SPDL1	2	14:59																						X				
ZZZZZZZ	20	15:04																										
ZZZZZZZ	20	15:11																										
ZZZZZZZ	20	15:17																										
ZZZZZZZ	20	15:23																										
ZZZZZZZ	20	15:30																										
ZZZZZZZ	20	15:36																										
ZZZZZZZ	5	15:42																										
CCV1136344	1	15:48		X		X	X			X		X											X	X				
CCB1136345	1	15:54		X		X	X			X		X											X	X				
ZZZZZZZ	5	16:00																										
ZZZZZZZ	5	16:06																										
ZZZZZZZ	5	16:12																										
ZZZZZZZ	5	16:19																										
ZZZZZZZ	5	16:25																										
ZZZZZZZ	1	16:31																										
ZZZZZZZ	1	16:37																										
ZZZZZZZ	1	16:44																										
ZZZZZZZ	1	16:50																										
ZZZZZZZ	1	16:56																										
ZZZZZZZ	1	17:03																										
ZZZZZZZ	1	17:05																										
ZZZZZZZ	1	17:10																										
ZZZZZZZ	1	17:14																										
ZZZZZZZ	1	17:20																										
ZZZZZZZ	1	17:26																										
ZZZZZZZ	1	17:32																										
ZZZZZZZ	1	17:37																										
ZZZZZZZ	1	17:42																										
ZZZZZZZ	1	17:46																										

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc.

Contract: 35th Avenue Removal Site 2005148 13

Lab Code : PEL

Case No.: _____

SAS No: _____

SDG No.: 3507616

Instrument ID Number : ICAP2

Method : P

Start Date : 11/21/2012

End Date : 11/28/2012

EPA Sample No.	D/F	Time	%R	Analytes																								
				A G	A L	A S	B A	B E	B D	C N	C O	C R	C U	C E	F G	H I	K G	L N	M O	M A	M I	N B	P B	S B	S E	S N	T R	T I
CAL01	1	9:23		X		X			X		X												X	X				
CAL02	1	9:30							X		X																	
CAL03	1	9:36		X		X			X		X														X	X		
CAL04	1	9:42		X		X		X		X		X													X	X		
CAL05	1	9:47		X		X		X		X		X													X	X		
CAL06	1	9:53				X	X			X		X													X	X		
ICV1137112	1	10:27		X		X		X		X		X													X	X		
ICB1137113	1	10:33		X		X		X		X		X													X	X		
ZZZZZZ	1	10:39																										
ICS1137115	1	10:45		X		X			X		X														X	X		
ICS1137116	1	10:50		X		X		X		X		X													X	X		
CCV1137117	1	10:56		X		X		X		X		X													X	X		
CCB1137118	1	11:01		X		X		X		X		X													X	X		
ZZZZZZ	2	11:26																										
ZZZZZZ	5	11:32																										
ZZZZZZ	2	11:38																										
ZZZZZZ	2	11:43																										
ZZZZZZ	5	11:49																										
CCV1137124	1	11:54		X		X		X		X		X													X	X		
CCB1137125	1	11:59		X		X		X		X		X													X	X		
154939MB	1	12:05		X		X		X		X		X													X	X		
154940LCS	1	12:12		X		X		X		X		X													X	X		
154941LCSD	1	12:17		X		X		X		X		X													X	X		
ZZZZZZ	1	12:22																										
350761801L	5	12:28		X		X		X		X		X													X	X		
ZZZZZZ	1	12:33																										
ZZZZZZ	1	12:39																										
350761801A	1	12:44		X		X		X		X		X													X	X		
ZZZZZZ	1	12:49																										
FM0263C-CS-SP	1	12:55		X		X		X		X		X													X	X		
CCV1137136	1	13:00		X		X		X		X		X													X	X		
CCB1137137	1	13:05		X		X		X		X		X													X	X		
ZZZZZZ	1	13:12																										
ZZZZZZ	1	13:17																										

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 13Lab Code : PELCase No.: SAS No: SDG No.: 3507616Instrument ID Number : ICAP2Method : PStart Date : 11/21/2012End Date : 11/28/2012

EPA Sample No.	D/F	Time	%R	Analytes																							
				A G	A L	A S	B A	B E	B D	C N	C O	C R	C U	C E	F G	H I	K G	L N	M G	M N	N O	P A	S B	S B	S E	S N	S R
ZZZZZZ	1	13:22																									
ZZZZZZ	1	13:28																									
ZZZZZZ	1	13:33																									
ZZZZZZ	1	13:38																									
ZZZZZZ	5	13:44																									
ZZZZZZ	1	13:49																									
ZZZZZZ	1	13:54																									
ZZZZZZ	1	14:00																									
ZZZZZZ	1	14:05																									
ZZZZZZ	1	14:10																									
ZZZZZZ	1	14:14																									
ZZZZZZ	1	14:20																									
ZZZZZZ	1	14:25																									
ZZZZZZ	1	14:31																									
ZZZZZZ	1	14:36																									
ZZZZZZ	1	14:41																									
ZZZZZZ	1	14:47																									
ZZZZZZ	1	14:52																									
ZZZZZZ	1	14:58																									
ZZZZZZ	1	15:03																									
ZZZZZZ	1	15:08																									
ZZZZZZ	1	15:14																									
ZZZZZZ	1	15:19																									
ZZZZZZ	1	15:23																									

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 13Lab Code : PELCase No.: SAS No: SDG No.: 3507616Instrument ID Number : FIMSMethod : CVStart Date : 11/21/2012End Date : 11/28/2012

EPA Sample No.	D/F	Time	%R	Analytes																							
				A G	A L	A S	B A	B E	B D	C N	C O	C R	C U	C E	F G	H I	K G	L N	M G	M N	M O	N A	P B	S B	S E	S N	T R
CAL01	1	12:09														X											
CAL02	1	12:11															X										
CAL03	1	12:13															X										
CAL04	1	12:14															X										
CAL05	1	12:16															X										
CAL06	1	12:18															X										
ZZZZZZ	1	12:20																									
ZZZZZZ	1	12:22																									
ICV1135933	1	12:27															X										
ICB1135934	1	12:28																X									
CCV1135935	1	12:30																X									
CCB1135936	1	12:32																X									
154431MB	1	12:34																X									
154432LCS	1	12:36																X									
154433LCSD	1	12:37																X									
ZZZZZZ	1	12:39																									
ZZZZZZ	1	12:41																									
ZZZZZZ	1	12:43																									
ZZZZZZ	1	12:45																									
ZZZZZZ	1	12:46																									
ZZZZZZ	1	12:48																									
ZZZZZZ	1	12:50																									
CCV1135947	1	12:52																X									
CCB1135948	1	12:54																X									
ZZZZZZ	1	12:55																									
ZZZZZZ	1	12:57																									
ZZZZZZ	1	12:59																									
ZZZZZZ	1	13:01																									
ZZZZZZ	1	13:03																									
ZZZZZZ	1	13:04																									
ZZZZZZ	1	13:06																									
ZZZZZZ	1	13:08																									
ZZZZZZ	1	13:10																									
ZZZZZZ	1	13:12																									

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 13Lab Code : PELCase No.: SAS No: SDG No.: 3507616Instrument ID Number : FIMSMethod : CVStart Date : 11/21/2012End Date : 11/28/2012

EPA Sample No.	D/F	Time	%R	Analytes																						
				A G	A L	A S	B A	B E	B D	C N	C O	C R	C E	F G	H I	K G	L N	M G	M N	N O	P A	S B	S B	S E	S N	S R
ZZZZZZ	1	13:13																								
ZZZZZZ	1	13:15																								
ZZZZZZ	1	13:17																								
ZZZZZZ	1	13:19																								
ZZZZZZ	1	13:21																								
ZZZZZZ	1	13:22																								
ZZZZZZ	5	13:24																								
ZZZZZZ	1	13:26																								
ZZZZZZ	1	13:28																								
ZZZZZZ	1	13:30																								
ZZZZZZ	1	13:39																								
ZZZZZZ	1	13:40																								
ZZZZZZ	1	13:42																								
ZZZZZZ	1	13:44																								
ZZZZZZ	1	13:46																								
ZZZZZZ	1	13:48																								
ZZZZZZ	5	13:49																								
ZZZZZZ	1	13:51																								
ZZZZZZ	1	13:53																								
ZZZZZZ	1	13:55																								
CCV1135979	1	14:53																X								
CCB1135980	1	14:54																X								
CV0041B-CS	1	14:56																X								
CV0043C-CS	1	14:58																X								
FM0126C-GS-SP	1	15:00																X								
CV0699B-CS	1	15:02																X								
350762201L	5	15:04																X								
350762201A	1	15:05																X								
CCV1135987	1	15:07																X								
CCB1135988	1	15:09																X								
CAL01	1	12:47																X								
CAL02	1	12:49																X								
CAL03	1	12:50																X								
CAL04	1	12:52																X								

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 13Lab Code : PELCase No.: SAS No: SDG No.: 3507616Instrument ID Number : FIMSMethod : CVStart Date : 11/21/2012End Date : 11/28/2012

EPA Sample No.	D/F	Time	%R	Analytes																								
				A G	A L	A S	B A	B E	B D	C C	C N	C O	C R	C U	C E	F G	H I	K G	L N	M G	M N	N O	P A	S B	S B	S E	S N	T R
CAL05	1	12:54															X											
CAL06	1	12:56																X										
ICV1137190	1	12:58																X										
ICB1137191	1	13:00																	X									
CCV1137192	1	13:01																X										
CCB1137193	1	13:03																X										
155043MB	1	13:05																X										
155044LCS	1	13:07																X										
155045LCSD	1	13:09																X										
ZZZZZZ	1	13:10																										
ZZZZZZ	1	13:12																										
ZZZZZZ	1	13:14																										
ZZZZZZ	1	13:16																										
ZZZZZZ	1	13:18																										
ZZZZZZ	1	13:20																										
ZZZZZZ	1	13:21																										
CCV1137204	1	13:23																X										
CCB1137205	1	13:25																X										
ZZZZZZ	1	13:27																										
ZZZZZZ	1	13:28																										
ZZZZZZ	1	13:30																										
ZZZZZZ	1	13:32																										
ZZZZZZ	1	13:34																										
ZZZZZZ	1	13:36																										
ZZZZZZ	1	13:37																										
ZZZZZZ	1	13:39																										
ZZZZZZ	1	13:41																										
ZZZZZZ	1	13:43																										
CCV1137216	1	13:45																X										
CCB1137217	1	13:46																X										
ZZZZZZ	1	13:48																										
ZZZZZZ	1	13:50																										
FM0263C-CS-SP	1	13:52																X										
ZZZZZZ	5	13:54																										

U.S. EPA - CLP

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc.Contract: 35th Avenue Removal Site 2005148 13Lab Code : PEL

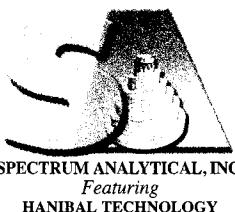
Case No.: _____

SAS No: _____

SDG No.: 3507616Instrument ID Number : FIMSMethod : CVStart Date : 11/21/2012End Date : 11/28/2012

EPA Sample No.	D/F	Time	%R	Analytes																							
				A G	A L	A S	B A	B E	B D	C N	C O	C R	C U	C E	F	H	K	L	M	M	M	N	P	S	S	S	T
ZZZZZZ	1	13:56																									
CCV1137223	1	13:57																X									
CCB1137224	1	13:59																X									
CCV1137225	1	14:31																X									
CCB1137226	1	14:33																X									
ZZZZZZ	2	14:35																									
ZZZZZZ	2	14:36																									
ZZZZZZ	2	14:38																									
ZZZZZZ	1	14:40																									
350761801L	10	14:42																X									
350761801A	2	14:43																X									
CCV1137233	1	14:45																X									
CCB1137234	1	14:47																X									

Chain of Custody Documentation



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Page 1 of 6 35076164

CHAIN OF CUSTODY RECORD

11 Almgren Drive
Agawam, MA 01001
(413) 789-9018

8405 Benjamin Road, Ste A
Tampa, FL 33634
(813) 888-9507

175 Metro Center Blvd
Warwick, RI 02886
(401) 732-3400

Special Handling:

- TAT- Indicate Date Needed: 14 days
- All TATs subject to laboratory approval.
 - Min. 24-hour notification needed for rushes.
 - Samples disposed of after 60 days unless otherwise instructed.

Report To: Limari Krebs
Oneida Total Integrated Ent.
1020 Kenesette Circle, Site 1020
Varicka, GA 30060
Telephone #: 678-255-16412
Project Mgr. Russell Henderson

Invoice To: Accounts Payable
Oneida Total Integrated Ent.
1033 N. Mayfair Road, Ste 200
Milwaukee, WI 53226
P.O. No.: _____ RQN: _____

Project No.: 2005148-13516
Site Name: 35th Avenue Removal Site
Location: Birmingham State: AL
Sampler(s): R. Stobbs, J. Parton, A. Davis.

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8= NaHSO₄ 9= Deionized Water 10=H₃PO₄ 11= _____ 12= _____

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= _____ X2= _____ X3= _____

Analyses:

QA/QC Reporting Level

- Level I Level II
 Level III Level IV
 Other _____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Type:	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	DAW(SIM)	OCRA & TCL SUOC
01	CV8841A-CS	11/14/12	1025	CS	SO			1	X	
02	CV8841B-CS	11/14/12	1045	CS	SO		2		X	X
03	CV8843A-CS	11/14/12	1125	CS	SO	1			X	
04	CV8843B-CS	11/14/12	1150	CS	SO	1			X	
05	CV8843C-CS	11/14/12	1225	CS	SO	2			X	X
06	CV8192A-CS	11/14/12	0900	CS	SO	1			X	
07	CV8192B-CS	11/14/12	0930	CS	SO	1			X	
08	FM8263A-CS	11/14/12	0932	CS	SO	1			X	
09	FM8263B-CS	11/14/12	1000	CS	SO	1			X	
10	FM8263C-CS	11/14/12	1050	CS	SO	1			X	

*Mr. - Added per client
11/20/12*

State-specific reporting standards:

Relinquished by:

Received by:

Date:

11/16/2012

Time:

10:02

Temp °C

11.0

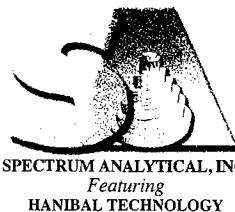
3.8

EDD Format SEND

E-mail to Lkrebbs@one.com

Condition upon receipt:

- Ambient Cold Refrigerated DI VOA Frozen Soil Jar Frozen



SPECTRUM ANALYTICAL, INC.
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Page 2 of 6

35076164F

CHAIN OF CUSTODY RECORD

11 Almgren Drive
Agawam, MA 01001
(413) 789-9018

8405 Benjamin Road, Ste A
Tampa, FL 33634
(813) 888-9507

175 Metro Center Blvd
Warwick, RI 02886
(401) 732-3400

- TAT- Indicate Date Needed: 14 days
 All TATs subject to laboratory approval.
 Min. 24-hour notification needed for rushes.
 Samples disposed of after 60 days unless otherwise instructed.

Report To: Liman Krebs
Oneida Total Integrated Cent
1220 Limestone Circle, Ste 100
Marietta, GA 30060
 Telephone #: 678-255-1641
 Project Mgr. Russell Henderson

Invoice To: Accounts Payable
Oneida Total Integrated Ent
1033 N. Mayfair Road, Ste 200
Milwaukee, WI 53226
 P.O. No.: _____ RQN: _____

Project No.: 2008148-13516
 Site Name: 35th Avenue Removal Site
 Location: Birmingham State: AL
 Sampler(s): R. Stubbs, J. Partap, A. Davis

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
 8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11= _____ 12= _____

List preservative code below:

QA/QC Reporting Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
 O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
 X1= _____ X2= _____ X3= _____

Containers:

Analyses:

QA/QC Reporting Level

- Level I Level II
 Level III Level IV
 Other _____

G=Grab C=Composite

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	PAN (S1MS)	QCRAS	TESSOC
11	FN0126A-CS	11/14/12	1153	CS	SO		1			X		
12	FN0126B-CS	11/14/12	1214	CS	SO		1			X		
13	FN0126C-CS	11/14/12	1208	GS	SO	2				X	X	
14	CN01699A-CS	11/14/12	1130	CS	SO	1				X		
15	CN01699B-CS	11/14/12	1205	CS	SO	2				X	X	
16	CN01699C-CS	11/14/12	1227	CS	SO	1				X		
17	FN0218A-CS	11/14/12	0919	CS	SO	1				X		
18	FN0218B-CS	11/14/12	0950	CS	SO	1				X		
19	FN0218C-CS	11/14/12	1015	CS	SO	1				X		
20	CN0362A-CS	11/14/12	1530	CS	SO	1				X		

Relinquished by:

Received by:

Date: Time: Temp°C

11/16/2012 10:02 4.0
3.8

EDD Format SE00

E-mail to lkrebs@one.com

Condition upon receipt:

- Ambient Iced Refrigerated DI VOA Frozen Soil Jar Frozen

From: (678) 355-5550
 Limari Krebs
 OTIE
 1220 Kennestone Circle
 Suite 106
 Marietta, GA 30066

Origin ID: NCQA



Ship Date: 15NOV12
 ActWgt: 55.0 LB
 CAD: 2139088/INET3300

SHIP TO: (813) 888-9507

BILL SENDER

Sample Receipt
PEL
8405 Benjamin Road
Suite A
TAMPA, FL 33634

Delivery Address Bar Code



Ref # 1356-Smptolab
 Invoice #
 PO #
 Dept #

2 of 2

FRI - 16 NOV A1

PRIORITY OVERNIGHT

MPS# 7940 8975 2140

0263

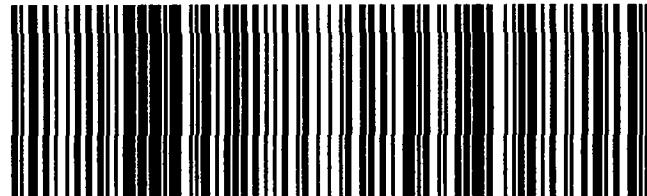
Mstr# 7940 8975 2839

0201

33634

FL-US

TPA

XJ TPFA

515G3/EE3B/AA44

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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

From: (678) 355-5550
 Limari Krebs
 OTIE
 1220 Kennestone Circle
 Suite 106
 Marietta, GA 30066

Origin ID: NCQA



J12201209200325

Ship Date: 15NOV12
 ActWgt: 55.0 LB
 CAD: 2139088/NET3300

SHIP TO: (813) 888-9507

BILL SENDER

Sample Receipt
PEL
8405 Benjamin Road
Suite A
TAMPA, FL 33634

Delivery Address Bar Code



Ref # 1356-Smptolab
 Invoice #
 PO #
 Dept #

1 of 2

FRI - 16 NOV A1

PRIORITY OVERNIGHT

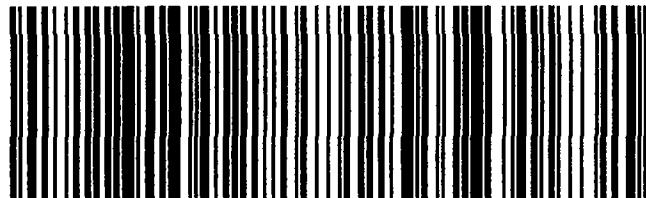
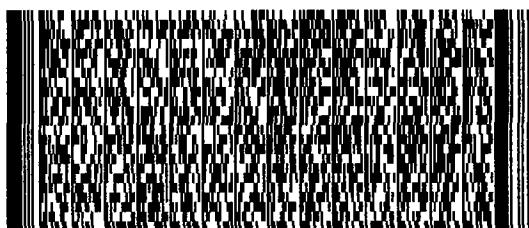
TRK# 7940 8975 2839

0201 ## MASTER ##

33634

FL-US

TPA

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Sample Receipt Confirmation Sheet

Client Information			
SDG:	3507616	Level:	4
Client:	OTIE	Date Rec'd:	11/16/2012 10:02:00 AM
Profile:	91122	Due Date:	11/28/2012
Project:	35th Avenue Superfund Site	Profile Name:	35th Avenue Superfund Site

Sample Verification			
Samples/Cooler Secure?	Yes	COC Present?	Yes
Temperature of Samples:	4.0	All Samples on COC accounted For?	Yes
Number of Coolers Received:	2	All Samples Rec'd Intact?	Yes
Temp Gun ID:	101722663	Sample Vol. Sufficient For Analysis	Yes
pH Verified?	No	Samples Rec'd W/I Hold Time?	Yes
pH WNL?	No	Are All Samples to be Analyzed?	Yes
Samples Received By:	Fed-Ex	Correct Sample Containers?	Yes
Tracking Number:	794089752140	COC Comments written on COC?	Yes
Profile Picked By:	MG	Samplers Initials on COC?	Yes
Soil Origin (Domestic/Foreign):	Domestic	Sample Date/Time Indicated?	Yes
Site Location/Project on COC?	Yes	TAT Requested:	STD
Client Project # on COC?	Yes	Client Requests Verbal Results?	No
Project Mgr. Indicated on COC?	Yes	Client Requests Faxed Results?	No
COC relinquished/Dated by Client?	Yes	Specific Subcontract Indicated?	No
COC Received/Dated by SA?	Yes	Written on Outside Lab Board?	No
Written on Internal COC?	Yes	Radioactivity Check?	No
Lab to Conduct ALL Analyses?	Yes		

Comments

Specific tests noted on COC.

LABEL REVIEW

PEER REVIEW

Client: OTIE

WONo: 3507616

Profile Name: 35th Avenue Superfu Profile #: 91122

MATRIX S

Sample #	Bottle	Parameter		Check	Received	Date
01	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:08 PM
01	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:03 AM
01	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:57:28 PM
01	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:41:39 PM
01	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:20 PM
02	002	6010	Metals	In	Cfryman	11/16/2012 2:45:08 PM
02	002	6010	Metals	Out	Justin Bowman	11/20/2012 4:57:10 PM
02	002	6010	Metals	In	Justin Bowman	11/20/2012 11:31:57 PM
02	002	7471	Mercury	In	Cfryman	11/16/2012 2:45:08 PM
02	002	7471	Mercury	Out	Justin Bowman	11/20/2012 4:57:10 PM
02	002	7471	Mercury	In	Justin Bowman	11/20/2012 11:31:58 PM
02	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:08 PM
02	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:06 AM
02	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:57:31 PM
02	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:41:48 PM
02	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:24 PM
03	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:08 PM
03	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:09 AM
03	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:57:36 PM
03	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:41:49 PM
03	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:25 PM
04	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:09 PM
04	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:11 AM
04	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:57:47 PM
04	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:41:49 PM
04	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:27 PM

WONo: 3507616

Profile Name: 35th Avenue Superfu Profile #: 91122

05	002	6010	Metals	In	Cfryman	11/16/2012 2:45:09 PM
05	002	6010	Metals	Out	Justin Bowman	11/20/2012 4:57:19 PM
05	002	6010	Metals	In	Justin Bowman	11/20/2012 11:32:00 PM
05	002	7471	Mercury	In	Cfryman	11/16/2012 2:45:09 PM
05	002	7471	Mercury	Out	Justin Bowman	11/20/2012 4:57:19 PM
05	002	7471	Mercury	In	Justin Bowman	11/20/2012 11:32:00 PM
05	001	8270	GCMS semivolatile	Out	Robert Nickel	11/20/2012 9:05:40 AM
05	001	8270	GCMS semivolatile	In	Agnes Tapolyai	11/20/2012 6:59:40 PM
05	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:09 PM
05	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:13 AM
05	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:57:52 PM
05	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:41:50 PM
05	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:29 PM
06	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:09 PM
06	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:15 AM
06	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:57:55 PM
06	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:41:51 PM
06	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:31 PM
07	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:09 PM
07	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:16 AM
07	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:01 PM
07	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:41:51 PM
07	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:34 PM
08	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:09 PM
08	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:18 AM
08	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:04 PM
08	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:41:52 PM
08	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:36 PM
09	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:09 PM

WONo: 3507616

Profile Name: 35th Avenue Superfu Profile #: 91122

09	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:20 AM
09	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:08 PM
09	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:41:52 PM
09	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:44 PM
10	001	6010	Metals	Out	Justin Bowman	11/27/2012 8:29:51 PM
10	001	6010	Metals	In	Justin Bowman	11/27/2012 9:26:03 PM
10	001	7471	Mercury	Out	Justin Bowman	11/28/2012 8:12:58 AM
10	001	7471	Mercury	In	Justin Bowman	11/28/2012 10:21:42 AM
10	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:09 PM
10	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:22 AM
10	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:12 PM
10	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:41:54 PM
10	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:47 PM
11	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:10 PM
11	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:26 AM
11	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:15 PM
11	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:41:57 PM
11	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:50 PM
12	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:10 PM
12	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:28 AM
12	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:18 PM
12	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:41:59 PM
12	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:53 PM
13	002	6010	Metals	In	Cfryman	11/16/2012 2:45:10 PM
13	002	6010	Metals	Out	Justin Bowman	11/20/2012 4:57:25 PM
13	002	6010	Metals	In	Justin Bowman	11/20/2012 11:32:02 PM
13	002	7471	Mercury	In	Cfryman	11/16/2012 2:45:10 PM
13	002	7471	Mercury	Out	Justin Bowman	11/20/2012 4:57:25 PM
13	002	7471	Mercury	In	Justin Bowman	11/20/2012 11:32:02 PM
13	001	8270	GCMS semivolatile	Out	Robert Nickel	11/20/2012 9:05:50 AM

WONo: 3507616

Profile Name: 35th Avenue Superfu Profile #: 91122

13	001	8270	GCMS semivolatile	In	Agnes Tapolyai	11/20/2012 6:59:27 PM
13	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:10 PM
13	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:31 AM
13	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:23 PM
13	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:42:00 PM
13	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:57 PM
14	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:10 PM
14	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:33 AM
14	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:31 PM
14	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:42:01 PM
14	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:58 PM
15	002	6010	Metals	In	Cfryman	11/16/2012 2:45:10 PM
15	002	6010	Metals	Out	Justin Bowman	11/20/2012 4:57:05 PM
15	002	6010	Metals	In	Justin Bowman	11/20/2012 11:32:03 PM
15	002	7471	Mercury	In	Cfryman	11/16/2012 2:45:11 PM
15	002	7471	Mercury	Out	Justin Bowman	11/20/2012 4:57:05 PM
15	002	7471	Mercury	In	Justin Bowman	11/20/2012 11:32:03 PM
15	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:10 PM
15	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:36 AM
15	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:34 PM
15	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:42:02 PM
15	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:29:58 PM
16	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:11 PM
16	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:38 AM
16	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:38 PM
16	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:42:05 PM
16	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:30:00 PM
17	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:11 PM
17	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:40 AM

WONo: 3507616

Profile Name: 35th Avenue Superfu Profile #: 91122

17	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:42 PM
17	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:42:07 PM
17	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:30:02 PM
18	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:11 PM
18	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:42 AM
18	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:45 PM
18	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:42:09 PM
18	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:30:04 PM
19	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:11 PM
19	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:44 AM
19	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:48 PM
19	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:42:11 PM
19	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:30:06 PM
20	001	8270_SIM	GCMS semivolatile SIM	In	Cfryman	11/16/2012 2:45:11 PM
20	001	8270_SIM	GCMS semivolatile SIM	Out	Robert Nickel	11/20/2012 9:06:46 AM
20	001	8270_SIM	GCMS semivolatile SIM	In	Agnes Tapolyai	11/20/2012 6:58:52 PM
20	001	Dry Weight	Dry Weight	Out	Devon Thompson	11/19/2012 4:42:13 PM
20	001	Dry Weight	Dry Weight	In	Devon Thompson	11/19/2012 6:30:08 PM

Addendum

Letter of Acceptance

Customer Name: Oneida Total Integrated Enterprises

Date and Time Received: 11/16/2012 10:02:00 AM

Date to be Reported: 12/1/2012

Laboratory Submission Number/SDG: 3507616

Project: 35th Avenue Removal Site 2005148 1356

Samples: The submission consisted of 20 samples, including QC, with sample identification shown in the attached data tables.

Tests: The Samples will be analyzed for EPA methods: 6010, 7471, 8270, 8270_SIM.

Sample Custody/COC discrepancies:

None.

Notes:

Temp 4.0, 3.8 C
6010 RCRA 8

Distribution of Report to:

Oneida Total Integrated Enterprises

Attn: Limari Krebs

(W): 678-355-5550

(F): 770-528-0167

Note: Submitted material will be retained for 30 days unless otherwise requested by client or consumed in analysis. Spectrum Analytical letters and reports are for the exclusive use of the client to whom they are addressed. Our letters and reports apply to the sample tested and are not necessarily indicative of the qualities of apparently identical or similar materials.

Log-in Report

Level: 4

Total of: 50 analyses on 20 samples (including QC)

19-Nov-12

Report/SDG #: 3507616

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
CV0041A-CS	350761601		S	11/14/2012 10:25:00 AM	11/16/2012 10:02:00 AM

Method

8270_SIM	GCMS semivolatile SIM	8270 SIM
Dry Weight	Dry Weight	Dry Weight

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
CV0041B-CS	350761602		S	11/14/2012 10:45:00 AM	11/16/2012 10:02:00 AM

Method

6010	Metals	6010
7471	Mercury	7471
8270_SIM	GCMS semivolatile SIM	8270 SIM
Dry Weight	Dry Weight	Dry Weight

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
CV0043A-CS	350761603		S	11/14/2012 11:25:00 AM	11/16/2012 10:02:00 AM

Method

8270_SIM	GCMS semivolatile SIM	8270 SIM
Dry Weight	Dry Weight	Dry Weight

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
CV0043B-CS	350761604		S	11/14/2012 11:50:00 AM	11/16/2012 10:02:00 AM

Method

8270_SIM	GCMS semivolatile SIM	8270 SIM
Dry Weight	Dry Weight	Dry Weight

Report/SDG #: 3507616

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
CV0043C-CS	350761605		S	11/14/2012 12:25:00 PM	11/16/2012 10:02:00 AM

Method

6010	Metals	6010
7471	Mercury	7471
8270	GCMS semivolatile	8270
8270_SIM	GCMS semivolatile SIM	8270 SIM
Dry Weight	Dry Weight	Dry Weight

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
CV0192A-CS	350761606		S	11/14/2012 9:00:00 AM	11/16/2012 10:02:00 AM

Method

8270_SIM	GCMS semivolatile SIM	8270 SIM
Dry Weight	Dry Weight	Dry Weight

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
CV0192B-CS	350761607		S	11/14/2012 9:30:00 AM	11/16/2012 10:02:00 AM

Method

8270_SIM	GCMS semivolatile SIM	8270 SIM
Dry Weight	Dry Weight	Dry Weight

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
FM0263A-CS-SP	350761608		S	11/14/2012 9:32:00 AM	11/16/2012 10:02:00 AM

Method

8270_SIM	GCMS semivolatile SIM	8270 SIM
Dry Weight	Dry Weight	Dry Weight

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
FM0263B-CS-SP	350761609		S	11/14/2012 10:25:00 AM	11/16/2012 10:02:00 AM

Method

8270_SIM	GCMS semivolatile SIM	8270 SIM
Dry Weight	Dry Weight	Dry Weight

Report/SDG #: 3507616

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
FM0263C-CS-SP	350761610		S	11/14/2012 10:56:00 AM	11/16/2012 10:02:00 AM
Method					
8270_SIM	GCMS semivolatile SIM			8270 SIM	
Dry Weight	Dry Weight			Dry Weight	
SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
FM0126A-CS-SP	350761611		S	11/14/2012 11:53:00 AM	11/16/2012 10:02:00 AM
Method					
8270_SIM	GCMS semivolatile SIM			8270 SIM	
Dry Weight	Dry Weight			Dry Weight	
SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
FM0126B-CS-SP	350761612		S	11/14/2012 12:14:00 PM	11/16/2012 10:02:00 AM
Method					
8270_SIM	GCMS semivolatile SIM			8270 SIM	
Dry Weight	Dry Weight			Dry Weight	
SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
FM0126C-GS-SP	350761613		S	11/14/2012 12:08:00 PM	11/16/2012 10:02:00 AM
Method					
6010	Metals			6010	
7471	Mercury			7471	
8270	GCMS semivolatile			8270	
8270_SIM	GCMS semivolatile SIM			8270 SIM	
Dry Weight	Dry Weight			Dry Weight	
SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
CV0699A-CS	350761614		S	11/14/2012 11:30:00 AM	11/16/2012 10:02:00 AM
Method					
8270_SIM	GCMS semivolatile SIM			8270 SIM	
Dry Weight	Dry Weight			Dry Weight	

Report/SDG #: 3507616

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
CV0699B-CS	350761615		S	11/14/2012 12:05:00 PM	11/16/2012 10:02:00 AM
Method					
6010	Metals			6010	
7471	Mercury			7471	
8270_SIM	GCMS semivolatile SIM			8270 SIM	
Dry Weight	Dry Weight			Dry Weight	
SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
CV0699C-CS	350761616		S	11/14/2012 12:27:00 PM	11/16/2012 10:02:00 AM
Method					
8270_SIM	GCMS semivolatile SIM			8270 SIM	
Dry Weight	Dry Weight			Dry Weight	
SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
FM0210A-CS	350761617		S	11/14/2012 9:19:00 AM	11/16/2012 10:02:00 AM
Method					
8270_SIM	GCMS semivolatile SIM			8270 SIM	
Dry Weight	Dry Weight			Dry Weight	
SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
FM0210B-CS	350761618		S	11/14/2012 9:50:00 AM	11/16/2012 10:02:00 AM
Method					
8270_SIM	GCMS semivolatile SIM			8270 SIM	
Dry Weight	Dry Weight			Dry Weight	
SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
FM0210C-CS	350761619		S	11/14/2012 10:15:00 AM	11/16/2012 10:02:00 AM
Method					
8270_SIM	GCMS semivolatile SIM			8270 SIM	
Dry Weight	Dry Weight			Dry Weight	

Report/SDG #: 3507616

SampleID	LAB ID	StationID	Matrix	SampleDate	ReceiveDate
CV0362A-CS	350761620		S	11/14/2012 3:30:00 PM	11/16/2012 10:02:00 AM

Method

8270_SIM	GCMS semivolatile SIM	8270 SIM
Dry Weight	Dry Weight	Dry Weight

Mark Gudnason [Tampa]

From: Mark Gudnason [Tampa]
Sent: Tuesday, November 20, 2012 4:47 PM
To: 'Limari Krebs'
Subject: RE: 35 Avenue: LOA3507620.pdf, LOA3507618.pdf, LOA3507616.pdf

Limari,
I will check but we can add the metals to these 2 samples regardless.
Mark

-----Original Message-----

From: Limari Krebs [mailto:LKrebs@otie.com]
Sent: Tuesday, November 20, 2012 4:44 PM
To: Mark Gudnason [Tampa]
Subject: RE: 35 Avenue: LOA3507620.pdf, LOA3507618.pdf, LOA3507616.pdf

Mark:

Here some other issues we noticed with the COC:

Were there 4 oz jars for samples:
CV0359A-CS
FM0263C-CS-SP

If so, could you add RCRA 8 Metals analysis to these samples. We usually pair up the unsieved and sieved fractions for RCRA 8 metals analysis.

Thanks,

Limari Krebs
START Sr. Chemist

Oneida Total Integrated Enterprises (OTIE) 1220 Kennestone Circle, Suite 106 Marietta, GA 30066 678.355.5550 x 5703 office
678.255.6412 cell
770.528.0167 fax
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Engineering, Science and Construction

-----Original Message-----

From: Mark Gudnason [Tampa] [mailto:mgudnason@pelab.com]
Sent: Monday, November 19, 2012 4:54 PM
To: Russell Henderson; Limari Krebs
Subject: 35 Avenue: LOA3507620.pdf, LOA3507618.pdf, LOA3507616.pdf

<<LOA3507620.pdf>>
<<LOA3507618.pdf>> Go <<LOA3507616.pdf>> od afternoon.
Please review the attached LOA (Letter of Acceptance) for accuracy and let me know of any changes prior to reporting.

Thank you,
Mark

The message is ready to be sent with the following file or link attachments:

LOA3507620.pdf
LOA3507618.pdf

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Mark Gudnason [Tampa]

From: Mark Gudnason [Tampa]
Sent: Friday, November 30, 2012 4:44 PM
To: 'Limari Krebs'; 'Russell Henderson'
Subject: FW: 3507616-SIM-OTIE

Good afternoon.

This will be in the case narrative for the referenced method and SDG. Let me know if you have any questions or concerns.

A. Calibration:

All acceptance criteria were met with the exception of:

Note that the Continuing Calibration Verification sample CCV1136644 analyzed on 11/26/12 exceeded the 40% Maximum Difference criteria for Dibenzo(a,h) anthracene at -50.8%. However this CCV was only associated with the two samples which required a dilution for compounds other than Dibenzo(a,h) anthracene. No further action was taken.

All other acceptance criteria were met.

A. Blanks:

All acceptance criteria were met.

B. Surrogates:

All acceptance criteria were met with the exception of:

Sample CV0192B-CS was recovered below criteria for the following surrogate: Benzo(e) pyrene-d12 at 46.7 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

Sample CV0699C-CS was recovered below criteria for the following surrogate: Benzo(e) pyrene-d12 at 27.4 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

Sample FM0210A-CS was recovered below criteria for the following surrogate: Benzo(e) pyrene-d12 at 16.9 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

Sample FM0210B-CS was recovered below criteria for the following surrogate: Benzo(e) pyrene-d12 at 41.9 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

Sample FM0263C-CS-SP was recovered below criteria for the following surrogate: Benzo (e)pyrene-d12 at 37.3 % with criteria of (50-140). The surrogate recovery was only slightly below the target range, and the low surrogate recovery was probably due to the sample matrix. Therefore no further action was taken.

Samples coded accordingly.

The following samples had surrogates that were diluted out: CV0699B-CSDL1, FM0210C-CSDL1, FM0263A-CS-SPDL1, FM0263B-CS-SPDL1, FM0263C-CS-SPDL1.

C. Spikes:

1. Laboratory Control Spikes (LCS)

All acceptance criteria were met.

2. Matrix Spike/Matrix Spike Duplicate Samples (MS/SD)

No spikes requested by client.

D. Internal Standards:

All acceptance criteria were met.

E. Samples:

Sample analysis proceeded normally.

Sample CV0699B-CS required a 20X dilution due to high concentration of the following analytes: Benzo(a)anthracene, Benzo(b)fluoranthene, Chrysene, Fluoranthene, Pyrene. Both full and diluted runs are reported.

Sample FM0210C-CS required a 20X dilution due to high concentration of the following analyte: Fluoranthene. Both full and diluted runs are reported.

Sample FM0263A-CS-SP required a 20X dilution due to high concentration of the following analytes: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Chrysene, Fluoranthene, Phenanthrene, Pyrene. Both full and diluted runs are reported.

Sample FM0263B-CS-SP required a 20X dilution due to high concentration of the following analytes: Benzo(a)anthracene, Benzo(b)fluoranthene, Chrysene, Fluoranthene, Phenanthrene, Pyrene. Both full and diluted runs are reported.

Sample FM0263C-CS-SP required a 20X dilution due to high concentration of the following analytes: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Chrysene, Fluoranthene, Phenanthrene, Pyrene. Both full and diluted runs are reported.

Note that sample FM0126C-GS-SP also had analytes present in the 8270SIM analysis that were above the high calibration of the 8270SIM method. However, the sample was also analyzed using the SW8270 method. The SW8270 method has a higher calibration range than the 8270SIM method, and the analytes that were high in the 8270SIM method were within the calibration range for the SW8270 method. Therefore no dilution was performed on the sample.

Mark Gudnason [Tampa]

From: Mark Gudnason [Tampa]
Sent: Monday, December 17, 2012 12:26 PM
To: 'Limari Krebs'
Cc: Renea Anglin; Russell Henderson
Subject: RE: Questions about Organics SDG 3507558

Limari,
We can revise the other SDGs to include the summary forms for MS/MSDs.

I will keep you posted on the revisions.

Mark

From: Limari Krebs [mailto:LKrebs@otie.com]
Sent: Monday, December 17, 2012 10:30 AM
To: Mark Gudnason [Tampa]
Cc: Renea Anglin; Russell Henderson
Subject: RE: Questions about Organics SDG 3507558

Mark:

Will you be revising the other SDGs to include the MS/MSD results as well?

Limari Krebs
START Sr. Chemist

Oneida Total Integrated Enterprises (OTIE)
1220 Kennestone Circle, Suite 106
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678.255.6412 cell
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From: Mark Gudnason [Tampa] [mailto:mgudnason@pelab.com]
Sent: Friday, December 14, 2012 2:49 PM
To: Limari Krebs
Cc: Renea Anglin; Russell Henderson
Subject: RE: Questions about Organics SDG 3507558

Limari,

The revised EDD and report just posted and is available online.

Mark

From: Limari Krebs [mailto:LKrebs@otie.com]
Sent: Wednesday, December 12, 2012 11:43 AM

To: Mark Gudnason [Tampa]
 Cc: Renea Anglin; Russell Henderson
 Subject: Questions about Organics SDG 3507558

Mark:

The data validation group has brought up some questions with regards to SDG 3507558. Could you please take a look and provide a response to all in the email chain above?

1. Results for only one surrogate, benzo(a)pyrene-d12, were reported by the laboratory for the SW-846 8270D SIM analysis. Recovery of this surrogate did not meet laboratory control limits in all undiluted sample analyses, but one. According to the raw data, each sample was spiked with the surrogates benzo (e)pyrene-d12, fluoranthene-d10, and 2-methylnaphthalene-d2^[1], but results for fluoranthene-d10 and 2-methylnaphthalene-d21 were not reported by the laboratory. If the laboratory had reported results for these two surrogates, qualification of most semivolatile data may possibly be avoided. Because only results for benzo(a)pyrene-d12 are reported, qualification of all data is based on the results of this one surrogate compound.

Associated Target Compounds for Benzo (a) pyrene-d12 per June 2001 NFG:

Benzo(b)fluoranthene
 Benzo(k)fluoranthene
 Benzo(a)pyrene
 Indeno(1,2,3-cd)pyrene
 Dibenzo(a,h)anthracene
 Benzo(g,h,i)perylene

According to CLP NFG (June 2008), 2-Methylnaphthalene-d10 and fluoranthene-d10 are the surrogates to be used for SIM analysis.

Associated Target Compounds for Fluoranthene-d10 and 2-Methylnaphthalene-d10 per June 2008 NFG:

Fluoranthene-d10 (DMC)	2-Methylnaphthalene-d10 (DMC)
Fluoranthene	Naphthalene
Pyrene	2-Methylnaphthalene
Benzo(a)anthracene	Acenaphthylene
Chrysene	Acenaphthene
Benzo(b)fluoranthene	Fluorene
Benzo(k)fluoranthene	Pentachlorophenol
Benzo(a)pyrene	Phenanthrene
Indeno(1,2,3-cd)pyrene	Anthracene
Dibenzo(a,h)anthracene	
Benzo(g,h,i)perylene	

It is recommended that results for the two above-mentioned surrogates be reported by the laboratory.

2. There are inconsistencies between the Extraction Log 8270 SIM Soil Ext (pages 230-237) and Standards Log (page 238-241) concerning the spiking levels used for the surrogates. According to Extraction Log 8270 SIM Soil Ext, 0.5 µg/L of 48541 (benzo(a)pyrene-d12) and 48187 were spiked into the samples. According to the Standards Log, standard 48541 consists of benzo(a)pyrene-d12 at a concentration of 0.6 µg/L. This difference may result in surrogate recoveries being even lower than that reported by the laboratory. The standard 48187 appears to consist of 2-methylnaphthalene-d10 and fluoranthene-d10 at a concentration of 0.8 µg/ml. Results for 2-methylnaphthalene-d10 and fluoranthene-d10 have not been reported by the laboratory (refer to issue 6).

3. MS/MSD results were not included. According to the Soil Extraction Log, sample CV0494A-CS was prepared for the PAH-SIM MS and MSD analysis; however, the analytical results were not included in the data package

Regards,

Limari Krebs
START Sr. Chemist

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[1] Standards Log reflect 2-methylnaphthalene-d10

Appendix

Raw Data Method 8270 SIM

SEQUENCE CHECK

SDG: 3507616

Method: 8270_SIM

Sample ID	Lab ID	Initial Cal Reference	File Name	Batch	Col	Instrument	Run Date	Dilution
DFTPP1135489	47701	N/A	DFTPP1.D	S3112012	1	SMSD03	11/20/12 16:50	1
STD1135485	47785	SMSD0311/20/12-1950~S3112012	SSCAL4.D	S3112012	1	SMSD03	11/20/12 17:27	1
STD1135483	47782	SMSD0311/20/12-1950~S3112012	SSCAL7.D	S3112012	1	SMSD03	11/20/12 17:52	1
STD1135480	47783	SMSD0311/20/12-1950~S3112012	SSCAL6.D	S3112012	1	SMSD03	11/20/12 18:15	1
STD1135477	47784	SMSD0311/20/12-1950~S3112012	SSCAL5.D	S3112012	1	SMSD03	11/20/12 18:39	1
STD1135471	47786	SMSD0311/20/12-1950~S3112012	SSCAL3.D	S3112012	1	SMSD03	11/20/12 19:02	1
STD1135468	47787	SMSD0311/20/12-1950~S3112012	SSCAL2.D	S3112012	1	SMSD03	11/20/12 19:26	1
STD1135465	47788	SMSD0311/20/12-1950~S3112012	SSCAL1.D	S3112012	1	SMSD03	11/20/12 19:50	1
SSC1135487	47789	SMSD0311/20/12-1950~S3112012	SSSEC.D	S3112012	1	SMSD03	11/20/12 20:13	1
DFTPP1137665	47701	N/A	DFTPP2.D	S3112112	1	SMSD03	11/21/12 18:18	1
CCV1137703	47785	SMSD0311/20/12-1950~S3112012	SSCCV2.D	S3112112	1	SMSD03	11/21/12 19:01	1
CV0041A-CS	350761601	SMSD0311/20/12-1950~S3112012	616-01.D	S3112112	1	SMSD03	11/21/12 19:44	1
CV0041B-CS	350761602	SMSD0311/20/12-1950~S3112012	616-02.D	S3112112	1	SMSD03	11/21/12 20:08	1
CV0043A-CS	350761603	SMSD0311/20/12-1950~S3112012	616-03.D	S3112112	1	SMSD03	11/21/12 20:31	1
CV0043B-CS	350761604	SMSD0311/20/12-1950~S3112012	616-04.D	S3112112	1	SMSD03	11/21/12 20:55	1
CV0192A-CS	350761606	SMSD0311/20/12-1950~S3112012	616-06.D	S3112112	1	SMSD03	11/21/12 21:18	1
CV0192B-CS	350761607	SMSD0311/20/12-1950~S3112012	616-07.D	S3112112	1	SMSD03	11/21/12 21:42	1
FM0263A-CS-SP	350761608	SMSD0311/20/12-1950~S3112012	616-08.D	S3112112	1	SMSD03	11/21/12 22:05	1
FM0263B-CS-SP	350761609	SMSD0311/20/12-1950~S3112012	616-09.D	S3112112	1	SMSD03	11/21/12 22:29	1
FM0263C-CS-SP	350761610	SMSD0311/20/12-1950~S3112012	616-10.D	S3112112	1	SMSD03	11/21/12 22:53	1
FM0126A-CS-SP	350761611	SMSD0311/20/12-1950~S3112012	616-11.D	S3112112	1	SMSD03	11/21/12 23:16	1
FM0126B-CS-SP	350761612	SMSD0311/20/12-1950~S3112012	616-12.D	S3112112	1	SMSD03	11/21/12 23:40	1
CV0699A-CS	350761614	SMSD0311/20/12-1950~S3112012	616-14.D	S3112112	1	SMSD03	11/22/12 00:04	1
CV0699B-CS	350761615	SMSD0311/20/12-1950~S3112012	616-15.D	S3112112	1	SMSD03	11/22/12 00:27	1
CV0699C-CS	350761616	SMSD0311/20/12-1950~S3112012	616-16.D	S3112112	1	SMSD03	11/22/12 00:51	1
FM0210A-CS	350761617	SMSD0311/20/12-1950~S3112012	616-17.D	S3112112	1	SMSD03	11/22/12 01:14	1
FM0210B-CS	350761618	SMSD0311/20/12-1950~S3112012	616-18.D	S3112112	1	SMSD03	11/22/12 01:38	1
FM0210C-CS	350761619	SMSD0311/20/12-1950~S3112012	616-19.D	S3112112	1	SMSD03	11/22/12 02:01	1
CV0362A-CS	350761620	SMSD0311/20/12-1950~S3112012	616-20.D	S3112112	1	SMSD03	11/22/12 02:25	1
DFTPP1136633	47701	N/A	DFTPP2.D	S3112612	1	SMSD03	11/26/12 17:56	1
CCV1136644	47785	SMSD0311/20/12-1950~S3112012	SSCCV1.D	S3112612	1	SMSD03	11/26/12 18:16	1
FM0263A-CS-SPDL1	350761608DL1	SMSD0311/20/12-1950~S3112012	61608D20.D	S3112612	1	SMSD03	11/26/12 22:42	20
FM0263B-CS-SPDL1	350761609DL1	SMSD0311/20/12-1950~S3112012	61609D20.D	S3112612	1	SMSD03	11/26/12 23:05	20
FM0263C-CS-SPDL1	350761610DL1	SMSD0311/20/12-1950~S3112012	61610D20.D	S3112612	1	SMSD03	11/26/12 23:29	20

SDG: 3507616

Method: 8270_SIM

Sample ID	Lab ID	Initial Cal Reference	File Name	Batch	Col	Instrument	Run Date	Dilution
CV0699B-CSDL1	350761615DL1	SMSD0311/20/12-1950~S3112012	61615D20.D	S3112612	1	SMSD03	11/26/12 23:52	20
FM0210C-CSDL1	350761619DL1	SMSD0311/20/12-1950~S3112012	61619D20.D	S3112612	1	SMSD03	11/27/12 00:16	20
DFTPP1135989	47137	N/A	DFTPP2.D	S41114SScal	1	SMSD04	11/14/12 19:35	1
STD1135484	47782	SMSD0411/14/12-2158~S41114SScal	SSCAL7.d	S41114SScal	1	SMSD04	11/14/12 19:53	1
STD1135481	47783	SMSD0411/14/12-2158~S41114SScal	SSCAL6.d	S41114SScal	1	SMSD04	11/14/12 20:14	1
STD1135478	47784	SMSD0411/14/12-2158~S41114SScal	SSCAL5.d	S41114SScal	1	SMSD04	11/14/12 20:35	1
STD1135474	47785	SMSD0411/14/12-2158~S41114SScal	SSCAL4.d	S41114SScal	1	SMSD04	11/14/12 20:56	1
STD1135472	47786	SMSD0411/14/12-2158~S41114SScal	SSCAL3.d	S41114SScal	1	SMSD04	11/14/12 21:17	1
STD1135469	47787	SMSD0411/14/12-2158~S41114SScal	SSCAL2.d	S41114SScal	1	SMSD04	11/14/12 21:38	1
STD1135466	47788	SMSD0411/14/12-2158~S41114SScal	SSCAL1.d	S41114SScal	1	SMSD04	11/14/12 21:58	1
SSC1135488	47789	SMSD0411/14/12-2158~S41114SScal	SSSEC.d	S41114SScal	1	SMSD04	11/14/12 22:19	1
DFTPP1136634	47137	N/A	DFTPP2.d	S4112612	1	SMSD04	11/26/12 16:26	1
CCV1136643	47785	SMSD0411/14/12-2158~S41114SScal	SSCAL4.d	S4112612	1	SMSD04	11/26/12 16:44	1
CV0043C-CS	350761605	SMSD0411/14/12-2158~S41114SScal	616-05.d	S4112612	1	SMSD04	11/26/12 19:28	1
FM0126C-GS-SP	350761613	SMSD0411/14/12-2158~S41114SScal	616-13.d	S4112612	1	SMSD04	11/26/12 19:48	1
DFTPP1137576	47137	N/A	112812DFTPP1.d	S411281P	1	SMSD04	11/28/12 14:54	1
CCV1137596	47785	SMSD0411/14/12-2158~S41114SScal	SSCCV1.d	S411281P	1	SMSD04	11/28/12 17:13	1
154206MB	154206MB	SMSD0411/14/12-2158~S41114SScal	11607MB.d	S411281P	1	SMSD04	11/28/12 17:54	1
154207LCS	154207LCS	SMSD0411/14/12-2158~S41114SScal	11607LCS.d	S411281P	1	SMSD04	11/28/12 18:15	1

3507616

Signature: 
Name: Mark Jacobs Title: Chemist

11/30/2012 9:57:57

Analyst Posted: mjacobs

Date

Signature: 
Name: Brian C. Spann Title: Lab Director

11/30/2012 10:43:4

Analyst Reviewed: bspann

Date

SEQUENCE CHECK

SDG: 3507616

Method: 8270_SIM

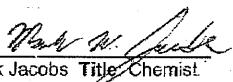
Sample ID	Lab ID	Initial Cal Reference	File Name	Batch	Col	Instrument	Run Date	Dilution
DFTPP1135489	47701	N/A	DFTPP1.D	S3112012	1	SMSD03	11/20/12 16:50	1
STD1135485	47785	SMSD0311/20/12-1950~S3112012	SSCAL4.D	S3112012	1	SMSD03	11/20/12 17:27	1
STD1135483	47782	SMSD0311/20/12-1950~S3112012	SSCAL7.D	S3112012	1	SMSD03	11/20/12 17:52	1
STD1135480	47783	SMSD0311/20/12-1950~S3112012	SSCAL6.D	S3112012	1	SMSD03	11/20/12 18:15	1
STD1135477	47784	SMSD0311/20/12-1950~S3112012	SSCAL5.D	S3112012	1	SMSD03	11/20/12 18:39	1
STD1135471	47786	SMSD0311/20/12-1950~S3112012	SSCAL3.D	S3112012	1	SMSD03	11/20/12 19:02	1
STD1135468	47787	SMSD0311/20/12-1950~S3112012	SSCAL2.D	S3112012	1	SMSD03	11/20/12 19:26	1
STD1135465	47788	SMSD0311/20/12-1950~S3112012	SSCAL1.D	S3112012	1	SMSD03	11/20/12 19:50	1
SSC1135487	47789	SMSD0311/20/12-1950~S3112012	SSSEC.D	S3112012	1	SMSD03	11/20/12 20:13	1
DFTPP1137665	47701	N/A	DFTPP2.D	S3112112	1	SMSD03	11/21/12 18:18	1
CCV1137703	47785	SMSD0311/20/12-1950~S3112012	SSCCV2.D	S3112112	1	SMSD03	11/21/12 19:01	1
CV0041A-CS	350761601	SMSD0311/20/12-1950~S3112012	616-01.D	S3112112	1	SMSD03	11/21/12 19:44	1
CV0041B-CS	350761602	SMSD0311/20/12-1950~S3112012	616-02.D	S3112112	1	SMSD03	11/21/12 20:08	1
CV0043A-CS	350761603	SMSD0311/20/12-1950~S3112012	616-03.D	S3112112	1	SMSD03	11/21/12 20:31	1
CV0043B-CS	350761604	SMSD0311/20/12-1950~S3112012	616-04.D	S3112112	1	SMSD03	11/21/12 20:55	1
CV0192A-CS	350761606	SMSD0311/20/12-1950~S3112012	616-06.D	S3112112	1	SMSD03	11/21/12 21:18	1
CV0192B-CS	350761607	SMSD0311/20/12-1950~S3112012	616-07.D	S3112112	1	SMSD03	11/21/12 21:42	1
FM0263A-CS-SP	350761608	SMSD0311/20/12-1950~S3112012	616-08.D	S3112112	1	SMSD03	11/21/12 22:05	1
FM0263B-CS-SP	350761609	SMSD0311/20/12-1950~S3112012	616-09.D	S3112112	1	SMSD03	11/21/12 22:29	1
FM0263C-CS-SP	350761610	SMSD0311/20/12-1950~S3112012	616-10.D	S3112112	1	SMSD03	11/21/12 22:53	1
FM0126A-CS-SP	350761611	SMSD0311/20/12-1950~S3112012	616-11.D	S3112112	1	SMSD03	11/21/12 23:16	1
FM0126B-CS-SP	350761612	SMSD0311/20/12-1950~S3112012	616-12.D	S3112112	1	SMSD03	11/21/12 23:40	1
CV0699A-CS	350761614	SMSD0311/20/12-1950~S3112012	616-14.D	S3112112	1	SMSD03	11/22/12 00:04	1
CV0699B-CS	350761615	SMSD0311/20/12-1950~S3112012	616-15.D	S3112112	1	SMSD03	11/22/12 00:27	1
CV0699C-CS	350761616	SMSD0311/20/12-1950~S3112012	616-16.D	S3112112	1	SMSD03	11/22/12 00:51	1
FM0210A-CS	350761617	SMSD0311/20/12-1950~S3112012	616-17.D	S3112112	1	SMSD03	11/22/12 01:14	1
FM0210B-CS	350761618	SMSD0311/20/12-1950~S3112012	616-18.D	S3112112	1	SMSD03	11/22/12 01:38	1
FM0210C-CS	350761619	SMSD0311/20/12-1950~S3112012	616-19.D	S3112112	1	SMSD03	11/22/12 02:01	1
CV0362A-CS	350761620	SMSD0311/20/12-1950~S3112012	616-20.D	S3112112	1	SMSD03	11/22/12 02:25	1
DFTPP1136633	47701	N/A	DFTPP2.D	S3112612	1	SMSD03	11/26/12 17:56	1
CCV1136644	47785	SMSD0311/20/12-1950~S3112012	SSCCV1.D	S3112612	1	SMSD03	11/26/12 18:16	1
FM0263A-CS-SPDL1	350761608DL1	SMSD0311/20/12-1950~S3112012	61608D20.D	S3112612	1	SMSD03	11/26/12 22:42	20
FM0263B-CS-SPDL1	350761609DL1	SMSD0311/20/12-1950~S3112012	61609D20.D	S3112612	1	SMSD03	11/26/12 23:05	20
FM0263C-CS-SPDL1	350761610DL1	SMSD0311/20/12-1950~S3112012	61610D20.D	S3112612	1	SMSD03	11/26/12 23:29	20

SDG: 3507616

Method: 8270_SIM

Sample ID	Lab ID	Initial Cal Reference	File Name	Batch	Col	Instrument	Run Date	Dilution
CV0699B-CSDL1	350761615DL1	SMSD0311/20/12-1950~S3112012	61615D20.D	S3112612	1	SMSD03	11/26/12 23:52	20
FM0210C-CSDL1	350761619DL1	SMSD0311/20/12-1950~S3112012	61619D20.D	S3112612	1	SMSD03	11/27/12 00:16	20
DFTPP1135989	47137	N/A	DFTPP2.D	S41114SScal	1	SMSD04	11/14/12 19:35	1
STD1135484	47782	SMSD0411/14/12-2158~S41114SScal	SSCAL7.d	S41114SScal	1	SMSD04	11/14/12 19:53	1
STD1135481	47783	SMSD0411/14/12-2158~S41114SScal	SSCAL6.d	S41114SScal	1	SMSD04	11/14/12 20:14	1
STD1135478	47784	SMSD0411/14/12-2158~S41114SScal	SSCAL5.d	S41114SScal	1	SMSD04	11/14/12 20:35	1
STD1135474	47785	SMSD0411/14/12-2158~S41114SScal	SSCAL4.d	S41114SScal	1	SMSD04	11/14/12 20:56	1
STD1135472	47786	SMSD0411/14/12-2158~S41114SScal	SSCAL3.d	S41114SScal	1	SMSD04	11/14/12 21:17	1
STD1135469	47787	SMSD0411/14/12-2158~S41114SScal	SSCAL2.d	S41114SScal	1	SMSD04	11/14/12 21:38	1
STD1135466	47788	SMSD0411/14/12-2158~S41114SScal	SSCAL1.d	S41114SScal	1	SMSD04	11/14/12 21:58	1
SSC1135488	47789	SMSD0411/14/12-2158~S41114SScal	SSSEC.d	S41114SScal	1	SMSD04	11/14/12 22:19	1
DFTPP1136634	47137	N/A	DFTPP2.d	S4112612	1	SMSD04	11/26/12 16:26	1
CCV1136643	47785	SMSD0411/14/12-2158~S41114SScal	SSCAL4.d	S4112612	1	SMSD04	11/26/12 16:44	1
CV0043C-CS	350761605	SMSD0411/14/12-2158~S41114SScal	616-05.d	S4112612	1	SMSD04	11/26/12 19:28	1
FM0126C-GS-SP	350761613	SMSD0411/14/12-2158~S41114SScal	616-13.d	S4112612	1	SMSD04	11/26/12 19:48	1
DFTPP1137576	47137	N/A	112812DFTPP1.d	S411281P	1	SMSD04	11/28/12 14:54	1
CCV1137596	47785	SMSD0411/14/12-2158~S41114SScal	SSCCV1.d	S411281P	1	SMSD04	11/28/12 17:13	1
154206MB	154206MB	SMSD0411/14/12-2158~S41114SScal	11607MB.d	S411281P	1	SMSD04	11/28/12 17:54	1
154207LCS	154207LCS	SMSD0411/14/12-2158~S41114SScal	11607LCS.d	S411281P	1	SMSD04	11/28/12 18:15	1

3507616

Signature: 
Name: Mark Jacobs Title: Chemist

11/30/2012 9:57:57

Analyst Posted: mjacobs

Date

Signature: 
Name: Brian C. Spann Title: Lab Director

11/30/2012 10:43:4

Analyst Reviewed: bspann

Date

Extraction Method	3545
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Extraction Log 8270 SIM Soil Ext

Start: 11/20/2012 9:00:00 AM

End: 11/21/2012 3:43:38 PM

Water Bath Temp: 70°C

Batch ID: 11607

Thermometer ID: STBA

Balance ID: P35923

Final

Batch ID: 11607

Lab ID	Cont	Client ID	Date Samp	Type	Odor	Color	Sed	Initial	Final	pH	Standards	Cleanups	Archive
350761601	1	CV0041A-CS	11/14/2012 10:25:00 AM	SAMPLE	NONE	BLACK	SOIL	25.14 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761602	1	CV0041B-CS	11/14/2012 10:45:00 AM	SAMPLE	NONE	BLACK	SOIL	25.31 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761603	1	CV0043A-CS	11/14/2012 11:25:00 AM	SAMPLE	NONE	BLACK	SOIL	25.06 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761604	1	CV0043B-CS	11/14/2012 11:50:00 AM	SAMPLE	NONE	BLACK	SOIL	25.08 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761605	1	CV0043C-CS	11/14/2012 12:25:00 PM	SAMPLE	NONE	BLACK	SOIL	25.33 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761606	1	CV0192A-CS	11/14/2012 9:00:00 AM	SAMPLE	NONE	BLACK	SOIL	25.03 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761607	1	CV0192B-CS	11/14/2012 9:30:00 AM	SAMPLE	NONE	BLACK	SOIL	25.27 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761608	1	FM0263A-CS-SP	11/14/2012 9:32:00 AM	SAMPLE	NONE	BLACK	SOIL	25.21 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761609	1	FM0263B-CS-SP	11/14/2012 10:25:00 AM	SAMPLE	NONE	BLACK	SOIL	25.29 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A

Lab ID	Cont	Client ID	Date Samp	Type	Odor	Color	Sed	Initial	Final	pH	Standards	Cleanups	Archive
350761610	1	FM0263C-CS-SP	11/14/2012 10:56:00 AM	SAMPLE	NONE	BLACK	SOIL	25.79 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761611	1	FM0126A-CS-SP	11/14/2012 11:53:00 AM	SAMPLE	NONE	BLACK	SOIL	25.77 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761612	1	FM0126B-CS-SP	11/14/2012 12:14:00 PM	SAMPLE	NONE	BLACK	SOIL	25.61 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761613	1	FM0126C-GS-SP	11/14/2012 12:08:00 PM	SAMPLE	NONE	BLACK	SOIL	25.6 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761614	1	CV0699A-CS	11/14/2012 11:30:00 AM	SAMPLE	NONE	BLACK	SOIL	25.02 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761615	1	CV0699B-CS	11/14/2012 12:05:00 PM	SAMPLE	NONE	BLACK	SOIL	25.01 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761616	1	CV0699C-CS	11/14/2012 12:27:00 PM	SAMPLE	NONE	BLACK	SOIL	25.3 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761617	1	FM0210A-CS	11/14/2012 9:19:00 AM	SAMPLE	NONE	BLACK	SOIL	25.2 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761618	1	FM0210B-CS	11/14/2012 9:50:00 AM	SAMPLE	NONE	BLACK	SOIL	25.08 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761619	1	FM0210C-CS	11/14/2012 10:15:00 AM	SAMPLE	NONE	BLACK	SOIL	25.06 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
350761620	1	CV0362A-CS	11/14/2012 3:30:00 PM	SAMPLE	NONE	BLACK	SOIL	25.08 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A

Lab ID	Cont	Client ID	Date Samp	Type	Odor	Color	Sed	Initial	Final	pH	Standards	Cleanups	Archive
154206MB		154206MB		MB	NONE	TAN	SAND	20.19 G	1 mL		1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
154207LCS		154207LCS		LCS	NONE	TAN	SAND	20.22 G	1 mL		1mL 8270 SIM_Spike: 48086 @ PAH 0.5 ug/ml; 1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
154208MS	1	CV0043A-CSMS		MS	NONE	BLACK	SOIL	25.02 G	1 mL		1mL 8270 SIM_Spike: 48086 @ PAH 0.5 ug/ml; 1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A
154209MSD	1	CV0043A-CSMSD		MSD	NONE	BLACK	SOIL	25.01 G	1 mL		1mL 8270 SIM_Spike: 48086 @ PAH 0.5 ug/ml; 1mL 8270 SIM_Surrogate: 48560 @ 0.5 ug/ml;		N/A

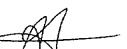
3507616

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Lab ID	Cont	Client ID	Date Samp	Type	Odor	Color	Sed	Initial	Final	pH	Standards	Cleanups	Archive
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Initial Solvent 48452
 Final Solvent 48452
 Cellulose Filter 46973
 NaSO4 48592

Hydromatrix 48593
 Sand 48589
 ASE # 2


 Name: Agnes Tapolyai Title: Prep Tech 11/21/2012 3:43:38 PM

Analyst Posted atapolyai Date


 Peer Reviewed RBENNETT 11/21/2012 5:37:00 PM


 Analyst Reviewed nsubar 11/29/2012 7:1
 Date

3507616

Comments:**Sample Comments**

Lab ID	Client ID	Comments
154206MB	154206MB	
154207LCS	154207LCS	
154208MS	CV0043A-CSMS	
154209MSD	CV0043A-CSMSD	
350761601	CV0041A-CS	
350761602	CV0041B-CS	
350761603	CV0043A-CS	
350761604	CV0043B-CS	

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Lab ID	Con1	Client ID	Date Samp	Type	Odor	Color	Sed	Initial	Final	pH	Standards	Cleanups	Archive
350761605		CV0043C-CS											
350761606		CV0192A-CS											
350761607		CV0192B-CS											
350761608		FM0263A-CS-SP											
350761609		FM0263B-CS-SP											
350761610		FM0263C-CS-SP											
350761611		FM0126A-CS-SP											
350761612		FM0126B-CS-SP											
350761613		FM0126C-GS-SP											
350761614		CV0699A-CS											
350761615		CV0699B-CS											
350761616		CV0699C-CS											
350761617		FM0210A-CS											
350761618		FM0210B-CS											
350761619		FM0210C-CS											
350761620		CV0362A-CS											

STANDARDS LOG

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
30687	8151_PCP_STK	Restek	A061936	8/1/2016	1 ML	9/9/2009	jwood
	1000 UG/ML: Pentachlorophenol						
40389	8151_PCP_STK	Ultra PH-180	CG-0917	4/30/2014	1 ML	3/23/2011	jacker
	1000 UG/ML: Pentachlorophenol						
43150	SIMSCAN_surr_stk	CIL-DLM-257-S	SCIF-014	12/18/2018	1 ML	9/22/2011	cabadia
	200 UG/ML: Benzo(e)pyrene-D12						
45123	8310_RTK2MN_STK	Restek - 31285	A064100	12/31/2015	1 ML	2/24/2012	cabadia
	1000 UG/ML: 2-Methylnaphthalene						
45131	8310_CALMX5_STK	RESTEK - 31011	079674	3/30/2018	1 ML	2/24/2012	cabadia
	2000 UG/ML: Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene						
45160	8310_AS1MN_STK	AccuStandard S-51	B6040092-1B	2/22/2014	1 ML	2/27/2012	cabadia
	2000 UG/ML: 1-Methylnaphthalene						

3507616

STANDARDS LOG

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
45687	8270BNSURRSTK	NSI Solutions, Inc.	C-376-49	1/31/2014	1 ML	4/5/2012	cabadia
5000 UG/ML: 2-Fluorobiphenyl, Nitrobenzene-d5, p-Terphenyl-d14							
45900	8270_DFTPP_STK_1	NSI C-491	C-491-09	7/30/2014	1.5 ML	4/20/2012	cabadia
500 UG/ML: 4,4'-DDT, Benzidine, Decafluorotriphenyl phosphine(DFTPP), Pentachlorophenol							
3507616	Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on
	46552	SVOA_2M_STK	CIL DLM-1332-S	SDAB-004	6/18/2020	1.2 ML	6/11/2012
200 UG/ML: 2-Methylnaphthalene-d10							
46555	SVOA-Fd10_STK	CIL DLM-2140-S	SCJG-001	11/20/2019	1.2 ML	6/11/2012	cabadia
200 UG/ML: Fluoranthene-d10							
46967	Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on
	DCM	Honeywell	DG265	7/18/2013	200 L	7/18/2012	treuter
47137	Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on
	DFTPP_std				1/31/2013	5 ML	7/31/2012
50 UG/ML: 4,4'-DDT, Benzidine, Decafluorotriphenyl phosphine(DFTPP), Pentachlorophenol							

STANDARDS LOG

COMPOSED OF:

45900: 500 UL 46967: 4500 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47241	8310_ARHYDRO_STK	Restek 31458	A081951	6/30/2018	1 ML	8/7/2012	cabadia
1000 UG/ML: 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene							

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47247	8310_RTK1MN_STK	Restek 31283	A084039	10/31/2018	1 ML	8/7/2012	cabadia
1000 UG/ML: 1-Methylnaphthalene							

3507616

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47414	DCM	Honeywell	DG800	8/23/2013	200 L	8/23/2012	atopolyai

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47503	SS8270_ISTD			3/4/2013	2 ML	9/4/2012	nsubar
40 UG/ML: 2-Methylnaphthalene-d10, Fluoranthene-d10							

COMPOSED OF:

46552: 400 UL 46555: 400 UL 47414: UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47541	DCM	Honeywell	DG800	9/6/2013	200 L	9/6/2012	atopolyai

STANDARDS LOG

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47701	DFTPP_std			3/21/2013	5 ML	9/21/2012	nsubar
50 UG/ML: 4,4'-DDT, Benzidine, Decafluorotriphenyl phosphine(DFTPP), Pentachlorophenol							
COMPOSED OF:							
	45900: 500 UL	47541: 4500 UL					
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47708	DCM	Honeywell	DG937	9/24/2013	200 L	9/24/2012	treuter
<hr/>							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47781	SS8270_TOP			4/2/2013	5 ML	10/2/2012	nsubar
3507616 10 UG/ML: 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(e)pyrene-d12, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene							
COMPOSED OF:							
	43150: 250 UL	47241: 50 UL	47247: 50 UL				
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47782	SS8270_CAL7			3/4/2013	1 ML	10/2/2012	nsubar
0.8 UG/ML: 2-Methylnaphthalene-d10, Fluoranthene-d10							
10 UG/ML: 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(e)pyrene-d12, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene							
20 UG/ML: Pentachlorophenol							
COMPOSED OF:							
	30687: 20 UL	47503: 20 UL	47708: 0 UL	47781: 1000 UL			
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47783	SS8270_CAL6			3/4/2013	1 ML	10/2/2012	nsubar
0.8 UG/ML: 2-Methylnaphthalene-d10, Fluoranthene-d10							
10 UG/ML: Pentachlorophenol							
5 UG/ML: 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(e)pyrene-d12, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene							

STANDARDS LOG

COMPOSED OF:

30687: 10 UL 47503: 20 UL 47708: 490 UL 47781: 500 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47784	SS8270_CAL5			3/4/2013	1 ML	10/2/2012	nsubar

0.8 UG/ML: 2-Methylnaphthalene-d10, Fluoranthene-d10

1 UG/ML: 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(e)pyrene-D12, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene

7 UG/ML: Pentachlorophenol

COMPOSED OF:

30687: 7 UL 47503: 20 UL 47708: 900 UL 47781: 100 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47785	SS8270_CAL4			3/4/2013	1 ML	10/2/2012	nsubar

0.5 UG/ML: 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(e)pyrene-D12, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene

0.8 UG/ML: 2-Methylnaphthalene-d10, Fluoranthene-d10

5 UG/ML: Pentachlorophenol

COMPOSED OF:

30687: 5 UL 47503: 20 UL 47708: 945 UL 47781: 50 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47786	SS8270_CAL3			3/4/2013	1 ML	10/2/2012	nsubar

0.1 UG/ML: 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(e)pyrene-D12, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene

0.8 UG/ML: 2-Methylnaphthalene-d10, Fluoranthene-d10

2 UG/ML: Pentachlorophenol

COMPOSED OF:

30687: 2 UL 47503: 20 UL 47708: 985 UL 47781: 10 UL

STANDARDS LOG

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47787	SS8270_CAL2			3/4/2013	1 ML	10/2/2012	nsubar
0.05 UG/ML: 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(e)pyrene-D12, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene							
0.8 UG/ML: 2-Methylnaphthalene-d10, Fluoranthene-d10							
1 UG/ML: Pentachlorophenol							
COMPOSED OF:							
30687: 1 UL 47503: 20 UL 47708: 994 UL 47781: 5 UL							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47788	SS8270_CAL1			3/4/2013	1 ML	10/2/2012	nsubar
0.02 UG/ML: 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(e)pyrene-D12, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene							
0.7 UG/ML: Pentachlorophenol							
0.8 UG/ML: 2-Methylnaphthalene-d10, Fluoranthene-d10							
COMPOSED OF:							
30687: 0.7 UL 47503: 20 UL 47708: 998 UL 47781: 2 UL							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47789	SS8270_SEC			3/4/2013	1 ML	10/2/2012	nsubar
0.5 UG/ML: 1-Methylnaphthalene, 2-Fluorobiphenyl, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(e)pyrene-D12, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Nitrobenzene-d5, Phenanthrene, p-Terphenyl-d14, Pyrene							
0.8 UG/ML: 2-Methylnaphthalene-d10, Fluoranthene-d10							
5 UG/ML: Pentachlorophenol							
COMPOSED OF:							
40389: 5 UL 43150: 2.5 UL 47503: 20 UL 47708: 950 UL 47791: 50 UL							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47791	8270 SIM_INT SEC			4/2/2013	5 ML	10/2/2012	nsubar
10 UG/ML: 1-Methylnaphthalene, 2-Fluorobiphenyl, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Nitrobenzene-d5, Phenanthrene, p-Terphenyl-d14, Pyrene							

STANDARDS LOG

COMPOSED OF:

45123: 50 UL 45131: 25 UL 45160: 25 UL 45687: 10 UL 47708: 4.89 ML

Data File: \\Svecd04\DD\chem\smsd03.i\S3112012.b\DFTPP1.D
Report Date: 30-Nov-2012 09:41

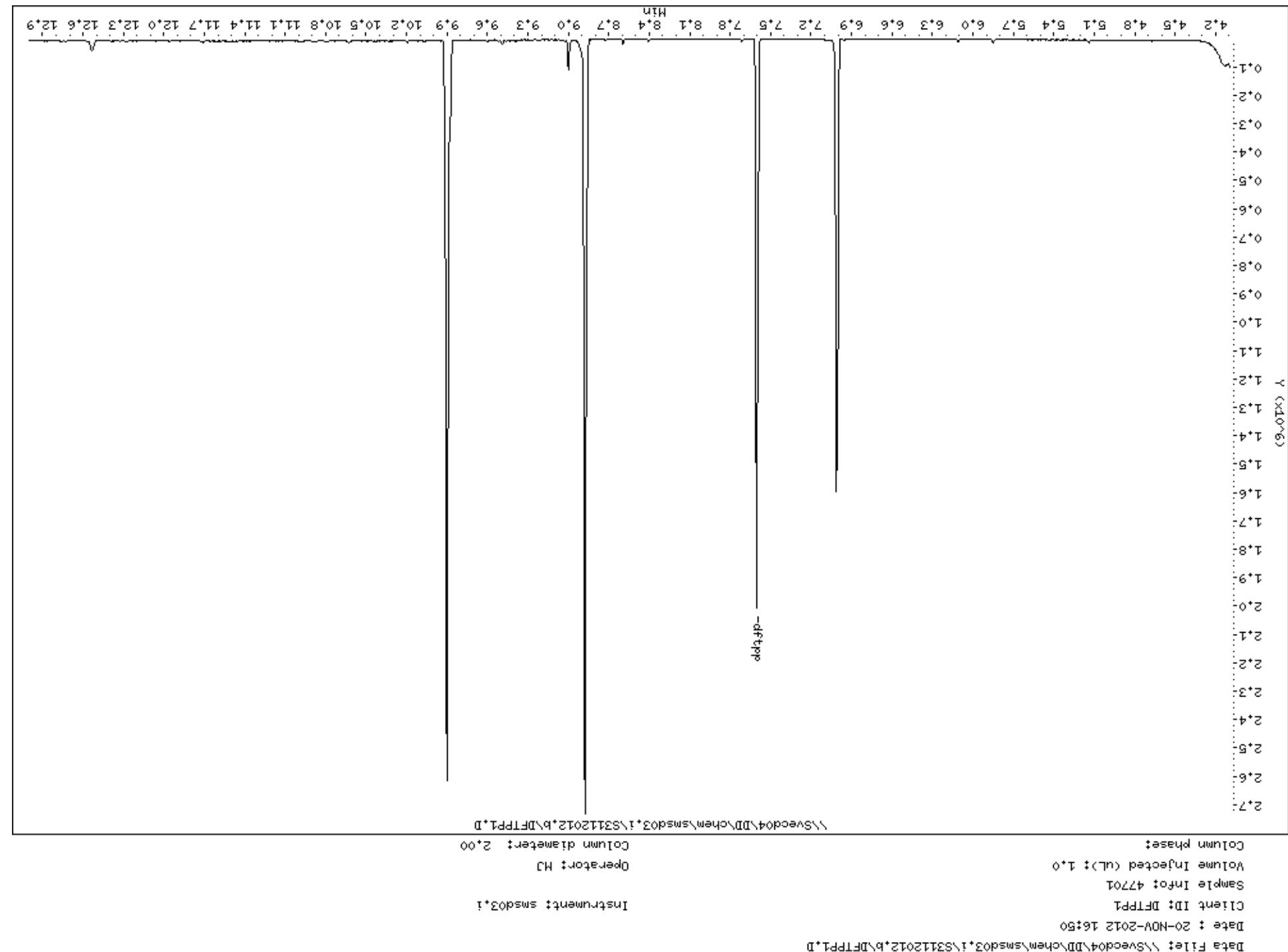
PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112012.b\DFTPP1.D
Lab Smp Id: DFTPP1 Client Smp ID: DFTPP1
Inj Date : 20-NOV-2012 16:50
Operator : MJ Inst ID: smsd03.i
Smp Info : 47701
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112012.b\DoDTUN.m
Meth Date : 14-Sep-2012 08:05 mjacobs Quant Type: ISTD
Cal Date : 23-MAR-2009 02:58 Cal File: AP9CAL1.D
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER

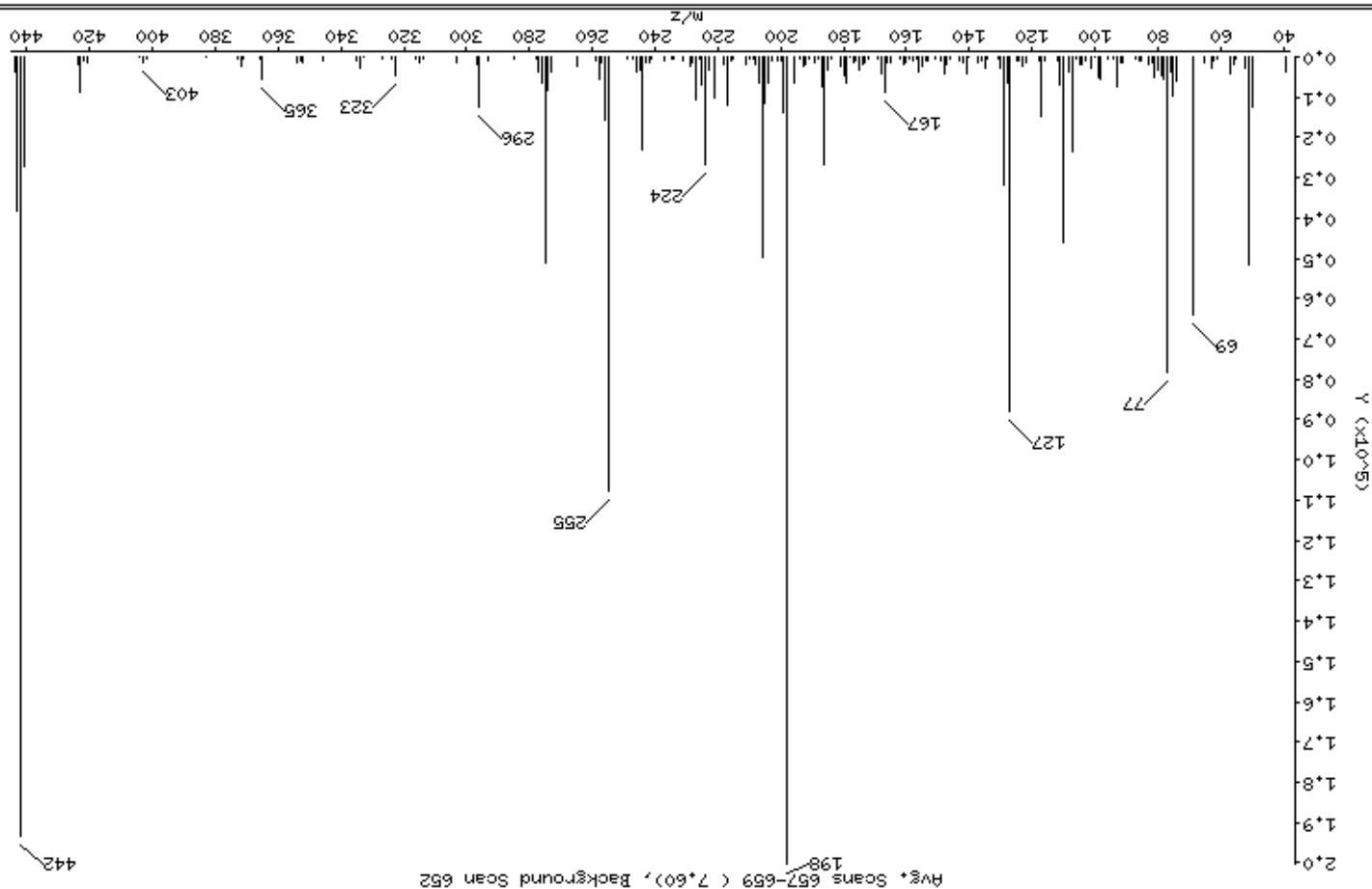
Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
7.603	7.713 (0.000)	198	200256		0.00-	100.00	100.00
7.603	7.713 (0.000)	51	51376		10.00-	80.00	25.66
7.603	7.713 (0.000)	68	0	0.0	0.00-	2.00	0.00
7.603	7.713 (0.000)	69	63888		0.00-	0.00	31.90
7.603	7.713 (0.000)	70	0	0.0	0.00-	2.00	0.00
7.603	7.713 (0.000)	127	87808		10.00-	80.00	43.85
7.603	7.713 (0.000)	197	0	0.0	0.00-	2.00	0.00
7.603	7.713 (0.000)	199	13901		5.00-	9.00	6.94
7.603	7.713 (0.000)	275	50904		10.00-	60.00	25.42
7.603	7.713 (0.000)	365	5326		1.00-	0.00	2.66
7.603	7.713 (0.000)	441	27192		0.01-	24.00	14.06
7.603	7.713 (0.000)	442	193344		50.00-	0.00	96.55
7.603	7.713 (0.000)	443	38336		15.00-	24.00	19.83
<hr/>							



m/e	% RELATIVE ABUNDANCE	ION ABUNDANCE CRITERIA
198	100.00	Base Peak, 100% relative abundance
54	25.66	Less than 2.00% of mass 198
68	0.00 (0.00)	Less than 2.00% of mass 69
69	0.00 (0.00)	Mass 69 relative abundance
70	0.00 (0.00)	Less than 2.00% of mass 69
127	43.85	10.00 - 80.00% of mass 198
197	0.00	Less than 2.00% of mass 198
199	0.00	5.00 - 9.00% of mass 198
275	6.94	10.00 - 60.00% of mass 198
365	25.42	Greater than 1.00% of mass 198
441	2.66	1.00% of mass 198
442	13.58 (14.06)	0.01 - 24.00% of mass 442
443	96.55	15.00 - 24.00% of mass 442
444	19.14 (19.83)	



Date : 20-NOV-2012 16:50
Data File: \\\severdd\lilachem\msd03\1\S3112012\6.DFPP1.D
Client ID: DFPP1
Instrument: msd03.i
Sample Info: 47701
Volume Injected (uL): 1.0
Operator: HS
Column Phase: t
Column diameter: 2.00
dfpp

Data File: \\\\$vedc04\DD\chem\msd03\1\33112012.b\DFTPP1.D						
Client ID: DFTPP1	Instrument: smsd03.i	Sample Info: 47701	Specctrum: Avg+ Scans 657-659 (7.60), BackGround Scan 652	Location of Maximum: 198.00	Number of Points: 188	m/z
m/z	y	m/z	y	m/z	y	m/z
39.00	3593	124.00	903	187.00	7299	1258.00
56.00	1670	130.00	2822	193.00	2230	1275.00
57.00	4045	1321.00	239	194.00	247	1276.00
61.00	642	1334.00	616	196.00	6447	1277.00
62.00	730	135.00	2670	198.00	200256	1278.00
63.00	2567	136.00	892	199.00	13901	1285.00
64.00	461	129.00	31928	192.00	2004	1274.00
55.00	4641	128.00	6543	191.00	586	1273.00
52.00	51376	127.00	87808	189.00	1539	1265.00
51.00	50.00	802	188.00	632	1259.00	753
50.00	12209	125.00	803	187.00	7299	1258.00
5619	1	5619	1	5619	1	5619
65.00	1218	137.00	1371	200.00	878	1293.00
66.00	1218	137.00	1371	200.00	913	1
69.00	63888	140.00	225	201.00	1008	1296.00
74.00	6041	1411.00	4043	203.00	1099	1297.00
75.00	9794	1424.00	4043	204.00	6492	1203.00
76.00	3767	143.00	741	205.00	11601	1344.00
78.00	5462	147.00	2033	207.00	4183	1208.00
79.00	4542	148.00	2033	207.00	1709	1323.00
80.00	864	155.00	916	215.00	254	1334.00
82.00	1616	154.00	1616	214.00	1865	1333.00
83.00	1616	154.00	1015	214.00	1015	1333.00
84.00	1526	153.00	1526	153.00	1526	153.00
85.00	1616	154.00	1616	154.00	1616	154.00
86.00	1111	156.00	3657	217.00	11926	1346.00
87.00	569	157.00	688	218.00	1690	1352.00
88.00	1111	156.00	3657	216.00	1028	1355.00
89.00	7284	160.00	1349	224.00	2649	1354.00
90.00	1301	159.00	648	223.00	3183	1354.00
91.00	4896	166.00	1456	228.00	1313	1373.00
92.00	229	167.00	8757	229.00	2418	1383.00
93.00	1000	166.00	1456	228.00	1313	1373.00
94.00	99.	166.00	1456	228.00	1313	1373.00
95.00	229	167.00	8757	229.00	2418	1383.00
96.00	96.	167.00	245	166.00	535	1374.00
97.00	94.	166.00	551	161.00	2058	1366.00
98.00	98.	165.00	1510	227.00	10720	1372.00
99.00	99.	165.00	1510	227.00	2620	1
100.00	100.	165.00	1510	227.00	10720	1372.00
101.00	101.	168.00	4018	231.00	737	1402.00
102.00	102.	168.00	2809	168.00	4018	1402.00
103.00	103.	169.00	868	169.00	463	1403.00
104.00	104.	169.00	616	234.00	463	1403.00
105.00	105.	169.00	616	234.00	463	1403.00
106.00	106.	169.00	616	234.00	463	1403.00
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200.00	200.	169.00	616	234.00	463	1403.00
201.00	201.	169.00	616	234.00	463	1403.00
202.00	202.	169.00	616	234.00	463	1403.00
203.00	203.	169.00	616</td			

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 Sample Info: 47701
 Instrument: msd03.i
 Date : 20-NOV-2012 16:50
 Column Phases:
 Volume Injected (uL): 1.0
 Operator: HS
 Column diameter: 2.00
 Location of Maximum: 198.00
 Spectrum: Avg. Scans 657-659 (7.60), Background Scan 652
 Number of Points: 188

m/z	y	m/z	y	m/z	y	m/z	y
104.00	1892	172.00	586	1235.00	626	1404.00	219
105.00	1829	173.00	1217	1237.00	862	1422.00	366
106.00	487	174.00	1797	1241.00	490	1422.00	1085
107.00	23576	175.00	3452	1242.00	1286	1423.00	8618
108.00	3680	176.00	1119	1243.00	1459	1424.00	1738
110.00	45824	177.00	1537	1244.00	23024	1441.00	27192
111.00	6828	178.00	219	1245.00	3173	1442.00	193344
112.00	722	179.00	6281	1246.00	3687	1443.00	38336
116.00	1051	180.00	4548	1247.00	545	1444.00	3680
117.00	14745	181.00	2228	1249.00	667	1	1
118.00	1089	184.00	300	1255.00	107872	1	1
122.00	1369	185.00	2999	1266.00	15810	1	1
123.00	1223	186.00	2239	1266.00	26592	1257.00	1309

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/20/2012 17:10

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112012.b/DFTPP1.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/26/2012 14:40

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112012.b/DFTPP1.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/29/2012 10:07

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112012.b/DFTPP1.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/29/2012 17:49

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112012.b/DFTPP1.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/29/2012 18:21

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112012.b/DFTPP1.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/30/2012 09:37

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112012.b/DFTPP1.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/30/2012 09:41

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112012.b/DFTPP1.D

PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SSCAL4.D
Lab Smp Id: 47785 Client Smp ID: SSCCV1
Inj Date : 20-NOV-2012 17:27 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : 47785
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SS8270.m
Meth Date : 29-Nov-2012 16:25 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 17:27 Cal File: SSCLAL4.D
Als bottle: 99 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/ml)	TARGET RANGE	RATIO
5.682	5.683 (0.900)	128	21824	0.50000	0.52	80.00- 120.00	100.00
5.688	5.683 (0.901)	129	2389		0.00-	40.88	10.95

* 1 Naphthalene							
6.316	6.317 (1.000)	152	20894	0.80000	80.00-	120.00	100.00
6.310	6.311 (1.000)	122	6749		2.00-	62.00	32.30

* 2 2-Methyl Naphthalene-d2							
6.349	6.345 (1.005)	142	13928	0.50000	0.49	80.00- 120.00	100.00
6.349	6.345 (1.005)	141	11912		54.36-	114.36	85.53

* 3 2-Methylnaphthalene							
6.444	6.445 (1.020)	142	12914	0.50000	0.48	80.00- 120.00	100.00
6.444	6.445 (1.020)	141	11259		56.64-	116.64	87.18

* 5 Acenaphthylene							
7.224	7.224 (1.144)	152	21290	0.50000	0.50	80.00- 120.00	100.00
7.224	7.220 (1.144)	151	4034		0.00-	48.91	18.95

* 6 Acenaphthene							
7.396	7.392 (1.171)	153	13318	0.50000	0.50	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.391	7.392 (1.170)	152	6307			17.33-	77.33	47.36
<hr/>								
7.896	7.896 (1.251)	166	15234 0.50000	0.50	80.00-	120.00	100.00	
7.897	7.896 (1.250)	165	14063		63.04-	123.04	92.31	
<hr/>								
8.634	8.634 (0.865)	266	14079 5.00000	5.9	80.00-	120.00	100.00(A)	
8.634	8.634 (0.864)	264	8973		33.02-	93.02	63.73	
<hr/>								
8.839	8.839 (0.885)	178	22365 0.50000	0.48	80.00-	120.00	100.00	
8.839	8.839 (0.885)	179	3420		0.00-	45.27	15.29	
<hr/>								
8.887	8.888 (0.889)	178	23328 0.50000	0.51	80.00-	120.00	100.00	
8.887	8.888 (0.889)	179	3560		0.00-	45.00	15.26	
<hr/>								
* 9.987	9.985 (1.000)	106	5595		0.00-	45.92	15.97	
<hr/>								
10.009	10.007 (1.002)	202	25785 0.50000	0.50	80.00-	120.00	100.00	
10.009	10.007 (1.002)	101	3469		0.00-	43.17	13.45	
<hr/>								
10.229	10.227 (1.024)	101	3793		0.00-	44.81	14.62	
<hr/>								
11.401	11.401 (1.141)	226	6303 0.50000	0.50	80.00-	120.00	100.00	
11.401	11.397 (1.141)	200	820		0.00-	42.98	13.01	
<hr/>								
11.436	11.436 (1.144)	226	6879 0.50000	0.48	80.00-	120.00	100.00	
11.436	11.436 (1.144)	200	869		0.00-	42.59	12.63	
<hr/>								
12.391	12.390 (1.240)	252	24774 0.50000	0.52	80.00-	120.00	100.00	
12.391	12.385 (1.240)	250	5380		0.00-	53.98	21.72	
<hr/>								
12.413	12.412 (1.242)	252	26258 0.50000	0.47	80.00-	120.00	100.00	
12.413	12.412 (1.242)	250	6148		0.00-	52.08	23.41	
<hr/>								
\$ 12.616	12.615 (1.262)	264	25905 0.50000	0.53	80.00-	120.00	100.00	
12.616	12.615 (1.262)	132	4485		0.00-	47.49	17.31	
<hr/>								
12.691	12.690 (1.270)	252	22882 0.50000	0.50	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.691	12.685	(1.270)	250	5380		0.00-	54.02	23.51
-----	-----	-----	-----	-----	-----	-----	-----	-----
20	Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5			
13.827	13.821	(1.384)	276	30015	0.50000	0.55	80.00-	120.00
13.827	13.821	(1.384)	138	8881		0.44-	60.44	29.59
-----	-----	-----	-----	-----	-----	-----	-----	-----
21	Dibenz[a,h]anthracene				CAS #: 53-70-3			
13.836	13.830	(1.385)	278	24403	0.50000	0.53	80.00-	120.00
13.827	13.821	(1.384)	138	8881		6.81-	66.81	36.39
-----	-----	-----	-----	-----	-----	-----	-----	-----
22	Benzo[g,h,i]perylene				CAS #: 191-24-2			
14.138	14.132	(1.415)	276	23331	0.50000	0.52	80.00-	120.00
14.133	14.132	(1.414)	138	6219		0.00-	55.67	26.66
-----	-----	-----	-----	-----	-----	-----	-----	-----

QC Flag Legend

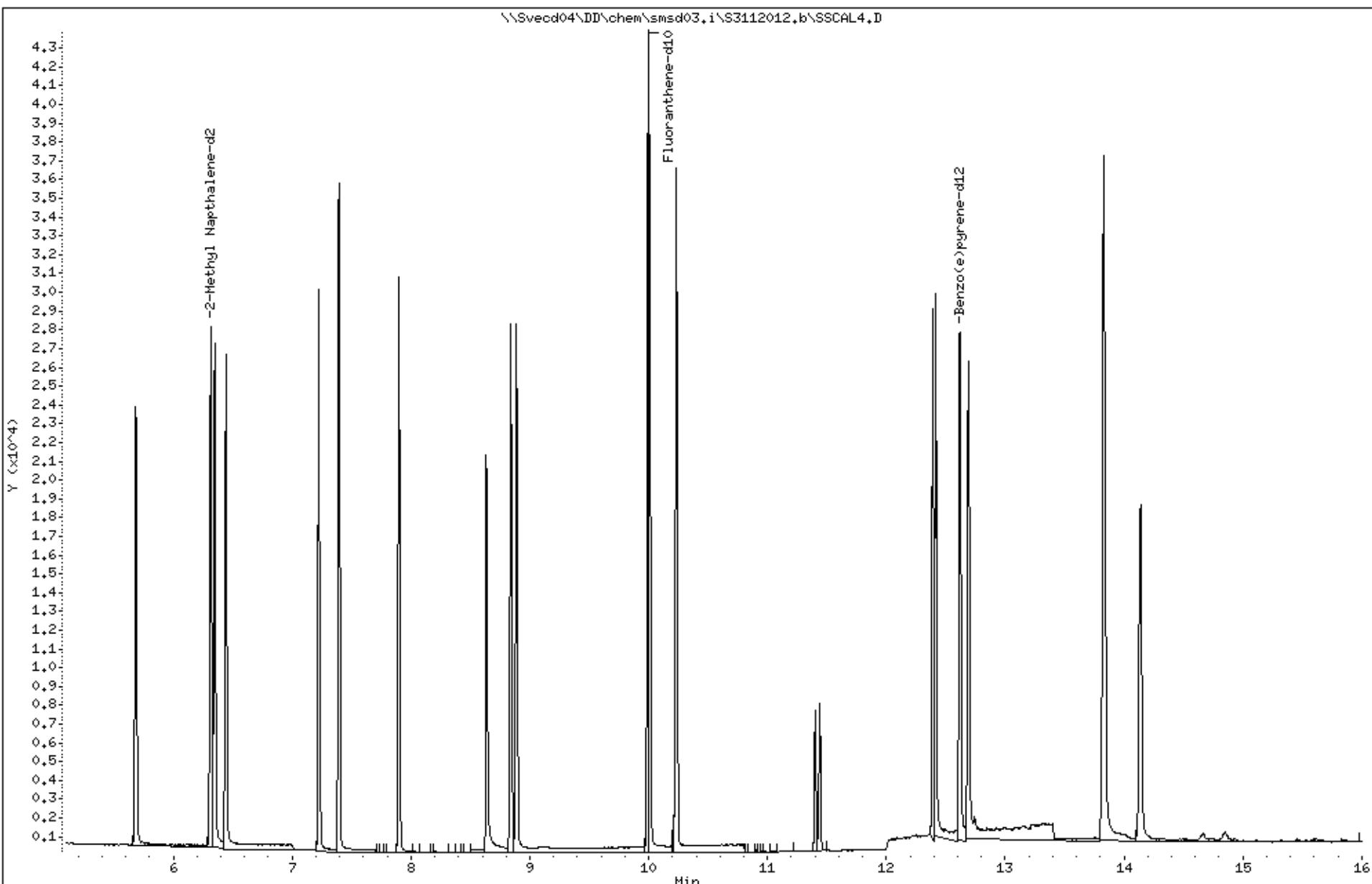
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Sved04\DD\chem\smsd03.i\S3112012.b\SSCAL4.D
Date : 20-NOV-2012 17:27
Client ID: SSCCW1
Sample Info: 47785

Column phase: HPMS-5

Instrument: smsd03,i
Operator: MJ
Column diameter: 0.25

Page 4



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SSCAL7.D
Lab Smp Id: 47782 Client Smp ID: SSCL7
Inj Date : 20-NOV-2012 17:52 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : 47782
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SS8270.m
Meth Date : 29-Nov-2012 16:25 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 17:52 Cal File: SSCL7.D
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO
				CAL-AMT	ON-COL		
<hr/>							
5.685	5.683 (0.900)	128	373333	10.0000	8.3	80.00- 120.00	100.00
5.685	5.683 (0.900)	129	45643		0.00-	40.88	12.23
<hr/>							
*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.319	6.317 (1.000)	152	22304	0.80000	80.00-	120.00	100.00
6.313	6.311 (1.000)	122	7052		2.00-	62.00	31.62
<hr/>							
6.347	6.345 (1.004)	142	266457	10.0000	8.7	80.00- 120.00	100.00
6.347	6.345 (1.004)	141	224914		54.36-	114.36	84.41
<hr/>							
6.447	6.445 (1.020)	142	254931	10.0000	8.8	80.00- 120.00	100.00
6.441	6.445 (1.019)	141	222317		56.64-	116.64	87.21
<hr/>							
7.224	7.224 (1.143)	152	386571	10.0000	8.5	80.00- 120.00	100.00
7.224	7.220 (1.143)	151	78144		0.00-	48.91	20.21
<hr/>							
7.392	7.392 (1.170)	153	247988	10.0000	8.7	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.392	7.392 (1.170)	152	119833			17.33-	77.33	48.32
<hr/>								
6 Acenaphthene (continued)								
7.900	7.896 (1.250)	166	292090	10.0000	9.0	80.00-	120.00	100.00
7.896	7.896 (1.250)	165	270502			63.04-	123.04	92.61
<hr/>								
7 Fluorene								
8.638	8.634 (0.865)	266	70644	20.0000	26.8	80.00-	120.00	100.00(A)
8.633	8.634 (0.864)	264	45354			33.02-	93.02	64.20
<hr/>								
8 Pentachlorophenol								
8.838	8.839 (0.885)	178	399310	10.0000	7.7	80.00-	120.00	100.00
8.838	8.839 (0.885)	179	65384			0.00-	45.27	16.37
<hr/>								
9 Phenanthrene								
8.887	8.888 (0.889)	178	399628	10.0000	7.9	80.00-	120.00	100.00
8.892	8.888 (0.890)	179	66597			0.00-	45.00	16.66
<hr/>								
* 11 Fluoranthene-d10								
9.992	9.991 (1.000)	212	38682	0.80000		80.00-	120.00	100.00
9.992	9.985 (1.000)	106	6124			0.00-	45.92	15.83
<hr/>								
12 Fluoranthene								
10.014	10.007 (1.002)	202	496083	10.0000	8.8	80.00-	120.00	100.00
10.008	10.007 (1.002)	101	70678			0.00-	43.17	14.25
<hr/>								
13 Pyrene								
10.233	10.233 (1.024)	202	519499	10.0000	8.5	80.00-	120.00	100.00
10.233	10.227 (1.024)	101	89813			0.00-	44.81	17.29
<hr/>								
14 Benzo[a]anthracene								
11.405	11.401 (1.141)	226	134247	10.0000	10	80.00-	120.00	100.00
11.401	11.397 (1.141)	200	18331			0.00-	42.98	13.65
<hr/>								
15 Chrysene								
11.440	11.436 (1.145)	226	147090	10.0000	9.2	80.00-	120.00	100.00
11.436	11.436 (1.145)	200	19078			0.00-	42.59	12.97
<hr/>								
16 Benzo[b]fluoranthene								
12.394	12.390 (1.240)	252	415176	10.0000	9.5	80.00-	120.00	100.00
12.390	12.385 (1.240)	250	105365			0.00-	53.98	25.38
<hr/>								
17 Benzo[k]fluoranthene								
12.416	12.412 (1.243)	252	461588	10.0000	7.4	80.00-	120.00	100.00
12.416	12.412 (1.243)	250	109038			0.00-	52.08	23.62
<hr/>								
\$ 18 Benzo(e)pyrene-d12								
12.619	12.615 (1.263)	264	427706	10.0000	7.9	80.00-	120.00	100.00
12.619	12.615 (1.263)	132	77917			0.00-	47.49	18.22
<hr/>								
19 Benzo[a]pyrene								
12.694	12.690 (1.270)	252	401552	10.0000	7.9	80.00-	120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.690	12.685	(1.270)	250	100844		0.00-	54.02	25.11

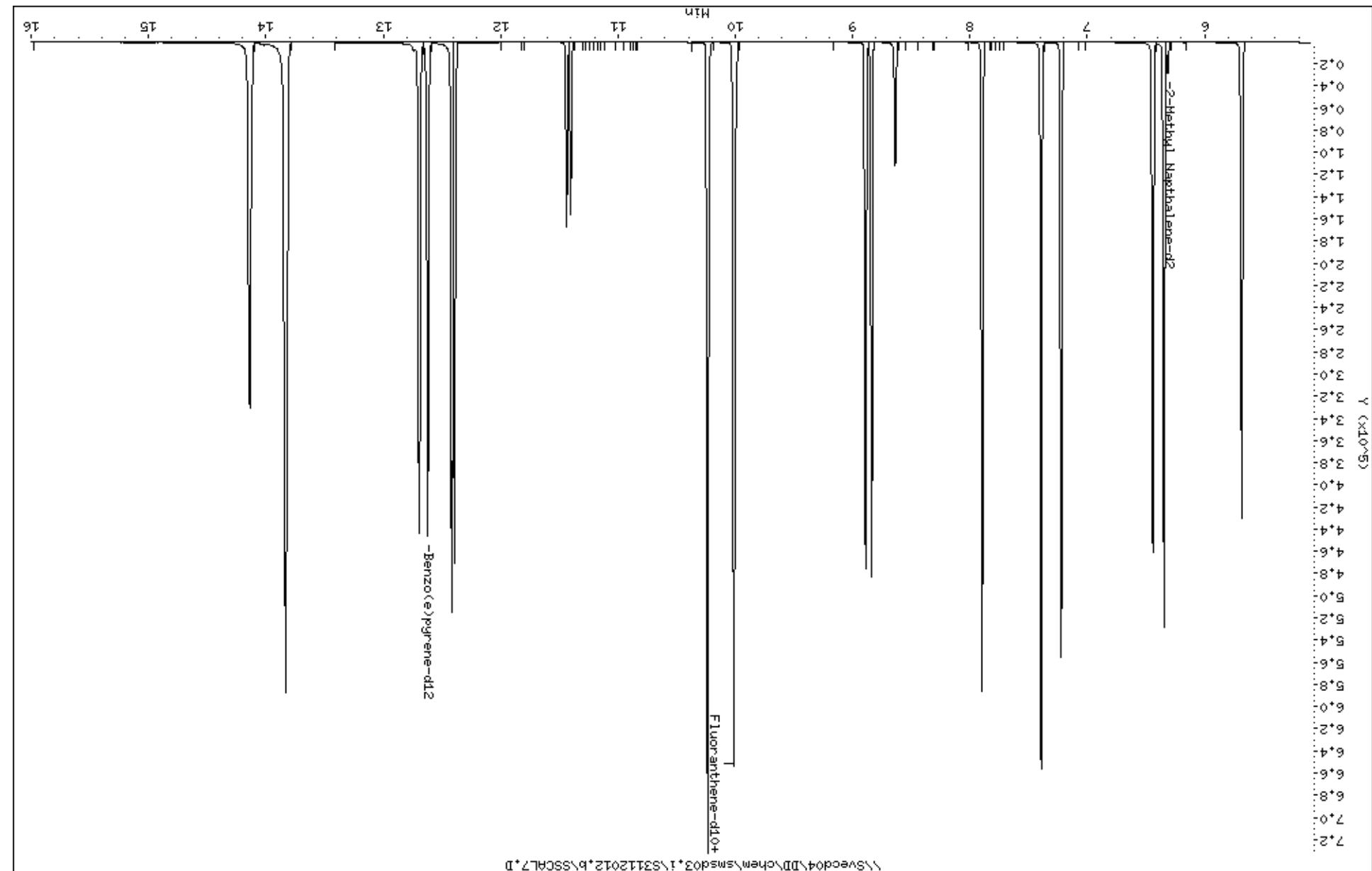
13.825	13.821	(1.384)	276	488557	10.0000	8.1	80.00-	120.00
13.825	13.821	(1.384)	138	148750		0.44-	60.44	30.45

13.834	13.830	(1.385)	278	407642	10.0000	9.7	80.00-	120.00
13.825	13.821	(1.384)	138	148750		6.81-	66.81	36.49

14.141	14.132	(1.415)	276	423092	10.0000	8.5	80.00-	120.00
14.137	14.132	(1.415)	138	110486		0.00-	55.67	26.11

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SSCAL6.D
Lab Smp Id: 47783 Client Smp ID: SSCL6
Inj Date : 20-NOV-2012 18:15 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : 47783
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SS8270.m
Meth Date : 29-Nov-2012 16:25 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 18:15 Cal File: SSCL6.D
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO
				CAL-AMT	ON-COL		
<hr/>							
5.683	5.683 (0.900)	128	205755	5.00000	4.6	80.00- 120.00	100.00
5.683	5.683 (0.900)	129	24384		0.00-	40.88	11.85
<hr/>							
*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.317	6.317 (1.000)	152	22078	0.80000	80.00-	120.00	100.00
6.311	6.311 (1.000)	122	7017		2.00-	62.00	31.78
<hr/>							
6.350	6.345 (1.005)	142	143074	5.00000	4.7	80.00- 120.00	100.00
6.344	6.345 (1.004)	141	119809		54.36-	114.36	83.74
<hr/>							
6.444	6.445 (1.020)	142	134571	5.00000	4.7	80.00- 120.00	100.00
6.444	6.445 (1.020)	141	117368		56.64-	116.64	87.22
<hr/>							
7.224	7.224 (1.144)	152	207622	5.00000	4.6	80.00- 120.00	100.00
7.224	7.220 (1.144)	151	41092		0.00-	48.91	19.79
<hr/>							
7.396	7.392 (1.171)	153	134302	5.00000	4.8	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.391	7.392 (1.170)	152	64164			17.33-	77.33	47.78
<hr/>								
7.897	7.896 (1.250)	166	160543	5.00000	5.0	80.00-	120.00	100.00
7.897	7.896 (1.250)	165	148612			63.04-	123.04	92.57
<hr/>								
8.634	8.634 (0.864)	266	32999	10.0000	13.4	80.00-	120.00	100.00(A)
8.634	8.634 (0.864)	264	20986			33.02-	93.02	63.60
<hr/>								
8.840	8.839 (0.885)	178	234621	5.00000	4.9	80.00-	120.00	100.00
8.840	8.839 (0.885)	179	38237			0.00-	45.27	16.30
<hr/>								
8.888	8.888 (0.890)	178	234126	5.00000	5.0	80.00-	120.00	100.00
8.888	8.888 (0.890)	179	37771			0.00-	45.00	16.13
<hr/>								
9.992	9.991 (1.000)	212	36153	0.80000		80.00-	120.00	100.00
9.987	9.985 (1.000)	106	5678			0.00-	45.92	15.71
<hr/>								
10.009	10.007 (1.002)	202	234142	5.00000	4.4	80.00-	120.00	100.00
10.009	10.007 (1.002)	101	32188			0.00-	43.17	13.75
<hr/>								
10.234	10.233 (1.024)	202	281984	5.00000	4.9	80.00-	120.00	100.00
10.229	10.227 (1.024)	101	47870			0.00-	44.81	16.98
<hr/>								
11.405	11.401 (1.141)	226	63663	5.00000	5.0	80.00-	120.00	100.00
11.401	11.397 (1.141)	200	8473			0.00-	42.98	13.31
<hr/>								
11.436	11.436 (1.144)	226	71773	5.00000	4.8	80.00-	120.00	100.00
11.436	11.436 (1.144)	200	9352			0.00-	42.59	13.03
<hr/>								
12.390	12.390 (1.240)	252	236255	5.00000	5.8	80.00-	120.00	100.00
12.390	12.385 (1.240)	250	52829			0.00-	53.98	22.36
<hr/>								
12.416	12.412 (1.243)	252	246065	5.00000	4.2	80.00-	120.00	100.00
12.412	12.412 (1.242)	250	64525			0.00-	52.08	26.22
<hr/>								
12.619	12.615 (1.263)	264	245664	5.00000	4.8	80.00-	120.00	100.00
12.614	12.615 (1.262)	132	45301			0.00-	47.49	18.44
<hr/>								
12.689	12.690 (1.270)	252	227108	5.00000	4.8	80.00-	120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.689	12.685	(1.270)	250	54908		0.00-	54.02	24.18

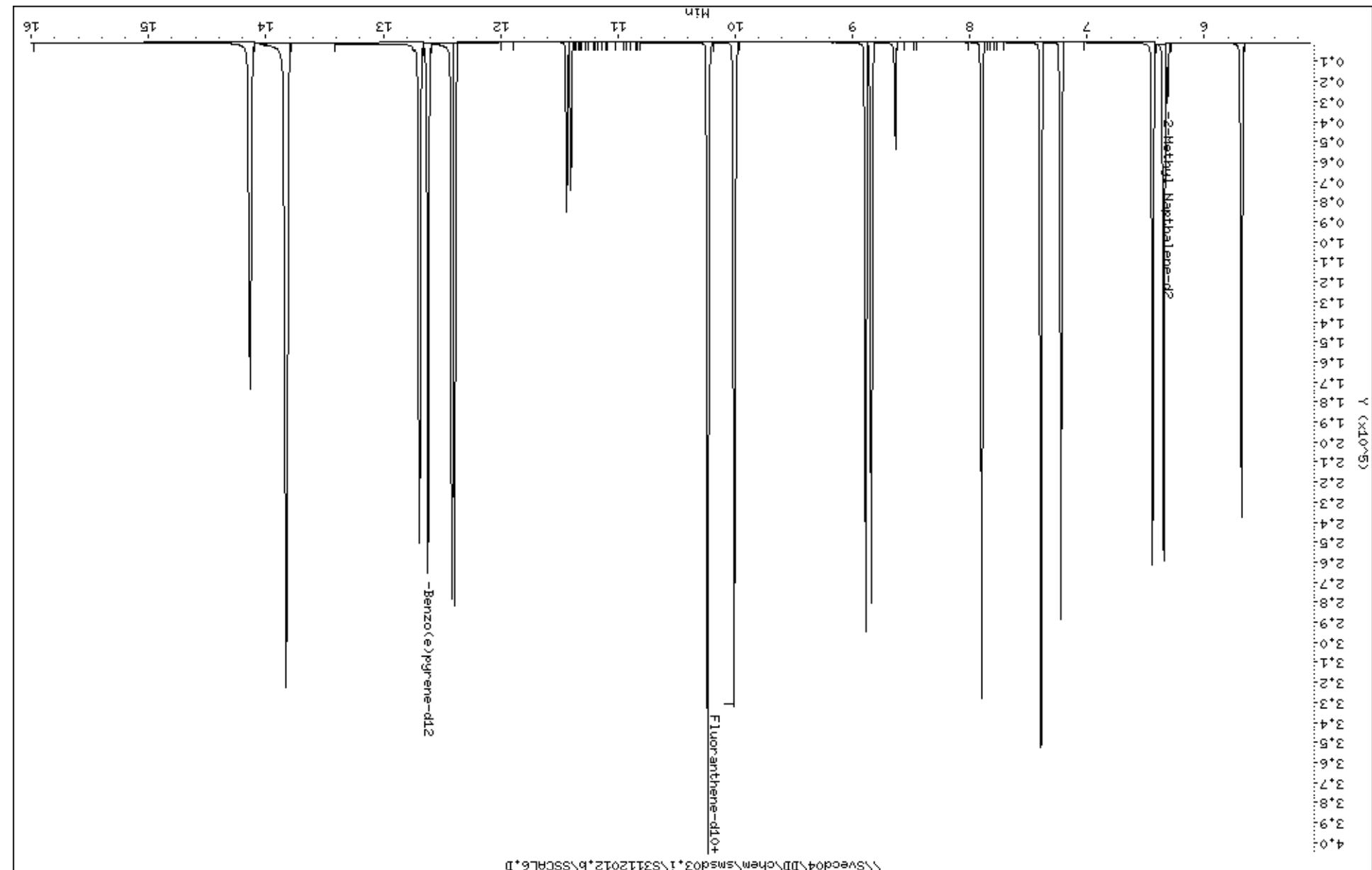
20	Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5			
13.826	13.821	(1.384)	276	264303	5.00000	4.7	80.00-	120.00
13.826	13.821	(1.384)	138	80557		0.44-	60.44	30.48

21	Dibenz[a,h]anthracene				CAS #: 53-70-3			
13.831	13.830	(1.384)	278	218580	5.00000	5.5	80.00-	120.00
13.826	13.821	(1.384)	138	80557		6.81-	66.81	36.85

22	Benzo[g,h,i]perylene				CAS #: 191-24-2			
14.137	14.132	(1.415)	276	223115	5.00000	4.8	80.00-	120.00
14.133	14.132	(1.414)	138	57803		0.00-	55.67	25.91

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SSCAL5.D
Lab Smp Id: 47784 Client Smp ID: SSCL5
Inj Date : 20-NOV-2012 18:39 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : 47784
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SS8270.m
Meth Date : 29-Nov-2012 16:25 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 18:39 Cal File: SSCL5.D
Als bottle: 3 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO
				CAL-AMT	ON-COL		
5.685	5.683 (0.900)	128	40267	1.00000	0.92	80.00- 120.00	100.00
5.685	5.683 (0.900)	129	4402		0.00-	40.88	10.93
*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.319	6.317 (1.000)	152	21814	0.80000	80.00-	120.00	100.00
6.314	6.311 (1.000)	122	6828		2.00-	62.00	31.30
3	2-Methylnaphthalene				CAS #: 91-57-6		
6.347	6.345 (1.004)	142	29207	1.00000	0.98	80.00- 120.00	100.00
6.347	6.345 (1.004)	141	24430		54.36-	114.36	83.64
4	1-Methylnaphthalene				CAS #: 90-12-0		
6.441	6.445 (1.019)	142	25253	1.00000	0.90	80.00- 120.00	100.00
6.441	6.445 (1.019)	141	21954		56.64-	116.64	86.94
5	Acenaphthylene				CAS #: 208-96-8		
7.224	7.224 (1.143)	152	40899	1.00000	0.92	80.00- 120.00	100.00
7.220	7.220 (1.143)	151	7774		0.00-	48.91	19.01
6	Acenaphthene				CAS #: 83-32-9		
7.392	7.392 (1.170)	153	25324	1.00000	0.91	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.392	7.392 (1.170)	152	12017			17.33-	77.33	47.45
<hr/>								
7.897	7.896 (1.250)	166	29078	1.00000	0.91	80.00-	120.00	100.00
7.897	7.896 (1.250)	165	26886			63.04-	123.04	92.46
<hr/>								
8.634	8.634 (0.864)	266	16392	7.00000	7.0	80.00-	120.00	100.00(A)
8.634	8.634 (0.864)	264	10390			33.02-	93.02	63.38
<hr/>								
8.839	8.839 (0.885)	178	41282	1.00000	0.91	80.00-	120.00	100.00
8.839	8.839 (0.885)	179	6384			0.00-	45.27	15.46
<hr/>								
8.887	8.888 (0.890)	178	41223	1.00000	0.93	80.00-	120.00	100.00
8.887	8.888 (0.890)	179	6327			0.00-	45.00	15.35
<hr/>								
* 9.992	9.991 (1.000)	212	34091	0.80000		80.00-	120.00	100.00
9.992	9.985 (1.000)	106	5527			0.00-	45.92	16.21
<hr/>								
10.008	10.007 (1.002)	202	49480	1.00000	0.99	80.00-	120.00	100.00
10.008	10.007 (1.002)	101	6573			0.00-	43.17	13.28
<hr/>								
10.233	10.233 (1.024)	202	50796	1.00000	0.94	80.00-	120.00	100.00
10.233	10.227 (1.024)	101	7616			0.00-	44.81	14.99
<hr/>								
11.401	11.401 (1.141)	226	12019	1.00000	1.00	80.00-	120.00	100.00
11.401	11.397 (1.141)	200	1579			0.00-	42.98	13.14
<hr/>								
11.437	11.436 (1.145)	226	13088	1.00000	0.93	80.00-	120.00	100.00
11.437	11.436 (1.145)	200	1666			0.00-	42.59	12.73
<hr/>								
12.390	12.390 (1.240)	252	40313	1.00000	0.95	80.00-	120.00	100.00
12.390	12.385 (1.240)	250	9836			0.00-	53.98	24.40
<hr/>								
12.412	12.412 (1.242)	252	53318	1.00000	0.98	80.00-	120.00	100.00
12.412	12.412 (1.242)	250	12499			0.00-	52.08	23.44
<hr/>								
\$ 12.620	12.615 (1.263)	264	44121	1.00000	0.92	80.00-	120.00	100.00
12.615	12.615 (1.263)	132	7816			0.00-	47.49	17.71
<hr/>								
12.690	12.690 (1.270)	252	41309	1.00000	0.92	80.00-	120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.690	12.685	(1.270)	250	9688		0.00-	54.02	23.45

13.826	13.821	(1.384)	276	54078	1.00000	1.0	80.00-	120.00
13.826	13.821	(1.384)	138	16272		0.44-	60.44	30.09

13.830	13.830	(1.384)	278	44823	1.00000	1.1	80.00-	120.00
13.826	13.821	(1.384)	138	16718		6.81-	66.81	37.30

14.137	14.132	(1.415)	276	41354	1.00000	0.94	80.00-	120.00
14.133	14.132	(1.414)	138	10440		0.00-	55.67	25.25

QC Flag Legend

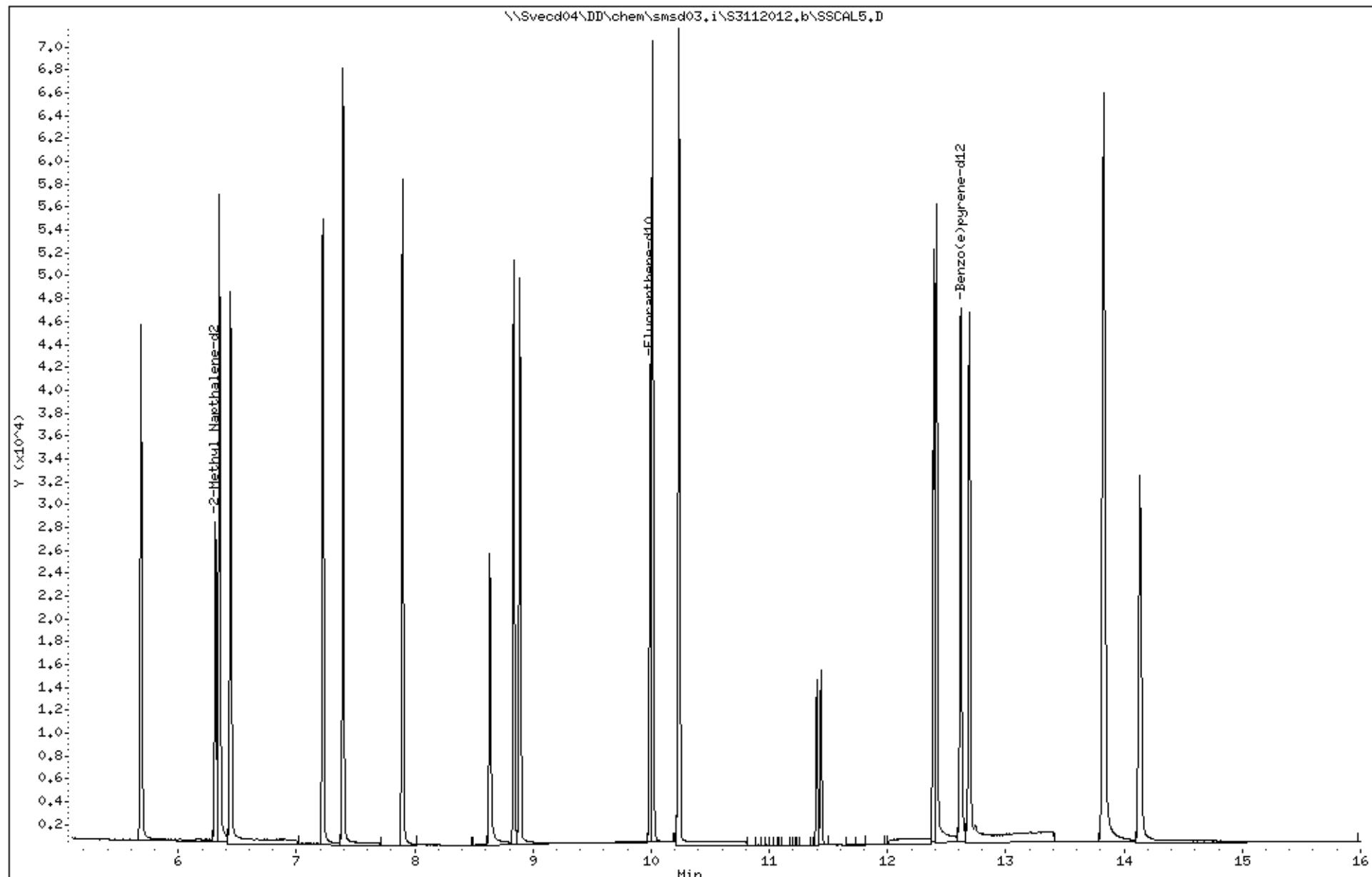
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Sved04\DD\chem\smsd03.i\S3112012.b\SSCAL5.D
Date : 20-NOV-2012 18:39
Client ID: SSCL5
Sample Info: 47784

Column phase: HPMS-5

Instrument: smsd03,i
Operator: MJ
Column diameter: 0.25

Page 4



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SSCAL3.D
Lab Smp Id: 47786 Client Smp ID: SSCL3
Inj Date : 20-NOV-2012 19:02 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : 47786
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SS8270.m
Meth Date : 29-Nov-2012 16:25 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:02 Cal File: SSCL3.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO
				CAL-AMT	ON-COL		
<hr/>							
5.683	5.683 (0.900)	128	4321	0.10000	0.11	80.00- 120.00	100.00
5.683	5.683 (0.900)	129	475		0.00-	40.88	10.99
<hr/>							
*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.317	6.317 (1.000)	152	19574	0.80000	80.00-	120.00	100.00
6.311	6.311 (1.000)	122	6261		2.00-	62.00	31.99
<hr/>							
6.345	6.345 (1.004)	142	2793	0.10000	0.10	80.00- 120.00	100.00
6.345	6.345 (1.004)	141	2425		54.36-	114.36	86.82
<hr/>							
6.445	6.445 (1.020)	142	2825	0.10000	0.11	80.00- 120.00	100.00
6.445	6.445 (1.020)	141	2557		56.64-	116.64	90.51
<hr/>							
7.225	7.224 (1.144)	152	4506	0.10000	0.11	80.00- 120.00	100.00
7.220	7.220 (1.143)	151	825		0.00-	48.91	18.31
<hr/>							
7.392	7.392 (1.170)	153	2708	0.10000	0.11	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.392	7.392 (1.170)	152	1255			17.33-	77.33	46.34
<hr/>								
7.896	7.896 (1.251)	166	3051 0.10000	0.11	80.00-	120.00	100.00	
7.897	7.896 (1.250)	165	2805		63.04-	123.04	91.94	
<hr/>								
8.634	8.634 (0.865)	266	3111 2.00000	1.3	80.00-	120.00	100.00(A)	
8.634	8.634 (0.864)	264	1928		33.02-	93.02	61.97	
<hr/>								
8.839	8.839 (0.885)	178	4991 0.10000	0.11	80.00-	120.00	100.00	
8.839	8.839 (0.885)	179	747		0.00-	45.27	14.97	
<hr/>								
8.887	8.888 (0.890)	178	4831 0.10000	0.11	80.00-	120.00	100.00	
8.887	8.888 (0.890)	179	694		0.00-	45.00	14.37	
<hr/>								
9.992	9.991 (1.000)	212	34034 0.80000		80.00-	120.00	100.00	
9.992	9.985 (1.000)	106	5485		0.00-	45.92	16.12	
<hr/>								
10.008	10.007 (1.002)	202	5053 0.10000	0.10	80.00-	120.00	100.00	
10.008	10.007 (1.002)	101	711		0.00-	43.17	14.07	
<hr/>								
10.233	10.233 (1.024)	202	5771 0.10000	0.11	80.00-	120.00	100.00	
10.233	10.227 (1.024)	101	881		0.00-	44.81	15.27	
<hr/>								
11.400	11.401 (1.141)	226	1290 0.10000	0.093	80.00-	120.00	100.00	
11.400	11.397 (1.141)	200	166		0.00-	42.98	12.87	
<hr/>								
11.439	11.436 (1.145)	226	1444 0.10000	0.10	80.00-	120.00	100.00	
11.435	11.436 (1.145)	200	180		0.00-	42.59	12.47	
<hr/>								
12.390	12.390 (1.240)	252	4987 0.10000	0.019	80.00-	120.00	100.00	
12.390	12.385 (1.240)	250	1215		0.00-	53.98	24.36	
<hr/>								
12.412	12.412 (1.242)	252	5830 0.10000	0.11	80.00-	120.00	100.00	
12.412	12.412 (1.242)	250	1358		0.00-	52.08	23.29	
<hr/>								
12.619	12.615 (1.263)	264	4945 0.10000	0.10	80.00-	120.00	100.00	
12.614	12.615 (1.263)	132	920		0.00-	47.49	18.60	
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12.689	12.690 (1.270)	252	4999 0.10000	0.11	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.689	12.685	(1.270)	250	1187		0.00-	54.02	23.74

13.826	13.821	(1.384)	276	5138	0.10000	0.097	80.00-	120.00
13.826	13.821	(1.384)	138	1466		0.44-	60.44	28.53

13.830	13.830	(1.384)	278	4315	0.10000	80.00-	120.00	100.00
13.826	13.821	(1.384)	138	1548		6.81-	66.81	35.87

14.133	14.132	(1.414)	276	4422	0.10000	0.10	80.00-	120.00
14.133	14.132	(1.414)	138	1118		0.00-	55.67	25.28

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Date : 20-NOV-2012 19:02

Client ID: SSICAL3

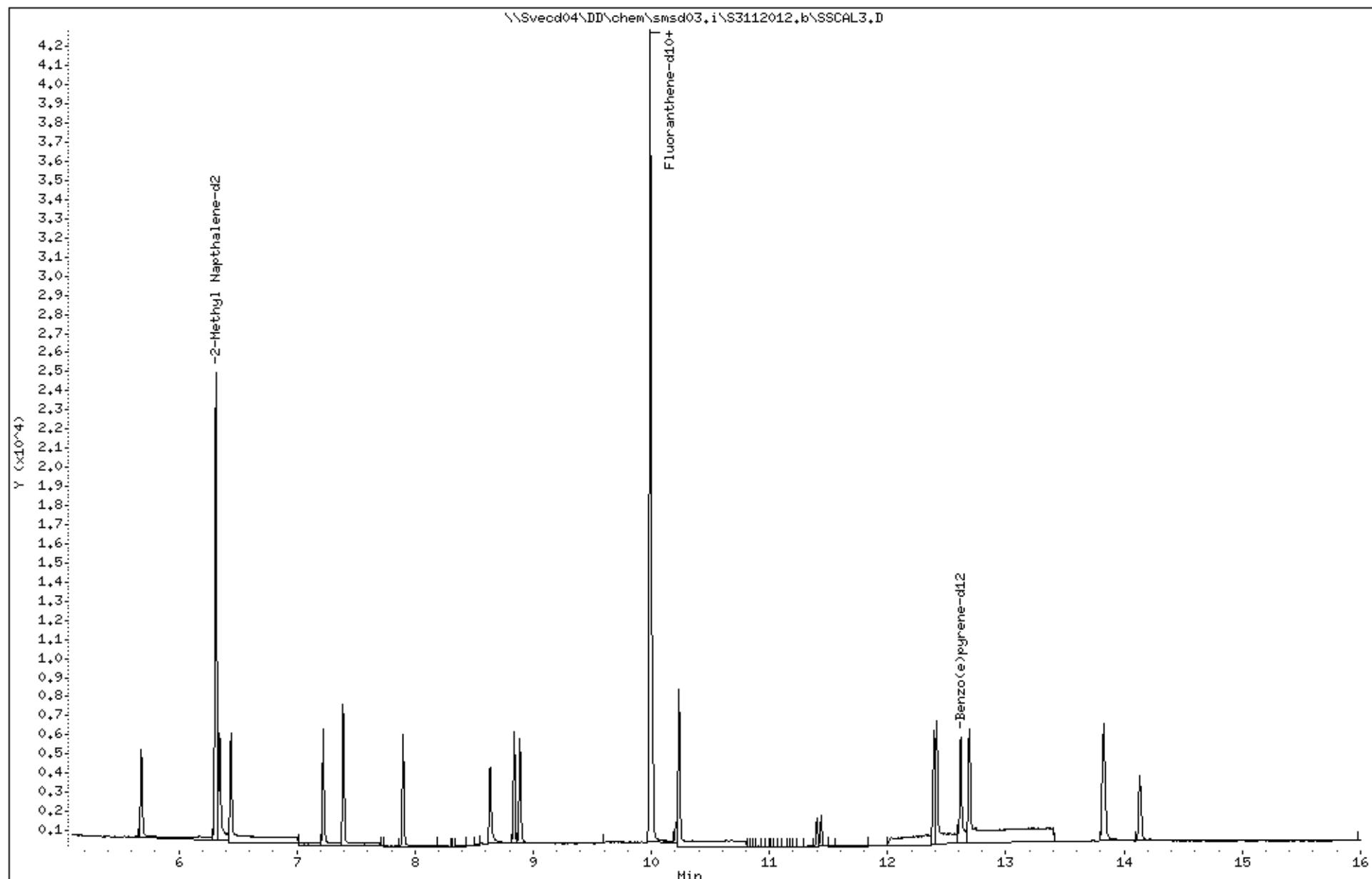
Sample Info: 47786

Column phase: HPMS-5

Instrument: smsd03.i

Operator: MJ

Column diameter: 0.25



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SSCAL2.D
Lab Smp Id: 47787 Client Smp ID: SSCL2
Inj Date : 20-NOV-2012 19:26 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : 47787
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SS8270.m
Meth Date : 29-Nov-2012 16:25 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:26 Cal File: SSCL2.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO
				CAL-AMT	ON-COL		
<hr/>							
5.684	5.683 (0.900)	128	2455 0.05000	0.053	80.00- 120.00	100.00	
5.684	5.683 (0.900)	129	250		0.00- 40.88	10.18	
<hr/>							
*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.317	6.317 (1.000)	152	22889 0.80000		80.00- 120.00	100.00	
6.312	6.311 (1.000)	122	7256		2.00- 62.00	31.70	
<hr/>							
6.345	6.345 (1.004)	142	1671 0.05000	0.053	80.00- 120.00	100.00	
6.345	6.345 (1.004)	141	1423		54.36- 114.36	85.16	
<hr/>							
6.445	6.445 (1.020)	142	1513 0.05000	0.051	80.00- 120.00	100.00	
6.445	6.445 (1.020)	141	1326		56.64- 116.64	87.64	
<hr/>							
7.223	7.224 (1.143)	152	2478 0.05000	0.053	80.00- 120.00	100.00	
7.223	7.220 (1.143)	151	456		0.00- 48.91	18.40	
<hr/>							
7.395	7.392 (1.171)	153	1536 0.05000	0.053	80.00- 120.00	100.00	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.390	7.392 (1.170)	152	753			17.33-	77.33	49.02
<hr/>								
6 Acenaphthene (continued)								
7.900	7.896 (1.251)	166	1654 0.05000	0.049	80.00-	120.00	100.00	
7.897	7.896 (1.250)	165	1542		63.04-	123.04	93.23	
<hr/>								
8 Pentachlorophenol								
8.639	8.634 (0.865)	266	1169 1.00000	0.51	80.00-	120.00	100.00(A)	
8.639	8.634 (0.865)	264	704		33.02-	93.02	60.22	
<hr/>								
9 Phenanthrene								
8.839	8.839 (0.885)	178	2411 0.05000	0.054	80.00-	120.00	100.00	
8.839	8.839 (0.885)	179	345		0.00-	45.27	14.31	
<hr/>								
10 Anthracene								
8.887	8.888 (0.889)	178	2290 0.05000	0.052	80.00-	120.00	100.00	
8.887	8.888 (0.889)	179	326		0.00-	45.00	14.24	
<hr/>								
* 11 Fluoranthene-d10								
9.992	9.991 (1.000)	212	33752 0.80000		80.00-	120.00	100.00	
9.986	9.985 (1.000)	106	5340		0.00-	45.92	15.82	
<hr/>								
12 Fluoranthene								
10.008	10.007 (1.002)	202	2672 0.05000	0.054	80.00-	120.00	100.00	
10.008	10.007 (1.002)	101	397		0.00-	43.17	14.86	
<hr/>								
13 Pyrene								
10.233	10.233 (1.024)	202	2798 0.05000	0.052	80.00-	120.00	100.00	
10.228	10.227 (1.024)	101	352		0.00-	44.81	12.58	
<hr/>								
14 Benzo[a]anthracene								
11.400	11.401 (1.141)	226	689 0.05000	0.043	80.00-	120.00	100.00	
11.400	11.397 (1.141)	200	100		0.00-	42.98	14.51	
<hr/>								
15 Chrysene								
11.439	11.436 (1.145)	226	760 0.05000	0.055	80.00-	120.00	100.00	
11.435	11.436 (1.144)	200	90		0.00-	42.59	11.84	
<hr/>								
16 Benzo[b]fluoranthene								
12.390	12.390 (1.240)	252	2450 0.05000		80.00-	120.00	100.00	
12.390	12.385 (1.240)	250	583		0.00-	53.98	23.80	
<hr/>								
17 Benzo[k]fluoranthene								
12.412	12.412 (1.242)	252	3500 0.05000	0.065	80.00-	120.00	100.00	
12.412	12.412 (1.242)	250	592		0.00-	52.08	16.91	
<hr/>								
\$ 18 Benzo(e)pyrene-d12								
12.619	12.615 (1.263)	264	2561 0.05000	0.054	80.00-	120.00	100.00	
12.615	12.615 (1.262)	132	446		0.00-	47.49	17.42	
<hr/>								
19 Benzo[a]pyrene								
12.690	12.690 (1.270)	252	2285 0.05000	0.052	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.685	12.685 (1.270)	250	587		0.00-	54.02	25.69	

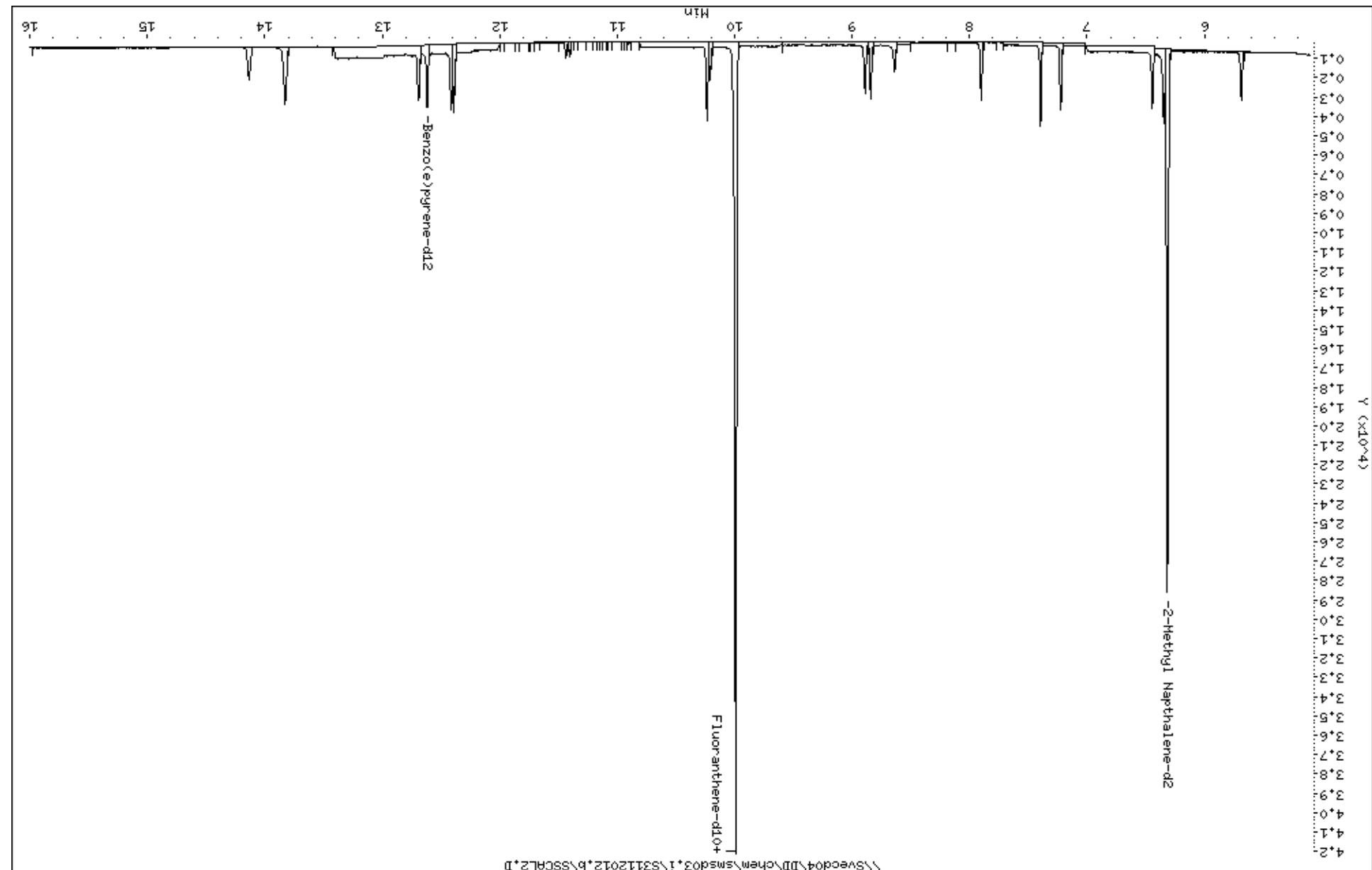
20	Indeno[1,2,3-cd]pyrene				CAS #:	193-39-5		
13.821	13.821 (1.383)	276	2510 0.05000	0.048	80.00-	120.00	100.00	
13.826	13.821 (1.384)	138	728		0.44-	60.44	29.00	

21	Dibenz[a,h]anthracene				CAS #:	53-70-3		
13.830	13.830 (1.384)	278	2051 0.05000		80.00-	120.00	100.00	
13.826	13.821 (1.384)	138	689		6.81-	66.81	33.59	

22	Benzo[g,h,i]perylene				CAS #:	191-24-2		
14.133	14.132 (1.414)	276	2271 0.05000	0.052	80.00-	120.00	100.00	
14.133	14.132 (1.414)	138	529		0.00-	55.67	23.29	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SSCAL1.D
Lab Smp Id: 47788 Client Smp ID: SSCL1
Inj Date : 20-NOV-2012 19:50 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : 47788
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SS8270.m
Meth Date : 29-Nov-2012 16:25 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCL1.D
Als bottle: 6 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	TARGET RANGE
5.683	5.683 (0.900)	128	1010	0.02000	0.023	80.00- 120.00	100.00
5.688	5.683 (0.901)	129	118			0.00- 40.88	11.68

* 1 Naphthalene							
6.316	6.317 (1.000)	152	22131	0.80000	80.00-	120.00	100.00
6.311	6.311 (1.000)	122	7034		2.00-	62.00	31.78

* 3 2-Methyl Naphthalene-d2							
6.350	6.345 (1.005)	142	684	0.02000	0.022	80.00- 120.00	100.00
6.344	6.345 (1.004)	141	531		54.36-	114.36	77.63

* 4 1-Methyl Naphthalene							
6.444	6.445 (1.020)	142	670	0.02000	0.023	80.00- 120.00	100.00
6.444	6.445 (1.020)	141	563		56.64-	116.64	84.03

* 5 Acenaphthylene							
7.224	7.224 (1.144)	152	1035	0.02000	0.023	80.00- 120.00	100.00
7.224	7.220 (1.144)	151	192		0.00-	48.91	18.55

* 6 Acenaphthene							
7.396	7.392 (1.171)	153	632	0.02000	0.022	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.391	7.392 (1.170)	152	308			17.33-	77.33	48.73
<hr/>								
6 Acenaphthene (continued)								
7.900	7.896 (1.251)	166	743 0.02000	0.023	80.00-	120.00	100.00	
7.896	7.896 (1.250)	165	667		63.04-	123.04	89.77	
<hr/>								
7 Fluorene								
8.640	8.634 (0.865)	266	791 0.70000	0.32	80.00-	120.00	100.00(A)	
8.640	8.634 (0.865)	264	489		33.02-	93.02	61.82	
<hr/>								
8 Pentachlorophenol								
8.840	8.839 (0.885)	178	1149 0.02000	0.024	80.00-	120.00	100.00	
8.840	8.839 (0.885)	179	172		0.00-	45.27	14.97	
<hr/>								
9 Phenanthrene								
8.888	8.888 (0.890)	178	1036 0.02000	0.022	80.00-	120.00	100.00	
8.888	8.888 (0.890)	179	148		0.00-	45.00	14.29	
<hr/>								
* 11 Fluoranthene-d10								
9.991	9.991 (1.000)	212	35660 0.80000		80.00-	120.00	100.00	
9.991	9.985 (1.000)	106	5615		0.00-	45.92	15.75	
<hr/>								
12 Fluoranthene								
10.008	10.007 (1.002)	202	1203 0.02000	0.023	80.00-	120.00	100.00	
10.008	10.007 (1.002)	101	205		0.00-	43.17	17.04	
<hr/>								
13 Pyrene								
10.233	10.233 (1.024)	202	1318 0.02000	0.023	80.00-	120.00	100.00	
10.233	10.227 (1.024)	101	162		0.00-	44.81	12.29	
<hr/>								
14 Benzo[a]anthracene								
11.401	11.401 (1.141)	226	285 0.02000	0.0071	80.00-	120.00	100.00	
11.401	11.397 (1.141)	200	36		0.00-	42.98	12.63	
<hr/>								
15 Chrysene								
11.436	11.436 (1.145)	226	324 0.02000	0.022	80.00-	120.00	100.00	
11.436	11.436 (1.145)	200	42		0.00-	42.59	12.96	
<hr/>								
16 Benzo[b]fluoranthene								
12.389	12.390 (1.240)	252	1210 0.02000		80.00-	120.00	100.00	
12.389	12.385 (1.240)	250	299		0.00-	53.98	24.71	
<hr/>								
17 Benzo[k]fluoranthene								
12.411	12.412 (1.242)	252	1287 0.02000	0.022	80.00-	120.00	100.00(M)	
12.389	12.412 (1.240)	250	267		0.00-	52.08	20.75	
<hr/>								
\$ 18 Benzo(e)pyrene-d12								
12.619	12.615 (1.263)	264	1147 0.02000	0.023	80.00-	120.00	100.00	
12.614	12.615 (1.263)	132	177		0.00-	47.49	15.43	
<hr/>								
19 Benzo[a]pyrene								
12.689	12.690 (1.270)	252	1091 0.02000	0.023	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.689	12.685 (1.270)		250	255		0.00-	54.02	23.37
-----	-----	-----	-----	-----	-----	-----	-----	-----
20	Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5			
13.825	13.821 (1.384)		276	1328 0.02000	0.024	80.00-	120.00	100.00
13.825	13.821 (1.384)		138	407	0.44-	60.44		30.65
-----	-----	-----	-----	-----	-----	-----	-----	-----
21	Dibenz[a,h]anthracene				CAS #: 53-70-3			
13.830	13.830 (1.384)		278	1125 0.02000	80.00-	120.00		100.00
13.825	13.821 (1.384)		138	407	6.81-	66.81		36.18
-----	-----	-----	-----	-----	-----	-----	-----	-----
22	Benzo[g,h,i]perylene				CAS #: 191-24-2			
14.132	14.132 (1.414)		276	1046 0.02000	0.023	80.00-	120.00	100.00
14.128	14.132 (1.414)		138	283	0.00-	55.67		27.06
-----	-----	-----	-----	-----	-----	-----	-----	-----

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd03.i\S3112012.b\SSCAL1.D

Page 4

Date : 20-NOV-2012 19:50

Client ID: SSCLAL1

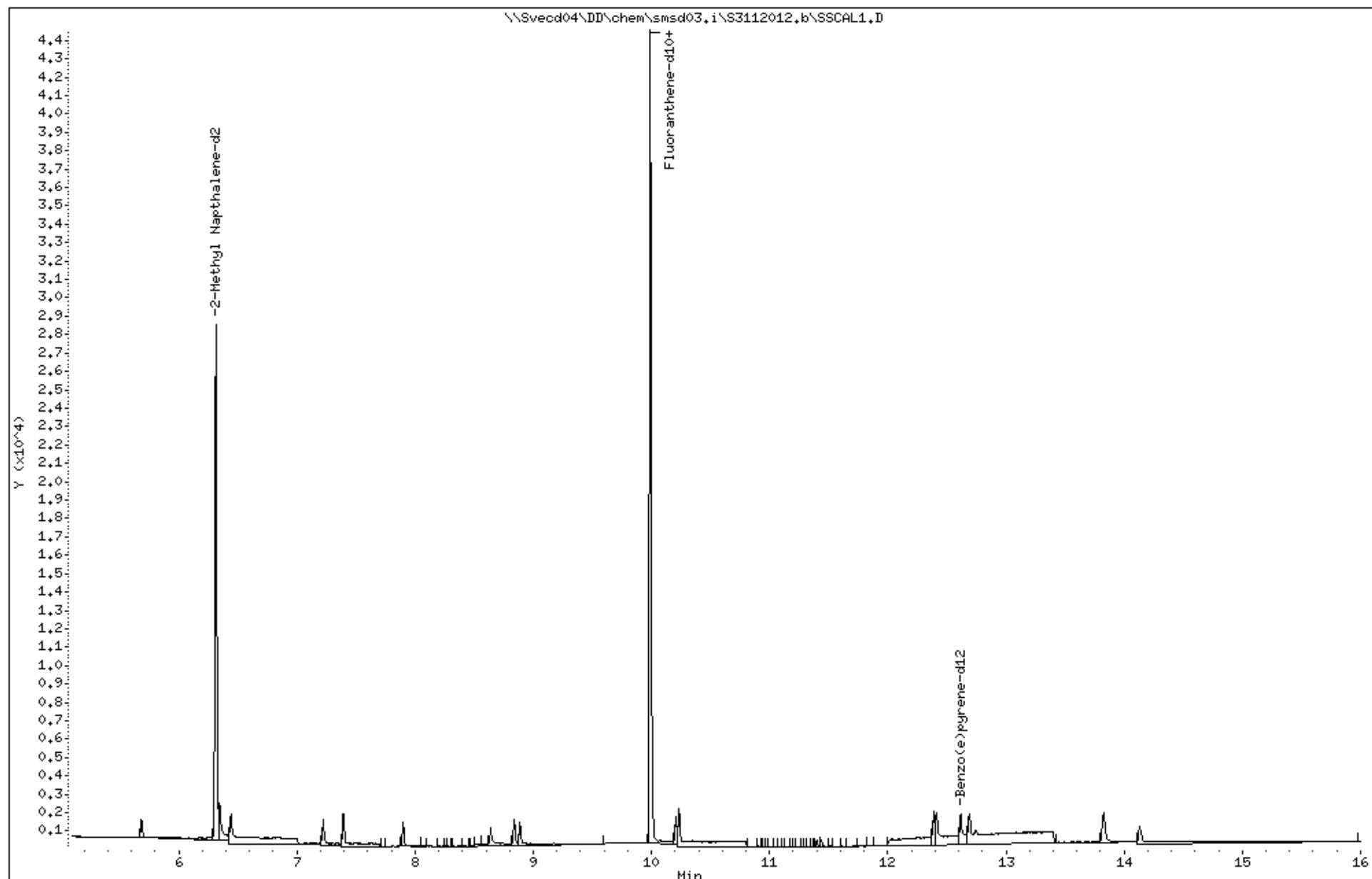
Sample Info: 47788

Column phase: HPMS-5

Instrument: smsd03,i

Operator: MJ

Column diameter: 0.25



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SSSEC.D
Lab Smp Id: 47789 Client Smp ID: SSSEC
Inj Date : 20-NOV-2012 20:13 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : 47789
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112012.b\SS8270.m
Meth Date : 29-Nov-2012 16:25 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

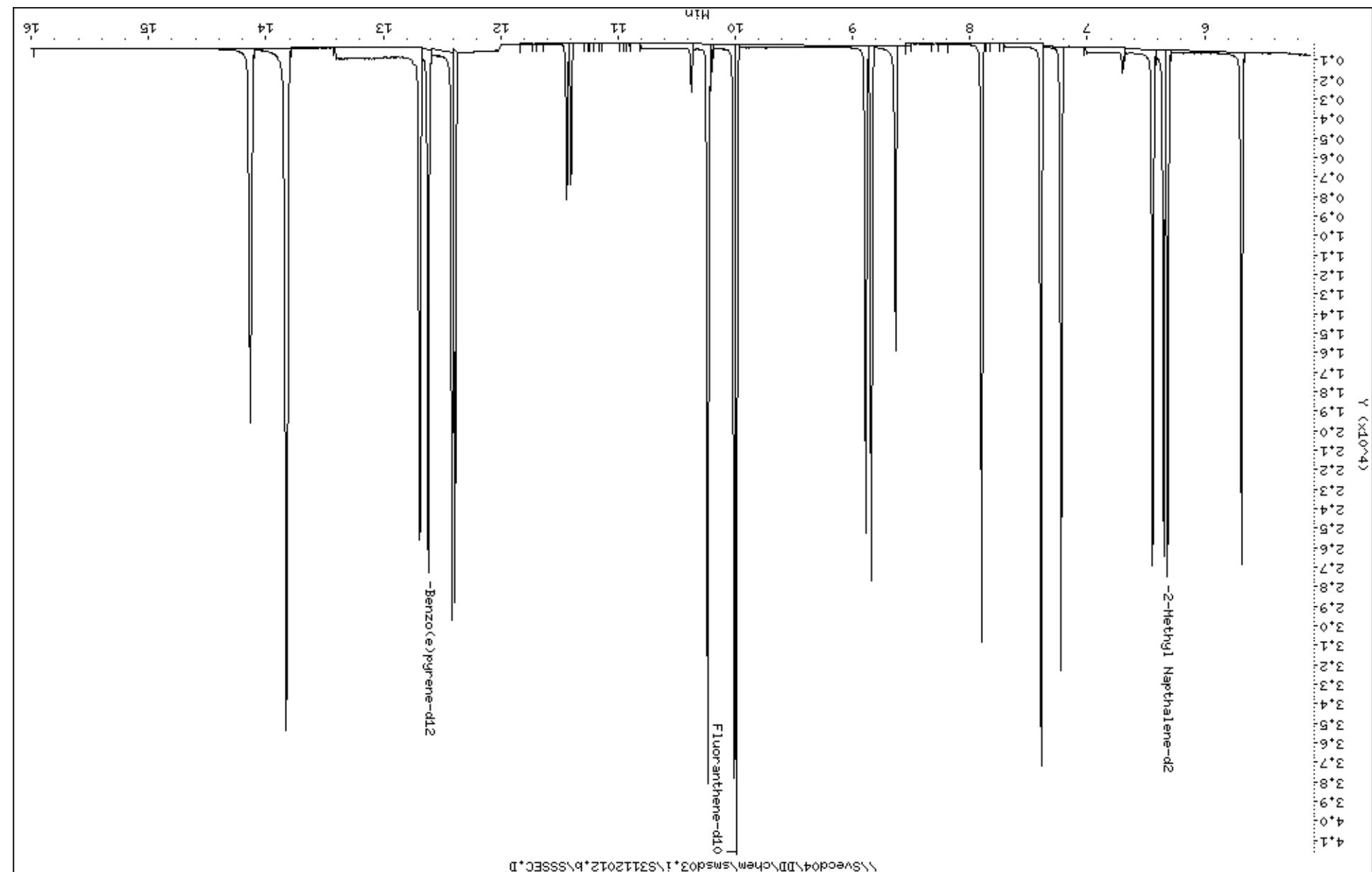
RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO
				CAL-AMT	ON-COL		
<hr/>							
5.683	5.683 (0.900)	128	23335 0.50000	0.54	80.00- 120.00	100.00	
5.683	5.683 (0.900)	129	2540		0.00- 40.88	10.88	
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*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.317	6.317 (1.000)	152	21262 0.80000		80.00- 120.00	100.00	
6.311	6.311 (1.000)	122	6803		2.00- 62.00	32.00	
<hr/>							
6.345	6.345 (1.004)	142	13910 0.50000	0.48	80.00- 120.00	100.00	
6.345	6.345 (1.004)	141	11735		54.36- 114.36	84.36	
<hr/>							
6.445	6.445 (1.020)	142	14399 0.50000	0.52	80.00- 120.00	100.00	
6.445	6.445 (1.020)	141	12475		56.64- 116.64	86.64	
<hr/>							
7.224	7.224 (1.144)	152	24093 0.50000	0.55	80.00- 120.00	100.00	
7.220	7.220 (1.143)	151	4555		0.00- 48.91	18.91	
<hr/>							
7.392	7.392 (1.170)	153	13910 0.50000	0.51	80.00- 120.00	100.00	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	CAL-AMT	ON-COL
				RESPONSE	(ug/ml)				
7.392	7.392 (1.170)	152	6584			17.33-	77.33	47.33	
<hr/>									
6 Acenaphthene (continued)									
7.896	7.896 (1.250)	166	15551	0.50000	0.50	80.00-	120.00	100.00	
7.896	7.896 (1.250)	165	14468		63.04-	123.04		93.04	
<hr/>									
7 Fluorene									
8.634	8.634 (0.864)	266	10150	5.00000	4.5	80.00-	120.00	100.00(A)	
8.634	8.634 (0.864)	264	6397		33.02-	93.02		63.02	
<hr/>									
8 Pentachlorophenol									
8.839	8.839 (0.885)	178	23494	0.50000	0.54	80.00-	120.00	100.00	
8.839	8.839 (0.885)	179	3588		0.00-	45.27		15.27	
<hr/>									
9 Phenanthrene									
8.888	8.888 (0.890)	178	20735	0.50000	0.49	80.00-	120.00	100.00	
8.888	8.888 (0.890)	179	3111		0.00-	45.00		15.00	
<hr/>									
* 11 Fluoranthene-d10									
9.991	9.991 (1.000)	212	32823	0.80000	80.00-	120.00		100.00	
9.985	9.985 (1.000)	106	5225		0.00-	45.92		15.92	
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12 Fluoranthene									
10.007	10.007 (1.002)	202	25832	0.50000	0.54	80.00-	120.00	100.00	
10.007	10.007 (1.002)	101	3403		0.00-	43.17		13.17	
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13 Pyrene									
10.233	10.233 (1.024)	202	26943	0.50000	0.52	80.00-	120.00	100.00	
10.227	10.227 (1.024)	101	3991		0.00-	44.81		14.81	
<hr/>									
14 Benzo[a]anthracene									
11.401	11.401 (1.141)	226	6173	0.50000	0.52	80.00-	120.00	100.00	
11.397	11.397 (1.141)	200	801		0.00-	42.98		12.98	
<hr/>									
15 Chrysene									
11.436	11.436 (1.145)	226	6982	0.50000	0.52	80.00-	120.00	100.00	
11.436	11.436 (1.145)	200	879		0.00-	42.59		12.59	
<hr/>									
16 Benzo[b]fluoranthene									
12.390	12.390 (1.240)	252	23555	0.50000	0.53	80.00-	120.00	100.00	
12.385	12.385 (1.240)	250	5648		0.00-	53.98		23.98	
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17 Benzo[k]fluoranthene									
12.412	12.412 (1.242)	252	27877	0.50000	0.53	80.00-	120.00	100.00	
12.412	12.412 (1.242)	250	6155		0.00-	52.08		22.08	
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\$ 18 Benzo(e)pyrene-d12									
12.615	12.615 (1.263)	264	24847	0.50000	0.54	80.00-	120.00	100.00	
12.615	12.615 (1.263)	132	4345		0.00-	47.49		17.49	
<hr/>									
19 Benzo[a]pyrene									
12.690	12.690 (1.270)	252	22958	0.50000	0.53	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.685	12.685 (1.270)	250	5515		0.00-	54.02	24.02	
13.821	13.821 (1.383)	276	27894 0.50000	0.55	80.00-	120.00	100.00	
13.821	13.821 (1.383)	138	8492		0.44-	60.44	30.44	
13.830	13.830 (1.384)	278	23108 0.50000	0.53	80.00-	120.00	100.00	
13.821	13.821 (1.383)	138	8506		6.81-	66.81	36.81	
14.132	14.132 (1.414)	276	24083 0.50000	0.57	80.00-	120.00	100.00	
14.132	14.132 (1.414)	138	6181		0.00-	55.67	25.67	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.



Data File: \\Sweden4\\DD\\chem\\msd03\\1\\3112012\\MSSEC.D
Date : 20-NOV-2012 20:13
Client ID: MSSEC
Sample Info: 47789
Instrument: msd03.i
Operator: HJ
Column diameter: 0.25
Column phase: HP-5
\\Sweden4\\DD\\chem\\msd03\\1\\3112012\\MSSEC.D

Data File: \\Svecd04\DD\chem\smsd03.i\S3112112.b\DFTPP2.D
Report Date: 30-Nov-2012 09:45

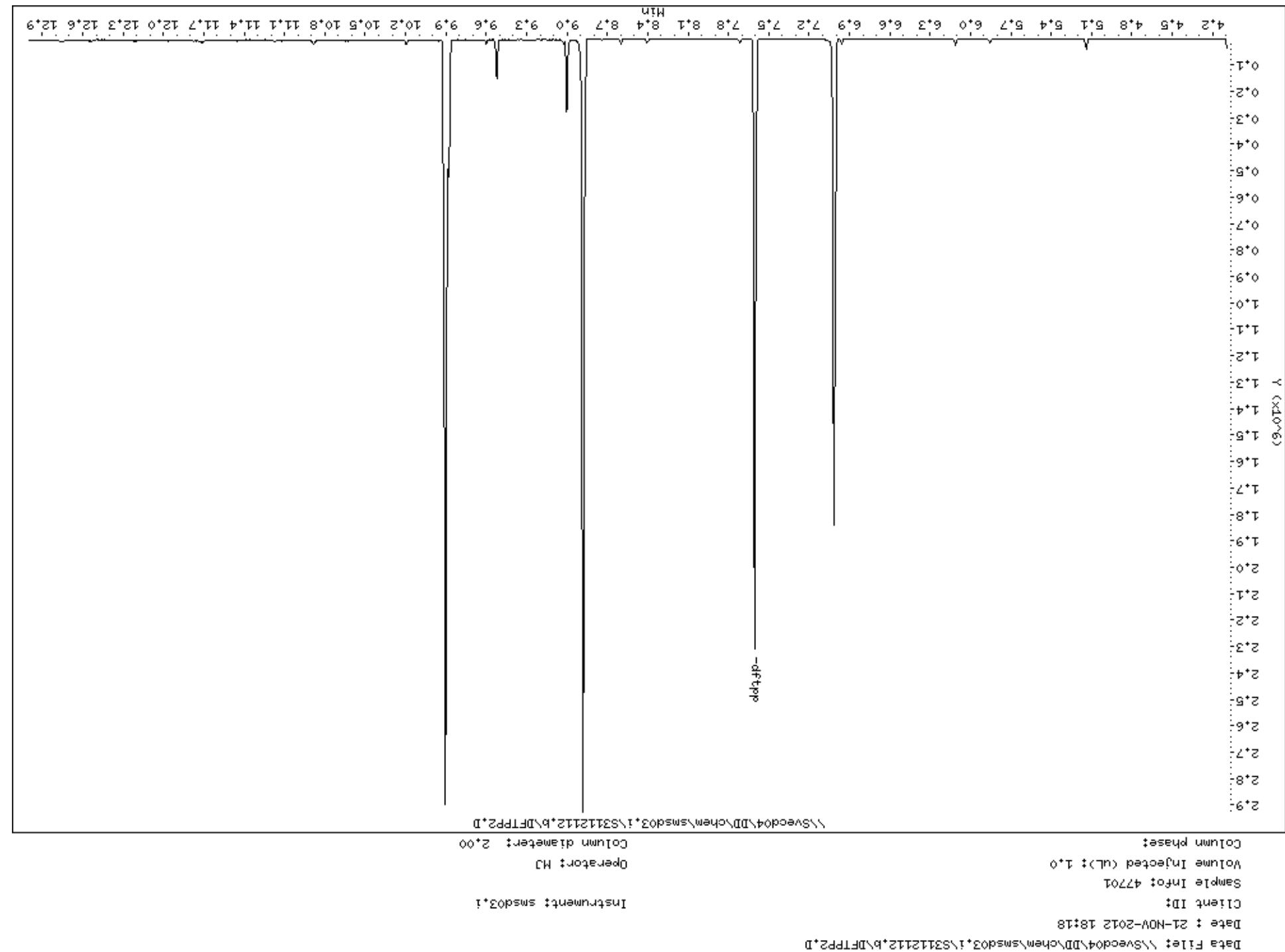
PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\DFTPP2.D
Lab Smp Id:
Inj Date : 21-NOV-2012 18:18
Operator : MJ Inst ID: smsd03.i
Smp Info : 47701
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\DoDTUN.m
Meth Date : 14-Sep-2012 08:05 mjacobs Quant Type: ISTD
Cal Date : 23-MAR-2009 02:58 Cal File: AP9CAL1.D
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: WETCHEMDX500

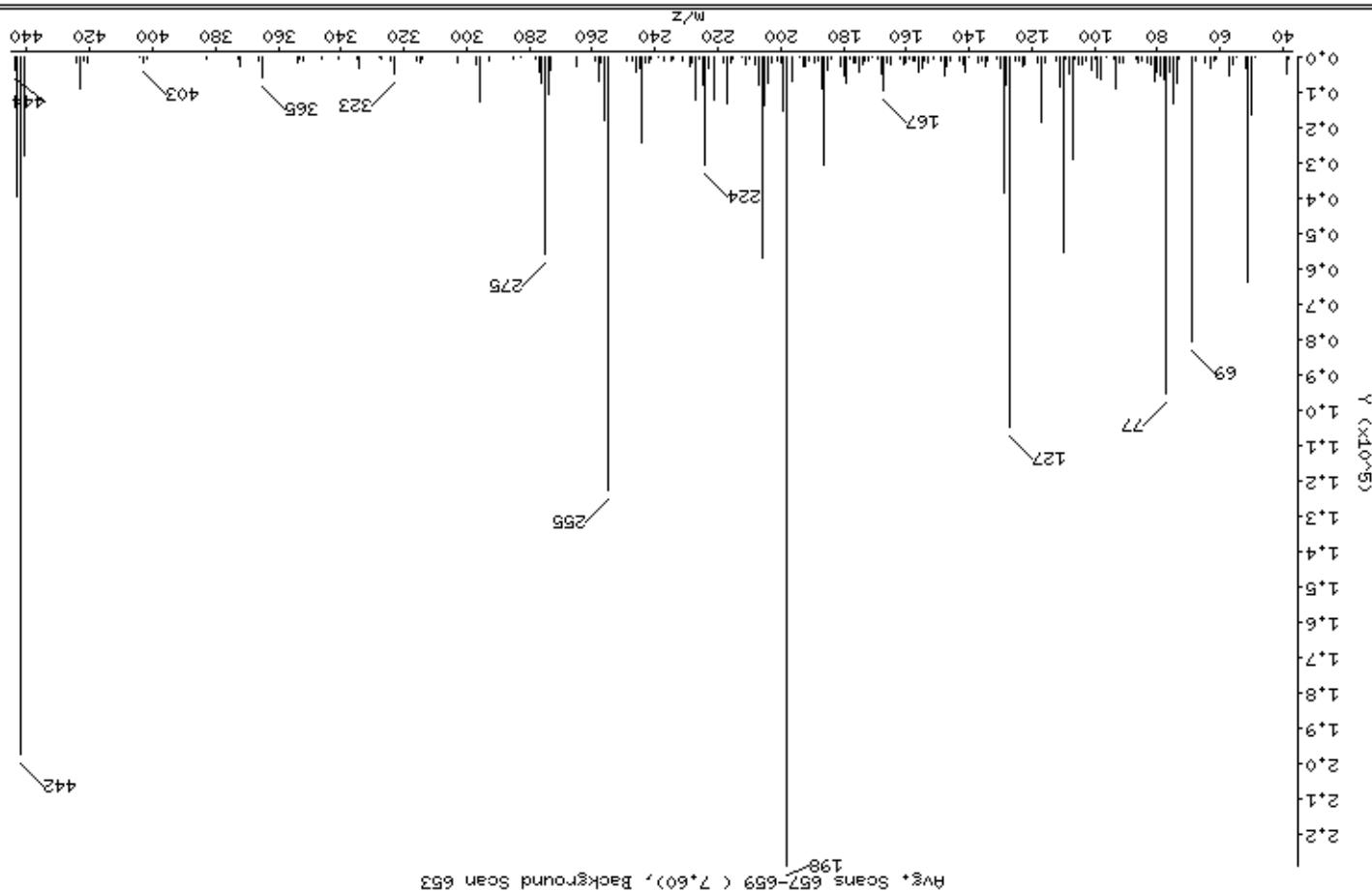
Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
7.603	7.713 (0.000)	198	228992		0.00-	100.00	100.00
7.603	7.713 (0.000)	51	63568		10.00-	80.00	27.76
7.603	7.713 (0.000)	68	1147		0.00-	2.00	1.42
7.603	7.713 (0.000)	69	80504		0.00-	0.00	35.16
7.603	7.713 (0.000)	70	0	0.0	0.00-	2.00	0.00
7.603	7.713 (0.000)	127	104808		10.00-	80.00	45.77
7.603	7.713 (0.000)	197	0	0.0	0.00-	2.00	0.00
7.603	7.713 (0.000)	199	15486		5.00-	9.00	6.76
7.603	7.713 (0.000)	275	56056		10.00-	60.00	24.48
7.603	7.713 (0.000)	365	5850		1.00-	0.00	2.55
7.603	7.713 (0.000)	441	28016		0.01-	24.00	14.19
7.603	7.713 (0.000)	442	197376		50.00-	0.00	86.19
7.603	7.713 (0.000)	443	39528		15.00-	24.00	20.03
<hr/>							



M/z/e	% RELATIVE ABUNDANCE	ION ABUNDANCE CRITERIA	ABUNDANCE
198	100.00	Base Peak, 100% relative abundance	
51	10.00 - 80.00%	Less than 2.00% of mass 198	100.00
68	10.00 - 80.00%	Less than 2.00% of mass 69	27.76
69	10.00 - 80.00%	Mass 69 relative abundance	0.50 (1.42)
70	10.00 - 80.00%	Less than 2.00% of mass 69	35.16
127	10.00 - 80.00%	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00%	Less than 2.00% of mass 198	45.77
139	10.00 - 80.00%	Less than 2.00% of mass 198	0.00
199	10.00 - 80.00%	Less than 2.00% of mass 198	6.76
275	10.00 - 80.00%	Less than 2.00% of mass 198	24.48
365	10.00 - 80.00%	Greater than 50.00% of mass 198	2.55
441	0.01 - 24.00%	Greater than 50.00% of mass 442	12.23 (14.19)
442	0.01 - 24.00%	Greater than 50.00% of mass 198	86.19
443	15.00 - 24.00%	Greater than 50.00% of mass 442	17.26 (20.03)



```
Dataset : 21-NOV-2012_18:18  
Data File: \\\Server04\U1\Chem\msd3\1\211212\6\DP1PP2.D  
Client ID: msd3\1  
Instrument: msd3\1  
Sample Info: 47701  
Volume Injected (uL): 1.0  
Dilution: 10  
Column diameter: 2.00  
Column phase: d4ffpp  
Detector: MS
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Data File: \\\\$vedad04\DD\chem\msd03\1\33112112.b\DFTP2.D																																																			
Client ID:	Instrument:	msd03.i	Number of Points:	196	Location of Maximum:	198.00																																													
Date : 21-NOV-2012 18:18	Sample Info:	47701	Column Phaset:	2.00	Column diameter:	2.00																																													
VOLUME INJECTED (UL): 1.0	OPERATOR:	MSD	Volume Injected (UL):	1.0	Operator:	MSD																																													
INSTRUMENT:	MSD03.I	INSTRUMENT:	msd03.i	INSTRUMENT:	msd03.i	INSTRUMENT:	msd03.i																																												
DATA FILE:	\\\$vedad04\DD\chem\msd03\1\33112112.b\DFTP2.D	DATA FILE:	\\\$vedad04\DD\chem\msd03\1\33112112.b\DFTP2.D	DATA FILE:	\\\$vedad04\DD\chem\msd03\1\33112112.b\DFTP2.D	DATA FILE:	\\\$vedad04\DD\chem\msd03\1\33112112.b\DFTP2.D																																												
+	+	+	+	+	+	+																																													
1 38.00 627 1 118.00 1436 1 185.00 3782 1 257.00 1463 1	1 39.00 4501 1 122.00 1859 1 186.00 30576 1 258.00 6627 1	1 49.00 226 1 123.00 2827 1 187.00 8709 1 259.00 1041 1	1 50.00 16061 1 124.00 1221 1 188.00 954 1 265.00 2520 1	1 51.00 63568 1 125.00 1256 1 189.00 1676 1 273.00 3743 1	1 52.00 3103 1 127.00 104808 1 194.00 1036 1 274.00 10630 1	1 53.00 224 1 128.00 7722 1 192.00 2490 1 275.00 56056 1	1 54.00 2127 1 129.00 38296 1 193.00 2534 1 276.00 7166 1	1 55.00 5369 1 130.00 3409 1 194.00 223 1 277.00 4210 1	1 56.00 62 1 131.00 1147 1 137.00 1682 1 201.00 1119 1 296.00 12873 1	1 57.00 68.00 1796 1 136.00 1168 1 200.00 1265 1 293.00 1057 1	1 58.00 63.00 3030 1 135.00 2874 1 199.00 15486 1 285.00 704 1	1 59.00 62.00 1063 1 134.00 1072 1 198.00 228992 1 283.00 230 1	1 60.00 504 1 141.00 4419 1 204.00 7437 1 303.00 1752 1	1 61.00 616 1 134.00 272 1 196.00 7074 1 278.00 542 1	1 62.00 62.00 1147 1 137.00 1682 1 201.00 1119 1 296.00 12873 1	1 63.00 62.00 3030 1 135.00 2874 1 199.00 15486 1 285.00 704 1	1 64.00 62.00 1063 1 134.00 1072 1 198.00 228992 1 283.00 230 1	1 65.00 504 1 141.00 4419 1 204.00 7437 1 303.00 1752 1	1 66.00 80504 1 140.00 242 1 203.00 1798 1 297.00 1914 1	1 67.00 77.00 95256 1 147.00 2675 1 208.00 1995 1 323.00 4768 1	1 68.00 76.00 4375 1 146.00 867 1 207.00 7831 1 316.00 959 1	1 69.00 75.00 12977 1 143.00 1228 1 206.00 56720 1 315.00 1544 1	1 70.00 74.00 7421 1 142.00 1896 1 205.00 13618 1 314.00 511 1	1 71.00 74.00 5453 1 149.00 1117 1 211.00 2147 1 327.00 780 1	1 72.00 73.00 6250 1 148.00 5247 1 210.00 700 1 324.00 819 1	1 73.00 73.00 504 1 141.00 4419 1 204.00 7437 1 303.00 1752 1	1 74.00 74.00 7421 1 142.00 1896 1 205.00 13618 1 314.00 511 1	1 75.00 75.00 12977 1 143.00 1228 1 206.00 56720 1 315.00 1544 1	1 76.00 76.00 4375 1 146.00 867 1 207.00 7831 1 316.00 959 1	1 77.00 77.00 95256 1 147.00 2675 1 208.00 1995 1 323.00 4768 1	1 78.00 78.00 6250 1 148.00 5247 1 210.00 700 1 324.00 819 1	1 79.00 79.00 5453 1 149.00 1117 1 211.00 2147 1 327.00 780 1	1 80.00 80.00 4453 1 151.00 341 1 212.00 2147 1 327.00 780 1	1 81.00 81.00 6701 1 153.00 1457 1 215.00 475 1 334.00 3369 1	1 82.00 82.00 1856 1 154.00 1275 1 216.00 1343 1 335.00 640 1	1 83.00 83.00 1804 1 155.00 2952 1 217.00 13375 1 341.00 283 1	1 84.00 84.00 1088 1 156.00 4219 1 218.00 1741 1 346.00 746 1	1 85.00 85.00 1596 1 157.00 990 1 224.00 11986 1 352.00 1235 1	1 86.00 86.00 623 1 158.00 1043 1 225.00 3348 1 353.00 694 1	1 87.00 87.00 1596 1 162.00 362 1 227.00 12288 1 372.00 2560 1	1 88.00 88.00 8930 1 161.00 2332 1 226.00 643 1 366.00 899 1	1 89.00 89.00 1596 1 165.00 1972 1 228.00 1676 1 373.00 584 1	1 90.00 90.00 629 1 166.00 1656 1 229.00 2453 1 383.00 519 1	1 91.00 91.00 1454 1 169.00 325 1 224.00 30776 1 354.00 1444 1	1 92.00 92.00 1503 1 160.00 1435 1 225.00 7667 1 365.00 5850 1	1 93.00 93.00 8930 1 161.00 2332 1 226.00 643 1 366.00 899 1	1 94.00 94.00 1596 1 165.00 1972 1 228.00 1676 1 373.00 584 1	1 95.00 95.00 629 1 166.00 1656 1 229.00 2453 1 383.00 519 1	1 96.00 96.00 1454 1 169.00 325 1 224.00 30776 1 354.00 1444 1	1 97.00 97.00 1596 1 172.00 1043 1 225.00 3348 1 353.00 694 1	1 98.00 98.00 629 1 176.00 1656 1 229.00 2453 1 383.00 519 1

Data File: \ISV\ed04\DD\chem\msd03\IS3112112.b\DFTP2.D
 Client ID: Date : 21-NOV-2012 18:18
 Sample Info: 47701
 Instrument: msd03.i
 Operator: HS
 Volume Injected (uL): 1.0
 Column diameter: 2.00
 Number of points: 196
 Location of Maximum: 198.00
 Spectrum: Avg+ Scans 657-659 (7.60), Background Scan 653

m/z	y	m/z	y	m/z	y	m/z	y
99.00	5695	167.00	9680	1234.00	955	1402.00	721
100.00	506	168.00	4539	1234.00	309	1403.00	4374
101.00	3783	169.00	652	1235.00	1003	1404.00	236
102.00	1154	171.00	262	1237.00	968	1421.00	1382
103.00	2084	172.00	868	1239.00	240	1422.00	1100
104.00	2091	173.00	1130	1241.00	327	1423.00	8932
105.00	568	174.00	2126	1242.00	1562	1424.00	1718
106.00	28720	175.00	4141	1243.00	1679	1441.00	28016
107.00	4745	176.00	1584	1244.00	24368	1442.00	197376
108.00	533	177.00	1728	1245.00	3327	1443.00	39628
110.00	55400	178.00	495	1246.00	4196	1444.00	3780
111.00	8227	179.00	7195	1247.00	925	1445.00	+
112.00	957	180.00	5458	1249.00	868	1446.00	+
113.00	1499	181.00	2672	1256.00	122666	1447.00	+
114.00	1116	182.00	5458	1256.00	122666	1448.00	+
115.00	1117	184.00	354	1256.00	17920	1449.00	+

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/21/2012 18:58

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112112.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/30/2012 09:37

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112112.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/30/2012 09:45

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112112.b/DFTPP2.D

PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SSCCV2.D
Lab Smp Id: 47785 Client Smp ID: SSACCV2
Inj Date : 21-NOV-2012 19:01 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : 47785
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	RATIO
5.684	5.684 (0.900)	128	25844	0.50000	0.52	80.00- 120.00	100.00
5.684	5.684 (0.900)	129	2659		0.00-	40.29	10.29

*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.317	6.317 (1.000)	152	24524	0.80000	80.00-	120.00	100.00
6.312	6.312 (1.000)	122	7847		2.00-	62.00	32.00

3	2-Methylnaphthalene				CAS #: 91-57-6		
6.351	6.351 (1.005)	142	16293	0.50000	0.48	80.00- 120.00	100.00
6.345	6.345 (1.004)	141	13965		55.71-	115.71	85.71

4	1-Methylnaphthalene				CAS #: 90-12-0		
6.445	6.445 (1.020)	142	16122	0.50000	0.51	80.00- 120.00	100.00
6.445	6.445 (1.020)	141	14047		57.13-	117.13	87.13

5	Acenaphthylene				CAS #: 208-96-8		
7.223	7.223 (1.143)	152	26114	0.50000	0.52	80.00- 120.00	100.00
7.223	7.223 (1.143)	151	5011		0.00-	49.19	19.19

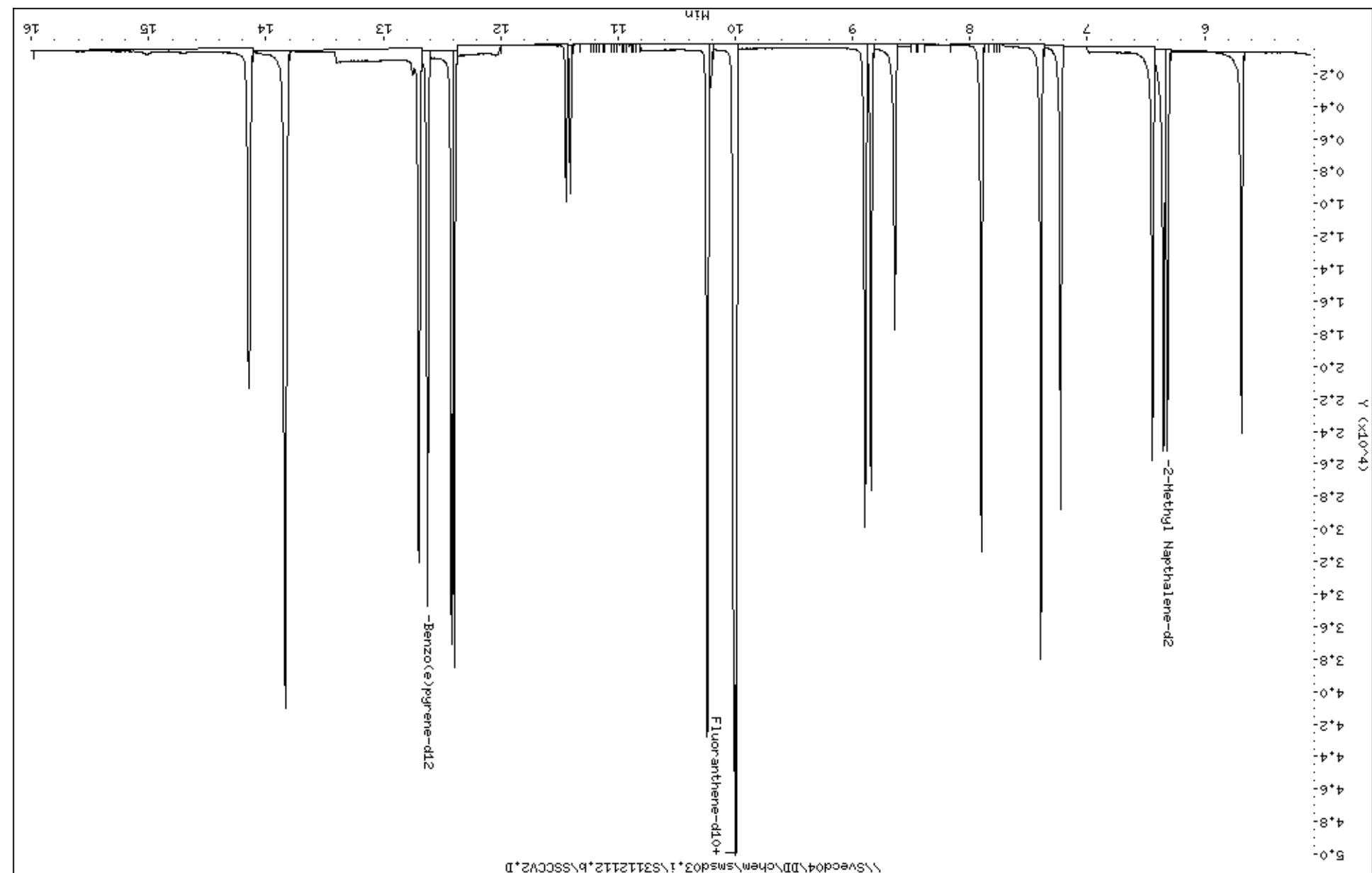
6	Acenaphthene				CAS #: 83-32-9		
7.395	7.395 (1.171)	153	15916	0.50000	0.51	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.395	7.395 (1.171)	152	7382			16.38-	76.38	46.38
<hr/>								
6 Acenaphthene (continued)								
7.900	7.900 (1.251)	166	19343 0.50000	0.54	80.00-	120.00	100.00	
7.900	7.900 (1.251)	165	18002		63.07-	123.07	93.07	
<hr/>								
7 Fluorene								
8.639	8.639 (0.864)	266	14687 5.00000	4.6	80.00-	120.00	100.00(A)	
8.639	8.639 (0.864)	264	9094		31.92-	91.92	61.92	
<hr/>								
8 Pentachlorophenol								
8.839	8.839 (0.884)	178	26685 0.50000	0.43	80.00-	120.00	100.00	
8.844	8.844 (0.885)	179	4036		0.00-	45.12	15.12	
<hr/>								
9 Phenanthrene								
8.893	8.893 (0.889)	178	29246 0.50000	0.48	80.00-	120.00	100.00	
8.893	8.893 (0.889)	179	4389		0.00-	45.01	15.01	
<hr/>								
* 11 Fluoranthene-d10								
9.998	9.998 (1.000)	212	46606 0.80000		80.00-	120.00	100.00	
9.992	9.992 (1.000)	106	7533		0.00-	46.16	16.16	
<hr/>								
12 Fluoranthene								
10.014	10.014 (1.002)	202	33376 0.50000	0.49	80.00-	120.00	100.00	
10.009	10.009 (1.001)	101	4478		0.00-	43.42	13.42	
<hr/>								
13 Pyrene								
10.240	10.240 (1.024)	202	34802 0.50000	0.47	80.00-	120.00	100.00	
10.234	10.234 (1.024)	101	5409		0.00-	45.54	15.54	
<hr/>								
14 Benzo[a]anthracene								
11.404	11.404 (1.141)	226	7919 0.50000	0.47	80.00-	120.00	100.00	
11.404	11.404 (1.141)	200	1053		0.00-	43.30	13.30	
<hr/>								
15 Chrysene								
11.443	11.443 (1.145)	226	8810 0.50000	0.46	80.00-	120.00	100.00	
11.439	11.439 (1.144)	200	1104		0.00-	42.53	12.53	
<hr/>								
16 Benzo[b]fluoranthene								
12.395	12.395 (1.240)	252	32314 0.50000	0.51	80.00-	120.00	100.00	
12.395	12.395 (1.240)	250	7019		0.00-	51.72	21.72	
<hr/>								
17 Benzo[k]fluoranthene								
12.417	12.417 (1.242)	252	33137 0.50000	0.44	80.00-	120.00	100.00	
12.417	12.417 (1.242)	250	8777		0.00-	56.49	26.49	
<hr/>								
\$ 18 Benzo(e)pyrene-d12								
12.624	12.624 (1.263)	264	31856 0.50000	0.49	80.00-	120.00	100.00	
12.620	12.620 (1.262)	132	5622		0.00-	47.65	17.65	
<hr/>								
19 Benzo[a]pyrene								
12.695	12.695 (1.270)	252	29369 0.50000	0.48	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.695	12.695	(1.270)	250	6979		0.00-	53.76	23.76
-----	-----	-----	-----	-----	-----	-----	-----	-----
20	Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5			
13.835	13.835	(1.384)	276	32239	0.50000	0.44	80.00-	120.00
13.831	13.831	(1.383)	138	9694		0.07-	60.07	30.07
-----	-----	-----	-----	-----	-----	-----	-----	-----
21	Dibenz[a,h]anthracene				CAS #: 53-70-3			
13.840	13.840	(1.384)	278	26112	0.50000	0.40	80.00-	120.00
13.831	13.831	(1.383)	138	9694		7.12-	67.12	37.12
-----	-----	-----	-----	-----	-----	-----	-----	-----
22	Benzo[g,h,i]perylene				CAS #: 191-24-2			
14.147	14.147	(1.415)	276	27429	0.50000	0.46	80.00-	120.00
14.142	14.142	(1.415)	138	6977		0.00-	55.44	25.44
-----	-----	-----	-----	-----	-----	-----	-----	-----

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.



Data File: \\S:\\vedo4\\DD\\chem\\msd03\\1\\S3112112\\SSCCV2.D
Date : 21-NOV-2012 19:01
Client ID: SSCCV2
Sample Info: 47785
Instrument: msd03.i
Operator: HJ
Column diameter: 0.25
Column phase: HPMS-5
Page 4

PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-01.D
Lab Smp Id: 350761601 Client Smp ID: CV0041A-CS
Inj Date : 21-NOV-2012 19:44 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761601
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.140	Weight of sample extracted (g)
M	20.900	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

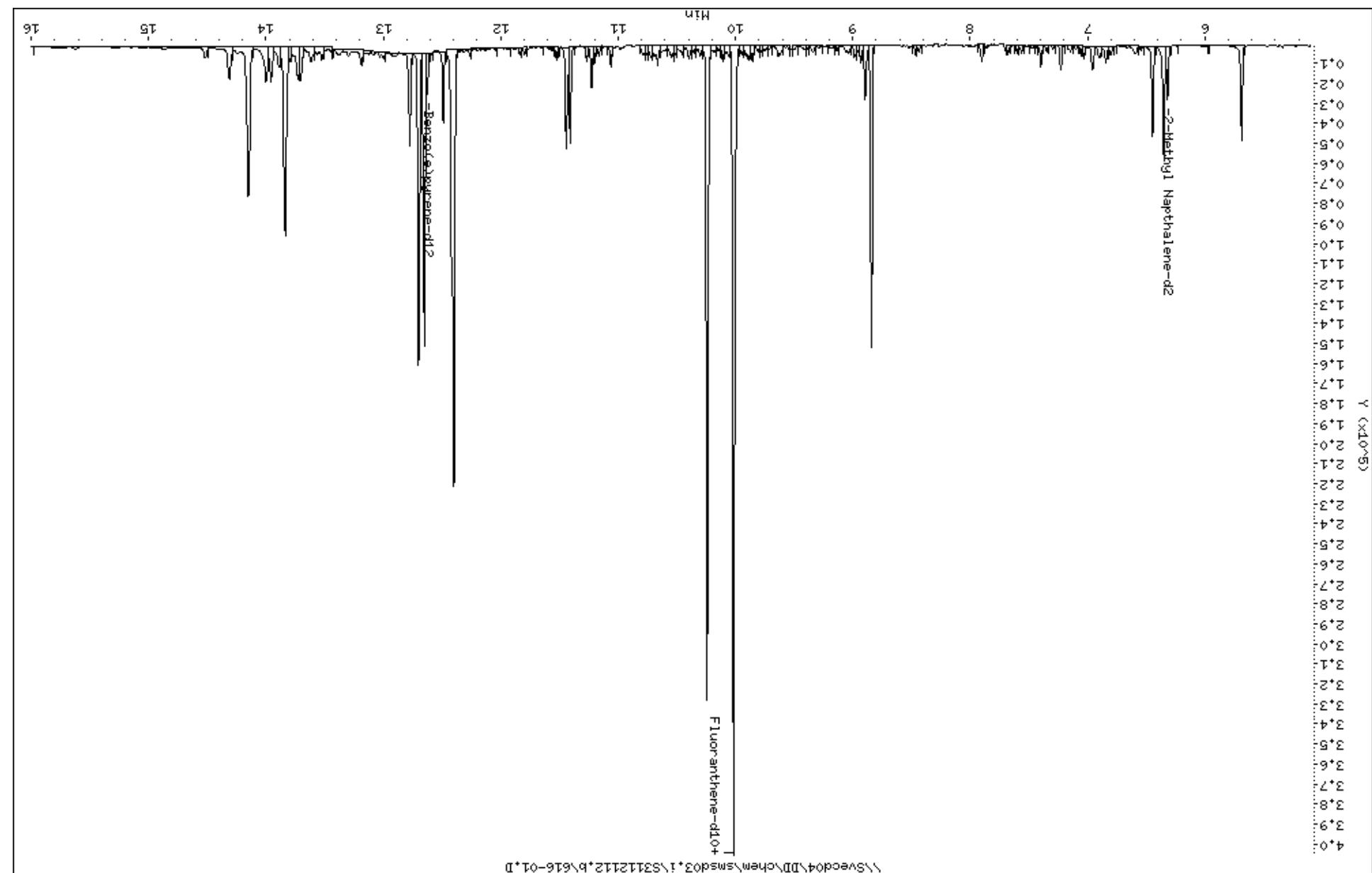
RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
5.686	5.684	(0.900)	128	45905	0.95598	48.1 80.00- 120.00	100.00
5.686	5.684	(0.900)	129	4929		0.00- 40.29	10.74
*	2	2-Methyl Naphthalene-d2				CAS #: 7927-45-2	
6.319	6.317	(1.000)	152	23827	0.80000	80.00- 120.00	100.00
6.314	6.312	(1.000)	122	8323		2.00- 62.00	34.93
3	2-Methylnaphthalene					CAS #: 91-57-6	
6.347	6.351	(1.004)	142	34589	1.05904	53.2 80.00- 120.00	100.00
6.347	6.345	(1.004)	141	28888		55.71- 115.71	83.52
4	1-Methylnaphthalene					CAS #: 90-12-0	
6.447	6.445	(1.020)	142	26914	0.87516	44.0 80.00- 120.00	100.00
6.447	6.445	(1.020)	141	22909		57.13- 117.13	85.12
5	Acenaphthylene					CAS #: 208-96-8	
7.224	7.223	(1.143)	152	10058	0.20617	10.4 80.00- 120.00	100.00
7.224	7.223	(1.143)	151	2430		0.00- 49.19	24.16
6	Acenaphthene					CAS #: 83-32-9	
7.396	7.395	(1.170)	153	4513	0.14868	7.5 80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.396	7.395 (1.170)	152	2365			16.38-	76.38	52.40
<hr/>								
6 Acenaphthene (continued)				CAS #: 86-73-7				
7.900	7.900 (1.250)	166	5021 0.14408	7.2	80.00-	120.00	100.00	
7.900	7.900 (1.250)	165	5606		63.07-	123.07	111.65	
<hr/>								
9 Phenanthrene				CAS #: 85-01-8				
8.839	8.839 (0.884)	178	138278 2.50815	126	80.00-	120.00	100.00	
8.844	8.844 (0.885)	179	22940		0.00-	45.12	16.59	
<hr/>								
10 Anthracene				CAS #: 120-12-7				
8.893	8.893 (0.890)	178	22909 0.42585	21.4	80.00-	120.00	100.00	
8.893	8.893 (0.890)	179	4579		0.00-	45.01	19.99	
<hr/>								
* 11 Fluoranthene-d10				CAS #: 93951-69-0				
9.997	9.998 (1.000)	212	41389 0.80000		80.00-	120.00	100.00	
9.992	9.992 (1.000)	106	6478		0.00-	46.16	15.65	
<hr/>								
12 Fluoranthene				CAS #: 206-44-0				
10.013	10.014 (1.002)	202	282356 4.65618	234	80.00-	120.00	100.00	
10.013	10.009 (1.002)	101	39463		0.00-	43.42	13.98	
<hr/>								
13 Pyrene				CAS #: 129-00-0				
10.239	10.240 (1.024)	202	242872 3.70849	186	80.00-	120.00	100.00	
10.233	10.234 (1.024)	101	41980		0.00-	45.54	17.28	
<hr/>								
14 Benzo[a]anthracene				CAS #: 56-55-3				
11.409	11.404 (1.141)	226	44445 3.07494	155	80.00-	120.00	100.00	
11.405	11.404 (1.141)	200	5776		0.00-	43.30	13.00	
<hr/>								
15 Chrysene				CAS #: 218-01-9				
11.440	11.443 (1.144)	226	58795 3.44928	173	80.00-	120.00	100.00	
11.440	11.439 (1.144)	200	5695		0.00-	42.53	9.69	
<hr/>								
16 Benzo[b]fluoranthene				CAS #: 205-99-2				
12.399	12.395 (1.240)	252	229554 4.87559	245	80.00-	120.00	100.00(M)	
12.395	12.395 (1.240)	250	59431		0.00-	51.72	25.89	
<hr/>								
17 Benzo[k]fluoranthene				CAS #: 207-08-9				
12.413	12.417 (1.242)	252	94211 1.42149	71.5	80.00-	120.00	100.00(M)	
12.413	12.417 (1.242)	250	20292		0.00-	56.49	21.54	
<hr/>								
\$ 18 Benzo(e)pyrene-d12				CAS #: 205440-82-0				
12.624	12.624 (1.263)	264	19133 0.32963	16.6	80.00-	120.00	100.00	
12.620	12.620 (1.262)	132	3193		0.00-	47.65	16.69	
<hr/>								
19 Benzo[a]pyrene				CAS #: 50-32-8				
12.699	12.695 (1.270)	252	141898 2.61849	132	80.00-	120.00	100.00	
12.695	12.695 (1.270)	250	34485		0.00-	53.76	24.30	
<hr/>								
20 Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5				
13.835	13.835 (1.384)	276	90882 1.41221	71.0	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)							
13.835	13.831 (1.384)	138	24853			0.07-	60.07	27.35
21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.840	13.840 (1.384)	278	27604 0.49871	25.1	80.00- 120.00	100.00(Q)		
13.835	13.831 (1.384)	138	22511		7.12-	67.12	81.55	
22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
14.151	14.147 (1.415)	276	99937 1.88120	94.6	80.00- 120.00	100.00		
14.146	14.142 (1.415)	138	25302		0.00-	55.44	25.32	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.



Page 4

Data File: \\\\$vedod4\\DD\\chem\\msd03\\1\\S3112112.b\\616-01.D
Date : 21-NOV-2012 19:44
Client ID: CVO041A-CS
Instrument: msd03.i
Sample Info: S1H350761601
Column phase: HPMS-5
Operater: HJ
Column diameter: 0.25

PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-02.D
Lab Smp Id: 350761602 Client Smp ID: CV0041B-CS
Inj Date : 21-NOV-2012 20:08 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761602
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.310	Weight of sample extracted (g)
M	16.300	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
5.683	5.684	(0.900)	128	45616	0.95517	45.1	80.00- 120.00
5.683	5.684	(0.900)	129	4866		0.00-	40.29
<hr/>							
*	2	2-Methyl Naphthalene-d2				CAS #: 7927-45-2	
6.317	6.317	(1.000)	152	23697	0.80000	80.00-	120.00
6.311	6.312	(1.000)	122	8292		2.00-	62.00
<hr/>							
6.350	6.351	(1.005)	142	34106	1.04998	49.6	80.00- 120.00
6.345	6.345	(1.004)	141	28403		55.71-	115.71
<hr/>							
6.445	6.445	(1.020)	142	24535	0.80218	37.9	80.00- 120.00
6.445	6.445	(1.020)	141	20741		57.13-	117.13
<hr/>							
7.224	7.223	(1.144)	152	9734	0.20062	9.5	80.00- 120.00
7.224	7.223	(1.144)	151	1798		0.00-	49.19
<hr/>							
7.396	7.395	(1.171)	153	3530	0.11693	5.5	80.00- 120.00
<hr/>							

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.396	7.395 (1.171)	152	1912			16.38-	76.38	54.16
<hr/>								
6 Acenaphthene (continued)				CAS #: 86-73-7				
7.900	7.900 (1.251)	166	4597 0.13264	6.3	80.00-	120.00	100.00	
7.896	7.900 (1.250)	165	5246		63.07-	123.07	114.12	
<hr/>								
9 Phenanthrene				CAS #: 85-01-8				
8.839	8.839 (0.884)	178	96974 1.63887	77.4	80.00-	120.00	100.00	
8.839	8.844 (0.884)	179	16389		0.00-	45.12	16.90	
<hr/>								
10 Anthracene				CAS #: 120-12-7				
8.888	8.893 (0.889)	178	17011 0.29462	13.9	80.00-	120.00	100.00	
8.888	8.893 (0.889)	179	3733		0.00-	45.01	21.94	
<hr/>								
* 11 Fluoranthene-d10				CAS #: 93951-69-0				
9.996	9.998 (1.000)	212	44422 0.80000		80.00-	120.00	100.00	
9.991	9.992 (1.000)	106	7363		0.00-	46.16	16.58	
<hr/>								
12 Fluoranthene				CAS #: 206-44-0				
10.013	10.014 (1.002)	202	182733 2.80761	132	80.00-	120.00	100.00	
10.007	10.009 (1.001)	101	25674		0.00-	43.42	14.05	
<hr/>								
13 Pyrene				CAS #: 129-00-0				
10.238	10.240 (1.024)	202	159299 2.26631	107	80.00-	120.00	100.00	
10.232	10.234 (1.024)	101	27183		0.00-	45.54	17.06	
<hr/>								
14 Benzo[a]anthracene				CAS #: 56-55-3				
11.405	11.404 (1.141)	226	32990 2.12168	100	80.00-	120.00	100.00	
11.405	11.404 (1.141)	200	2713		0.00-	43.30	8.22	
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15 Chrysene				CAS #: 218-01-9				
11.440	11.443 (1.144)	226	43835 2.39605	113	80.00-	120.00	100.00	
11.440	11.439 (1.144)	200	4034		0.00-	42.53	9.20	
<hr/>								
16 Benzo[b]fluoranthene				CAS #: 205-99-2				
12.398	12.395 (1.240)	252	180421 3.54030	167	80.00-	120.00	100.00(M)	
12.398	12.395 (1.240)	250	46600		0.00-	51.72	25.83	
<hr/>								
17 Benzo[k]fluoranthene				CAS #: 207-08-9				
12.412	12.417 (1.242)	252	74468 1.04688	49.4	80.00-	120.00	100.00(M)	
12.412	12.417 (1.242)	250	16145		0.00-	56.49	21.68	
<hr/>								
\$ 18 Benzo(e)pyrene-d12				CAS #: 205440-82-0				
12.623	12.624 (1.263)	264	18320 0.29408	13.9	80.00-	120.00	100.00	
12.623	12.620 (1.263)	132	3400		0.00-	47.65	18.56	
<hr/>								
19 Benzo[a]pyrene				CAS #: 50-32-8				
12.698	12.695 (1.270)	252	103532 1.78007	84.0	80.00-	120.00	100.00	
12.694	12.695 (1.270)	250	25154		0.00-	53.76	24.30	
<hr/>								
20 Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5				
13.834	13.835 (1.384)	276	74303 1.07576	50.8	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)							
13.834	13.831 (1.384)	138	21388			0.07-	60.07	28.78
21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.839	13.840 (1.384)	278	22300	0.34505	16.3	80.00-	120.00	100.00(Q)
13.834	13.831 (1.384)	138	20988		7.12-	67.12		94.12
22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
14.150	14.147 (1.416)	276	81324	1.42631	67.3	80.00-	120.00	100.00
14.150	14.142 (1.416)	138	20036		0.00-	55.44		24.64

QC Flag Legend

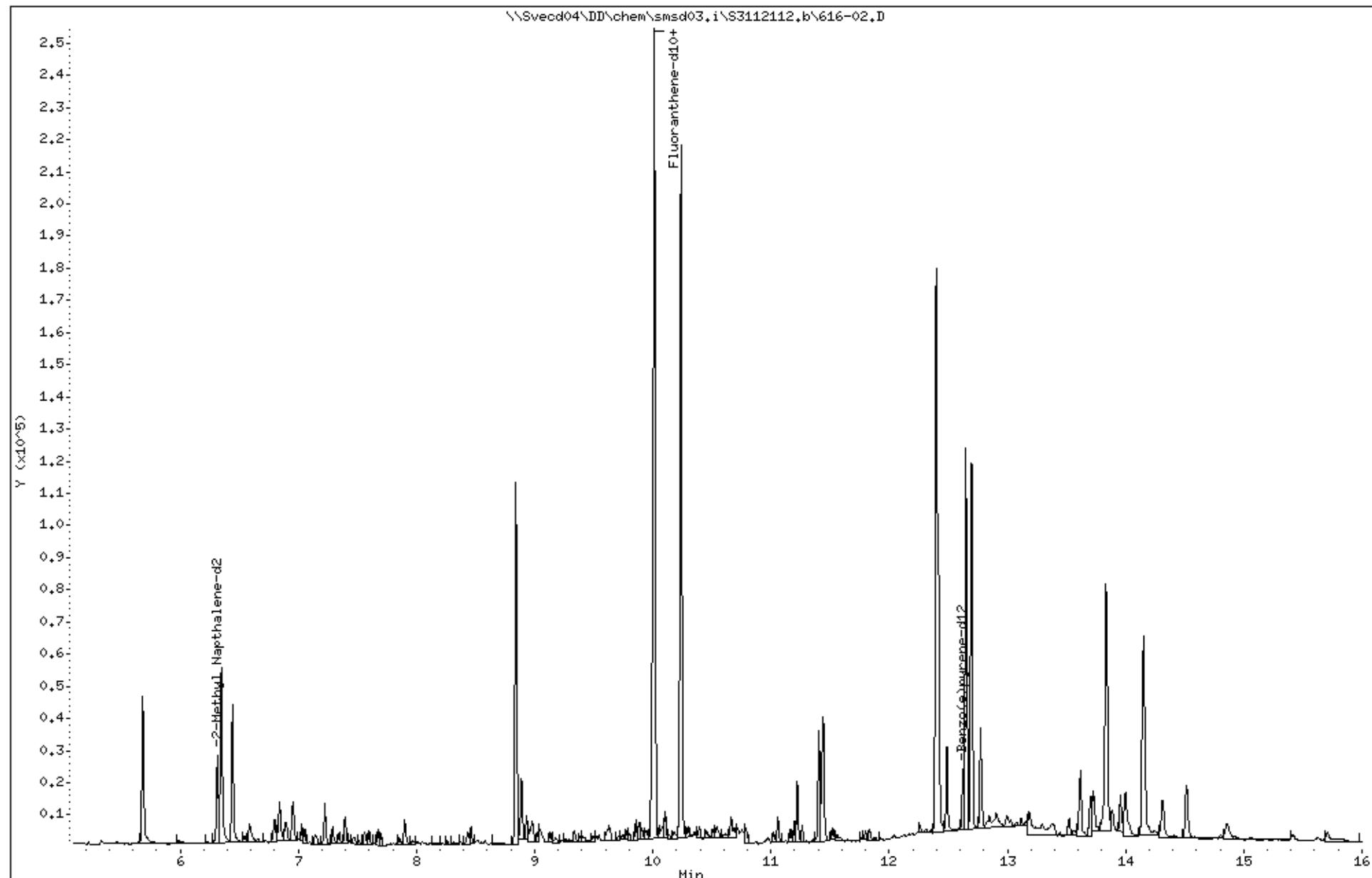
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd03.i\S3112112.b\616-02.D
Date : 21-NOV-2012 20:08
Client ID: CV0041B-CS
Sample Info: SIM350761602

Column phase: HPMS-5

Instrument: smsd03,i
Operator: MJ
Column diameter: 0.25

Page 4



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-03.D
Lab Smp Id: 350761603 Client Smp ID: CV0043A-CS
Inj Date : 21-NOV-2012 20:31 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761603
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.060	Weight of sample extracted (g)
M	22.000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.683	5.684	(0.900)	128	79070	1.75766	89.9	80.00- 120.00
5.688	5.684	(0.901)	129	10103		0.00-	40.29

1 Naphthalene							
6.316	6.317	(1.000)	152	22322	0.80000	80.00-	120.00
6.311	6.312	(1.000)	122	7966		2.00-	62.00

* 2 2-Methyl Naphthalene-d2							
6.350	6.351	(1.005)	142	53187	1.73827	88.9	80.00- 120.00
6.350	6.345	(1.005)	141	44269		55.71-	115.71

3 2-Methylnaphthalene							
6.444	6.445	(1.020)	142	30234	1.04940	53.7	80.00- 120.00
6.444	6.445	(1.020)	141	26328		57.13-	117.13

4 1-Methylnaphthalene							
7.224	7.223	(1.144)	152	13838	0.30277	15.5	80.00- 120.00
7.224	7.223	(1.144)	151	2608		0.00-	49.19

5 Acenaphthylene							
7.396	7.395	(1.171)	153	3260	0.11464	5.9	80.00- 120.00

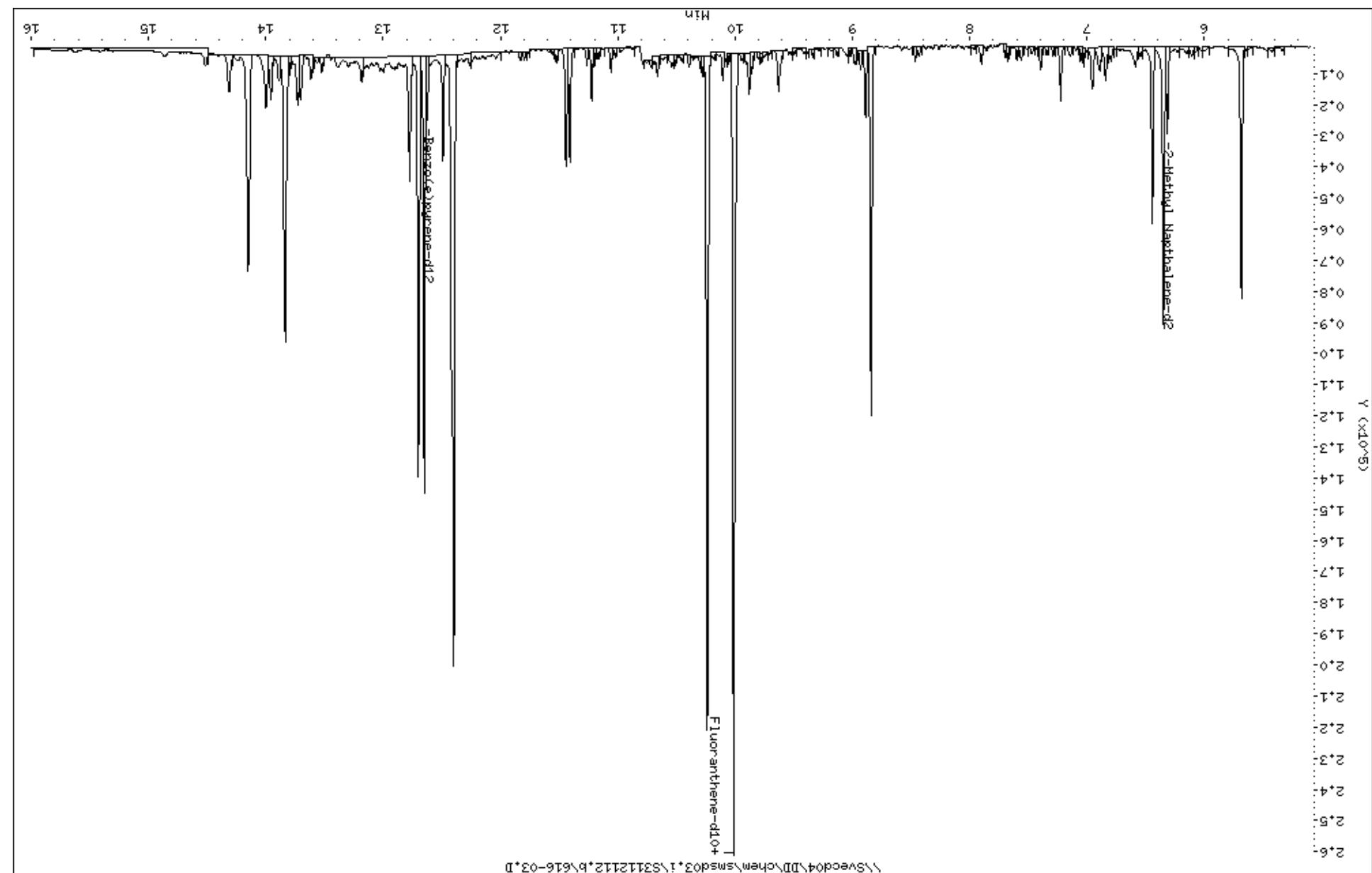
6 Acenaphthene							
3507616							

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.396	7.395 (1.171)	152	1741			16.38-	76.38	53.40
<hr/>								
7.900	7.900 (1.251)	166	4078 0.12491	6.4	80.00-	120.00	100.00	
7.896	7.900 (1.250)	165	4761		63.07-	123.07	116.75	
<hr/>								
8.840	8.839 (0.884)	178	101770 1.99891	102	80.00-	120.00	100.00	
8.840	8.844 (0.884)	179	17106		0.00-	45.12	16.81	
<hr/>								
8.888	8.893 (0.889)	178	19501 0.39253	20.1	80.00-	120.00	100.00	
8.894	8.893 (0.890)	179	3701		0.00-	45.01	18.98	
<hr/>								
9.997	9.998 (1.000)	212	38222 0.80000	80.00-	120.00	100.00		
9.991	9.992 (1.000)	106	5790		0.00-	46.16	15.15	
<hr/>								
10.013	10.014 (1.002)	202	186076 3.32273	170	80.00-	120.00	100.00	
10.008	10.009 (1.001)	101	25563		0.00-	43.42	13.74	
<hr/>								
10.238	10.240 (1.024)	202	173196 2.86371	146	80.00-	120.00	100.00	
10.233	10.234 (1.024)	101	28749		0.00-	45.54	16.60	
<hr/>								
11.405	11.404 (1.141)	226	34209 2.56022	131	80.00-	120.00	100.00	
11.405	11.404 (1.141)	200	3918		0.00-	43.30	11.45	
<hr/>								
11.440	11.443 (1.144)	226	42930 2.72722	140	80.00-	120.00	100.00	
11.440	11.439 (1.144)	200	4541		0.00-	42.53	10.58	
<hr/>								
12.398	12.395 (1.240)	252	197479 4.53418	232	80.00-	120.00	100.00(M)	
12.398	12.395 (1.240)	250	51380		0.00-	51.72	26.02	
<hr/>								
12.411	12.417 (1.241)	252	94100 1.53745	78.6	80.00-	120.00	100.00(M)	
12.411	12.417 (1.241)	250	21063		0.00-	56.49	22.38	
<hr/>								
12.627	12.624 (1.263)	264	17885 0.33366	17.1	80.00-	120.00	100.00	
12.623	12.620 (1.263)	132	3122		0.00-	47.65	17.46	
<hr/>								
12.698	12.695 (1.270)	252	118543 2.36877	121	80.00-	120.00	100.00	
12.698	12.695 (1.270)	250	28631		0.00-	53.76	24.15	
<hr/>								
13.834	13.835 (1.384)	276	86958 1.46320	74.8	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)							
13.834	13.831 (1.384)	138	24053			0.07-	60.07	27.66
21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.839	13.840 (1.384)	278	26539 0.52423	26.8	80.00- 120.00	100.00(Q)		
13.834	13.831 (1.384)	138	21202		7.12-	67.12	79.89	
22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
14.150	14.147 (1.415)	276	91385 1.86275	95.3	80.00- 120.00	100.00		
14.150	14.142 (1.415)	138	23087		0.00-	55.44	25.26	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.



Page 4

Data File: \\Svedod4\\DD\\chem\\msd03\\1\\S3112112\\b\\616-03.D
Date : 21-NOV-2012 20:31
Client ID: CVO043A-CS
Sample Info: SIM350761603
Instrument: msd03.i
Operator: HJ
Column diameter: 0.25 mm
Column phase: HPMS-5
\\Svedod4\\DD\\chem\\msd03\\1\\S3112112\\b\\616-03.D

PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-04.D
Lab Smp Id: 350761604 Client Smp ID: CV0043B-CS
Inj Date : 21-NOV-2012 20:55 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761604
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.080	Weight of sample extracted (g)
M	24.400	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.683	5.684	(0.900)	128	27563 0.56870	30.0	80.00- 120.00	100.00
5.683	5.684	(0.900)	129	2830		0.00- 40.29	10.27

* 1 Naphthalene							
6.317	6.317	(1.000)	152	24049 0.80000	80.00-	120.00	100.00
6.311	6.312	(1.000)	122	7476	2.00-	62.00	31.09

* 3 2-Methyl Naphthalene-d2							
6.350	6.351	(1.005)	142	16794 0.50945	26.9	80.00- 120.00	100.00
6.350	6.345	(1.005)	141	13949	55.71-	115.71	83.06

* 4 1-Methylnaphthalene							
6.445	6.445	(1.020)	142	11595 0.37355	19.7	80.00- 120.00	100.00
6.445	6.445	(1.020)	141	9830	57.13-	117.13	84.78

* 5 Acenaphthylene							
7.224	7.223	(1.144)	152	3942 0.08006	4.2	80.00- 120.00	100.00
7.224	7.223	(1.144)	151	764	0.00-	49.19	19.38

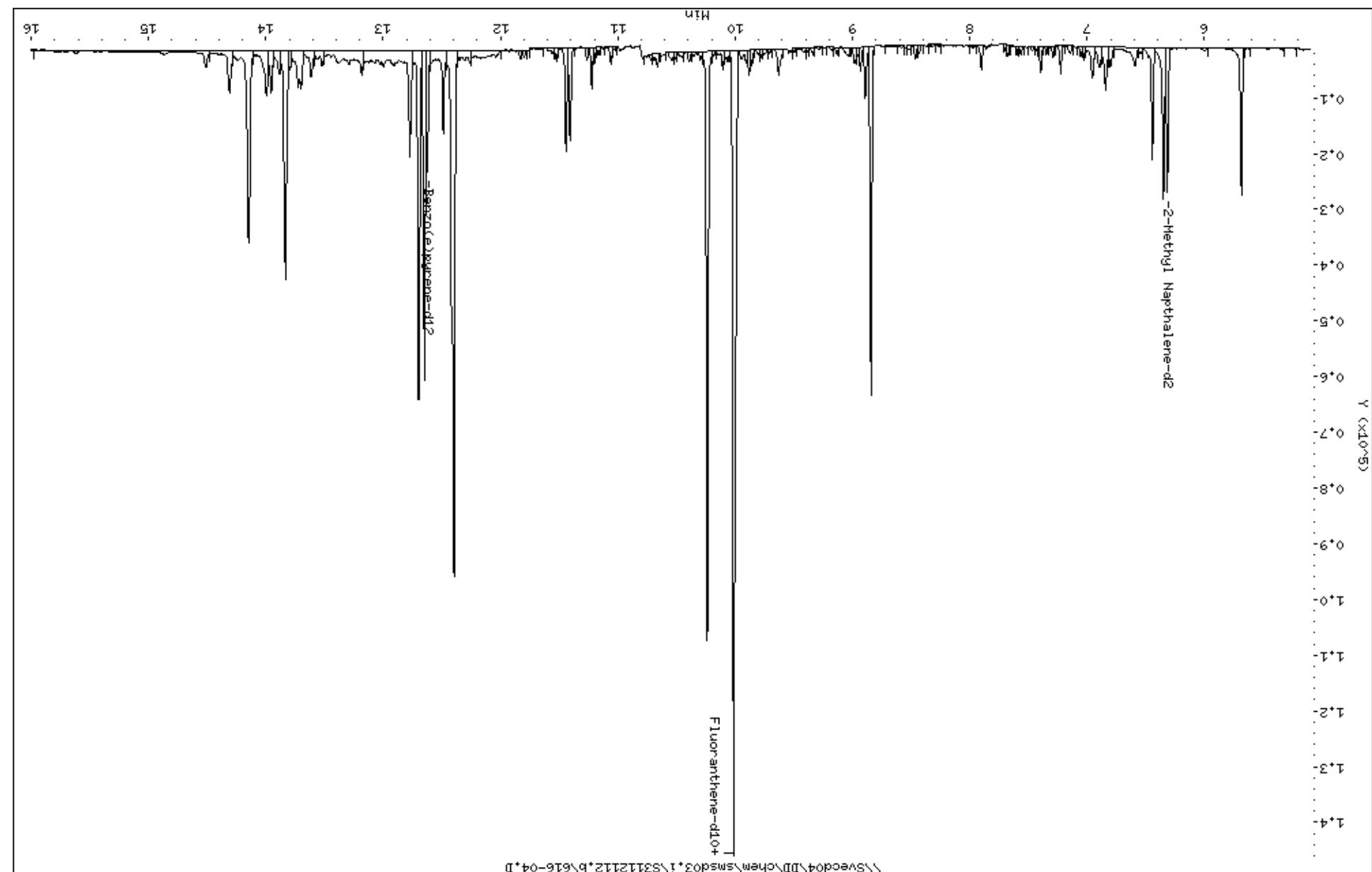
* 6 Acenaphthene							
7.396	7.395	(1.171)	153	1932 0.06306	3.3	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.396	7.395 (1.171)	152	984			16.38-	76.38	50.93
<hr/>								
7.900	7.900 (1.251)	166	2599 0.07389		CAS #: 86-73-7	3.9	80.00- 120.00	100.00
7.900	7.900 (1.251)	165	2752			63.07-	123.07	105.89
<hr/>								
8.839	8.839 (0.884)	178	54722 0.96729		CAS #: 85-01-8	51.0	80.00- 120.00	100.00(H)
8.839	8.844 (0.884)	179	8845			0.00-	45.12	16.16
<hr/>								
8.893	8.893 (0.890)	178	7908 0.14325		CAS #: 120-12-7	7.6	80.00- 120.00	100.00
8.893	8.893 (0.890)	179	1672			0.00-	45.01	21.14
<hr/>								
9.997	9.998 (1.000)	212	42471 0.80000		CAS #: 93951-69-0	80.00-	120.00	100.00
9.992	9.992 (1.000)	106	6693			0.00-	46.16	15.76
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10.014	10.014 (1.002)	202	106804 1.71638		CAS #: 206-44-0	90.5	80.00- 120.00	100.00
10.008	10.009 (1.001)	101	15098			0.00-	43.42	14.14
<hr/>								
10.239	10.240 (1.024)	202	85212 1.26798		CAS #: 129-00-0	66.9	80.00- 120.00	100.00
10.233	10.234 (1.024)	101	15062			0.00-	45.54	17.68
<hr/>								
11.405	11.404 (1.141)	226	15311 1.02173		CAS #: 56-55-3	53.9	80.00- 120.00	100.00
11.405	11.404 (1.141)	200	1362			0.00-	43.30	8.90
<hr/>								
11.440	11.443 (1.144)	226	20360 1.16401		CAS #: 218-01-9	61.4	80.00- 120.00	100.00
11.440	11.439 (1.144)	200	1946			0.00-	42.53	9.56
<hr/>								
12.394	12.395 (1.240)	252	99646 1.99764		CAS #: 205-99-2	105	80.00- 120.00	100.00(M)
12.394	12.395 (1.240)	250	22902			0.00-	51.72	22.98
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12.416	12.417 (1.242)	252	39027 0.57385		CAS #: 207-08-9	30.3	80.00- 120.00	100.00(M)
12.411	12.417 (1.241)	250	8717			0.00-	56.49	22.34
<hr/>								
12.623	12.624 (1.263)	264	18373 0.30848		CAS #: 205440-82-0	16.3	80.00- 120.00	100.00
12.619	12.620 (1.262)	132	3161			0.00-	47.65	17.20
<hr/>								
12.698	12.695 (1.270)	252	56328 1.01296		CAS #: 50-32-8	53.4	80.00- 120.00	100.00
12.694	12.695 (1.270)	250	13456			0.00-	53.76	23.89
<hr/>								
13.834	13.835 (1.384)	276	37636 0.56992		CAS #: 193-39-5	30.0	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)			(ug/ml)	(ug/kg)			
13.830	13.831 (1.383)	138	9187			0.07-	60.07	24.41
21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.839	13.840 (1.384)	278	11977 0.14009	7.4	80.00- 120.00	100.00(Q)		
13.830	13.831 (1.383)	138	9554		7.12-	67.12	79.77	
22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
14.146	14.147 (1.415)	276	43745 0.80247	42.3	80.00- 120.00	100.00		
14.146	14.142 (1.415)	138	10878		0.00-	55.44	24.87	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-06.D
Lab Smp Id: 350761606 Client Smp ID: CV0192A-CS
Inj Date : 21-NOV-2012 21:18 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761606
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.030	Weight of sample extracted (g)
M	18.000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

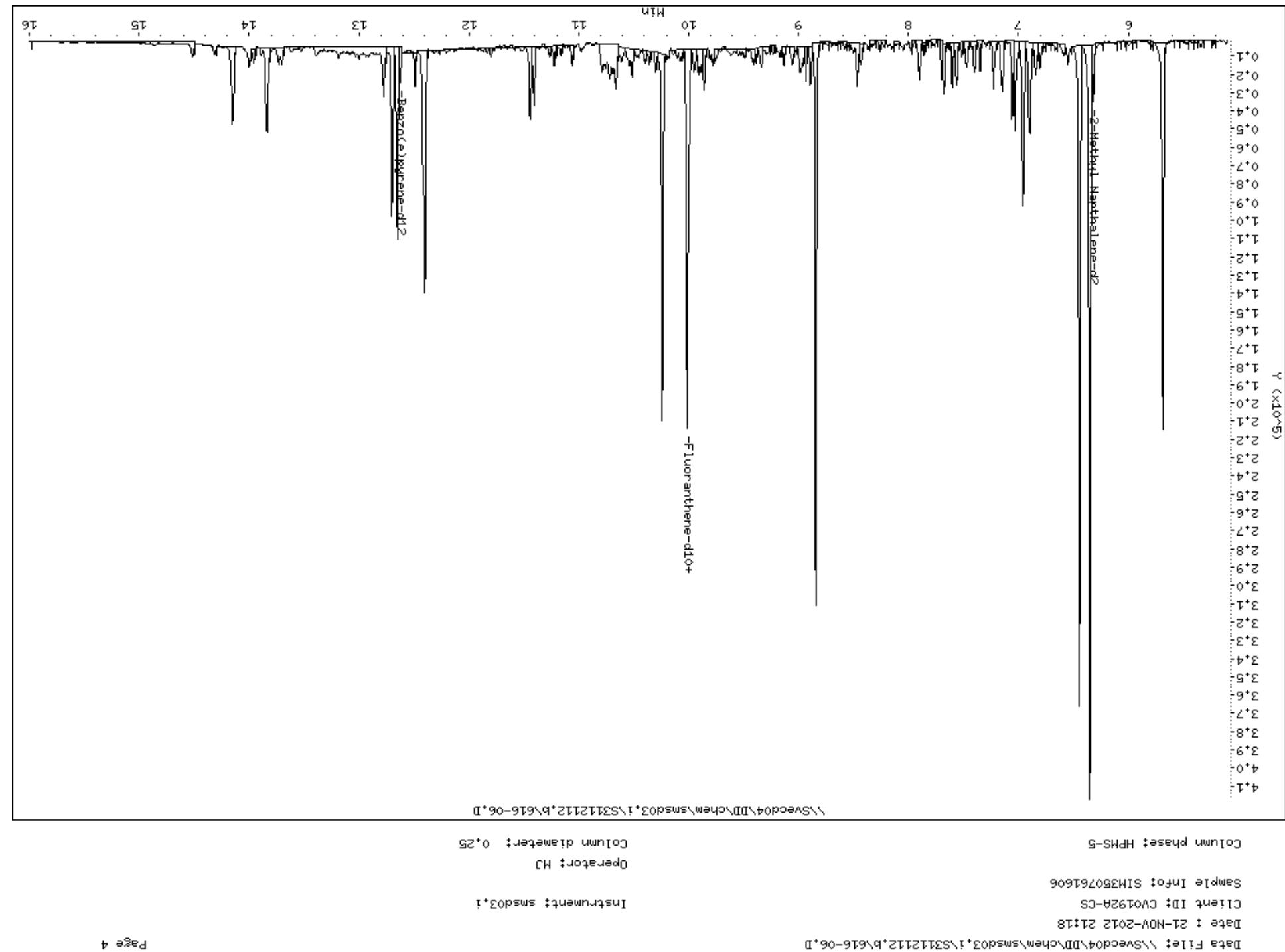
RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
5.684	5.684	(0.900)	128	204770	3.99367	194 80.00- 120.00	100.00
5.684	5.684	(0.900)	129	23798		0.00- 40.29	11.62
<hr/>							
*	6.317	6.317	(1.000)	152	25442 0.80000	CAS #: 7927-45-2 80.00- 120.00	100.00
6.312	6.312	(1.000)	122	11886		2.00- 62.00	46.72
<hr/>							
6.350	6.351	(1.005)	142	249972	7.16779	CAS #: 91-57-6 349 80.00- 120.00	100.00
6.350	6.345	(1.005)	141	209592		55.71- 115.71	83.85
<hr/>							
6.445	6.445	(1.020)	142	196473	5.98316	CAS #: 90-12-0 292 80.00- 120.00	100.00
6.445	6.445	(1.020)	141	169935		57.13- 117.13	86.49
<hr/>							
7.224	7.223	(1.144)	152	14776	0.28365	CAS #: 208-96-8 13.8 80.00- 120.00	100.00
7.224	7.223	(1.144)	151	3630		0.00- 49.19	24.57
<hr/>							
7.396	7.395	(1.171)	153	9603	0.29628	CAS #: 83-32-9 14.4 80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.401	7.395 (1.172)	152	6558			16.38-	76.38	68.29
<hr/>								
7.900	7.900 (1.251)	166	11729 0.31521	15.4	80.00-	120.00	100.00(Q)	
7.896	7.900 (1.250)	165	16387		63.07-	123.07	139.71	
<hr/>								
8.839	8.839 (0.884)	178	270710 4.42182	215	80.00-	120.00	100.00	
8.844	8.844 (0.885)	179	48859		0.00-	45.12	18.05	
<hr/>								
8.893	8.893 (0.890)	178	18272 0.30587	14.9	80.00-	120.00	100.00	
8.887	8.893 (0.889)	179	5991		0.00-	45.01	32.79	
<hr/>								
9.997	9.998 (1.000)	212	45961 0.80000		80.00-	120.00	100.00	
9.992	9.992 (1.000)	106	7256		0.00-	46.16	15.79	
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10.014	10.014 (1.002)	202	148797 2.20965	108	80.00-	120.00	100.00	
10.014	10.009 (1.002)	101	21837		0.00-	43.42	14.68	
<hr/>								
10.239	10.240 (1.024)	202	148913 2.04761	99.8	80.00-	120.00	100.00	
10.233	10.234 (1.024)	101	25237		0.00-	45.54	16.95	
<hr/>								
11.405	11.404 (1.141)	226	30524 1.89566	92.4	80.00-	120.00	100.00	
11.405	11.404 (1.141)	200	2818		0.00-	43.30	9.23	
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11.441	11.443 (1.144)	226	43233 2.28401	111	80.00-	120.00	100.00	
11.441	11.439 (1.144)	200	5798		0.00-	42.53	13.41	
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12.398	12.395 (1.240)	252	133550 2.50083	122	80.00-	120.00	100.00(M)	
12.398	12.395 (1.240)	250	34105		0.00-	51.72	25.54	
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12.412	12.417 (1.241)	252	60507 0.82213	40.0	80.00-	120.00	100.00(M)	
12.412	12.417 (1.241)	250	14162		0.00-	56.49	23.41	
<hr/>								
12.628	12.624 (1.263)	264	16201 0.25135	12.2	80.00-	120.00	100.00	
12.623	12.620 (1.263)	132	2585		0.00-	47.65	15.96	
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12.698	12.695 (1.270)	252	81459 1.35366	66.0	80.00-	120.00	100.00	
12.698	12.695 (1.270)	250	19953		0.00-	53.76	24.49	
<hr/>								
13.835	13.835 (1.384)	276	44365 0.62081	30.2	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)							
13.835	13.831 (1.384)	138	12777			0.07-	60.07	28.80
21	Dibenz[a,h]anthracene CAS #: 53-70-3							
13.839	13.840 (1.384)	278	17401 0.23008	11.2	80.00-	120.00	100.00(Q)	
13.835	13.831 (1.384)	138	12752		7.12-	67.12	73.28	
22	Benzo[g,h,i]perylene CAS #: 191-24-2							
14.150	14.147 (1.415)	276	54554 0.92476	45.0	80.00-	120.00	100.00	
14.150	14.142 (1.415)	138	13313		0.00-	55.44	24.40	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-07.D
Lab Smp Id: 350761607 Client Smp ID: CV0192B-CS
Inj Date : 21-NOV-2012 21:42 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761607
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.270	Weight of sample extracted (g)
M	17.600	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
5.684	5.684	(0.900)	128	85465	1.67779	80.6 80.00- 120.00	100.00
5.684	5.684	(0.900)	129	9426		0.00- 40.29	11.03
*	2	2-Methyl Naphthalene-d2				CAS #: 7927-45-2	
6.317	6.317	(1.000)	152	25276	0.80000	80.00- 120.00	100.00
6.312	6.312	(1.000)	122	9307		2.00- 62.00	36.82
3	2-Methylnaphthalene					CAS #: 91-57-6	
6.351	6.351	(1.005)	142	76960	2.22127	107 80.00- 120.00	100.00
6.345	6.345	(1.004)	141	64136		55.71- 115.71	83.34
4	1-Methylnaphthalene					CAS #: 90-12-0	
6.445	6.445	(1.020)	142	57637	1.76674	84.8 80.00- 120.00	100.00
6.445	6.445	(1.020)	141	49717		57.13- 117.13	86.26
5	Acenaphthylene					CAS #: 208-96-8	
7.224	7.223	(1.144)	152	44950	0.86856	41.7 80.00- 120.00	100.00
7.224	7.223	(1.144)	151	8704		0.00- 49.19	19.36
6	Acenaphthene					CAS #: 83-32-9	
7.396	7.395	(1.171)	153	17063	0.52990	25.4 80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.396	7.395 (1.171)	152	8631			16.38-	76.38	50.58
<hr/>								
6 Acenaphthene (continued)				CAS #: 86-73-7				
7.900	7.900 (1.251)	166	17513 0.47375	22.8	80.00-	120.00	100.00	
7.896	7.900 (1.250)	165	18355		63.07-	123.07	104.81	
<hr/>								
9 Phenanthrene				CAS #: 85-01-8				
8.839	8.839 (0.884)	178	291473 4.96311	238	80.00-	120.00	100.00	
8.844	8.844 (0.885)	179	49840		0.00-	45.12	17.10	
<hr/>								
10 Anthracene				CAS #: 120-12-7				
8.893	8.893 (0.890)	178	70101 1.22328	58.7	80.00-	120.00	100.00	
8.893	8.893 (0.890)	179	13931		0.00-	45.01	19.87	
<hr/>								
* 11 Fluoranthene-d10				CAS #: 93951-69-0				
9.997	9.998 (1.000)	212	44089 0.80000		80.00-	120.00	100.00	
9.991	9.992 (1.000)	106	6714		0.00-	46.16	15.23	
<hr/>								
12 Fluoranthene				CAS #: 206-44-0				
10.013	10.014 (1.002)	202	398168 6.16388	296	80.00-	120.00	100.00	
10.013	10.009 (1.002)	101	57397		0.00-	43.42	14.42	
<hr/>								
13 Pyrene				CAS #: 129-00-0				
10.238	10.240 (1.024)	202	335969 4.81586	231	80.00-	120.00	100.00	
10.233	10.234 (1.024)	101	59254		0.00-	45.54	17.64	
<hr/>								
14 Benzo[a]anthracene				CAS #: 56-55-3				
11.409	11.404 (1.141)	226	69266 4.50610	216	80.00-	120.00	100.00	
11.405	11.404 (1.141)	200	8000		0.00-	43.30	11.55	
<hr/>								
15 Chrysene				CAS #: 218-01-9				
11.440	11.443 (1.144)	226	80672 4.44289	213	80.00-	120.00	100.00	
11.440	11.439 (1.144)	200	11128		0.00-	42.53	13.79	
<hr/>								
16 Benzo[b]fluoranthene				CAS #: 205-99-2				
12.399	12.395 (1.240)	252	376788 7.57347	364	80.00-	120.00	100.00(M)	
12.399	12.395 (1.240)	250	99811		0.00-	51.72	26.49	
<hr/>								
17 Benzo[k]fluoranthene				CAS #: 207-08-9				
12.412	12.417 (1.242)	252	177113 2.50868	120	80.00-	120.00	100.00(M)	
12.407	12.417 (1.241)	250	53071		0.00-	56.49	29.96	
<hr/>								
\$ 18 Benzo(e)pyrene-d12				CAS #: 205440-82-0				
12.628	12.624 (1.263)	264	14422 0.23325	11.2	80.00-	120.00	100.00(R)	
12.623	12.620 (1.263)	132	2247		0.00-	47.65	15.58	
<hr/>								
19 Benzo[a]pyrene				CAS #: 50-32-8				
12.698	12.695 (1.270)	252	203308 3.52196	169	80.00-	120.00	100.00	
12.698	12.695 (1.270)	250	49935		0.00-	53.76	24.56	
<hr/>								
20 Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5				
13.839	13.835 (1.384)	276	135918 1.98268	95.2	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)			(ug/ml)	(ug/kg)			
13.834	13.831 (1.384)	138	35038			0.07-	60.07	25.78
21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.844	13.840 (1.385)	278	44331 0.81411	39.1	80.00- 120.00	100.00(Q)		
13.834	13.831 (1.384)	138	31544		7.12-	67.12	71.16	
22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
14.150	14.147 (1.415)	276	147183 2.60088	125	80.00- 120.00	100.00		
14.150	14.142 (1.415)	138	38249		0.00-	55.44	25.99	

QC Flag Legend

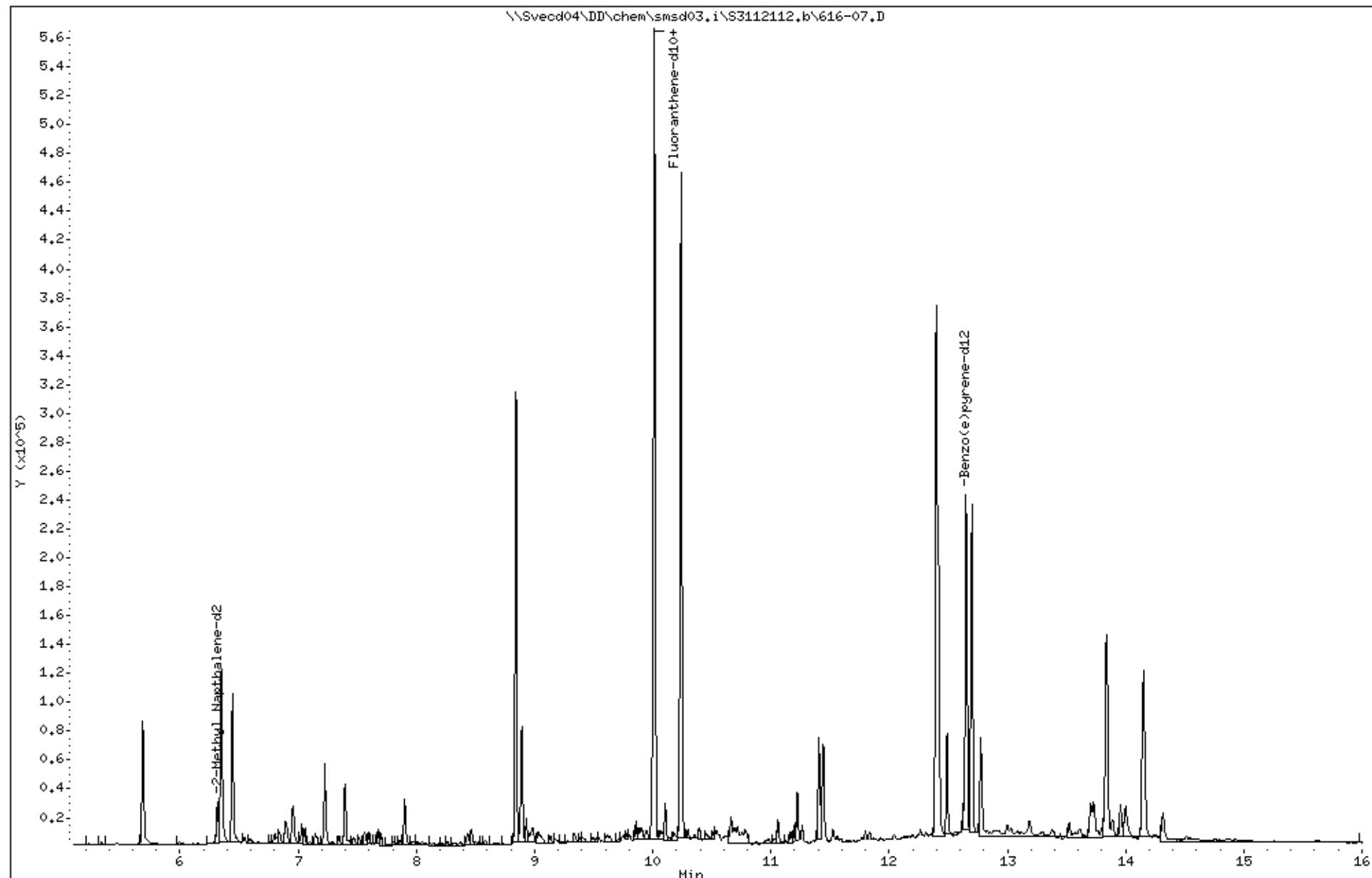
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd03.i\S3112112.b\616-07.D
Date : 21-NOV-2012 21:42
Client ID: CV0192B-CS
Sample Info: SIM350761607

Column phase: HPMS-5

Instrument: smsd03,i
Operator: MJ
Column diameter: 0.25

Page 4



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-08.D
Lab Smp Id: 350761608 Client Smp ID: FM0263A-CS-SP
Inj Date : 21-NOV-2012 22:05 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761608
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.210	Weight of sample extracted (g)
M	20.800	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.684	5.684	(0.900)	128	64140 1.23934	62.1	80.00- 120.00	100.00
5.684	5.684	(0.900)	129	6908		0.00- 40.29	10.77

* 1 Naphthalene							
6.317	6.317	(1.000)	152	25680 0.80000	80.00-	120.00	100.00
6.312	6.312	(1.000)	122	8736	2.00-	62.00	34.02

* 3 2-Methyl Naphthalene-d2							
6.351	6.351	(1.005)	142	31416 0.89248	44.7	80.00- 120.00	100.00
6.351	6.345	(1.005)	141	26247	55.71-	115.71	83.55

* 4 1-Methylnaphthalene							
6.445	6.445	(1.020)	142	24558 0.74093	37.1	80.00- 120.00	100.00
6.445	6.445	(1.020)	141	20622	57.13-	117.13	83.97

* 5 Acenaphthylene							
7.228	7.223	(1.144)	152	22211 0.42243	21.2	80.00- 120.00	100.00
7.223	7.223	(1.143)	151	4220	0.00-	49.19	19.00

* 6 Acenaphthene							
7.395	7.395	(1.171)	153	57161 1.74724	87.5	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.395	7.395 (1.171)	152	27911			16.38-	76.38	48.83
<hr/>								
7.900	7.900 (1.251)	166	59660	1.58849	CAS #: 86-73-7	79.6	80.00- 120.00	100.00
7.900	7.900 (1.251)	165	55738			63.07-	123.07	93.43
<hr/>								
8.839	8.839 (0.884)	178	709555	13.4981	CAS #: 85-01-8	676	80.00- 120.00	100.00(A)
8.845	8.844 (0.885)	179	121885			0.00-	45.12	17.18
<hr/>								
8.893	8.893 (0.889)	178	208501	4.06481	CAS #: 120-12-7	204	80.00- 120.00	100.00
8.893	8.893 (0.889)	179	44581			0.00-	45.01	21.38
<hr/>								
9.999	9.998 (1.000)	212	39464	0.80000	CAS #: 93951-69-0	80.00-	120.00	100.00
9.993	9.992 (1.000)	106	6115			0.00-	46.16	15.50
<hr/>								
10.015	10.014 (1.002)	202	1119243	19.3571	CAS #: 206-44-0	969	80.00- 120.00	100.00(A)
10.015	10.009 (1.002)	101	163178			0.00-	43.42	14.58
<hr/>								
10.240	10.240 (1.024)	202	978853	15.6755	CAS #: 129-00-0	785	80.00- 120.00	100.00(A)
10.240	10.234 (1.024)	101	180342			0.00-	45.54	18.42
<hr/>								
11.409	11.404 (1.141)	226	170064	12.3879	CAS #: 56-55-3	620	80.00- 120.00	100.00(A)
11.405	11.404 (1.141)	200	24338			0.00-	43.30	14.31
<hr/>								
11.444	11.443 (1.145)	226	179820	11.0639	CAS #: 218-01-9	554	80.00- 120.00	100.00(A)
11.440	11.439 (1.144)	200	19786			0.00-	42.53	11.00
<hr/>								
12.402	12.395 (1.240)	252	793301	17.9662	CAS #: 205-99-2	900	80.00- 120.00	100.00(AM)
12.402	12.395 (1.240)	250	215821			0.00-	51.72	27.21
<hr/>								
12.415	12.417 (1.242)	252	354365	5.60758	CAS #: 207-08-9	281	80.00- 120.00	100.00(M)
12.415	12.417 (1.242)	250	82614			0.00-	56.49	23.31
<hr/>								
12.627	12.624 (1.263)	264	16179	0.29234	CAS #: 205440-82-0	14.6	80.00- 120.00	100.00
12.622	12.620 (1.262)	132	2673			0.00-	47.65	16.52
<hr/>								
12.702	12.695 (1.270)	252	550782	10.6595	CAS #: 50-32-8	534	80.00- 120.00	100.00(A)
12.702	12.695 (1.270)	250	139576			0.00-	53.76	25.34
<hr/>								
13.840	13.835 (1.384)	276	271291	4.42121	CAS #: 193-39-5	221	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
13.840	13.831 (1.384)	138	66483		0.07-	60.07	24.51	
13.845	13.840 (1.385)	278	84031 1.86110	93.2	80.00-	120.00	100.00(Q)	
13.840	13.831 (1.384)	138	72757		7.12-	67.12	86.58	
14.156	14.147 (1.416)	276	258834 5.10991	256	80.00-	120.00	100.00	
14.156	14.142 (1.416)	138	68291		0.00-	55.44	26.38	

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

Data File: \\Svedcd04\DD\chem\smsd03.i\S3112112.b\616-08.D
Date : 21-NOV-2012 22:05
Client ID: FH0263A-CS-SP
Sample Info: SIM350761608

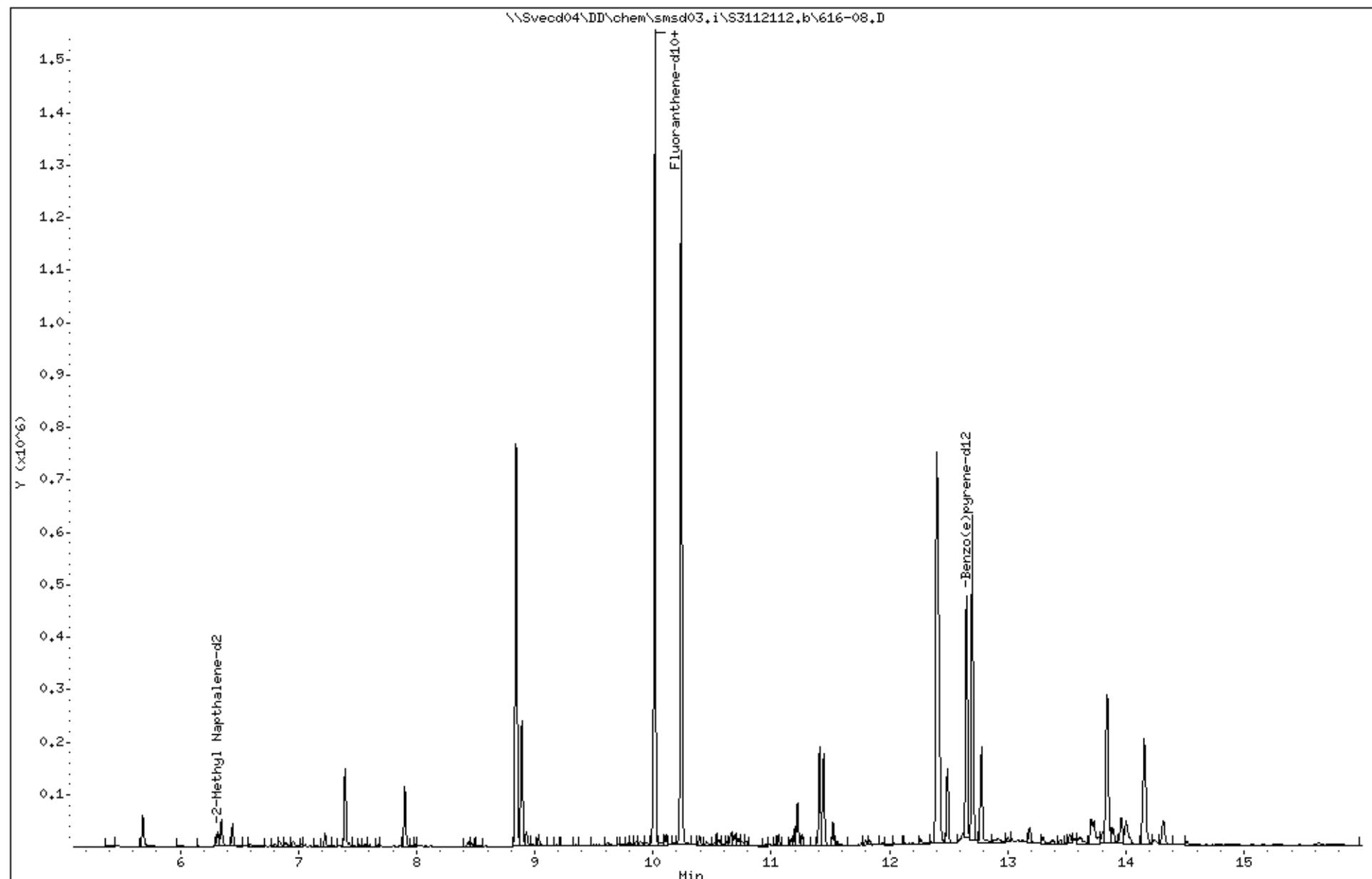
Column phase: HPMS-5

Instrument: smsd03,i

Operator: MJ

Column diameter: 0.25

Page 4



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-09.D
Lab Smp Id: 350761609 Client Smp ID: FM0263B-CS-SP
Inj Date : 21-NOV-2012 22:29 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761609
Misc Info :
Comment :
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Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.290	Weight of sample extracted (g)
M	17.500	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
5.688	5.684 (0.901)	128	55408	1.11535	53.4	80.00- 120.00	100.00
5.688	5.684 (0.901)	129	5694		0.00-	40.29	10.28
<hr/>							
*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.316	6.317 (1.000)	152	24650	0.80000	80.00-	120.00	100.00
6.316	6.312 (1.000)	122	9337		2.00-	62.00	37.88
<hr/>							
6.350	6.351 (1.005)	142	40273	1.19191	57.1	80.00- 120.00	100.00
6.350	6.345 (1.005)	141	33824		55.71-	115.71	83.99
<hr/>							
6.444	6.445 (1.020)	142	32337	1.01639	48.7	80.00- 120.00	100.00
6.444	6.445 (1.020)	141	28243		57.13-	117.13	87.34
<hr/>							
7.228	7.223 (1.144)	152	14938	0.29597	14.2	80.00- 120.00	100.00
7.224	7.223 (1.144)	151	2688		0.00-	49.19	17.99
<hr/>							
7.396	7.395 (1.171)	153	48392	1.54101	73.8	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.396	7.395 (1.171)	152	24487			16.38-	76.38	50.60
<hr/>								
7.901	7.900 (1.251)	166	46029	1.27676	CAS #: 86-73-7	61.2	80.00- 120.00	100.00
7.901	7.900 (1.251)	165	43512			63.07-	123.07	94.53
<hr/>								
8.839	8.839 (0.884)	178	818664	15.5713	CAS #: 85-01-8	746	80.00- 120.00	100.00(A)
8.845	8.844 (0.885)	179	142302			0.00-	45.12	17.38
<hr/>								
8.893	8.893 (0.890)	178	131296	2.55928	CAS #: 120-12-7	123	80.00- 120.00	100.00
8.893	8.893 (0.890)	179	29365			0.00-	45.01	22.37
<hr/>								
9.997	9.998 (1.000)	212	39470	0.80000	CAS #: 93951-69-0		80.00- 120.00	100.00
9.992	9.992 (1.000)	106	5927			0.00-	46.16	15.02
<hr/>								
10.014	10.014 (1.002)	202	1075688	18.6010	CAS #: 206-44-0	892	80.00- 120.00	100.00(A)
10.014	10.009 (1.002)	101	157373			0.00-	43.42	14.63
<hr/>								
10.239	10.240 (1.024)	202	1031579	16.5173	CAS #: 129-00-0	792	80.00- 120.00	100.00(A)
10.239	10.234 (1.024)	101	186137			0.00-	45.54	18.04
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11.408	11.404 (1.141)	226	153704	11.1929	CAS #: 56-55-3	536	80.00- 120.00	100.00(A)
11.408	11.404 (1.141)	200	20255			0.00-	43.30	13.18
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11.443	11.443 (1.145)	226	186677	11.4841	CAS #: 218-01-9	550	80.00- 120.00	100.00(A)
11.443	11.439 (1.145)	200	20503			0.00-	42.53	10.98
<hr/>								
12.399	12.395 (1.240)	252	601816	13.6003	CAS #: 205-99-2	652	80.00- 120.00	100.00(AM)
12.399	12.395 (1.240)	250	183019			0.00-	51.72	30.41
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12.412	12.417 (1.242)	252	352455	5.57651	CAS #: 207-08-9	267	80.00- 120.00	100.00(M)
12.408	12.417 (1.241)	250	111021			0.00-	56.49	31.50
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12.629	12.624 (1.263)	264	16724	0.30214	CAS #: 205440-82-0	14.5	80.00- 120.00	100.00
12.624	12.620 (1.263)	132	2679			0.00-	47.65	16.02
<hr/>								
12.699	12.695 (1.270)	252	439838	8.51110	CAS #: 50-32-8	408	80.00- 120.00	100.00
12.699	12.695 (1.270)	250	110933			0.00-	53.76	25.22
<hr/>								
13.840	13.835 (1.384)	276	224559	3.65906	CAS #: 193-39-5	175	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)							
13.840	13.831 (1.384)	138	58058			0.07-	60.07	25.85
21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.845	13.840 (1.385)	278	65571 1.42507	68.3	80.00- 120.00	100.00(Q)		
13.840	13.831 (1.384)	138	56870		7.12-	67.12	86.73	
22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
14.156	14.147 (1.416)	276	220191 4.34635	208	80.00- 120.00	100.00		
14.156	14.142 (1.416)	138	57805		0.00-	55.44	26.25	

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

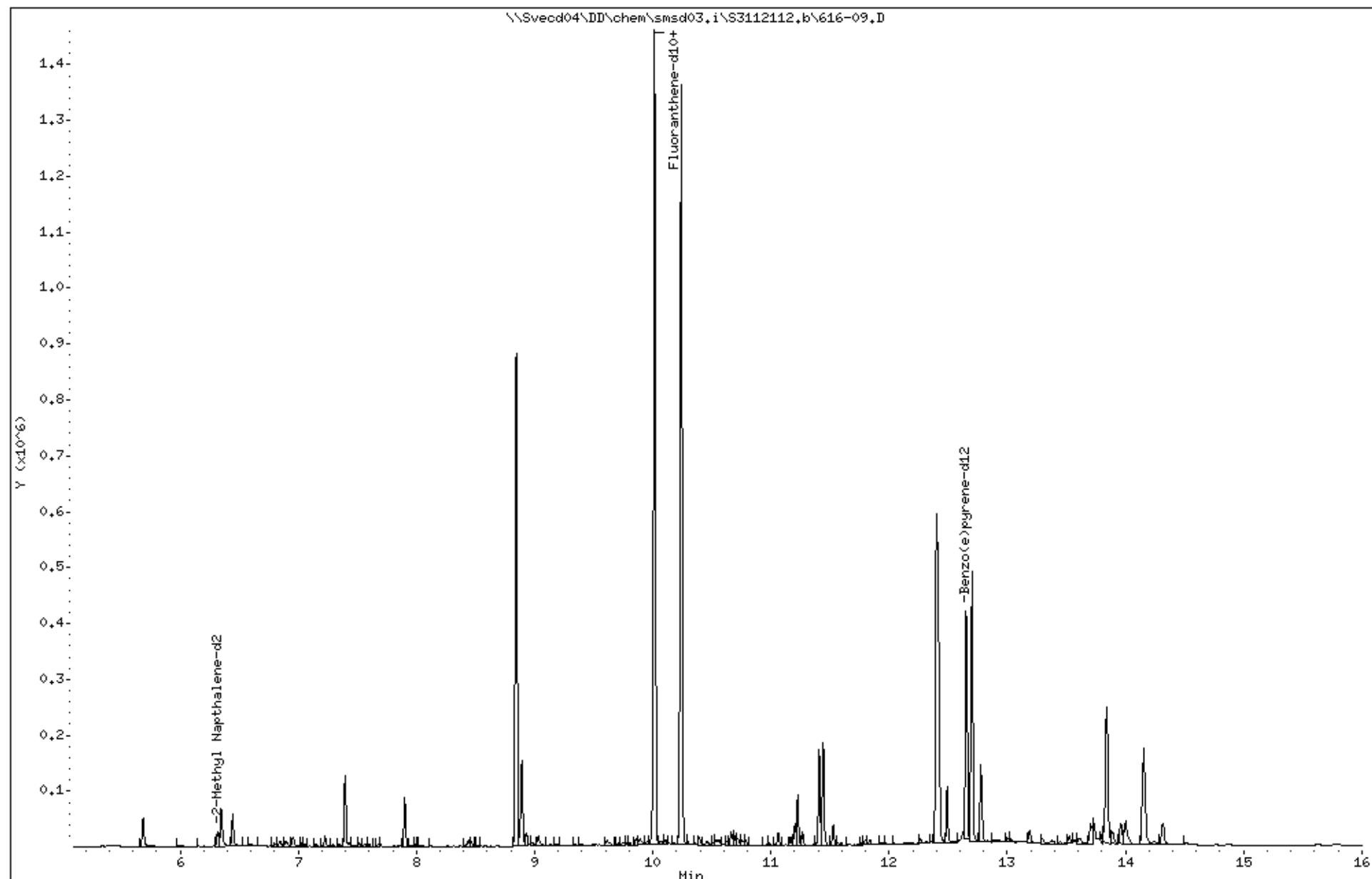
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Date : 21-NOV-2012 22:29
Client ID: FM0263B-CS-SP
Sample Info: SIM350761609

Column phase: HPMS-5

Instrument: smsd03,i

Operator: MJ

Column diameter: 0.25



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-10.D
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Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761610
Misc Info :
Comment :
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Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.790	Weight of sample extracted (g)
M	22.100	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.688	5.684 (0.901)	128	133667	2.96706	148	80.00- 120.00	100.00
5.688	5.684 (0.901)	129	14850		0.00- 40.29	11.11	

* 1 Naphthalene							
6.316	6.317 (1.000)	152	22354	0.80000	80.00- 120.00	100.00	
6.316	6.312 (1.000)	122	7789		2.00- 62.00	34.84	

* 2 2-Methyl Naphthalene-d2							
6.350	6.351 (1.005)	142	48146	1.57127	78.2	80.00- 120.00	100.00
6.350	6.345 (1.005)	141	40644		55.71- 115.71	84.42	

* 3 2-Methylnaphthalene							
6.444	6.445 (1.020)	142	33068	1.14612	57.0	80.00- 120.00	100.00
6.444	6.445 (1.020)	141	27900		57.13- 117.13	84.37	

* 5 Acenaphthylene							
7.224	7.223 (1.144)	152	21377	0.46706	23.2	80.00- 120.00	100.00
7.224	7.223 (1.144)	151	4164		0.00- 49.19	19.48	

* 6 Acenaphthene							
7.396	7.395 (1.171)	153	100590	3.53222	176	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.396	7.395 (1.171)	152	49648			16.38-	76.38	49.36
<hr/>								
7.901	7.900 (1.251)	166	102420	3.13274	CAS #: 86-73-7	156	80.00- 120.00	100.00
7.901	7.900 (1.251)	165	94856			63.07-	123.07	92.61
<hr/>								
8.844	8.839 (0.885)	178	1221953	24.3268	CAS #: 85-01-8	1210	80.00- 120.00	100.00(A)
8.844	8.844 (0.885)	179	216429			0.00-	45.12	17.71
<hr/>								
8.893	8.893 (0.889)	178	276633	5.64392	CAS #: 120-12-7	281	80.00- 120.00	100.00
8.893	8.893 (0.889)	179	64083			0.00-	45.01	23.17
<hr/>								
9.998	9.998 (1.000)	212	37710	0.80000	CAS #: 93951-69-0		80.00- 120.00	100.00
9.992	9.992 (1.000)	106	5565			0.00-	46.16	14.76
<hr/>								
10.020	10.014 (1.002)	202	1581761	28.6287	CAS #: 206-44-0	1420	80.00- 120.00	100.00(A)
10.014	10.009 (1.002)	101	240559			0.00-	43.42	15.21
<hr/>								
10.239	10.240 (1.024)	202	1270778	21.2970	CAS #: 129-00-0	1060	80.00- 120.00	100.00(A)
10.239	10.234 (1.024)	101	236649			0.00-	45.54	18.62
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11.408	11.404 (1.141)	226	214350	16.3451	CAS #: 56-55-3	814	80.00- 120.00	100.00(A)
11.408	11.404 (1.141)	200	30127			0.00-	43.30	14.06
<hr/>								
11.448	11.443 (1.145)	226	243553	15.6823	CAS #: 218-01-9	780	80.00- 120.00	100.00(A)
11.444	11.439 (1.145)	200	27342			0.00-	42.53	11.23
<hr/>								
12.404	12.395 (1.241)	252	1009990	23.9749	CAS #: 205-99-2	1190	80.00- 120.00	100.00(AM)
12.404	12.395 (1.241)	250	245976			0.00-	51.72	24.35
<hr/>								
12.412	12.417 (1.241)	252	552425	9.14835	CAS #: 207-08-9	455	80.00- 120.00	100.00(M)
12.412	12.417 (1.241)	250	133793			0.00-	56.49	24.22
<hr/>								
12.629	12.624 (1.263)	264	9885	0.18692	CAS #: 205440-82-0	9.3	80.00- 120.00	100.00(R)
12.624	12.620 (1.263)	132	1821			0.00-	47.65	18.42
<hr/>								
12.704	12.695 (1.271)	252	610165	12.3581	CAS #: 50-32-8	615	80.00- 120.00	100.00(A)
12.699	12.695 (1.270)	250	156814			0.00-	53.76	25.70
<hr/>								
13.840	13.835 (1.384)	276	324917	5.54144	CAS #: 193-39-5	276	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)			(ug/ml)	(ug/kg)			
13.840	13.831 (1.384)	138	87463			0.07-	60.07	26.92
21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.845	13.840 (1.385)	278	98248 2.30460	115	80.00- 120.00	100.00(Q)		
13.840	13.831 (1.384)	138	83334		7.12-	67.12	84.82	
22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
14.156	14.147 (1.416)	276	352498 7.28271	362	80.00- 120.00	100.00		
14.151	14.142 (1.415)	138	96087		0.00-	55.44	27.26	

QC Flag Legend

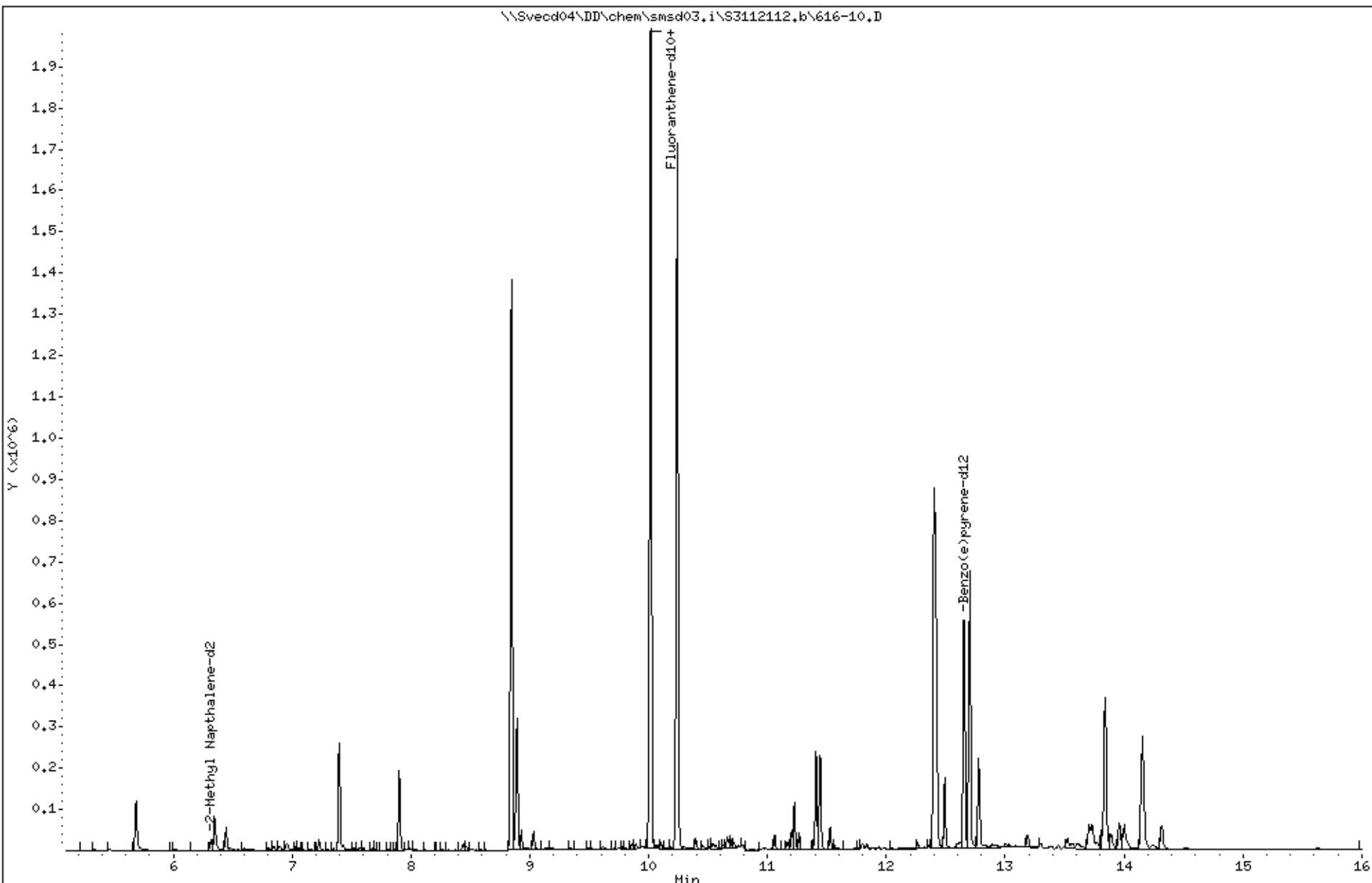
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.
- M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd03.i\S3112112.b\616-10.D
Date : 21-NOV-2012 22:53
Client ID: FH0263C-CS-SP
Sample Info: SIM350761610

Column phase: HPMS-5

Instrument: smsd03,i
Operator: MJ
Column diameter: 0.25

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PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-11.D
Lab Smp Id: 350761611 Client Smp ID: FM0126A-CS-SP
Inj Date : 21-NOV-2012 23:16 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761611
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.770	Weight of sample extracted (g)
M	18.300	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.686	5.684 (0.900)	128	29901	0.66698	31.7	80.00- 120.00	100.00
5.686	5.684 (0.900)	129	3196		0.00-	40.29	10.69

*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.319	6.317 (1.000)	152	22245	0.80000	80.00-	120.00	100.00
6.314	6.312 (1.000)	122	7227		2.00-	62.00	32.49

3	2-Methylnaphthalene				CAS #: 91-57-6		
6.352	6.351 (1.005)	142	14269	0.46796	22.2	80.00- 120.00	100.00
6.347	6.345 (1.004)	141	11920		55.71-	115.71	83.54

4	1-Methylnaphthalene				CAS #: 90-12-0		
6.447	6.445 (1.020)	142	9274	0.32301	15.3	80.00- 120.00	100.00
6.447	6.445 (1.020)	141	8246		57.13-	117.13	88.92

5	Acenaphthylene				CAS #: 208-96-8		
7.227	7.223 (1.144)	152	3938	0.08646	4.1	80.00- 120.00	100.00
7.227	7.223 (1.144)	151	684		0.00-	49.19	17.37

6	Acenaphthene				CAS #: 83-32-9		
7.394	7.395 (1.170)	153	4186	0.14771	7.0	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.394	7.395 (1.170)	152	2179			16.38-	76.38	52.05
<hr/>								
7.903	7.900 (1.251)	166	4372 0.13438		CAS #: 86-73-7	6.4	80.00- 120.00	100.00
7.899	7.900 (1.250)	165	4192			63.07-	123.07	95.88
<hr/>								
8.844	8.839 (0.885)	178	85595 1.60135		CAS #: 85-01-8	76.0	80.00- 120.00	100.00
8.844	8.844 (0.885)	179	13925			0.00-	45.12	16.27
<hr/>								
8.893	8.893 (0.889)	178	15066 0.28886		CAS #: 120-12-7	13.7	80.00- 120.00	100.00
8.893	8.893 (0.889)	179	4090			0.00-	45.01	27.15
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9.998	9.998 (1.000)	212	40128 0.80000		CAS #: 93951-69-0	80.00-	120.00	100.00
9.992	9.992 (1.000)	106	6471			0.00-	46.16	16.13
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10.014	10.014 (1.002)	202	135501 2.30469		CAS #: 206-44-0	109	80.00- 120.00	100.00
10.014	10.009 (1.002)	101	19383			0.00-	43.42	14.30
<hr/>								
10.239	10.240 (1.024)	202	113339 1.78499		CAS #: 129-00-0	84.8	80.00- 120.00	100.00
10.234	10.234 (1.024)	101	20145			0.00-	45.54	17.77
<hr/>								
11.408	11.404 (1.141)	226	18673 1.32347		CAS #: 56-55-3	62.9	80.00- 120.00	100.00
11.404	11.404 (1.141)	200	2280			0.00-	43.30	12.21
<hr/>								
11.443	11.443 (1.145)	226	22799 1.37956		CAS #: 218-01-9	65.5	80.00- 120.00	100.00
11.439	11.439 (1.144)	200	2320			0.00-	42.53	10.18
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12.399	12.395 (1.240)	252	93078 1.97364		CAS #: 205-99-2	93.7	80.00- 120.00	100.00(M)
12.399	12.395 (1.240)	250	23790			0.00-	51.72	25.56
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12.412	12.417 (1.241)	252	41333 0.64324		CAS #: 207-08-9	30.6	80.00- 120.00	100.00(M)
12.412	12.417 (1.241)	250	9038			0.00-	56.49	21.87
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12.628	12.624 (1.263)	264	14891 0.26461		CAS #: 205440-82-0	12.6	80.00- 120.00	100.00
12.624	12.620 (1.263)	132	2494			0.00-	47.65	16.75
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12.699	12.695 (1.270)	252	58000 1.10393		CAS #: 50-32-8	52.4	80.00- 120.00	100.00
12.699	12.695 (1.270)	250	13911			0.00-	53.76	23.98
<hr/>								
13.840	13.835 (1.384)	276	32356 0.51858		CAS #: 193-39-5	24.6	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)							
13.835	13.831	(1.384)	138	8269		0.07-	60.07	25.56
21	Dibenz[a,h]anthracene							
13.840	13.840	(1.384)	278	8890	0.08376	4.0	80.00- 120.00	100.00(Q)
13.835	13.831	(1.384)	138	8116		7.12-	67.12	91.29
22	Benzo[g,h,i]perylene							
14.151	14.147	(1.415)	276	30342	0.58910	28.0	80.00- 120.00	100.00
14.151	14.142	(1.415)	138	7057		0.00-	55.44	23.26

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

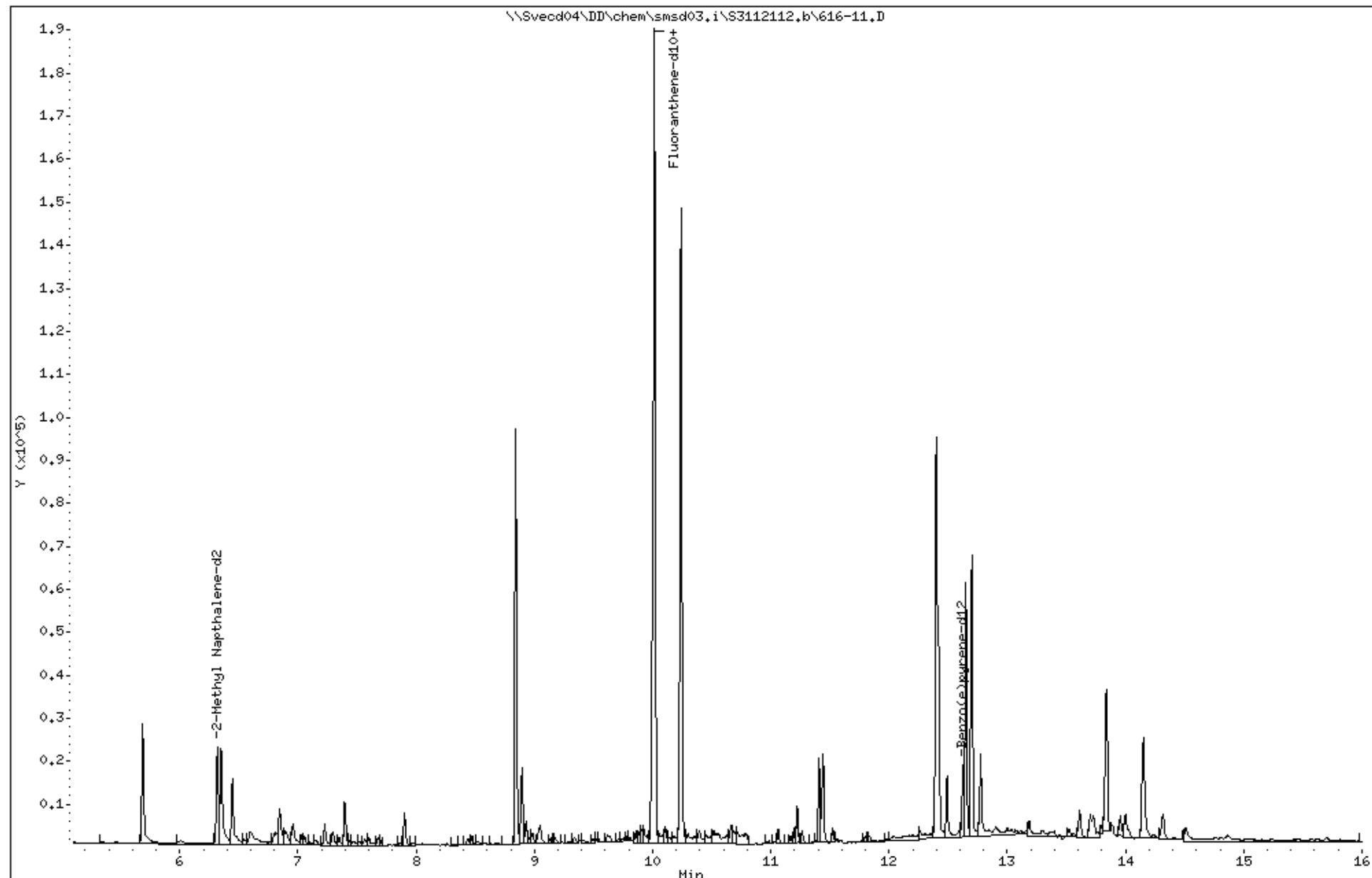
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Client ID: FH0126A-CS-SP
Sample Info: SIM350761611

Column phase: HPMS-5

Instrument: smsd03,i

Operator: MJ

Column diameter: 0.25



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-12.D
Lab Smp Id: 350761612 Client Smp ID: FM0126B-CS-SP
Inj Date : 21-NOV-2012 23:40 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761612
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.610	Weight of sample extracted (g)
M	20.600	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.689	5.684 (0.901)	128	40281	0.96441	47.4	80.00- 120.00	100.00
5.689	5.684 (0.901)	129	4299		0.00-	40.29	10.67

* 1 Naphthalene							
6.317	6.317 (1.000)	152	20725	0.80000	80.00-	120.00	100.00
6.317	6.312 (1.000)	122	6909		2.00-	62.00	33.34

* 3 2-Methyl Naphthalene-d2							
6.350	6.351 (1.005)	142	30534	1.07482	52.8	80.00- 120.00	100.00
6.350	6.345 (1.005)	141	25593		55.71-	115.71	83.82

* 4 1-Methylnaphthalene							
6.445	6.445 (1.020)	142	18560	0.69384	34.1	80.00- 120.00	100.00
6.445	6.445 (1.020)	141	16051		57.13-	117.13	86.48

* 5 Acenaphthylene							
7.229	7.223 (1.144)	152	3182	0.07499	3.7	80.00- 120.00	100.00
7.224	7.223 (1.144)	151	592		0.00-	49.19	18.60

* 6 Acenaphthene							
7.396	7.395 (1.171)	153	1763	0.06677	3.3	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.401	7.395 (1.172)	152	1052			16.38-	76.38	59.67
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7.900	7.900 (1.251)	166	2299 0.07585	CAS #:	86-73-7	3.7	80.00- 120.00	100.00
7.900	7.900 (1.251)	165	2586			63.07-	123.07	112.48
<hr/>								
8.840	8.839 (0.884)	178	63327 1.41266	CAS #:	85-01-8	69.5	80.00- 120.00	100.00
8.845	8.844 (0.885)	179	10379			0.00-	45.12	16.39
<hr/>								
8.894	8.893 (0.890)	178	7272 0.16625	CAS #:	120-12-7	8.2	80.00- 120.00	100.00
8.894	8.893 (0.890)	179	2220			0.00-	45.01	30.53
<hr/>								
9.997	9.998 (1.000)	212	33654 0.80000	CAS #:	93951-69-0	80.00-	120.00	100.00
9.992	9.992 (1.000)	106	5445			0.00-	46.16	16.18
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10.014	10.014 (1.002)	202	76821 1.55798	CAS #:	206-44-0	76.6	80.00- 120.00	100.00
10.014	10.009 (1.002)	101	11383			0.00-	43.42	14.82
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10.239	10.240 (1.024)	202	63957 1.20104	CAS #:	129-00-0	59.1	80.00- 120.00	100.00
10.233	10.234 (1.024)	101	10363			0.00-	45.54	16.20
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11.409	11.404 (1.141)	226	12095 1.01853	CAS #:	56-55-3	50.1	80.00- 120.00	100.00
11.405	11.404 (1.141)	200	1490			0.00-	43.30	12.32
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11.445	11.443 (1.145)	226	17235 1.24350	CAS #:	218-01-9	61.2	80.00- 120.00	100.00
11.441	11.439 (1.144)	200	1722			0.00-	42.53	9.99
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12.398	12.395 (1.240)	252	67853 1.70084	CAS #:	205-99-2	83.6	80.00- 120.00	100.00
12.398	12.395 (1.240)	250	15408			0.00-	51.72	22.71
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12.420	12.417 (1.242)	252	30713 0.56992	CAS #:	207-08-9	28.0	80.00- 120.00	100.00(M)
12.416	12.417 (1.242)	250	6498			0.00-	56.49	21.16
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12.628	12.624 (1.263)	264	13221 0.28013	CAS #:	205440-82-0	13.8	80.00- 120.00	100.00
12.623	12.620 (1.263)	132	2276			0.00-	47.65	17.22
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12.698	12.695 (1.270)	252	37283 0.84612	CAS #:	50-32-8	41.6	80.00- 120.00	100.00
12.698	12.695 (1.270)	250	8814			0.00-	53.76	23.64
<hr/>								
13.835	13.835 (1.384)	276	21450 0.40992	CAS #:	193-39-5	20.2	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)							
13.835	13.831 (1.384)	138	5508			0.07-	60.07	25.68
21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.839	13.840 (1.384)	278	6576	0.05940	2.9	80.00-	120.00	100.00(Q)
13.835	13.831 (1.384)	138	5354			7.12-	67.12	81.42
22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
14.151	14.147 (1.415)	276	20869	0.48312	23.8	80.00-	120.00	100.00
14.146	14.142 (1.415)	138	5053			0.00-	55.44	24.21

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd03.i\S3112112.b\616-12.D
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Client ID: FH0126B-CS-SP
Sample Info: SIM350761612

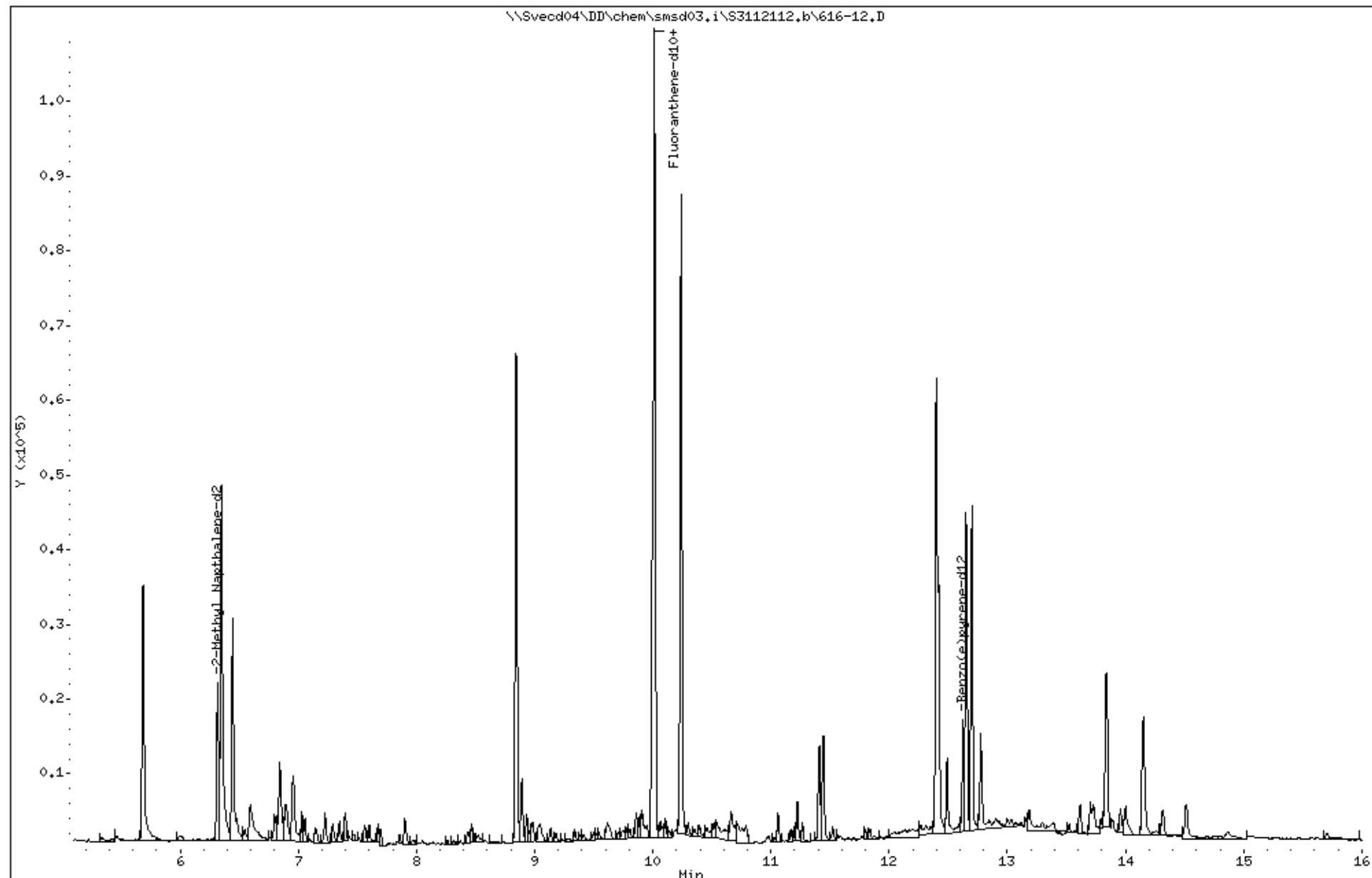
Column phase: HPMS-5

Instrument: smsd03,i

Operator: MJ

Column diameter: 0.25

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PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-14.D
Lab Smp Id: 350761614 Client Smp ID: CV0699A-CS
Inj Date : 22-NOV-2012 00:04 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
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Misc Info :
Comment :
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Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.020	Weight of sample extracted (g)
M	16.800	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
5.683	5.684 (0.900)	128	40785 0.93042	44.7	80.00- 120.00	100.00	
5.689	5.684 (0.901)	129	4312		0.00- 40.29	10.57	
<hr/>							
* 2 2-Methyl Naphthalene-d2							
6.317	6.317 (1.000)	152	21751 0.80000		80.00- 120.00	100.00	
6.317	6.312 (1.000)	122	7237		2.00- 62.00	33.27	
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3 2-Methylnaphthalene							
6.350	6.351 (1.005)	142	29316 0.98326	47.2	80.00- 120.00	100.00	
6.350	6.345 (1.005)	141	24825		55.71- 115.71	84.68	
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4 1-Methylnaphthalene							
6.445	6.445 (1.020)	142	19542 0.69609	33.4	80.00- 120.00	100.00	
6.445	6.445 (1.020)	141	16196		57.13- 117.13	82.88	
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5 Acenaphthylene							
7.224	7.223 (1.144)	152	8058 0.18094	8.7	80.00- 120.00	100.00	
7.224	7.223 (1.144)	151	1582		0.00- 49.19	19.63	
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6 Acenaphthene							
7.396	7.395 (1.171)	153	4191 0.15125	7.3	80.00- 120.00	100.00	

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.396	7.395 (1.171)	152	2178			16.38-	76.38	51.97
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7.900	7.900 (1.251)	166	5234 0.16453		CAS #: 86-73-7	7.9	80.00- 120.00	100.00
7.900	7.900 (1.251)	165	5263			63.07-	123.07	100.55
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8.839	8.839 (0.884)	178	111184 2.21147		CAS #: 85-01-8	106	80.00- 120.00	100.00
8.845	8.844 (0.885)	179	18191			0.00-	45.12	16.36
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8.894	8.893 (0.890)	178	19770 0.40299		CAS #: 120-12-7	19.4	80.00- 120.00	100.00
8.894	8.893 (0.890)	179	5061			0.00-	45.01	25.60
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9.996	9.998 (1.000)	212	37744 0.80000		CAS #: 93951-69-0	80.00-	120.00	100.00
9.996	9.992 (1.000)	106	5729			0.00-	46.16	15.18
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10.012	10.014 (1.002)	202	164307 2.97116		CAS #: 206-44-0	143	80.00- 120.00	100.00
10.012	10.009 (1.002)	101	23068			0.00-	43.42	14.04
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10.238	10.240 (1.024)	202	148109 2.47992		CAS #: 129-00-0	119	80.00- 120.00	100.00
10.238	10.234 (1.024)	101	24291			0.00-	45.54	16.40
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11.409	11.404 (1.141)	226	36232 2.74711		CAS #: 56-55-3	132	80.00- 120.00	100.00
11.405	11.404 (1.141)	200	4282			0.00-	43.30	11.82
<hr/>								
11.444	11.443 (1.145)	226	41640 2.67877		CAS #: 218-01-9	129	80.00- 120.00	100.00
11.440	11.439 (1.144)	200	5476			0.00-	42.53	13.15
<hr/>								
12.398	12.395 (1.240)	252	183181 4.25234		CAS #: 205-99-2	204	80.00- 120.00	100.00(M)
12.398	12.395 (1.240)	250	42695			0.00-	51.72	23.31
<hr/>								
12.415	12.417 (1.242)	252	65554 1.08462		CAS #: 207-08-9	52.1	80.00- 120.00	100.00(M)
12.415	12.417 (1.242)	250	13865			0.00-	56.49	21.15
<hr/>								
12.627	12.624 (1.263)	264	15097 0.28522		CAS #: 205440-82-0	13.7	80.00- 120.00	100.00
12.627	12.620 (1.263)	132	2731			0.00-	47.65	18.09
<hr/>								
12.698	12.695 (1.270)	252	120583 2.44005		CAS #: 50-32-8	117	80.00- 120.00	100.00
12.698	12.695 (1.270)	250	29426			0.00-	53.76	24.40
<hr/>								
13.839	13.835 (1.384)	276	62321 1.06192		CAS #: 193-39-5	51.0	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)							
13.839	13.831	(1.384)	138	14923		0.07-	60.07	23.95
21	Dibenz[a,h]anthracene							
13.843	13.840	(1.385)	278	18795	0.34128	16.4	80.00-	120.00
13.839	13.831	(1.384)	138	16767		7.12-	67.12	89.21
22	Benzo[g,h,i]perylene							
14.155	14.147	(1.416)	276	60943	1.25797	60.4	80.00-	120.00
14.150	14.142	(1.416)	138	15455		0.00-	55.44	25.36

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

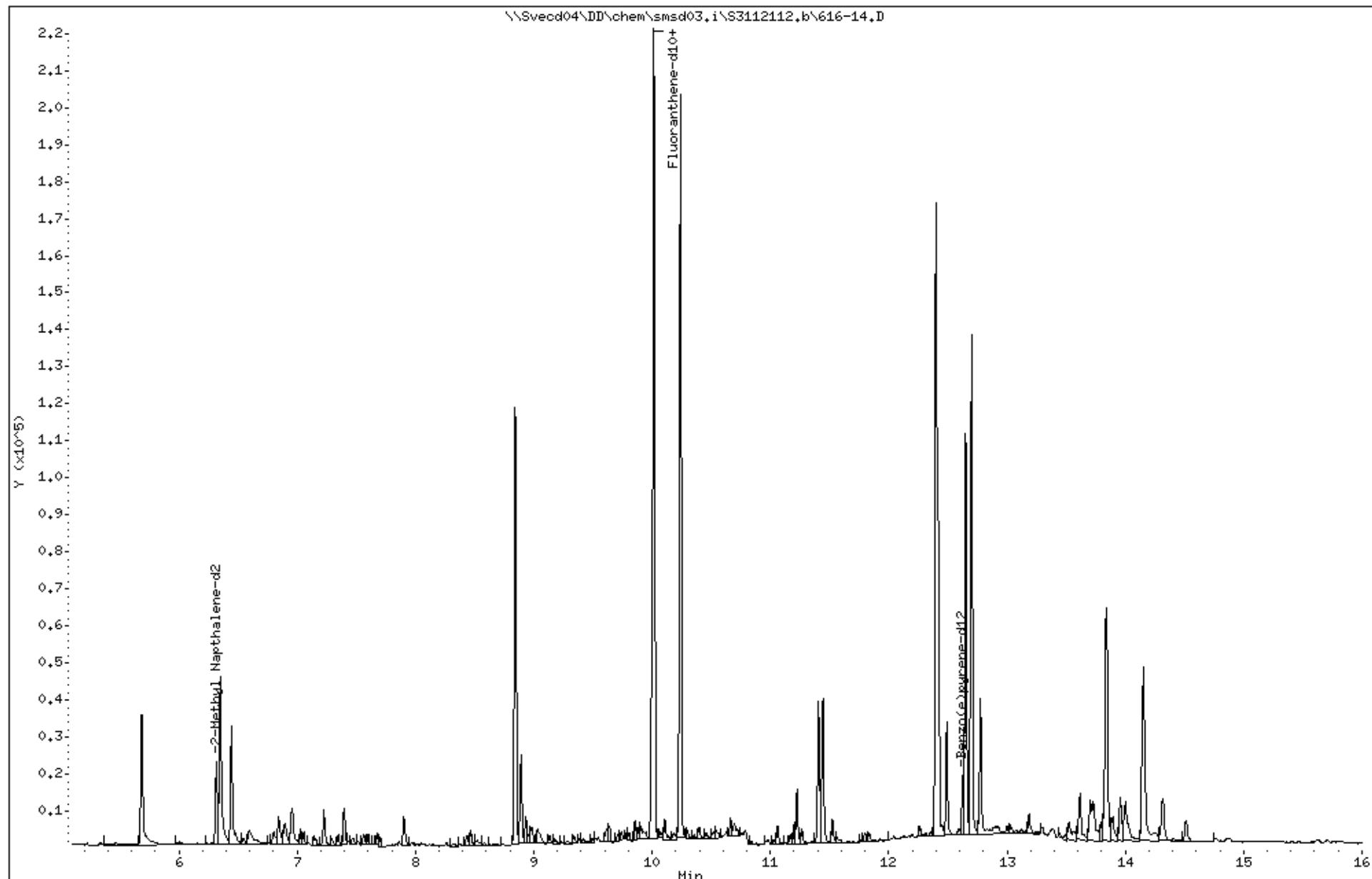
Data File: \\Sved04\DD\chem\smsd03.i\S3112112.b\616-14.D
Date : 22-NOV-2012 00:04
Client ID: CV0699A-CS
Sample Info: SIM350761614

Column phase: HPMS-5

Instrument: smsd03,i

Operator: MJ
Column diameter: 0.25

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PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-15.D
Lab Smp Id: 350761615 Client Smp ID: CV0699B-CS
Inj Date : 22-NOV-2012 00:27 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761615
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.010	Weight of sample extracted (g)
M	19.200	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
5.683	5.684 (0.900)	128	33433 0.73314	36.3	80.00- 120.00	100.00	
5.689	5.684 (0.901)	129	3547		0.00- 40.29	10.61	
<hr/>							
* 2 2-Methyl Naphthalene-d2							
6.317	6.317 (1.000)	152	22628 0.80000	80.00-	120.00	100.00	
6.311	6.312 (1.000)	122	7219		2.00- 62.00	31.90	
<hr/>							
3 2-Methylnaphthalene							
6.350	6.351 (1.005)	142	20137 0.64922	32.1	80.00- 120.00	100.00	
6.350	6.345 (1.005)	141	16998		55.71- 115.71	84.41	
<hr/>							
4 1-Methylnaphthalene							
6.445	6.445 (1.020)	142	14722 0.50408	24.9	80.00- 120.00	100.00	
6.445	6.445 (1.020)	141	12403		57.13- 117.13	84.25	
<hr/>							
5 Acenaphthylene							
7.228	7.223 (1.144)	152	7660 0.16533	8.2	80.00- 120.00	100.00	
7.223	7.223 (1.143)	151	1419		0.00- 49.19	18.52	
<hr/>							
6 Acenaphthene							
7.395	7.395 (1.171)	153	14373 0.49860	24.7	80.00- 120.00	100.00	

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.395	7.395 (1.171)	152	7298			16.38-	76.38	50.78
<hr/>								
6 Acenaphthene (continued)				CAS #: 86-73-7				
7.903	7.900 (1.251)	166	11516 0.34798	17.2	80.00-	120.00	100.00	
7.899	7.900 (1.250)	165	11188		63.07-	123.07	97.15	
<hr/>								
9 Phenanthrene				CAS #: 85-01-8				
8.844	8.839 (0.885)	178	339825 6.63886	328	80.00-	120.00	100.00	
8.844	8.844 (0.885)	179	56025		0.00-	45.12	16.49	
<hr/>								
10 Anthracene				CAS #: 120-12-7				
8.892	8.893 (0.889)	178	99101 1.98410	98.2	80.00-	120.00	100.00	
8.892	8.893 (0.889)	179	19864		0.00-	45.01	20.04	
<hr/>								
* 11 Fluoranthene-d10				CAS #: 93951-69-0				
9.998	9.998 (1.000)	212	38428 0.80000		80.00-	120.00	100.00	
9.992	9.992 (1.000)	106	5857		0.00-	46.16	15.24	
<hr/>								
12 Fluoranthene				CAS #: 206-44-0				
10.014	10.014 (1.002)	202	1005245 17.8543	884	80.00-	120.00	100.00(A)	
10.014	10.009 (1.002)	101	147539		0.00-	43.42	14.68	
<hr/>								
13 Pyrene				CAS #: 129-00-0				
10.240	10.240 (1.024)	202	1050990 17.2845	855	80.00-	120.00	100.00(A)	
10.234	10.234 (1.024)	101	197757		0.00-	45.54	18.82	
<hr/>								
14 Benzo[a]anthracene				CAS #: 56-55-3				
11.409	11.404 (1.141)	226	171105 12.8002	633	80.00-	120.00	100.00(A)	
11.409	11.404 (1.141)	200	22987		0.00-	43.30	13.43	
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15 Chrysene				CAS #: 218-01-9				
11.444	11.443 (1.145)	226	170706 10.7863	534	80.00-	120.00	100.00(A)	
11.444	11.439 (1.145)	200	24138		0.00-	42.53	14.14	
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16 Benzo[b]fluoranthene				CAS #: 205-99-2				
12.402	12.395 (1.240)	252	759658 17.6662	874	80.00-	120.00	100.00(AM)	
12.402	12.395 (1.240)	250	206508		0.00-	51.72	27.18	
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17 Benzo[k]fluoranthene				CAS #: 207-08-9				
12.415	12.417 (1.242)	252	345752 5.61879	278	80.00-	120.00	100.00(M)	
12.415	12.417 (1.242)	250	78439		0.00-	56.49	22.69	
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\$ 18 Benzo(e)pyrene-d12				CAS #: 205440-82-0				
12.627	12.624 (1.263)	264	15214 0.28231	14.0	80.00-	120.00	100.00	
12.623	12.620 (1.263)	132	2464		0.00-	47.65	16.20	
<hr/>								
19 Benzo[a]pyrene				CAS #: 50-32-8				
12.702	12.695 (1.270)	252	474210 9.42504	466	80.00-	120.00	100.00	
12.698	12.695 (1.270)	250	119252		0.00-	53.76	25.15	
<hr/>								
20 Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5				
13.840	13.835 (1.384)	276	206298 3.45266	171	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
13.840	13.831 (1.384)	138	62345		0.07-	60.07	30.22	
13.844	13.840 (1.385)	278	66383 1.48673	CAS #: 53-70-3	73.6	80.00-	120.00	100.00(Q)
13.840	13.831 (1.384)	138	58091		7.12-	67.12	87.51	
14.155	14.147 (1.416)	276	185209 3.75497	CAS #: 191-24-2	186	80.00-	120.00	100.00
14.151	14.142 (1.415)	138	48205		0.00-	55.44	26.03	

QC Flag Legend

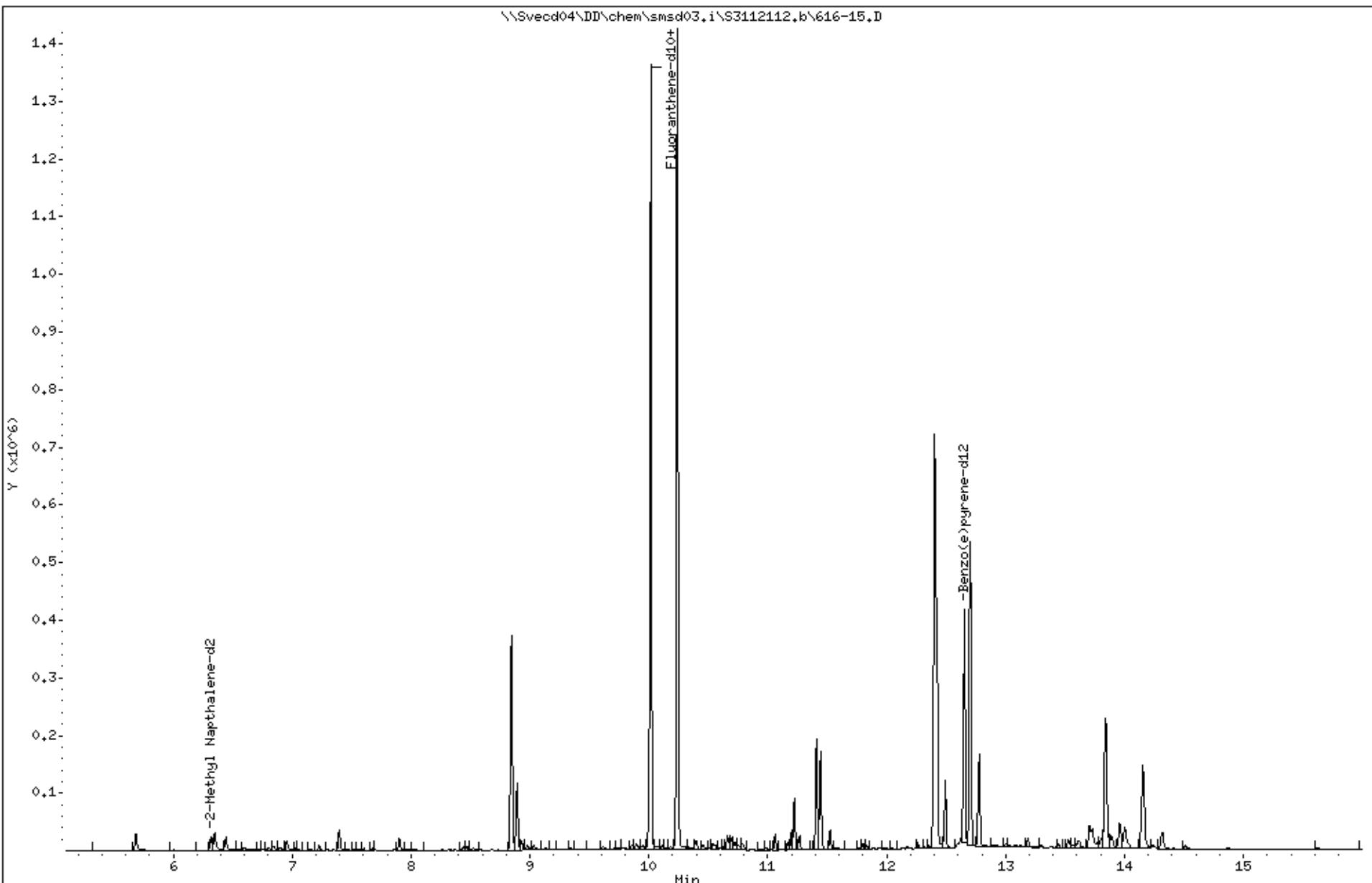
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd03.i\S3112112.b\616-15.D
Date : 22-NOV-2012 00:27
Client ID: CV0699B-CS
Sample Info: SIM350761615

Column phase: HPMS-5

Instrument: smsd03,i
Operator: MJ
Column diameter: 0.25

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PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-16.D
Lab Smp Id: 350761616 Client Smp ID: CV0699C-CS
Inj Date : 22-NOV-2012 00:51 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761616
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.300	Weight of sample extracted (g)
M	18.000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
5.685	5.684	(0.900)	128	42296	1.00775	48.6 80.00- 120.00	100.00
5.685	5.684	(0.900)	129	4578		0.00- 40.29	10.82
*	2	2-Methyl Naphthalene-d2				CAS #: 7927-45-2	
6.318	6.317	(1.000)	152	20826	0.80000	80.00- 120.00	100.00
6.313	6.312	(1.000)	122	6920		2.00- 62.00	33.23
3	2-Methylnaphthalene					CAS #: 91-57-6	
6.352	6.351	(1.005)	142	27029	0.94682	45.6 80.00- 120.00	100.00
6.352	6.345	(1.005)	141	22441		55.71- 115.71	83.03
4	1-Methylnaphthalene					CAS #: 90-12-0	
6.446	6.445	(1.020)	142	18654	0.69398	33.4 80.00- 120.00	100.00
6.446	6.445	(1.020)	141	15664		57.13- 117.13	83.97
5	Acenaphthylene					CAS #: 208-96-8	
7.228	7.223	(1.144)	152	5513	0.12929	6.2 80.00- 120.00	100.00
7.224	7.223	(1.143)	151	1022		0.00- 49.19	18.54
6	Acenaphthene					CAS #: 83-32-9	
7.396	7.395	(1.171)	153	6593	0.24850	12.0 80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.396	7.395 (1.171)	152	3298			16.38-	76.38	50.02
<hr/>								
7.900	7.900 (1.250)	166	7970 0.26167	CAS #:	86-73-7	12.6	80.00- 120.00	100.00
7.900	7.900 (1.250)	165	7820			63.07-	123.07	98.12
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8.840	8.839 (0.884)	178	102776 2.34550	CAS #:	85-01-8	113	80.00- 120.00	100.00
8.845	8.844 (0.885)	179	16742			0.00-	45.12	16.29
<hr/>								
8.894	8.893 (0.890)	178	22402 0.52393	CAS #:	120-12-7	25.2	80.00- 120.00	100.00
8.894	8.893 (0.890)	179	5510			0.00-	45.01	24.60
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9.997	9.998 (1.000)	212	32896 0.80000	CAS #:	93951-69-0	80.00-	120.00	100.00
9.992	9.992 (1.000)	106	4944			0.00-	46.16	15.03
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10.014	10.014 (1.002)	202	147517 3.06067	CAS #:	206-44-0	148	80.00- 120.00	100.00
10.014	10.009 (1.002)	101	20720			0.00-	43.42	14.05
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10.239	10.240 (1.024)	202	121080 2.32613	CAS #:	129-00-0	112	80.00- 120.00	100.00
10.233	10.234 (1.024)	101	20181			0.00-	45.54	16.67
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11.409	11.404 (1.141)	226	25996 2.25868	CAS #:	56-55-3	109	80.00- 120.00	100.00
11.405	11.404 (1.141)	200	3213			0.00-	43.30	12.36
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11.444	11.443 (1.145)	226	29921 2.20854	CAS #:	218-01-9	106	80.00- 120.00	100.00
11.440	11.439 (1.144)	200	3122			0.00-	42.53	10.43
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12.399	12.395 (1.240)	252	131785 3.49046	CAS #:	205-99-2	168	80.00- 120.00	100.00(M)
12.399	12.395 (1.240)	250	34028			0.00-	51.72	25.82
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12.412	12.417 (1.242)	252	64302 1.22070	CAS #:	207-08-9	58.8	80.00- 120.00	100.00(M)
12.412	12.417 (1.242)	250	14425			0.00-	56.49	22.43
<hr/>								
12.629	12.624 (1.263)	264	6299 0.13654	CAS #:	205440-82-0	6.6	80.00- 120.00	100.00(R)
12.624	12.620 (1.263)	132	905			0.00-	47.65	14.37
<hr/>								
12.699	12.695 (1.270)	252	82849 1.92355	CAS #:	50-32-8	92.7	80.00- 120.00	100.00
12.699	12.695 (1.270)	250	19870			0.00-	53.76	23.98
<hr/>								
13.839	13.835 (1.384)	276	40136 0.78469	CAS #:	193-39-5	37.8	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)							
13.839	13.831 (1.384)	138	9517			0.07-	60.07	23.71
21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.843	13.840 (1.385)	278	13137 0.24941	12.0	80.00- 120.00	100.00(Q)		
13.839	13.831 (1.384)	138	10562	7.12-	67.12	80.40		
22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
14.154	14.147 (1.416)	276	44294 1.04905	50.6	80.00- 120.00	100.00		
14.150	14.142 (1.415)	138	11709	0.00-	55.44	26.43		

QC Flag Legend

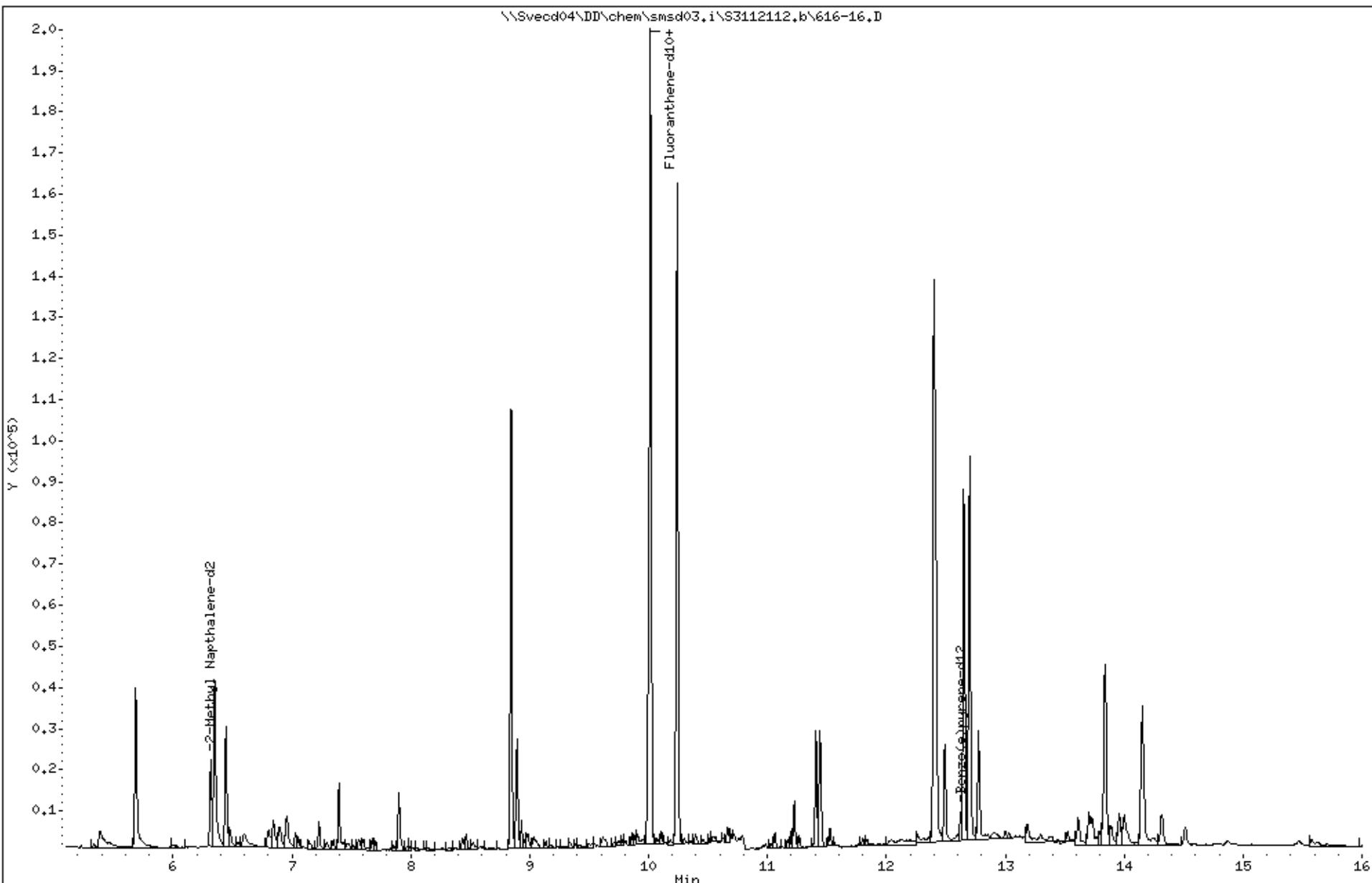
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd03.i\S3112112.b\616-16.D
Date : 22-NOV-2012 00:51
Client ID: CV0699C-CS
Sample Info: SIM350761616

Column phase: HPMS-5

Instrument: smsd03,i
Operator: MJ
Column diameter: 0.25

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PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-17.D
Lab Smp Id: 350761617 Client Smp ID: FM0210A-CS
Inj Date : 22-NOV-2012 01:14 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761617
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.200	Weight of sample extracted (g)
M	18.000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.684	5.684 (0.900)	128	19915	0.44631	21.6	80.00- 120.00	100.00
5.690	5.684 (0.901)	129	1954		0.00-	40.29	9.81

* 1 Naphthalene							
6.318	6.317 (1.000)	152	22141	0.80000	80.00-	120.00	100.00
6.312	6.312 (1.000)	122	6986		2.00-	62.00	31.55

* 2 2-Methyl Naphthalene-d2							
6.351	6.351 (1.005)	142	10158	0.33470	16.2	80.00- 120.00	100.00
6.351	6.345 (1.005)	141	8485		55.71-	115.71	83.53

* 3 2-Methylnaphthalene							
6.446	6.445 (1.020)	142	6957	0.24345	11.8	80.00- 120.00	100.00
6.446	6.445 (1.020)	141	6358		57.13-	117.13	91.39

* 5 Acenaphthylene							
7.228	7.223 (1.144)	152	2248	0.04959	2.4	80.00- 120.00	100.00
7.223	7.223 (1.143)	151	439		0.00-	49.19	19.53

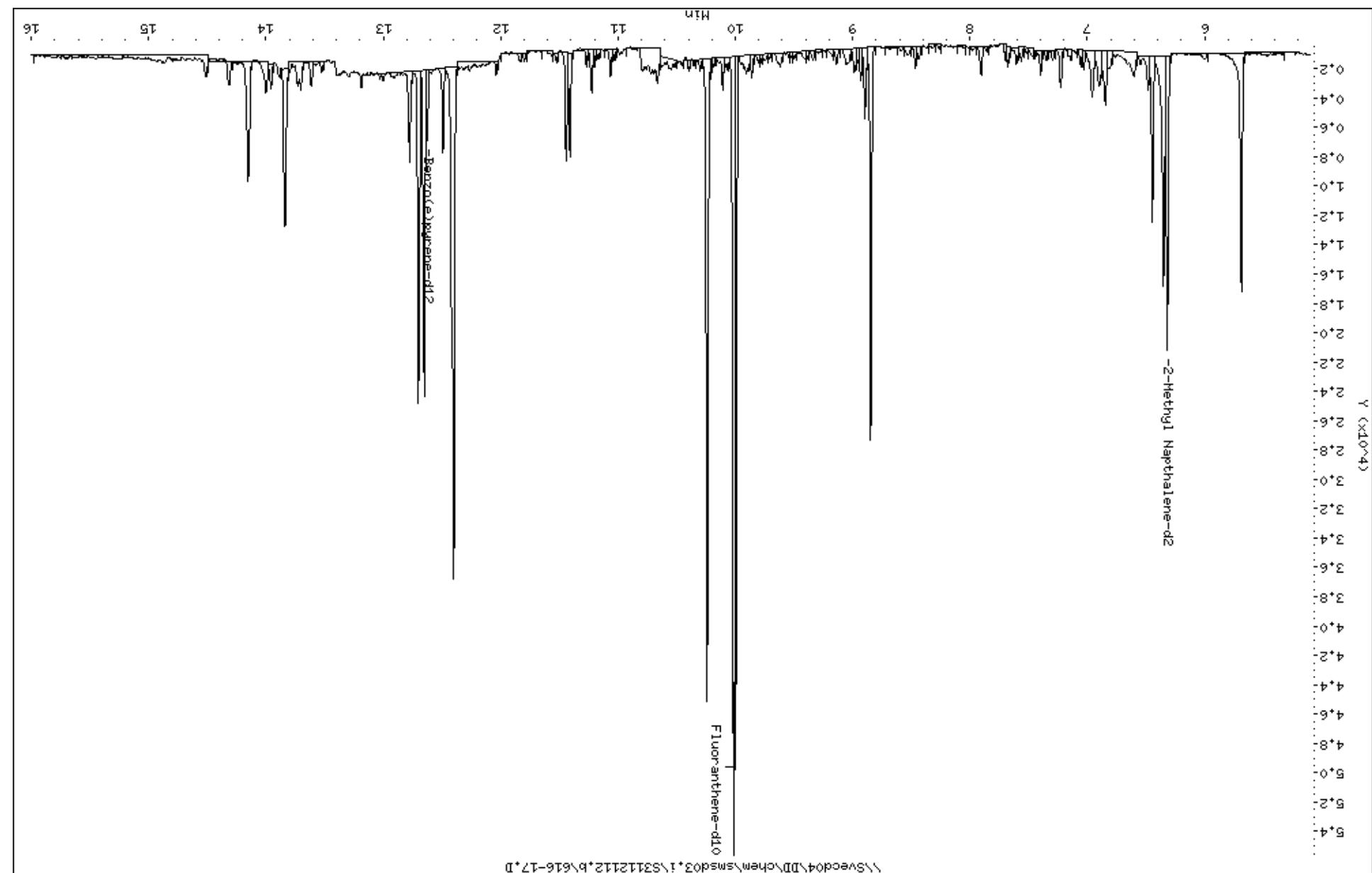
* 6 Acenaphthene							
7.400	7.395 (1.171)	153	853	0.03024	1.5	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.400	7.395 (1.171)	152	601		16.38-	76.38	70.46	
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7.904	7.900 (1.251)	166	1356 0.04188	2.0	80.00-	120.00	100.00	
7.901	7.900 (1.250)	165	1518		63.07-	123.07	111.95	
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8.845	8.839 (0.885)	178	26376 0.50260	24.3	80.00-	120.00	100.00	
8.845	8.844 (0.885)	179	4257		0.00-	45.12	16.14	
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8.893	8.893 (0.890)	178	3738 0.07300	3.5	80.00-	120.00	100.00	
8.893	8.893 (0.890)	179	1236		0.00-	45.01	33.07	
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9.998	9.998 (1.000)	212	39398 0.80000	80.00-	120.00	100.00		
9.993	9.992 (1.000)	106	6373		0.00-	46.16	16.18	
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10.015	10.014 (1.002)	202	39351 0.68171	33.0	80.00-	120.00	100.00	
10.015	10.009 (1.002)	101	6392		0.00-	43.42	16.24	
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10.240	10.240 (1.024)	202	34248 0.54937	26.6	80.00-	120.00	100.00	
10.234	10.234 (1.024)	101	5441		0.00-	45.54	15.89	
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11.408	11.404 (1.141)	226	7021 0.49702	24.0	80.00-	120.00	100.00	
11.408	11.404 (1.141)	200	594		0.00-	43.30	8.46	
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11.444	11.443 (1.145)	226	8941 0.55104	26.7	80.00-	120.00	100.00	
11.440	11.439 (1.144)	200	876		0.00-	42.53	9.80	
<hr/>								
12.399	12.395 (1.240)	252	34830 0.68265	33.0	80.00-	120.00	100.00(M)	
12.399	12.395 (1.240)	250	8835		0.00-	51.72	25.37	
<hr/>								
12.412	12.417 (1.241)	252	15483 0.24542	11.9	80.00-	120.00	100.00(M)	
12.408	12.417 (1.241)	250	4600		0.00-	56.49	29.71	
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12.628	12.624 (1.263)	264	4701 0.08508	4.1	80.00-	120.00	100.00(R)	
12.624	12.620 (1.263)	132	795		0.00-	47.65	16.91	
<hr/>								
12.699	12.695 (1.270)	252	20565 0.39867	19.3	80.00-	120.00	100.00	
12.699	12.695 (1.270)	250	4856		0.00-	53.76	23.61	
<hr/>								
13.840	13.835 (1.384)	276	10706 0.17477	8.4	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)							
13.835	13.831	(1.384)	138	2700		0.07-	60.07	25.22
22	Benzo[g,h,i]perylene							
14.151	14.147	(1.415)	276	11057	0.21865	10.6	80.00-	120.00
14.151	14.142	(1.415)	138	2573		0.00-	55.44	23.27

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.



Page 4

Data File: \\Svedod4\\DD\\chem\\msd03\\1\\S3112112.b\\616-17.D
Date : 22-NOV-2012 01:14
Client ID: FH0210A-CS
Sample Info: S1H350761617
Instrument: msd03.i
Operator: H3
Column diameter: 0.25 mm
Column phase: HPMS-5
\\Svedod4\\DD\\chem\\msd03\\1\\S3112112.b\\616-17.D

PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-18.D
Lab Smp Id: 350761618 Client Smp ID: FM0210B-CS
Inj Date : 22-NOV-2012 01:38 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761618
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.080	Weight of sample extracted (g)
M	17.300	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
5.685	5.684 (0.900)	128	34969 0.88339	42.6	80.00- 120.00	100.00	
5.685	5.684 (0.900)	129	3609		0.00- 40.29	10.32	
<hr/>							
*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.319	6.317 (1.000)	152	19642 0.80000		80.00- 120.00	100.00	
6.313	6.312 (1.000)	122	6513		2.00- 62.00	33.16	
<hr/>							
6.352	6.351 (1.005)	142	23337 0.86677	41.8	80.00- 120.00	100.00	
6.347	6.345 (1.004)	141	19576		55.71- 115.71	83.88	
<hr/>							
6.447	6.445 (1.020)	142	17428 0.68745	33.1	80.00- 120.00	100.00	
6.447	6.445 (1.020)	141	14311		57.13- 117.13	82.11	
<hr/>							
7.227	7.223 (1.144)	152	4106 0.10210	4.9	80.00- 120.00	100.00	
7.223	7.223 (1.143)	151	759		0.00- 49.19	18.49	
<hr/>							
7.395	7.395 (1.170)	153	2914 0.11645	5.6	80.00- 120.00	100.00	

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.399	7.395 (1.171)	152	1620			16.38-	76.38	55.59
<hr/>								
7.904	7.900 (1.251)	166	3765 0.13106		CAS #: 86-73-7	6.3	80.00- 120.00	100.00
7.900	7.900 (1.250)	165	4266			63.07-	123.07	113.31
<hr/>								
8.844	8.839 (0.885)	178	84729 1.77867		CAS #: 85-01-8	85.8	80.00- 120.00	100.00
8.844	8.844 (0.885)	179	14167			0.00-	45.12	16.72
<hr/>								
8.893	8.893 (0.889)	178	9954 0.21415		CAS #: 120-12-7	10.3	80.00- 120.00	100.00
8.893	8.893 (0.889)	179	2241			0.00-	45.01	22.51
<hr/>								
9.998	9.998 (1.000)	212	35762 0.80000		CAS #: 93951-69-0	80.00-	120.00	100.00
9.993	9.992 (1.000)	106	5796			0.00-	46.16	16.21
<hr/>								
10.015	10.014 (1.002)	202	93388 1.78233		CAS #: 206-44-0	85.9	80.00- 120.00	100.00
10.015	10.009 (1.002)	101	13510			0.00-	43.42	14.47
<hr/>								
10.240	10.240 (1.024)	202	89162 1.57566		CAS #: 129-00-0	76.0	80.00- 120.00	100.00
10.234	10.234 (1.024)	101	15078			0.00-	45.54	16.91
<hr/>								
11.408	11.404 (1.141)	226	14674 1.16513		CAS #: 56-55-3	56.2	80.00- 120.00	100.00
11.404	11.404 (1.141)	200	1771			0.00-	43.30	12.07
<hr/>								
11.443	11.443 (1.145)	226	20577 1.39712		CAS #: 218-01-9	67.4	80.00- 120.00	100.00
11.439	11.439 (1.144)	200	2834			0.00-	42.53	13.77
<hr/>								
12.399	12.395 (1.240)	252	66210 1.55264		CAS #: 205-99-2	74.8	80.00- 120.00	100.00(M)
12.399	12.395 (1.240)	250	16799			0.00-	51.72	25.37
<hr/>								
12.412	12.417 (1.241)	252	29660 0.51793		CAS #: 207-08-9	25.0	80.00- 120.00	100.00(M)
12.412	12.417 (1.241)	250	6685			0.00-	56.49	22.54
<hr/>								
12.628	12.624 (1.263)	264	10468 0.20873		CAS #: 205440-82-0	10.1	80.00- 120.00	100.00(R)
12.624	12.620 (1.263)	132	1743			0.00-	47.65	16.65
<hr/>								
12.699	12.695 (1.270)	252	38430 0.82075		CAS #: 50-32-8	39.6	80.00- 120.00	100.00
12.699	12.695 (1.270)	250	8909			0.00-	53.76	23.18
<hr/>								
13.840	13.835 (1.384)	276	18476 0.33227		CAS #: 193-39-5	16.0	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)							
13.835	13.831 (1.384)	138	4534			0.07-	60.07	24.54
21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.844	13.840 (1.385)	278	6497 0.04662	2.2	80.00- 120.00	100.00(Q)		
13.835	13.831 (1.384)	138	4563		7.12-	67.12	70.23	
22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
14.151	14.147 (1.415)	276	21016 0.45785	22.1	80.00- 120.00	100.00		
14.151	14.142 (1.415)	138	5046		0.00-	55.44	24.01	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

R - Spike/Surrogate failed recovery limits.

M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd03.i\S3112112.b\616-18.D

Page 4

Date : 22-NOV-2012 01:38

Client ID: FH0210B-CS

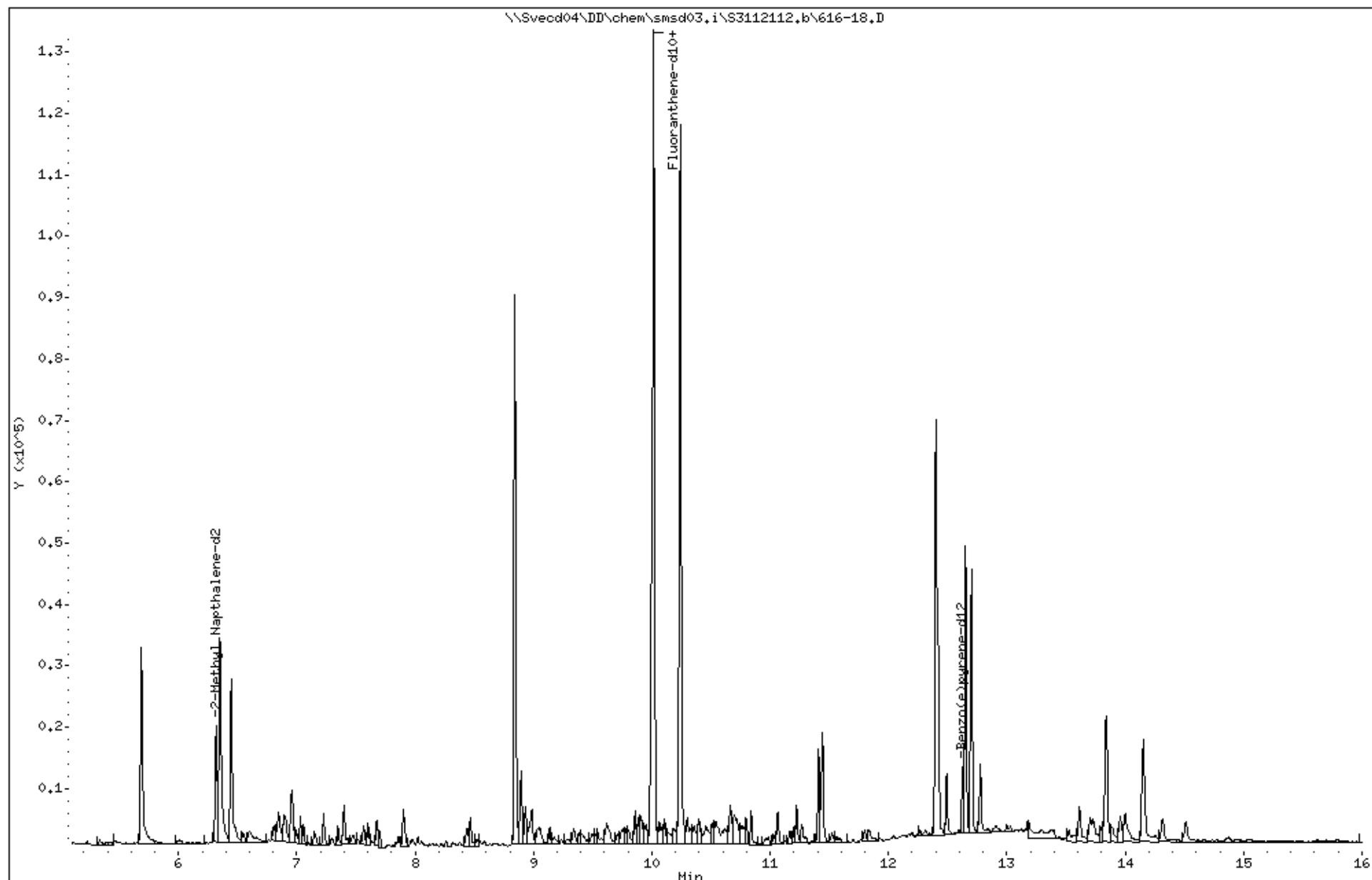
Sample Info: SIM350761618

Column phase: HPMS-5

Instrument: smsd03,i

Operator: MJ

Column diameter: 0.25



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-19.D
Lab Smp Id: 350761619 Client Smp ID: FM0210C-CS
Inj Date : 22-NOV-2012 02:01 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761619
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.060	Weight of sample extracted (g)
M	15.500	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.684	5.684	(0.900)	128	44434 1.03362	48.8	80.00- 120.00	100.00
5.684	5.684	(0.900)	129	4602		0.00- 40.29	10.36

* 1 Naphthalene							
6.317	6.317	(1.000)	152	21331 0.80000	80.00-	120.00	100.00
6.312	6.312	(1.000)	122	7347	2.00-	62.00	34.44

* 3 2-Methyl Naphthalene-d2							
6.351	6.351	(1.005)	142	30813 1.05382	49.8	80.00- 120.00	100.00
6.351	6.345	(1.005)	141	25732	55.71-	115.71	83.51

* 4 1-Methylnaphthalene							
6.445	6.445	(1.020)	142	25491 0.92588	43.7	80.00- 120.00	100.00
6.445	6.445	(1.020)	141	20751	57.13-	117.13	81.41

* 5 Acenaphthylene							
7.227	7.223	(1.144)	152	11309 0.25894	12.2	80.00- 120.00	100.00
7.223	7.223	(1.143)	151	2242	0.00-	49.19	19.82

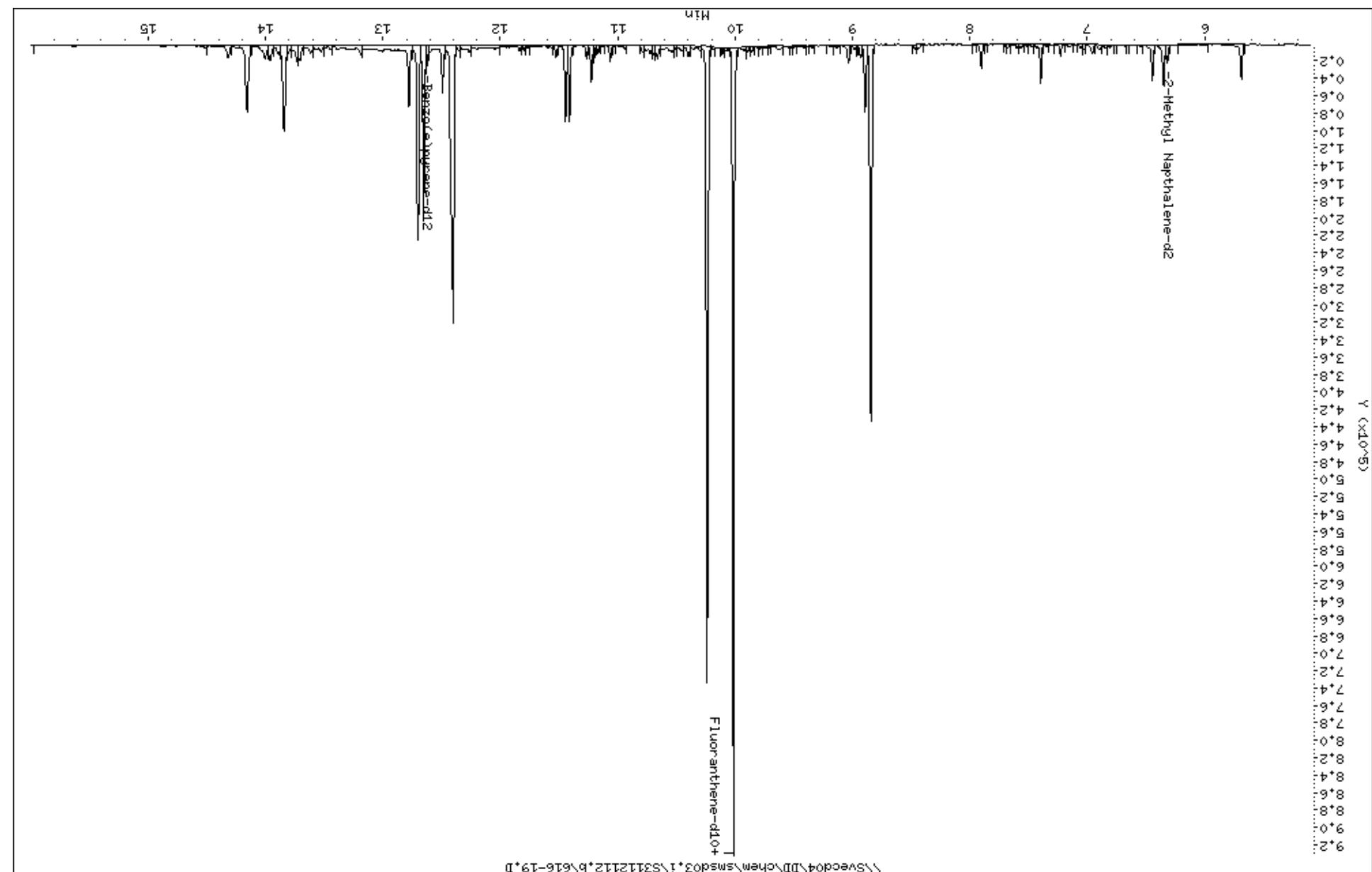
* 6 Acenaphthene							
7.395	7.395	(1.171)	153	18314 0.67394	31.8	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.395	7.395 (1.171)	152	9624			16.38-	76.38	52.55
<hr/>								
7.900	7.900 (1.250)	166	15801 0.50649	CAS #:	86-73-7	23.9	80.00- 120.00	100.00
7.900	7.900 (1.250)	165	15529			63.07-	123.07	98.28
<hr/>								
8.839	8.839 (0.884)	178	398648 8.08468	CAS #:	85-01-8	382	80.00- 120.00	100.00
8.845	8.844 (0.885)	179	67279			0.00-	45.12	16.88
<hr/>								
8.893	8.893 (0.889)	178	64653 1.34372	CAS #:	120-12-7	63.4	80.00- 120.00	100.00
8.893	8.893 (0.889)	179	15724			0.00-	45.01	24.32
<hr/>								
9.998	9.998 (1.000)	212	37018 0.80000	CAS #:	93951-69-0	80.00-	120.00	100.00
9.993	9.992 (1.000)	106	5553			0.00-	46.16	15.00
<hr/>								
10.015	10.014 (1.002)	202	662875 12.2218	CAS #:	206-44-0	577	80.00- 120.00	100.00(A)
10.015	10.009 (1.002)	101	97652			0.00-	43.42	14.73
<hr/>								
10.240	10.240 (1.024)	202	545220 9.30816	CAS #:	129-00-0	440	80.00- 120.00	100.00
10.234	10.234 (1.024)	101	96696			0.00-	45.54	17.74
<hr/>								
11.409	11.404 (1.141)	226	79141 6.13770	CAS #:	56-55-3	290	80.00- 120.00	100.00
11.409	11.404 (1.141)	200	6704			0.00-	43.30	8.47
<hr/>								
11.444	11.443 (1.145)	226	90411 5.93036	CAS #:	218-01-9	280	80.00- 120.00	100.00
11.440	11.439 (1.144)	200	8472			0.00-	42.53	9.37
<hr/>								
12.400	12.395 (1.240)	252	355812 8.53199	CAS #:	205-99-2	403	80.00- 120.00	100.00
12.400	12.395 (1.240)	250	114768			0.00-	51.72	32.26
<hr/>								
12.413	12.417 (1.242)	252	178266 3.00733	CAS #:	207-08-9	142	80.00- 120.00	100.00(M)
12.413	12.417 (1.242)	250	40681			0.00-	56.49	22.82
<hr/>								
12.629	12.624 (1.263)	264	18437 0.35515	CAS #:	205440-82-0	16.8	80.00- 120.00	100.00
12.625	12.620 (1.263)	132	3237			0.00-	47.65	17.56
<hr/>								
12.700	12.695 (1.270)	252	200773 4.14240	CAS #:	50-32-8	196	80.00- 120.00	100.00
12.700	12.695 (1.270)	250	48099			0.00-	53.76	23.96
<hr/>								
13.840	13.835 (1.384)	276	94097 1.63482	CAS #:	193-39-5	77.2	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
13.840	13.831 (1.384)	138	23528		0.07-	60.07	25.00	
13.845	13.840 (1.385)	278	28315 0.58997	CAS #: 53-70-3	27.9	80.00-	120.00	100.00(Q)
13.840	13.831 (1.384)	138	23054		7.12-	67.12	81.42	
14.156	14.147 (1.416)	276	97354 2.04896	CAS #: 191-24-2	96.8	80.00-	120.00	100.00
14.156	14.142 (1.416)	138	25727		0.00-	55.44	26.43	

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.



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Data File: \\Svedod4\\DD\\chem\\msd03\\1\\S3112112.b\\616-19.D
Date : 22-NOV-2012 02:01
Client ID: FH0210C-CS
Sample Info: S1H350761619
Instrument: msd03.i
Operator: HJ
Column diameter: 0.25 mm
Column phase: HPMS-5

PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112112.b\616-20.D
Lab Smp Id: 350761620 Client Smp ID: CV0362A-CS
Inj Date : 22-NOV-2012 02:25 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761620
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112112.b\SS8270.m
Meth Date : 29-Nov-2012 18:30 smsd03.i Quant Type: ISTD
Cal Date : 20-NOV-2012 19:50 Cal File: SSCAL1.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.080	Weight of sample extracted (g)
M	21.100	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
5.689	5.684 (0.901)	128	36190	0.86571	43.7	80.00- 120.00	100.00
5.689	5.684 (0.901)	129	3966		0.00-	40.29	10.96
*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.317	6.317 (1.000)	152	20743	0.80000	80.00-	120.00	100.00
6.317	6.312 (1.000)	122	6870		2.00-	62.00	33.12
3	2-Methylnaphthalene				CAS #: 91-57-6		
6.350	6.351 (1.005)	142	25842	0.90887	45.9	80.00- 120.00	100.00
6.350	6.345 (1.005)	141	21579		55.71-	115.71	83.50
4	1-Methylnaphthalene				CAS #: 90-12-0		
6.444	6.445 (1.020)	142	20581	0.76873	38.8	80.00- 120.00	100.00
6.444	6.445 (1.020)	141	17456		57.13-	117.13	84.82
5	Acenaphthylene				CAS #: 208-96-8		
7.228	7.223 (1.144)	152	24108	0.56763	28.7	80.00- 120.00	100.00
7.224	7.223 (1.144)	151	4457		0.00-	49.19	18.49
6	Acenaphthene				CAS #: 83-32-9		
7.396	7.395 (1.171)	153	10406	0.39379	19.9	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.396	7.395 (1.171)	152	5379			16.38-	76.38	51.69
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7.904	7.900 (1.251)	166	10166 0.33510		CAS #: 86-73-7	16.9	80.00- 120.00	100.00
7.900	7.900 (1.251)	165	9884			63.07-	123.07	97.23
<hr/>								
8.840	8.839 (0.884)	178	196760 4.41611		CAS #: 85-01-8	223	80.00- 120.00	100.00
8.845	8.844 (0.885)	179	31502			0.00-	45.12	16.01
<hr/>								
8.894	8.893 (0.890)	178	44501 1.02358		CAS #: 120-12-7	51.7	80.00- 120.00	100.00
8.894	8.893 (0.890)	179	9956			0.00-	45.01	22.37
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9.997	9.998 (1.000)	212	33449 0.80000		CAS #: 93951-69-0	80.00-	120.00	100.00
9.997	9.992 (1.000)	106	5047			0.00-	46.16	15.09
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10.013	10.014 (1.002)	202	388378 7.92482		CAS #: 206-44-0	400	80.00- 120.00	100.00
10.013	10.009 (1.002)	101	53574			0.00-	43.42	13.79
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10.238	10.240 (1.024)	202	341255 6.44764		CAS #: 129-00-0	326	80.00- 120.00	100.00
10.238	10.234 (1.024)	101	58070			0.00-	45.54	17.02
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11.409	11.404 (1.141)	226	81560 7.00245		CAS #: 56-55-3	354	80.00- 120.00	100.00
11.405	11.404 (1.141)	200	10130			0.00-	43.30	12.42
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11.444	11.443 (1.145)	226	79903 5.80033		CAS #: 218-01-9	293	80.00- 120.00	100.00
11.440	11.439 (1.144)	200	10898			0.00-	42.53	13.64
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12.398	12.395 (1.240)	252	288405 7.64196		CAS #: 205-99-2	386	80.00- 120.00	100.00(M)
12.398	12.395 (1.240)	250	76006			0.00-	51.72	26.35
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12.412	12.417 (1.242)	252	163820 3.05851		CAS #: 207-08-9	154	80.00- 120.00	100.00(M)
12.403	12.417 (1.241)	250	63587			0.00-	56.49	38.82
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12.628	12.624 (1.263)	264	12831 0.27353		CAS #: 205440-82-0	13.8	80.00- 120.00	100.00
12.623	12.620 (1.263)	132	2146			0.00-	47.65	16.73
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12.698	12.695 (1.270)	252	197675 4.51366		CAS #: 50-32-8	228	80.00- 120.00	100.00
12.698	12.695 (1.270)	250	48418			0.00-	53.76	24.49
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13.839	13.835 (1.384)	276	89313 1.71727		CAS #: 193-39-5	86.8	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)							
13.839	13.831 (1.384)	138	22712			0.07-	60.07	25.43
21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.843	13.840 (1.385)	278	29312 0.69377	35.0	80.00- 120.00	100.00(Q)		
13.839	13.831 (1.384)	138	21936		7.12-	67.12	74.84	
22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
14.150	14.147 (1.415)	276	92977 2.16563	109	80.00- 120.00	100.00		
14.150	14.142 (1.415)	138	24555		0.00-	55.44	26.41	

QC Flag Legend

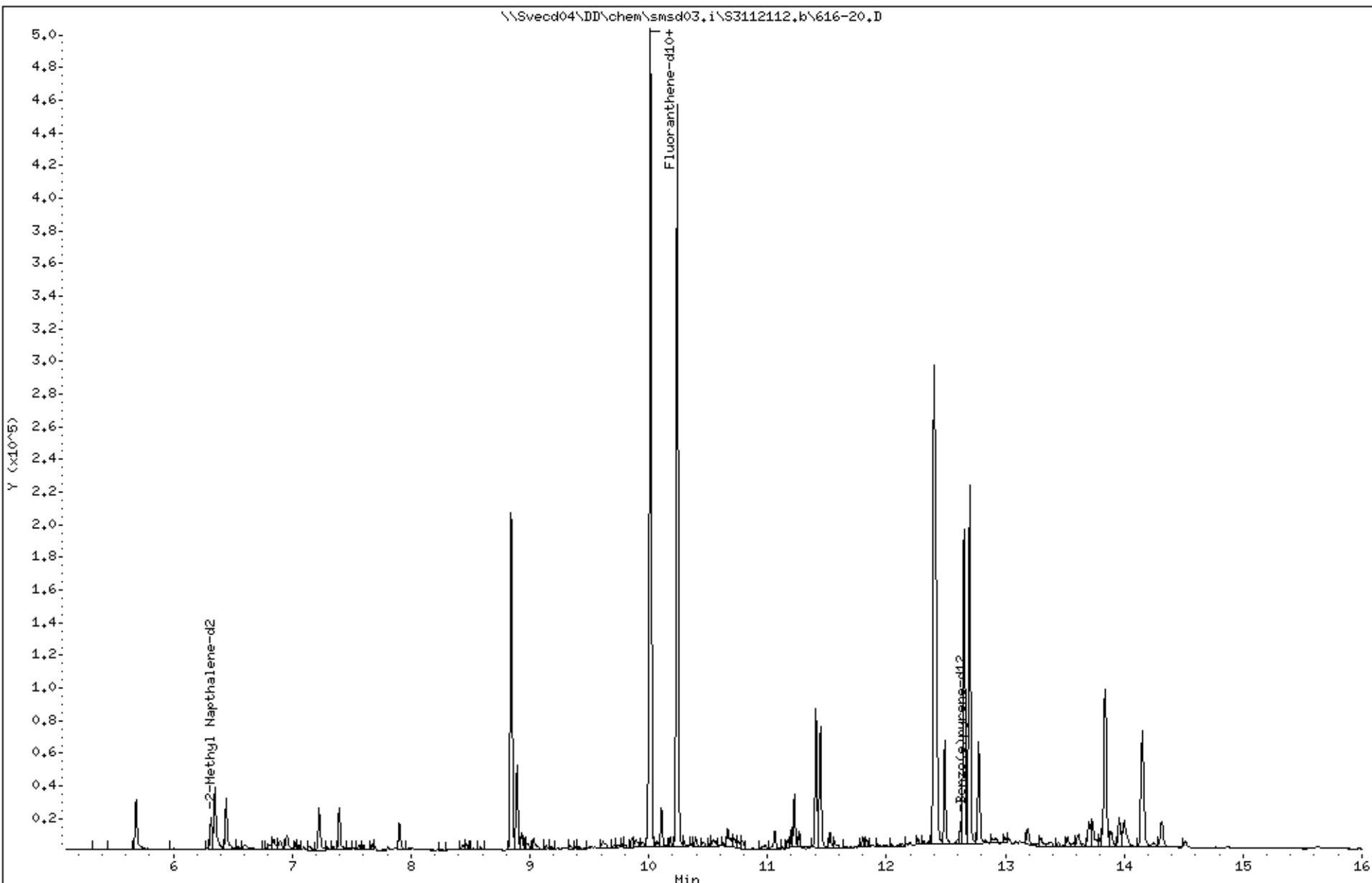
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd03.i\S3112112.b\616-20.D
Date : 22-NOV-2012 02:25
Client ID: CV0362A-CS
Sample Info: SIM350761620

Column phase: HPMS-5

Instrument: smsd03,i
Operator: MJ
Column diameter: 0.25

Page 4



Data File: \\Svecd04\DD\chem\smsd03.i\S3112612.b\DFTPP2.D
Report Date: 30-Nov-2012 09:49

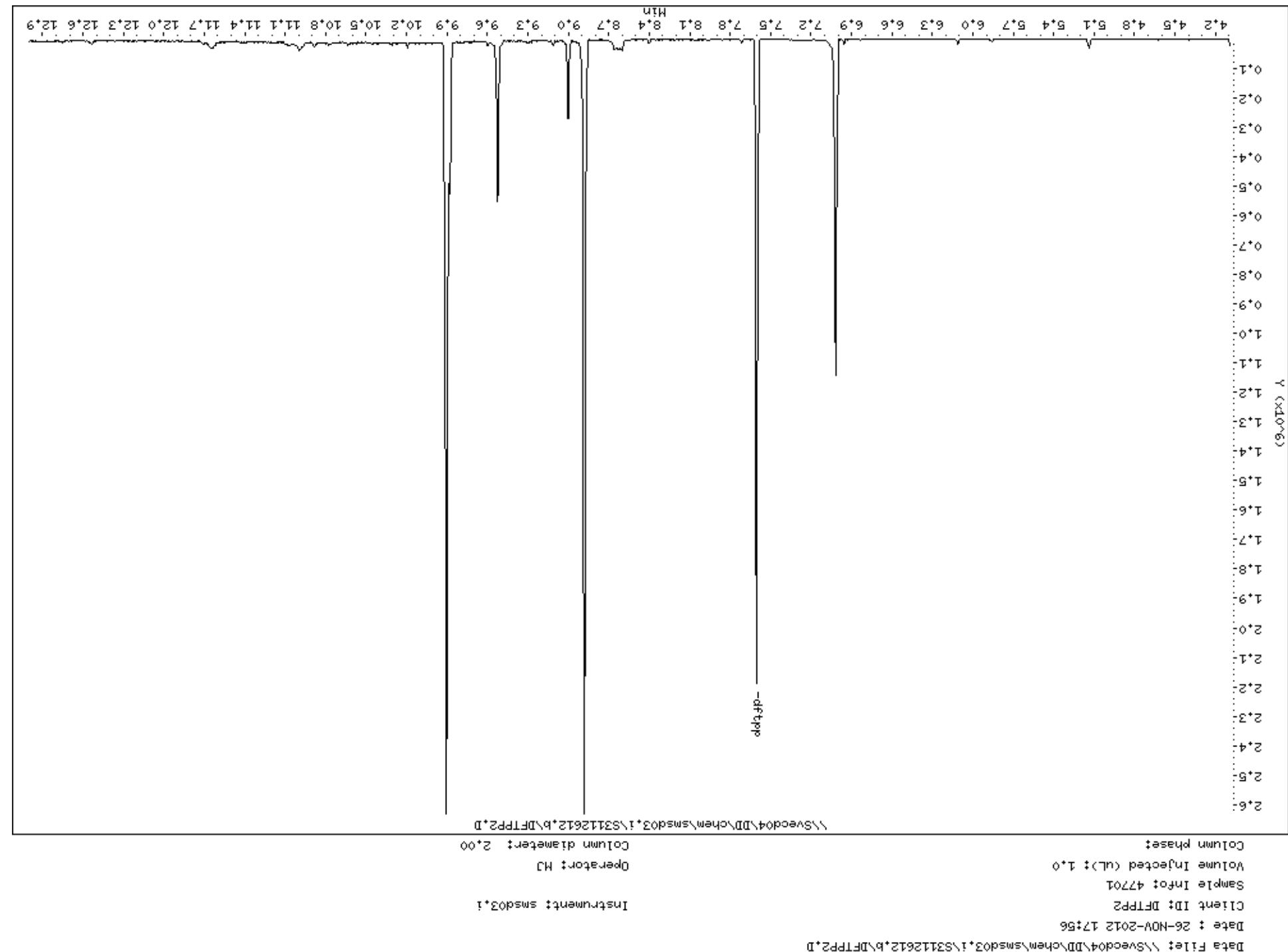
PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112612.b\DFTPP2.D
Lab Smp Id: 47701 Client Smp ID: DFTPP2
Inj Date : 26-NOV-2012 17:56
Operator : MJ Inst ID: smsd03.i
Smp Info : 47701
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112612.b\DoDTUN.m
Meth Date : 14-Sep-2012 08:05 mjacobs Quant Type: ISTD
Cal Date : 23-MAR-2009 02:58 Cal File: AP9CAL1.D
Als bottle: 100 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: WETCHEMDX500

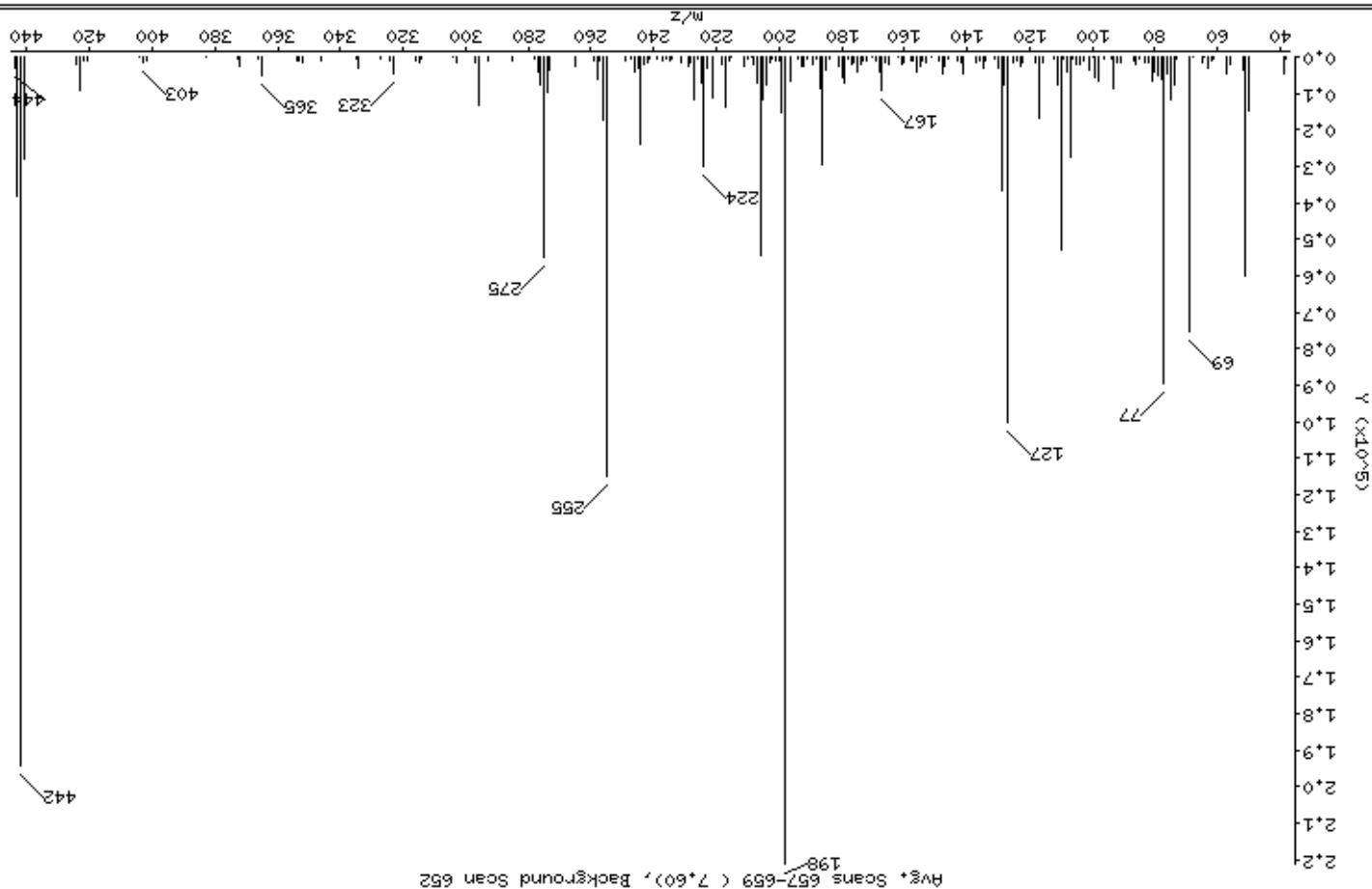
Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
7.603	7.713 (0.000)	198	221184		0.00-	100.00	100.00
7.603	7.713 (0.000)	51	59968		10.00-	80.00	27.11
7.603	7.713 (0.000)	68	243		0.00-	2.00	0.32
7.603	7.713 (0.000)	69	75288		0.00-	0.00	34.04
7.603	7.713 (0.000)	70	0	0.0	0.00-	2.00	0.00
7.603	7.713 (0.000)	127	100080		10.00-	80.00	45.25
7.603	7.713 (0.000)	197	0	0.0	0.00-	2.00	0.00
7.603	7.713 (0.000)	199	15287		5.00-	9.00	6.91
7.603	7.713 (0.000)	275	55072		10.00-	60.00	24.90
7.603	7.713 (0.000)	365	5201		1.00-	0.00	2.35
7.603	7.713 (0.000)	441	27864		0.01-	24.00	14.34
7.603	7.713 (0.000)	442	194368		50.00-	0.00	87.88
7.603	7.713 (0.000)	443	38344		15.00-	24.00	19.73
<hr/>							



m/e	% RELATIVE ABUNDANCE	ION ABUNDANCE CRITERIA
198	100.00	Base Peak, 100% relative abundance
54	10.00 - 80.00%	Less than 2.00% of mass 69
68	0.41 (0.32)	Less than 2.00% of mass 69
69	34.04	Mass 69 relative abundance
70	0.00 (0.00)	Less than 2.00% of mass 69
127	45.25	10.00 - 80.00% of mass 198
197	0.00	Less than 2.00% of mass 198
199	6.94	5.00 - 9.00% of mass 198
275	24.90	10.00 - 60.00% of mass 198
365	6.91	Greater than 1.00% of mass 198
444	2.35	2.00 - 6.00% of mass 442
442	87.88	Greater than 50.00% of mass 198
443	17.34 (19.73)	15.00 - 24.00% of mass 442



```
Dataset File: \\\$veded4\UDC\chem\smso3\133112612\B\DFTP2.D  
Date : 26-NOV-2012 17:56  
Client ID: DFTP2  
Instrument: smso3.i  
Sample Info: 47701  
Instrument: smso3.i  
Volume Injected (uL): 1.0  
Operator: M3  
Column Phase: C1  
Column diameter: 2.00  
dfpp
```

Number of points: 193
Location of Maxima: 198.00
Spectrum: Avg., Scans 657-659 (7.60), Background Scan 655
Data File: DFTPP2.D

Date : 26-NOV-2012 17:56 Client ID: DFTPP2 Instrument: smd03.i Sample Info: 47701 Volume Injected (uL): 1.00 Operator: M3 Column Phases: 1 Column diameter: 2.00

Data File: \\\\$vedola4\DD\chem\msdos3\1\3112612\bin\DFTP2.D
 Client ID: DFTP2
 Sample Info: 47701
 Column Phases:
 Volume Injected (uL): 1.0
 Operator: HS
 Column diameter: 2.00
 Spectrnum: Avg+ Scans 657-659 (7.60), Background Scan 652
 Location of Maximum: 198.00
 Number of Points: 193
 Data File: DFTP2.D
 Instrument: msdos3.i
 Date : 26-NOV-2012 17:56
 Client ID: DFTP2
 Instrument: msdos3.i
 Sample Info: 47701
 Column Phases:
 Volume Injected (uL): 1.0
 Operator: HS
 Column diameter: 2.00
 Spectrnum: Avg+ Scans 657-659 (7.60), Background Scan 652
 Location of Maximum: 198.00
 Number of Points: 193
 +-----+
 m/z y m/z y m/z y m/z y
 +-----+
 1 100.00 225 1 169.00 990 1 234.00 1272 1 402.00 1002 1
 1 101.00 3566 1 170.00 232 1 234.00 640 1 403.00 1299 1
 1 102.00 1262 1 172.00 923 1 235.00 882 1 404.00 218 1
 1 104.00 2142 1 173.00 834 1 236.00 358 1 421.00 1174 1
 1 105.00 2215 1 174.00 1952 1 237.00 1018 1 422.00 1154 1
 1 106.00 636 1 175.00 3897 1 239.00 268 1 423.00 9009 1
 1 107.00 27240 1 176.00 1440 1 241.00 319 1 424.00 1790 1
 1 108.00 4142 1 177.00 1997 1 242.00 1478 1 441.00 27864 1
 1 109.00 592 1 178.00 278 1 243.00 1882 1 442.00 194368 1
 1 110.00 52808 1 179.00 7270 1 244.00 24152 1 443.00 38344 1
 1 111.00 7663 1 180.00 5386 1 245.00 3170 1 444.00 3243 1
 1 112.00 708 1 181.00 2399 1 246.00 4309 1 4309 1
 1 113.00 1394 1 184.00 291 1 247.00 756 1 756 1
 1 114.00 17024 1 185.00 3656 1 249.00 1022 1 1022 1
 1 115.00 1117.00 1 186.00 3243 1 3243 1
 +-----+

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/26/2012 18:28

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112612.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/28/2012 10:07

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112612.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/29/2012 17:50

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112612.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/29/2012 18:21

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112612.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/30/2012 09:49

Datafile Analyzed: //Svecd04/DD/chem/smsd03.i/S3112612.b/DFTPP2.D

PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112612.b\SSCCV1.D
Lab Smp Id: 47785 Client Smp ID: SSACCV1
Inj Date : 26-NOV-2012 18:16
Operator : MJ Inst ID: smsd03.i
Smp Info : 47785
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112612.b\SS8270.m
Meth Date : 29-Nov-2012 18:08 smsd03.i Quant Type: ISTD
Cal Date : 19-NOV-2012 20:17 Cal File: SSACAL1.D
Als bottle: 99 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	TARGET RANGE
5.688	5.688 (0.901)	128	28674	0.50000	0.51	80.00- 120.00	100.00
5.688	5.688 (0.901)	129	2828		0.00-	39.86	9.86

*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.316	6.316 (1.000)	152	27859	0.80000	80.00-	120.00	100.00
6.316	6.316 (1.000)	122	8899		1.94-	61.94	31.94

3	2-Methylnaphthalene				CAS #: 91-57-6		
6.349	6.349 (1.005)	142	18394	0.50000	0.48	80.00- 120.00	100.00
6.349	6.349 (1.005)	141	15739		55.57-	115.57	85.57

4	1-Methylnaphthalene				CAS #: 90-12-0		
6.444	6.444 (1.020)	142	18556	0.50000	0.52	80.00- 120.00	100.00
6.444	6.444 (1.020)	141	16100		56.76-	116.76	86.76

5	Acenaphthylene				CAS #: 208-96-8		
7.223	7.223 (1.144)	152	28290	0.50000	0.50	80.00- 120.00	100.00
7.223	7.223 (1.144)	151	5325		0.00-	48.82	18.82

6	Acenaphthene				CAS #: 83-32-9		
7.395	7.395 (1.171)	153	17982	0.50000	0.51	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	CAL-AMT	ON-COL
				RESPONSE	(ug/ml)				
7.395	7.395 (1.171)	152	8336			16.36-	76.36	46.36	
<hr/>									
6 Acenaphthene (continued)									
7.904	7.904 (1.251)	166	20250 0.50000	0.50	80.00-	120.00	100.00		
7.900	7.900 (1.251)	165	18673		62.21-	122.21	92.21		
<hr/>									
7 Fluorene									
					CAS #:	86-73-7			
8.645	8.645 (0.865)	266	6606 5.00000	1.9	80.00-	120.00	100.00(A)		
8.645	8.645 (0.865)	264	4318		35.36-	95.36	65.36		
<hr/>									
8 Pentachlorophenol									
					CAS #:	87-86-5			
8.845	8.845 (0.885)	178	31310 0.50000	0.45	80.00-	120.00	100.00		
8.845	8.845 (0.885)	179	4880		0.00-	45.59	15.59		
<hr/>									
9 Phenanthrene									
					CAS #:	85-01-8			
8.893	8.893 (0.889)	178	31732 0.50000	0.47	80.00-	120.00	100.00		
8.893	8.893 (0.889)	179	4852		0.00-	45.29	15.29		
<hr/>									
* 11 Fluoranthene-d10									
					CAS #:	93951-69-0			
9.998	9.998 (1.000)	212	51698 0.80000		80.00-	120.00	100.00		
9.993	9.993 (1.000)	106	8411		0.00-	46.27	16.27		
<hr/>									
12 Fluoranthene									
					CAS #:	206-44-0			
10.015	10.015 (1.002)	202	36888 0.50000	0.49	80.00-	120.00	100.00		
10.015	10.015 (1.002)	101	5013		0.00-	43.59	13.59		
<hr/>									
13 Pyrene									
					CAS #:	129-00-0			
10.240	10.240 (1.024)	202	38903 0.50000	0.48	80.00-	120.00	100.00		
10.234	10.234 (1.024)	101	6144		0.00-	45.79	15.79		
<hr/>									
14 Benzo[a]anthracene									
					CAS #:	56-55-3			
11.408	11.408 (1.141)	226	9061 0.50000	0.49	80.00-	120.00	100.00		
11.405	11.405 (1.141)	200	1180		0.00-	43.02	13.02		
<hr/>									
15 Chrysene									
					CAS #:	218-01-9			
11.444	11.444 (1.145)	226	9972 0.50000	0.47	80.00-	120.00	100.00		
11.444	11.444 (1.145)	200	1257		0.00-	42.61	12.61		
<hr/>									
16 Benzo[b]fluoranthene									
					CAS #:	205-99-2			
12.399	12.399 (1.240)	252	31476 0.50000	0.44	80.00-	120.00	100.00		
12.394	12.394 (1.240)	250	7619		0.00-	54.21	24.21		
<hr/>									
17 Benzo[k]fluoranthene									
					CAS #:	207-08-9			
12.421	12.421 (1.242)	252	37996 0.50000	0.46	80.00-	120.00	100.00		
12.421	12.421 (1.242)	250	9282		0.00-	54.43	24.43		
<hr/>									
\$ 18 Benzo(e)pyrene-d12									
					CAS #:	205440-82-0			
12.628	12.628 (1.263)	264	32258 0.50000	0.44	80.00-	120.00	100.00		
12.624	12.624 (1.263)	132	6716		0.00-	50.82	20.82		
<hr/>									
19 Benzo[a]pyrene									
					CAS #:	50-32-8			
12.699	12.699 (1.270)	252	29267 0.50000	0.43	80.00-	120.00	100.00		

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.699	12.699	(1.270)	250	7176		0.00-	54.52	24.52

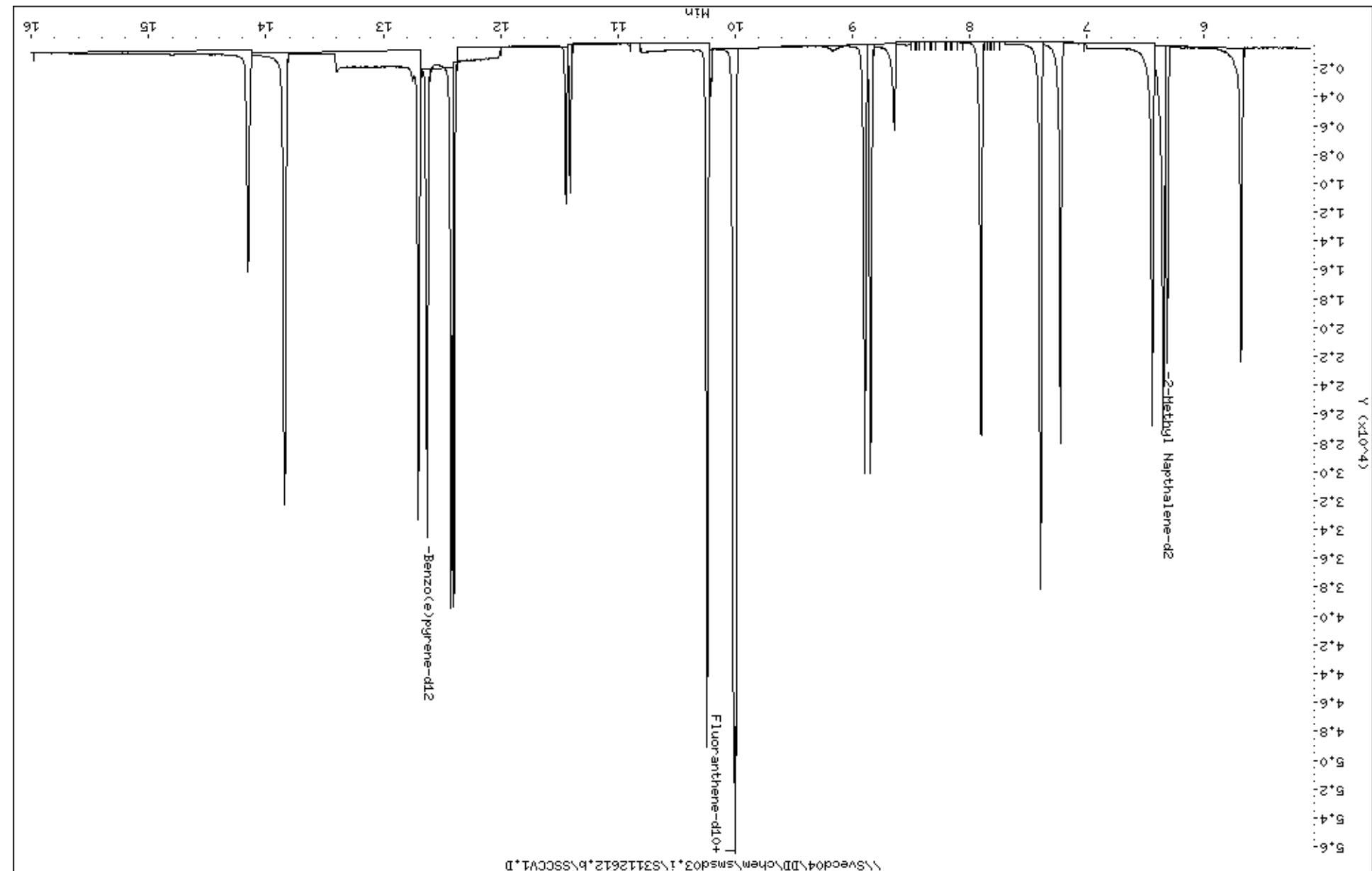
20	Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5			
13.840	13.840	(1.384)	276	24179	0.50000	0.30	80.00-	120.00
13.840	13.840	(1.384)	138	7465		0.87-	60.87	30.87

21	Dibenz[a,h]anthracene				CAS #: 53-70-3			
13.845	13.845	(1.385)	278	20463	0.50000	0.25	80.00-	120.00
13.840	13.840	(1.384)	138	7399		6.16-	66.16	36.16

22	Benzo[g,h,i]perylene				CAS #: 191-24-2			
14.152	14.152	(1.415)	276	20374	0.50000	0.31	80.00-	120.00
14.152	14.152	(1.415)	138	5172		0.00-	55.39	25.39

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.



Page 4

Data File: \\\\$vedod4\\DD\\chem\\msd03\\1\\S3112612\\b\\SSCCV1.D
Date : 26-NOV-2012 18:16
Client ID: SSCLV
Sample Info: 47785
Column Phase: HPMs-5
Operater: HJ
Column diameter: 0.25
Instrument: msd03.i
Client ID: SSCLV
Instrument: msd03.i
Data File: \\\\$vedod4\\DD\\chem\\msd03\\1\\S3112612\\b\\SSCCV1.D
Page 4

PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112612.b\61608D20.D
Lab Smp Id: 350761608 Client Smp ID: FM0263A-CS-SP
Inj Date : 26-NOV-2012 22:42 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761608
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112612.b\SS8270.m
Meth Date : 29-Nov-2012 18:08 smsd03.i Quant Type: ISTD
Cal Date : 19-NOV-2012 20:17 Cal File: SSCAL1.D
Als bottle: 7
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	20.000	Dilution Factor
Ws	25.210	Weight of sample extracted (g)
M	20.800	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.689	5.688	(0.900)	128	3577 0.06681	66.9	80.00- 120.00	100.00
5.689	5.688	(0.900)	129	264		0.00- 39.86	7.38
<hr/>							
*	2	2-Methyl Naphthalene-d2			CAS #: 7927-45-2		
6.323	6.316	(1.000)	152	26568 0.80000	80.00-	120.00	100.00
6.317	6.316	(1.000)	122	8136	1.94-	61.94	30.62
<hr/>							
3	2-Methylnaphthalene				CAS #: 91-57-6		
6.351	6.349	(1.004)	142	1456 0.03998	40.0	80.00- 120.00	100.00
6.351	6.349	(1.004)	141	1201	55.57-	115.57	82.49
<hr/>							
4	1-Methylnaphthalene				CAS #: 90-12-0		
6.445	6.444	(1.019)	142	1305 0.03806	38.1	80.00- 120.00	100.00
6.445	6.444	(1.019)	141	1012	56.76-	116.76	77.55
<hr/>							
5	Acenaphthylene				CAS #: 208-96-8		
7.229	7.223	(1.143)	152	1114 0.02048	20.5	80.00- 120.00	100.00
7.229	7.223	(1.143)	151	183	0.00-	48.82	16.43
<hr/>							
6	Acenaphthene				CAS #: 83-32-9		
7.396	7.395	(1.170)	153	3431 0.10137	102	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.396	7.395 (1.170)	152	1489			16.36-	76.36	43.40
<hr/>								
7.908	7.904 (1.251)	166	3279 0.08439	84.5	80.00-	120.00	100.00	
7.904	7.900 (1.250)	165	2979		62.21-	122.21	90.85	
<hr/>								
8.845	8.845 (0.885)	178	48557 0.81685	818	80.00-	120.00	100.00	
8.845	8.845 (0.885)	179	7591		0.00-	45.59	15.63	
<hr/>								
8.899	8.893 (0.890)	178	12771 0.22017	220	80.00-	120.00	100.00	
8.899	8.893 (0.890)	179	2185		0.00-	45.29	17.11	
<hr/>								
9.997	9.998 (1.000)	212	44627 0.80000		80.00-	120.00	100.00	
9.997	9.993 (1.000)	106	7159		0.00-	46.27	16.04	
<hr/>								
10.013	10.015 (1.002)	202	84992 1.29986	1300	80.00-	120.00	100.00	
10.013	10.015 (1.002)	101	11582		0.00-	43.59	13.63	
<hr/>								
10.238	10.240 (1.024)	202	65397 0.92612	928	80.00-	120.00	100.00	
10.238	10.234 (1.024)	101	11341		0.00-	45.79	17.34	
<hr/>								
11.409	11.408 (1.141)	226	10726 0.67588	677	80.00-	120.00	100.00	
11.409	11.405 (1.141)	200	1472		0.00-	43.02	13.72	
<hr/>								
11.444	11.444 (1.145)	226	12335 0.67114	672	80.00-	120.00	100.00	
11.444	11.444 (1.145)	200	1730		0.00-	42.61	14.03	
<hr/>								
12.399	12.399 (1.240)	252	46899 0.83271	834	80.00-	120.00	100.00(M)	
12.399	12.394 (1.240)	250	11898		0.00-	54.21	25.37	
<hr/>								
12.413	12.421 (1.242)	252	22413 0.31364	314	80.00-	120.00	100.00(M)	
12.413	12.421 (1.242)	250	4954		0.00-	54.43	22.10	
<hr/>								
12.699	12.699 (1.270)	252	29107 0.49815	499	80.00-	120.00	100.00	
12.699	12.699 (1.270)	250	6980		0.00-	54.52	23.98	
<hr/>								
13.839	13.840 (1.384)	276	14378 0.20721	208	80.00-	120.00	100.00	
13.835	13.840 (1.384)	138	3738		0.87-	60.87	26.00	
<hr/>								
14.150	14.152 (1.415)	276	15493 0.27048	271	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
22	Benzo[g,h,i]perylene (continued)			(ug/ml)	(ug/kg)			
14.150	14.152	(1.415)	138	4117		0.00-	55.39	26.57

QC Flag Legend

M - Compound response manually integrated.

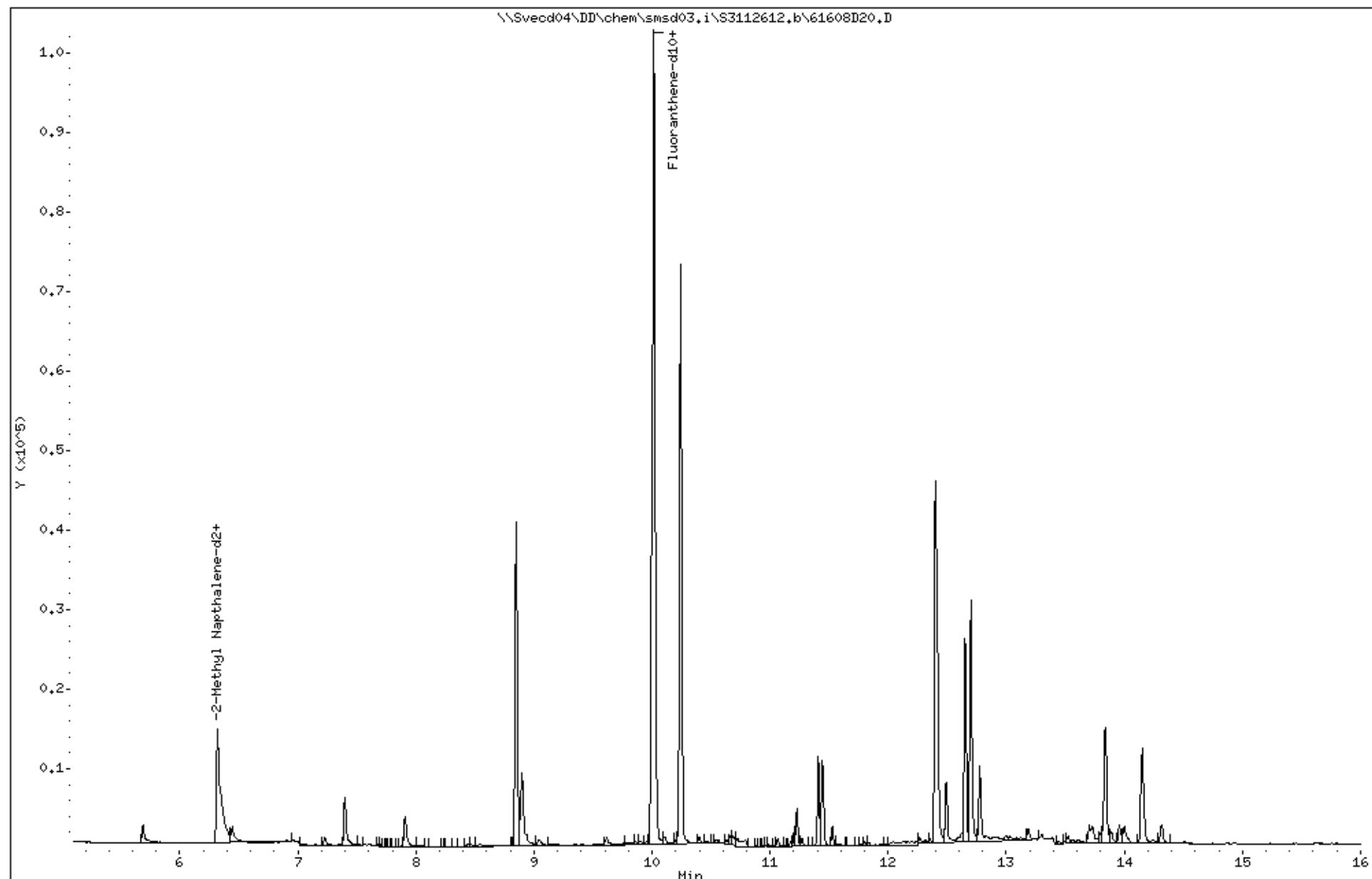
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Date : 26-NOV-2012 22:42
Client ID: FH0263A-CS-SP
Sample Info: SIM350761608

Column phase: HPMS-5

Instrument: smsd03,i

Operator: MJ

Column diameter: 0.25



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Data file : \\Svecd04\DD\chem\smsd03.i\S3112612.b\61609D20.D
Lab Smp Id: 350761609 Client Smp ID: FM0263B-CS-SP
Inj Date : 26-NOV-2012 23:05 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761609
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112612.b\SS8270.m
Meth Date : 29-Nov-2012 18:08 smsd03.i Quant Type: ISTD
Cal Date : 19-NOV-2012 20:17 Cal File: SSCAL1.D
Als bottle: 8
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

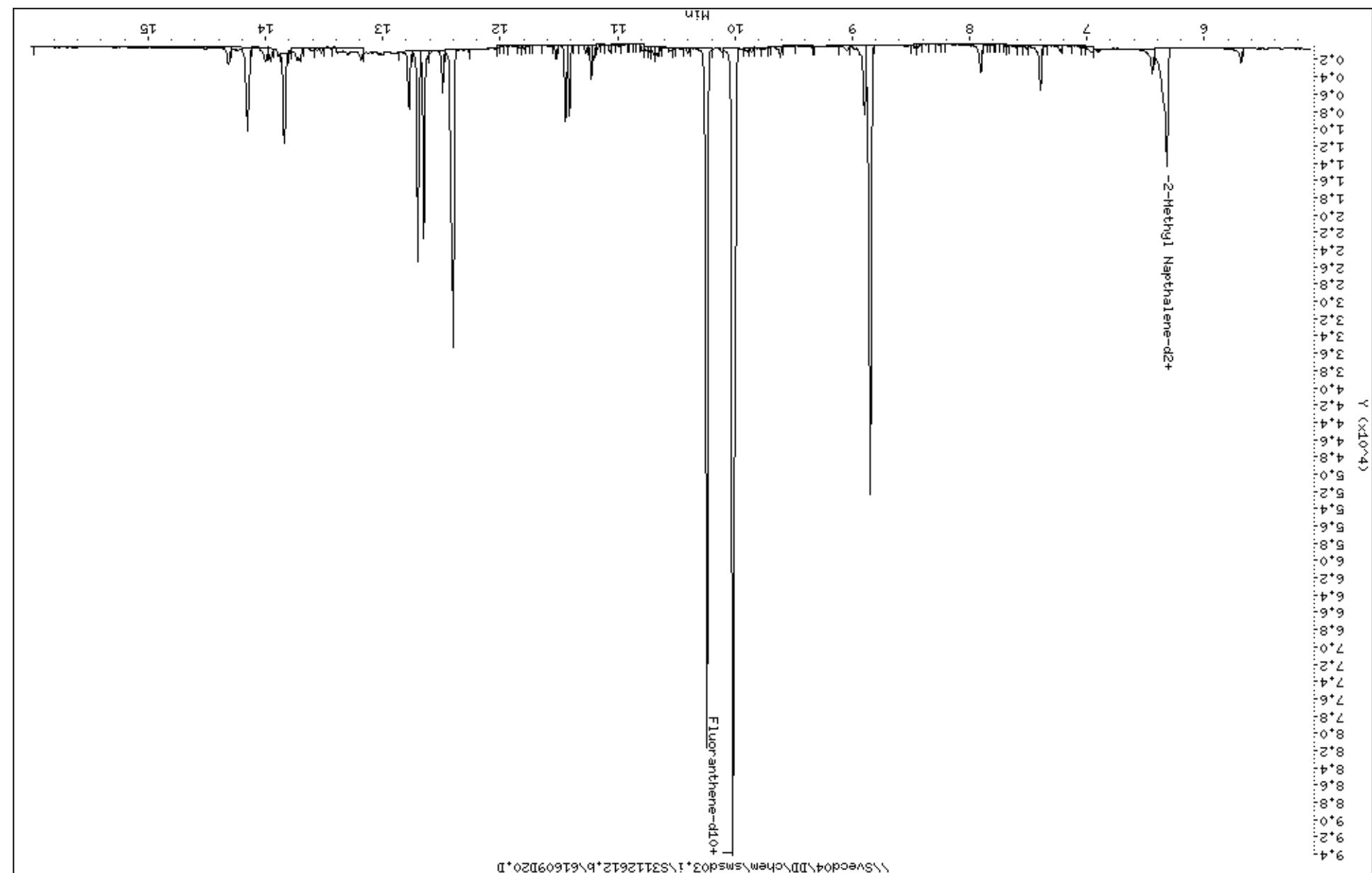
Name	Value	Description
DF	20.000	Dilution Factor
Ws	25.290	Weight of sample extracted (g)
M	17.500	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.688	5.688	(0.900)	128	2924 0.05674	54.4	80.00- 120.00	100.00
5.688	5.688	(0.900)	129	287		0.00- 39.86	9.82
<hr/>							
*	2	2-Methyl Naphthalene-d2			CAS #: 7927-45-2		
6.322	6.316	(1.000)	152	25570 0.80000	80.00-	120.00	100.00
6.316	6.316	(1.000)	122	7979	1.94-	61.94	31.20
<hr/>							
3	2-Methylnaphthalene				CAS #: 91-57-6		
6.349	6.349	(1.004)	142	2076 0.05923	56.8	80.00- 120.00	100.00
6.349	6.349	(1.004)	141	1750	55.57-	115.57	84.30
<hr/>							
4	1-Methylnaphthalene				CAS #: 90-12-0		
6.444	6.444	(1.019)	142	1821 0.05518	52.9	80.00- 120.00	100.00
6.444	6.444	(1.019)	141	1893	56.76-	116.76	103.95
<hr/>							
6	Acenaphthene				CAS #: 83-32-9		
7.395	7.395	(1.170)	153	3020 0.09271	88.9	80.00- 120.00	100.00
7.395	7.395	(1.170)	152	1343	16.36-	76.36	44.47
<hr/>							
7	Fluorene				CAS #: 86-73-7		
7.904	7.904	(1.250)	166	2772 0.07412	71.0	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.904	7.900 (1.250)	165	2575			62.21-	122.21	92.89
<hr/>								
8.845	8.845 (0.885)	178	61802 1.10133	CAS #:	85-01-8	1060	80.00- 120.00	100.00
8.845	8.845 (0.885)	179	9615			0.00-	45.59	15.56
<hr/>								
8.899	8.893 (0.890)	178	10246 0.18712	CAS #:	120-12-7	179	80.00- 120.00	100.00
8.899	8.893 (0.890)	179	1522			0.00-	45.29	14.85
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9.998	9.998 (1.000)	212	42128 0.80000	CAS #:	93951-69-0	80.00-	120.00	100.00
9.993	9.993 (1.000)	106	6675			0.00-	46.27	15.84
<hr/>								
10.015	10.015 (1.002)	202	80048 1.29687	CAS #:	206-44-0	1240	80.00- 120.00	100.00
10.015	10.015 (1.002)	101	10602			0.00-	43.59	13.24
<hr/>								
10.240	10.240 (1.024)	202	73796 1.10705	CAS #:	129-00-0	1060	80.00- 120.00	100.00
10.240	10.234 (1.024)	101	12431			0.00-	45.79	16.85
<hr/>								
11.408	11.408 (1.141)	226	7675 0.50846	CAS #:	56-55-3	487	80.00- 120.00	100.00
11.408	11.405 (1.141)	200	1101			0.00-	43.02	14.35
<hr/>								
11.444	11.444 (1.145)	226	9979 0.57516	CAS #:	218-01-9	551	80.00- 120.00	100.00
11.440	11.444 (1.144)	200	1410			0.00-	42.61	14.13
<hr/>								
12.400	12.399 (1.240)	252	35757 0.65092	CAS #:	205-99-2	624	80.00- 120.00	100.00(M)
12.400	12.394 (1.240)	250	9130			0.00-	54.21	25.53
<hr/>								
12.413	12.421 (1.242)	252	17292 0.25633	CAS #:	207-08-9	246	80.00- 120.00	100.00(M)
12.413	12.421 (1.242)	250	4051			0.00-	54.43	23.43
<hr/>								
12.700	12.699 (1.270)	252	22958 0.41622	CAS #:	50-32-8	399	80.00- 120.00	100.00
12.700	12.699 (1.270)	250	5503			0.00-	54.52	23.97
<hr/>								
13.840	13.840 (1.384)	276	11777 0.17979	CAS #:	193-39-5	172	80.00- 120.00	100.00
13.836	13.840 (1.384)	138	2761			0.87-	60.87	23.44
<hr/>								
14.152	14.152 (1.415)	276	12735 0.23552	CAS #:	191-24-2	226	80.00- 120.00	100.00
14.152	14.152 (1.415)	138	3341			0.00-	55.39	26.23
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QC Flag Legend

M - Compound response manually integrated.



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112612.b\61610D20.D
Lab Smp Id: 350761610 Client Smp ID: FM0263C-CS-SP
Inj Date : 26-NOV-2012 23:29 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761610
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112612.b\SS8270.m
Meth Date : 29-Nov-2012 18:08 smsd03.i Quant Type: ISTD
Cal Date : 19-NOV-2012 20:17 Cal File: SSCAL1.D
Als bottle: 9
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	20.000	Dilution Factor
Ws	25.790	Weight of sample extracted (g)
M	22.100	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
5.688	5.688	(0.900)	128	7864 0.15664	156 80.00-	120.00	100.00
5.688	5.688	(0.900)	129	592	0.00-	39.86	7.53
*	2	2-Methyl Naphthalene-d2			CAS #:	91-20-3	
6.322	6.316	(1.000)	152	24911 0.80000	80.00-	120.00	100.00
6.316	6.316	(1.000)	122	7737	1.94-	61.94	31.06
3	2-Methylnaphthalene				CAS #:	91-57-6	
6.350	6.349	(1.004)	142	2611 0.07646	76.1 80.00-	120.00	100.00
6.350	6.349	(1.004)	141	2216	55.57-	115.57	84.87
4	1-Methylnaphthalene				CAS #:	90-12-0	
6.444	6.444	(1.019)	142	2098 0.06525	65.0 80.00-	120.00	100.00
6.444	6.444	(1.019)	141	1574	56.76-	116.76	75.02
5	Acenaphthylene				CAS #:	208-96-8	
7.228	7.223	(1.143)	152	1201 0.02355	23.4 80.00-	120.00	100.00
7.228	7.223	(1.143)	151	197	0.00-	48.82	16.40
6	Acenaphthene				CAS #:	83-32-9	
7.395	7.395	(1.170)	153	7128 0.22461	224 80.00-	120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.395	7.395 (1.170)	152	3018			16.36-	76.36	42.34
<hr/>								
6 Acenaphthene (continued)				CAS #: 86-73-7				
7.904	7.904 (1.250)	166	6091 0.16718	166	80.00-	120.00	100.00	
7.904	7.900 (1.250)	165	5462		62.21-	122.21	89.67	
<hr/>								
9 Phenanthrene				CAS #: 85-01-8				
8.844	8.845 (0.885)	178	99015 2.00032	1990	80.00-	120.00	100.00	
8.844	8.845 (0.885)	179	15650		0.00-	45.59	15.81	
<hr/>								
10 Anthracene				CAS #: 120-12-7				
8.898	8.893 (0.890)	178	18719 0.38755	386	80.00-	120.00	100.00	
8.898	8.893 (0.890)	179	3651		0.00-	45.29	19.50	
<hr/>								
* 11 Fluoranthene-d10				CAS #: 93951-69-0				
9.998	9.998 (1.000)	212	37161 0.80000		80.00-	120.00	100.00	
9.993	9.993 (1.000)	106	5802		0.00-	46.27	15.61	
<hr/>								
12 Fluoranthene				CAS #: 206-44-0				
10.014	10.015 (1.002)	202	116034 2.13116	2120	80.00-	120.00	100.00	
10.014	10.015 (1.002)	101	15193		0.00-	43.59	13.09	
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13 Pyrene				CAS #: 129-00-0				
10.240	10.240 (1.024)	202	88649 1.50762	1500	80.00-	120.00	100.00	
10.234	10.234 (1.024)	101	14942		0.00-	45.79	16.86	
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14 Benzo[a]anthracene				CAS #: 56-55-3				
11.409	11.408 (1.141)	226	12536 0.95506	951	80.00-	120.00	100.00	
11.405	11.405 (1.141)	200	1671		0.00-	43.02	13.33	
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15 Chrysene				CAS #: 218-01-9				
11.444	11.444 (1.145)	226	14499 0.94738	943	80.00-	120.00	100.00	
11.440	11.444 (1.144)	200	1587		0.00-	42.61	10.95	
<hr/>								
16 Benzo[b]fluoranthene				CAS #: 205-99-2				
12.399	12.399 (1.240)	252	57732 1.28477	1280	80.00-	120.00	100.00(M)	
12.399	12.394 (1.240)	250	14610		0.00-	54.21	25.31	
<hr/>								
17 Benzo[k]fluoranthene				CAS #: 207-08-9				
12.412	12.421 (1.241)	252	27788 0.46698	465	80.00-	120.00	100.00(M)	
12.412	12.421 (1.241)	250	6118		0.00-	54.43	22.02	
<hr/>								
19 Benzo[a]pyrene				CAS #: 50-32-8				
12.699	12.699 (1.270)	252	35316 0.72585	722	80.00-	120.00	100.00	
12.699	12.699 (1.270)	250	8467		0.00-	54.52	23.97	
<hr/>								
20 Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5				
13.840	13.840 (1.384)	276	16605 0.28738	286	80.00-	120.00	100.00	
13.835	13.840 (1.384)	138	4306		0.87-	60.87	25.93	
<hr/>								
22 Benzo[g,h,i]perylene				CAS #: 191-24-2				
14.151	14.152 (1.415)	276	17111 0.35874	357	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
22	Benzo[g,h,i]perylene (continued)			(ug/ml)	(ug/kg)			
14.151	14.152 (1.415)	138	4484		0.00-	55.39	26.21	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Svedd04\DD\chem\smsd03.i\S3112612.b\61610D20.D
Date : 26-NOV-2012 23:29
Client ID: FH0263C-CS-SP
Sample Info: SIM350761610

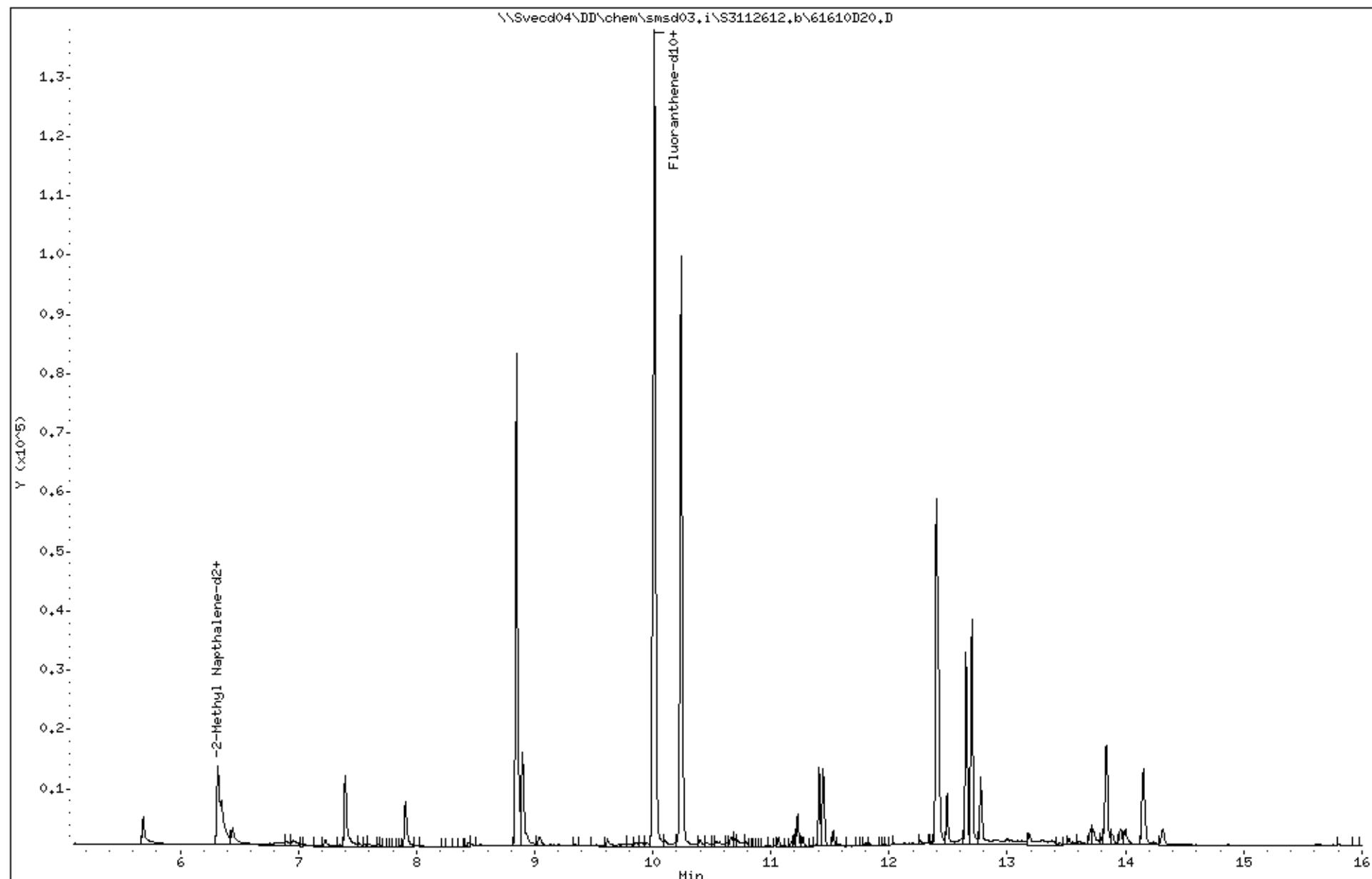
Column phase: HPMS-5

Instrument: smsd03,i

Operator: MJ

Column diameter: 0.25

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PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112612.b\61615D20.D
Lab Smp Id: 350761615 Client Smp ID: CV0699B-CS
Inj Date : 26-NOV-2012 23:52 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761615
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112612.b\SS8270.m
Meth Date : 29-Nov-2012 18:08 smsd03.i Quant Type: ISTD
Cal Date : 19-NOV-2012 20:17 Cal File: SSCAL1.D
Als bottle: 10
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	20.000	Dilution Factor
Ws	25.010	Weight of sample extracted (g)
M	19.200	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.688	5.688	(0.900)	128	1976 0.03917	38.8	80.00- 120.00	100.00
5.688	5.688	(0.900)	129	142	0.00-	39.86	7.19
<hr/>							
* 2 2-Methyl Naphthalene-d2							
6.322	6.316	(1.000)	152	25034 0.80000	80.00-	120.00	100.00
6.316	6.316	(1.000)	122	7893	1.94-	61.94	31.53
<hr/>							
3 2-Methylnaphthalene							
6.355	6.349	(1.005)	142	1106 0.03223	31.9	80.00- 120.00	100.00
6.350	6.349	(1.004)	141	924	55.57-	115.57	83.54
<hr/>							
4 1-Methylnaphthalene							
6.444	6.444	(1.019)	142	893 0.02764	27.4	80.00- 120.00	100.00
6.444	6.444	(1.019)	141	732	56.76-	116.76	81.97
<hr/>							
6 Acenaphthene							
7.395	7.395	(1.170)	153	914 0.02866	28.4	80.00- 120.00	100.00
7.395	7.395	(1.170)	152	433	16.36-	76.36	47.37
<hr/>							
9 Phenanthrene							
8.844	8.845	(0.885)	178	23203 0.44512	440	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
8.850	8.845 (0.885)	179	3674		0.00-	45.59	15.83	
<hr/>								
9 Phenanthrene (continued)				CAS #: 120-12-7				
8.899	8.893 (0.890)	178	6738 0.13247	131	80.00-	120.00	100.00	
8.899	8.893 (0.890)	179	1070		0.00-	45.29	15.88	
<hr/>								
* 11 Fluoranthene-d10				CAS #: 93951-69-0				
9.997	9.998 (1.000)	212	39134 0.80000		80.00-	120.00	100.00	
9.997	9.993 (1.000)	106	6292		0.00-	46.27	16.08	
<hr/>								
12 Fluoranthene				CAS #: 206-44-0				
10.013	10.015 (1.002)	202	73700 1.28538	1270	80.00-	120.00	100.00	
10.013	10.015 (1.002)	101	9503		0.00-	43.59	12.89	
<hr/>								
13 Pyrene				CAS #: 129-00-0				
10.238	10.240 (1.024)	202	70226 1.13409	1120	80.00-	120.00	100.00	
10.238	10.234 (1.024)	101	11609		0.00-	45.79	16.53	
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14 Benzo[a]anthracene				CAS #: 56-55-3				
11.408	11.408 (1.141)	226	9375 0.67362	667	80.00-	120.00	100.00	
11.408	11.405 (1.141)	200	1295		0.00-	43.02	13.81	
<hr/>								
15 Chrysene				CAS #: 218-01-9				
11.444	11.444 (1.145)	226	10149 0.62971	623	80.00-	120.00	100.00	
11.444	11.444 (1.145)	200	996		0.00-	42.61	9.81	
<hr/>								
16 Benzo[b]fluoranthene				CAS #: 205-99-2				
12.399	12.399 (1.240)	252	38520 0.77281	765	80.00-	120.00	100.00(M)	
12.399	12.394 (1.240)	250	9925		0.00-	54.21	25.77	
<hr/>								
17 Benzo[k]fluoranthene				CAS #: 207-08-9				
12.412	12.421 (1.242)	252	21614 0.34491	341	80.00-	120.00	100.00(M)	
12.412	12.421 (1.242)	250	4903		0.00-	54.43	22.68	
<hr/>								
19 Benzo[a]pyrene				CAS #: 50-32-8				
12.699	12.699 (1.270)	252	25101 0.48989	485	80.00-	120.00	100.00	
12.699	12.699 (1.270)	250	5975		0.00-	54.52	23.80	
<hr/>								
20 Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5				
13.839	13.840 (1.384)	276	10509 0.17271	171	80.00-	120.00	100.00	
13.839	13.840 (1.384)	138	2323		0.87-	60.87	22.10	
<hr/>								
22 Benzo[g,h,i]perylene				CAS #: 191-24-2				
14.150	14.152 (1.416)	276	10664 0.21230	210	80.00-	120.00	100.00	
14.150	14.152 (1.416)	138	2737		0.00-	55.39	25.67	
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QC Flag Legend

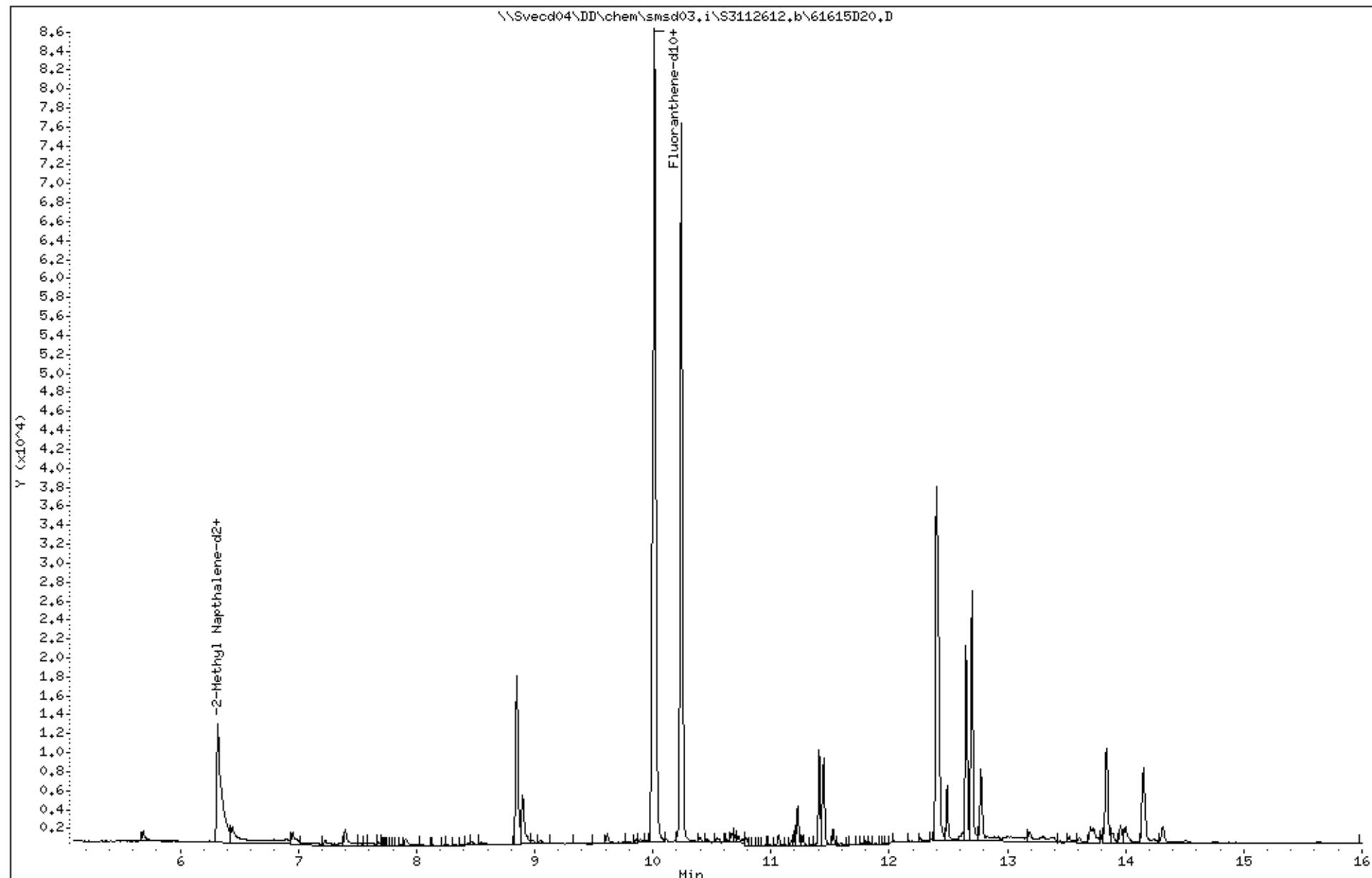
M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd03.i\S3112612.b\61615D20.D
Date : 26-NOV-2012 23:52
Client ID: CV0699B-CS
Sample Info: SIM350761615

Column phase: HPMS-5

Instrument: smsd03,i
Operator: MJ
Column diameter: 0.25

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PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd03.i\S3112612.b\61619D20.D
Lab Smp Id: 350761619 Client Smp ID: FM0210C-CS
Inj Date : 27-NOV-2012 00:16 MS Autotune Date: 30-MAY-2012 16:20
Operator : MJ Inst ID: smsd03.i
Smp Info : SIM350761619
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd03.i\S3112612.b\SS8270.m
Meth Date : 29-Nov-2012 18:08 smsd03.i Quant Type: ISTD
Cal Date : 19-NOV-2012 20:17 Cal File: SSCAL1.D
Als bottle: 11
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	20.000	Dilution Factor
Ws	25.060	Weight of sample extracted (g)
M	15.500	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.689	5.688	(0.900)	128	2587 0.04947	46.7	80.00- 120.00	100.00
5.689	5.688	(0.900)	129	215		0.00- 39.86	8.31

* 1 Naphthalene							
6.322	6.316	(1.000)	152	25950 0.80000	80.00-	120.00	100.00
6.317	6.316	(1.000)	122	7972	1.94-	61.94	30.72

* 3 2-Methyl Naphthalene-d2							
6.350	6.349	(1.004)	142	1544 0.04341	41.0	80.00- 120.00	100.00
6.350	6.349	(1.004)	141	1336	55.57-	115.57	86.53

* 4 1-Methyl Naphthalene							
6.445	6.444	(1.019)	142	1301 0.03884	36.7	80.00- 120.00	100.00
6.445	6.444	(1.019)	141	1047	56.76-	116.76	80.48

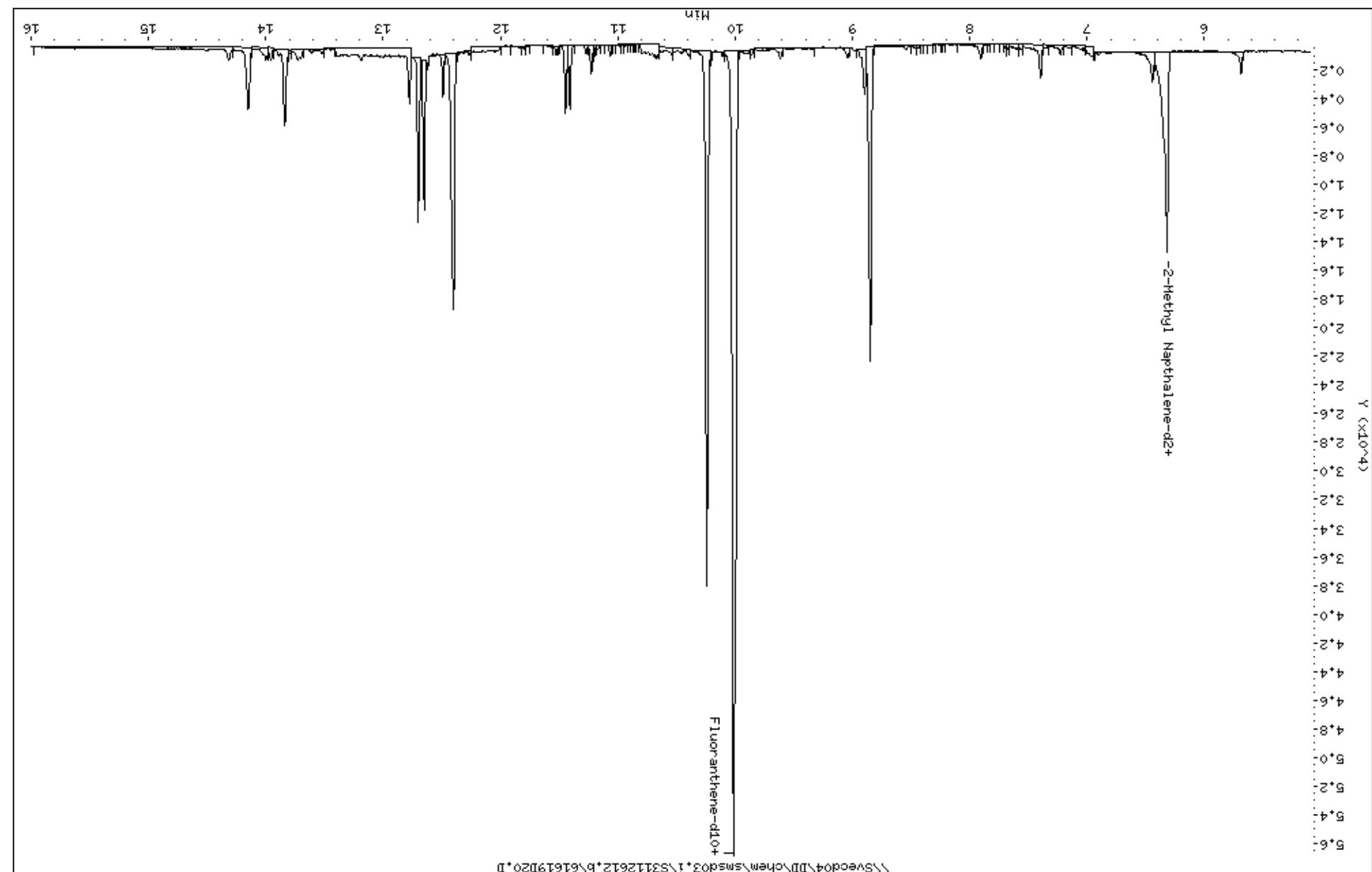
* 6 Acenaphthene							
7.396	7.395	(1.170)	153	1115 0.03373	31.8	80.00- 120.00	100.00
7.396	7.395	(1.170)	152	560	16.36-	76.36	50.22

* 7 Fluorene							
7.904	7.904	(1.250)	166	824 0.02171	20.5	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.904	7.900 (1.250)	165	778			62.21-	122.21	94.42
<hr/>								
8.845	8.845 (0.885)	178	27991 0.48191	455	80.00-	120.00	100.00	
8.845	8.845 (0.885)	179	4474		0.00-	45.59	15.98	
<hr/>								
8.899	8.893 (0.890)	178	4404 0.07770	73.4	80.00-	120.00	100.00	
8.937	8.893 (0.894)	179	482		0.00-	45.29	10.94	
<hr/>								
9.997	9.998 (1.000)	212	43605 0.80000		80.00-	120.00	100.00	
9.997	9.993 (1.000)	106	7047		0.00-	46.27	16.16	
<hr/>								
10.013	10.015 (1.002)	202	44535 0.69708	658	80.00-	120.00	100.00	
10.013	10.015 (1.002)	101	6018		0.00-	43.59	13.51	
<hr/>								
10.239	10.240 (1.024)	202	36004 0.52182	493	80.00-	120.00	100.00	
10.239	10.234 (1.024)	101	5737		0.00-	45.79	15.93	
<hr/>								
11.409	11.408 (1.141)	226	4244 0.26422	250	80.00-	120.00	100.00	
11.409	11.405 (1.141)	200	575		0.00-	43.02	13.55	
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11.444	11.444 (1.145)	226	5223 0.29084	275	80.00-	120.00	100.00	
11.444	11.444 (1.145)	200	781		0.00-	42.61	14.95	
<hr/>								
12.399	12.399 (1.240)	252	18853 0.27642	261	80.00-	120.00	100.00(M)	
12.399	12.394 (1.240)	250	4835		0.00-	54.21	25.65	
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12.412	12.421 (1.242)	252	9694 0.13883	131	80.00-	120.00	100.00(M)	
12.412	12.421 (1.242)	250	2314		0.00-	54.43	23.87	
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12.699	12.699 (1.270)	252	11079 0.19405	183	80.00-	120.00	100.00	
12.699	12.699 (1.270)	250	2707		0.00-	54.52	24.43	
<hr/>								
13.839	13.840 (1.384)	276	5968 0.08802	83.1	80.00-	120.00	100.00	
13.839	13.840 (1.384)	138	1323		0.87-	60.87	22.17	
<hr/>								
14.151	14.152 (1.415)	276	6088 0.10878	103	80.00-	120.00	100.00	
14.146	14.152 (1.415)	138	1637		0.00-	55.39	26.89	
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QC Flag Legend

M - Compound response manually integrated.



Data File: \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\DFTPP2.D
Report Date: 30-Nov-2012 09:53

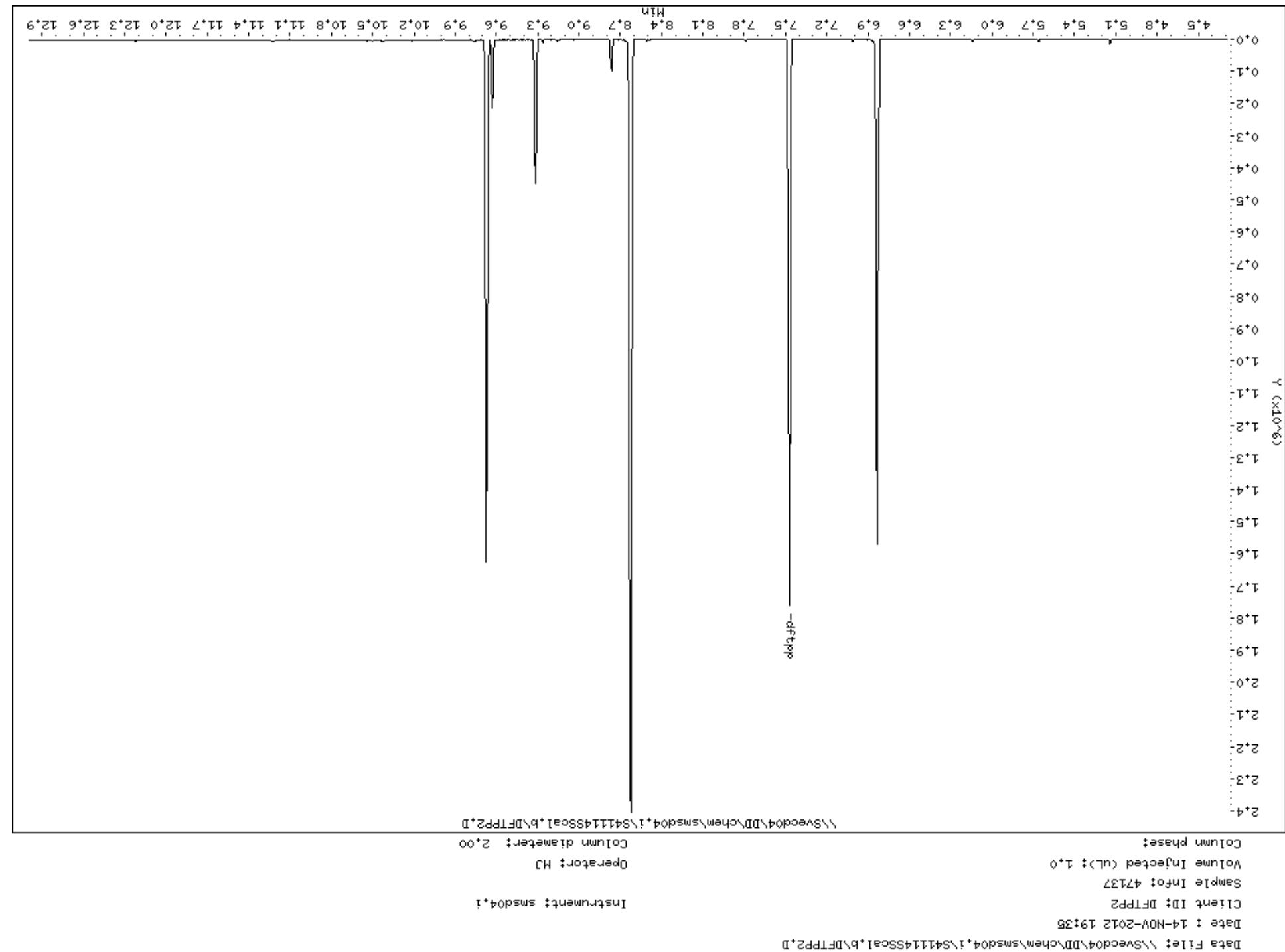
PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\DFTPP2.D
Lab Smp Id: 47137 Client Smp ID: DFTPP2
Inj Date : 14-NOV-2012 19:35
Operator : MJ Inst ID: smsd04.i
Smp Info : 47137
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\DoDTUN.m
Meth Date : 06-Aug-2012 11:47 Quant Type: ISTD
Cal Date : 23-MAR-2009 02:58 Cal File: AP9CAL1.D
Als bottle: 1 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER

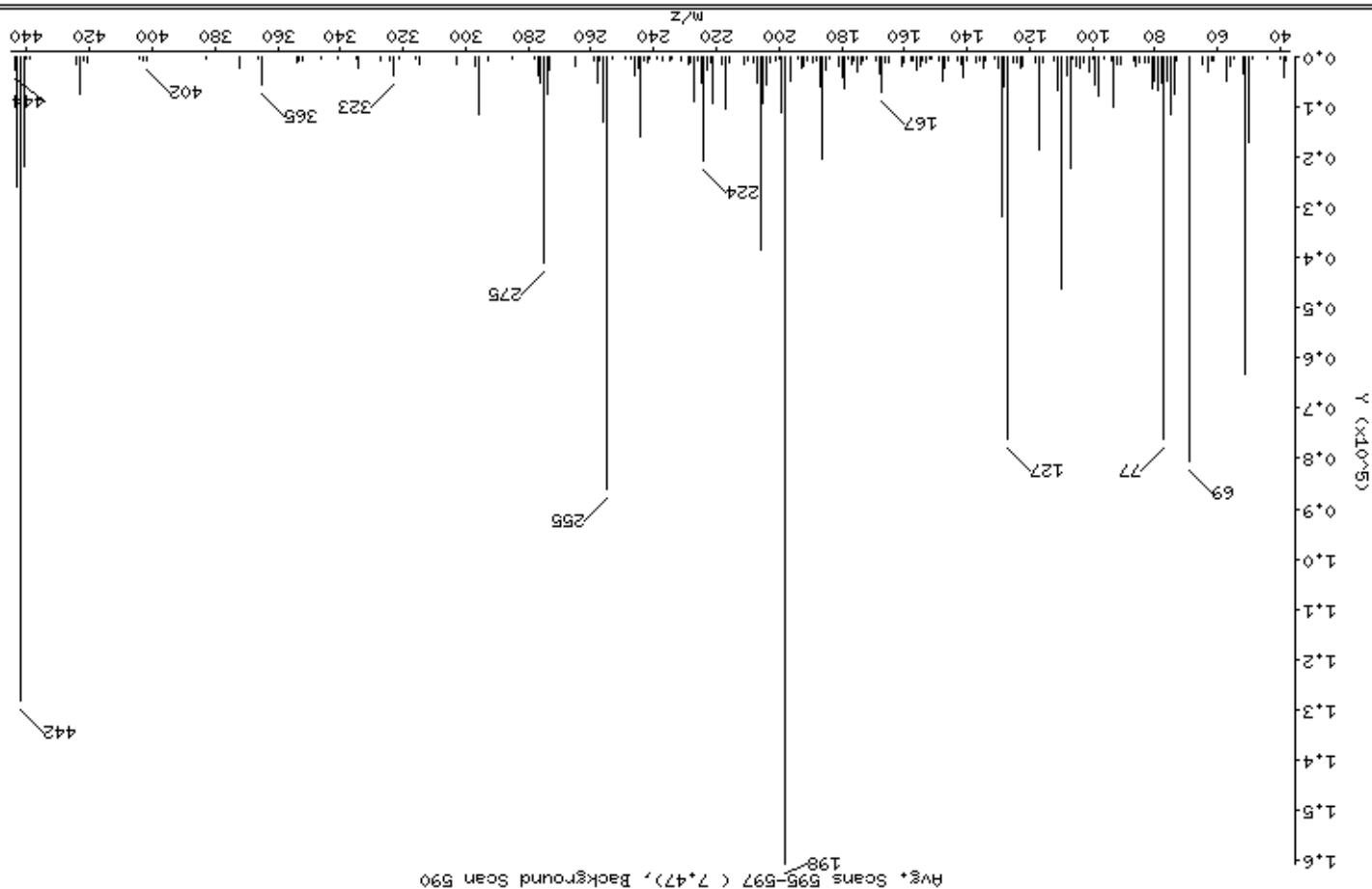
Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
7.474	7.410	(0.000)	198	160768		0.00- 100.00	100.00
7.474	7.410	(0.000)	51	63144		10.00- 80.00	39.28
7.474	7.410	(0.000)	68	0	0.0	0.00- 2.00	0.00
7.474	7.410	(0.000)	69	80600		0.00- 0.00	50.13
7.474	7.410	(0.000)	70	0	0.0	0.00- 2.00	0.00
7.474	7.410	(0.000)	127	76144		10.00- 80.00	47.36
7.474	7.410	(0.000)	197	0	0.0	0.00- 2.00	0.00
7.474	7.410	(0.000)	199	11183		5.00- 9.00	6.96
7.474	7.410	(0.000)	275	40952		10.00- 60.00	25.47
7.474	7.410	(0.000)	365	5692		1.00- 0.00	3.54
7.474	7.410	(0.000)	441	21680		0.01- 24.00	16.90
7.474	7.410	(0.000)	442	128272		50.00- 0.00	79.79
7.474	7.410	(0.000)	443	25920		15.00- 24.00	20.21
<hr/>							



m/e	% RELATIVE ABUNDANCE	ION ABUNDANCE CRITERIA
198	100.00	Base Peak, 100% relative abundance
54	10.00 - 80.00% of mass 198	Less than 2.00% of mass 69
68	0.00 (0.00)	Less than 2.00% of mass 69
69	0.00 (0.00)	Mass 69 relative abundance
70	0.00 (0.00)	Less than 2.00% of mass 69
127	10.00 - 80.00% of mass 198	10.00 - 80.00% of mass 198
127	0.00 (0.00)	Less than 2.00% of mass 198
197	0.00 (0.00)	Less than 2.00% of mass 198
198	0.00 (0.00)	Less than 2.00% of mass 198
199	0.00 (0.00)	10.00 - 90.00% of mass 198
275	0.00 (0.00)	6.00 - 60.00% of mass 198
275	0.00 (0.00)	25.47
365	0.00 (0.00)	3.54
365	0.00 (0.00)	Greater than 1.00% of mass 198
444	0.00 (0.00)	13.49 (16.90)
444	0.00 (0.00)	4.91
442	0.00 (0.00)	79.79
442	0.00 (0.00)	16.12 (20.21)
443	0.00 (0.00)	15.00 - 24.00% of mass 442



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Data File: \\\$veded4\DD\Chem\smso4_1\41114sscal.b\DFTP2.D
Date : 14-NOV-2012 19:35
Client ID: DFTP2
Instrument: smso4_1
Sample Info: 47137
Volume Injected (uL): 1.0
Operator: HJ
Column Phase:
Column diameter: 2.00
A dfpp
```


Data File: \\\\$veded4\DD\chem\msd4\1\54111455001.b\DFTP2.D
 Client ID: DFTP2
 Sample Info: 47137
 Instrument: msd4.i
 Date : 14-NOV-2012 19:35
 Column Phases: Column diameter: 2.00
 Volume Injected (uL): 1.0
 Operator: HS
 Spectrnum: Avg. Scans 595-597 (7.47), Background Scan 590
 Location of Maximum: 198.00
 Number of Points: 193

m/z	y	m/z	y	m/z	y	m/z	y
98.00	7775	167.00	7202	234.00	500	404.00	222
99.00	5512	168.00	3358	235.00	626	422.00	1109
100.00	223	169.00	629	237.00	898	422.00	888
101.00	3060	172.00	541	239.00	224	423.00	7248
102.00	959	173.00	806	241.00	271	424.00	1605
104.00	2143	174.00	1497	242.00	1026	439.00	314
105.00	1970	175.00	3068	243.00	609	440.00	254
106.00	538	176.00	730	244.00	16074	441.00	21680
107.00	22328	177.00	1606	245.00	2224	442.00	128272
108.00	3678	178.00	484	246.00	3578	443.00	25920
110.00	46328	179.00	6155	247.00	489	444.00	2496
111.00	6632	180.00	4188	249.00	321	445.00	2496
112.00	593	181.00	1907	253.00	448	446.00	2496
113.00	1011	184.00	249	255.00	86256	447.00	2496
114.00	1116	185.00					

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/26/2012 16:38

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S41114SScal.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/26/2012 16:54

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S41114SScal.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/26/2012 18:04

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S41114SScal.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/28/2012 10:14

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S41114SScal.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/29/2012 10:14

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S41114SScal.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/29/2012 17:50

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S41114SScal.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/29/2012 18:22

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S41114SScal.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/30/2012 09:53

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S41114SScal.b/DFTPP2.D

PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SSCAL7.d
Lab Smp Id: 47782 Client Smp ID: SSCAL7
Inj Date : 14-NOV-2012 19:53 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47782
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SS8270.m
Meth Date : 27-Nov-2012 16:40 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 19:53 Cal File: SSCAL7.d
Als bottle: 11 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	TARGET RANGE
5.480	5.478 (1.000)	128	106440	10.0000	10.3	80.00- 120.00	100.00(A)
5.480	5.478 (1.000)	129	11614		0.00-	30.00	10.91

* 1 Naphthalene							
6.116	6.106 (1.000)	152	5025	0.80000	80.00-	120.00	100.00(M)
6.108	6.106 (0.999)	122	2384		13.59-	73.59	47.44

* 3 2-Methyl Naphthalene-d2							
6.140	6.138 (1.000)	142	72439	10.0000	10.1	80.00- 120.00	100.00(A)
6.140	6.138 (1.000)	141	62043		66.11-	126.11	85.65

* 4 1-Methyl Naphthalene							
6.243	6.241 (1.000)	142	65468	10.0000	10	80.00- 120.00	100.00
6.243	6.241 (1.000)	141	58395		64.49-	124.49	89.20

* 5 Acenaphthylene							
7.018	7.015 (1.000)	152	111771	10.0000	10.9	80.00- 120.00	100.00(A)
7.018	7.015 (1.000)	151	21609		0.00-	41.18	19.33

* 6 Acenaphthene							
7.195	7.193 (1.000)	153	71343	10.0000	10.2	80.00- 120.00	100.00(A)

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.195	7.193 (1.000)	152	33929			13.30-	73.30	47.56
<hr/>								
6 Acenaphthene (continued)								
7.692	7.690 (1.000)	166	85686	10.0000	10.3	80.00-	120.00	100.00(A)
7.692	7.690 (1.000)	165	79306			61.41-	121.41	92.55
<hr/>								
7 Fluorene								
8.483	8.474 (0.867)	266	28823	20.0000	20.4	80.00-	120.00	100.00(A)
8.476	8.474 (0.867)	264	18960			39.89-	99.89	65.78
<hr/>								
8 Pentachlorophenol								
8.622	8.619 (0.882)	178	123494	10.0000	10.2	80.00-	120.00	100.00(A)
8.622	8.619 (0.882)	176	23438			0.00-	41.18	18.98
<hr/>								
9 Phenanthrene								
8.665	8.663 (0.886)	178	119609	10.0000	11.0	80.00-	120.00	100.00(A)
8.665	8.663 (0.886)	176	21925			0.00-	39.42	18.33
<hr/>								
* 11 Fluoranthene-d10								
9.780	9.777 (1.000)	212	8432	0.80000		80.00-	120.00	100.00
9.780	9.777 (1.000)	106	1036			0.00-	44.41	12.29
<hr/>								
12 Fluoranthene								
9.795	9.793 (1.002)	202	135981	10.0000	10.1	80.00-	120.00	100.00(A)
9.795	9.793 (1.002)	101	14047			0.00-	30.00	10.33
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13 Pyrene								
10.018	10.015 (1.024)	202	140486	10.0000	10.2	80.00-	120.00	100.00(A)
10.010	10.015 (1.024)	101	17539			0.00-	36.40	12.48
<hr/>								
14 Benzo[a]anthracene								
11.190	11.188 (1.144)	226	34513	10.0000	11.4	80.00-	120.00	100.00(A)
11.190	11.188 (1.144)	200	5182			0.00-	30.00	15.01
<hr/>								
15 Chrysene								
11.232	11.229 (1.148)	226	38347	10.0000	10.7	80.00-	120.00	100.00(A)
11.232	11.229 (1.148)	200	5556			0.00-	30.00	14.49
<hr/>								
16 Benzo[b]fluoranthene								
12.193	12.190 (1.247)	252	156681	10.0000	12.3	80.00-	120.00	100.00(A)
12.193	12.190 (1.247)	250	37879			0.00-	47.79	24.18
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17 Benzo[k]fluoranthene								
12.216	12.214 (1.249)	252	141663	10.0000	9.8	80.00-	120.00	100.00
12.216	12.214 (1.249)	250	30437			0.00-	56.48	21.49
<hr/>								
\$ 18 Benzo(e)pyrene-d12								
12.415	12.405 (1.269)	264	123882	10.0000	10.6	80.00-	120.00	100.00(A)
12.407	12.405 (1.269)	132	16113			0.00-	36.00	13.01
<hr/>								
19 Benzo[a]pyrene								
12.479	12.476 (1.276)	252	122243	10.0000	11.4	80.00-	120.00	100.00(A)

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.479	12.476	(1.276)	250	28425		0.00-	40.19	23.25

13.560	13.550	(1.387)	276	139964	10.0000	11.4	80.00-	120.00
13.560	13.550	(1.387)	138	29408		0.00-	37.88	21.01

13.568	13.566	(1.387)	278	114660	10.0000	11.4	80.00-	120.00
13.560	13.566	(1.387)	138	29527		0.00-	38.19	25.75

13.847	13.836	(1.416)	276	116796	10.0000	10.9	80.00-	120.00
13.847	13.836	(1.416)	138	20915		0.00-	30.00	17.91

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd04.i\S41114SScal.b\SSCAL7.d

Page 4

Date : 14-NOV-2012 19:53

Client ID: SSCL7

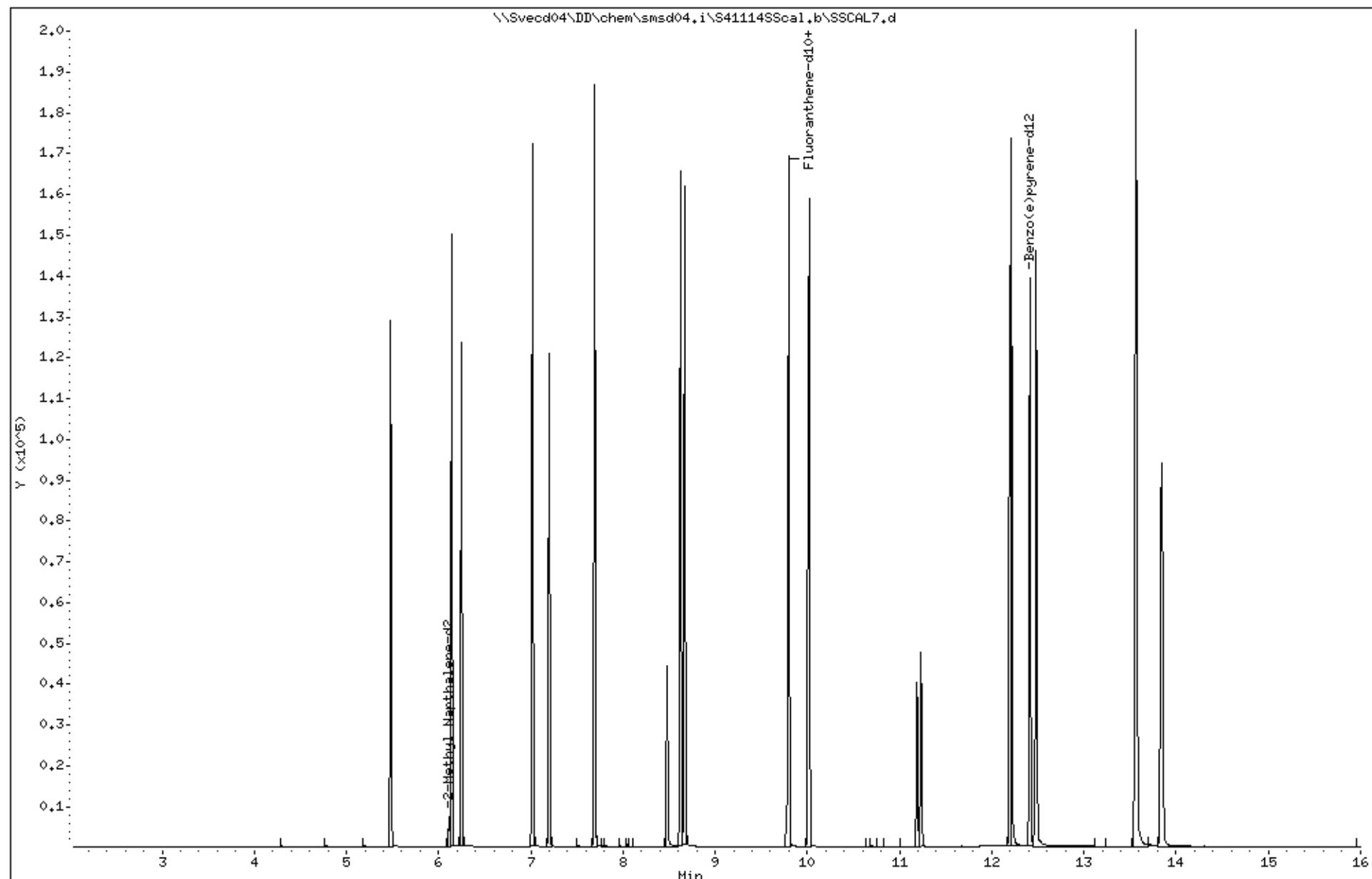
Sample Info: 47782

Column phase: HPMS-5

Instrument: smsd04.i

Operator: MJ

Column diameter: 0.25



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SSCAL6.d
Lab Smp Id: 47783 Client Smp ID: SSCAL6
Inj Date : 14-NOV-2012 20:14 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47783
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SS8270.m
Meth Date : 27-Nov-2012 16:40 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 20:14 Cal File: SSCAL6.d
Als bottle: 12 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	TARGET RANGE
5.481	5.478 (0.897)	128	53965	5.00000	5.2	80.00- 120.00	100.00
5.481	5.478 (0.897)	129	5919		0.00-	30.00	10.97

* 1 Naphthalene							
6.108	6.106 (1.000)	152	5138	0.80000	80.00-	120.00	100.00
6.108	6.106 (1.000)	122	2386		13.59-	73.59	46.44

* 3 2-Methyl Naphthalene-d2							
6.140	6.138 (1.005)	142	36472	5.00000	5.0	80.00- 120.00	100.00
6.140	6.138 (1.005)	141	31248		66.11-	126.11	85.68

* 4 1-Methylnaphthalene							
6.244	6.241 (1.022)	142	33180	5.00000	4.9	80.00- 120.00	100.00
6.244	6.241 (1.022)	141	29403		64.49-	124.49	88.62

* 5 Acenaphthylene							
7.018	7.015 (1.149)	152	55310	5.00000	5.3	80.00- 120.00	100.00
7.018	7.015 (1.149)	151	10803		0.00-	41.18	19.53

* 6 Acenaphthene							
7.195	7.193 (1.178)	153	35635	5.00000	5.0	80.00- 120.00	100.00

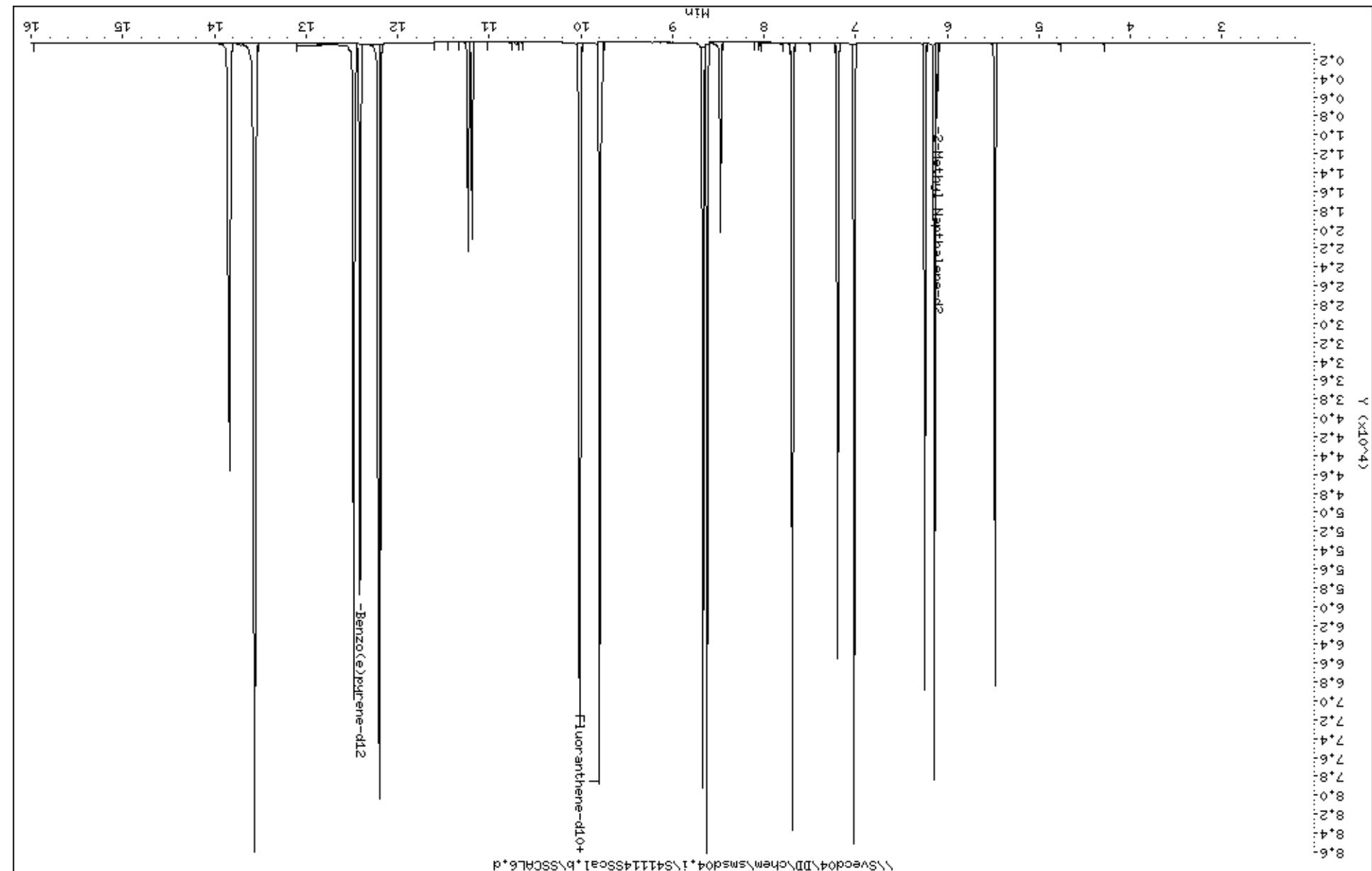
RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.195	7.193 (1.178)	152	17071			13.30-	73.30	47.91
<hr/>								
7.692	7.690 (1.259)	166	42221 5.00000	5.0	80.00-	120.00	100.00	
7.692	7.690 (1.259)	165	39353		61.41-	121.41	93.21	
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8.476	8.474 (0.867)	266	12265 10.0000	9.5	80.00-	120.00	100.00	
8.476	8.474 (0.867)	264	7912		39.89-	99.89	64.51	
<hr/>								
8.622	8.619 (0.882)	178	61242 5.00000	5.1	80.00-	120.00	100.00	
8.622	8.619 (0.882)	176	11633		0.00-	41.18	19.00	
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8.666	8.663 (0.886)	178	58628 5.00000	5.4	80.00-	120.00	100.00	
8.666	8.663 (0.886)	176	10685		0.00-	39.42	18.23	
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9.780	9.777 (1.000)	212	8433 0.80000		80.00-	120.00	100.00	
9.772	9.777 (1.000)	106	1037		0.00-	44.41	12.30	
<hr/>								
9.796	9.793 (1.002)	202	65908 5.00000	4.9	80.00-	120.00	100.00	
9.788	9.793 (1.001)	101	6830		0.00-	30.00	10.36	
<hr/>								
10.010	10.015 (1.024)	202	68623 5.00000	5.0	80.00-	120.00	100.00	
10.010	10.015 (1.024)	101	8420		0.00-	36.40	12.27	
<hr/>								
11.190	11.188 (1.144)	226	16499 5.00000	5.4	80.00-	120.00	100.00	
11.190	11.188 (1.144)	200	2483		0.00-	30.00	15.05	
<hr/>								
11.232	11.229 (1.148)	226	18320 5.00000	5.1	80.00-	120.00	100.00	
11.232	11.229 (1.148)	200	2666		0.00-	30.00	14.55	
<hr/>								
12.193	12.190 (1.247)	252	61589 5.00000	4.8	80.00-	120.00	100.00	
12.193	12.190 (1.247)	250	14564		0.00-	47.79	23.65	
<hr/>								
12.217	12.214 (1.249)	252	83767 5.00000	5.8	80.00-	120.00	100.00	
12.209	12.214 (1.248)	250	17705		0.00-	56.48	21.14	
<hr/>								
12.415	12.405 (1.269)	264	60117 5.00000	5.2	80.00-	120.00	100.00	
12.407	12.405 (1.269)	132	7597		0.00-	36.00	12.64	
<hr/>								
12.479	12.476 (1.276)	252	57471 5.00000	5.4	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.479	12.476	(1.276)	250	13405		0.00-	40.19	23.32

20	Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5			
13.560	13.550	(1.387)	276	65007	5.00000	5.3	80.00-	120.00
13.560	13.550	(1.387)	138	13653		0.00-	37.88	21.00

21	Dibenz[a,h]anthracene				CAS #: 53-70-3			
13.568	13.566	(1.387)	278	53200	5.00000	5.3	80.00-	120.00
13.560	13.566	(1.387)	138	13712		0.00-	38.19	25.77

22	Benzo[g,h,i]perylene				CAS #: 191-24-2			
13.839	13.836	(1.415)	276	55135	5.00000	5.1	80.00-	120.00
13.839	13.836	(1.415)	138	9888		0.00-	30.00	17.93



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SSCAL5.d
Lab Smp Id: 47784 Client Smp ID: SSCAL5
Inj Date : 14-NOV-2012 20:35 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47784
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SS8270.m
Meth Date : 27-Nov-2012 16:40 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 20:35 Cal File: SSCAL5.d
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO
				CAL-AMT	ON-COL		
<hr/>							
5.481	5.478 (0.897)	128	10172	1.00000	0.95	80.00- 120.00	100.00
5.481	5.478 (0.897)	129	1105		0.00-	30.00	10.86
<hr/>							
* 2 2-Methyl Naphthalene-d2							
6.108	6.106 (1.000)	152	5042	0.80000	80.00-	120.00	100.00
6.108	6.106 (1.000)	122	2295		13.59-	73.59	45.52
<hr/>							
3 2-Methylnaphthalene							
6.140	6.138 (1.005)	142	6920	1.00000	0.96	80.00- 120.00	100.00
6.140	6.138 (1.005)	141	5929		66.11-	126.11	85.68
<hr/>							
4 1-Methylnaphthalene							
6.243	6.241 (1.022)	142	6374	1.00000	0.97	80.00- 120.00	100.00
6.243	6.241 (1.022)	141	5701		64.49-	124.49	89.44
<hr/>							
5 Acenaphthylene							
7.018	7.015 (1.149)	152	10120	1.00000	0.98	80.00- 120.00	100.00
7.018	7.015 (1.149)	151	1979		0.00-	41.18	19.56
<hr/>							
6 Acenaphthene							
7.195	7.193 (1.178)	153	6946	1.00000	0.98	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
====	=====	=====	====	=====	=====	=====	=====	=====
6 Acenaphthene (continued)								
7.195	7.193 (1.178)	152	3270			13.30-	73.30	47.08
<hr/>								
7 Fluorene								
7.685	7.690 (1.258)	166	8083 1.00000	0.97	80.00-	120.00	100.00	
7.685	7.690 (1.258)	165	7500		61.41-	121.41	92.79	
<hr/>								
8 Pentachlorophenol								
8.476	8.474 (0.867)	266	7696 7.00000	6.3	80.00-	120.00	100.00	
8.476	8.474 (0.867)	264	4838		39.89-	99.89	62.86	
<hr/>								
9 Phenanthrene								
8.622	8.619 (0.882)	178	11963 1.00000	0.96	80.00-	120.00	100.00	
8.622	8.619 (0.882)	176	2279		0.00-	41.18	19.05	
<hr/>								
10 Anthracene								
8.665	8.663 (0.886)	178	10691 1.00000	0.95	80.00-	120.00	100.00	
8.665	8.663 (0.886)	176	1974		0.00-	39.42	18.46	
<hr/>								
* 11 Fluoranthene-d10								
9.780	9.777 (1.000)	212	8726 0.80000		80.00-	120.00	100.00	
9.772	9.777 (1.000)	106	1048		0.00-	44.41	12.01	
<hr/>								
12 Fluoranthene								
9.796	9.793 (1.002)	202	12940 1.00000	0.93	80.00-	120.00	100.00	
9.788	9.793 (1.001)	101	1354		0.00-	30.00	10.46	
<hr/>								
13 Pyrene								
10.010	10.015 (1.024)	202	13458 1.00000	0.95	80.00-	120.00	100.00	
10.010	10.015 (1.024)	101	1701		0.00-	36.40	12.64	
<hr/>								
14 Benzo[a]anthracene								
11.190	11.188 (1.144)	226	3092 1.00000	0.98	80.00-	120.00	100.00	
11.183	11.188 (1.144)	200	458		0.00-	30.00	14.81	
<hr/>								
15 Chrysene								
11.232	11.229 (1.148)	226	3475 1.00000	0.94	80.00-	120.00	100.00	
11.225	11.229 (1.148)	200	522		0.00-	30.00	15.02	
<hr/>								
16 Benzo[b]fluoranthene								
12.193	12.190 (1.247)	252	12670 1.00000	0.96	80.00-	120.00	100.00	
12.193	12.190 (1.247)	250	3049		0.00-	47.79	24.06	
<hr/>								
17 Benzo[k]fluoranthene								
12.209	12.214 (1.248)	252	14032 1.00000	0.94	80.00-	120.00	100.00(M)	
12.209	12.214 (1.248)	250	2849		0.00-	56.48	20.30	
<hr/>								
\$ 18 Benzo(e)pyrene-d12								
12.407	12.405 (1.269)	264	11344 1.00000	0.94	80.00-	120.00	100.00	
12.407	12.405 (1.269)	132	1485		0.00-	36.00	13.09	
<hr/>								
19 Benzo[a]pyrene								
12.479	12.476 (1.276)	252	10616 1.00000	0.96	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.471	12.476	(1.275)	250	2477		0.00-	40.19	23.33

20	Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5			
13.552	13.550	(1.386)	276	11747	1.00000	0.92	80.00-	120.00
13.552	13.550	(1.386)	138	2495		0.00-	37.88	21.24

21	Dibenz[a,h]anthracene				CAS #: 53-70-3			
13.560	13.566	(1.387)	278	9672	1.00000	0.93	80.00-	120.00
13.552	13.566	(1.386)	138	2549		0.00-	38.19	26.35

22	Benzo[g,h,i]perylene				CAS #: 191-24-2			
13.839	13.836	(1.415)	276	10165	1.00000	0.91	80.00-	120.00
13.839	13.836	(1.415)	138	1838		0.00-	30.00	18.08

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd04.i\S41114SScal.b\SSCAL5.d

Page 4

Date : 14-NOV-2012 20:35

Client ID: SSCL5

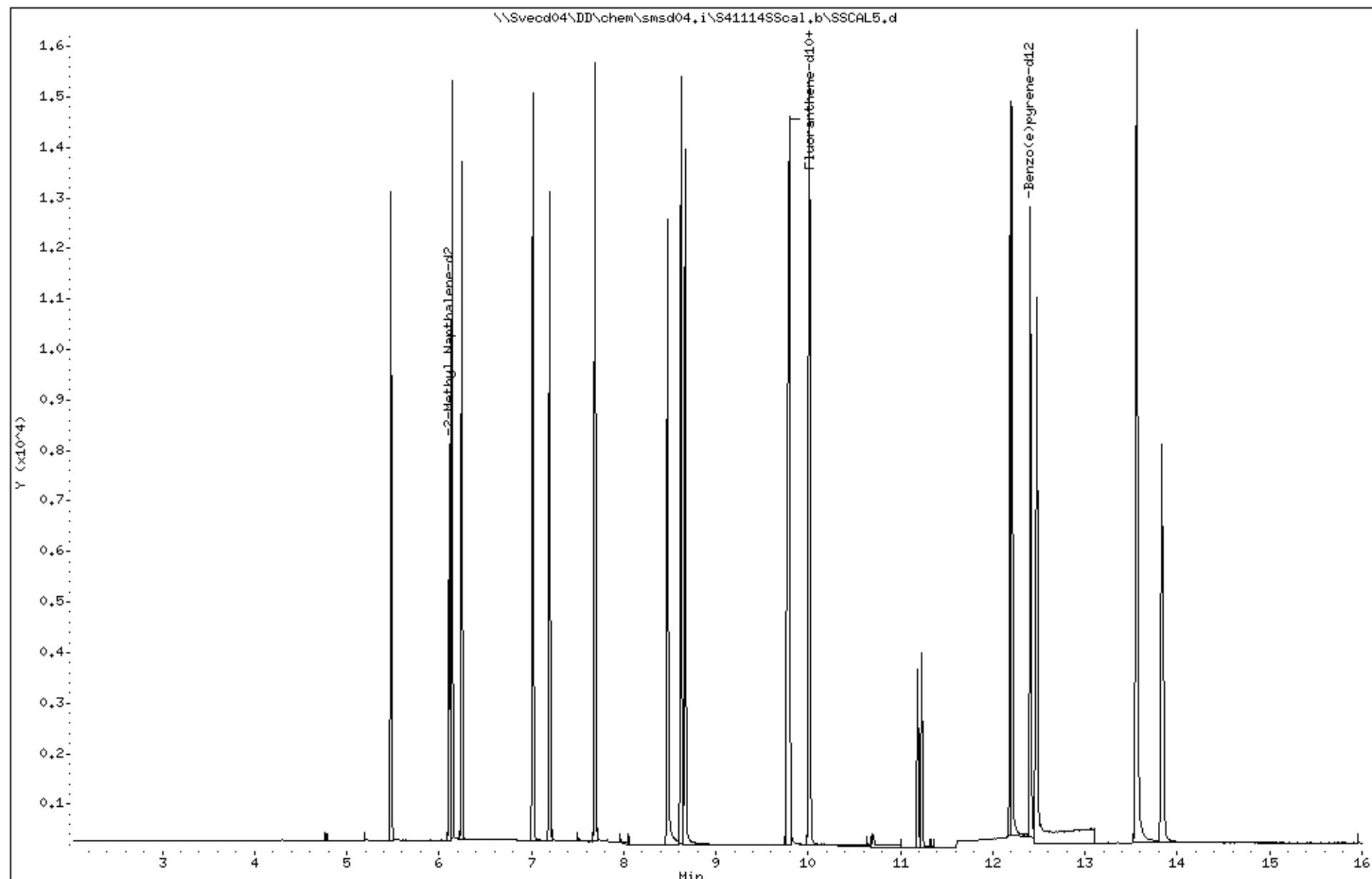
Sample Info: 47784

Column phase: HPMS-5

Instrument: smsd04.i

Operator: MJ

Column diameter: 0.25



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SSCAL4.d
Lab Smp Id: 47785 Client Smp ID: SSCAL4
Inj Date : 14-NOV-2012 20:56 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47785
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SS8270.m
Meth Date : 27-Nov-2012 16:40 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 20:56 Cal File: SSCAL4.d
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	TARGET RANGE
5.481	5.478 (0.897)	128	5200	0.50000	0.45	80.00- 120.00	100.00
5.481	5.478 (0.897)	129	574			0.00- 30.00	11.04

*	2	2-Methyl Naphthalene-d2				CAS #: 7927-45-2	
6.108	6.106 (1.000)	152	5143	0.80000	80.00-	120.00	100.00
6.108	6.106 (1.000)	122	2354		13.59-	73.59	45.77

3	2-Methylnaphthalene				CAS #: 91-57-6		
6.140	6.138 (1.005)	142	3537	0.50000	0.48	80.00- 120.00	100.00
6.140	6.138 (1.005)	141	3047		66.11-	126.11	86.15

4	1-Methylnaphthalene				CAS #: 90-12-0		
6.244	6.241 (1.022)	142	3235	0.50000	0.48	80.00- 120.00	100.00
6.244	6.241 (1.022)	141	2875		64.49-	124.49	88.87

5	Acenaphthylene				CAS #: 208-96-8		
7.018	7.015 (1.149)	152	5091	0.50000	0.48	80.00- 120.00	100.00
7.018	7.015 (1.149)	151	1009		0.00-	41.18	19.82

6	Acenaphthene				CAS #: 83-32-9		
7.195	7.193 (1.178)	153	3526	0.50000	0.49	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.195	7.193 (1.178)	152	1689			13.30-	73.30	47.90
<hr/>								
6 Acenaphthene (continued)								
7.685	7.690 (1.258)	166	4209 0.50000	0.49	80.00-	120.00	100.00	
7.685	7.690 (1.258)	165	3905		61.41-	121.41	92.78	
<hr/>								
7 Fluorene								
8.476	8.474 (0.867)	266	5491 5.00000	4.6	80.00-	120.00	100.00	
8.476	8.474 (0.867)	264	3461		39.89-	99.89	63.03	
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8 Pentachlorophenol								
8.622	8.619 (0.882)	178	6320 0.50000	0.46	80.00-	120.00	100.00	
8.622	8.619 (0.882)	176	1207		0.00-	41.18	19.10	
<hr/>								
9 Phenanthrene								
8.666	8.663 (0.886)	178	5495 0.50000	0.45	80.00-	120.00	100.00	
8.666	8.663 (0.886)	176	999		0.00-	39.42	18.18	
<hr/>								
* 11 Fluoranthene-d10								
9.780	9.777 (1.000)	212	9469 0.80000		80.00-	120.00	100.00	
9.772	9.777 (1.000)	106	1150		0.00-	44.41	12.14	
<hr/>								
12 Fluoranthene								
9.796	9.793 (1.002)	202	7115 0.50000	0.47	80.00-	120.00	100.00	
9.788	9.793 (1.001)	101	728		0.00-	30.00	10.23	
<hr/>								
13 Pyrene								
10.010	10.015 (1.024)	202	7248 0.50000	0.47	80.00-	120.00	100.00	
10.010	10.015 (1.024)	101	932		0.00-	36.40	12.86	
<hr/>								
14 Benzo[a]anthracene								
11.190	11.188 (1.144)	226	1664 0.50000	0.49	80.00-	120.00	100.00	
11.190	11.188 (1.144)	200	252		0.00-	30.00	15.14	
<hr/>								
15 Chrysene								
11.232	11.229 (1.148)	226	2005 0.50000	0.50	80.00-	120.00	100.00	
11.225	11.229 (1.148)	200	284		0.00-	30.00	14.16	
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16 Benzo[b]fluoranthene								
12.193	12.190 (1.247)	252	7093 0.50000	0.49	80.00-	120.00	100.00	
12.193	12.190 (1.247)	250	1695		0.00-	47.79	23.90	
<hr/>								
17 Benzo[k]fluoranthene								
12.209	12.214 (1.248)	252	7717 0.50000	0.48	80.00-	120.00	100.00(M)	
12.209	12.214 (1.248)	250	1555		0.00-	56.48	20.15	
<hr/>								
\$ 18 Benzo(e)pyrene-d12								
12.407	12.405 (1.269)	264	6434 0.50000	0.49	80.00-	120.00	100.00	
12.407	12.405 (1.269)	132	816		0.00-	36.00	12.68	
<hr/>								
19 Benzo[a]pyrene								
12.479	12.476 (1.276)	252	5746 0.50000	0.48	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.471	12.476	(1.275)	250	1332		0.00-	40.19	23.18

13.553	13.550	(1.386)	276	6439	0.50000	0.47	80.00-	120.00
13.553	13.550	(1.386)	138	1356		0.00-	37.88	21.06

13.560	13.566	(1.387)	278	5270	0.50000	0.47	80.00-	120.00
13.553	13.566	(1.386)	138	1331		0.00-	38.19	25.26

13.839	13.836	(1.415)	276	5412	0.50000	0.45	80.00-	120.00
13.831	13.836	(1.414)	138	983		0.00-	30.00	18.16

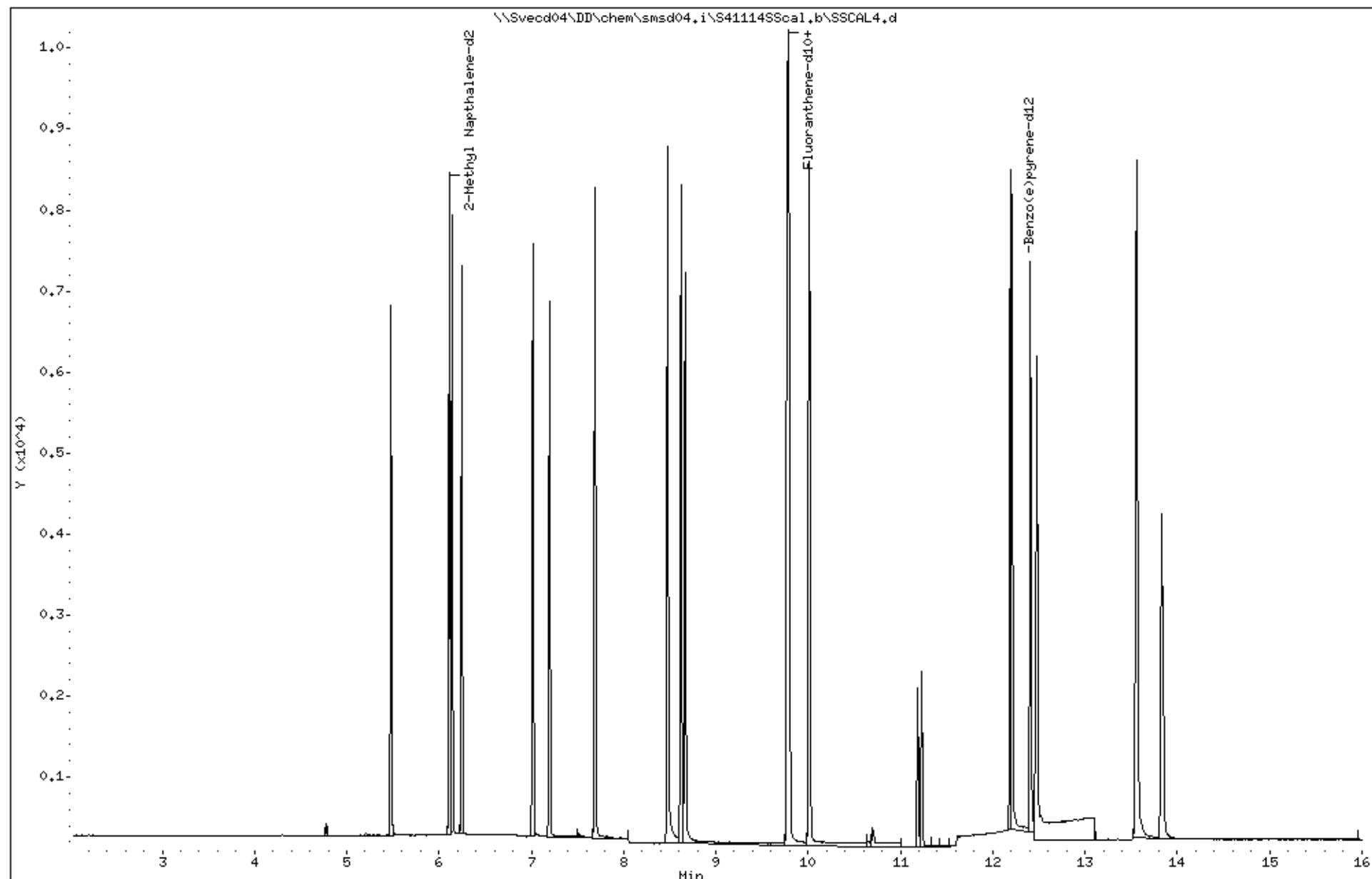
QC Flag Legend

M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd04,i\S41114SScal,b\SSCAL4.d
Date : 14-NOV-2012 20:56
Client ID: SSCL4
Sample Info: 47785

Column phase: HPMS-5

Instrument: smsd04,i
Operator: MJ
Column diameter: 0.25



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SSCAL3.d
Lab Smp Id: 47786 Client Smp ID: SSCAL3
Inj Date : 14-NOV-2012 21:17 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47786
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SS8270.m
Meth Date : 27-Nov-2012 16:40 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 21:17 Cal File: SSCAL3.d
Als bottle: 15 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	TARGET RANGE
5.480	5.478 (0.897)	128	1049	0.10000	0.095	80.00- 120.00	100.00
5.480	5.478 (0.897)	129	116			0.00- 30.00	11.06

*	2	2-Methyl Naphthalene-d2				CAS #: 7927-45-2	
6.108	6.106 (1.000)	152	5052	0.80000	80.00-	120.00	100.00
6.108	6.106 (1.000)	122	2353		13.59-	73.59	46.58

3	2-Methylnaphthalene				CAS #: 91-57-6		
6.140	6.138 (1.005)	142	714	0.10000	0.099	80.00- 120.00	100.00
6.140	6.138 (1.005)	141	607		66.11-	126.11	85.01

4	1-Methylnaphthalene				CAS #: 90-12-0		
6.243	6.241 (1.022)	142	657	0.10000	0.099	80.00- 120.00	100.00
6.243	6.241 (1.022)	141	578		64.49-	124.49	87.98

5	Acenaphthylene				CAS #: 208-96-8		
7.018	7.015 (1.149)	152	983	0.10000	0.095	80.00- 120.00	100.00
7.018	7.015 (1.149)	151	194		0.00-	41.18	19.74

6	Acenaphthene				CAS #: 83-32-9		
7.195	7.193 (1.178)	153	712	0.10000	0.10	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.195	7.193 (1.178)	152	328			13.30-	73.30	46.07
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7.692	7.690 (1.259)	166	838 0.10000	0.10	80.00-	120.00	100.00	
7.685	7.690 (1.258)	165	769		61.41-	121.41	91.77	
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8.476	8.474 (0.867)	266	1537 2.00000	2.3	80.00-	120.00	100.00	
8.476	8.474 (0.867)	264	972		39.89-	99.89	63.24	
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8.622	8.619 (0.882)	178	1252 0.10000	0.097	80.00-	120.00	100.00	
8.622	8.619 (0.882)	176	238		0.00-	41.18	19.01	
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8.665	8.663 (0.886)	178	1102 0.10000	0.095	80.00-	120.00	100.00	
8.665	8.663 (0.886)	176	194		0.00-	39.42	17.60	
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9.780	9.777 (1.000)	212	8996 0.80000		80.00-	120.00	100.00	
9.772	9.777 (1.000)	106	1065		0.00-	44.41	11.84	
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9.795	9.793 (1.002)	202	1422 0.10000	0.099	80.00-	120.00	100.00	
9.787	9.793 (1.001)	101	162		0.00-	30.00	11.39	
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10.010	10.015 (1.024)	202	1409 0.10000	0.096	80.00-	120.00	100.00	
10.010	10.015 (1.024)	101	248		0.00-	36.40	17.60	
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11.190	11.188 (1.144)	226	303 0.10000	0.094	80.00-	120.00	100.00	
11.183	11.188 (1.144)	200	43		0.00-	30.00	14.19	
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11.232	11.229 (1.148)	226	369 0.10000	0.096	80.00-	120.00	100.00	
11.225	11.229 (1.148)	200	53		0.00-	30.00	14.36	
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12.192	12.190 (1.247)	252	1262 0.10000	0.092	80.00-	120.00	100.00	
12.192	12.190 (1.247)	250	301		0.00-	47.79	23.85	
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12.208	12.214 (1.248)	252	1419 0.10000	0.092	80.00-	120.00	100.00(M)	
12.208	12.214 (1.248)	250	293		0.00-	56.48	20.65	
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12.407	12.405 (1.269)	264	1202 0.10000	0.097	80.00-	120.00	100.00	
12.407	12.405 (1.269)	132	150		0.00-	36.00	12.48	
<hr/>								
12.479	12.476 (1.276)	252	1043 0.10000	0.092	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.471	12.476	(1.275)	250	247		0.00-	40.19	23.68

13.552	13.550	(1.386)	276	1215	0.10000	0.093	80.00-	120.00
13.552	13.550	(1.386)	138	249		0.00-	37.88	20.49

13.568	13.566	(1.387)	278	994	0.10000	0.093	80.00-	120.00
13.552	13.566	(1.386)	138	256		0.00-	38.19	25.75

13.839	13.836	(1.415)	276	1031	0.10000	0.090	80.00-	120.00
13.831	13.836	(1.414)	138	189		0.00-	30.00	18.33

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd04.i\S41114SScal.b\SSCAL3.d

Page 4

Date : 14-NOV-2012 21:17

Client ID: SSCL3

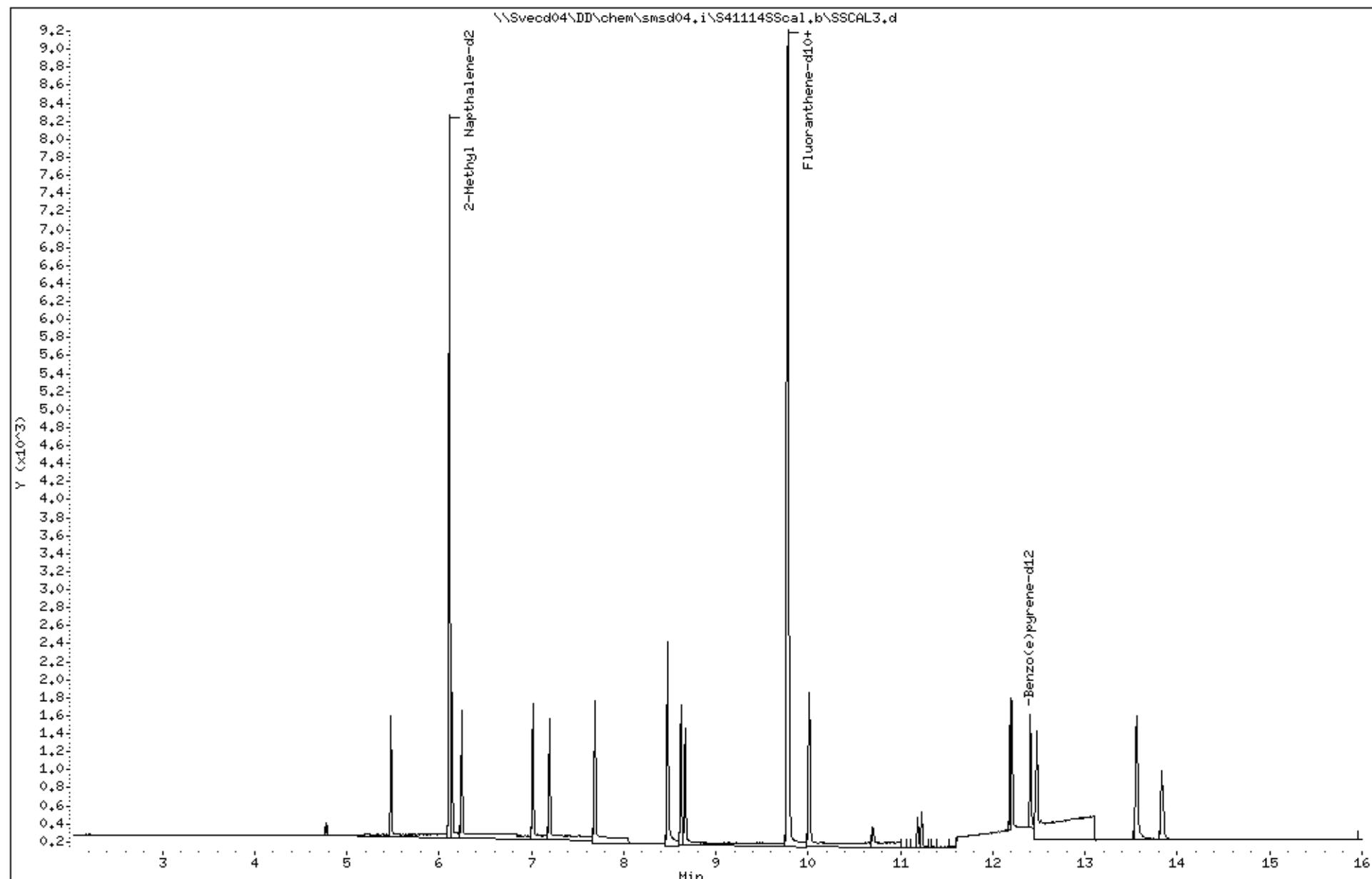
Sample Info: 47786

Column phase: HPMS-5

Instrument: smsd04.i

Operator: MJ

Column diameter: 0.25



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SSCAL2.d
Lab Smp Id: 47787 Client Smp ID: SSCAL2
Inj Date : 14-NOV-2012 21:38 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47787
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SS8270.m
Meth Date : 27-Nov-2012 16:40 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 21:38 Cal File: SSCAL2.d
Als bottle: 16 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO
				CAL-AMT	ON-COL		
<hr/>							
5.481	5.478 (0.897)	128	530	0.05000	0.054	80.00- 120.00	100.00
5.481	5.478 (0.897)	129	60			0.00- 30.00	11.32
<hr/>							
*	2	2-Methyl Naphthalene-d2				CAS #: 7927-45-2	
6.108	6.106 (1.000)	152	4892	0.80000		80.00- 120.00	100.00
6.108	6.106 (1.000)	122	2278			13.59- 73.59	46.57
<hr/>							
6.140	6.138 (1.005)	142	354	0.05000	0.051	80.00- 120.00	100.00
6.140	6.138 (1.005)	141	307			66.11- 126.11	86.72
<hr/>							
6.243	6.241 (1.022)	142	322	0.05000	0.050	80.00- 120.00	100.00
6.243	6.241 (1.022)	141	288			64.49- 124.49	89.44
<hr/>							
7.018	7.015 (1.149)	152	479	0.05000	0.048	80.00- 120.00	100.00
7.018	7.015 (1.149)	151	88			0.00- 41.18	18.37
<hr/>							
7.195	7.193 (1.178)	153	338	0.05000	0.049	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.195	7.193 (1.178)	152	164			13.30-	73.30	48.52
<hr/>								
7.685	7.690 (1.258)	166	395 0.05000	0.049	80.00-	120.00	100.00	
7.685	7.690 (1.258)	165	359		61.41-	121.41	90.89	
<hr/>								
8.476	8.474 (0.867)	266	656 1.00000	1.8	80.00-	120.00	100.00	
8.476	8.474 (0.867)	264	414		39.89-	99.89	63.11	
<hr/>								
8.622	8.619 (0.882)	178	587 0.05000	0.051	80.00-	120.00	100.00	
8.622	8.619 (0.882)	176	109		0.00-	41.18	18.57	
<hr/>								
8.665	8.663 (0.886)	178	514 0.05000	0.049	80.00-	120.00	100.00	
8.665	8.663 (0.886)	176	85		0.00-	39.42	16.54	
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9.780	9.777 (1.000)	212	8075 0.80000		80.00-	120.00	100.00	
9.772	9.777 (1.000)	106	987		0.00-	44.41	12.22	
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9.796	9.793 (1.002)	202	633 0.05000	0.049	80.00-	120.00	100.00	
9.788	9.793 (1.001)	101	85		0.00-	30.00	13.43	
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10.010	10.015 (1.024)	202	667 0.05000	0.051	80.00-	120.00	100.00	
10.010	10.015 (1.024)	101	154		0.00-	36.40	23.09	
<hr/>								
11.190	11.188 (1.144)	226	136 0.05000	0.047	80.00-	120.00	100.00	
11.183	11.188 (1.144)	200	19		0.00-	30.00	13.97	
<hr/>								
11.232	11.229 (1.148)	226	171 0.05000	0.050	80.00-	120.00	100.00	
11.225	11.229 (1.148)	200	25		0.00-	30.00	14.62	
<hr/>								
12.193	12.190 (1.247)	252	577 0.05000	0.047	80.00-	120.00	100.00	
12.193	12.190 (1.247)	250	135		0.00-	47.79	23.40	
<hr/>								
12.208	12.214 (1.248)	252	701 0.05000	0.051	80.00-	120.00	100.00(M)	
12.208	12.214 (1.248)	250	132		0.00-	56.48	18.83	
<hr/>								
12.407	12.405 (1.269)	264	576 0.05000	0.052	80.00-	120.00	100.00	
12.407	12.405 (1.269)	132	74		0.00-	36.00	12.85	
<hr/>								
12.479	12.476 (1.276)	252	500 0.05000	0.049	80.00-	120.00	100.00	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.479	12.476	(1.276)	250	125		0.00-	40.19	25.00

13.560	13.550	(1.387)	276	598	0.05000	0.051	80.00-	120.00
13.560	13.550	(1.387)	138	138		0.00-	37.88	23.08

13.568	13.566	(1.387)	278	479	0.05000	0.050	80.00-	120.00
13.560	13.566	(1.387)	138	138		0.00-	38.19	28.81

13.839	13.836	(1.415)	276	556	0.05000	0.054	80.00-	120.00
13.839	13.836	(1.415)	138	91		0.00-	30.00	16.37

QC Flag Legend

M - Compound response manually integrated.

Date : 14-NOV-2012 21:38

Client ID: SSCL2

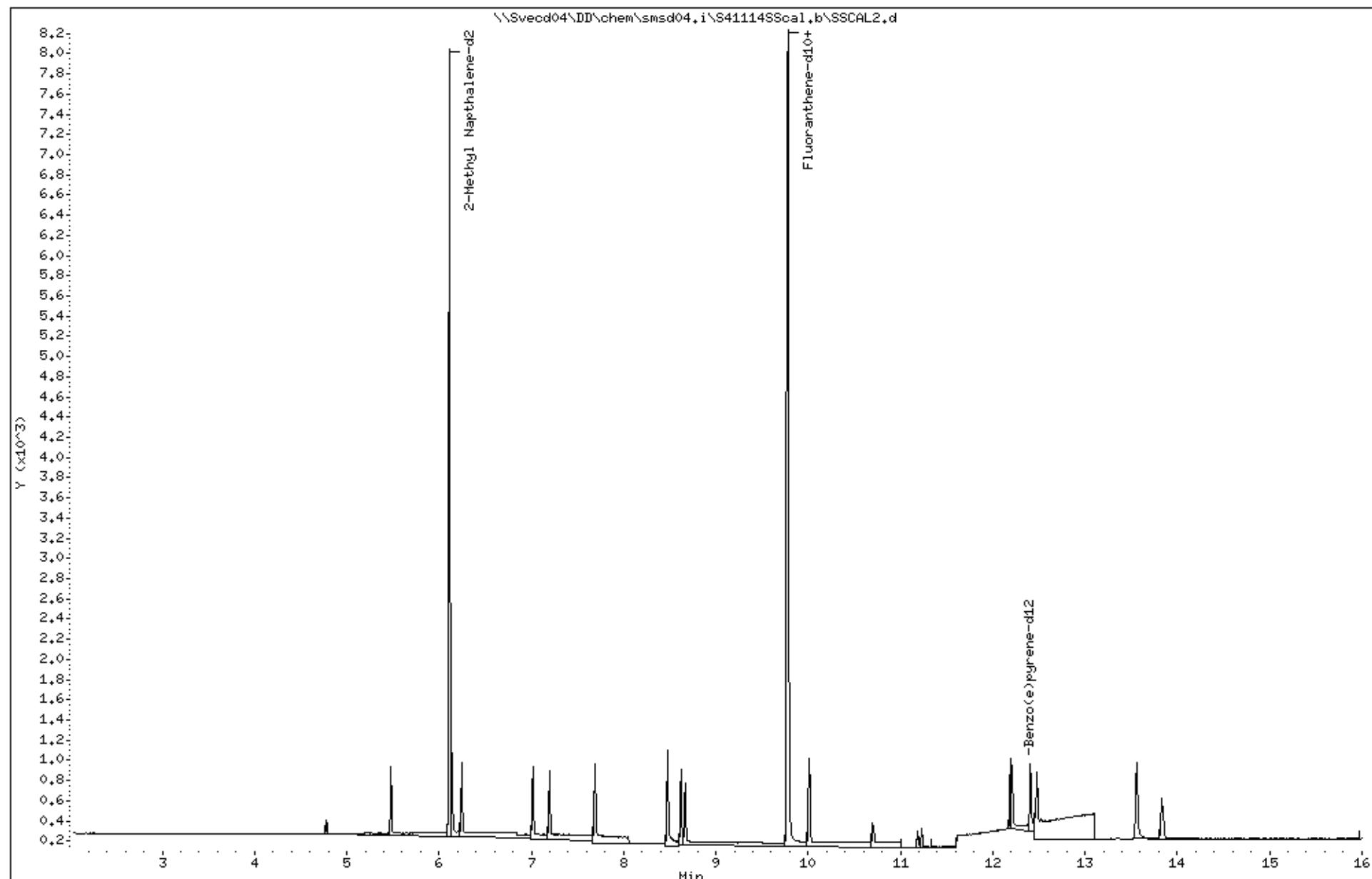
Sample Info: 47787

Column phase: HPMS-5

Instrument: smsd04.i

Operator: MJ

Column diameter: 0.25



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SSCAL1.d
 Lab Smp Id: 47788 Client Smp ID: SSCAL1
 Inj Date : 14-NOV-2012 21:58 MS Autotune Date: 07-MAR-2012 16:32
 Operator : MJ Inst ID: smsd04.i
 Smp Info : 47788
 Misc Info :
 Comment :
 Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SS8270.m
 Meth Date : 27-Nov-2012 16:40 nsubar Quant Type: ISTD
 Cal Date : 14-NOV-2012 21:58 Cal File: SSCAL1.d
 Als bottle: 17 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	RATIO
5.480	5.478 (0.897)	128	212	0.02000	0.021	80.00- 120.00	100.00
5.480	5.478 (0.897)	129	27			0.00- 30.00	12.74
<hr/>							
* 2 2-Methyl Naphthalene-d2							
6.108	6.106 (1.000)	152	4765	0.80000	80.00-	120.00	100.00
6.108	6.106 (1.000)	122	2205		13.59-	73.59	46.27
<hr/>							
3 2-Methylnaphthalene							
6.140	6.138 (1.005)	142	143	0.02000	0.021	80.00- 120.00	100.00
6.140	6.138 (1.005)	141	123			66.11- 126.11	86.01
<hr/>							
4 1-Methylnaphthalene							
6.243	6.241 (1.022)	142	135	0.02000	0.022	80.00- 120.00	100.00
6.243	6.241 (1.022)	141	118			64.49- 124.49	87.41
<hr/>							
5 Acenaphthylene							
7.018	7.015 (1.149)	152	191	0.02000	0.020	80.00- 120.00	100.00
7.018	7.015 (1.149)	151	37			0.00- 41.18	19.37
<hr/>							
6 Acenaphthene							
7.195	7.193 (1.178)	153	137	0.02000	0.020	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.195	7.193 (1.178)	152	71			13.30-	73.30	51.82
<hr/>								
7.685	7.690 (1.258)	166	164	0.02000	0.021	80.00-	120.00	100.00
7.685	7.690 (1.258)	165	158			61.41-	121.41	96.34
<hr/>								
8.476	8.474 (0.867)	266	419	0.70000	1.7	80.00-	120.00	100.00
8.476	8.474 (0.867)	264	259			39.89-	99.89	61.81
<hr/>								
8.622	8.619 (0.882)	178	256	0.02000	0.022	80.00-	120.00	100.00
8.614	8.619 (0.881)	176	47			0.00-	41.18	18.36
<hr/>								
8.665	8.663 (0.886)	178	214	0.02000	0.020	80.00-	120.00	100.00
8.665	8.663 (0.886)	176	36			0.00-	39.42	16.82
<hr/>								
9.780	9.777 (1.000)	212	8141	0.80000		80.00-	120.00	100.00
9.772	9.777 (1.000)	106	980			0.00-	44.41	12.04
<hr/>								
9.795	9.793 (1.002)	202	296	0.02000	0.023	80.00-	120.00	100.00
9.788	9.793 (1.001)	101	47			0.00-	30.00	15.88
<hr/>								
10.010	10.015 (1.024)	202	297	0.02000	0.022	80.00-	120.00	100.00
10.010	10.015 (1.024)	101	119			0.00-	36.40	40.07
<hr/>								
11.190	11.188 (1.144)	226	55	0.02000	0.019	80.00-	120.00	100.00
11.225	11.188 (1.148)	200	10			0.00-	30.00	18.18
<hr/>								
11.232	11.229 (1.148)	226	71	0.02000	0.020	80.00-	120.00	100.00
11.225	11.229 (1.148)	200	10			0.00-	30.00	14.08
<hr/>								
12.193	12.190 (1.247)	252	245	0.02000	0.020	80.00-	120.00	100.00
12.193	12.190 (1.247)	250	67			0.00-	47.79	27.35
<hr/>								
12.208	12.214 (1.248)	252	286	0.02000	0.020	80.00-	120.00	100.00(M)
12.208	12.214 (1.248)	250	62			0.00-	56.48	21.68
<hr/>								
12.407	12.405 (1.269)	264	221	0.02000	0.020	80.00-	120.00	100.00
12.407	12.405 (1.269)	132	22			0.00-	36.00	9.95
<hr/>								
12.479	12.476 (1.276)	252	198	0.02000	0.019	80.00-	120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.471	12.476	(1.275)	250	58		0.00-	40.19	29.29

13.552	13.550	(1.386)	276	238	0.02000	0.020	80.00-	120.00
13.552	13.550	(1.386)	138	62		0.00-	37.88	26.05

13.560	13.566	(1.387)	278	197	0.02000	0.020	80.00-	120.00
13.552	13.566	(1.386)	138	50		0.00-	38.19	25.38

13.839	13.836	(1.415)	276	227	0.02000	0.022	80.00-	120.00
13.831	13.836	(1.414)	138	47		0.00-	30.00	20.70

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd04.i\S41114SScal.b\SSCAL1.d

Page 4

Date : 14-NOV-2012 21:58

Client ID: SSCLAL1

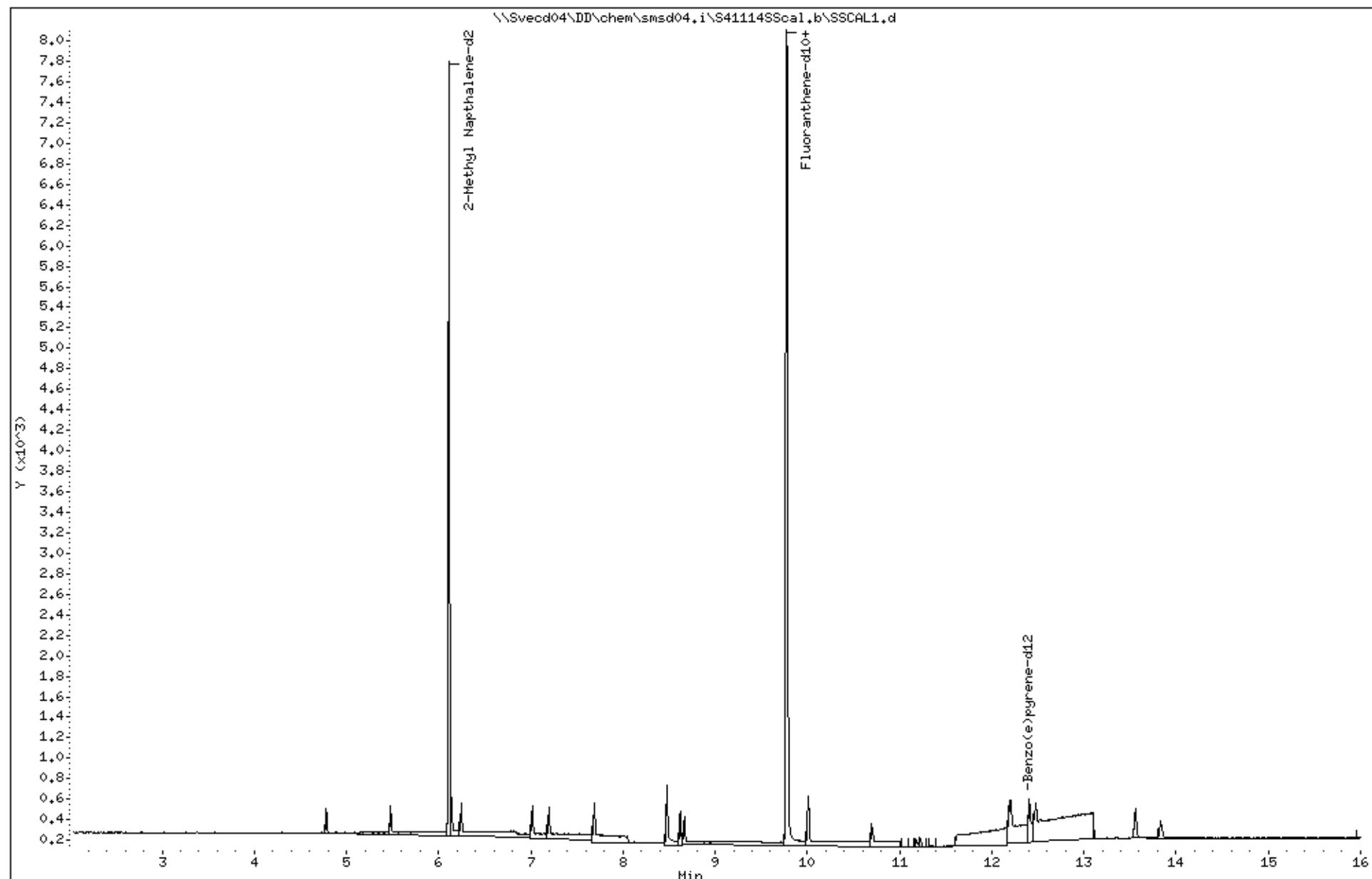
Sample Info: 47788

Column phase: HPMS-5

Instrument: smsd04.i

Operator: MJ

Column diameter: 0.25



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SSSEC.d
Lab Smp Id: 47789 Client Smp ID: SSSEC
Inj Date : 14-NOV-2012 22:19 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47789
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\SS8270.m
Meth Date : 27-Nov-2012 16:40 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 21:58 Cal File: SSCAL1.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	TARGET RANGE
5.478	5.478 (0.560)	128	4185	0.50000	0.49	80.00- 120.00	100.00(M)
5.481	5.478 (0.561)	129	0	0.00	0.00	0.00- 30.00	0.00
*	2 2-Methyl Naphthalene-d2					CAS #: 7927-45-2	
6.106	6.106 (1.000)	152	4113	0.80000	80.00-	120.00	100.00
6.106	6.106 (1.000)	122	1793		13.59-	73.59	43.59
3	2-Methylnaphthalene				CAS #: 91-57-6		
6.138	6.138 (1.005)	142	2312	0.50000	0.39	80.00- 120.00	100.00
6.138	6.138 (1.005)	141	2222		66.11-	126.11	96.11
4	1-Methylnaphthalene				CAS #: 90-12-0		
6.241	6.241 (1.022)	142	2396	0.50000	0.44	80.00- 120.00	100.00
6.241	6.241 (1.022)	141	2264		64.49-	124.49	94.49
5	Acenaphthylene				CAS #: 208-96-8		
7.015	7.015 (1.149)	152	3944	0.50000	0.47	80.00- 120.00	100.00(M)
7.015	7.015 (1.149)	151	441		0.00-	41.18	11.18
6	Acenaphthene				CAS #: 83-32-9		
7.193	7.193 (1.178)	153	2628	0.50000	0.46	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	CAL-AMT	ON-COL
				RESPONSE	(ug/ml)				
7.200	7.193 (1.179)	152	1138			13.30-	73.30	43.30	
<hr/>									
6 Acenaphthene (continued)									
7.690	7.690 (1.259)	166	3364 0.50000	0.49	80.00-	120.00	100.00		
7.690	7.690 (1.259)	165	3075		61.41-	121.41	91.41		
<hr/>									
7 Fluorene									
8.474	8.474 (0.867)	266	3447 5.00000	4.1	80.00-	120.00	100.00		
8.474	8.474 (0.867)	264	2409		39.89-	99.89	69.89		
<hr/>									
8 Pentachlorophenol									
8.619	8.619 (0.882)	178	5615 0.50000	0.56	80.00-	120.00	100.00(M)		
8.619	8.619 (0.882)	176	628		0.00-	41.18	11.18		
<hr/>									
9 Phenanthrene									
8.663	8.663 (0.886)	178	4012 0.50000	0.44	80.00-	120.00	100.00(M)		
8.663	8.663 (0.886)	176	378		0.00-	39.42	9.42		
<hr/>									
* 11 Fluoranthene-d10									
9.777	9.777 (1.000)	212	7011 0.80000		80.00-	120.00	100.00		
9.777	9.777 (1.000)	106	1010		0.00-	44.41	14.41		
<hr/>									
12 Fluoranthene									
9.793	9.793 (1.002)	202	5494 0.50000	0.49	80.00-	120.00	100.00(M)		
9.796	9.793 (1.002)	101	0 0.00	0.00	0.00-	30.00	0.00		
<hr/>									
13 Pyrene									
10.015	10.015 (1.024)	202	5033 0.50000	0.44	80.00-	120.00	100.00(M)		
10.007	10.015 (1.024)	101	322		0.00-	36.40	6.40		
<hr/>									
14 Benzo[a]anthracene									
11.188	11.188 (1.144)	226	1089 0.50000	0.43	80.00-	120.00	100.00(M)		
11.191	11.188 (1.145)	200	0 0.00	0.00	0.00-	30.00	0.00		
<hr/>									
15 Chrysene									
11.229	11.229 (1.149)	226	1411 0.50000	0.47	80.00-	120.00	100.00(M)		
11.232	11.229 (1.149)	200	0 0.00	0.00	0.00-	30.00	0.00		
<hr/>									
16 Benzo[b]fluoranthene									
12.190	12.190 (1.247)	252	4824 0.50000	0.45	80.00-	120.00	100.00		
12.190	12.190 (1.247)	250	858		0.00-	47.79	17.79		
<hr/>									
17 Benzo[k]fluoranthene									
12.214	12.214 (1.249)	252	5339 0.50000	0.44	80.00-	120.00	100.00(M)		
12.206	12.214 (1.248)	250	1414		0.00-	56.48	26.48		
<hr/>									
\$ 18 Benzo(e)pyrene-d12				CAS #: 205440-82-0					
12.405	12.405 (1.269)	264	5282 0.50000	0.54	80.00-	120.00	100.00(M)		
12.405	12.405 (1.269)	132	317		0.00-	36.00	6.00		
<hr/>									
19 Benzo[a]pyrene									
12.476	12.476 (1.276)	252	3914 0.50000	0.44	80.00-	120.00	100.00(M)		

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.476	12.476	(1.276)	250	399		0.00-	40.19	10.19

20	Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5			
13.550	13.550	(1.386)	276	4292	0.50000	0.42	80.00-	120.00
13.566	13.550	(1.387)	138	338		0.00-	37.88	7.88

21	Dibenz[a,h]anthracene				CAS #: 53-70-3			
13.566	13.566	(1.387)	278	4128	0.50000	0.49	80.00-	120.00
13.566	13.566	(1.387)	138	338		0.00-	38.19	8.19

22	Benzo[g,h,i]perylene				CAS #: 191-24-2			
13.836	13.836	(1.415)	276	3966	0.50000	0.44	80.00-	120.00
13.839	13.836	(1.415)	138	0	0.00	0.00	0.00-	30.00

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd04.i\S41114SScal.b\SSSEC.d

Page 4

Date : 14-NOV-2012 22:19

Client ID: SSSEC

Sample Info: 47789

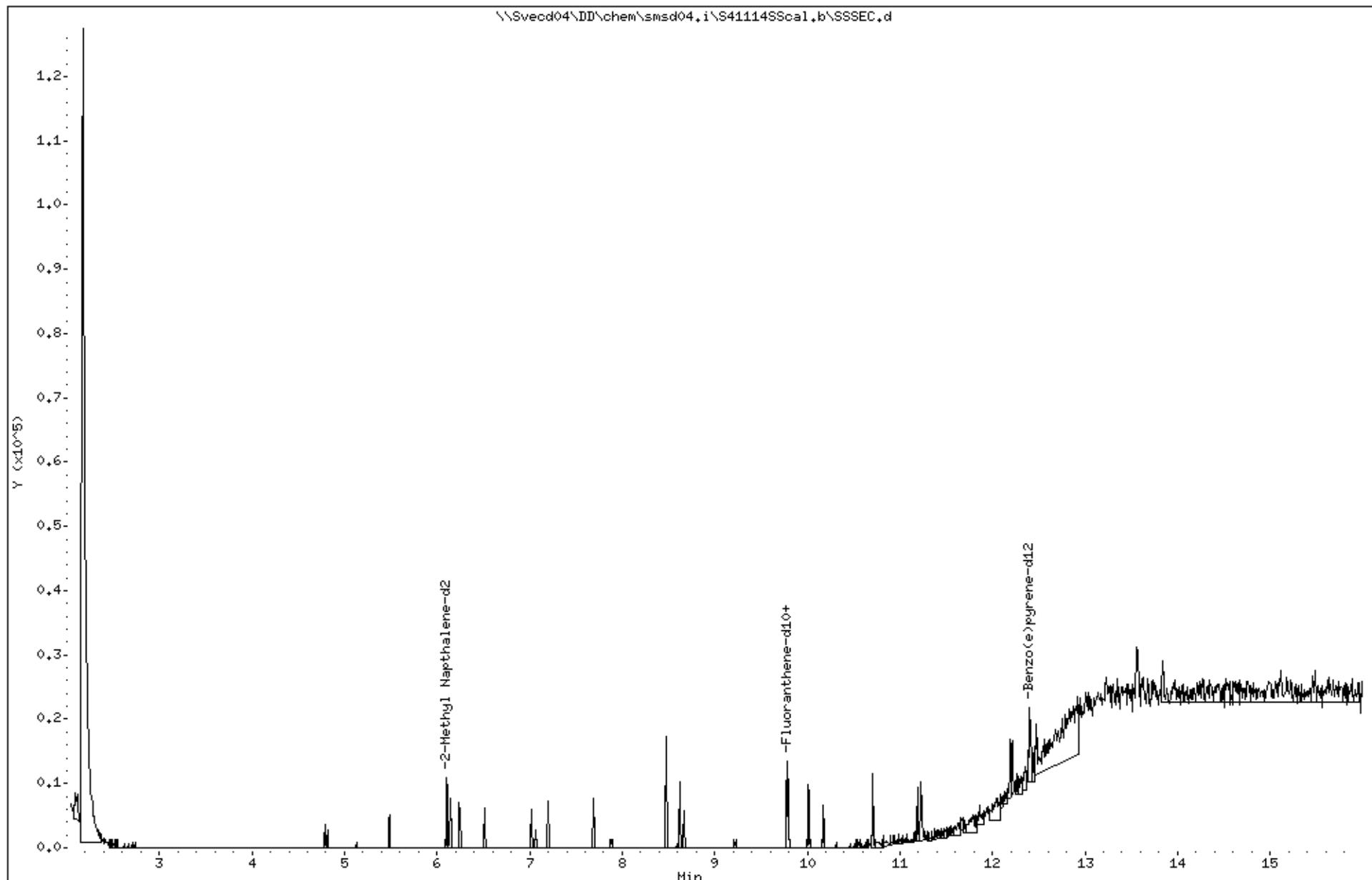
Column phase: HPMS-5

Instrument: smsd04.i

Operator: MJ

Column diameter: 0.25

\\Sved04\DD\chem\smsd04.i\S41114SScal.b\SSSEC.d



Data File: DFTPP2.d
Report Date: 30-Nov-2012 09:53

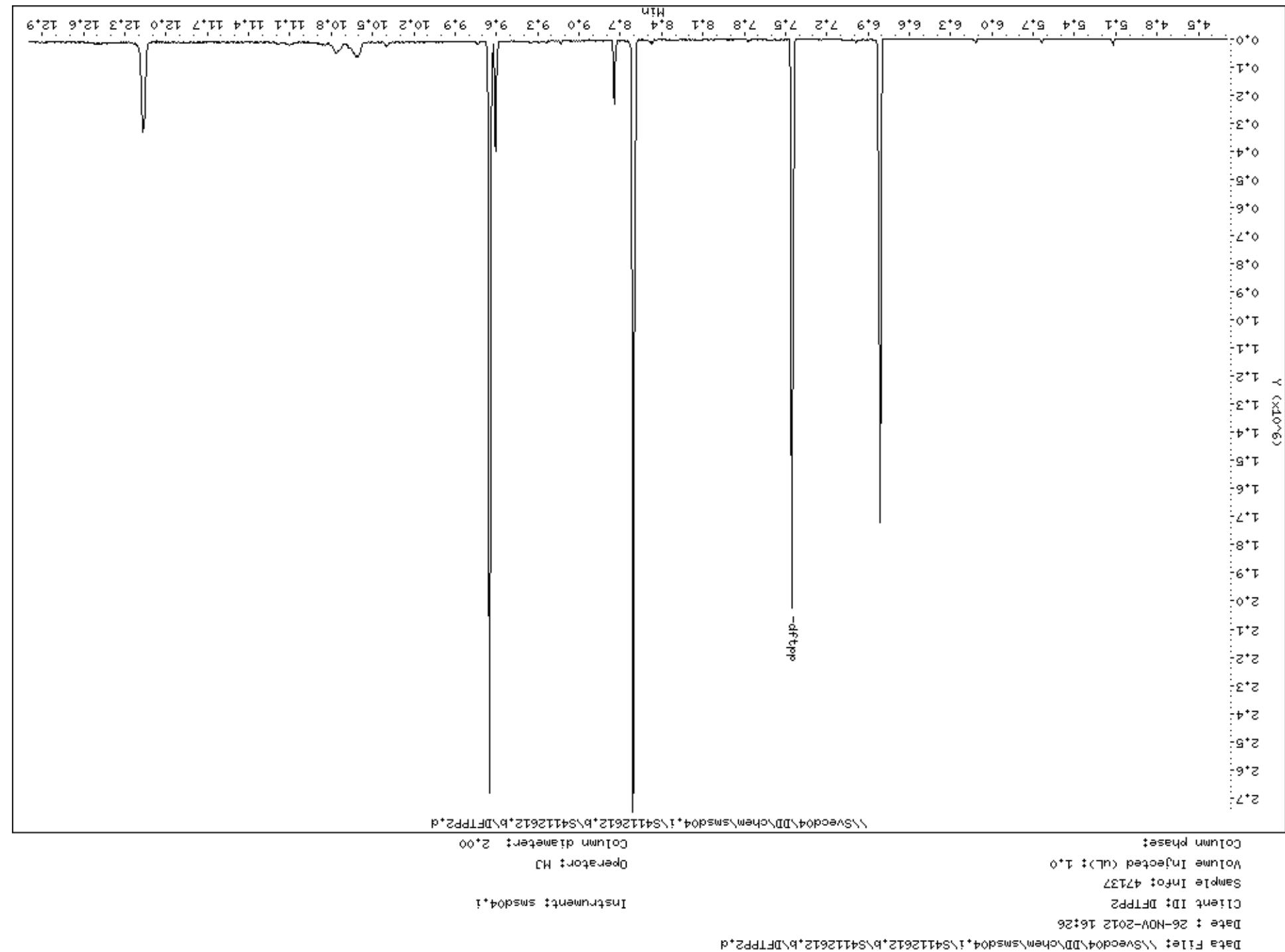
PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S4112612.b\S4112612.b\DFTPP2.d
Lab Smp Id: 47137 Client Smp ID: DFTPP2
Inj Date : 26-NOV-2012 16:26 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47137
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S4112612.b\DoDTUN.m
Meth Date : 06-Aug-2012 11:47 Quant Type: ISTD
Cal Date : 23-MAR-2009 02:58 Cal File: AP9CAL1.D
Als bottle: 1 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: WETCHEMDX500

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

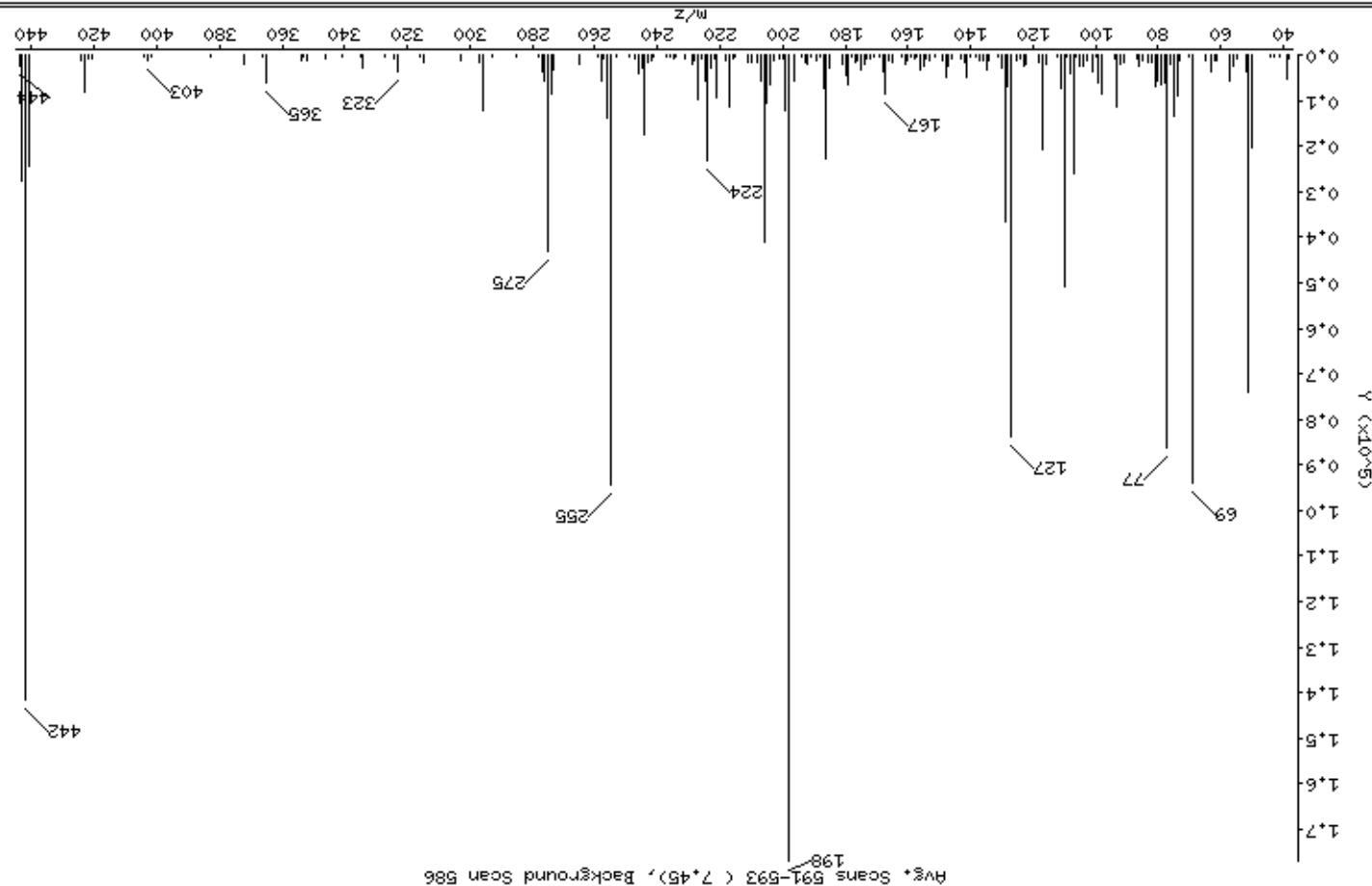
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
7.453	7.410 (0.000)	198	176896			0.00- 100.00	100.00
7.453	7.410 (0.000)	51	74096			10.00- 80.00	41.89
7.453	7.410 (0.000)	68	0	0.0	0.0	0.00- 2.00	0.00
7.453	7.410 (0.000)	69	94128			0.00- 0.00	53.21
7.453	7.410 (0.000)	70	519			0.00- 2.00	0.55
7.453	7.410 (0.000)	127	83896			10.00- 80.00	47.43
7.453	7.410 (0.000)	197	0	0.0	0.0	0.00- 2.00	0.00
7.453	7.410 (0.000)	199	12302			5.00- 9.00	6.95
7.453	7.410 (0.000)	275	42936			10.00- 60.00	24.27
7.453	7.410 (0.000)	365	6137			1.00- 0.00	3.47
7.453	7.410 (0.000)	441	24272			0.01- 24.00	17.16
7.453	7.410 (0.000)	442	141440			50.00- 0.00	79.96
7.453	7.410 (0.000)	443	27768			15.00- 24.00	19.63
<hr/>							



+-----+	
443 15,00 - 24,00% of mass 442	15,70 (19,63)
442 Greater than 50,00% of mass 198	79,96
441 0,01 - 24,00% of mass 442	13,72 (17,16)
365 Greater than 1,00% of mass 198	3,47
275 10,00 - 60,00% of mass 198	24,27
199 5,00 - 9,00% of mass 198	6,95
197 Less than 2,00% of mass 198	0,00
127 10,00 - 80,00% of mass 198	47,43
70 Less than 2,00% of mass 69	0,29 (0,55)
69 Mass 69 relative abundance	53,21
68 Less than 2,00% of mass 69	0,00 (0,00)
51 10,00 - 80,00% of mass 198	41,89
198 Base Peak, 100% relative abundance	100,00
+-----+	

m/z ION ABUNDANCE CRITERIA
% RELATIVE ABUNDANCE



Client ID: DFTPP2
Instrument: msd4.i
Sample Info: 47137
Volume Injected (uL): 1.0
Operatort: HS
Column Phaset: C18
Column diameter: 2.00
Date : 26-NOV-2012 16:26
Data File: \\\Svedol4\DD\chem\msd4\1\4112612.b\DFTPP2.d

m/z	y	m/z	y	m/z	y	m/z	y	m/z	y
1 384.00	861 1 116.00	1872 1 179.00	6674 1 247.00	775 1					
1 50*+00	20256 1 124.00	993 1 187.00	7234 1 257.00	843 1					
1 57*+00	5725 1 130.00	2929 1 193.00	1845 1 274.00	8746 1					
1 61*+00	1079 1 131.00	223 1 194.00	235 1 275.00	42936 1					
1 62*+00	11143 1 134.00	1209 1 196.00	5677 1 276.00	42936 1					
1 65*+00	3483 1 135.00	3155 1 198.00	176896 1 277.00	3641 1					
1 66*+00	13509 1 136.00	1024 1 199.00	12302 1 278.00	228 1					
1 73*+00	519 1 138.00	262 1 201.00	979 1 293.00	463 1					
1 76*+00	1991 1 143.00	756 1 206.00	41248 1 315.00	1466 1					
1 77*+00	86072 1 146.00	683 1 207.00	5887 1 316.00	385 1					
1 79*+00	6047 1 147.00	2294 1 208.00	1625 1 323.00	3740 1					
1 80*+00	5504 1 149.00	1057 1 211.00	1457 1 327.00	330 1					
1 82*+00	1622 1 153.00	1386 1 216.00	948 1 335.00	604 1					
1 83*+00	1536 1 154.00	920 1 217.00	11233 1 341.00	490 1					
1 85*+00	1155 1 155.00	2371 1 218.00	1342 1 346.00	940 1					
1 86*+00	2257 1 156.00	3418 1 221.00	9395 1 352.00	1155 1					
1 87*+00	935 1 157.00	557 1 222.00	933 1 353.00	496 1					
1 91*+00	1722 1 158.00	641 1 223.00	2849 1 354.00	1279 1					
1 92*+00	1874 1 159.00	256 1 224.00	23248 1 365.00	1279 1					
1 93*+00	12292 1 160.00	1298 1 225.00	5740 1 366.00	605 1					
1 94*+00	686 1 161.00	1934 1 226.00	932 1 372.00	1489 1					

Number of points: 194
Location of Maxima: 198.00
Spectrum: Avg., Scans 591-593 (7+45), Background Scan 586
Data file: DFTPP.d

Date : 26-NOV-2012 16:26
Client ID: DFTPP2
Instrument: msd04.i
Sample Infile: 473737
Volume Injected (uL): 1.0
Operator: MD
Column Phases: C18⁺
Column diameter: 2.00

Client ID: DFTP2
 Date : 26-NOV-2012 16:26
 Data File: \\\\$ecod4\\$\\$ecod4\\$\\$chem\\$\\$msd4\\$\\$1\\$\\$4112612\\$\\$4112612\\$\\$DFTP2.d
 Sample Info: 47327
 Volume Injected (UL): 1.0
 Operator: HJ
 Instrument: msd04.i
 Column Phase: t
 Column diameter: 2.00
 Location of Maximum: 198.00
 Number of Points: 194
 Spectrum: Avg+ Scans 591-593 (7.45), Background Scan 586

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/26/2012 16:41

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S4112612.b/DFTPP2.d
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/28/2012 10:30

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S4112612.b/DFTPP2.d
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/28/2012 10:34

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S4112612.b/DFTPP2.d
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/28/2012 12:31

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S4112612.b/DFTPP2.d
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/30/2012 09:53

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S4112612.b/S4112612.b/DFTPP2.d

PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S4112612.b\S4112612.b\SSCAL4.d
Lab Smp Id: 47785 Client Smp ID: SSCAL4
Inj Date : 26-NOV-2012 16:44 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47785
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S4112612.b\S4112612.b\SS8270.m
Meth Date : 27-Nov-2012 17:10 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 21:58 Cal File: SSCAL1.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: WETCHEMDX500

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO
				CAL-AMT	ON-COL		
<hr/>							
5.464	5.465 (0.560)	128	4381 0.50000	0.44	80.00- 120.00	100.00	
5.464	5.465 (0.560)	129	481		0.00- 40.98	10.99	
<hr/>							
* 2 2-Methyl Naphthalene-d2							
6.092	6.092 (1.000)	152	4274 0.80000		80.00- 120.00	100.00	
6.092	6.092 (1.000)	122	1928		15.11- 75.11	45.13	
<hr/>							
3 2-Methylnaphthalene							
6.124	6.125 (1.005)	142	2921 0.50000	0.48	80.00- 120.00	100.00	
6.124	6.125 (1.005)	141	2523		56.37- 116.37	86.37	
<hr/>							
4 1-Methylnaphthalene							
6.227	6.227 (1.022)	142	2693 0.50000	0.48	80.00- 120.00	100.00	
6.227	6.227 (1.022)	141	2386		58.60- 118.60	88.62	
<hr/>							
5 Acenaphthylene							
7.003	7.003 (1.150)	152	4421 0.50000	0.51	80.00- 120.00	100.00	
7.003	7.003 (1.150)	151	861		0.00- 49.48	19.48	
<hr/>							

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
				(ug/ml)	(ug/ml)			
6	Acenaphthene					CAS #:	83-32-9	
7.181	7.181 (1.179)	153	2902	0.50000	0.48	80.00-	120.00	100.00
7.181	7.181 (1.179)	152	1389			17.86-	77.86	47.86
7	Fluorene					CAS #:	86-73-7	
7.671	7.671 (1.259)	166	3423	0.50000	0.48	80.00-	120.00	100.00
7.671	7.671 (1.259)	165	3191			63.22-	123.22	93.24
8	Pentachlorophenol					CAS #:	87-86-5	
8.462	8.462 (0.867)	266	5620	5.00000	5.3	80.00-	120.00	100.00
8.462	8.462 (0.867)	264	3579			33.68-	93.68	63.68
9	Phenanthrene					CAS #:	85-01-8	
8.607	8.607 (0.882)	178	5185	0.50000	0.45	80.00-	120.00	100.00
8.600	8.607 (0.882)	176	983			0.00-	48.96	18.97
10	Anthracene					CAS #:	120-12-7	
8.651	8.651 (0.887)	178	5069	0.50000	0.49	80.00-	120.00	100.00
8.643	8.651 (0.886)	176	911			0.00-	47.97	17.98
*	11 Fluoranthene-d10					CAS #:	93951-69-0	
9.756	9.756 (1.000)	212	8046	0.80000		80.00-	120.00	100.00
9.756	9.756 (1.000)	106	950			0.00-	41.81	11.81
12	Fluoranthene					CAS #:	206-44-0	
9.780	9.780 (1.002)	202	5838	0.50000	0.46	80.00-	120.00	100.00
9.772	9.780 (1.002)	101	610			0.00-	40.45	10.45
13	Pyrene					CAS #:	129-00-0	
9.994	9.994 (1.024)	202	6101	0.50000	0.46	80.00-	120.00	100.00
9.994	9.994 (1.024)	101	1103			0.00-	48.08	18.09
14	Benzo[a]anthracene					CAS #:	56-55-3	
11.169	11.169 (1.145)	226	1525	0.50000	0.53	80.00-	120.00	100.00
11.169	11.169 (1.145)	200	242			0.00-	45.87	15.92
15	Chrysene					CAS #:	218-01-9	
11.211	11.211 (1.149)	226	1647	0.50000	0.48	80.00-	120.00	100.00
11.211	11.211 (1.149)	200	245			0.00-	44.88	14.89
16	Benzo[b]fluoranthene					CAS #:	205-99-2	
12.177	12.177 (1.248)	252	7040	0.50000	0.58	80.00-	120.00	100.00
12.169	12.177 (1.247)	250	1722			0.00-	54.46	24.47
17	Benzo[k]fluoranthene					CAS #:	207-08-9	
12.192	12.192 (1.250)	252	6526	0.50000	0.47	80.00-	120.00	100.00
12.192	12.192 (1.250)	250	1324			0.00-	50.29	20.29
\$ 18	Benzo(e)pyrene-d12					CAS #:	205440-82-0	
12.391	12.392 (1.270)	264	5567	0.50000	0.50	80.00-	120.00	100.00
12.383	12.392 (1.269)	132	748			0.00-	43.44	13.44
19	Benzo[a]pyrene					CAS #:	50-32-8	
12.455	12.455 (1.277)	252	5559	0.50000	0.55	80.00-	120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.455	12.455	(1.277)	250	1288		0.00-	53.17	23.17

20	Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5			
13.528	13.529	(1.387)	276	6233	0.50000	0.53	80.00-	120.00
13.528	13.529	(1.387)	138	1327		0.00-	51.29	21.29

21	Dibenz[a,h]anthracene				CAS #: 53-70-3			
13.536	13.537	(1.388)	278	5085	0.50000	0.53	80.00-	120.00
13.528	13.537	(1.387)	138	1327		0.00-	56.10	26.10

22	Benzo[g,h,i]perylene				CAS #: 191-24-2			
13.807	13.807	(1.415)	276	5371	0.50000	0.52	80.00-	120.00
13.799	13.807	(1.414)	138	905		0.00-	46.85	16.87

Date : 26-NOV-2012 16:44

Client ID: SSCL4

Sample Info: 47785

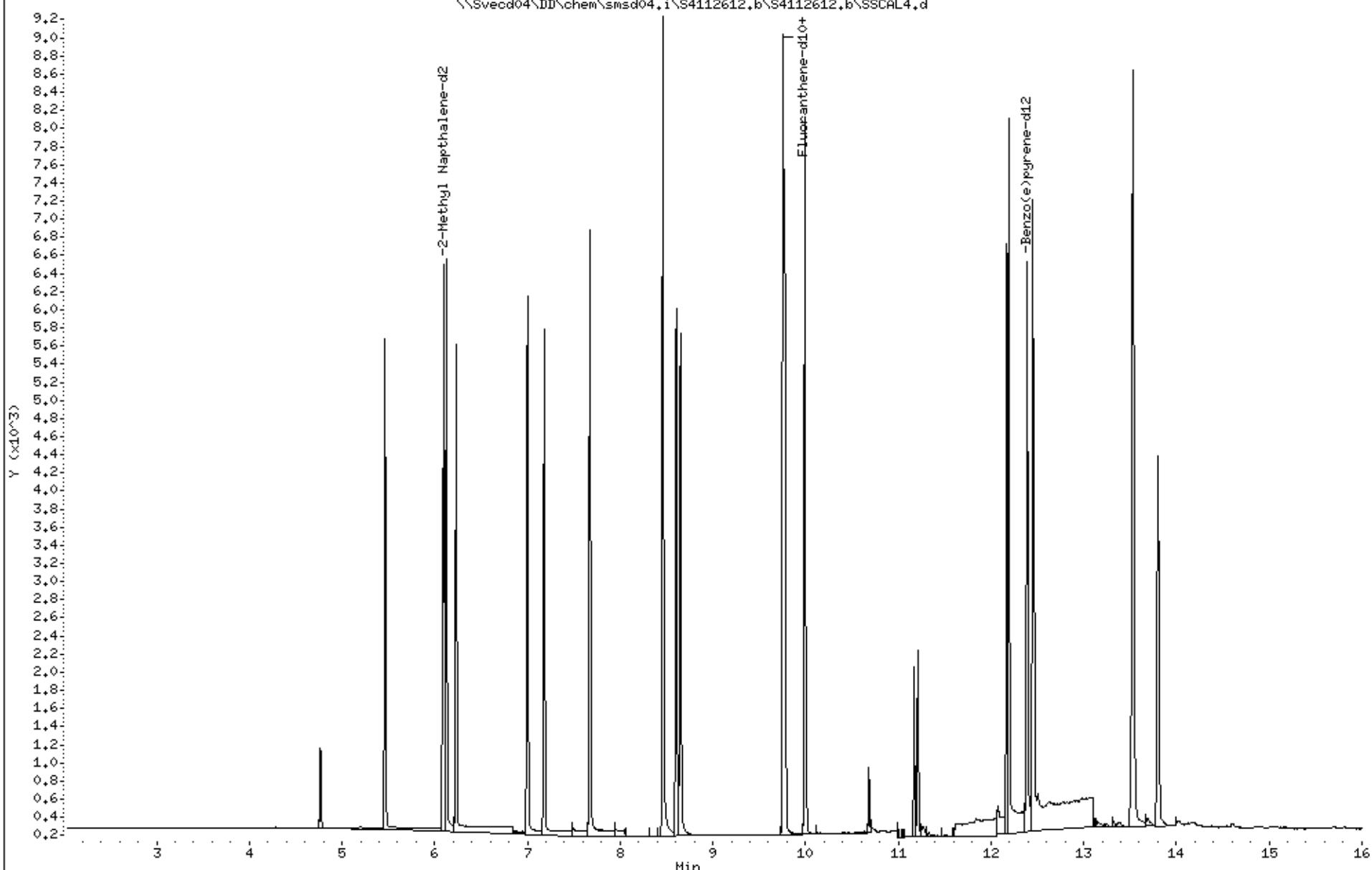
Column phase: HPMS-5

Instrument: smsd04.i

Operator: MJ

Column diameter: 0.25

\\Sved04\DD\chem\smsd04.i\S4112612.b\S4112612.b\SSCAL4.d



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S4112612.b\S4112612.b\616-05.d
Lab Smp Id: 350761605 Client Smp ID: CV0043C-CS
Inj Date : 26-NOV-2012 19:28 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : sim350761605
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S4112612.b\S4112612.b\SS8270.m
Meth Date : 27-Nov-2012 17:10 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 21:58 Cal File: SSCAL1.d
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.330	Weight of sample extracted (g)
M	23.400	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.465	5.465 (0.560)	128	4814	0.45232	23.3	80.00- 120.00	100.00
5.465	5.465 (0.560)	129	596		0.00-	40.98	12.38

*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.092	6.092 (1.000)	152	4751	0.80000	80.00-	120.00	100.00
6.092	6.092 (1.000)	122	2146		15.11-	75.11	45.17

3	2-Methylnaphthalene				CAS #: 91-57-6		
6.124	6.125 (1.005)	142	3231	0.47747	24.6	80.00- 120.00	100.00
6.124	6.125 (1.005)	141	2812		56.37-	116.37	87.03

4	1-Methylnaphthalene				CAS #: 90-12-0		
6.227	6.227 (1.022)	142	1914	0.30820	15.9	80.00- 120.00	100.00
6.227	6.227 (1.022)	141	1700		58.60-	118.60	88.82

5	Acenaphthylene				CAS #: 208-96-8		
7.003	7.003 (1.150)	152	844	0.08713	4.5	80.00- 120.00	100.00
7.003	7.003 (1.150)	151	170		0.00-	49.48	20.14

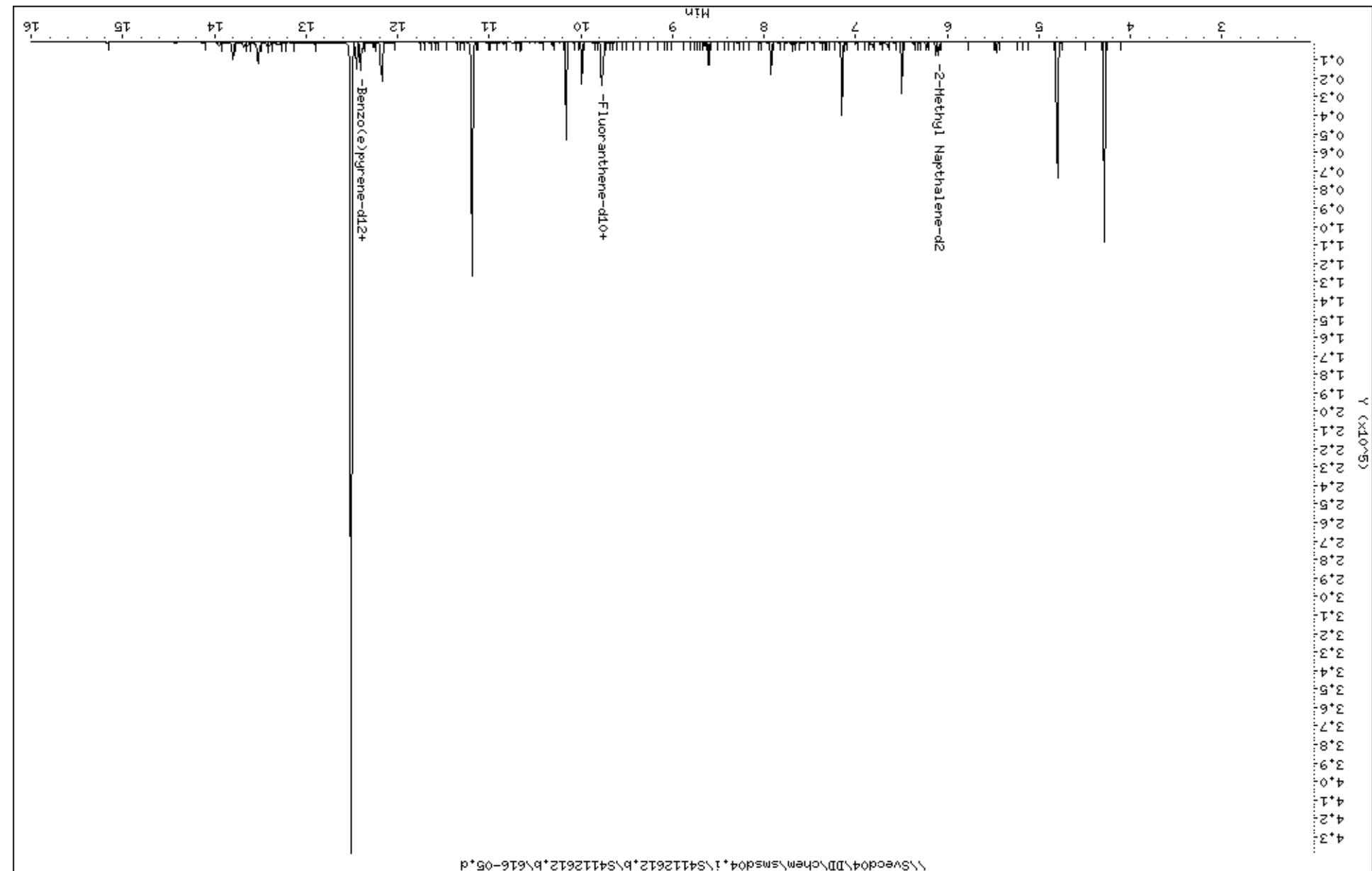
6	Acenaphthene				CAS #: 83-32-9		
7.181	7.181 (1.179)	153	367	0.05526	2.8	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.181	7.181 (1.179)	152	217			17.86-	77.86	59.13
<hr/>								
7.671	7.671 (1.259)	166	382	0.04859	CAS #: 86-73-7	2.5	80.00- 120.00	100.00
7.671	7.671 (1.259)	165	381			63.22-	123.22	99.74
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8.607	8.607 (0.882)	178	10995	0.88350	CAS #: 85-01-8	45.5	80.00- 120.00	100.00
8.600	8.607 (0.882)	176	2111			0.00-	48.96	19.20
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8.651	8.651 (0.887)	178	1820	0.16303	CAS #: 120-12-7	8.4	80.00- 120.00	100.00
8.644	8.651 (0.886)	176	339			0.00-	47.97	18.63
<hr/>								
9.756	9.756 (1.000)	212	8676	0.80000	CAS #: 93951-69-0	80.00-	120.00	100.00
9.756	9.756 (1.000)	106	1018			0.00-	41.81	11.73
<hr/>								
9.772	9.780 (1.002)	202	20634	1.49605	CAS #: 206-44-0	77.1	80.00- 120.00	100.00
9.772	9.780 (1.002)	101	2072			0.00-	40.45	10.04
<hr/>								
9.994	9.994 (1.024)	202	17873	1.26393	CAS #: 129-00-0	65.1	80.00- 120.00	100.00
9.994	9.994 (1.024)	101	2467			0.00-	48.08	13.80
<hr/>								
11.169	11.169 (1.145)	226	3740	1.19844	CAS #: 56-55-3	61.8	80.00- 120.00	100.00
11.169	11.169 (1.145)	200	579			0.00-	45.87	15.48
<hr/>								
11.211	11.211 (1.149)	226	4546	1.23050	CAS #: 218-01-9	63.4	80.00- 120.00	100.00
11.211	11.211 (1.149)	200	727			0.00-	44.88	15.99
<hr/>								
12.169	12.177 (1.247)	252	17564	1.33618	CAS #: 205-99-2	68.9	80.00- 120.00	100.00(M)
12.169	12.177 (1.247)	250	4377			0.00-	54.46	24.92
<hr/>								
12.185	12.192 (1.249)	252	16964	1.14297	CAS #: 207-08-9	58.9	80.00- 120.00	100.00(M)
12.169	12.192 (1.247)	250	5537			0.00-	50.29	32.64
<hr/>								
12.383	12.392 (1.269)	264	3678	0.30675	CAS #: 205440-82-0	15.8	80.00- 120.00	100.00(M)
12.383	12.392 (1.269)	132	420			0.00-	43.44	11.42
<hr/>								
12.455	12.455 (1.277)	252	13257	1.20766	CAS #: 50-32-8	62.2	80.00- 120.00	100.00
12.447	12.455 (1.276)	250	3021			0.00-	53.17	22.79
<hr/>								
13.520	13.529 (1.386)	276	10911	0.86295	CAS #: 193-39-5	44.5	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)			(ug/ml)	(ug/kg)			
13.520	13.529 (1.386)	138	2340		0.00-	51.29	21.45	
21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.528	13.537 (1.387)	278	4437 0.42902	22.1	80.00-	120.00	100.00	
13.520	13.537 (1.386)	138	2146		0.00-	56.10	48.37	
22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
13.799	13.807 (1.414)	276	11048 0.99952	51.5	80.00-	120.00	100.00	
13.799	13.807 (1.414)	138	1857		0.00-	46.85	16.81	

QC Flag Legend

M - Compound response manually integrated.



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S4112612.b\S4112612.b\616-13.d
Lab Smp Id: 350761613 Client Smp ID: FM0126C-GS-SP
Inj Date : 26-NOV-2012 19:48 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : sim350761613
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S4112612.b\S4112612.b\SS8270.m
Meth Date : 27-Nov-2012 17:10 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 21:58 Cal File: SSCAL1.d
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.600	Weight of sample extracted (g)
M	28.200	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.465	5.465 (0.560)	128	26349	2.91402	158	80.00- 120.00	100.00
5.465	5.465 (0.560)	129	2906		0.00-	40.98	11.03

*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.092	6.092 (1.000)	152	3837	0.80000	80.00-	120.00	100.00
6.092	6.092 (1.000)	122	1724		15.11-	75.11	44.93

3	2-Methylnaphthalene				CAS #: 91-57-6		
6.124	6.125 (1.005)	142	8990	1.64497	89.5	80.00- 120.00	100.00
6.124	6.125 (1.005)	141	7723		56.37-	116.37	85.91

4	1-Methylnaphthalene				CAS #: 90-12-0		
6.227	6.227 (1.022)	142	4852	0.96739	52.6	80.00- 120.00	100.00
6.227	6.227 (1.022)	141	4305		58.60-	118.60	88.73

5	Acenaphthylene				CAS #: 208-96-8		
7.003	7.003 (1.150)	152	1629	0.20822	11.3	80.00- 120.00	100.00
6.996	7.003 (1.148)	151	349		0.00-	49.48	21.42

6	Acenaphthene				CAS #: 83-32-9		
7.181	7.181 (1.179)	153	11814	2.20276	120	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.181	7.181 (1.179)	152	5681			17.86-	77.86	48.09
<hr/>								
6 Acenaphthene (continued)								
7.671	7.671 (1.259)	166	12780 2.01285		110	80.00-	120.00	100.00
7.671	7.671 (1.259)	165	11573			63.22-	123.22	90.56
<hr/>								
7 Fluorene								
8.462	8.462 (0.867)	266	27 1.40442		76.4	80.00-	120.00	100.00
8.462	8.462 (0.867)	264	17			33.68-	93.68	62.96
<hr/>								
8 Pentachlorophenol								
8.607	8.607 (0.882)	178	142925 13.5180		735	80.00-	120.00	100.00(A)
8.600	8.607 (0.882)	176	27060			0.00-	48.96	18.93
<hr/>								
9 Phenanthrene								
8.644	8.651 (0.886)	178	37393 3.94252		214	80.00-	120.00	100.00
8.644	8.651 (0.886)	176	6736			0.00-	47.97	18.01
<hr/>								
* 11 Fluoranthene-d10								
9.756	9.756 (1.000)	212	7371 0.80000			80.00-	120.00	100.00
9.756	9.756 (1.000)	106	842			0.00-	41.81	11.42
<hr/>								
12 Fluoranthene								
9.772	9.780 (1.002)	202	181171 15.4613		841	80.00-	120.00	100.00(A)
9.772	9.780 (1.002)	101	18281			0.00-	40.45	10.09
<hr/>								
13 Pyrene								
9.994	9.994 (1.024)	202	140498 11.6947		636	80.00-	120.00	100.00(A)
9.994	9.994 (1.024)	101	17867			0.00-	48.08	12.72
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14 Benzo[a]anthracene								
11.169	11.169 (1.145)	226	28452 10.7313		584	80.00-	120.00	100.00(A)
11.169	11.169 (1.145)	200	4830			0.00-	45.87	16.98
<hr/>								
15 Chrysene								
11.211	11.211 (1.149)	226	33432 10.6514		579	80.00-	120.00	100.00(A)
11.211	11.211 (1.149)	200	5198			0.00-	44.88	15.55
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16 Benzo[b]fluoranthene								
12.169	12.177 (1.247)	252	99893 8.94478		487	80.00-	120.00	100.00(M)
12.169	12.177 (1.247)	250	24457			0.00-	54.46	24.48
<hr/>								
17 Benzo[k]fluoranthene								
12.185	12.192 (1.249)	252	125963 9.98951		543	80.00-	120.00	100.00(M)
12.185	12.192 (1.249)	250	28331			0.00-	50.29	22.49
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\$ 18 Benzo(e)pyrene-d12								
12.383	12.392 (1.269)	264	2905 0.28517		15.5	80.00-	120.00	100.00(M)
12.383	12.392 (1.269)	132	391			0.00-	43.44	13.46
<hr/>								
19 Benzo[a]pyrene								
12.455	12.455 (1.277)	252	87398 9.37117		510	80.00-	120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
12.455	12.455 (1.277)	250	19808		0.00-	53.17	22.66	

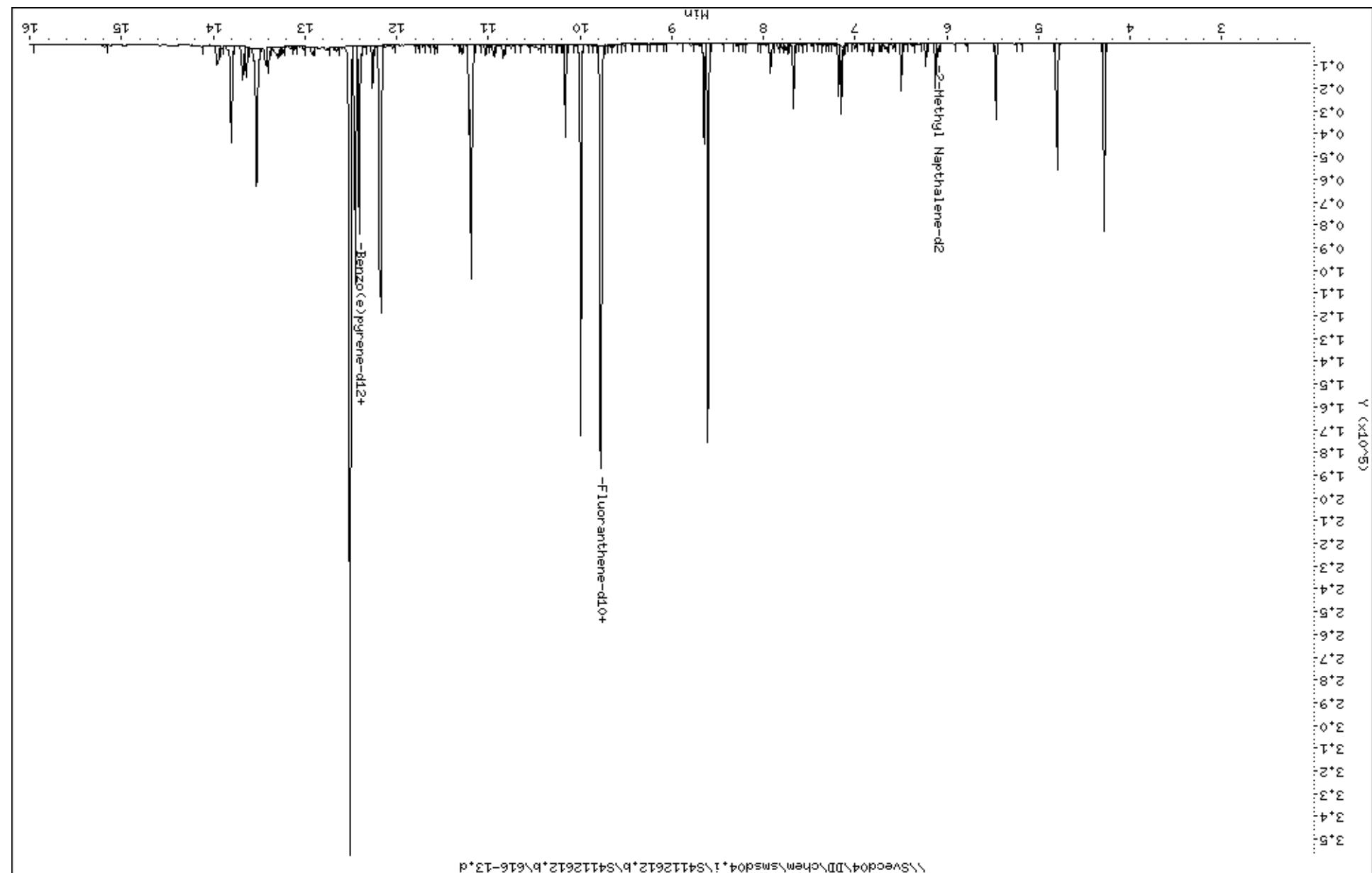
20	Indeno[1,2,3-cd]pyrene			CAS #:	193-39-5			
13.528	13.529 (1.387)	276	56880 5.29511	288	80.00-	120.00	100.00	
13.520	13.529 (1.386)	138	12102		0.00-	51.29	21.28	

21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.528	13.537 (1.387)	278	28265 3.21685	175	80.00-	120.00	100.00	
13.520	13.537 (1.386)	138	10175		0.00-	56.10	36.00	

22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
13.807	13.807 (1.415)	276	52559 5.59689	304	80.00-	120.00	100.00	
13.807	13.807 (1.415)	138	8741		0.00-	46.85	16.63	

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.



Data File: 112812DFTPP1.d
Report Date: 30-Nov-2012 09:53

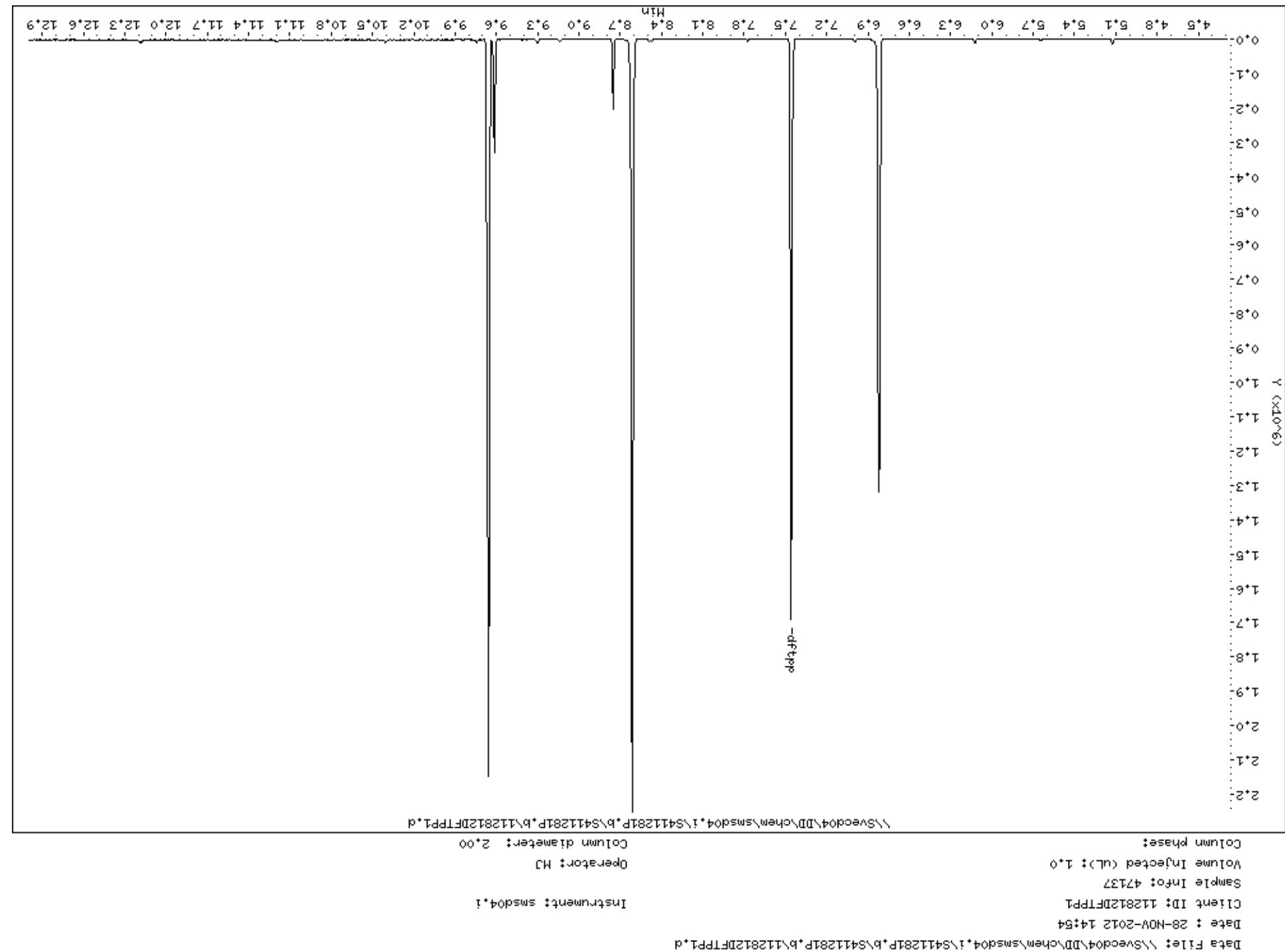
PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S411281P.b\S411281P.b\112812DFTPP1.d
Lab Smp Id: 47137 Client Smp ID: 112812DFTPP1
Inj Date : 28-NOV-2012 14:54 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47137
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S411281P.b\DoDTUN.m
Meth Date : 06-Aug-2012 11:47 Quant Type: ISTD
Cal Date : 23-MAR-2009 02:58 Cal File: AP9CAL1.D
Als bottle: 21 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: SVECD04

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
7.458	7.410 (0.000)	198	147200			0.00- 100.00	100.00
7.458	7.410 (0.000)	51	61816			10.00- 80.00	41.99
7.458	7.410 (0.000)	68	0	0.0	0.0	0.00- 2.00	0.00
7.458	7.410 (0.000)	69	79160			0.00- 0.00	53.78
7.458	7.410 (0.000)	70	0	0.0	0.0	0.00- 2.00	0.00
7.458	7.410 (0.000)	127	72768			10.00- 80.00	49.43
7.458	7.410 (0.000)	197	0	0.0	0.0	0.00- 2.00	0.00
7.458	7.410 (0.000)	199	9805			5.00- 9.00	6.66
7.458	7.410 (0.000)	275	36936			10.00- 60.00	25.09
7.458	7.410 (0.000)	365	4543			1.00- 0.00	3.09
7.458	7.410 (0.000)	441	19952			0.01- 24.00	17.50
7.458	7.410 (0.000)	442	114032			50.00- 0.00	77.47
7.458	7.410 (0.000)	443	21792			15.00- 24.00	19.11
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Data File: \\Svecd04\DD\chem\smsd04.i\S411281P.b\S411281P.b\112812DFTPP1.d

Date : 28-NOV-2012 14:54

Client ID: 112812DFTPP1

Instrument: smsd04.i

Sample Info: 47137

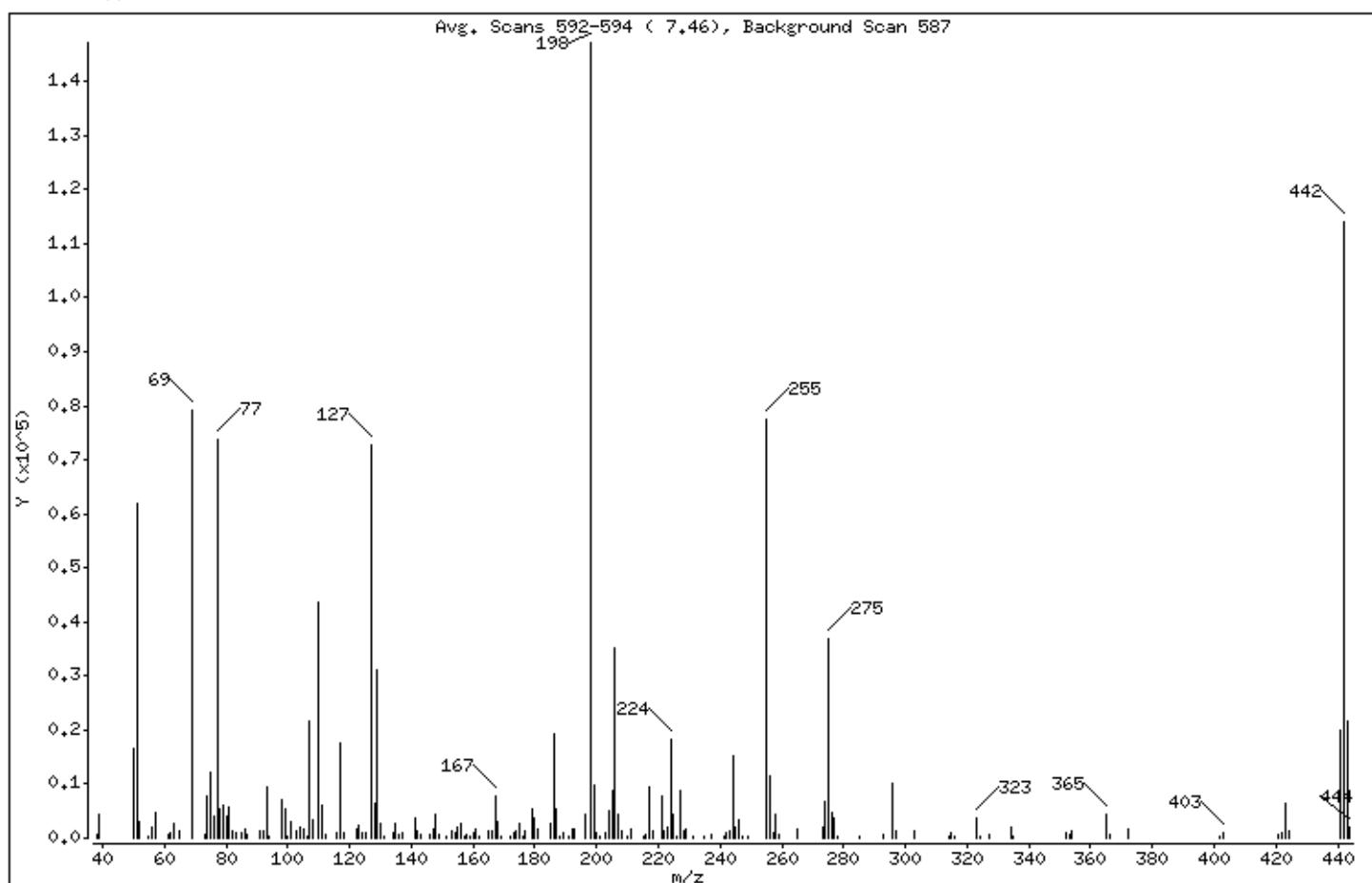
Volume Injected (uL): 1.0

Operator: MJ

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
		+	+
198	Base Peak, 100% relative abundance	100.00	
51	10.00 - 80.00% of mass 198	41.99	
68	Less than 2.00% of mass 69	0.00 (< 0.00)	
69	Mass 69 relative abundance	53.78	
70	Less than 2.00% of mass 69	0.00 (< 0.00)	
127	10.00 - 80.00% of mass 198	49.43	
197	Less than 2.00% of mass 198	0.00	
199	5.00 - 9.00% of mass 198	6.66	
275	10.00 - 60.00% of mass 198	25.09	
365	Greater than 1.00% of mass 198	3.09	
441	0.01 - 24.00% of mass 442	13.55 (< 17.50)	
442	Greater than 50.00% of mass 198	77.47	
443	15.00 - 24.00% of mass 442	14.80 (< 19.11)	

Data File: \\\\$vedola4\DD\chem\msd4\I\\$\411284TP\B\112812DFTP1.d					
Client ID: 112812DFTP1					
Instrument: msd4.i					
Date : 28-NOV-2012 14:54					
m/z	y	m/z	y	m/z	y
38.00	690	1117.00	17712	180.00	3569
39.00	4482	1118.00	1125	181.00	1702
50.00	16562	1122.00	1795	185.00	2544
55.00	225	1225.00	944	188.00	230
56.00	2158	1227.00	72768	189.00	1140
63.00	2614	1321.00	495	196.00	4455
65.00	1437	1324.00	1069	198.00	147200
72.00	4100	1424.00	1363	204.00	4938
75.00	12172	1441.00	3697	203.00	977
76.00	4100	1442.00	1363	204.00	4938
77.00	73768	1443.00	1363	204.00	4938
78.00	5820	1449.00	707	210.00	236
80.00	4184	1448.00	4373	208.00	1280
81.00	5820	1449.00	707	210.00	236
82.00	1420	1551.00	479	211.00	1768
84.00	5820	1449.00	707	210.00	236
85.00	1119	1554.00	914	216.00	617
86.00	1772	1555.00	2002	217.00	9268
87.00	578	1556.00	2793	218.00	1258
88.00	7206	1611.00	1544	225.00	4497
90.00	690	1117.00	1068	224.00	18432
94.00	500	160.00	1068	224.00	18432
95.00	5316	162.00	1544	225.00	4497
97.00	98	161.00	1544	225.00	4497
99.00	7206	161.00	1544	225.00	4497
100.00	457	165.00	1432	227.00	8692
101.00	2955	166.00	1204	228.00	1228
102.00	457	165.00	1432	227.00	8692
103.00	535	162.00	280	226.00	1202
104.00	93	162.00	280	226.00	1202
105.00	1343	157.00	344	224.00	1347
106.00	1507	158.00	668	222.00	1347
107.00	934	159.00	251	223.00	1212
108.00	9534	159.00	251	223.00	1212
109.00	93	159.00	251	223.00	1212
110.00	1343	157.00	344	224.00	1347
111.00	1507	158.00	668	222.00	1347
112.00	934	159.00	251	223.00	1212
113.00	9534	159.00	251	223.00	1212
114.00	93	159.00	251	223.00	1212
115.00	1343	157.00	344	224.00	1347
116.00	1507	158.00	668	222.00	1347
117.00	934	159.00	251	223.00	1212
118.00	9534	159.00	251	223.00	1212
119.00	93	159.00	251	223.00	1212
120.00	1343	157.00	344	224.00	1347
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122.00	934	159.00	251	223.00	1212
123.00	9534	159.00	251	223.00	1212
124.00	93	159.00	251	223.00	1212
125.00	1343	157.00	344	224.00	1347
126.00	1507	158.00	668	222.00	1347
127.00	934	159.00	251	223.00	1212
128.00	9534	159.00	251	223.00	1212
129.00	93	159.00	251	223.00	1212
130.00	1343	157.00	344	224.00	1347
131.00	1507	158.00	668	222.00	1347
132.00	934	159.00	251	223.00	1212
133.00	9534	159.00	251	223.00	1212
134.00	93	159.00	251	223.00	1212
135.00	1343	157.00	344	224.00	1347
136.00	1507	158.00	668	222.00	1347
137.00	934	159.00	251	223.00	1212
138.00	9534	159.00	251	223.00	1212
139.00	93	159.00	251	223.00	1212
140.00	1343	157.00	344	224.00	1347
141.00	1507	158.00	668	222.00	1347
142.00	934	159.00	251	223.00	1212
143.00	9534	159.00	251	223.00	1212
144.00	93	159.00	251	223.00	1212
145.00	1343	157.00	344	224.00	1347
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148.00	9534	159.00	251	223.00	1212
149.00	93	159.00	251	223.00	1212
150.00	1343	157.00	344	224.00	1347
151.00	1507	158.00	668	222.00	1347
152.00	934	159.00	251	223.00	1212
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154.00	93	159.00	251	223.00	1212
155.00	1343	157.00	344	224.00	1347
156.00	1507	158.00	668	222.00	1347
157.00	934	159.00	251	223.00	1212
158.00	9534	159.00	251	223.00	1212
159.00	93	159.00	251	223.00	1212
160.00	1343	157.00	344	224.00	1347
161.00	1507	158.00	668	222.00	1347
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169.00	93	159.00	251	223.00	1212
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171.00	1507	158.00	668	222.00	1347
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173.00	9534	159.00	251	223.00	1212
174.00	93	159.00	251	223.00	1212
175.00	1343	157.00	344	224.00	1347
176.00	1507	158.00	668	222.00	1347
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179.00	93	159.00	251	223.00	1212
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181.00	1507	158.00	668	222.00	1347
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183.00	9534	159.00	251	223.00	1212
184.00	93	159.00	251	223.00	1212
185.00	1343	157.00	344	224.00	1347
186.00	1507	158.00	668	222.00	1347
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188.00	9534	159.00	251	223.00	1212
189.00	93	159.00	251	223.00	1212
190.00	1343	157.00	344	224.00	1347
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193.00	9534	159.00	251	223.00	1212
194.00	93	159.00	251	223.00	1212
195.00	1343	157.00	344	224.00	1347
196.00	1507	158.00	668	222.00	1347
197.00	934	159.00	251	223.00	1212
198.00	9534	159.00	251	223.00	1212
199.00	93	159.00	251	223.00	1212
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201.00	1507	158.00	668	222.00	1347
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203.00	9534	159.00	251	223.00	1212
204.00	93	159.00	251	223.00	1212
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210.00	1343	157.00	344	224.00	1347
211.00	1507	158.00	668	222.00	1347
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213.00	9534	159.00	251	223.00	1212
214.00	93	159.00	251	223.00	1212
215.00	1343	157.00	344	224.00	1347
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220.00	1343	157.00	344	224.00	1347
221.00	1507	158.00	668	222.00	1347
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223.00	9534	159.00	251	223.00	1212
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229.00	93	159.00	251	223.00	1212
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231.00	1507	158.00	668	222.00	1347
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234.00	93	159.00	251	223.00	1212
235.00	1343	157.00	344	224.00	1347
236.00	1507	158.00	668	222.00	1347
237.00	934	159.00	251	223.00	1212
238.00	9534	159.00	251	223.00	1212
239.00	93	159.00	251	223.00	1212
240.00	1343	157.00	344	224.00	1347
241.00	1507	158.00	668	222.00	1347

Data File: \\\\$avedata\DD\chem\msd4\1\112812DFTPP1.d
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 Sample Info: 47427
 Volume Injected (UL): 1.0
 Operator: HS
 Column diameter: 2.00
 Number of points: 178
 Location of Maximum: 198.00
 Spectrum: Avg+, Scan 592-594 (7.46), Background Scan 587
 Data File: 112812DFTPP1.d
 Date : 28-NOV-2012 14:54
 Instrument: msd4.d
 Column Phaseset
 Column diameter: 2.00
 Y
 m/z
 +-----+
 103.00 1270 1 167.00 7629 1 229.00 1641 1 421.00 779 1
 104.00 2028 1 168.00 3200 1 231.00 236 1 422.00 1089 1
 105.00 1732 1 169.00 340 1 235.00 300 1 423.00 6410 1
 106.00 347 1 170.00 287 1 237.00 574 1 424.00 1396 1
 107.00 21496 1 173.00 1008 1 241.00 254 1 441.00 19952 1
 111.00 43784 1 175.00 2708 1 243.00 1361 1 443.00 27292 1
 112.00 6249 1 176.00 346 1 244.00 15133 1 444.00 2023 1
 116.00 1153 1 177.00 1446 1 245.00 2168 1
 118.00 653 1 178.00 1446 1 246.00 3249 1
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DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/28/2012 15:23

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S411281P.b/112812DFTPP1.d
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/29/2012 17:51

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S411281P.b/S411281P.b/112812DFT
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/29/2012 18:23

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S411281P.b/S411281P.b/112812DFT
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/30/2012 09:53

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S411281P.b/S411281P.b/112812DFT

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Data file : \\Svecd04\DD\chem\smsd04.i\S411281P.b\S411281P.b\SSCCV1.d
Lab Smp Id: 47785 Client Smp ID: SSCCV1
Inj Date : 28-NOV-2012 17:13 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47785
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S411281P.b\S411281P.b\SS8270.m
Meth Date : 28-Nov-2012 17:39 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 21:58 Cal File: SSCAL1.d
Als bottle: 25 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL
Processing Host: WETCHEMDX500

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO
				CAL-AMT	ON-COL		
<hr/>							
5.465	5.465 (0.560)	128	2949 0.50000	0.43	80.00- 120.00	100.00	
5.465	5.465 (0.560)	129	298		0.00- 40.11	10.12	
<hr/>							
* 2	2-Methyl Naphthalene-d2			CAS #:	91-20-3		
6.100	6.100 (1.000)	152	2932 0.80000		80.00- 120.00	100.00	
6.092	6.092 (1.000)	122	1305		14.51- 74.51	44.50	
<hr/>							
3	2-Methylnaphthalene			CAS #:	91-57-6		
6.124	6.124 (1.004)	142	1915 0.50000	0.46	80.00- 120.00	100.00	
6.124	6.124 (1.004)	141	1672		57.31- 117.31	87.28	
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4	1-Methylnaphthalene			CAS #:	90-12-0		
6.227	6.227 (1.021)	142	1840 0.50000	0.48	80.00- 120.00	100.00	
6.227	6.227 (1.021)	141	1582		55.98- 115.98	86.01	
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5	Acenaphthylene			CAS #:	208-96-8		
7.003	7.003 (1.148)	152	3021 0.50000	0.50	80.00- 120.00	100.00	
7.003	7.003 (1.148)	151	580		0.00- 49.20	19.20	
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RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.181	7.181 (1.177)	153	1933 0.50000	0.47	80.00- 120.00	100.00		
7.181	7.181 (1.177)	152	903		16.71- 76.71	46.71		
7.678	7.678 (1.259)	166	2307 0.50000	0.48	80.00- 120.00	100.00		
7.678	7.678 (1.259)	165	2134		62.50- 122.50	92.49		
8.469	8.469 (0.867)	266	3414 5.00000	4.8	80.00- 120.00	100.00		
8.469	8.469 (0.867)	264	2153		33.06- 93.06	63.05		
8.607	8.607 (0.882)	178	3312 0.50000	0.42	80.00- 120.00	100.00		
8.607	8.607 (0.882)	176	645		0.00- 49.47	19.49		
8.651	8.651 (0.886)	178	3524 0.50000	0.49	80.00- 120.00	100.00		
8.651	8.651 (0.886)	176	633		0.00- 47.96	17.97		
9.764	9.764 (1.000)	212	5535 0.80000		80.00- 120.00	100.00		
9.764	9.764 (1.000)	106	642		0.00- 41.60	11.60		
9.780	9.780 (1.002)	202	4107 0.50000	0.47	80.00- 120.00	100.00		
9.780	9.780 (1.002)	101	414		0.00- 40.08	10.09		
10.002	10.002 (1.024)	202	4327 0.50000	0.48	80.00- 120.00	100.00		
9.994	9.994 (1.024)	101	896		0.00- 50.71	20.73		
11.176	11.176 (1.145)	226	1058 0.50000	0.53	80.00- 120.00	100.00		
11.176	11.176 (1.145)	200	161		0.00- 45.22	15.29		
11.218	11.218 (1.149)	226	1193 0.50000	0.51	80.00- 120.00	100.00		
11.211	11.211 (1.148)	200	175		0.00- 44.67	14.67		
12.177	12.177 (1.247)	252	4372 0.50000	0.52	80.00- 120.00	100.00		
12.177	12.177 (1.247)	250	1036		0.00- 53.70	23.69		
12.193	12.193 (1.249)	252	5326 0.50000	0.56	80.00- 120.00	100.00		
12.193	12.193 (1.249)	250	1114		0.00- 50.92	20.93		
12.391	12.391 (1.269)	264	4121 0.50000	0.54	80.00- 120.00	100.00		
12.391	12.391 (1.269)	132	499		0.00- 42.11	12.13		
12.463	12.463 (1.276)	252	3998 0.50000	0.57	80.00- 120.00	100.00		

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
12.455	12.455	(1.276)	250	916		0.00-	52.91	22.94

20	Indeno[1,2,3-cd]pyrene				CAS #: 193-39-5			
13.528	13.528	(1.386)	276	4569	0.50000	0.57	80.00-	120.00
13.536	13.536	(1.386)	138	923		0.00-	50.20	20.21

21	Dibenz[a,h]anthracene				CAS #: 53-70-3			
13.536	13.536	(1.386)	278	3783	0.50000	0.57	80.00-	120.00
13.536	13.536	(1.386)	138	938		0.00-	54.80	24.81

22	Benzo[g,h,i]perylene				CAS #: 191-24-2			
13.807	13.807	(1.414)	276	3929	0.50000	0.56	80.00-	120.00
13.807	13.807	(1.414)	138	677		0.00-	47.23	17.25

Data File: \\Sved04\DD\chem\smsd04.i\S411281P.b\S411281P.b\SSCCV1.d

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Date : 28-NOV-2012 17:13

Client ID: SCCV1

Sample Info: 47785

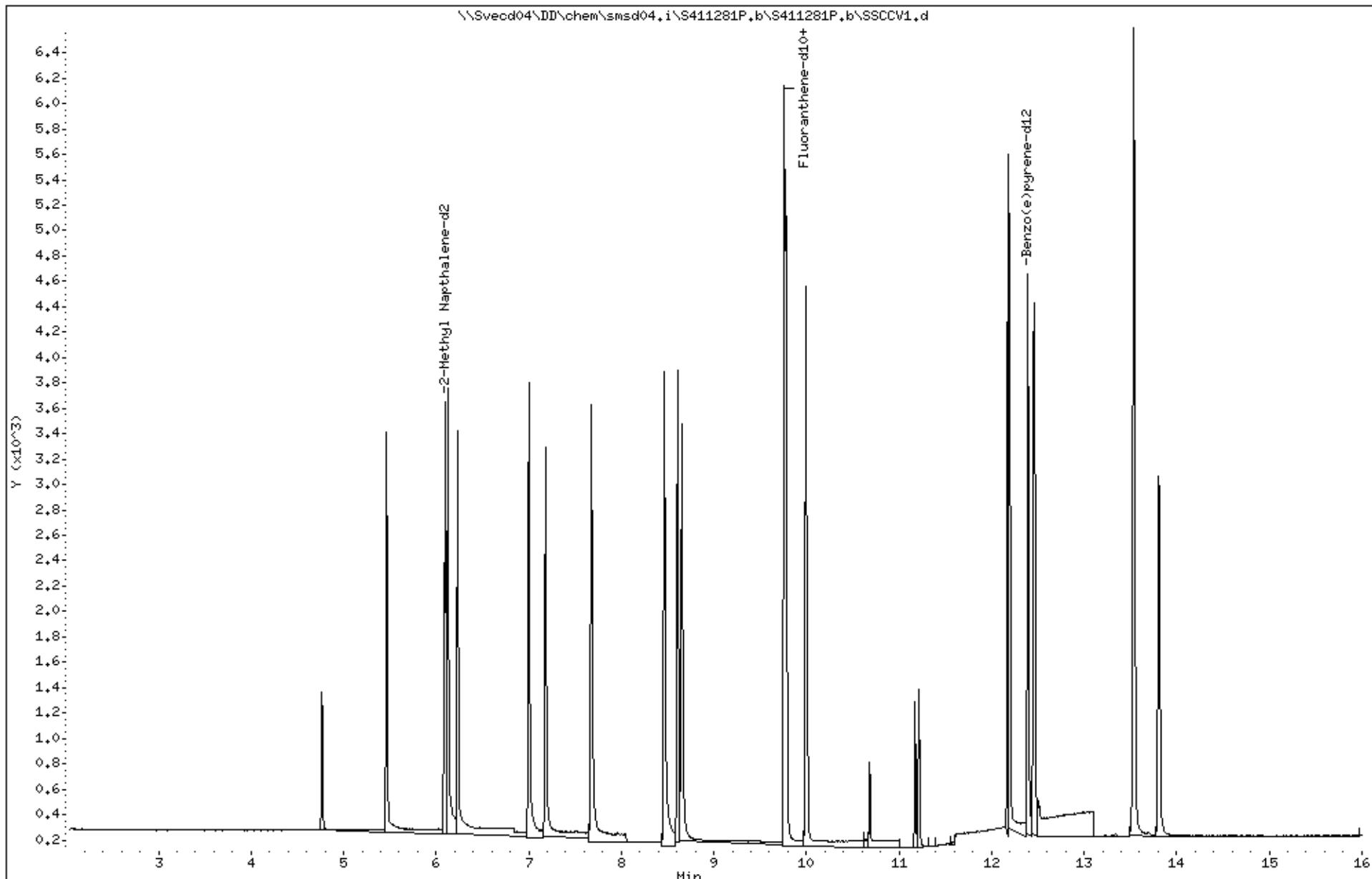
Column phase: HPMS-5

Instrument: smsd04.i

Operator: MJ

Column diameter: 0.25

\\Sved04\DD\chem\smsd04.i\S411281P.b\S411281P.b\SSCCV1.d



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Data file : \\Svecd04\DD\chem\smsd04.i\S411281P.b\S411281P.b\11607MB.d
Lab Smp Id: 154206MB Client Smp ID: 154206MB
Inj Date : 28-NOV-2012 17:54 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : SIM154206MB
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S411281P.b\S411281P.b\SS8270.m
Meth Date : 28-Nov-2012 17:39 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 21:58 Cal File: SSCAL1.d
Als bottle: 27 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	20.190	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
*	2	2-Methyl Naphthalene-d2			CAS #: 7927-45-2		
6.092	6.100	(1.000)	152	4021 0.80000	80.00- 120.00	100.00	
6.092	6.092	(1.000)	122	1849	14.51- 74.51	46.00	
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*	11	Fluoranthene-d10			CAS #: 93951-69-0		
9.756	9.764	(1.000)	212	6767 0.80000	80.00- 120.00	100.00	
9.756	9.764	(1.000)	106	801	0.00- 41.60	11.84	
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\$	18	Benzo(e)pyrene-d12			CAS #: 205440-82-0		
12.391	12.391	(1.270)	264	2350 0.25128	12.4 80.00- 120.00	100.00	
12.383	12.391	(1.269)	132	291	0.00- 42.11	12.42	
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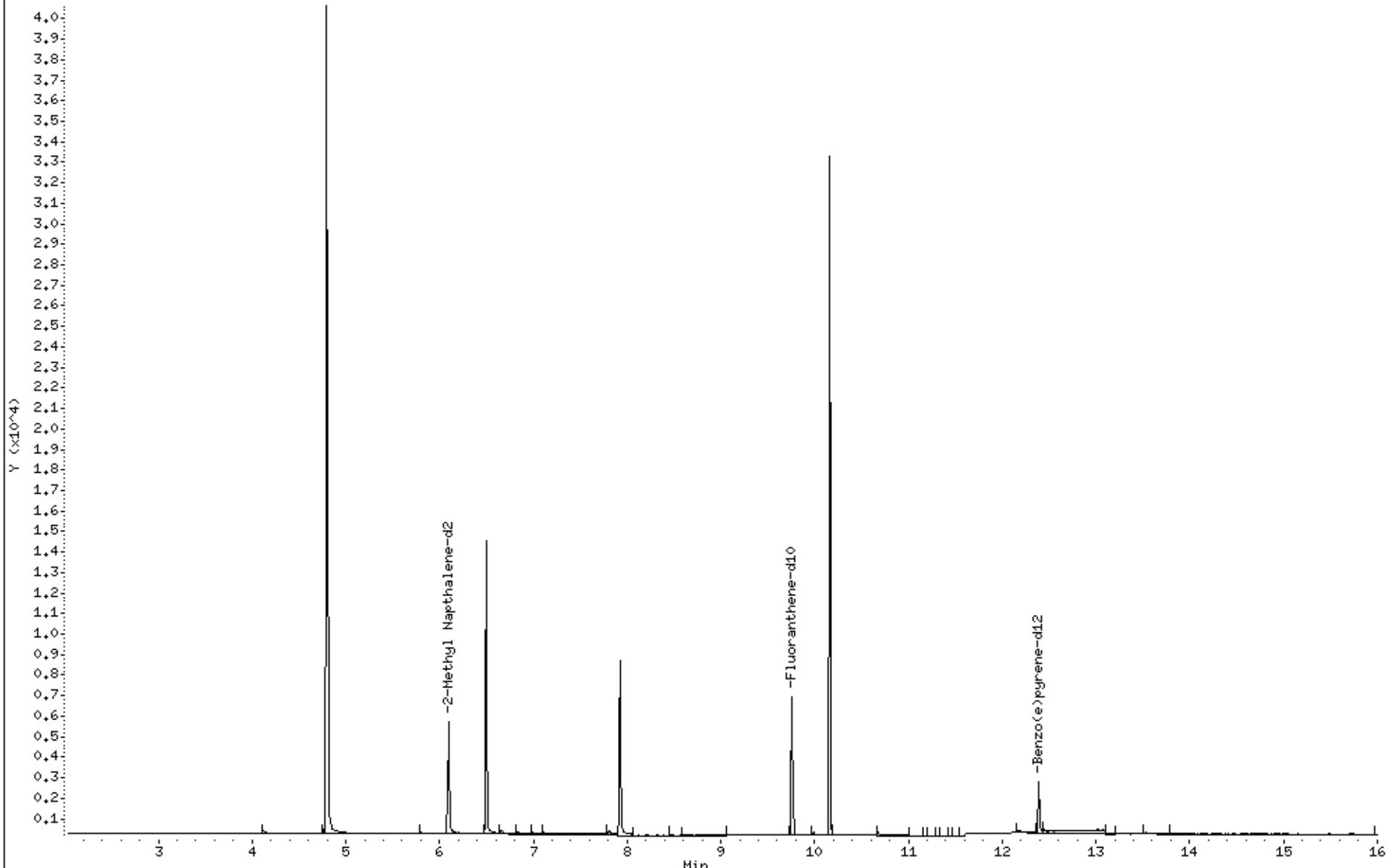
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Date : 28-NOV-2012 17:54
Client ID: 154206MB
Sample Info: SIM154206MB

Page 2

Column phase: HPMS-5

Instrument: smsd04.i
Operator: MJ
Column diameter: 0.25

\\Svedd04\DD\chem\smsd04.i\S411281P.b\S411281P.b\11607MB.d



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Data file : \\Svecd04\DD\chem\smsd04.i\S411281P.b\S411281P.b\11607LCS.d
Lab Smp Id: 154207LCS Client Smp ID: 154207LCS
Inj Date : 28-NOV-2012 18:15 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : SIM154207LCS
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S411281P.b\S411281P.b\SS8270.m
Meth Date : 28-Nov-2012 17:39 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 21:58 Cal File: SSCAL1.d
Als bottle: 28 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	20.220	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.465	5.465 (0.560)	128	2374	0.31462	15.6	80.00- 120.00	100.00
5.465	5.465 (0.560)	129	252		0.00-	40.11	10.62

*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.093	6.100 (1.000)	152	3594	0.80000	80.00-	120.00	100.00
6.093	6.092 (1.000)	122	1510		14.51-	74.51	42.02

3	2-Methylnaphthalene				CAS #: 91-57-6		
6.124	6.124 (1.005)	142	1559	0.30455	15.1	80.00- 120.00	100.00(R)
6.124	6.124 (1.005)	141	1332		57.31-	117.31	85.42

4	1-Methylnaphthalene				CAS #: 90-12-0		
6.228	6.227 (1.022)	142	1463	0.31141	15.4	80.00- 120.00	100.00(R)
6.228	6.227 (1.022)	141	1275		55.98-	115.98	87.19

5	Acenaphthylene				CAS #: 208-96-8		
7.004	7.003 (1.150)	152	2468	0.33680	16.6	80.00- 120.00	100.00
6.997	7.003 (1.148)	151	493		0.00-	49.20	19.98

6	Acenaphthene				CAS #: 83-32-9		
7.181	7.181 (1.179)	153	1596	0.31770	15.7	80.00- 120.00	100.00(R)

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.181	7.181 (1.179)	152	763			16.71-	76.71	47.83
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7.671	7.678 (1.259)	166	1934 0.32520	CAS #:	86-73-7	16.1	80.00- 120.00	100.00(R)
7.671	7.678 (1.259)	165	1792			62.50-	122.50	92.64
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8.607	8.607 (0.882)	178	2927 0.33175	CAS #:	85-01-8	16.4	80.00- 120.00	100.00
8.607	8.607 (0.882)	176	561			0.00-	49.47	19.19
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8.651	8.651 (0.886)	178	2886 0.36464	CAS #:	120-12-7	18.0	80.00- 120.00	100.00
8.651	8.651 (0.886)	176	516			0.00-	47.96	17.90
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9.764	9.764 (1.000)	212	6151 0.80000	CAS #:	93951-69-0	80.00-	120.00	100.00
9.756	9.764 (1.000)	106	710			0.00-	41.60	11.55
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9.780	9.780 (1.002)	202	3496 0.35753	CAS #:	206-44-0	17.7	80.00- 120.00	100.00
9.772	9.780 (1.001)	101	370			0.00-	40.08	10.59
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9.994	10.002 (1.024)	202	3629 0.36198	CAS #:	129-00-0	17.9	80.00- 120.00	100.00
9.994	9.994 (1.024)	101	509			0.00-	50.71	14.05
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11.176	11.176 (1.145)	226	914 0.41311	CAS #:	56-55-3	20.4	80.00- 120.00	100.00
11.170	11.176 (1.144)	200	136			0.00-	45.22	14.93
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11.211	11.218 (1.148)	226	999 0.38141	CAS #:	218-01-9	18.9	80.00- 120.00	100.00
11.211	11.211 (1.148)	200	149			0.00-	44.67	14.98
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12.177	12.177 (1.247)	252	3784 0.40604	CAS #:	205-99-2	20.1	80.00- 120.00	100.00
12.177	12.177 (1.247)	250	914			0.00-	53.70	24.16
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12.193	12.193 (1.249)	252	4318 0.41036	CAS #:	207-08-9	20.3	80.00- 120.00	100.00
12.193	12.193 (1.249)	250	944			0.00-	50.92	21.87
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12.391	12.391 (1.269)	264	2382 0.28021	CAS #:	205440-82-0	13.8	80.00- 120.00	100.00
12.384	12.391 (1.268)	132	285			0.00-	42.11	11.99
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12.455	12.463 (1.276)	252	3315 0.42595	CAS #:	50-32-8	21.1	80.00- 120.00	100.00
12.455	12.455 (1.276)	250	763			0.00-	52.91	23.04
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13.529	13.528 (1.386)	276	3821 0.42626	CAS #:	193-39-5	21.1	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)							
13.529	13.536	(1.386)	138	768		0.00-	50.20	20.11
21	Dibenz[a,h]anthracene							
13.537	13.536	(1.386)	278	3108	0.42388	21.0	80.00- 120.00	100.00
13.529	13.536	(1.386)	138	766		0.00-	54.80	24.66
22	Benzo[g,h,i]perylene							
13.807	13.807	(1.414)	276	3289	0.41971	20.8	80.00- 120.00	100.00
13.807	13.807	(1.414)	138	550		0.00-	47.23	16.75

QC Flag Legend

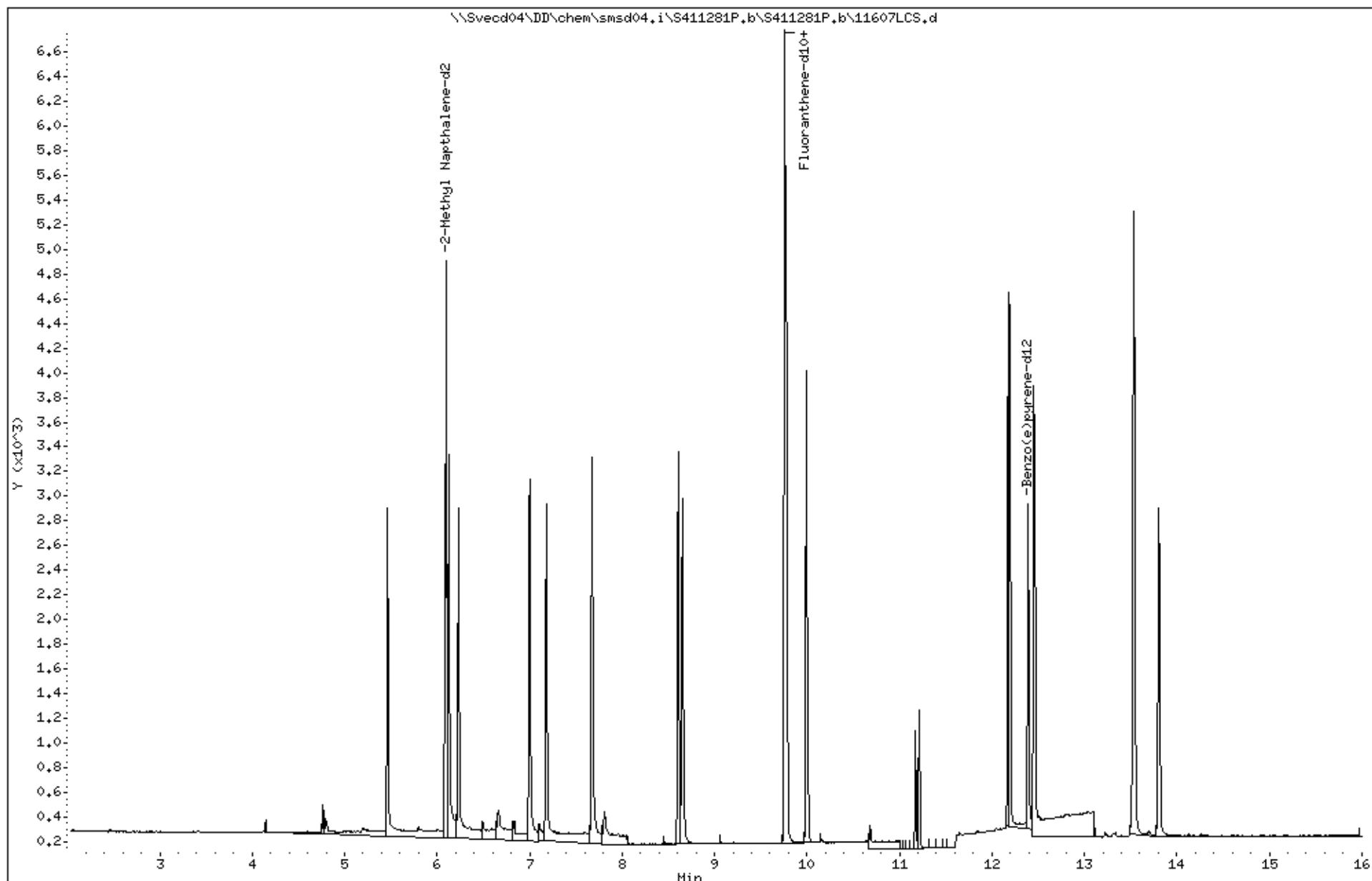
R - Spike/Surrogate failed recovery limits.

Data File: \\Sved04\DD\chem\smsd04.i\S411281P.b\S411281P.b\11607LCS.d
Date : 28-NOV-2012 18:15
Client ID: 154207LCS
Sample Info: SIM154207LCS

Column phase: HPMS-5

Instrument: smsd04.i
Operator: MJ
Column diameter: 0.25

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PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S4112612.b\S4112612.b\11607MS.d
Lab Smp Id: 154208MS Client Smp ID: CV0043A-CSMS
Inj Date : 26-NOV-2012 20:49 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : sim154208MS
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S4112612.b\S4112612.b\SS8270.m
Meth Date : 27-Nov-2012 17:10 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 21:58 Cal File: SSCAL1.d
Als bottle: 8 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.020	Weight of sample extracted (g)
M	22.000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
5.465	5.465 (0.560)	128	18575	1.93261	99.0	80.00- 120.00	100.00(R)
5.465	5.465 (0.560)	129	2098		0.00-	40.98	11.29
*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.092	6.092 (1.000)	152	4040	0.80000	80.00-	120.00	100.00
6.092	6.092 (1.000)	122	1964		15.11-	75.11	48.61
3	2-Methylnaphthalene				CAS #: 91-57-6		
6.124	6.125 (1.005)	142	11403	1.98166	102	80.00- 120.00	100.00(R)
6.124	6.125 (1.005)	141	9740		56.37-	116.37	85.42
4	1-Methylnaphthalene				CAS #: 90-12-0		
6.227	6.227 (1.022)	142	7672	1.45278	74.4	80.00- 120.00	100.00(R)
6.227	6.227 (1.022)	141	6837		58.60-	118.60	89.12
5	Acenaphthylene				CAS #: 208-96-8		
7.003	7.003 (1.150)	152	27863	3.38256	173	80.00- 120.00	100.00(R)
7.003	7.003 (1.150)	151	5544		0.00-	49.48	19.90
6	Acenaphthene				CAS #: 83-32-9		
7.181	7.181 (1.179)	153	3303	0.58491	30.0	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.181	7.181 (1.179)	152	1714			17.86-	77.86	51.89
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7.671	7.671 (1.259)	166	18975	2.83840	CAS #: 86-73-7	145	80.00- 120.00	100.00(R)
7.671	7.671 (1.259)	165	17687			63.22-	123.22	93.21
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8.607	8.607 (0.882)	178	325749	28.9852	CAS #: 85-01-8	1480	80.00- 120.00	100.00(AR)
8.607	8.607 (0.882)	176	61640			0.00-	48.96	18.92
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8.651	8.651 (0.886)	178	53685	5.32505	CAS #: 120-12-7	273	80.00- 120.00	100.00(R)
8.651	8.651 (0.886)	176	9731			0.00-	47.97	18.13
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9.764	9.756 (1.000)	212	7835	0.80000	CAS #: 93951-69-0		80.00- 120.00	100.00
9.756	9.756 (1.000)	106	871			0.00-	41.81	11.12
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9.780	9.780 (1.002)	202	500978	40.2219	CAS #: 206-44-0	2060	80.00- 120.00	100.00(AR)
9.780	9.780 (1.002)	101	51497			0.00-	40.45	10.28
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10.002	9.994 (1.024)	202	361557	28.3128	CAS #: 129-00-0	1450	80.00- 120.00	100.00(AR)
9.994	9.994 (1.024)	101	43214			0.00-	48.08	11.95
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11.176	11.169 (1.145)	226	79316	28.1441	CAS #: 56-55-3	1440	80.00- 120.00	100.00(AR)
11.176	11.169 (1.145)	200	8891			0.00-	45.87	11.21
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11.218	11.211 (1.149)	226	62791	18.8204	CAS #: 218-01-9	964	80.00- 120.00	100.00(AR)
11.211	11.211 (1.148)	200	9957			0.00-	44.88	15.86
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12.177	12.177 (1.247)	252	175273	14.7651	CAS #: 205-99-2	756	80.00- 120.00	100.00(ARM)
12.177	12.177 (1.247)	250	43309			0.00-	54.46	24.71
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12.192	12.192 (1.249)	252	186224	13.8939	CAS #: 207-08-9	712	80.00- 120.00	100.00(ARM)
12.192	12.192 (1.249)	250	42113			0.00-	50.29	22.61
<hr/>								
12.391	12.392 (1.269)	264	2950	0.27244	CAS #: 205440-82-0	14.0	80.00- 120.00	100.00
12.391	12.392 (1.269)	132	396			0.00-	43.44	13.42
<hr/>								
12.463	12.455 (1.276)	252	142960	14.4210	CAS #: 50-32-8	739	80.00- 120.00	100.00(AR)
12.455	12.455 (1.276)	250	33113			0.00-	53.17	23.16
<hr/>								
13.528	13.529 (1.386)	276	97336	8.52464	CAS #: 193-39-5	437	80.00- 120.00	100.00(R)

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
20	Indeno[1,2,3-cd]pyrene (continued)			(ug/ml)	(ug/kg)		
13.528	13.529 (1.386)	138	17729		0.00-	51.29	18.21
21	Dibenz[a,h]anthracene			CAS #:	53-70-3		
13.536	13.537 (1.386)	278	40105 4.29406	220	80.00-	120.00	100.00(R)
13.528	13.537 (1.386)	138	18114		0.00-	56.10	45.17
22	Benzo[g,h,i]perylene			CAS #:	191-24-2		
13.815	13.807 (1.415)	276	80495 8.06410	413	80.00-	120.00	100.00(R)
13.807	13.807 (1.414)	138	13992		0.00-	46.85	17.38

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- R - Spike/Surrogate failed recovery limits.
- M - Compound response manually integrated.

Data File: \\Svedcd04\DD\chem\smsd04.i\S4112612.b\S4112612.b\11607MS.d

Page 4

Date : 26-NOV-2012 20:49

Client ID: CV0043A-CSHS

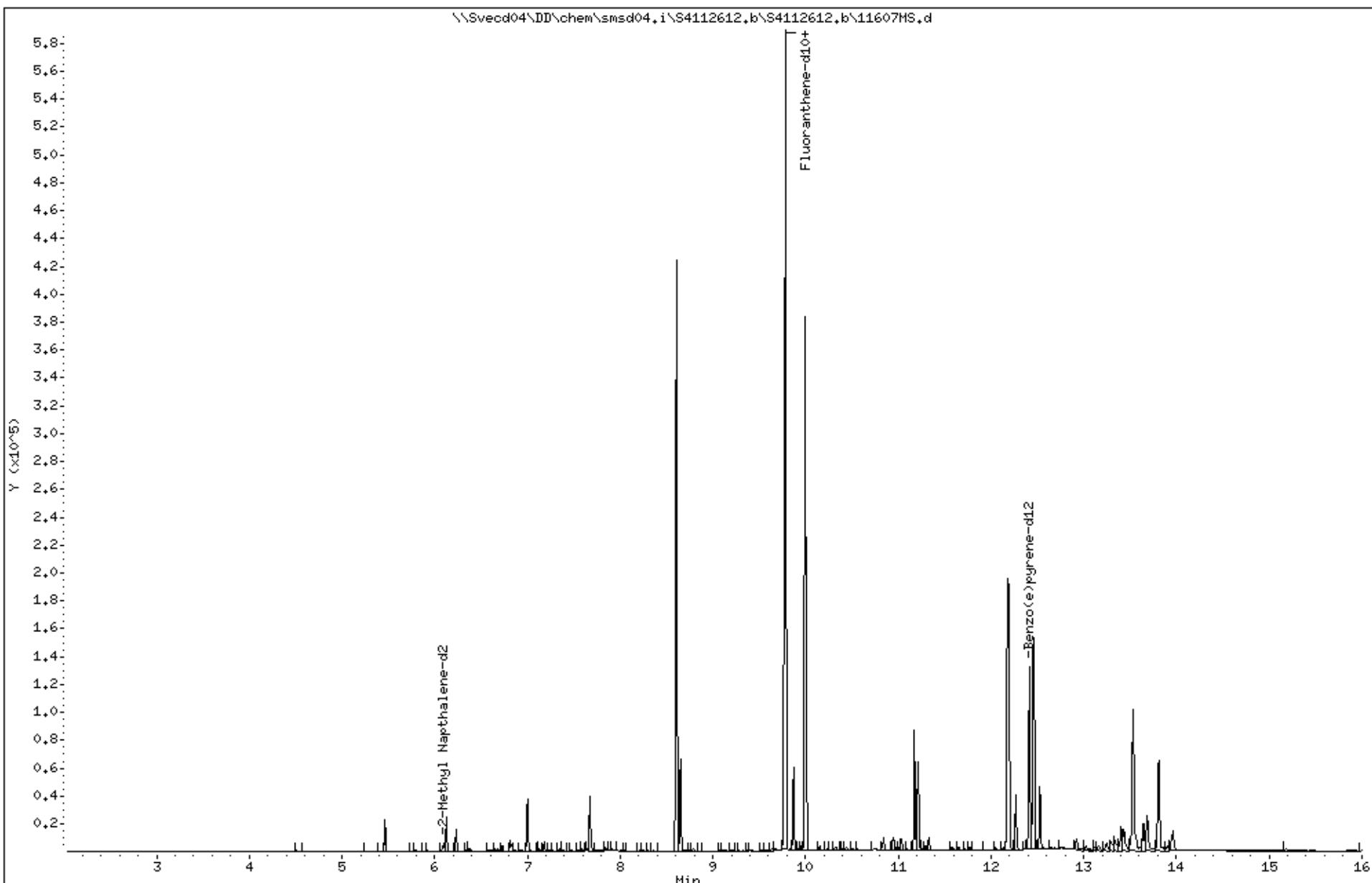
Sample Info: sim154208MS

Column phase: HPMS-5

Instrument: smsd04.i

Operator: MJ

Column diameter: 0.25



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S4112612.b\S4112612.b\11607MSD.d
Lab Smp Id: 154209MSD Client Smp ID: CV0043A-CSMSD
Inj Date : 26-NOV-2012 21:09 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : sim154209MSD
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S4112612.b\S4112612.b\SS8270.m
Meth Date : 27-Nov-2012 17:10 nsubar Quant Type: ISTD
Cal Date : 14-NOV-2012 21:58 Cal File: SSCAL1.d
Als bottle: 9 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	25.010	Weight of sample extracted (g)
M	22.000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	ON-COL (ug/kg)	FINAL (ug/kg)	TARGET RANGE
5.465	5.465 (0.560)	128	15031	1.62464	83.3	80.00- 120.00	100.00(R)
5.465	5.465 (0.560)	129	1785		0.00-	40.98	11.88

*	2 2-Methyl Naphthalene-d2				CAS #: 7927-45-2		
6.092	6.092 (1.000)	152	3952	0.80000	80.00-	120.00	100.00
6.092	6.092 (1.000)	122	1932		15.11-	75.11	48.89

3	2-Methylnaphthalene				CAS #: 91-57-6		
6.124	6.125 (1.005)	142	10133	1.80016	92.3	80.00- 120.00	100.00(R)
6.124	6.125 (1.005)	141	8632		56.37-	116.37	85.19

4	1-Methylnaphthalene				CAS #: 90-12-0		
6.228	6.227 (1.022)	142	6662	1.28962	66.1	80.00- 120.00	100.00(R)
6.228	6.227 (1.022)	141	5914		58.60-	118.60	88.77

5	Acenaphthylene				CAS #: 208-96-8		
7.004	7.003 (1.150)	152	6368	0.79029	40.5	80.00- 120.00	100.00(R)
7.004	7.003 (1.150)	151	1264		0.00-	49.48	19.85

6	Acenaphthene				CAS #: 83-32-9		
7.181	7.181 (1.179)	153	2875	0.52045	26.7	80.00- 120.00	100.00

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
7.181	7.181 (1.179)	152	1497			17.86-	77.86	52.07
<hr/>								
7.671	7.671 (1.259)	166	3655 0.55891	28.6	80.00-	120.00	100.00	
7.671	7.671 (1.259)	165	3423		63.22-	123.22	93.65	
<hr/>								
8.607	8.607 (0.882)	178	22474 2.07743	106	80.00-	120.00	100.00(R)	
8.600	8.607 (0.882)	176	4275		0.00-	48.96	19.02	
<hr/>								
8.644	8.651 (0.886)	178	7712 0.79468	40.7	80.00-	120.00	100.00(R)	
8.644	8.651 (0.886)	176	1423		0.00-	47.97	18.45	
<hr/>								
9.756	9.756 (1.000)	212	7542 0.80000	80.00-	120.00	100.00		
9.756	9.756 (1.000)	106	874		0.00-	41.81	11.59	
<hr/>								
9.780	9.780 (1.002)	202	41086 3.42681	176	80.00-	120.00	100.00(R)	
9.772	9.780 (1.002)	101	4155		0.00-	40.45	10.11	
<hr/>								
9.994	9.994 (1.024)	202	36758 2.99027	153	80.00-	120.00	100.00(R)	
9.994	9.994 (1.024)	101	4576		0.00-	48.08	12.45	
<hr/>								
11.169	11.169 (1.145)	226	9136 3.36771	173	80.00-	120.00	100.00(R)	
11.169	11.169 (1.145)	200	1242		0.00-	45.87	13.59	
<hr/>								
11.211	11.211 (1.149)	226	9751 3.03622	156	80.00-	120.00	100.00(R)	
11.211	11.211 (1.149)	200	1450		0.00-	44.88	14.87	
<hr/>								
12.169	12.177 (1.247)	252	35082 3.07014	157	80.00-	120.00	100.00(RM)	
12.169	12.177 (1.247)	250	8578		0.00-	54.46	24.45	
<hr/>								
12.177	12.192 (1.248)	252	43563 3.37644	173	80.00-	120.00	100.00(RM)	
12.185	12.192 (1.249)	250	9725		0.00-	50.29	22.32	
<hr/>								
12.391	12.392 (1.270)	264	3169 0.30404	15.6	80.00-	120.00	100.00	
12.383	12.392 (1.269)	132	422		0.00-	43.44	13.32	
<hr/>								
12.455	12.455 (1.277)	252	29193 3.05922	157	80.00-	120.00	100.00(R)	
12.455	12.455 (1.277)	250	6647		0.00-	53.17	22.77	
<hr/>								
13.529	13.529 (1.387)	276	25421 2.31285	118	80.00-	120.00	100.00(R)	

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET	RANGE	RATIO
				ON-COL	FINAL			
20	Indeno[1,2,3-cd]pyrene (continued)			(ug/ml)	(ug/kg)			
13.529	13.529 (1.387)	138	5192		0.00-	51.29	20.42	
21	Dibenz[a,h]anthracene			CAS #:	53-70-3			
13.529	13.537 (1.387)	278	12769 1.42030	72.8	80.00-	120.00	100.00(R)	
13.529	13.537 (1.387)	138	5104		0.00-	56.10	39.97	
22	Benzo[g,h,i]perylene			CAS #:	191-24-2			
13.807	13.807 (1.415)	276	24061 2.50411	128	80.00-	120.00	100.00(R)	
13.807	13.807 (1.415)	138	4220		0.00-	46.85	17.54	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd04.i\S4112612.b\S4112612.b\11607MSD.d

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Date : 26-NOV-2012 21:09

Client ID: CV0043A-CSHSD

Sample Info: sim154209MSD

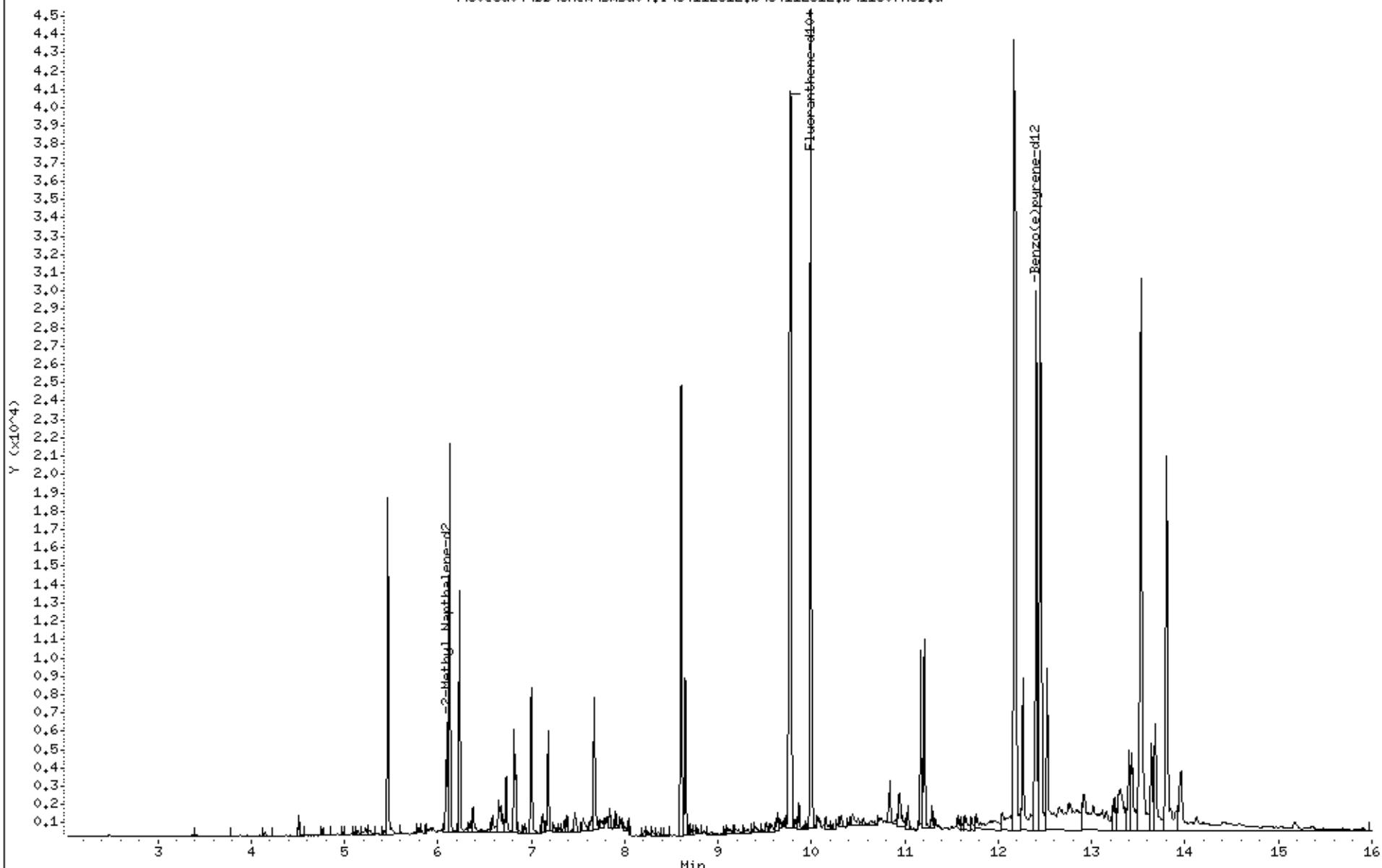
Instrument: smsd04.i

Column phase: HPMS-5

Operator: MJ

Column diameter: 0.25

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Raw Data Method 8270

SEQUENCE CHECK

SDG: 3507616

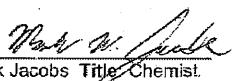
Method: 8270

Sample ID	Lab ID	Initial Cal Reference	File Name	Batch	Col	Instrument	Run Date	Dilution	
DFTPP1135989	47137	N/A	DFTPP2.D	S41114SScal	1	SMSD04	11/14/12 19:35	1	
STD1135504	47763	SMSD0411/15/12-1130~S41114SScal	8270CAL7.d	S41114SScal	1	SMSD04	11/14/12 22:40	1	
STD1135503	47764	SMSD0411/15/12-1130~S41114SScal	8270CAL6.d	S41114SScal	1	SMSD04	11/14/12 23:01	1	
STD1135502	47765	SMSD0411/15/12-1130~S41114SScal	8270CAL5.d	S41114SScal	1	SMSD04	11/14/12 23:22	1	
STD1135500	47766	SMSD0411/15/12-1130~S41114SScal	8270CAL4.d	S41114SScal	1	SMSD04	11/14/12 23:43	1	
STD1135499	47767	SMSD0411/15/12-1130~S41114SScal	8270CAL3.d	S41114SScal	1	SMSD04	11/15/12 00:04	1	
STD1135498	47768	SMSD0411/15/12-1130~S41114SScal	8270CAL2.d	S41114SScal	1	SMSD04	11/15/12 00:25	1	
STD1135497	47769	SMSD0411/15/12-1130~S41114SScal	8270CAL1.d	S41114SScal	1	SMSD04	11/15/12 00:46	1	
SSC1135505	47770	SMSD0411/15/12-1130~S41114SScal	8270SEC.d	S41114SScal	1	SMSD04	11/15/12 01:07	1	
DFTPP1135493	47137	N/A	DFTPP4.d	S41114SScal	1	SMSD04	11/15/12 01:43	1	
STD1135522	47885	SMSD0411/15/12-1130~S41114SScal	BSCAL7.d	S41114SScal	1	SMSD04	11/15/12 02:01	1	
STD1135521	47962	SMSD0411/15/12-1130~S41114SScal	BSCAL6.d	S41114SScal	1	SMSD04	11/15/12 02:22	1	
STD1135520	47964	SMSD0411/15/12-1130~S41114SScal	BSCAL5.d	S41114SScal	1	SMSD04	11/15/12 02:43	1	
DFTPP1135524	47137	N/A	DFTPP6.d	S41114SScal	1	SMSD04	11/15/12 07:22	1	
STD1135518	47965	SMSD0411/15/12-1130~S41114SScal	BSCAL4.d	S41114SScal	1	SMSD04	11/15/12 07:40	1	
3507616 9/9/16	47966	SMSD0411/15/12-1130~S41114SScal	BSCAL3.d	S41114SScal	1	SMSD04	11/15/12 08:01	1	
STD1135517	47967	SMSD0411/15/12-1130~S41114SScal	BSCAL2.d	S41114SScal	1	SMSD04	11/15/12 08:22	1	
STD1135516	47968	SMSD0411/15/12-1130~S41114SScal	BSCAL1.d	S41114SScal	1	SMSD04	11/15/12 08:43	1	
STD1135515	47969	SMSD0411/15/12-1130~S41114SScal	BSSEC.d	S41114SScal	1	SMSD04	11/15/12 09:04	1	
SSC1135523	47933	SMSD0411/15/12-1130~S41114SScal	AP9CAL7.d	S41114SScal	1	SMSD04	11/15/12 09:25	1	
STD1135513	47934	SMSD0411/15/12-1130~S41114SScal	AP9CAL6.d	S41114SScal	1	SMSD04	11/15/12 09:46	1	
STD1135512	47935	SMSD0411/15/12-1130~S41114SScal	AP9CAL5.d	S41114SScal	1	SMSD04	11/15/12 10:07	1	
STD1135511	47936	SMSD0411/15/12-1130~S41114SScal	AP9CAL4.d	S41114SScal	1	SMSD04	11/15/12 10:28	1	
STD1135509	47937	SMSD0411/15/12-1130~S41114SScal	AP9CAL3.d	S41114SScal	1	SMSD04	11/15/12 10:49	1	
STD1135508	47938	SMSD0411/15/12-1130~S41114SScal	AP9CAL2.d	S41114SScal	1	SMSD04	11/15/12 11:09	1	
STD1135507	47939	SMSD0411/15/12-1130~S41114SScal	AP9CAL1.d	S41114SScal	1	SMSD04	11/15/12 11:30	1	
STD1135506	47943	SMSD0411/15/12-1130~S41114SScal	AP9SEC.d	S41114SScal	1	SMSD04	11/15/12 11:51	1	
SSC1135514	47943	SMSD0411/15/12-1130~S41114SScal	N/A	DFTPP2.d	S4112012	1	SMSD04	11/20/12 15:52	1
DFTPP1135492	47137	N/A	8270CAL4.d	S4112012	1	SMSD04	11/20/12 16:30	1	
CCV1136491	47766	SMSD0411/15/12-1130~S41114SScal	BSCAL4.d	S4112012	1	SMSD04	11/20/12 16:53	1	
CCV1136493	47965	SMSD0411/15/12-1130~S41114SScal	AP9CAL4.d	S4112012	1	SMSD04	11/20/12 17:14	1	
CCV1136492	47936	SMSD0411/15/12-1130~S41114SScal	11608MB.d	S4112012	1	SMSD04	11/20/12 18:22	1	
154210MB	154210MB	SMSD0411/15/12-1130~S41114SScal	11608LCS.d	S4112012	1	SMSD04	11/20/12 18:42	1	
154211LCS	154211LCS	SMSD0411/15/12-1130~S41114SScal	DFTPP2.d	S4112612	1	SMSD04	11/26/12 16:26	1	
DFTPP1136634	47137	N/A							

SDG: 3507616

Method: 8270

Sample ID	Lab ID	Initial Cal Reference	File Name	Batch	Col	Instrument	Run Date	Dilution
CCV1137614	47766	SMSD0411/15/12-1130~S41114SScal	8270CAL4.d	S4112612	1	SMSD04	11/26/12 17:04	1
CCV1137617	47965	SMSD0411/15/12-1130~S41114SScal	BSCAL4.d	S4112612	1	SMSD04	11/26/12 17:25	1
CCV1137615	47936	SMSD0411/15/12-1130~S41114SScal	AP9CAL4.d	S4112612	1	SMSD04	11/26/12 17:46	1
CV0043C-CS	350761605	SMSD0411/15/12-1130~S41114SScal	616-05.d	S4112612	1	SMSD04	11/26/12 19:28	1
FM0126C-GS-SP	350761613	SMSD0411/15/12-1130~S41114SScal	616-13.d	S4112612	1	SMSD04	11/26/12 19:48	1

Signature: 
Name: Mark Jacobs Title: Chemist

11/29/2012 6:17:05

Analyst Posted: mjacobs

Date

Signature: 
Name: Brian C. Spann Title: Lab Director

11/30/2012 10:57:0

Analyst Reviewed: bspann

Date

3507616

471

Extraction Method	3545
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Extraction Log 8270 Soil Ext

Start: 11/20/2012 9:00:00 AM

End: 11/20/2012 8:40:06 PM

Water Bath Temp: 70°C

Batch ID: 11608

Thermometer ID: STBA

Balance ID: P35923

Final

Batch ID: 11608

Lab ID	Cont	Client ID	Date Samp	Type	Odor	Color	Sed	Initial	Final	pH	Standards	Cleanups	Archive
350761605	1	CV0043C-CS	11/14/2012 12:25:00 PM	SAMPLE	NONE	BROWN	SOIL	25.11 G	1 mL		0.5mL 8270_BNA-Surr_ST: 46658 @ 100:200 ug/mL;		N/A
350761613	1	FM0126C-GS-SP	11/14/2012 12:08:00 PM	SAMPLE	NONE	BROWN	SOIL	25.41 G	1 mL		0.5mL 8270_BNA-Surr_ST: 46658 @ 100:200 ug/mL;		N/A
154210MB		154210MB		MB	NONE	TAN	SAND	20.22 G	1 mL		0.5mL 8270_BNA-Surr_ST: 46658 @ 100:200 ug/mL;		N/A
154211LCS		154211LCS		LCS	NONE	TAN	SAND	20.19 G	1 mL		250uL 8270_BNA_SPK: 47848 @ 160 ug/mL; 250uL AP-9wg_spk: 47798 @ AP9 160 ug/ml; 250uL SOWwg_spk: 48617 @ 160 ug/ml - 0.5ml		N/A
154212MS	1	FM0126C-GS-SPMS		MS	NONE	BROWN	SOIL	25.23 G	1 mL		250uL 8270_BNA_SPK: 47848 @ 160 ug/mL; 250uL AP-9wg_spk: 47798 @ AP9 160 ug/ml; 250uL SOWwg_spk: 48617 @ 160 ug/ml - 0.5ml		N/A
154213MSD	1	FM0126C-GS-SPMSD		MSD	NONE	BROWN	SOIL	25.83 G	1 mL		250uL 8270_BNA_SPK: 47848 @ 160 ug/mL; 250uL AP-9wg_spk: 47798 @ AP9 160 ug/ml; 250uL SOWwg_spk: 48617 @ 160 ug/ml - 0.5ml		N/A

Lab ID	Cont	Client ID	Date Samp	Type	Odor	Color	Sed	Initial	Final	pH	Standards	Cleanups	Archive
--------	------	-----------	-----------	------	------	-------	-----	---------	-------	----	-----------	----------	---------

Initial Solvent 48452

Hydromatrix 48593

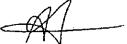
Final Solvent 48452

Sand 48589

Cellulose Filter 4973

ASE # 2

NaSO4 48592



Name: Agnes Tapolyai Title: Prep Tech 11/20/2012 8:40:06 PM

Analyst Posted atapolyai Date



Ryan Bennett

11/20/2012 8:41:41 PM

Peer Reviewed rbennett Date



Signature: Mark W. Jacobs
Name: Mark Jacobs Title: Chemist

11/29/2012 5:4

Analyst Reviewed mjacobs Date

Comments:**Sample Comments**

Lab ID	Client ID	Comments
154210MB	154210MB	
154211LCS	154211LCS	
154212MS	FM0126C-GS-SPMS	
154213MSD	FM0126C-GS-SPMSD	
350761605	CV0043C-CS	
350761613	FM0126C-GS-SP	

3507616

473

STANDARDS LOG

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
40330	8270_Benzidines_STK	NSI Solutions Inc.	C-402-28	1/31/2014	1.5 ML	3/22/2011	jacker
2000 UG/ML: 3,3'-Dichlorobenzidine, Benzidine							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
40399	8270AP9Mix1_UtSTK	Ultra - SPCT-305	CH-0586	3/31/2013	1 ML	3/23/2011	jacker
1000 MG/L: 1,2,4,5-Tetrachlorobenzene, 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 1,4-Naphthoquinone, 2,3,4,6-Tetrachlorophenol, 2,6-Dichlorophenol, 3-Methylcholanthrene, 7,12-Dimethylbenz(a)anthracene, Acetophenone, Chlorobenzilate, Dibenz(a,j)acridine, Dinoseb, Ethyl methanesulfonate, Hexachloropropene, Isosafrole, Kepone, Methylmethanesulfonate, Pentachlorobenzene, Pentachloroethane, Pentachloronitrobenzene(PCNB), Safrole							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
42259	8270_BENZID_STK	Ultra Scientific	CG-3908	12/31/2012	1 ML	7/12/2011	jacker
2000 UG/ML: 3,3'-Dichlorobenzidine, Benzidine							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
44064	8270_SEC_STK	NSI Q-2945	120511-25	12/5/2012	1 ML	12/8/2011	cabadia
150 UG/ML: 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1-Methylnaphthalene, 2,2'-Oxybis(1-chloropropane), 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Fluorobiphenyl, 2-Methylnaphthalene, 2-Methylphenol, 2-Nitroaniline, 2-Nitrophenol, 3,3'-Dichlorobenzidine, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl-phenylether, 4-Chloro-3-methylphenol, 4-Chloroaniline, 4-Chlorophenyl-phenylether, 4-Methylphenol, 4-Nitroaniline, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Aniline, Anthracene, Azobenzene, Benzidine, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Benzoic acid, Benzyl alcohol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Carbazole, Chrysene, Dibenzo(a,h)anthracene, Dibenzofuran, Diethylphthalate, Dimethylphthalate, Di-n-butylphthalate, Di-n-octylphthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Indeno(1,2,3-cd)pyrene, Isophorone, Naphthalene, Nitrobenzene, Nitrobenzene-d5, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, p-Terphenyl-d14, Pyrene, Pyridine							
300 UG/ML: 2,4,6-Tribromophenol, 2-Fluorophenol, Phenol-d5							

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Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
44396	8270_SOWSEC_STK	NSI Solutions C-601	C-601-13	8/31/2013	1 ML	1/3/2012	NSUBAR
2000 UG/ML: 1,1'-Biphenyl, Acetophenone, Atrazine, Benzaldehyde, Caprolactam							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
44412	8270_PHENOL_STK	Ultra Scientific US-	CE-1838Z	9/30/2013	1 ML	1/4/2012	cabadia
2000 UG/ML: 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2-Chlorophenol, 2-Nitrophenol, 4,6-Dinitro-2-methylphenol, 4-Chloro-3-methylphenol, 4-Nitrophenol, Pentachlorophenol, Phenol							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
44973	8270_SOW_STK	SUPELCO - 47514-	LB84222	4/30/2013	1 UG/	2/9/2012	cabadia
2000 UG/ML: 1,1'-Biphenyl, Acetophenone, Atrazine, Benzaldehyde, Caprolactam							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
45131	8310_CALMX5_STK	RESTEK - 31011	079674	3/30/2018	1 ML	2/24/2012	cabadia
2000 UG/ML: Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
45160	8310_AS1MN_STK	AccuStandard S-51	B6040092-1B	2/22/2014	1 ML	2/27/2012	cabadia
2000 UG/ML: 1-Methylnaphthalene							

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STANDARDS LOG

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
45687	8270BNSURRSTK	NSI Solutions, Inc.	C-376-49	1/31/2014	1 ML	4/5/2012	cabadia
5000 UG/ML: 2-Fluorobiphenyl, Nitrobenzene-d5, p-Terphenyl-d14							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
45900	8270_DFTPP_STK_1	NSI C-491	C-491-09	7/30/2014	1.5 ML	4/20/2012	cabadia
500 UG/ML: 4,4'-DDT, Benzidine, Decafluorotriphenyl phosphine(DFTPP), Pentachlorophenol							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
46113	8270_TOXMIX1_STK	Ultra Scientific US-1	CJ-1309	5/31/2015	1 ML	5/11/2012	mjacobs
2000 UG/ML: 2,4,5-Trichlorophenol, 2-Methylphenol, 4-Methylphenol, Benzoic acid							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
46114	8270_TOXMIX2_STK	Ultra Scientific - US	CH-1651	6/30/2014	1 ML	5/11/2012	mjacobs
2000 UG/ML: 2-Methylnaphthalene, 2-Nitroaniline, 3-Nitroaniline, 4-Chloroaniline, 4-Nitroaniline, Aniline, Benzyl alcohol, Dibenzofuran							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
46115	8270_BNMIX1_STK	ChemService PP-H	462-77A	2/28/2013	1 ML	5/11/2012	mjacobs
2000 UG/ML: 2,2'-Oxybis(1-chloropropane), 4-Bromophenyl-phenylether, 4-Chlorophenyl-phenylether, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Diethylphthalate, Dimethylphthalate, Di-n-butylphthalate, Di-n-octylphthalate, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine							

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Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by	
46304	8270_AP9Mix1_NSISTK	NSI Q-5238	100608-01	2/28/2013	1 ML	5/24/2012	cabadia	
1000 MG/L: 1,2,4,5-Tetrachlorobenzene, 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 1,4-Naphthoquinone, 2,3,4,6-Tetrachlorophenol, 2,6-Dichlorophenol, 3-Methylcholanthrene, 7,12-Dimethylbenz(a)anthracene, Acetophenone, Chlorobenzilate, Dibenz(a,j)acridine, Dinoseb, Ethyl methanesulfonate, Hexachloropropene, Isosafrole, Kepone, Methylmethanesulfonate, Pentachlorobenzene, Pentachloroethane, Pentachloronitrobenzene(PCNB), Safrrole								
46305	8270_AP9Mix2_NSISTK	NSI V-721	C-721-01	4/30/2013	1 ML	5/24/2012	cabadia	
2000 MG/L: 0,0,0-Triethylphosphorothioate, 1-Naphthylamine, 2-Acetylaminofluorene, 2-Naphthylamine, 2-Picoline, 3,3'-Dimethylbenzidine, 4-Aminobiphenyl, 4-Nitroquinoline-1-oxide, 5-Nitro-o-toluidine, a,a-Dimethylphenethylamine, Aramide, Diallate (Avadex), Isodrin, Methapyrilene, N-Nitrosodibutylamine, N-Nitrosodiethylamine, N-Nitrosomethylamine, N-Nitrosomorpholine, N-Nitrosopiperidine, N-Nitrosopyrrolidine, o-Toluidine, p-Dimethylaminoazobenzene, Phenacetin, p-Phenylenediamine, Pronamide								
3507616	Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
46967	DCM	Honeywell	DG265	7/18/2013	200 L	7/18/2012	treuter	
47020	8270_BNMIX2_STK	Ultra Scientific US-1	CJ-0240	2/28/2013	1 ml	7/23/2012	cabadia	
2000 UG/ML: 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, Azobenzene, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Isophorone, Nitrobenzene								
47137	DFTPP_std			1/31/2013	5 ML	7/31/2012	mjacobs	
50 UG/ML: 4,4'-DDT, Benzidine, Decafluorotriphenyl phosphine(DFTPP), Pentachlorophenol								
COMPOSED OF:								
45900: 500 UL 46967: 4500 UL								

STANDARDS LOG

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47195	8270_Pyri_STK	NSI (W-271-06)	271-06-04	11/30/2013	1 ML	8/6/2012	cabadia
5000 UG/ML: Pyridine							
47235	8270_ACDSURR_STK	Ultra Scientific-ISM-	CC-2873	9/30/2014	1 ML	8/7/2012	cabadia
2000 UG/ML: 2,4,6-Tribromophenol, 2-Fluorophenol, Phenol-d5							
47264	8270_CARBZ_STK	SUPELCO 48076	LB92361	4/30/2015	1 UG/	8/8/2012	nsubar
2000 UG/ML: Carbazole							
47437	8270_AP9MIX2	CPI Z-116470-01	194807	8/25/2015	1 ML	8/24/2012	cabadia
2000 MG/L: 0,0,0-Triethylphosphorothioate, 1-Naphthylamine, 2-Acetylaminofluorene, 2-Naphthylamine, 2-Picoline, 3,3'-Dimethylbenzidine, 4-Aminobiphenyl, 4-Nitroquinoline-1-oxide, 5-Nitro-o-toluidine, a,a-Dimethylphenethylamine, Aramite, Diallate (Avadex), Isodrin, Methapyrilene, N-Nitrosodibutylamine, N-Nitrosodiethylamine, N-Nitrosomethylalamine, N-Nitrosomorpholine, N-Nitrosopiperidine, N-Nitrosopyrrolidine, o-Toluidine, p-Dimethylaminoazobenzene, Phenacetin, p-Phenylenediamine, Pronamide							
47464	8270_IS_STK	Mitkem	SI120822A	8/22/2013	10 ML	8/27/2012	nsubar
2000 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							
47541	DCM	Honeywell	DG800	9/6/2013	200 L	9/6/2012	atapolyai

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Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47701	DFTPP_std			3/21/2013	5 ML	9/21/2012	nsubar
50 UG/ML: 4,4'-DDT, Benzidine, Decafluorotriphenyl phosphine(DFTPP), Pentachlorophenol							
COMPOSED OF:							
	45900: 500 UL			47541: 4500 UL			
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47708	DCM	Honeywell	DG937	9/24/2013	200 L	9/24/2012	treuter
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Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47762	8270_TOP			2/28/2013	5 ML	10/1/2012	nsubar
3507616 100 UG/ML: 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1-Methylnaphthalene, 2,2'-Oxybis(1-chloropropane), 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Fluorobiphenyl, 2-Methylnaphthalene, 2-Methylphenol, 2-Nitroaniline, 2-Nitrophenol, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl-phenylether, 4-Chloro-3-methylphenol, 4-Chloroaniline, 4-Chlorophenyl-phenylether, 4-Methylphenol, 4-Nitroaniline, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Aniline, Anthracene, Azobenzene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Benzoic acid, Benzyl alcohol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Carbazole, Chrysene, Dibenzo(a,h)anthracene, Dibenzofuran, Diethylphthalate, Dimethylphthalate, Di-n-butylphthalate, Di-n-octylphthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Indeno(1,2,3-cd)pyrene, Isophorone, Naphthalene, Nitrobenzene, Nitrobenzene-d5, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, p-Terphenyl-d14, Pyrene, Pyridine							
200 UG/ML: 2,4,6-Tribromophenol, 2-Fluorophenol, Phenol-d5							
COMPOSED OF:							
44412: 250 UL 45131: 250 UL 45160: 250 UL 45687: 100 UL 46113: 250 UL 46114: 250 UL 46115: 250 UL 47020: 250 UL 47195: 100 UL 47235: 500 UL 47264: 250 UL 47708: 2.3 ML							

STANDARDS LOG

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47763	8270_CAL7			2/28/2013	1 ML	10/1/2012	nsubar
100 UG/ML: 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1-Methylnaphthalene, 2,2'-Oxybis(1-chloropropane), 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Fluorobiphenyl, 2-Methylnaphthalene, 2-Methylphenol, 2-Nitroaniline, 2-Nitrophenol, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl-phenylether, 4-Chloro-3-methylphenol, 4-Chloroaniline, 4-Chlorophenyl-phenylether, 4-Methylphenol, 4-Nitroaniline, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Aniline, Anthracene, Azobenzene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Benzoic acid, Benzyl alcohol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Carbazole, Chrysene, Dibenzo(a,h)anthracene, Dibenzofuran, Diethylphthalate, Dimethylphthalate, Di-n-butylphthalate, Di-n-octylphthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Indeno(1,2,3-cd)pyrene, Isophorone, Naphthalene, Nitrobenzene, Nitrobenzene-d5, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, p-Terphenyl-d14, Pyrene, Pyridine							
200 UG/ML: 2,4,6-Tribromophenol, 2-Fluorophenol, Phenol-d5							
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							

COMPOSED OF:

47464: 20 UL 47762: 1 ML

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47764	8270_CAL6			2/28/2013	1 ML	10/1/2012	nsubar
150 UG/ML: 2,4,6-Tribromophenol, 2-Fluorophenol, Phenol-d5							
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							
75 UG/ML: 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1-Methylnaphthalene, 2,2'-Oxybis(1-chloropropane), 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Fluorobiphenyl, 2-Methylnaphthalene, 2-Methylphenol, 2-Nitroaniline, 2-Nitrophenol, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl-phenylether, 4-Chloro-3-methylphenol, 4-Chloroaniline, 4-Chlorophenyl-phenylether, 4-Methylphenol, 4-Nitroaniline, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Aniline, Anthracene, Azobenzene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Benzoic acid, Benzyl alcohol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Carbazole, Chrysene, Dibenzo(a,h)anthracene, Dibenzofuran, Diethylphthalate, Dimethylphthalate, Di-n-butylphthalate, Di-n-octylphthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Indeno(1,2,3-cd)pyrene, Isophorone, Naphthalene, Nitrobenzene, Nitrobenzene-d5, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, p-Terphenyl-d14, Pyrene, Pyridine							

COMPOSED OF:

47464: 20 UL 47708: 250 UL 47762: 750 UL

STANDARDS LOG

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47765	8270_CAL5			2/28/2013	1 ML	10/1/2012	nsubar
120 UG/ML: 2,4,6-Tribromophenol, 2-Fluorophenol, Phenol-d5 40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10 60 UG/ML: 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1-Methylnaphthalene, 2,2'-Oxybis(1-chloropropane), 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Fluorobiphenyl, 2-Methylnaphthalene, 2-Methylphenol, 2-Nitroaniline, 2-Nitrophenol, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl-phenylether, 4-Chloro-3-methylphenol, 4-Chloroaniline, 4-Chlorophenyl-phenylether, 4-Methylphenol, 4-Nitroaniline, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Aniline, Anthracene, Azobenzene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Benzoic acid, Benzyl alcohol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Carbazole, Chrysene, Dibenzo(a,h)anthracene, Dibenzofuran, Diethylphthalate, Dimethylphthalate, Di-n-butylphthalate, Di-n-octylphthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Indeno(1,2,3-cd)pyrene, Isophorone, Naphthalene, Nitrobenzene, Nitrobenzene-d5, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, p-Terphenyl-d14, Pyrene, Pyridine							
COMPOSED OF:							
47464: 20 UL 47708: 400 UL 47762: 600 UL							

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47766	8270_CAL4			2/28/2013	1 ML	10/1/2012	nsubar
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10 45 UG/ML: 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1-Methylnaphthalene, 2,2'-Oxybis(1-chloropropane), 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Fluorobiphenyl, 2-Methylnaphthalene, 2-Methylphenol, 2-Nitroaniline, 2-Nitrophenol, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl-phenylether, 4-Chloro-3-methylphenol, 4-Chloroaniline, 4-Chlorophenyl-phenylether, 4-Methylphenol, 4-Nitroaniline, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Aniline, Anthracene, Azobenzene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Benzoic acid, Benzyl alcohol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Carbazole, Chrysene, Dibenzo(a,h)anthracene, Dibenzofuran, Diethylphthalate, Dimethylphthalate, Di-n-butylphthalate, Di-n-octylphthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Indeno(1,2,3-cd)pyrene, Isophorone, Naphthalene, Nitrobenzene, Nitrobenzene-d5, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, p-Terphenyl-d14, Pyrene, Pyridine 90 UG/ML: 2,4,6-Tribromophenol, 2-Fluorophenol, Phenol-d5							
COMPOSED OF:							
47464: 20 UL 47708: 550 UL 47762: 450 UL							

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STANDARDS LOG

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47767	8270_CAL3			2/28/2013	1 ML	10/1/2012	nsubar
20 UG/ML: 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1-Methylnaphthalene, 2,2'-Oxybis(1-chloropropane), 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Fluorobiphenyl, 2-Methylnaphthalene, 2-Methylphenol, 2-Nitroaniline, 2-Nitrophenol, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl-phenylether, 4-Chloro-3-methylphenol, 4-Chloroaniline, 4-Chlorophenyl-phenylether, 4-Methylphenol, 4-Nitroaniline, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Aniline, Anthracene, Azobenzene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Benzoic acid, Benzyl alcohol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Carbazole, Chrysene, Dibenzo(a,h)anthracene, Dibenzofuran, Diethylphthalate, Dimethylphthalate, Di-n-butylphthalate, Di-n-octylphthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Indeno(1,2,3-cd)pyrene, Isophorone, Naphthalene, Nitrobenzene, Nitrobenzene-d5, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, p-Terphenyl-d14, Pyrene, Pyridine							
40 UG/ML: 1,4-Dichlorobenzene-d4, 2,4,6-Tribromophenol, 2-Fluorophenol, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10, Phenol-d5							
COMPOSED OF:							
47464: 20 UL 47708: 800 UL 47762: 200 UL							

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47768	8270_CAL2			2/28/2013	1 ML	10/1/2012	nsubar
10 UG/ML: 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1-Methylnaphthalene, 2,2'-Oxybis(1-chloropropane), 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Fluorobiphenyl, 2-Methylnaphthalene, 2-Methylphenol, 2-Nitroaniline, 2-Nitrophenol, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl-phenylether, 4-Chloro-3-methylphenol, 4-Chloroaniline, 4-Chlorophenyl-phenylether, 4-Methylphenol, 4-Nitroaniline, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Aniline, Anthracene, Azobenzene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Benzoic acid, Benzyl alcohol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Carbazole, Chrysene, Dibenzo(a,h)anthracene, Dibenzofuran, Diethylphthalate, Dimethylphthalate, Di-n-butylphthalate, Di-n-octylphthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Indeno(1,2,3-cd)pyrene, Isophorone, Naphthalene, Nitrobenzene, Nitrobenzene-d5, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, p-Terphenyl-d14, Pyrene, Pyridine							
20 UG/ML: 2,4,6-Tribromophenol, 2-Fluorophenol, Phenol-d5							
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							
COMPOSED OF:							
47464: 20 UL 47708: 900 UL 47762: 100 UL							

STANDARDS LOG

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47769	8270_CAL1			10/27/2012	1 ML	10/1/2012	nsubar
4 UG/ML: 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1-Methylnaphthalene, 2,2'-Oxybis(1-chloropropane), 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Fluorobiphenyl, 2-Methylnaphthalene, 2-Methylphenol, 2-Nitroaniline, 2-Nitrophenol, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl-phenylether, 4-Chloro-3-methylphenol, 4-Chloroaniline, 4-Chlorophenyl-phenylether, 4-Methylphenol, 4-Nitroaniline, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Aniline, Anthracene, Azobenzene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Benzoic acid, Benzyl alcohol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Carbazole, Chrysene, Dibenzene, Dibenzo(a,h)anthracene, Dibenzofuran, Diethylphthalate, Dimethylphthalate, Di-n-butylphthalate, Di-n-octylphthalate, Fluoranthene, Fluorene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Indeno(1,2,3-cd)pyrene, Isophorone, Naphthalene, Nitrobenzene, Nitrobenzene-d5, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, p-Terphenyl-d14, Pyrene, Pyridine							
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							
8 UG/ML: 2,4,6-Tribromophenol, 2-Fluorophenol, Phenol-d5							

COMPOSED OF:

47464: 20 UL 47708: 960 UL 47762: 40 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
3507616	47770	8270_SEC_WKG		12/5/2012	1 ML	10/1/2012	nsubar
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							
45 UG/ML: 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1-Methylnaphthalene, 2,2'-Oxybis(1-chloropropane), 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Fluorobiphenyl, 2-Methylnaphthalene, 2-Methylphenol, 2-Nitroaniline, 2-Nitrophenol, 3,3'-Dichlorobenzidine, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl-phenylether, 4-Chloro-3-methylphenol, 4-Chloroaniline, 4-Chlorophenyl-phenylether, 4-Methylphenol, 4-Nitroaniline, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Aniline, Anthracene, Azobenzene, Benzidine, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Benzoic acid, Benzyl alcohol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Carbazole, Chrysene, Dibenzene, Dibenzo(a,h)anthracene, Dibenzofuran, Diethylphthalate, Dimethylphthalate, Di-n-butylphthalate, Di-n-octylphthalate, Fluoranthene, Fluorene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Indeno(1,2,3-cd)pyrene, Isophorone, Naphthalene, Nitrobenzene, Nitrobenzene-d5, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, p-Terphenyl-d14, Pyrene, Pyridine							
90 UG/ML: 2,4,6-Tribromophenol, 2-Fluorophenol, Phenol-d5							

COMPOSED OF:

44064: 300 UL 47464: 20 UL 47708: 700 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47877	DCM	Honeywell	DG937	10/8/2013	200 L	10/8/2012	rbennett

STANDARDS LOG

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47881	8270BS_TOP			4/8/2013	5 ML	10/8/2012	mjacobs
100 UG/ML: 1,1'-Biphenyl, 3,3'-Dichlorobenzidine, Acetophenone, Atrazine, Benzaldehyde, Benzidine, Caprolactam							
COMPOSED OF:							
40330: 250 UL 44973: 250 UL 47877: 4500 UL							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47885	8270BS_CAL7			4/8/2013	1 ML	10/8/2012	mjacobs
100 UG/ML: 1,1'-Biphenyl, 3,3'-Dichlorobenzidine, Acetophenone, Atrazine, Benzaldehyde, Benzidine, Caprolactam							
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							
COMPOSED OF:							
47464: 20 UL 47881: 1 ML							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47930	AP9_TOP			3/31/2013	5 ML	10/9/2012	mjacobs
100 UG/ML: 0,0,0-Triethylphosphorothioate, 1,2,4,5-Tetrachlorobenzene, 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 1,4-Naphthoquinone, 1-Naphthylamine, 2,3,4,6-Tetrachlorophenol, 2,6-Dichlorophenol, 2-Acetylaminofluorene, 2-Naphthylamine, 2-Picoline, 3,3'-Dimethylbenzidine, 3-Methylcholanthrene, 4-Aminobiphenyl, 4-Nitroquinoline-1-oxide, 5-Nitro-o-toluidine, 7,12-Dimethylbenz(a)anthracene, a,a-Dimethylphenethylamine, Acetophenone, Aramite, Chlorobenzilate, Diallate (Avadex), Dibenz(a,j)acridine, Dinoseb, Ethyl methanesulfonate, Hexachloropropene, Isodrin, Isosafrole, Kepone, Methapyrilene, Methylmethanesulfonate, N-Nitrosodibutylamine, N-Nitrosodiethylamine, N-Nitrosomethylamine, N-Nitrosomorpholine, N-Nitrosopiperidine, N-Nitrosopyrrolidine, o-Toluidine, p-Dimethylaminoazobenzene, Pentachlorobenzene, Pentachloroethane, Pentachloronitrobenzene(PCNB), Phenacetin, p-Phenylenediamine, Pronamide, Safrole							
COMPOSED OF:							
40399: 500 UL 47437: 250 UL 47877: 4250 UL							
Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47933	AP9_CAL7			3/31/2013	1 ML	10/9/2012	mjacobs
100 UG/ML: 0,0,0-Triethylphosphorothioate, 1,2,4,5-Tetrachlorobenzene, 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 1,4-Naphthoquinone, 1-Naphthylamine, 2,3,4,6-Tetrachlorophenol, 2,6-Dichlorophenol, 2-Acetylaminofluorene, 2-Naphthylamine, 2-Picoline, 3,3'-Dimethylbenzidine, 3-Methylcholanthrene, 4-Aminobiphenyl, 4-Nitroquinoline-1-oxide, 5-Nitro-o-toluidine, 7,12-Dimethylbenz(a)anthracene, a,a-Dimethylphenethylamine, Acetophenone, Aramite, Chlorobenzilate, Diallate (Avadex), Dibenz(a,j)acridine, Dinoseb, Ethyl methanesulfonate, Hexachloropropene, Isodrin, Isosafrole, Kepone, Methapyrilene, Methylmethanesulfonate, N-Nitrosodibutylamine, N-Nitrosodiethylamine, N-Nitrosomethylamine, N-Nitrosomorpholine, N-Nitrosopiperidine, N-Nitrosopyrrolidine, o-Toluidine, p-Dimethylaminoazobenzene, Pentachlorobenzene, Pentachloroethane, Pentachloronitrobenzene(PCNB), Phenacetin, p-Phenylenediamine, Pronamide, Safrole							
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							

STANDARDS LOG

COMPOSED OF:

47464: 20 UL 47877: 0 ML 47930: 1 ML

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47934	AP9_CAL6			3/31/2013	1 ML	10/9/2012	mjacobs
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10 75 UG/ML: 0,0,0-Triethylphosphorothioate, 1,2,4,5-Tetrachlorobenzene, 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 1,4-Naphthoquinone, 1-Naphthylamine, 2,3,4,6-Tetrachlorophenol, 2,6-Dichlorophenol, 2-Acetylaminofluorene, 2-Naphthylamine, 2-Picoline, 3,3'-Dimethylbenzidine, 3-Methylcholanthrene, 4-Aminobiphenyl, 4-Nitroquinoline-1-oxide, 5-Nitro-o-toluidine, 7,12-Dimethylbenz(a)anthracene, a,a-Dimethylphenethylamine, Acetophenone, Aramite, Chlorobenzilate, Diallate (Avadex), Dibenz(a,j)acridine, Dinoseb, Ethyl methanesulfonate, Hexachloropropene, Isodrin, Isosafrole, Kepone, Methapyriline, Methylmethanesulfonate, N-Nitrosodibutylamine, N-Nitrosodiethylamine, N-Nitrosomethylmethylethylamine, N-Nitrosomorpholine, N-Nitrosopiperidine, N-Nitrosopyrrolidine, o-Toluidine, p-Dimethylaminoazobenzene, Pentachlorobenzene, Pentachloroethane, Pentachloronitrobenzene(PCNB), Phenacetin, p-Phenylenediamine, Pronamide, Safrole							

COMPOSED OF:

47464: 20 UL 47877: 250 UL 47930: 750 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47935	AP9_CAL5			3/31/2013	1 ML	10/9/2012	mjacobs
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10 60 UG/ML: 0,0,0-Triethylphosphorothioate, 1,2,4,5-Tetrachlorobenzene, 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 1,4-Naphthoquinone, 1-Naphthylamine, 2,3,4,6-Tetrachlorophenol, 2,6-Dichlorophenol, 2-Acetylaminofluorene, 2-Naphthylamine, 2-Picoline, 3,3'-Dimethylbenzidine, 3-Methylcholanthrene, 4-Aminobiphenyl, 4-Nitroquinoline-1-oxide, 5-Nitro-o-toluidine, 7,12-Dimethylbenz(a)anthracene, a,a-Dimethylphenethylamine, Acetophenone, Aramite, Chlorobenzilate, Diallate (Avadex), Dibenz(a,j)acridine, Dinoseb, Ethyl methanesulfonate, Hexachloropropene, Isodrin, Isosafrole, Kepone, Methapyriline, Methylmethanesulfonate, N-Nitrosodibutylamine, N-Nitrosodiethylamine, N-Nitrosomethylmethylethylamine, N-Nitrosomorpholine, N-Nitrosopiperidine, N-Nitrosopyrrolidine, o-Toluidine, p-Dimethylaminoazobenzene, Pentachlorobenzene, Pentachloroethane, Pentachloronitrobenzene(PCNB), Phenacetin, p-Phenylenediamine, Pronamide, Safrole							

COMPOSED OF:

47464: 20 UL 47877: 400 UL 47930: 600 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47936	AP9_CAL4			3/31/2013	1 ML	10/9/2012	mjacobs
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10 45 UG/ML: 0,0,0-Triethylphosphorothioate, 1,2,4,5-Tetrachlorobenzene, 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 1,4-Naphthoquinone, 1-Naphthylamine, 2,3,4,6-Tetrachlorophenol, 2,6-Dichlorophenol, 2-Acetylaminofluorene, 2-Naphthylamine, 2-Picoline, 3,3'-Dimethylbenzidine, 3-Methylcholanthrene, 4-Aminobiphenyl, 4-Nitroquinoline-1-oxide, 5-Nitro-o-toluidine, 7,12-Dimethylbenz(a)anthracene, a,a-Dimethylphenethylamine, Acetophenone, Aramite, Chlorobenzilate, Diallate (Avadex), Dibenz(a,j)acridine, Dinoseb, Ethyl methanesulfonate, Hexachloropropene, Isodrin, Isosafrole, Kepone, Methapyriline, Methylmethanesulfonate, N-Nitrosodibutylamine, N-Nitrosodiethylamine, N-Nitrosomethylmethylethylamine, N-Nitrosomorpholine, N-Nitrosopiperidine, N-Nitrosopyrrolidine, o-Toluidine, p-Dimethylaminoazobenzene, Pentachlorobenzene, Pentachloroethane, Pentachloronitrobenzene(PCNB), Phenacetin, p-Phenylenediamine, Pronamide, Safrole							

3507616

STANDARDS LOG

COMPOSED OF:

47464: 20 UL 47877: 550 UL 47930: 450 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47937	AP9_CAL3			3/31/2013	1 ML	10/9/2012	mjacobs
20 UG/ML: 0,0,0-Triethylphosphorothioate, 1,2,4,5-Tetrachlorobenzene, 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 1,4-Naphthoquinone, 1-Naphthylamine, 2,3,4,6-Tetrachlorophenol, 2,6-Dichlorophenol, 2-Acetylaminofluorene, 2-Naphthylamine, 2-Picoline, 3,3'-Dimethylbenzidine, 3-Methylcholanthrene, 4-Aminobiphenyl, 4-Nitroquinoline-1-oxide, 5-Nitro-o-toluidine, 7,12-Dimethylbenz(a)anthracene, a,a-Dimethylphenethylamine, Acetophenone, Aramite, Chlorobenzilate, Diallate (Avadex), Dibenz(a,j)acridine, Dinoseb, Ethyl methanesulfonate, Hexachloropropene, Isodrin, Isosafrole, Kepone, Methapyriline, Methylmethanesulfonate, N-Nitrosodibutylamine, N-Nitrosodiethylamine, N-Nitrosomethylethylamine, N-Nitrosomorpholine, N-Nitrosopiperidine, N-Nitrosopyrrolidine, o-Toluidine, p-Dimethylaminoazobenzene, Pentachlorobenzene, Pentachloroethane, Pentachloronitrobenzene(PCNB), Phenacetin, p-Phenylenediamine, Pronamide, Safrrole							
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							

COMPOSED OF:

47464: 20 UL 47877: 800 UL 47930: 200 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47938	AP9_CAL2			3/31/2013	1 ML	10/9/2012	mjacobs
10 UG/ML: 0,0,0-Triethylphosphorothioate, 1,2,4,5-Tetrachlorobenzene, 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 1,4-Naphthoquinone, 1-Naphthylamine, 2,3,4,6-Tetrachlorophenol, 2,6-Dichlorophenol, 2-Acetylaminofluorene, 2-Naphthylamine, 2-Picoline, 3,3'-Dimethylbenzidine, 3-Methylcholanthrene, 4-Aminobiphenyl, 4-Nitroquinoline-1-oxide, 5-Nitro-o-toluidine, 7,12-Dimethylbenz(a)anthracene, a,a-Dimethylphenethylamine, Acetophenone, Aramite, Chlorobenzilate, Diallate (Avadex), Dibenz(a,j)acridine, Dinoseb, Ethyl methanesulfonate, Hexachloropropene, Isodrin, Isosafrole, Kepone, Methapyriline, Methylmethanesulfonate, N-Nitrosodibutylamine, N-Nitrosodiethylamine, N-Nitrosomethylethylamine, N-Nitrosomorpholine, N-Nitrosopiperidine, N-Nitrosopyrrolidine, o-Toluidine, p-Dimethylaminoazobenzene, Pentachlorobenzene, Pentachloroethane, Pentachloronitrobenzene(PCNB), Phenacetin, p-Phenylenediamine, Pronamide, Safrrole							
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							

COMPOSED OF:

47464: 20 UL 47877: 900 UL 47930: 100 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47939	AP9_CAL1			3/31/2013	1 ML	10/9/2012	mjacobs
4 UG/ML: 0,0,0-Triethylphosphorothioate, 1,2,4,5-Tetrachlorobenzene, 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 1,4-Naphthoquinone, 1-Naphthylamine, 2,3,4,6-Tetrachlorophenol, 2,6-Dichlorophenol, 2-Acetylaminofluorene, 2-Naphthylamine, 2-Picoline, 3,3'-Dimethylbenzidine, 3-Methylcholanthrene, 4-Aminobiphenyl, 4-Nitroquinoline-1-oxide, 5-Nitro-o-toluidine, 7,12-Dimethylbenz(a)anthracene, a,a-Dimethylphenethylamine, Acetophenone, Aramite, Chlorobenzilate, Diallate (Avadex), Dibenz(a,j)acridine, Dinoseb, Ethyl methanesulfonate, Hexachloropropene, Isodrin, Isosafrole, Kepone, Methapyriline, Methylmethanesulfonate, N-Nitrosodibutylamine, N-Nitrosodiethylamine, N-Nitrosomethylethylamine, N-Nitrosomorpholine, N-Nitrosopiperidine, N-Nitrosopyrrolidine, o-Toluidine, p-Dimethylaminoazobenzene, Pentachlorobenzene, Pentachloroethane, Pentachloronitrobenzene(PCNB), Phenacetin, p-Phenylenediamine, Pronamide, Safrrole							
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							

3507616

STANDARDS LOG

COMPOSED OF:

47464: 20 UL 47877: 960 UL 47930: 40 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47943	8270_AP9SEC			2/28/2013	1 ML	10/9/2012	mjacobs
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10 45 UG/ML: 0,0,0-Triethylphosphorothioate, 1,2,4,5-Tetrachlorobenzene, 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 1,4-Naphthoquinone, 1-Naphthylamine, 2,3,4,6-Tetrachlorophenol, 2,6-Dichlorophenol, 2-Acetylaminofluorene, 2-Naphthylamine, 2-Picoline, 3,3'-Dimethylbenzidine, 3-Methylcholanthrene, 4-Aminobiphenyl, 4-Nitroquinoline-1-oxide, 5-Nitro-o-toluidine, 7,12-Dimethylbenz(a)anthracene, a,a-Dimethylphenethylamine, Acetophenone, Aramite, Chlorobenzilate, Diallate (Avadex), Dibenz(a,j)acridine, Dinoseb, Ethyl methanesulfonate, Hexachloropropene, Isodrin, Isosafrole, Kepone, Methapyrilene, Methylmethanesulfonate, N-Nitrosodibutylamine, N-Nitrosodiethylamine, N-Nitrosomethylethylenimine, N-Nitrosomorpholine, N-Nitrosopiperidine, N-Nitrosopyrrolidine, o-Toluidine, p-Dimethylaminoazobenzene, Pentachlorobenzene, Pentachloroethane, Pentachloronitrobenzene(PCNB), Phenacetin, p-Phenylenediamine, Pronamide, Safrole							

COMPOSED OF:

46304: 45 UL 46305: 22.5 UL 47464: 20 UL 47877: 932.5 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47962	8270BS_CAL6			4/8/2013	1 ML	10/9/2012	mjacobs
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10 75 UG/ML: 1,1'-Biphenyl, 3,3'-Dichlorobenzidine, Acetophenone, Atrazine, Benzaldehyde, Benzidine, Caprolactam							

COMPOSED OF:

47464: 20 UL 47877: 250 UL 47881: 750 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47964	8270BS_CAL5			4/8/2013	1 ML	10/9/2012	mjacobs
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10 60 UG/ML: 1,1'-Biphenyl, 3,3'-Dichlorobenzidine, Acetophenone, Atrazine, Benzaldehyde, Benzidine, Caprolactam							

COMPOSED OF:

47464: 20 UL 47877: 400 UL 47881: 600 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47965	8270BS_CAL4			4/8/2013	1 ML	10/9/2012	mjacobs
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10 45 UG/ML: 1,1'-Biphenyl, 3,3'-Dichlorobenzidine, Acetophenone, Atrazine, Benzaldehyde, Benzidine, Caprolactam							

STANDARDS LOG

COMPOSED OF:

47464: 20 UL 47877: 550 UL 47881: 450 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47966	8270BS_CAL3			4/8/2013	1 ML	10/9/2012	mjacobs
20 UG/ML: 1,1'-Biphenyl, 3,3'-Dichlorobenzidine, Acetophenone, Atrazine, Benzaldehyde, Benzidine, Caprolactam 40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							

COMPOSED OF:

47464: 20 UL 47877: 800 UL 47881: 200 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47967	8270BS_CAL2			4/8/2013	1 ML	10/9/2012	mjacobs
10 UG/ML: 1,1'-Biphenyl, 3,3'-Dichlorobenzidine, Acetophenone, Atrazine, Benzaldehyde, Benzidine, Caprolactam 40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							

COMPOSED OF:

47464: 20 UL 47877: 900 UL 47881: 100 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47968	8270BS_CAL1			4/8/2013	1 ML	10/9/2012	mjacobs
4 UG/ML: 1,1'-Biphenyl, 3,3'-Dichlorobenzidine, Acetophenone, Atrazine, Benzaldehyde, Benzidine, Caprolactam 40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10							

COMPOSED OF:

47464: 20 UL 47877: 960 UL 47881: 40 UL

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
47969	8270BS_SEC_WKG			12/31/2012	1 ML	10/9/2012	mjacobs
40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10 45 UG/ML: 1,1'-Biphenyl, 3,3'-Dichlorobenzidine, Acetophenone, Atrazine, Benzaldehyde, Benzidine, Caprolactam							

COMPOSED OF:

42259: 22.5 UL 44396: 22.5 UL 47464: 20 UL 47877: 955 UL

3507616

STANDARDS LOG

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
48170	DCM	Honeywell	DG937	10/22/2013	200 L	10/22/2012	atapolyai

Standard ID	Type	Manufacturer	Mfg Lot	Expires	Volume	Created on	Created by
48294	8270_CAL4			2/28/2013	1 ML	11/1/2012	mjacobs

40 UG/ML: 1,4-Dichlorobenzene-d4, Acenaphthene-d10, Chrysene-d12, Naphthalene-d8, Perylene-d12, Phenanthrene-d10
 45 UG/ML: 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1-Methylnaphthalene, 2,2'-Oxybis(1-chloropropane), 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Fluorobiphenyl, 2-Methylnaphthalene, 2-Methylphenol, 2-Nitroaniline, 2-Nitrophenol, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl-phenylether, 4-Chloro-3-methylphenol, 4-Chloroaniline, 4-Chlorophenyl-phenylether, 4-Methylphenol, 4-Nitroaniline, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Aniline, Anthracene, Azobenzene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Benzoic acid, Benzyl alcohol, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Carbazole, Chrysene, Dibenzo(a,h)anthracene, Dibenzofuran, Diethylphthalate, Dimethylphthalate, Di-n-butylphthalate, Di-n-octylphthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Indeno(1,2,3-cd)pyrene, Isophorone, Naphthalene, Nitrobenzene, Nitrobenzene-d5, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, p-Terphenyl-d14, Pyrene, Pyridine
 90 UG/ML: 2,4,6-Tribromophenol, 2-Fluorophenol, Phenol-d5

COMPOSED OF:

47464: 20 UL 47762: 450 UL 48170: 550 UL

Data File: \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\DFTPP2.D
Report Date: 26-Nov-2012 18:03

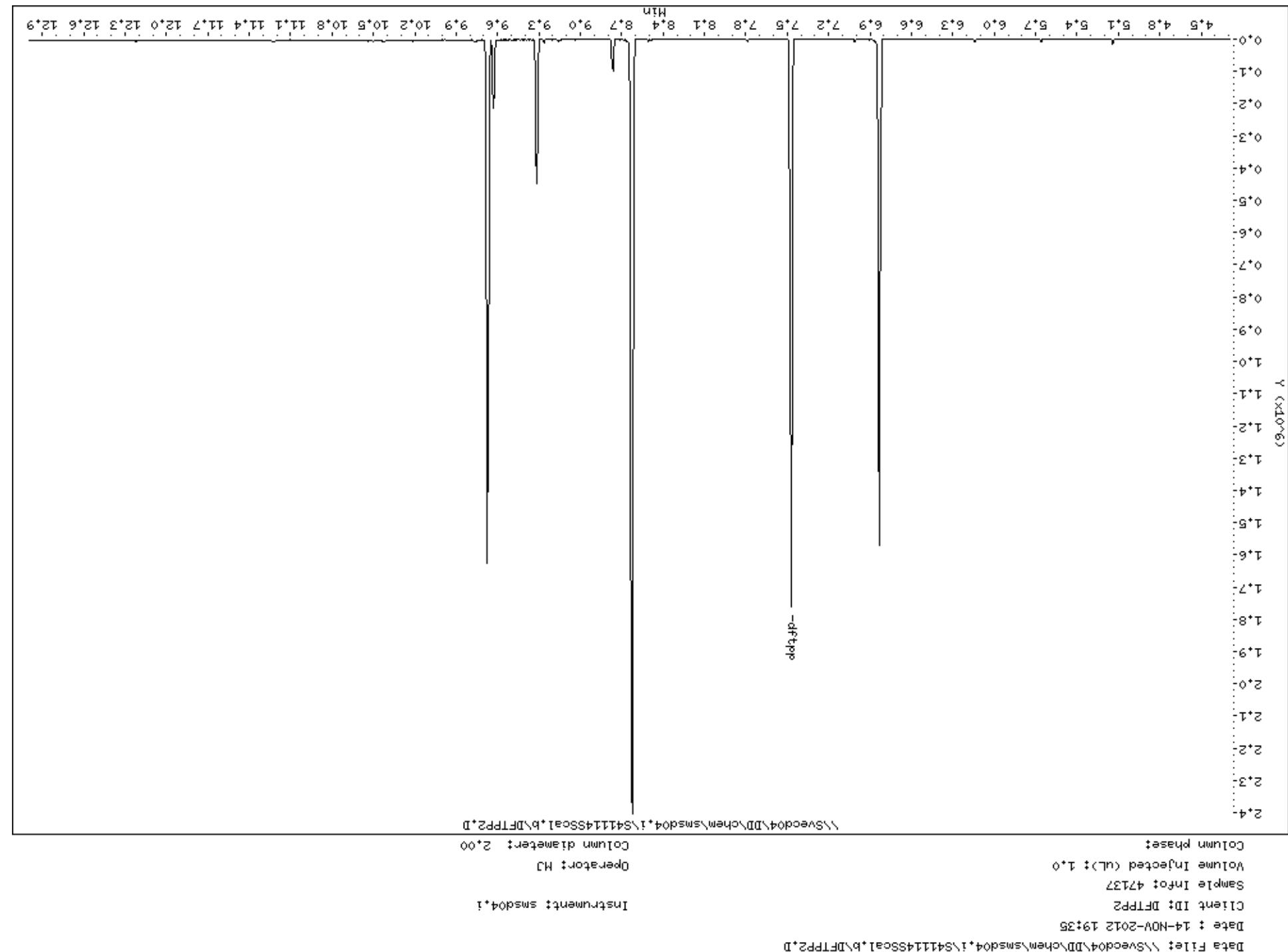
PEL Laboratories, Inc.

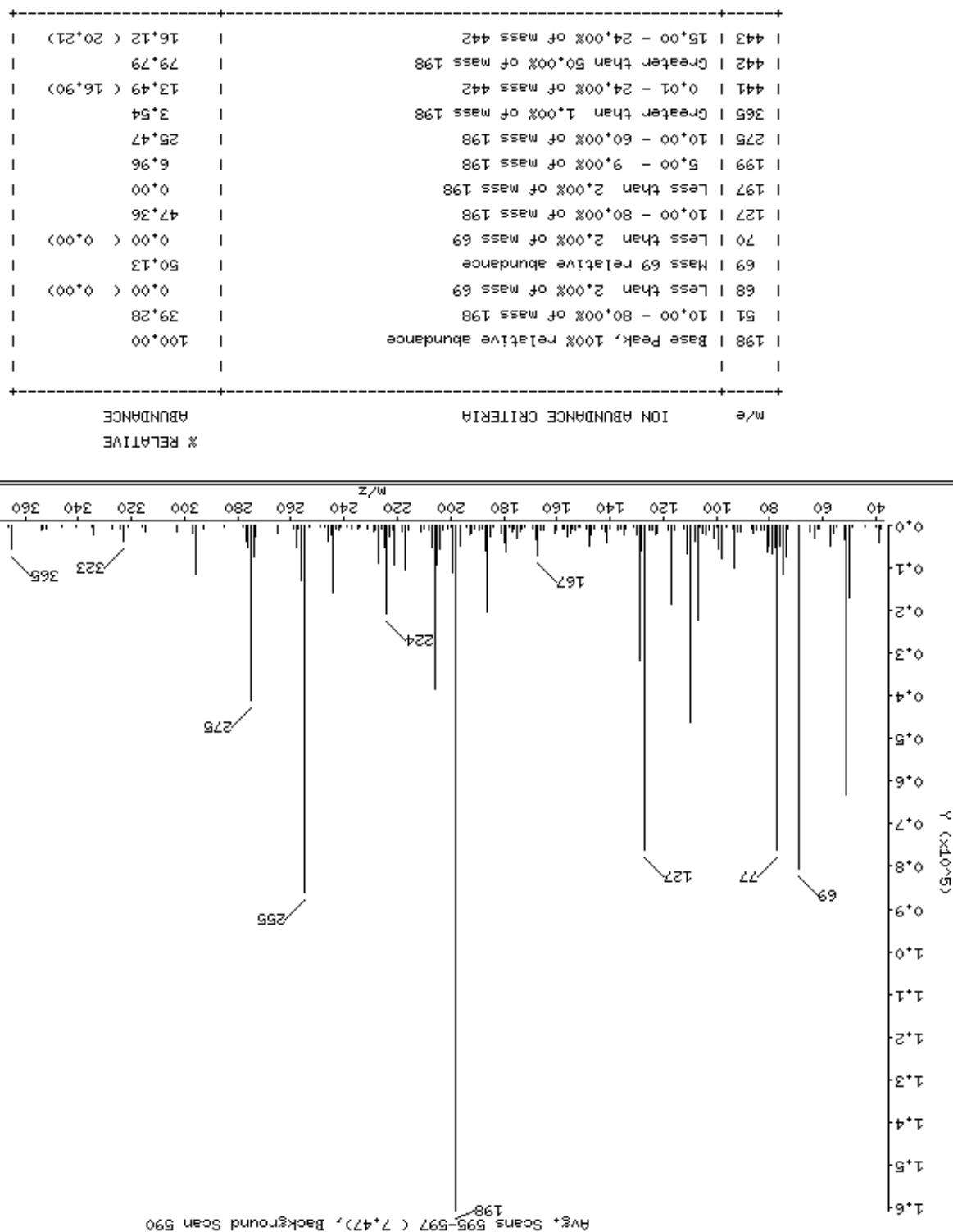
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Lab Smp Id: 47137 Client Smp ID: DFTPP2
Inj Date : 14-NOV-2012 19:35
Operator : MJ Inst ID: smsd04.i
Smp Info : 47137
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\DoDTUN.m
Meth Date : 06-Aug-2012 11:47 Quant Type: ISTD
Cal Date : 23-MAR-2009 02:58 Cal File: AP9CAL1.D
Als bottle: 1 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
<hr/>							
7.474	7.410	(0.000)	198	160768		0.00- 100.00	100.00
7.474	7.410	(0.000)	51	63144		10.00- 80.00	39.28
7.474	7.410	(0.000)	68	0	0.0	0.00- 2.00	0.00
7.474	7.410	(0.000)	69	80600		0.00- 0.00	50.13
7.474	7.410	(0.000)	70	0	0.0	0.00- 2.00	0.00
7.474	7.410	(0.000)	127	76144		10.00- 80.00	47.36
7.474	7.410	(0.000)	197	0	0.0	0.00- 2.00	0.00
7.474	7.410	(0.000)	199	11183		5.00- 9.00	6.96
7.474	7.410	(0.000)	275	40952		10.00- 60.00	25.47
7.474	7.410	(0.000)	365	5692		1.00- 0.00	3.54
7.474	7.410	(0.000)	441	21680		0.01- 24.00	16.90
7.474	7.410	(0.000)	442	128272		50.00- 0.00	79.79
7.474	7.410	(0.000)	443	25920		15.00- 24.00	20.21
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Data File: \\\Server\c$\chem\msd04\1\NOV2012\19435.D  
Date : 14-NOV-2012 19:43:55  
Client ID: DFTPP2  
Instrument: msd04.i  
Sample Info: 47137  
Volume Injected (UL): 1.0  
Operator: HJ  
Column Phases: C1  
Column diameter: 2.00  
dfpp.d
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Data File: DFTPP2.D
Date : 14-NOV-2012 19:35
Client ID: \Svedec4\DD\chem\msd4\1\S41114SSC1\B\DFTPP2.D
Data File: \Svedec4\DD\chem\msd4\1\S41114SSC1\B\DFTPP2.D
Instrument: msd4.i
Sample Info: 47137
Volume Injected (UL): 1.0
Operator: HS
Column Phase: C18
Column diameter: 2.00

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Data File: \\\\$veded4\DD\chem\msd4\1\5411145501.b\DFTP2.D
 Client ID: DFTP2
 Sample Info: 47137
 Instrument: msd4.i
 Date : 14-NOV-2012 19:35
 Column Phases: Column diameter: 2.00
 Volume Injected (uL): 1.0
 Operator: HS
 Spectrnum: Avg. Scans 595-597 (7.47), Background Scan 590
 Location of Maximum: 198.00
 Number of Points: 193

m/z	y	m/z	y	m/z	y	m/z	y
98.00	7775	167.00	7202	234.00	500	404.00	222
99.00	5512	168.00	3358	235.00	626	422.00	1109
100.00	223	169.00	629	237.00	898	422.00	888
101.00	3060	172.00	541	239.00	224	423.00	7248
102.00	959	173.00	806	241.00	271	424.00	1605
104.00	2143	174.00	1497	242.00	1026	439.00	314
105.00	1970	175.00	3068	243.00	609	440.00	254
106.00	538	176.00	730	244.00	16074	441.00	21680
107.00	22328	177.00	1606	245.00	2224	442.00	128272
108.00	3678	178.00	484	246.00	3578	443.00	25920
110.00	46328	179.00	6155	247.00	489	444.00	2496
111.00	6632	180.00	4188	249.00	321	445.00	2496
112.00	593	181.00	1907	253.00	448	446.00	2496
113.00	1011	184.00	249	255.00	86256	447.00	2496
114.00	1116	185.00					

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/26/2012 16:38

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S41114SScal.b/DFTPP2.D
DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 11/26/2012 16:54

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Report Date: 11/26/2012 18:04

Datafile Analyzed: //Svecd04/DD/chem/smsd04.i/S41114SScal.b/DFTPP2.D

PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\8270CAL7.d
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Inj Date : 14-NOV-2012 22:40 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47763
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\8270bcs.m
Meth Date : 26-Nov-2012 13:58 smsd04.i Quant Type: ISTD
Cal Date : 15-OCT-2012 13:17 Cal File: AP9CAL7.d
Als bottle: 21 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8270caln.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	TARGET RANGE
2.227	2.228	(0.518)	79	392424 100.000	80.00-	120.00	100.00(Q)
2.227	2.228	(0.518)	52	254725	35.30-	95.30	64.91
<hr/>							
M 16 Cresols (Total)							
				CAS #: 1319-77-3			
				699726 200.000			(a)
<hr/>							
1 N-Nitrosodimethylamine							
2.220	2.220	(0.517)	42	174816 100.000	80.00-	120.00	100.00(Q)
2.221	2.220	(0.517)	74	226898	97.07-	157.07	129.79
2.220	2.221	(0.517)	44	8149	0.00-	34.98	4.66
<hr/>							
\$ 6 2-Fluorophenol (SURR)							
3.251	3.246	(0.756)	112	716459 200.000	80.00-	120.00	100.00(aQ)
3.251	3.246	(0.756)	64	431869	32.62-	92.62	60.28
<hr/>							
\$ 11 Phenol-d5 (SURR)							
4.016	4.006	(0.934)	99	912656 200.000	80.00-	120.00	100.00(Q)
4.016	4.006	(0.934)	42	182402	0.00-	49.74	19.99
4.016	4.006	(0.934)	71	388755	12.66-	72.66	42.60
<hr/>							

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
4.026	4.016 (0.936)	94	521487	100.000		80.00-	120.00	100.00(Q)
4.026	4.016 (0.937)	65	262714			0.94-	60.94	50.38
4.025	4.015 (0.936)	66	304324			21.40-	81.40	58.36
<hr/>								
4.048	4.046 (0.942)	93	466624	100.000		80.00-	120.00	100.00(Q)
4.026	4.046 (0.937)	65	262712			0.00-	50.97	56.30
4.048	4.046 (0.942)	66	162494			12.95-	72.95	34.82
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4.098	4.094 (0.953)	93	343769	100.000		80.00-	120.00	100.00(Q)
4.098	4.093 (0.953)	63	253003			43.04-	103.04	73.60
4.098	4.094 (0.953)	95	110658			1.90-	61.90	32.19
<hr/>								
4.146	4.142 (0.964)	128	336285	100.000		80.00-	120.00	100.00(Q)
4.145	4.142 (0.964)	64	180799			24.14-	84.14	53.76
4.146	4.142 (0.964)	130	110411			2.15-	62.15	32.83
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4.269	4.267 (0.993)	146	401520	100.000		80.00-	120.00	100.00(Q)
4.269	4.267 (0.993)	148	256523			34.15-	94.15	63.89
4.269	4.267 (0.993)	111	180889			14.34-	74.34	45.05
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4.299	4.294 (1.000)	152	105070	40.0000		80.00-	120.00	100.00(Q)
4.299	4.294 (1.000)	115	66583			34.81-	94.81	63.37
4.300	4.294 (1.000)	150	209585			126.51-	186.51	199.47
<hr/>								
4.313	4.311 (1.003)	146	415315	100.000		80.00-	120.00	100.00(Q)
4.313	4.311 (1.003)	148	266061			36.10-	96.10	64.06
4.312	4.311 (1.003)	111	180255			14.95-	74.95	43.40
<hr/>								
4.436	4.429 (1.032)	108	230377	100.000		80.00-	120.00	100.00(Q)
4.436	4.429 (1.032)	79	359168			126.03-	186.03	155.90
4.436	4.429 (1.032)	77	241685			76.75-	136.75	104.91
<hr/>								
4.480	4.478 (1.042)	146	387728	100.000		80.00-	120.00	100.00(Q)
4.481	4.478 (1.042)	148	244881			33.36-	93.36	63.16
4.480	4.478 (1.042)	111	179775			18.07-	78.07	46.37
<hr/>								
4.543	4.538 (1.057)	107	277051	100.000		80.00-	120.00	100.00(Q)
4.543	4.538 (1.057)	108	319886			83.56-	143.56	115.46
4.542	4.538 (1.057)	79	154995			27.79-	87.79	55.94
<hr/>								
4.573	4.571 (1.064)	45	430468	100.000		80.00-	120.00	100.00(Q)
4.573	4.571 (1.064)	77	82351			0.00-	47.34	19.13

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
4.573	4.571 (1.064)	121	119016			0.00-	56.71	27.65
<hr/>								
23 2,2'-oxybis(1-chloropropane) (continued)								
4.679	4.668 (1.088)	107	422675	100.000		80.00-	120.00	100.00(Q)
4.679	4.668 (1.088)	108	342899			51.88-	111.88	81.13
4.678	4.668 (1.088)	79	117348			0.00-	57.76	27.76
<hr/>								
26 N-Nitrosodinpropylamine								
4.710	4.699 (1.096)	70	291667	100.000		80.00-	120.00	100.00(Q)
4.710	4.699 (1.096)	42	153575			21.53-	81.53	52.65
4.711	4.699 (1.096)	130	62722			0.00-	51.40	21.50
<hr/>								
30 Hexachloroethane								
4.754	4.753 (1.106)	117	173889	100.000		80.00-	120.00	100.00(Q)
4.755	4.754 (1.106)	201	163743			63.39-	123.39	94.17
4.755	4.754 (1.106)	199	104929			26.40-	86.40	60.34
<hr/>								
\$ 31 Nitrobenzene-d5 (SURR)								
4.824	4.818 (0.882)	82	458112	100.000		80.00-	120.00	100.00(Q)
4.824	4.818 (0.882)	128	166463			6.68-	66.68	36.34
4.824	4.818 (0.882)	54	223126			19.12-	79.12	48.71
<hr/>								
32 Nitrobenzene								
4.841	4.834 (0.885)	77	446670	100.000		80.00-	120.00	100.00(Q)
4.841	4.835 (0.885)	123	167020			6.73-	66.73	37.39
4.841	4.834 (0.885)	65	65711			0.00-	43.84	14.71
<hr/>								
34 Isophorone								
5.056	5.046 (0.924)	82	779079	100.000		80.00-	120.00	100.00(Q)
5.057	5.047 (0.924)	138	124059			0.00-	45.91	15.92
5.057	5.046 (0.924)	95	62927			0.00-	37.77	8.08
<hr/>								
35 2-Nitrophenol								
5.131	5.128 (0.938)	139	188548	100.000		80.00-	120.00	100.00(Q)
5.130	5.127 (0.938)	65	118218			33.65-	93.65	62.70
5.130	5.127 (0.938)	109	83564			13.08-	73.08	44.32
<hr/>								
36 2,4-Dimethylphenol								
5.165	5.158 (0.944)	122	278642	100.000		80.00-	120.00	100.00(Q)
5.164	5.158 (0.944)	107	382412			100.42-	160.42	137.24
5.165	5.158 (0.944)	121	171796			27.73-	87.73	61.65
<hr/>								
38 Bis(2-Chloroethoxy)methane								
5.256	5.252 (0.961)	93	449369	100.000		80.00-	120.00	100.00(Q)
5.256	5.252 (0.961)	95	146690			2.66-	62.66	32.64
5.257	5.252 (0.961)	123	56916			0.00-	43.79	12.67
<hr/>								
40 Benzoic Acid								
5.306	5.267 (0.970)	122	199985	100.000		80.00-	120.00	100.00(Q)
5.307	5.267 (0.970)	105	286586			114.27-	174.27	143.30
5.306	5.267 (0.970)	77	247713			94.81-	154.81	123.87
<hr/>								

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
====	=====	=====	====	=====	=====	=====	=====	=====
41	2,4-Dichlorophenol				CAS #: 120-83-2			
5.350	5.342 (0.978)	162	328720	100.000	80.00-	120.00	100.00(Q)	
5.350	5.342 (0.978)	164	210224		34.34-	94.34	63.95	
5.349	5.342 (0.978)	98	126747		8.30-	68.30	38.56	

42	1,2,4-Trichlorobenzene				CAS #: 120-82-1			
5.430	5.427 (0.993)	180	361380	100.000	80.00-	120.00	100.00(Q)	
5.430	5.427 (0.993)	182	344774		69.17-	129.17	95.40	
5.430	5.427 (0.993)	145	107238		0.41-	60.41	29.67	

*	43 Naphthalene-d8				CAS #: 1146-65-2			
5.470	5.463 (1.000)	136	353834	40.0000	80.00-	120.00	100.00(Q)	
5.470	5.463 (1.000)	68	24970		0.00-	37.51	7.06	

44	Naphthalene				CAS #: 91-20-3			
5.489	5.486 (1.004)	128	972608	100.000	80.00-	120.00	100.00(Q)	
5.489	5.485 (1.004)	129	106452		0.00-	40.78	10.95	
5.489	5.486 (1.004)	127	126273		0.00-	42.17	12.98	

45	4-Chloroaniline				CAS #: 106-47-8			
5.557	5.552 (1.016)	127	398494	100.000	80.00-	120.00	100.00(Q)	
5.557	5.552 (1.016)	129	128021		2.29-	62.29	32.13	
5.556	5.551 (1.016)	65	149190		8.57-	68.57	37.44	

48	Hexachlorobutadiene				CAS #: 87-68-3			
5.656	5.654 (1.034)	225	258102	100.000	80.00-	120.00	100.00(Q)	
5.656	5.654 (1.034)	223	162649		31.81-	91.81	63.02	
5.656	5.654 (1.034)	227	165418		34.78-	94.78	64.09	

51	4-Chloro-3-methylphenol				CAS #: 59-50-7			
6.012	6.009 (1.099)	107	356179	100.000	80.00-	120.00	100.00(Q)	
6.013	6.009 (1.099)	144	82706		0.00-	53.54	23.22	
6.013	6.009 (1.099)	142	261160		43.91-	103.91	73.32	

53	2-Methylnaphthalene				CAS #: 91-57-6			
6.145	6.141 (1.123)	142	668832	100.000	80.00-	120.00	100.00(Q)	
6.145	6.141 (1.123)	141	572330		55.50-	115.50	85.57	

54	1-Methylnaphthalene				CAS #: 90-12-0			
6.250	6.247 (1.142)	142	619216	100.000	80.00-	120.00	100.00(Q)	
6.250	6.247 (1.142)	141	552616		58.78-	118.78	89.24	

55	Hexachlorocyclopentadiene				CAS #: 77-47-4			
6.361	6.360 (0.887)	237	270324	100.000	80.00-	120.00	100.00(Q)	
6.361	6.360 (0.887)	235	167615		33.42-	93.42	62.01	
6.362	6.360 (0.887)	272	32612		0.00-	41.88	12.06	

57	2,4,6-Trichlorophenol				CAS #: 88-06-2			
6.441	6.438 (0.898)	196	250990	100.000	80.00-	120.00	100.00(Q)	
6.441	6.438 (0.898)	198	243328		67.54-	127.54	96.95	
6.441	6.438 (0.898)	200	76184		1.18-	61.18	30.35	

58	2,4,5-Trichlorophenol				CAS #: 95-95-4			
6.477	6.472 (0.903)	196	275406	100.000	80.00-	120.00	100.00(Q)	

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
58	2,4,5-Trichlorophenol (continued)							
6.478	6.472	(0.903)	198	266229		64.33-	124.33	96.67
6.477	6.472	(0.903)	97	162654		27.55-	87.55	59.06
\$ 59	2-Fluorobiphenyl (SURR)							
6.519	6.514	(0.909)	172	846354	100.000	80.00-	120.00	100.00(Q)
6.519	6.514	(0.909)	171	292844		4.90-	64.90	34.60
62	2-Chloronaphthalene							
6.615	6.610	(0.922)	162	706292	100.000	80.00-	120.00	100.00(Q)
6.615	6.610	(0.922)	164	231057		1.75-	61.75	32.71
6.614	6.610	(0.922)	127	276758		8.71-	68.71	39.18
63	2-Nitroaniline							
6.747	6.741	(0.941)	65	247214	100.000	80.00-	120.00	100.00(Q)
6.747	6.741	(0.941)	92	161516		35.13-	95.13	65.33
6.747	6.741	(0.941)	138	222265		59.53-	119.53	89.91
65	Dimethylphthalate							
6.956	6.950	(0.970)	163	810184	100.000	80.00-	120.00	100.00(Q)
6.957	6.950	(0.970)	194	49338		0.00-	35.76	6.09
6.956	6.949	(0.970)	164	82842		0.00-	39.66	10.23
68	Acenaphthylene							
7.024	7.020	(0.979)	152	1135023	100.000	80.00-	120.00	100.00(Q)
7.024	7.020	(0.979)	151	227764		0.00-	50.20	20.07
7.024	7.020	(0.979)	153	148105		0.00-	43.02	13.05
67	2,6-Dinitrotoluene							
7.022	7.015	(0.979)	165	197089	100.000	80.00-	120.00	100.00(Q)
7.022	7.015	(0.979)	89	132419		39.45-	99.45	67.19
7.022	7.016	(0.979)	63	196836		74.66-	134.66	99.87
69	3-Nitroaniline							
7.155	7.146	(0.998)	138	180377	100.000	80.00-	120.00	100.00(Q)
7.155	7.146	(0.998)	108	27205		0.00-	42.35	15.08
7.155	7.145	(0.998)	92	233460		104.62-	164.62	129.43
* 70	Acenaphthene-d10							
7.172	7.167	(1.000)	164	229070	40.0000	80.00-	120.00	100.00(Q)
7.172	7.168	(1.000)	162	215669		66.12-	126.12	94.15
7.172	7.167	(1.000)	160	97528		13.21-	73.21	42.58
71	Acenaphthene							
7.206	7.201	(1.005)	154	643020	100.000	80.00-	120.00	100.00(Q)
7.206	7.200	(1.005)	153	684148		77.18-	137.18	106.40
7.206	7.200	(1.005)	152	328975		21.21-	81.21	51.16
72	2,4-Dinitrophenol							
7.250	7.243	(1.011)	184	122850	100.000	80.00-	120.00	100.00(Q)
7.249	7.242	(1.011)	63	92703		48.18-	108.18	75.46
7.250	7.242	(1.011)	154	80607		33.05-	93.05	65.61

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.313	7.303 (1.020)	109	161695	100.000		80.00-	120.00	100.00(Q)
7.313	7.303 (1.020)	139	150173			61.80-	121.80	92.87
7.313	7.303 (1.020)	65	182785			80.41-	140.41	113.04
7.360	7.355 (1.026)	168	986684	100.000		80.00-	120.00	100.00(Q)
7.360	7.355 (1.026)	139	405946			10.69-	70.69	41.14
7.400	7.392 (1.032)	165	244710	100.000		80.00-	120.00	100.00(Q)
7.400	7.392 (1.032)	63	127841			23.55-	83.55	52.24
7.400	7.392 (1.032)	89	200447			51.82-	111.82	81.91
7.647	7.640 (1.066)	149	827266	100.000		80.00-	120.00	100.00(Q)
7.647	7.640 (1.066)	177	183366			0.00-	51.79	22.17
7.647	7.640 (1.066)	150	102638			0.00-	42.28	12.41
7.696	7.690 (1.073)	166	902841	100.000		80.00-	120.00	100.00(Q)
7.696	7.690 (1.073)	165	837162			61.04-	121.04	92.73
7.696	7.690 (1.073)	167	121632			0.00-	43.06	13.47
7.765	7.750 (1.083)	138	164465	100.000		80.00-	120.00	100.00(Q)
7.764	7.749 (1.083)	92	95924			30.30-	90.30	58.32
7.764	7.749 (1.083)	108	187900			85.44-	145.44	114.25
7.803	7.790 (0.907)	198	173788	100.000		80.00-	120.00	100.00(Q)
7.822	7.789 (0.909)	51	111329			21.07-	81.07	64.06
7.802	7.789 (0.907)	105	78100			14.43-	74.43	44.94
7.823	7.814 (0.909)	169	542509	100.000		80.00-	120.00	100.00(Q)
7.823	7.815 (0.909)	168	376218			41.33-	101.33	69.35
7.823	7.815 (0.909)	167	191113			5.93-	65.93	35.23
7.851	7.845 (1.095)	77	1001320	100.000		80.00-	120.00	100.00(Q)
7.851	7.845 (1.095)	105	127710			0.00-	44.08	12.75
7.851	7.845 (1.095)	182	214286			0.00-	53.69	21.40
7.953	7.946 (1.109)	330	323475	200.000		80.00-	120.00	100.00(Q)
7.953	7.946 (1.109)	332	314831			65.21-	125.21	97.33
7.952	7.945 (1.109)	141	124942			10.78-	70.78	38.62

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
8.168	8.163 (0.949)	248	270409	100.000		80.00-	120.00	100.00(Q)
8.168	8.163 (0.949)	250	257712			66.63-	126.63	95.30
8.167	8.162 (0.949)	141	205129			49.24-	109.24	75.86

93	4-Bromophenylphenylether				CAS #: 101-55-3			
8.313	8.307 (0.966)	284	304917	100.000		80.00-	120.00	100.00(Q)
8.312	8.307 (0.966)	142	116939			10.52-	70.52	38.35
8.313	8.307 (0.966)	249	95397			1.60-	61.60	31.29

94	Hexachlorobenzene				CAS #: 118-74-1			
8.486	8.480 (0.986)	266	199373	100.000		80.00-	120.00	100.00(Q)
8.486	8.481 (0.986)	264	126886			33.54-	93.54	63.64
8.486	8.481 (0.986)	268	127425			34.39-	94.39	63.91

* 100	Phenanthrene-d10				CAS #: 1517-22-2			
8.607	8.604 (1.000)	188	408314	40.0000		80.00-	120.00	100.00(Q)
8.606	8.604 (1.000)	94	43195			0.00-	40.39	10.58
8.606	8.603 (1.000)	80	45934			0.00-	41.55	11.25

101	Phenanthrene				CAS #: 85-01-8			
8.632	8.626 (1.003)	178	1162105	100.000		80.00-	120.00	100.00(Q)
8.632	8.626 (1.003)	179	177632			0.00-	45.20	15.29
8.633	8.626 (1.003)	176	223413			0.00-	48.69	19.22

103	Anthracene				CAS #: 120-12-7			
8.676	8.670 (1.008)	178	1043737	100.000		80.00-	120.00	100.00(Q)
8.676	8.670 (1.008)	179	160194			0.00-	45.53	15.35
8.676	8.670 (1.008)	176	192897			0.00-	49.11	18.48

104	Carbazole				CAS #: 86-74-8			
8.836	8.830 (1.027)	167	1020475	100.000		80.00-	120.00	100.00(Q)
8.836	8.830 (1.027)	139	138212			0.00-	43.72	13.54
8.836	8.830 (1.027)	83	92447			0.00-	39.70	9.06

105	Di-n-butylphthalate				CAS #: 84-74-2			
9.230	9.227 (1.072)	149	1408418	100.000		80.00-	120.00	100.00(Q)
9.230	9.227 (1.072)	150	128514			0.00-	39.16	9.12
9.230	9.227 (1.072)	104	91016			0.00-	36.36	6.46

109	Fluoranthene				CAS #: 206-44-0			
9.802	9.797 (1.139)	202	1276413	100.000		80.00-	120.00	100.00(Q)
9.801	9.796 (1.139)	101	149374			0.00-	41.60	11.70
9.802	9.797 (1.139)	203	221164			0.00-	47.37	17.33

111	Pyrene				CAS #: 129-00-0			
10.022	10.016 (0.893)	202	1292195	100.000		80.00-	120.00	100.00(Q)
10.022	10.016 (0.893)	200	271374			0.00-	50.33	21.00
10.022	10.016 (0.893)	203	233459			0.00-	47.92	18.07

\$ 112	Terphenyl-d14 (SURR)				CAS #: 1718-51-0			
10.182	10.179 (0.908)	244	1044672	100.000		80.00-	120.00	100.00(Q)
10.182	10.178 (0.908)	122	110658			0.00-	40.67	10.59

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
=====	=====	=====	====	=====	=====	=====	=====	=====
\$ 112 Terphenyl-d14 (SURR) (continued)								
10.182	10.179	(0.908)	212	83380		0.00-	37.92	7.98

118 Butylbenzylphthalate					CAS #:	85-68-7		
10.697	10.690	(0.954)	149	665257	100.000	80.00-	120.00	100.00(Q)
10.696	10.691	(0.954)	91	497468		45.72-	105.72	74.78
10.697	10.692	(0.954)	206	146822		0.00-	51.71	22.07

120 Benzo[a]anthracene					CAS #:	56-55-3		
11.200	11.194	(0.998)	228	1333267	100.000	80.00-	120.00	100.00(Q)
11.200	11.194	(0.998)	229	261274		0.00-	49.13	19.60
11.200	11.194	(0.998)	226	357342		0.00-	57.06	26.80

* 121 Chrysene-d12					CAS #:	1719-03-5		
11.217	11.211	(1.000)	240	477431	40.0000	80.00-	120.00	100.00(Q)
11.217	11.210	(1.000)	120	48689		0.00-	40.02	10.20
11.218	11.210	(1.000)	236	117691		0.00-	54.50	24.65

123 Chrysene					CAS #:	218-01-9		
11.245	11.238	(1.002)	228	1307164	100.000	80.00-	120.00	100.00(Q)
11.245	11.238	(1.002)	226	382506		0.00-	59.08	29.26
11.245	11.238	(1.002)	229	257753		0.00-	49.34	19.72

124 Bis-2-Ethylhexylphthalate					CAS #:	117-81-7		
11.278	11.275	(1.005)	149	925492	100.000	80.00-	120.00	100.00(Q)
11.278	11.276	(1.005)	167	276016		0.00-	59.84	29.82
11.279	11.276	(1.005)	279	70988		0.00-	37.67	7.67

125 Di-n-octylphthalate					CAS #:	117-84-0		
11.847	11.842	(0.945)	149	1629218	100.000	80.00-	120.00	100.00(Q)
11.848	11.843	(0.945)	167	25846		0.00-	31.49	1.59
11.847	11.842	(0.945)	43	134208		0.00-	38.92	8.24

127 Benzo[b]fluoranthene					CAS #:	205-99-2		
12.206	12.198	(0.974)	252	1085935	100.000	80.00-	120.00	100.00(Q)
12.206	12.198	(0.973)	253	238656		0.00-	52.25	21.98
12.205	12.219	(0.973)	125	107264		0.00-	48.56	9.88

128 Benzo[k]fluoranthene					CAS #:	207-08-9		
12.229	12.220	(0.975)	252	1415956	100.000	80.00-	120.00	100.00(Q)
12.229	12.220	(0.975)	253	314925		0.00-	52.11	22.24
12.229	12.219	(0.975)	125	116562		0.00-	46.79	8.23

129 Benzo[a]pyrene					CAS #:	50-32-8		
12.492	12.484	(0.996)	252	1136843	100.000	80.00-	120.00	100.00(Q)
12.492	12.484	(0.996)	253	255906		0.00-	51.58	22.51
12.491	12.484	(0.996)	125	112532		0.00-	39.66	9.90

* 130 Perylene-d12					CAS #:	1520-96-3		
12.538	12.532	(1.000)	264	395905	40.0000	80.00-	120.00	100.00(Q)
12.538	12.533	(1.000)	260	91897		0.00-	52.70	23.21
12.538	12.532	(1.000)	265	86646		0.00-	52.11	21.89

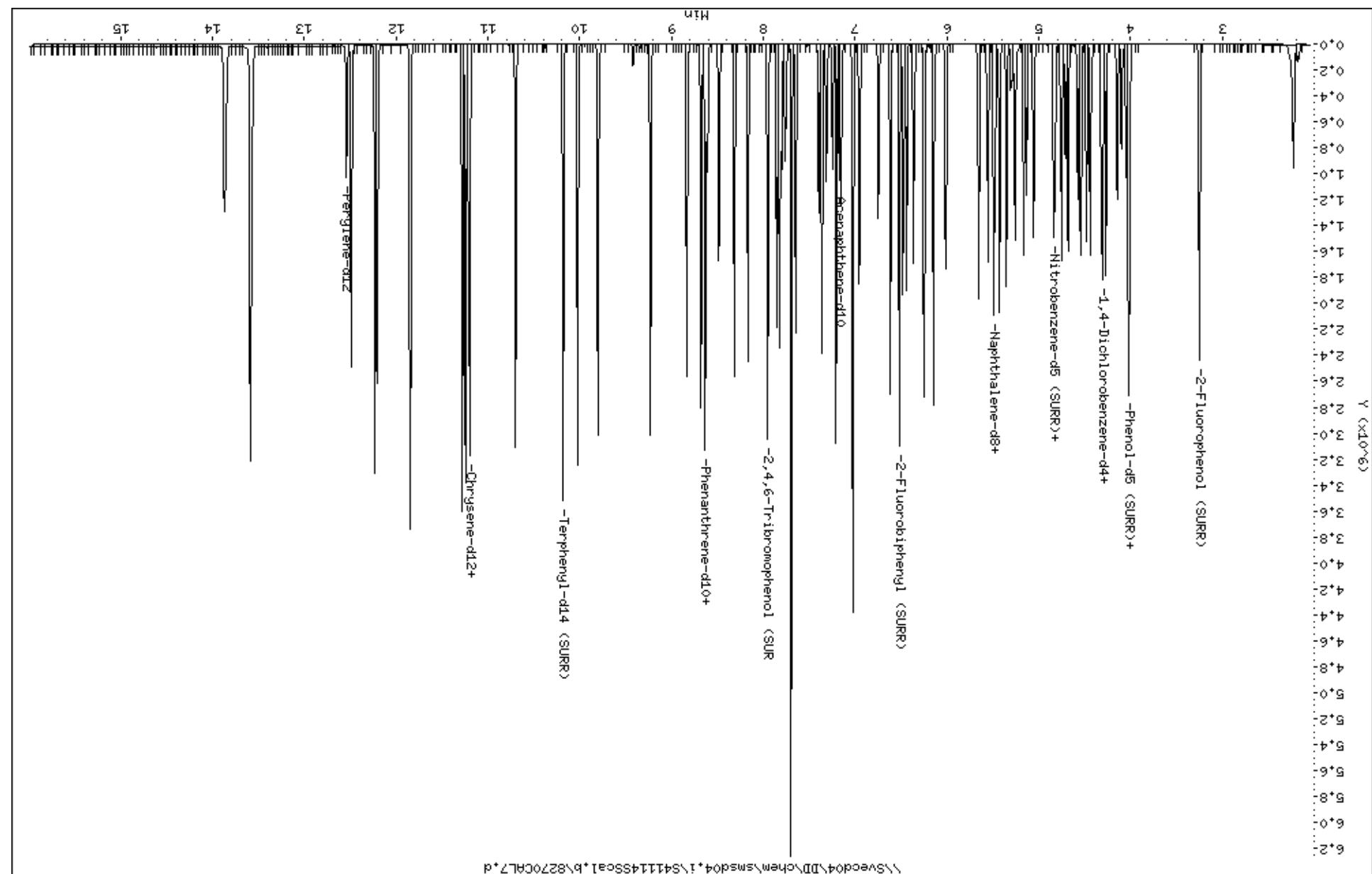
RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO
				CAL-AMT	ON-COL		
13.585	13.569 (1.083)	276	1235180	100.000	80.00- 120.00	100.00(Q)	
13.587	13.570 (1.084)	138	285930		0.00- 53.00	23.15	
13.586	13.570 (1.084)	277	316627		0.00- 55.19	25.63	

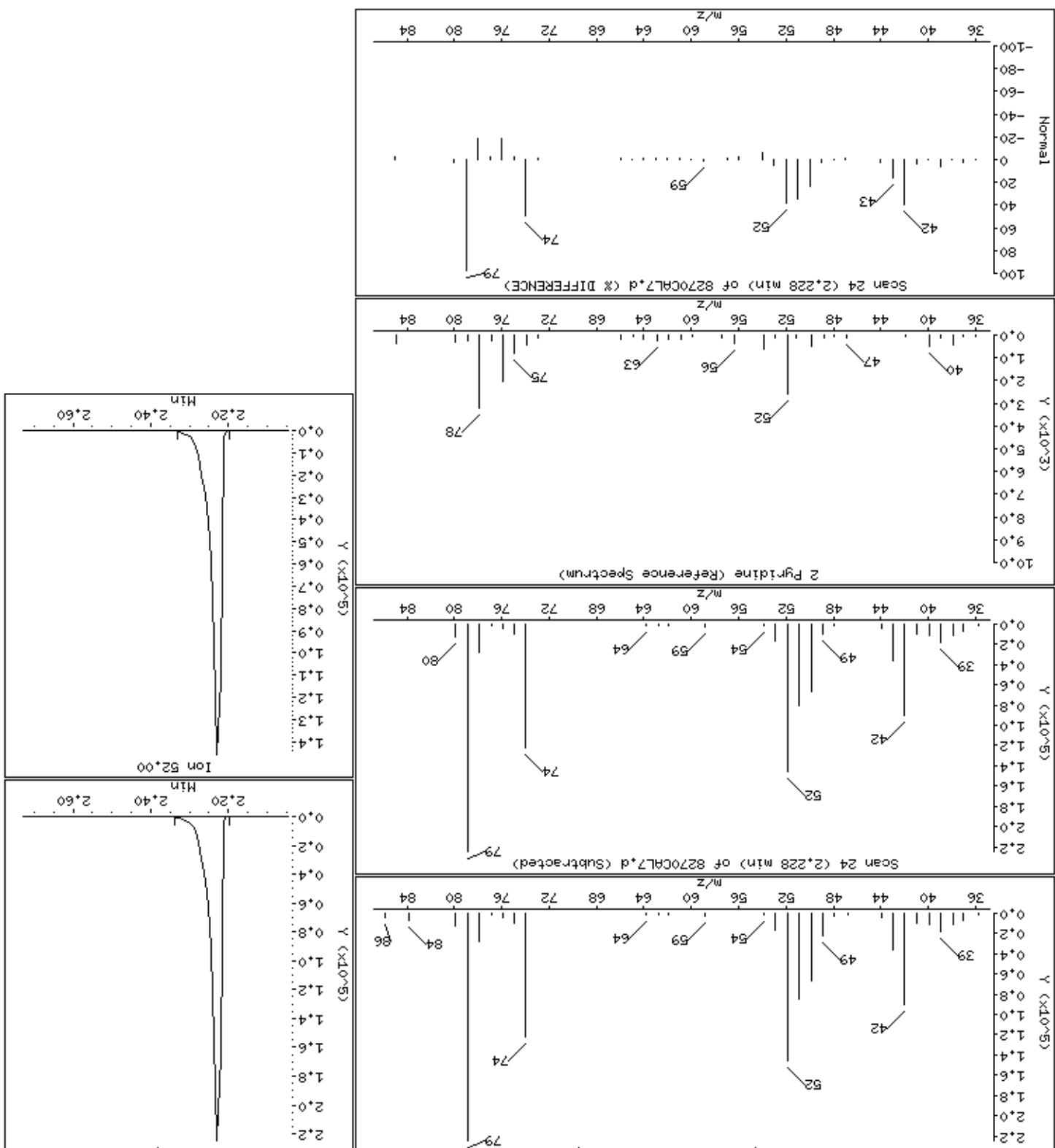
13.590	13.574 (1.084)	278	1074724	100.000	80.00- 120.00	100.00(Q)	
13.589	13.573 (1.084)	139	158447		0.00- 45.33	14.74	
13.590	13.574 (1.084)	279	253107		0.00- 53.44	23.55	

13.869	13.852 (1.106)	276	890522	100.000	80.00- 120.00	100.00(Q)	
13.868	13.852 (1.106)	138	170335		0.00- 48.86	19.13	
13.869	13.852 (1.106)	277	209872		0.00- 53.33	23.57	

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.





Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

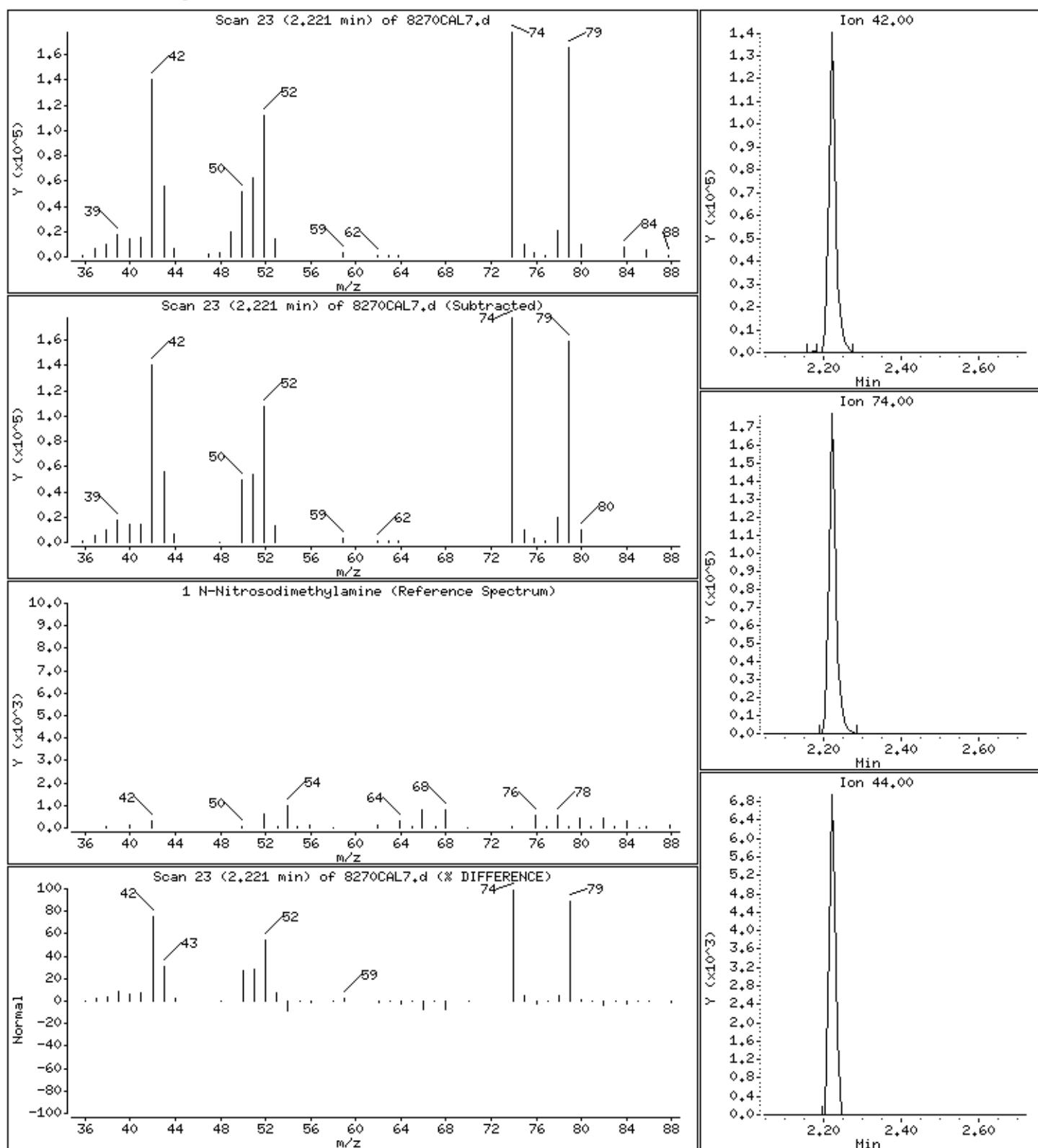
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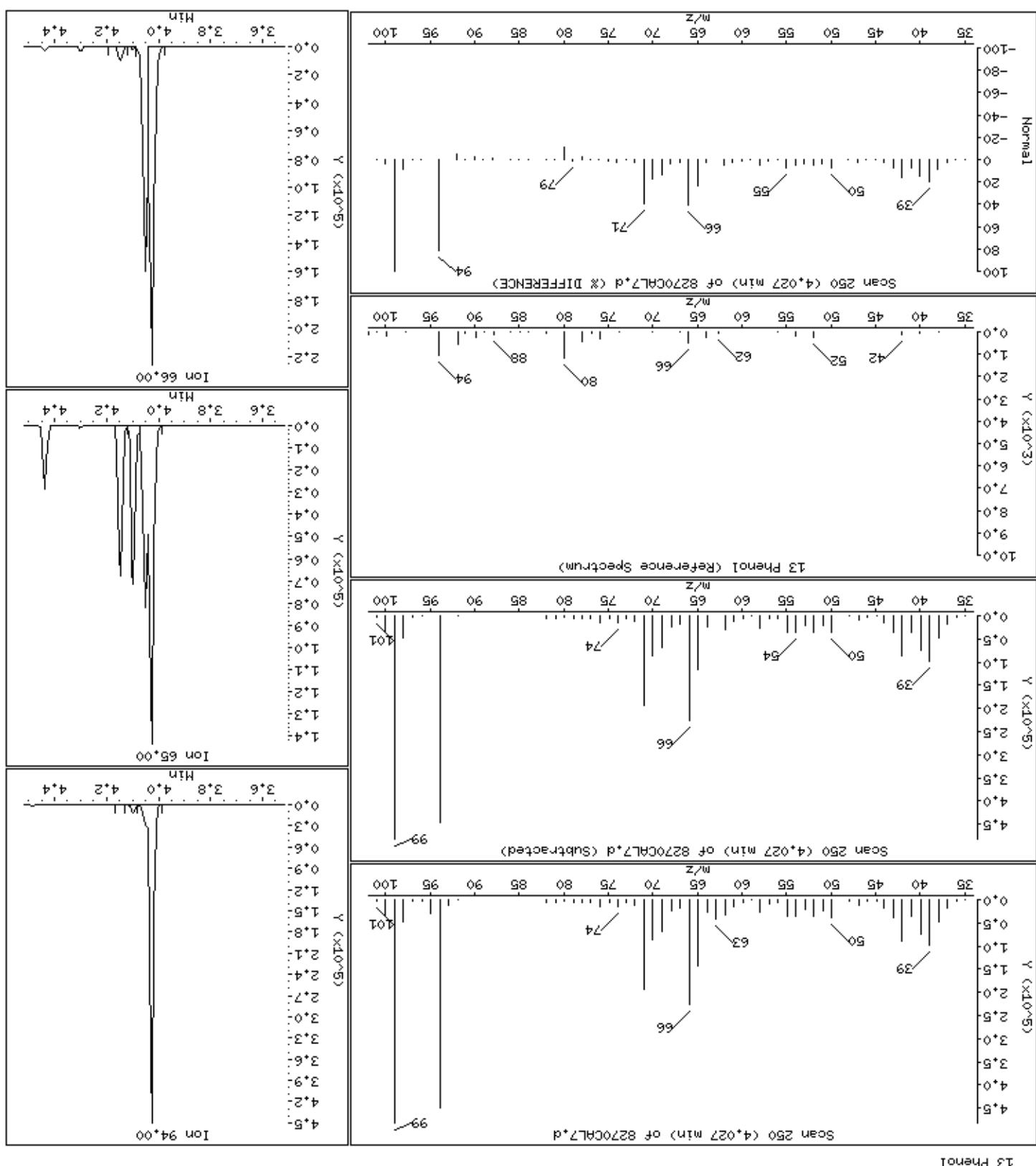
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Column phase: HPMS-5

Column diameter: 0.25

1 N-Nitrosodimethylamine





Column phase: HPS-5

Operator: M

Sample Info: 47763

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ST aged

Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

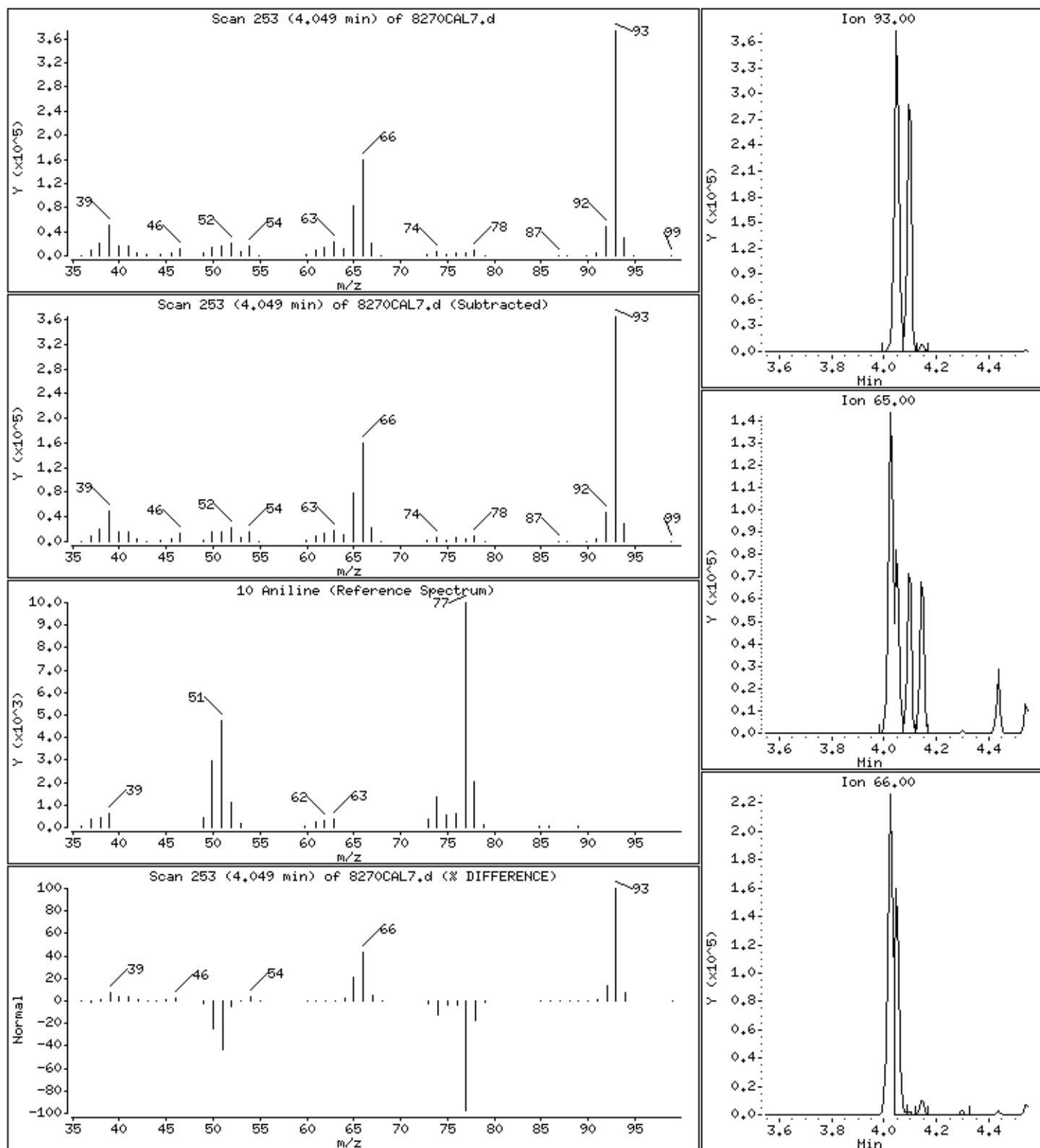
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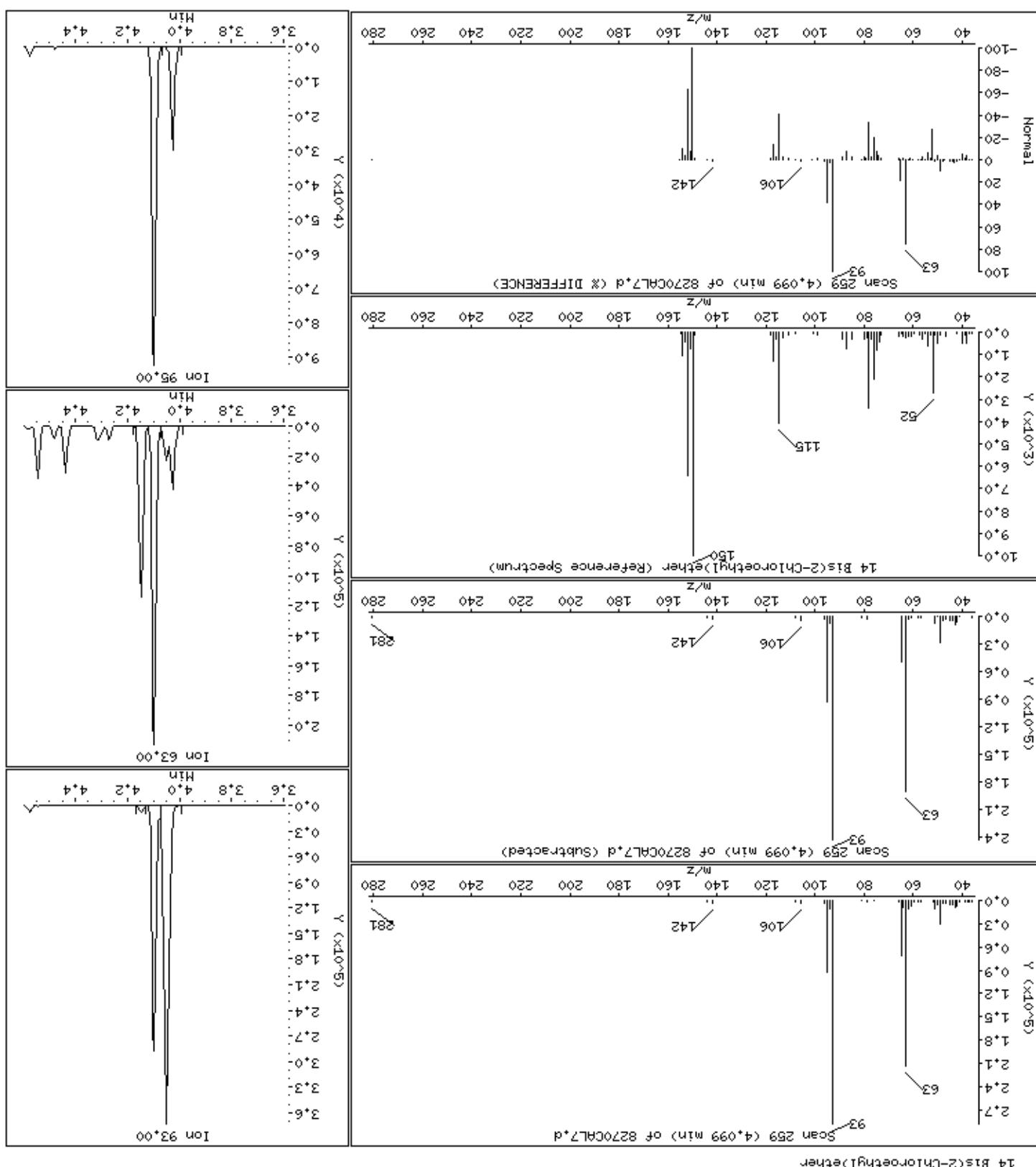
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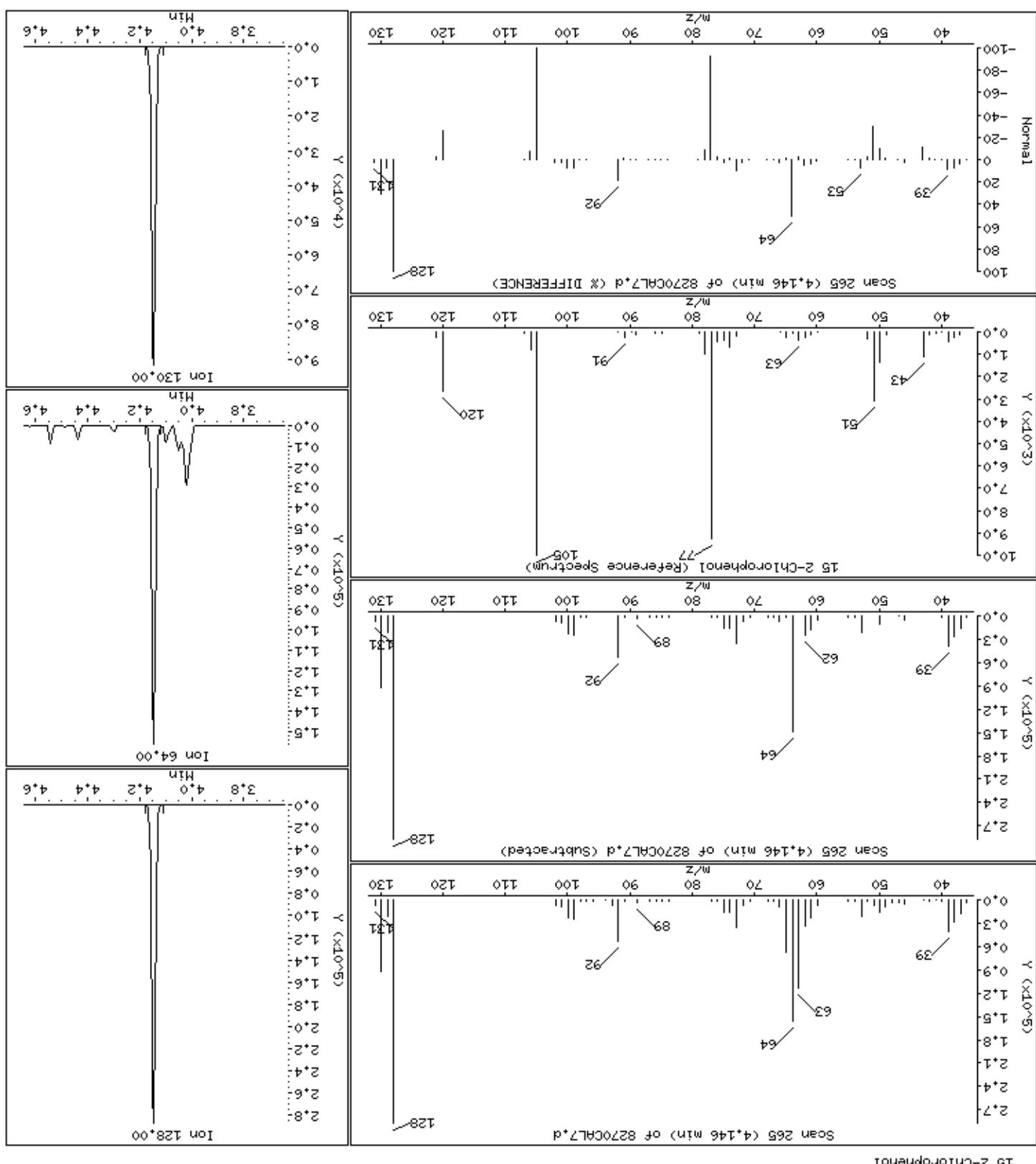
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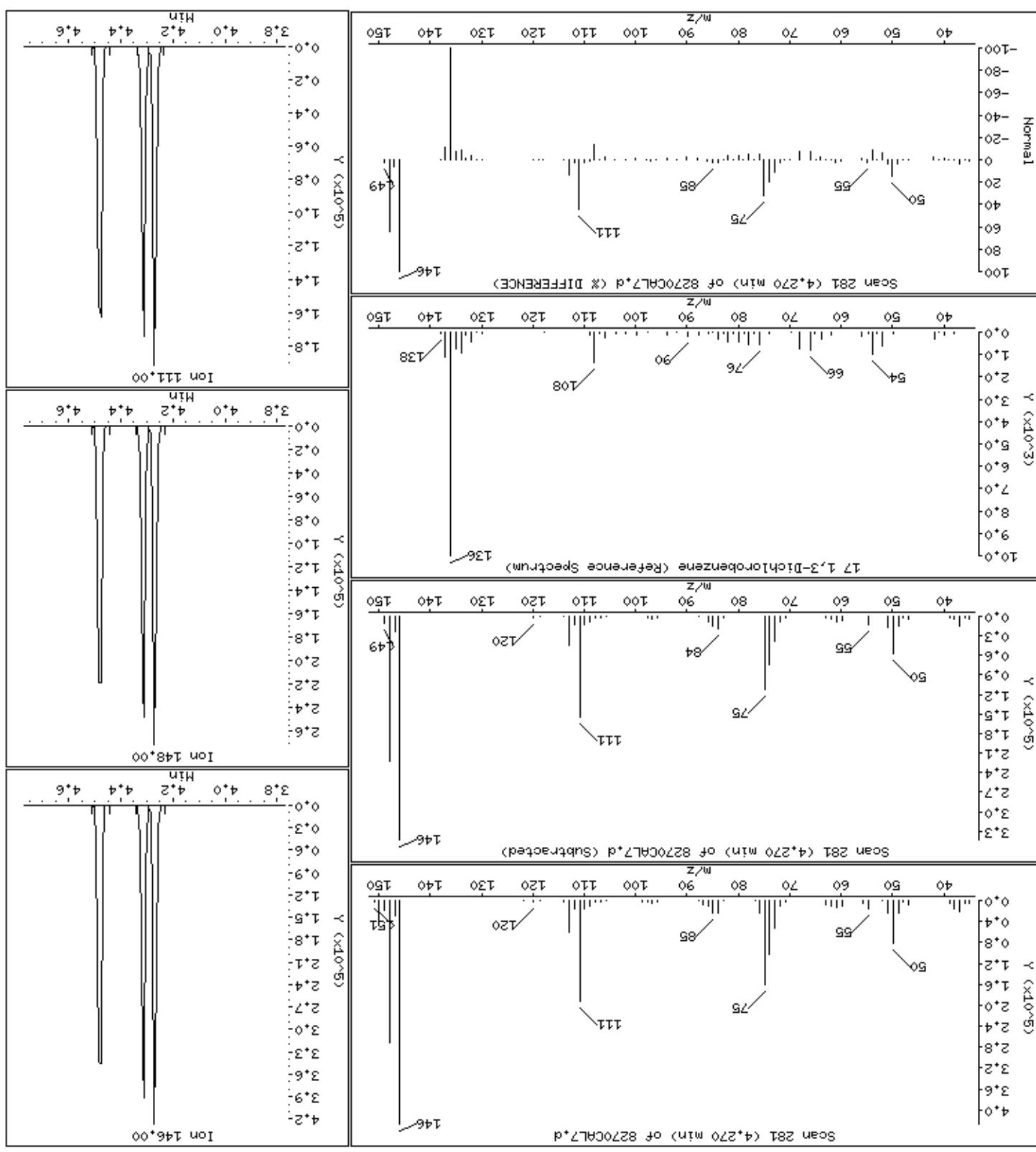
10 Aniline







97 228



Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

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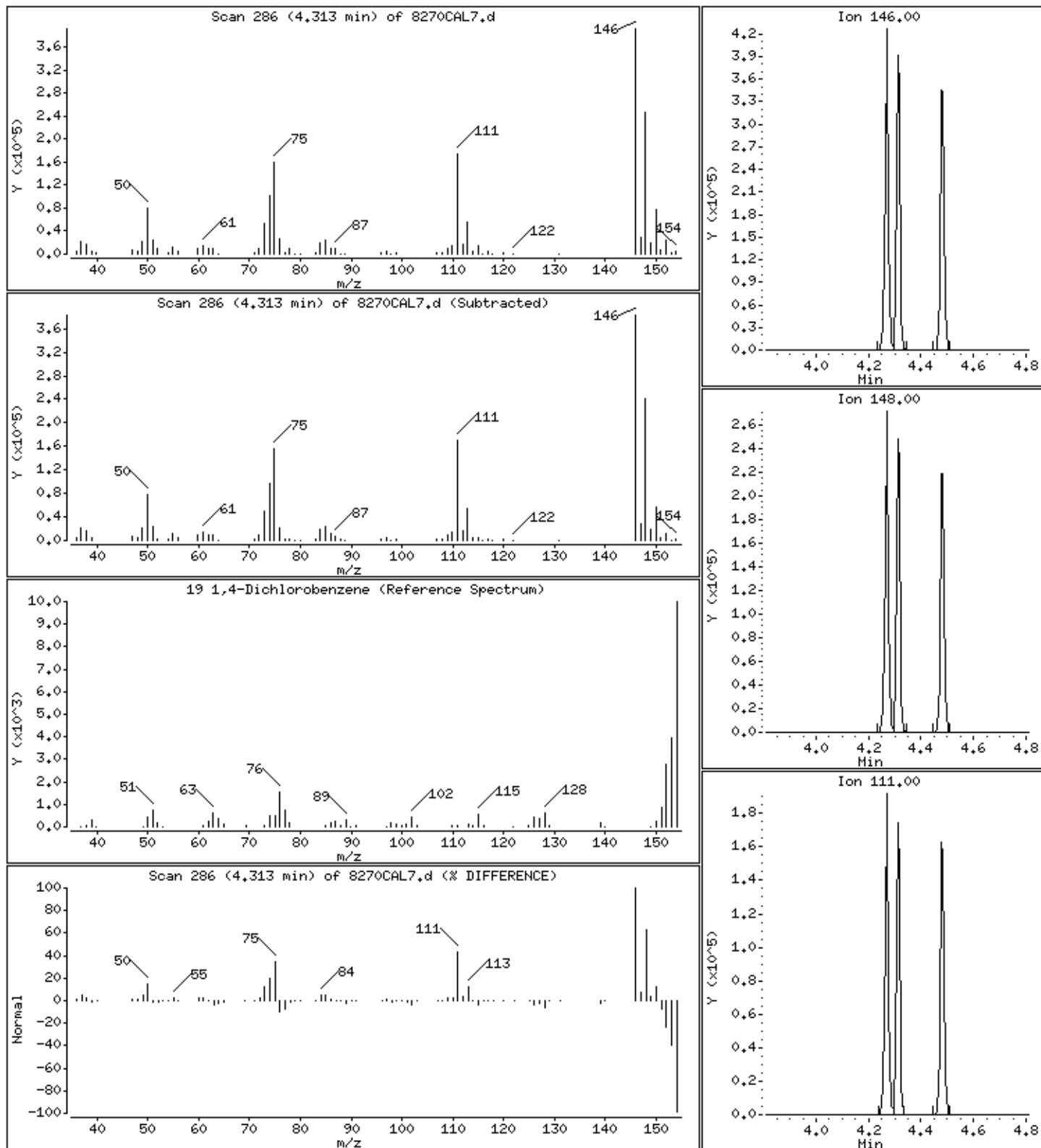
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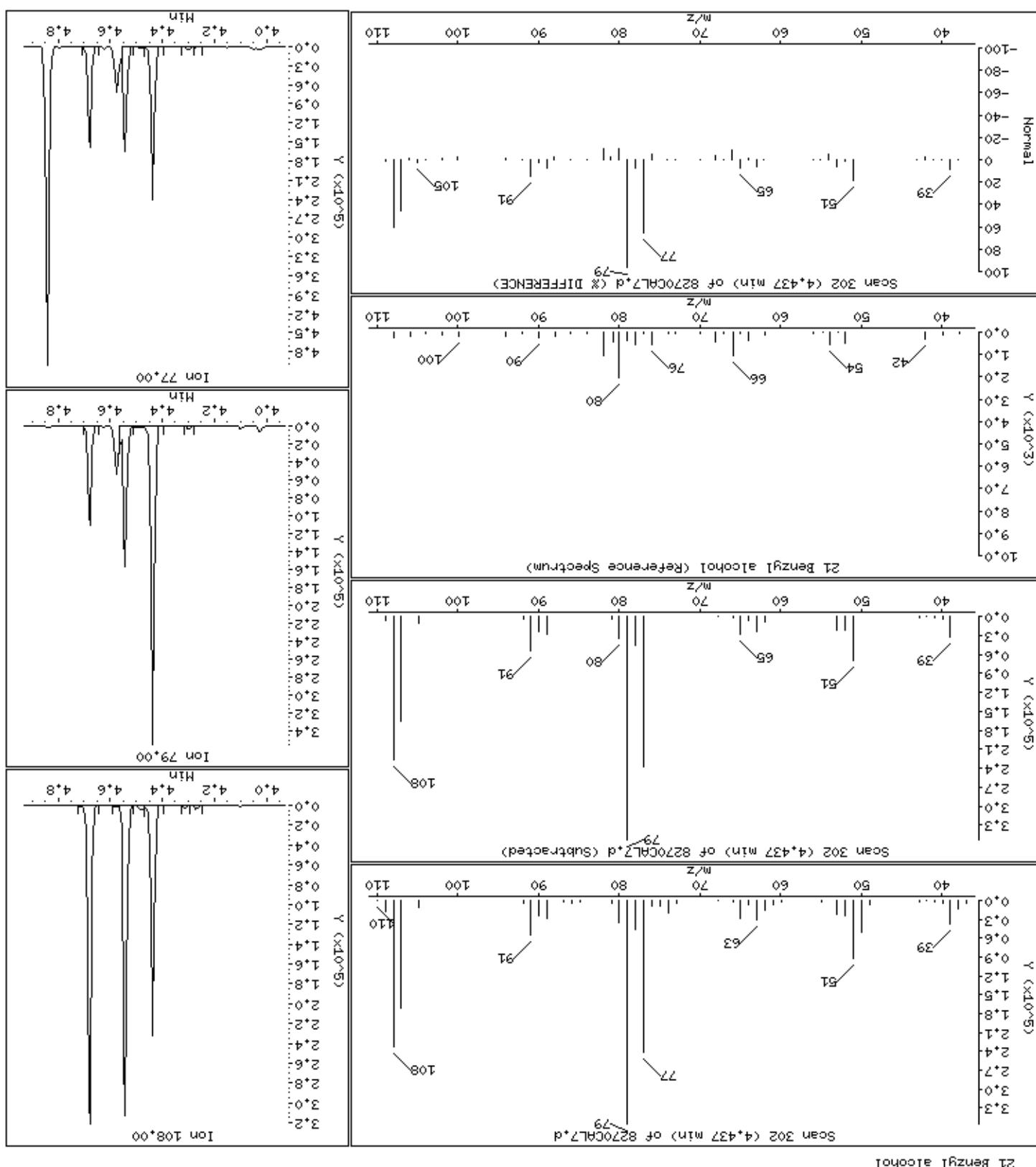
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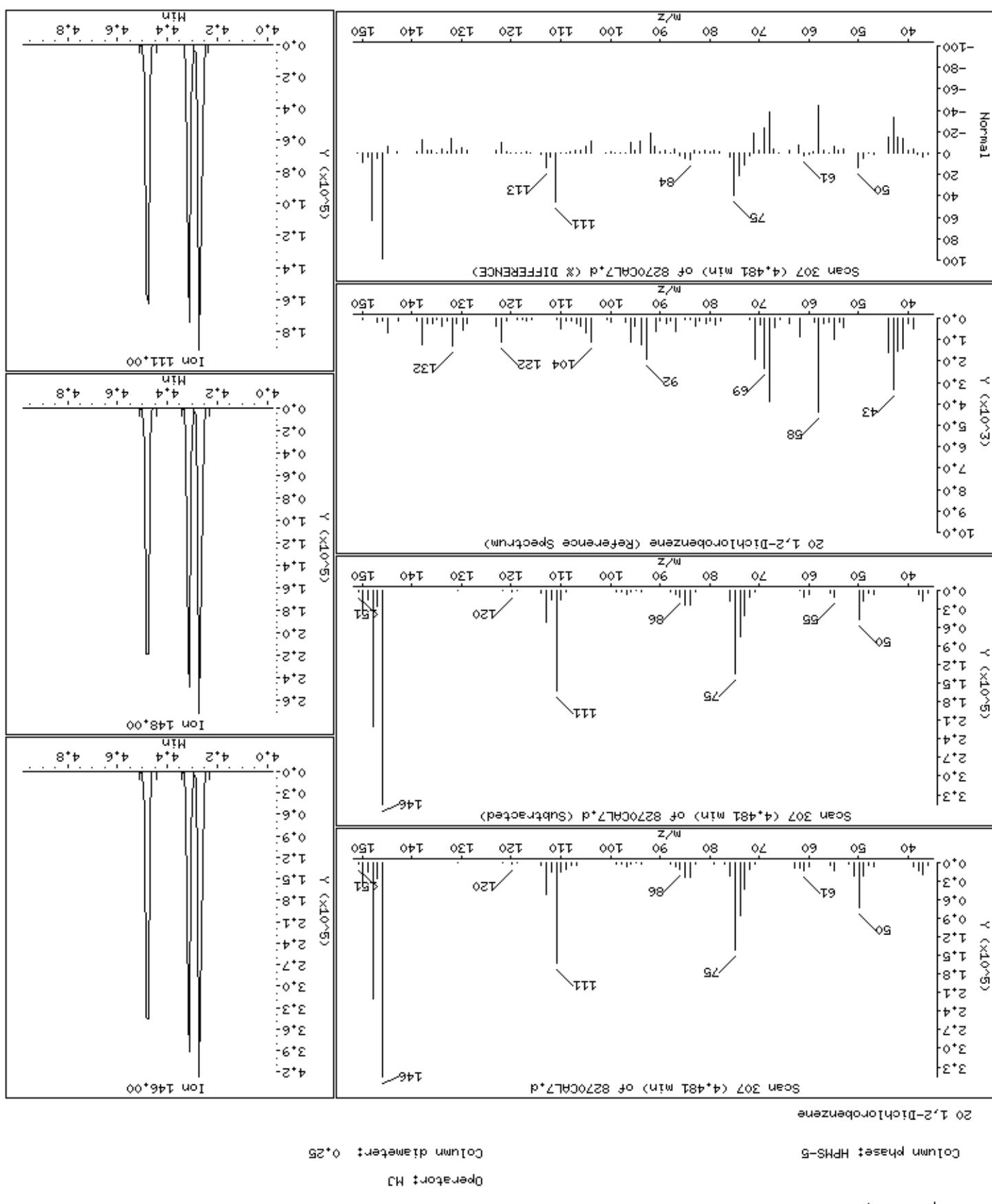
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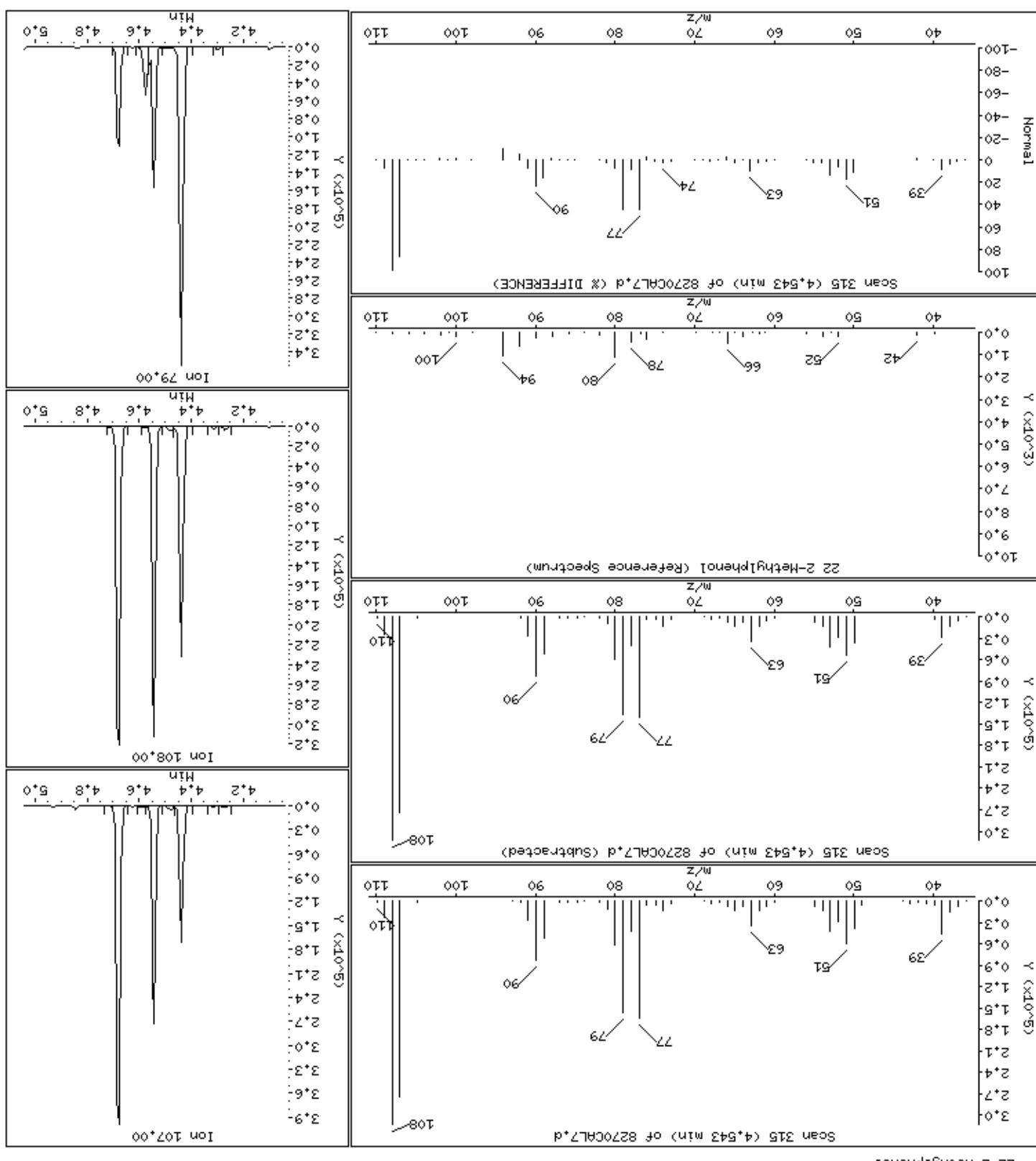
19 1,4-Dichlorobenzene

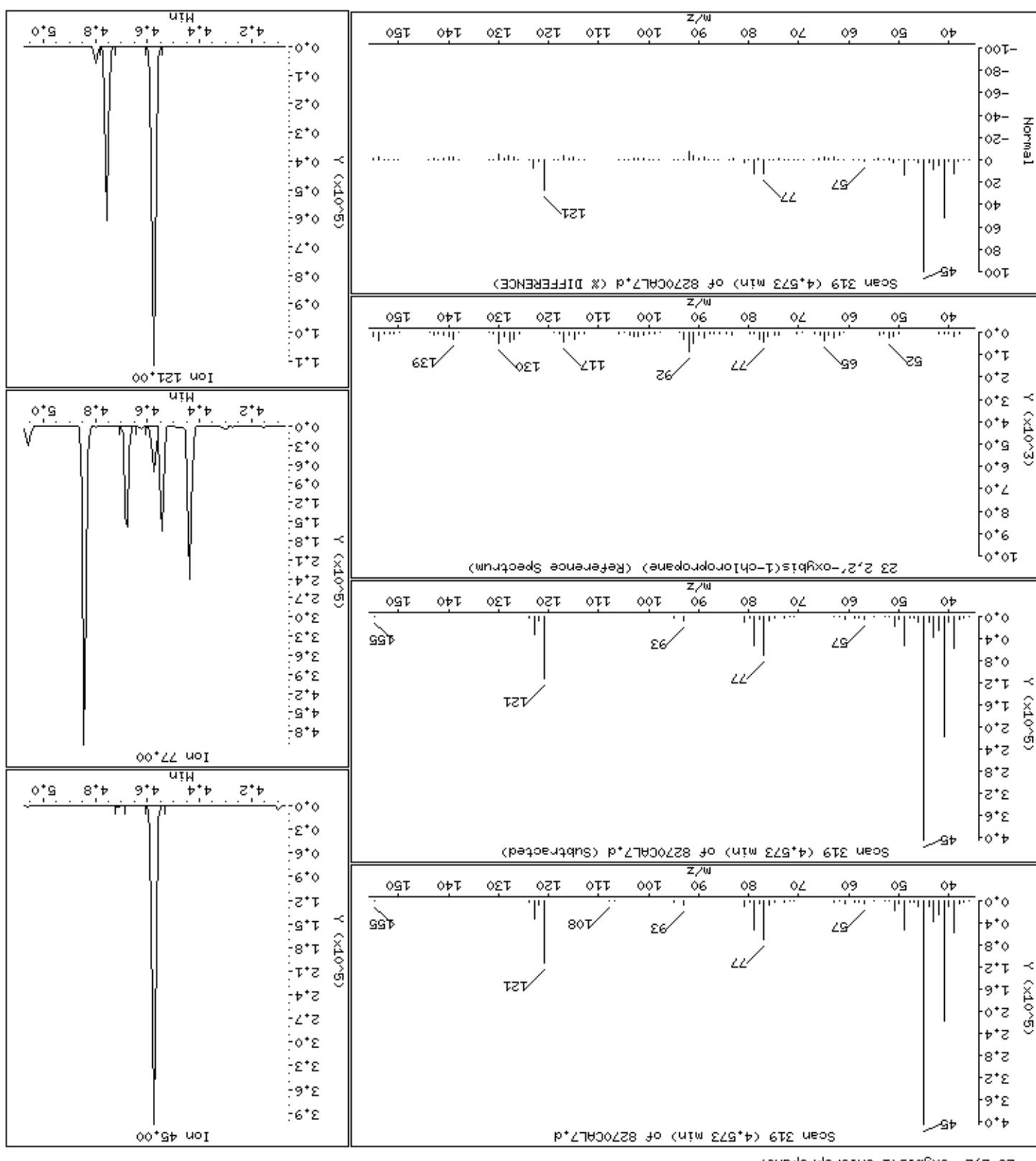




6T 225d



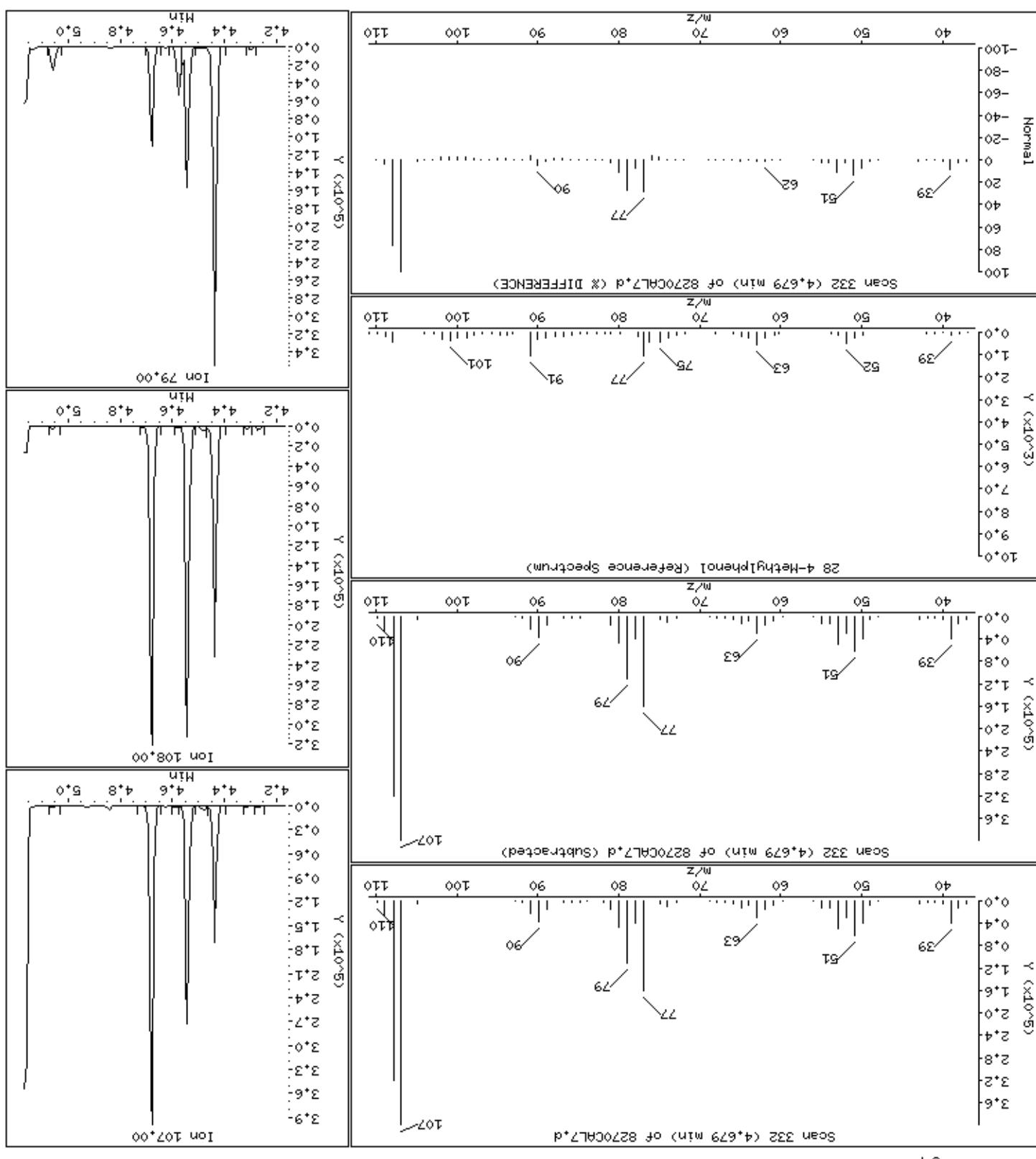




Sample Info: 47763
Client ID: 8270CAL7
Instrument: smsd4.i
Data File: \ISVedco4\DD\chem\smssd4\1\84111455001.b\8270CAL7.d
Page 22

Column phase: HPMs-5
Operatator: HJ
Column diameter: 0.25

Date : 14-NOV-2012 22:40
Instrument ID: smsd4.i
Client ID: 8270CAL7
Sample Info: 47763
Page 22



Column phase: HPMs-5 Column diameter: 0.25

Operator: M

370 [View document](#)

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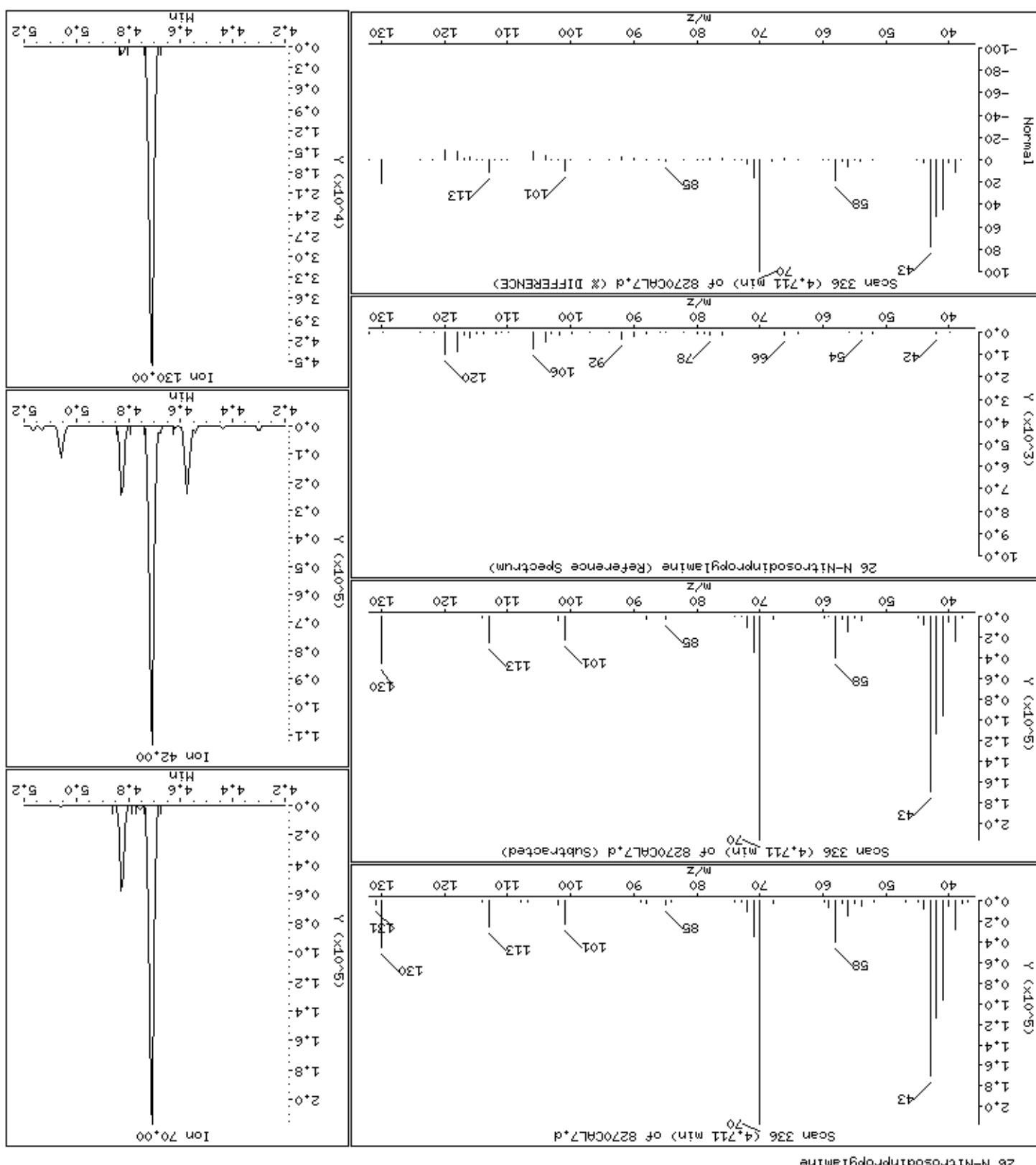
Sample Info: 47763

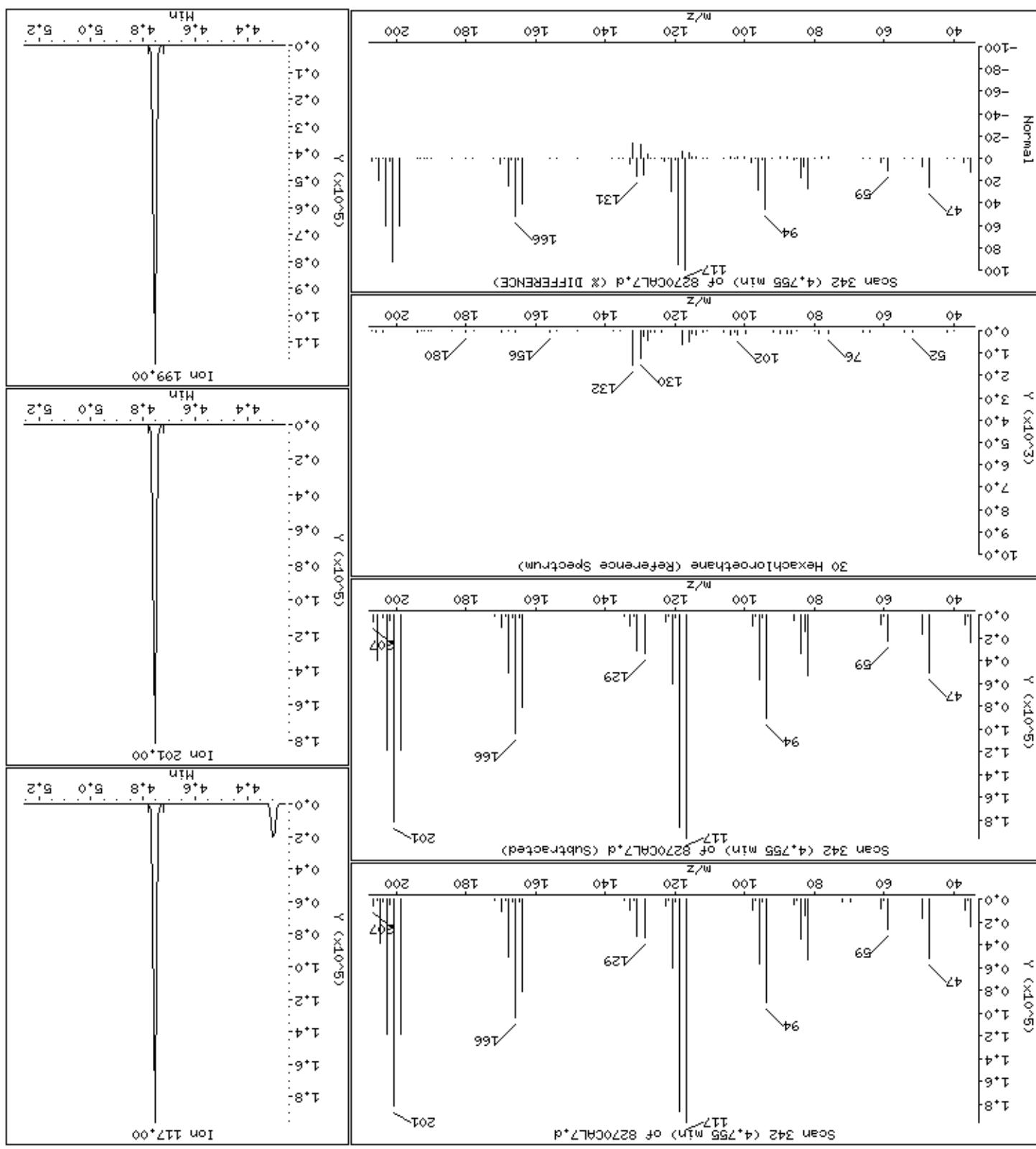
Digitized by srujanika@gmail.com

1

Instrument: smd04+1

22 aged





Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

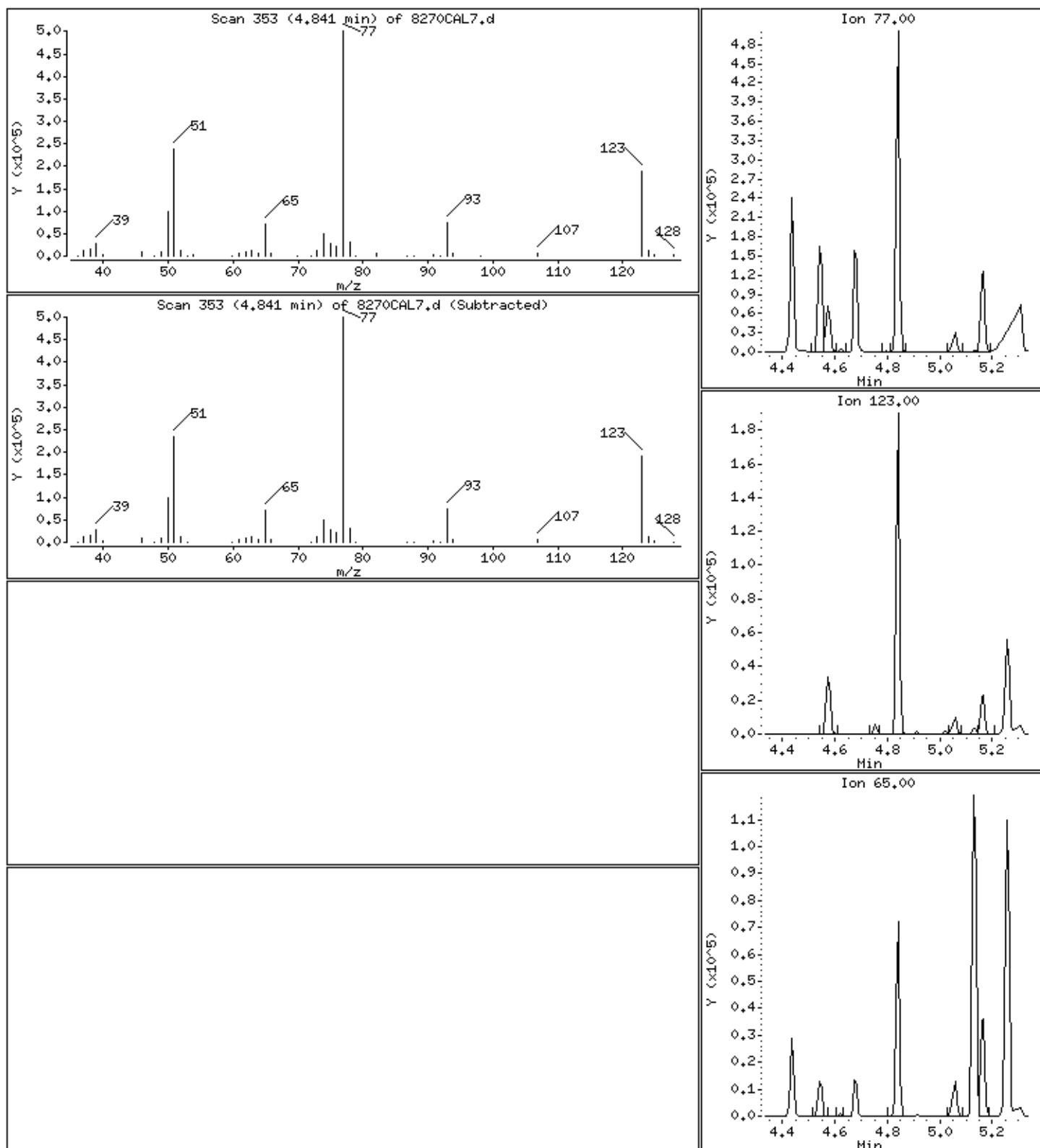
Sample Info: 47763

Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

32 Nitrobenzene



Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

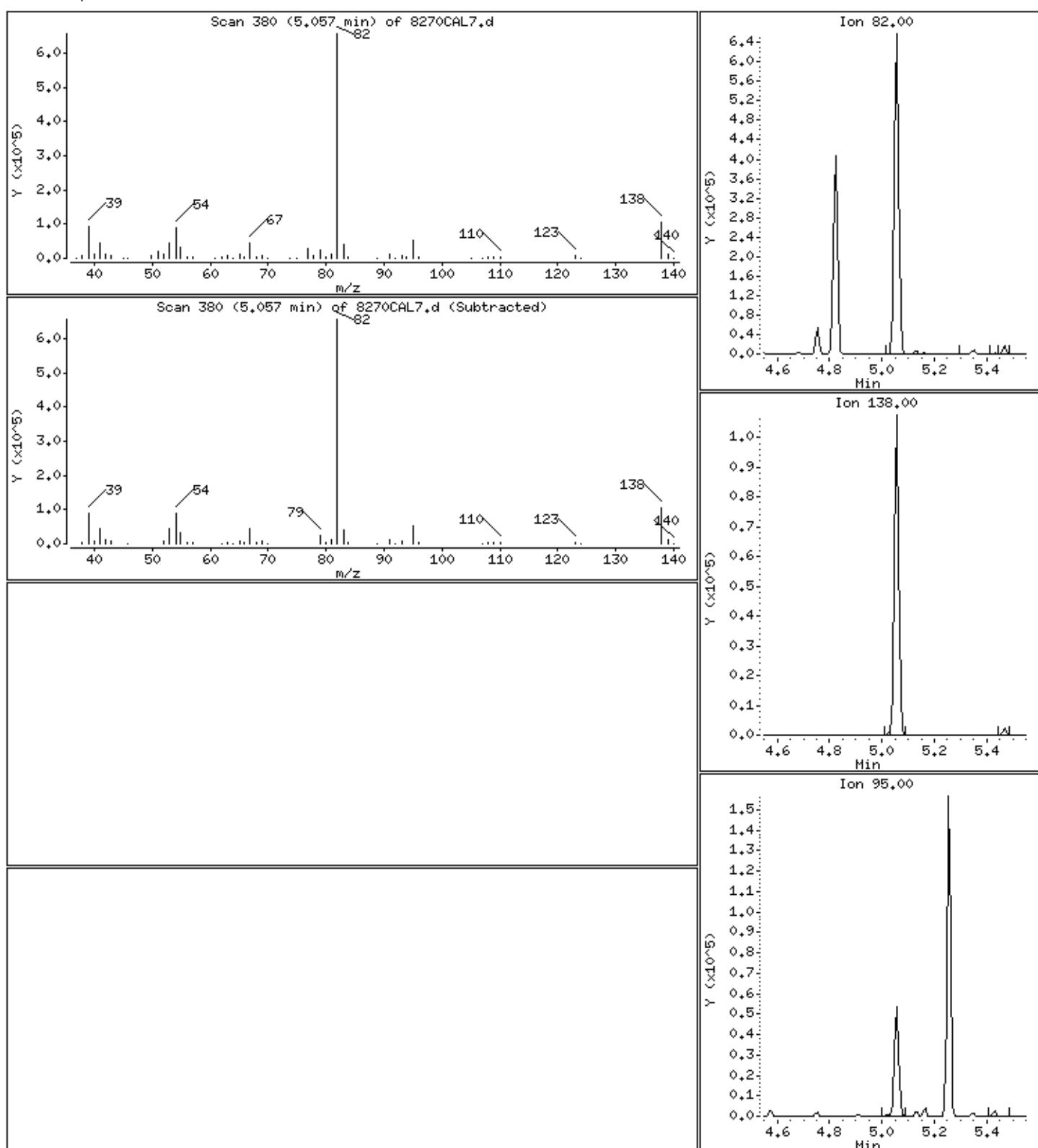
Sample Info: 47763

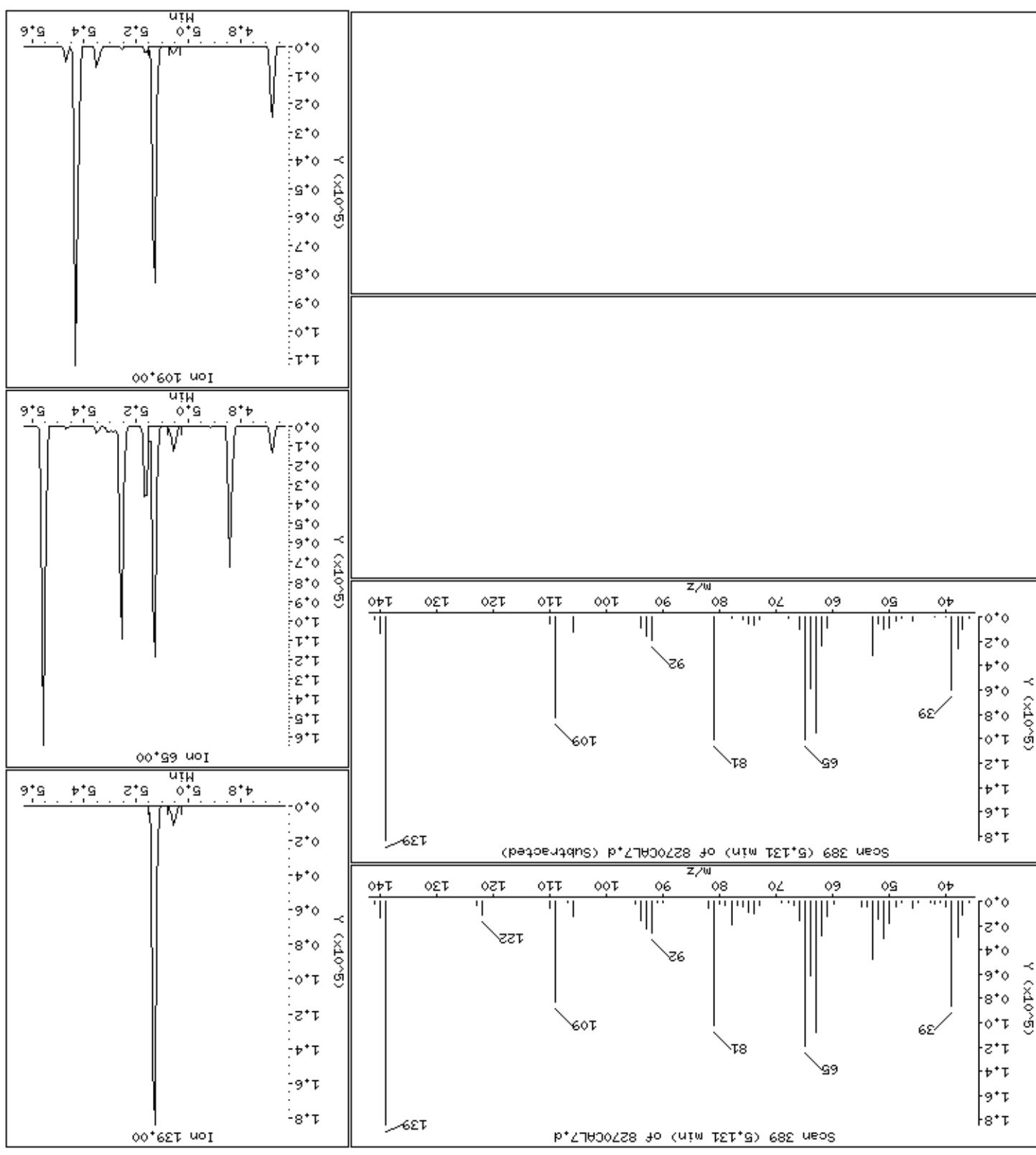
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

34 Isophorone





82 288

Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

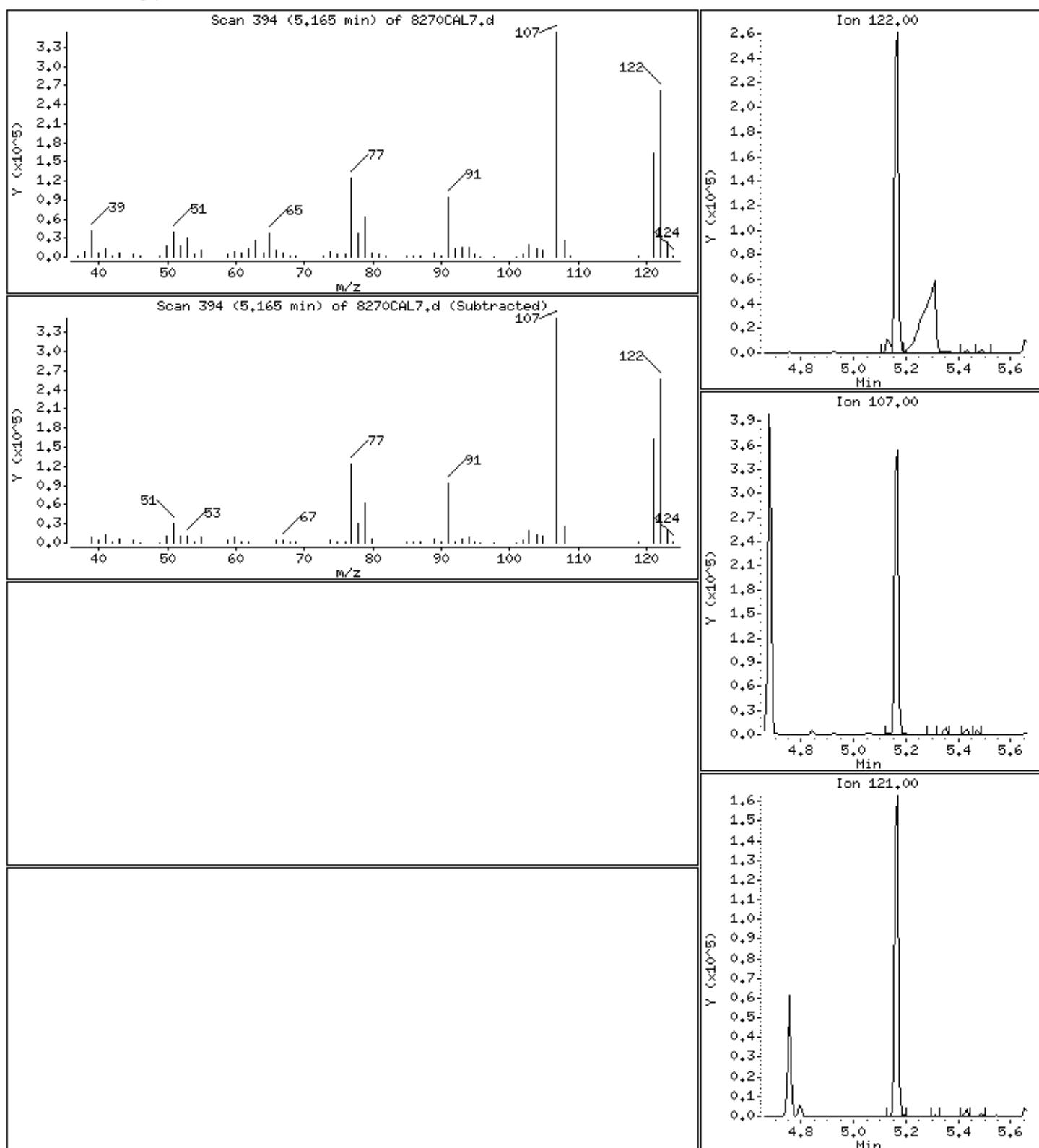
Sample Info: 47763

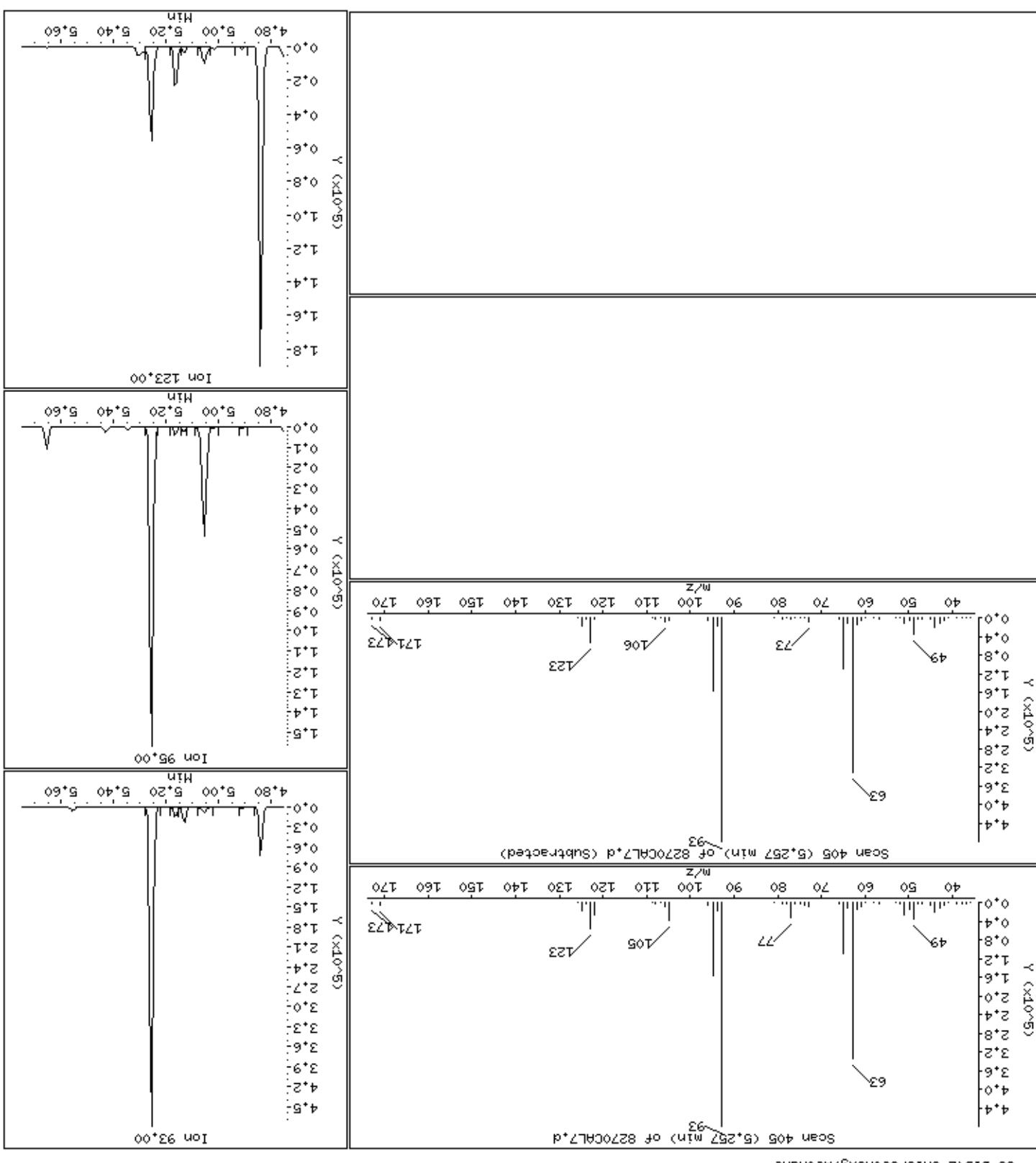
Operator: MJ

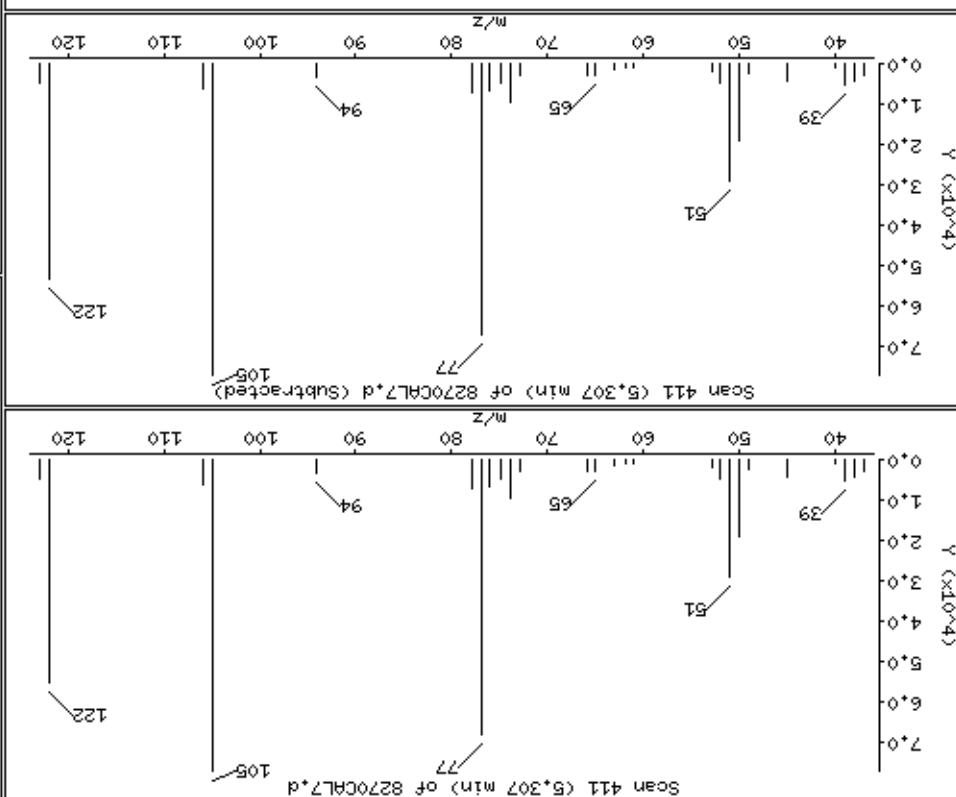
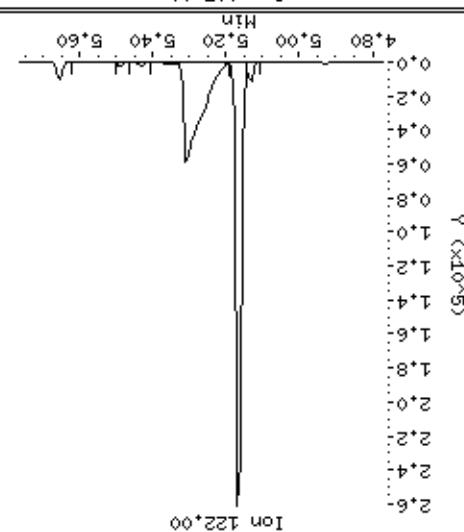
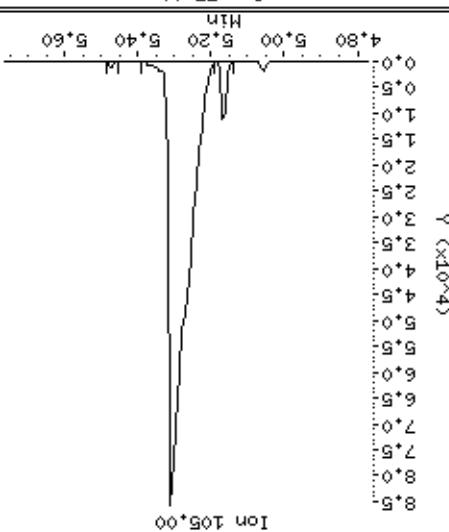
Column phase: HPMS-5

Column diameter: 0.25

36 2,4-Dimethylphenol







40 Benzotric Acid

Column phase: HPMs-5

0.25

Operatior: H3

Column diameter: 0.25

Instrument: smsd4+i

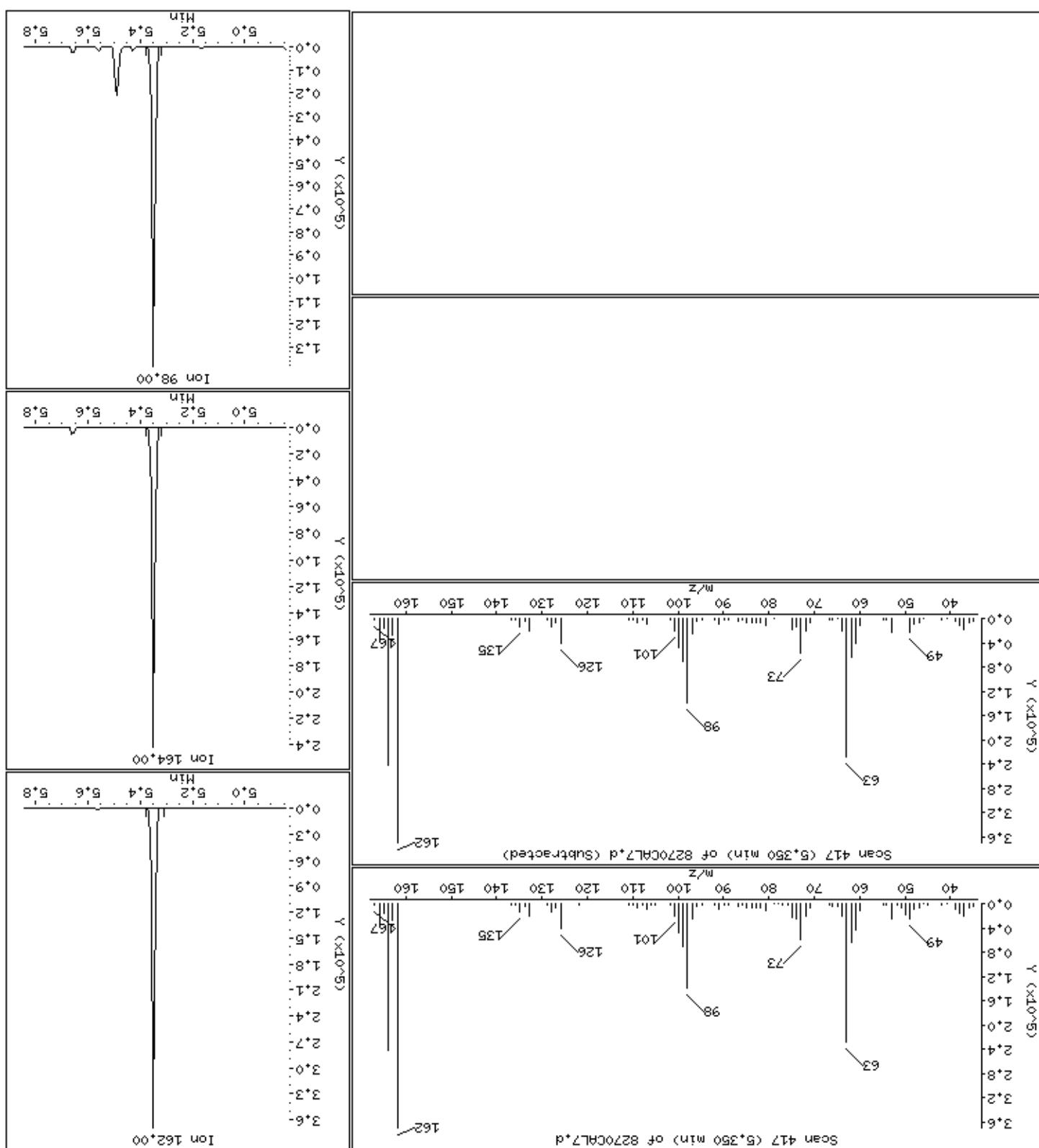
Sample Info: 47763

Client ID: 8270CAL7

Date : 14-NOV-2012 22:40

Data File: \\\Svedol4\DD\chem\smsd4\1\411145501.b\8270CAL7.a

Page 31



Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

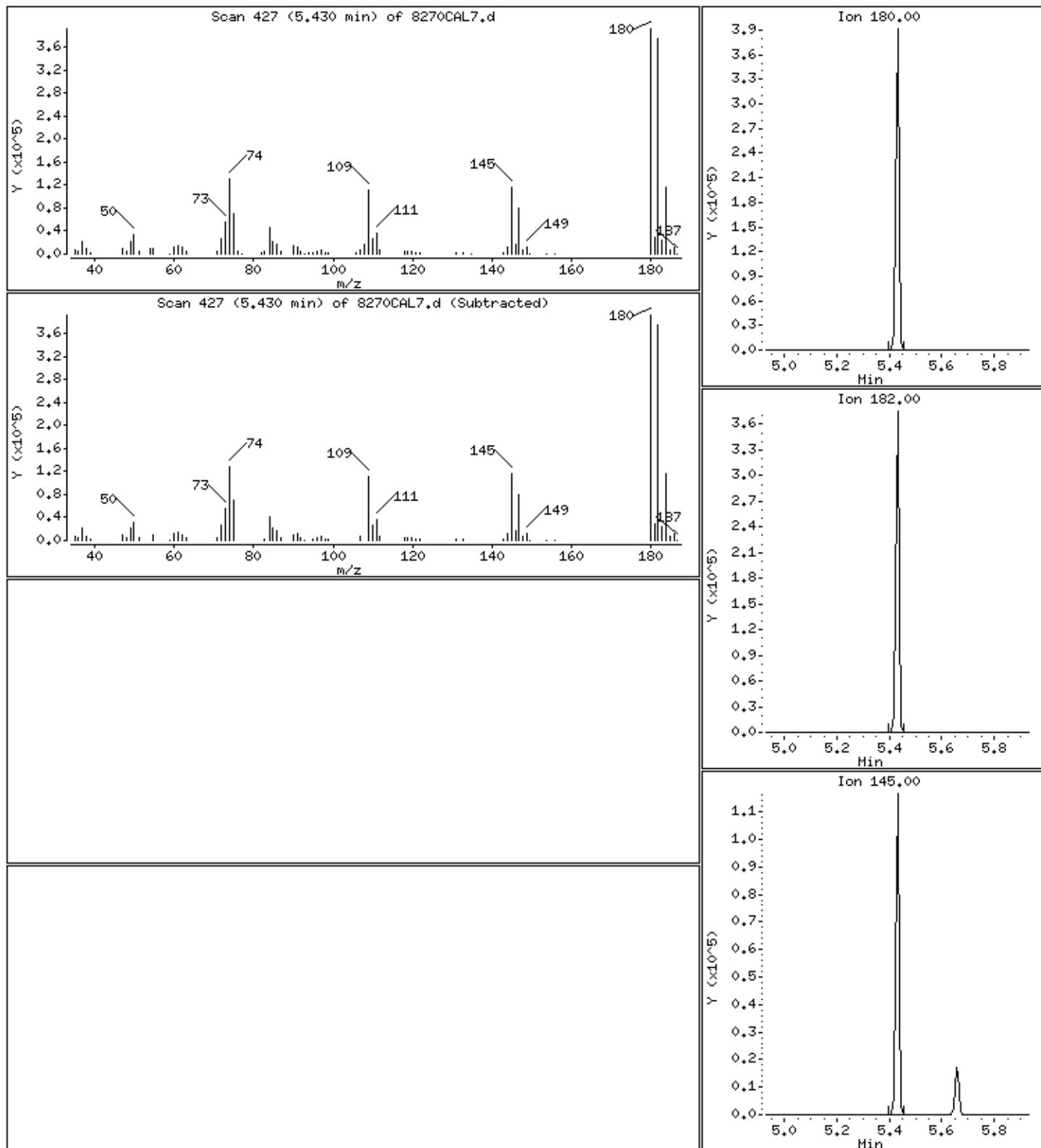
Sample Info: 47763

Operator: MJ

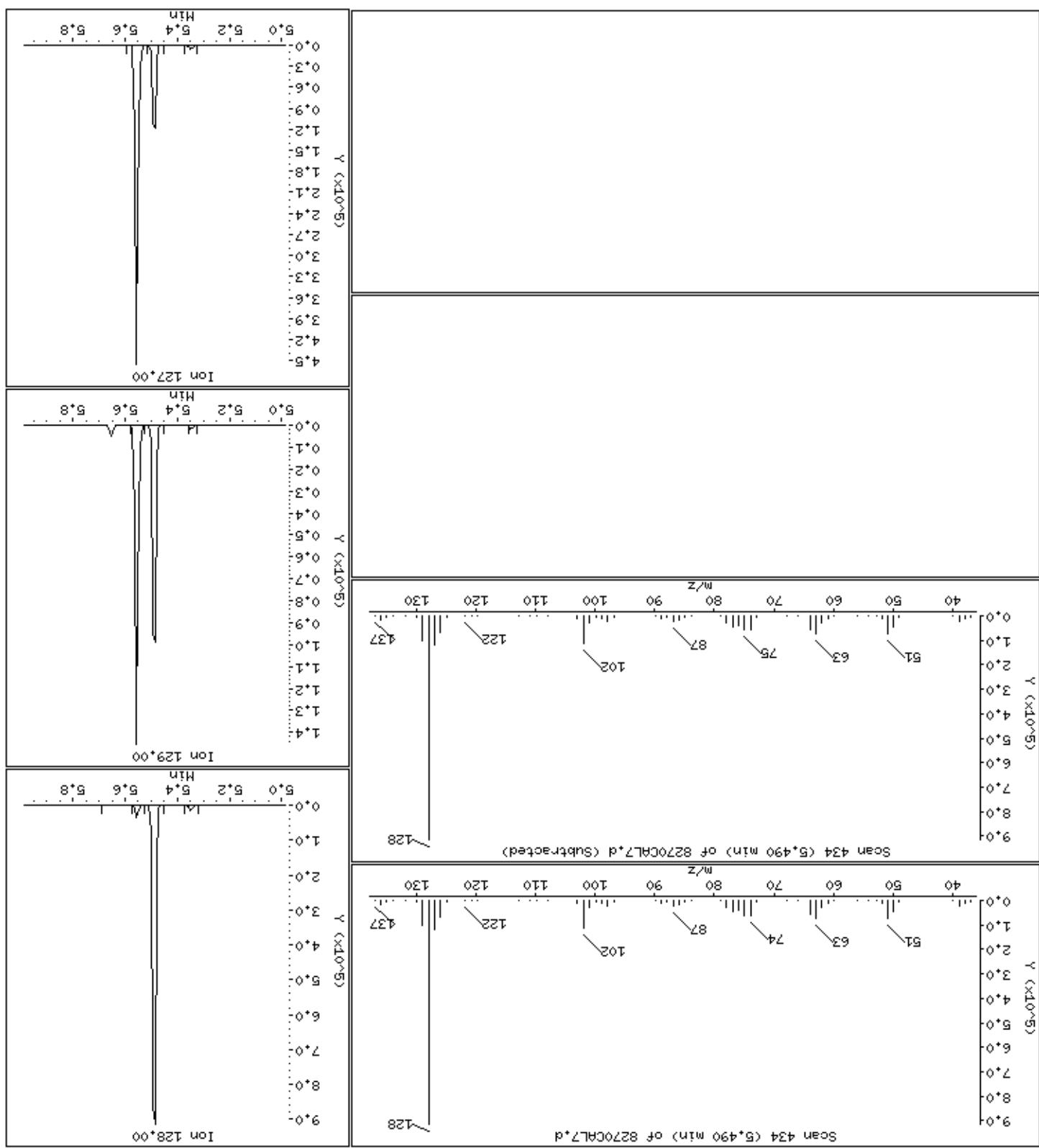
Column phase: HPMS-5

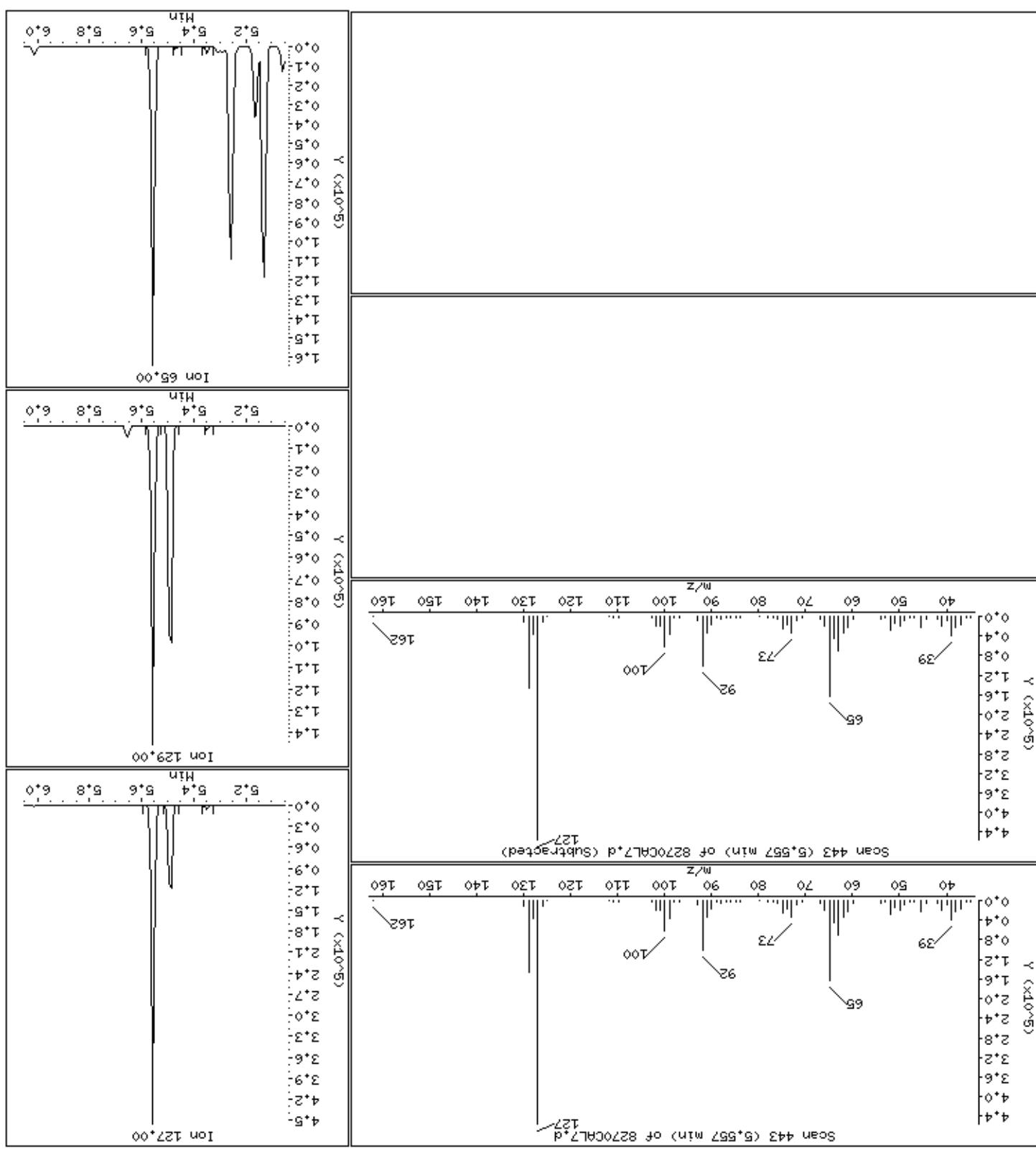
Column diameter: 0.25

42 1,2,4-Trichlorobenzene



Date : 14-NOV-2012 22:40
Client ID: 8270CALL7
Instrument: smsd4*i
Sample Info: 47763
Operator: HJ
Column phase: HPM-S5
Column diameter: 0.25

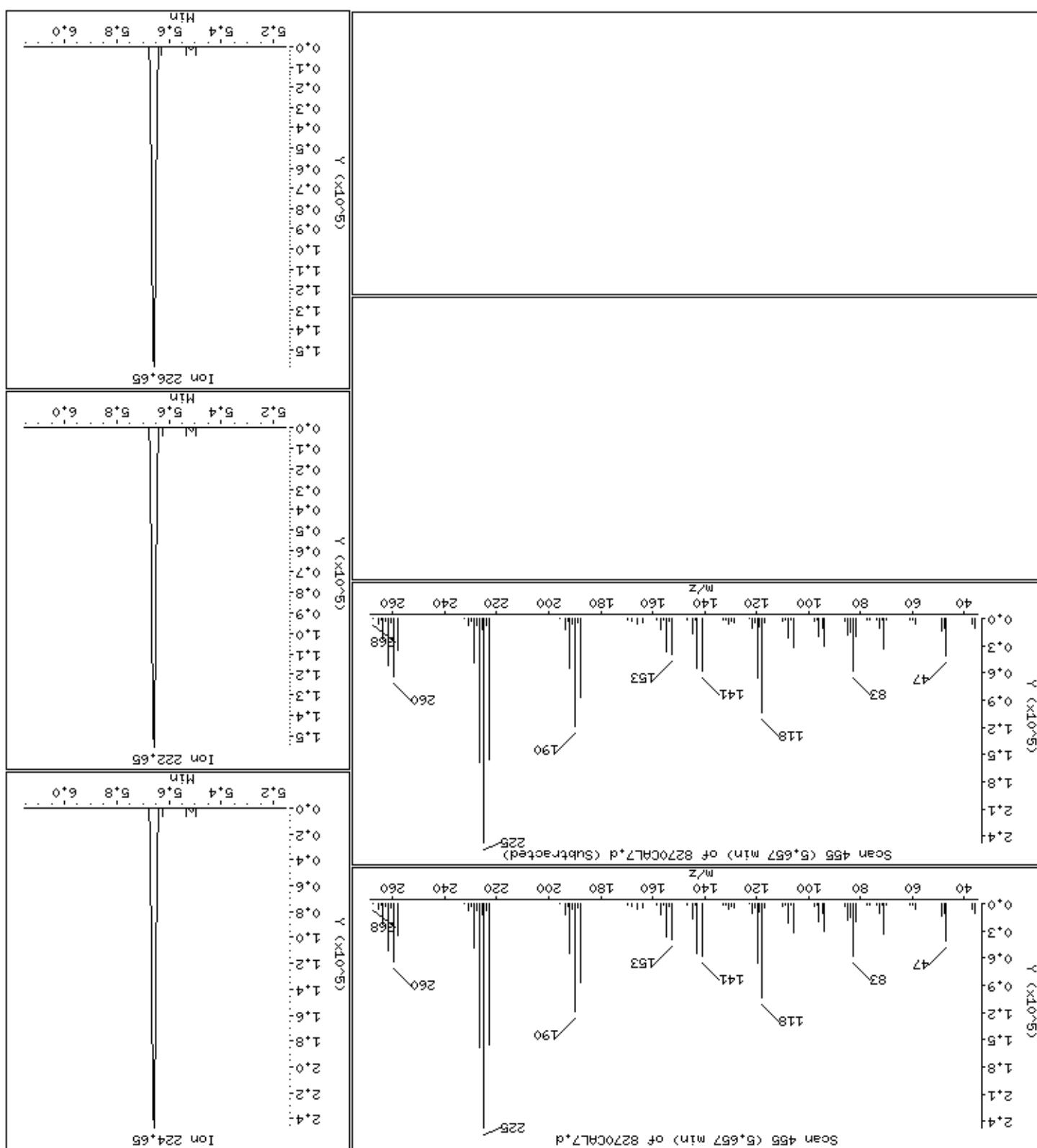




GF 2264

Table 5: Filtered average duration between successive observations

Column phase: HPM-5
Column diameter: 0.25
Operator: M3
Sample Info: 47763
Instrument: msd4*i*
Client ID: 82700CAL7



48 Hexachlorobutadiene

Column phase: HPMs-5

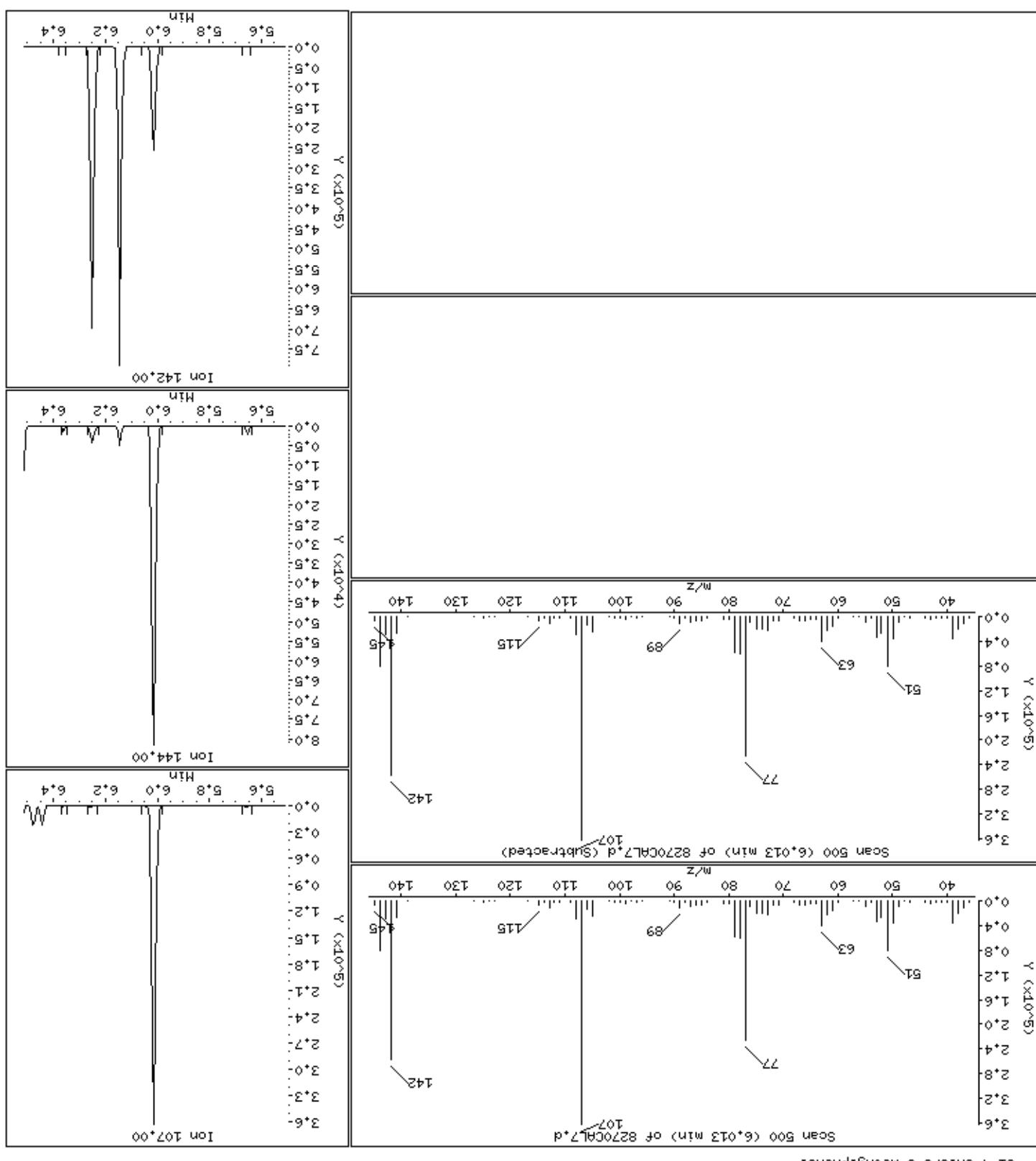
Sample Info: 47763

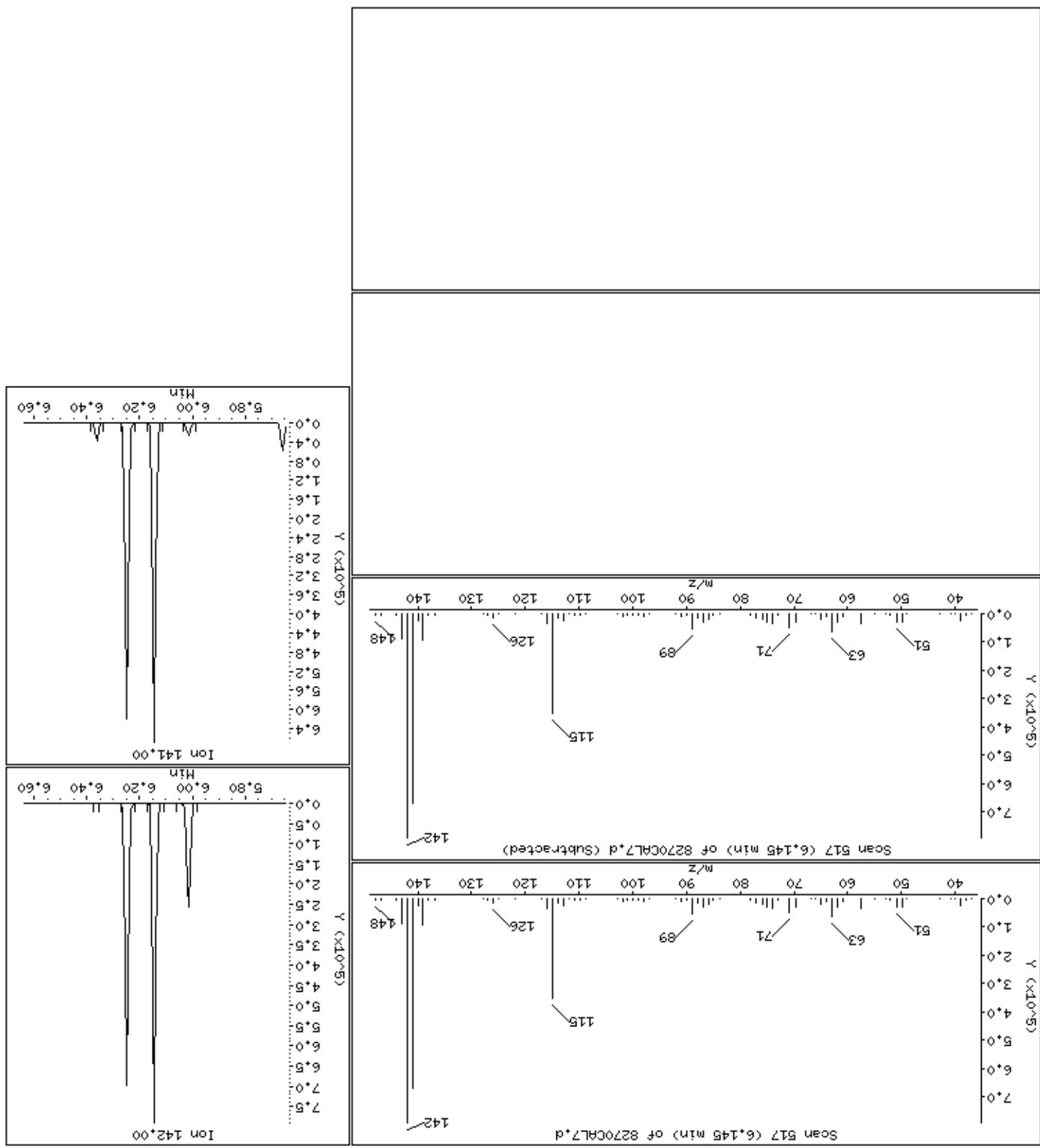
Client ID: 8270CAL7

Instrument: smsd4.i

Instrument ID: smsd4.i

Date : 14-NOV-2012 22:40





Date : 14-NOV-2012 22:40
Client ID: 8270CBL7
Instrument: smd4+i
Sample Info: 47763
Quesnet+H1

Column phase: HPS-5

Scanning electron micrograph showing the surface morphology of the sample. The image shows a dense, granular structure with irregular, protruding features.

Mass spectrum showing relative abundance (%) versus m/z . The x-axis ranges from 40 to 240 m/z , and the y-axis shows relative abundance from 0 to 100%. The base peak is at m/z 120.

m/z	Relative Abundance (%)
40	~10
60	~20
80	~30
100	~40
120	100
140	~50
160	~30
180	~20
200	~15
220	~10
240	~10

Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

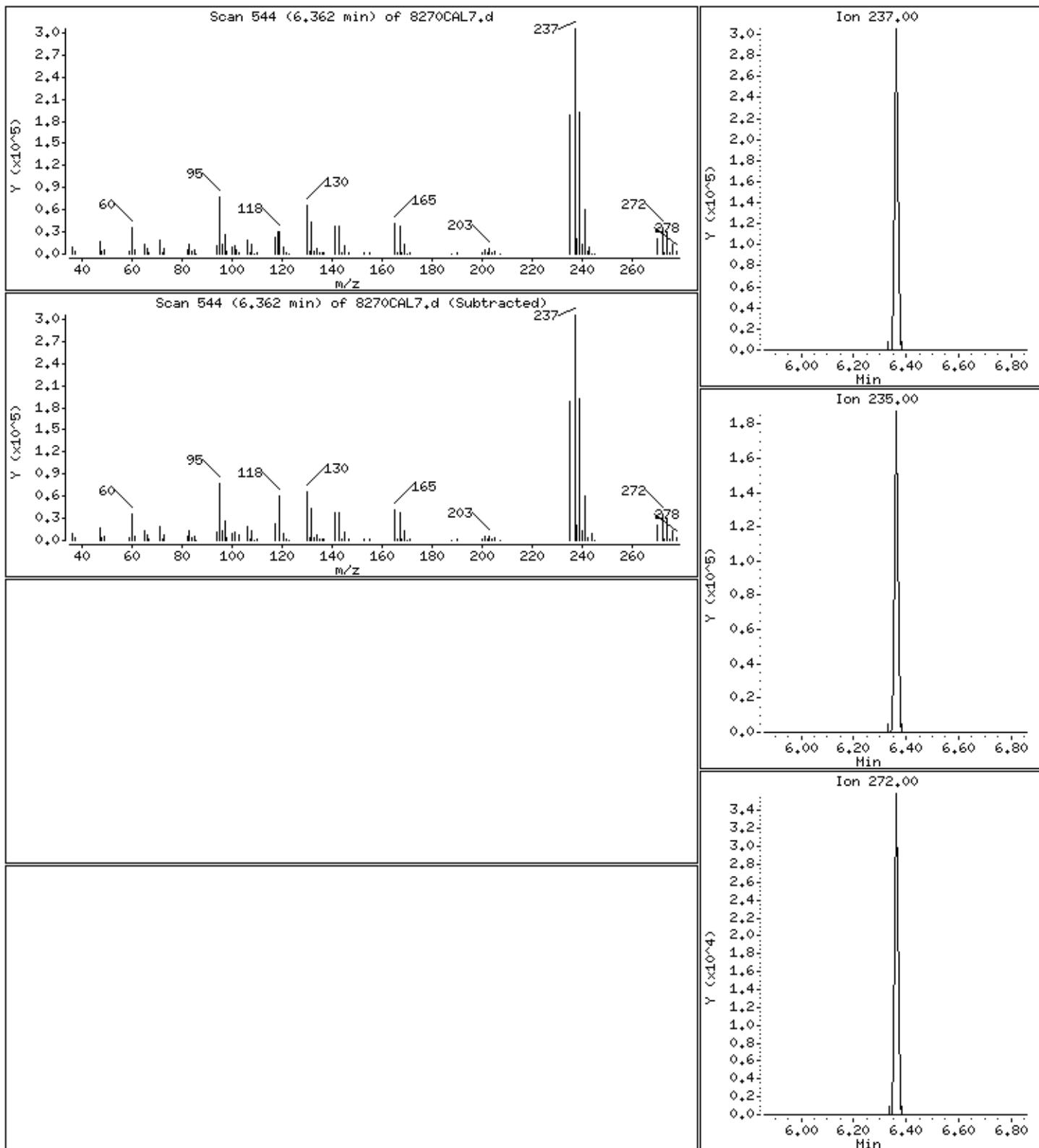
Sample Info: 47763

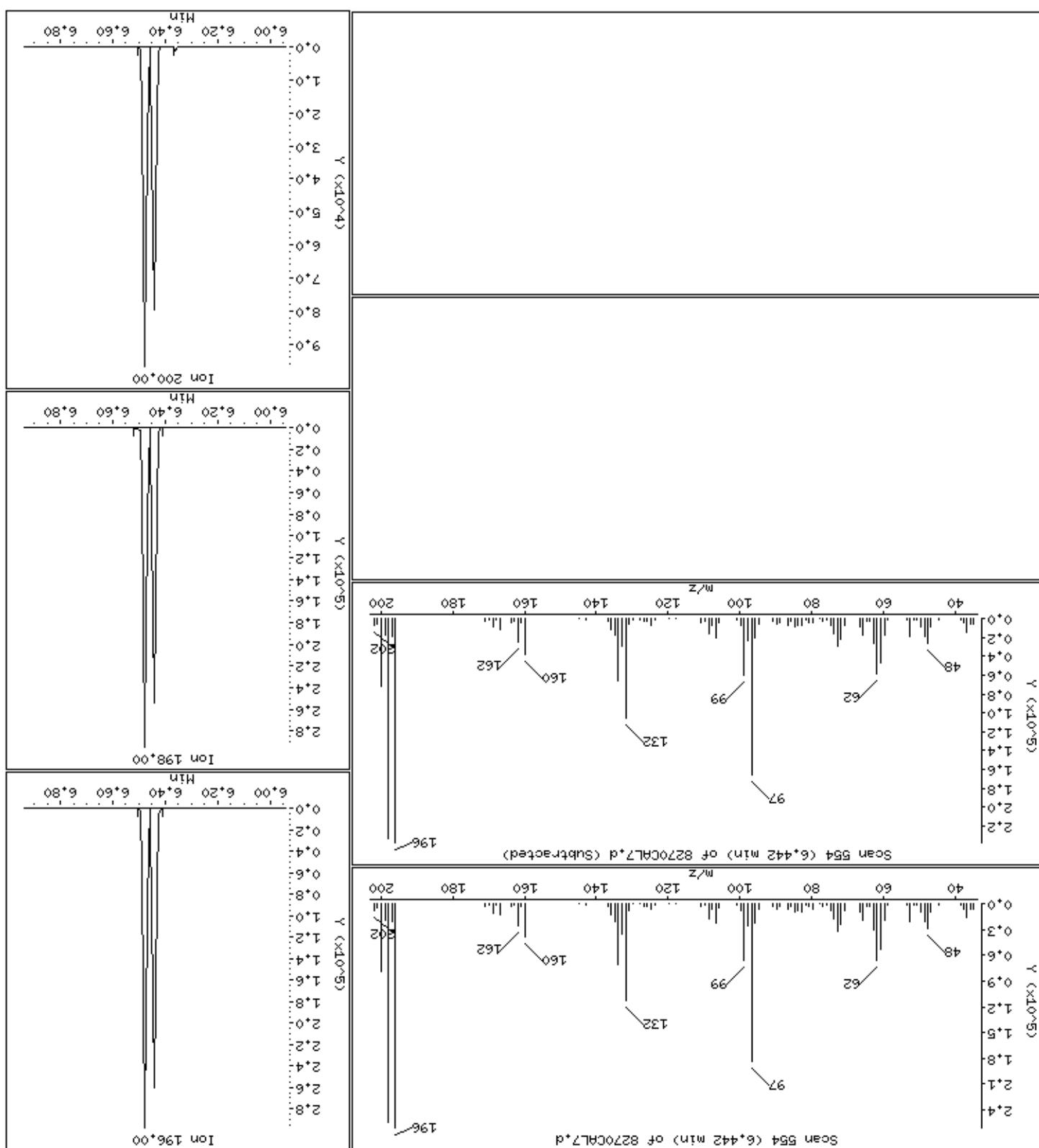
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

55 Hexachlorocyclopentadiene





Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

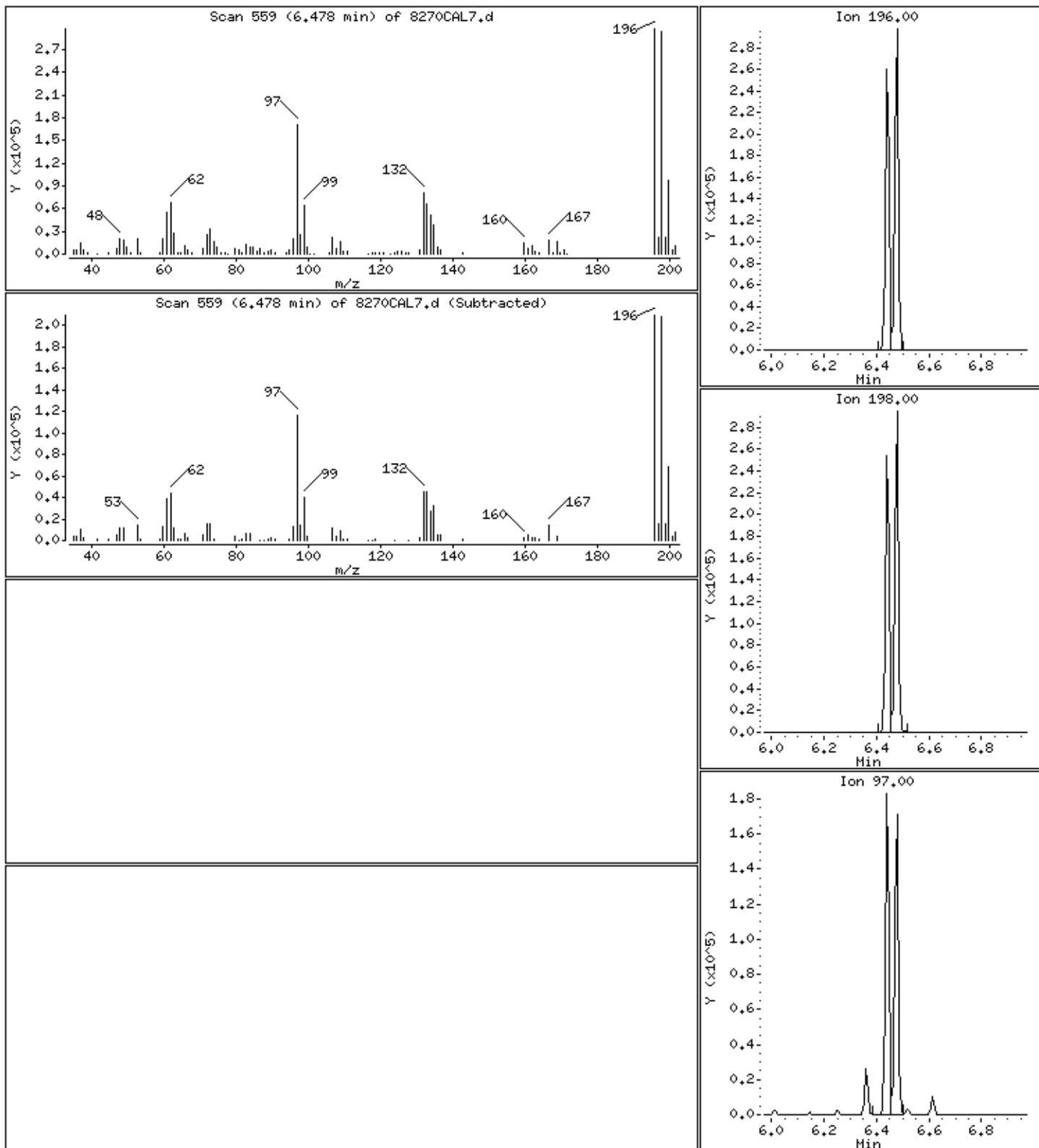
Sample Info: 47763

Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

58 2,4,5-Trichlorophenol



Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

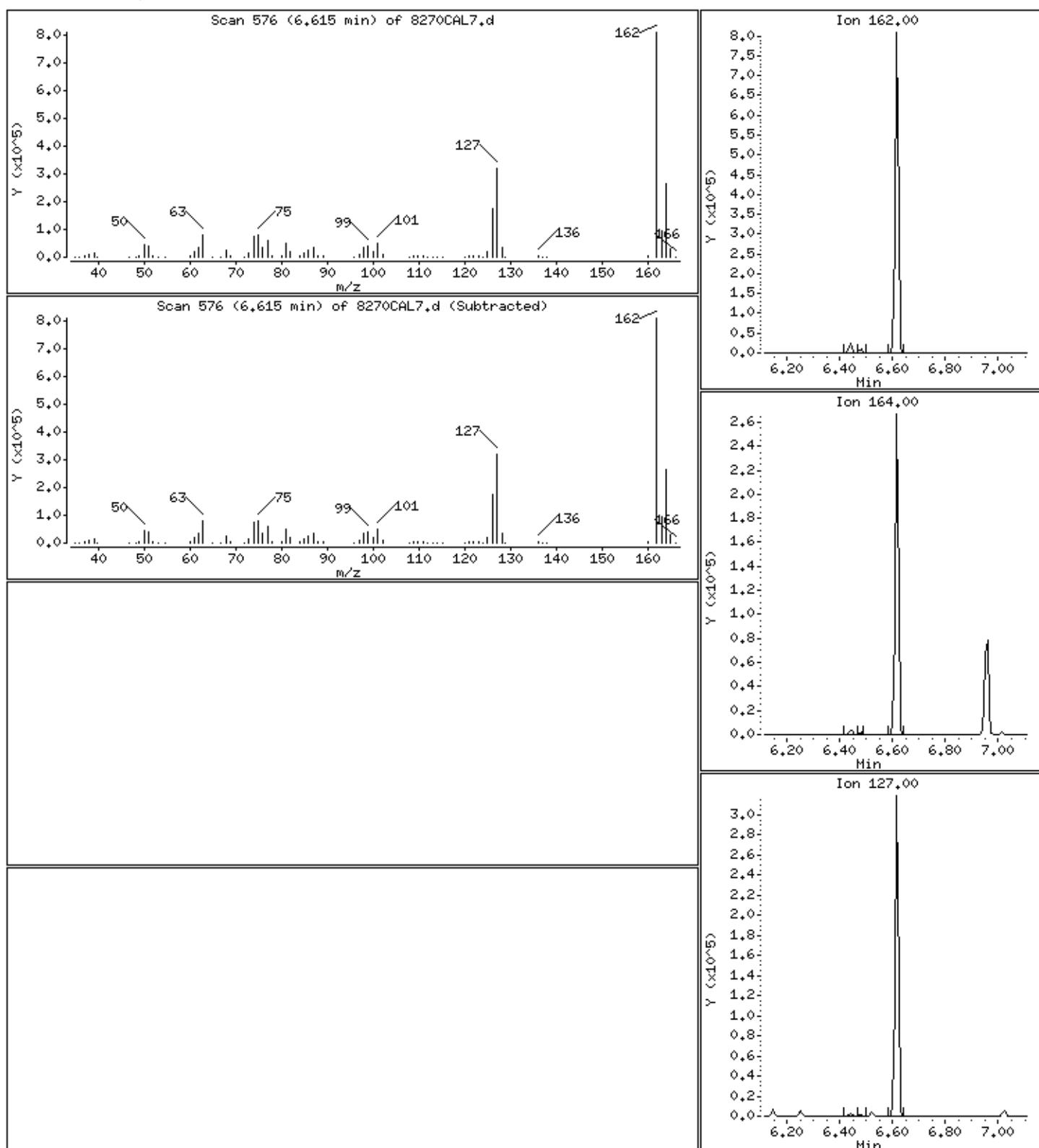
Sample Info: 47763

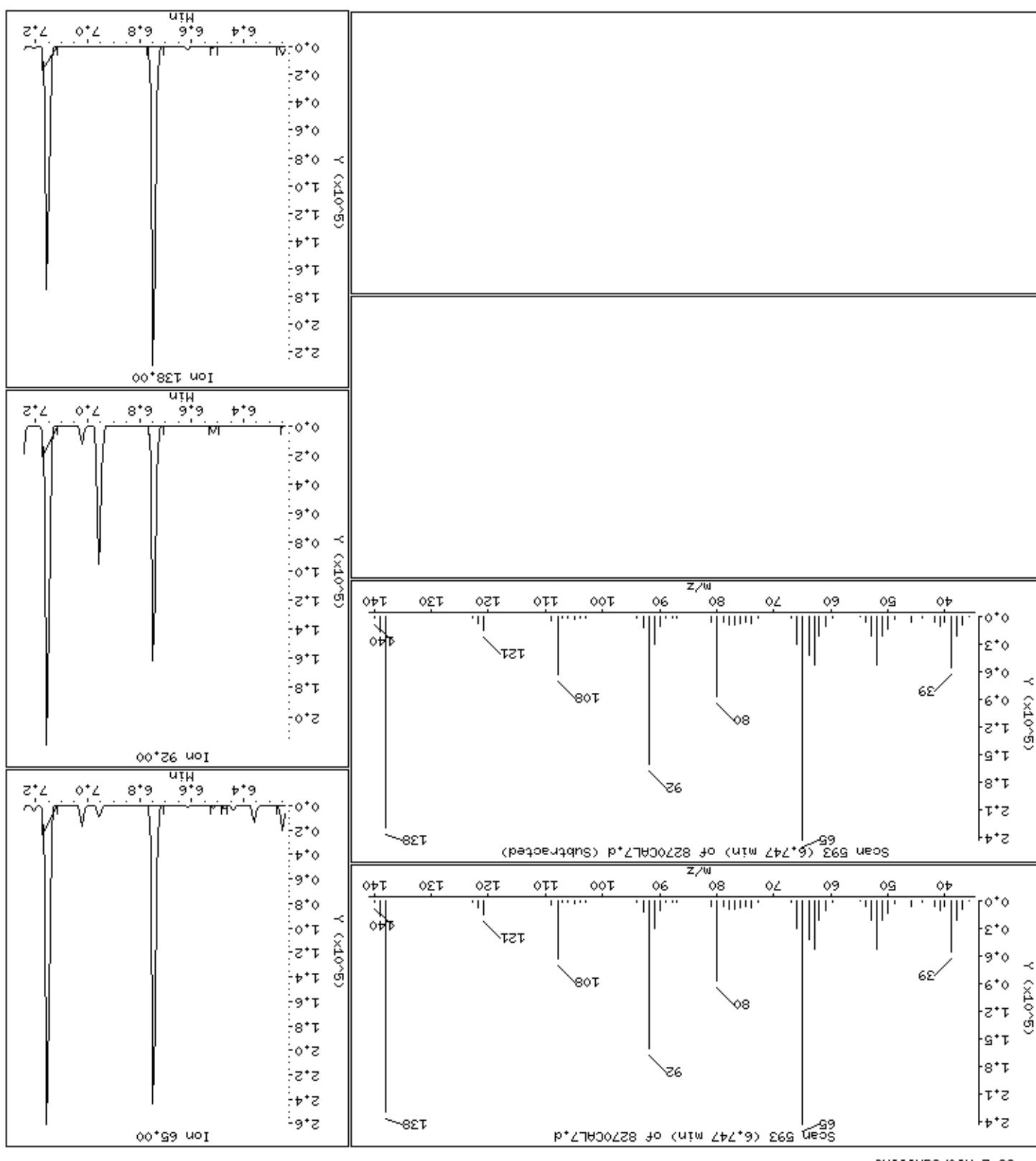
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

62 2-Chloronaphthalene

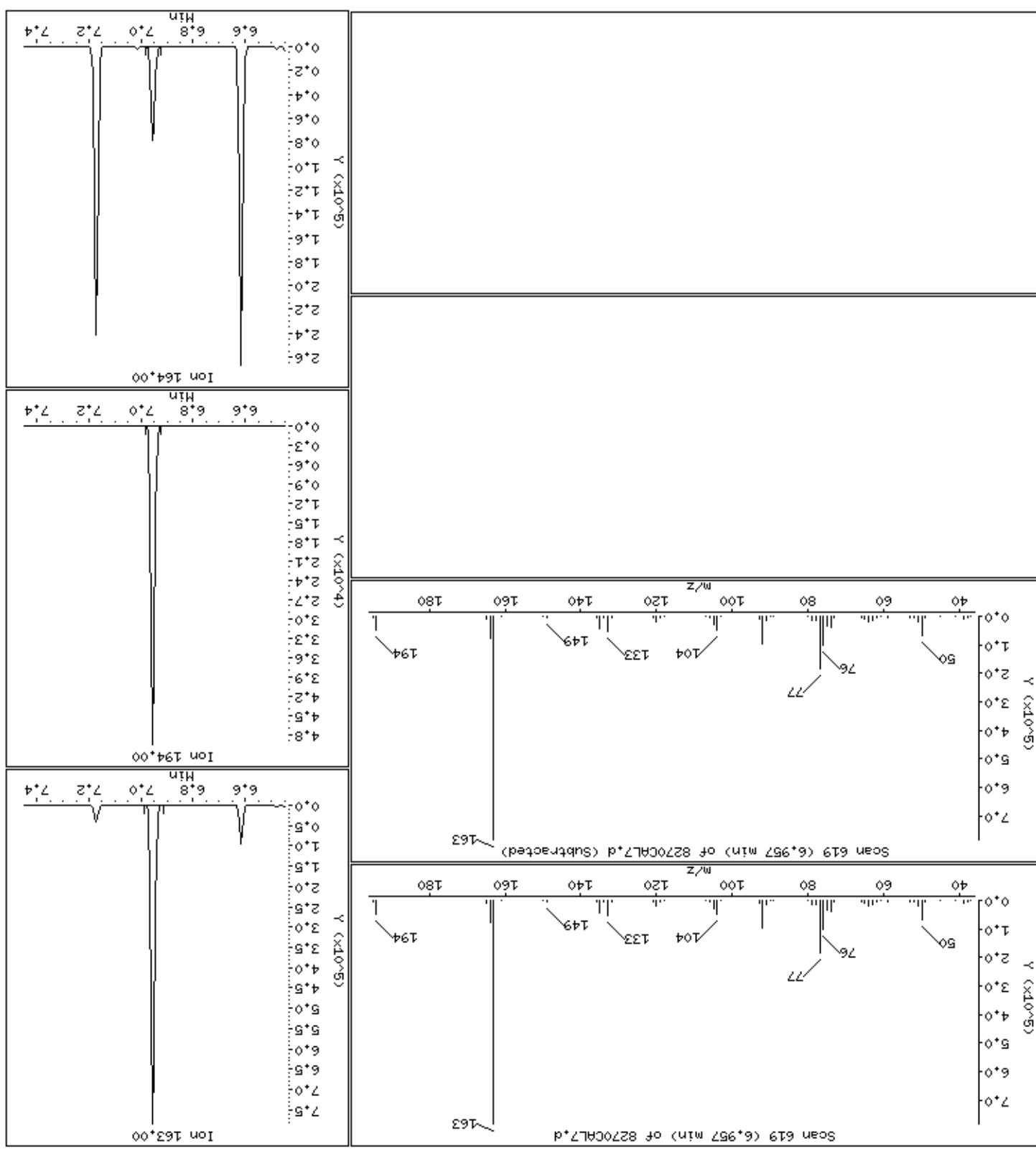




63 2-Nitroaniline

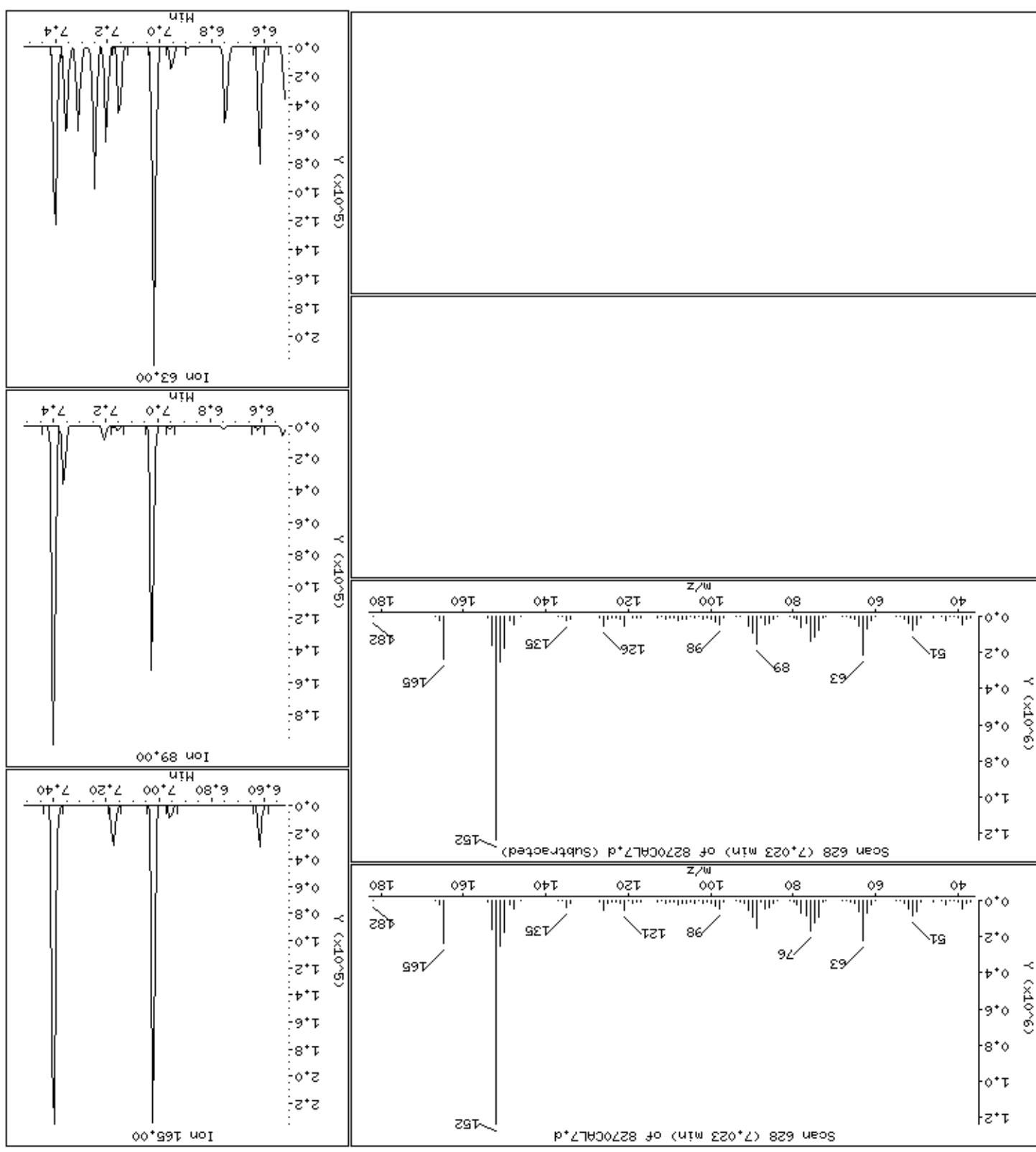
Page 44

Data File: \Svedod4\JULI\chem\smso4_1\IS41114SSC1.BAS\OCBL\#Page 44



The figure displays three vertically stacked mass spectra. The top spectrum is labeled "Scan 628 (7.024 min) of 8270CAL7.d". The middle spectrum is labeled "Scan 628 (7.024 min) of 8270CAL7.d (Subtracted)". The bottom spectrum is labeled "Ion 153.00". All three plots share a common x-axis representing the mass-to-charge ratio (m/z) from 40 to 180, and a common y-axis representing relative abundance from 0.0 to 1.0. The top plot shows several peaks, with the base peak at m/z 153. The middle plot shows the same peaks as the top plot, but the base peak has been removed, highlighting the other peaks. The bottom plot is a zoomed-in view of the region around m/z 153, showing the base peak at 153.00.

Sample Info: 47763
Instrument: smsd04+i
Client ID: 8270CALL7
Sample Info: 47763
Instrument: smsd04+i
Client ID: 8270CALL7
Operator: MJ
Column phase: HPMs-5
Column diameter: 0.25



67 2,6-Dinitrotoluene

Date : 14-NOV-2012 22:40
Data File: \\Svedec4\DDI\chem\msd4\1\8270CRL7.d
Page 47
Client ID: 8270CRL7
Instrument: msd4.i
Column Phases: HPS-5
Column diameter: 0.25
Operator: M3
Sample Info: 47763
C:\Program Files\Waters\MSD\Chem32\1\b\8270CRL7.d

Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

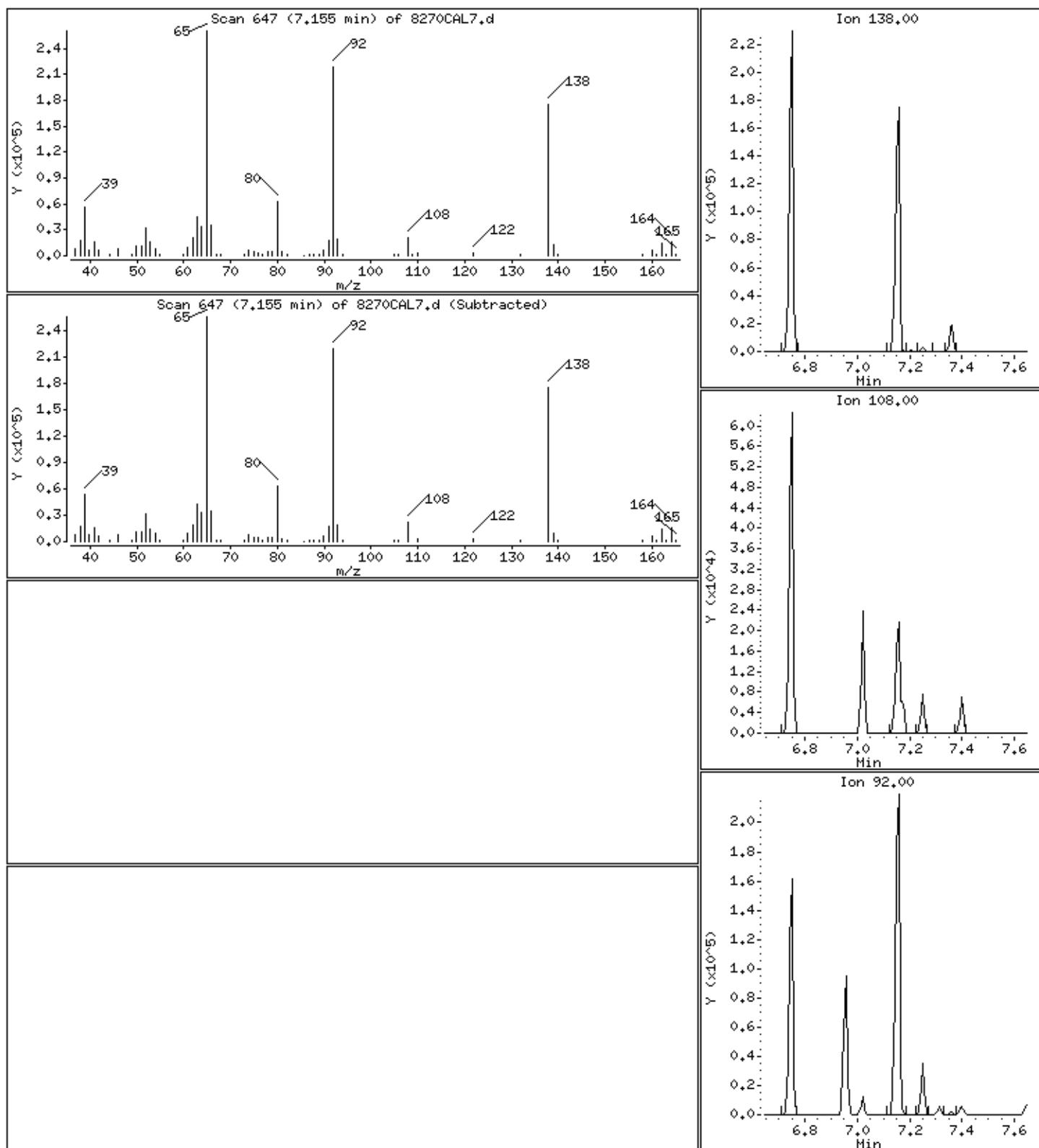
Sample Info: 47763

Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

69 3-Nitroaniline



Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

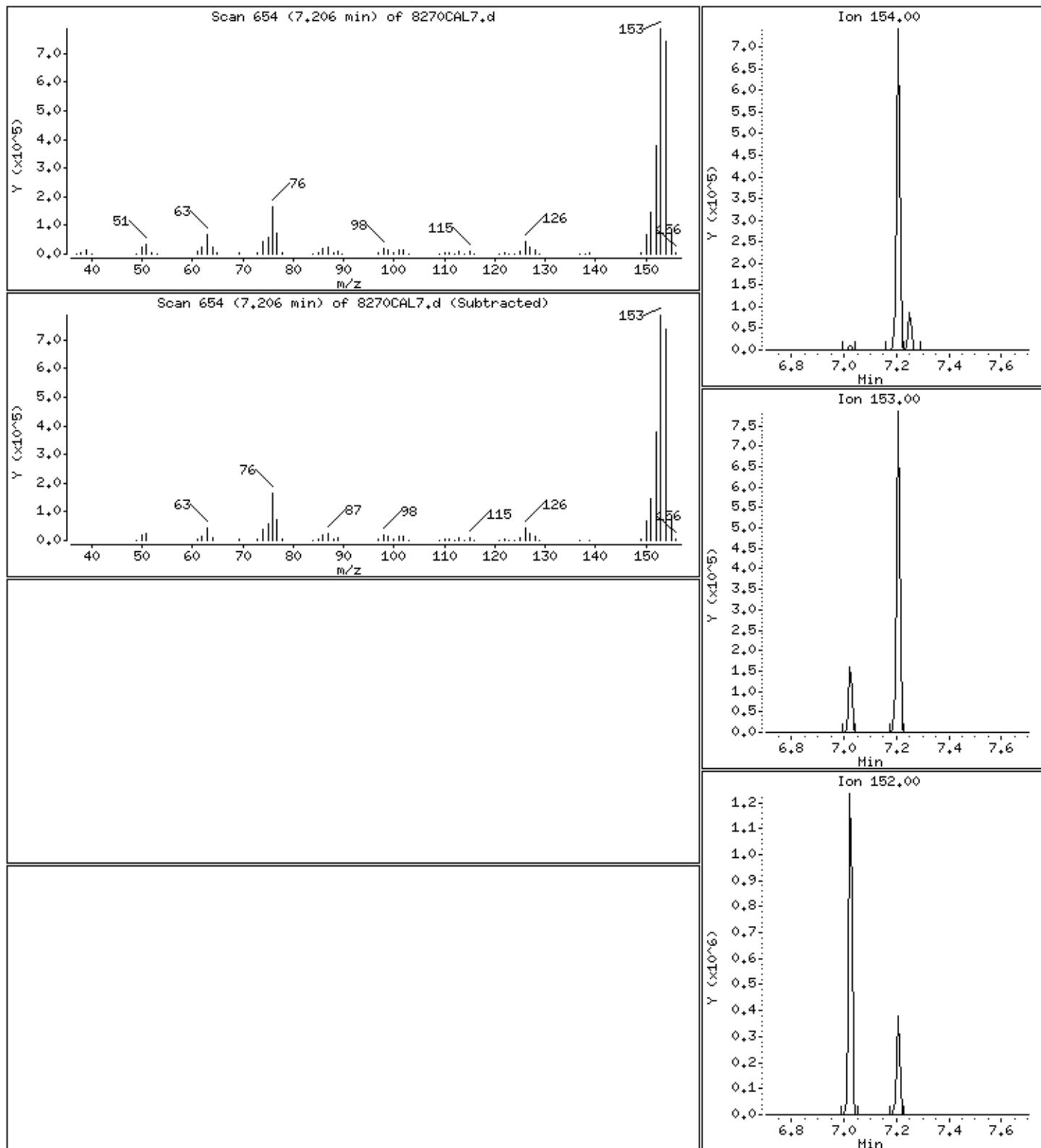
Sample Info: 47763

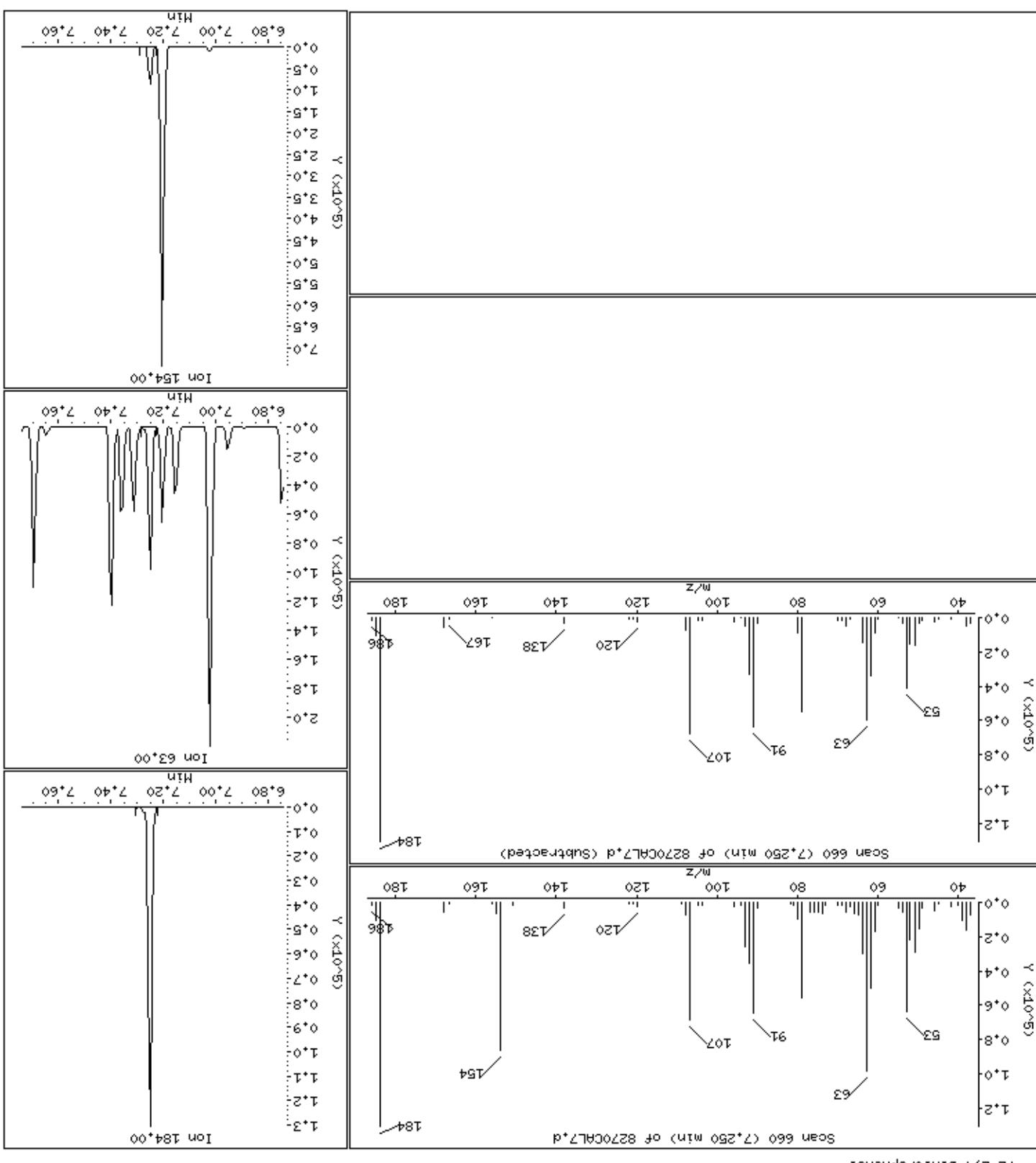
Operator: MJ

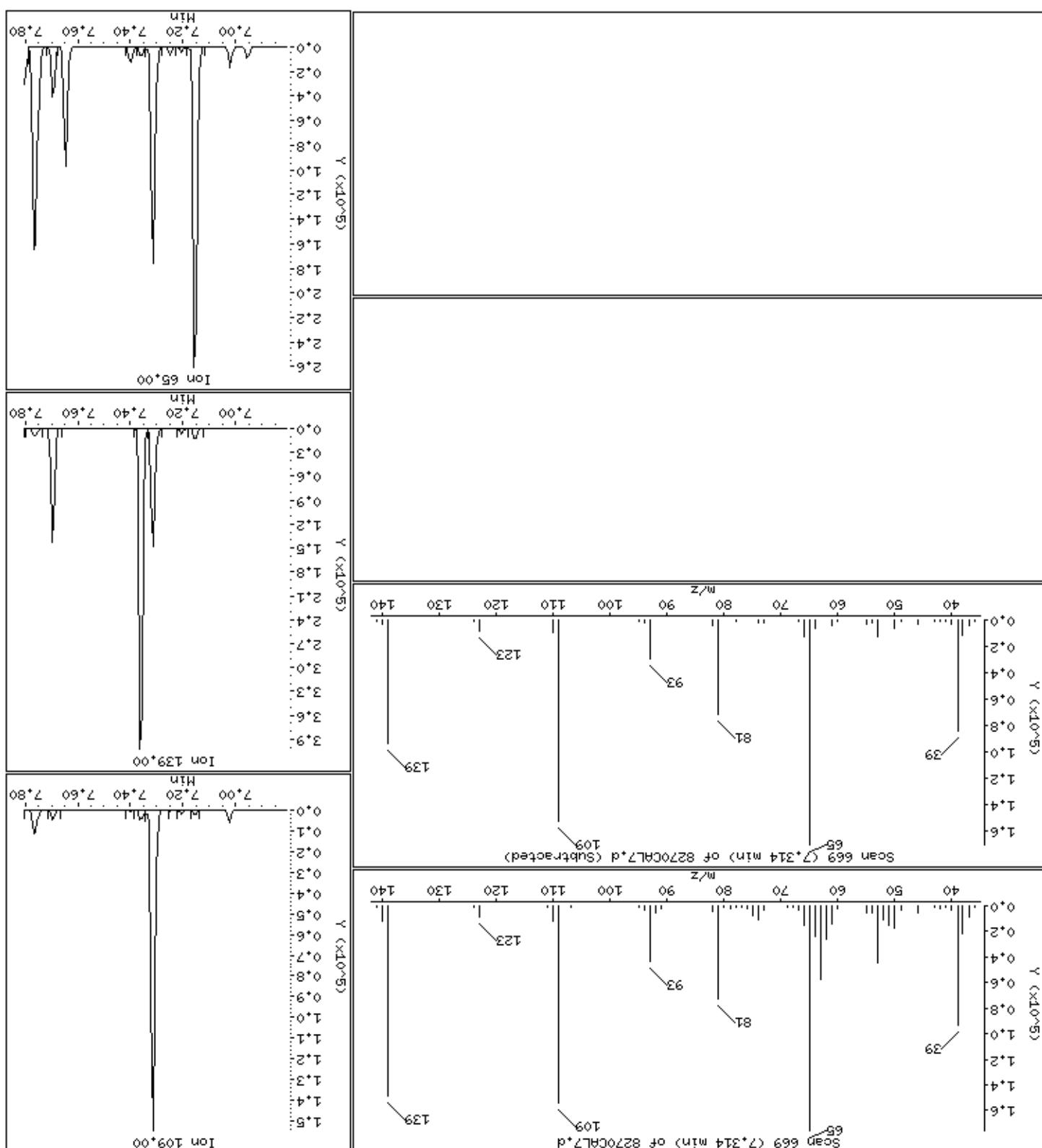
Column phase: HPMS-5

Column diameter: 0.25

71 Acenaphthene







74 4-Nitrophenol

Column phase: HPMs-5

Sample Info: 47763

Client ID: 8270CAL7

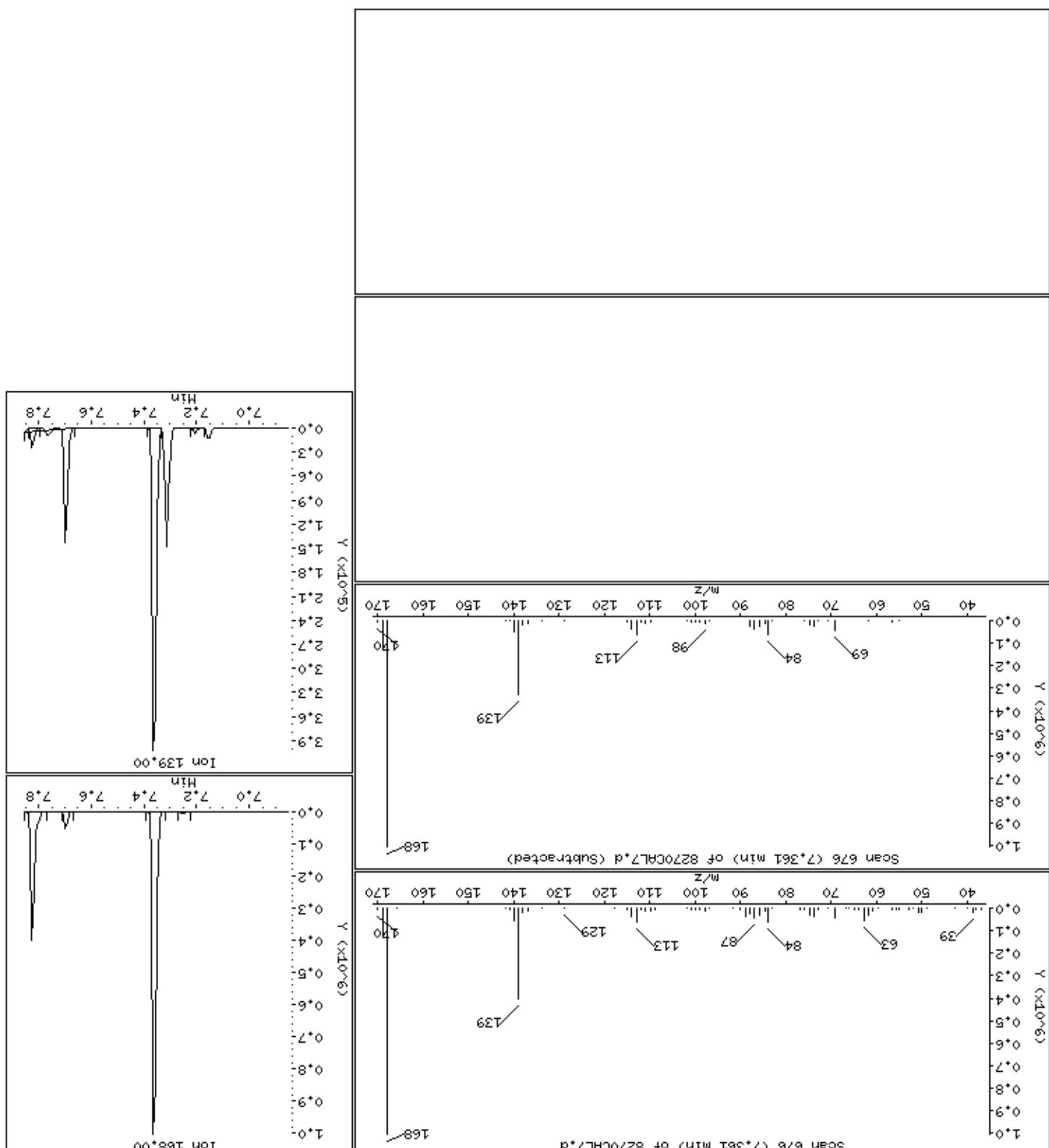
Date : 14-NOV-2012 22:40

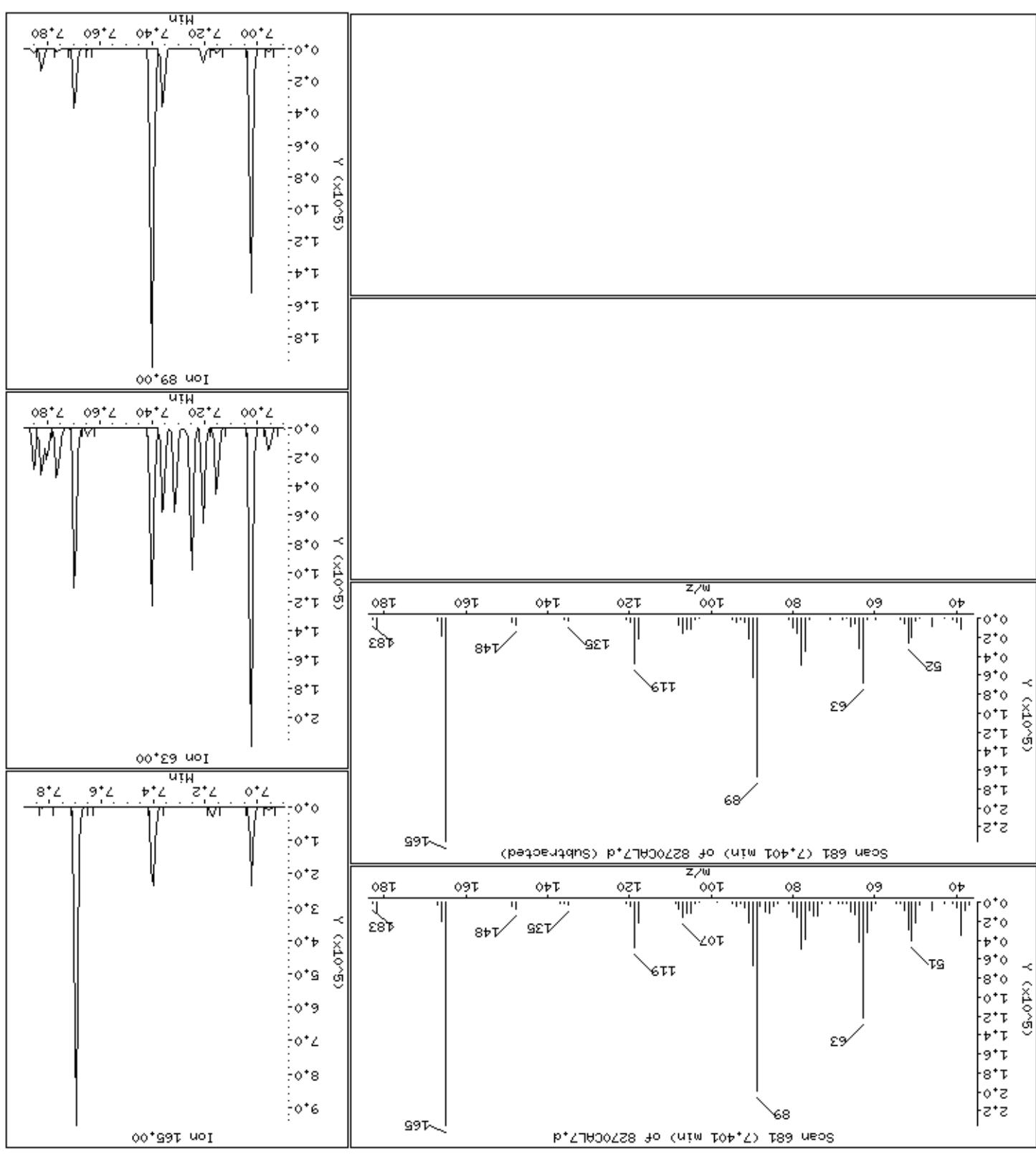
Operador: M3

Column diameter: 0.25

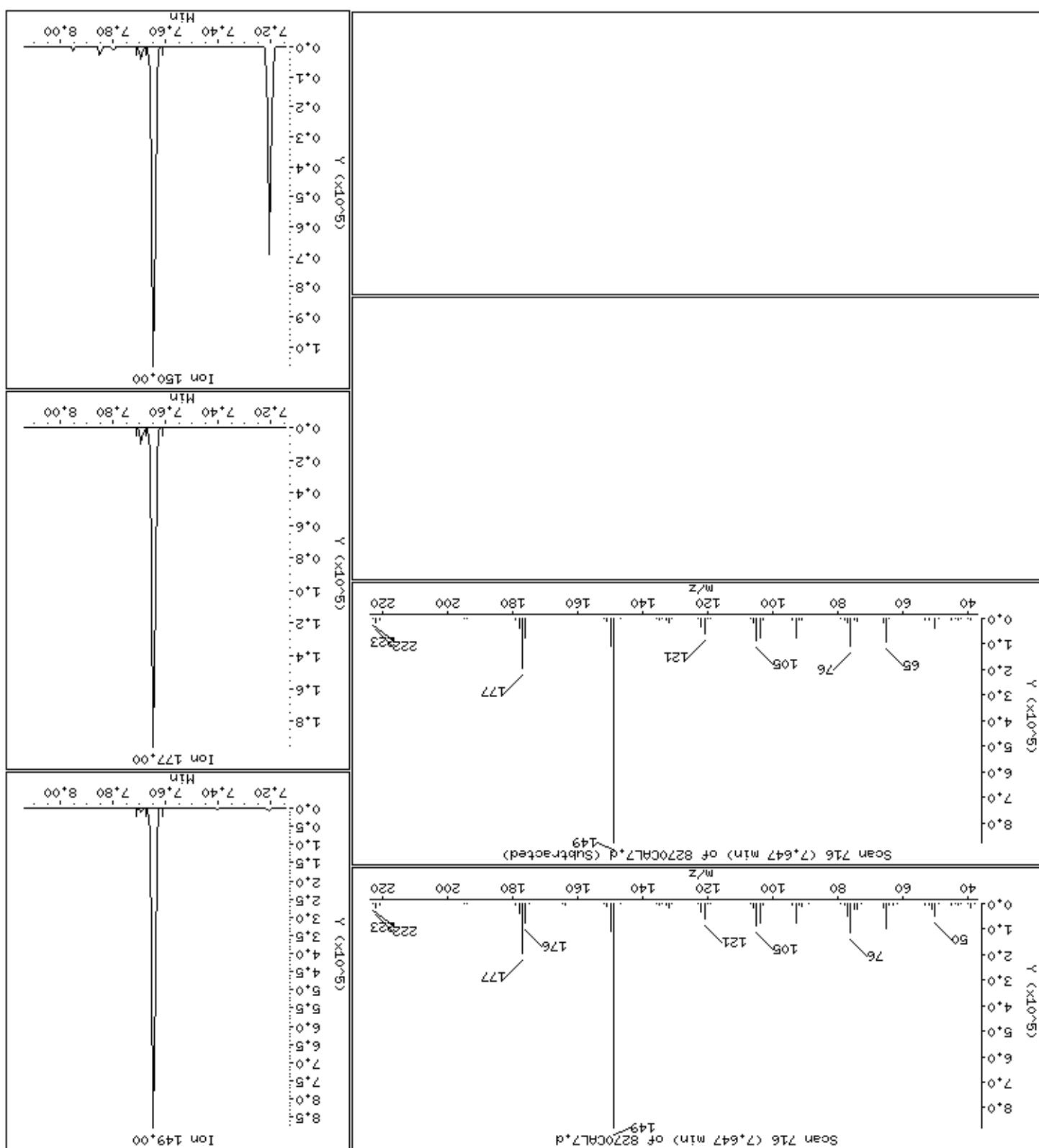
Instrument: smd04+i

TG aged





EG 226d



Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd4.i

Sample Info: 47763

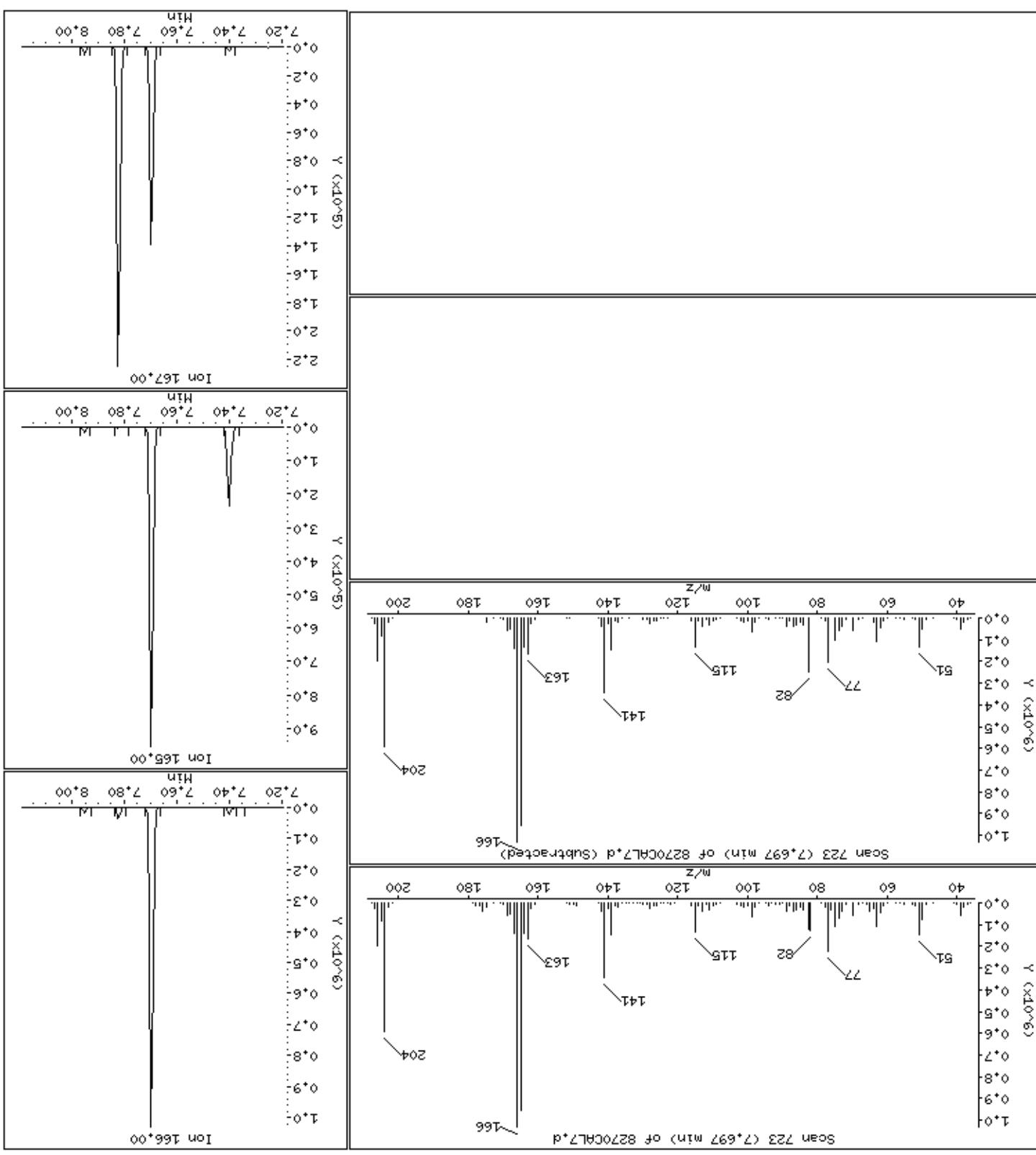
Column phase: HPM-S

Column diameter: 0.25

Operator: HS

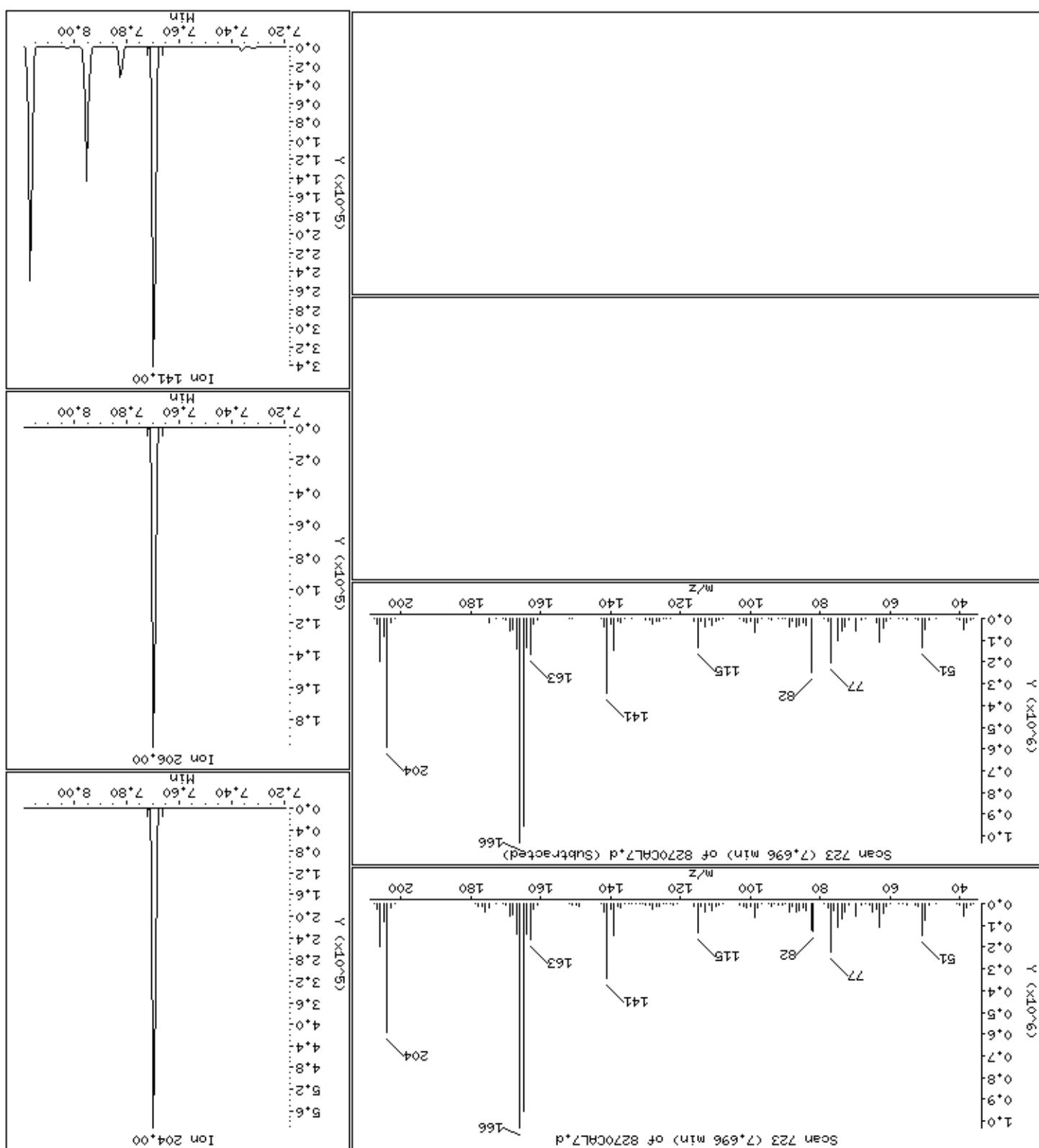
Data File: \ISVedod4\DD\chem\smsd4\1\8411145501.b\8270CAL7.d

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81 Fluorine

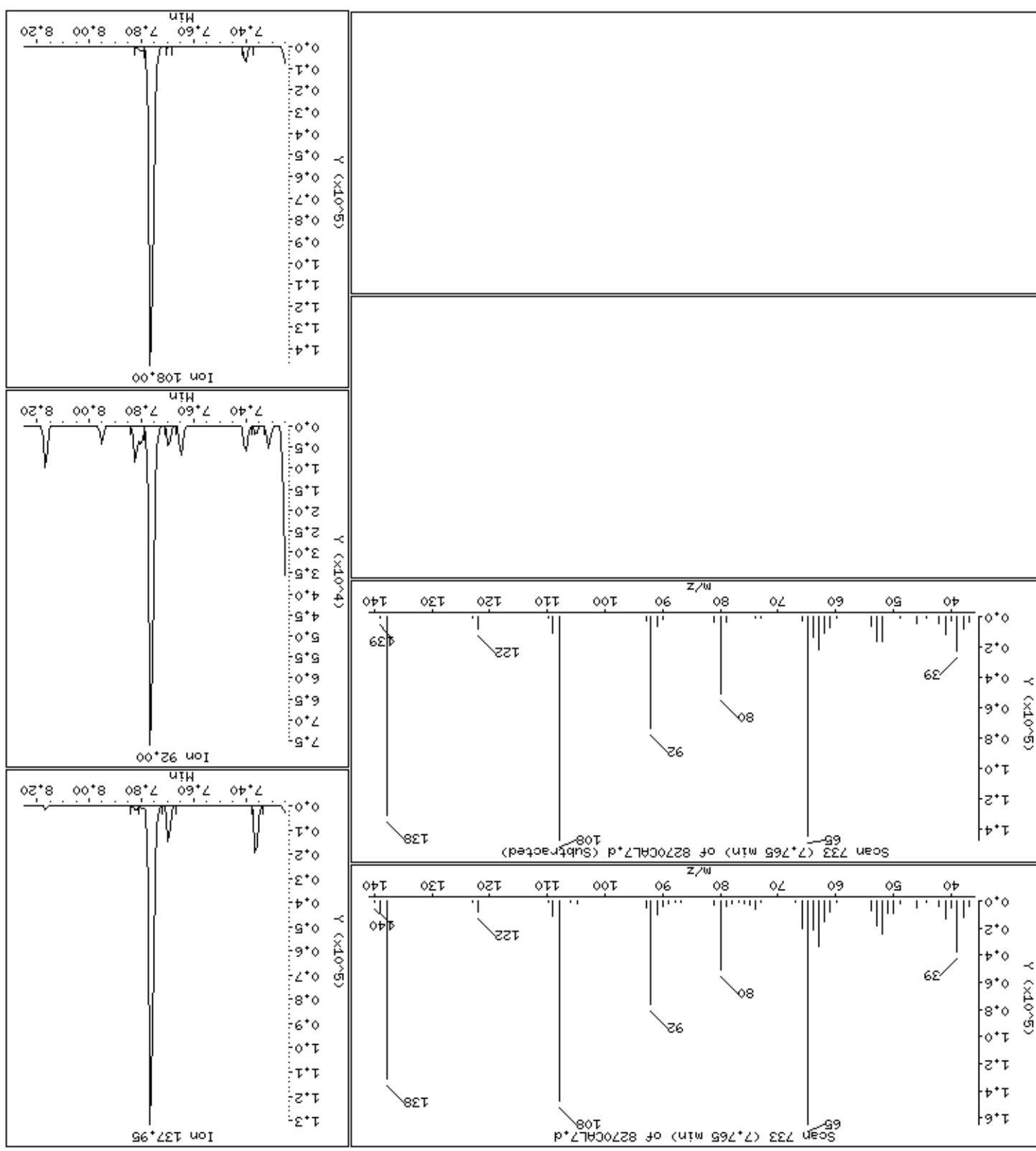
Data File: \\\Svedolof\DD\chem\msd4\1\8270CAL7.d
 Client ID: 8270CAL7
 Instrument: msd4.i
 Sample Info: 47762
 Operator: HS
 Column phase: HPG-S
 Column diameter: 0.25
 Date : 14-NOV-2012 22:40
 Page 55



82-4-Chlorophenyl-phenylether

Date : 14-NOV-2012 22:40
 Client ID: 8270CAL7
 Instrument: smsd4.i
 Sample Info: 47762
 Operator: H3
 Column phase: HPMs-5
 Column diameter: 0.25

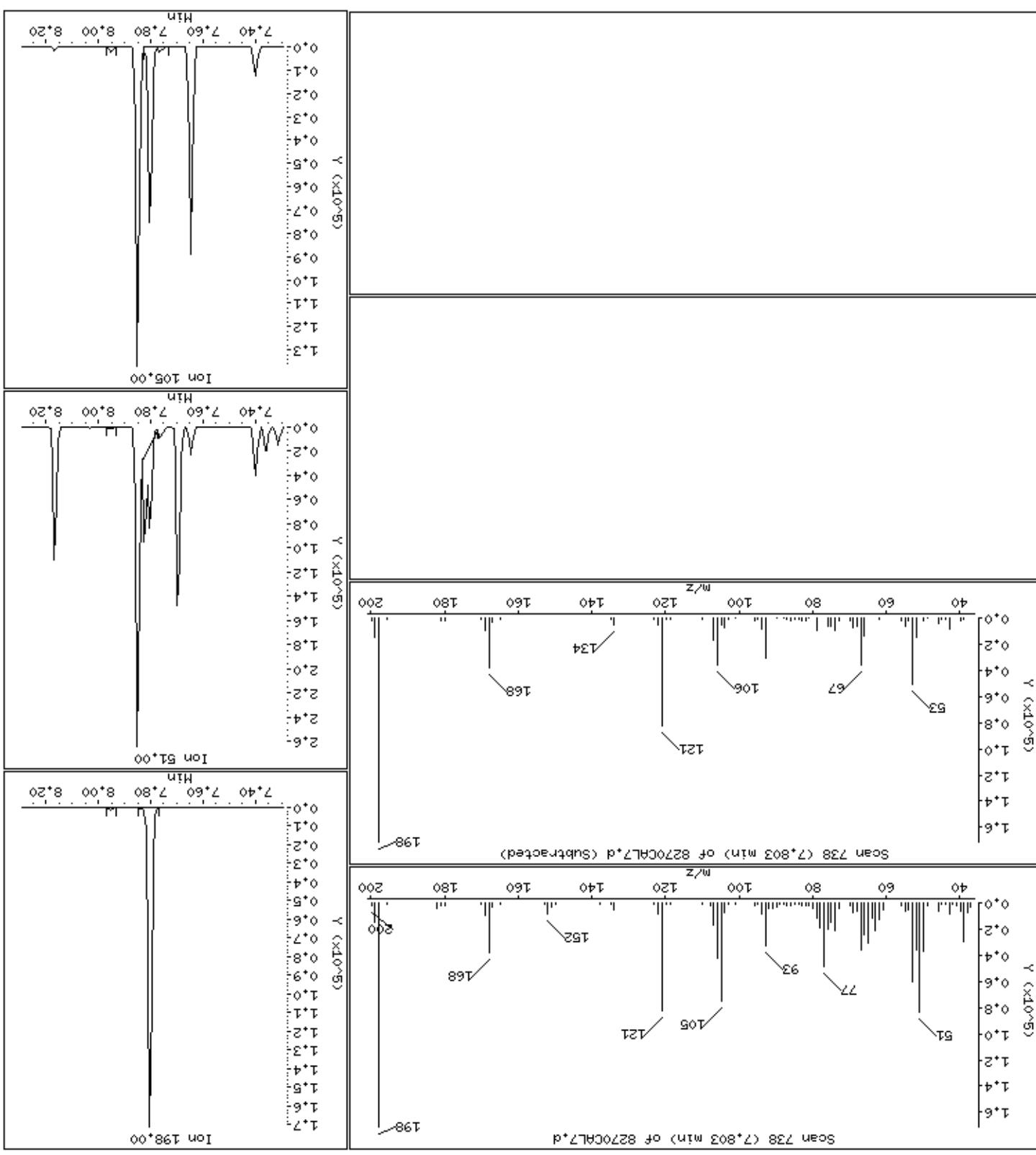
Data File: \\\Svededal\DDI\chem\smsd4\1\8411145501.b\8270CAL7.d
 Page 56



6 G 228d

Table 5: The effect of the number of hidden neurons on the performance of the proposed model.

Column phase: HPS-5
Column diameter: 0.25
Operator: M3
Sample Info: 47763
Instrument: msd04.i
Client ID: 8270CRL7



Data File: \\\Svededal\DD\Chem\msd4\1\1411145501.b\8270CAL7.d
 Date : 14-NOV-2012 22:40
 Client ID: 8270CAL7
 Instrument: msd4.i
 Sample Info: 47762
 Operator: HS
 Column phase: HPG-S
 Column diameter: 0.25

Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

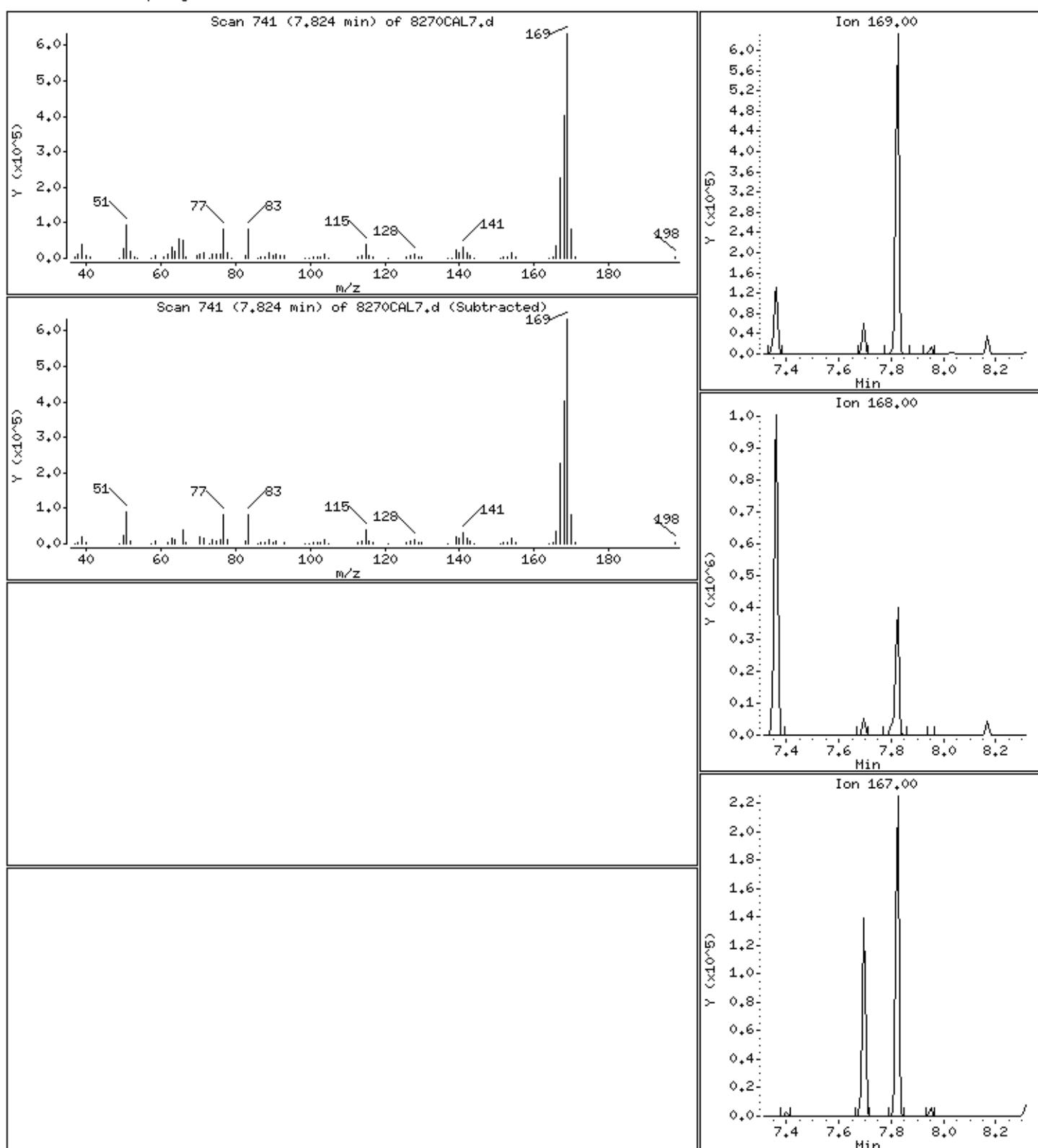
Sample Info: 47763

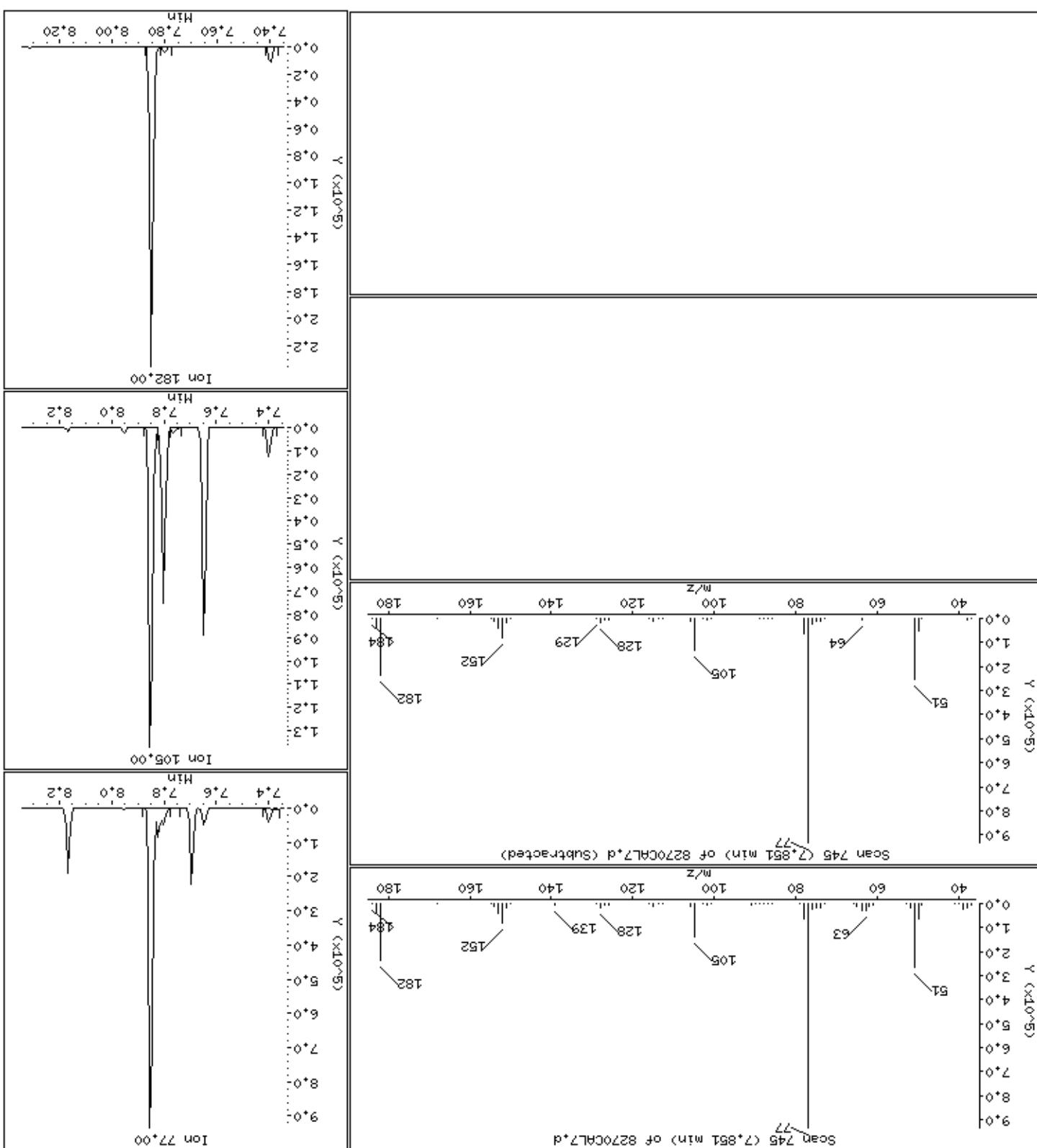
Operator: MJ

Column phase: HPMs-5

Column diameter: 0.25

86 N-Nitrosodiphenylamine





Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

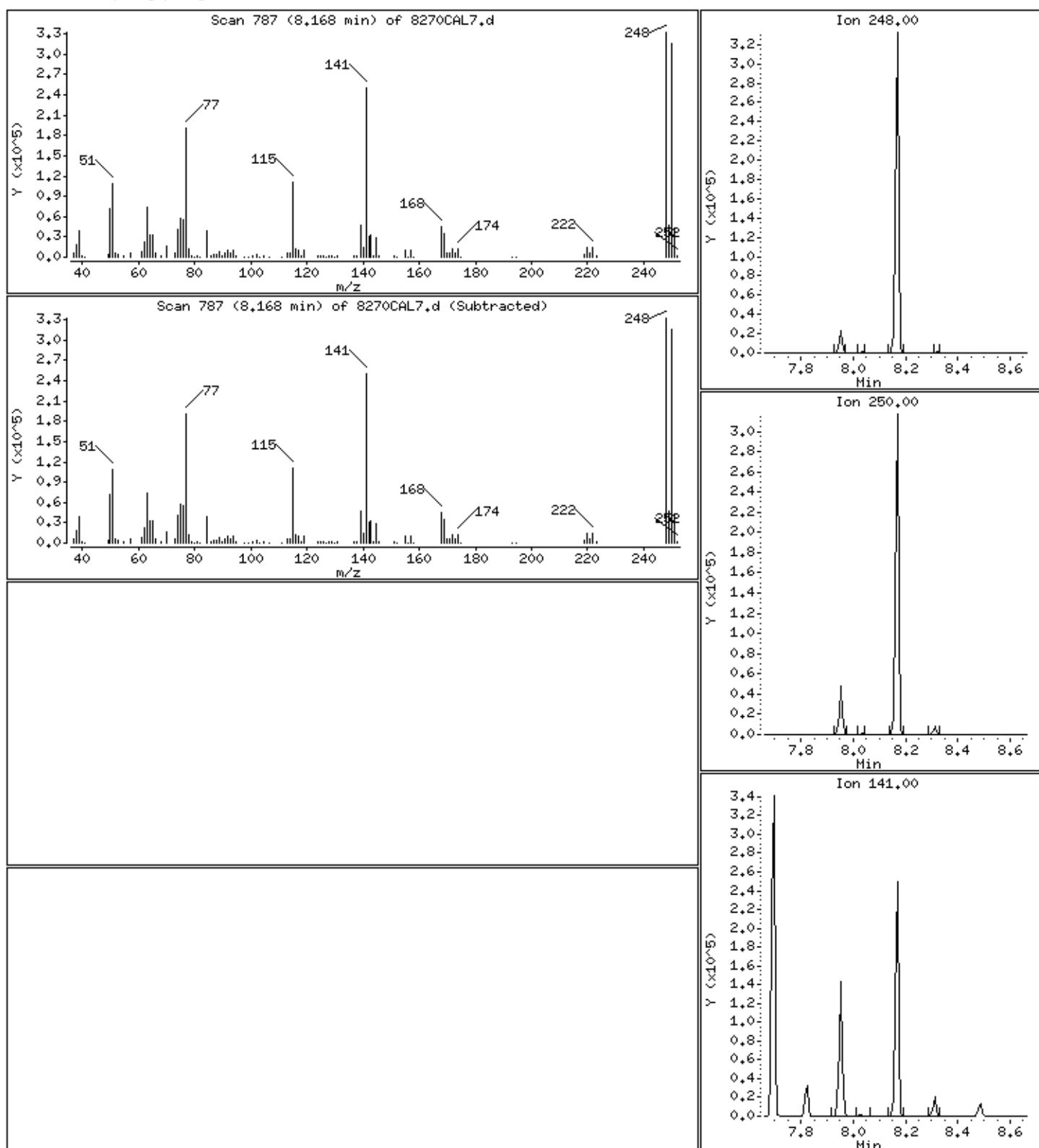
Sample Info: 47763

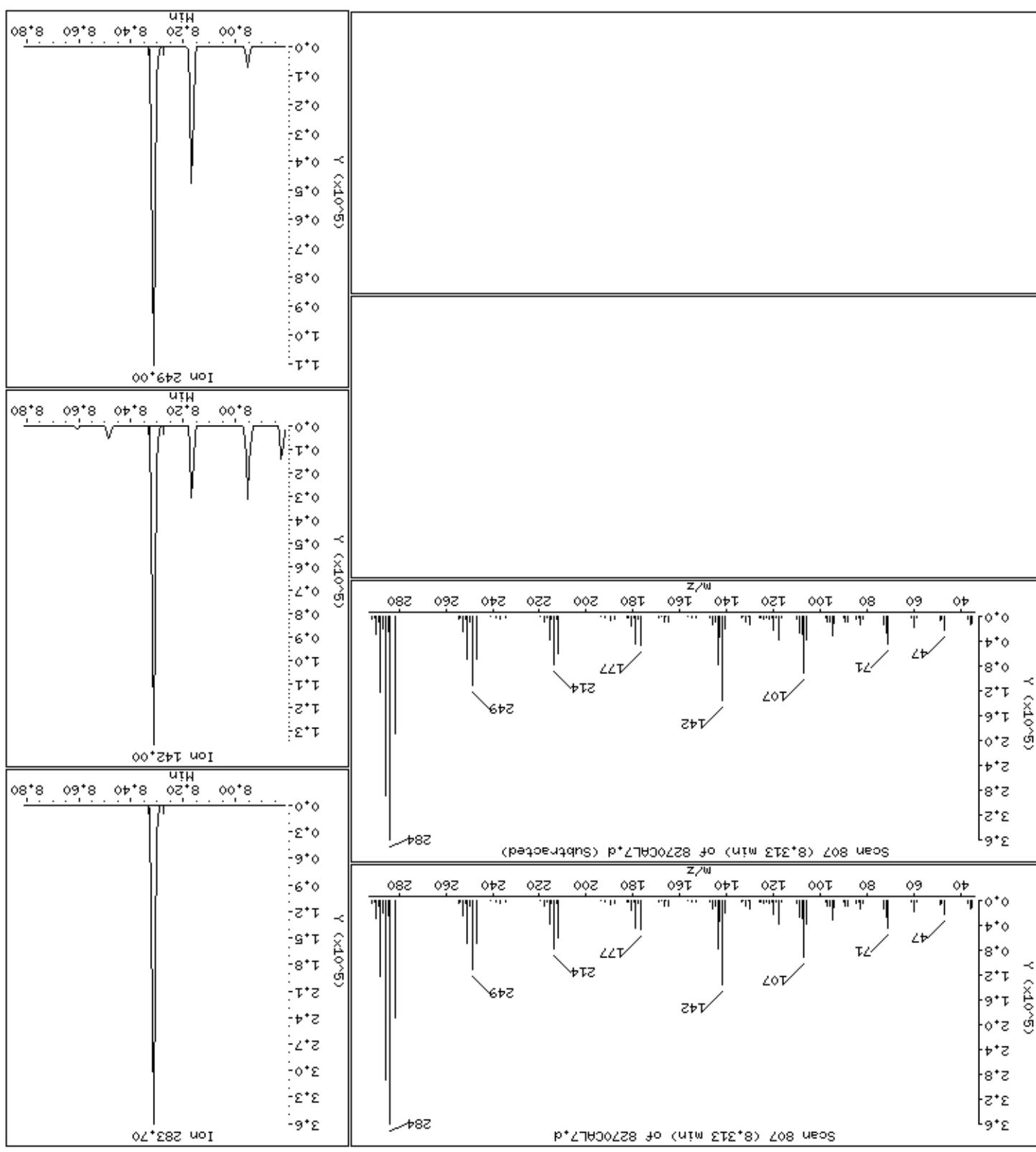
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

93 4-Bromophenylphenylether





94 Hexachlorobenzene

Date : 14-NOV-2012 22:40
 Client ID: 8270CAL7
 Instrument: smsd4.i
 Sample Info: 47763
 Operator: HS
 Column phase: HPMS-5
 Column diameter: 0.25

Data File: \\\Svedol4\DD\chem\smsd4\1\8411145501.b\8270CAL7.d
 Page 62

Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

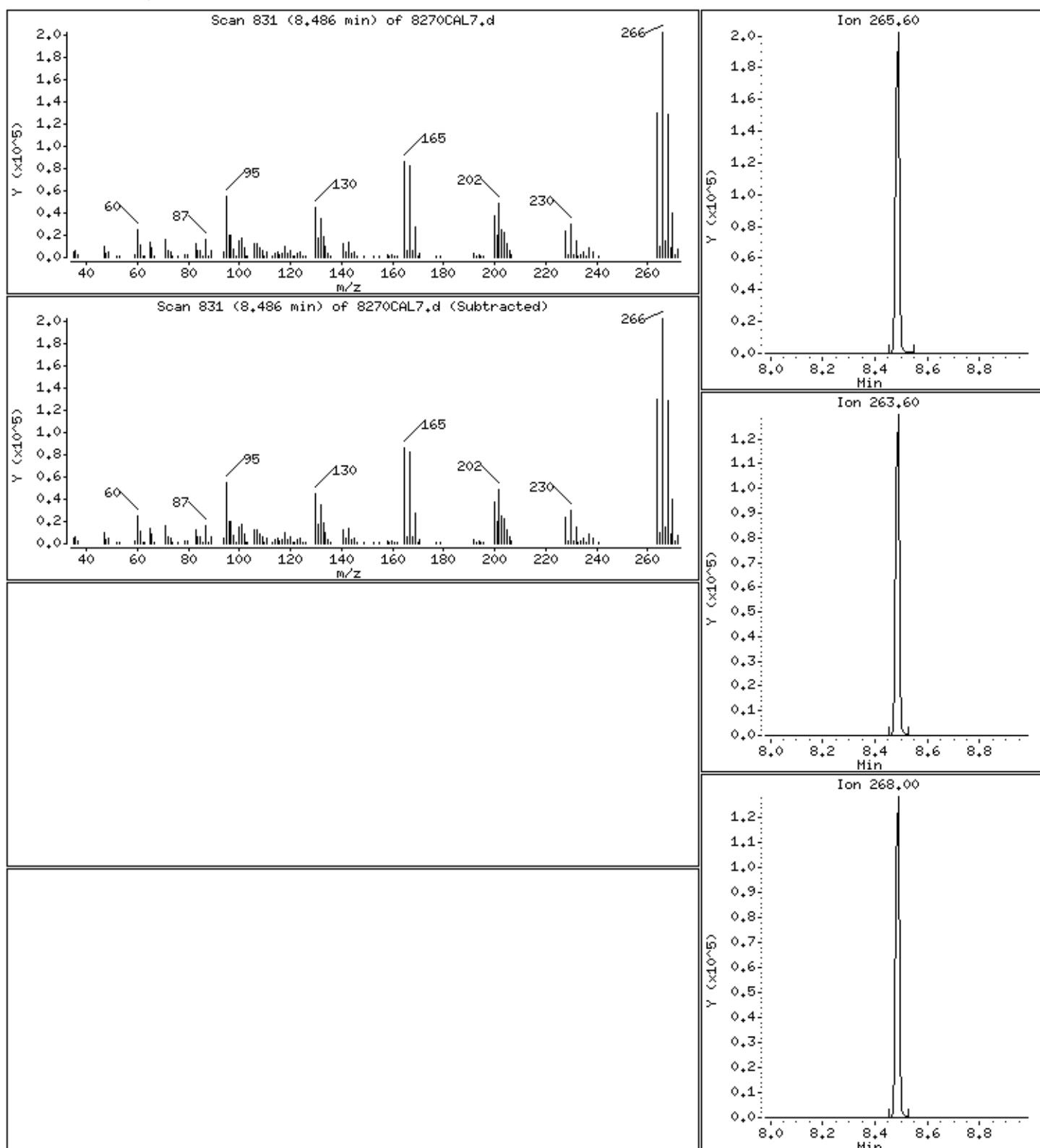
Sample Info: 47763

Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

96 Pentachlorophenol



Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

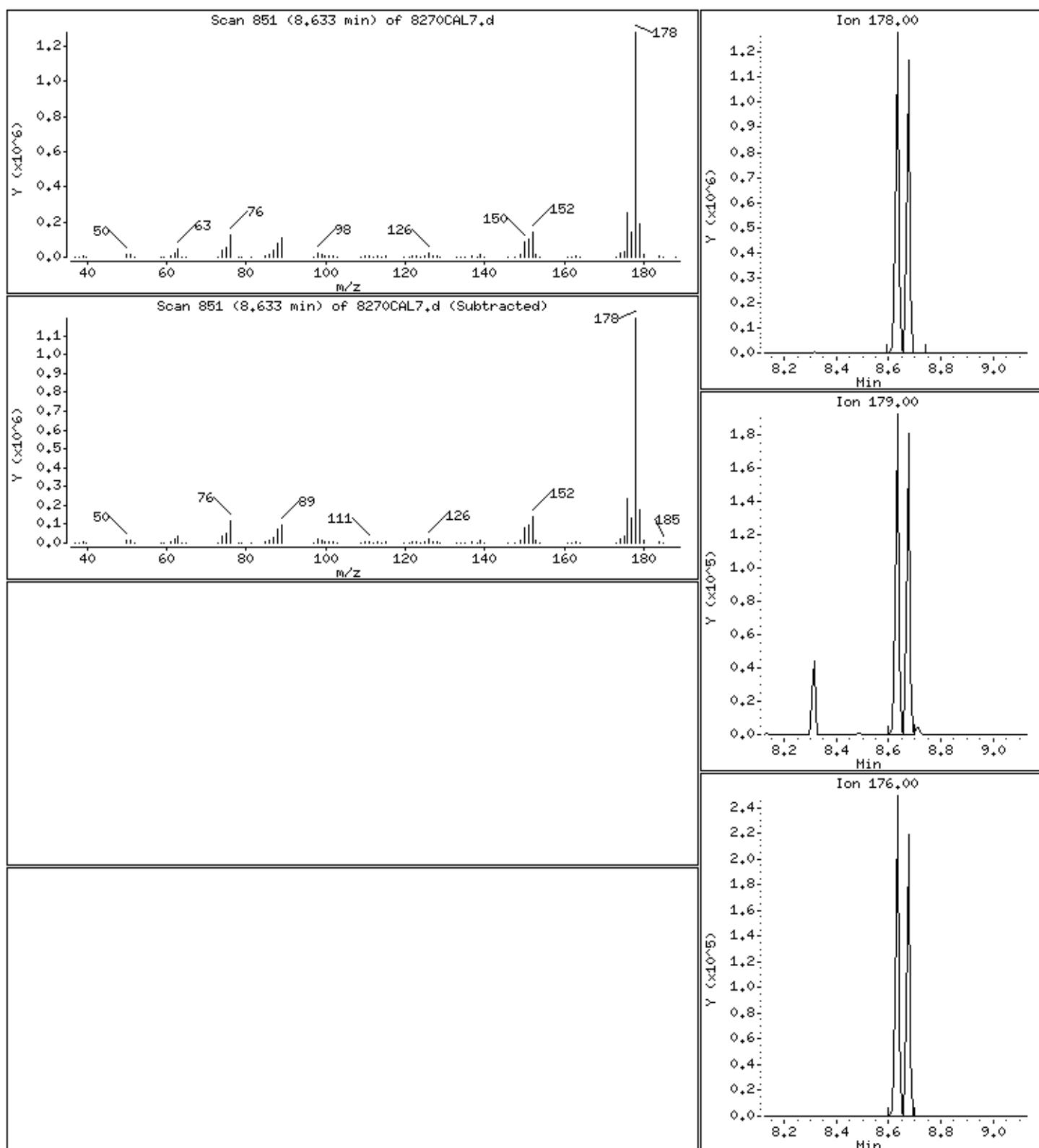
Sample Info: 47763

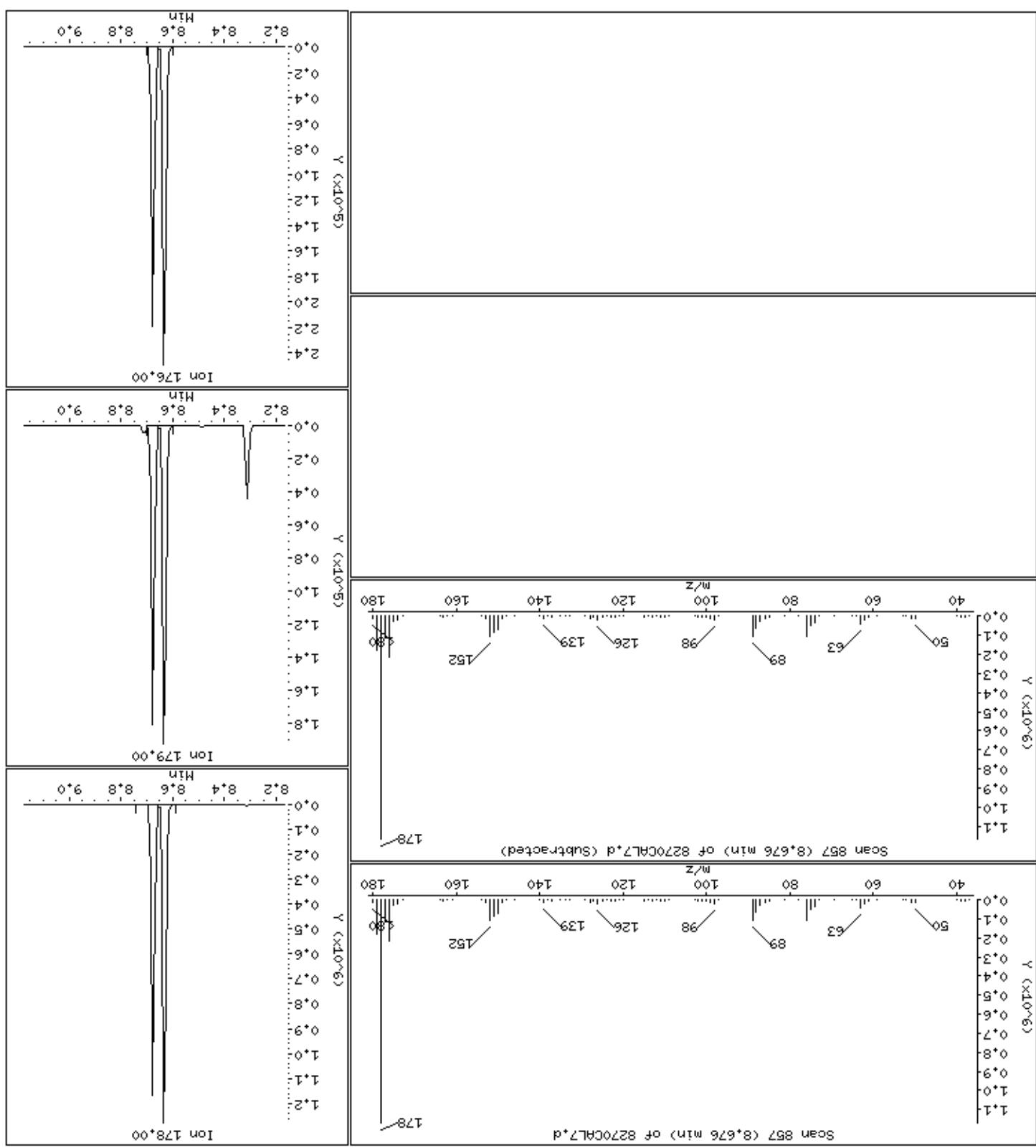
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

101 Phenanthrene





G9 225d

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Client ID: 8270C8L7
Instrument: smdsd4!1

operator: NO

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CM : 100% recycled

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Sample Info: 47763

Event ID: 8270C012

Date : 14-NOV-2012 22:40

Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

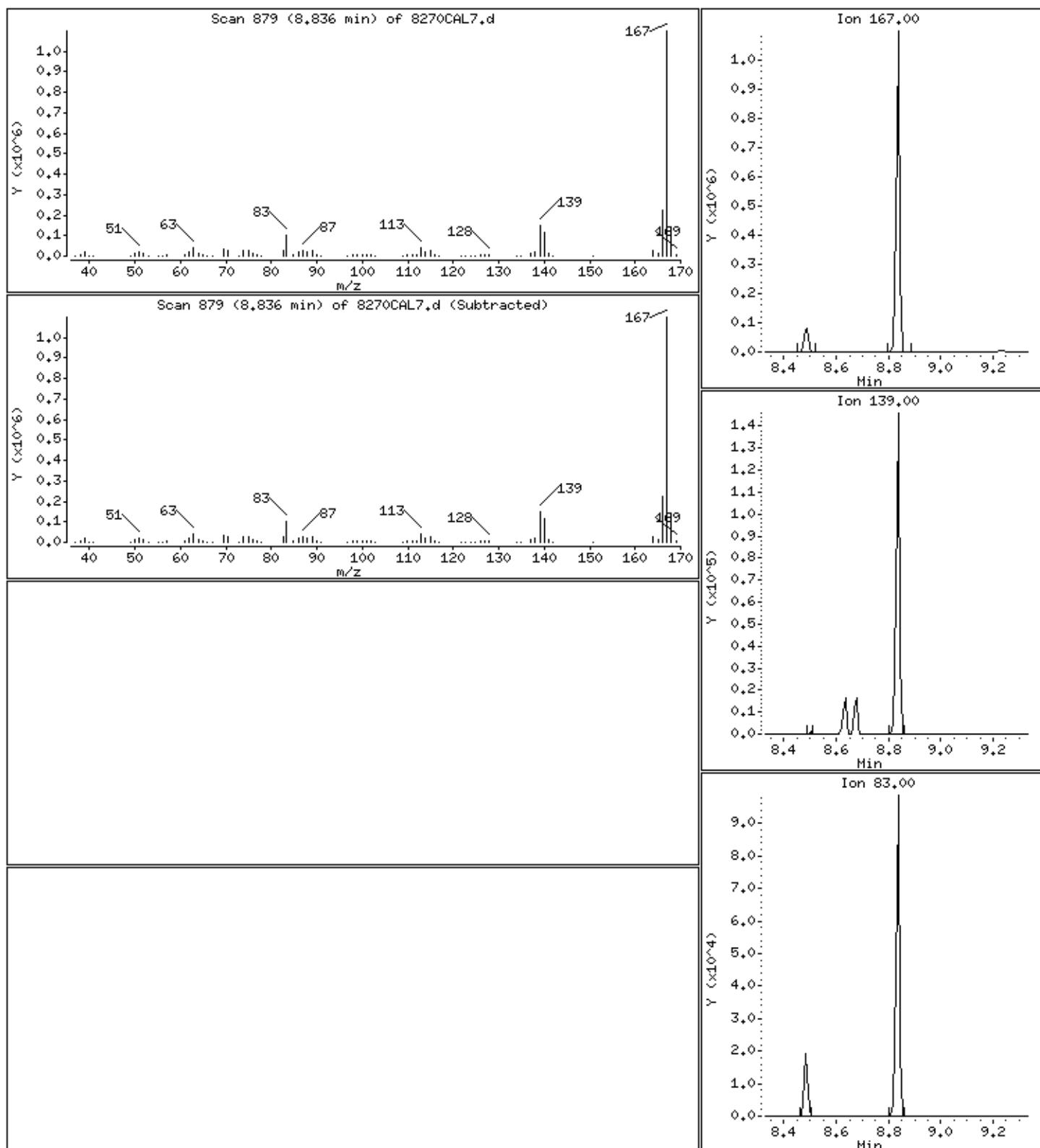
Sample Info: 47763

Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

104 Carbazole



Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

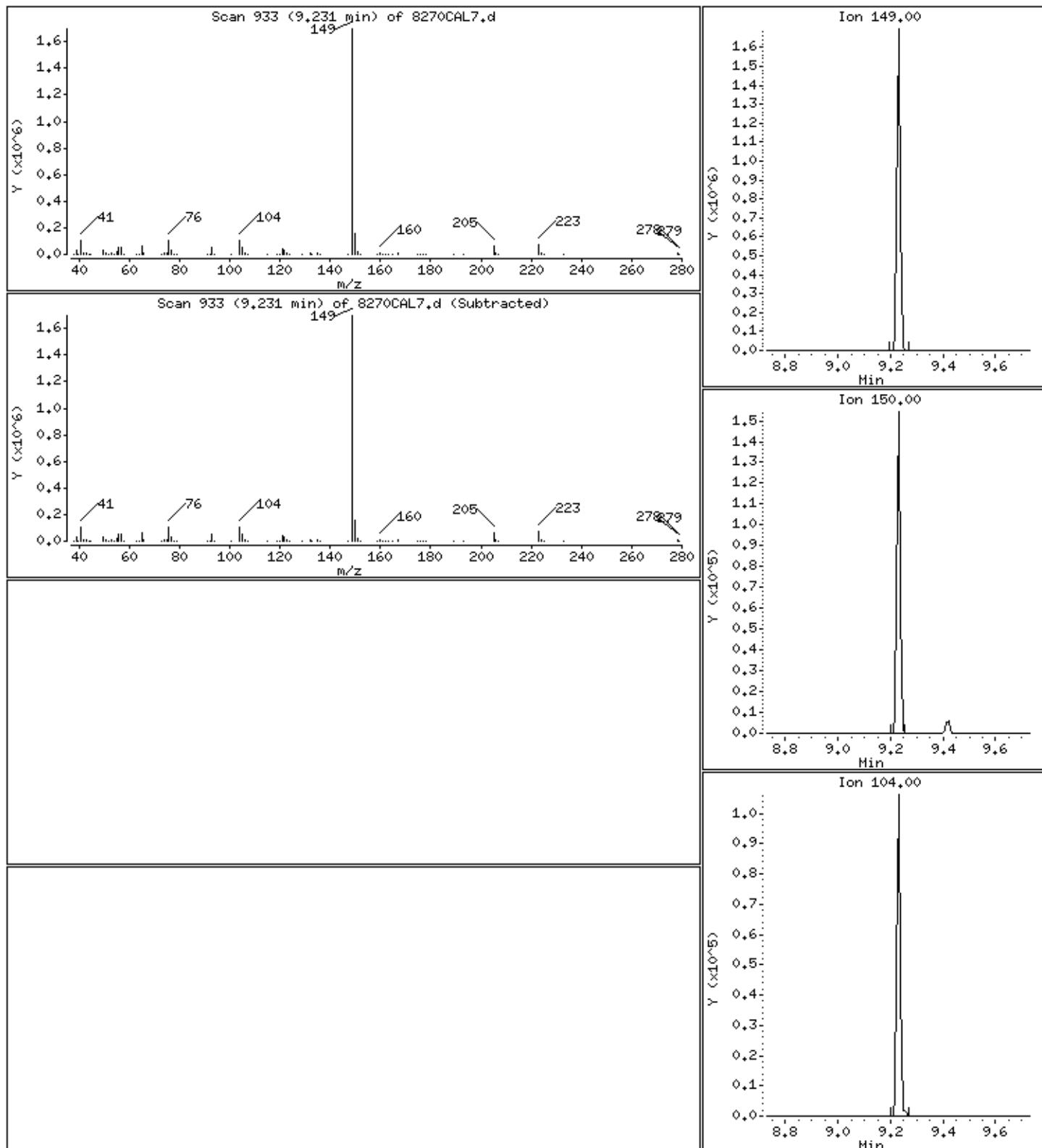
Sample Info: 47763

Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

105 Di-n-butylphthalate



Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

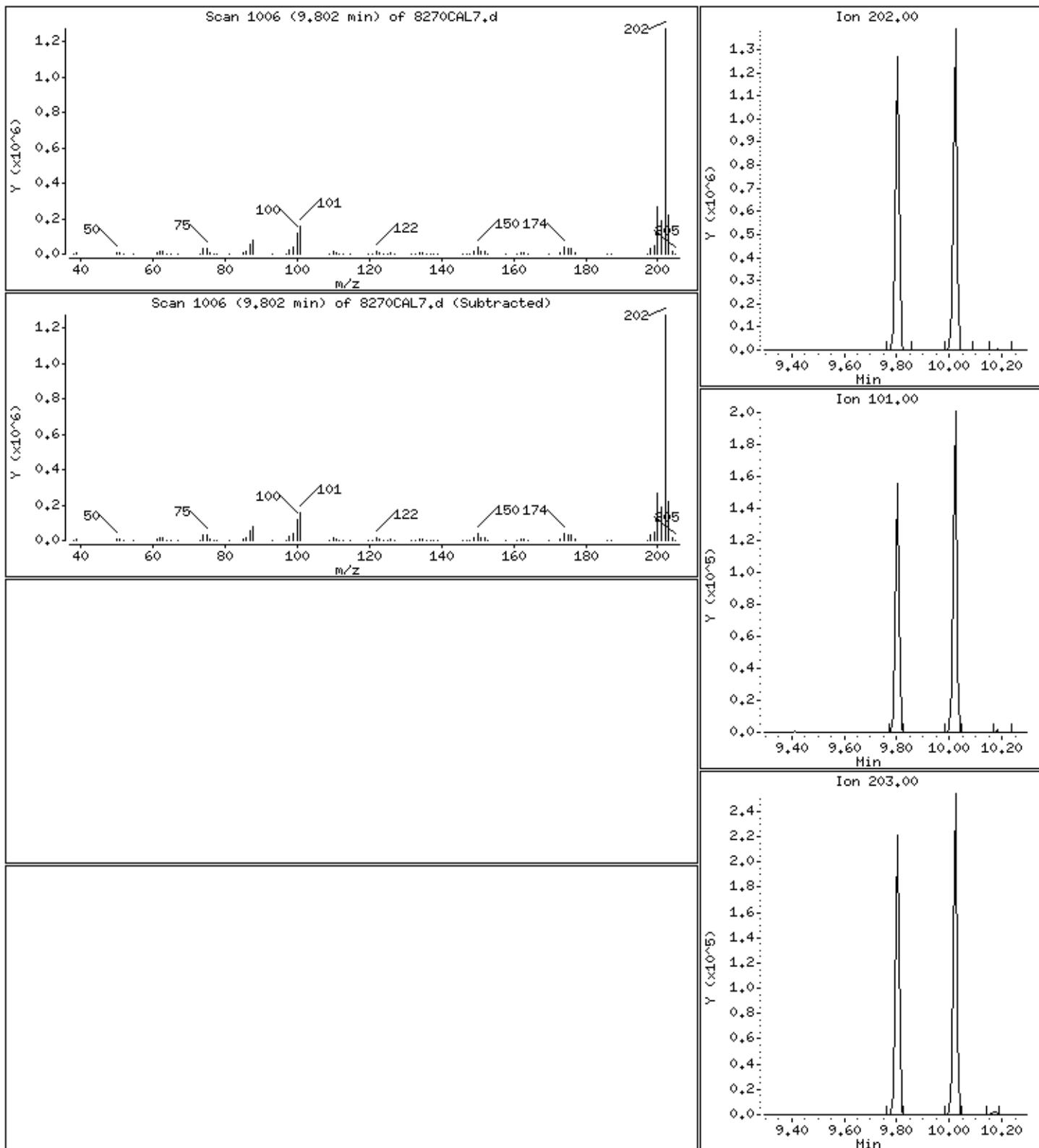
Sample Info: 47763

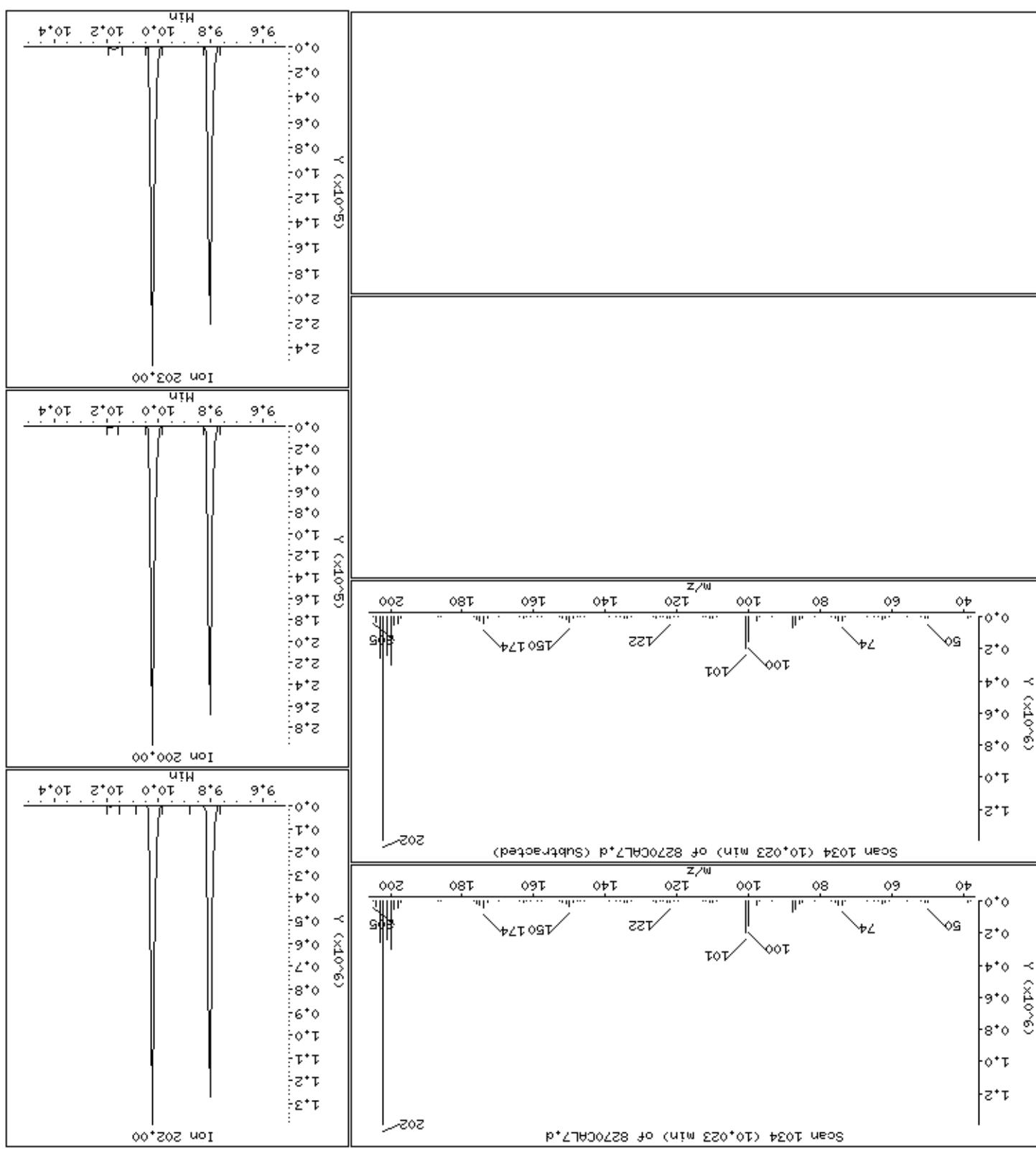
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

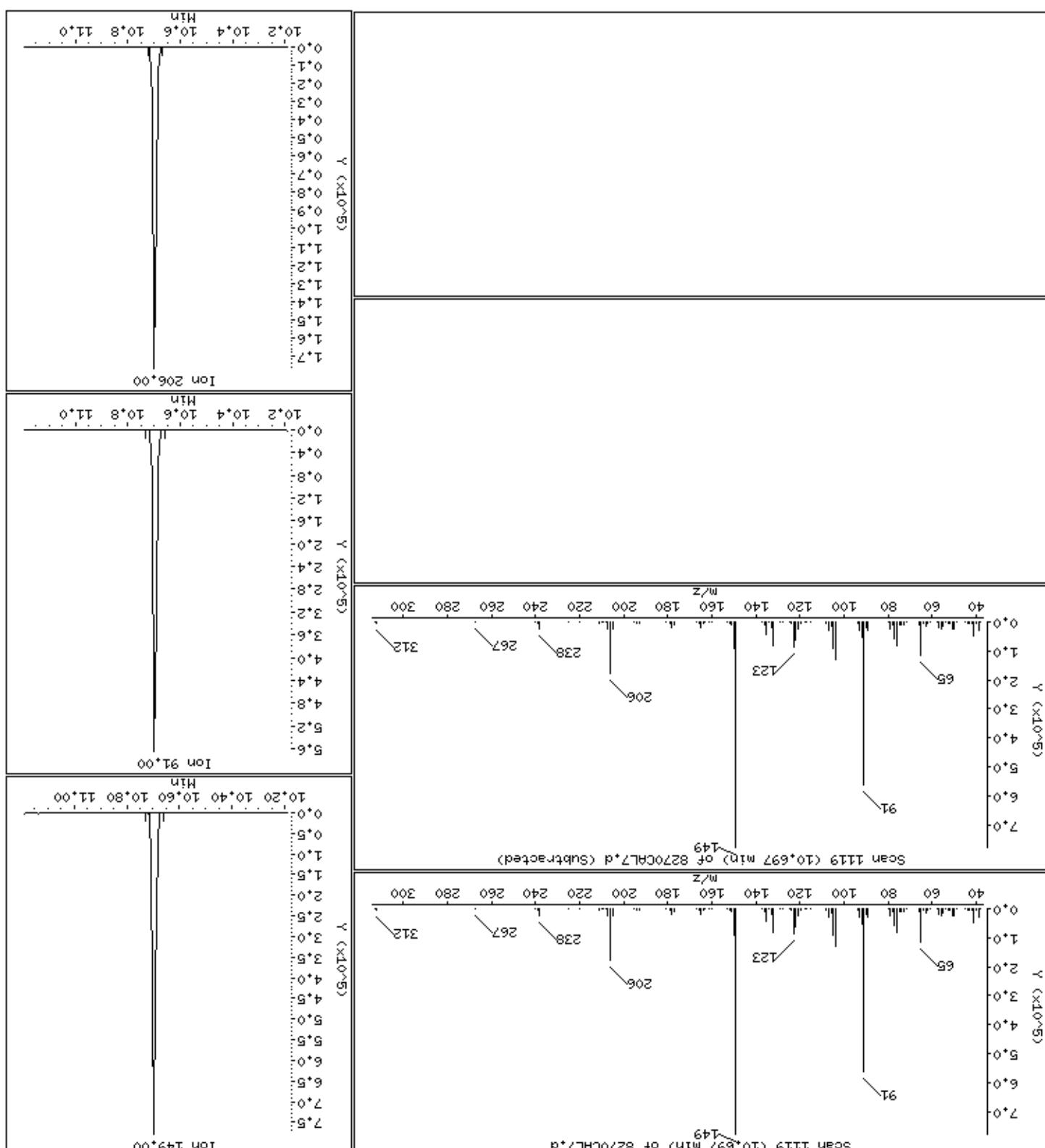
109 Fluoranthene





111 Pyrene

Column phase: HPM-S
 Column diameter: 0.25
 Operator: HS
 Instrument: smsd4.i
 Client ID: 8270CCL7
 Sample Info: 47763
 Date: 14-NOV-2012 22:40
 Data File: \\\\$vedod4\DD\chem\smsd4\1\84111455001.b\8270CCL7.d



118 Butylbenzylphthalate

Column phase: HPM-S

Column diameter: 0.25

Operatot: HS

Sample Info: 47763

Instrument: smsd4.i

Client ID: 8270CAL7

Sample Info: 47763

Date : 14-NOV-2012 22:40

Scan 1184 (111.201 min) of 8270CAL7+d

Ion 228+00

m/z

228

1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0

Scan 1184 (111.201 min) of 8270CAL7+d (Subtracted)

Ion 229+00

m/z

228

1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0

Scan 1184 (111.201 min) of 8270CAL7+d

Ion 226+00

m/z

226

1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0

Client ID: 8270CACL7 Instrument: smsd04*I
Sample Info: 47763 Column phase: HPM-S-5
Operator: MJ Column diameter: 0.25

Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

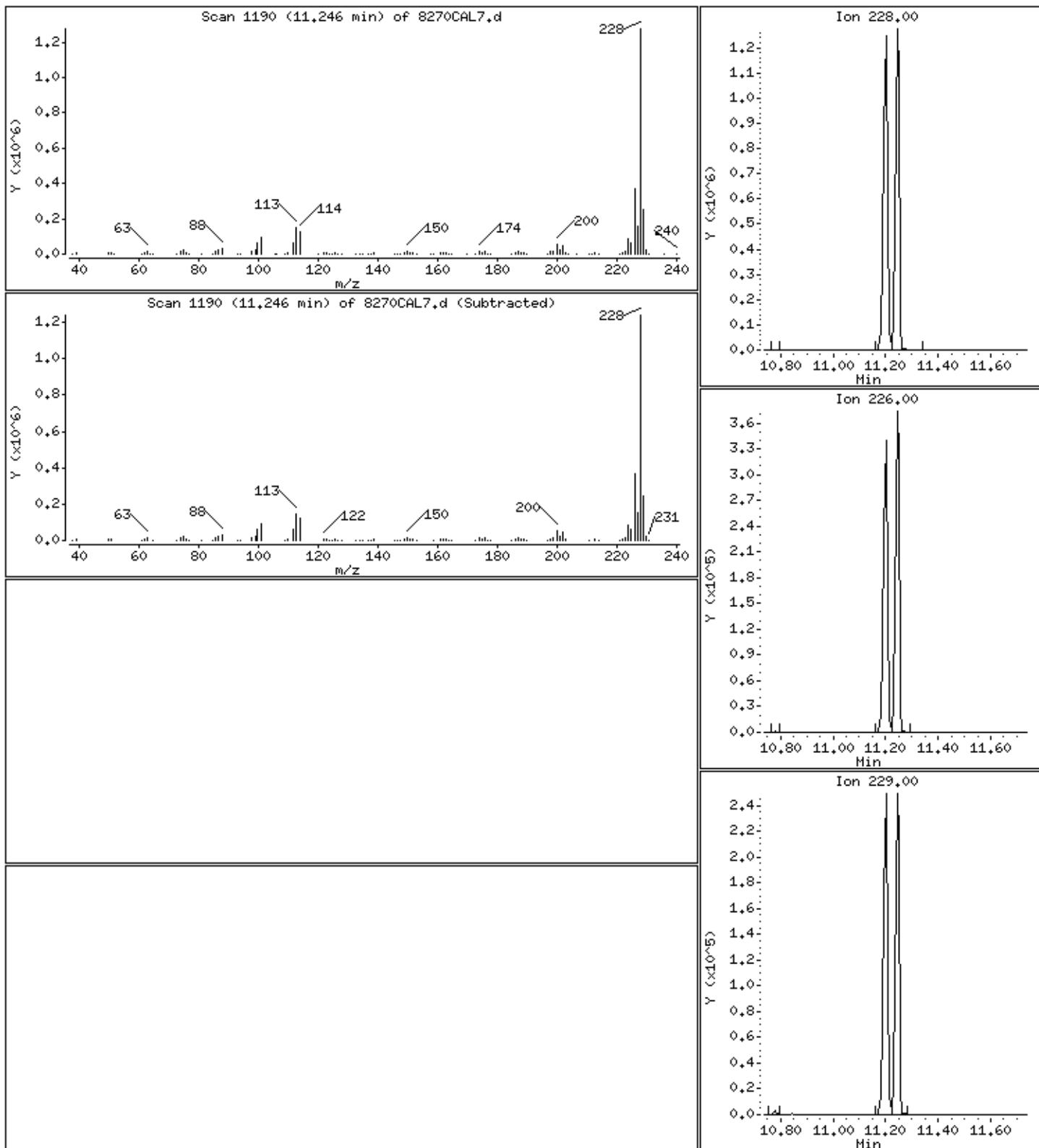
Sample Info: 47763

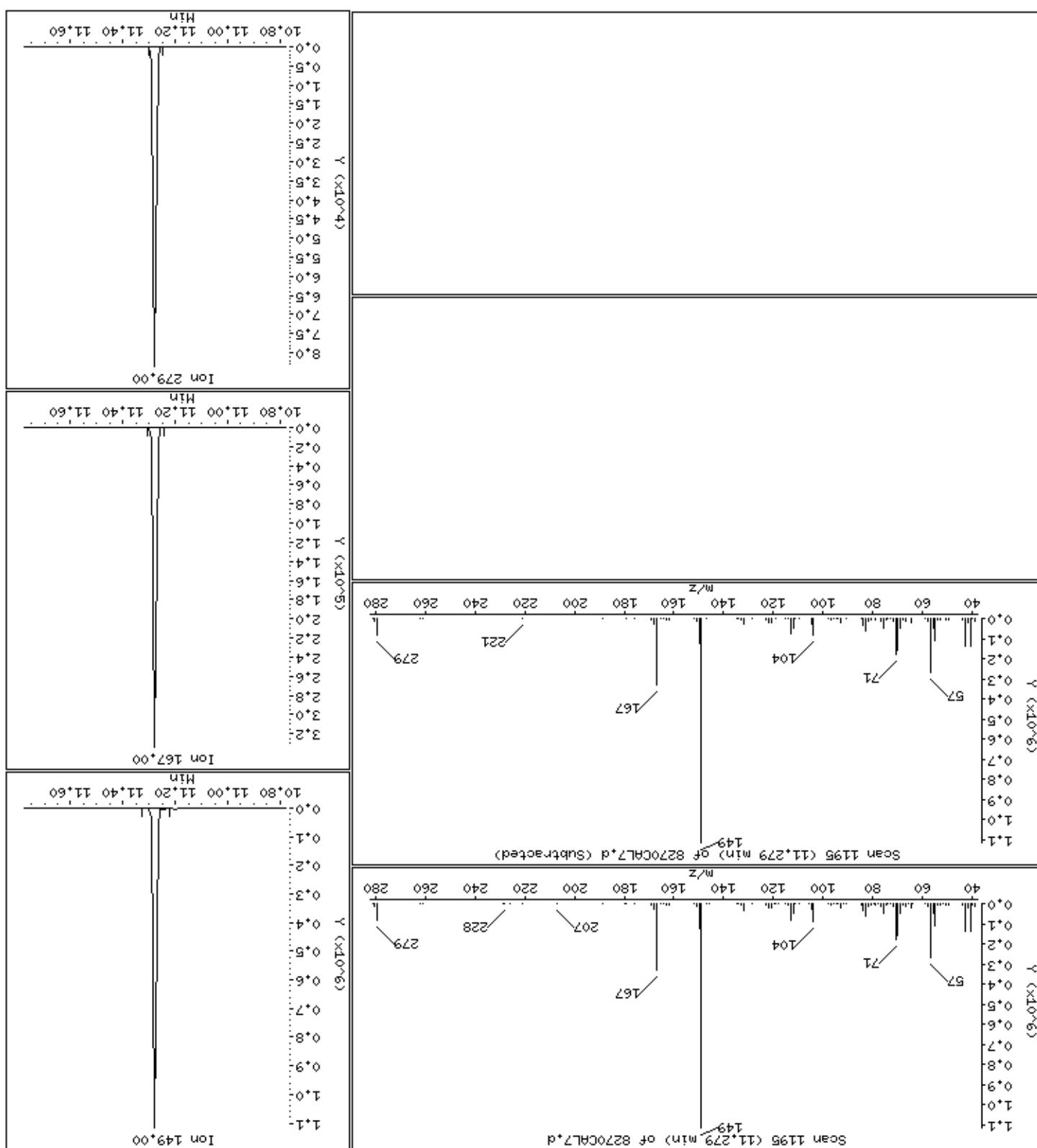
Operator: MJ

Column phase: HPMS-5

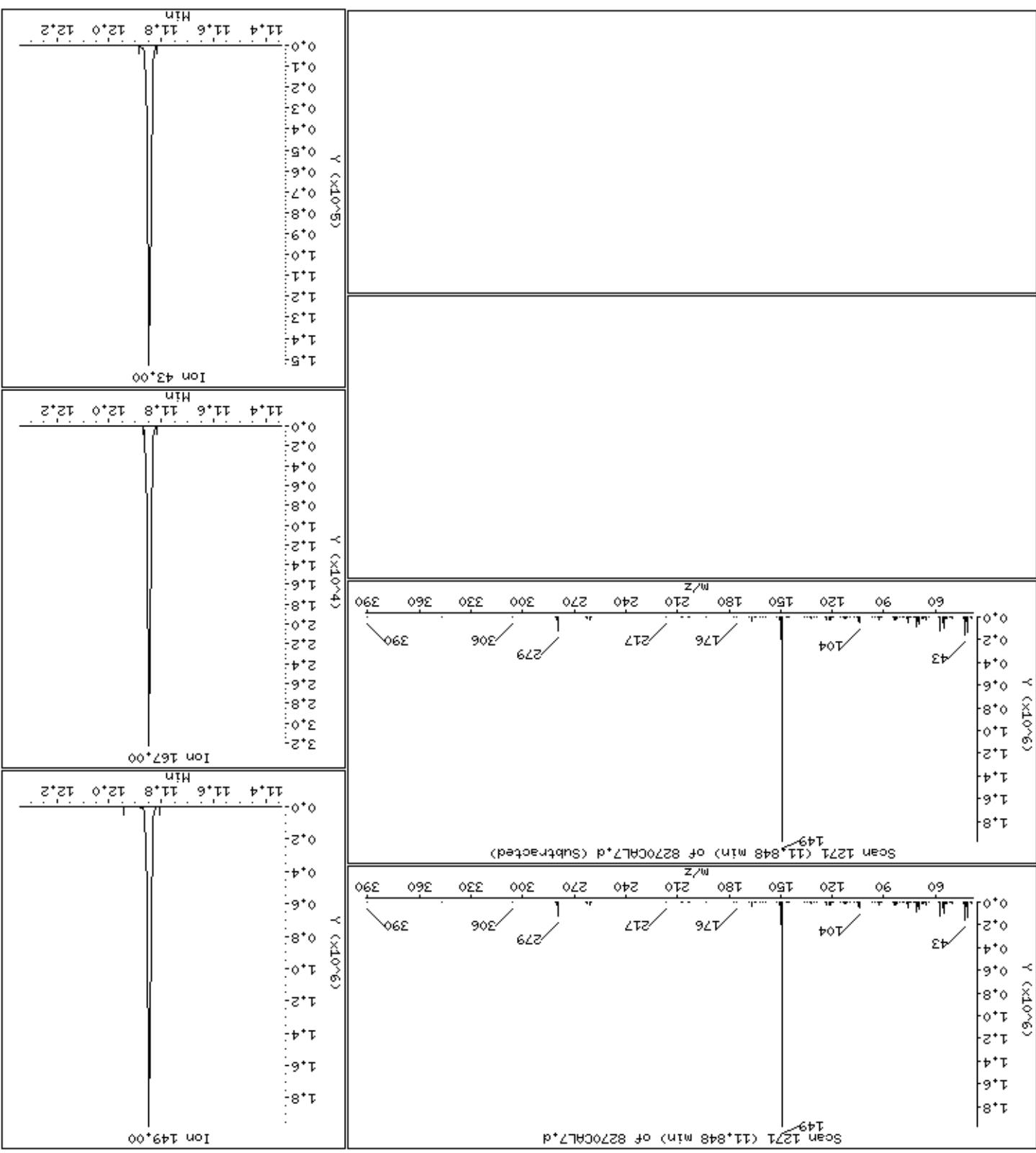
Column diameter: 0.25

123 Chrysene





Date : 14-NOV-2012 22:40 Client ID: 8270C1L7
Instrument: msd404.i Sample Info: 47763
Column phase: HPS-5
Column diameter: 0.25
Operator: M3



Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

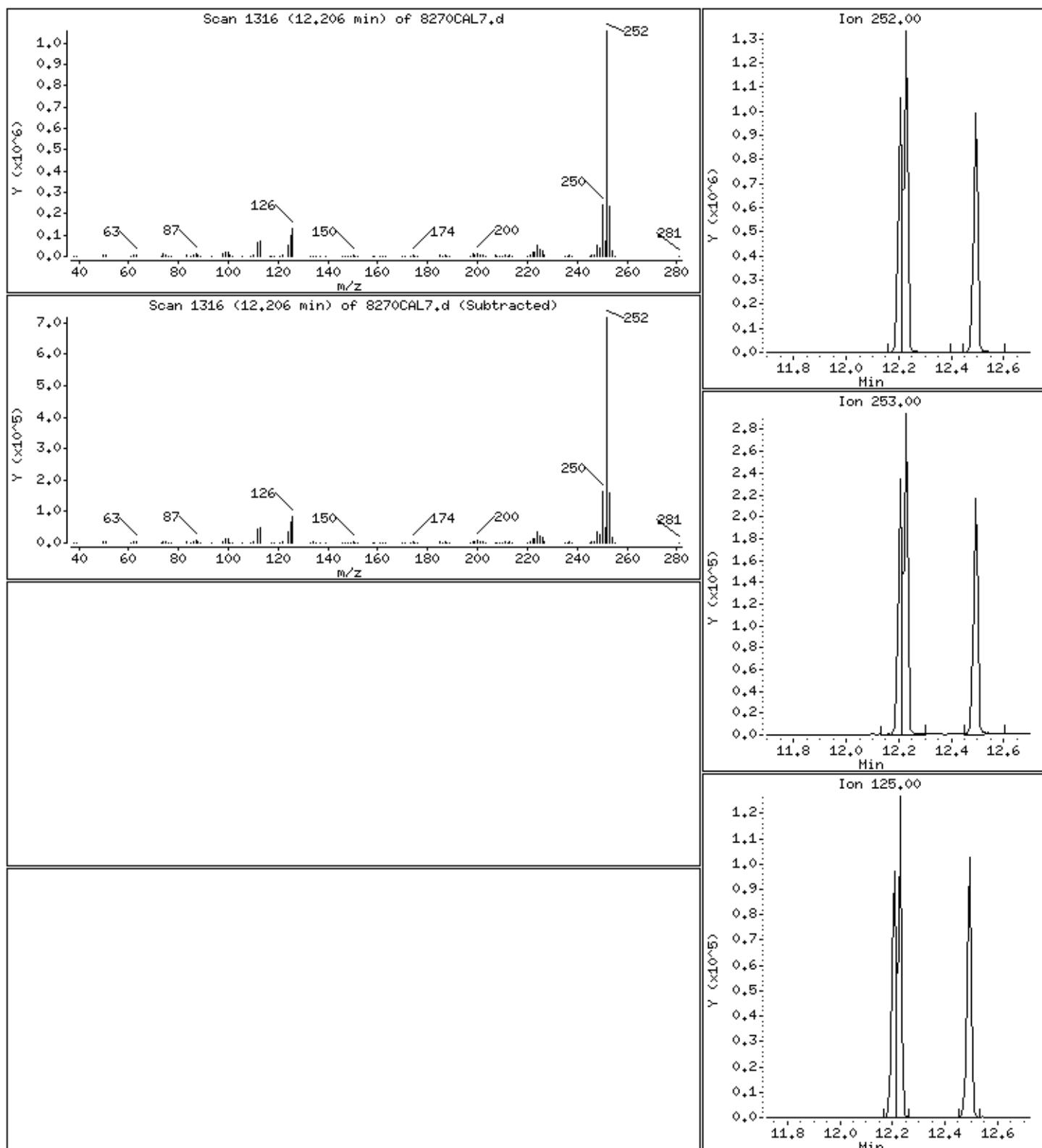
Sample Info: 47763

Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

127 Benzo[b]fluoranthene



Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

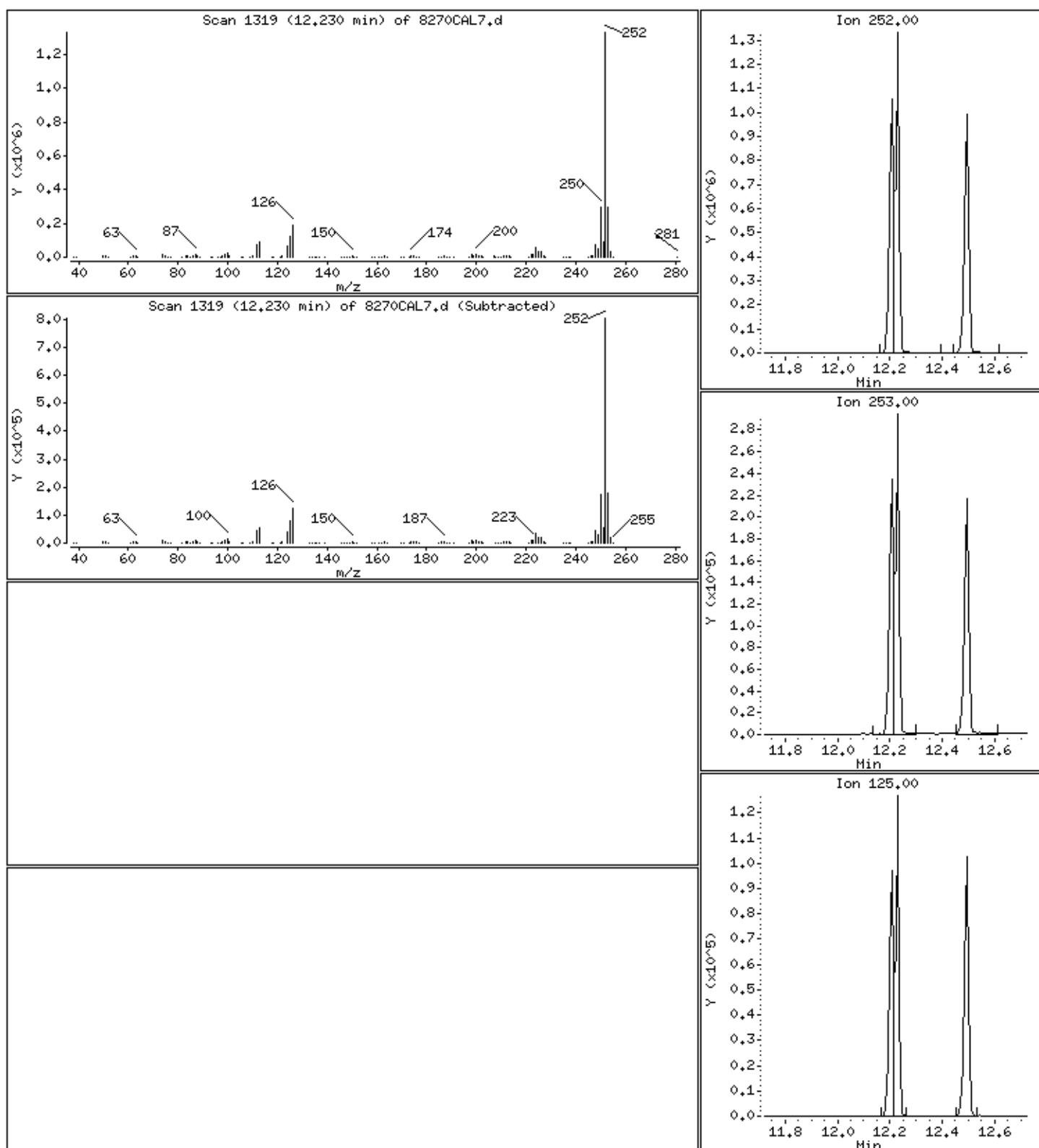
Sample Info: 47763

Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

128 Benzo[k]fluoranthene



Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

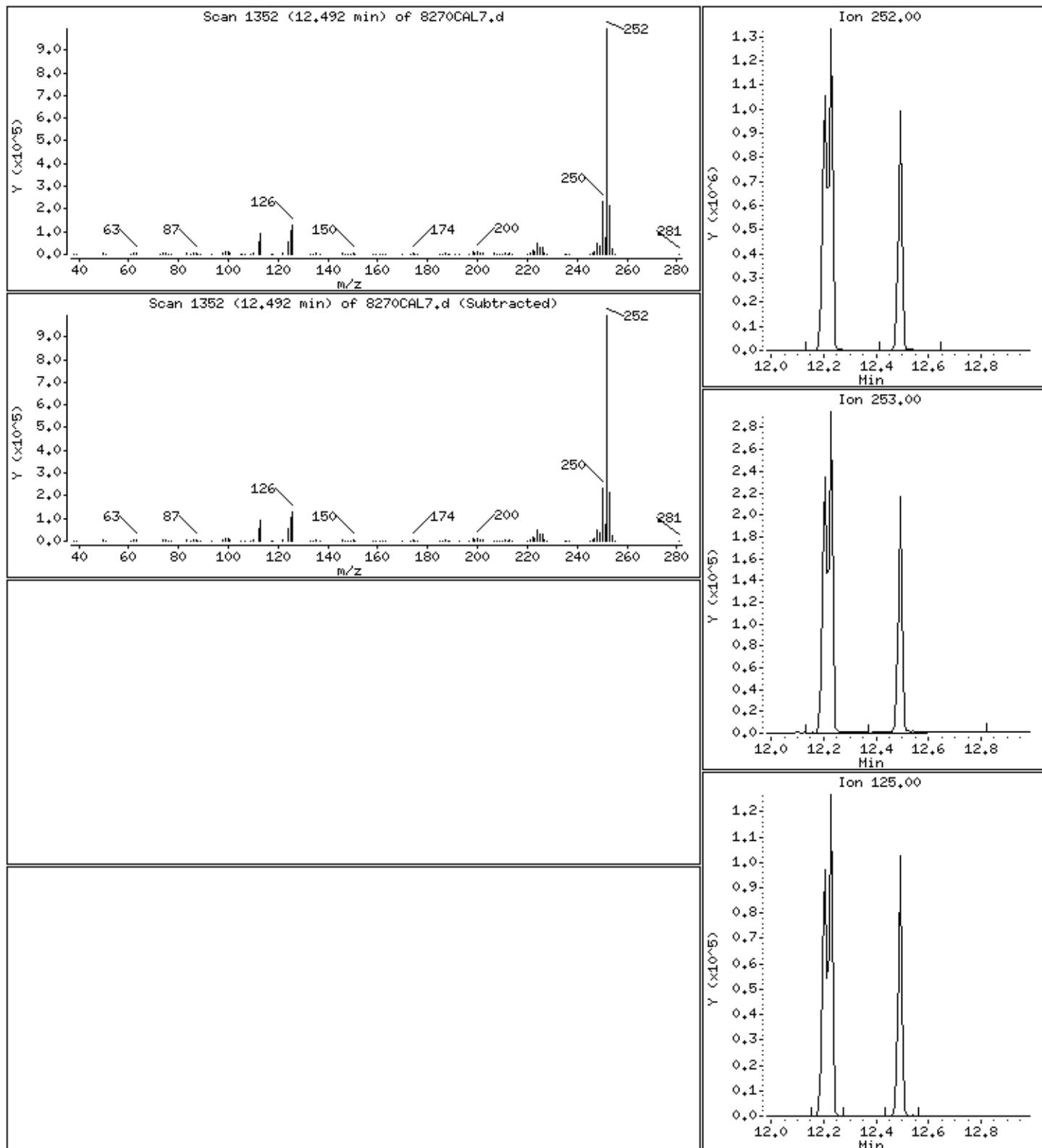
Sample Info: 47763

Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

129 Benzo[a]pyrene



Date : 14-NOV-2012 22:40

Client ID: 8270CAL7

Instrument: smsd04.i

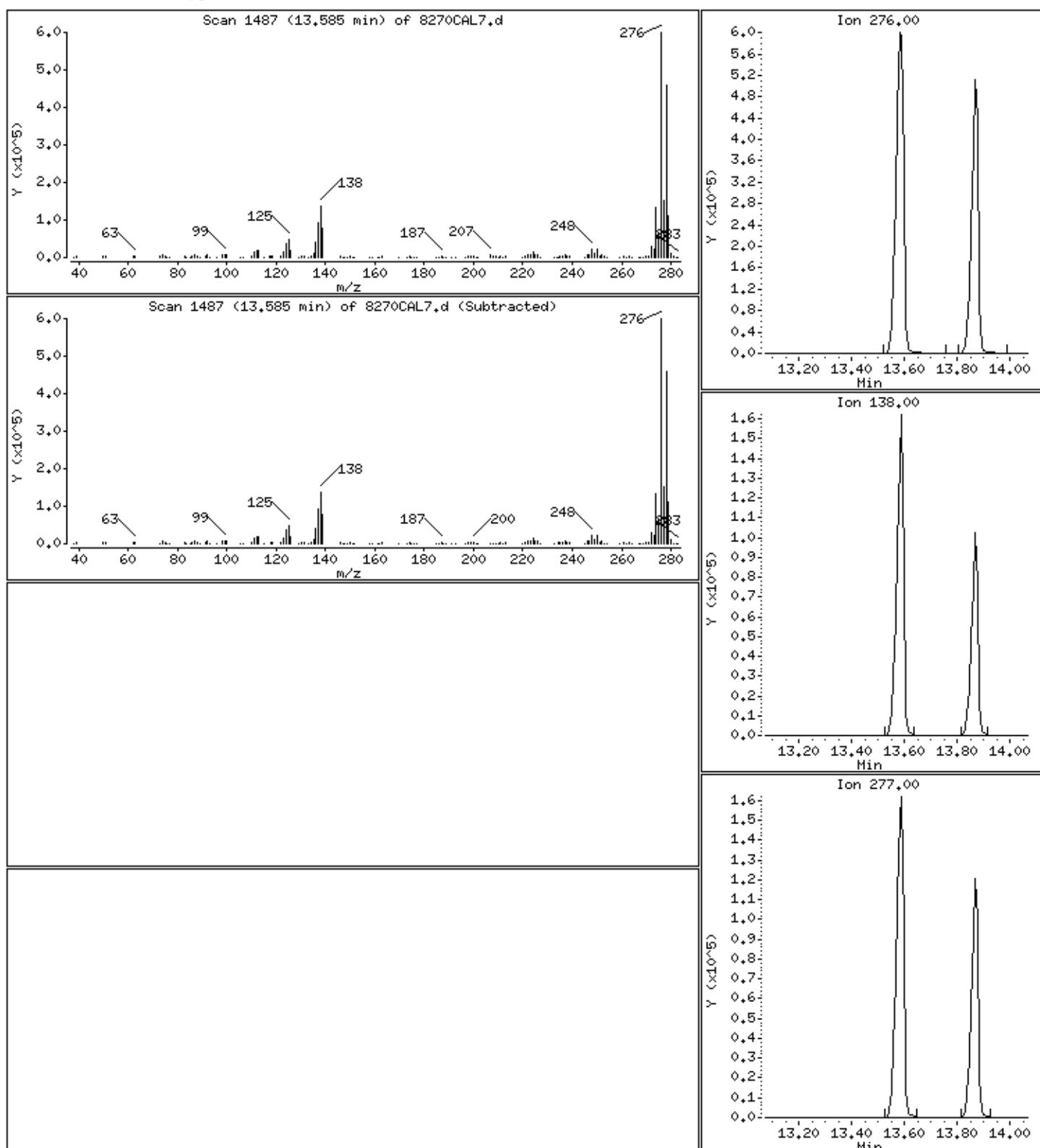
Sample Info: 47763

Operator: MJ

Column phase: HPMS-5

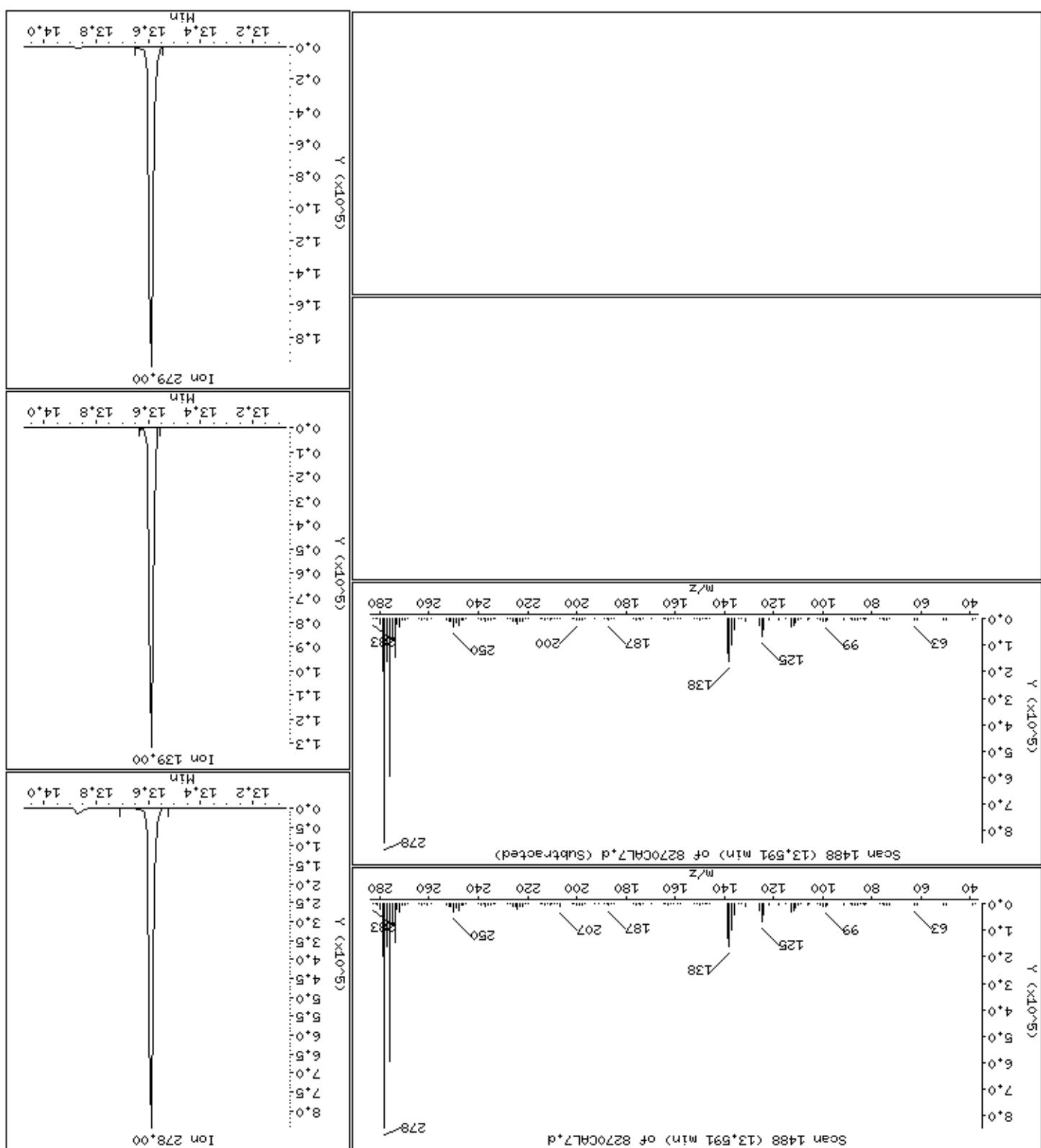
Column diameter: 0.25

133 Indeno[1,2,3-cd]pyrene



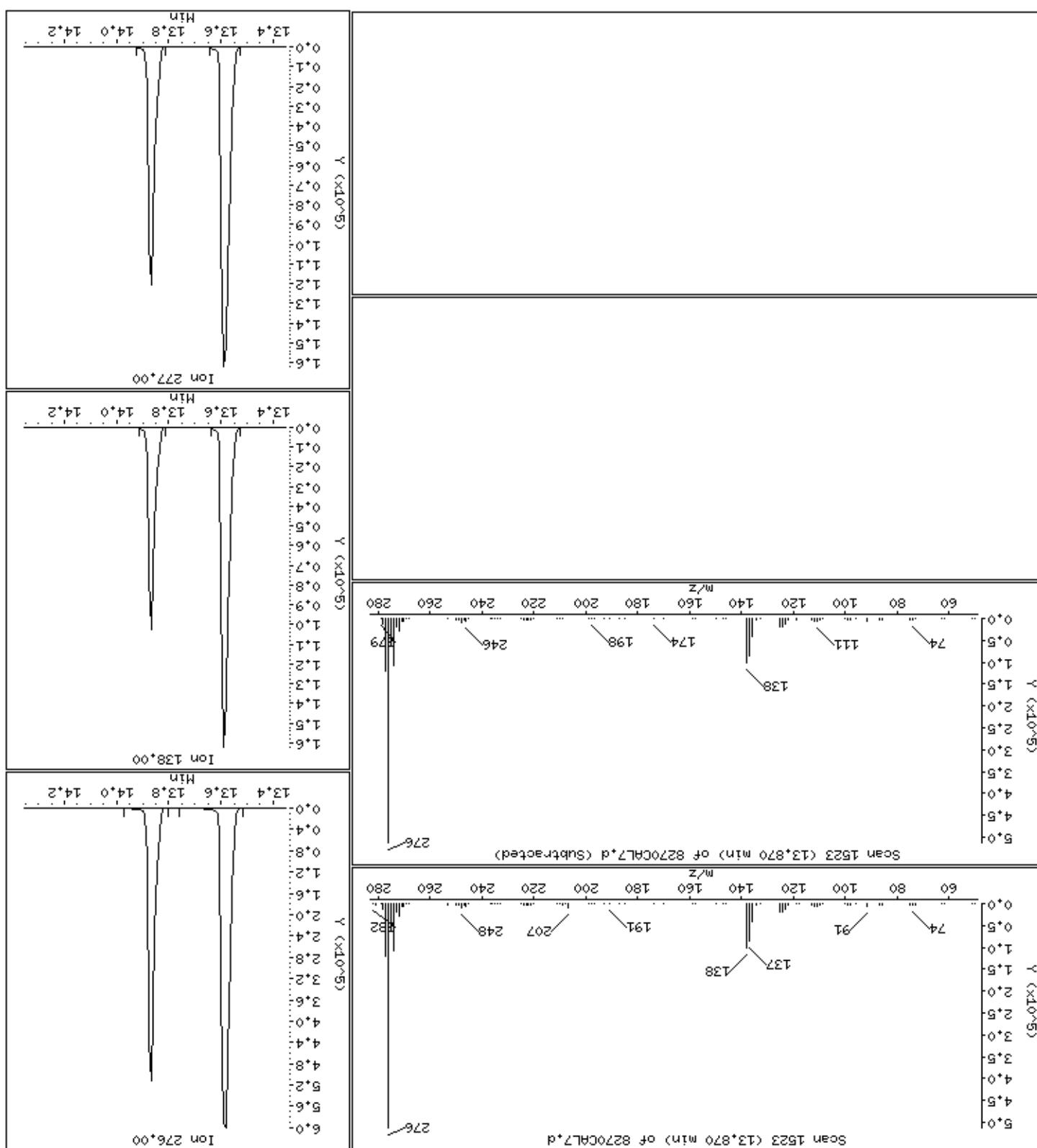
Date : 14-NOV-2012 22:40
Client ID: 8270CA7
Instrument: smsdad4.i
Sample Info: 47763
Operator: MJ
Column diameter: 0.25
Column phase: HPMS-5

Page 79



Date : 14-NOV-2012 22:40
Client ID: 8270CBL7
Instrument: msd04.i
Sample Info: 47763

Column phase: HPMs-5
Column diameter: 0.25



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\8270CAL6.d
Lab Smp Id: 47764 Client Smp ID: 8270CAL6
Inj Date : 14-NOV-2012 23:01 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47764
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\8270bcs.m
Meth Date : 26-Nov-2012 13:58 smsd04.i Quant Type: ISTD
Cal Date : 15-OCT-2012 13:38 Cal File: AP9CAL6.d
Als bottle: 22 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8270caln.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	TARGET RANGE
2.228	2.228	(0.519)	79	269379 75.0000	74.7	80.00- 120.00	100.00
2.228	2.228	(0.518)	52	175423		35.30- 95.30	65.12
<hr/>							
M 16 Cresols (Total)							
				CAS #: 1319-77-3			
				470342 150.000			(a)
<hr/>							
1 N-Nitrosodimethylamine							
2.220	2.220	(0.517)	42	118037 75.0000	73.5	80.00- 120.00	100.00
2.221	2.220	(0.517)	74	155101		97.07- 157.07	131.40
2.220	2.221	(0.517)	44	5732		0.00- 34.98	4.86
<hr/>							
\$ 6 2-Fluorophenol (SURR)							
3.248	3.246	(0.756)	112	476379 150.000	145	80.00- 120.00	100.00
3.248	3.246	(0.756)	64	291544		32.62- 92.62	61.20
<hr/>							
\$ 11 Phenol-d5 (SURR)							
4.011	4.006	(0.933)	99	608518 150.000	145	80.00- 120.00	100.00
4.010	4.006	(0.933)	42	118127		0.00- 49.74	19.41
4.010	4.006	(0.933)	71	255607		12.66- 72.66	42.00
<hr/>							

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
4.022	4.016 (0.936)	94	352046	75.0000	73.5	80.00-	120.00	100.00
4.022	4.016 (0.936)	65	97197		0.94-	60.94		27.61
4.020	4.015 (0.936)	66	166081		21.40-	81.40		47.18
<hr/>								
4.047	4.046 (0.942)	93	325667	75.0000	76.0	80.00-	120.00	100.00(Q)
4.047	4.046 (0.942)	65	80821		0.00-	50.97		24.82
4.047	4.046 (0.942)	66	154363		12.95-	72.95		47.40
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4.095	4.094 (0.953)	93	232110	75.0000	73.5	80.00-	120.00	100.00
4.095	4.093 (0.953)	63	174123		43.04-	103.04		75.02
4.095	4.094 (0.953)	95	75201		1.90-	61.90		32.40
<hr/>								
4.144	4.142 (0.964)	128	229658	75.0000	74.4	80.00-	120.00	100.00
4.143	4.142 (0.964)	64	124527		24.14-	84.14		54.22
4.144	4.142 (0.964)	130	74334		2.15-	62.15		32.37
<hr/>								
4.268	4.267 (0.993)	146	274661	75.0000	74.5	80.00-	120.00	100.00
4.268	4.267 (0.993)	148	176883		34.15-	94.15		64.40
4.268	4.267 (0.993)	111	123127		14.34-	74.34		44.83
<hr/>								
4.298	4.294 (1.000)	152	96497	40.0000		80.00-	120.00	100.00
4.297	4.294 (1.000)	115	61262		34.81-	94.81		63.49
4.298	4.294 (1.000)	150	182361		126.51-	186.51		188.98
<hr/>								
4.311	4.311 (1.003)	146	286697	75.0000	75.2	80.00-	120.00	100.00
4.311	4.311 (1.003)	148	182529		36.10-	96.10		63.67
4.311	4.311 (1.003)	111	125574		14.95-	74.95		43.80
<hr/>								
4.433	4.429 (1.032)	108	155781	75.0000	73.6	80.00-	120.00	100.00
4.433	4.429 (1.031)	79	242735		126.03-	186.03		155.82
4.433	4.429 (1.031)	77	165361		76.75-	136.75		106.15
<hr/>								
4.479	4.478 (1.042)	146	262337	75.0000	73.7	80.00-	120.00	100.00
4.479	4.478 (1.042)	148	165290		33.36-	93.36		63.01
4.479	4.478 (1.042)	111	119823		18.07-	78.07		45.68
<hr/>								
4.540	4.538 (1.056)	107	187685	75.0000	73.8	80.00-	120.00	100.00
4.540	4.538 (1.056)	108	209591		83.56-	143.56		111.67
4.540	4.538 (1.056)	79	105432		27.79-	87.79		56.17
<hr/>								
4.572	4.571 (1.064)	45	292556	75.0000	74.0	80.00-	120.00	100.00
4.572	4.571 (1.064)	77	55393		0.00-	47.34		18.93

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
4.572	4.571 (1.064)	121	80204			0.00-	56.71	27.41
<hr/>								
23	2,2'-oxybis(1-chloropropane) (continued)							
4.674	4.668 (1.088)	107	282657 75.0000	72.8	80.00- 120.00	100.00		
4.674	4.668 (1.088)	108	231546		51.88- 111.88	81.92		
4.674	4.668 (1.087)	79	77564		0.00- 57.76	27.44		
<hr/>								
26	N-Nitrosodinpropylamine				CAS #: 621-64-7			
4.704	4.699 (1.095)	70	199228 75.0000	74.4	80.00- 120.00	100.00		
4.704	4.699 (1.095)	42	105062		21.53- 81.53	52.73		
4.705	4.699 (1.095)	130	43851		0.00- 51.40	22.01		
<hr/>								
30	Hexachloroethane				CAS #: 67-72-1			
4.754	4.753 (1.106)	117	119950 75.0000	75.1	80.00- 120.00	100.00		
4.754	4.754 (1.106)	201	113141		63.39- 123.39	94.32		
4.754	4.754 (1.106)	199	69820		26.40- 86.40	58.21		
<hr/>								
\$ 31	Nitrobenzene-d5 (SURR)				CAS #: 4165-60-0			
4.820	4.818 (0.881)	82	308458 75.0000	73.6	80.00- 120.00	100.00		
4.820	4.818 (0.882)	128	114163		6.68- 66.68	37.01		
4.820	4.818 (0.881)	54	150559		19.12- 79.12	48.81		
<hr/>								
32	Nitrobenzene				CAS #: 98-95-3			
4.837	4.834 (0.885)	77	300256 75.0000	73.5	80.00- 120.00	100.00		
4.837	4.835 (0.885)	123	114283		6.73- 66.73	38.06		
4.837	4.834 (0.884)	65	44224		0.00- 43.84	14.73		
<hr/>								
34	Isophorone				CAS #: 78-59-1			
5.050	5.046 (0.923)	82	523087 75.0000	73.4	80.00- 120.00	100.00		
5.050	5.047 (0.924)	138	83018		0.00- 45.91	15.87		
5.050	5.046 (0.923)	95	41382		0.00- 37.77	7.91		
<hr/>								
35	2-Nitrophenol				CAS #: 88-75-5			
5.129	5.128 (0.938)	139	129470 75.0000	75.1	80.00- 120.00	100.00		
5.128	5.127 (0.938)	65	80538		33.65- 93.65	62.21		
5.129	5.127 (0.938)	109	55748		13.08- 73.08	43.06		
<hr/>								
36	2,4-Dimethylphenol				CAS #: 105-67-9			
5.160	5.158 (0.944)	122	192467 75.0000	75.6	80.00- 120.00	100.00		
5.160	5.158 (0.944)	107	252802		100.42- 160.42	131.35		
5.160	5.158 (0.944)	121	111388		27.73- 87.73	57.87		
<hr/>								
38	Bis(2-Chloroethoxy)methane				CAS #: 111-91-1			
5.254	5.252 (0.961)	93	304622 75.0000	74.1	80.00- 120.00	100.00		
5.254	5.252 (0.961)	95	99639		2.66- 62.66	32.71		
5.255	5.252 (0.961)	123	44309		0.00- 43.79	14.55		
<hr/>								
40	Benzoic Acid				CAS #: 65-85-0			
5.286	5.267 (0.967)	122	136127 75.0000	74.4	80.00- 120.00	100.00		
5.285	5.267 (0.966)	105	195497		114.27- 174.27	143.61		
5.285	5.267 (0.967)	77	169019		94.81- 154.81	124.16		
<hr/>								

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
====	=====	=====	====	=====	=====	=====	=====	=====
41	2,4-Dichlorophenol				CAS #: 120-83-2			
5.344	5.342 (0.977)	162	218454	75.0000	72.7	80.00-	120.00	100.00
5.344	5.342 (0.977)	164	137977		34.34-	94.34		63.16
5.344	5.342 (0.977)	98	82512		8.30-	68.30		37.77

42	1,2,4-Trichlorobenzene				CAS #: 120-82-1			
5.429	5.427 (0.993)	180	242642	75.0000	73.4	80.00-	120.00	100.00
5.429	5.427 (0.993)	182	228980		69.17-	129.17		94.37
5.428	5.427 (0.993)	145	70884		0.41-	60.41		29.21

*	43 Naphthalene-d8				CAS #: 1146-65-2			
5.468	5.463 (1.000)	136	323484	40.0000		80.00-	120.00	100.00
5.468	5.463 (1.000)	68	23757			0.00-	37.51	7.34

44	Naphthalene				CAS #: 91-20-3			
5.487	5.486 (1.003)	128	646281	75.0000	72.7	80.00-	120.00	100.00
5.486	5.485 (1.003)	129	71439			0.00-	40.78	11.05
5.486	5.486 (1.003)	127	85876			0.00-	42.17	13.29

45	4-Chloroaniline				CAS #: 106-47-8			
5.554	5.552 (1.016)	127	267932	75.0000	73.5	80.00-	120.00	100.00
5.554	5.552 (1.016)	129	86689		2.29-	62.29		32.35
5.553	5.551 (1.015)	65	99345		8.57-	68.57		37.08

48	Hexachlorobutadiene				CAS #: 87-68-3			
5.654	5.654 (1.034)	225	170613	75.0000	72.3	80.00-	120.00	100.00
5.654	5.654 (1.034)	223	107082		31.81-	91.81		62.76
5.655	5.654 (1.034)	227	111575		34.78-	94.78		65.40

51	4-Chloro-3-methylphenol				CAS #: 59-50-7			
6.010	6.009 (1.099)	107	231743	75.0000	71.2	80.00-	120.00	100.00
6.010	6.009 (1.099)	144	53894		0.00-	53.54		23.26
6.010	6.009 (1.099)	142	170884		43.91-	103.91		73.74

53	2-Methylnaphthalene				CAS #: 91-57-6			
6.143	6.141 (1.123)	142	444492	75.0000	72.7	80.00-	120.00	100.00
6.143	6.141 (1.123)	141	376675		55.50-	115.50		84.74

54	1-Methylnaphthalene				CAS #: 90-12-0			
6.248	6.247 (1.143)	142	409064	75.0000	72.2	80.00-	120.00	100.00
6.248	6.247 (1.143)	141	363554		58.78-	118.78		88.87

55	Hexachlorocyclopentadiene				CAS #: 77-47-4			
6.360	6.360 (0.887)	237	171226	75.0000	69.6	80.00-	120.00	100.00
6.360	6.360 (0.887)	235	109748		33.42-	93.42		64.10
6.361	6.360 (0.887)	272	21332		0.00-	41.88		12.46

57	2,4,6-Trichlorophenol				CAS #: 88-06-2			
6.439	6.438 (0.898)	196	165711	75.0000	72.6	80.00-	120.00	100.00
6.439	6.438 (0.898)	198	159052		67.54-	127.54		95.98
6.440	6.438 (0.898)	200	51588		1.18-	61.18		31.13

58	2,4,5-Trichlorophenol				CAS #: 95-95-4			
6.474	6.472 (0.903)	196	185946	75.0000	74.2	80.00-	120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
58	2,4,5-Trichlorophenol (continued)							
6.474	6.472	(0.903)	198	176385		64.33-	124.33	94.86
6.473	6.472	(0.903)	97	103496		27.55-	87.55	55.66
\$ 59	2-Fluorobiphenyl (SURR)							
6.517	6.514	(0.909)	172	567350	75.0000	73.7	80.00- 120.00	100.00
6.517	6.514	(0.909)	171	196147		4.90-	64.90	34.57
62	2-Chloronaphthalene							
6.613	6.610	(0.922)	162	463334	75.0000	72.1	80.00- 120.00	100.00
6.613	6.610	(0.922)	164	153352		1.75-	61.75	33.10
6.613	6.610	(0.922)	127	182205		8.71-	68.71	39.32
63	2-Nitroaniline							
6.742	6.741	(0.940)	65	164545	75.0000	73.2	80.00- 120.00	100.00
6.742	6.741	(0.940)	92	108132		35.13-	95.13	65.72
6.742	6.741	(0.940)	138	149203		59.53-	119.53	90.68
65	Dimethylphthalate							
6.952	6.950	(0.969)	163	540748	75.0000	73.4	80.00- 120.00	100.00
6.952	6.950	(0.969)	194	33678		0.00-	35.76	6.23
6.952	6.949	(0.969)	164	55801		0.00-	39.66	10.32
68	Acenaphthylene							
7.022	7.020	(0.979)	152	740696	75.0000	71.8	80.00- 120.00	100.00
7.022	7.020	(0.979)	151	146741		0.00-	50.20	19.81
7.021	7.020	(0.979)	153	98503		0.00-	43.02	13.30
67	2,6-Dinitrotoluene							
7.018	7.015	(0.979)	165	130233	75.0000	72.7	80.00- 120.00	100.00
7.017	7.015	(0.979)	89	88104		39.45-	99.45	67.65
7.018	7.016	(0.979)	63	133578		74.66-	134.66	102.57
69	3-Nitroaniline							
7.149	7.146	(0.997)	138	117454	75.0000	71.6	80.00- 120.00	100.00
7.149	7.146	(0.997)	108	18802		0.00-	42.35	16.01
7.149	7.145	(0.997)	92	157303		104.62-	164.62	133.93
* 70	Acenaphthene-d10							
7.171	7.167	(1.000)	164	208317	40.0000	80.00-	120.00	100.00
7.171	7.168	(1.000)	162	195324		66.12-	126.12	93.76
7.171	7.167	(1.000)	160	86392		13.21-	73.21	41.47
71	Acenaphthene							
7.203	7.201	(1.004)	154	420824	75.0000	72.0	80.00- 120.00	100.00
7.203	7.200	(1.004)	153	447763		77.18-	137.18	106.40
7.203	7.200	(1.004)	152	212204		21.21-	81.21	50.43
72	2,4-Dinitrophenol							
7.246	7.243	(1.010)	184	77165	75.0000	69.1	80.00- 120.00	100.00
7.245	7.242	(1.010)	63	59972		48.18-	108.18	77.72
7.245	7.242	(1.010)	154	49584		33.05-	93.05	64.26

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.308	7.303 (1.019)	109	108540	75.0000	73.8	80.00-	120.00	100.00
7.308	7.303 (1.019)	139	99732		61.80-	121.80		91.89
7.307	7.303 (1.019)	65	122148		80.41-	140.41		112.54
7.356	7.355 (1.026)	168	646335	75.0000	72.0	80.00-	120.00	100.00
7.356	7.355 (1.026)	139	264228		10.69-	70.69		40.88
7.396	7.392 (1.031)	165	159742	75.0000	71.8	80.00-	120.00	100.00
7.396	7.392 (1.031)	63	83787		23.55-	83.55		52.45
7.396	7.392 (1.031)	89	132417		51.82-	111.82		82.89
7.643	7.640 (1.066)	149	536823	75.0000	71.4	80.00-	120.00	100.00
7.643	7.640 (1.066)	177	116162		0.00-	51.79		21.64
7.643	7.640 (1.066)	150	65240		0.00-	42.28		12.15
7.693	7.690 (1.073)	166	583978	75.0000	71.1	80.00-	120.00	100.00
7.693	7.690 (1.073)	165	537143		61.04-	121.04		91.98
7.693	7.690 (1.073)	167	78701		0.00-	43.06		13.48
7.692	7.690 (1.073)	204	304737	75.0000	70.1	80.00-	120.00	100.00
7.692	7.690 (1.073)	206	101691		2.85-	62.85		33.37
7.691	7.690 (1.073)	141	181782		29.43-	89.43		59.65
7.755	7.750 (1.081)	138	109875	75.0000	73.5	80.00-	120.00	100.00
7.755	7.749 (1.081)	92	65406		30.30-	90.30		59.53
7.755	7.749 (1.081)	108	126783		85.44-	145.44		115.39
7.796	7.790 (0.906)	198	112950	75.0000	73.8	80.00-	120.00	100.00
7.795	7.789 (0.906)	51	39492		21.07-	81.07		34.96
7.795	7.789 (0.906)	105	50421		14.43-	74.43		44.64
7.818	7.814 (0.909)	169	350398	75.0000	73.4	80.00-	120.00	100.00
7.818	7.815 (0.909)	168	246628		41.33-	101.33		70.39
7.818	7.815 (0.909)	167	120202		5.93-	65.93		34.30
7.847	7.845 (1.094)	77	594395	75.0000	65.3	80.00-	120.00	100.00
7.847	7.845 (1.094)	105	84666		0.00-	44.08		14.24
7.848	7.845 (1.094)	182	141961		0.00-	53.69		23.88
7.949	7.946 (1.109)	330	204996	150.000	139	80.00-	120.00	100.00
7.949	7.946 (1.109)	332	195786		65.21-	125.21		95.51
7.948	7.945 (1.108)	141	80641		10.78-	70.78		39.34

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
8.166	8.163 (0.949)	248	172878	75.0000	72.6	80.00-	120.00	100.00
8.166	8.163 (0.949)	250	168075		66.63-	126.63		97.22
8.165	8.162 (0.949)	141	132634		49.24-	109.24		76.72

93	4-Bromophenylphenylether				CAS #:	101-55-3		
8.310	8.307 (0.966)	284	197448	75.0000	73.6	80.00-	120.00	100.00
8.309	8.307 (0.966)	142	74318		10.52-	70.52		37.64
8.310	8.307 (0.966)	249	61792		1.60-	61.60		31.30

94	Hexachlorobenzene				CAS #:	118-74-1		
8.482	8.480 (0.986)	266	125967	75.0000	71.8	80.00-	120.00	100.00
8.482	8.481 (0.986)	264	79573		33.54-	93.54		63.17
8.482	8.481 (0.986)	268	81060		34.39-	94.39		64.35

* 100	Phenanthrene-d10				CAS #:	1517-22-2		
8.605	8.604 (1.000)	188	359391	40.0000		80.00-	120.00	100.00
8.604	8.604 (1.000)	94	38085		0.00-	40.39		10.60
8.604	8.603 (1.000)	80	41198		0.00-	41.55		11.46

101	Phenanthrene				CAS #:	85-01-8		
8.628	8.626 (1.003)	178	758944	75.0000	74.2	80.00-	120.00	100.00
8.628	8.626 (1.003)	179	116636		0.00-	45.20		15.37
8.628	8.626 (1.003)	176	145317		0.00-	48.69		19.15

103	Anthracene				CAS #:	120-12-7		
8.672	8.670 (1.008)	178	678656	75.0000	73.9	80.00-	120.00	100.00
8.671	8.670 (1.008)	179	102962		0.00-	45.53		15.17
8.672	8.670 (1.008)	176	125760		0.00-	49.11		18.53

104	Carbazole				CAS #:	86-74-8		
8.832	8.830 (1.026)	167	673770	75.0000	75.0	80.00-	120.00	100.00
8.832	8.830 (1.026)	139	90803		0.00-	43.72		13.48
8.831	8.830 (1.026)	83	63655		0.00-	39.70		9.45

105	Di-n-butylphthalate				CAS #:	84-74-2		
9.229	9.227 (1.073)	149	929069	75.0000	74.9	80.00-	120.00	100.00
9.229	9.227 (1.073)	150	85012		0.00-	39.16		9.15
9.229	9.227 (1.073)	104	58964		0.00-	36.36		6.35

109	Fluoranthene				CAS #:	206-44-0		
9.800	9.797 (1.139)	202	844353	75.0000	75.2	80.00-	120.00	100.00
9.799	9.796 (1.139)	101	97585		0.00-	41.60		11.56
9.800	9.797 (1.139)	203	146076		0.00-	47.37		17.30

111	Pyrene				CAS #:	129-00-0		
10.018	10.016 (0.893)	202	848115	75.0000	74.4	80.00-	120.00	100.00
10.018	10.016 (0.893)	200	173819		0.00-	50.33		20.49
10.018	10.016 (0.893)	203	149464		0.00-	47.92		17.62

\$ 112	Terphenyl-d14 (SURR)				CAS #:	1718-51-0		
10.181	10.179 (0.908)	244	673605	75.0000	73.1	80.00-	120.00	100.00
10.181	10.178 (0.908)	122	70888		0.00-	40.67		10.52

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 112 Terphenyl-d14 (SURR) (continued)								
10.181	10.179 (0.908)	212	51691			0.00-	37.92	7.67

118 Butylbenzylphthalate					CAS #: 85-68-7			
10.694	10.690 (0.954)	149	425565	75.0000	72.5	80.00-	120.00	100.00
10.693	10.691 (0.953)	91	323905			45.72-	105.72	76.11
10.694	10.692 (0.954)	206	94735			0.00-	51.71	22.26

120 Benzo[a]anthracene					CAS #: 56-55-3			
11.197	11.194 (0.998)	228	856824	75.0000	72.8	80.00-	120.00	100.00
11.197	11.194 (0.998)	229	170029			0.00-	49.13	19.84
11.197	11.194 (0.998)	226	229457			0.00-	57.06	26.78

* 121 Chrysene-d12					CAS #: 1719-03-5			
11.215	11.211 (1.000)	240	421161	40.0000		80.00-	120.00	100.00
11.214	11.210 (1.000)	120	43199			0.00-	40.02	10.26
11.215	11.210 (1.000)	236	105534			0.00-	54.50	25.06

123 Chrysene					CAS #: 218-01-9			
11.241	11.238 (1.002)	228	834852	75.0000	72.4	80.00-	120.00	100.00
11.241	11.238 (1.002)	226	247028			0.00-	59.08	29.59
11.241	11.238 (1.002)	229	166006			0.00-	49.34	19.88

124 Bis-2-Ethylhexylphthalate					CAS #: 117-81-7			
11.276	11.275 (1.005)	149	592581	75.0000	72.6	80.00-	120.00	100.00
11.277	11.276 (1.005)	167	176720			0.00-	59.84	29.82
11.277	11.276 (1.006)	279	44522			0.00-	37.67	7.51

125 Di-n-octylphthalate					CAS #: 117-84-0			
11.845	11.842 (0.945)	149	1025786	75.0000	67.6	80.00-	120.00	100.00
11.845	11.843 (0.945)	167	15606			0.00-	31.49	1.52
11.844	11.842 (0.945)	43	89099			0.00-	38.92	8.69

127 Benzo[b]fluoranthene					CAS #: 205-99-2			
12.201	12.198 (0.974)	252	827508	75.0000	81.8	80.00-	120.00	100.00
12.201	12.198 (0.974)	253	183050			0.00-	52.25	22.12
12.200	12.219 (0.973)	125	78523			0.00-	48.56	9.49

128 Benzo[k]fluoranthene					CAS #: 207-08-9			
12.223	12.220 (0.975)	252	831578	75.0000	63.0	80.00-	120.00	100.00
12.223	12.220 (0.975)	253	182676			0.00-	52.11	21.97
12.222	12.219 (0.975)	125	69863			0.00-	46.79	8.40

129 Benzo[a]pyrene					CAS #: 50-32-8			
12.485	12.484 (0.996)	252	759409	75.0000	71.7	80.00-	120.00	100.00
12.485	12.484 (0.996)	253	181288			0.00-	51.58	23.87
12.485	12.484 (0.996)	125	71968			0.00-	39.66	9.48

* 130 Perylene-d12					CAS #: 1520-96-3			
12.533	12.532 (1.000)	264	368725	40.0000		80.00-	120.00	100.00
12.533	12.533 (1.000)	260	82472			0.00-	52.70	22.37
12.533	12.532 (1.000)	265	79224			0.00-	52.11	21.49

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO	
				CAL-AMT	ON-COL			
13.576	13.569	(1.083)	276	857963	75.0000	74.6	80.00- 120.00	100.00
13.578	13.570	(1.083)	138	194240		0.00-	53.00	22.64
13.576	13.570	(1.083)	277	223603		0.00-	55.19	26.06

13.581	13.574	(1.084)	278	730174	75.0000	72.9	80.00- 120.00	100.00
13.580	13.573	(1.084)	139	108963		0.00-	45.33	14.92
13.581	13.574	(1.084)	279	170891		0.00-	53.44	23.40

13.860	13.852	(1.106)	276	661351	75.0000	79.7	80.00- 120.00	100.00
13.859	13.852	(1.106)	138	124692		0.00-	48.86	18.85
13.860	13.852	(1.106)	277	153744		0.00-	53.33	23.25

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

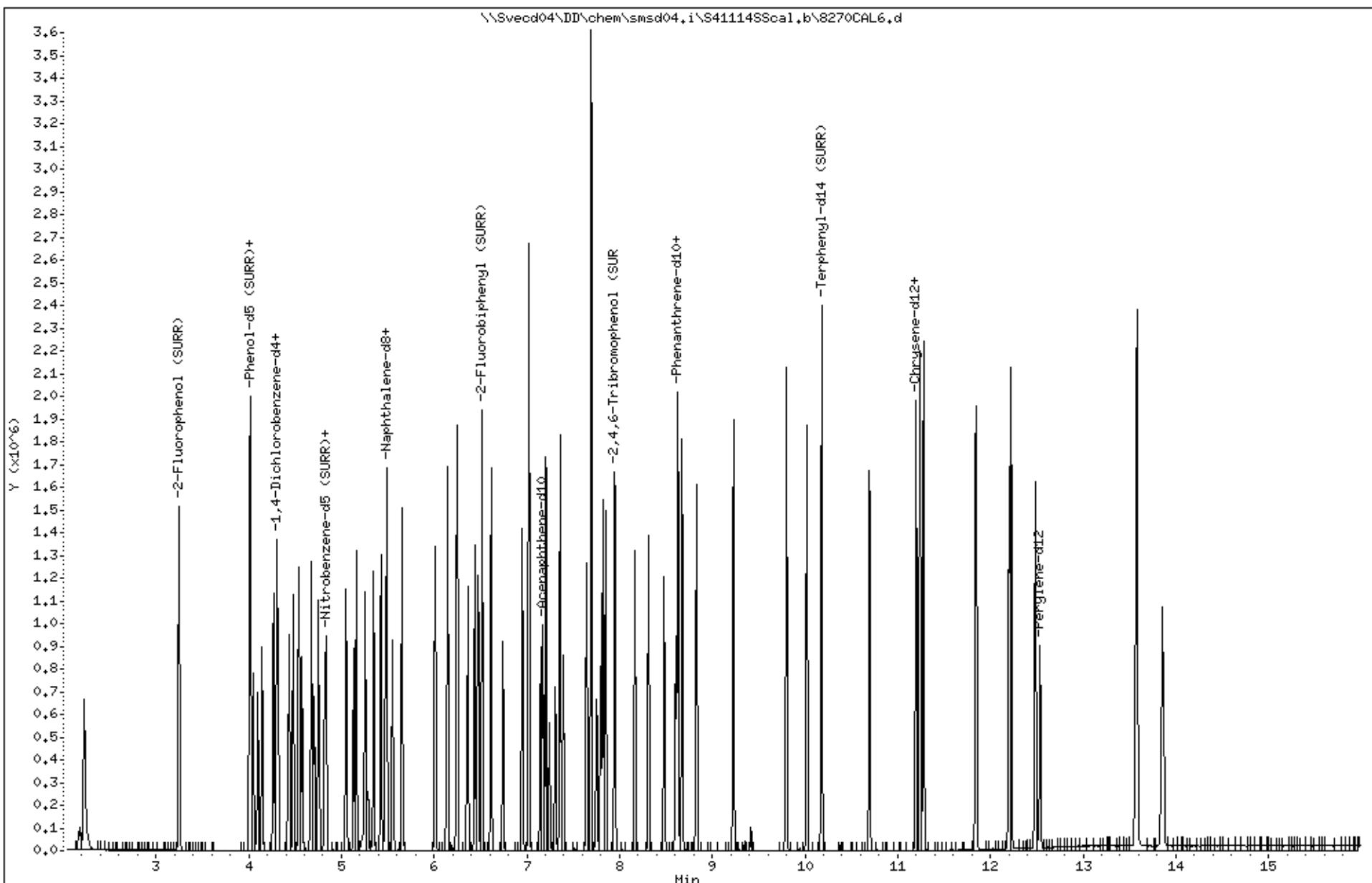
Data File: \\Sved04\DD\chem\smsd04,i\S41114SScal.b\8270CAL6.d
Date : 14-NOV-2012 23:01
Client ID: 8270CAL6
Sample Info: 47764

Page 10

Column phase: HPMS-5

Instrument: smsd04,i

Operator: MJ
Column diameter: 0.25



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

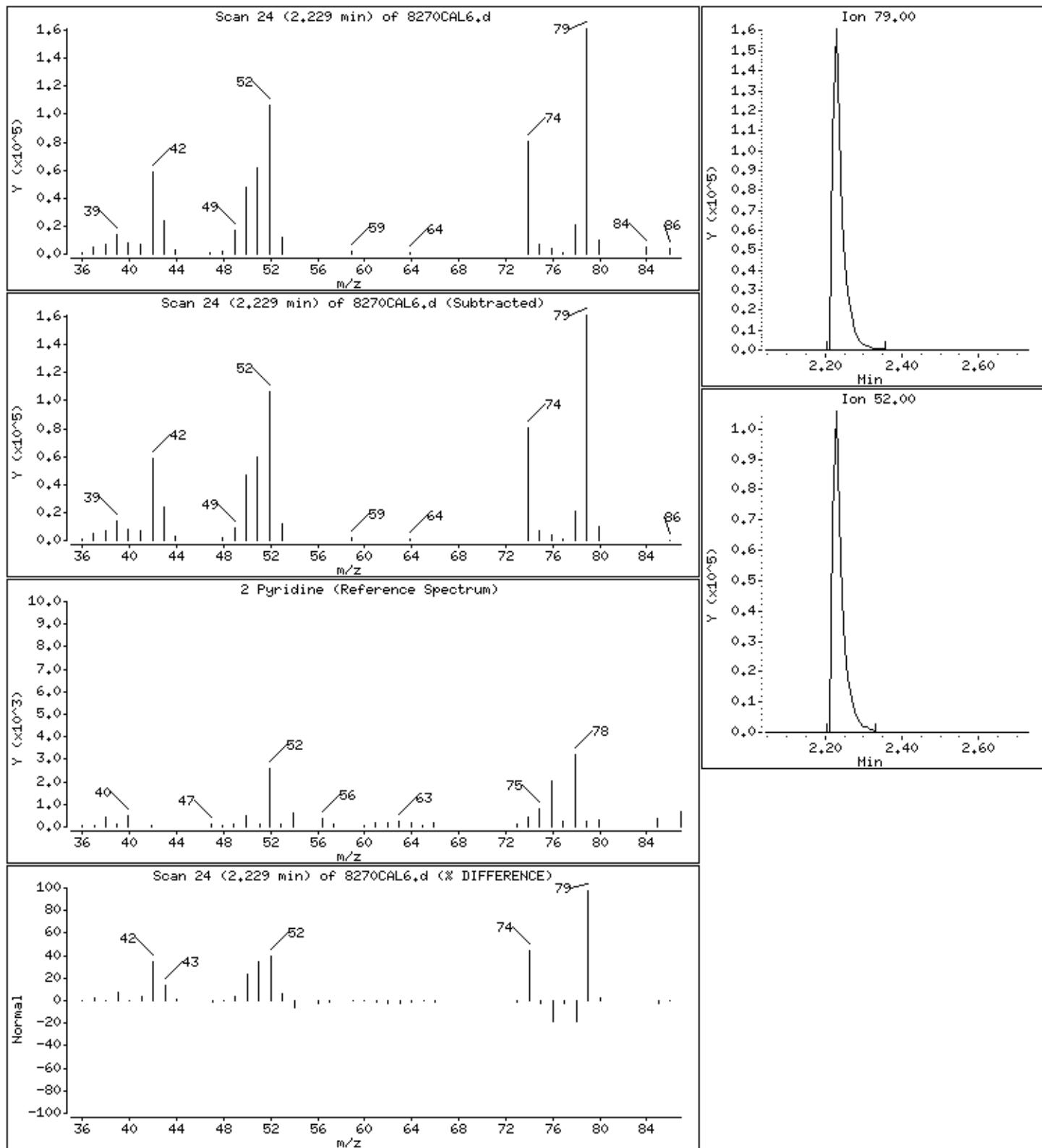
Operator: MJ

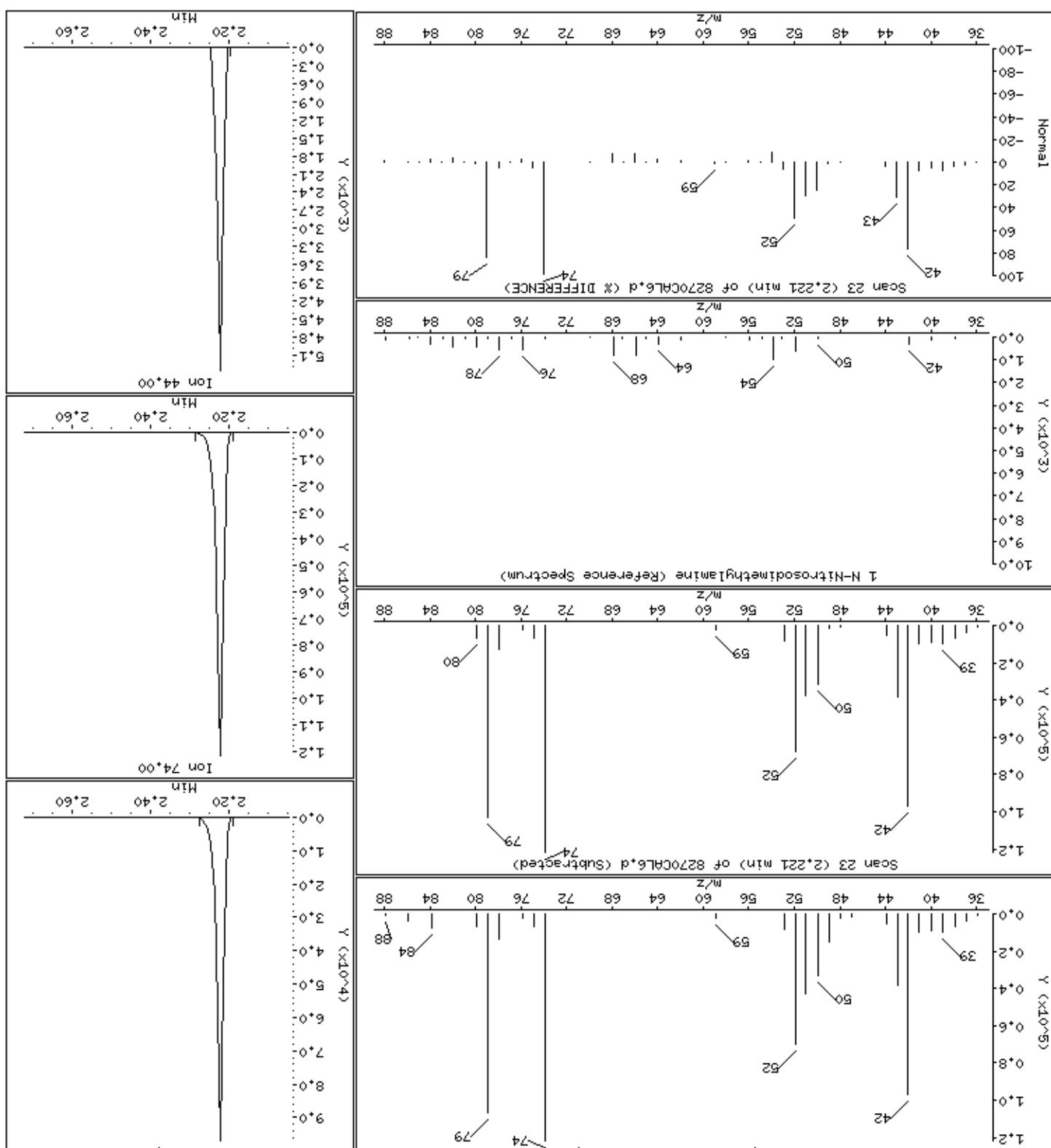
Column phase: HPMS-5

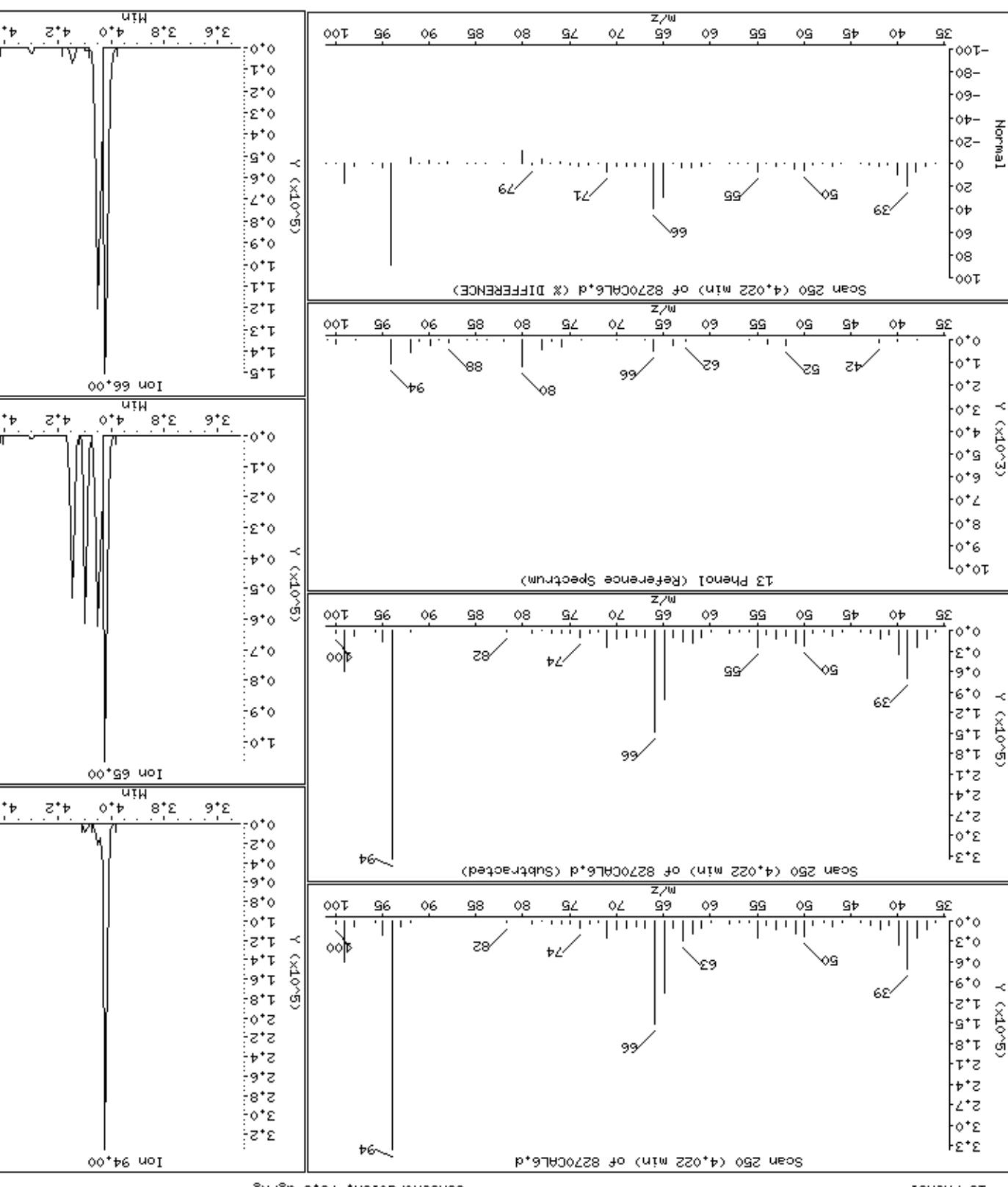
Column diameter: 0.25

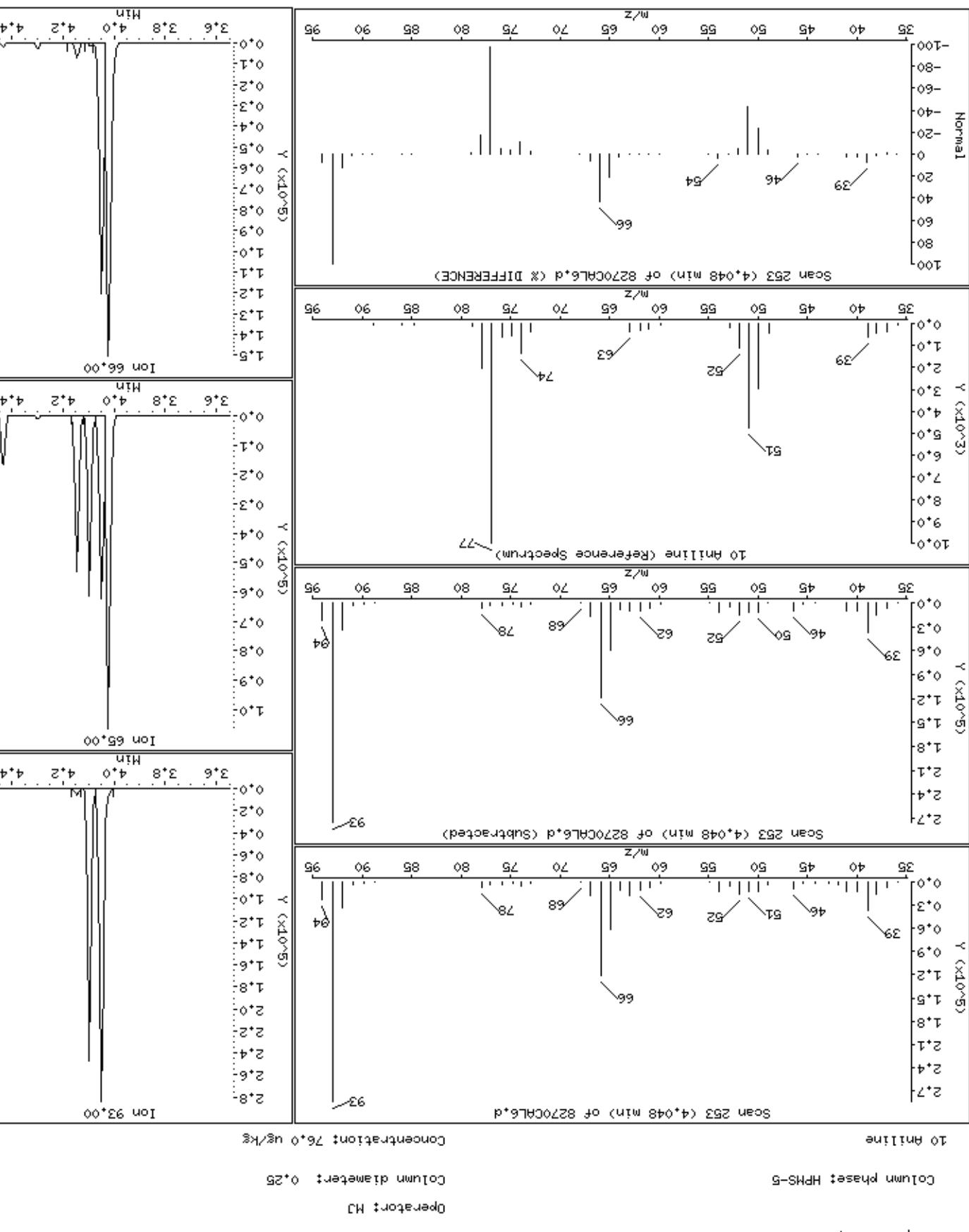
2 Pyridine

Concentration: 74.7 ug/kg









14 Bis(2-Chloroethyl)ether (Reference Spectrum)

Scan 259 (4.096 min) of 8270CAL6.d

Ion 93.00

Concentratio[n] 73.5 ug/kg

14 Bis(2-Chloroethyl)ether (Subtracted)

Scan 259 (4.096 min) of 8270CAL6.d (Subtracted)

Ion 93.00

14 Bis(2-Chloroethyl)ether (Difference)

Scan 259 (4.096 min) of 8270CAL6.d (% DIFFERENCE)

Ion 93.00

14 Bis(2-Chloroethyl)ether (Difference)

Scan 259 (4.096 min) of 8270CAL6.d (% DIFFERENCE)

Ion 63.00

14 Bis(2-Chloroethyl)ether (Reference Spectrum)

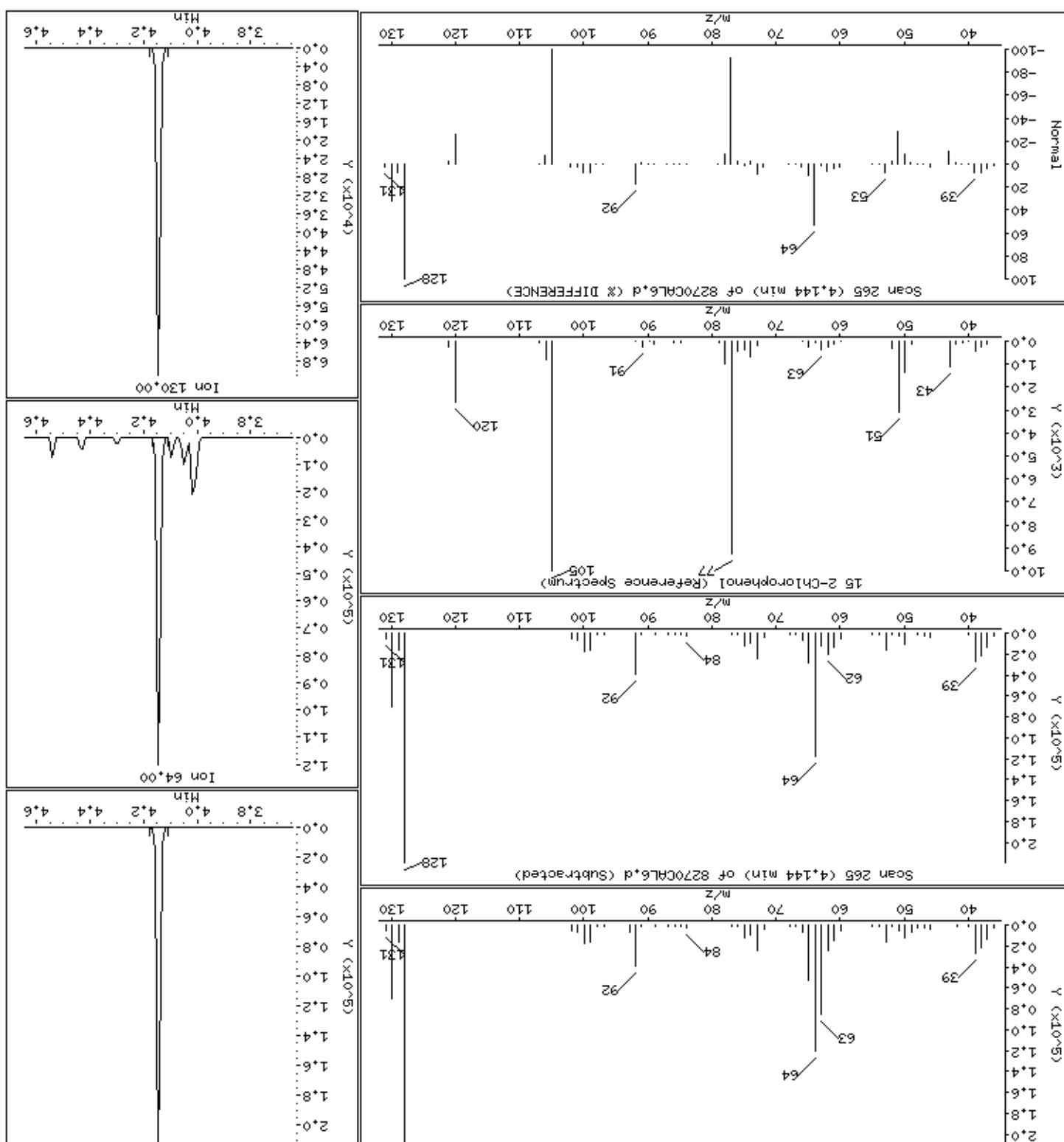
Scan 259 (4.096 min) of 8270CAL6.d

Ion 63.00

Ion 95.00

Normal

beta_file: \\\\$vcedat\\$\backslashDD\chem\msmd4.1\ss41114455cc1.b\8270C6L6.d
Page 15



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

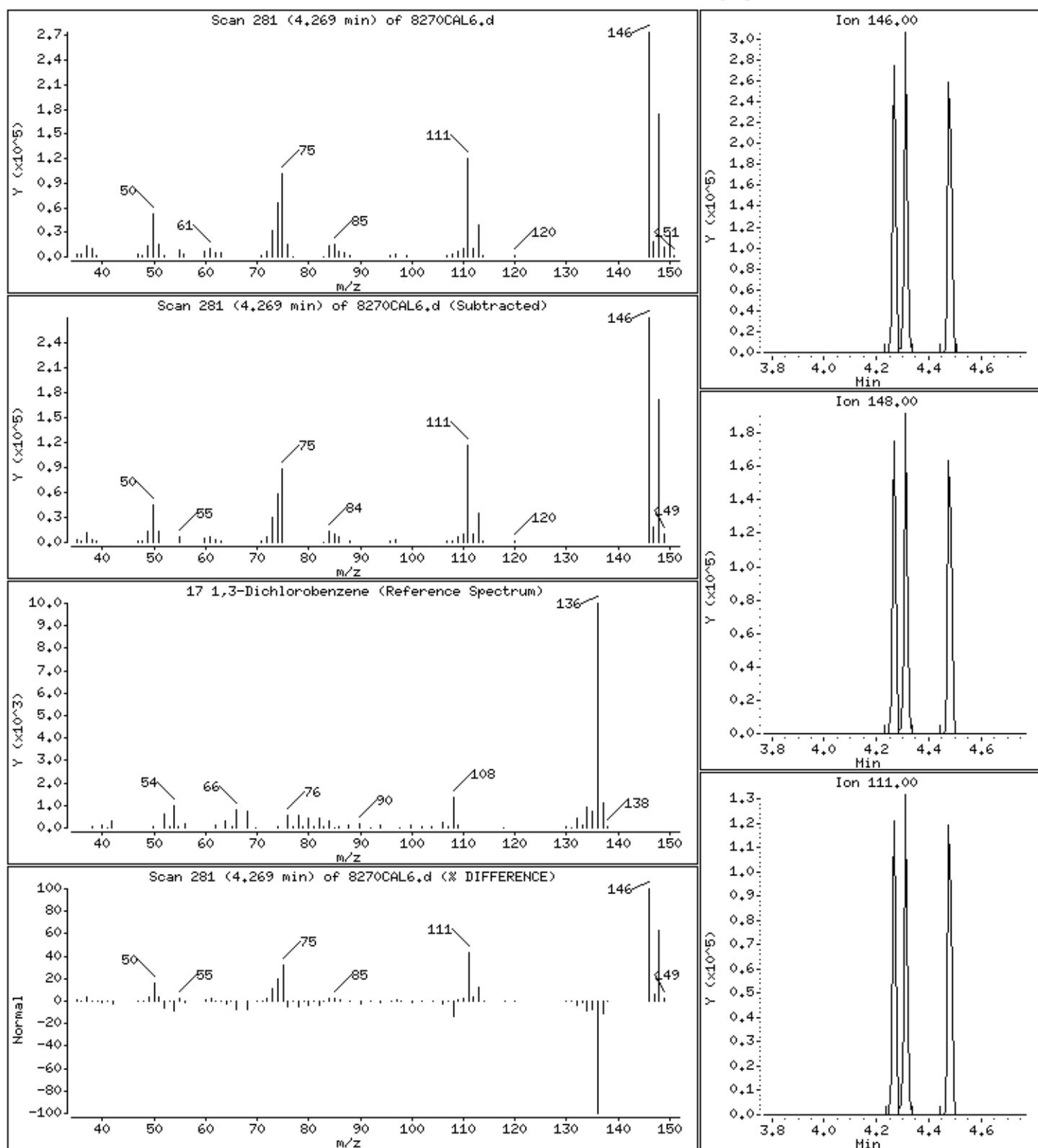
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

17 1,3-Dichlorobenzene

Concentration: 74.5 ug/kg



Instrument ID: 8270CAG6 Client ID: 8270CAL6 Sample Info: 47764 Instrument: msd041

Scan 286 (4,312 Min) of 8270CAL6.d

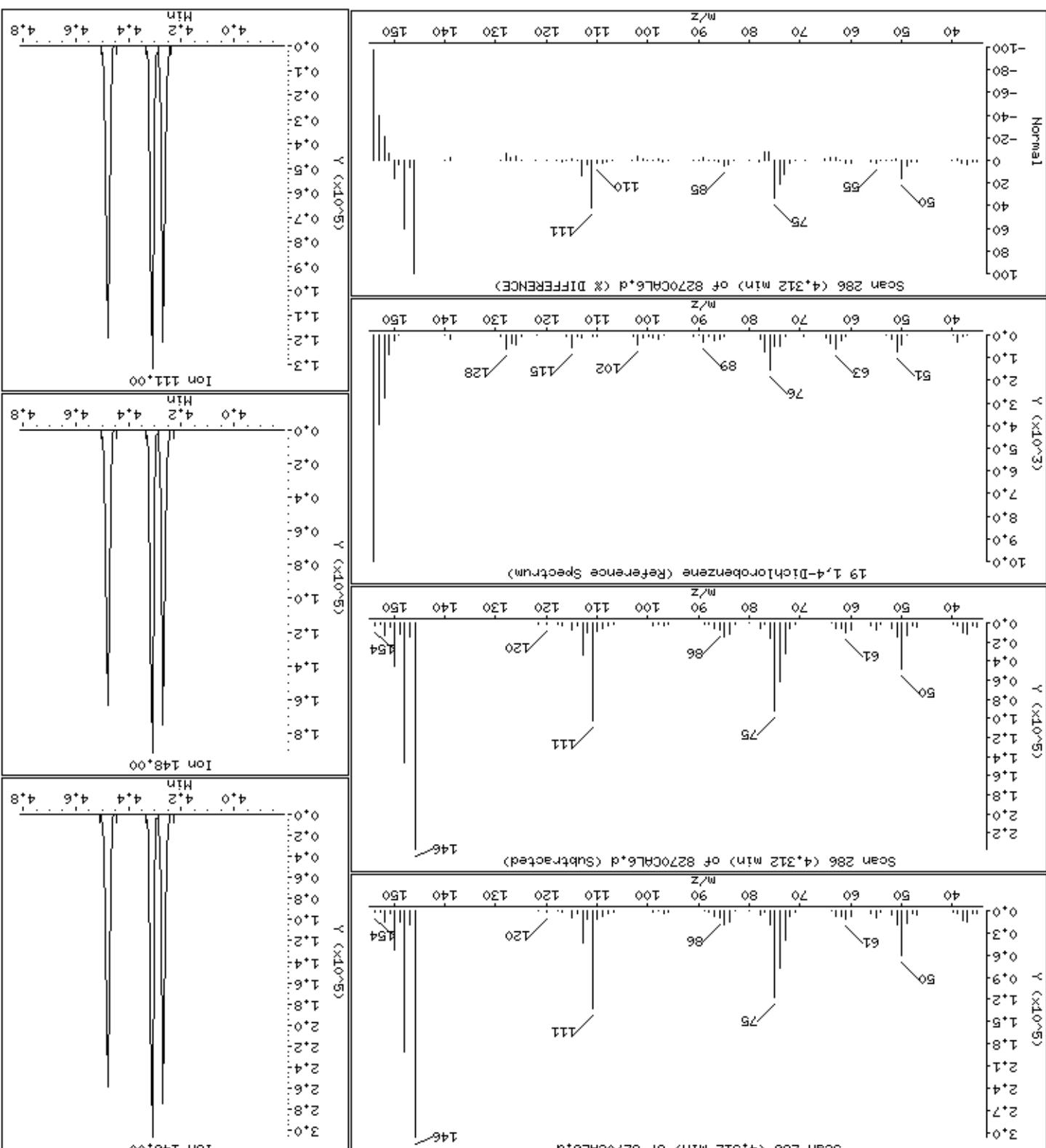
CH 1400E.indd

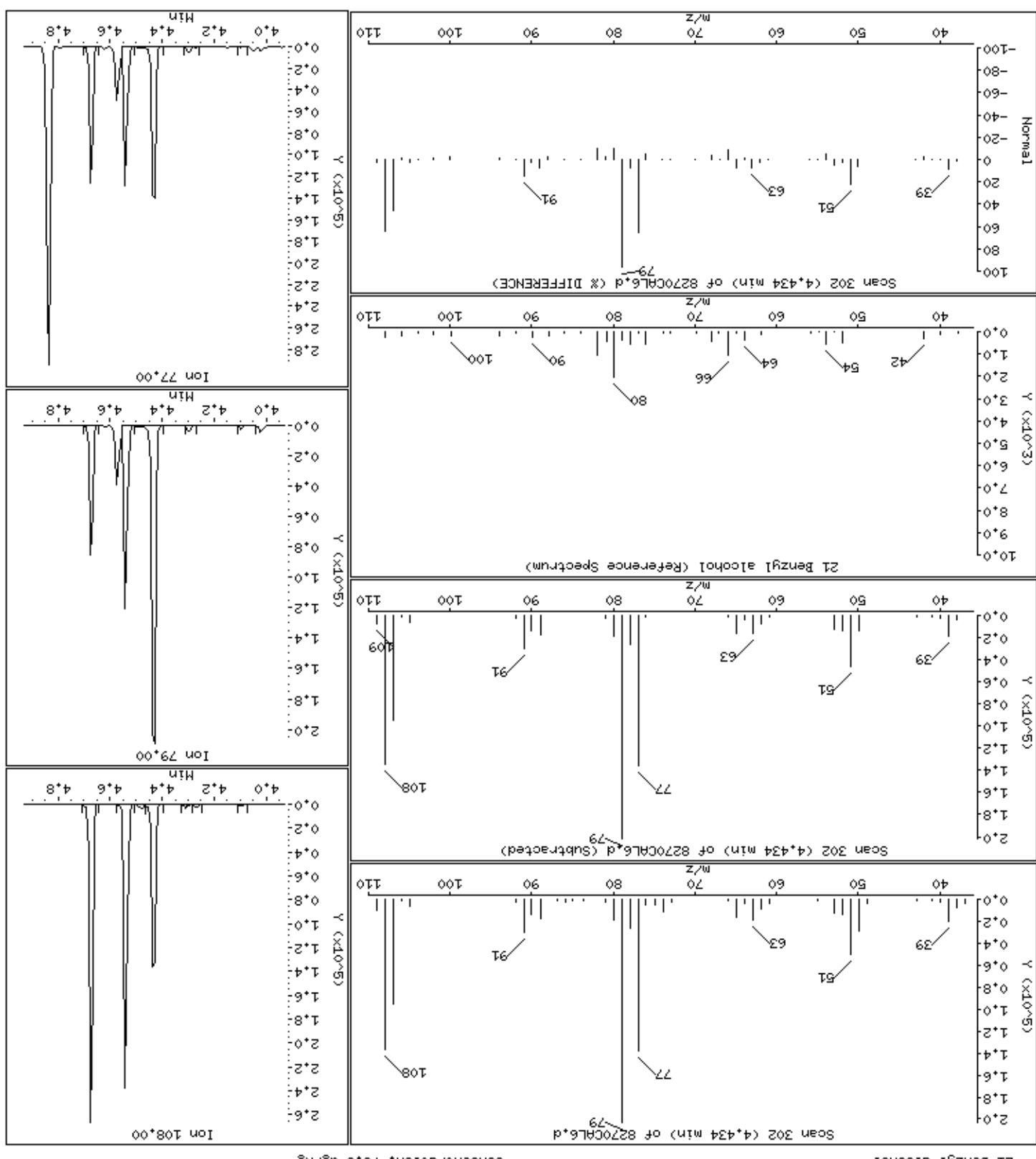
Column diameter 0.25

Column Passes: HPMs-5

Sample Info: 47764

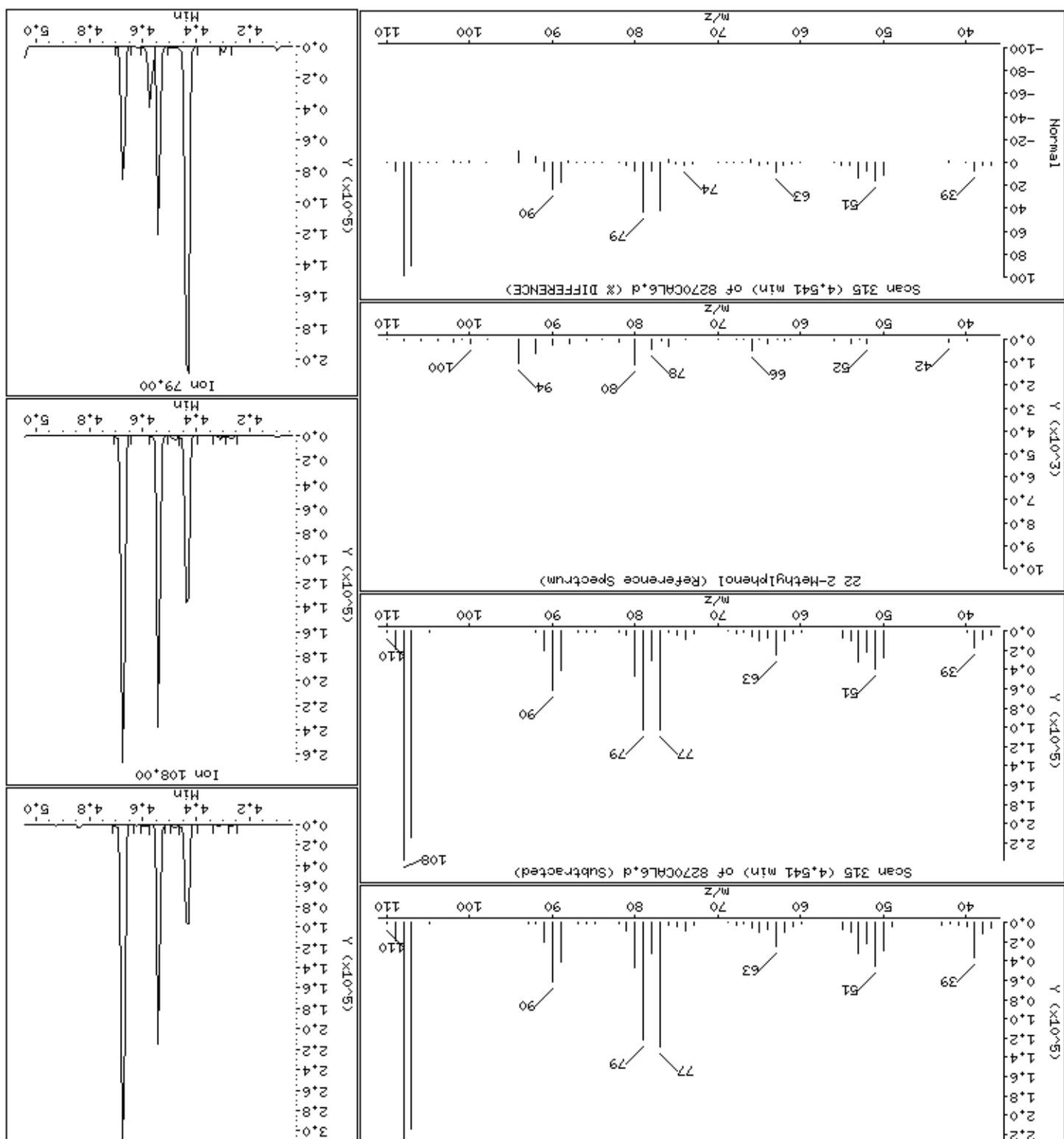
проверка (20.10.2018 г.)





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Date: File: \\SVCCODE4\DD\chem\smdsd4\1\4A11144SSS01.b\8270CRL6.d



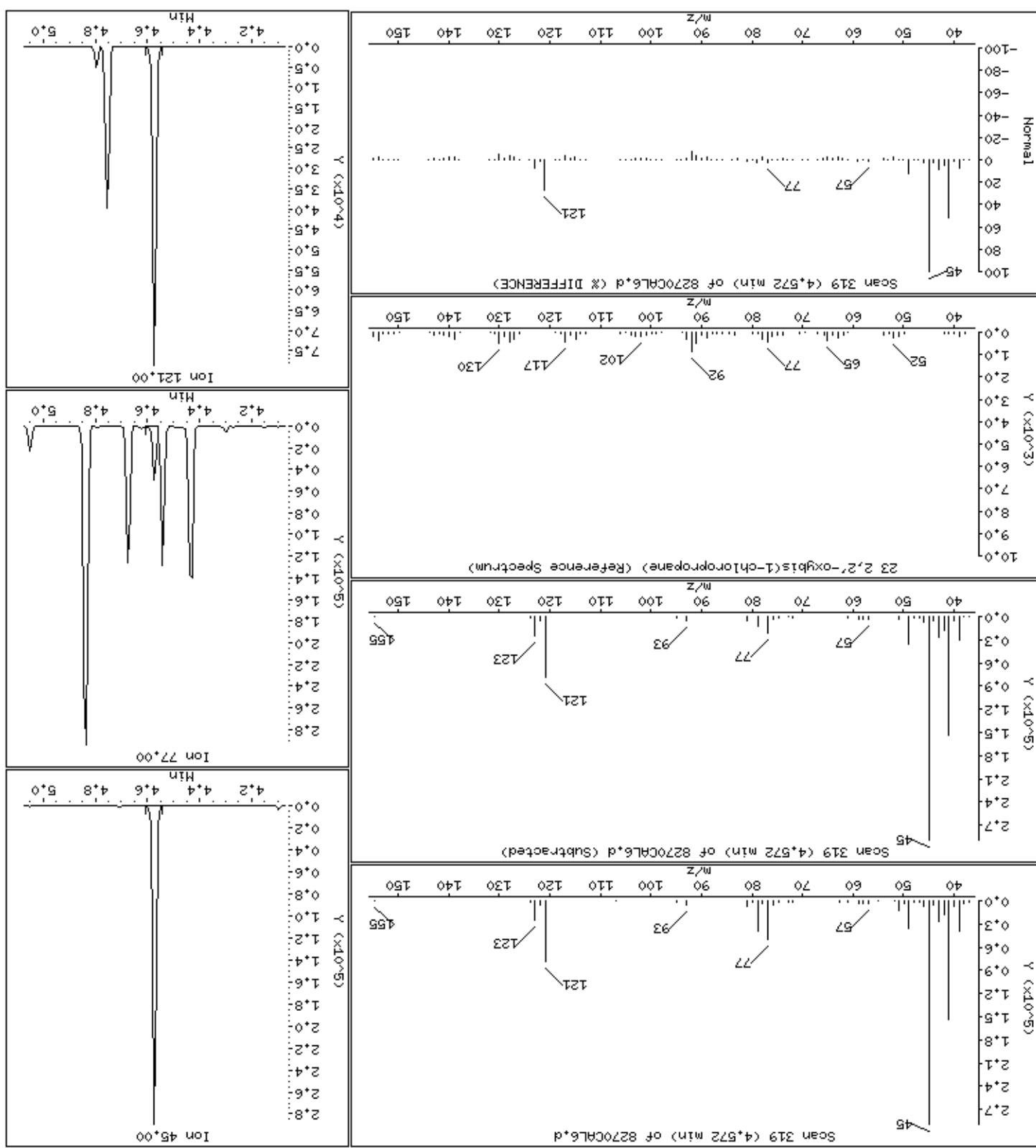
Date : 14-NOV-2012 23:01 Data File: \\\\$vedod4\DD\chem\msd4\1\8270CAL6,d Page 21

Client ID: 8270CAL6 Instrument: msd4,i Sample Info: 47764

Operator: HS Column diameter: 0.25

Column phase: HPMs-5

Concentration: 73.8 ug/kg



23 2,2'-oxybis(1-chloropropane) Concentration: 74.0 ug/Kg

Column diameter: 0.25

Operator: H3

Column phase: HPMs-5

Sample Info: 47764

Instrument: msd4.i

Date : 14-NOV-2012 23:01

Date : 14-NOV-2012 23:01
Client ID: 8270CAL6
Instrument: msd04,i
Sample Info: 47764

28 4-Methylphenol
Concentration: 72.8 ug/Kg
Scan 332 (4.674 min) of 8270CRL6.d
407

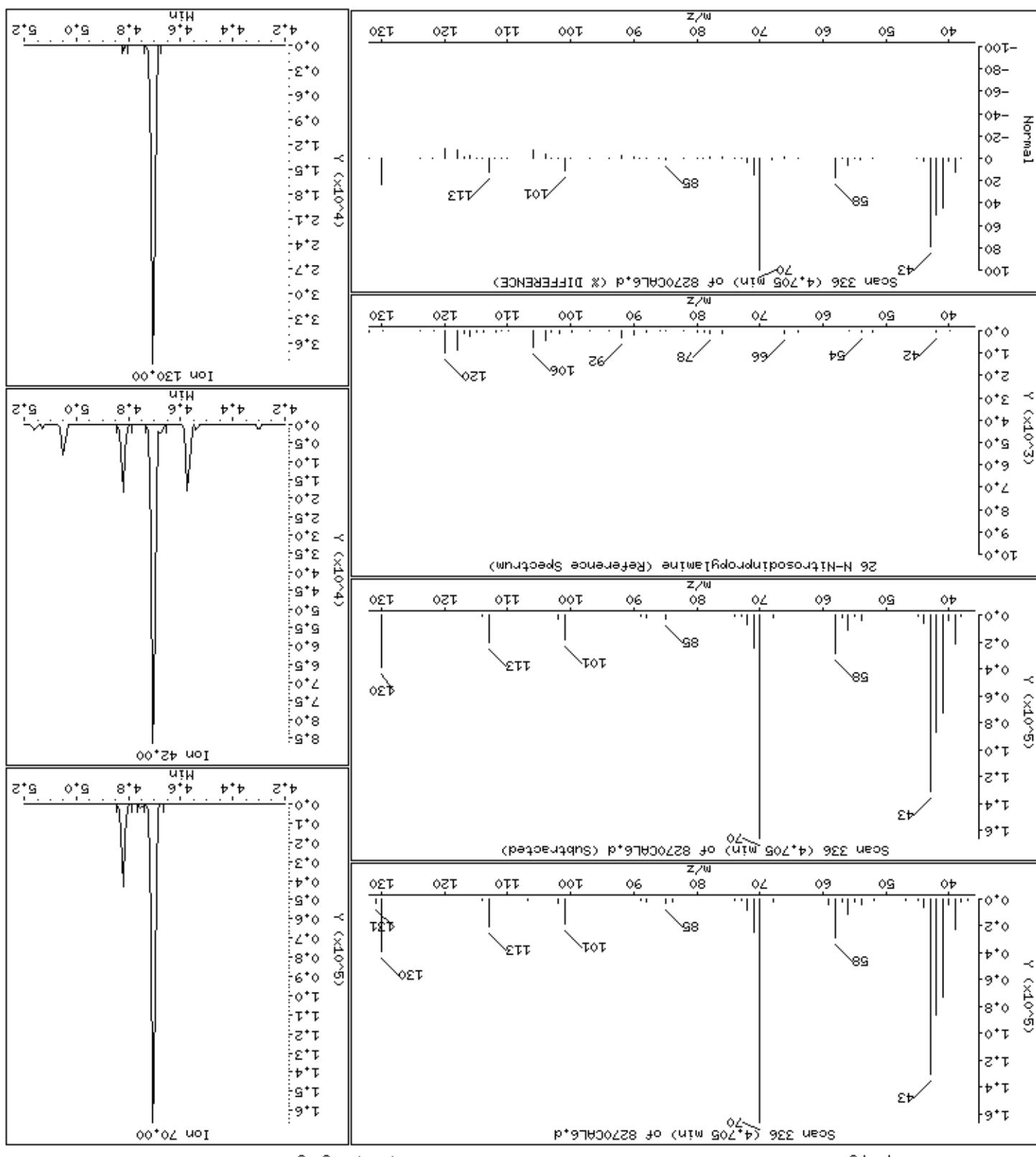
Column diameter: 0.25

Column phase: HPMs-5

Sample Info: 47764

Java File: \Java\src\com\javaweb\Jsp\JspTest.jsp

Sample Info: 47764
Client ID: 8270C8L6
Instrument: msd04+i
Date: 14-Nov-2012 23:01
Operator: HS



Date : 14-NOV-2012 23:01
Client ID: 8270CAL6
Instrument: smsd04.i
Sample Info: 47764
Operator: M3

Column phaseset HPMs-5

20 Hexachloroethane Concentration: 75.1 ug/kg

Scan 342 (4,755 min) of 8270CALL6.d 117
201- ION 117,00

1.2. 1.3. 1.4. 1.5.

8°0
6°0 166
9°0
8°0

47 0+4
0+5 0+7
0+8 0+9
0+9 0+10

129 59 0*2 0*1 0*0 0*5 0*6 0*10 0*15 0*20

0*4
0*5
0*6
0*7
0*8
0*9
0*0

142
Scan 342 (44/55 min) at 32°C (supercooled)
117

4+0 4+6 4+8 4+10 4+12 4+14 4+16 4+18

94 0*8-
A66 100 201 Ion

47
0.6
94
1.2
1.1
1.1

0.4 4 59 129 1.0 1.2 1.4

~~8*0~~ ~~200~~

The reference spectrum for hexachloroethane shows a single sharp peak at 116.5 ppm. The x-axis is labeled "PPM" and ranges from 100 to 130. The y-axis is labeled "X1000" and ranges from 0.0 to 0.5.

0*8
0*6

0^+2	0^+2	0^+2
0^+3	0^+3	0^+3

- τ^+ 0 -0.5 -0.6

4⁺⁰- 0⁺⁰- 4⁺⁴ 4⁺⁶ 4⁺⁸ 4⁺⁰- 3⁺⁰ 4⁺⁰- 4⁺⁴ 4⁺⁶ 4⁺⁸ Min A322

Mass spectrum showing relative abundance (%) versus m/z . The x-axis ranges from 65 to 100 m/z . The y-axis shows relative abundance from 0 to 100%. The base peak is at m/z 75.

m/z	Relative Abundance (%)
65	10
70	10
75	100
80	10
85	10
90	10
95	10
100	10

100 100
80 80
60 60
40 40
20 20
0 0

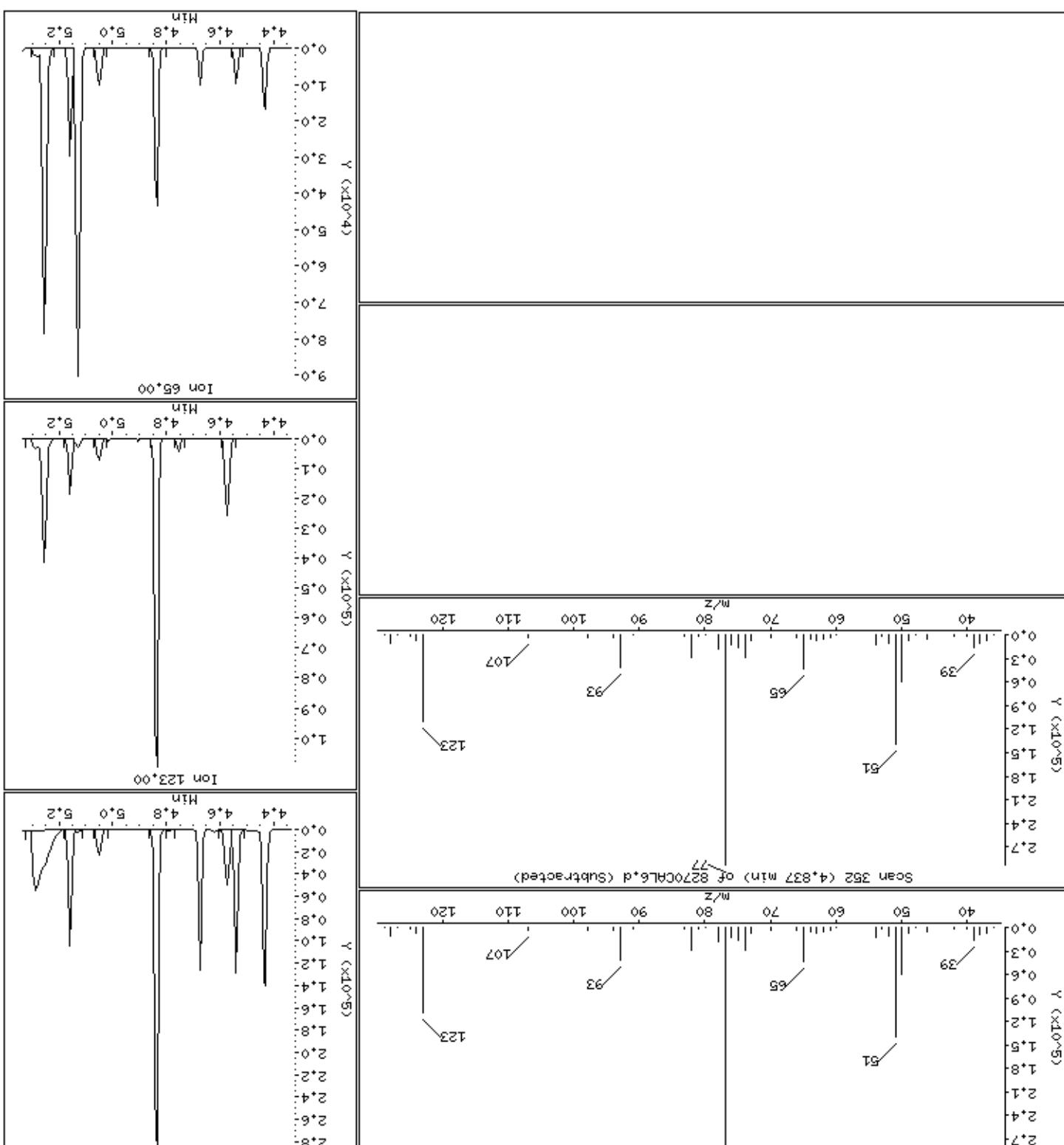
47 40
48 39
49 38
50 37
51 36
52 35
53 34
54 33
55 32
56 31
57 30
58 29
59 28
60 27

...
3+0
3+5
4XL
y (cm)
3
0
20
59

2+0
2+5
2+0
2+5

1+0
1+5
1+6
-40
-60

100
-80



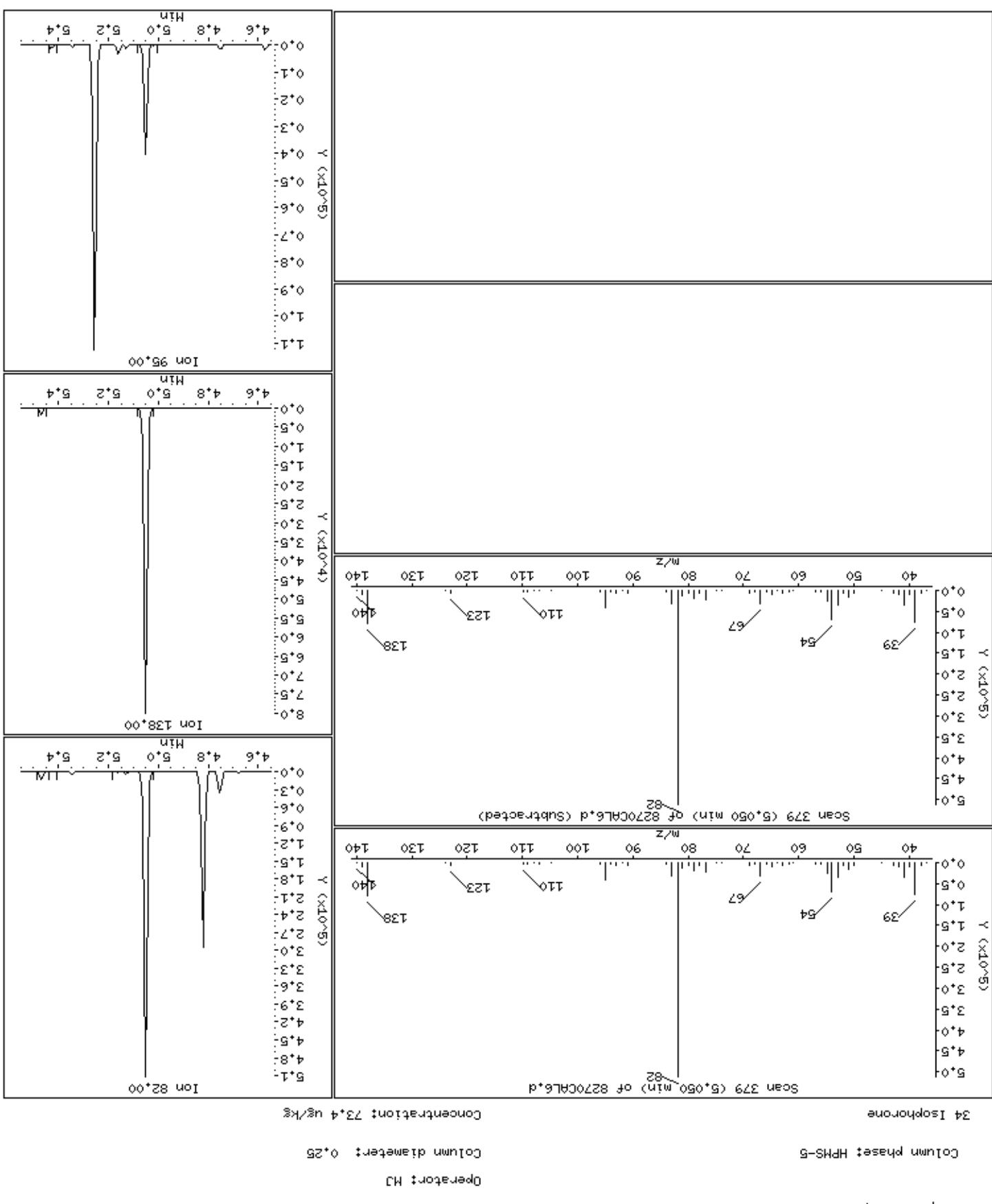
32 Nitrobenzene
 Scan 352 (4.837 min) of 8270CALS.d
 Ion 77.00
 Concentration: 73.5 ug/Kg

32 Nitrobenzene
 Scan 352 (4.837 min) of 8270CALS.d
 Ion 77.00
 Concentration: 73.5 ug/Kg

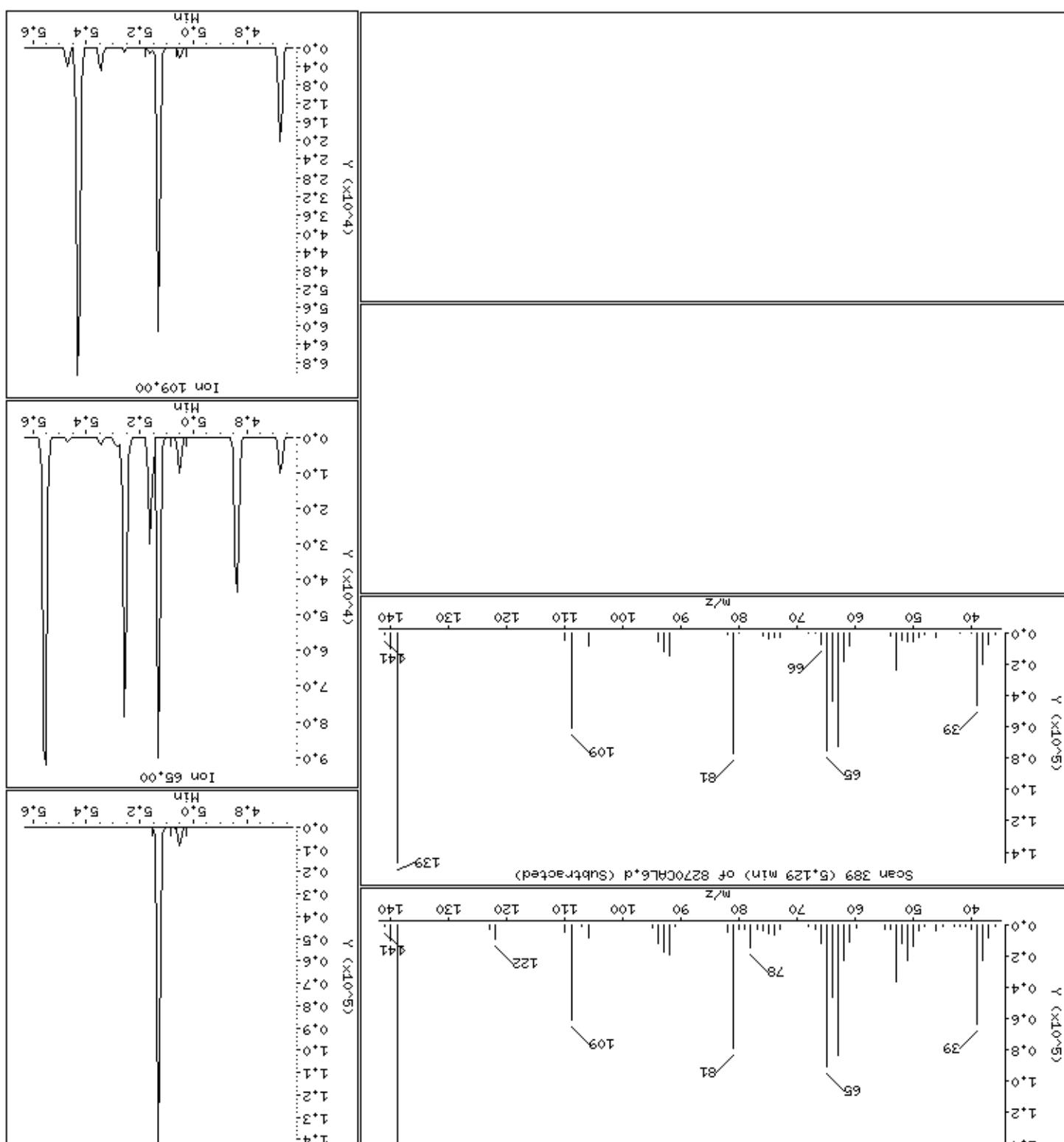
32 Nitrobenzene
 Scan 352 (4.837 min) of 8270CALS.d
 Ion 77.00
 Concentration: 73.5 ug/Kg

32 Nitrobenzene
 Scan 352 (4.837 min) of 8270CALS.d
 Ion 77.00
 Concentration: 73.5 ug/Kg

32 Nitrobenzene
 Scan 352 (4.837 min) of 8270CALS.d
 Ion 77.00
 Concentration: 73.5 ug/Kg



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Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

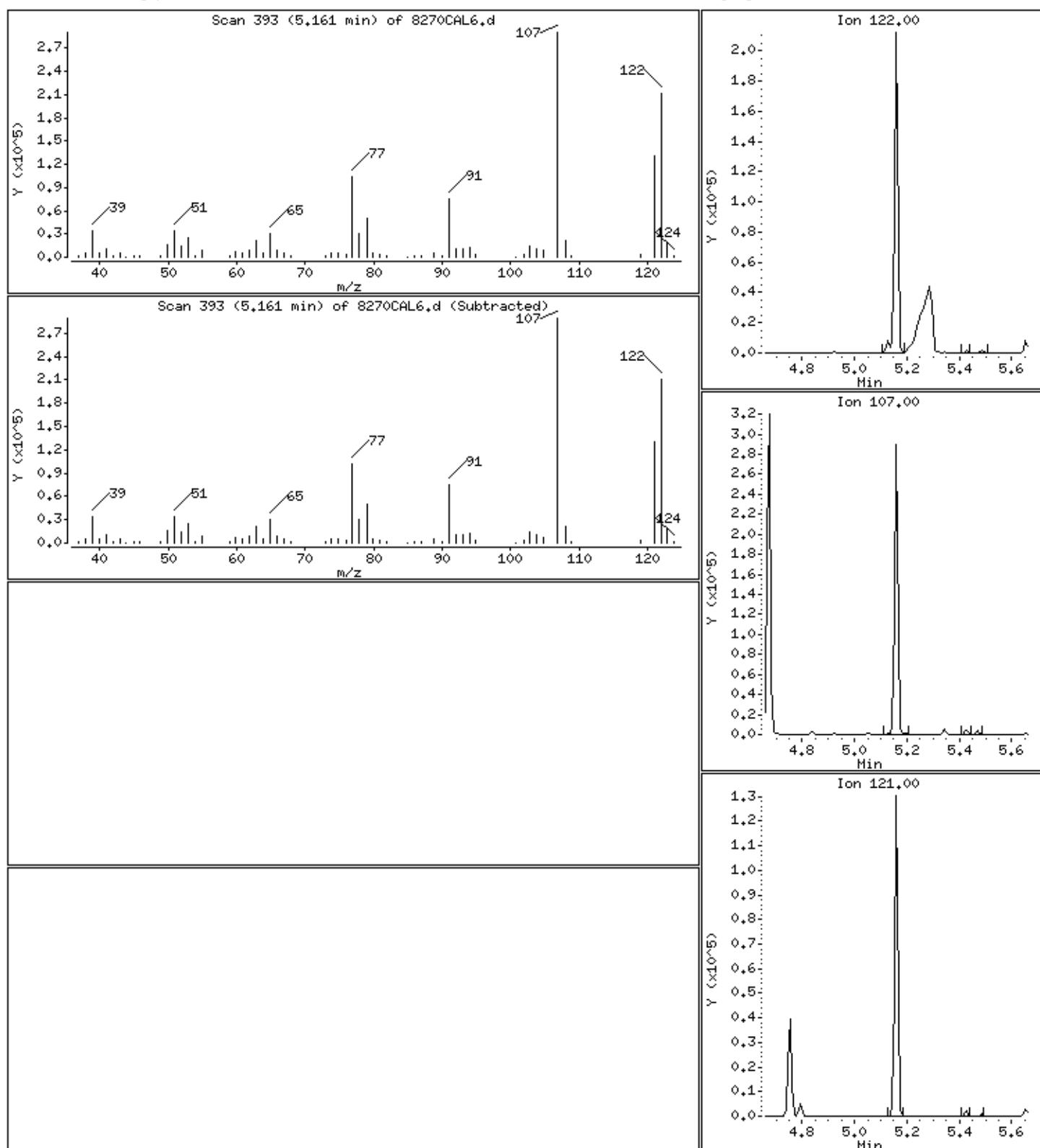
Operator: MJ

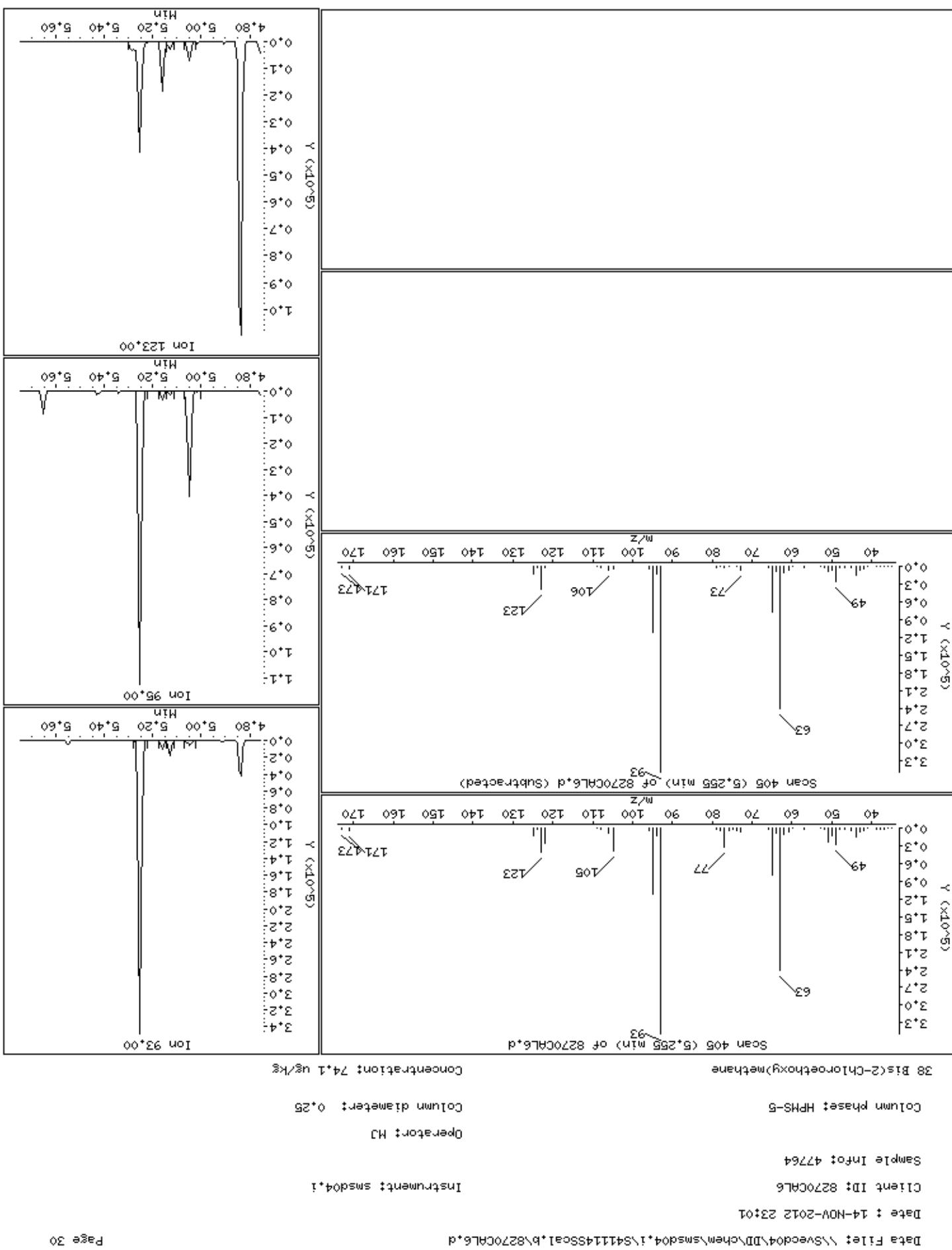
Column phase: HPMS-5

Column diameter: 0.25

36 2,4-Dimethylphenol

Concentration: 75.6 ug/kg





Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

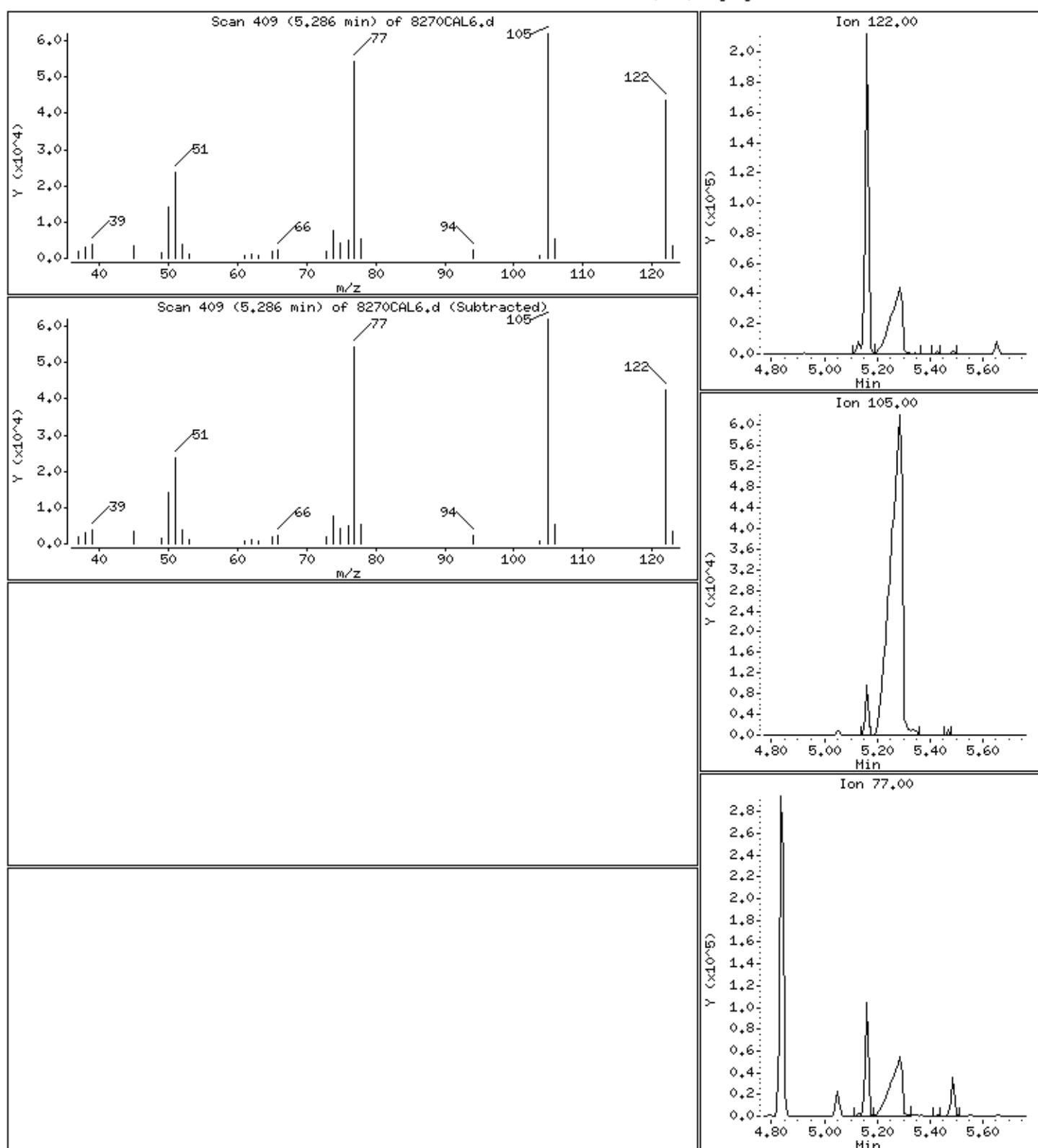
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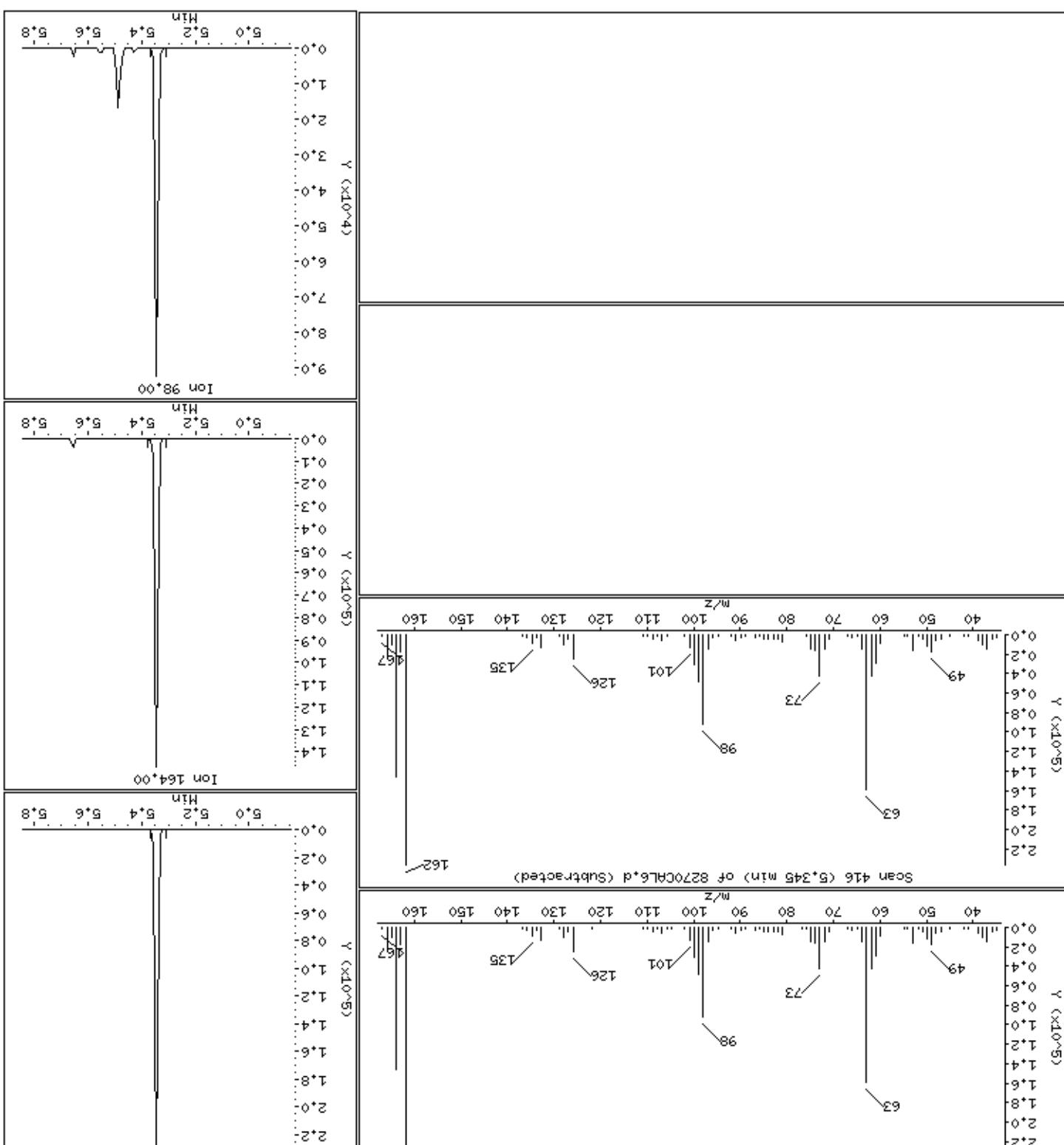
Column phase: HPMS-5

Column diameter: 0.25

40 Benzoic Acid

Concentration: 74.4 ug/kg





Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

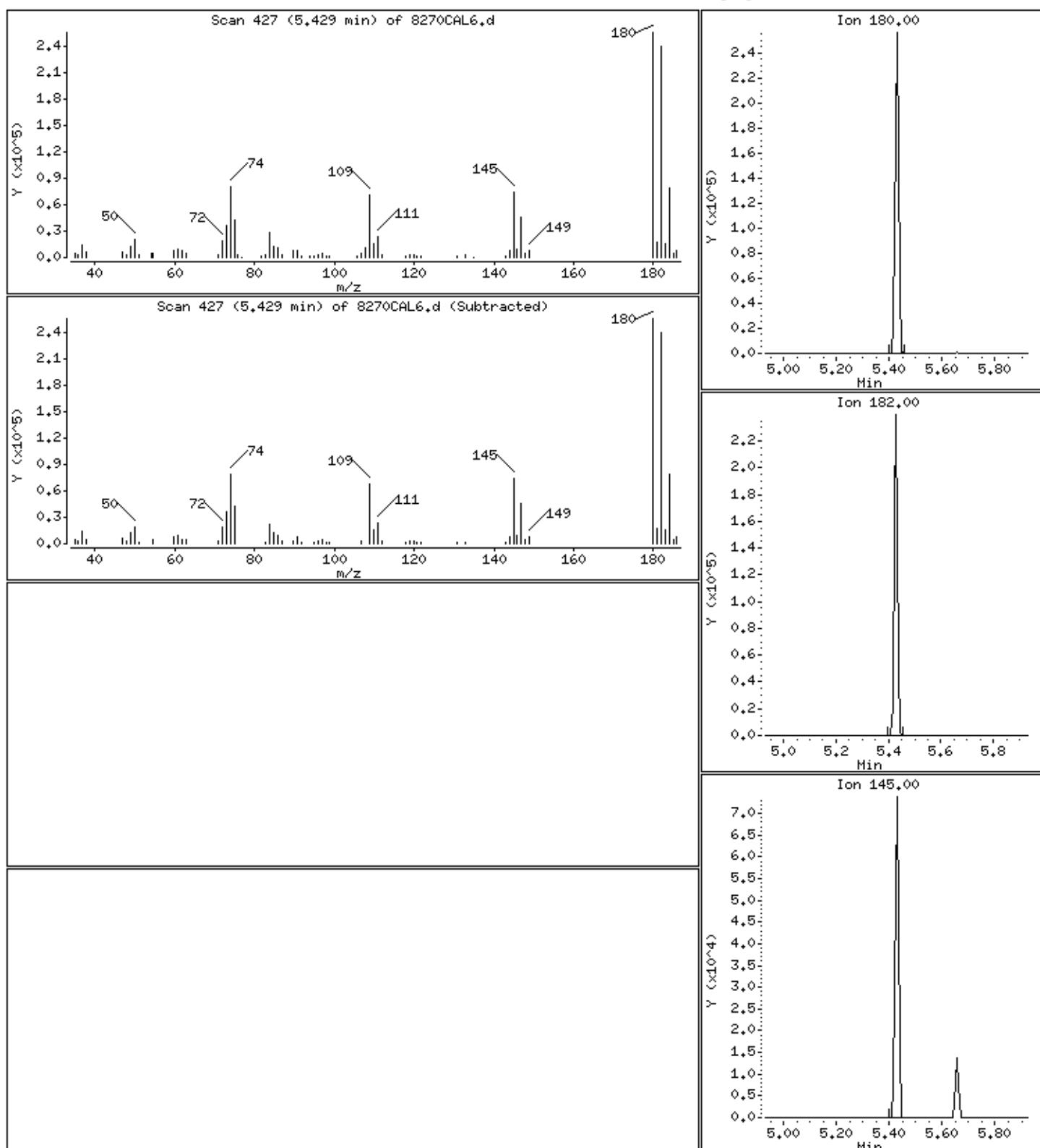
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

42 1,2,4-Trichlorobenzene

Concentration: 73.4 ug/kg



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

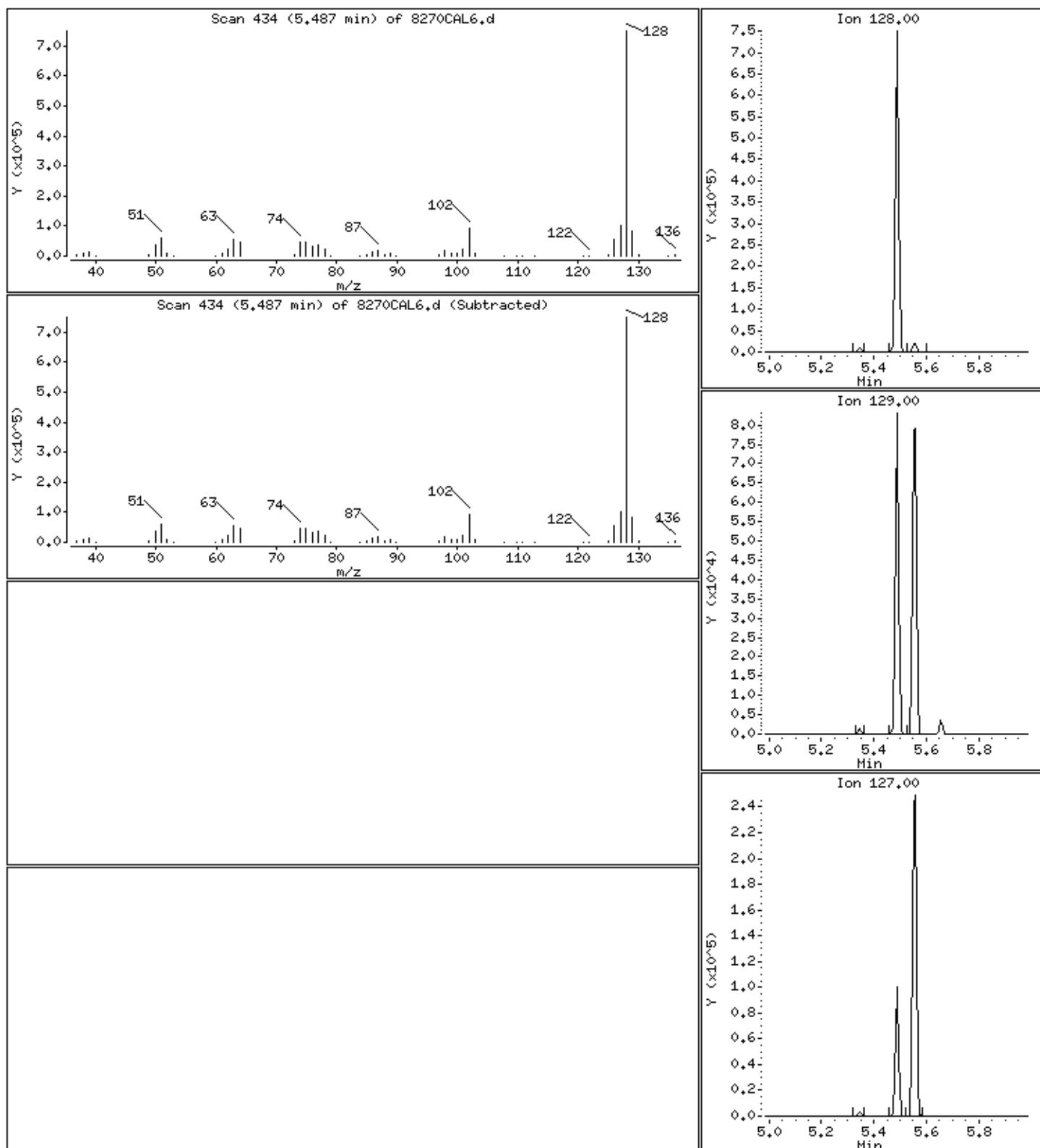
Operator: MJ

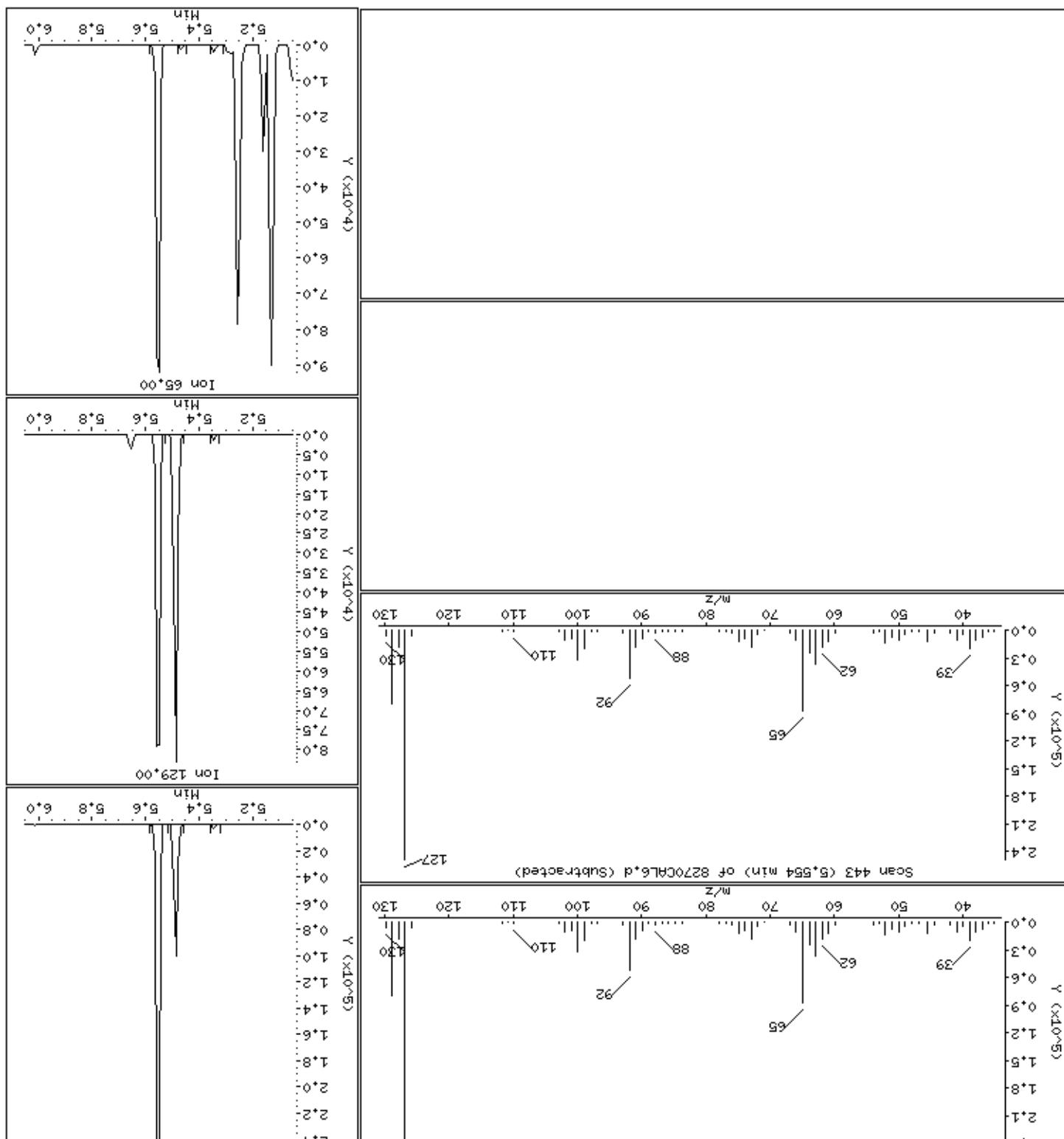
Column phase: HPMS-5

Column diameter: 0.25

44 Naphthalene

Concentration: 72.7 ug/kg





Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

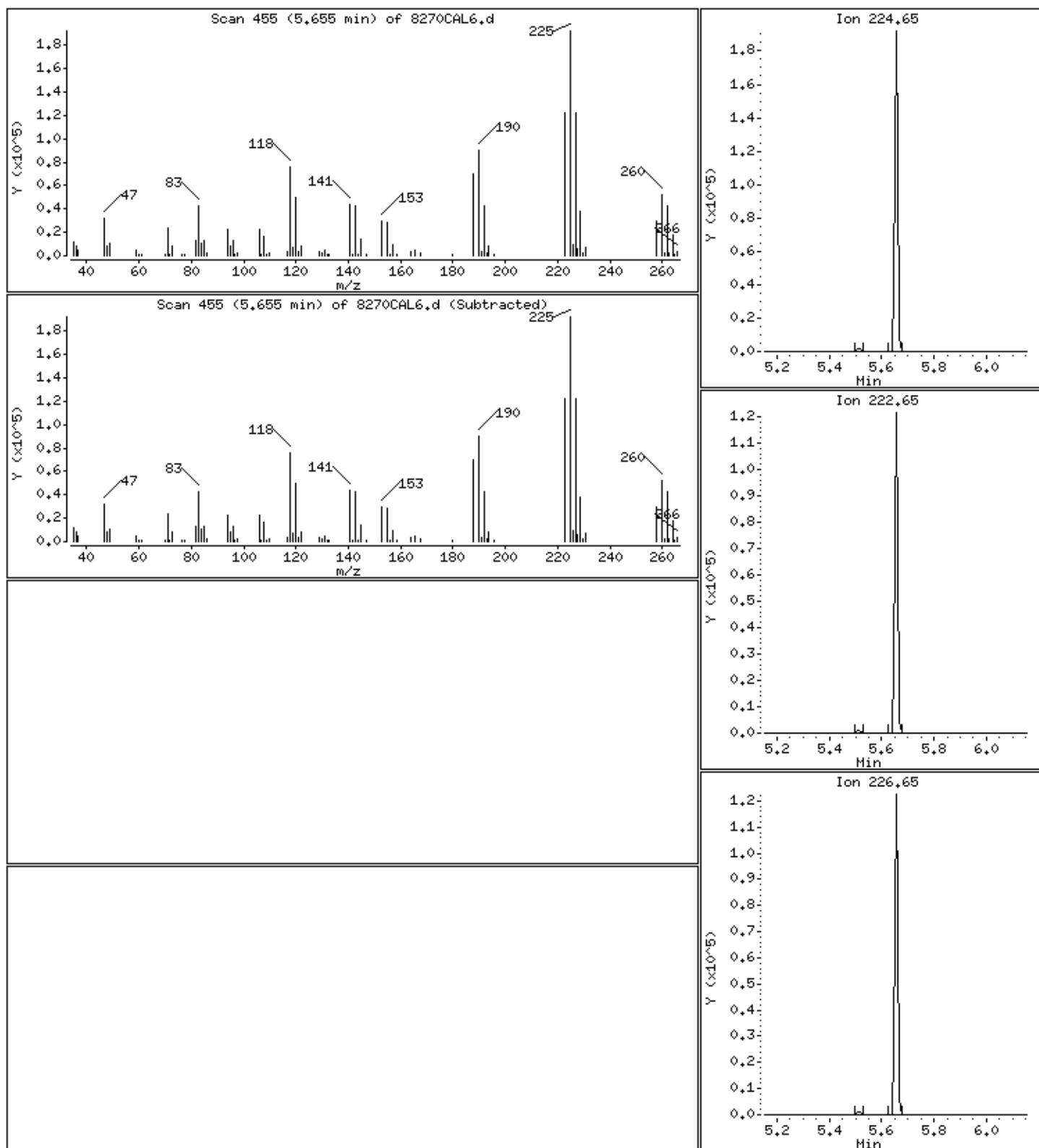
Operator: MJ

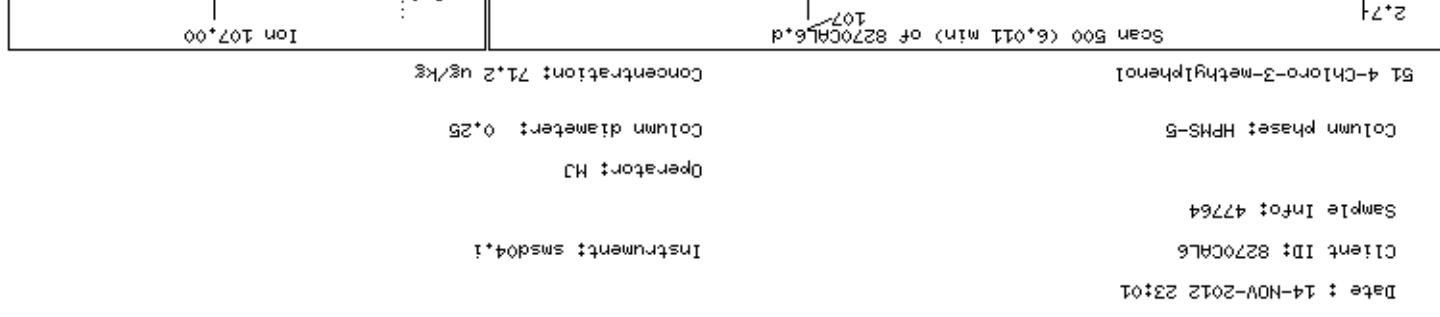
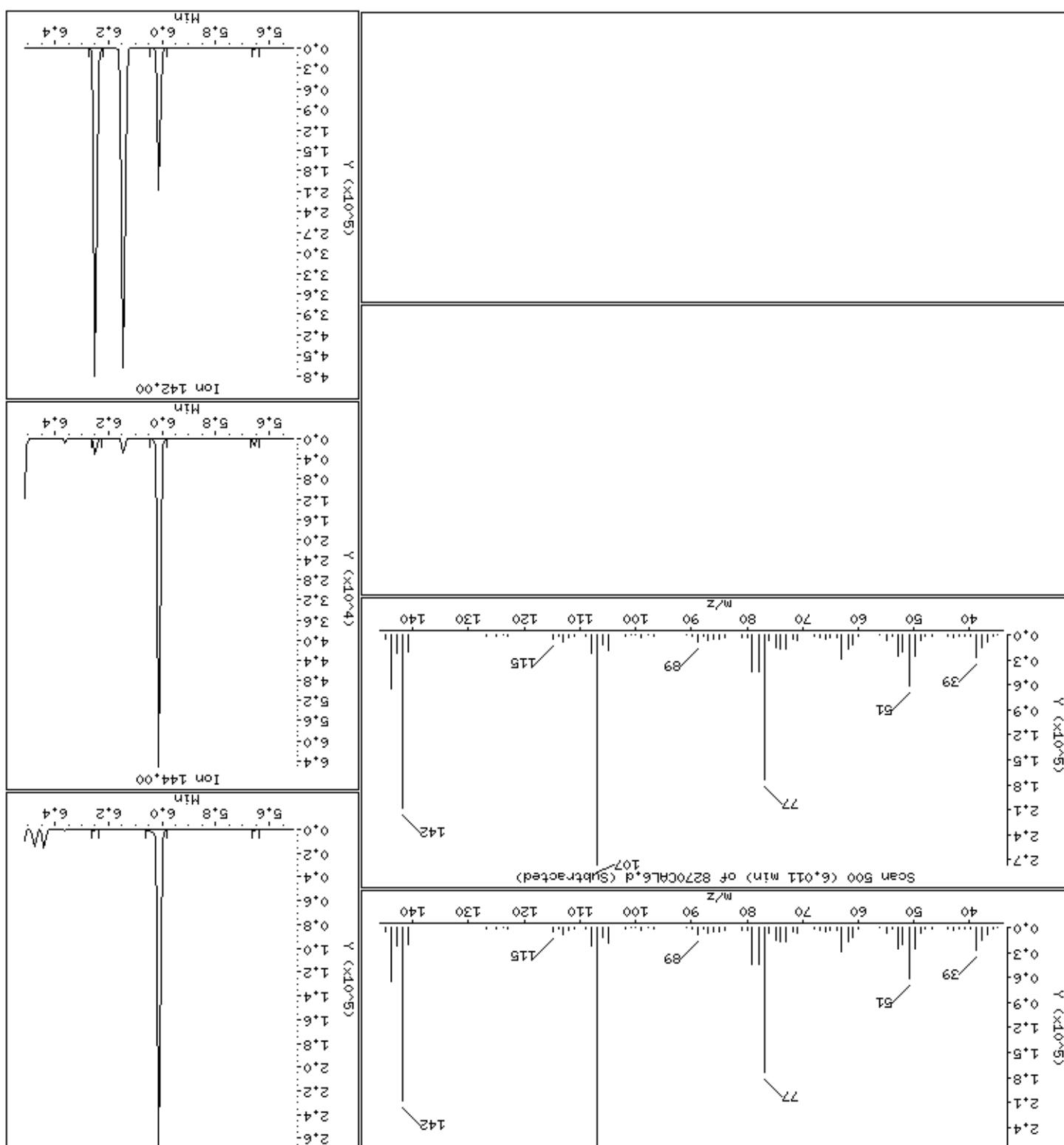
Column phase: HPMS-5

Column diameter: 0.25

48 Hexachlorobutadiene

Concentration: 72.3 ug/kg





Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

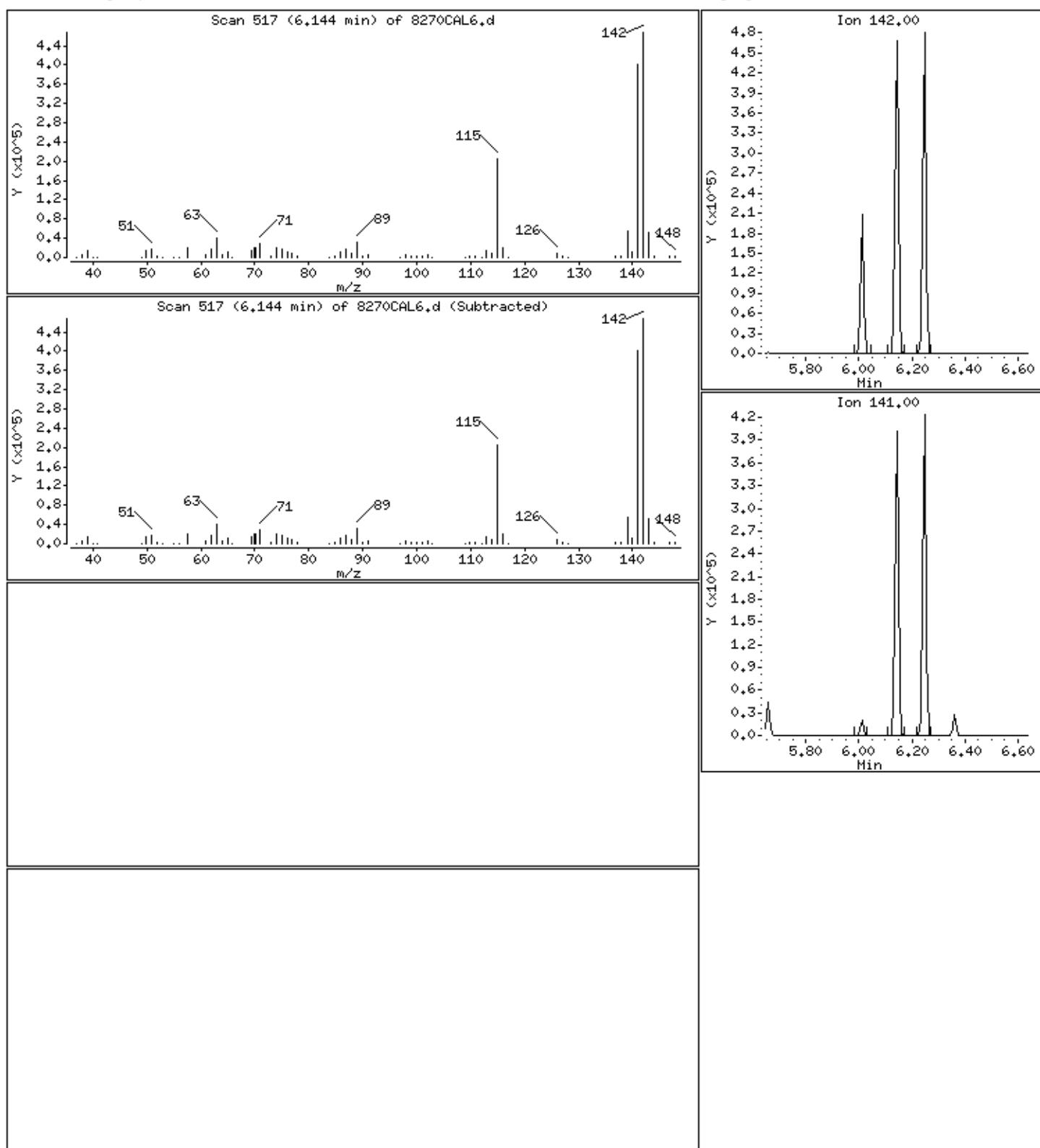
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

53 2-Methylnaphthalene

Concentration: 72.7 ug/kg



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

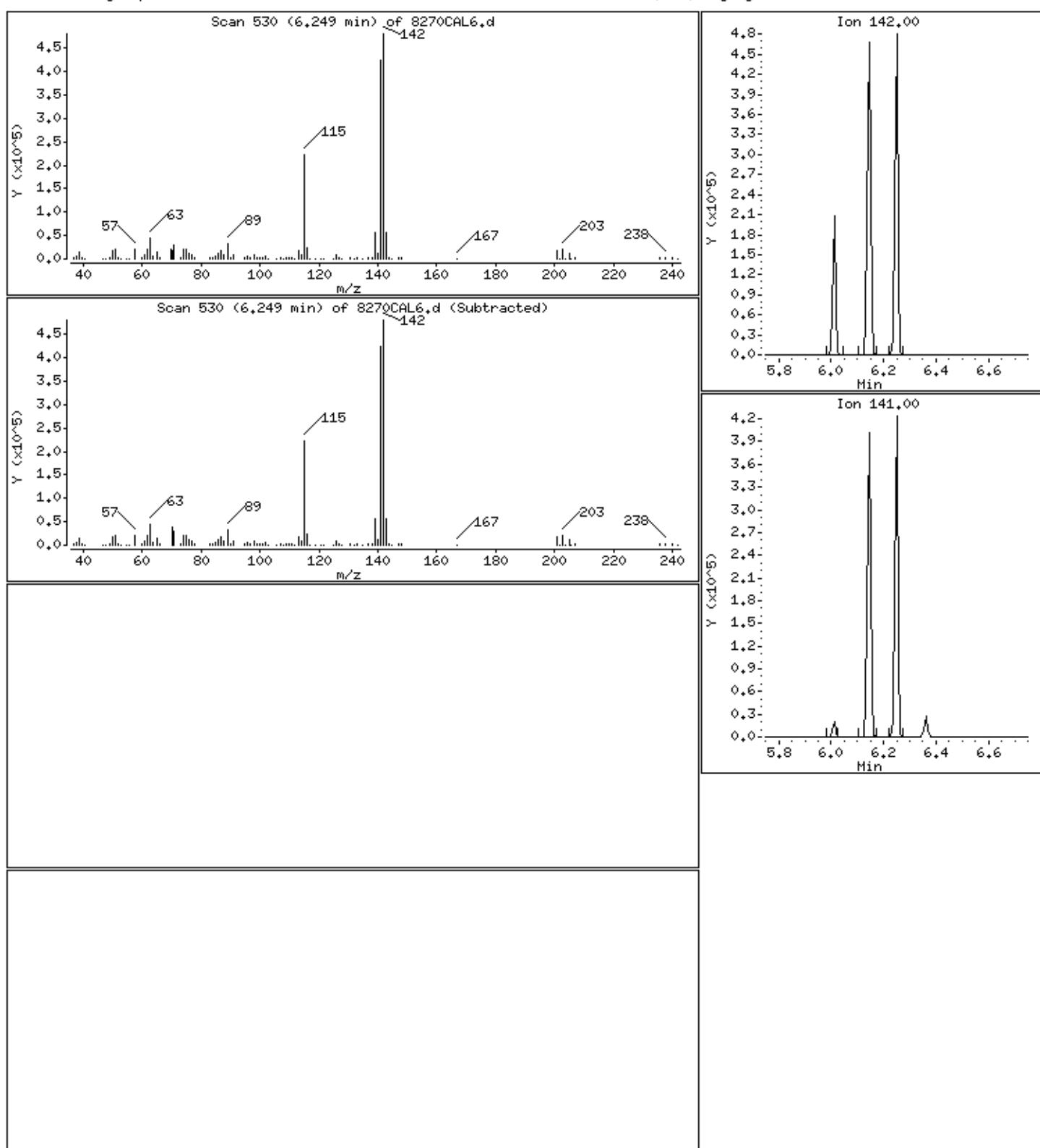
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

54 1-Methylnaphthalene

Concentration: 72.2 ug/kg



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

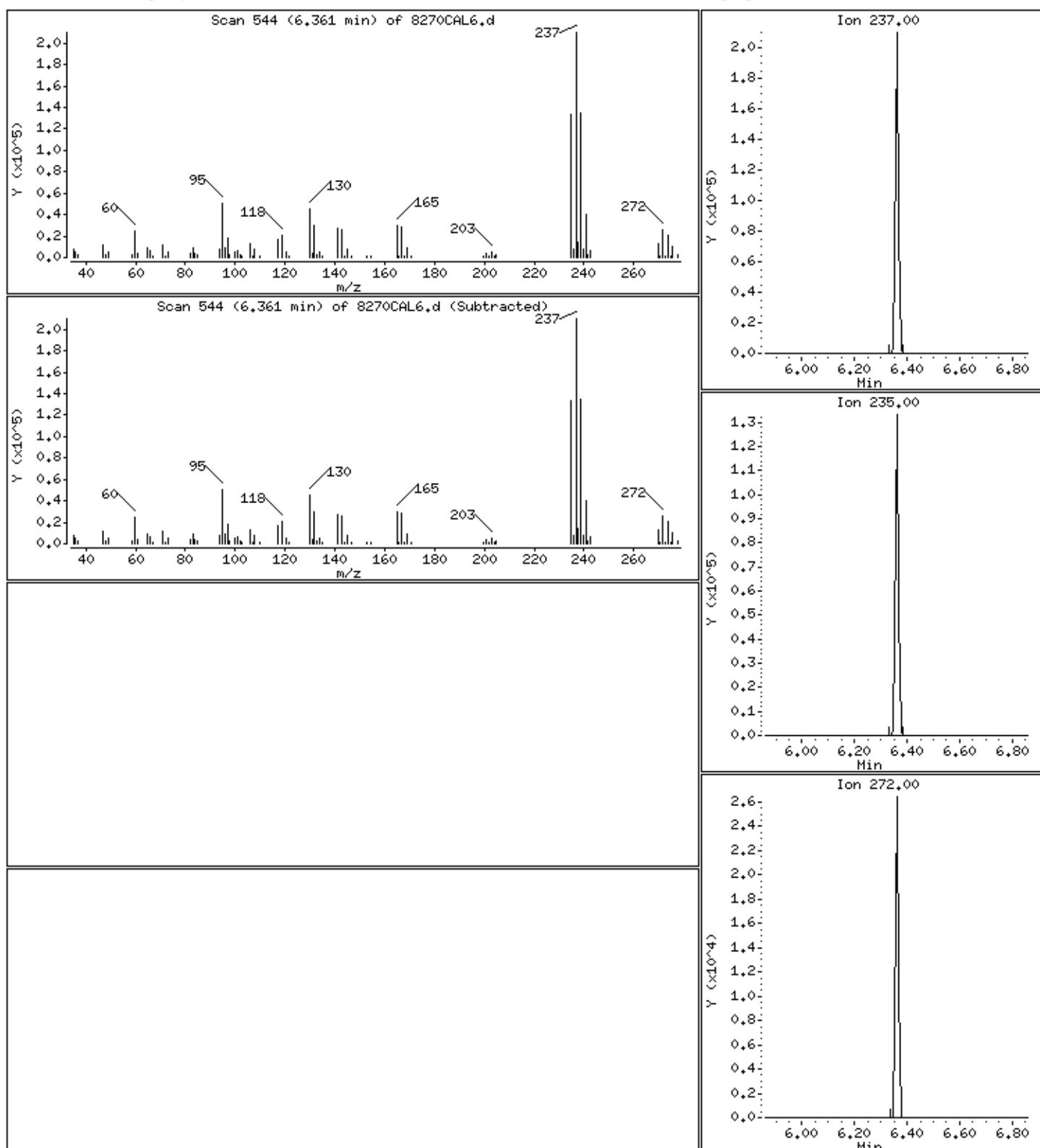
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

55 Hexachlorocyclopentadiene

Concentration: 69.6 ug/kg



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

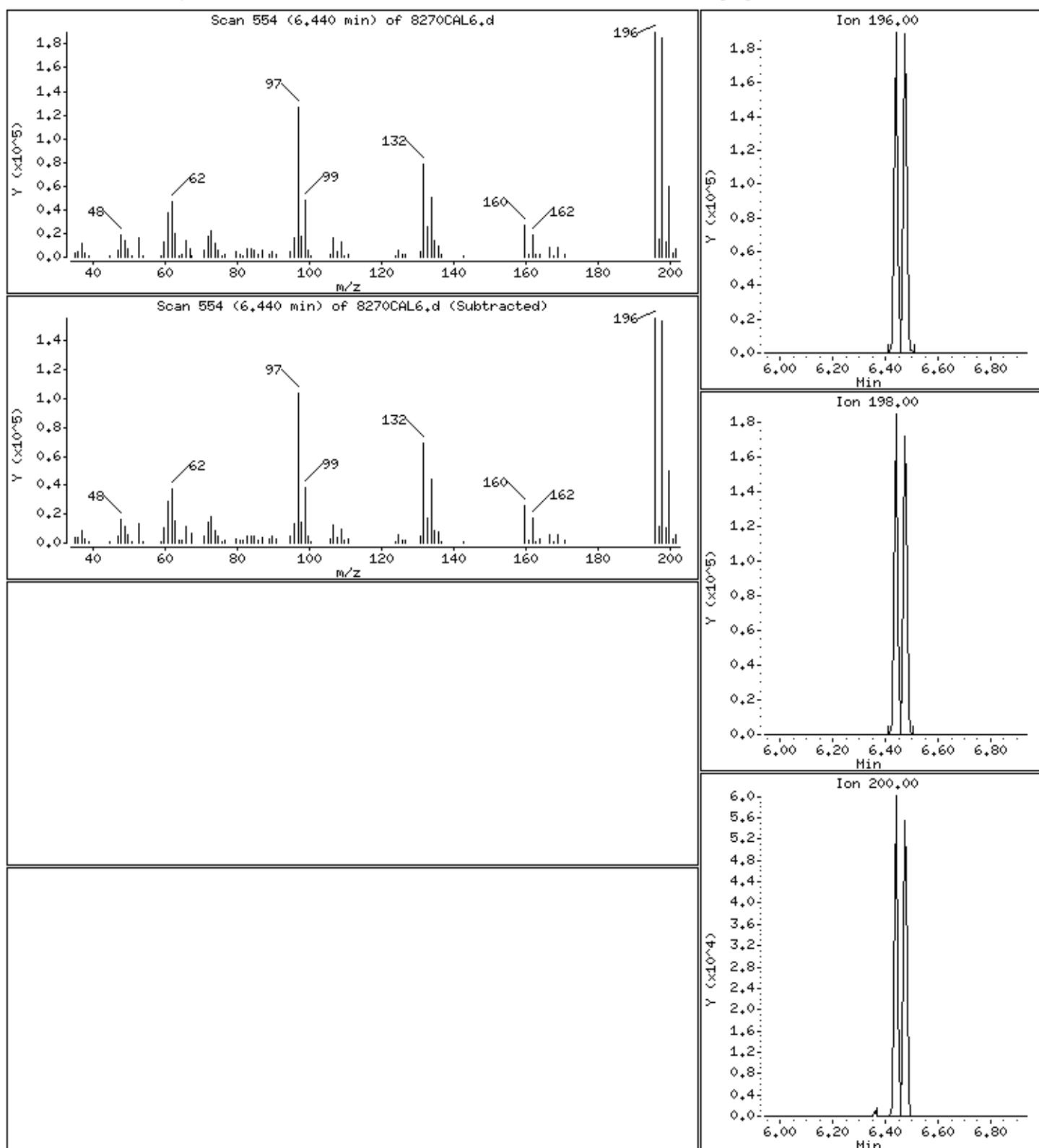
Operator: MJ

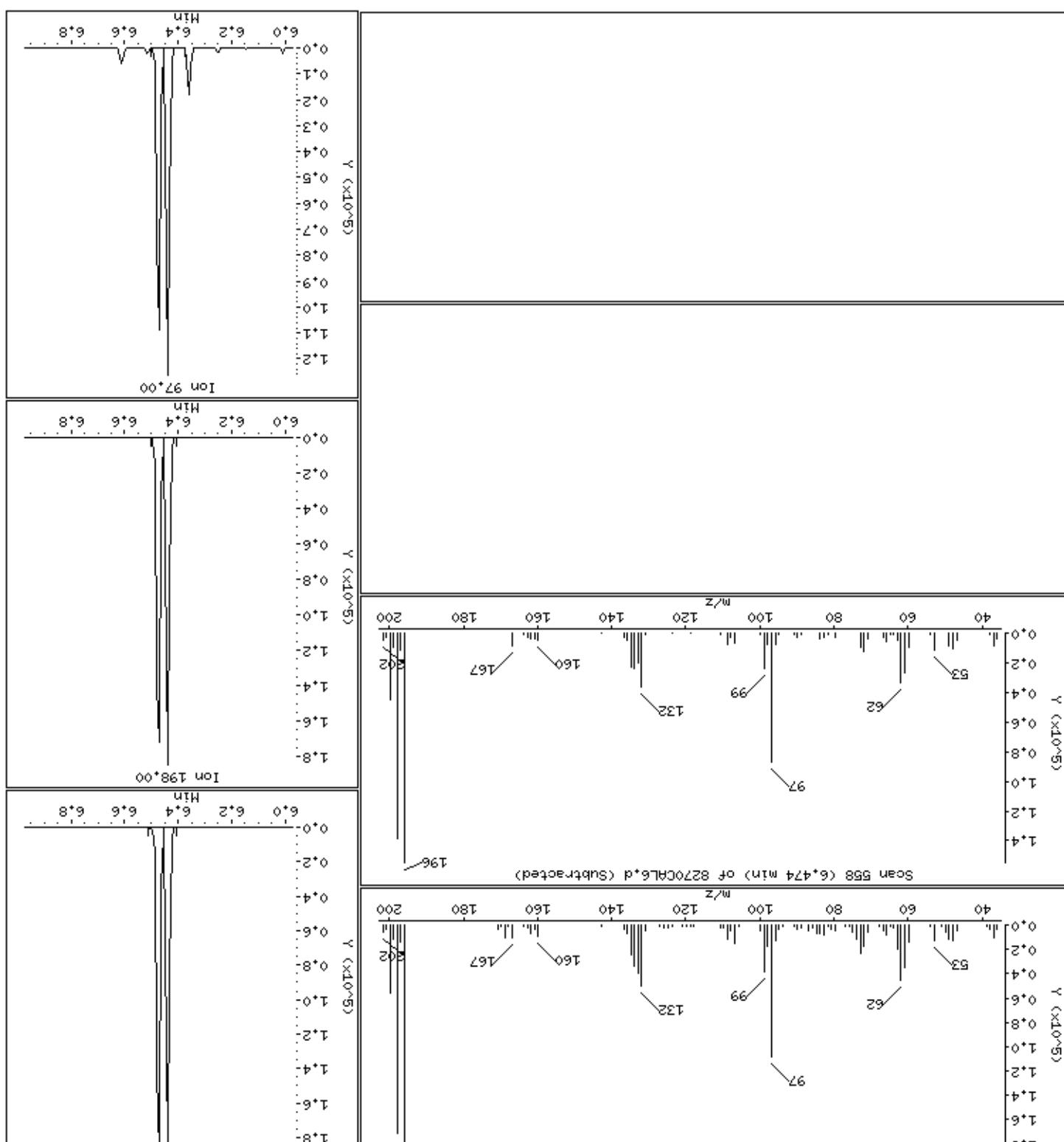
Column phase: HPMS-5

Column diameter: 0.25

57 2,4,6-Trichlorophenol

Concentration: 72.6 ug/kg





Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

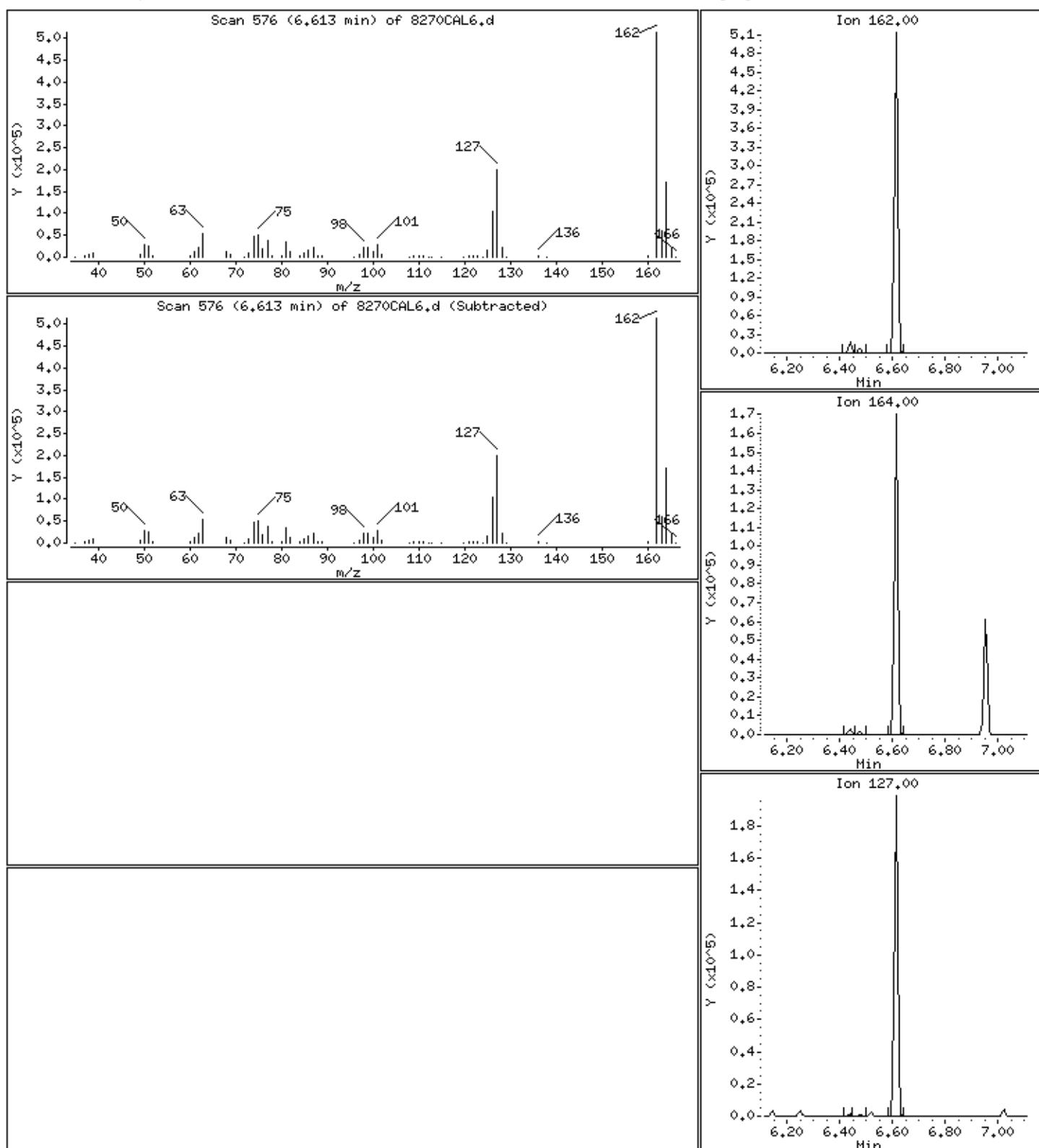
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

62 2-Chloronaphthalene

Concentration: 72.1 ug/kg



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

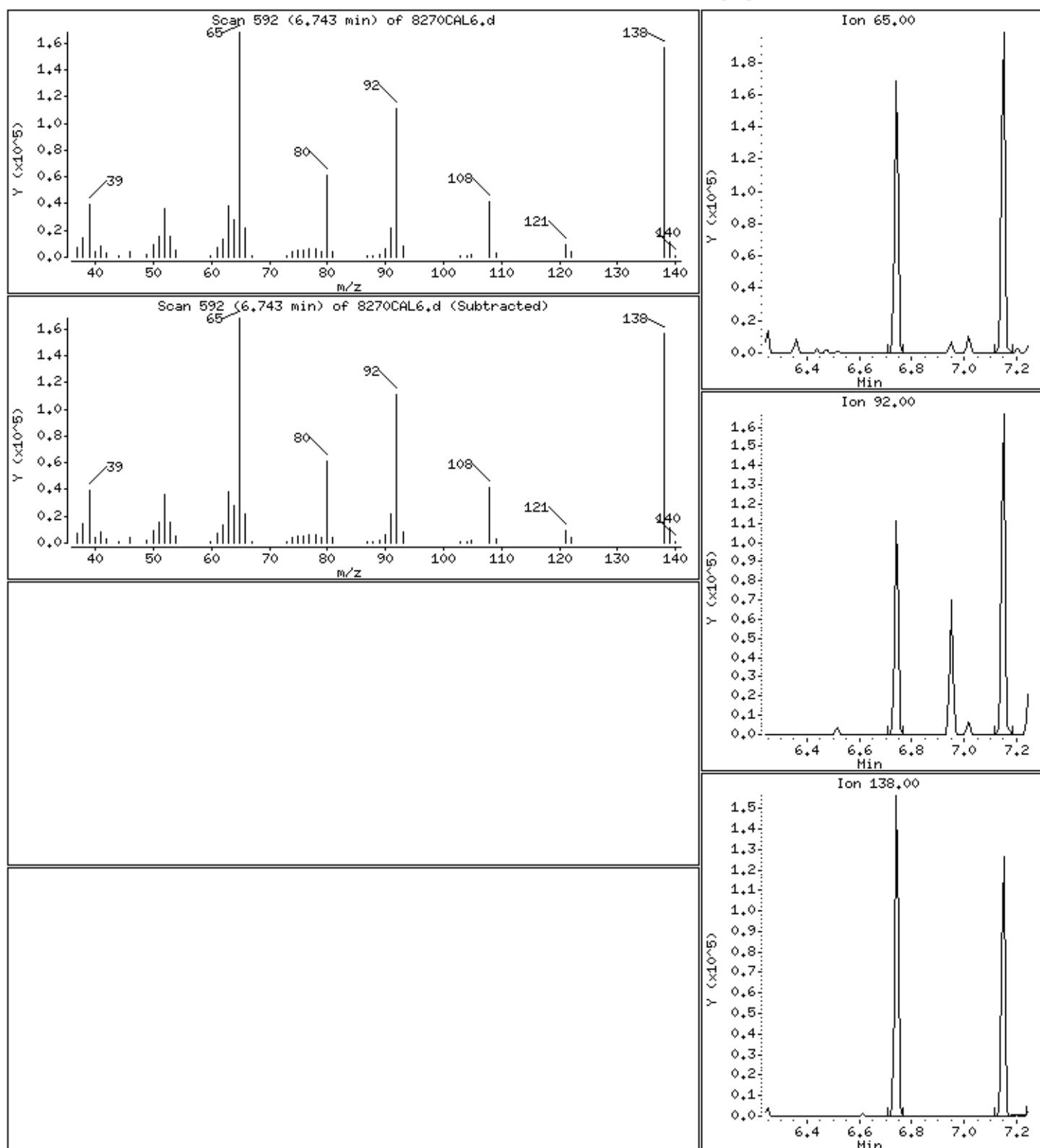
Operator: MJ

Column phase: HPMS-5

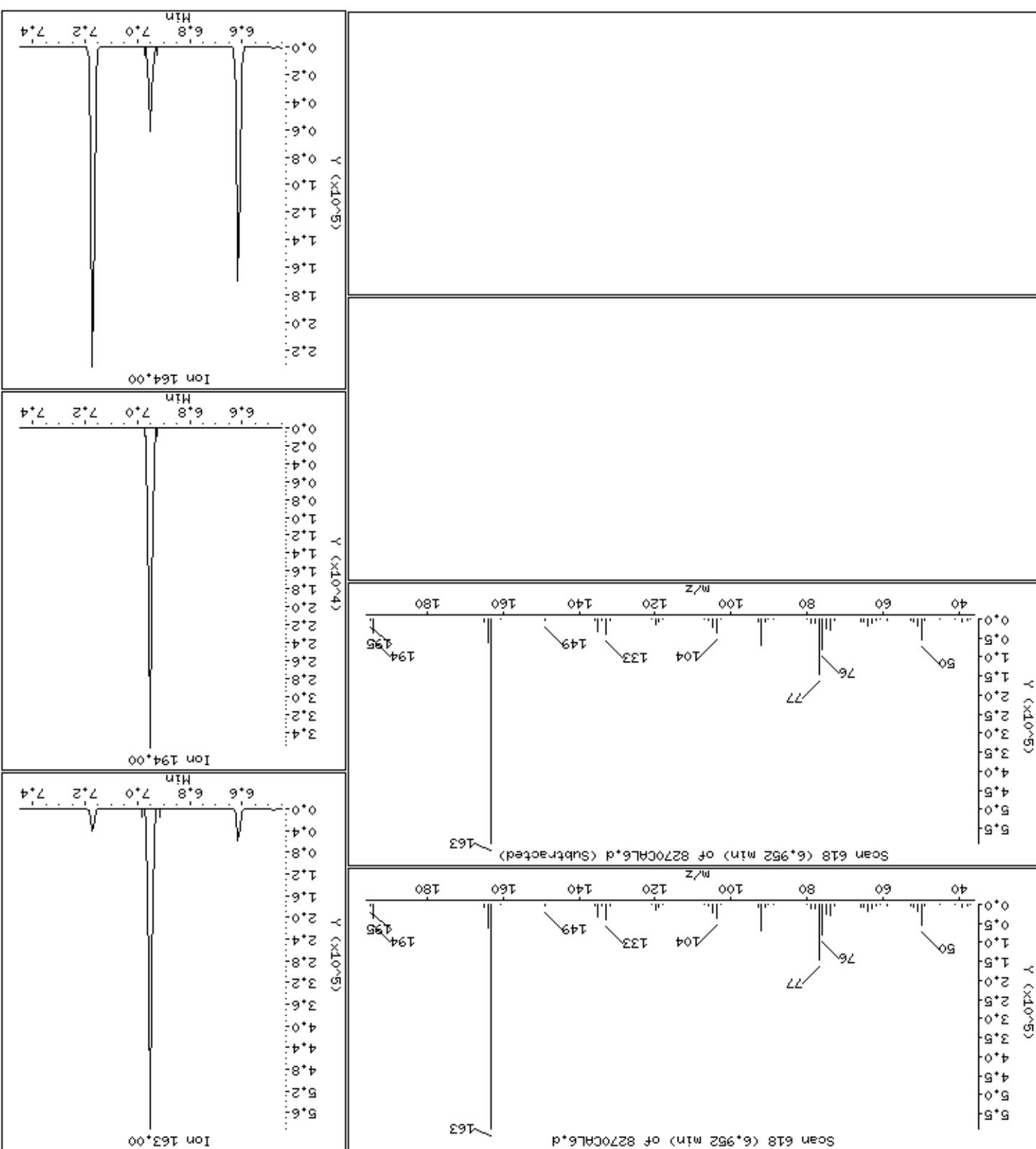
Column diameter: 0.25

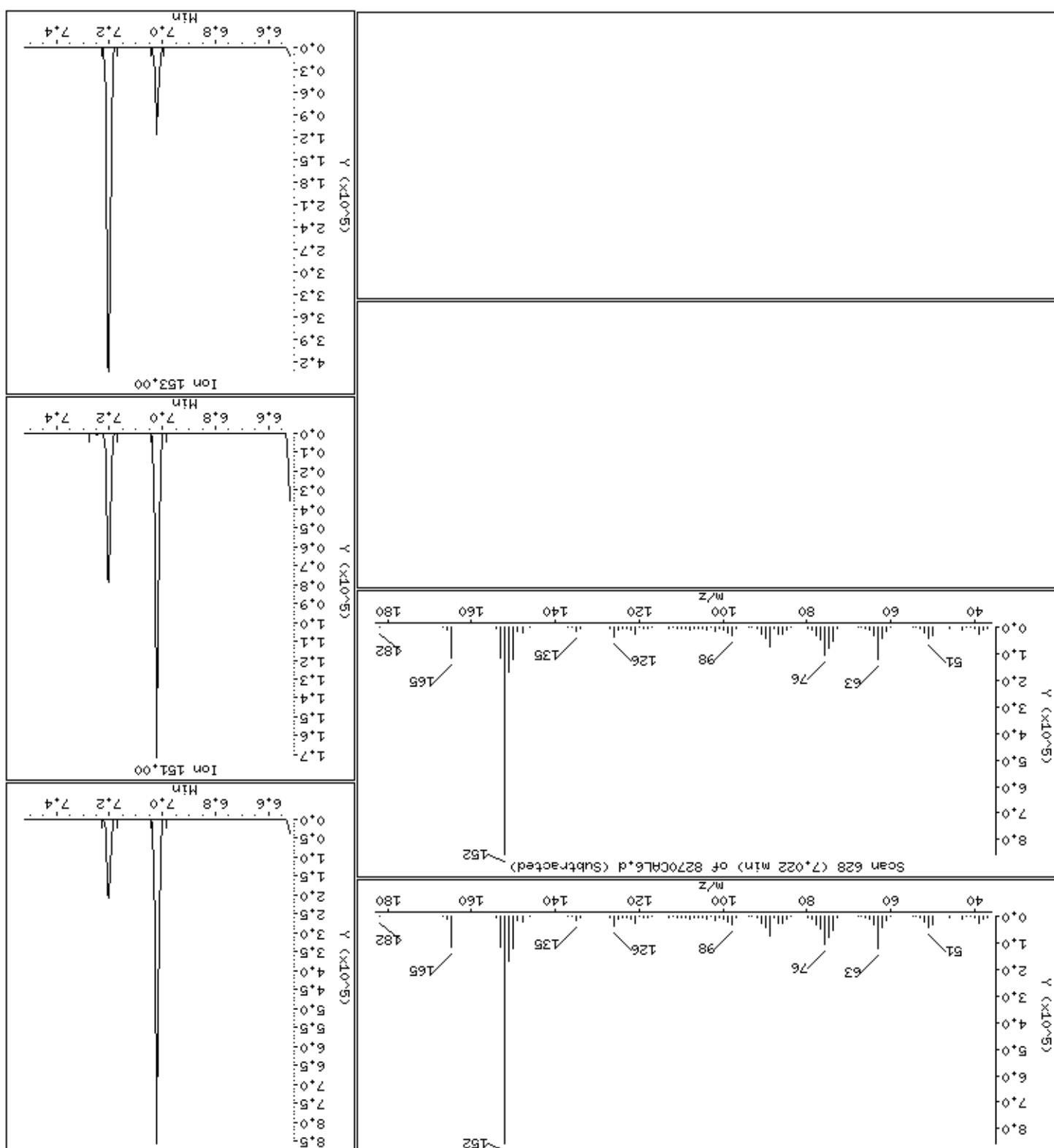
63 2-Nitroaniline

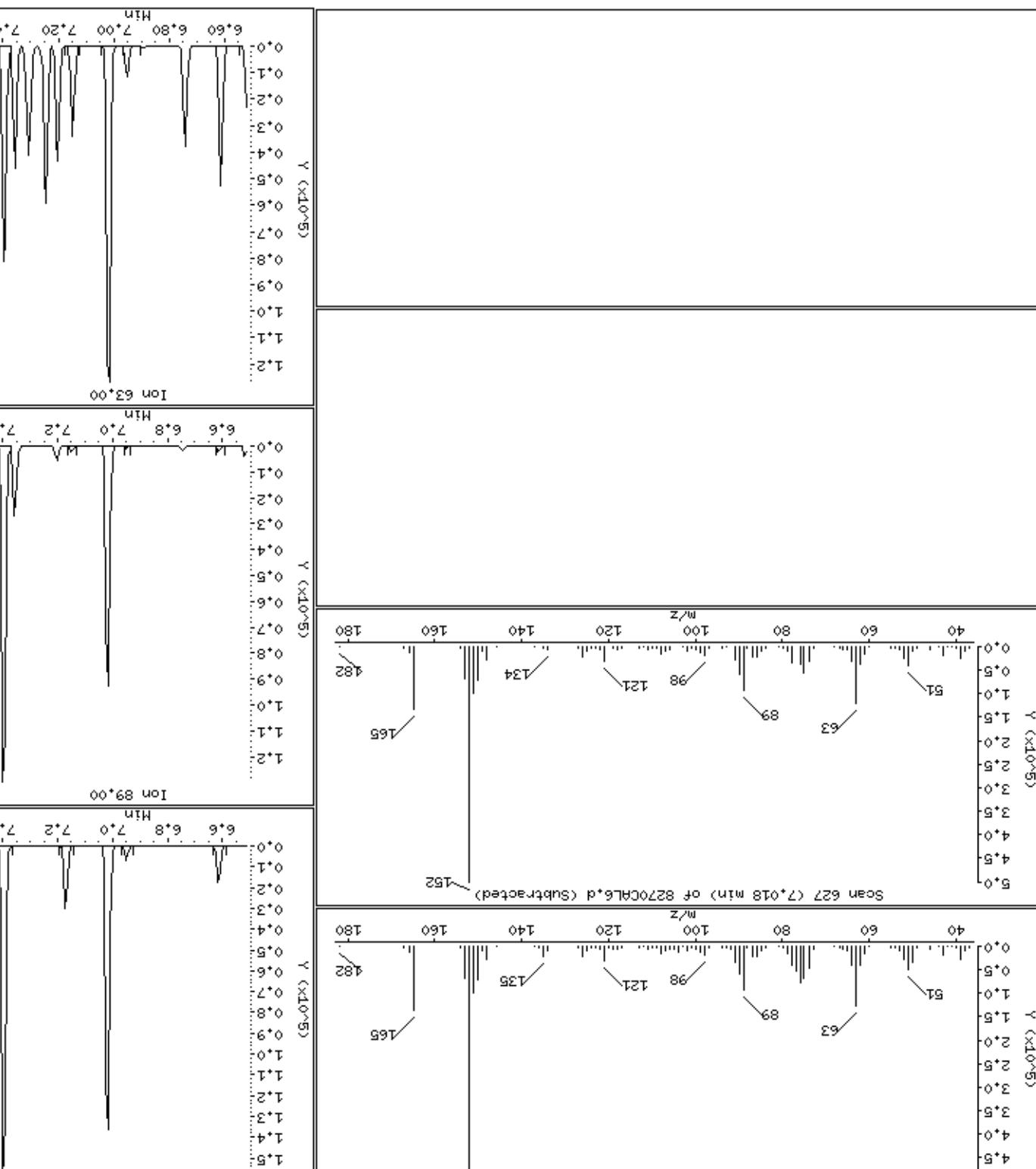
Concentration: 73.2 ug/kg



Date : 14-NOV-2012 23:01
Client ID: 8270CAL6
Instrument: smsd4*I
Sample Info: 47764
Operator: MJ
Column phase: HPM-S-5
Column diameter: 0.25
Dongcentration: 73.4 ug/kg
65 Diethylphthalate







Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

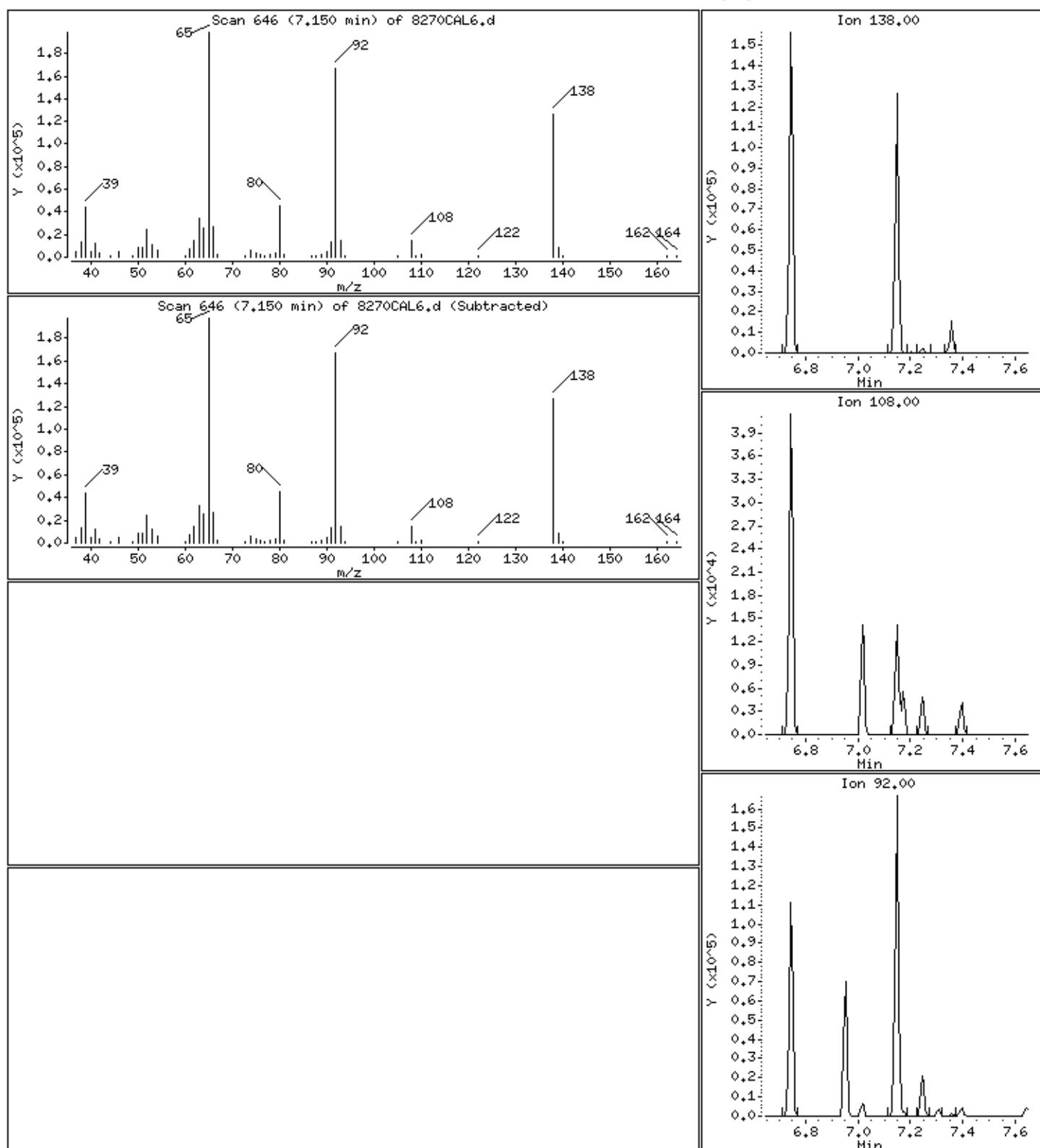
Operator: MJ

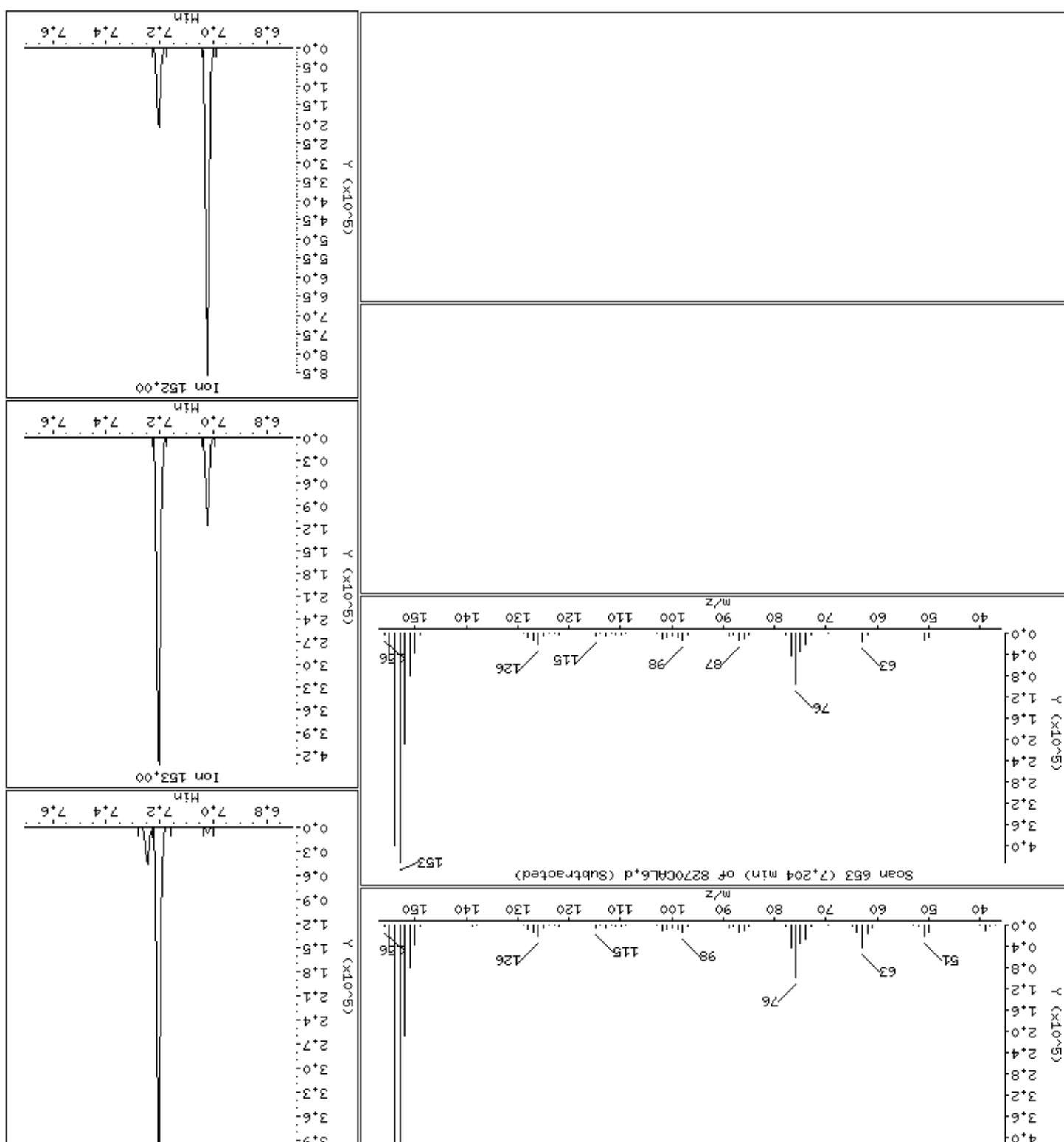
Column phase: HPMS-5

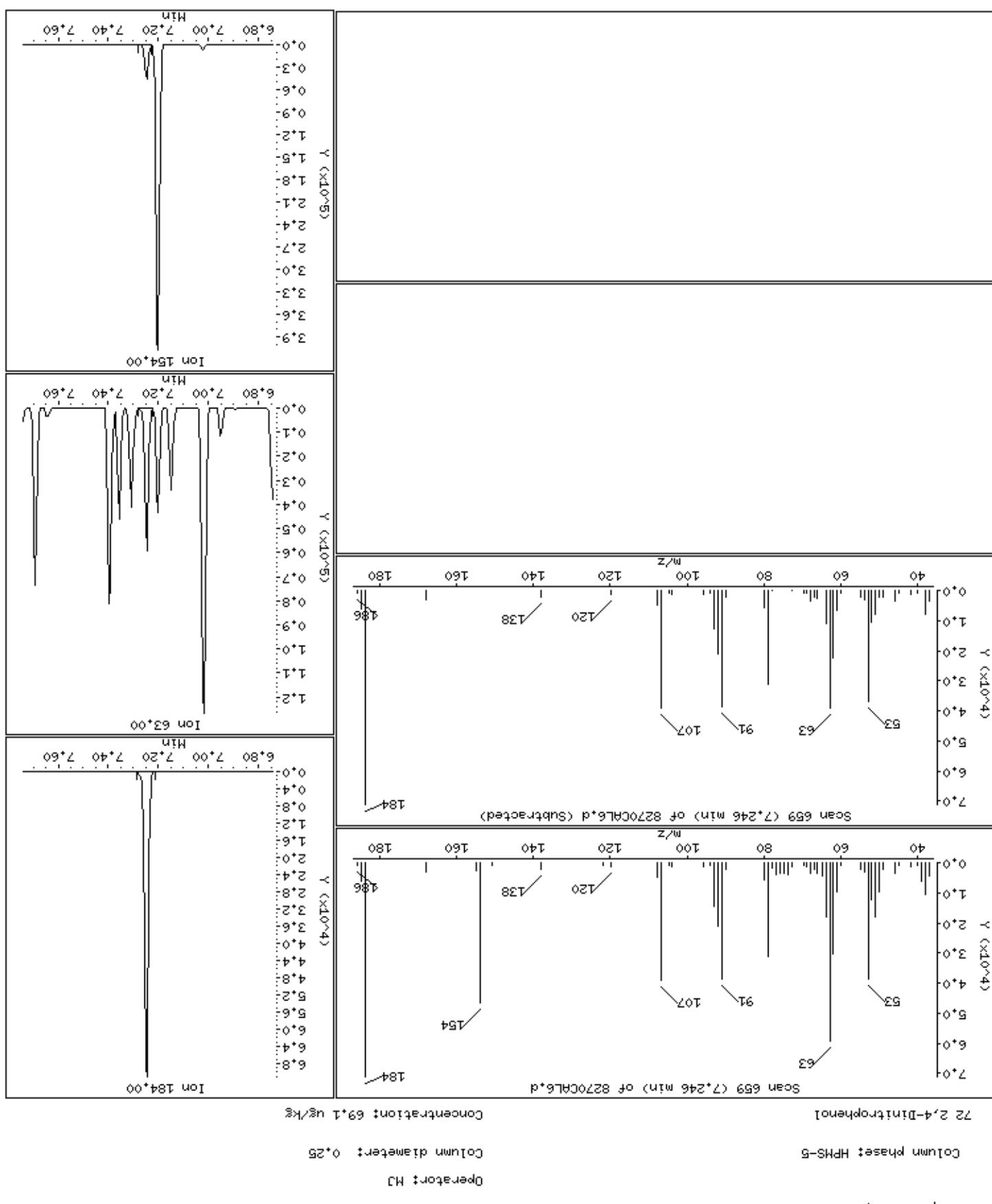
Column diameter: 0.25

69 3-Nitroaniline

Concentration: 71.6 ug/kg







OG aged

Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

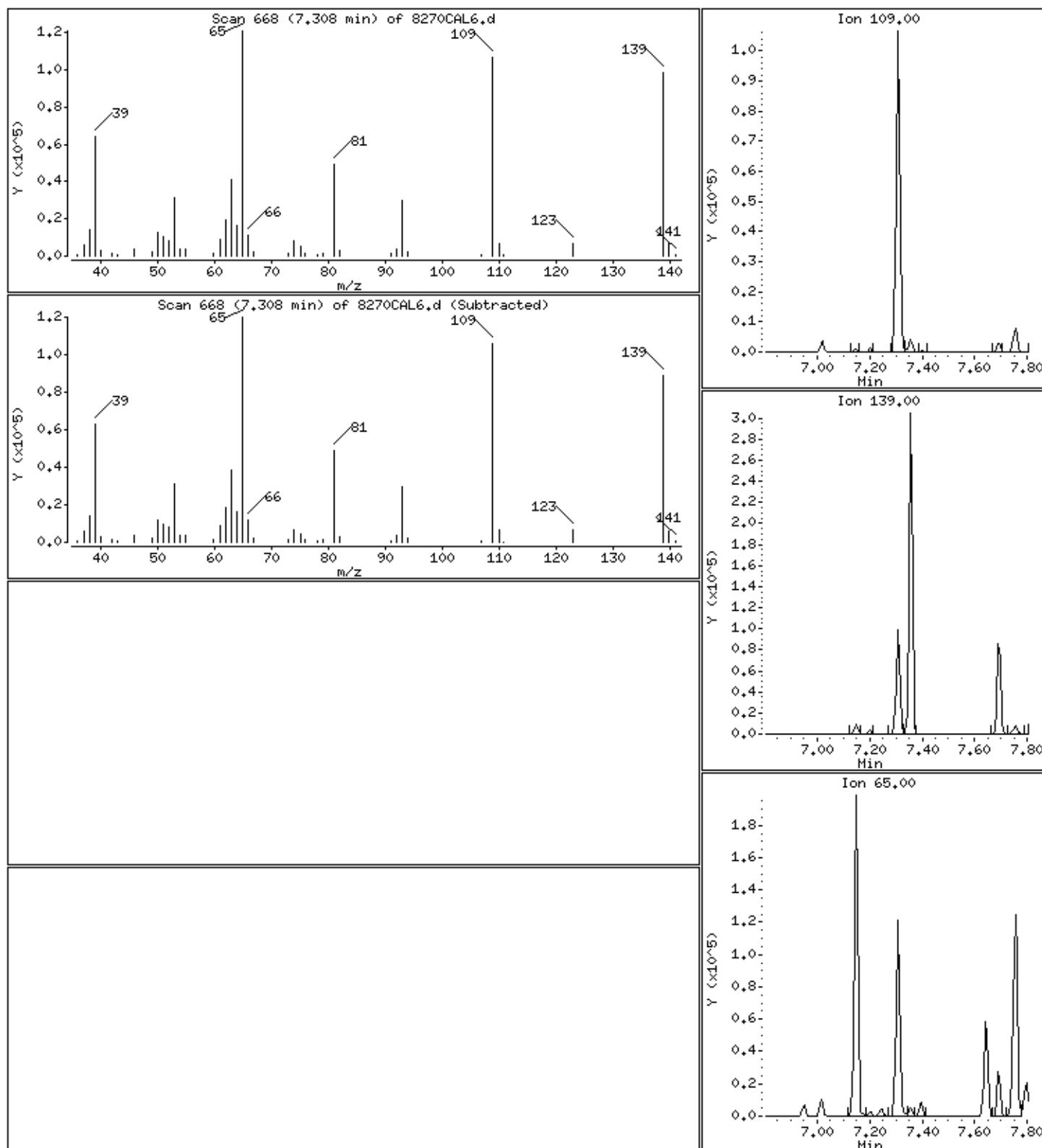
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

74 4-Nitrophenol

Concentration: 73.8 ug/kg



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

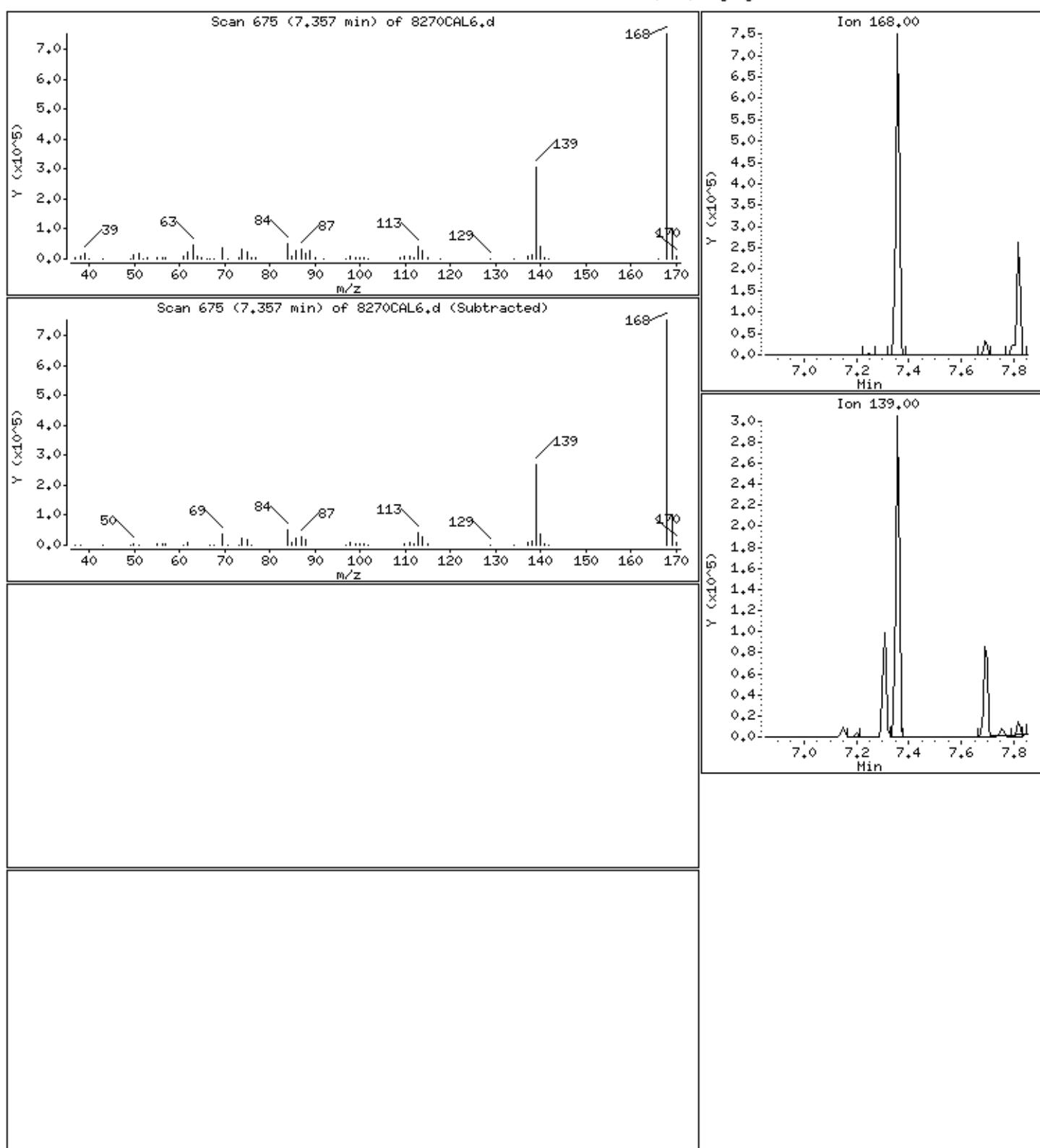
Operator: MJ

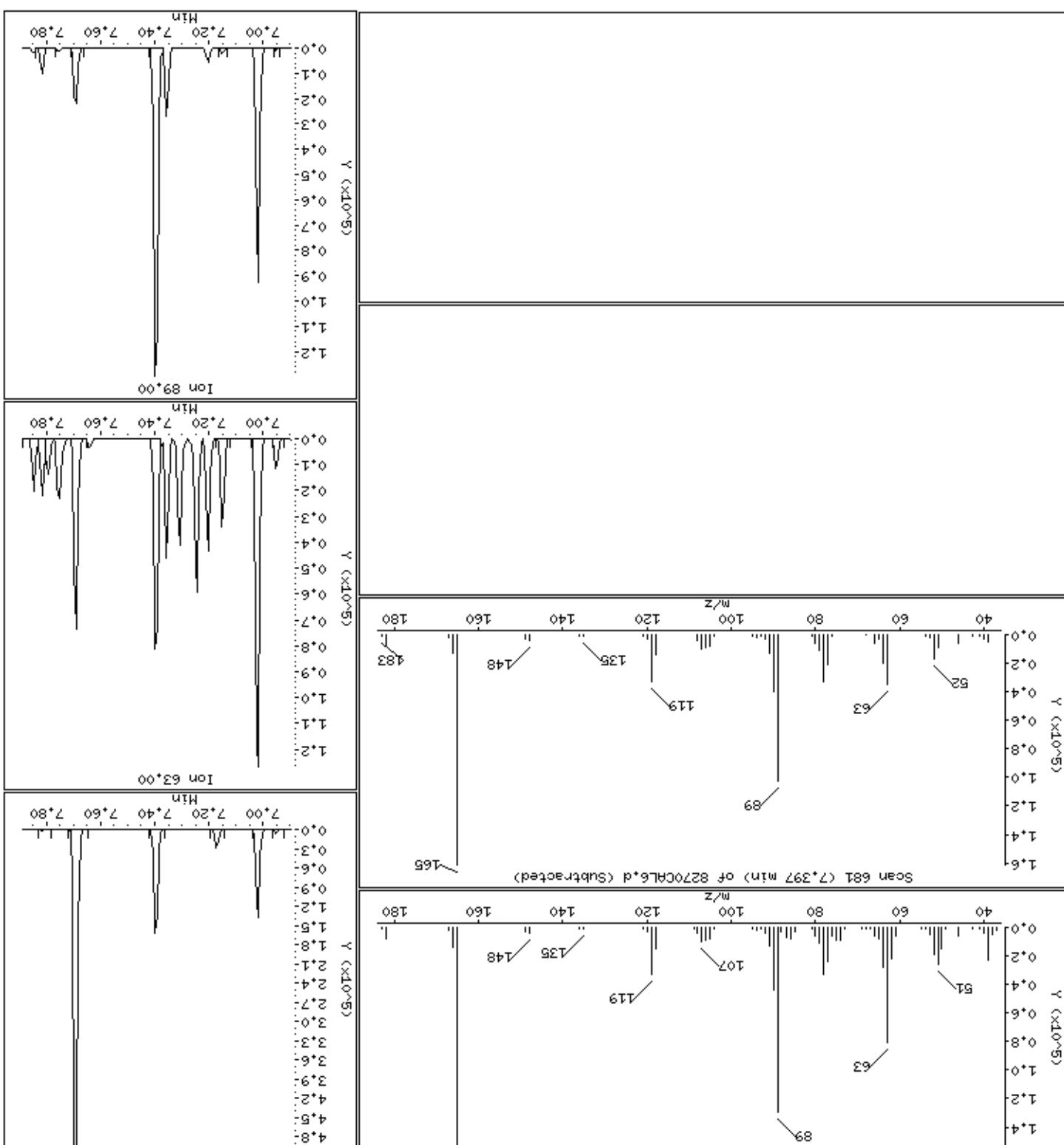
Column phase: HPMS-5

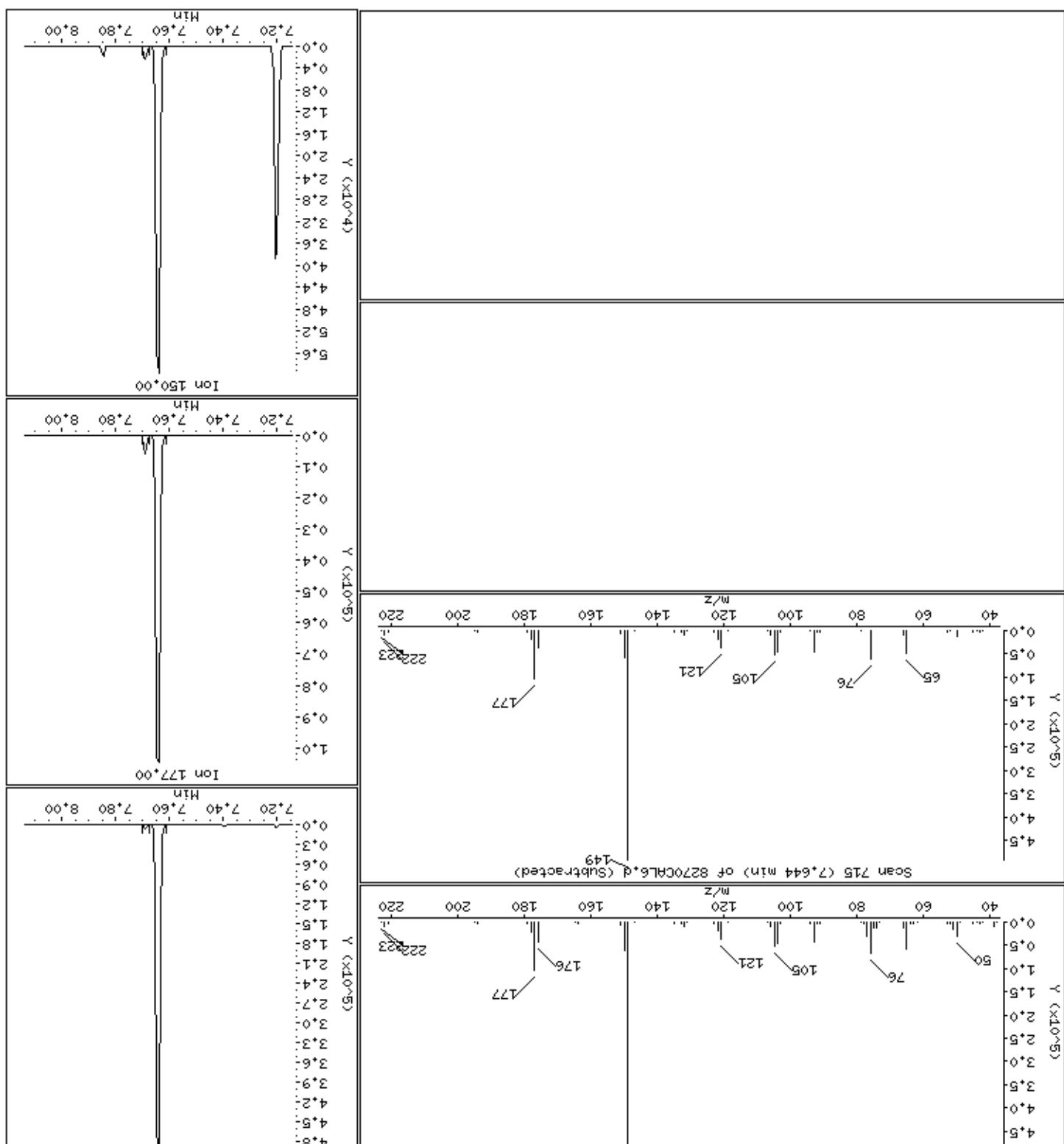
Column diameter: 0.25

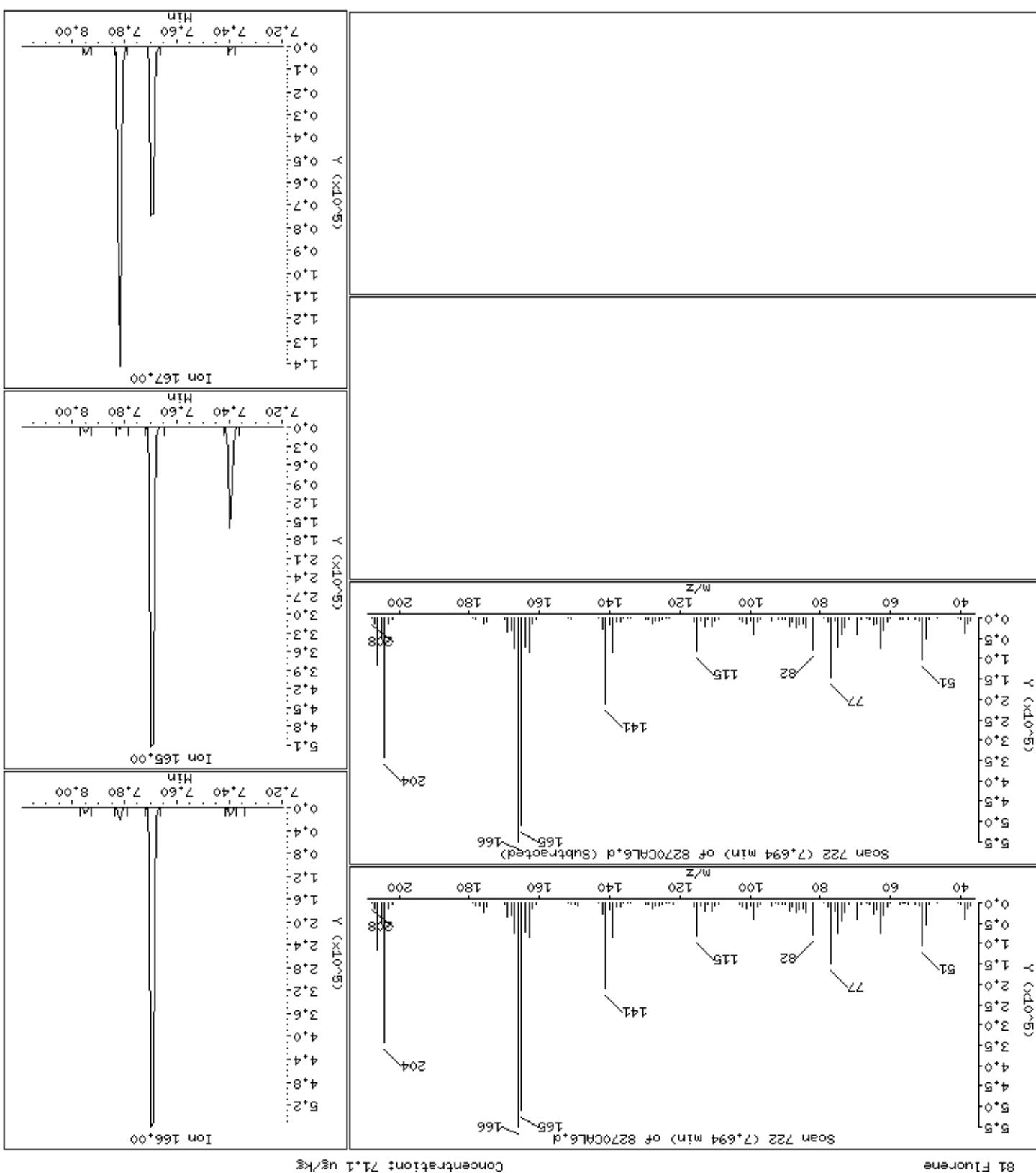
75 Dibenzofuran

Concentration: 72.0 ug/kg









GG aged

Page 55 [Index](#) [Feedback](#) [About Us](#) [Chemical Symbols](#) [IUPAC](#) [SOLVED](#)

www.vivabook.com | 1-800-225-7211 | 1-800-225-7211

Cittadine ID: 82/0CHL6
Inserimento: 15/01/2018
Sms da: 411

Sample Info: 47764

Operator: H3

For more information about the study, visit www.hrsa.gov.

6710 - 1200HWTB, UNIT 202
S. CHIN, 1200HWTB, UNIT 202

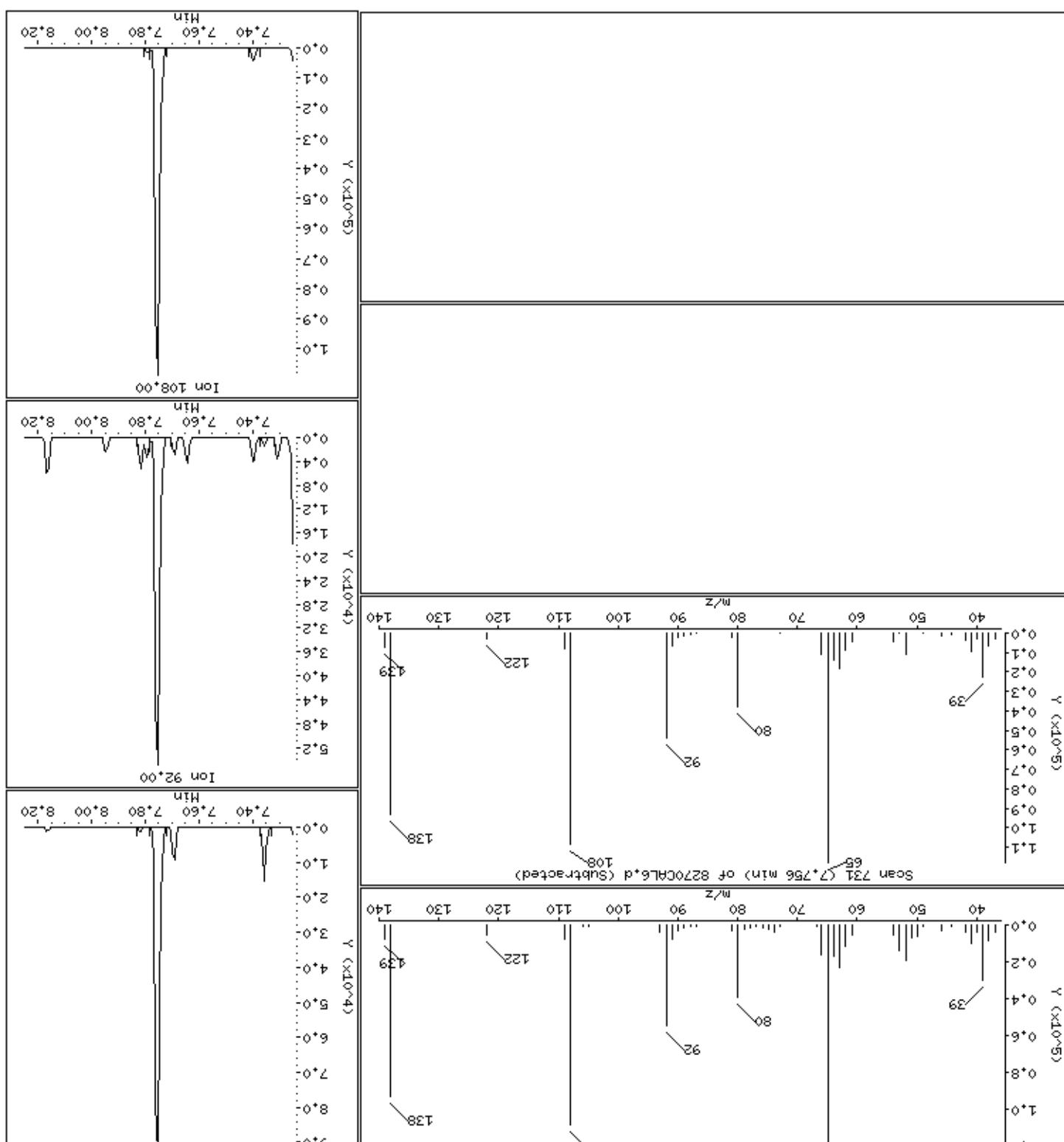
Fluorine Concentration: 74.1 us/ks

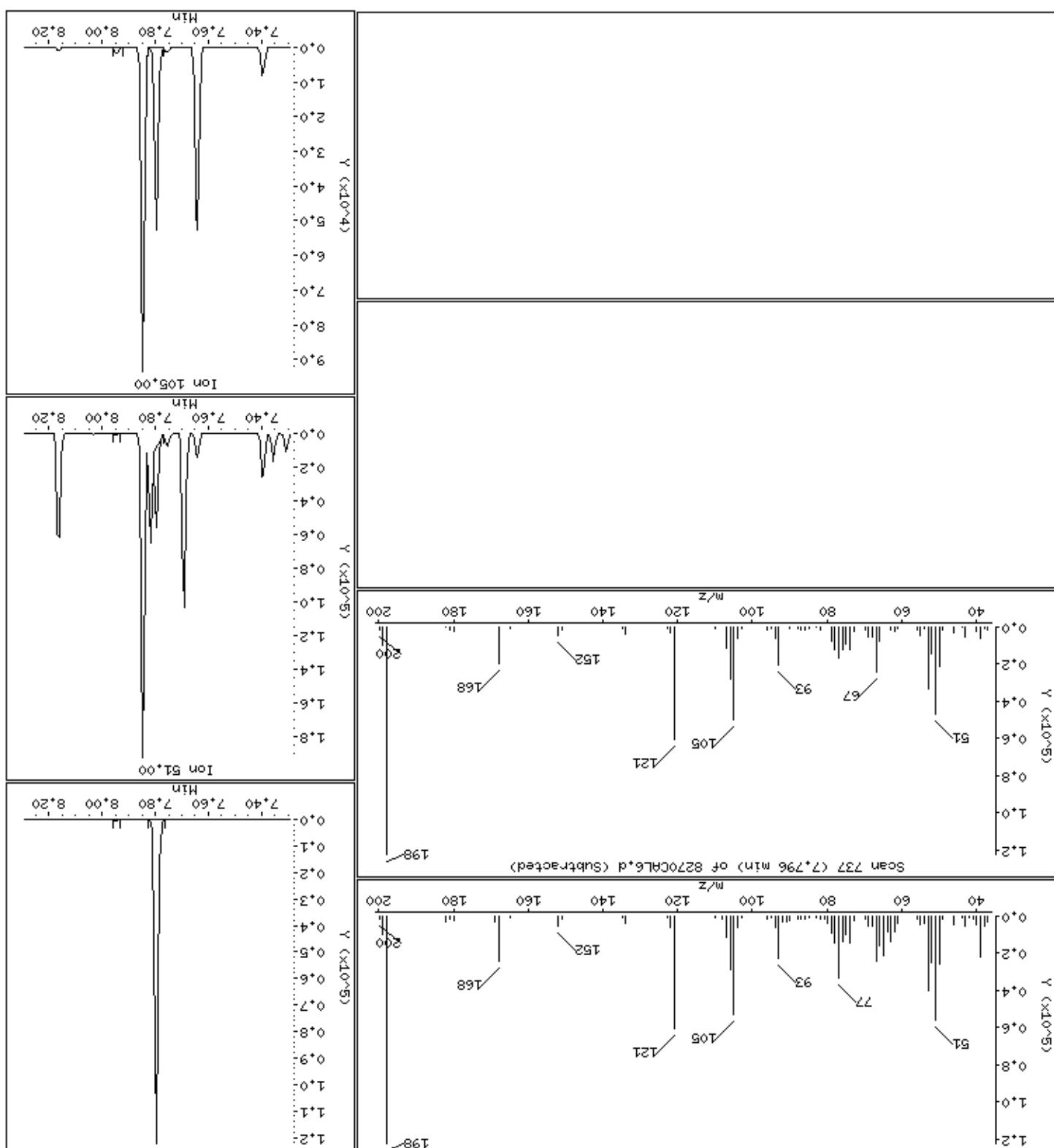
99Tc-99Tc-HMPAO/72a-IC (HTML) 100741 224 HMPAO

5*2-
5*10

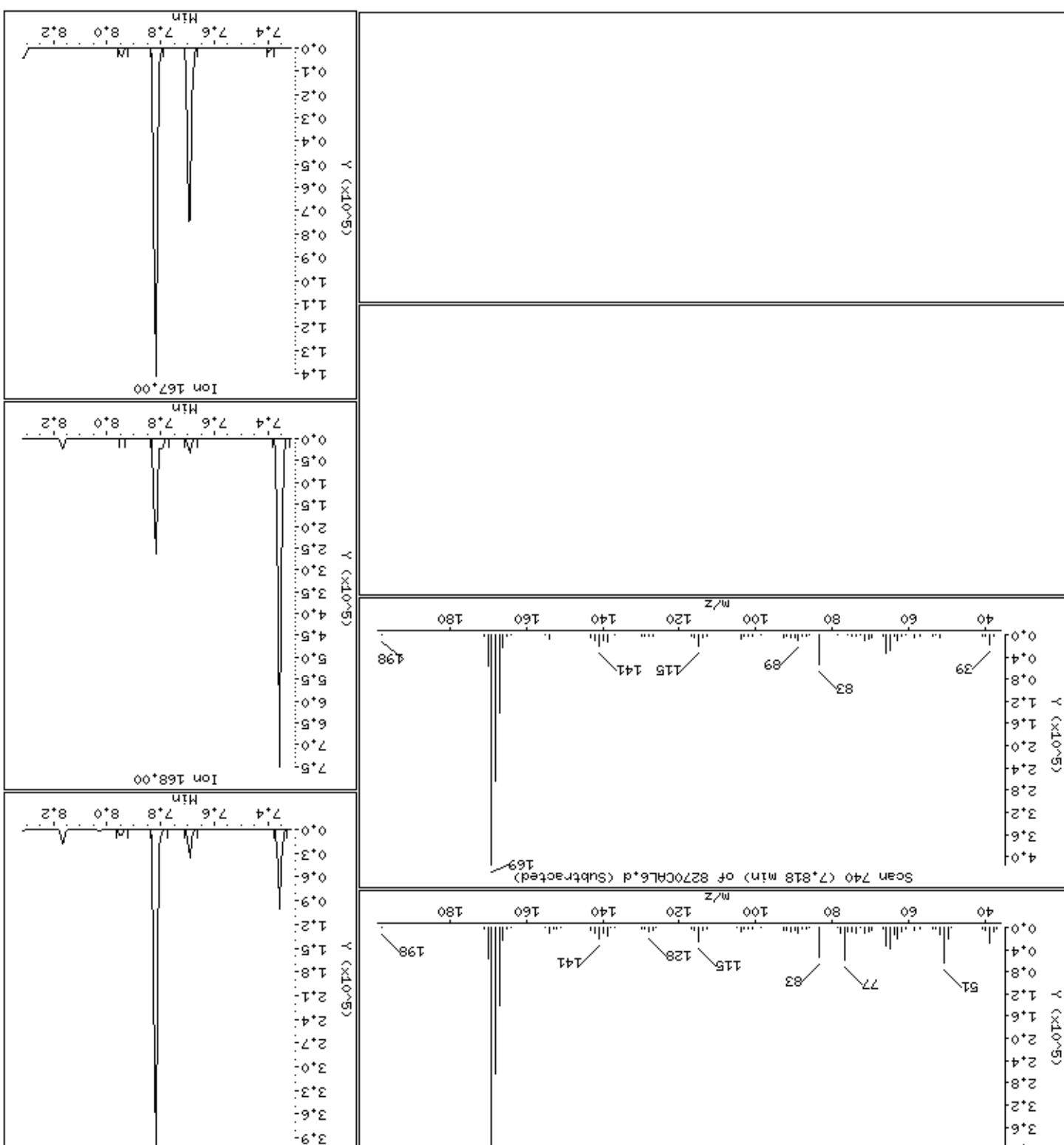
The figure displays four vertically stacked mass spectra, each showing relative abundance (0.0 to 5.5) on the y-axis and m/z (40 to 200) on the x-axis. The top three spectra are labeled "Scan 722 (7.692 min) of 8270CCL6_d (Subtracted)" and the bottom one is labeled "Scan 722 (7.692 min) of 8270CCL6_d". The top three spectra are for different ionization conditions: Ion 141.00, Ion 206.00, and Ion 204.00. The bottom spectrum is for Ion 204.00. All spectra show a base peak at m/z 115. Other significant peaks are labeled with their m/z values: 77, 82, 115, 141, 165, 166, 204, and 205. The x-axis is labeled "m/z" and the y-axis is labeled "Relative Abundance (%)".

Data File: \S\\$\\$econd\DD\chem\msd04\1\4411445521\B\8270C46.d Page 66





89 2854



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

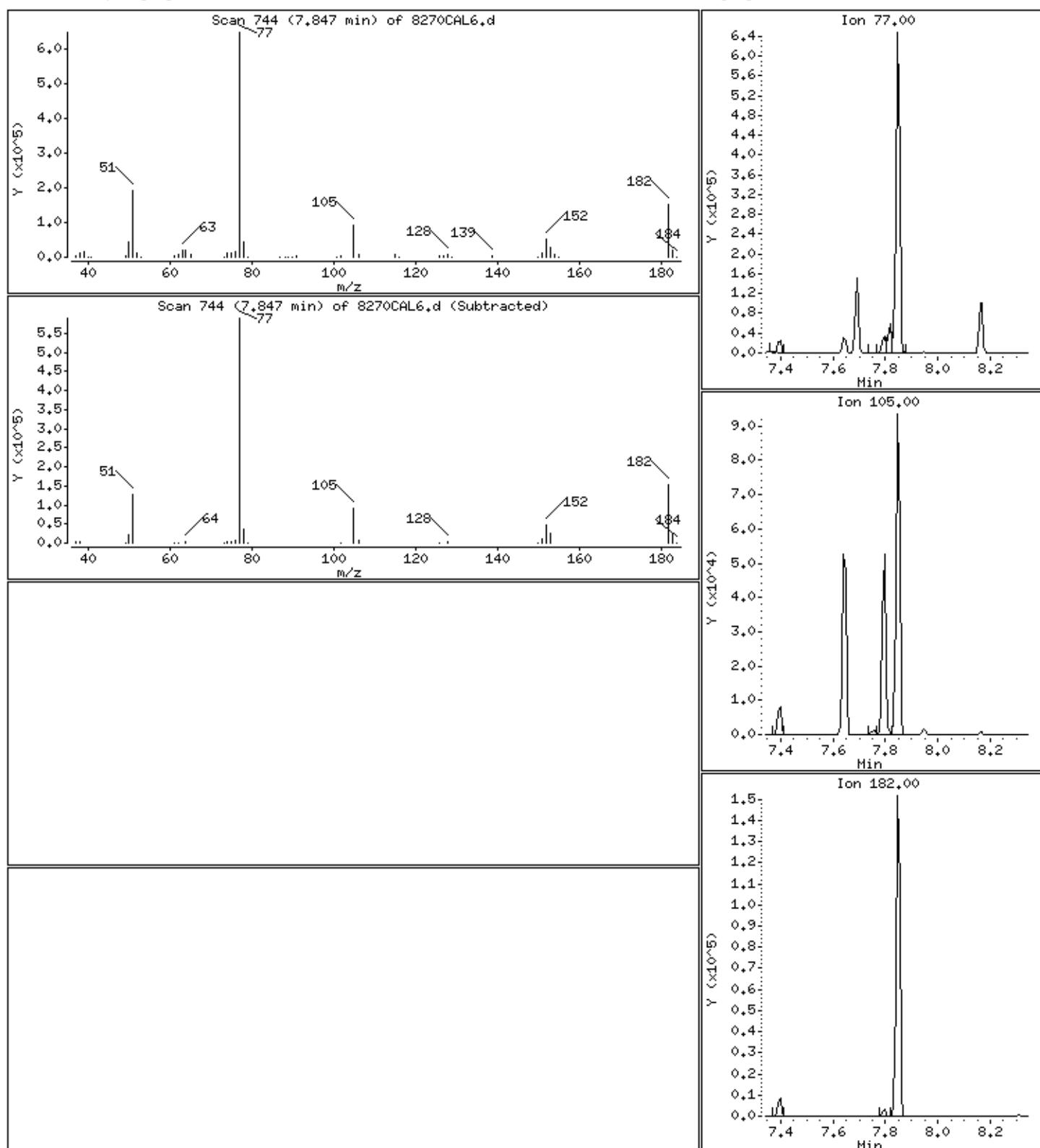
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

87 1,2-Diphenylhydrazine

Concentration: 65.3 ug/kg



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

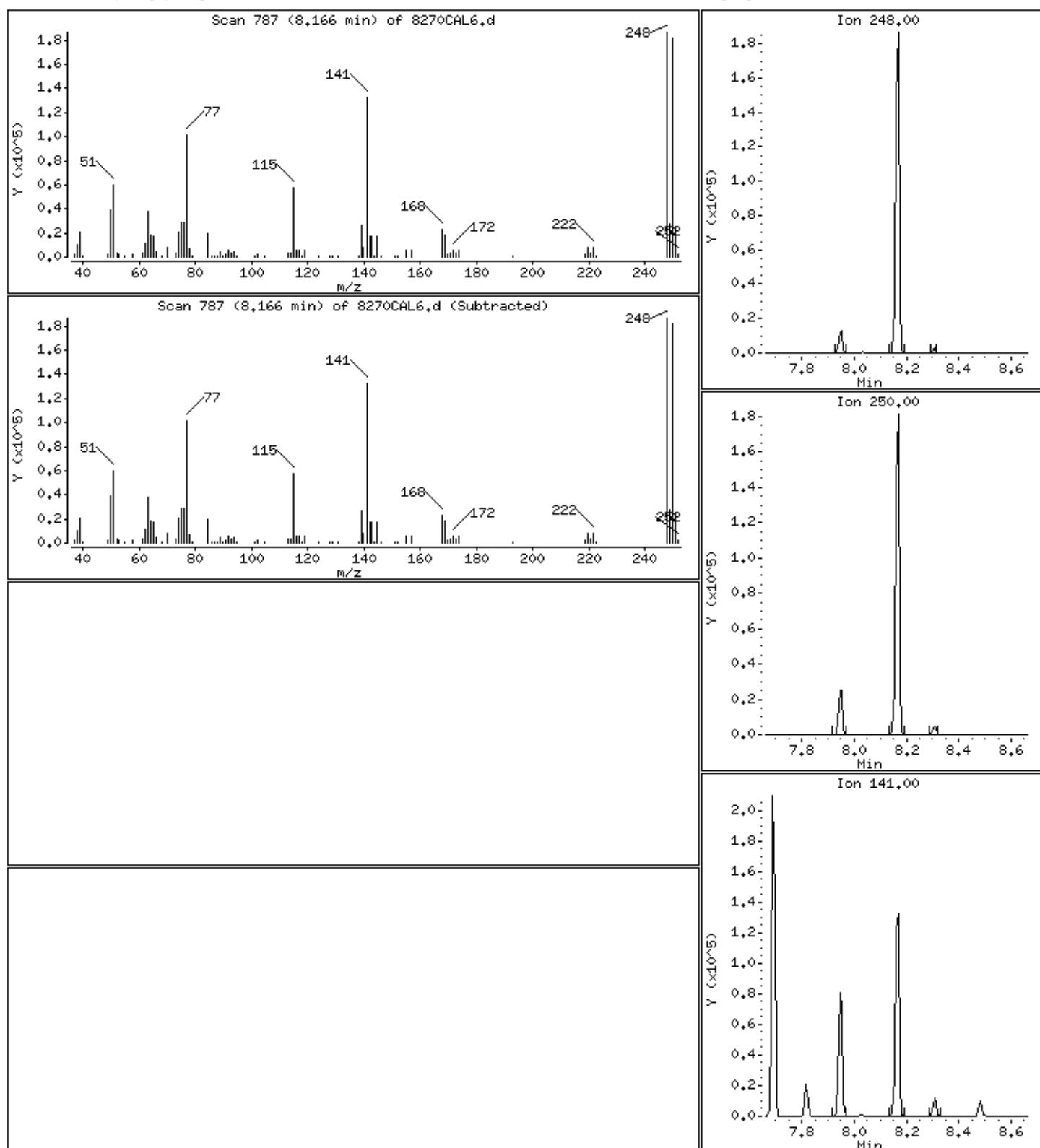
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

93 4-Bromophenylphenylether

Concentration: 72.6 ug/kg



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

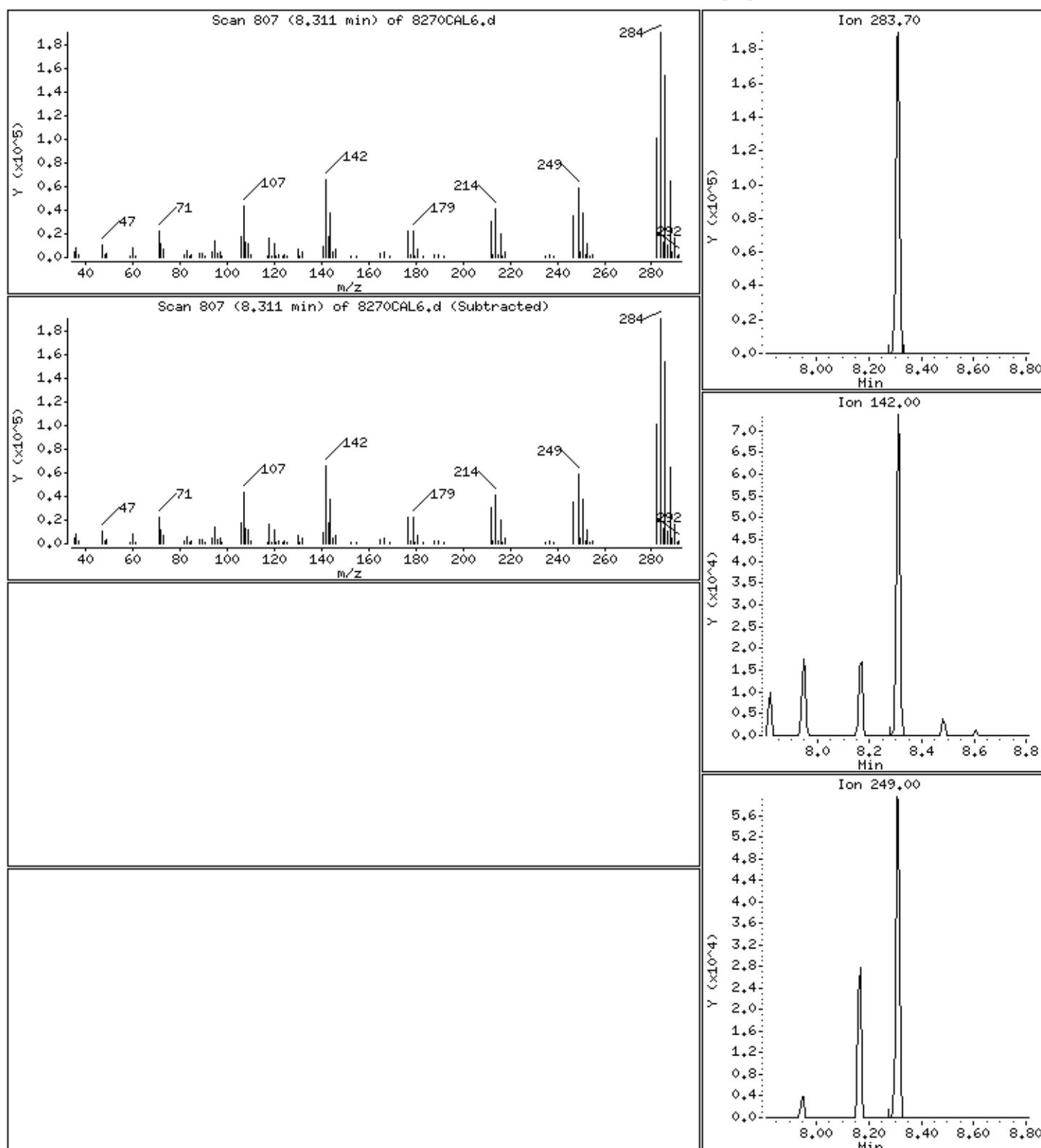
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

94 Hexachlorobenzene

Concentration: 73.6 ug/kg



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

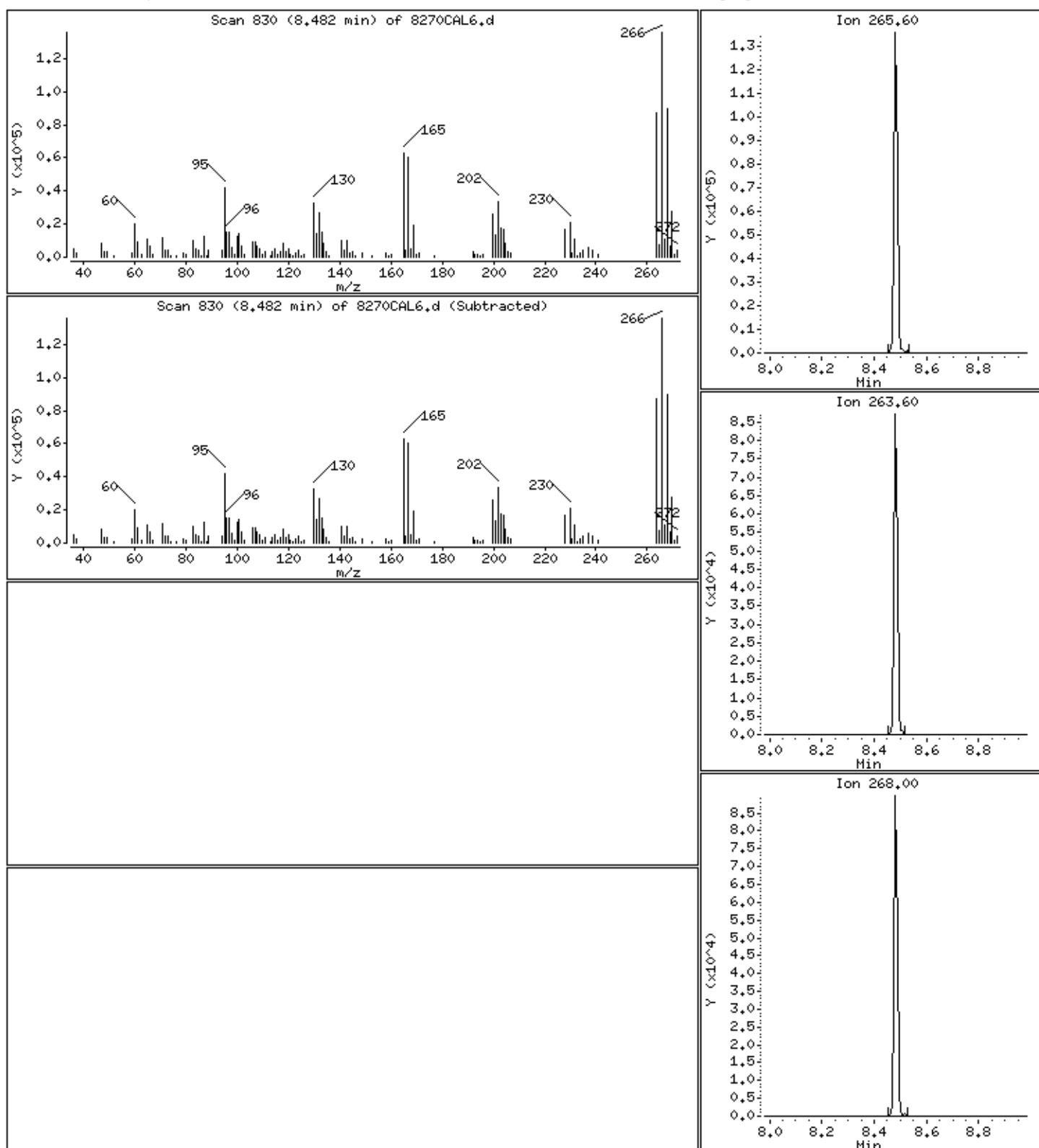
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

96 Pentachlorophenol

Concentration: 71.8 ug/kg



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

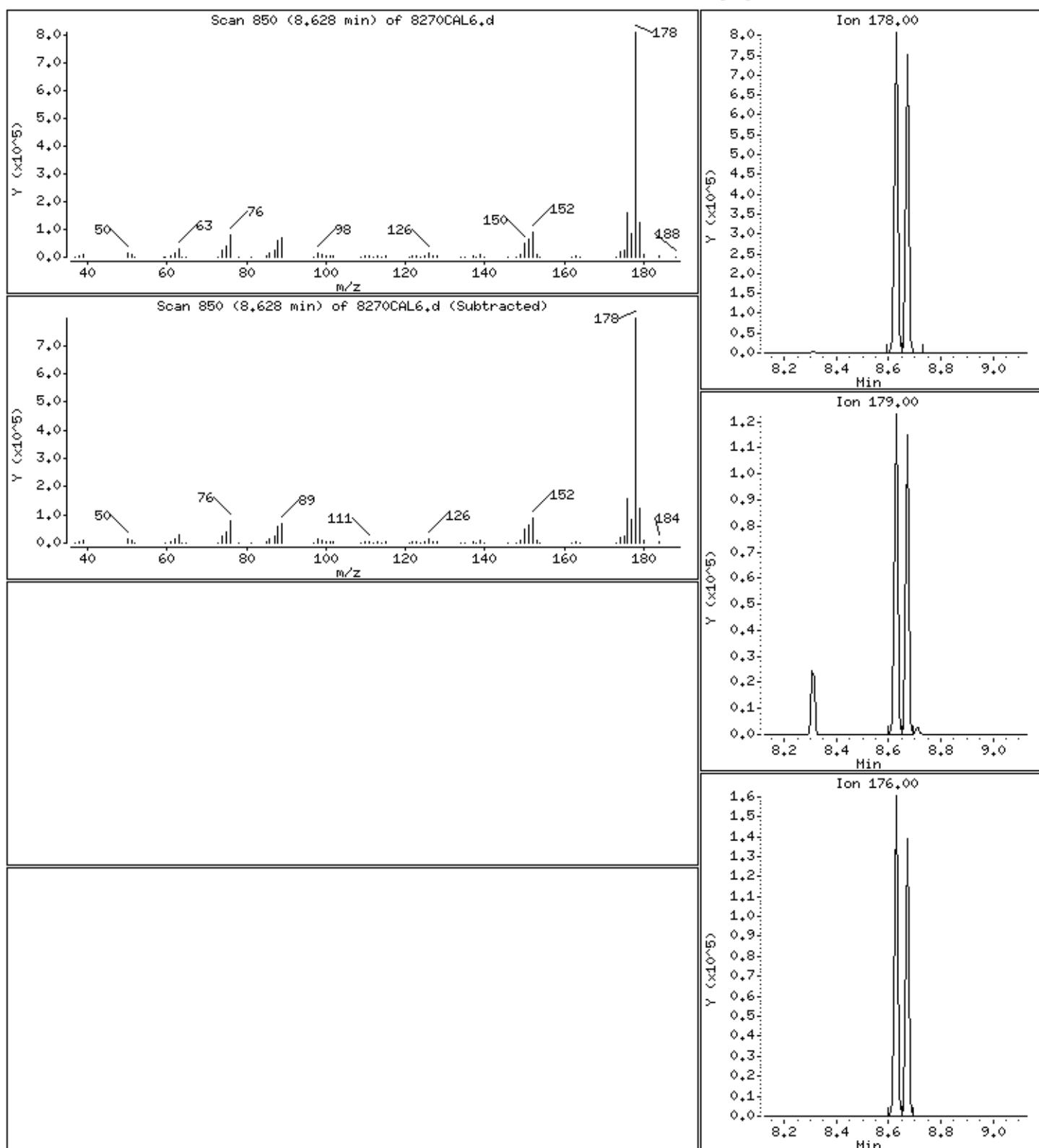
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

101 Phenanthrene

Concentration: 74.2 ug/kg



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

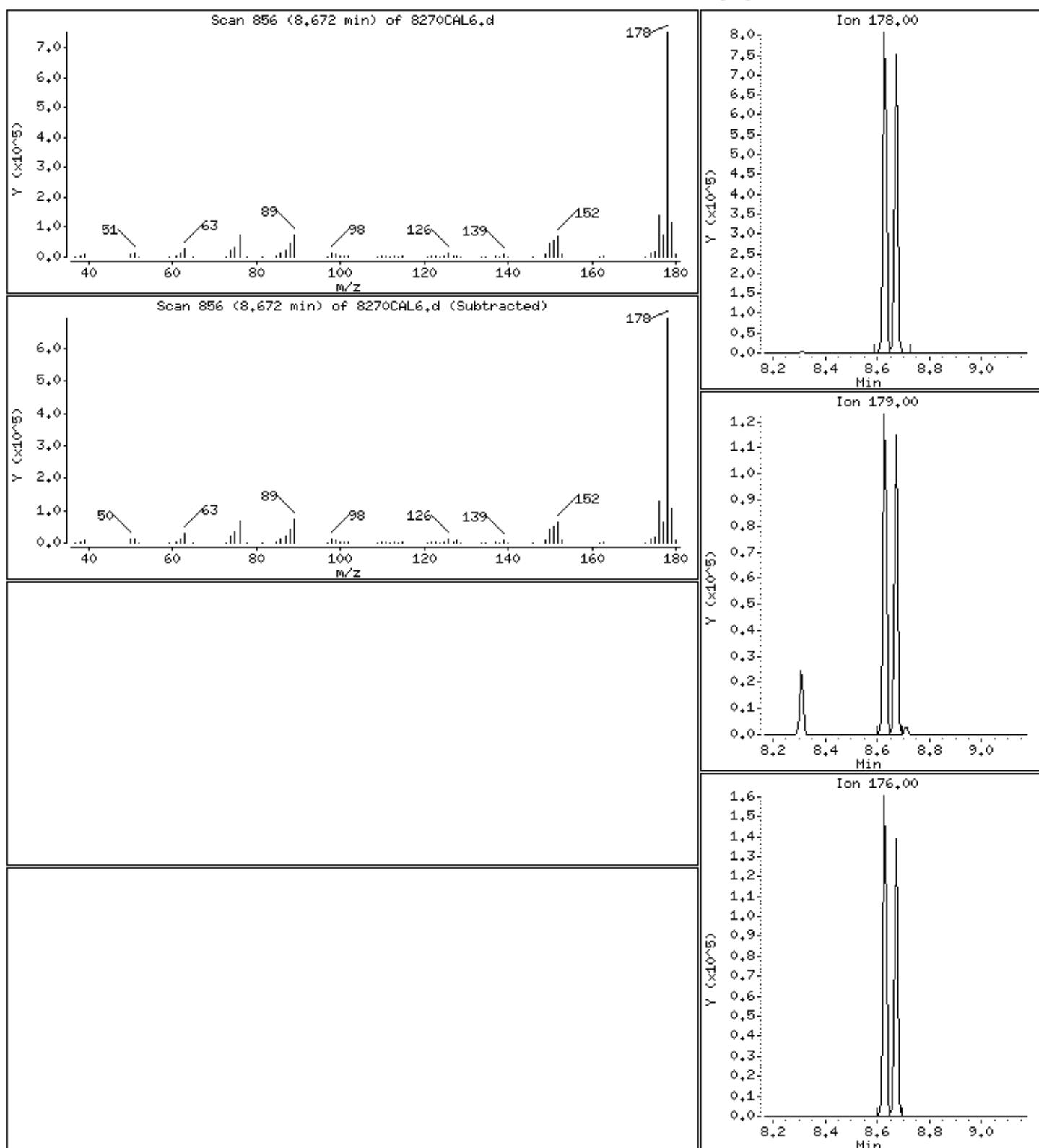
Operator: MJ

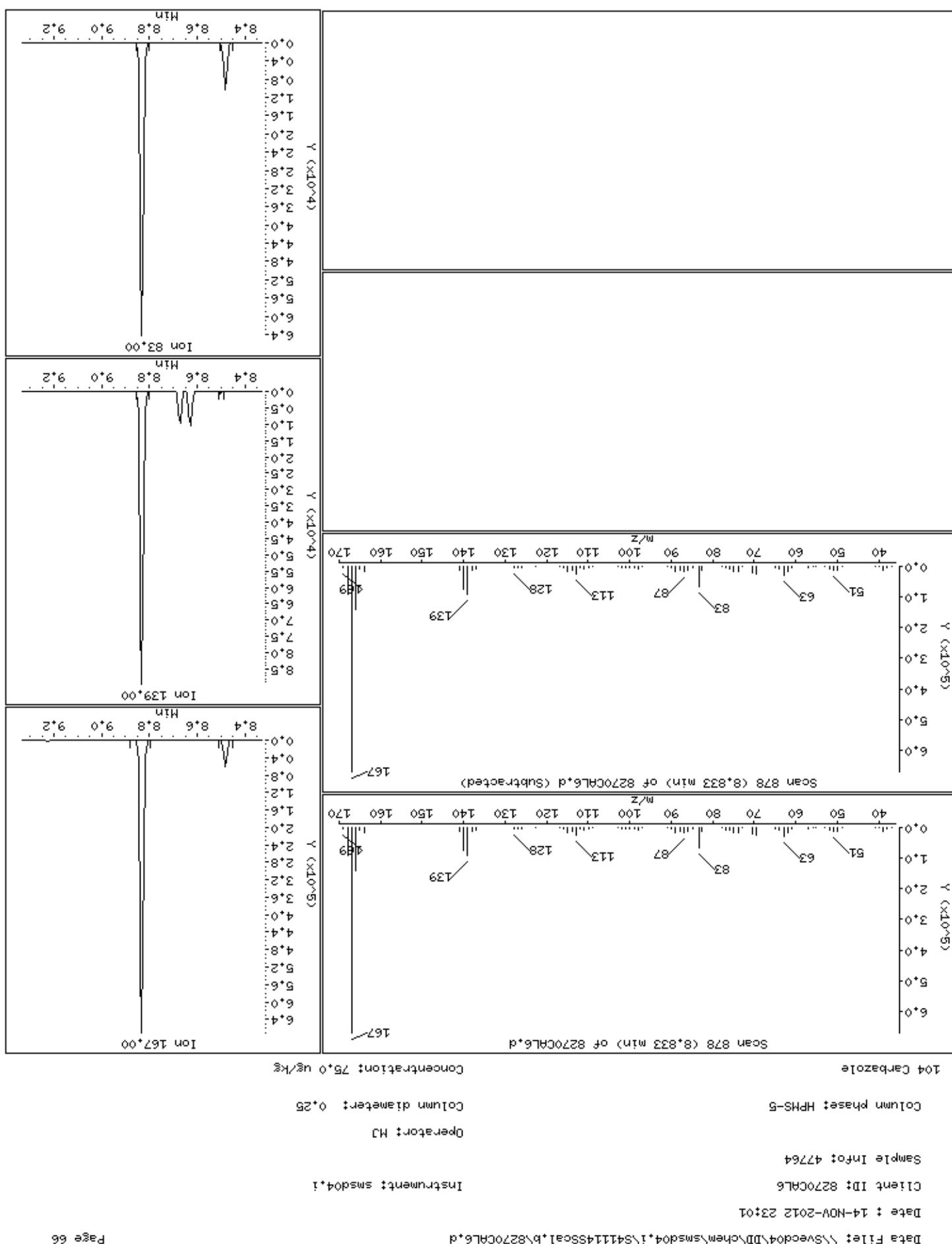
Column phase: HPMS-5

Column diameter: 0.25

103 Anthracene

Concentration: 73.9 ug/kg





Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

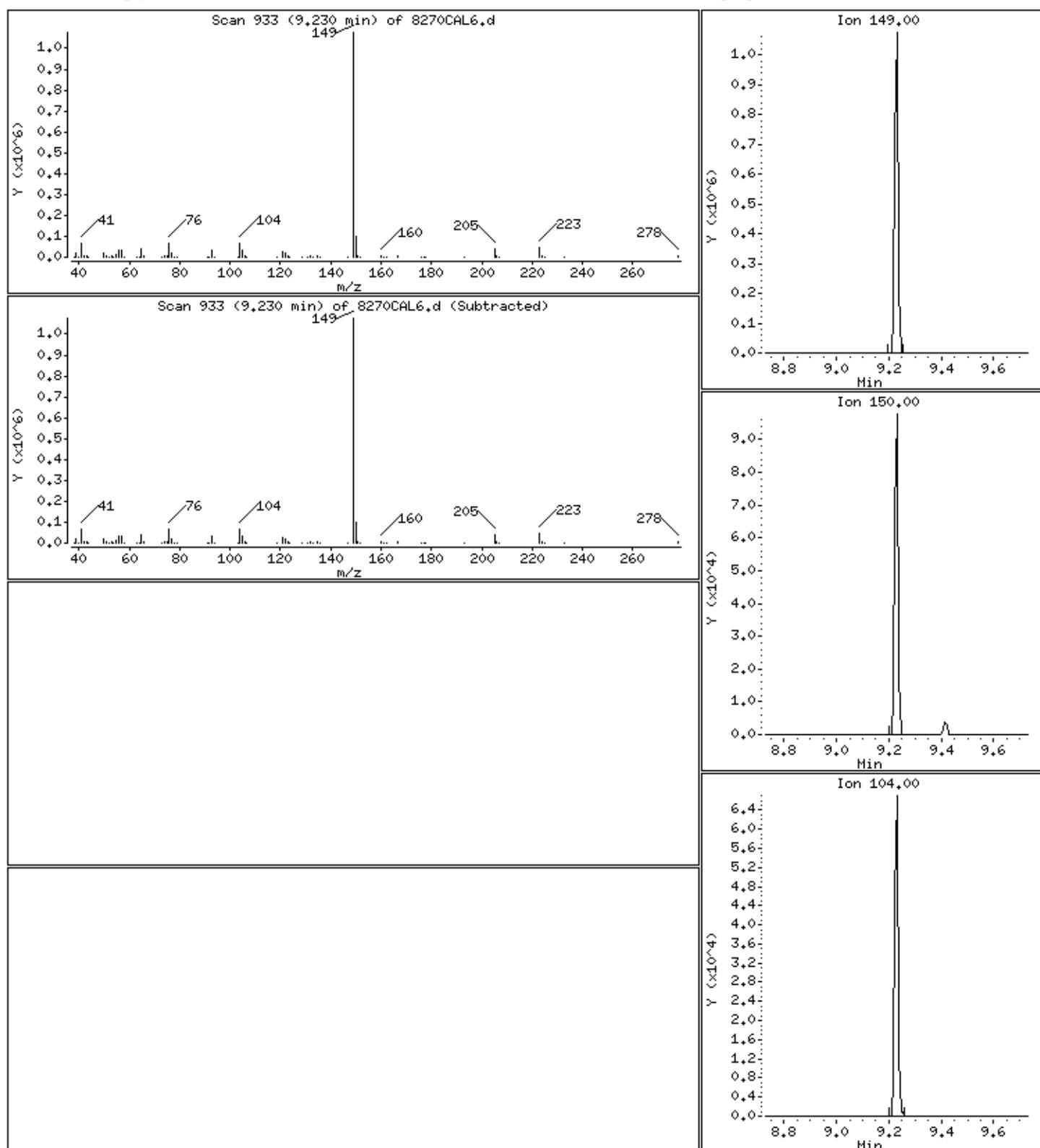
Operator: MJ

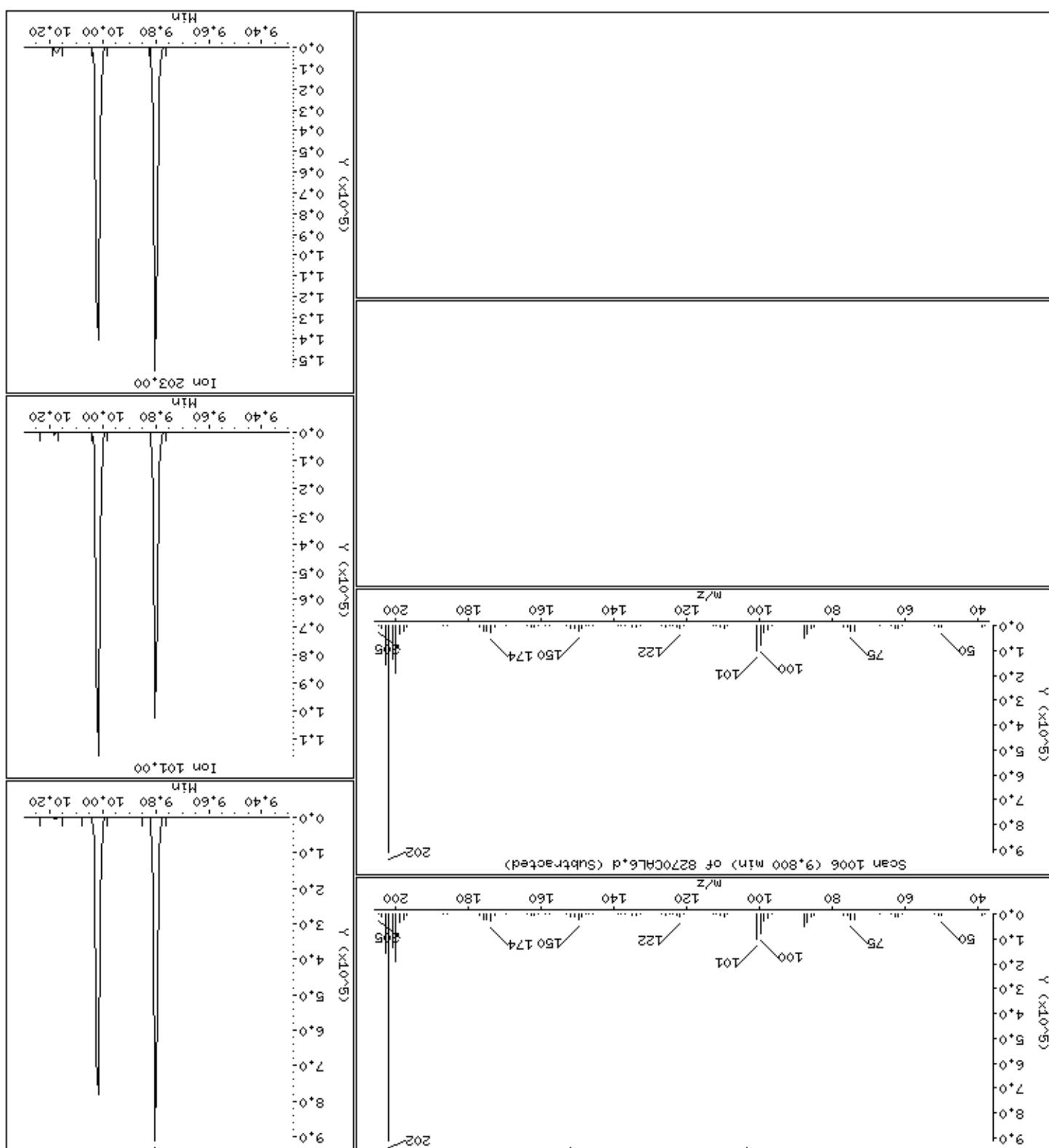
Column phase: HPMS-5

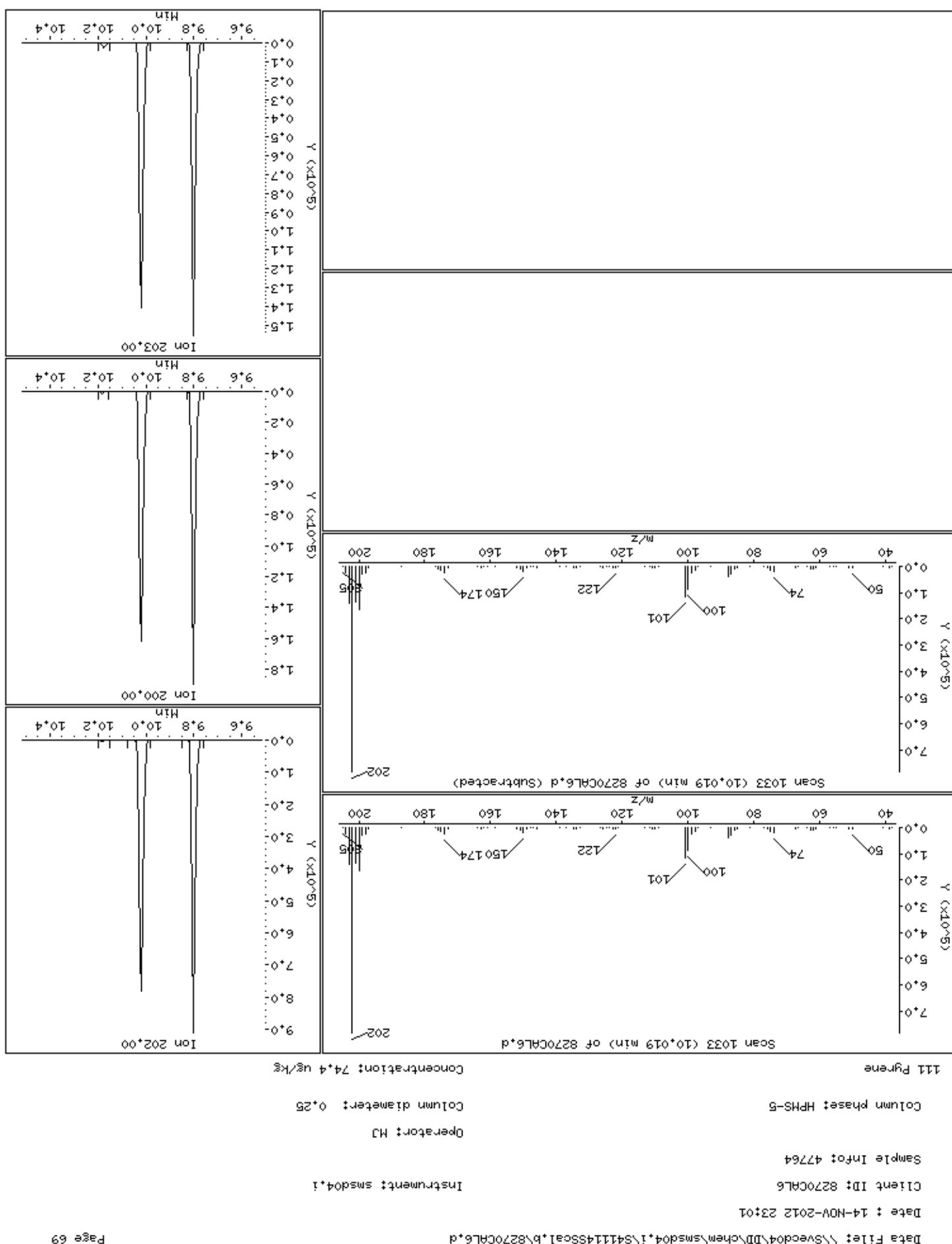
Column diameter: 0.25

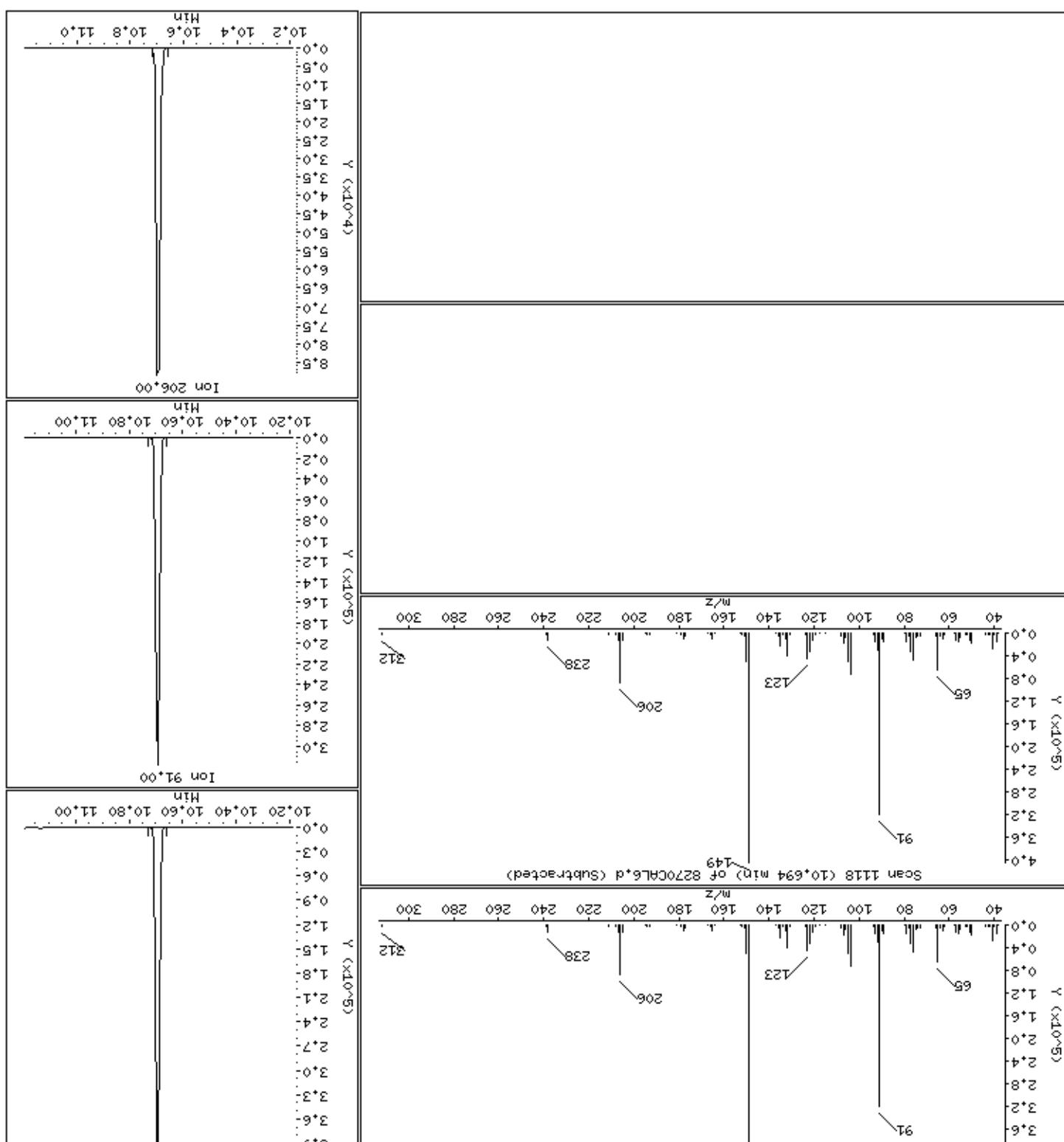
105 Di-n-butylphthalate

Concentration: 74.9 ug/kg









Min

10.2 10.4 10.6 10.8 11.0

0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
10.5
11.0

Ion 206.00

Min

10.2 10.4 10.6 10.8 11.0

0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
5.8
6.0
6.2
6.4
6.6
6.8
7.0
7.2
7.4
7.6
7.8
8.0
8.2
8.4
8.6
8.8
9.0
9.2
9.4
9.6
9.8
10.0
10.2
10.4
10.6
10.8
11.0

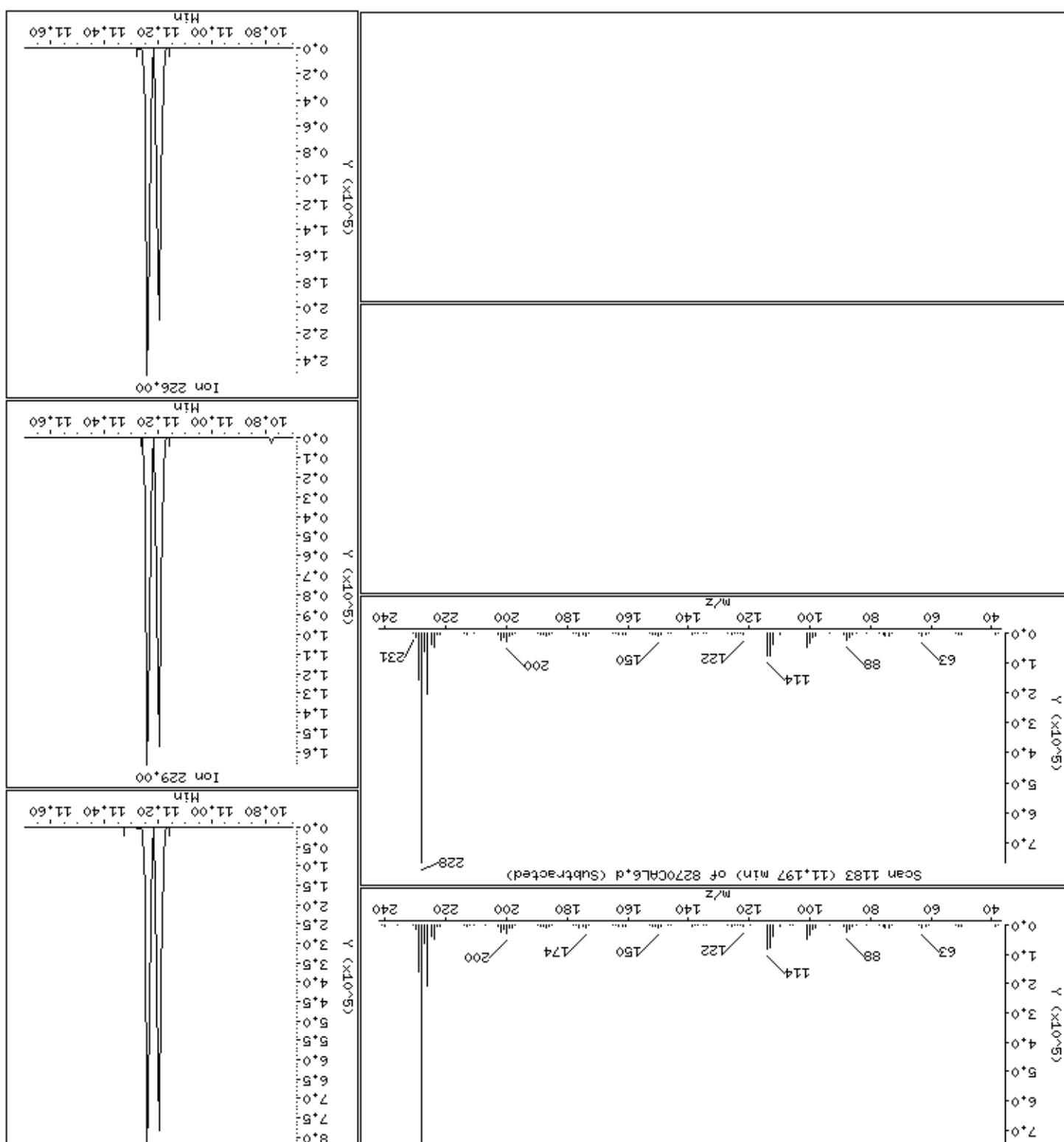
Ion 94.00

Min

10.2 10.4 10.6 10.8 11.0

0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
5.8
6.0
6.2
6.4
6.6
6.8
7.0
7.2
7.4
7.6
7.8
8.0
8.2
8.4
8.6
8.8
9.0
9.2
9.4
9.6
9.8
10.0
10.2
10.4
10.6
10.8
11.0

Ion 49.00



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

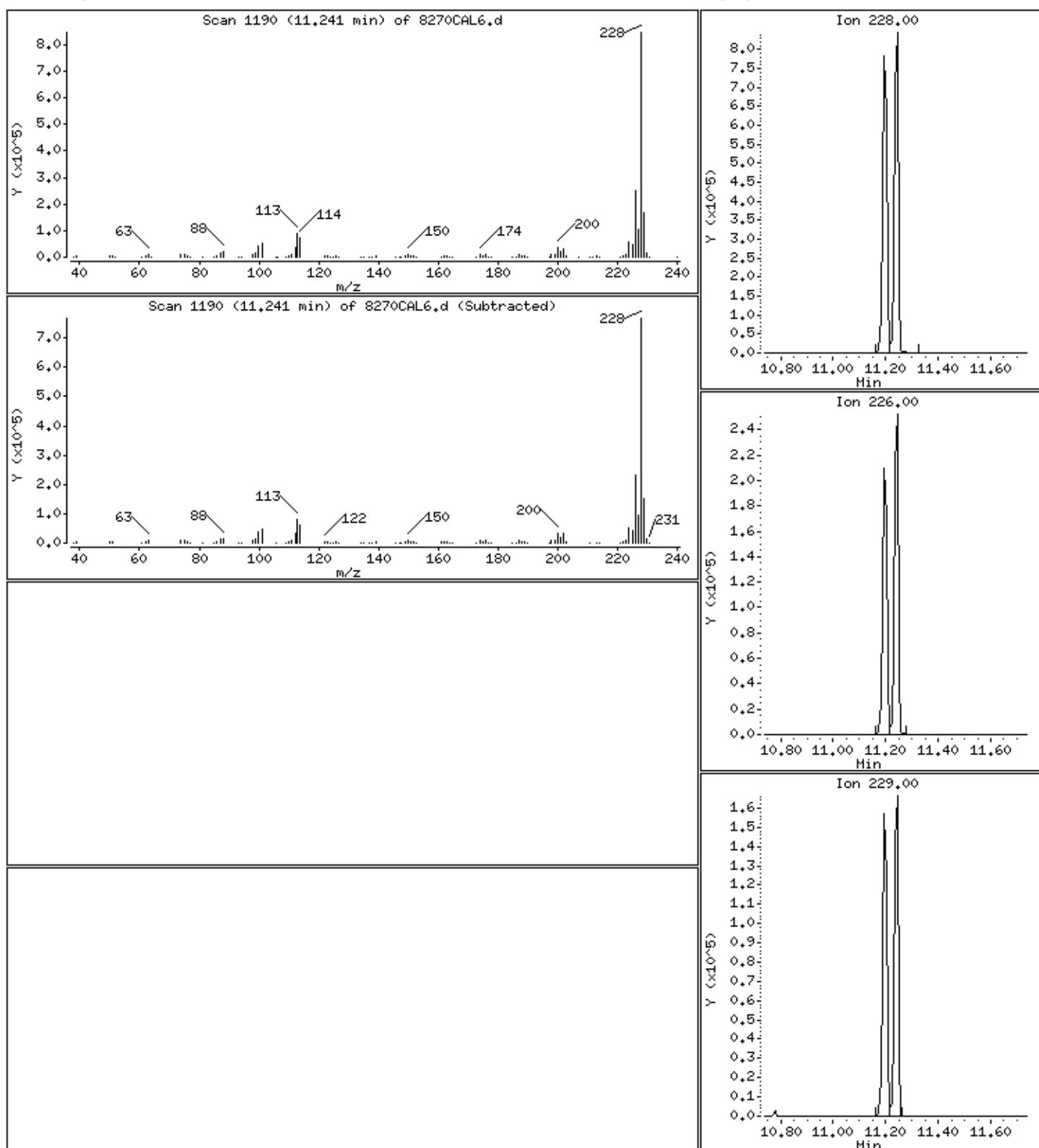
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

123 Chrysene

Concentration: 72.4 ug/kg



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

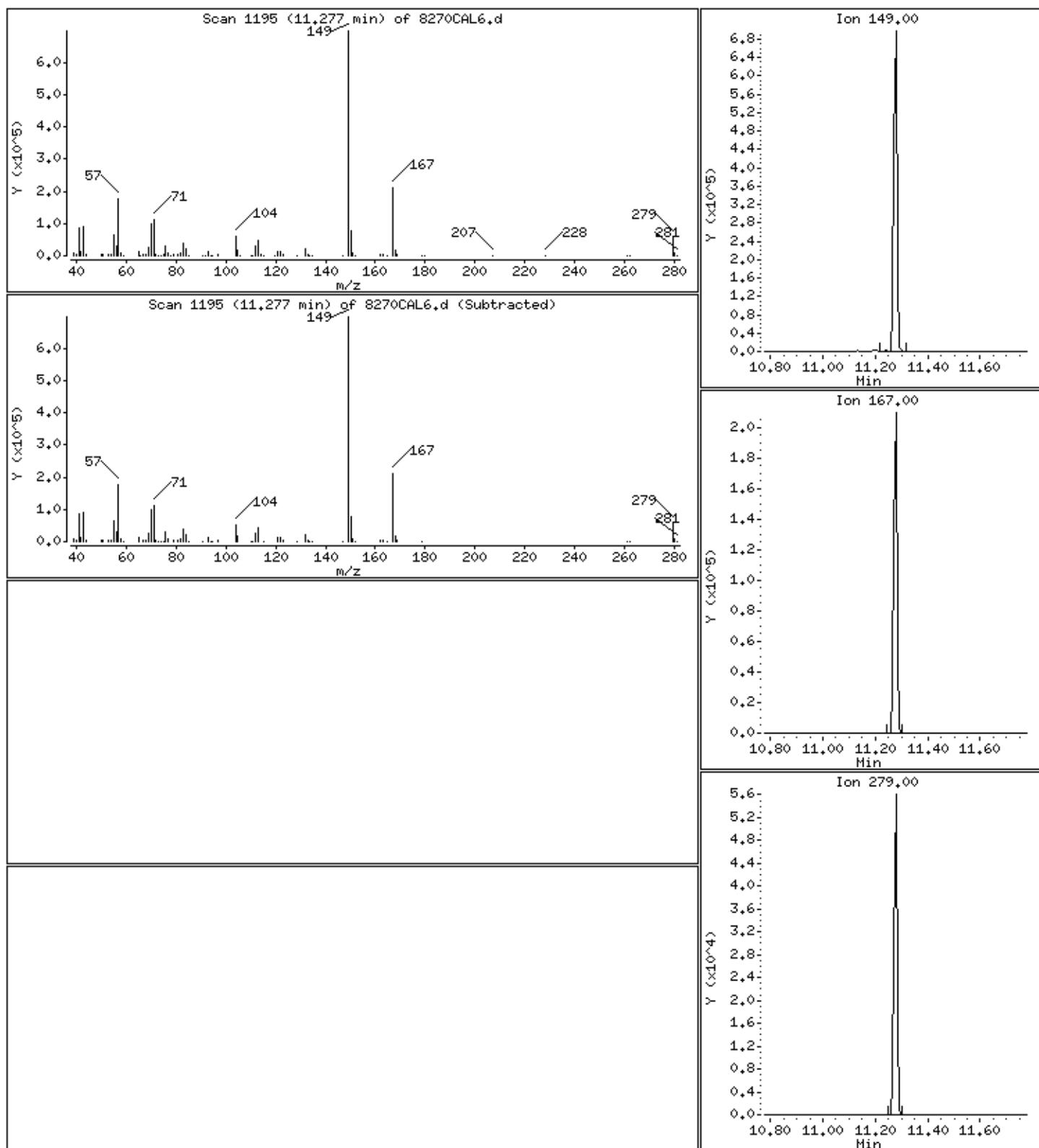
Operator: MJ

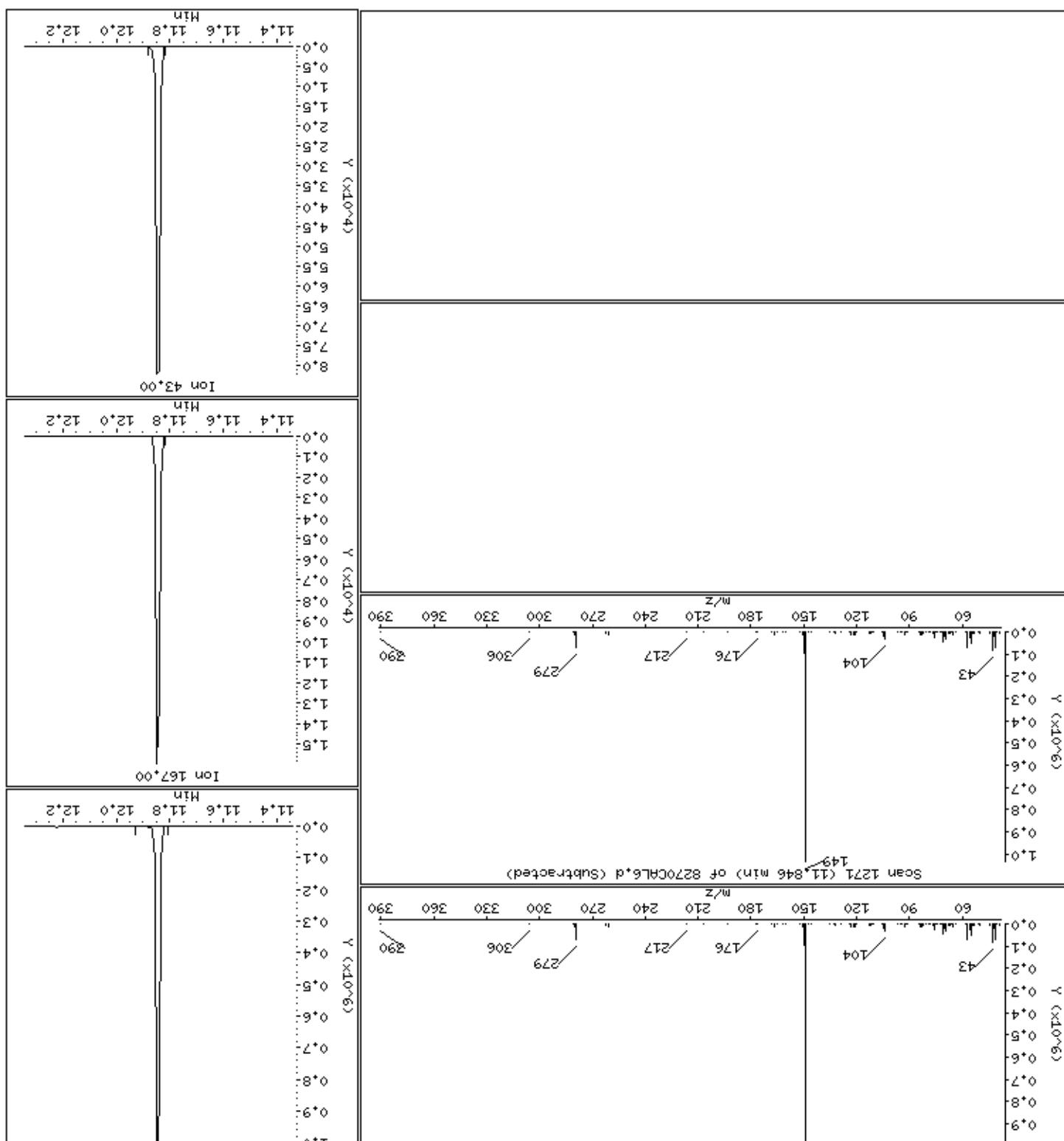
Column phase: HPMS-5

Column diameter: 0.25

124 Bis-2-Ethylhexylphthalate

Concentration: 72.6 ug/kg





Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

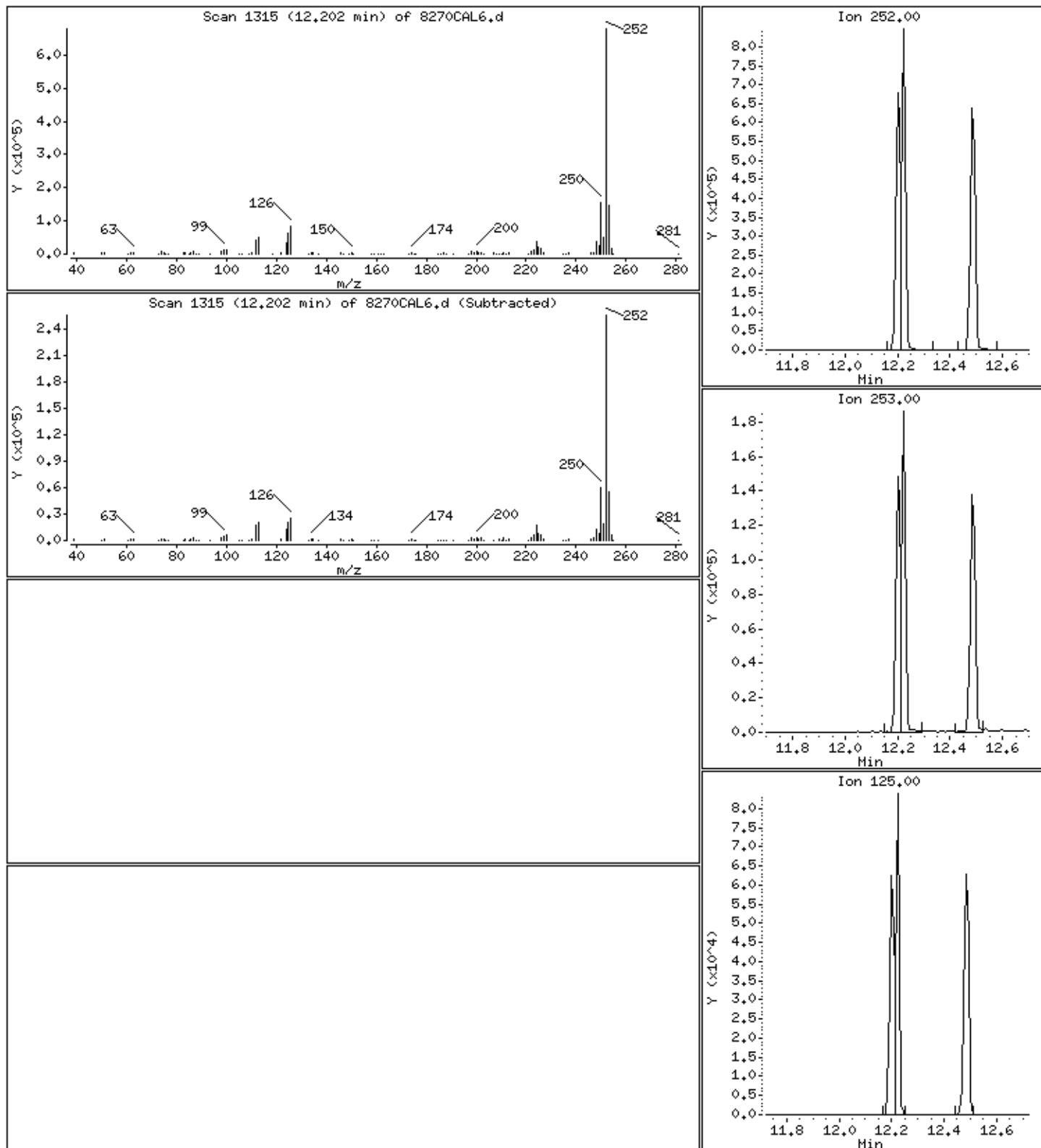
Operator: MJ

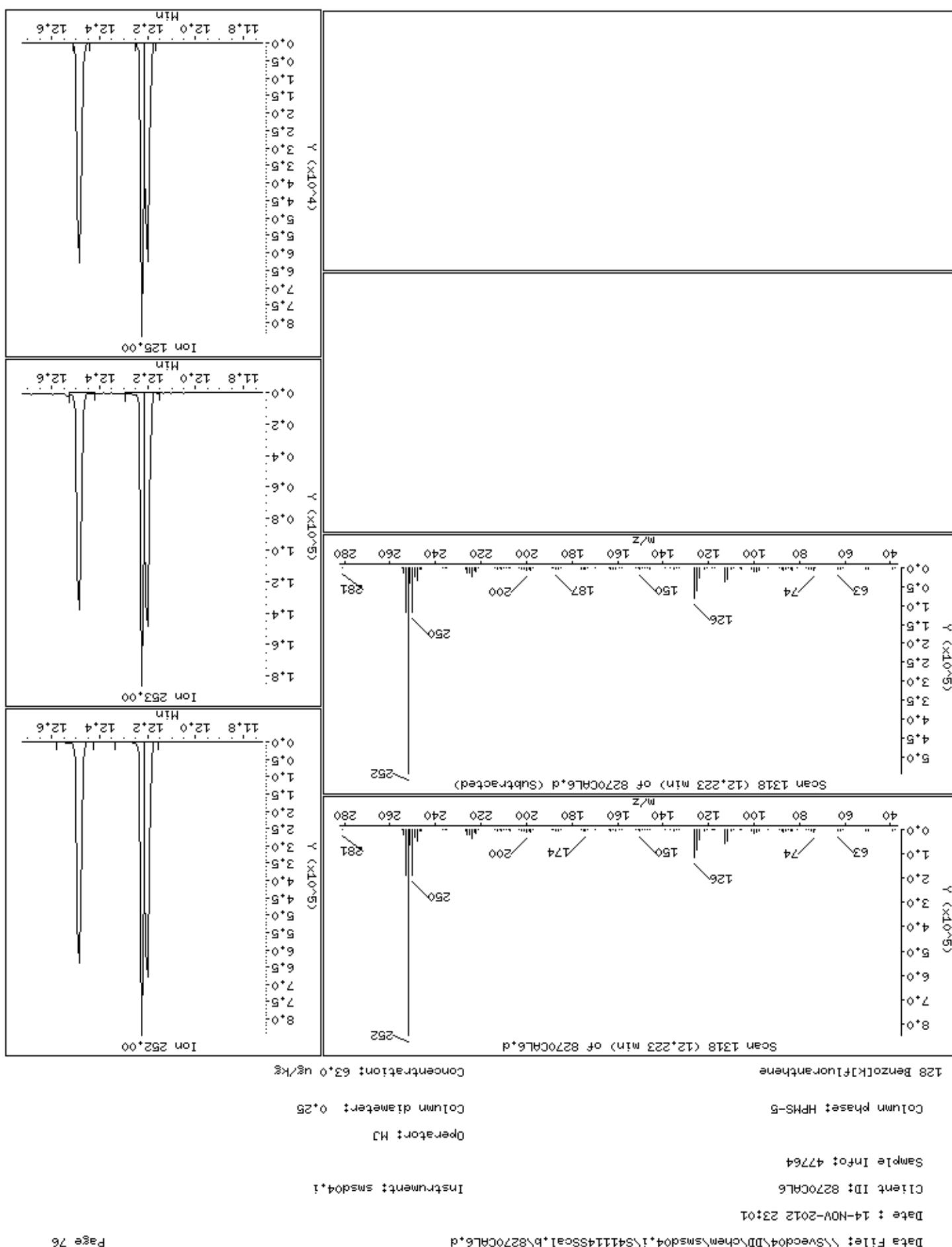
Column phase: HPMS-5

Column diameter: 0.25

127 Benzo[b]fluoranthene

Concentration: 81.8 ug/kg





Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

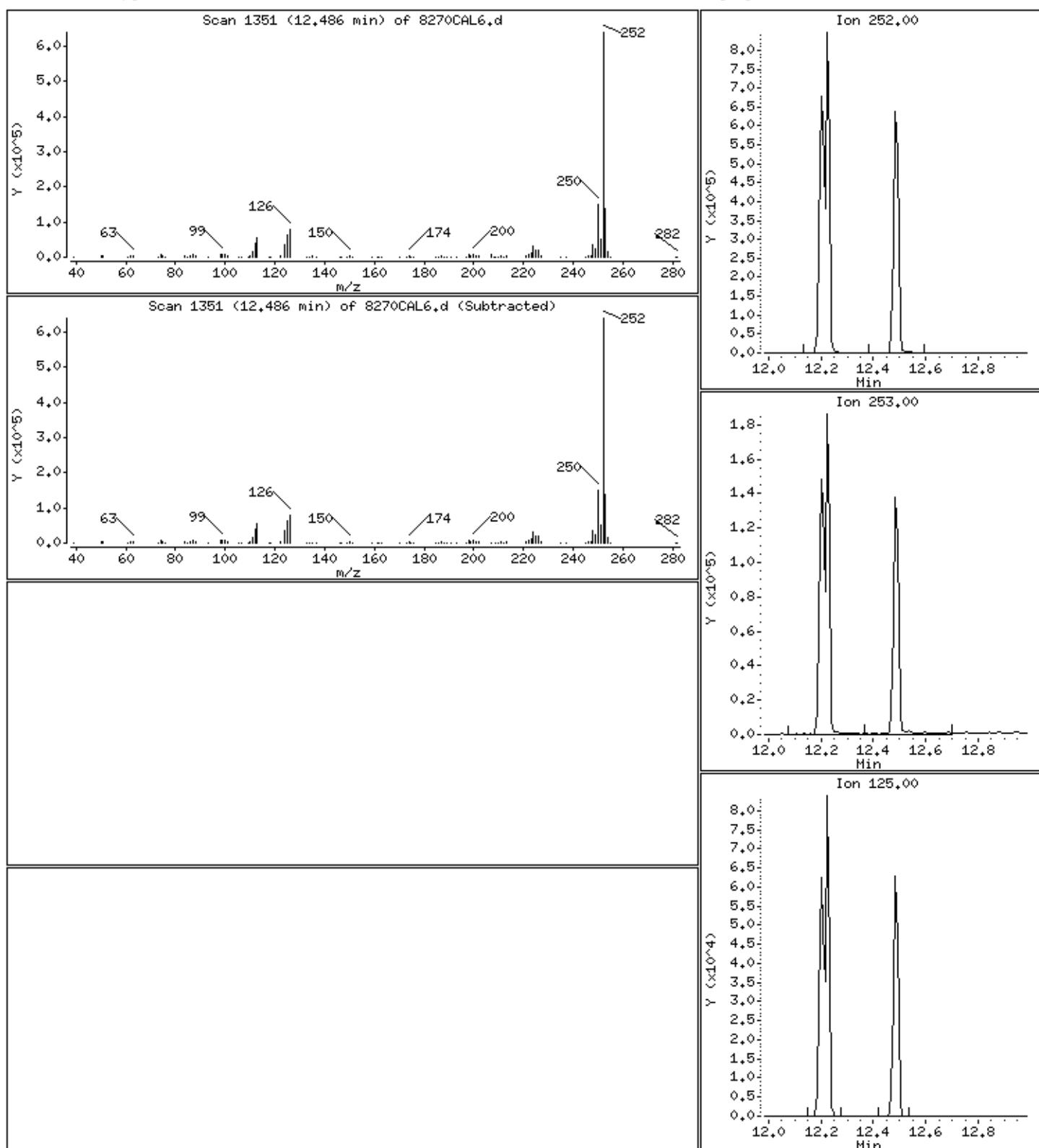
Operator: MJ

Column phase: HPMS-5

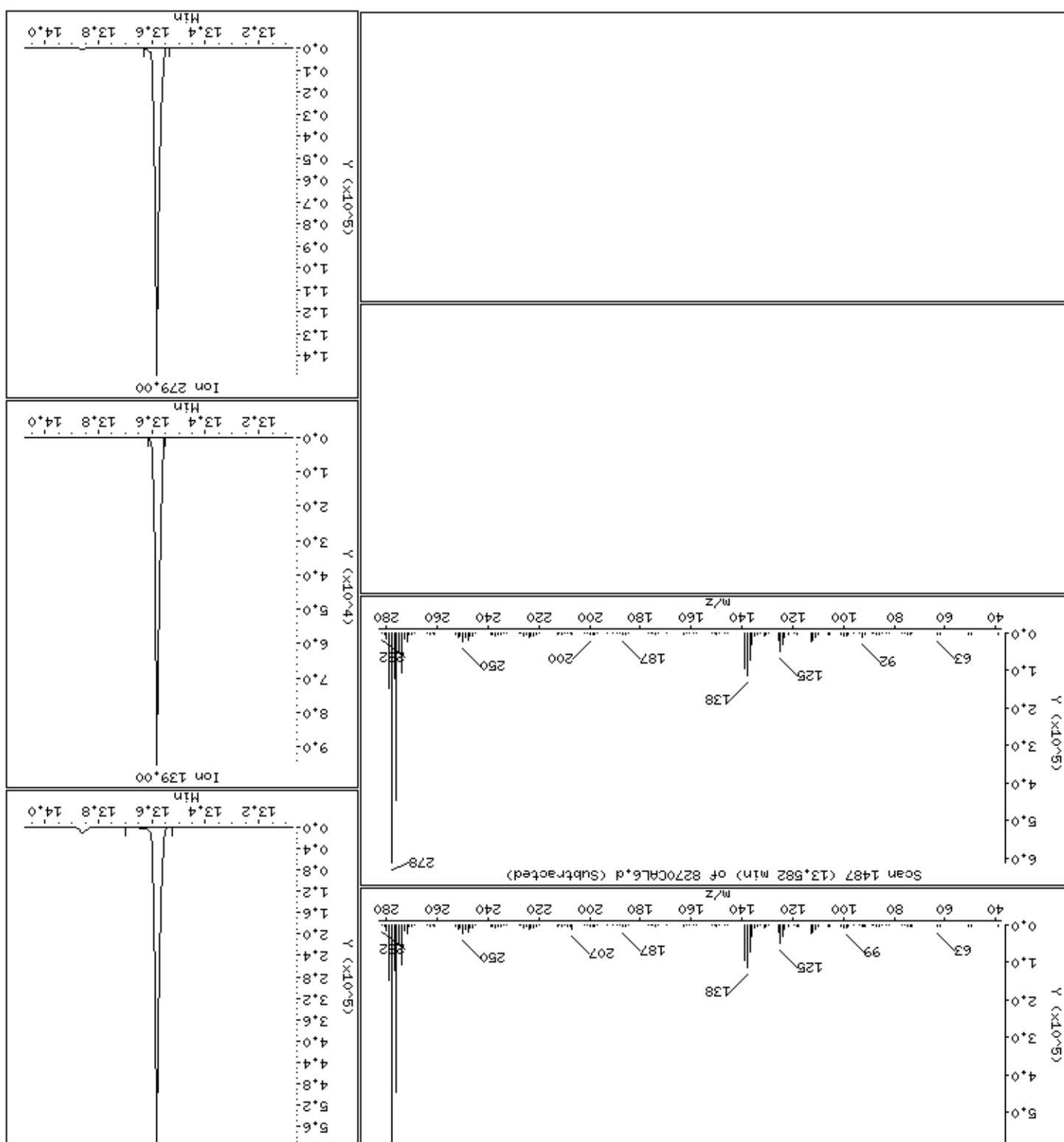
Column diameter: 0.25

129 Benzo[a]pyrene

Concentration: 71.7 ug/kg



Data File: \\\\$vedc04\DD\chem\smso4\1\441114SSC01.b\8270CRL6.d Page 78



Date : 14-NOV-2012 23:01

Client ID: 8270CAL6

Instrument: smsd04.i

Sample Info: 47764

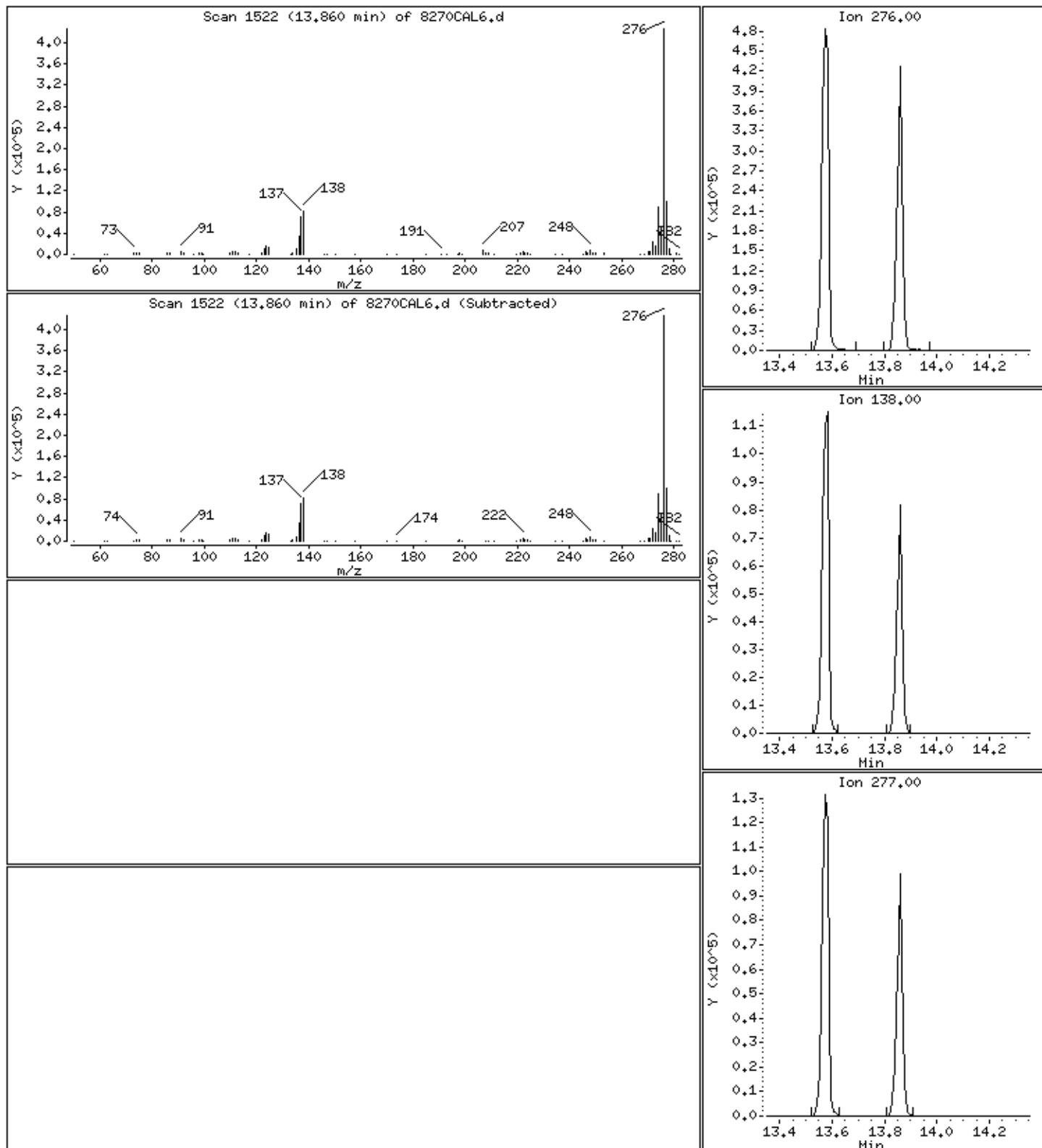
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

135 Benzo[g,h,i]perylene

Concentration: 79.7 ug/kg



PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\8270CAL5.d
Lab Smp Id: 47765 Client Smp ID: 8270CAL5
Inj Date : 14-NOV-2012 23:22 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47765
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\8270bcs.m
Meth Date : 26-Nov-2012 13:58 smsd04.i Quant Type: ISTD
Cal Date : 15-OCT-2012 13:59 Cal File: AP9CAL5.d
Als bottle: 23 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8270caln.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	TARGET RANGE
2.228	2.228	(0.519)	79	206814 60.0000	59.0	80.00- 120.00	100.00
2.228	2.228	(0.519)	52	136724		35.30- 95.30	66.11
<hr/>							
M 16 Cresols (Total)							
				CAS #: 1319-77-3			
				363240 120.000			(a)
<hr/>							
1 N-Nitrosodimethylamine							
2.220	2.220	(0.517)	42	92510 60.0000	59.7	80.00- 120.00	100.00
2.221	2.220	(0.517)	74	118518		97.07- 157.07	128.11
2.220	2.221	(0.517)	44	4140		0.00- 34.98	4.48
<hr/>							
\$ 6 2-Fluorophenol (SURR)							
3.247	3.246	(0.756)	112	365837 120.000	116	80.00- 120.00	100.00
3.247	3.246	(0.756)	64	223685		32.62- 92.62	61.14
<hr/>							
\$ 11 Phenol-d5 (SURR)							
4.008	4.006	(0.933)	99	463978 120.000	115	80.00- 120.00	100.00
4.008	4.006	(0.933)	42	91741		0.00- 49.74	19.77
4.008	4.006	(0.933)	71	196298		12.66- 72.66	42.31
<hr/>							

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
13 Phenol						CAS #: 108-95-2		
4.018	4.016 (0.935)	94	268918	60.0000	58.2	80.00-	120.00	100.00
4.017	4.016 (0.935)	65	77976		0.94-	60.94		29.00
4.017	4.015 (0.935)	66	138156		21.40-	81.40		51.37
10 Aniline						CAS #: 62-53-3		
4.047	4.046 (0.942)	93	259017	60.0000	61.6	80.00-	120.00	100.00
4.047	4.046 (0.942)	65	59650		0.00-	50.97		23.03
4.047	4.046 (0.942)	66	108920		12.95-	72.95		42.05
14 Bis(2-Chloroethyl)ether						CAS #: 111-44-4		
4.094	4.094 (0.953)	93	181969	60.0000	59.7	80.00-	120.00	100.00
4.094	4.093 (0.953)	63	137278		43.04-	103.04		75.44
4.094	4.094 (0.953)	95	60980		1.90-	61.90		33.51
15 2-Chlorophenol						CAS #: 95-57-8		
4.143	4.142 (0.964)	128	177415	60.0000	59.2	80.00-	120.00	100.00
4.143	4.142 (0.964)	64	96257		24.14-	84.14		54.26
4.143	4.142 (0.964)	130	57393		2.15-	62.15		32.35
17 1,3-Dichlorobenzene						CAS #: 541-73-1		
4.268	4.267 (0.993)	146	210660	60.0000	58.8	80.00-	120.00	100.00
4.268	4.267 (0.993)	148	134770		34.15-	94.15		63.98
4.268	4.267 (0.993)	111	91782		14.34-	74.34		43.57
* 18 1,4-Dichlorobenzene-d4						CAS #: 3855-82-1		
4.297	4.294 (1.000)	152	94086	40.0000		80.00-	120.00	100.00
4.296	4.294 (1.000)	115	59606		34.81-	94.81		63.35
4.297	4.294 (1.000)	150	169657		126.51-	186.51		180.32
19 1,4-Dichlorobenzene						CAS #: 106-46-7		
4.311	4.311 (1.003)	146	218041	60.0000	58.6	80.00-	120.00	100.00
4.311	4.311 (1.003)	148	141171		36.10-	96.10		64.75
4.311	4.311 (1.003)	111	95524		14.95-	74.95		43.81
21 Benzyl alcohol						CAS #: 100-51-6		
4.431	4.429 (1.031)	108	120441	60.0000	58.9	80.00-	120.00	100.00(M)
4.429	4.429 (1.031)	79	187485		126.03-	186.03		155.67
4.430	4.429 (1.031)	77	124493		76.75-	136.75		103.36
20 1,2-Dichlorobenzene						CAS #: 95-50-1		
4.479	4.478 (1.042)	146	202159	60.0000	58.7	80.00-	120.00	100.00
4.479	4.478 (1.042)	148	128265		33.36-	93.36		63.45
4.479	4.478 (1.042)	111	95015		18.07-	78.07		47.00
22 2-Methylphenol						CAS #: 95-48-7		
4.539	4.538 (1.056)	107	144848	60.0000	58.9	80.00-	120.00	100.00
4.539	4.538 (1.056)	108	163896		83.56-	143.56		113.15
4.539	4.538 (1.056)	79	83744		27.79-	87.79		57.82
23 2,2'-oxybis(1-chloropropane)						CAS #: 108-60-1		
4.571	4.571 (1.064)	45	232107	60.0000	60.6	80.00-	120.00	100.00
4.571	4.571 (1.064)	77	41698		0.00-	47.34		17.96

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
4.572	4.571 (1.064)	121	62791			0.00-	56.71	27.05
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23 2,2'-oxybis(1-chloropropane) (continued)								
4.670	4.668 (1.087)	107	218392	60.0000	58.6	80.00-	120.00	100.00
4.670	4.668 (1.087)	108	177104			51.88-	111.88	81.09
4.670	4.668 (1.087)	79	59697			0.00-	57.76	27.33
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26 N-Nitrosodinpropylamine								
4.699	4.699 (1.094)	70	158539	60.0000	61.0	80.00-	120.00	100.00(M)
4.701	4.699 (1.094)	42	82264			21.53-	81.53	51.89
4.701	4.699 (1.094)	130	33418			0.00-	51.40	21.08
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30 Hexachloroethane								
4.754	4.753 (1.106)	117	93268	60.0000	59.8	80.00-	120.00	100.00
4.754	4.754 (1.106)	201	87910			63.39-	123.39	94.26
4.754	4.754 (1.106)	199	56038			26.40-	86.40	60.08
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\$ 31 Nitrobenzene-d5 (SURR)								
4.819	4.818 (0.881)	82	239697	60.0000	58.9	80.00-	120.00	100.00
4.819	4.818 (0.881)	128	88940			6.68-	66.68	37.11
4.819	4.818 (0.881)	54	116759			19.12-	79.12	48.71
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32 Nitrobenzene								
4.835	4.834 (0.884)	77	239717	60.0000	60.5	80.00-	120.00	100.00
4.835	4.835 (0.884)	123	88031			6.73-	66.73	36.72
4.835	4.834 (0.884)	65	33965			0.00-	43.84	14.17
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34 Isophorone								
5.048	5.046 (0.923)	82	417648	60.0000	60.5	80.00-	120.00	100.00
5.048	5.047 (0.923)	138	65559			0.00-	45.91	15.70
5.048	5.046 (0.923)	95	33083			0.00-	37.77	7.92
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35 2-Nitrophenol								
5.128	5.128 (0.938)	139	100995	60.0000	59.8	80.00-	120.00	100.00
5.128	5.127 (0.938)	65	65074			33.65-	93.65	64.43
5.128	5.127 (0.938)	109	44161			13.08-	73.08	43.73
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36 2,4-Dimethylphenol								
5.159	5.158 (0.944)	122	149380	60.0000	59.6	80.00-	120.00	100.00
5.159	5.158 (0.944)	107	198556			100.42-	160.42	132.92
5.159	5.158 (0.944)	121	87688			27.73-	87.73	58.70
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38 Bis(2-Chloroethoxy)methane								
5.253	5.252 (0.961)	93	237132	60.0000	59.2	80.00-	120.00	100.00
5.253	5.252 (0.961)	95	78322			2.66-	62.66	33.03
5.253	5.252 (0.961)	123	34358			0.00-	43.79	14.49
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40 Benzoic Acid								
5.276	5.267 (0.965)	122	101251	60.0000	57.4	80.00-	120.00	100.00
5.276	5.267 (0.965)	105	147522			114.27-	174.27	145.70
5.275	5.267 (0.965)	77	129359			94.81-	154.81	127.76
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RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
====	=====	=====	====	=====	=====	=====	=====	=====
41	2,4-Dichlorophenol					CAS #: 120-83-2		
5.343	5.342 (0.977)	162	170590	60.0000	58.8	80.00-	120.00	100.00
5.343	5.342 (0.977)	164	110080		34.34-	94.34		64.53
5.343	5.342 (0.977)	98	64271		8.30-	68.30		37.68

42	1,2,4-Trichlorobenzene					CAS #: 120-82-1		
5.428	5.427 (0.993)	180	187411	60.0000	58.5	80.00-	120.00	100.00
5.428	5.427 (0.993)	182	179603		69.17-	129.17		95.83
5.428	5.427 (0.993)	145	56231		0.41-	60.41		30.00

*	43 Naphthalene-d8					CAS #: 1146-65-2		
5.468	5.463 (1.000)	136	316942	40.0000		80.00-	120.00	100.00
5.468	5.463 (1.000)	68	23527			0.00-	37.51	7.42

44	Naphthalene					CAS #: 91-20-3		
5.486	5.486 (1.003)	128	504204	60.0000	58.8	80.00-	120.00	100.00
5.486	5.485 (1.003)	129	55160			0.00-	40.78	10.94
5.486	5.486 (1.003)	127	66866			0.00-	42.17	13.26

45	4-Chloroaniline					CAS #: 106-47-8		
5.552	5.552 (1.015)	127	210056	60.0000	59.4	80.00-	120.00	100.00
5.552	5.552 (1.015)	129	67683		2.29-	62.29		32.22
5.552	5.551 (1.015)	65	77697		8.57-	68.57		36.99

48	Hexachlorobutadiene					CAS #: 87-68-3		
5.654	5.654 (1.034)	225	132697	60.0000	58.4	80.00-	120.00	100.00
5.654	5.654 (1.034)	223	84739		31.81-	91.81		63.86
5.654	5.654 (1.034)	227	85873		34.78-	94.78		64.71

51	4-Chloro-3-methylphenol					CAS #: 59-50-7		
6.010	6.009 (1.099)	107	183348	60.0000	59.0	80.00-	120.00	100.00
6.010	6.009 (1.099)	144	43466		0.00-	53.54		23.71
6.010	6.009 (1.099)	142	135481		43.91-	103.91		73.89

53	2-Methylnaphthalene					CAS #: 91-57-6		
6.143	6.141 (1.123)	142	348276	60.0000	59.0	80.00-	120.00	100.00
6.143	6.141 (1.123)	141	296681		55.50-	115.50		85.19

54	1-Methylnaphthalene					CAS #: 90-12-0		
6.248	6.247 (1.143)	142	318662	60.0000	58.5	80.00-	120.00	100.00
6.248	6.247 (1.143)	141	285791		58.78-	118.78		89.68

55	Hexachlorocyclopentadiene					CAS #: 77-47-4		
6.361	6.360 (0.887)	237	128331	60.0000	61.9	80.00-	120.00	100.00
6.360	6.360 (0.887)	235	80063		33.42-	93.42		62.39
6.361	6.360 (0.887)	272	17294		0.00-	41.88		13.48

57	2,4,6-Trichlorophenol					CAS #: 88-06-2		
6.439	6.438 (0.898)	196	130106	60.0000	59.6	80.00-	120.00	100.00
6.439	6.438 (0.898)	198	125001		67.54-	127.54		96.08
6.439	6.438 (0.898)	200	40326		1.18-	61.18		30.99

58	2,4,5-Trichlorophenol					CAS #: 95-95-4		
6.473	6.472 (0.903)	196	142478	60.0000	58.8	80.00-	120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
6.473	6.472 (0.903)	198	133986			64.33-	124.33	94.04
6.473	6.472 (0.903)	97	84872			27.55-	87.55	59.57
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\$ 59	2-Fluorobiphenyl (SURR)				CAS #: 321-60-8			
6.516	6.514 (0.909)	172	439543	60.0000	59.2	80.00-	120.00	100.00
6.516	6.514 (0.909)	171	151996			4.90-	64.90	34.58
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62	2-Chloronaphthalene				CAS #: 91-58-7			
6.612	6.610 (0.922)	162	363428	60.0000	59.3	80.00-	120.00	100.00
6.612	6.610 (0.922)	164	118343			1.75-	61.75	32.56
6.611	6.610 (0.922)	127	143912			8.71-	68.71	39.60
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63	2-Nitroaniline				CAS #: 88-74-4			
6.741	6.741 (0.940)	65	133072	60.0000	61.6	80.00-	120.00	100.00
6.741	6.741 (0.940)	92	86383			35.13-	95.13	64.91
6.741	6.741 (0.940)	138	119881			59.53-	119.53	90.09
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65	Dimethylphthalate				CAS #: 131-11-3			
6.951	6.950 (0.969)	163	437989	60.0000	61.8	80.00-	120.00	100.00
6.951	6.950 (0.969)	194	25383			0.00-	35.76	5.80
6.951	6.949 (0.969)	164	42591			0.00-	39.66	9.72
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68	Acenaphthylene				CAS #: 208-96-8			
7.021	7.020 (0.979)	152	583596	60.0000	59.4	80.00-	120.00	100.00
7.021	7.020 (0.979)	151	115715			0.00-	50.20	19.83
7.021	7.020 (0.979)	153	74973			0.00-	43.02	12.85
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67	2,6-Dinitrotoluene				CAS #: 606-20-2			
7.016	7.015 (0.978)	165	104986	60.0000	61.2	80.00-	120.00	100.00
7.016	7.015 (0.978)	89	70873			39.45-	99.45	67.51
7.017	7.016 (0.979)	63	104707			74.66-	134.66	99.73
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69	3-Nitroaniline				CAS #: 99-09-2			
7.148	7.146 (0.997)	138	94903	60.0000	60.9	80.00-	120.00	100.00
7.148	7.146 (0.997)	108	11442			0.00-	42.35	12.06
7.147	7.145 (0.997)	92	126246			104.62-	164.62	133.03
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* 70	Acenaphthene-d10				CAS #: 15067-26-2			
7.171	7.167 (1.000)	164	202489	40.0000		80.00-	120.00	100.00
7.171	7.168 (1.000)	162	192740			66.12-	126.12	95.19
7.171	7.167 (1.000)	160	86659			13.21-	73.21	42.80
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71	Acenaphthene				CAS #: 83-32-9			
7.201	7.201 (1.004)	154	329362	60.0000	59.1	80.00-	120.00	100.00
7.201	7.200 (1.004)	153	353455			77.18-	137.18	107.32
7.201	7.200 (1.004)	152	170706			21.21-	81.21	51.83
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72	2,4-Dinitropheno				CAS #: 51-28-5			
7.243	7.243 (1.010)	184	60124	60.0000	63.9	80.00-	120.00	100.00
7.243	7.242 (1.010)	63	45782			48.18-	108.18	76.15
7.243	7.242 (1.010)	154	39456			33.05-	93.05	65.62
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RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
7.306	7.303 (1.019)	109	85623	60.0000	60.4	80.00-	120.00	100.00
7.306	7.303 (1.019)	139	80342		61.80-	121.80		93.83
7.305	7.303 (1.019)	65	97297		80.41-	140.41		113.63
7.356	7.355 (1.026)	168	511324	60.0000	59.8	80.00-	120.00	100.00
7.355	7.355 (1.026)	139	212390		10.69-	70.69		41.54
7.394	7.392 (1.031)	165	127124	60.0000	60.0	80.00-	120.00	100.00
7.393	7.392 (1.031)	63	67580		23.55-	83.55		53.16
7.394	7.392 (1.031)	89	105808		51.82-	111.82		83.23
7.641	7.640 (1.066)	149	427766	60.0000	60.0	80.00-	120.00	100.00
7.641	7.640 (1.066)	177	93613		0.00-	51.79		21.88
7.641	7.640 (1.066)	150	51654		0.00-	42.28		12.08
7.691	7.690 (1.073)	166	459339	60.0000	59.1	80.00-	120.00	100.00
7.691	7.690 (1.073)	165	429895		61.04-	121.04		93.59
7.691	7.690 (1.073)	167	62443		0.00-	43.06		13.59
7.691	7.690 (1.073)	204	240363	60.0000	58.8	80.00-	120.00	100.00
7.691	7.690 (1.073)	206	80891		2.85-	62.85		33.65
7.690	7.690 (1.072)	141	145430		29.43-	89.43		60.50
7.752	7.750 (1.081)	138	88939	60.0000	61.8	80.00-	120.00	100.00
7.752	7.749 (1.081)	92	52063		30.30-	90.30		58.54
7.752	7.749 (1.081)	108	101058		85.44-	145.44		113.63
7.792	7.790 (0.906)	198	89959	60.0000	58.9	80.00-	120.00	100.00
7.791	7.789 (0.905)	51	35122		21.07-	81.07		39.04
7.792	7.789 (0.906)	105	39961		14.43-	74.43		44.42
7.816	7.814 (0.908)	169	280289	60.0000	59.0	80.00-	120.00	100.00
7.817	7.815 (0.908)	168	196912		41.33-	101.33		70.25
7.816	7.815 (0.908)	167	97713		5.93-	65.93		34.86
7.846	7.845 (1.094)	77	482760	60.0000	58.3	80.00-	120.00	100.00
7.846	7.845 (1.094)	105	66842		0.00-	44.08		13.85
7.846	7.845 (1.094)	182	113741		0.00-	53.69		23.56
7.947	7.946 (1.108)	330	160135	120.000	116	80.00-	120.00	100.00
7.947	7.946 (1.108)	332	156375		65.21-	125.21		97.65
7.946	7.945 (1.108)	141	65044		10.78-	70.78		40.62

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
8.165	8.163 (0.949)	248	137706	60.0000	58.5	80.00-	120.00	100.00
8.165	8.163 (0.949)	250	134371		66.63-	126.63		97.58
8.164	8.162 (0.949)	141	108961		49.24-	109.24		79.13

93	4-Bromophenylphenylether				CAS #:	101-55-3		
8.309	8.307 (0.966)	284	157474	60.0000	58.9	80.00-	120.00	100.00
8.308	8.307 (0.966)	142	59644		10.52-	70.52		37.88
8.308	8.307 (0.966)	249	50435		1.60-	61.60		32.03

94	Hexachlorobenzene				CAS #:	118-74-1		
8.481	8.480 (0.986)	266	100188	60.0000	61.7	80.00-	120.00	100.00
8.481	8.481 (0.986)	264	60482		33.54-	93.54		60.37
8.481	8.481 (0.986)	268	63678		34.39-	94.39		63.56

* 100	Phenanthrene-d10				CAS #:	1517-22-2		
8.604	8.604 (1.000)	188	361373	40.0000		80.00-	120.00	100.00
8.604	8.604 (1.000)	94	38493		0.00-	40.39		10.65
8.604	8.603 (1.000)	80	42726		0.00-	41.55		11.82

101	Phenanthrene				CAS #:	85-01-8		
8.627	8.626 (1.003)	178	601483	60.0000	58.8	80.00-	120.00	100.00
8.627	8.626 (1.003)	179	92124		0.00-	45.20		15.32
8.627	8.626 (1.003)	176	114939		0.00-	48.69		19.11

103	Anthracene				CAS #:	120-12-7		
8.670	8.670 (1.008)	178	537797	60.0000	58.6	80.00-	120.00	100.00
8.670	8.670 (1.008)	179	82064		0.00-	45.53		15.26
8.670	8.670 (1.008)	176	99998		0.00-	49.11		18.59

104	Carbazole				CAS #:	86-74-8		
8.831	8.830 (1.026)	167	542542	60.0000	60.1	80.00-	120.00	100.00
8.830	8.830 (1.026)	139	72334		0.00-	43.72		13.33
8.830	8.830 (1.026)	83	50848		0.00-	39.70		9.37

105	Di-n-butylphthalate				CAS #:	84-74-2		
9.229	9.227 (1.073)	149	758627	60.0000	60.9	80.00-	120.00	100.00
9.229	9.227 (1.073)	150	68245		0.00-	39.16		9.00
9.228	9.227 (1.073)	104	46521		0.00-	36.36		6.13

109	Fluoranthene				CAS #:	206-44-0		
9.799	9.797 (1.139)	202	691228	60.0000	61.1	80.00-	120.00	100.00
9.798	9.796 (1.139)	101	81189		0.00-	41.60		11.75
9.799	9.797 (1.139)	203	120539		0.00-	47.37		17.44

111	Pyrene				CAS #:	129-00-0		
10.017	10.016 (0.893)	202	699567	60.0000	59.6	80.00-	120.00	100.00
10.017	10.016 (0.893)	200	145950		0.00-	50.33		20.86
10.017	10.016 (0.893)	203	124871		0.00-	47.92		17.85

\$ 112	Terphenyl-d14 (SURR)				CAS #:	1718-51-0		
10.181	10.179 (0.908)	244	543845	60.0000	57.8	80.00-	120.00	100.00
10.180	10.178 (0.908)	122	59563		0.00-	40.67		10.95

RT	EXP RT	REL RT	MASS	RESPONSE	AMOUNTS		TARGET	RANGE	RATIO
					CAL-AMT	ON-COL			
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\$ 112 Terphenyl-d14 (SURR) (continued)									
10.180	10.179	(0.908)	212	42094			0.00-	37.92	7.74
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118 Butylbenzylphthalate					CAS #: 85-68-7				
10.692	10.690	(0.953)	149	355942	60.0000	59.6	80.00-	120.00	100.00
10.692	10.691	(0.953)	91	267490		45.72-	105.72		75.15
10.693	10.692	(0.953)	206	77867		0.00-	51.71		21.88
<hr/>									
120 Benzo[a]anthracene					CAS #: 56-55-3				
11.196	11.194	(0.998)	228	714684	60.0000	59.6	80.00-	120.00	100.00
11.196	11.194	(0.998)	229	138418		0.00-	49.13		19.37
11.196	11.194	(0.998)	226	187362		0.00-	57.06		26.22
<hr/>									
* 121 Chrysene-d12					CAS #: 1719-03-5				
11.215	11.211	(1.000)	240	435603	40.0000		80.00-	120.00	100.00
11.214	11.210	(1.000)	120	44737		0.00-	40.02		10.27
11.215	11.210	(1.000)	236	107584		0.00-	54.50		24.70
<hr/>									
123 Chrysene					CAS #: 218-01-9				
11.240	11.238	(1.002)	228	688475	60.0000	58.7	80.00-	120.00	100.00
11.240	11.238	(1.002)	226	200258		0.00-	59.08		29.09
11.240	11.238	(1.002)	229	134569		0.00-	49.34		19.55
<hr/>									
124 Bis-2-Ethylhexylphthalate					CAS #: 117-81-7				
11.277	11.275	(1.006)	149	489419	60.0000	58.9	80.00-	120.00	100.00
11.277	11.276	(1.006)	167	148535		0.00-	59.84		30.35
11.277	11.276	(1.006)	279	37090		0.00-	37.67		7.58
<hr/>									
125 Di-n-octylphthalate					CAS #: 117-84-0				
11.845	11.842	(0.945)	149	857415	60.0000	65.0	80.00-	120.00	100.00
11.845	11.843	(0.945)	167	13650		0.00-	31.49		1.59
11.844	11.842	(0.945)	43	75400		0.00-	38.92		8.79
<hr/>									
127 Benzo[b]fluoranthene					CAS #: 205-99-2				
12.201	12.198	(0.973)	252	664959	60.0000	60.8	80.00-	120.00	100.00
12.200	12.198	(0.973)	253	143812		0.00-	52.25		21.63
12.200	12.219	(0.973)	125	66729		0.00-	48.56		10.04
<hr/>									
128 Benzo[k]fluoranthene					CAS #: 207-08-9				
12.222	12.220	(0.975)	252	694239	60.0000	55.3	80.00-	120.00	100.00
12.222	12.220	(0.975)	253	155467		0.00-	52.11		22.39
12.222	12.219	(0.975)	125	55559		0.00-	46.79		8.00
<hr/>									
129 Benzo[a]pyrene					CAS #: 50-32-8				
12.485	12.484	(0.996)	252	621097	60.0000	58.0	80.00-	120.00	100.00
12.484	12.484	(0.996)	253	140212		0.00-	51.58		22.57
12.484	12.484	(0.996)	125	59366		0.00-	39.66		9.56
<hr/>									
* 130 Perylene-d12					CAS #: 1520-96-3				
12.533	12.532	(1.000)	264	381419	40.0000		80.00-	120.00	100.00
12.533	12.533	(1.000)	260	83149		0.00-	52.70		21.80
12.533	12.532	(1.000)	265	81429		0.00-	52.11		21.35

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO
				CAL-AMT	ON-COL		
13.573	13.569 (1.083)	276	683931	60.0000	57.6	80.00- 120.00	100.00
13.575	13.570 (1.083)	138	155587		0.00-	53.00	22.75
13.574	13.570 (1.083)	277	179973		0.00-	55.19	26.31

13.580	13.574 (1.083)	278	582046	60.0000	57.0	80.00- 120.00	100.00
13.580	13.573 (1.083)	139	72769		0.00-	45.33	12.50
13.580	13.574 (1.083)	279	137134		0.00-	53.44	23.56

13.858	13.852 (1.106)	276	535083	60.0000	60.4	80.00- 120.00	100.00
13.857	13.852 (1.106)	138	100983		0.00-	48.86	18.87
13.858	13.852 (1.106)	277	125702		0.00-	53.33	23.49

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Sample Info: 47765

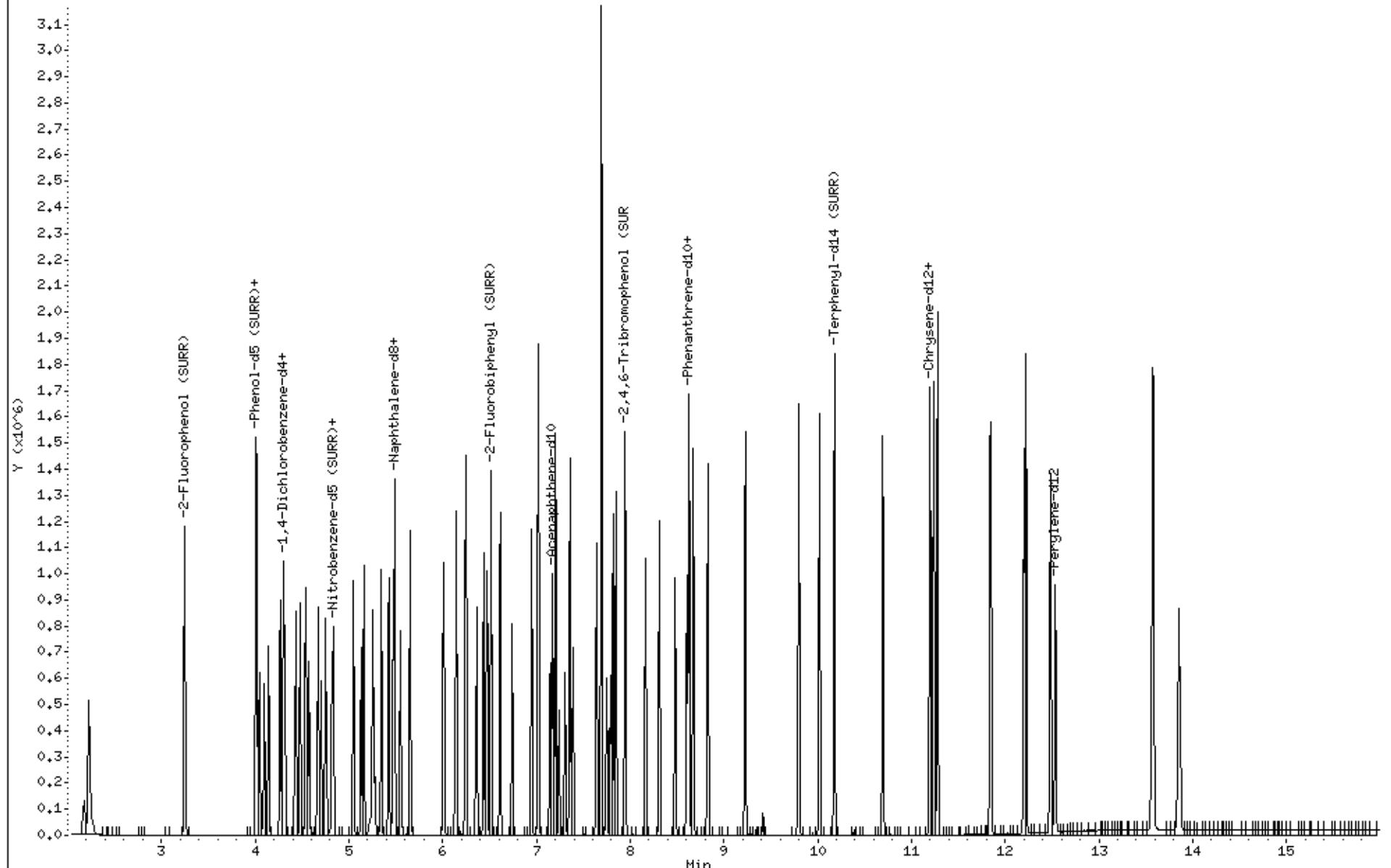
Column phase: HPMS-5

Instrument: smsd04,i

Operator: MJ

Column diameter: 0.25

\\Sved04\DD\chem\smsd04,i\S41114SScal,b\8270CAL5.d



Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

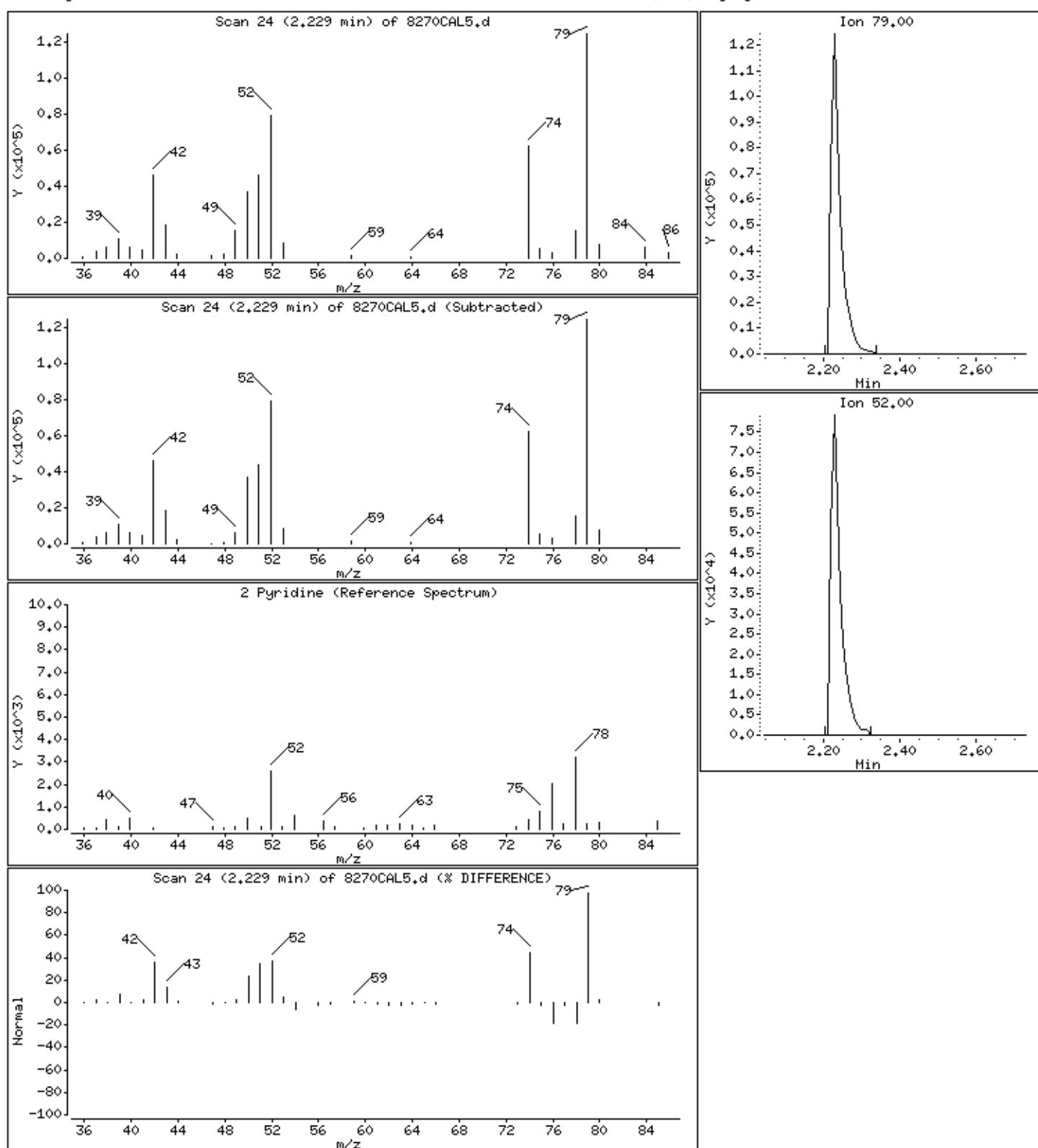
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

2 Pyridine

Concentration: 59.0 ug/kg



Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

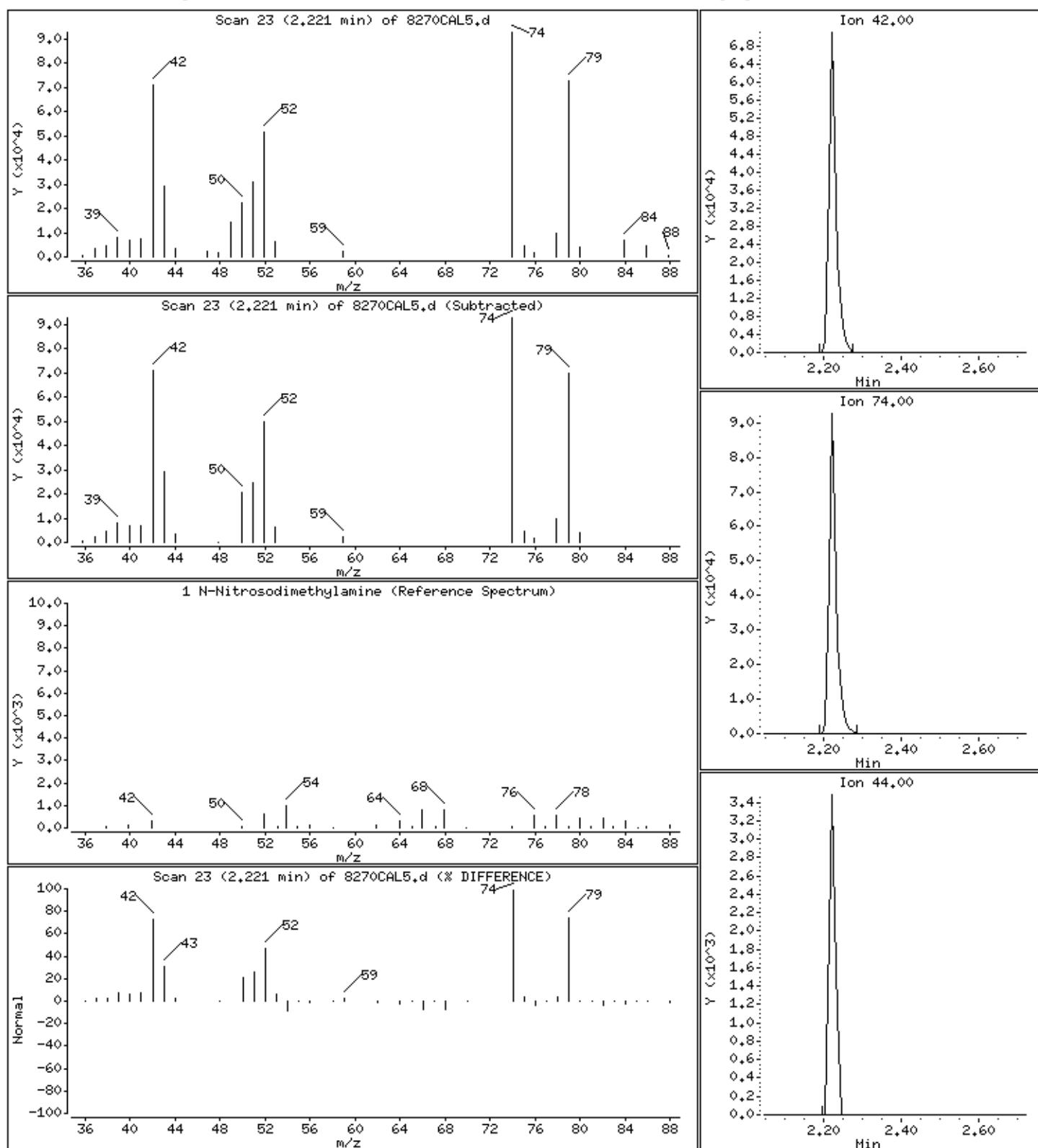
Operator: MJ

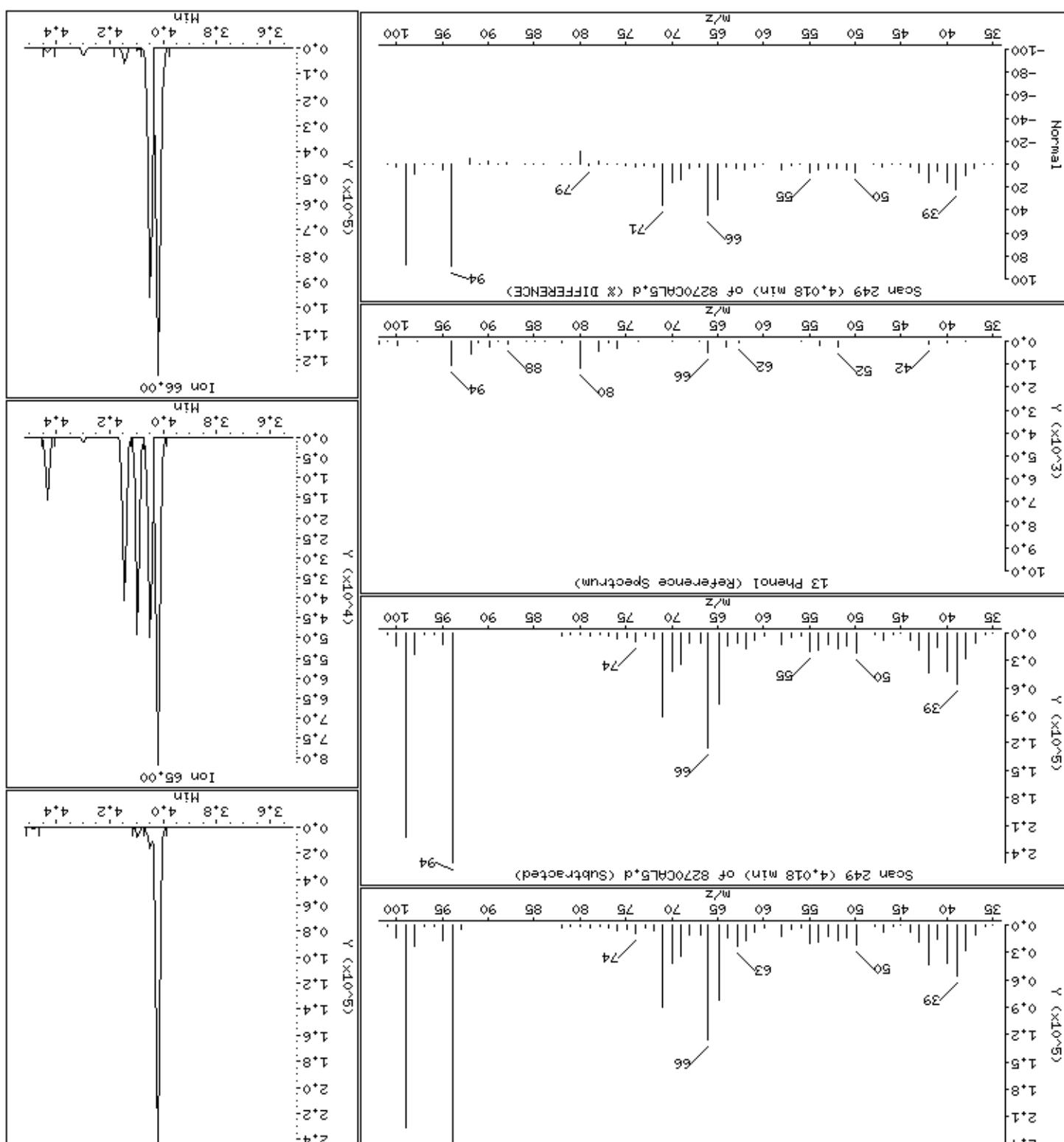
Column phase: HPMS-5

Column diameter: 0.25

1 N-Nitrosodimethylamine

Concentration: 59.7 ug/kg





Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

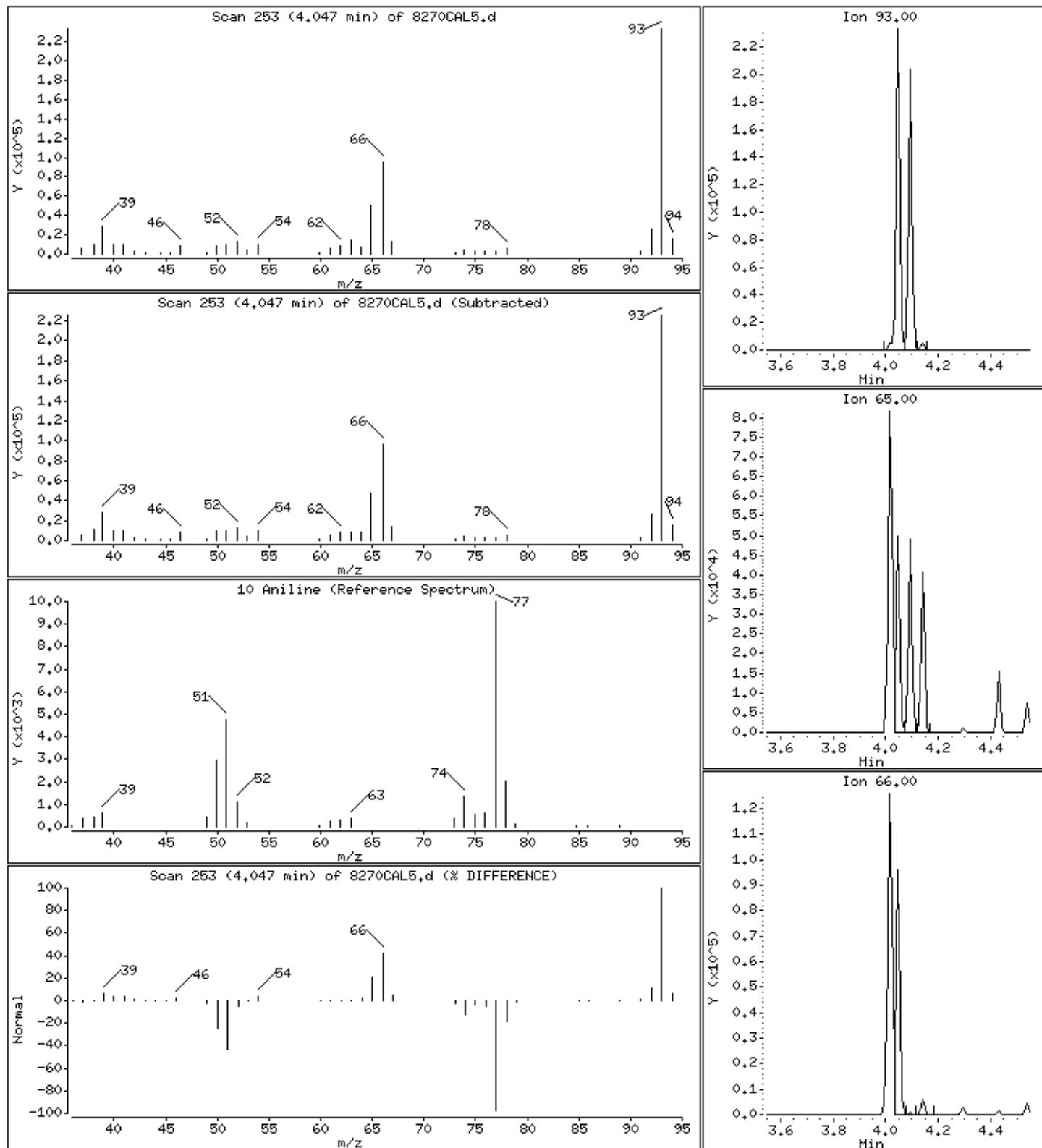
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

10 Aniline

Concentration: 61.6 ug/kg



Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

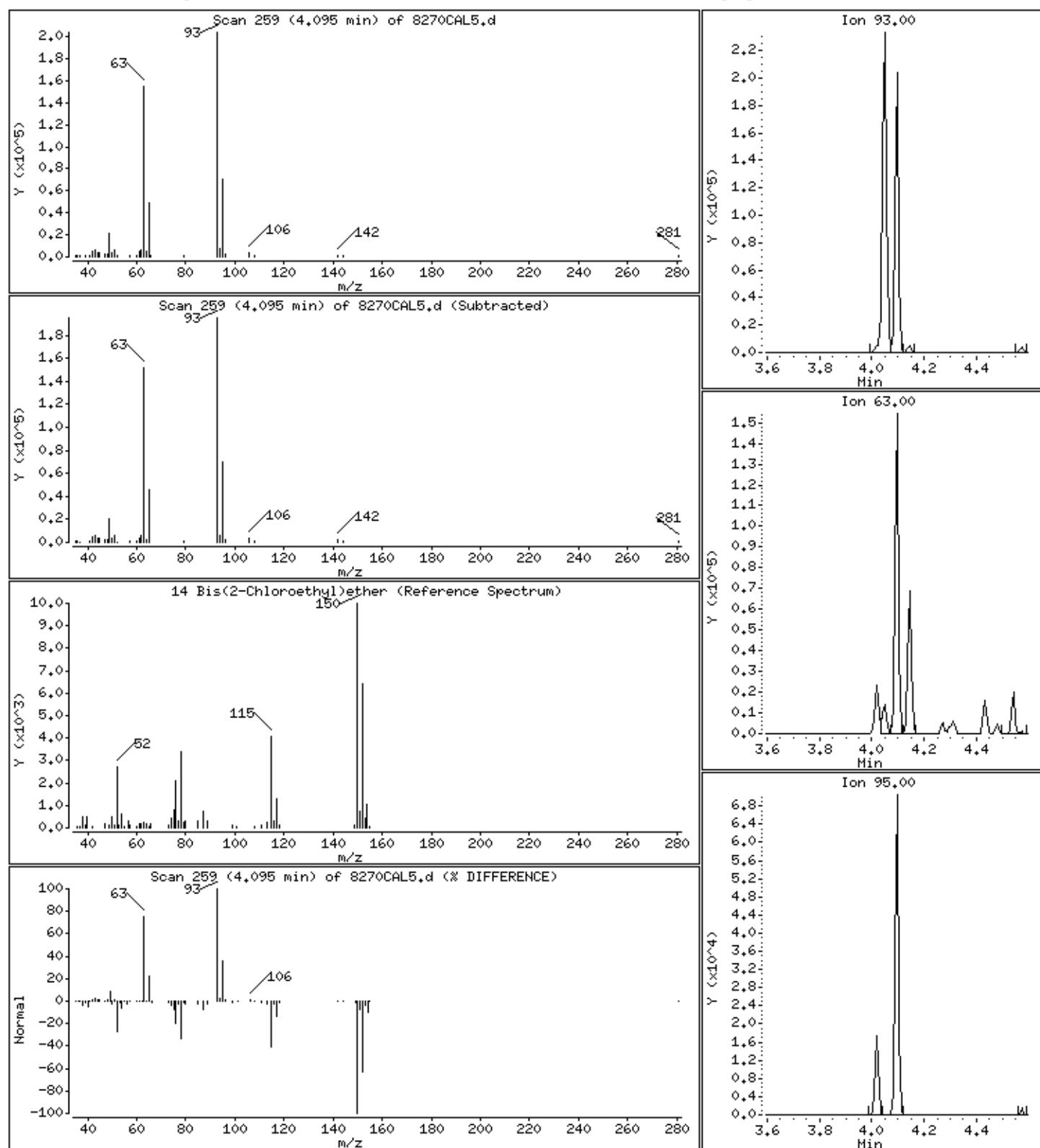
Operator: MJ

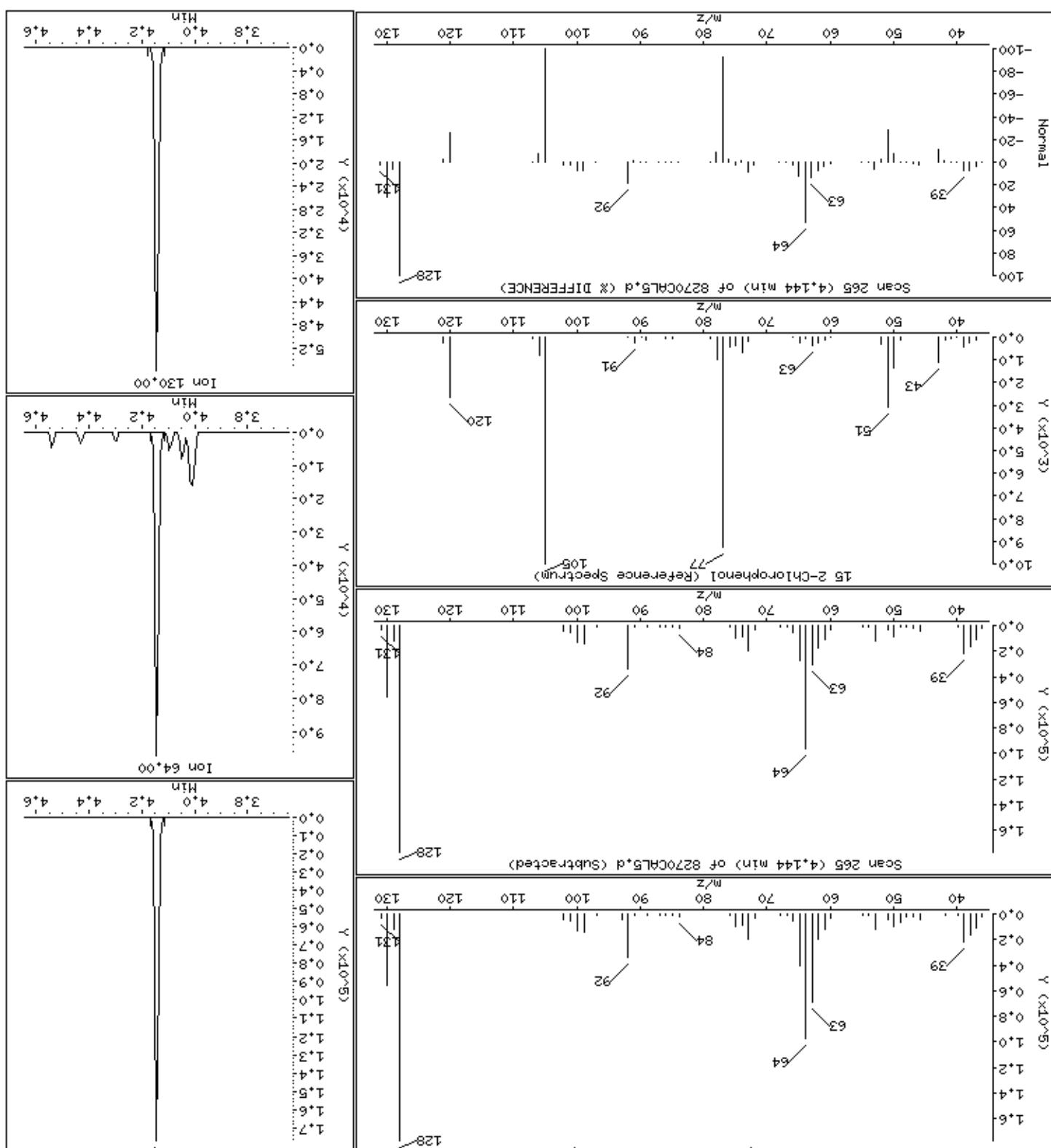
Column phase: HPMS-5

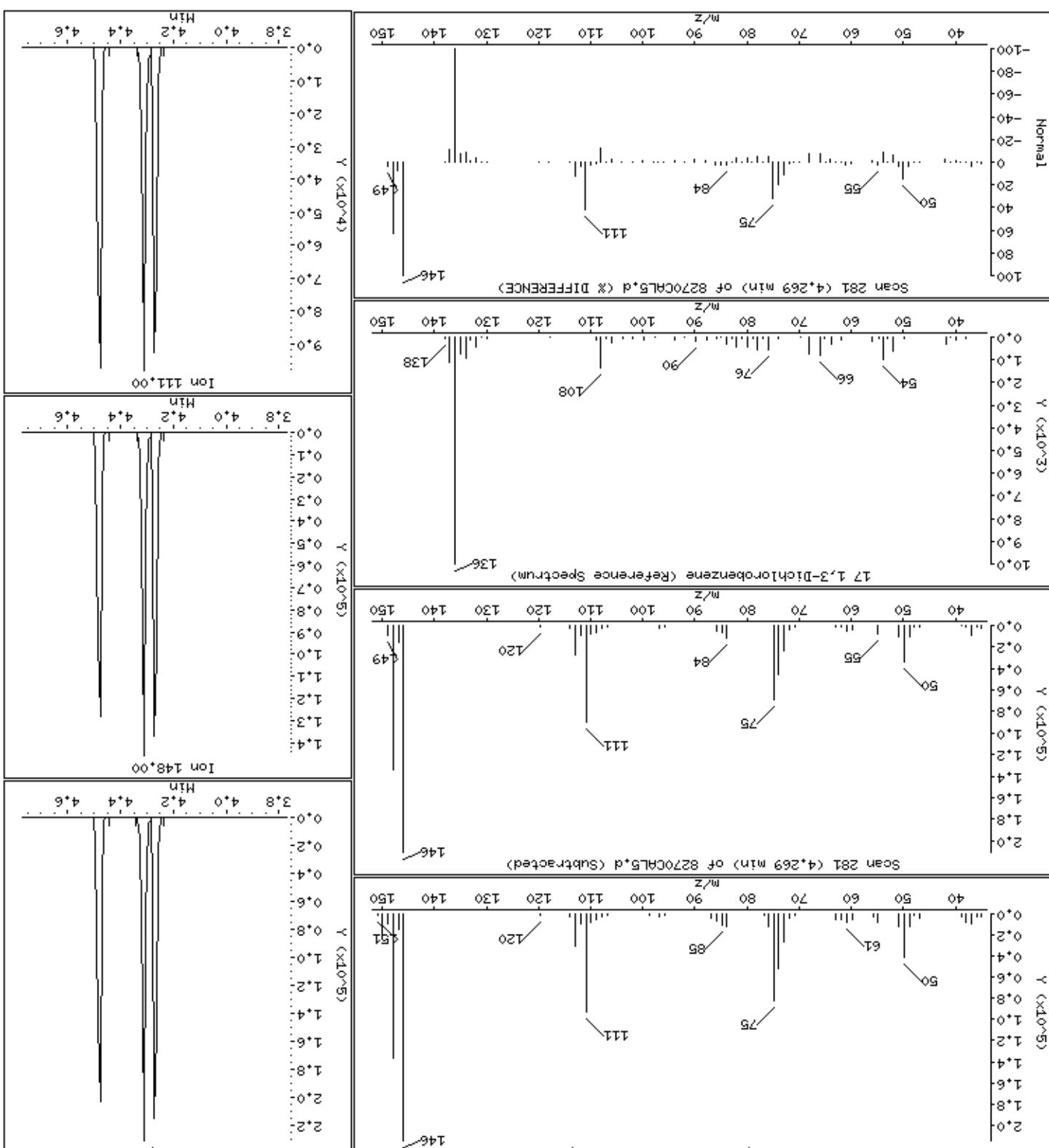
Column diameter: 0.25

14 Bis(2-Chloroethyl)ether

Concentration: 59.7 ug/kg







Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

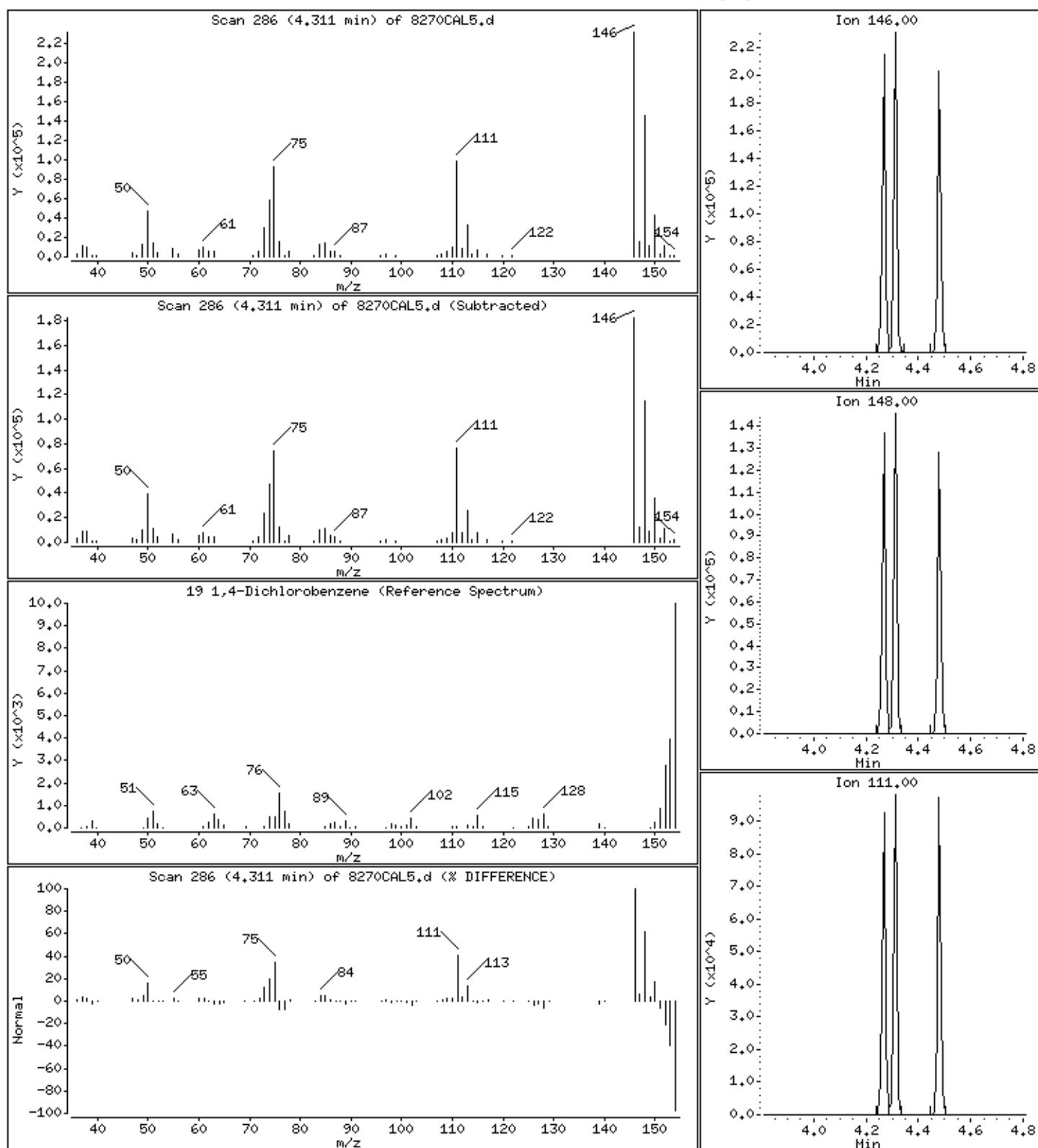
Operator: MJ

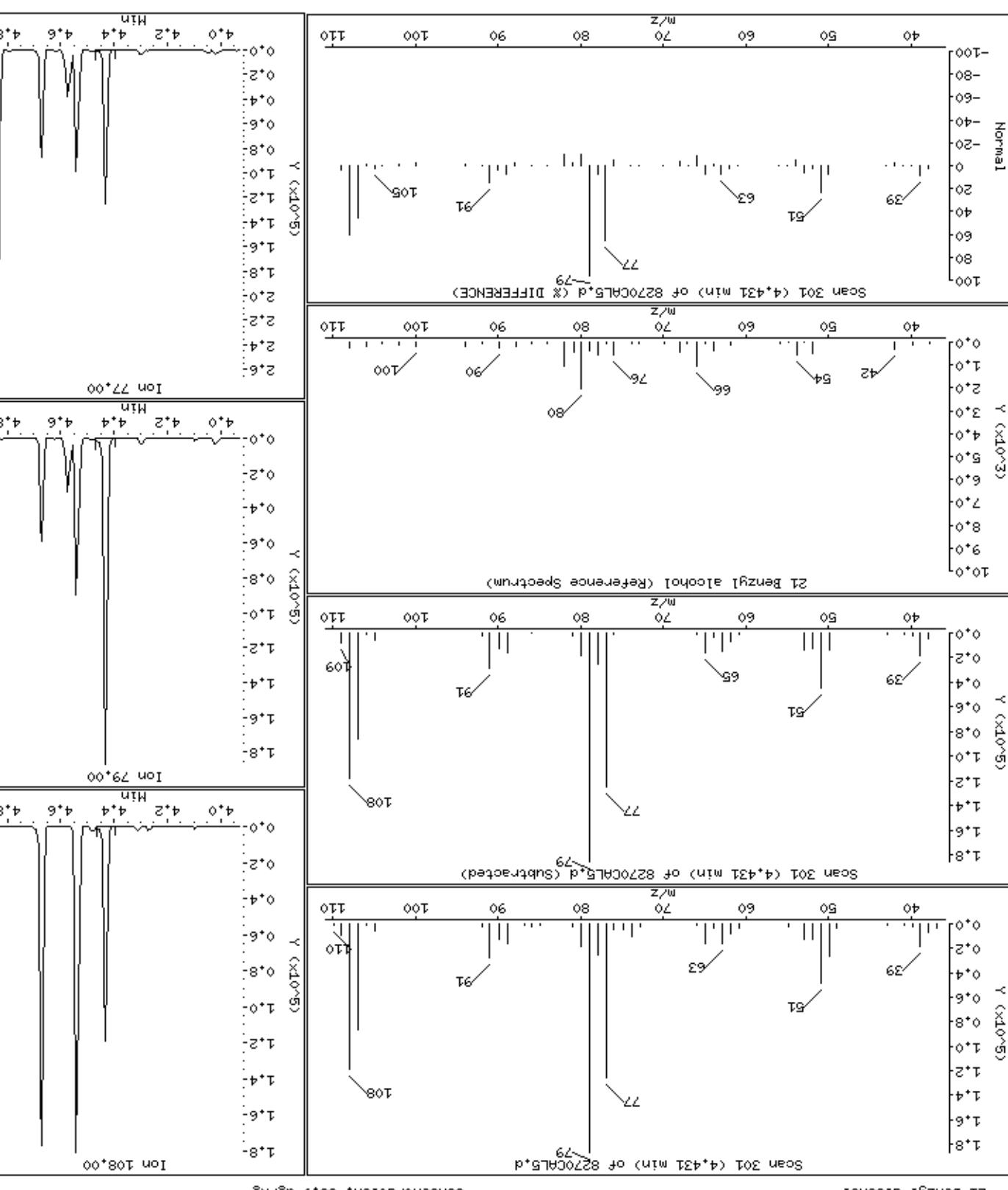
Column phase: HPMS-5

Column diameter: 0.25

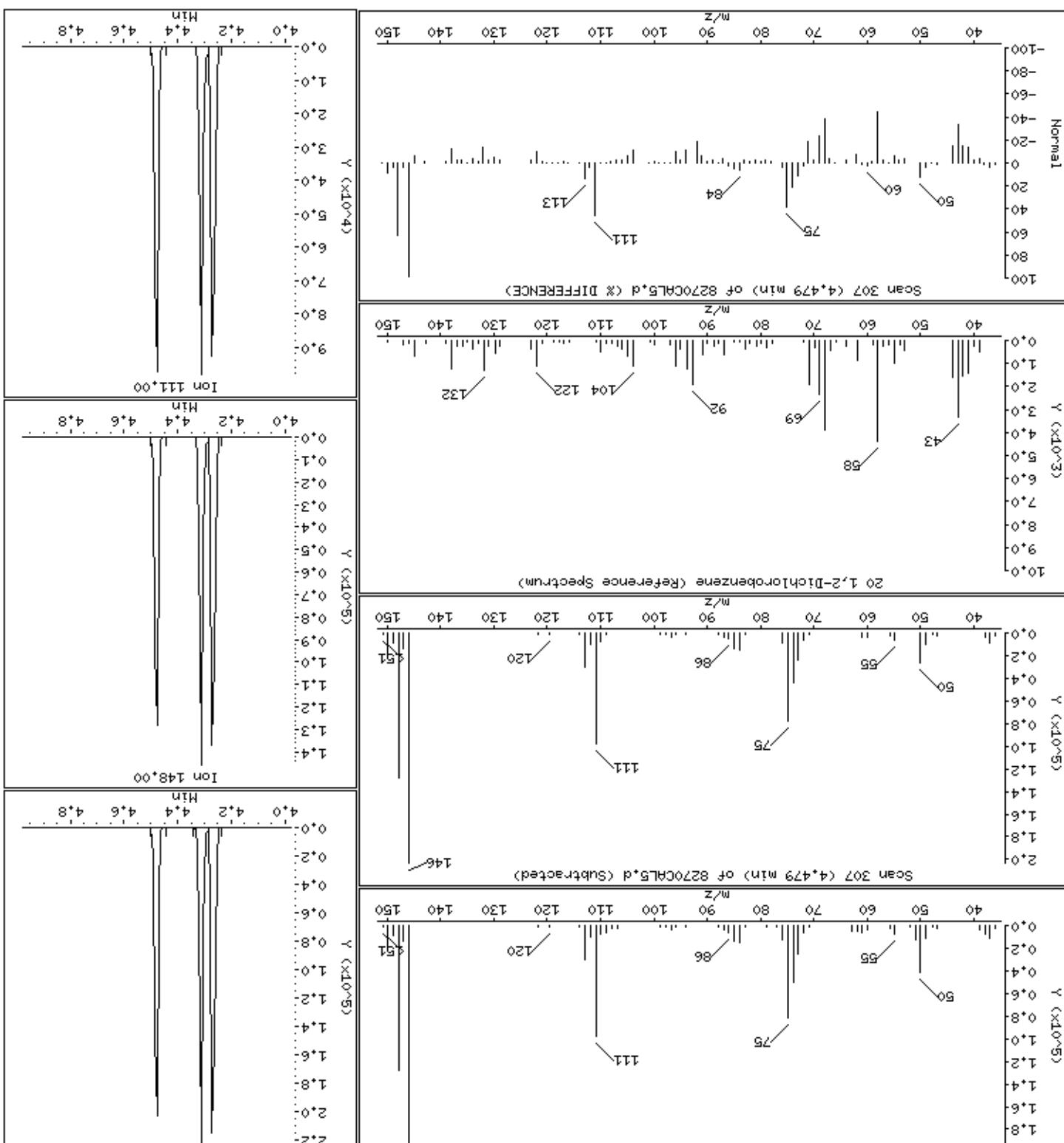
19 1,4-Dichlorobenzene

Concentration: 58.6 ug/kg

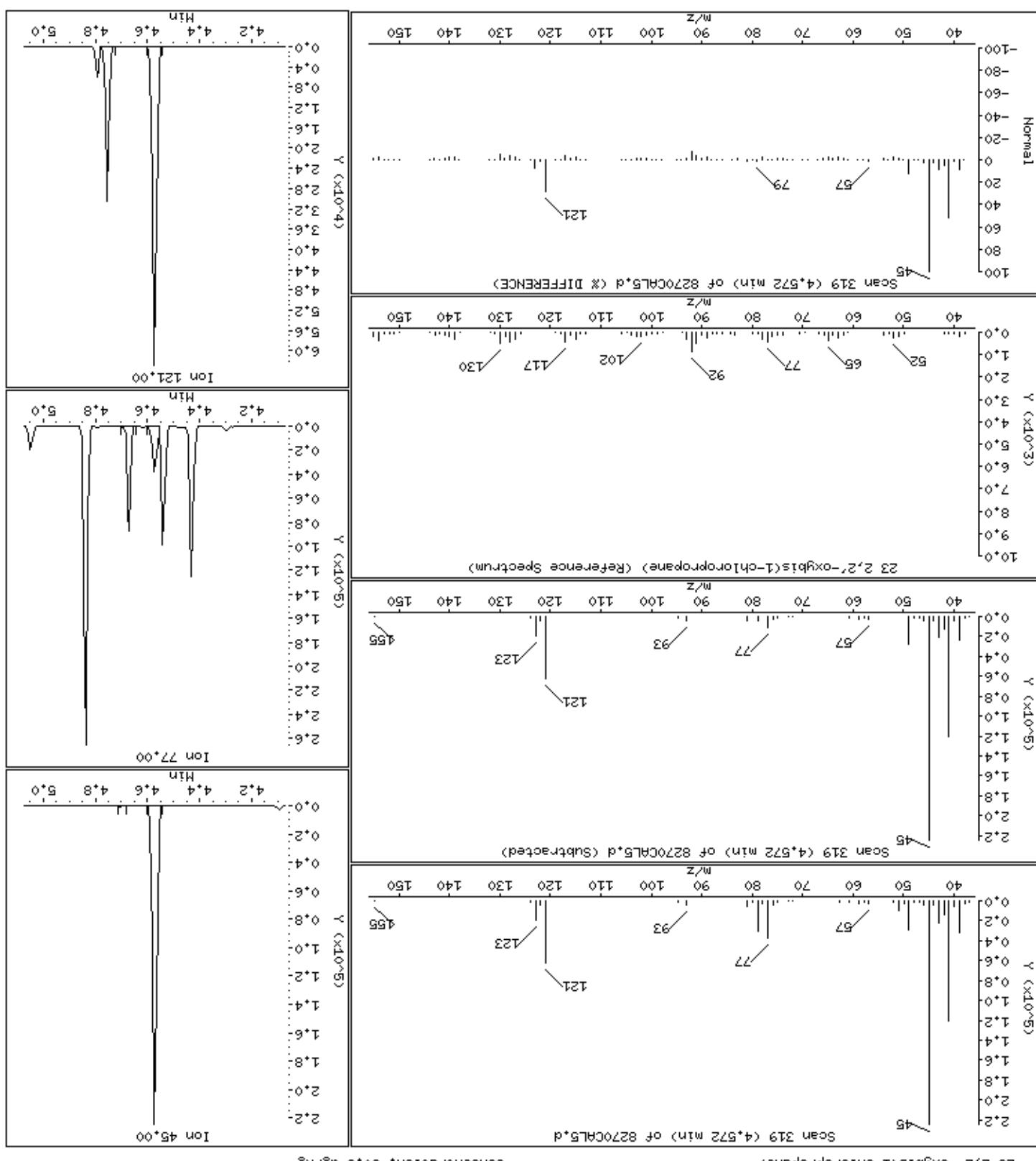


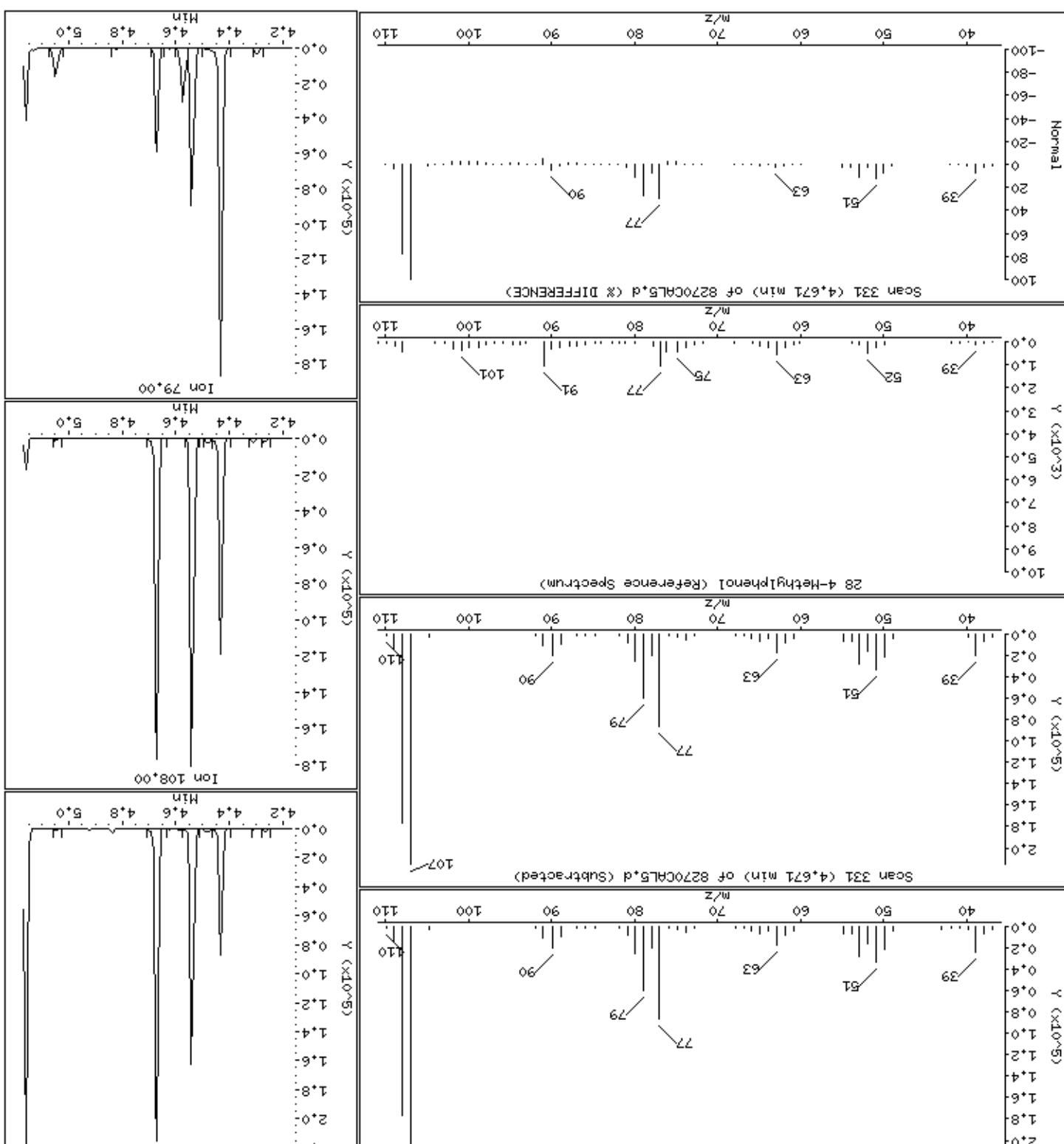


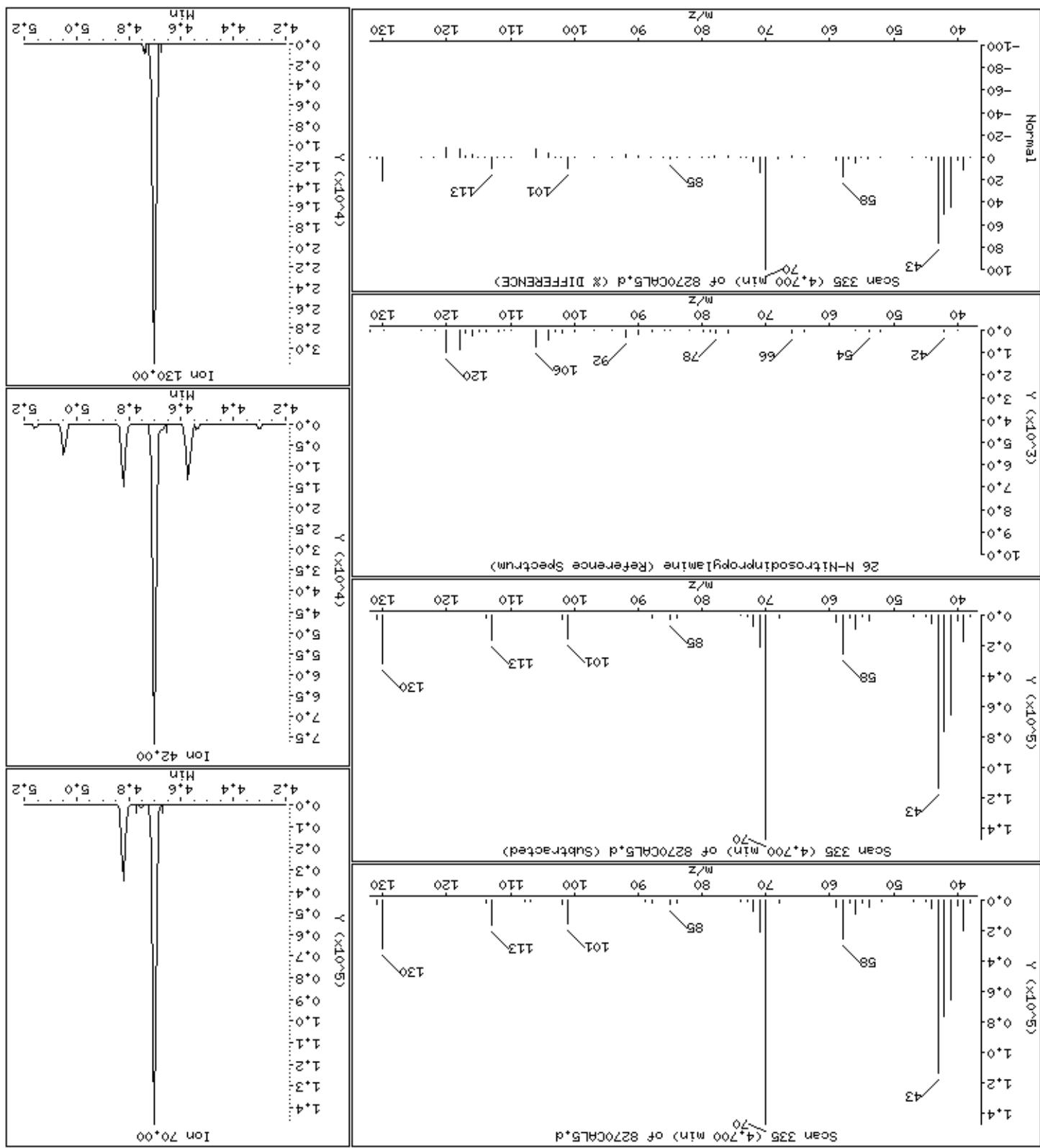
Date : 14-NOV-2012 23:22
 Page 19
 Data File: \\\\$vedol4\DD\chem\msd4\1\8411145501.b\8270CALS.d
 Client ID: 8270CALS
 Instrument: msd4.i
 Sample Info: 47765
 Column phase: HPMs-5
 Operator: HS
 Column diameter: 0.25
 Concentration: 58.9 ug/Kg
 Scan 301 (4.431 min) of 8270CALS.d
 Ion 79.00



Date : 14-NOV-2012 23:42
Client ID: 8270CRL5
Instrument: msd04.i
Sample Info: 47765
operator: H3
Column diameter: 0.25
Column Phase: HPS-5

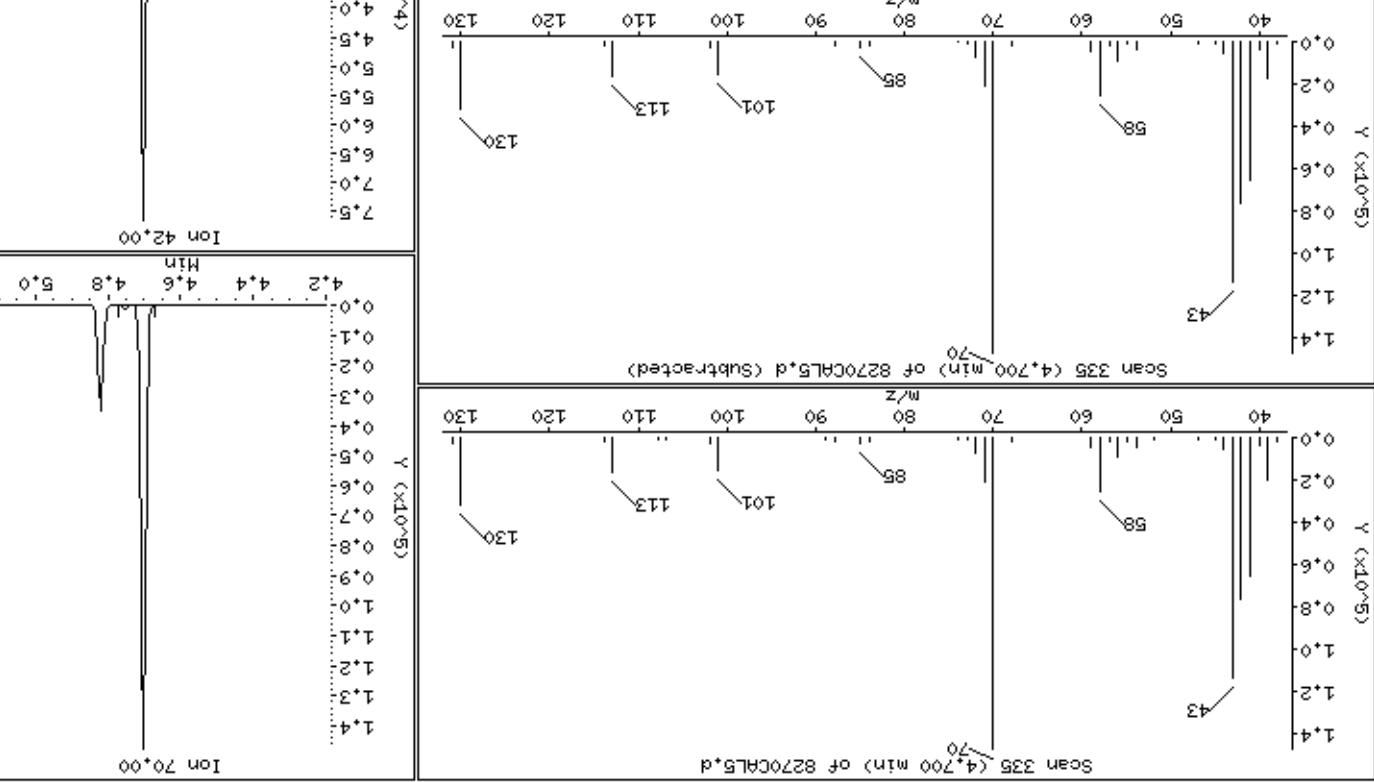
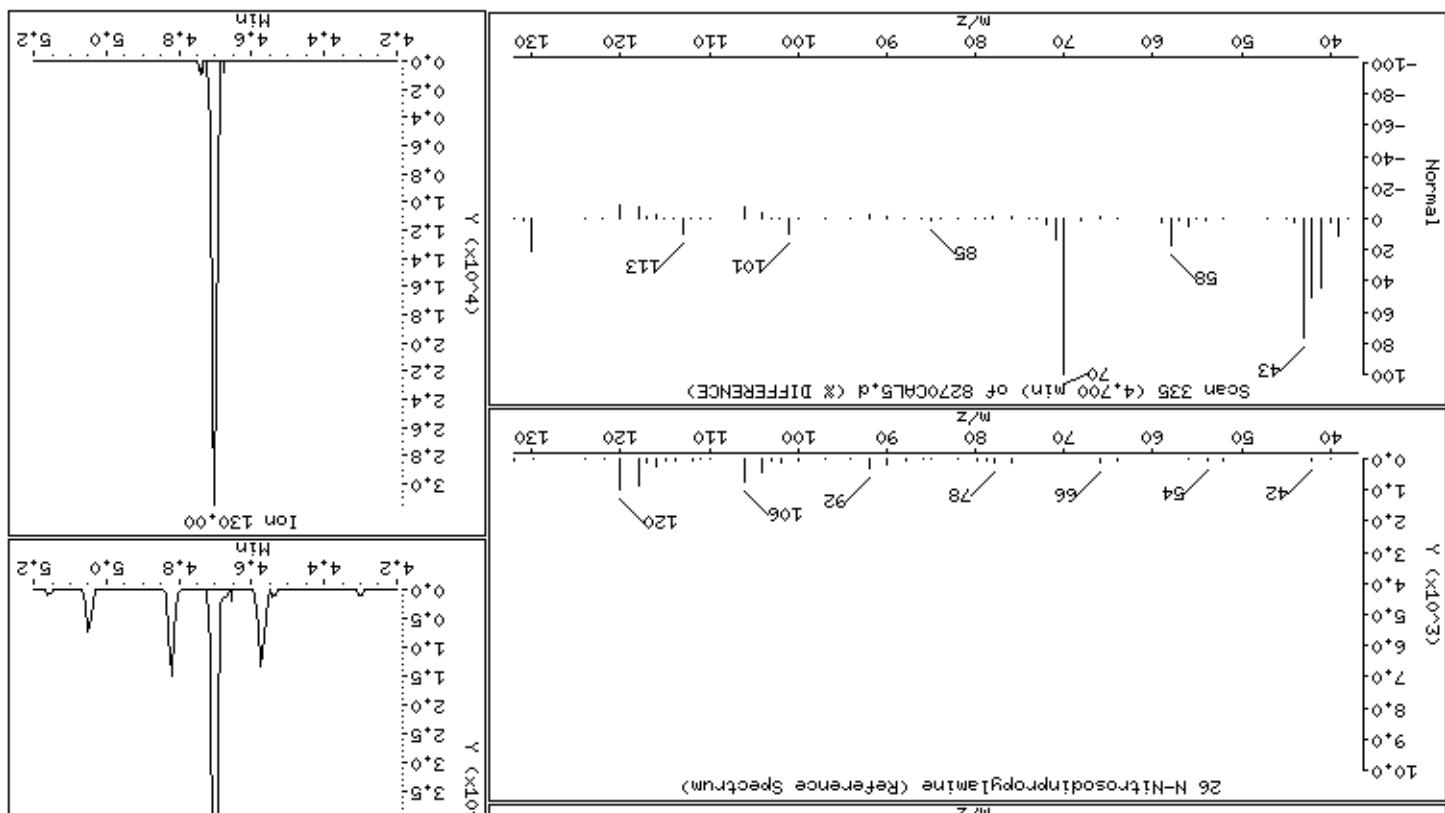


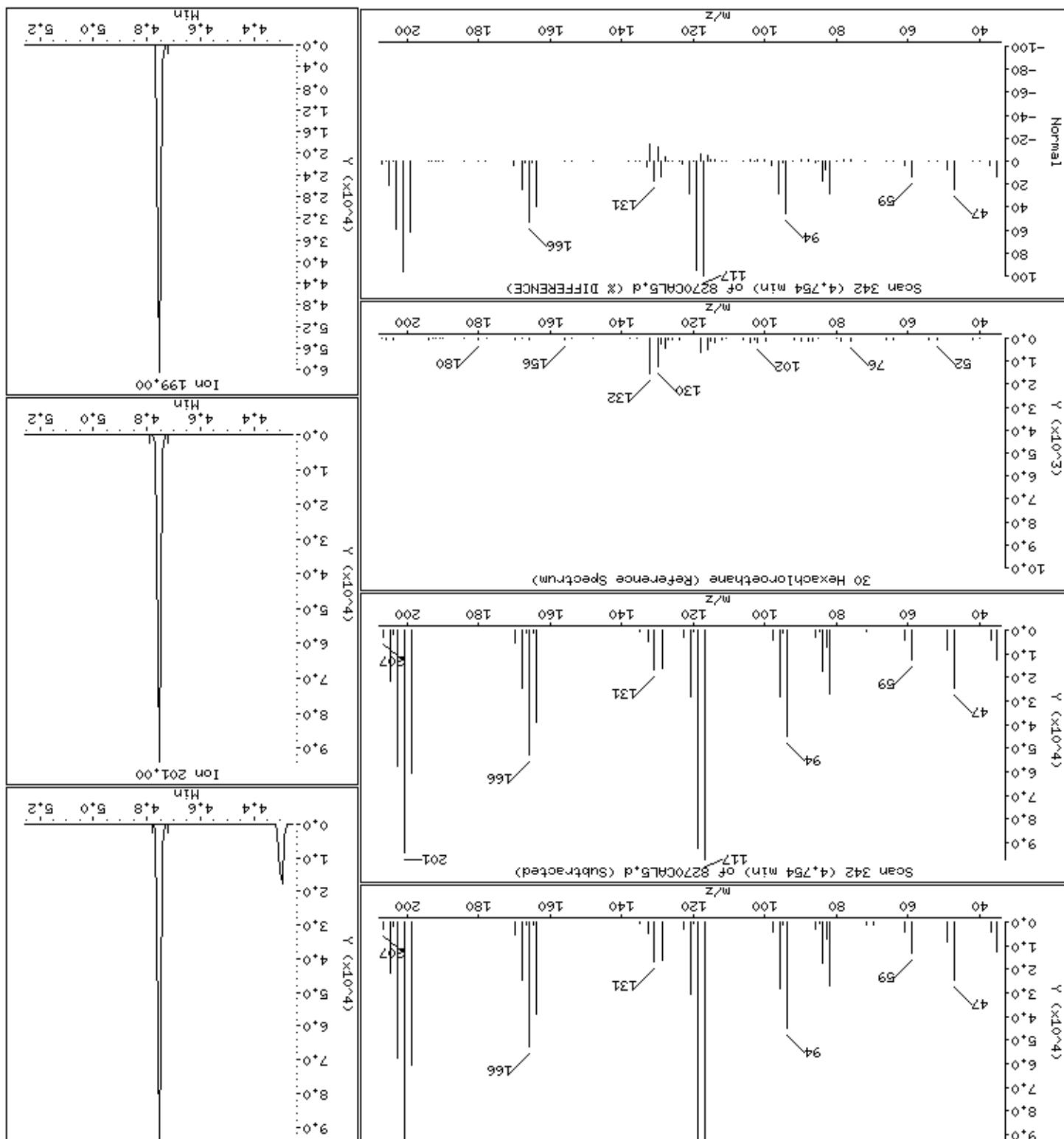




Date : 14-NOV-2012 23:22
 Page 24

Data File: \\\\$vedolad4\DD\chem\msd4\1\8411145501.b\8270CAL5.d
 Client ID: 8270CAL5
 Instrument: msd4.i
 Sample Info: 47765
 Operator: H3
 Column phase: HPMs-5
 Column diameter: 0.25
 Concentration: 61.0 ug/Kg
 Scan 335 (4.700 min) of 8270CAL5.d
 Scan 335 (4.700 min) of 8270CAL5.d (Subtracted)
 Scan 335 (4.700 min) of 8270CAL5.d (Reference Spectrum)
 Ion 70.00
 Ion 42.00
 Ion 420.00
 Ion 130.00 Min
 Ion 42.00 Min
 Ion 420.00 Min

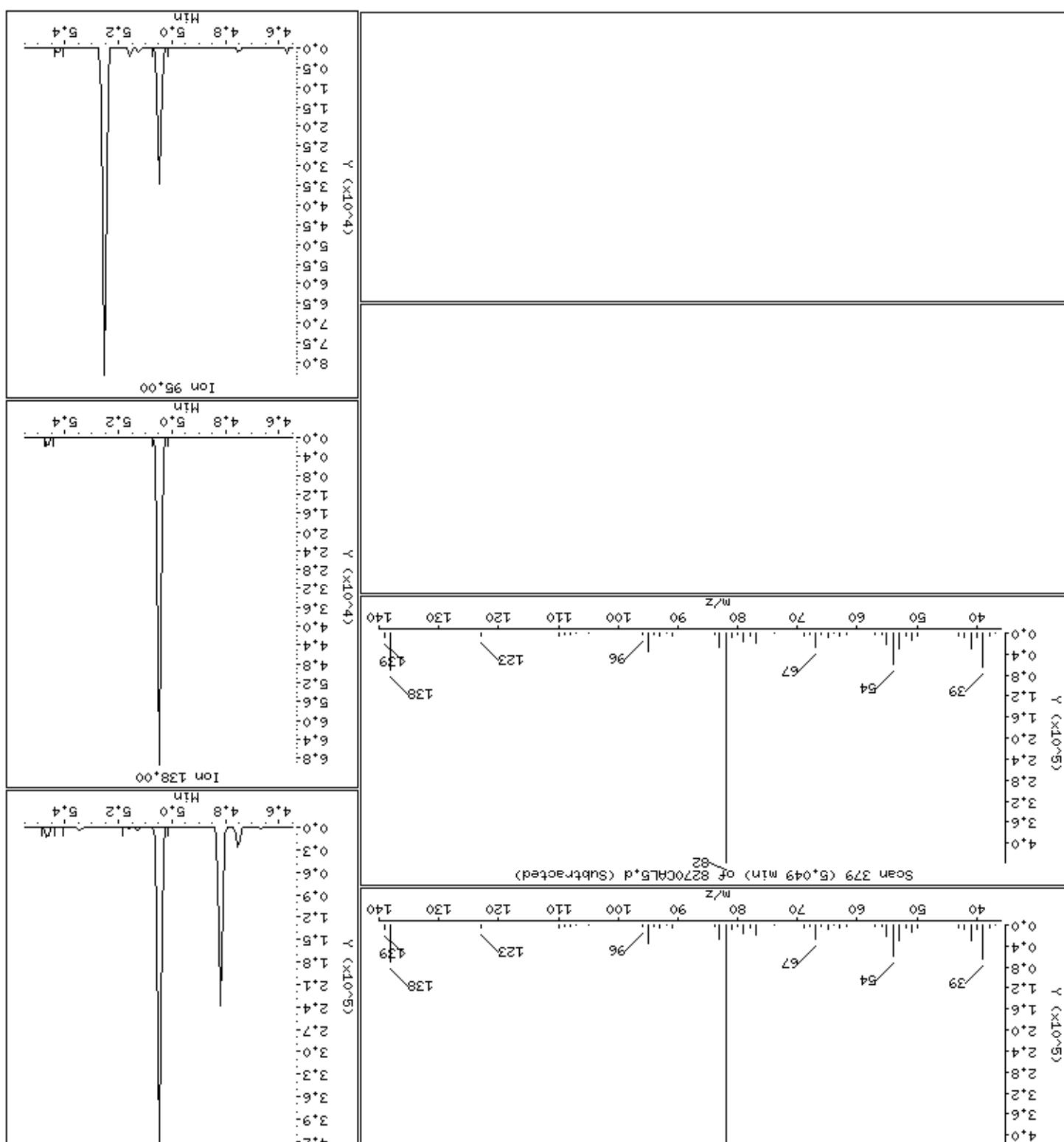




Date : 14-NOV-2012 23:22 Data File: \\\\$vedod4\DD\chem\msd4\1\8411145501.b\8270CAL5.d Client ID: 8270CAL5 Instrument: smsd4.i Sample Info: 47765 Column phase: HPM-S Operator: H3 Column diameter: 0.25

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Date : 14-NOV-2012 23:22
Page 26
Data File: \\\\$ec0d4\DD\Chem\msd04\1\41114SSG1.b\8270CALS.d
Citation ID: 8270CALS
Instrument: msd04.i
Sample Info: 47765
Column phase: HPM-S5
Column diameter: 0.25
Operator: M3



Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

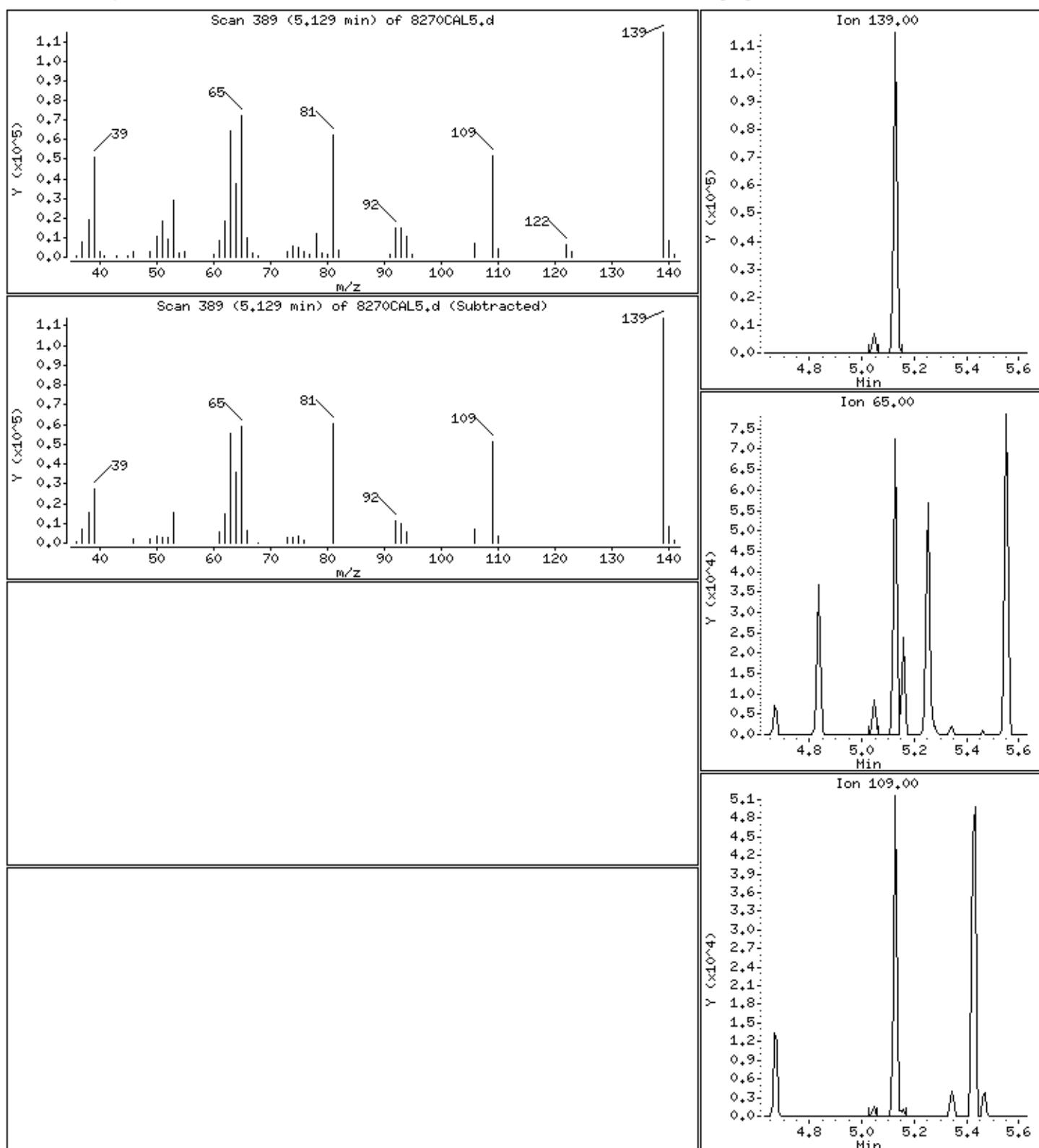
Operator: MJ

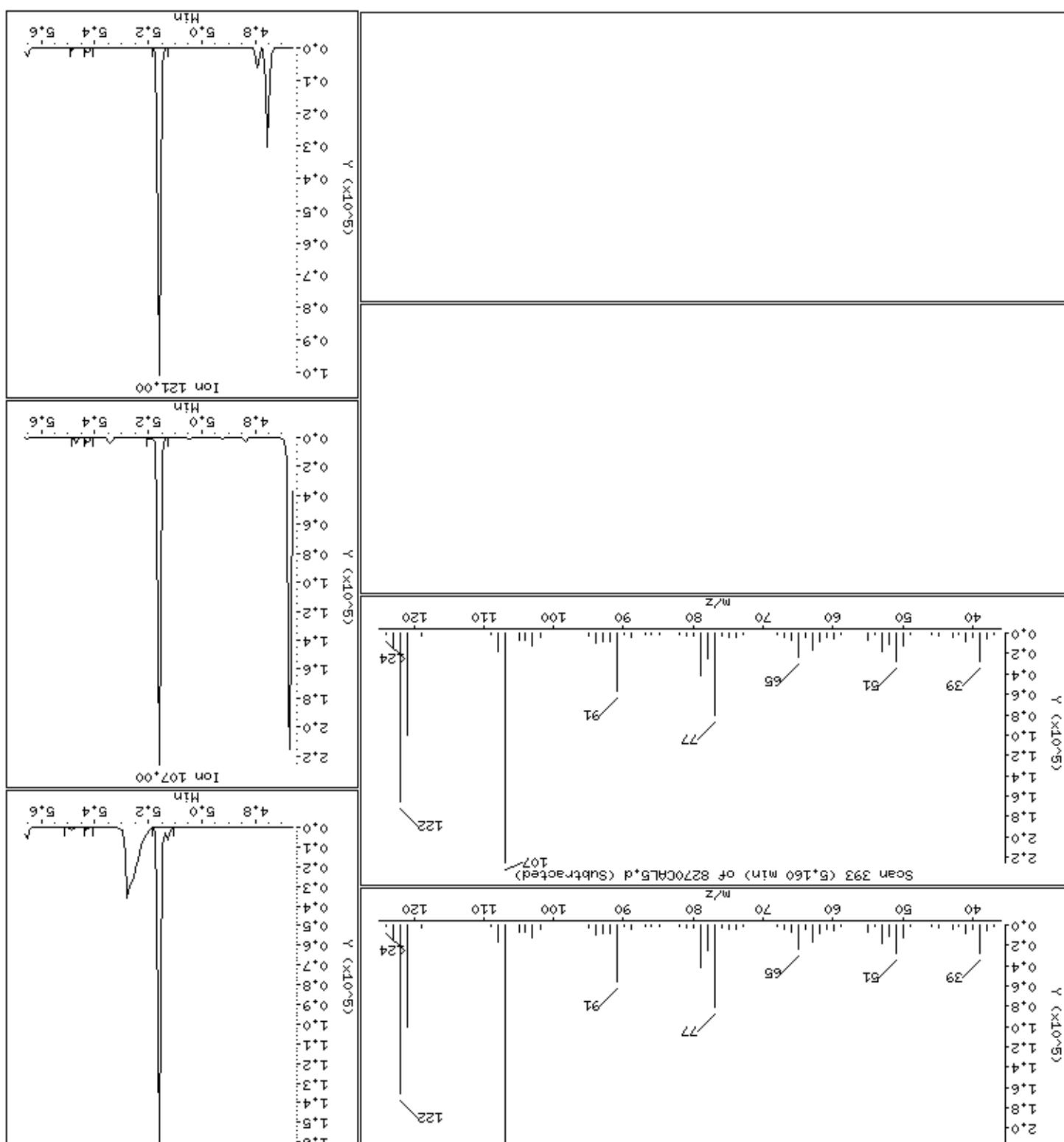
Column phase: HPMS-5

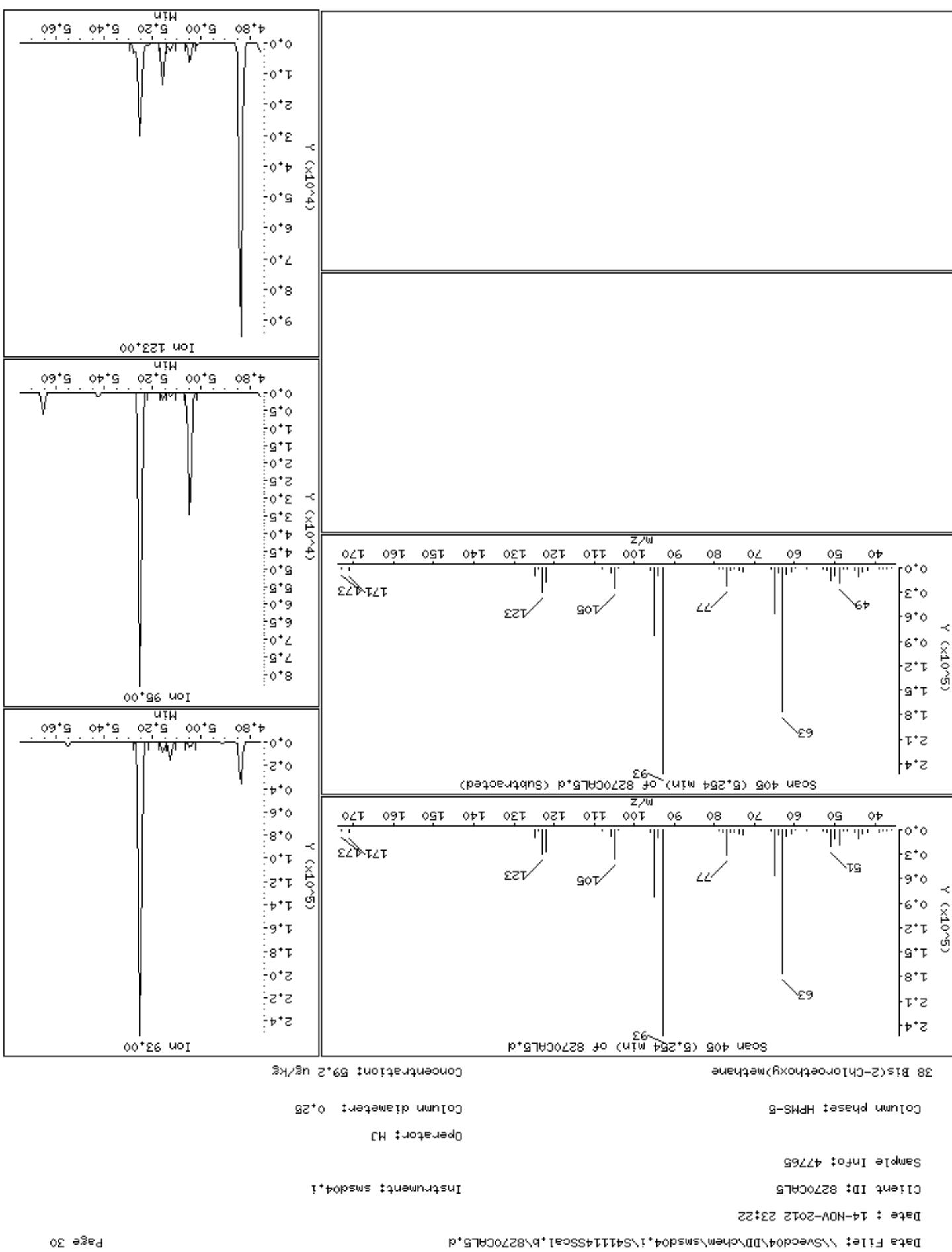
Column diameter: 0.25

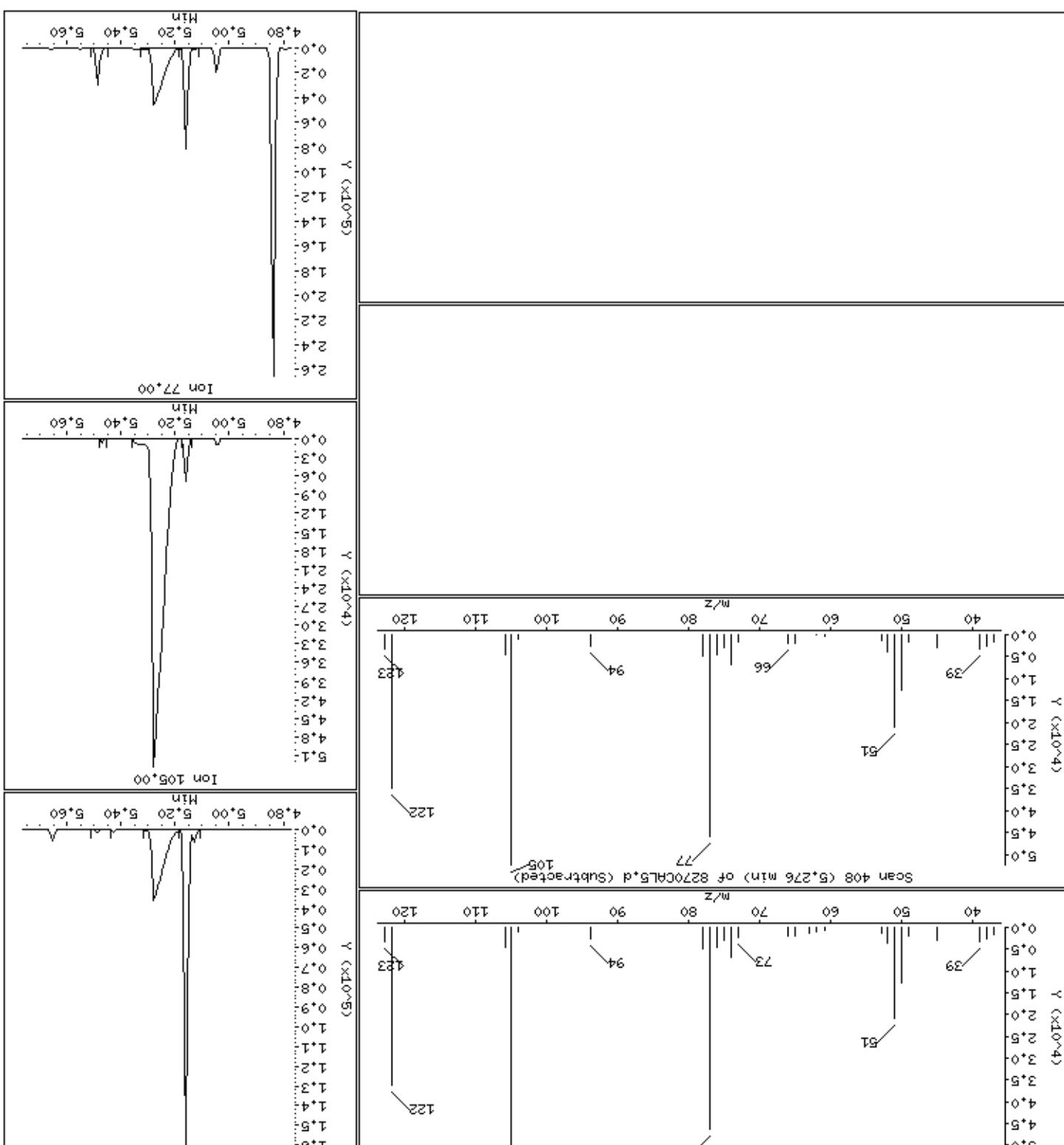
35 2-Nitrophenol

Concentration: 59.8 ug/kg









40 Benzotric Acid

Sample Info: 47765

Client ID: 8270CAL5

Instrument: smsd4.i

Date : 14-NOV-2012 23:22

Data File: \\\Svedol4\DD\Chem\smsd4.i\8270CAL5.d

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Column phase: HPMs-5

Operator: HS

Column diameter: 0.25

Concentration: 57.4 ug/Kg

Scan 408 (5.276 min) of 8270CAL5.d

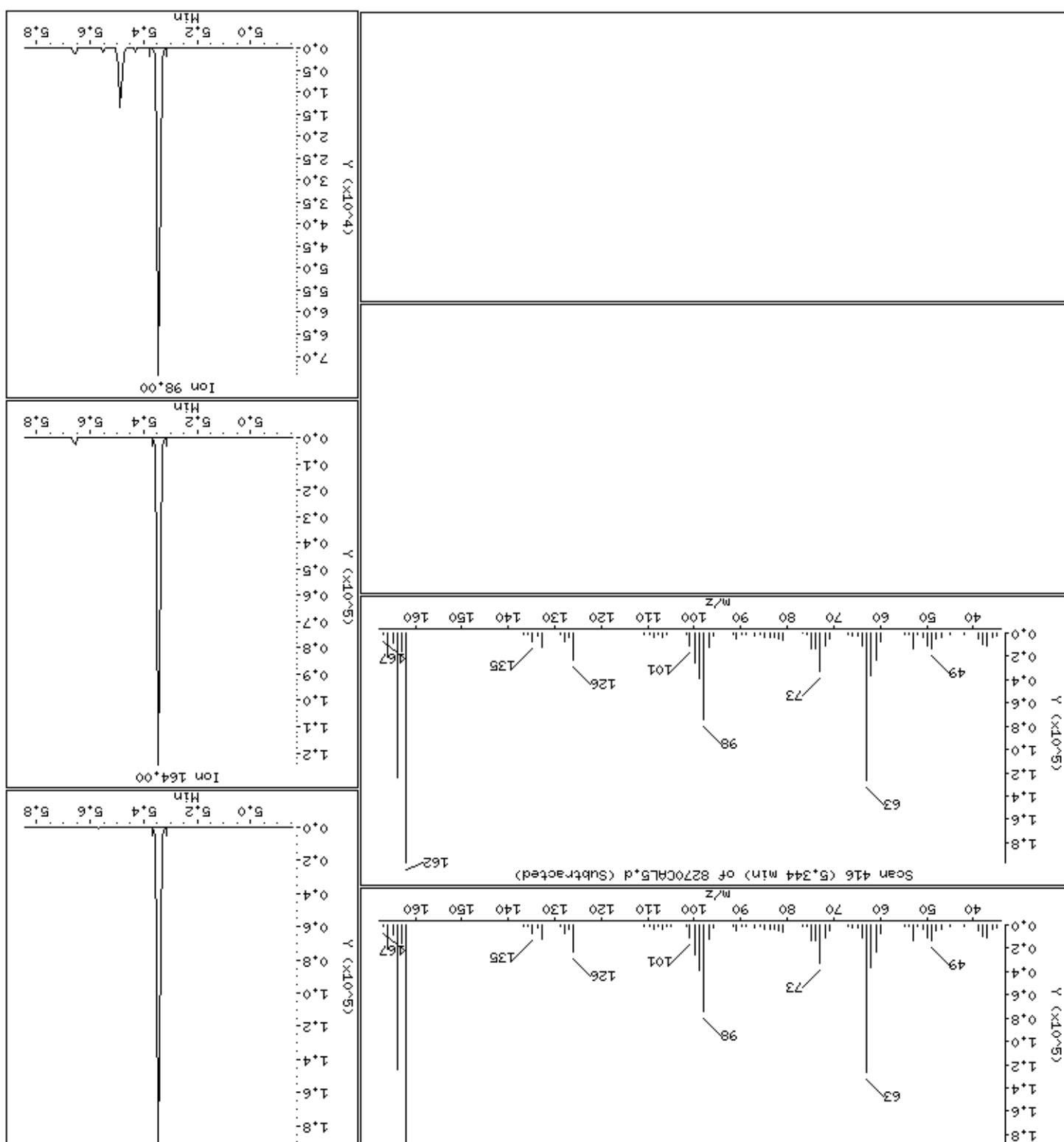
Ion 122.00

Scan 408 (5.276 min) of 8270CAL5.d (Subtracted)

Ion 77.00

Scan 408 (5.276 min) of 8270CAL5.d

Ion 51.00



Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

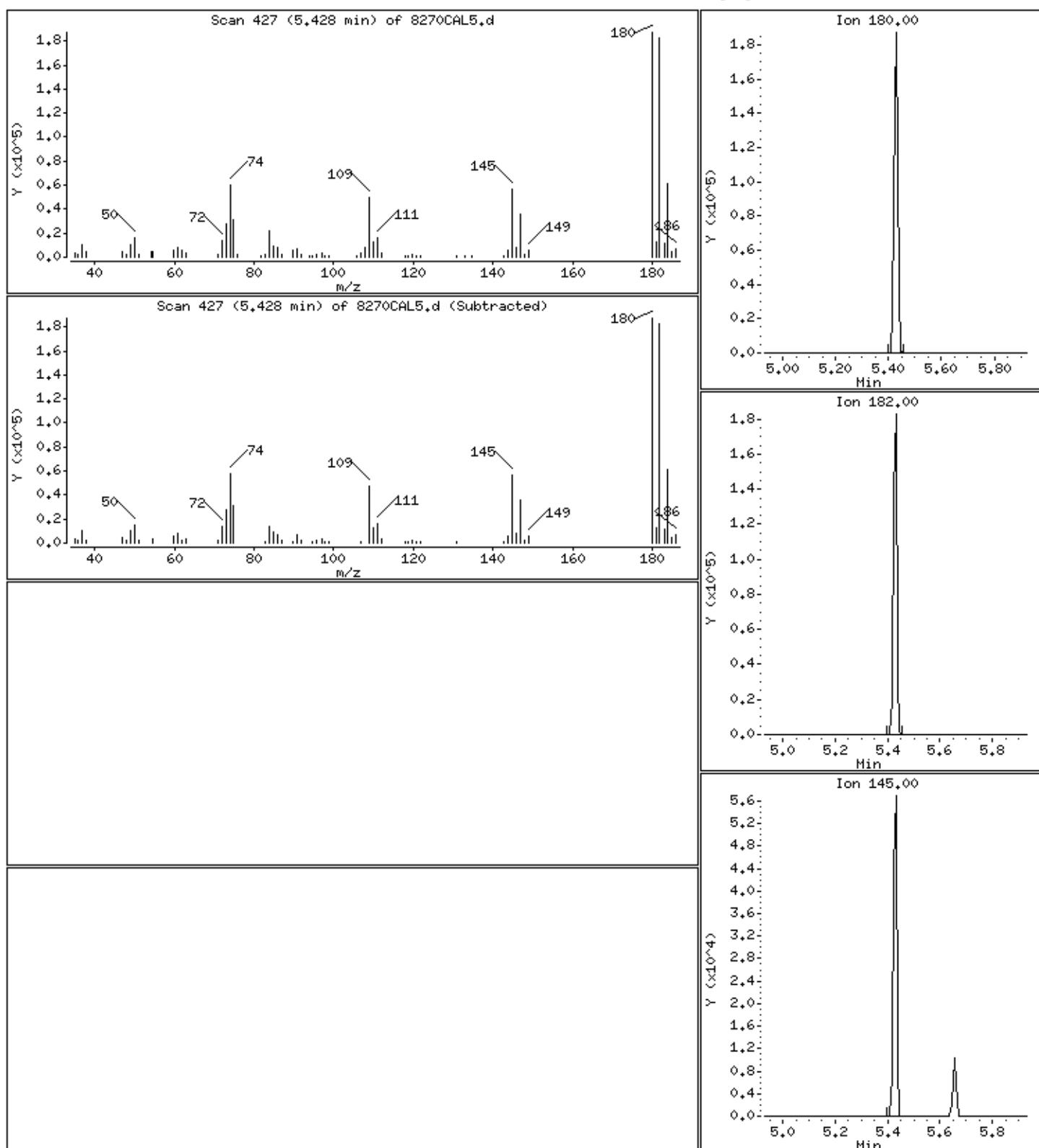
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

42 1,2,4-Trichlorobenzene

Concentration: 58.5 ug/kg



Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

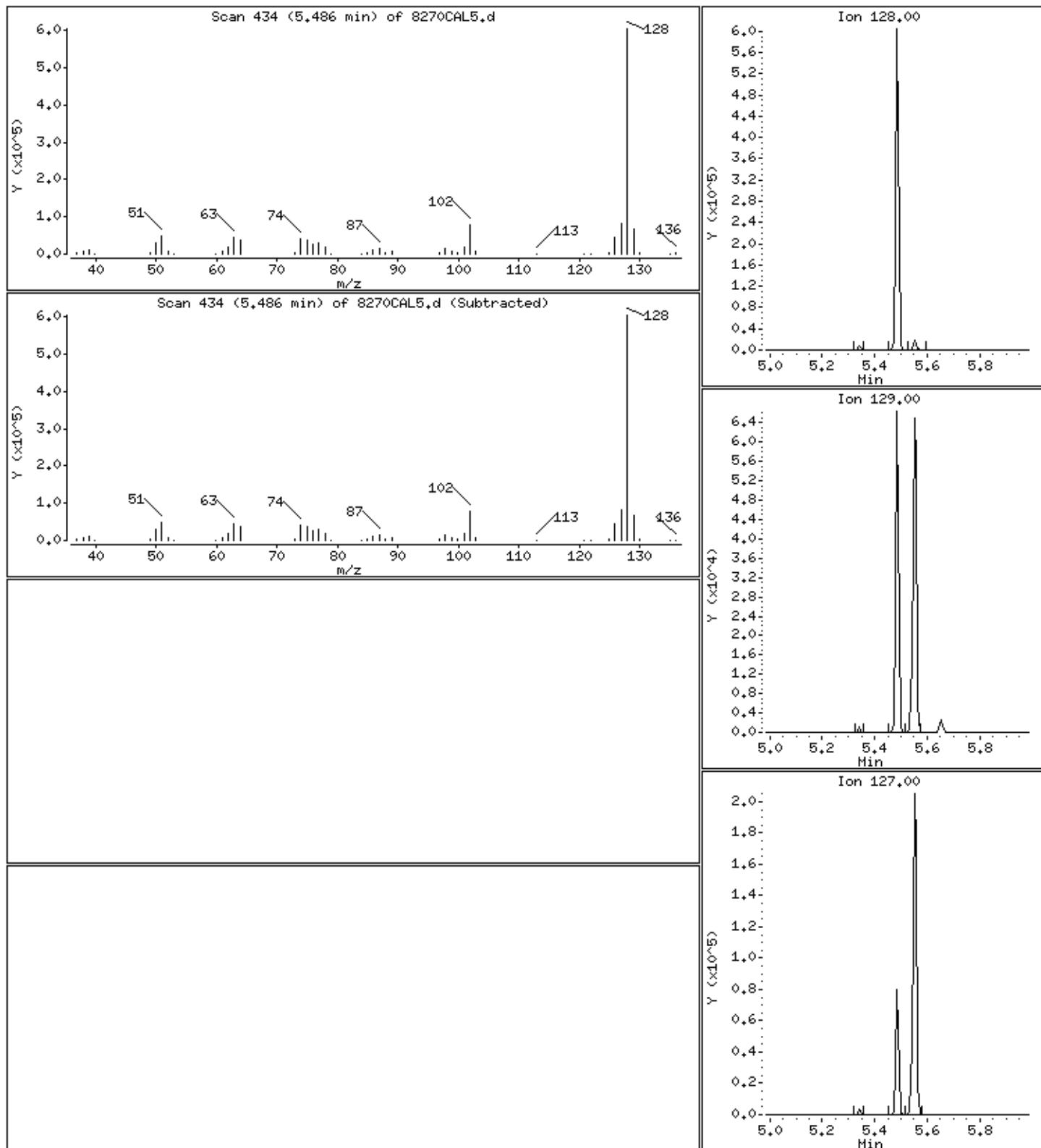
Operator: MJ

Column phase: HPMS-5

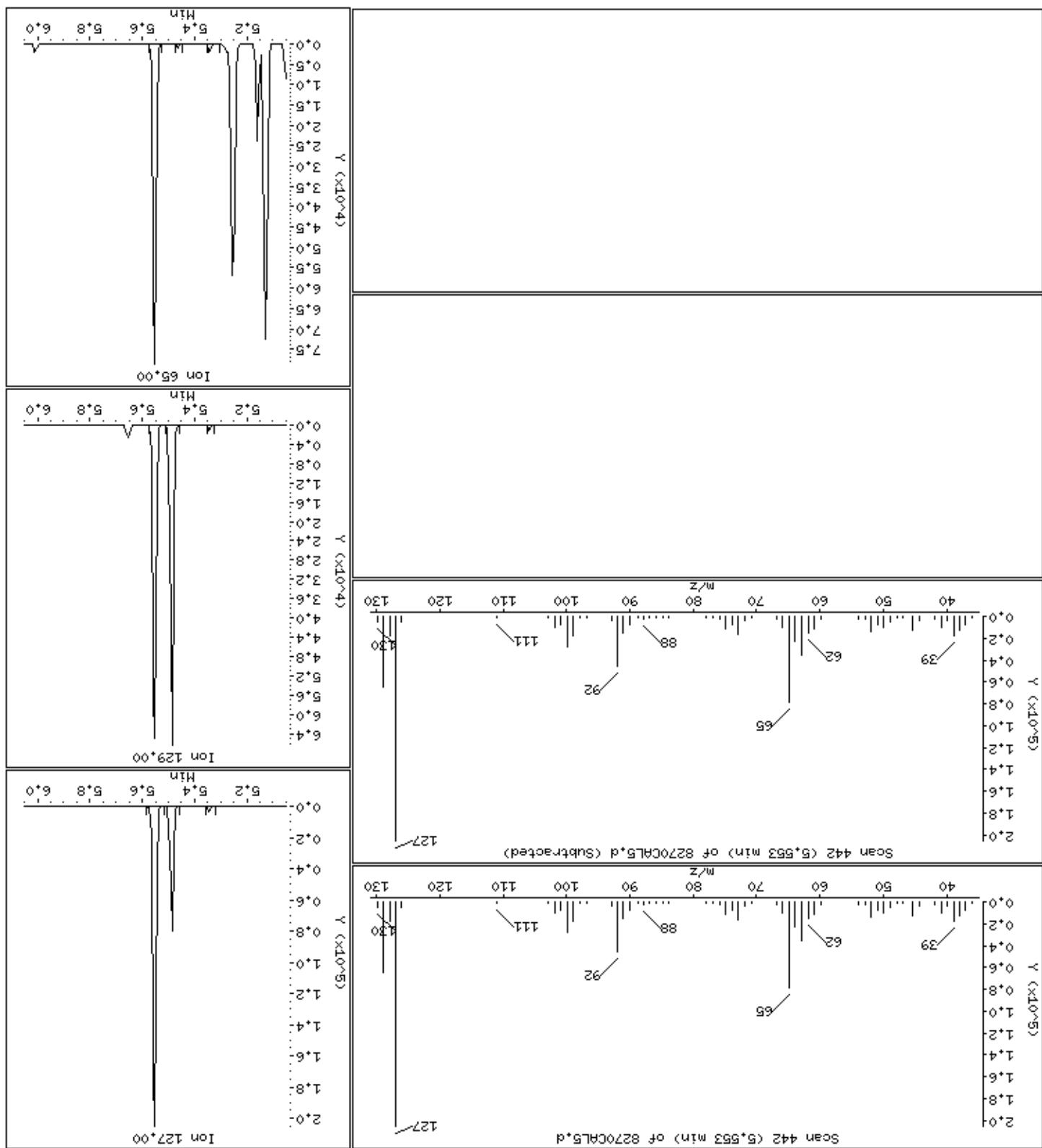
Column diameter: 0.25

44 Naphthalene

Concentration: 58.8 ug/kg



Date : 14-NOV-2012 23:22
Client ID: 8270CAL5
Instrument: smsd4*i
Sample Info: 47765
Operator: HJ
Column phase: HPM-S5
Column diameter: 0.25
Concentration: 59.4 ug/kg
45 4-Chloroaniline



The figure displays three vertically stacked mass spectra. Each plot has a y-axis labeled 'Relative Abundance (%)' ranging from 0.0 to 100.0 and an x-axis labeled 'm/z' ranging from 40 to 260.

- Top Plot:** Labeled 'Ion 226,65'. The y-axis is labeled 'Min'. The base peak is at m/z 226. Other significant peaks are labeled at m/z 83, 141, 153, 179, 218, 241, 260, and 266.
- Middle Plot:** Labeled 'Ion 222,65'. The y-axis is labeled 'Min'. The base peak is at m/z 222. Other significant peaks are labeled at m/z 47, 83, 118, 141, 153, 179, 218, 241, 260, and 266.
- Bottom Plot:** Labeled 'Ion 224,65'. The y-axis is labeled 'Scan 455 (5,655 min) of 8270CRL5,d'. The base peak is at m/z 224. Other significant peaks are labeled at m/z 47, 83, 118, 141, 153, 179, 218, 241, 260, and 266.

48 Hexachlorobutadiene
Concentration: 58.4 ug/kg
Column diameter: 0.25
Column phase: HPM-S-5
Operator: M3
Sample Info: 47765
Instrument: msd041
Client ID: 8270CRL5
Date: 14-NOV-2012 23:22

Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

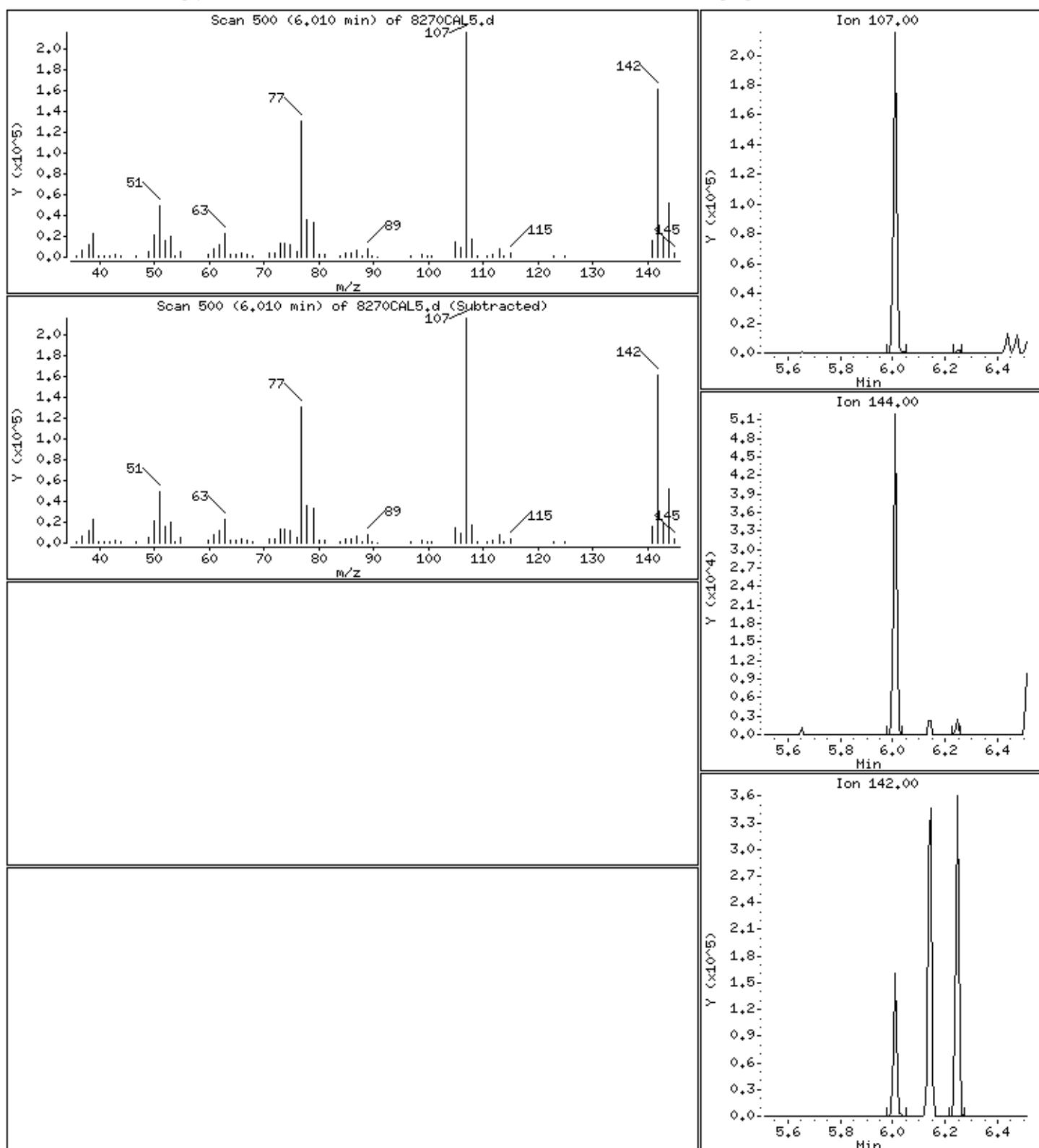
Operator: MJ

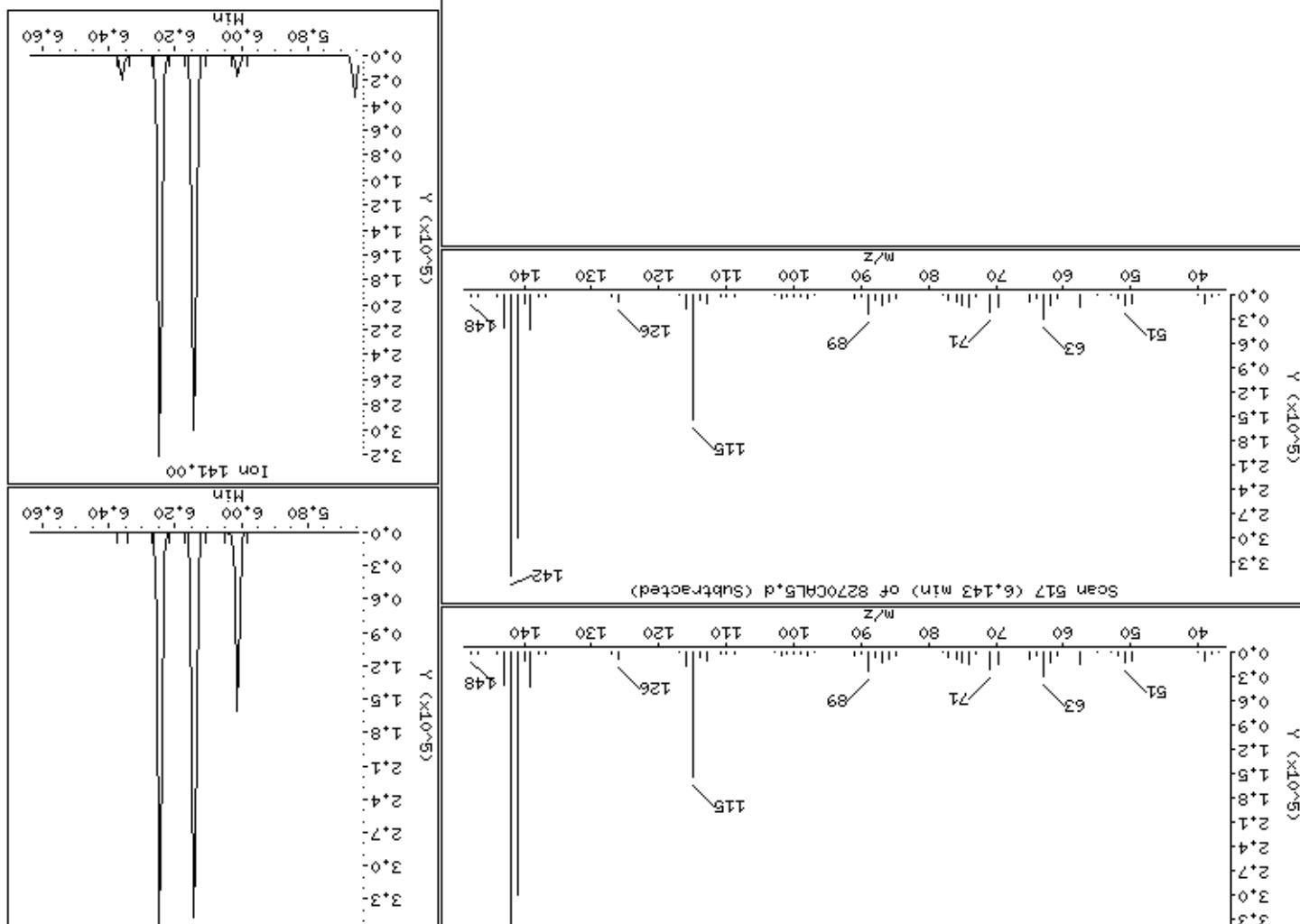
Column phase: HPMS-5

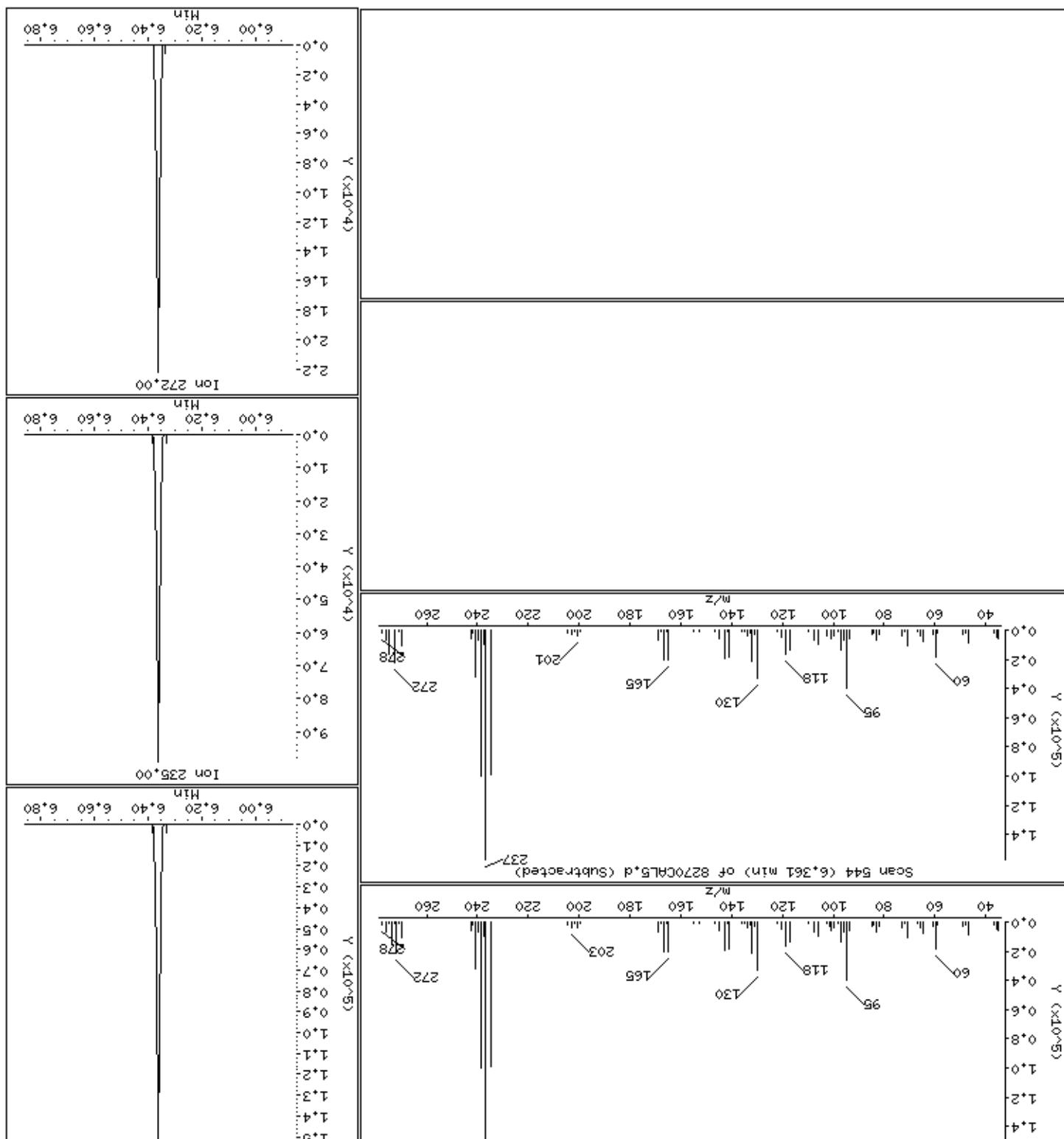
Column diameter: 0.25

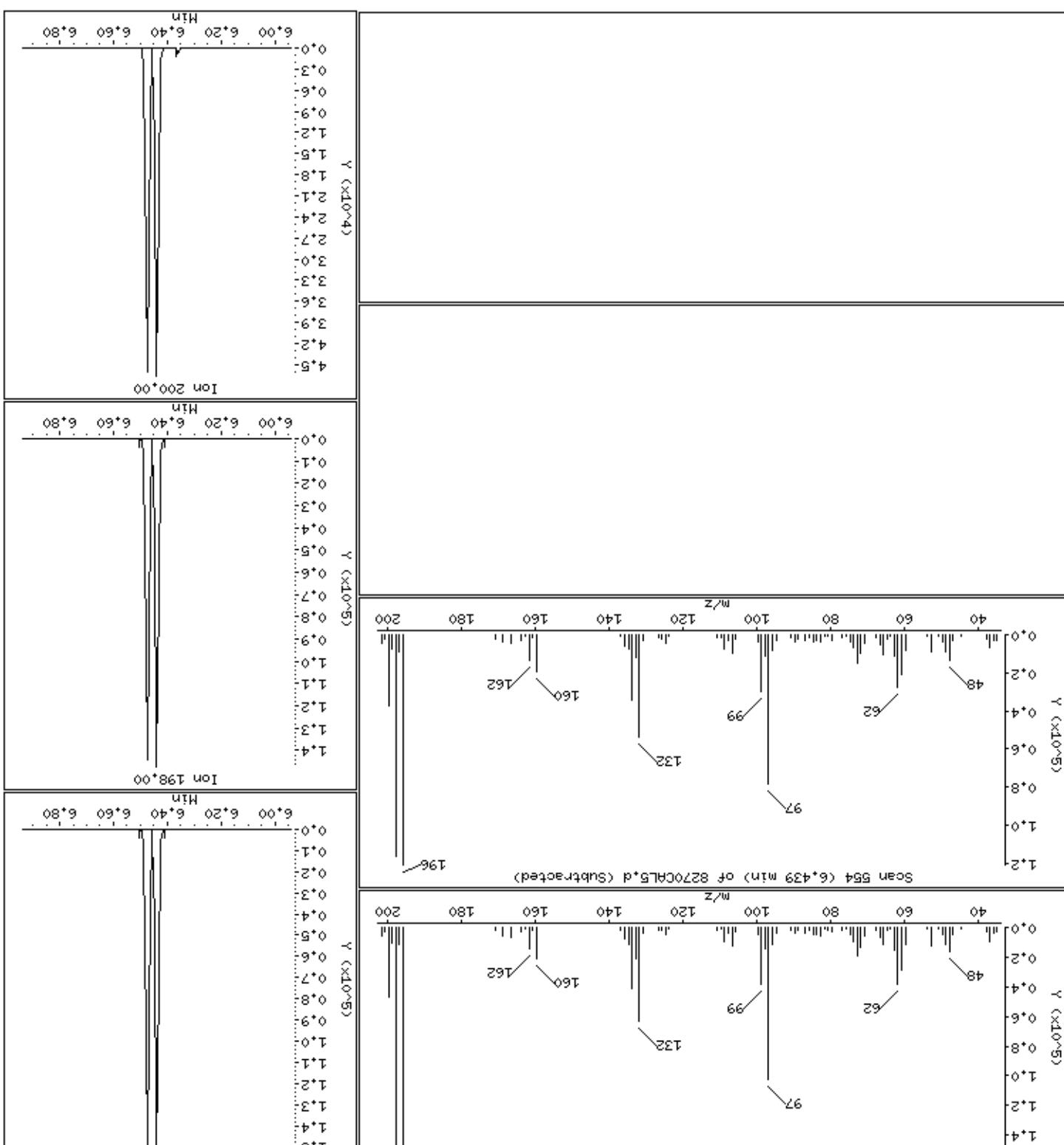
51 4-Chloro-3-methylphenol

Concentration: 59.0 ug/kg









Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

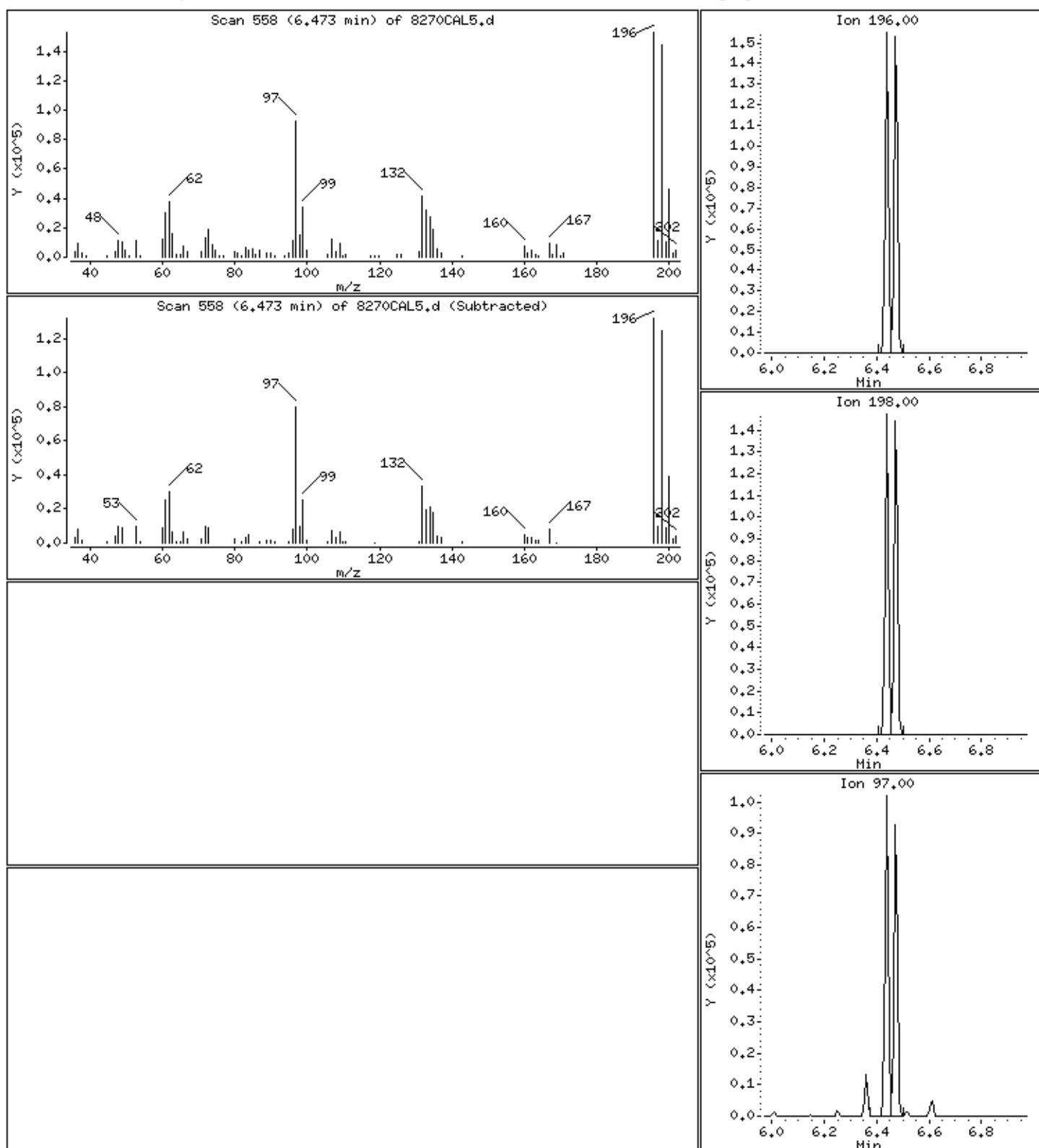
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

58 2,4,5-Trichlorophenol

Concentration: 58.8 ug/kg



Date : 14-NOV-2012 23:22
Client ID: 8270CBL5
Instrument: msd04*i
Sample Info: 47765
Operator: HJ
Column Phase: HPS-5
Column diameter: 0.25
Concentration: 59.3 ug/Kg
62 Z-Chloronaphthalene

Data File: \Sverdict\DD\chem\smso41\1\SA11114SS01\B8270CRL5.d

Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

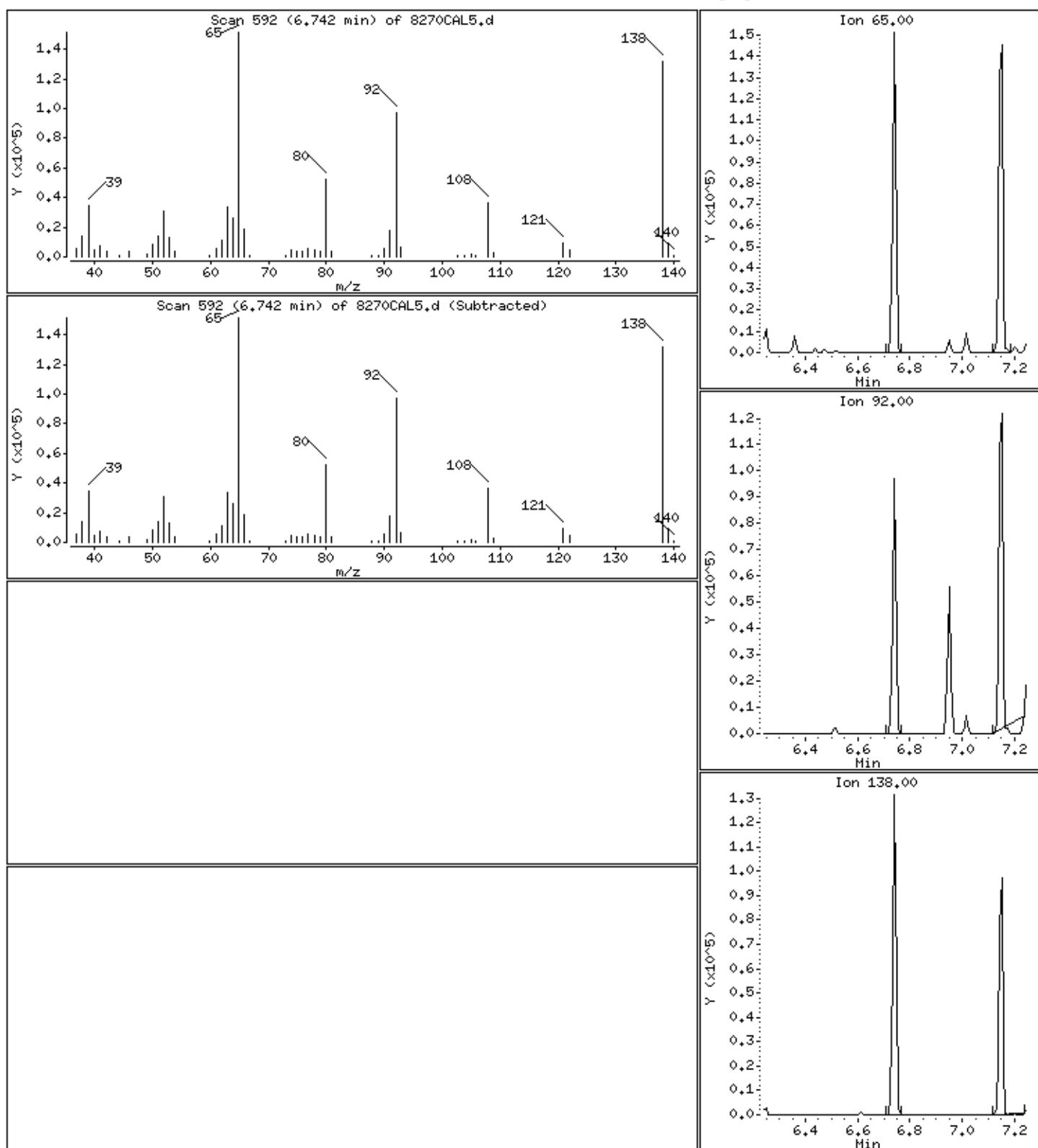
Operator: MJ

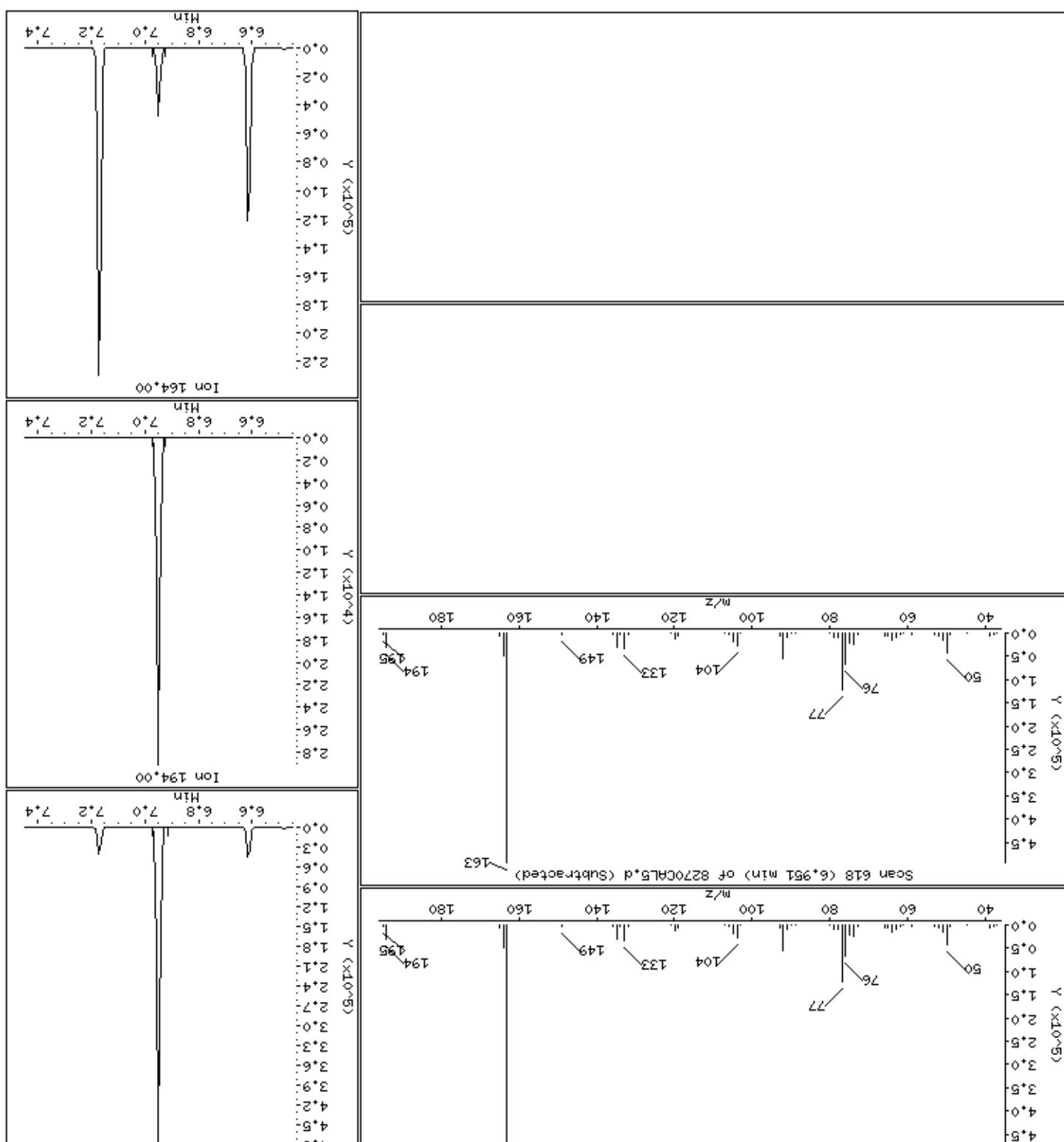
Column phase: HPMS-5

Column diameter: 0.25

63 2-Nitroaniline

Concentration: 61.6 ug/kg





Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

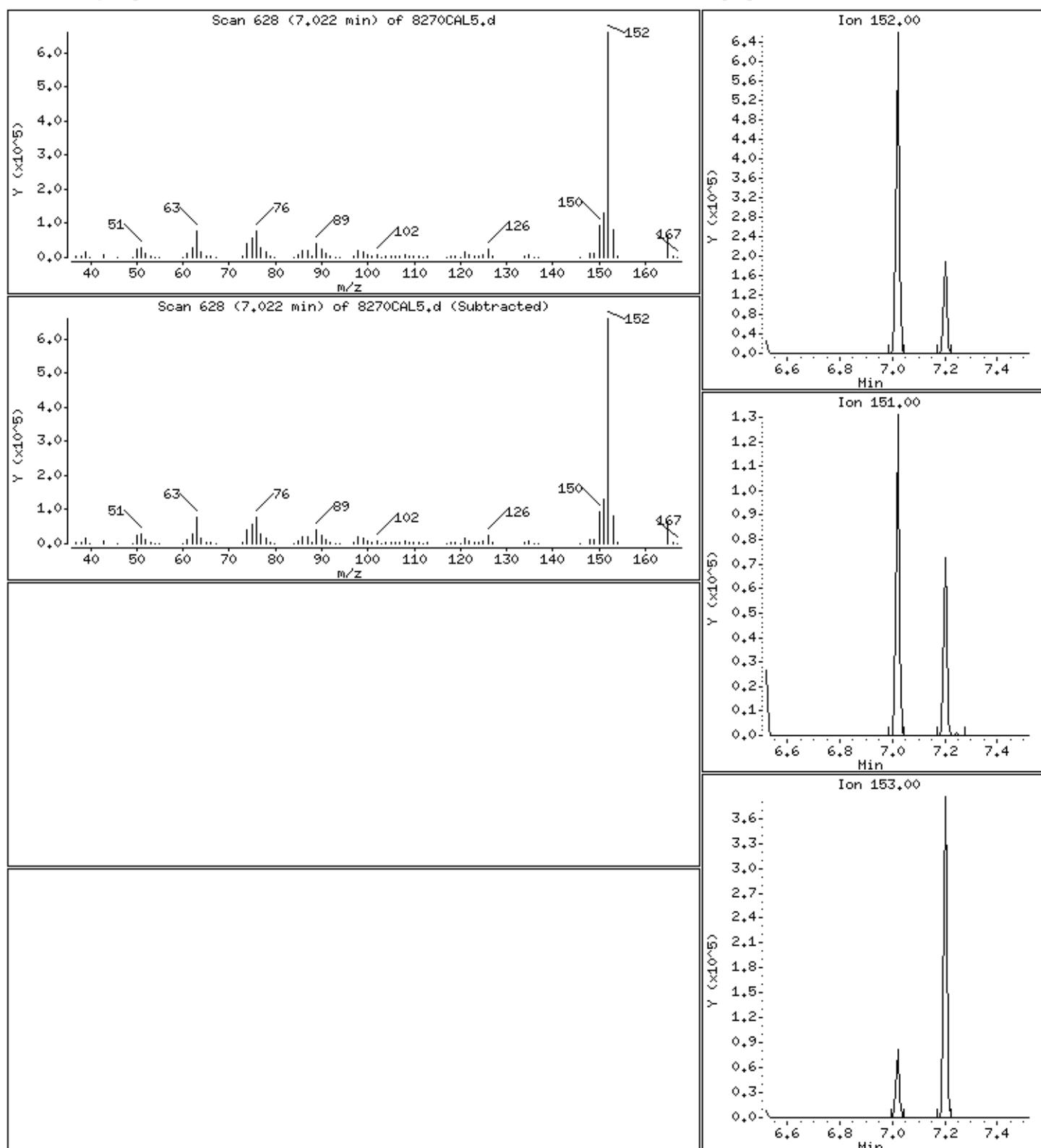
Operator: MJ

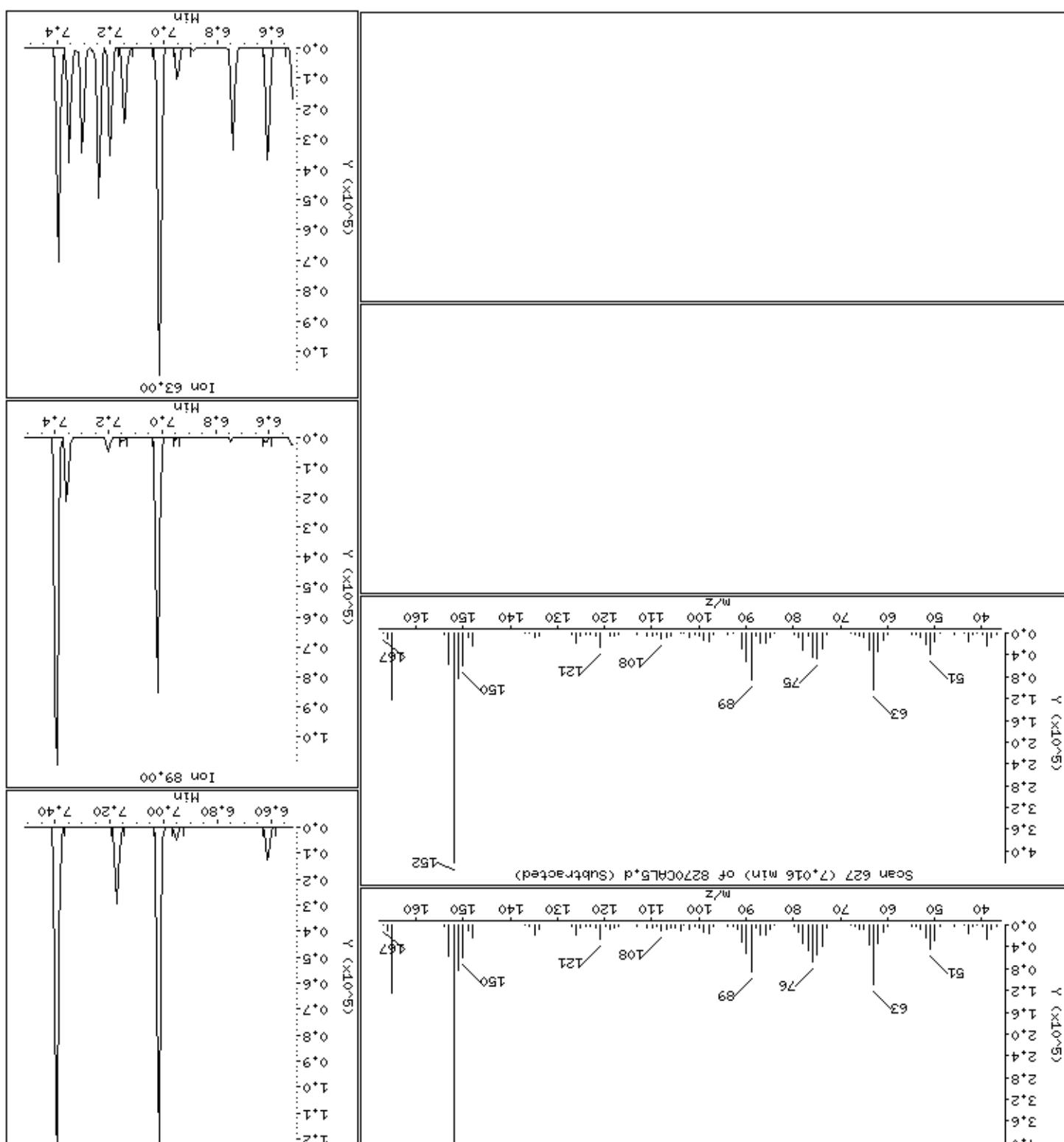
Column phase: HPMS-5

Column diameter: 0.25

68 Acenaphthylene

Concentration: 59.4 ug/kg





Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

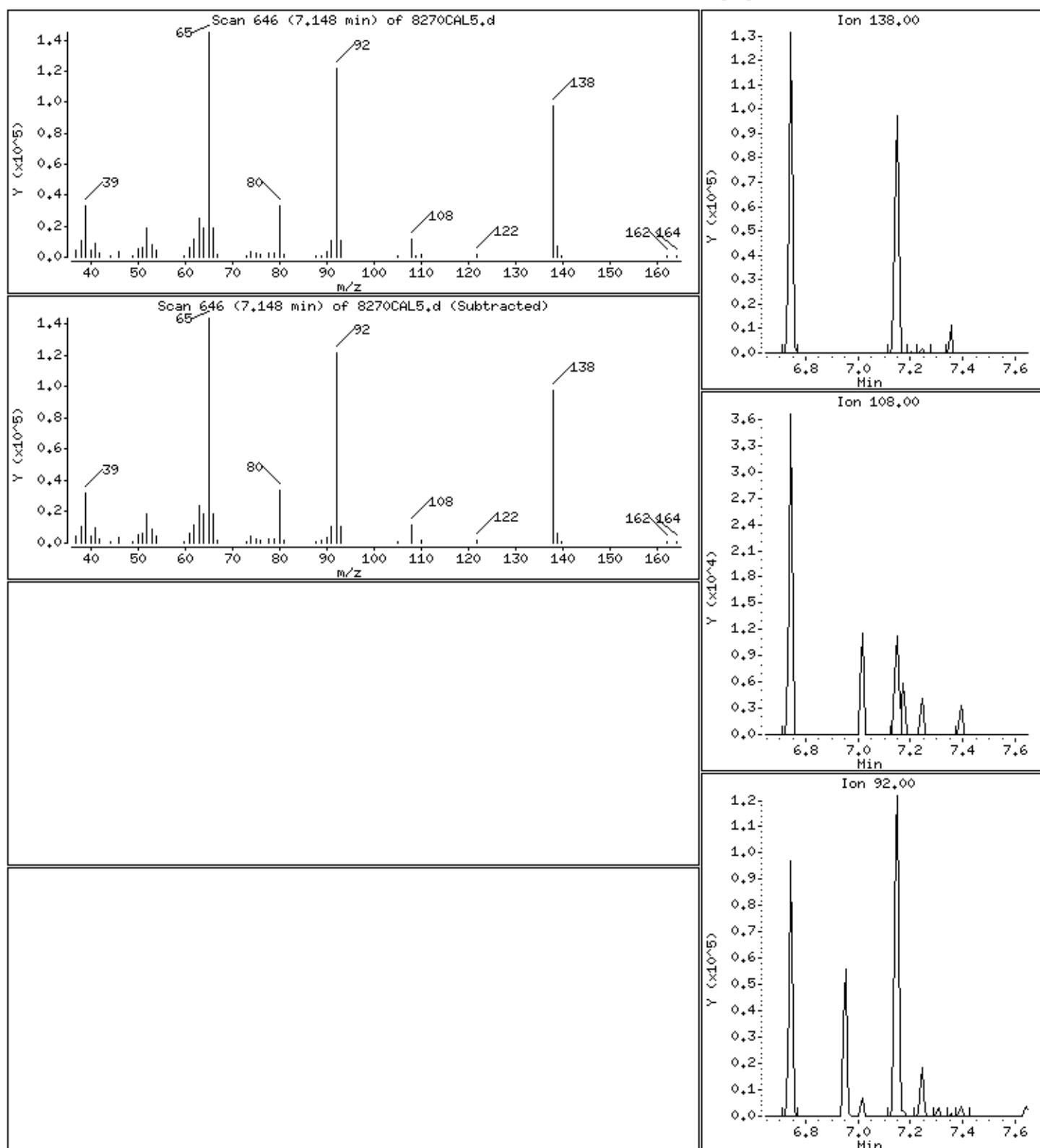
Operator: MJ

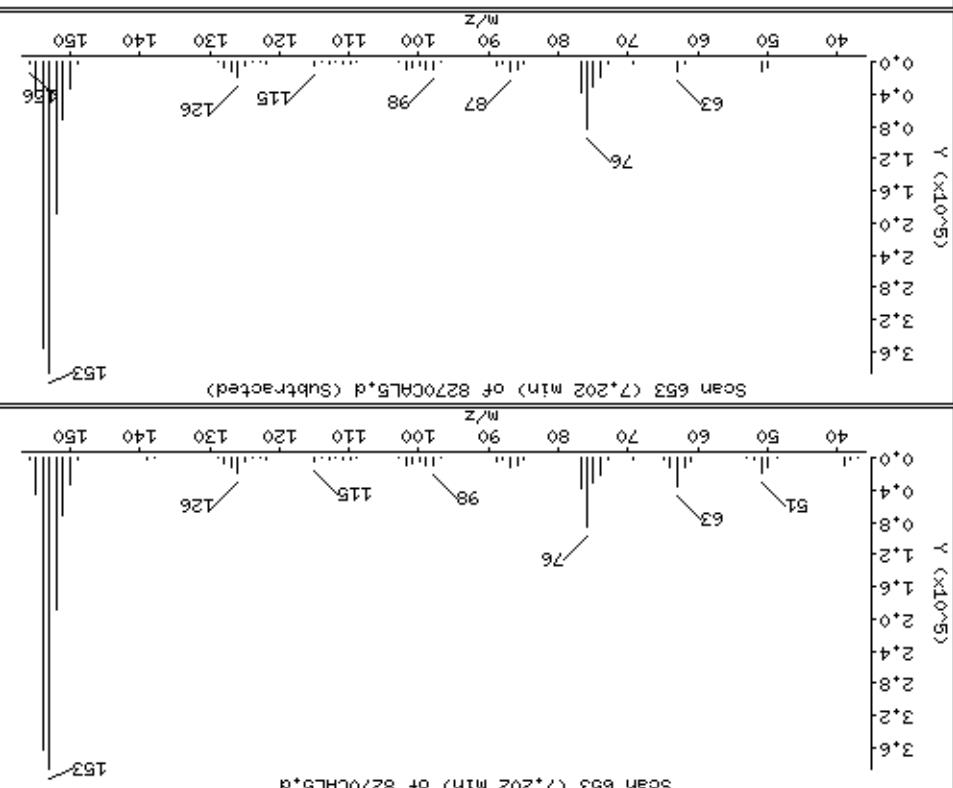
Column phase: HPMS-5

Column diameter: 0.25

69 3-Nitroaniline

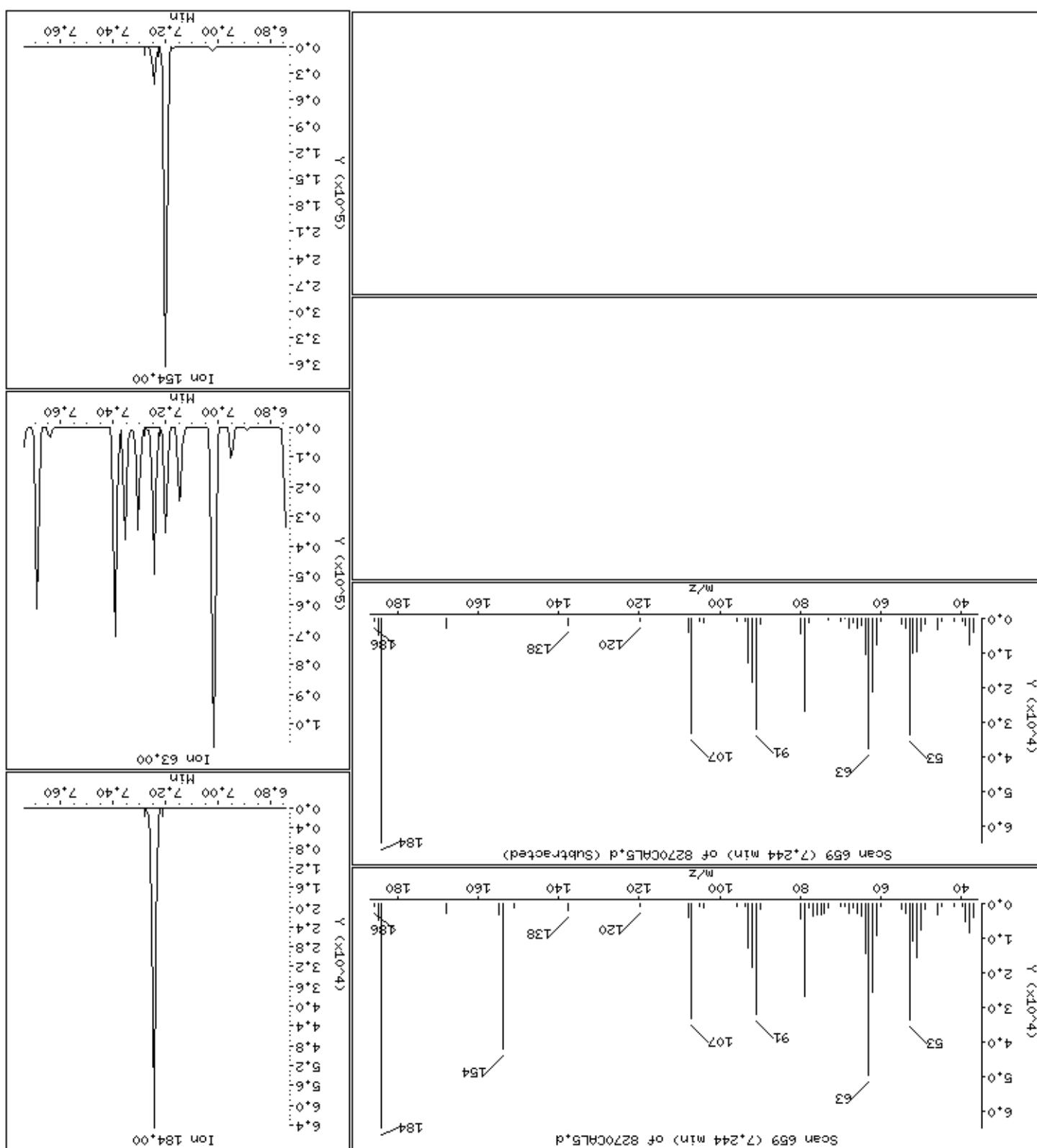
Concentration: 60.9 ug/kg

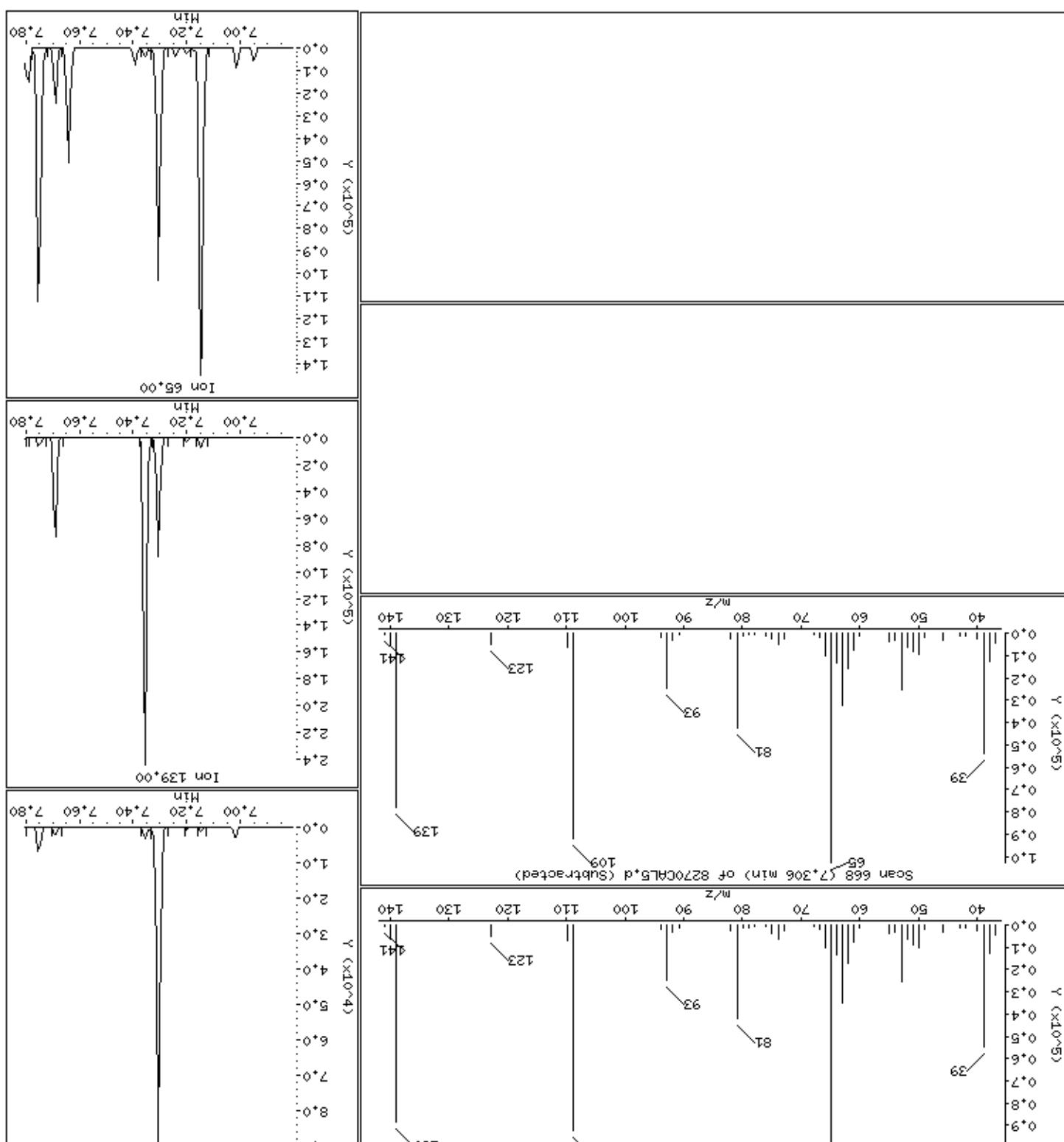




Date : 14-NOV-2012 23:22
Client ID: 8270C1A5
Instrument: msd04.i
Sample Info: 47765
Operator: HJ
Column phase: HPN-S-5
Column diameter: 0.25
Concentration: 59.1 ug/Kg
71 Acenaphthene

Date : 14-NOV-2012 23:422	Client ID: 8270CBL5	Instrument: smsd04.i	Sample Info: 47765	Column phase: HPM-S-5	Operator: H3	Column diameter: 0.25	Concentration: 63.9 ug/Kg	Scan 659 (7:244 min) of 8270CBL5.d	Ion 184,00
72 2,4-Dinitrophenol									





Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

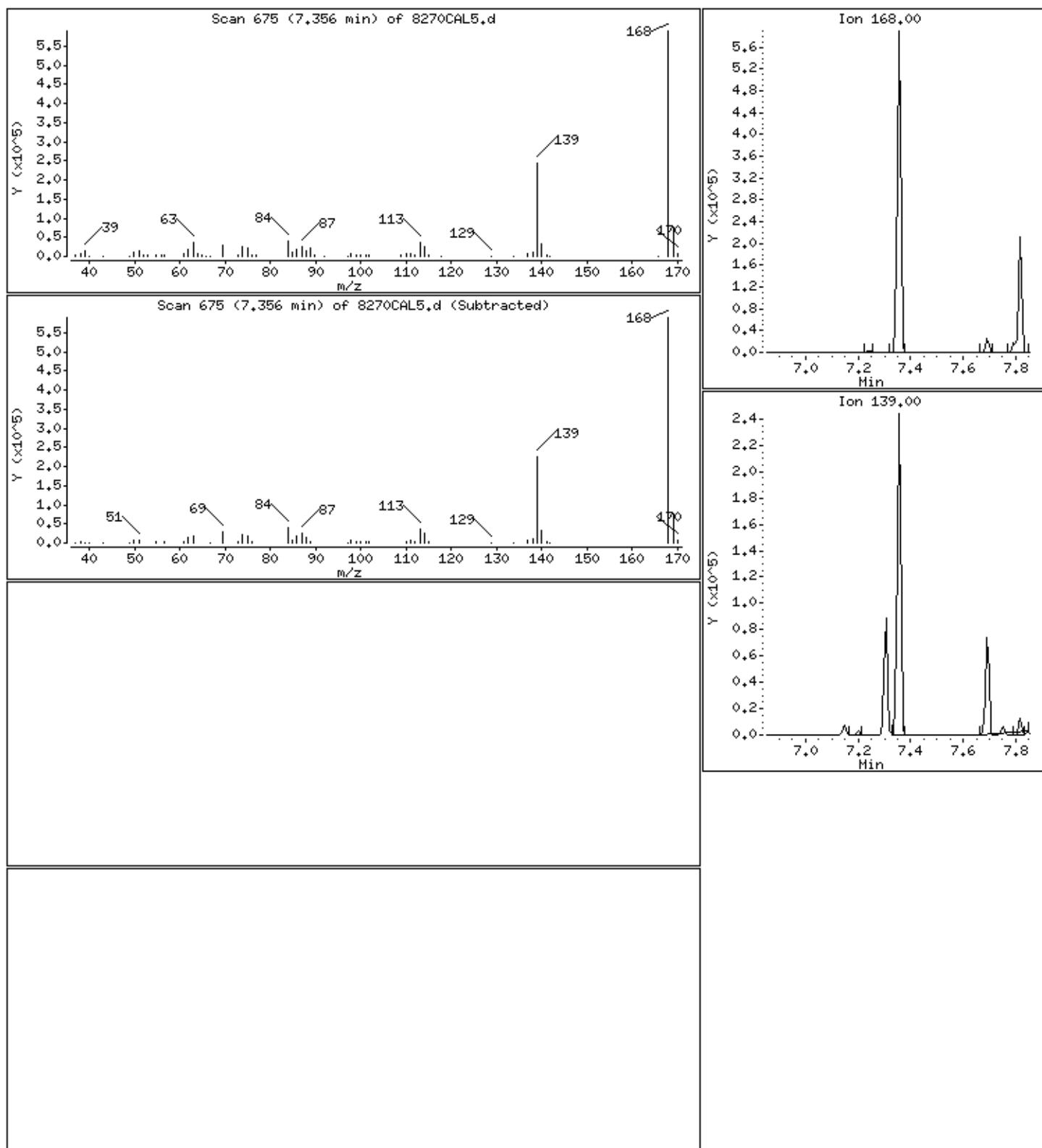
Operator: MJ

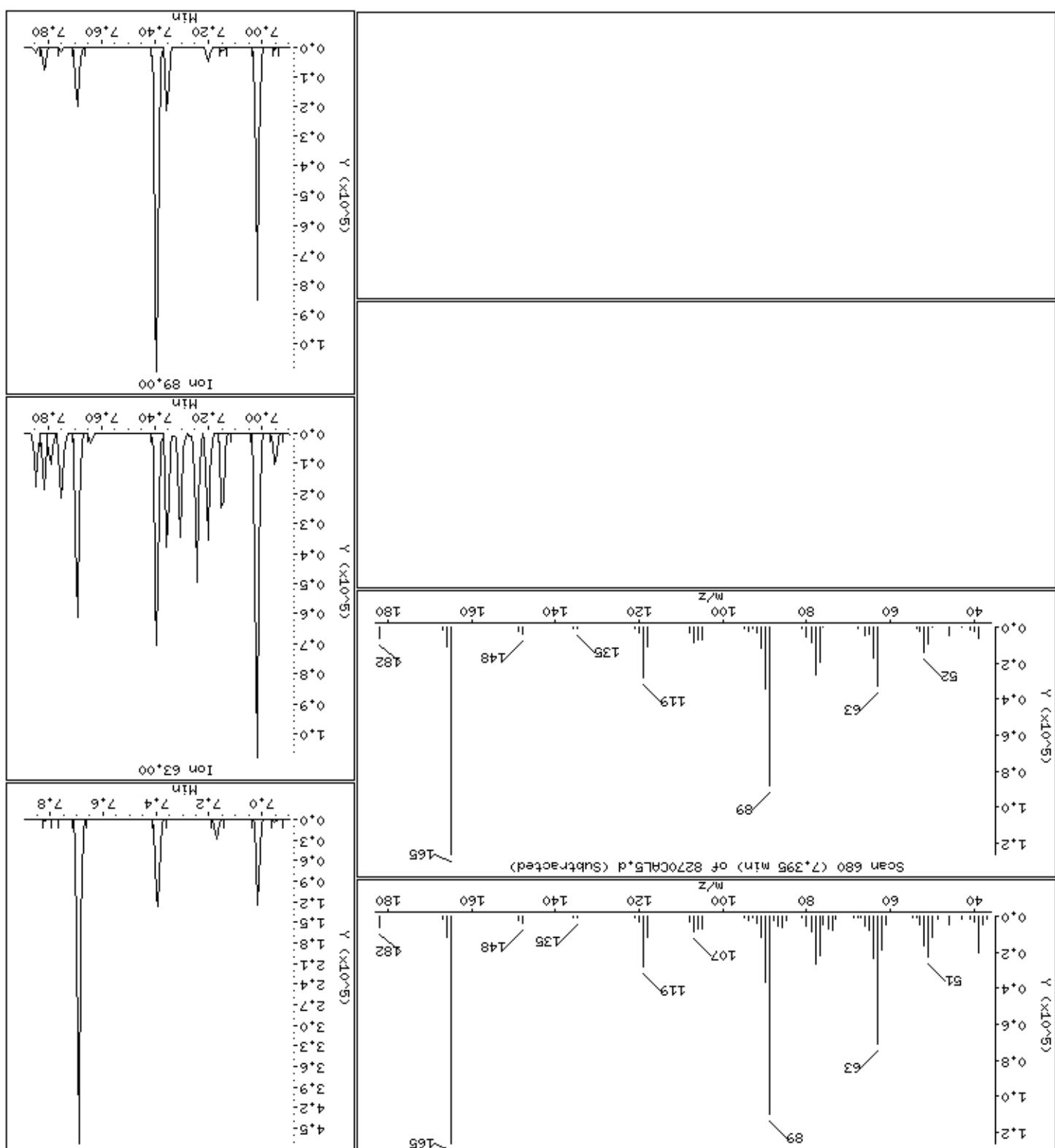
Column phase: HPMS-5

Column diameter: 0.25

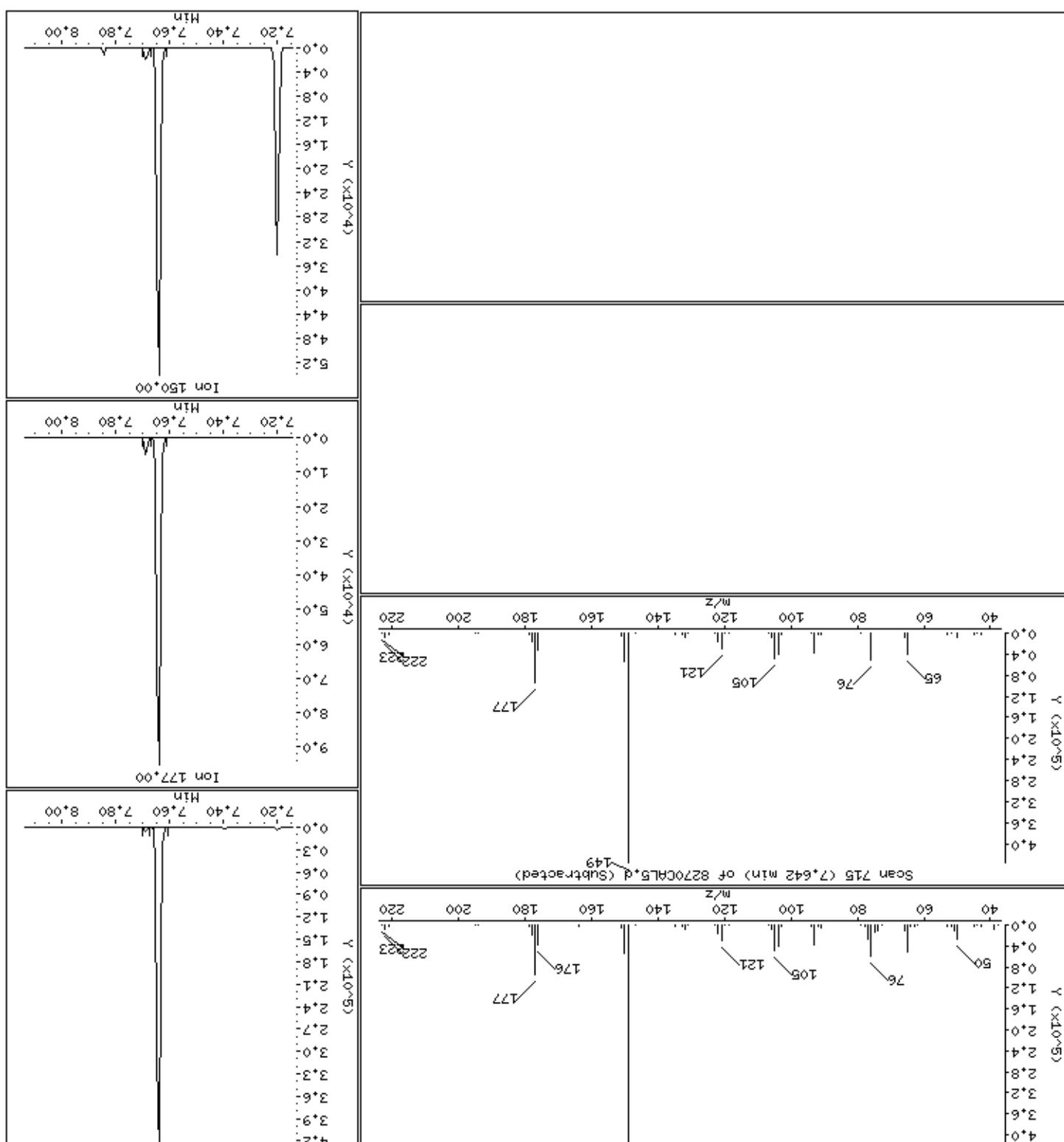
75 Dibenzofuran

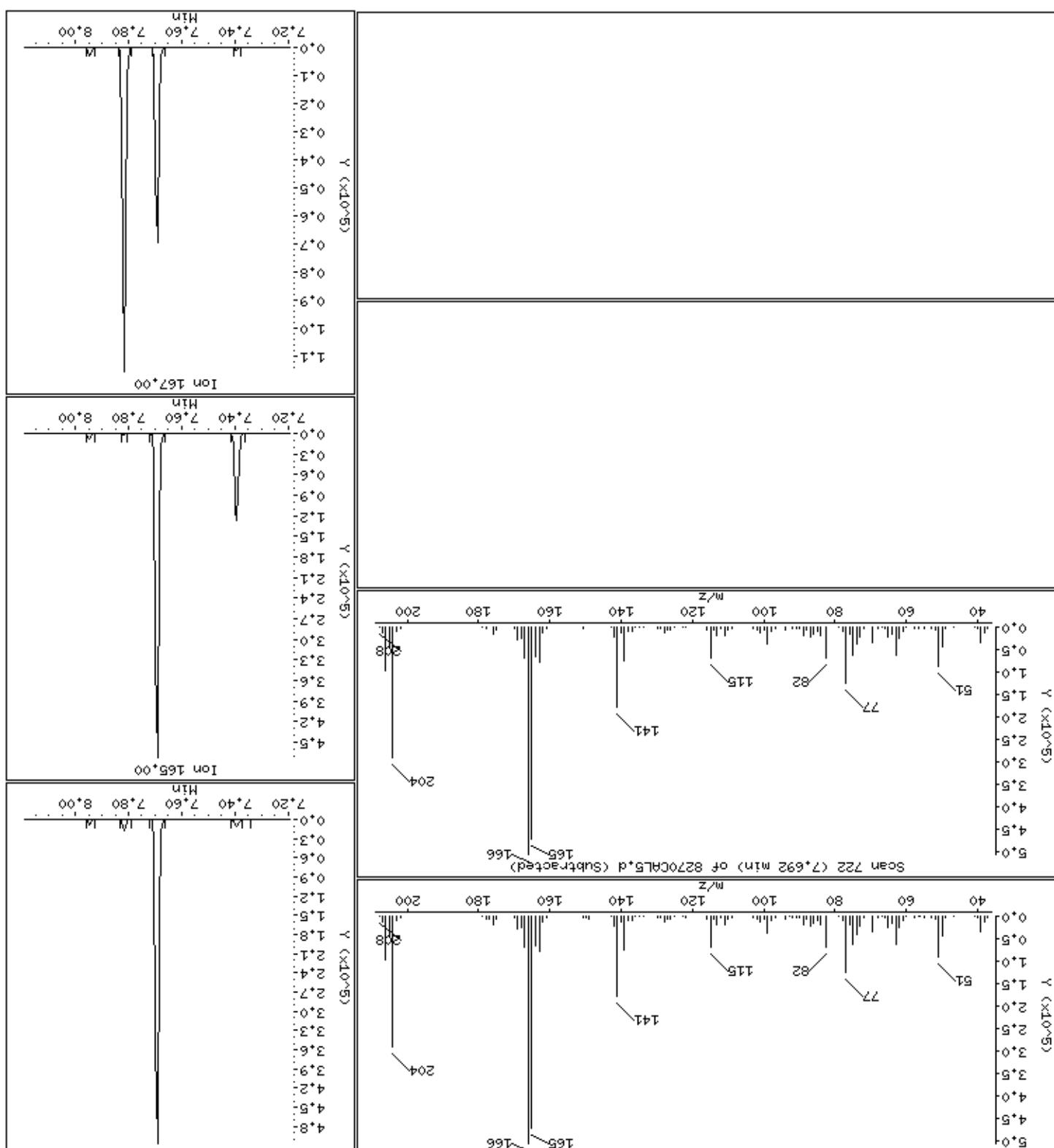
Concentration: 59.8 ug/kg





Page 2





Min

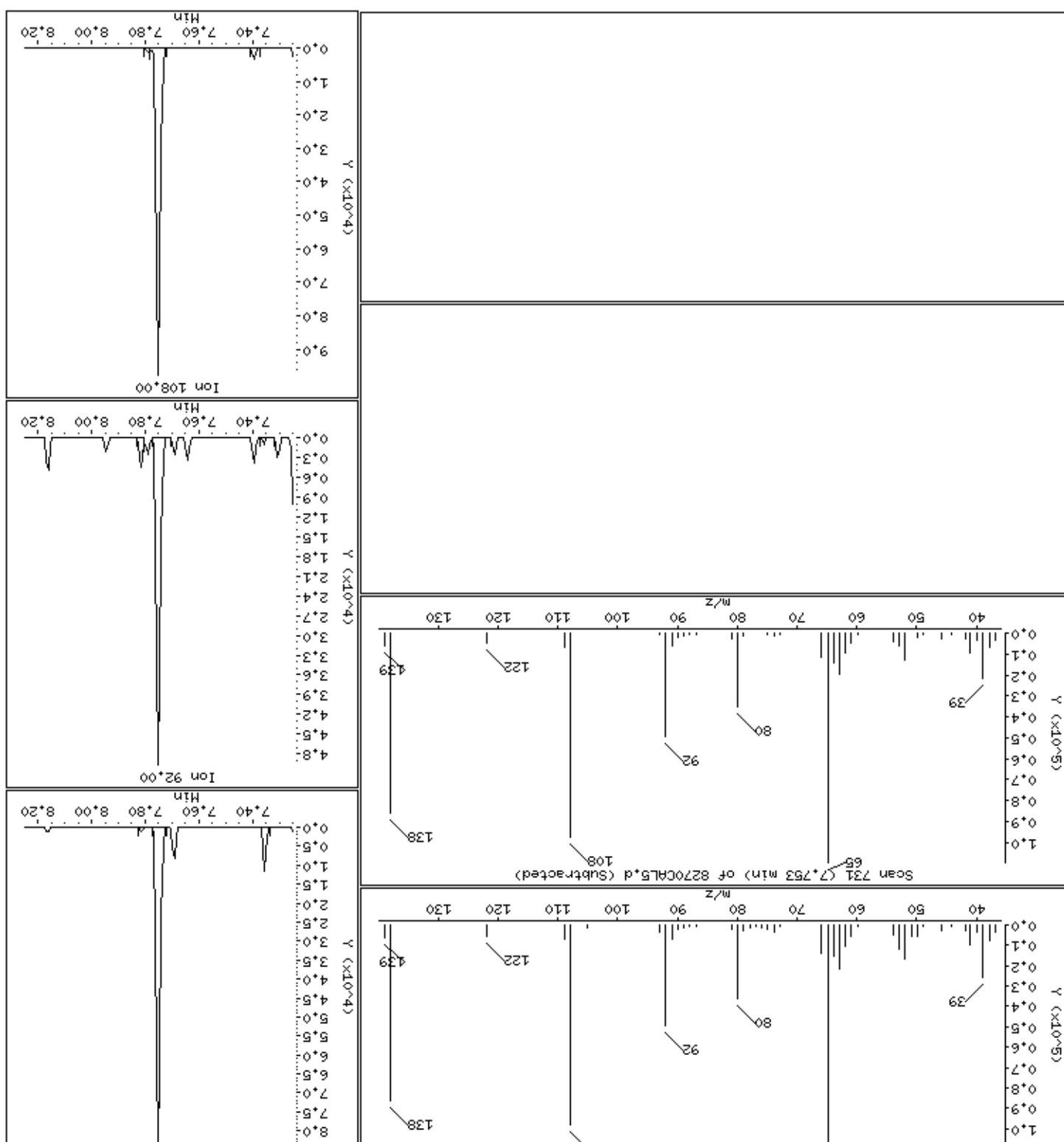
m/z

7.20 7.40 7.60 7.80 8.00

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 4.0 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9 5.0

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 4.0 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9 5.0

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 4.0 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9 5.0



84 4-Nitroaniline

Date : 14-NOV-2012 23:22
Client ID: 8270CAL5
Instrument: msd4.i
Sample Info: 47765

Column phase: HPGS-5

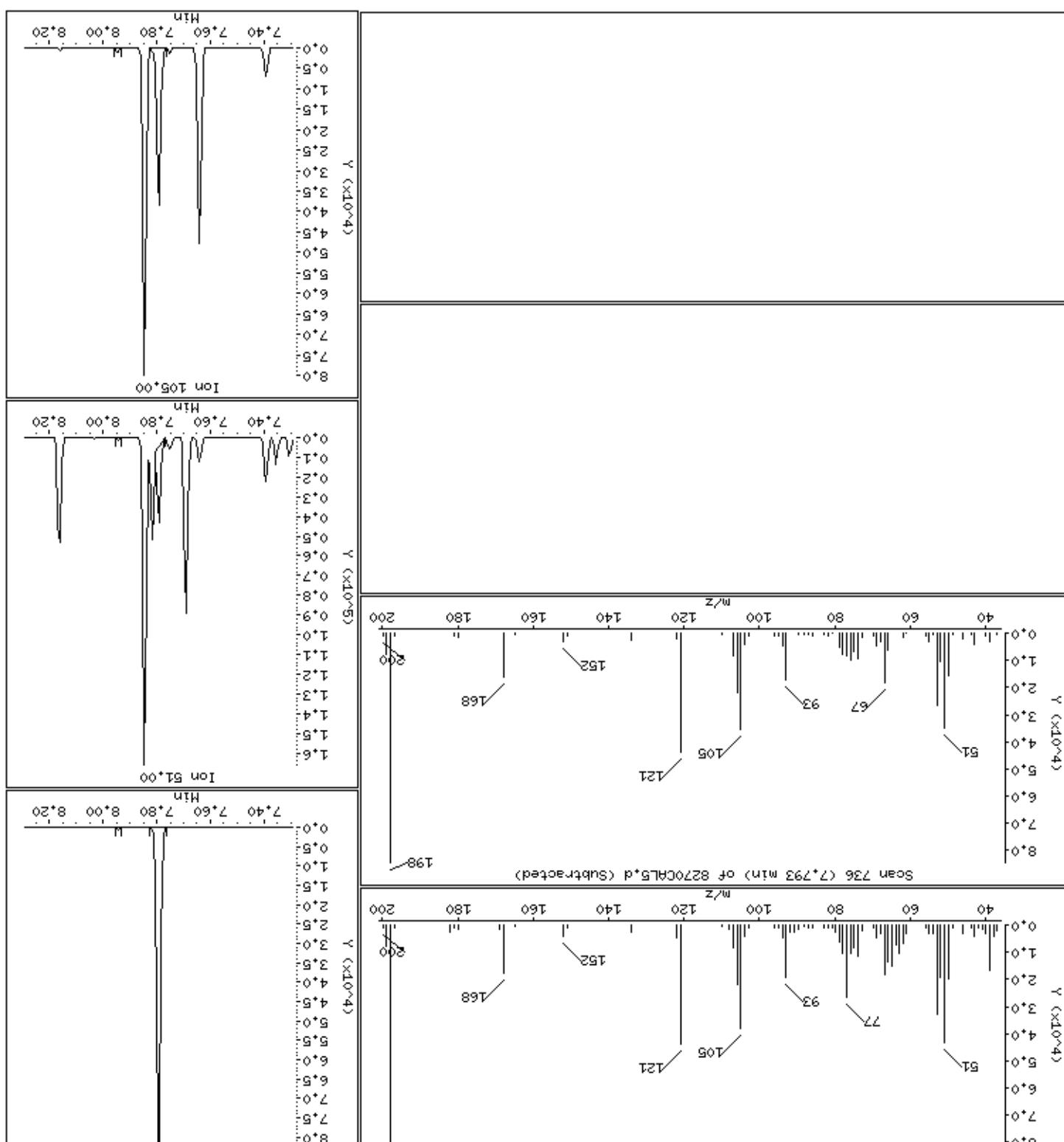
Operator: HS

Column diameter: 0.25

Operatordiameter: 0.25

Instrument: msd4.i

Client ID: 8270CAL5



Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

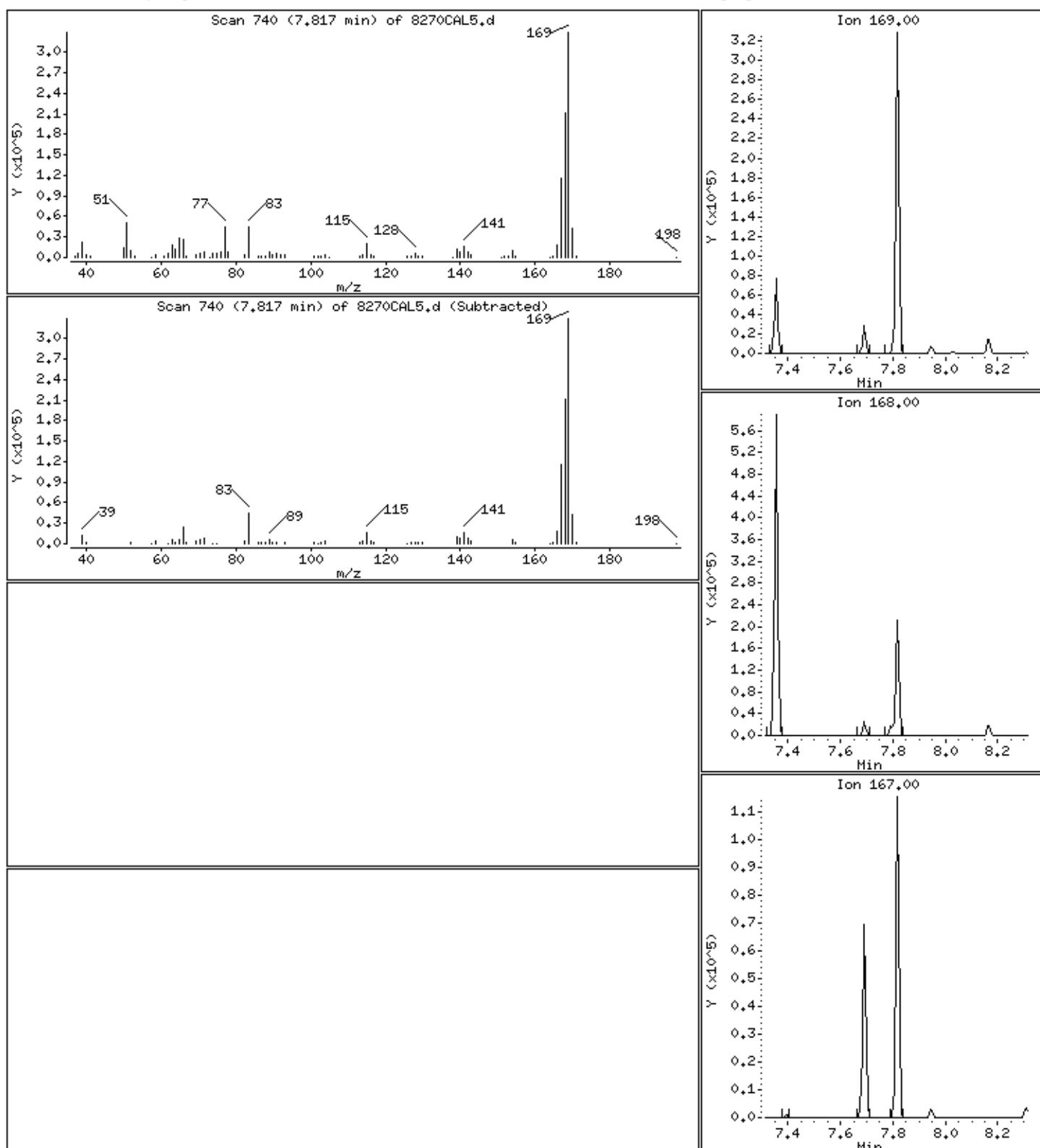
Operator: MJ

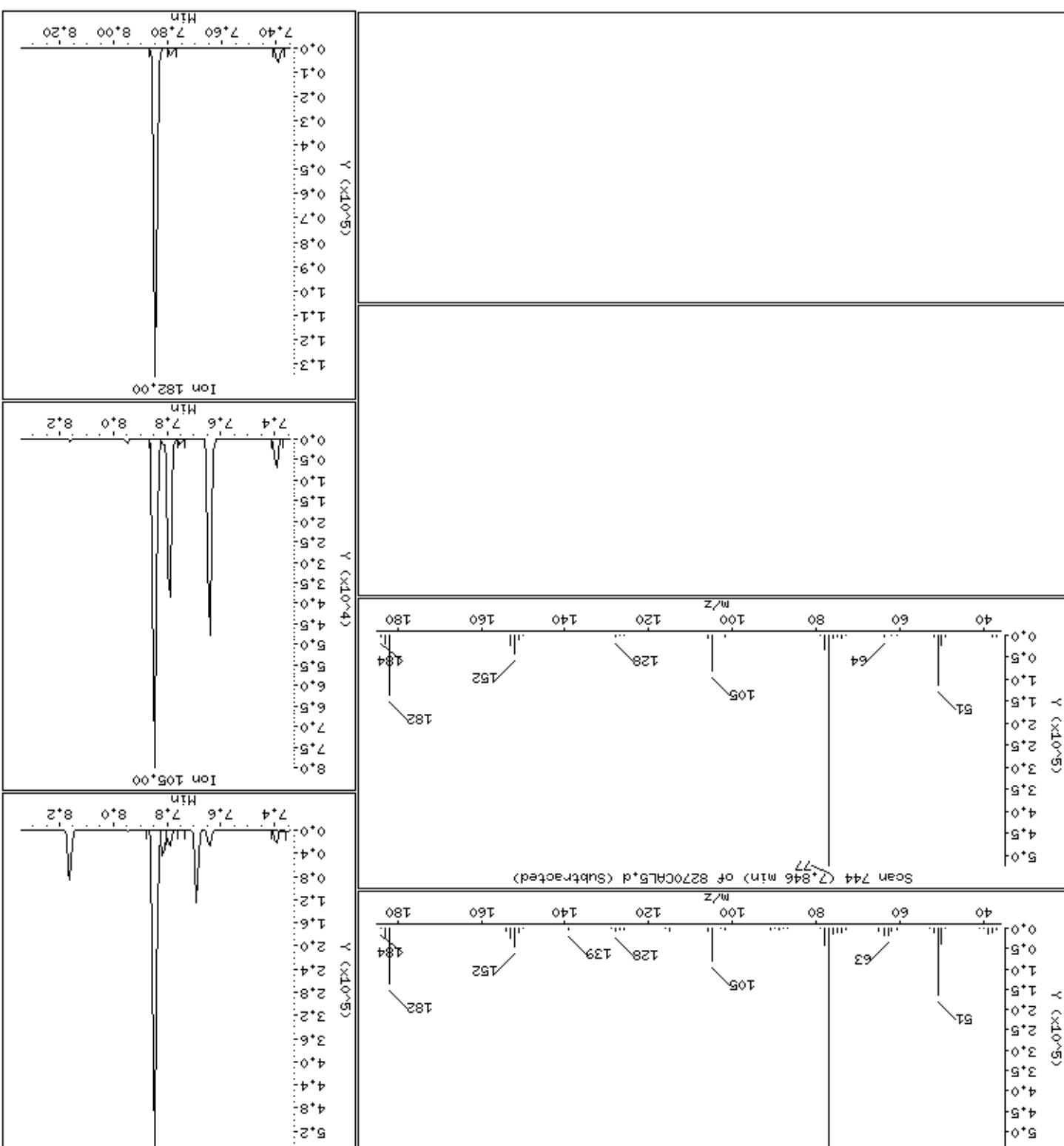
Column phase: HPMS-5

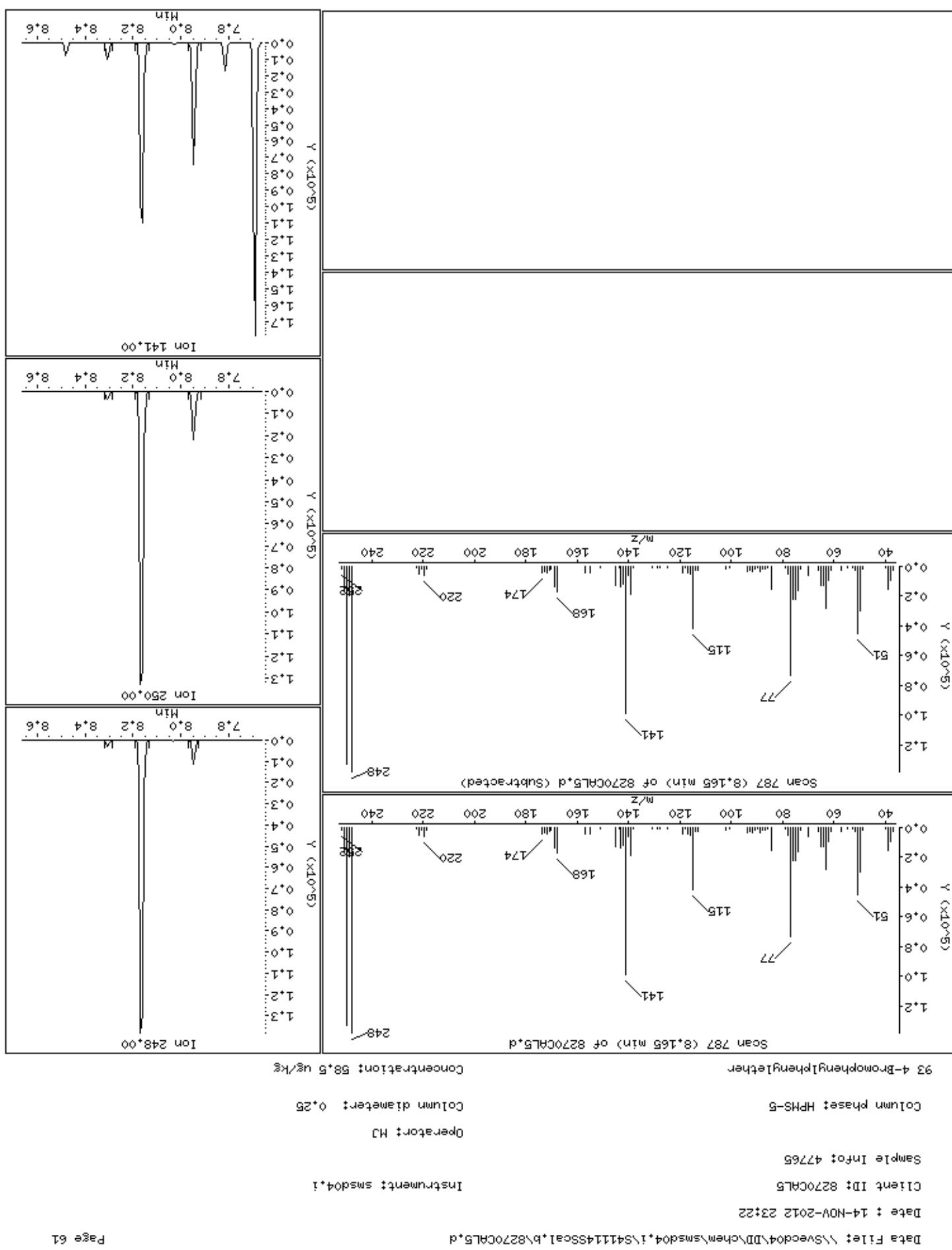
Column diameter: 0.25

86 N-Nitrosodiphenylamine

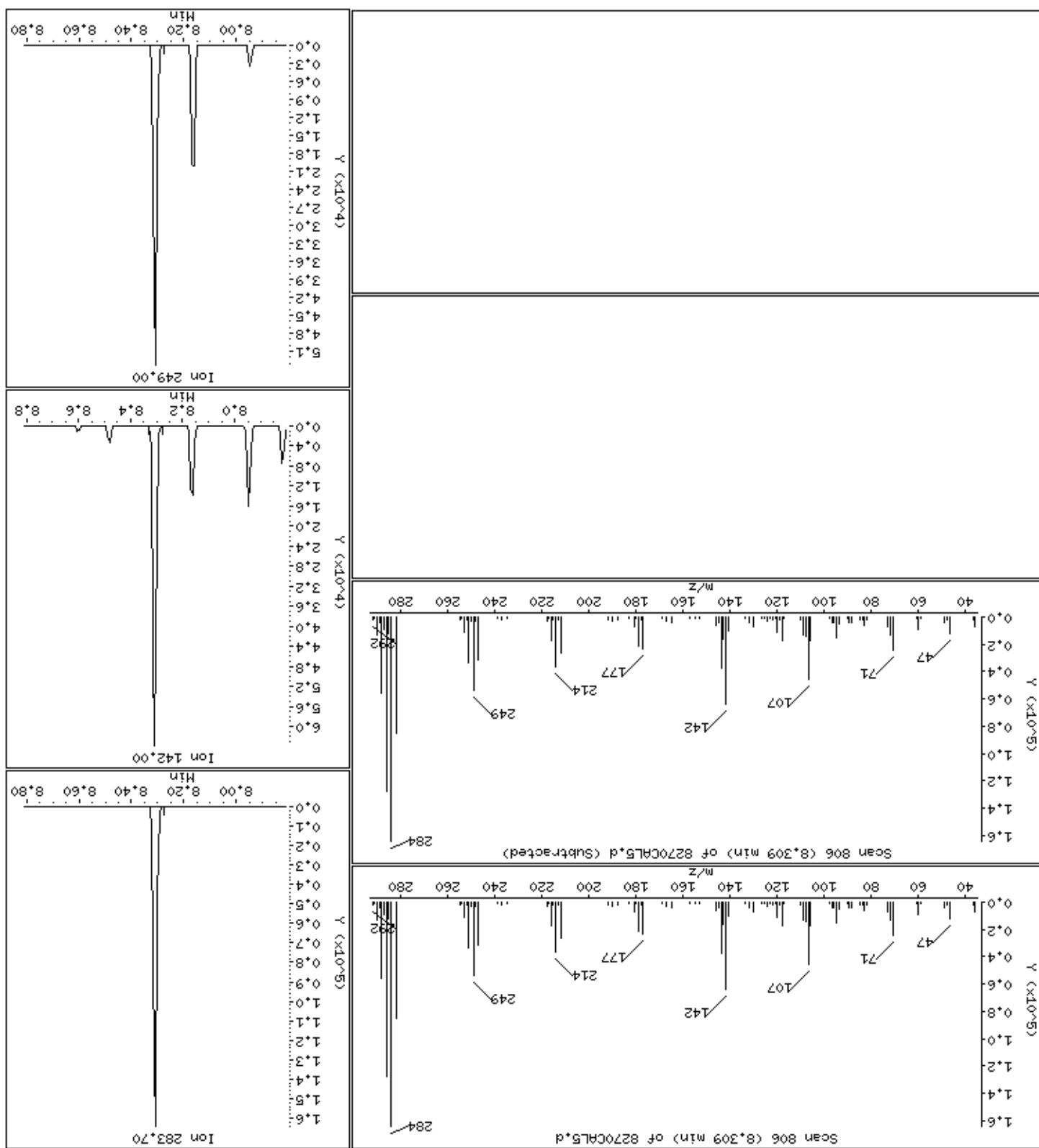
Concentration: 59.0 ug/kg







Date : 14-NOV-2012 23:22
Client ID: 8270CACL5
Instrument: smsd04.i
Sample Info: 47765
Instrument: smsd04.i
Operator: HJ
Column diameter: 0.25
Column phase: HPM-S



96 Pentachlorophenol

Column Phase: HPM-S-5
Concentration: 61.7 μ g/Kg
Oper员: M3
Column diameter: 0.25 mm
Scan 830 (8.482 min) of 8270CAL5.d

Ion 265.60

Scan 830 (8.482 min) of 8270CAL5.d (Subtracted)

Column Phase: HPM-S-5
Concentration: 61.7 μ g/Kg
Oper员: M3
Column diameter: 0.25 mm
Scan 830 (8.482 min) of 8270CAL5.d

Ion 263.60

Ion 268.00

beta_file: \SVcad4\DD\chem\msm4d.1\SM1144SSCA1.b\8270CAB5.d
Page 63

Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

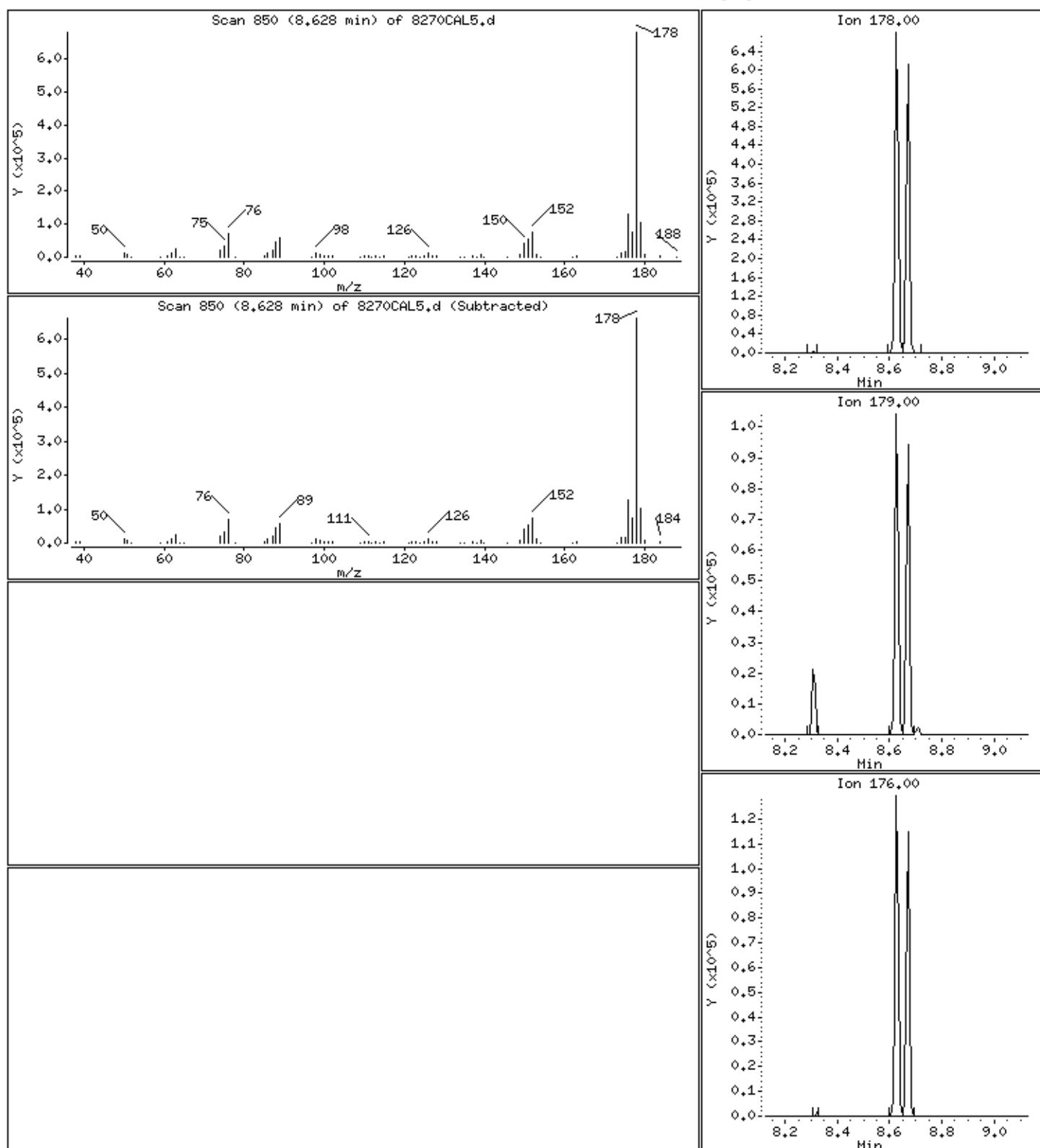
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

101 Phenanthrene

Concentration: 58.8 ug/kg



Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

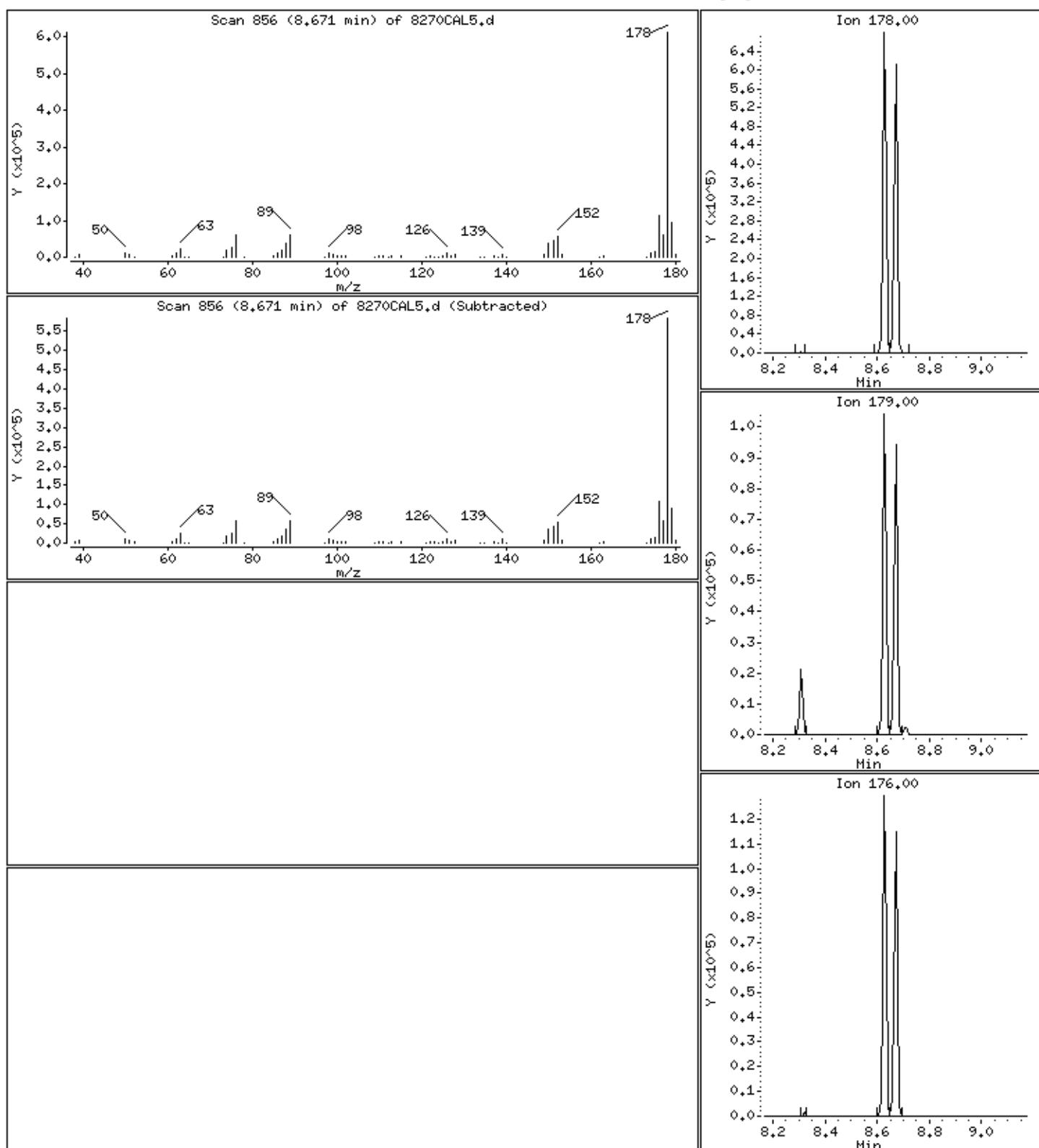
Operator: MJ

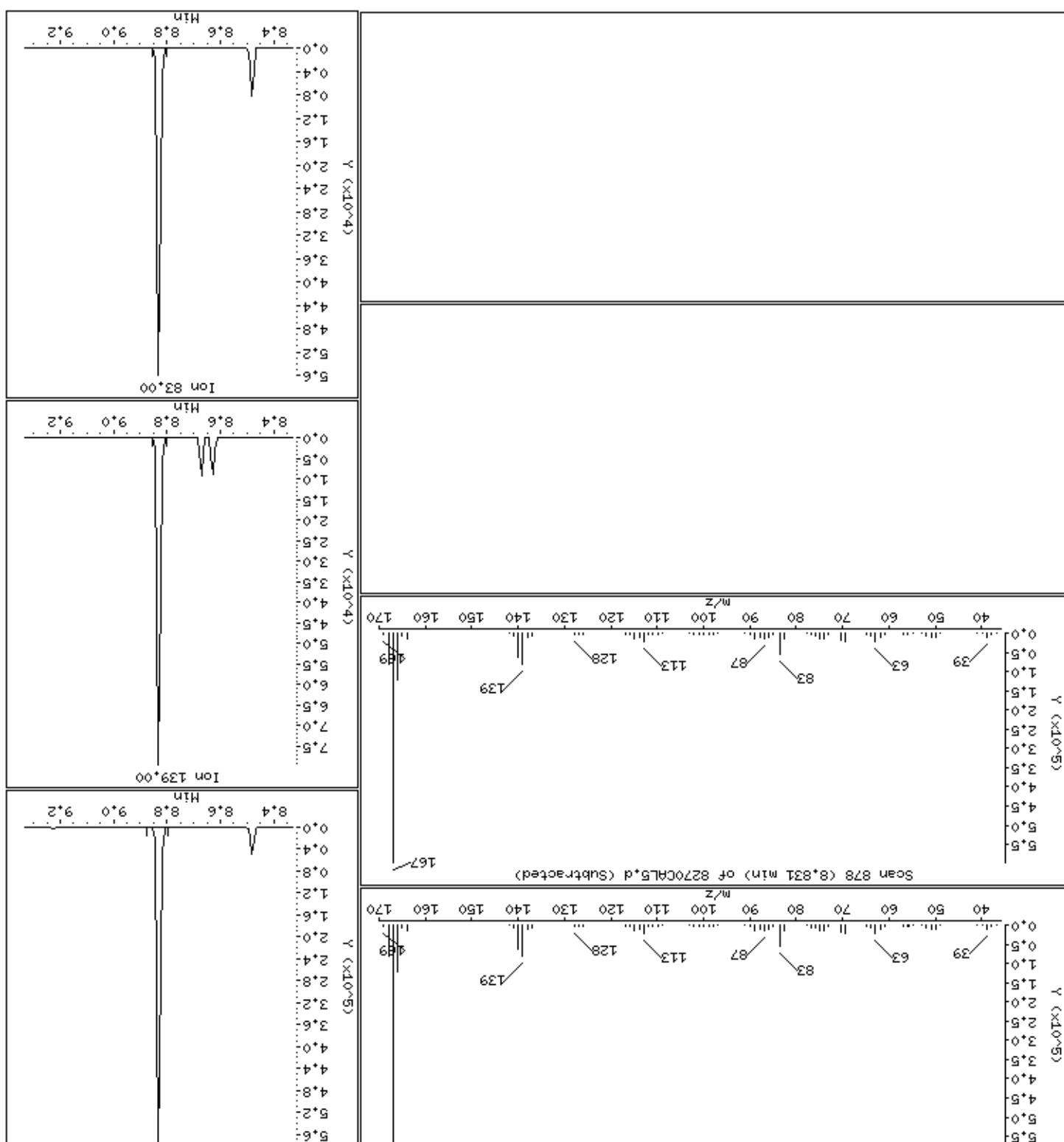
Column phase: HPMS-5

Column diameter: 0.25

103 Anthracene

Concentration: 58.6 ug/kg





Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

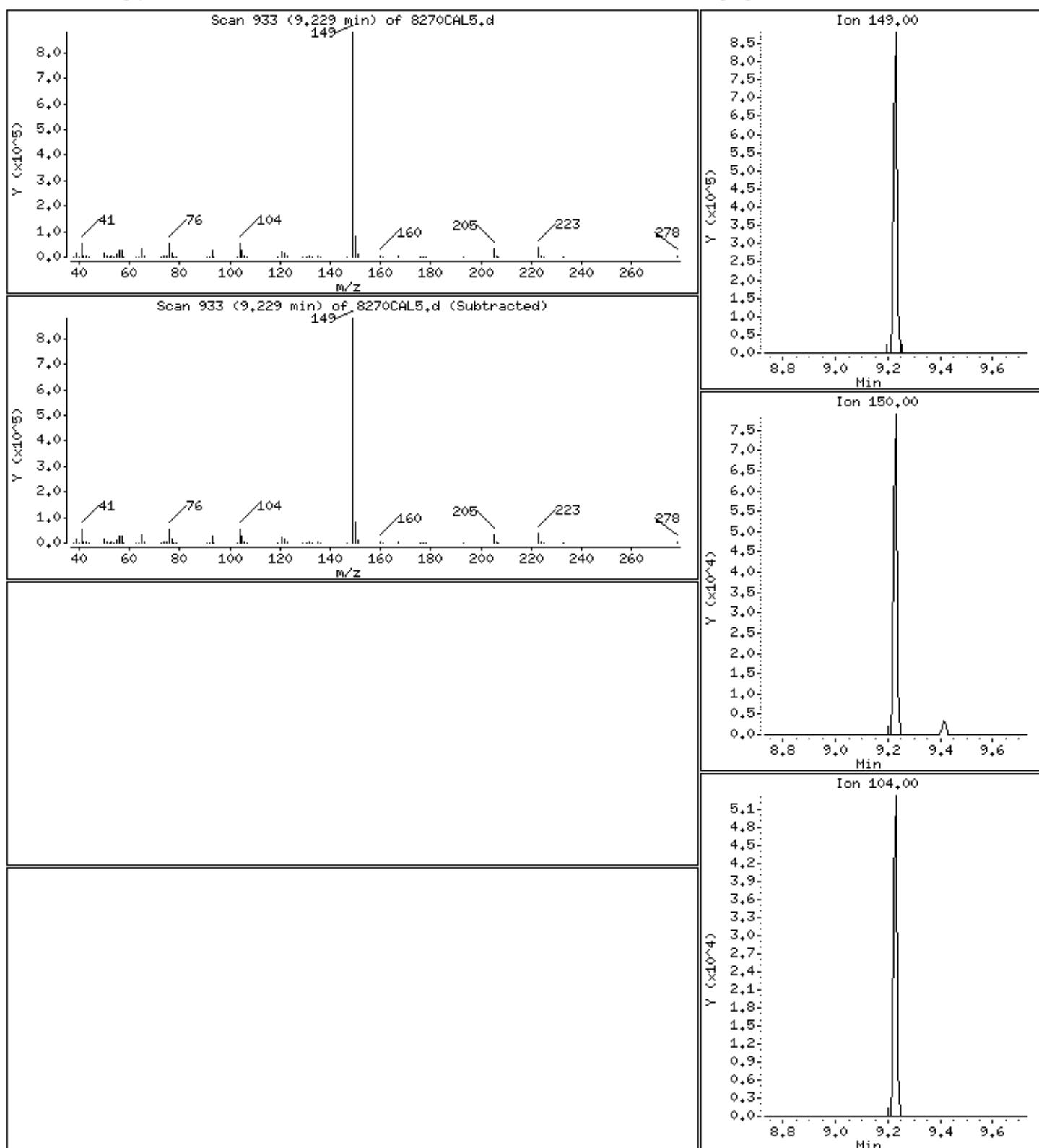
Operator: MJ

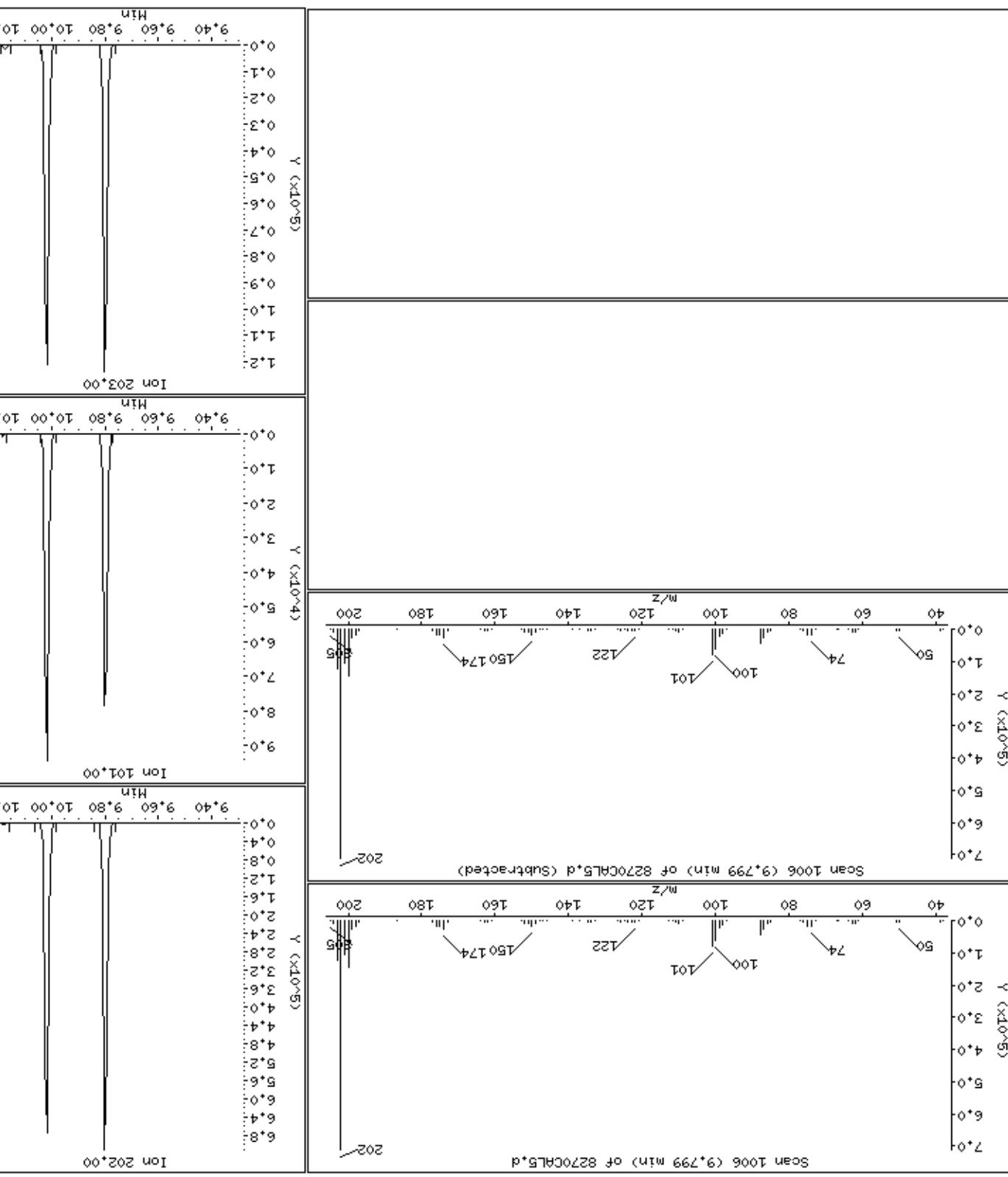
Column phase: HPMS-5

Column diameter: 0.25

105 Di-n-butylphthalate

Concentration: 60.9 ug/kg





Date : 14-NOV-2012 23:22
 Page 68
 Data File: \\\\$vedol4\DD\chem\msd4\1\411145501.b\8270CRL5.d
 Client ID: 8270CRL5
 Instrument: msd4.i
 Sample Info: 47765
 Operator: H3
 Column phase: HPMs-5
 Column diameter: 0.25
 Concentration: 61.1 ug/Kg
 Scan 1006 (9.799 min) of 8270CRL5.d
 Ion 202.00 Min

Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

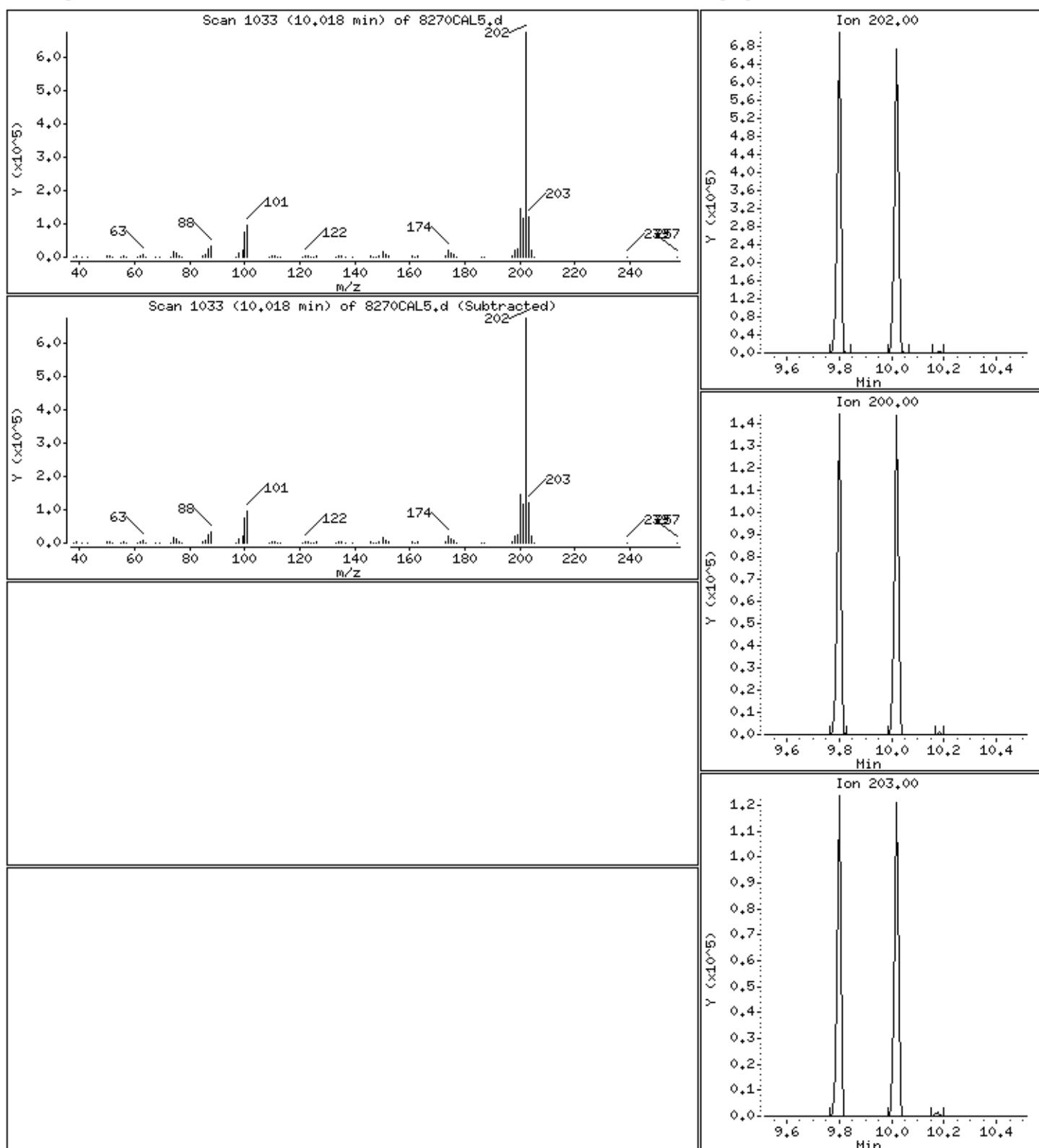
Operator: MJ

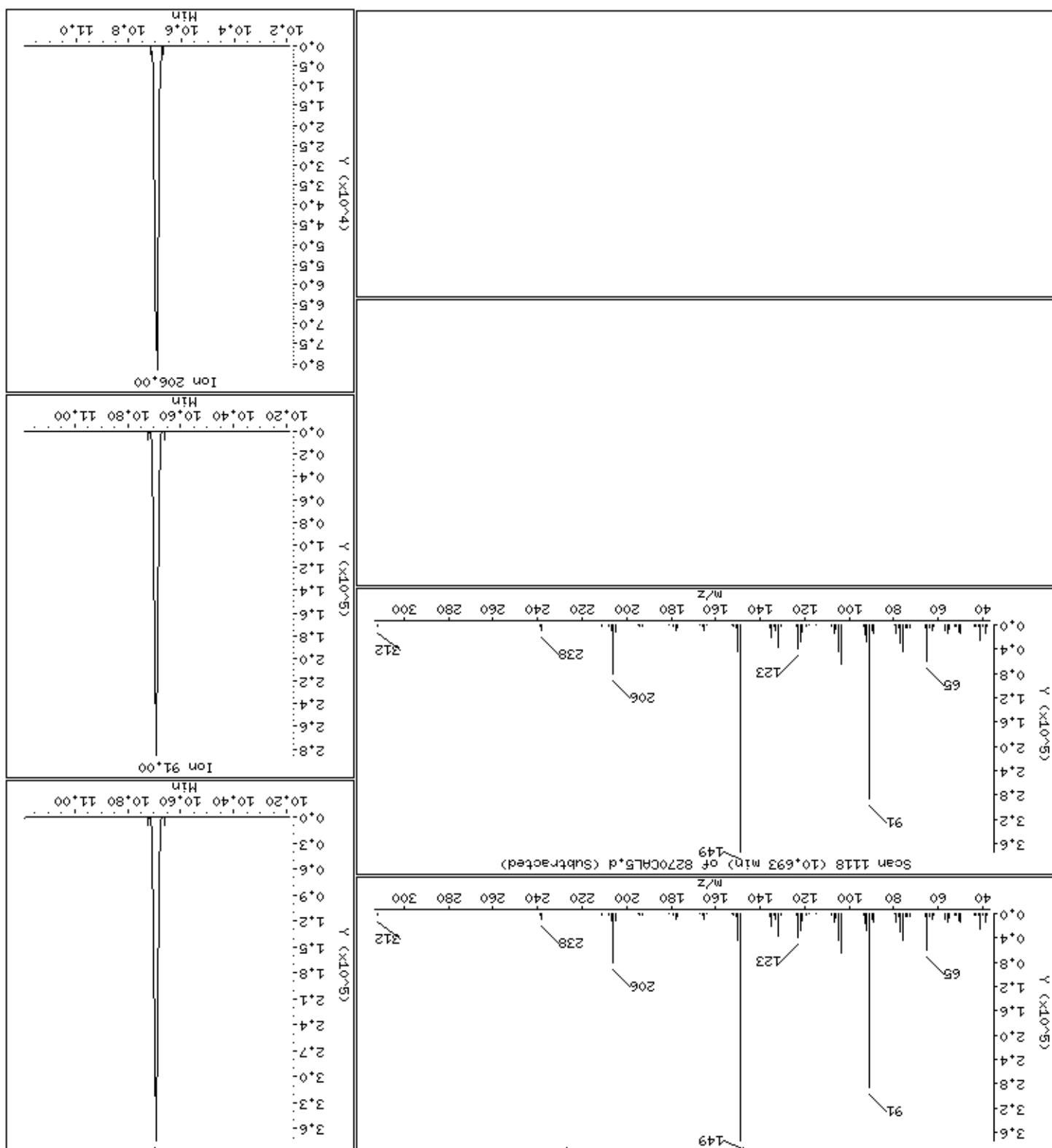
Column phase: HPMS-5

Column diameter: 0.25

111 Pyrene

Concentration: 59.6 ug/kg





Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

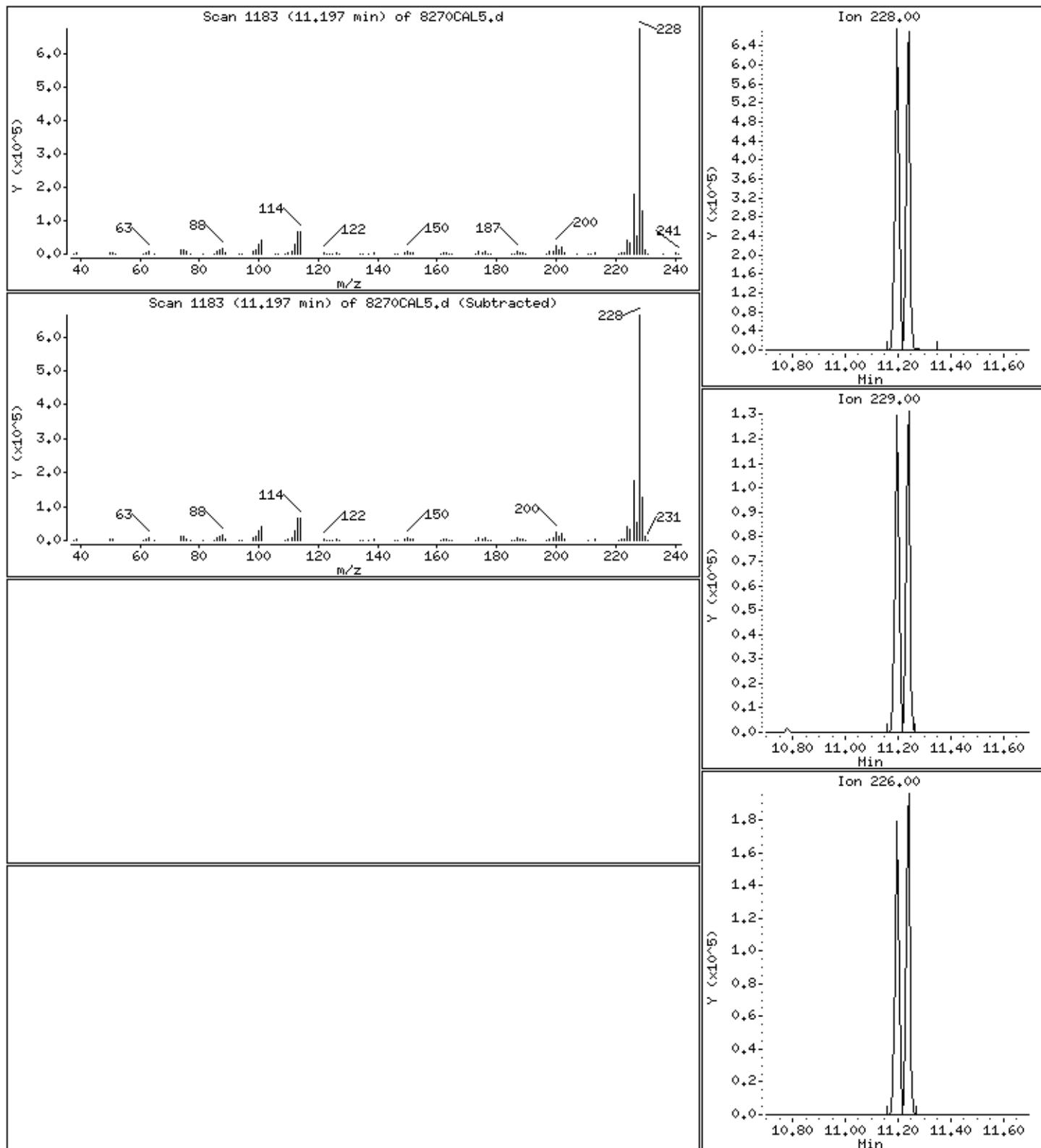
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

120 Benzo[alanthracene

Concentration: 59.6 ug/kg



Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

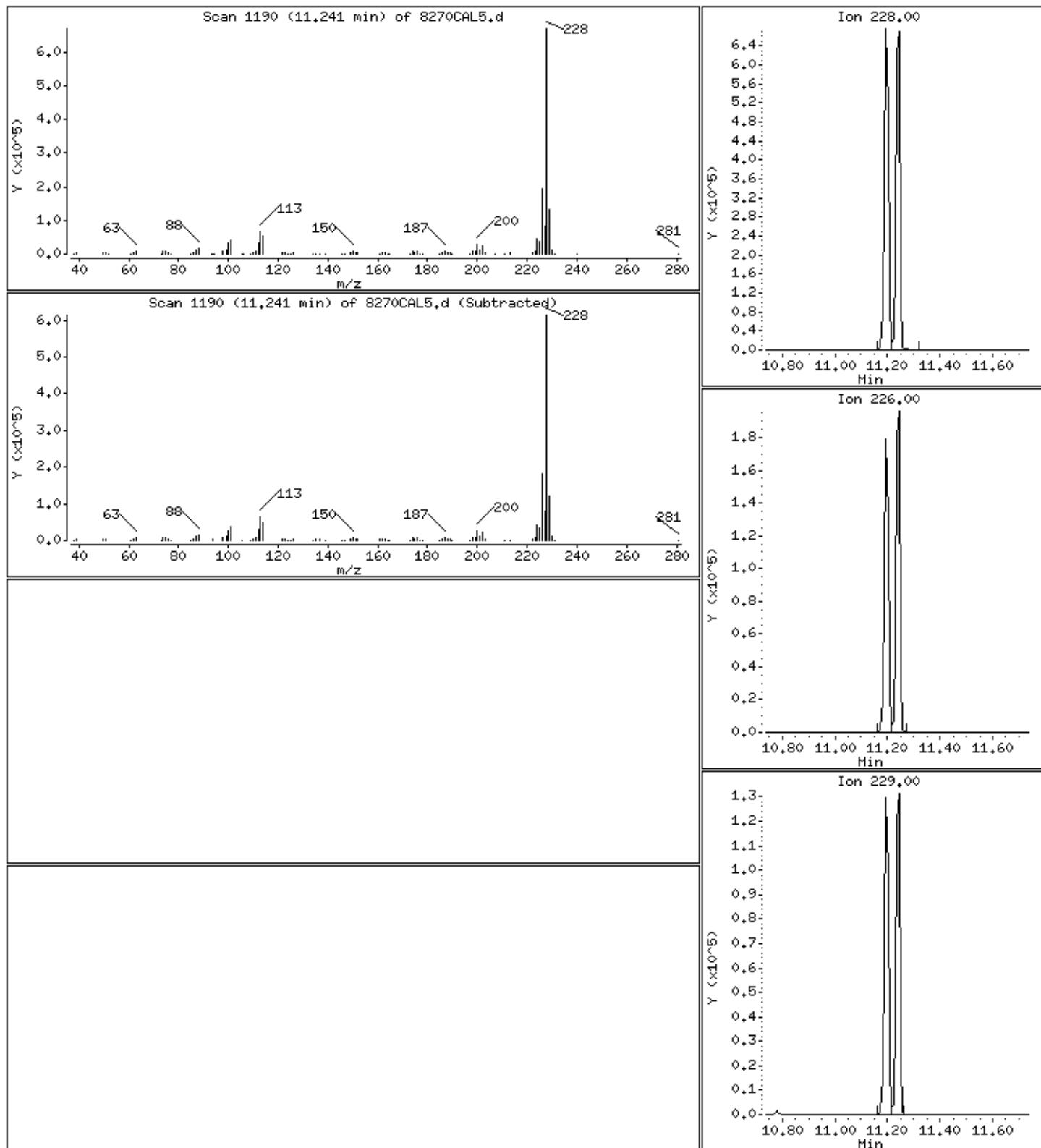
Operator: MJ

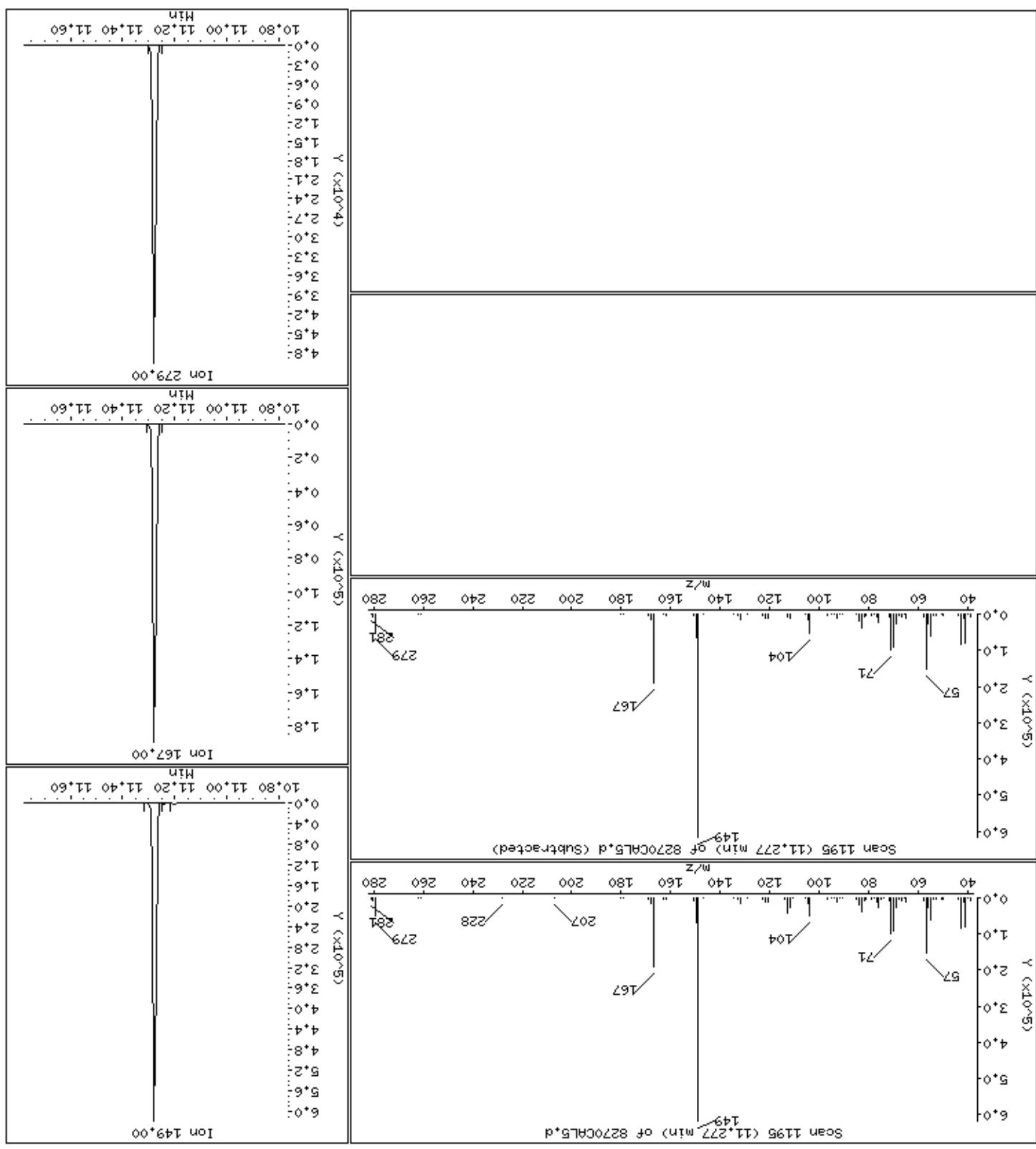
Column phase: HPMS-5

Column diameter: 0.25

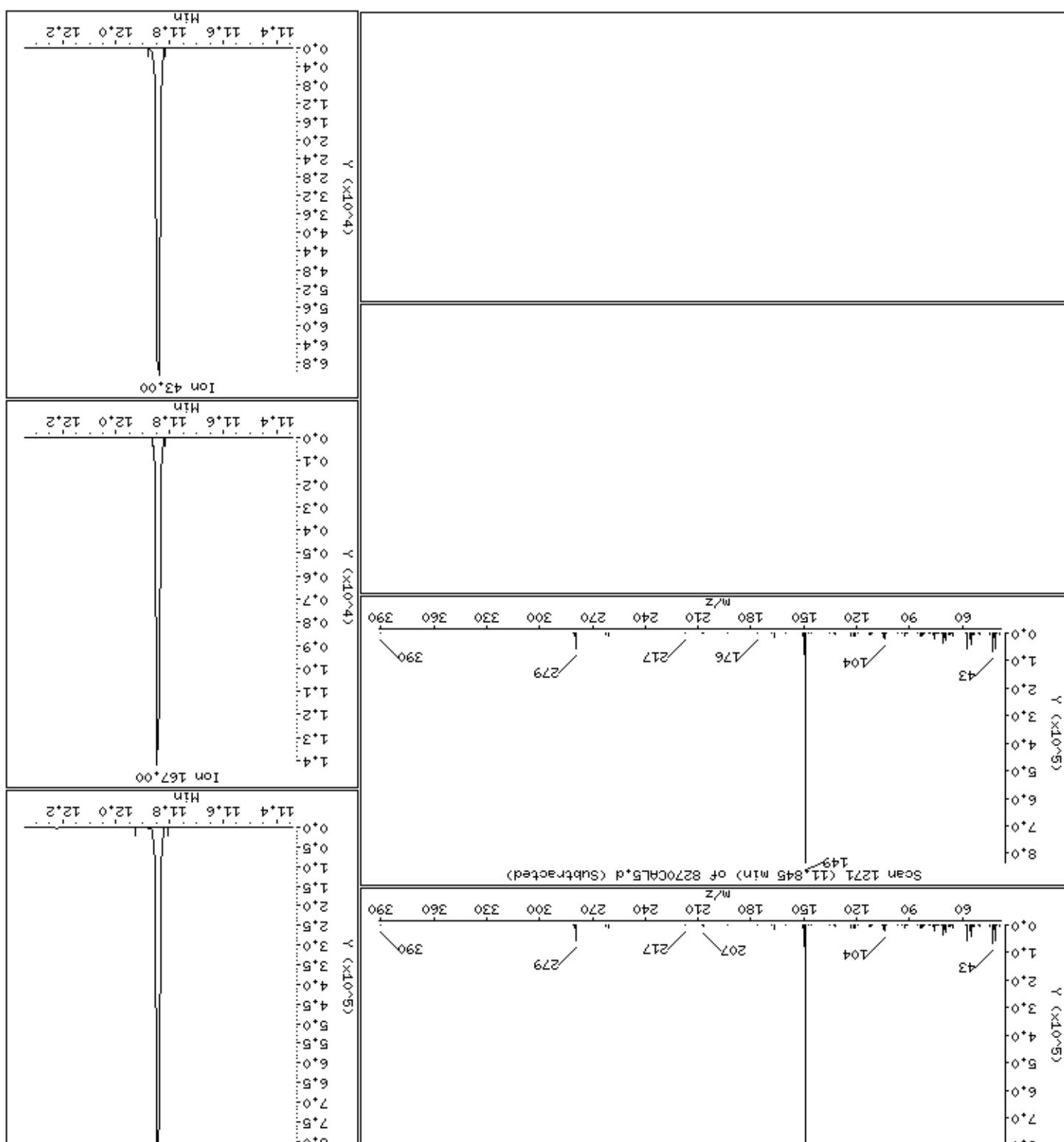
123 Chrysene

Concentration: 58.7 ug/kg

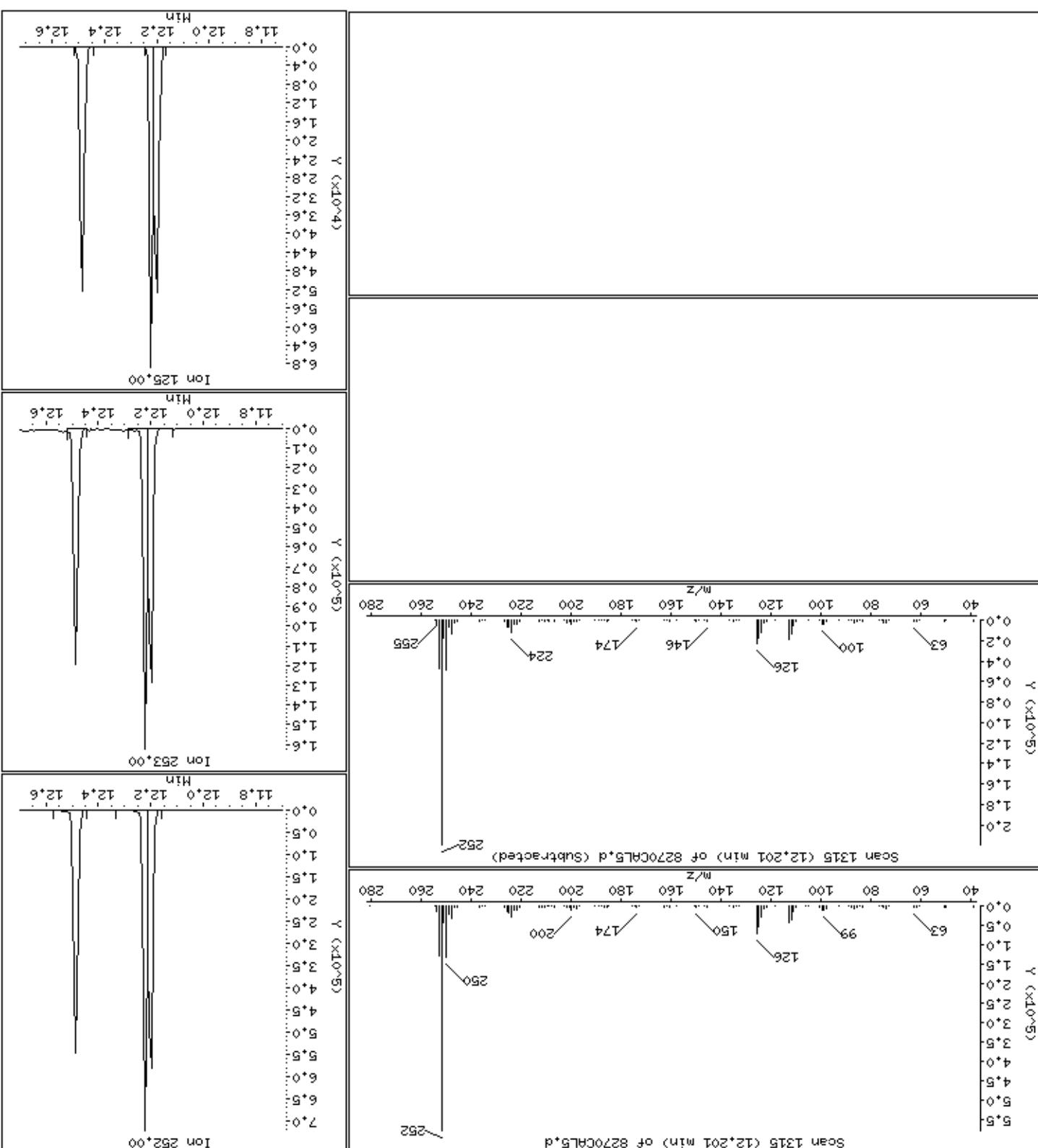


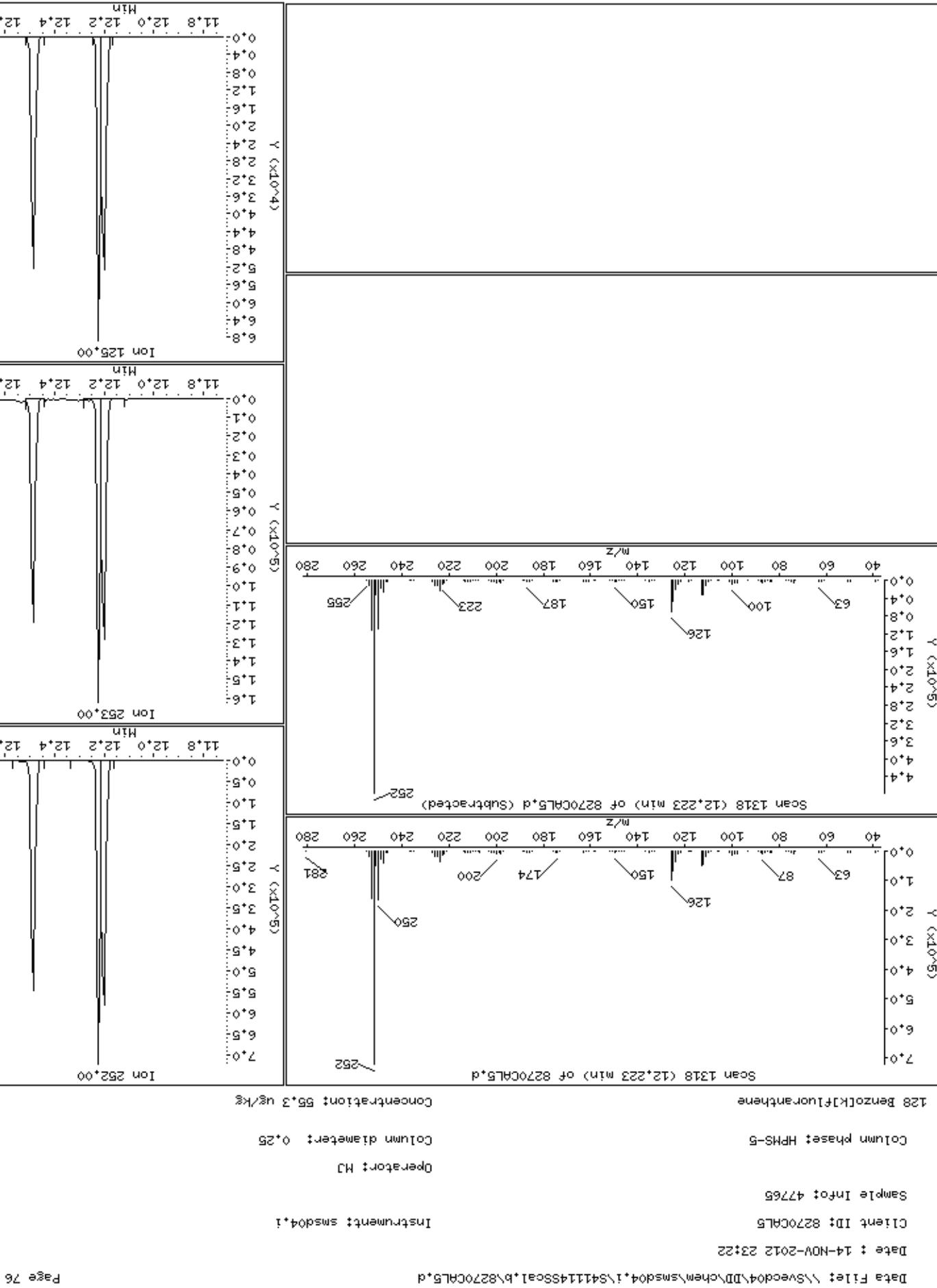


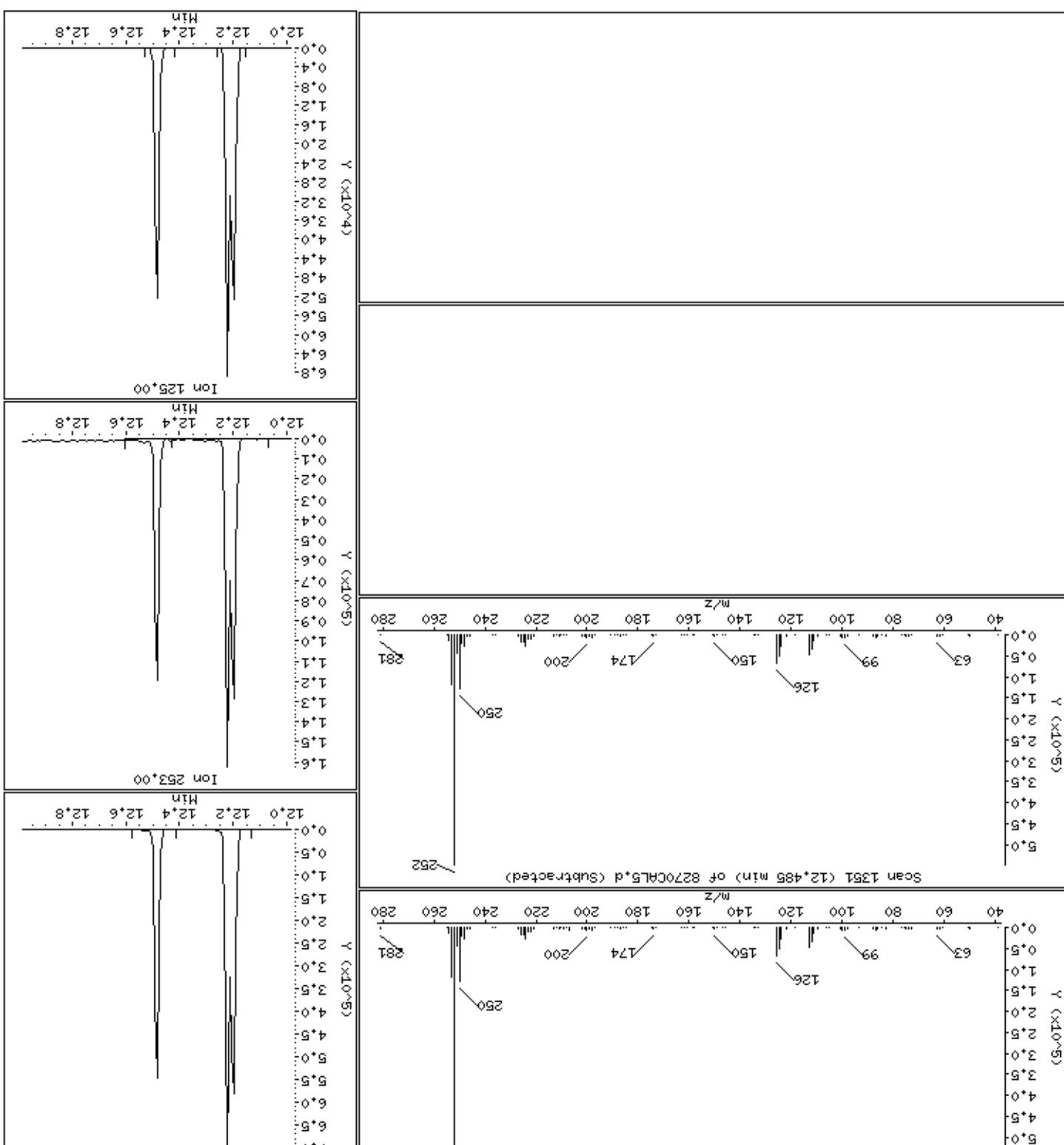
Page 3



Date : 14-NOV-2012 23:12Z Client ID: 8270C4L5 Instrument: smsd4d*1 Sample Info: 47765 Column Phase: HPM-S-5 Operator: HJ Column diameter: 0.25 Concentration: 60.8 ug/kg 127 Benzol[b]Fluoranthene







Date : 14-NOV-2012 23:22

Client ID: 8270CAL5

Instrument: smsd04.i

Sample Info: 47765

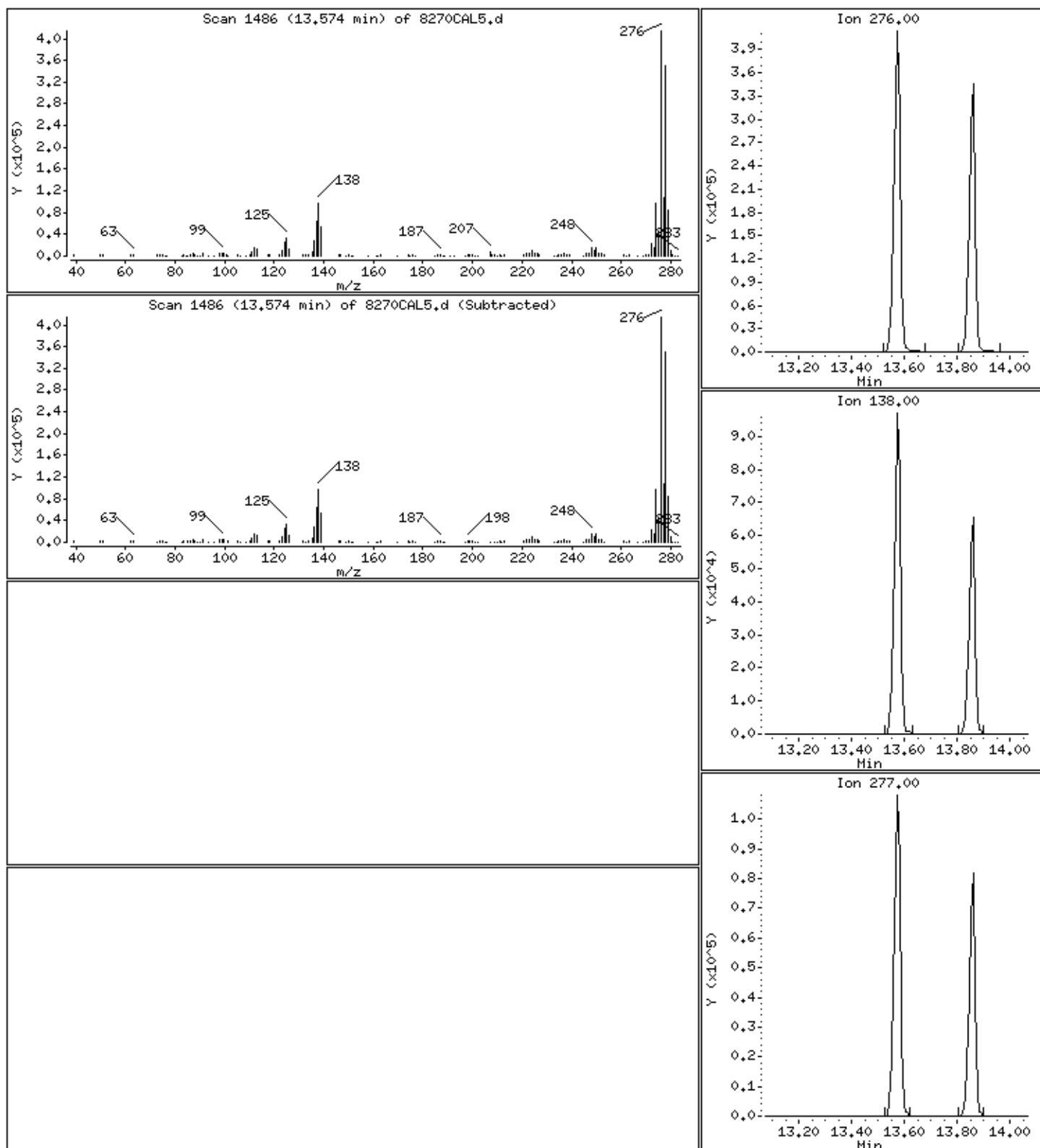
Operator: MJ

Column phase: HPMS-5

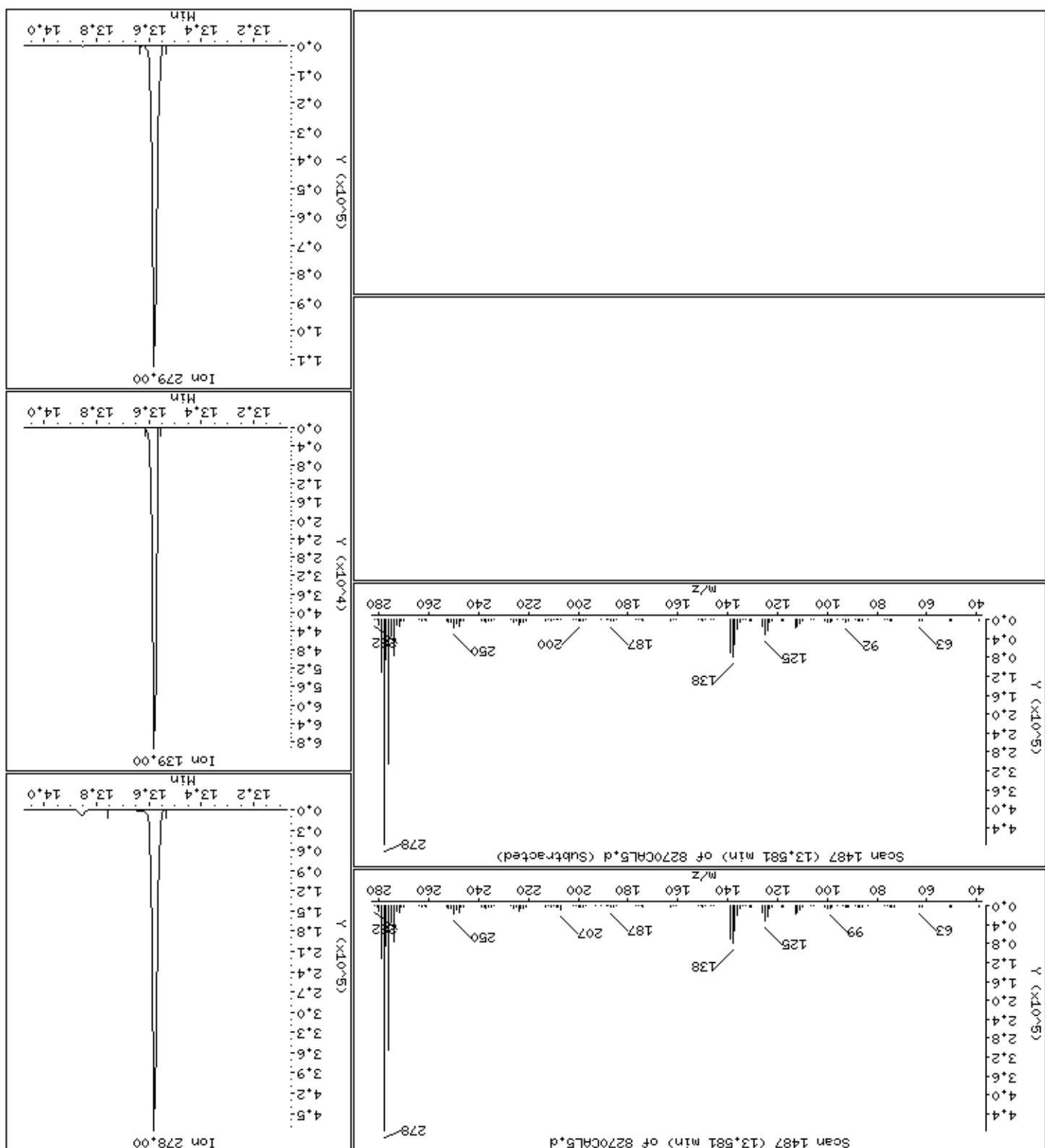
Column diameter: 0.25

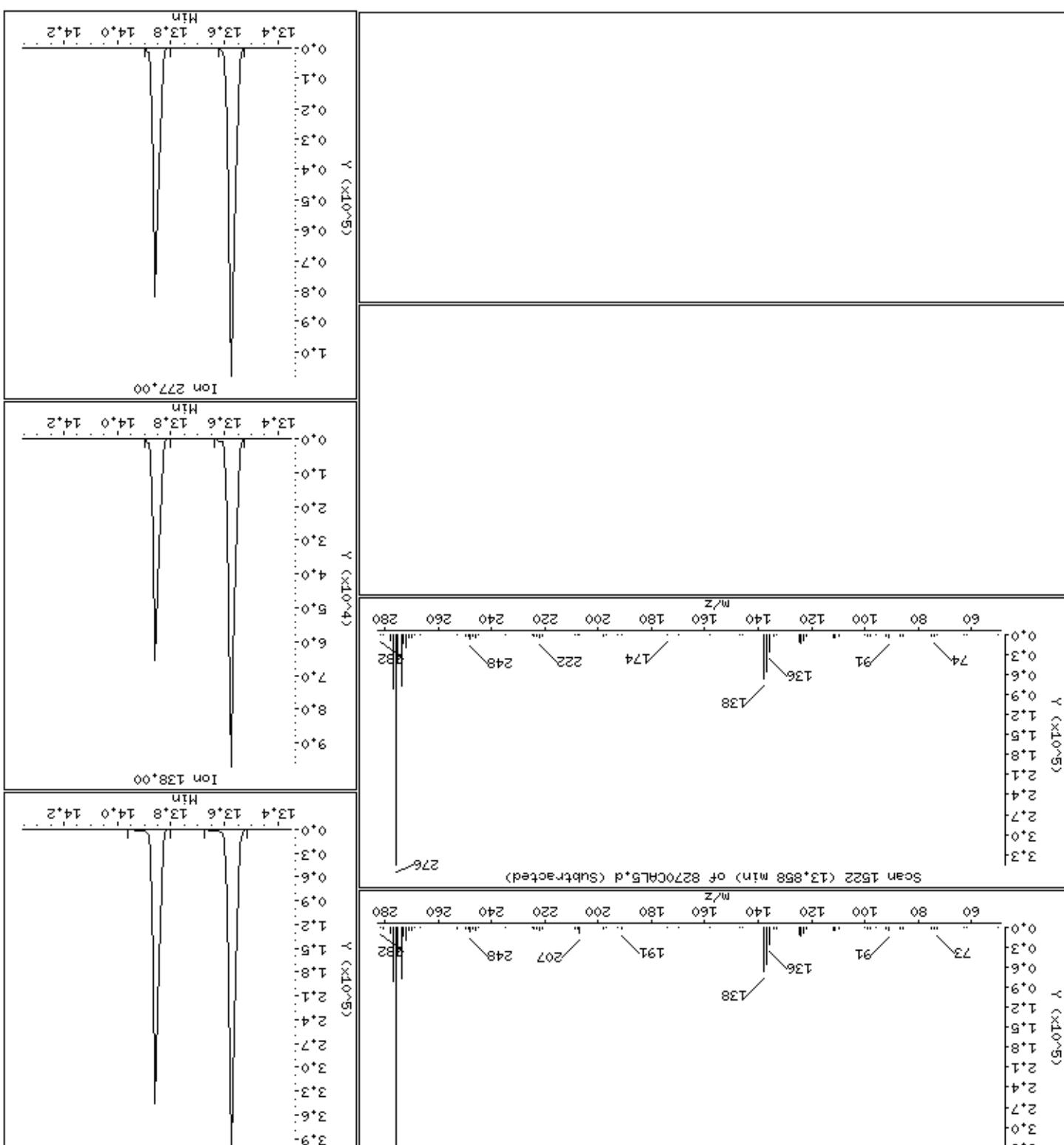
133 Indeno[1,2,3-cd]pyrene

Concentration: 57.6 ug/kg



Date : 14-NOV-2012 23:42Z Client ID: 8270CBL5 Instrument: smsd4.i Client Info: 47765
Date : 14-NOV-2012 23:42Z Client ID: 8270CBL5 Instrument: smsd4.i Client Info: 47765
34 Dibenz[a,h]anthracene Column phase: HPS-5
Operator: HJ Column diameter: 0.25 Concentration: 57.0 ug/Kg
Sample Info: 47765
34 Dibenz[a,h]anthracene





PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\8270CAL4.d
Lab Smp Id: 47766 Client Smp ID: 8270CAL4
Inj Date : 14-NOV-2012 23:43 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47766
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\8270bcs.m
Meth Date : 26-Nov-2012 13:58 smsd04.i Quant Type: ISTD
Cal Date : 15-OCT-2012 14:20 Cal File: AP9CAL4.d
Als bottle: 24 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8270caln.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	TARGET RANGE
2.229	2.228	(0.519)	79	164595 45.0000	44.7	80.00- 120.00	100.00
2.229	2.228	(0.519)	52	107705		35.30- 95.30	65.44
<hr/>							
M 16 Cresols (Total)							
				CAS #: 1319-77-3			
				280494 90.0000			(a)
<hr/>							
1 N-Nitrosodimethylamine							
2.221	2.220	(0.517)	42	72899 45.0000	44.6	80.00- 120.00	100.00
2.221	2.220	(0.517)	74	94785		97.07- 157.07	130.02
2.222	2.221	(0.517)	44	3424		0.00- 34.98	4.70
<hr/>							
\$ 6 2-Fluorophenol (SURR)							
3.247	3.246	(0.756)	112	292122 90.0000	88.7	80.00- 120.00	100.00
3.247	3.246	(0.756)	64	178234		32.62- 92.62	61.01
<hr/>							
\$ 11 Phenol-d5 (SURR)							
4.007	4.006	(0.933)	99	364964 90.0000	87.0	80.00- 120.00	100.00
4.006	4.006	(0.932)	42	72918		0.00- 49.74	19.98
4.007	4.006	(0.933)	71	151794		12.66- 72.66	41.59
<hr/>							

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
4.016	4.016	(0.935)	94	211679	45.0000	43.8	80.00- 120.00	100.00
4.016	4.016	(0.935)	65	65305		0.94-	60.94	30.85
4.015	4.015	(0.935)	66	105969		21.40-	81.40	50.06
<hr/>								
4.046	4.046	(0.942)	93	213114	45.0000	47.5	80.00- 120.00	100.00
4.046	4.046	(0.942)	65	44682		0.00-	50.97	20.97
4.046	4.046	(0.942)	66	90645		12.95-	72.95	42.53
<hr/>								
4.094	4.094	(0.953)	93	146543	45.0000	45.6	80.00- 120.00	100.00
4.093	4.093	(0.953)	63	106794		43.04-	103.04	72.88
4.094	4.094	(0.953)	95	46012		1.90-	61.90	31.40
<hr/>								
4.142	4.142	(0.964)	128	139406	45.0000	44.2	80.00- 120.00	100.00
4.142	4.142	(0.964)	64	76892		24.14-	84.14	55.16
4.143	4.142	(0.964)	130	46720		2.15-	62.15	33.51
<hr/>								
4.267	4.267	(0.993)	146	166876	45.0000	44.4	80.00- 120.00	100.00
4.268	4.267	(0.993)	148	105659		34.15-	94.15	63.32
4.267	4.267	(0.993)	111	73477		14.34-	74.34	44.03
<hr/>								
4.297	4.294	(1.000)	152	99413	40.0000	80.00-	120.00	100.00
4.296	4.294	(1.000)	115	62439		34.81-	94.81	62.81
4.297	4.294	(1.000)	150	190242		126.51-	186.51	191.37
<hr/>								
4.311	4.311	(1.003)	146	174109	45.0000	44.6	80.00- 120.00	100.00
4.311	4.311	(1.003)	148	112017		36.10-	96.10	64.34
4.311	4.311	(1.003)	111	76334		14.95-	74.95	43.84
<hr/>								
4.429	4.429	(1.031)	108	91639	45.0000	42.7	80.00- 120.00	100.00(M)
4.429	4.429	(1.031)	79	144876		126.03-	186.03	158.09
4.429	4.429	(1.031)	77	96039		76.75-	136.75	104.80
<hr/>								
4.479	4.478	(1.042)	146	159725	45.0000	44.2	80.00- 120.00	100.00
4.479	4.478	(1.042)	148	101987		33.36-	93.36	63.85
4.478	4.478	(1.042)	111	74369		18.07-	78.07	46.56
<hr/>								
4.539	4.538	(1.056)	107	112257	45.0000	43.4	80.00- 120.00	100.00
4.539	4.538	(1.056)	108	127253		83.56-	143.56	113.36
4.538	4.538	(1.056)	79	65319		27.79-	87.79	58.19
<hr/>								
4.571	4.571	(1.064)	45	182168	45.0000	44.9	80.00- 120.00	100.00
4.571	4.571	(1.064)	77	31722		0.00-	47.34	17.41

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
4.571	4.571 (1.064)	121	48326			0.00-	56.71	26.53
<hr/>								
23 2,2'-oxybis(1-chloropropane) (continued)								
4.668	4.668 (1.086)	107	168237 45.0000	43.0	80.00-	120.00	100.00	
4.668	4.668 (1.086)	108	140270		51.88-	111.88	83.38	
4.668	4.668 (1.086)	79	45425		0.00-	57.76	27.00	
<hr/>								
26 N-Nitrosodinpropylamine								
4.699	4.699 (1.094)	70	122167 45.0000	44.2	80.00-	120.00	100.00(M)	
4.699	4.699 (1.094)	42	62331		21.53-	81.53	51.02	
4.699	4.699 (1.094)	130	25412		0.00-	51.40	20.80	
<hr/>								
30 Hexachloroethane								
4.754	4.753 (1.106)	117	74092 45.0000	45.0	80.00-	120.00	100.00	
4.754	4.754 (1.106)	201	69866		63.39-	123.39	94.30	
4.754	4.754 (1.106)	199	43666		26.40-	86.40	58.93	
<hr/>								
\$ 31 Nitrobenzene-d5 (SURR)								
4.818	4.818 (0.881)	82	188188 45.0000	45.0	80.00-	120.00	100.00	
4.819	4.818 (0.881)	128	68768		6.68-	66.68	36.54	
4.818	4.818 (0.881)	54	93052		19.12-	79.12	49.45	
<hr/>								
32 Nitrobenzene								
4.835	4.834 (0.884)	77	187236 45.0000	45.5	80.00-	120.00	100.00	
4.835	4.835 (0.884)	123	69360		6.73-	66.73	37.04	
4.835	4.834 (0.884)	65	26452		0.00-	43.84	14.13	
<hr/>								
34 Isophorone								
5.047	5.046 (0.923)	82	318415 45.0000	44.4	80.00-	120.00	100.00	
5.047	5.047 (0.923)	138	49727		0.00-	45.91	15.62	
5.047	5.046 (0.923)	95	25232		0.00-	37.77	7.92	
<hr/>								
35 2-Nitrophenol								
5.128	5.128 (0.938)	139	77667 45.0000	44.4	80.00-	120.00	100.00	
5.128	5.127 (0.938)	65	49893		33.65-	93.65	64.24	
5.128	5.127 (0.938)	109	31967		13.08-	73.08	41.16	
<hr/>								
36 2,4-Dimethylphenol								
5.158	5.158 (0.943)	122	118023 45.0000	45.6	80.00-	120.00	100.00	
5.158	5.158 (0.943)	107	155243		100.42-	160.42	131.54	
5.158	5.158 (0.943)	121	69222		27.73-	87.73	58.65	
<hr/>								
38 Bis(2-Chloroethoxy)methane								
5.252	5.252 (0.961)	93	184290 45.0000	44.6	80.00-	120.00	100.00	
5.252	5.252 (0.961)	95	58799		2.66-	62.66	31.91	
5.252	5.252 (0.961)	123	25610		0.00-	43.79	13.90	
<hr/>								
40 Benzoic Acid								
5.263	5.267 (0.963)	122	75577 45.0000	44.8	80.00-	120.00	100.00	
5.264	5.267 (0.963)	105	106745		114.27-	174.27	141.24	
5.263	5.267 (0.963)	77	91800		94.81-	154.81	121.47	
<hr/>								

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
====	=====	=====	====	=====	=====	=====	=====	=====
41	2,4-Dichlorophenol					CAS #: 120-83-2		
5.342	5.342 (0.977)	162	131208	45.0000	44.0	80.00-	120.00	100.00
5.343	5.342 (0.977)	164	82641		34.34-	94.34		62.98
5.342	5.342 (0.977)	98	49430		8.30-	68.30		37.67

42	1,2,4-Trichlorobenzene					CAS #: 120-82-1		
5.427	5.427 (0.993)	180	144654	45.0000	44.0	80.00-	120.00	100.00
5.427	5.427 (0.993)	182	138655		69.17-	129.17		95.85
5.427	5.427 (0.993)	145	42129		0.41-	60.41		29.12

*	43 Naphthalene-d8					CAS #: 1146-65-2		
5.467	5.463 (1.000)	136	328158	40.0000		80.00-	120.00	100.00
5.466	5.463 (1.000)	68	23963			0.00-	37.51	7.30

44	Naphthalene					CAS #: 91-20-3		
5.486	5.486 (1.003)	128	396809	45.0000	45.0	80.00-	120.00	100.00
5.485	5.485 (1.003)	129	43504			0.00-	40.78	10.96
5.486	5.486 (1.003)	127	50702			0.00-	42.17	12.78

45	4-Chloroaniline					CAS #: 106-47-8		
5.552	5.552 (1.015)	127	164892	45.0000	45.2	80.00-	120.00	100.00
5.551	5.552 (1.015)	129	51931		2.29-	62.29		31.49
5.551	5.551 (1.015)	65	60968		8.57-	68.57		36.97

48	Hexachlorobutadiene					CAS #: 87-68-3		
5.654	5.654 (1.034)	225	105067	45.0000	45.1	80.00-	120.00	100.00
5.654	5.654 (1.034)	223	64716		31.81-	91.81		61.59
5.654	5.654 (1.034)	227	66935		34.78-	94.78		63.71

51	4-Chloro-3-methylphenol					CAS #: 59-50-7		
6.009	6.009 (1.099)	107	137461	45.0000	42.9	80.00-	120.00	100.00
6.009	6.009 (1.099)	144	32647		0.00-	53.54		23.75
6.009	6.009 (1.099)	142	97260		43.91-	103.91		70.75

53	2-Methylnaphthalene					CAS #: 91-57-6		
6.141	6.141 (1.123)	142	261173	45.0000	43.0	80.00-	120.00	100.00
6.142	6.141 (1.123)	141	224935		55.50-	115.50		86.12

54	1-Methylnaphthalene					CAS #: 90-12-0		
6.247	6.247 (1.143)	142	240769	45.0000	43.0	80.00-	120.00	100.00
6.247	6.247 (1.143)	141	216642		58.78-	118.78		89.98

55	Hexachlorocyclopentadiene					CAS #: 77-47-4		
6.360	6.360 (0.887)	237	99931	45.0000	49.9	80.00-	120.00	100.00
6.360	6.360 (0.887)	235	63303		33.42-	93.42		63.35
6.361	6.360 (0.887)	272	12638		0.00-	41.88		12.65

57	2,4,6-Trichlorophenol					CAS #: 88-06-2		
6.438	6.438 (0.898)	196	97617	45.0000	44.3	80.00-	120.00	100.00
6.438	6.438 (0.898)	198	95669		67.54-	127.54		98.00
6.438	6.438 (0.898)	200	29679		1.18-	61.18		30.40

58	2,4,5-Trichlorophenol					CAS #: 95-95-4		
6.472	6.472 (0.903)	196	107018	45.0000	43.9	80.00-	120.00	100.00

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
58	2,4,5-Trichlorophenol (continued)							
6.472	6.472 (0.903)	198	101409			64.33-	124.33	94.76
6.472	6.472 (0.903)	97	62368			27.55-	87.55	58.28
\$ 59	2-Fluorobiphenyl (SURR)							
6.515	6.514 (0.909)	172	336254	45.0000	45.0	80.00-	120.00	100.00
6.515	6.514 (0.909)	171	112883			4.90-	64.90	33.57
62	2-Chloronaphthalene							
6.611	6.610 (0.922)	162	278955	45.0000	45.2	80.00-	120.00	100.00
6.611	6.610 (0.922)	164	89001			1.75-	61.75	31.91
6.610	6.610 (0.922)	127	106544			8.71-	68.71	38.19
63	2-Nitroaniline							
6.740	6.741 (0.940)	65	98245	45.0000	44.6	80.00-	120.00	100.00
6.740	6.741 (0.940)	92	62829			35.13-	95.13	63.95
6.741	6.741 (0.940)	138	87606			59.53-	119.53	89.17
65	Dimethylphthalate							
6.949	6.950 (0.969)	163	323480	45.0000	44.7	80.00-	120.00	100.00
6.949	6.950 (0.969)	194	18713			0.00-	35.76	5.78
6.949	6.949 (0.969)	164	33022			0.00-	39.66	10.21
68	Acenaphthylene							
7.020	7.020 (0.979)	152	427379	45.0000	43.2	80.00-	120.00	100.00
7.020	7.020 (0.979)	151	85543			0.00-	50.20	20.02
7.020	7.020 (0.979)	153	55513			0.00-	43.02	12.99
67	2,6-Dinitrotoluene							
7.015	7.015 (0.978)	165	76311	45.0000	43.7	80.00-	120.00	100.00
7.015	7.015 (0.978)	89	53166			39.45-	99.45	69.67
7.016	7.016 (0.978)	63	79747			74.66-	134.66	104.50
69	3-Nitroaniline							
7.145	7.146 (0.997)	138	70097	45.0000	44.2	80.00-	120.00	100.00
7.146	7.146 (0.997)	108	8469			0.00-	42.35	12.08
7.145	7.145 (0.996)	92	94985			104.62-	164.62	135.51
* 70	Acenaphthene-d10							
7.170	7.167 (1.000)	164	204923	40.0000		80.00-	120.00	100.00
7.170	7.168 (1.000)	162	193527			66.12-	126.12	94.44
7.170	7.167 (1.000)	160	85850			13.21-	73.21	41.89
71	Acenaphthene							
7.201	7.201 (1.004)	154	247945	45.0000	44.2	80.00-	120.00	100.00
7.201	7.200 (1.004)	153	263913			77.18-	137.18	106.44
7.201	7.200 (1.004)	152	125381			21.21-	81.21	50.57
72	2,4-Dinitrophenol							
7.242	7.243 (1.010)	184	41229	45.0000	45.5	80.00-	120.00	100.00
7.241	7.242 (1.010)	63	31652			48.18-	108.18	76.77
7.242	7.242 (1.010)	154	26489			33.05-	93.05	64.25

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
74	4-Nitrophenol					CAS #: 100-02-7		
7.303	7.303 (1.019)	109	58571	45.0000	40.7	80.00-	120.00	100.00
7.303	7.303 (1.019)	139	57505		61.80-	121.80		98.18
7.303	7.303 (1.018)	65	67981		80.41-	140.41		116.07
75	Dibenzofuran					CAS #: 132-64-9		
7.354	7.355 (1.026)	168	377989	45.0000	43.7	80.00-	120.00	100.00
7.354	7.355 (1.026)	139	153683		10.69-	70.69		40.66
76	2,4-Dinitrotoluene					CAS #: 121-14-2		
7.392	7.392 (1.031)	165	91641	45.0000	42.8	80.00-	120.00	100.00
7.391	7.392 (1.031)	63	48606		23.55-	83.55		53.04
7.392	7.392 (1.031)	89	76144		51.82-	111.82		83.09
80	Diethylphthalate					CAS #: 84-66-2		
7.640	7.640 (1.066)	149	308997	45.0000	42.8	80.00-	120.00	100.00
7.640	7.640 (1.066)	177	67639		0.00-	51.79		21.89
7.640	7.640 (1.065)	150	37621		0.00-	42.28		12.18
81	Fluorene					CAS #: 86-73-7		
7.690	7.690 (1.073)	166	330384	45.0000	42.2	80.00-	120.00	100.00
7.690	7.690 (1.073)	165	311473		61.04-	121.04		94.28
7.690	7.690 (1.073)	167	45187		0.00-	43.06		13.68
82	4-Chlorophenyl-phenylether					CAS #: 7005-72-3		
7.690	7.690 (1.073)	204	176629	45.0000	43.0	80.00-	120.00	100.00
7.690	7.690 (1.073)	206	57143		2.85-	62.85		32.35
7.690	7.690 (1.072)	141	108014		29.43-	89.43		61.15
84	4-Nitroaniline					CAS #: 100-01-6		
7.747	7.750 (1.080)	138	62379	45.0000	42.4	80.00-	120.00	100.00
7.747	7.749 (1.080)	92	36460		30.30-	90.30		58.45
7.747	7.749 (1.080)	108	73484		85.44-	145.44		117.80
85	4,6-Dinitro-2-methylphenol					CAS #: 534-52-1		
7.789	7.790 (0.905)	198	62562	45.0000	43.3	80.00-	120.00	100.00
7.788	7.789 (0.905)	51	32613		21.07-	81.07		52.13
7.788	7.789 (0.905)	105	27290		14.43-	74.43		43.62
86	N-Nitrosodiphenylamine					CAS #: 86-30-6		
7.813	7.814 (0.908)	169	205359	45.0000	45.7	80.00-	120.00	100.00
7.813	7.815 (0.908)	168	143288		41.33-	101.33		69.77
7.813	7.815 (0.908)	167	71236		5.93-	65.93		34.69
87	1,2-Diphenylhydrazine					CAS #: 122-66-7		
7.845	7.845 (1.094)	77	360398	45.0000	43.4	80.00-	120.00	100.00
7.845	7.845 (1.094)	105	49646		0.00-	44.08		13.78
7.845	7.845 (1.094)	182	85412		0.00-	53.69		23.70
\$ 88	2,4,6-Tribromophenol (SURR)					CAS #: 118-79-6		
7.945	7.946 (1.108)	330	114308	90.0000	82.8	80.00-	120.00	100.00
7.945	7.946 (1.108)	332	109616		65.21-	125.21		95.90
7.945	7.945 (1.108)	141	46681		10.78-	70.78		40.84

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
8.163	8.163 (0.949)	248	101304	45.0000	45.6	80.00-	120.00	100.00
8.163	8.163 (0.949)	250	97440		66.63-	126.63		96.19
8.162	8.162 (0.949)	141	78918		49.24-	109.24		77.90

93	4-Bromophenylphenylether				CAS #: 101-55-3			
8.307	8.307 (0.966)	284	112087	45.0000	44.3	80.00-	120.00	100.00
8.306	8.307 (0.966)	142	42795		10.52-	70.52		38.18
8.307	8.307 (0.966)	249	33587		1.60-	61.60		29.97

94	Hexachlorobenzene				CAS #: 118-74-1			
8.480	8.480 (0.986)	266	67089	45.0000	45.0	80.00-	120.00	100.00
8.480	8.481 (0.986)	264	42382		33.54-	93.54		63.17
8.480	8.481 (0.986)	268	42821		34.39-	94.39		63.83

* 100	Phenanthrene-d10				CAS #: 1517-22-2			
8.603	8.604 (1.000)	188	343898	40.0000		80.00-	120.00	100.00
8.603	8.604 (1.000)	94	37422		0.00-	40.39		10.88
8.603	8.603 (1.000)	80	41006		0.00-	41.55		11.92

101	Phenanthrene				CAS #: 85-01-8			
8.626	8.626 (1.003)	178	427943	45.0000	44.2	80.00-	120.00	100.00
8.626	8.626 (1.003)	179	65051		0.00-	45.20		15.20
8.626	8.626 (1.003)	176	81851		0.00-	48.69		19.13

103	Anthracene				CAS #: 120-12-7			
8.669	8.670 (1.008)	178	380839	45.0000	44.0	80.00-	120.00	100.00
8.669	8.670 (1.008)	179	58380		0.00-	45.53		15.33
8.669	8.670 (1.008)	176	69560		0.00-	49.11		18.26

104	Carbazole				CAS #: 86-74-8			
8.829	8.830 (1.026)	167	390179	45.0000	45.4	80.00-	120.00	100.00
8.829	8.830 (1.026)	139	52706		0.00-	43.72		13.51
8.829	8.830 (1.026)	83	35967		0.00-	39.70		9.22

105	Di-n-butylphthalate				CAS #: 84-74-2			
9.226	9.227 (1.072)	149	534462	45.0000	44.8	80.00-	120.00	100.00
9.226	9.227 (1.072)	150	47319		0.00-	39.16		8.85
9.226	9.227 (1.072)	104	34379		0.00-	36.36		6.43

109	Fluoranthene				CAS #: 206-44-0			
9.795	9.797 (1.139)	202	479681	45.0000	44.3	80.00-	120.00	100.00
9.795	9.796 (1.139)	101	55805		0.00-	41.60		11.63
9.795	9.797 (1.139)	203	80345		0.00-	47.37		16.75

111	Pyrene				CAS #: 129-00-0			
10.016	10.016 (0.893)	202	479908	45.0000	45.8	80.00-	120.00	100.00
10.015	10.016 (0.893)	200	98320		0.00-	50.33		20.49
10.015	10.016 (0.893)	203	85167		0.00-	47.92		17.75

\$ 112	Terphenyl-d14 (SURR)				CAS #: 1718-51-0			
10.179	10.179 (0.908)	244	373530	45.0000	45.0	80.00-	120.00	100.00
10.177	10.178 (0.908)	122	40343		0.00-	40.67		10.80

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
=====	=====	=====	====	=====	=====	=====	=====	=====
\$ 112 Terphenyl-d14 (SURR) (continued)								
10.178	10.179	(0.908)	212	28319		0.00-	37.92	7.58

118 Butylbenzylphthalate					CAS #:	85-68-7		
10.691	10.690	(0.953)	149	235873	45.0000	44.3	80.00-	120.00
10.691	10.691	(0.953)	91	177779		45.72-	105.72	75.37
10.691	10.692	(0.953)	206	51193		0.00-	51.71	21.70

120 Benzo[a]anthracene					CAS #:	56-55-3		
11.194	11.194	(0.998)	228	464366	45.0000	43.4	80.00-	120.00
11.194	11.194	(0.998)	229	92014		0.00-	49.13	19.81
11.194	11.194	(0.998)	226	123585		0.00-	57.06	26.61

* 121 Chrysene-d12					CAS #:	1719-03-5		
11.213	11.211	(1.000)	240	389232	40.0000		80.00-	120.00
11.212	11.210	(1.000)	120	39830		0.00-	40.02	10.23
11.213	11.210	(1.000)	236	95070		0.00-	54.50	24.43

123 Chrysene					CAS #:	218-01-9		
11.236	11.238	(1.002)	228	454203	45.0000	43.7	80.00-	120.00
11.237	11.238	(1.002)	226	131801		0.00-	59.08	29.02
11.236	11.238	(1.002)	229	89670		0.00-	49.34	19.74

124 Bis-2-Ethylhexylphthalate					CAS #:	117-81-7		
11.275	11.275	(1.006)	149	319489	45.0000	43.3	80.00-	120.00
11.275	11.276	(1.006)	167	96133		0.00-	59.84	30.09
11.276	11.276	(1.006)	279	23642		0.00-	37.67	7.40

125 Di-n-octylphthalate					CAS #:	117-84-0		
11.842	11.842	(0.945)	149	557912	45.0000	48.5	80.00-	120.00
11.842	11.843	(0.945)	167	8532		0.00-	31.49	1.53
11.842	11.842	(0.945)	43	48697		0.00-	38.92	8.73

127 Benzo[b]fluoranthene					CAS #:	205-99-2		
12.198	12.198	(0.973)	252	426979	45.0000	43.0	80.00-	120.00
12.198	12.198	(0.973)	253	93622		0.00-	52.25	21.93
12.219	12.219	(0.975)	125	79012		0.00-	48.56	18.50

128 Benzo[k]fluoranthene					CAS #:	207-08-9		
12.220	12.220	(0.975)	252	463277	45.0000	42.0	80.00-	120.00
12.220	12.220	(0.975)	253	100897		0.00-	52.11	21.78
12.219	12.219	(0.975)	125	79013		0.00-	46.79	17.06

129 Benzo[a]pyrene					CAS #:	50-32-8		
12.482	12.484	(0.996)	252	409025	45.0000	42.8	80.00-	120.00
12.482	12.484	(0.996)	253	93365		0.00-	51.58	22.83
12.481	12.484	(0.996)	125	40106		0.00-	39.66	9.81

* 130 Perylene-d12					CAS #:	1520-96-3		
12.532	12.532	(1.000)	264	344421	40.0000		80.00-	120.00
12.532	12.533	(1.000)	260	76724		0.00-	52.70	22.28
12.532	12.532	(1.000)	265	73872		0.00-	52.11	21.45

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET RANGE	RATIO
				CAL-AMT	ON-COL		
13.569	13.569 (1.083)	276	473914	45.0000	44.8	80.00- 120.00	100.00
13.570	13.570 (1.083)	138	108383		0.00-	53.00	22.87
13.570	13.570 (1.083)	277	119436		0.00-	55.19	25.20

13.574	13.574 (1.083)	278	396036	45.0000	43.7	80.00- 120.00	100.00
13.573	13.573 (1.083)	139	60280		0.00-	45.33	15.22
13.574	13.574 (1.083)	279	90967		0.00-	53.44	22.97

13.852	13.852 (1.105)	276	376725	45.0000	47.0	80.00- 120.00	100.00
13.851	13.852 (1.105)	138	71705		0.00-	48.86	19.03
13.852	13.852 (1.105)	277	90068		0.00-	53.33	23.91

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\Sved04\DD\chem\smsd04,i\S41114SScal.b\8270CAL4.d
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Client ID: 8270CAL4
Sample Info: 47766

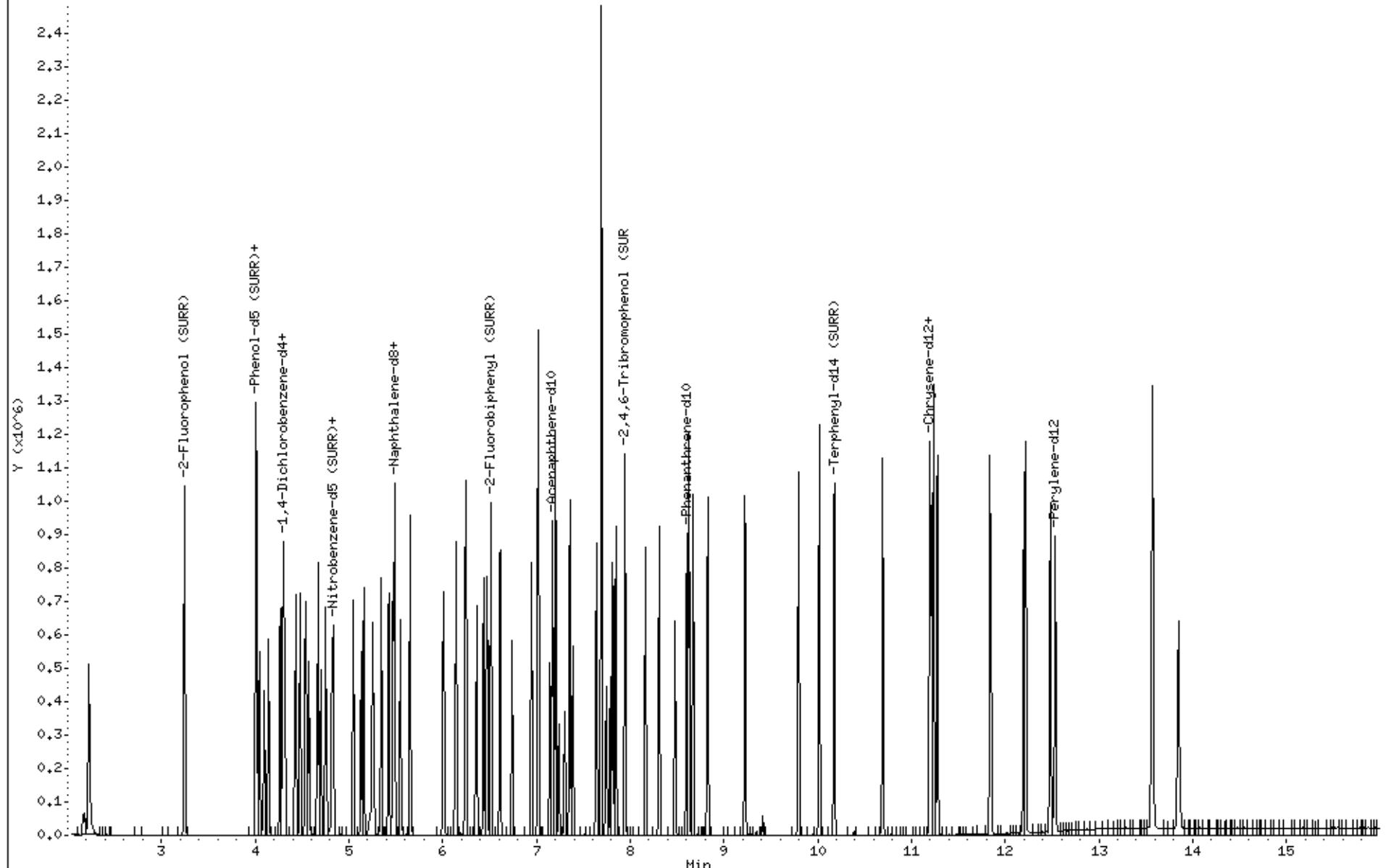
Page 10

Column phase: HPMS-5

Instrument: smsd04,i

Operator: MJ
Column diameter: 0.25

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Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

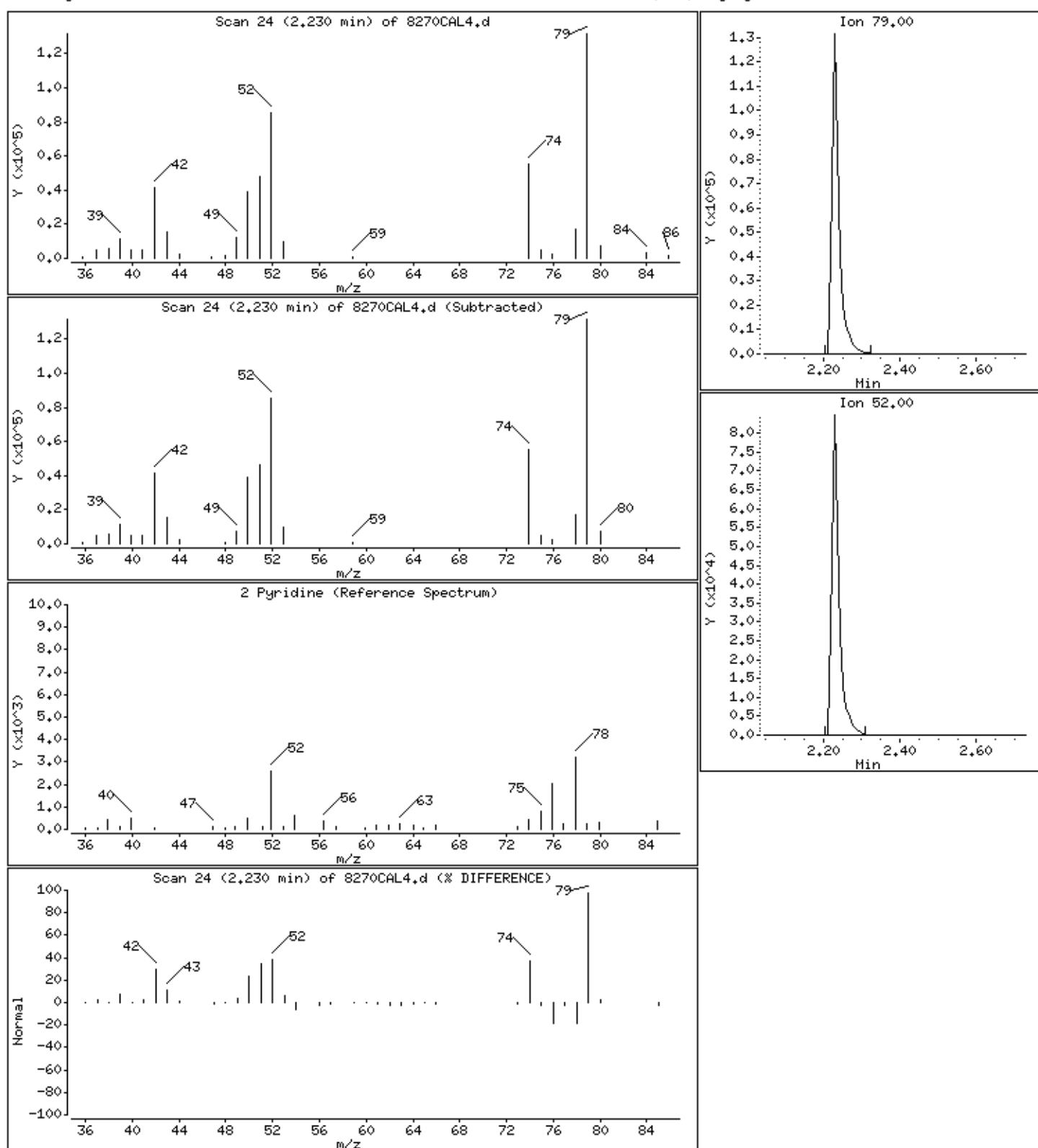
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

2 Pyridine

Concentration: 44.7 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

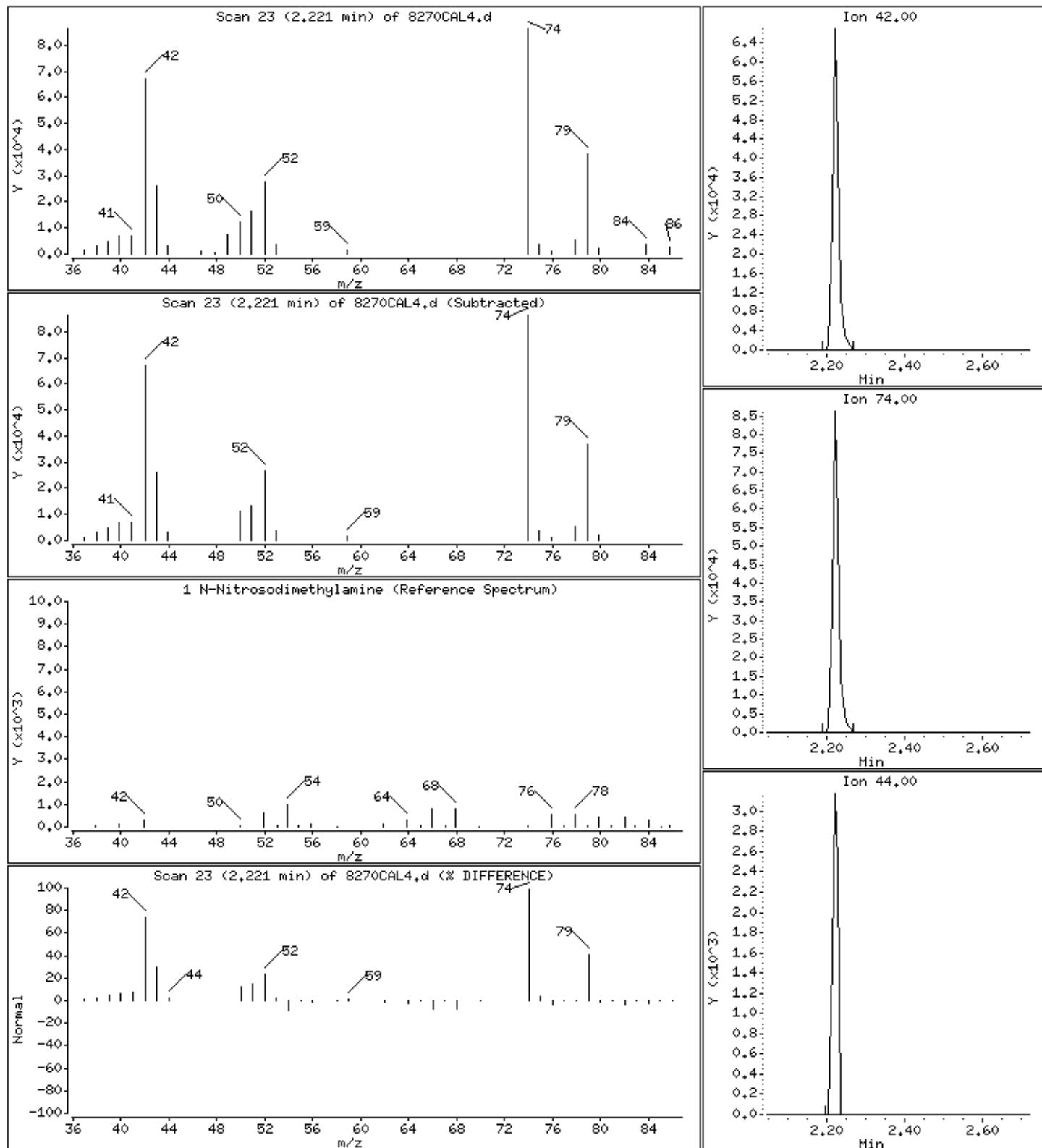
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

1 N-Nitrosodimethylamine

Concentration: 44.6 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

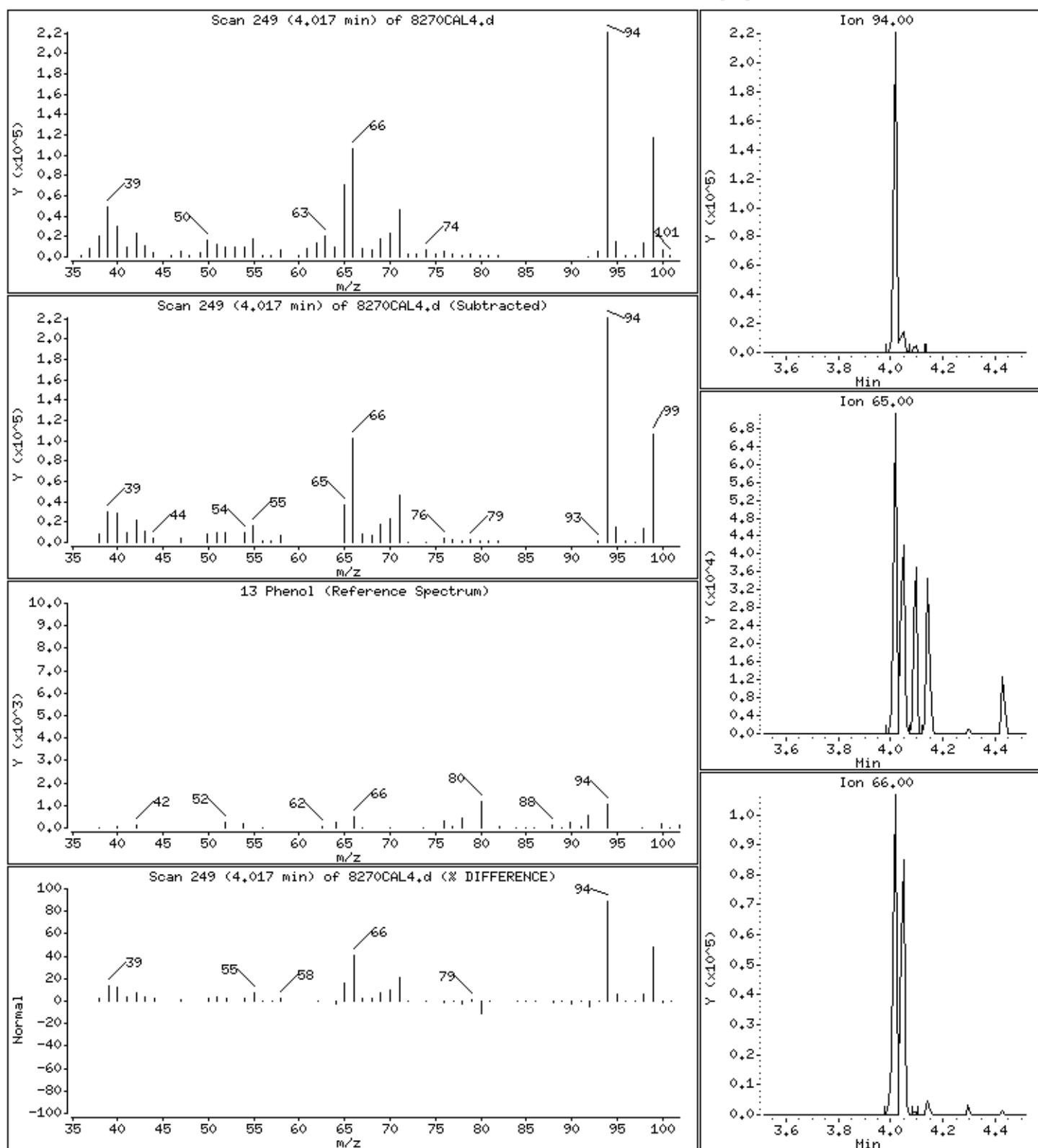
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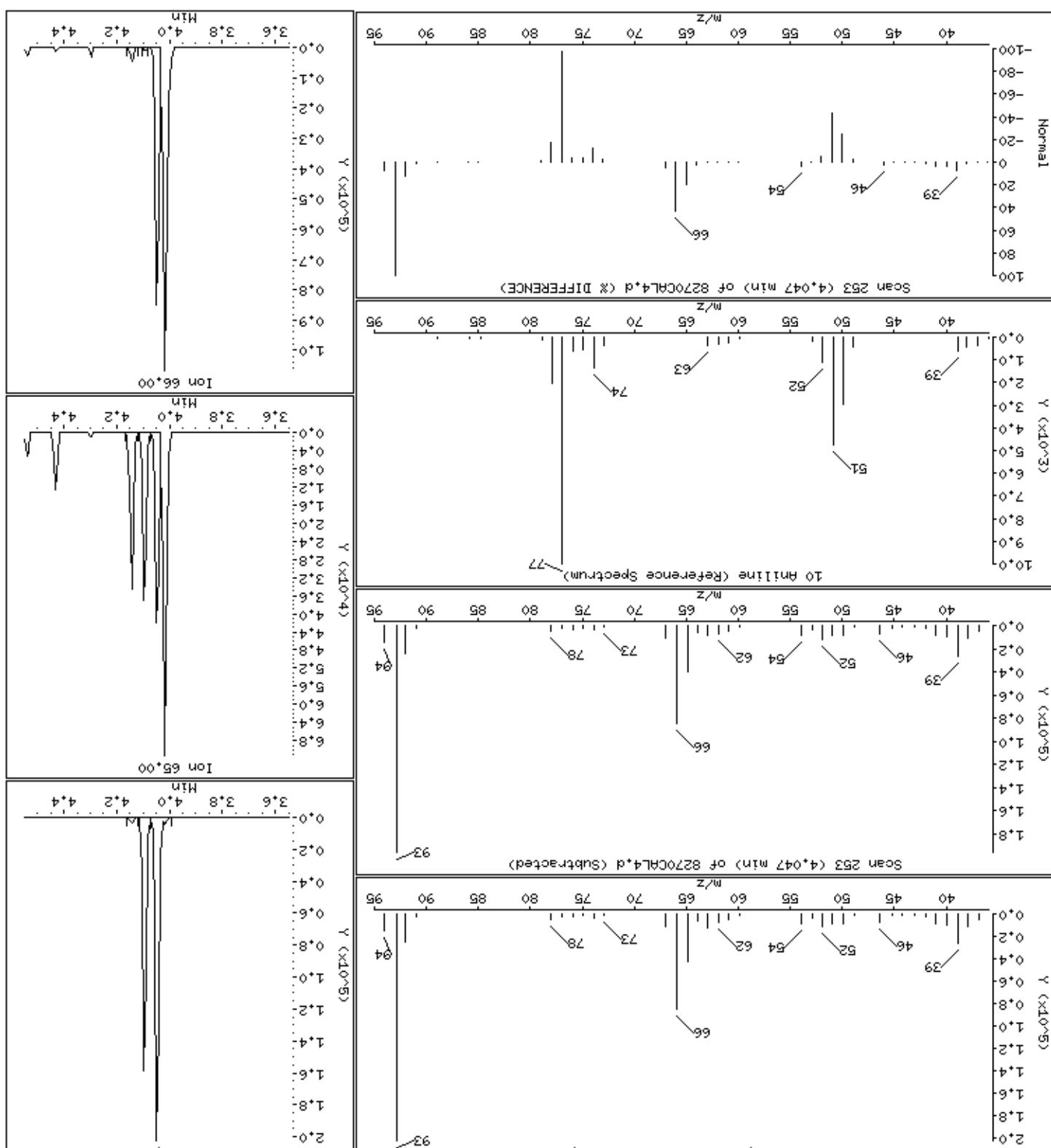
Column phase: HPMS-5

Column diameter: 0.25

13 Phenol

Concentration: 43.8 ug/kg





Date : 14-NOV-2012 23:43 Data File: \\\\$vedolad\DD\chem\msd4\1\8270CAL4.d Page 14

Client ID: 8270CAL4 Instrument: msd4.i Sample Info: 47766

Operator: HS Column phase: HPM-S Column diameter: 0.25

Concentration: 47.5 ug/Kg

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Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

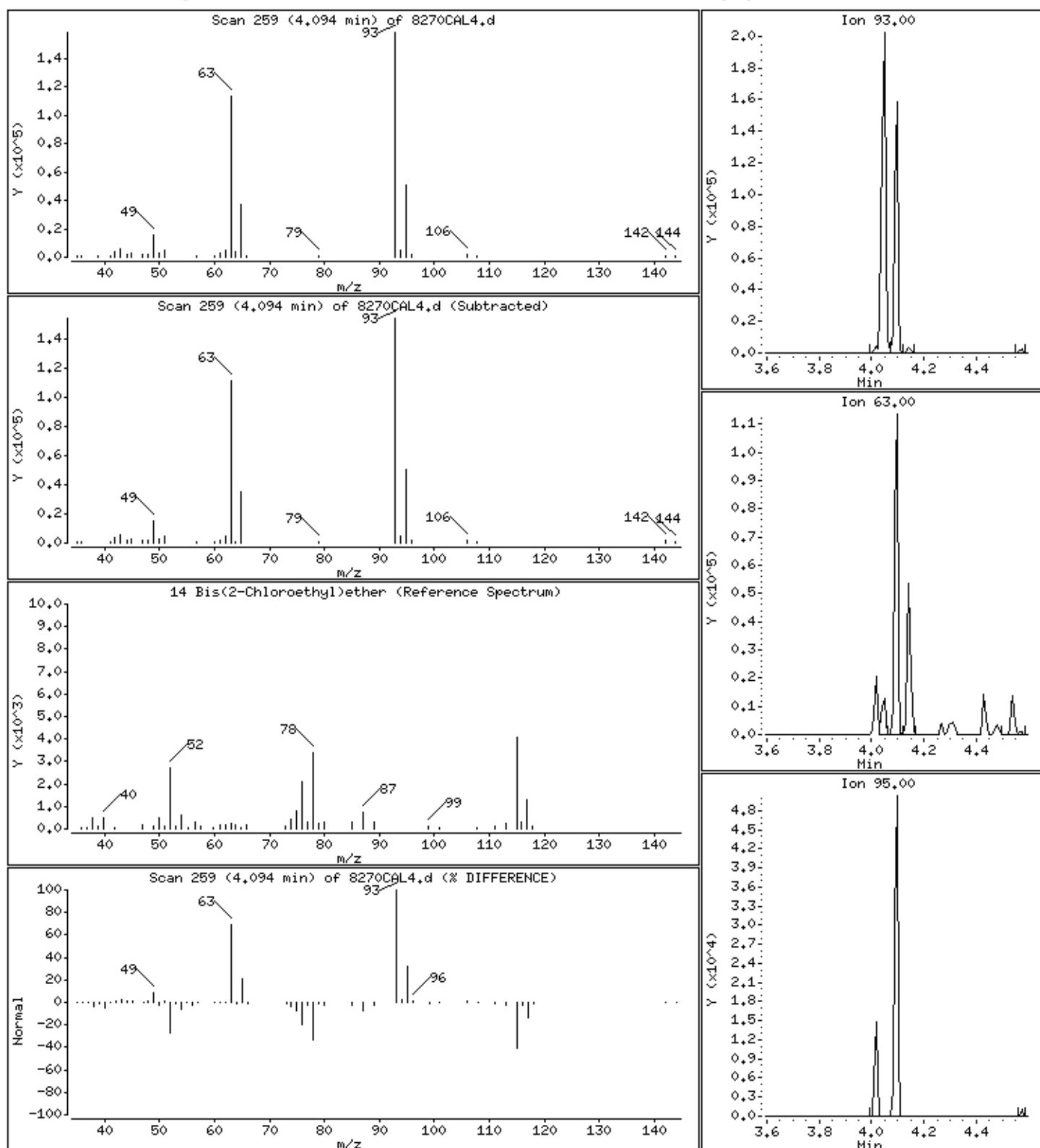
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

14 Bis(2-Chloroethyl)ether

Concentration: 45.6 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

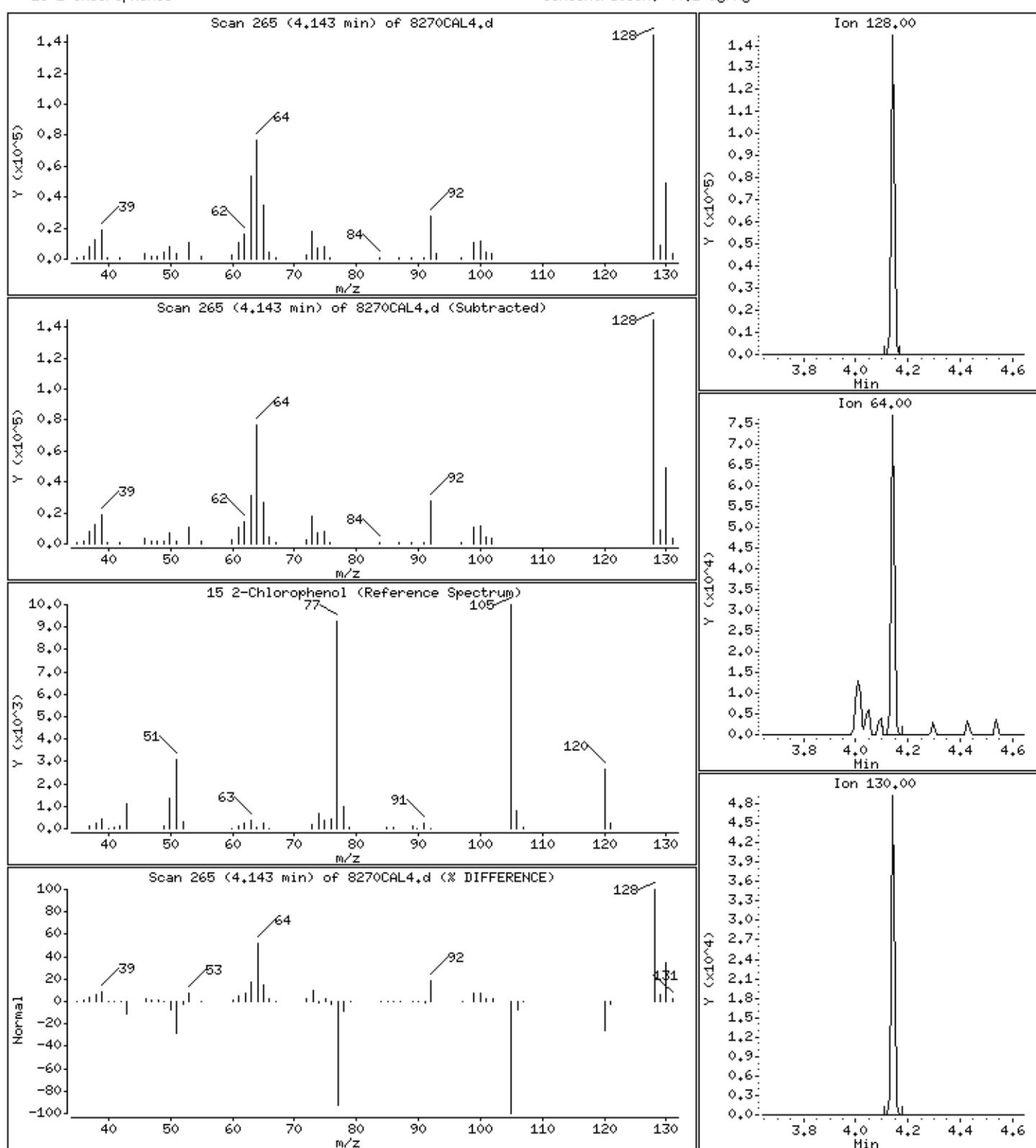
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Column phase: HPMS-5

Column diameter: 0.25

15 2-Chlorophenol

Concentration: 44.2 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

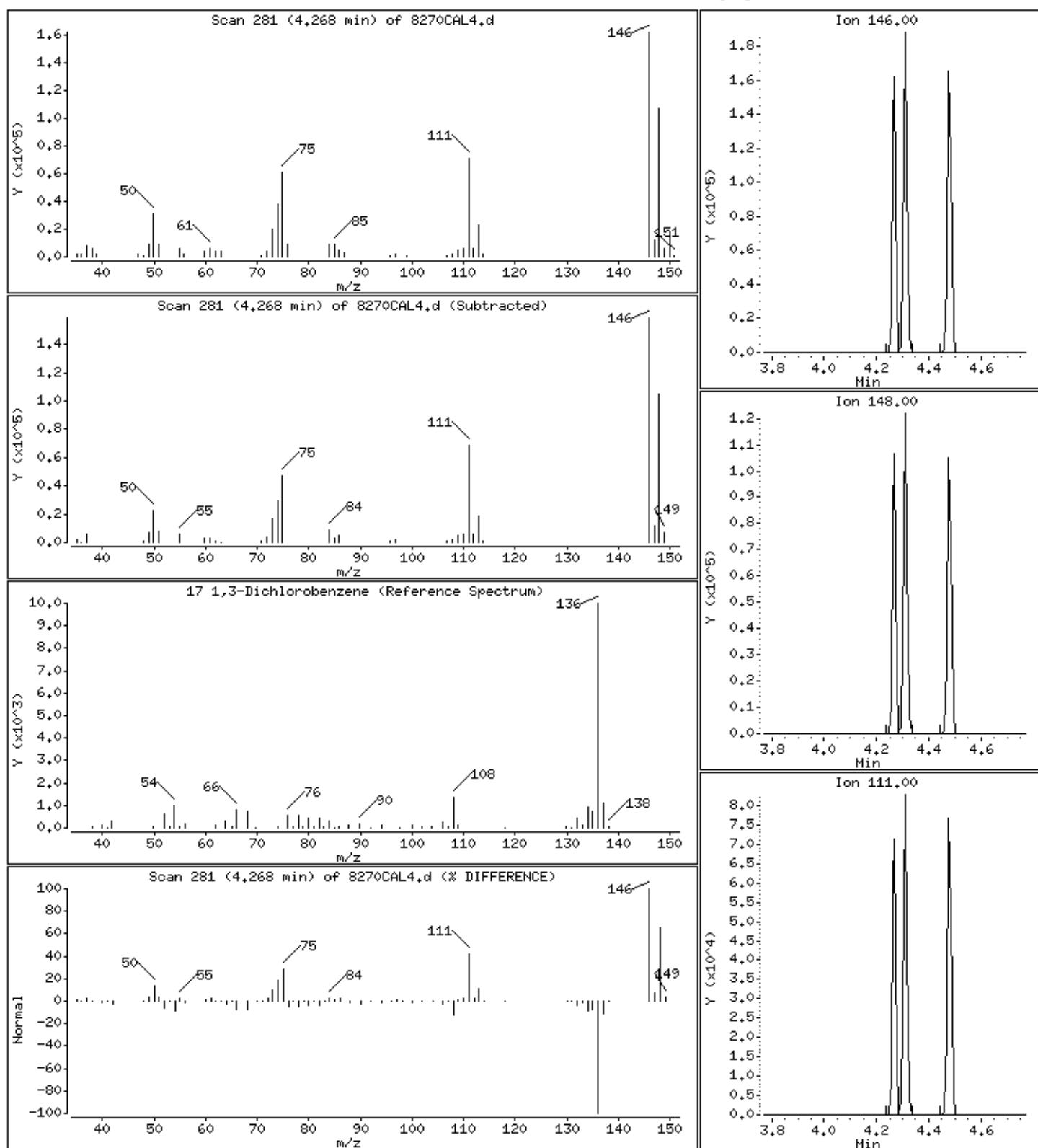
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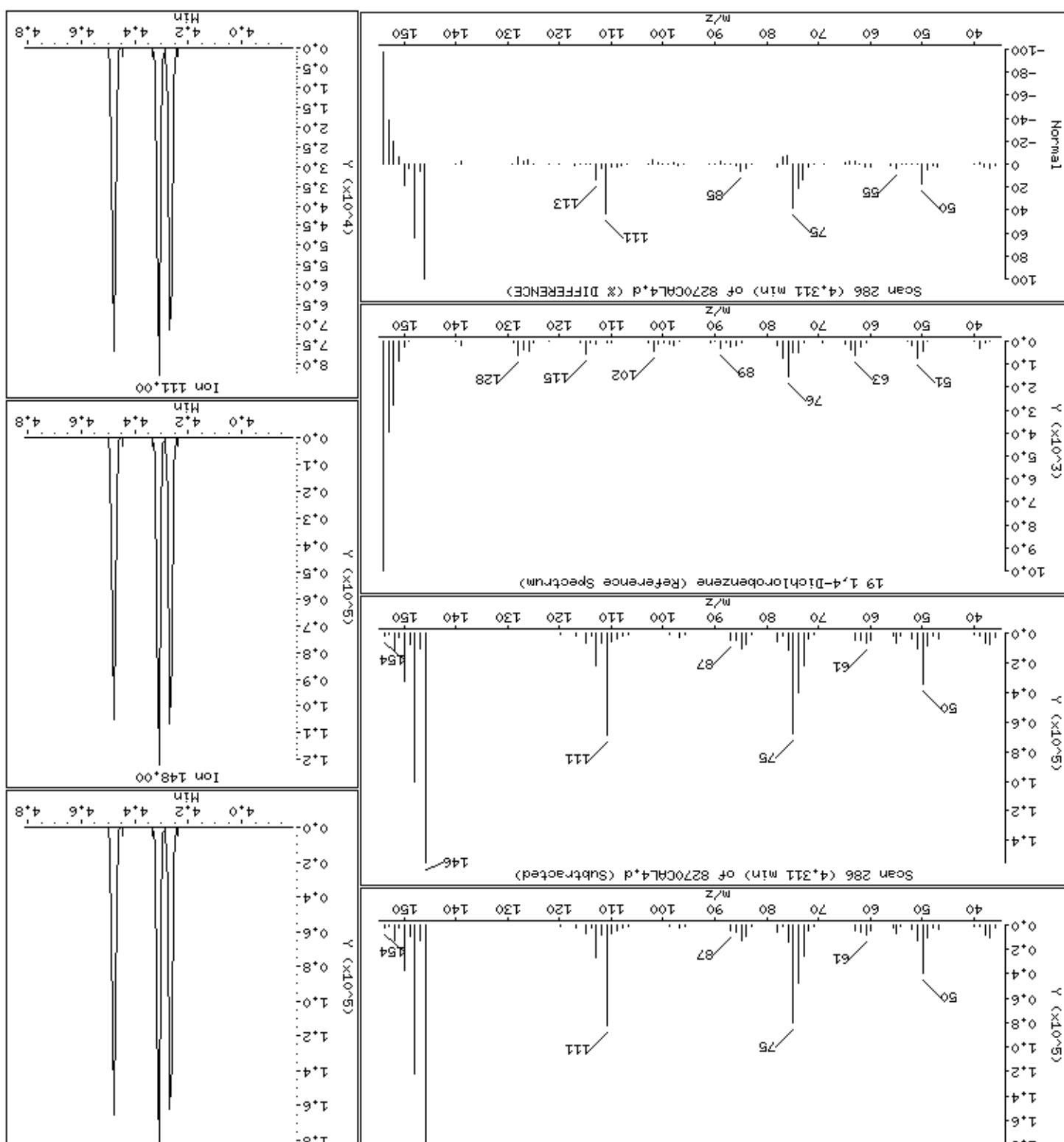
Column phase: HPMS-5

Column diameter: 0.25

17 1,3-Dichlorobenzene

Concentration: 44.4 ug/kg





Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

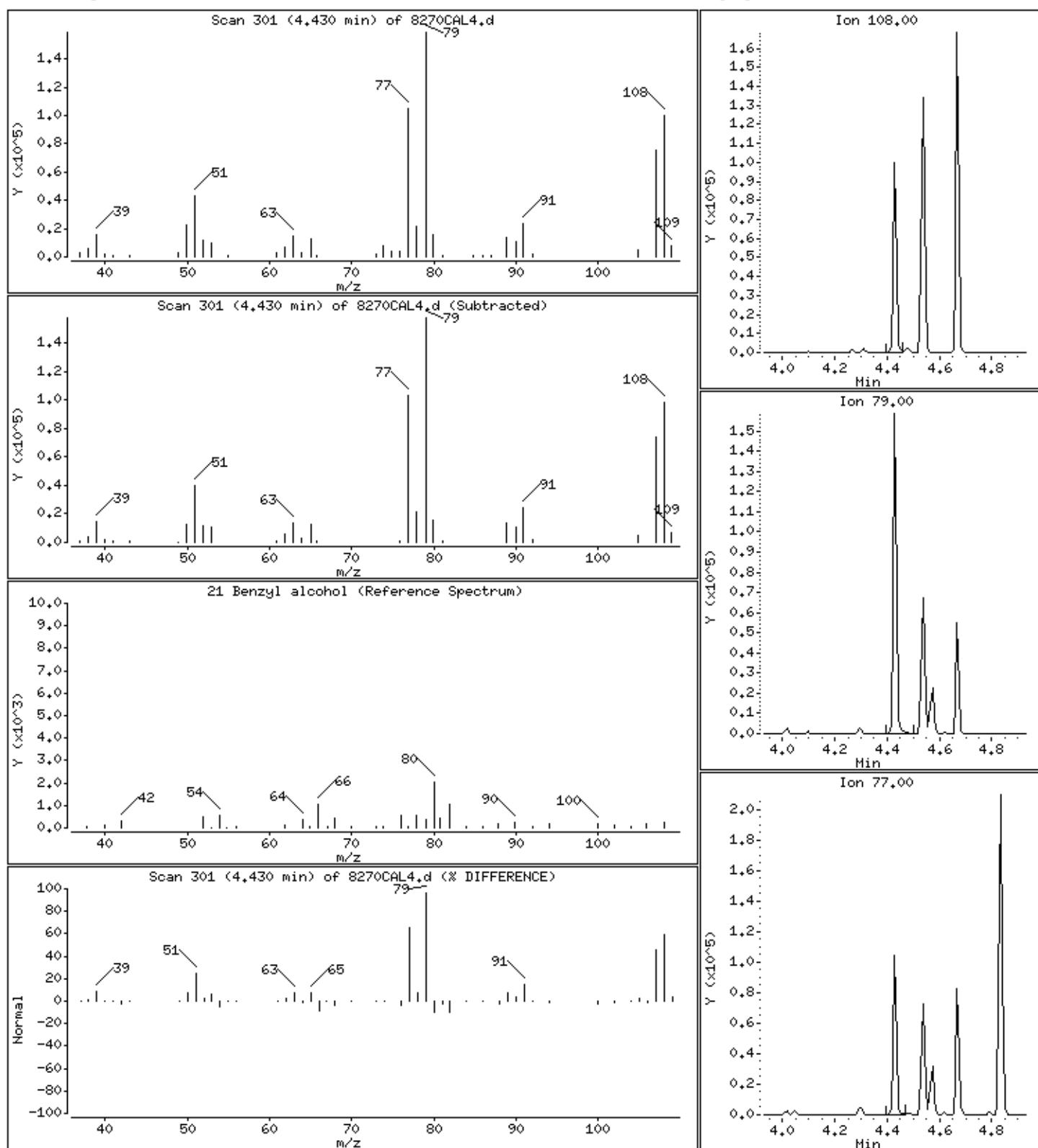
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

21 Benzyl alcohol

Concentration: 42.7 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

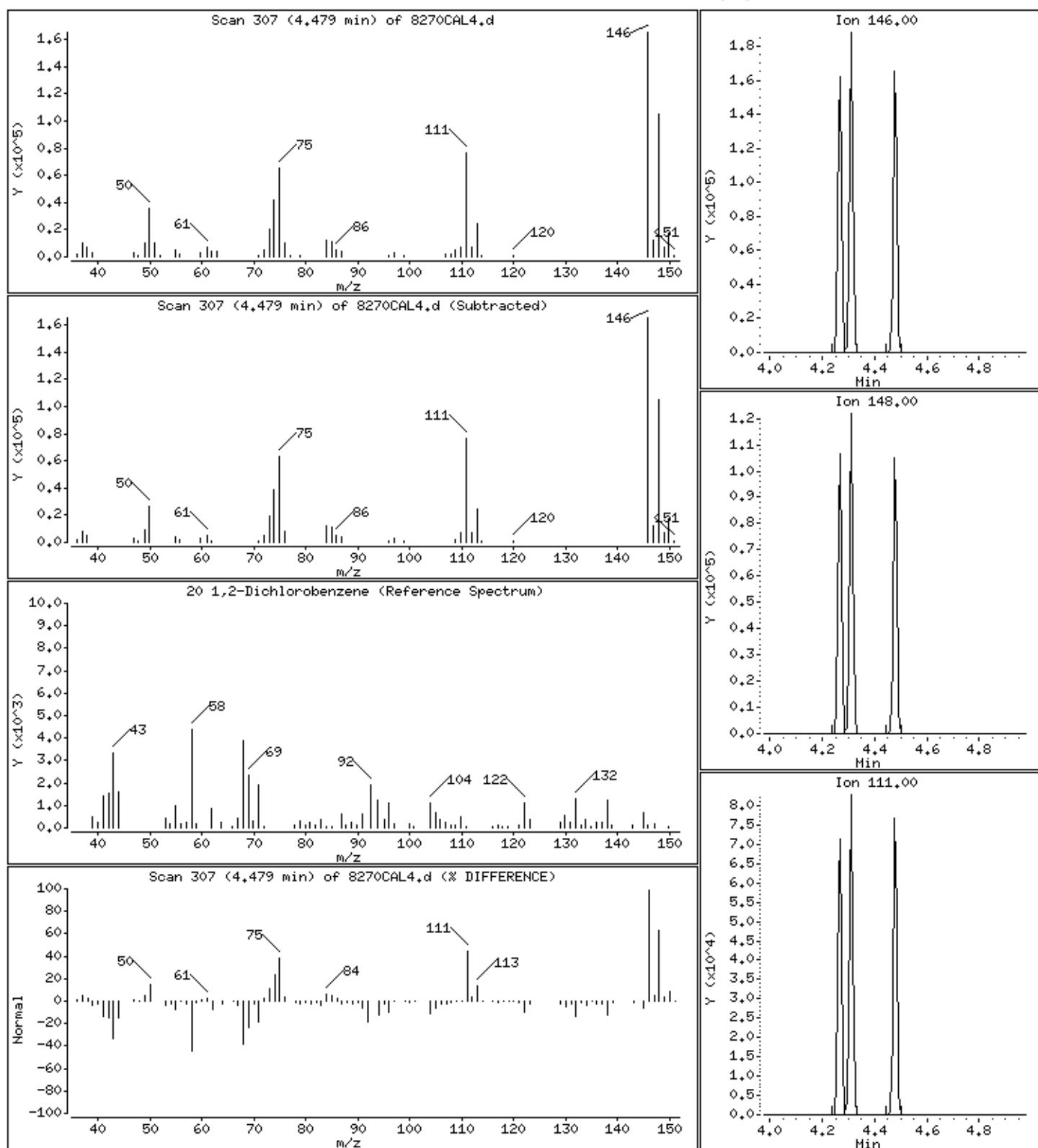
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

20 1,2-Dichlorobenzene

Concentration: 44.2 ug/kg



22 2-Methylphenol

Column phase: HPMs-5
Concentration: 43.4 μ g/kg
Operatort: H3
Column diameter: 0.25 mm
Scan 315 (4.539 min) of 8270CAL4.d

Ion 107.00

Scan 315 (4.539 min) of 8270CAL4.d (Subtracted)

Ion 107.00

Scan 315 (4.539 min) of 8270CAL4.d (Subtracted)

Ion 108.00

22 2-Methylphenol (Reference Spectrum)

Ion 79.00

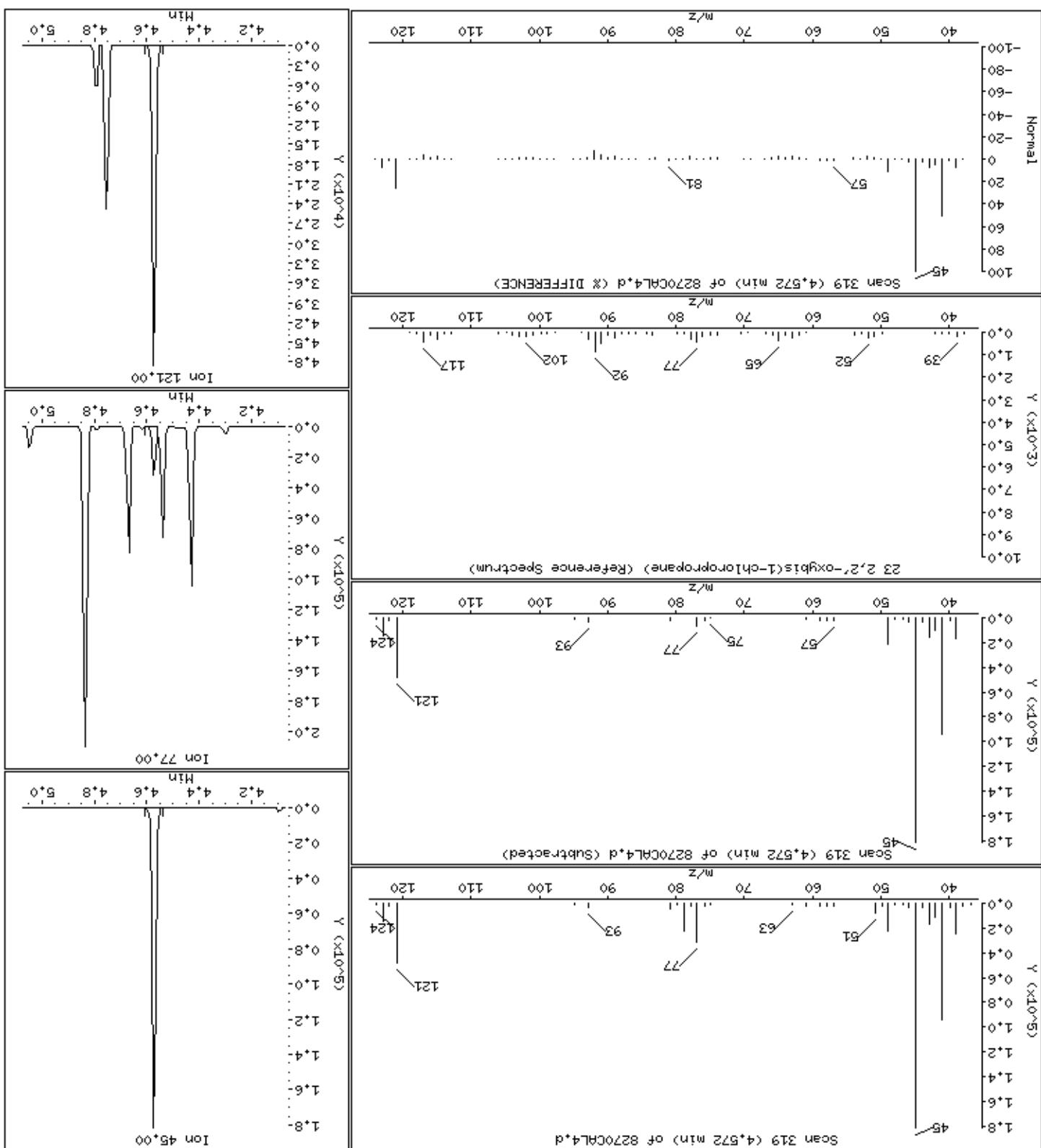
Scan 315 (4.539 min) of 8270CAL4.d (% Difference)

Ion 79.00

22 2-Methylphenol

Data file: \\\\$ecode\DD\chem\msd04\1\4111445521\b\8270C44.d Page 21

Instrument ID: 8270CALL4
Client ID: 8270CALL4
Sample Info: 47766
Operator: M3
Column phase: HPS-5
Column diameter: 0.25
Concentration: 44.9 ug/kg
23 2,2'-oxybis(1-chloropropane)



Date : 14-NOV-2012 23:43 Client ID: 8270C4LA
Instrument: msd04.i

Column phase: HPM-5
Column diameter: 0.25

Instrument ID: 82700CAL4
Sample Info: 47766
Instrument: msd04.i

Instrument: msd04+i

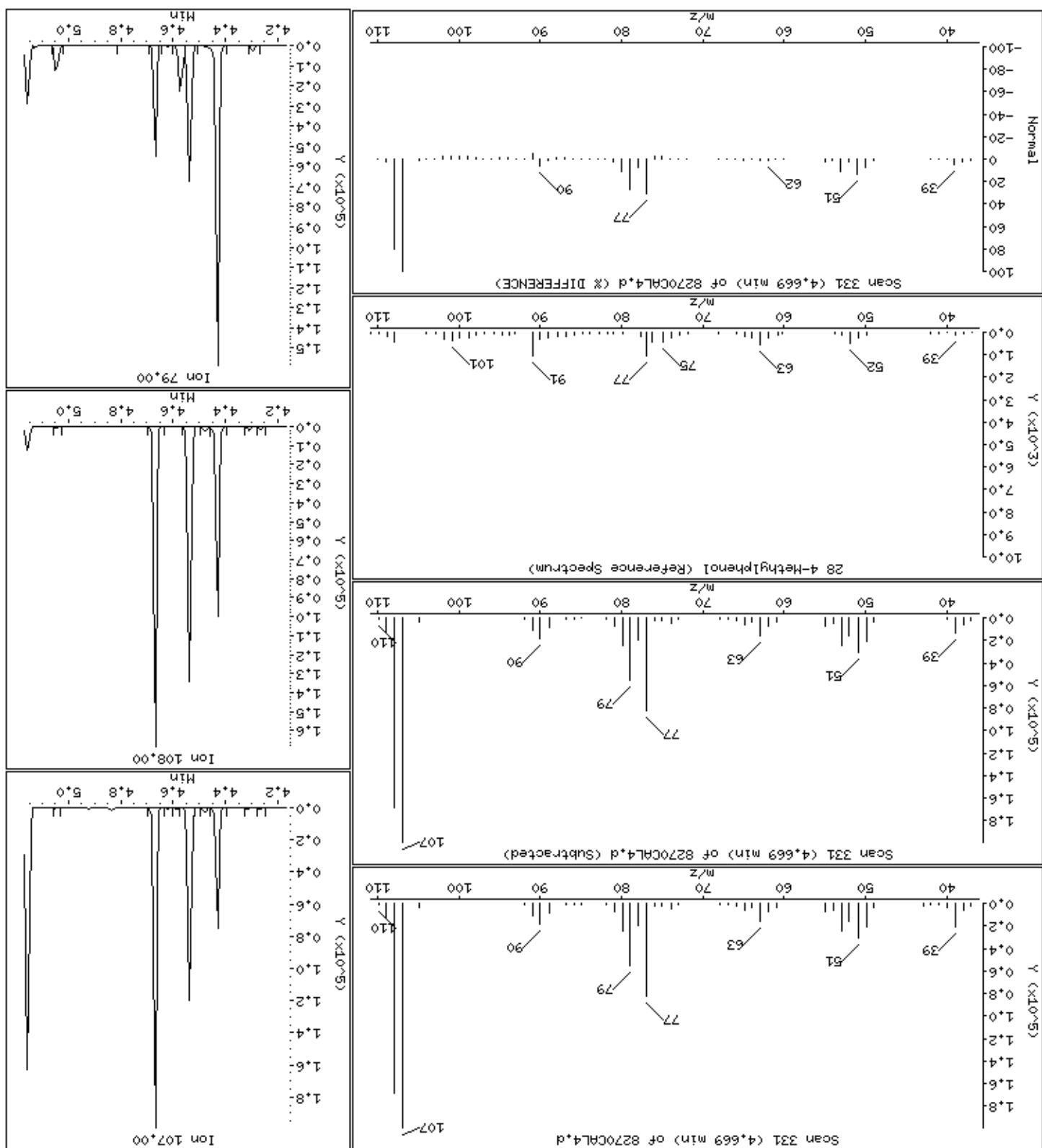
Concentration: 43.0 ug/kg

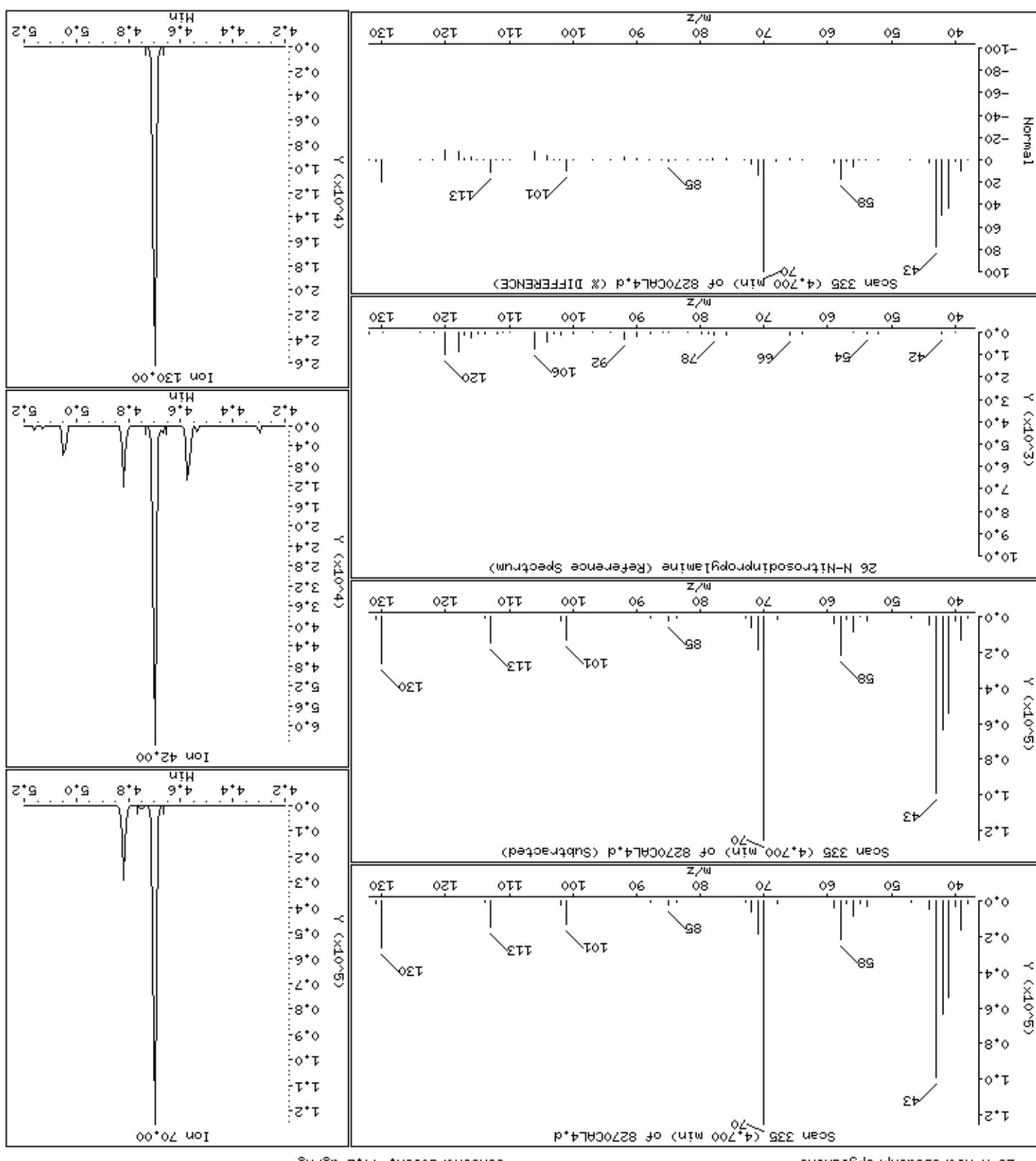
Column diameter: 0.25

REFERENCES

Instrument: smsd04+i

B+





Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

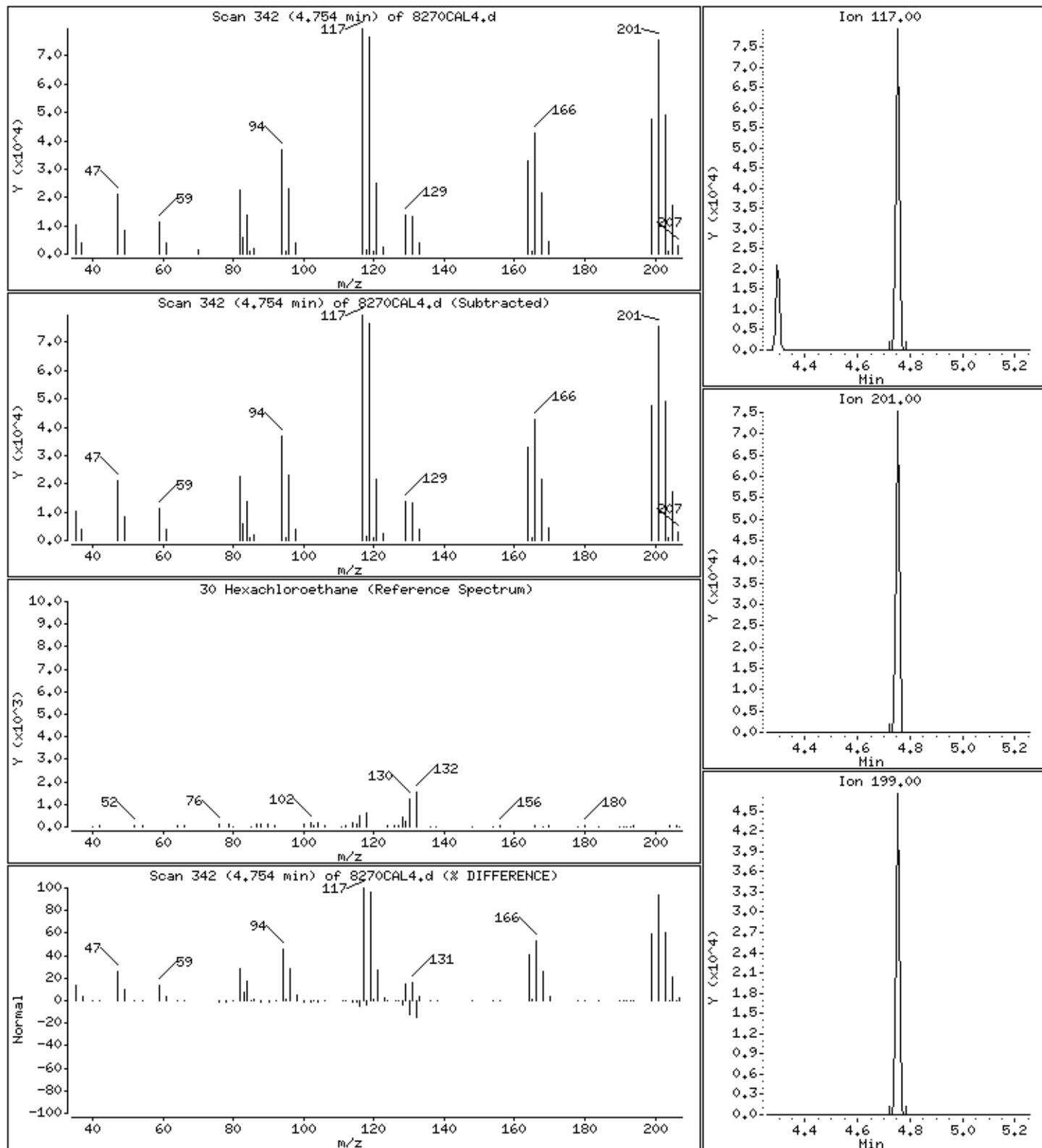
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

30 Hexachloroethane

Concentration: 45.0 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

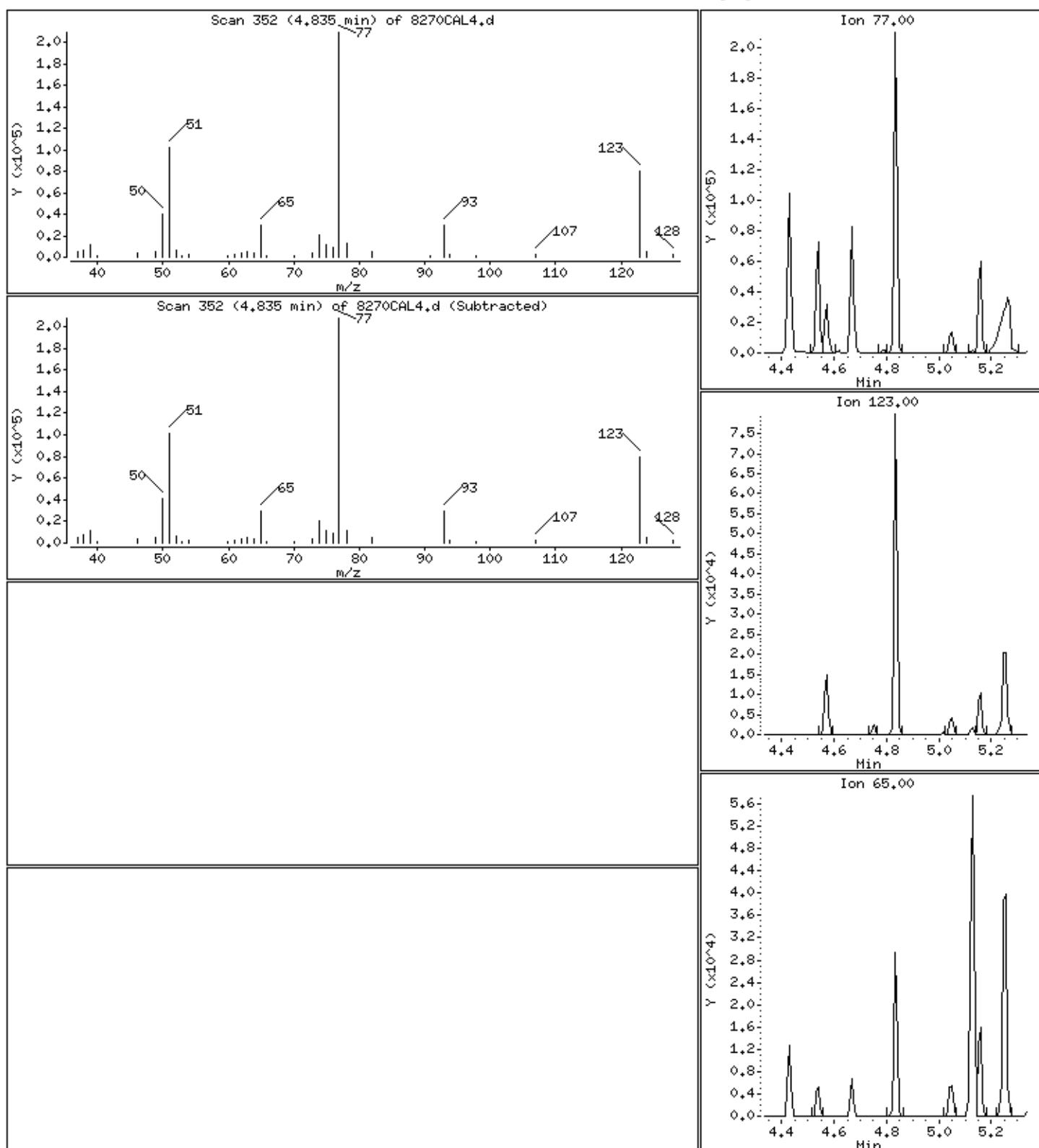
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

32 Nitrobenzene

Concentration: 45.5 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

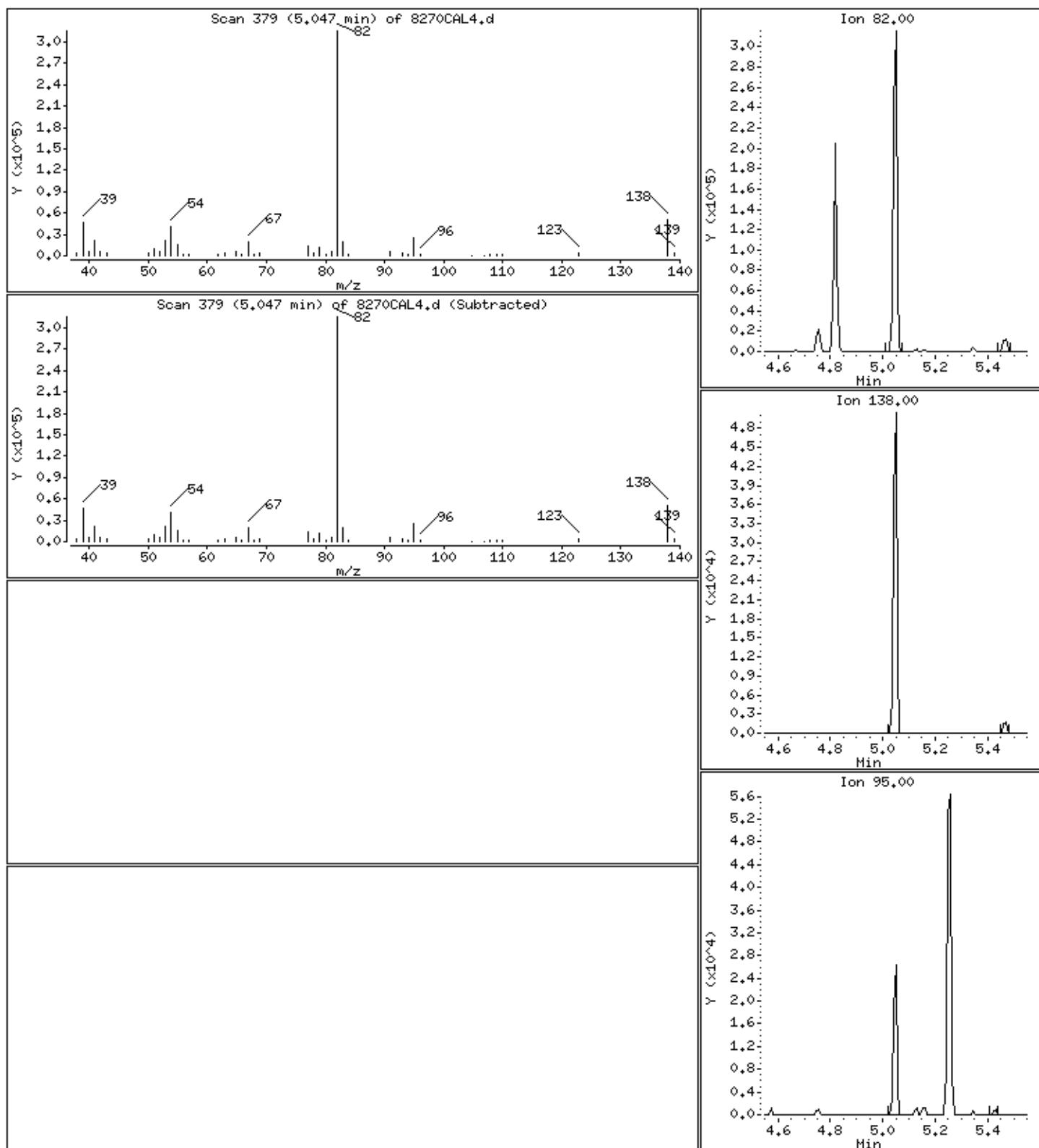
Operator: MJ

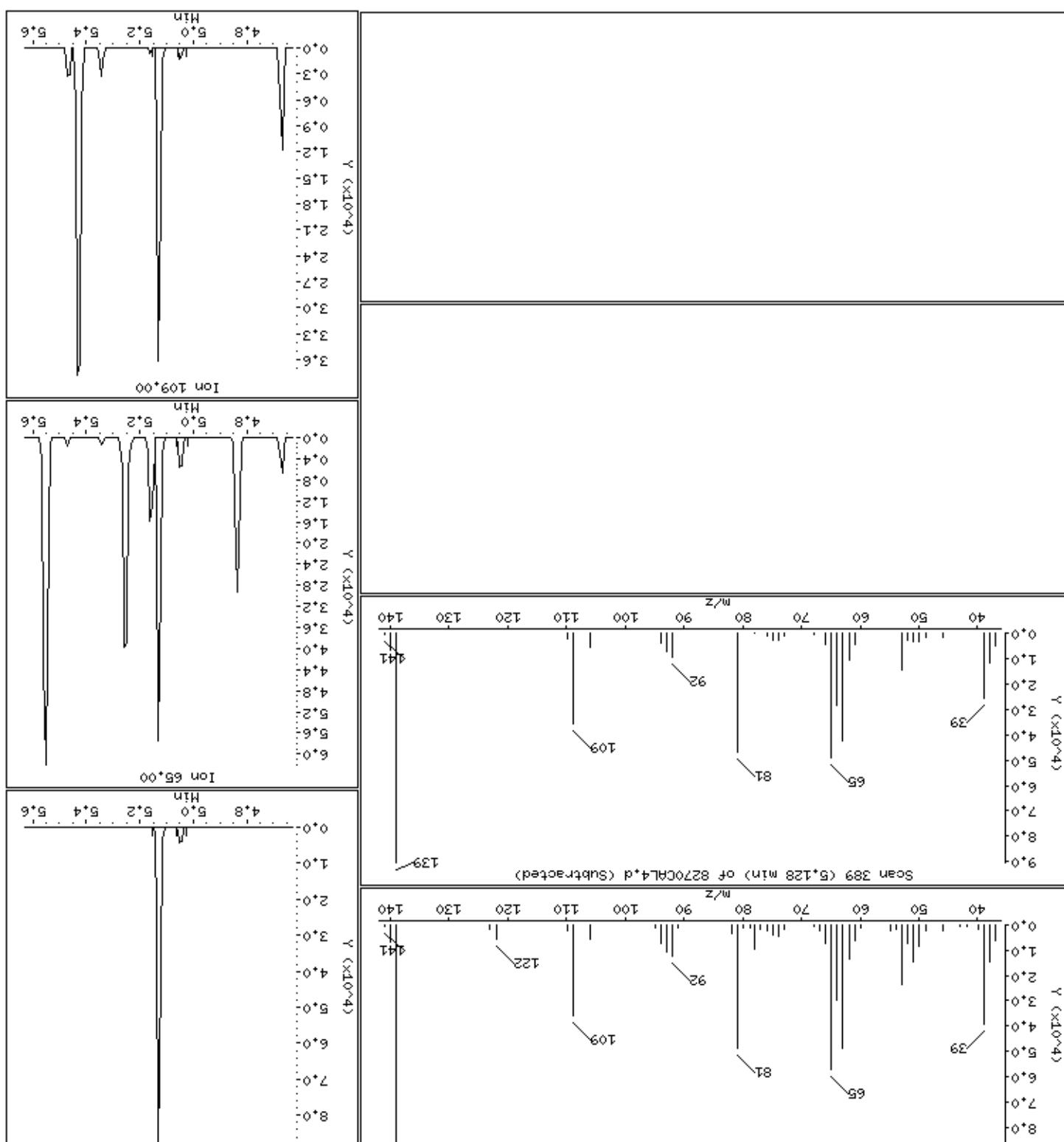
Column phase: HPMS-5

Column diameter: 0.25

34 Isophorone

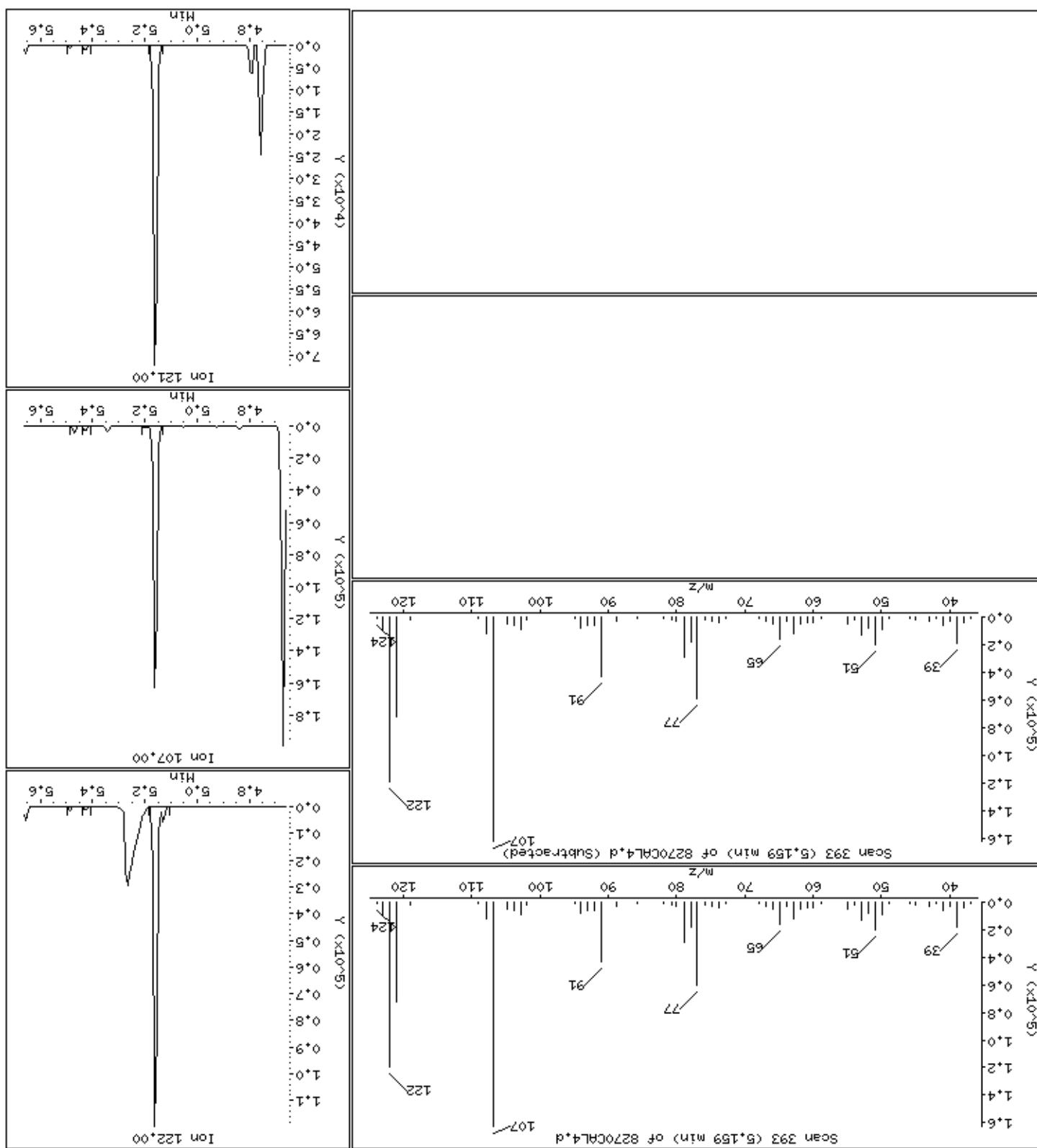
Concentration: 44.4 ug/kg





Date : 14-NOV-2012 23:43 Client ID: 8270CRA4 Instrument: msd04.i Sample Info: 47766 Operator: HJ Column Phases: HPM-S5 Column diameter: 0.25

62 aged



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

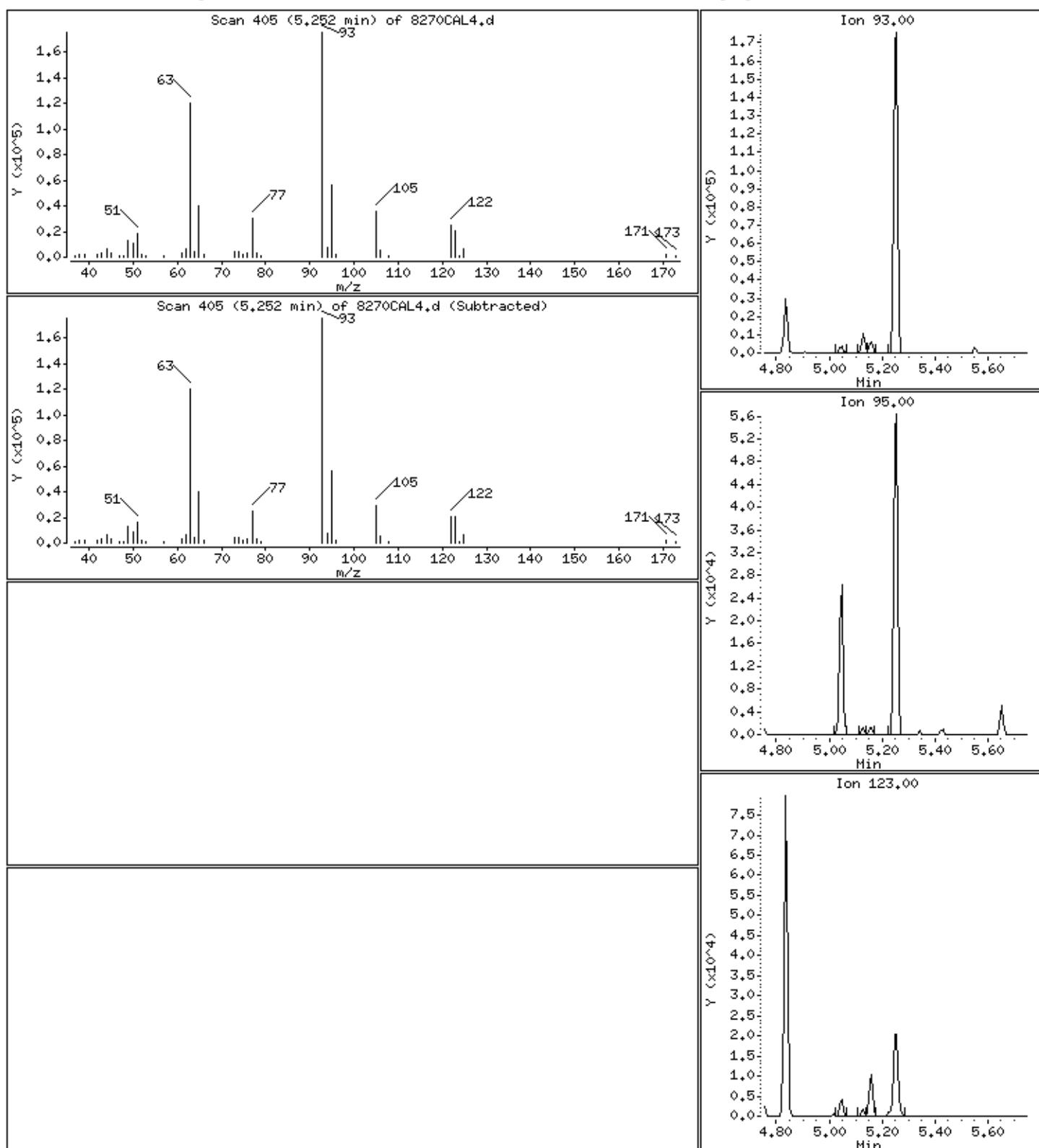
Operator: MJ

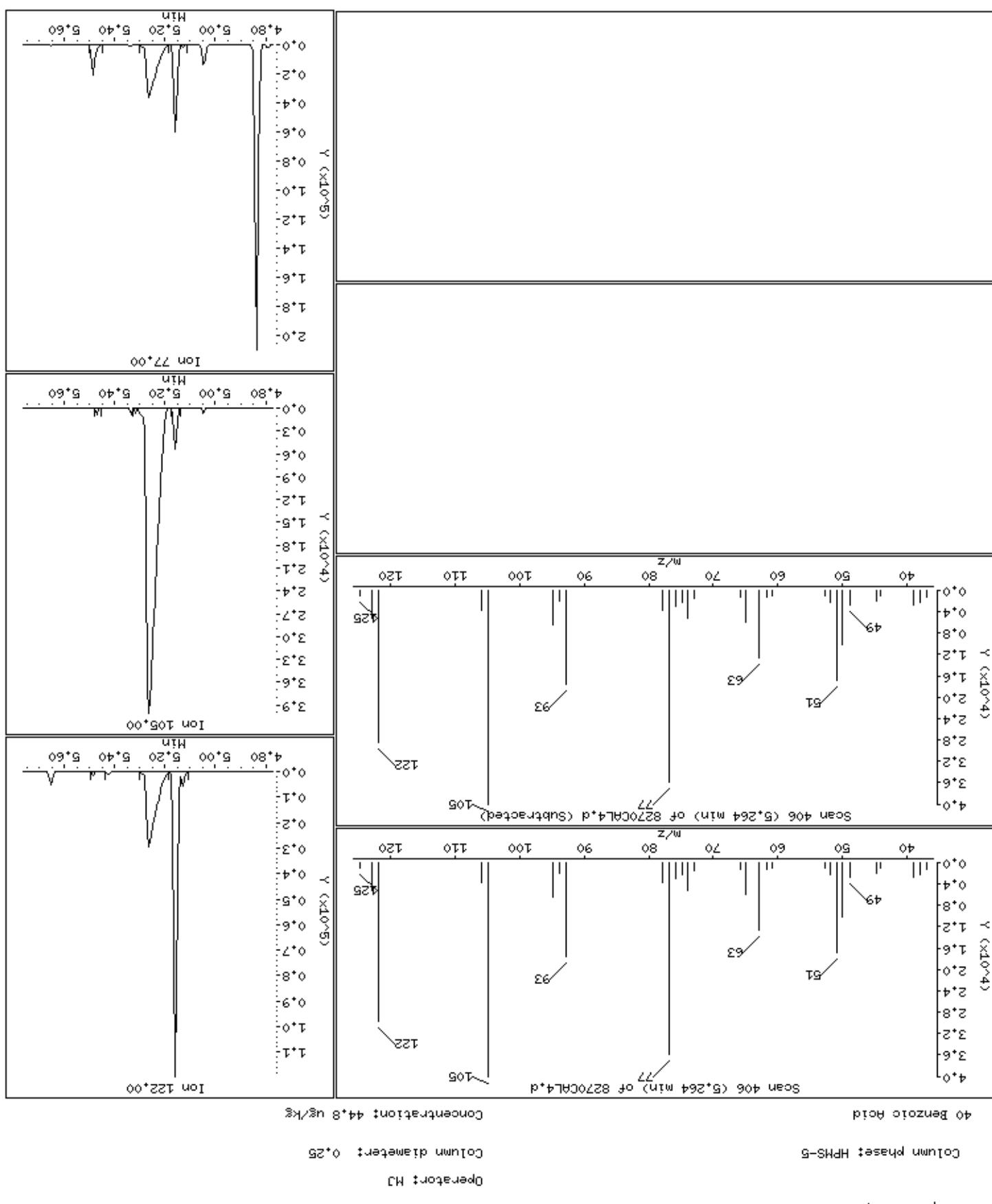
Column phase: HPMS-5

Column diameter: 0.25

38 Bis(2-Chloroethoxy)methane

Concentration: 44.6 ug/kg





Page 34

Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

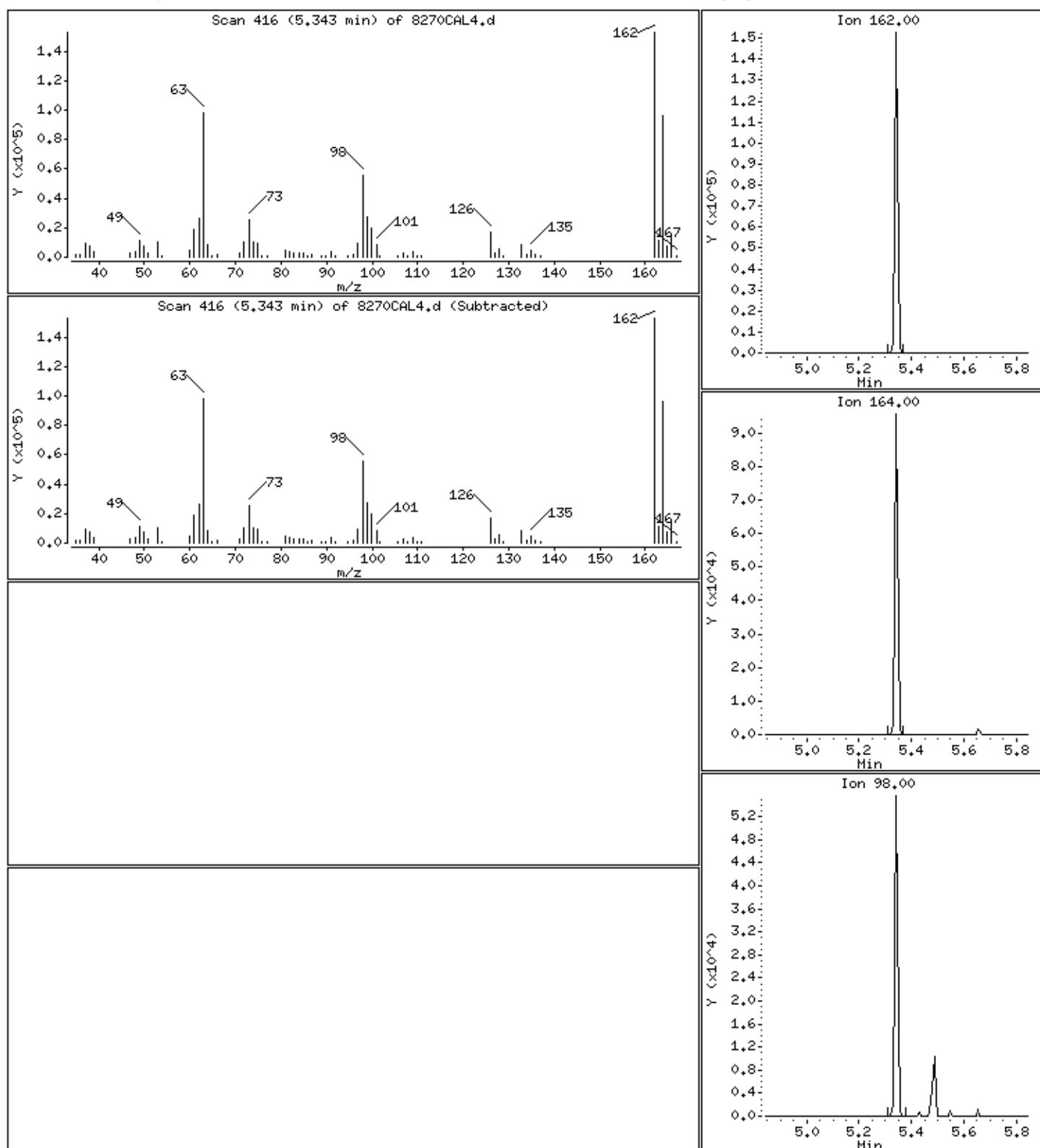
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

41 2,4-Dichlorophenol

Concentration: 44.0 ug/kg



Sample Info: 47766
Instrument: smsd04*I
Client ID: 8270CAL4
Barcode: 11-100-202-201

Instrument ID: 8270C4A4
Sample Info: 47766
Instrument: smsd4*1

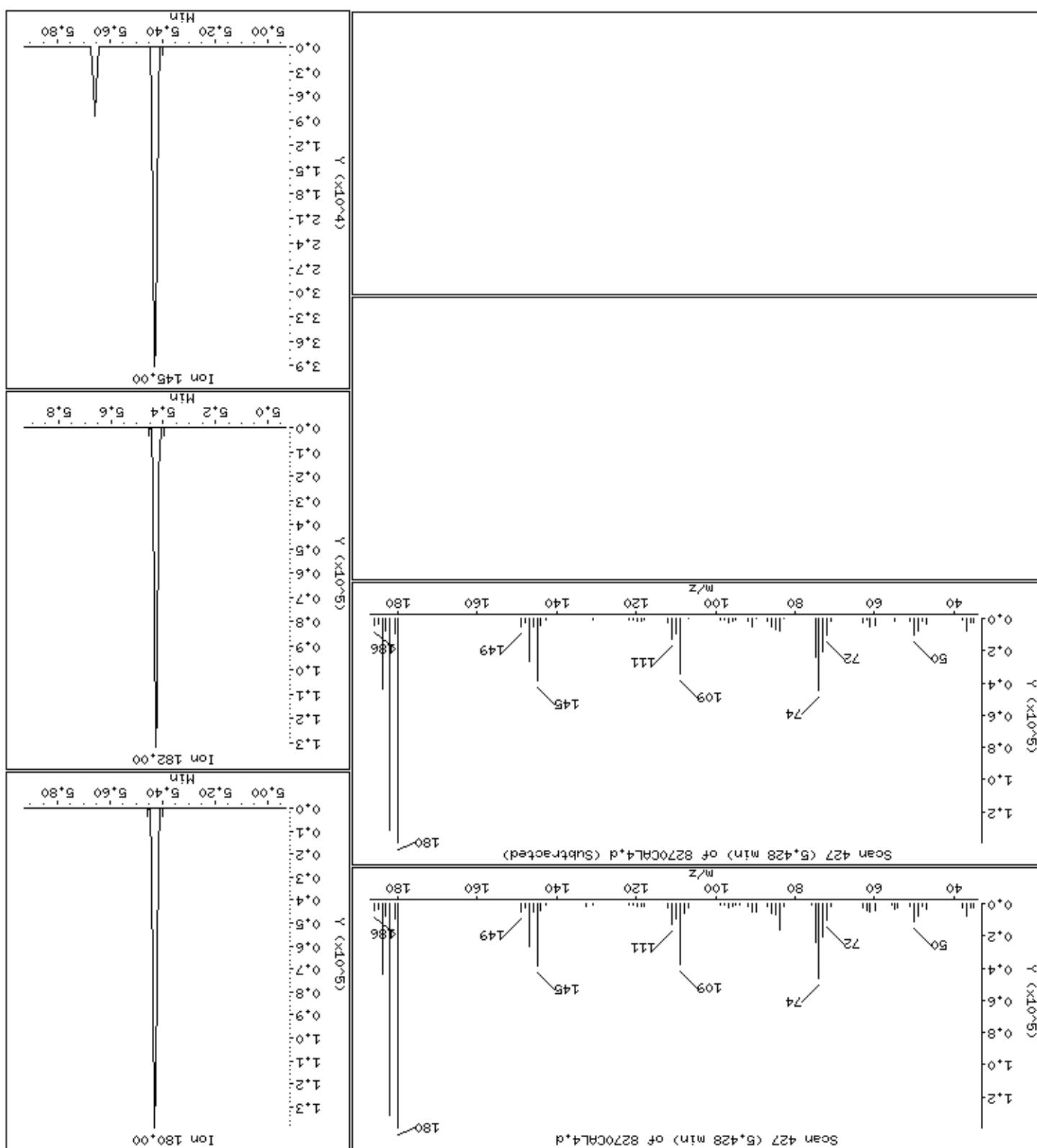
CH 102B (ado)

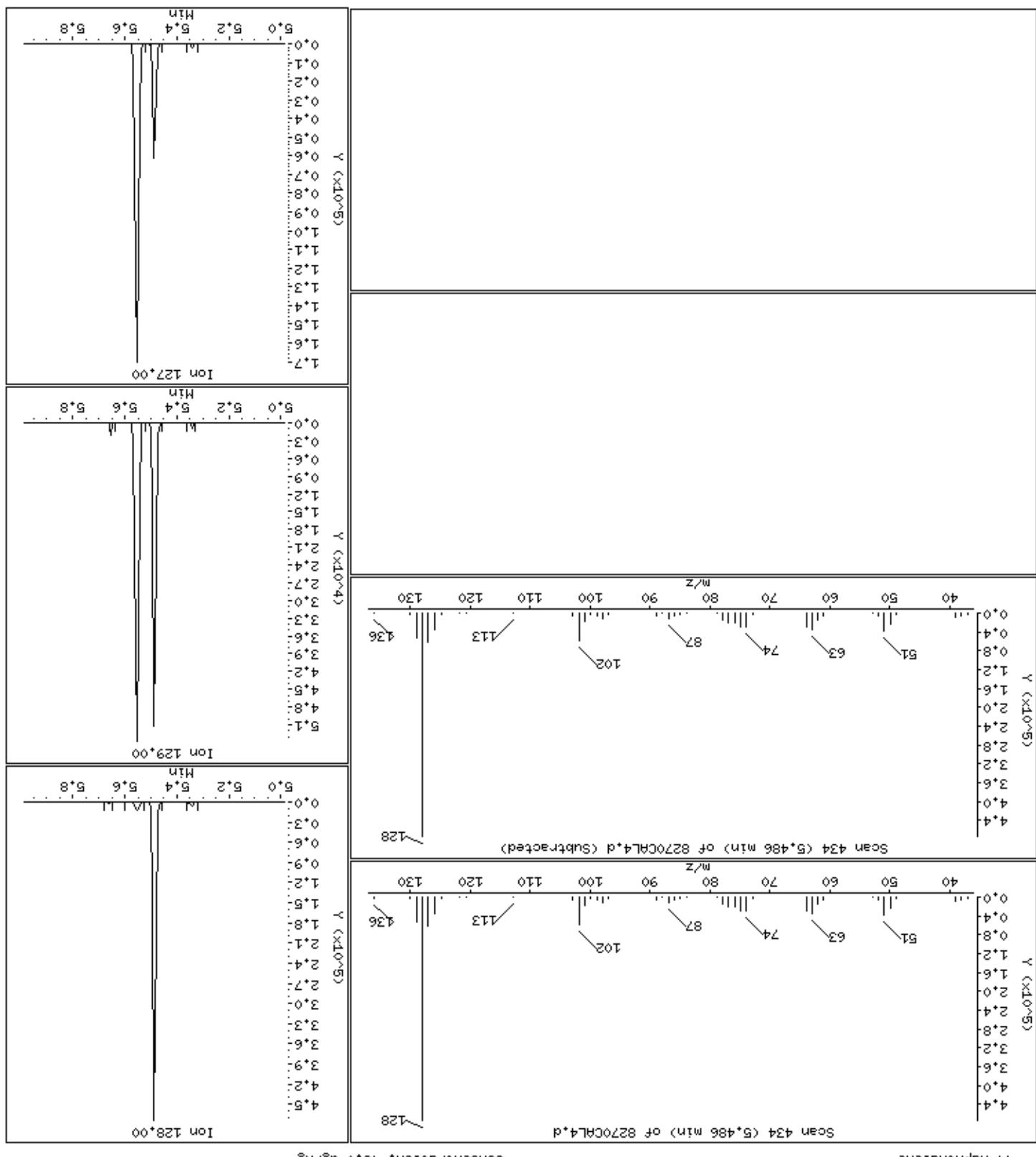
Column phase: HPMs-5

Sample Info: 47766

Scan 427 (5,428 min) of 8270CAL4.d

180





Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

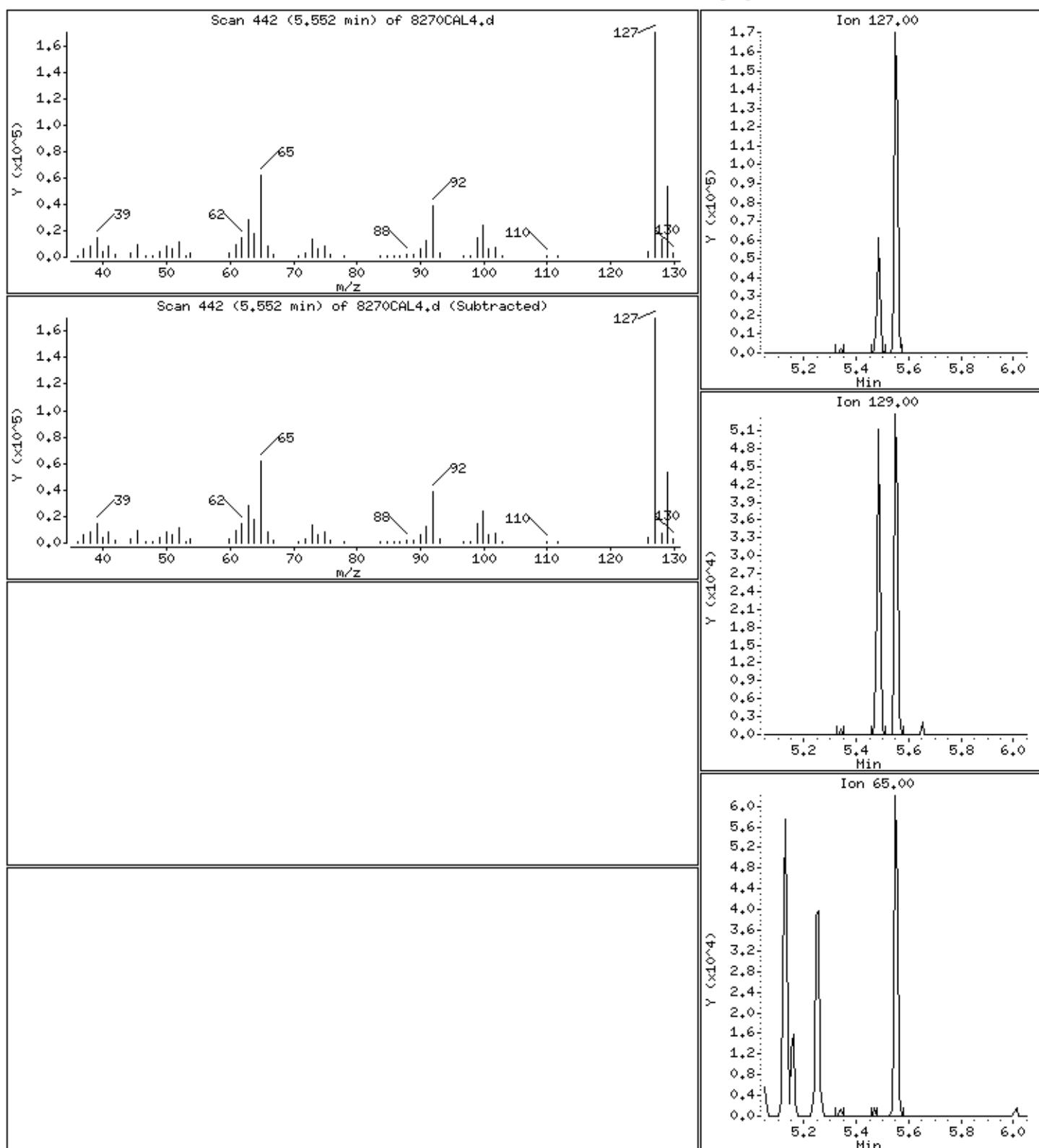
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

45 4-Chloroaniline

Concentration: 45.2 ug/kg



The figure displays four vertically stacked mass spectra, each representing a different ionization time (5.2, 5.4, 5.6, and 5.8 minutes) of the same sample. The x-axis for all spectra is the mass-to-charge ratio (m/z) ranging from 40 to 260. The y-axis represents relative intensity, scaled by $\times 10^{-4}$.

- Top Spectrum:** Ion 226,65 at 5.2 min. The base peak is at m/z 226. Other significant peaks are labeled at m/z 141, 153, 178, 190, 241, 260, and 283.
- Second Spectrum:** Ion 222,65 at 5.4 min. The base peak is at m/z 222. Other labeled peaks include 141, 153, 178, 190, 241, 260, and 283.
- Third Spectrum:** Scan 455 (5.655 min) of 8270CAL4+d (Subtracted). The base peak is at m/z 225. Other labeled peaks include 141, 153, 178, 190, 241, 260, and 283.
- Bottom Spectrum:** Scan 455 (5.655 min) of 8270CAL4+d. The base peak is at m/z 224. Other labeled peaks include 141, 153, 178, 190, 241, 260, and 283.

Concetration: 45.1 ug/kg

4.8 hexadecyltriodebutyrate

Figure 48 Hexachlorobutadiene Concentration vs. Time at 45.1 °C/kg

Column phase: HPM-5

Operator: M

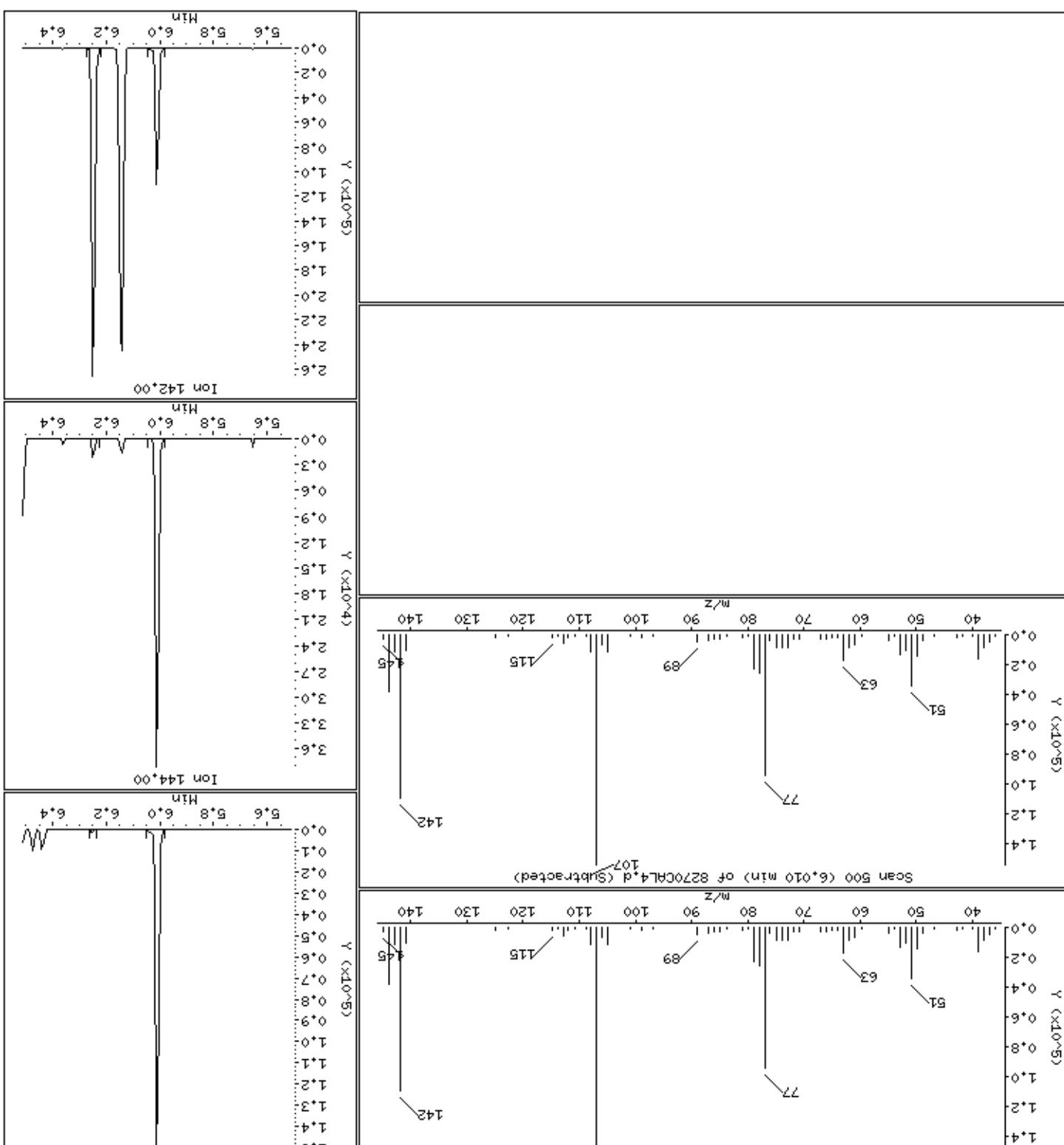
Sample Index: 47266

1

Sample Info: 47766

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Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

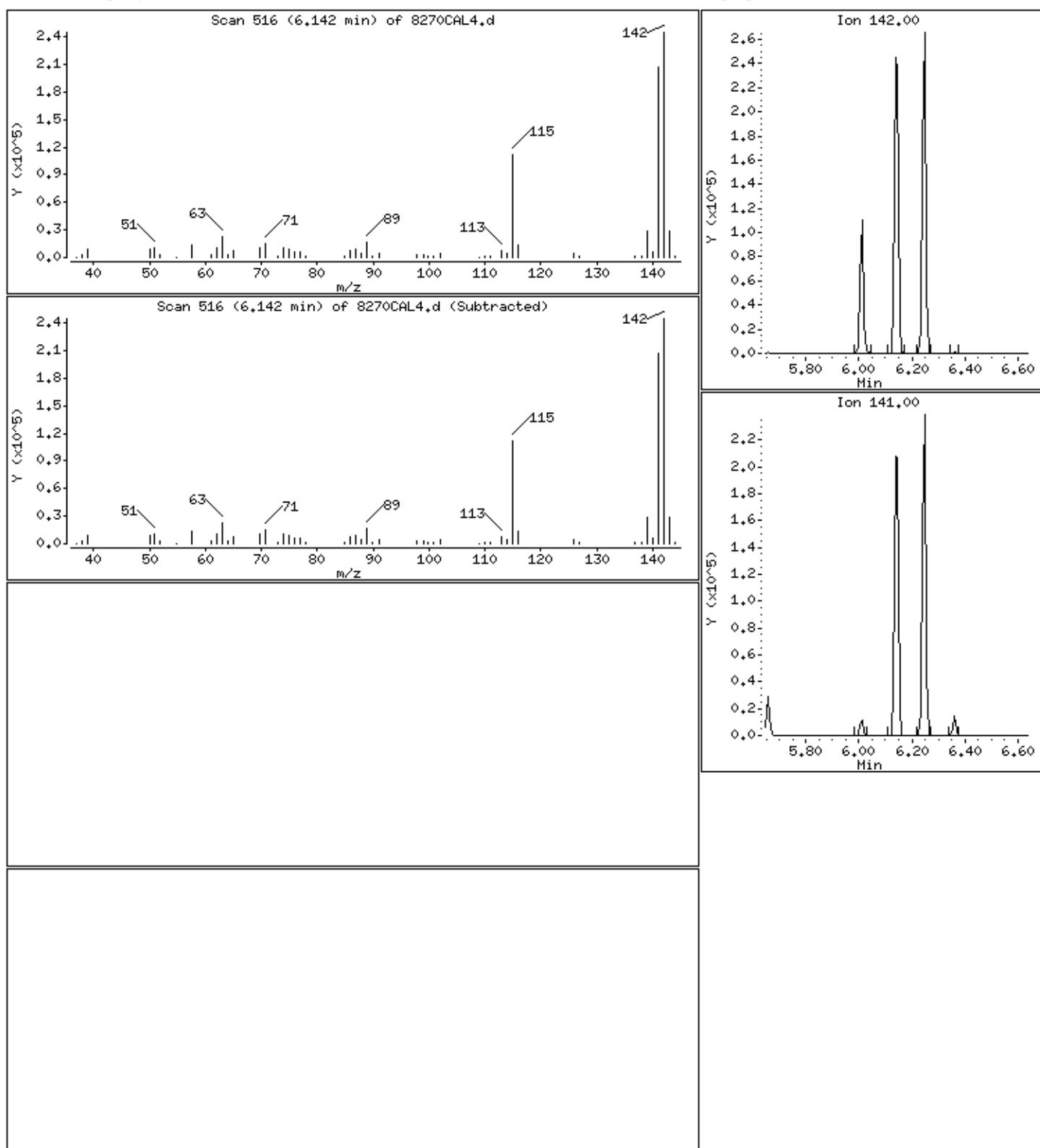
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

53 2-Methylnaphthalene

Concentration: 43.0 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

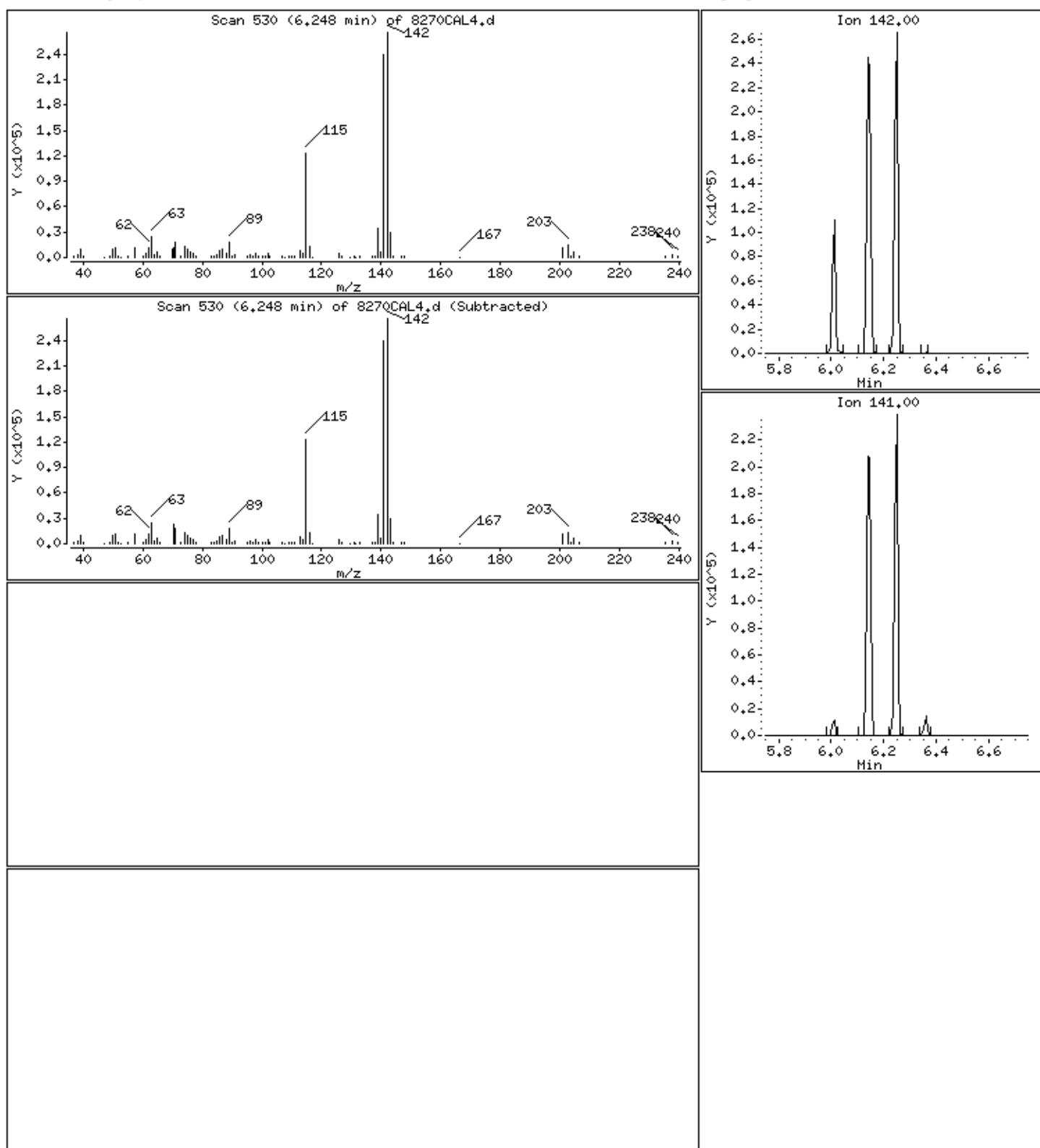
Operator: MJ

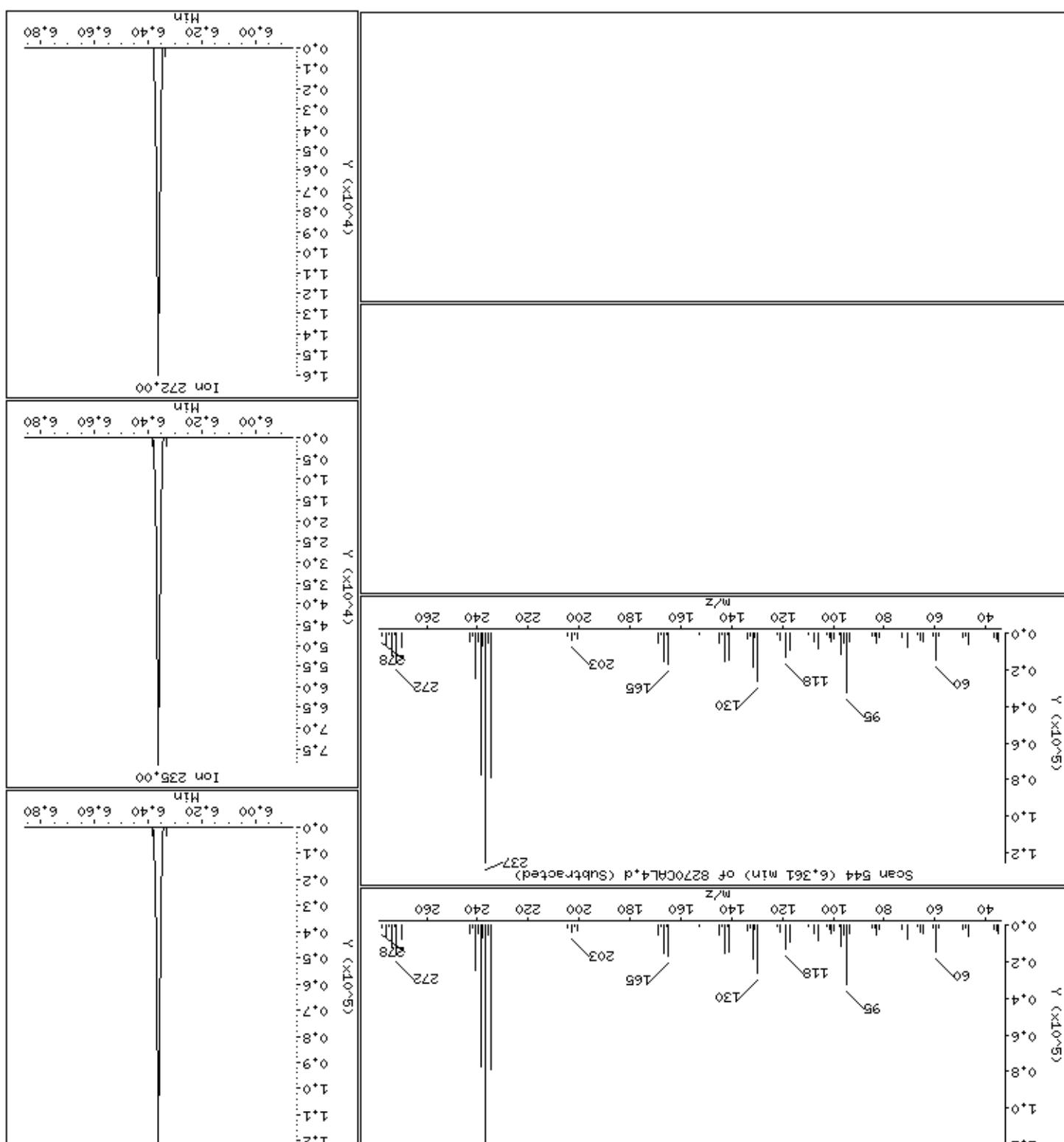
Column phase: HPMS-5

Column diameter: 0.25

54 1-Methylnaphthalene

Concentration: 43.0 ug/kg





Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

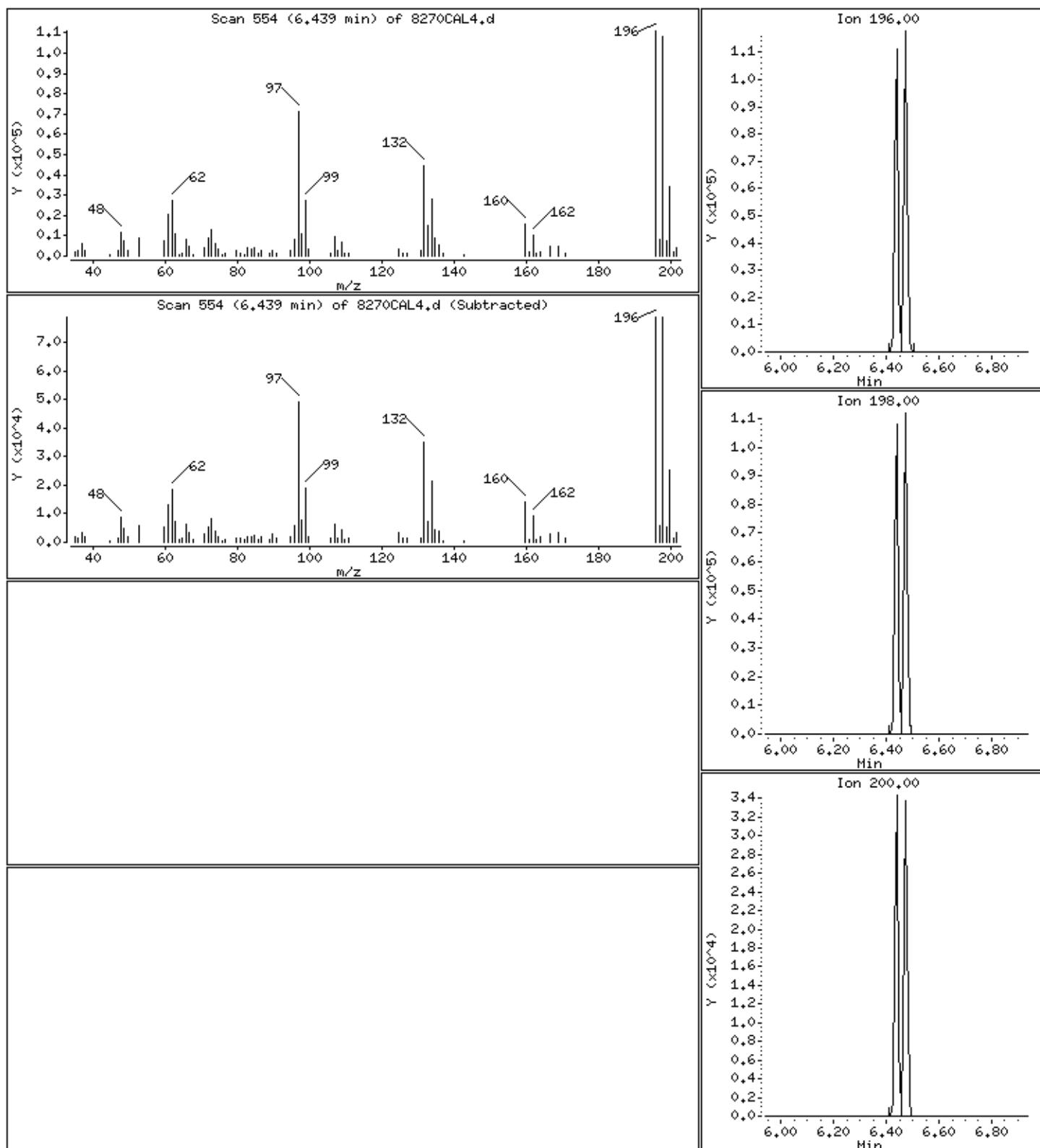
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

57 2,4,6-Trichlorophenol

Concentration: 44.3 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

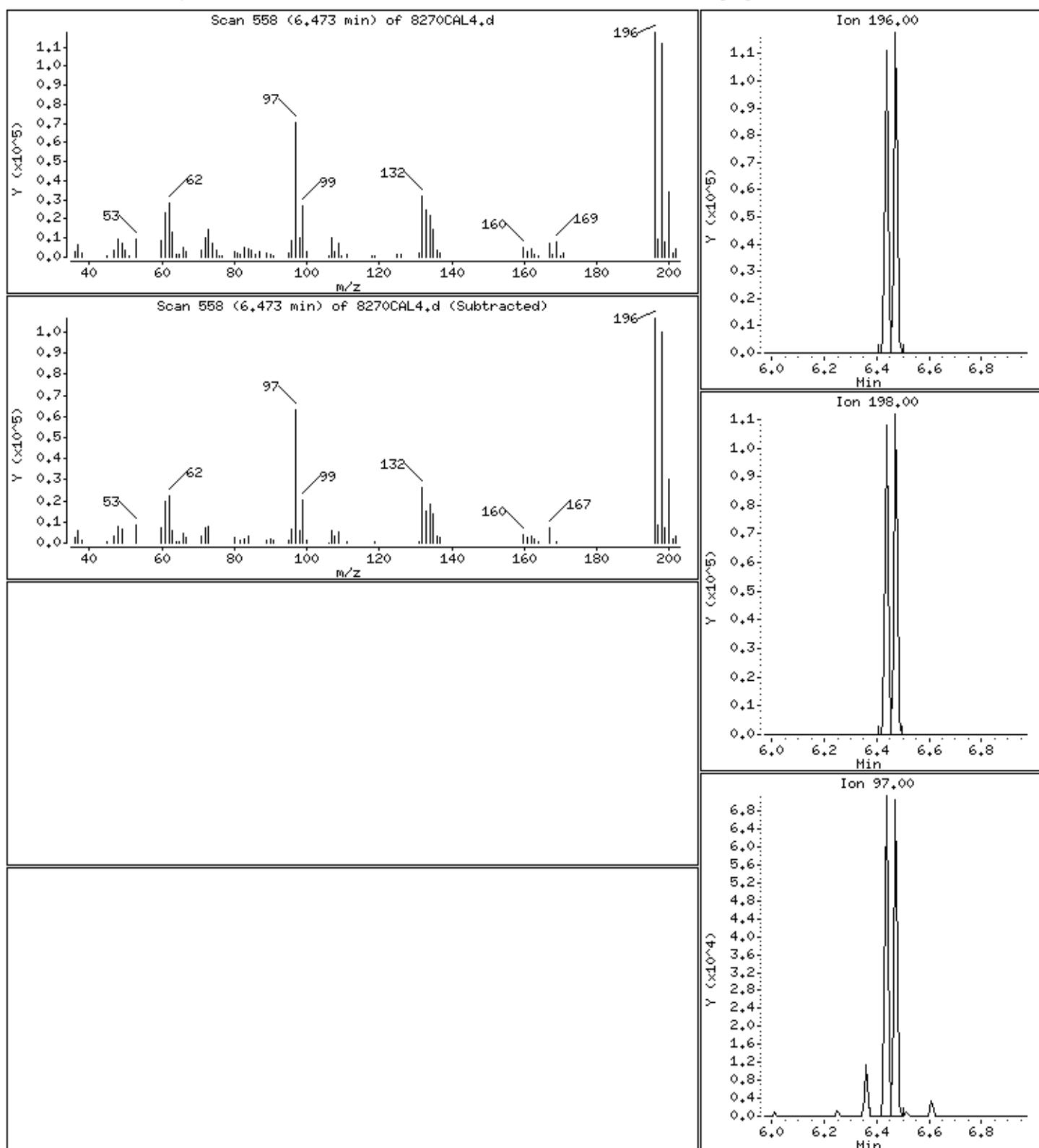
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

58 2,4,5-Trichlorophenol

Concentration: 43.9 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

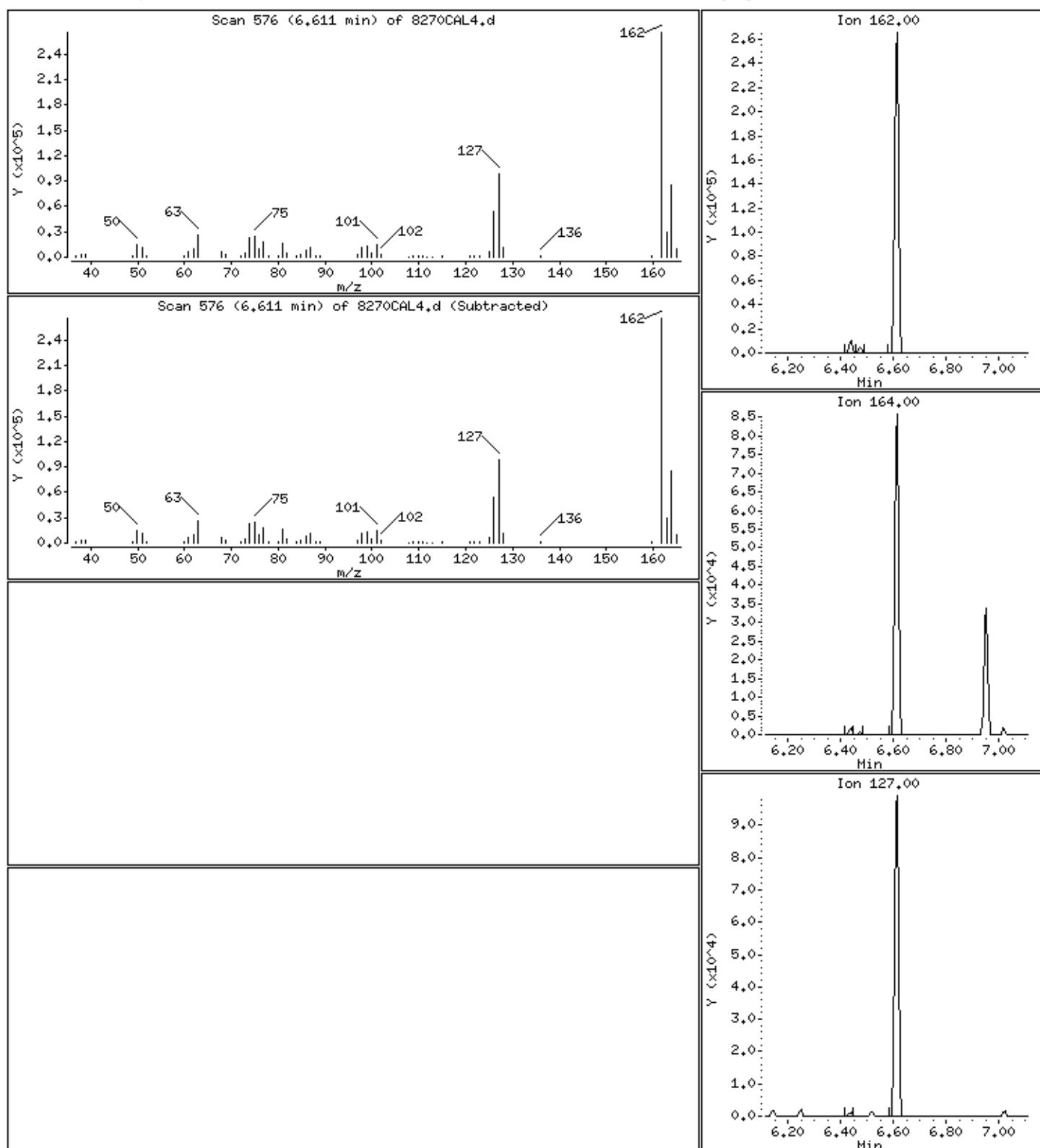
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

62 2-Chloronaphthalene

Concentration: 45.2 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

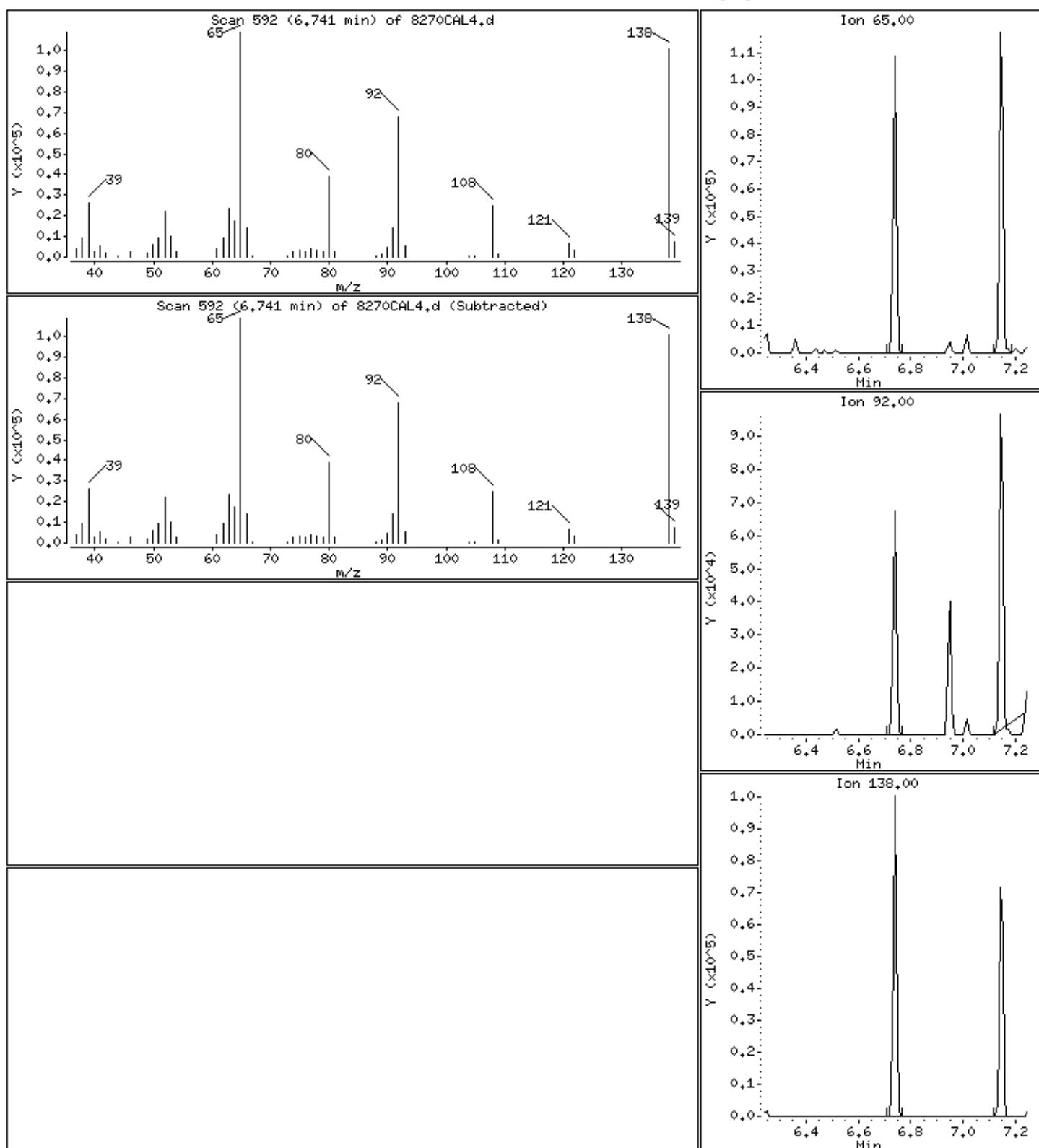
Operator: MJ

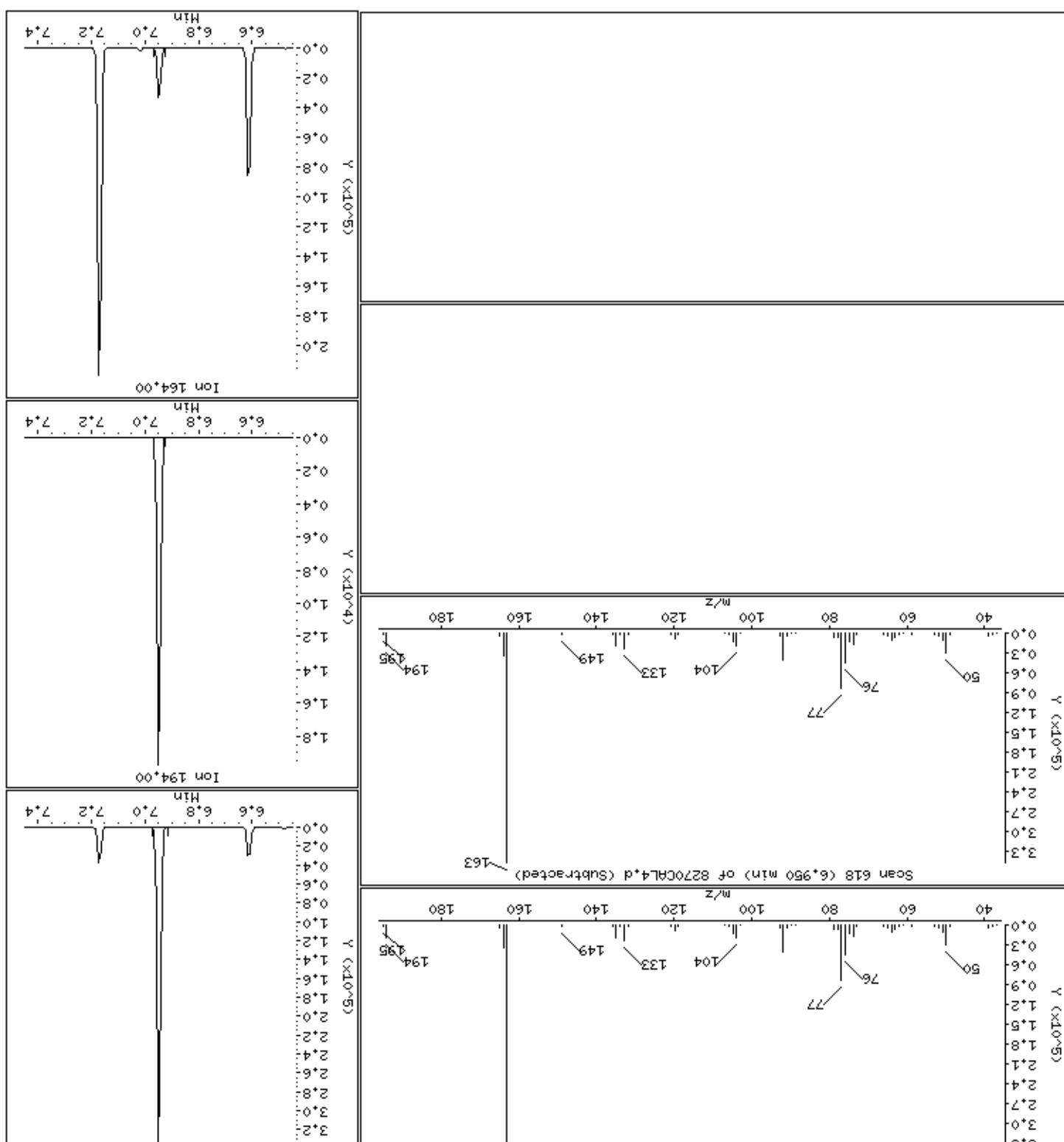
Column phase: HPMS-5

Column diameter: 0.25

63 2-Nitroaniline

Concentration: 44.6 ug/kg





Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

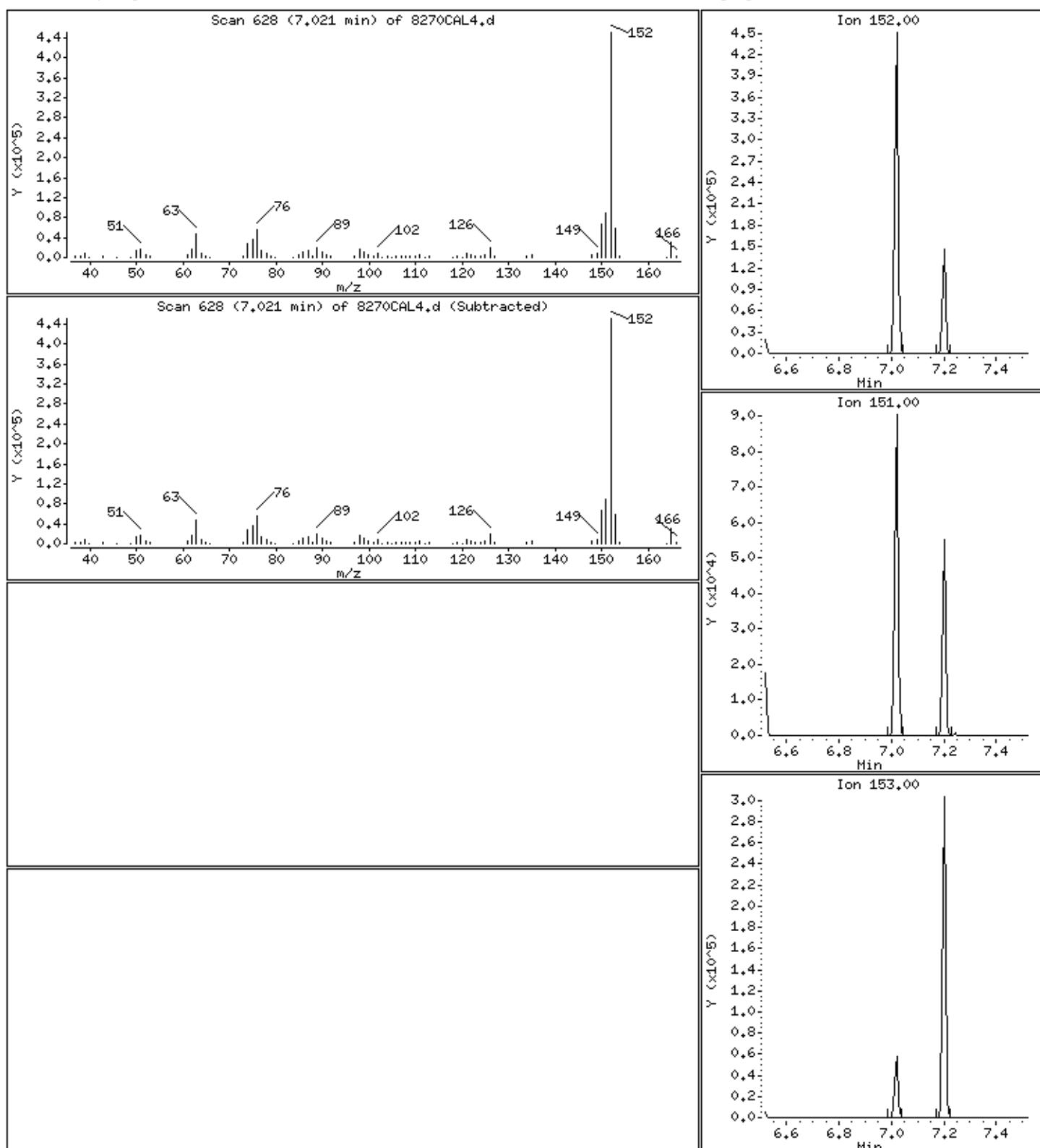
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

68 Acenaphthylene

Concentration: 43.2 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

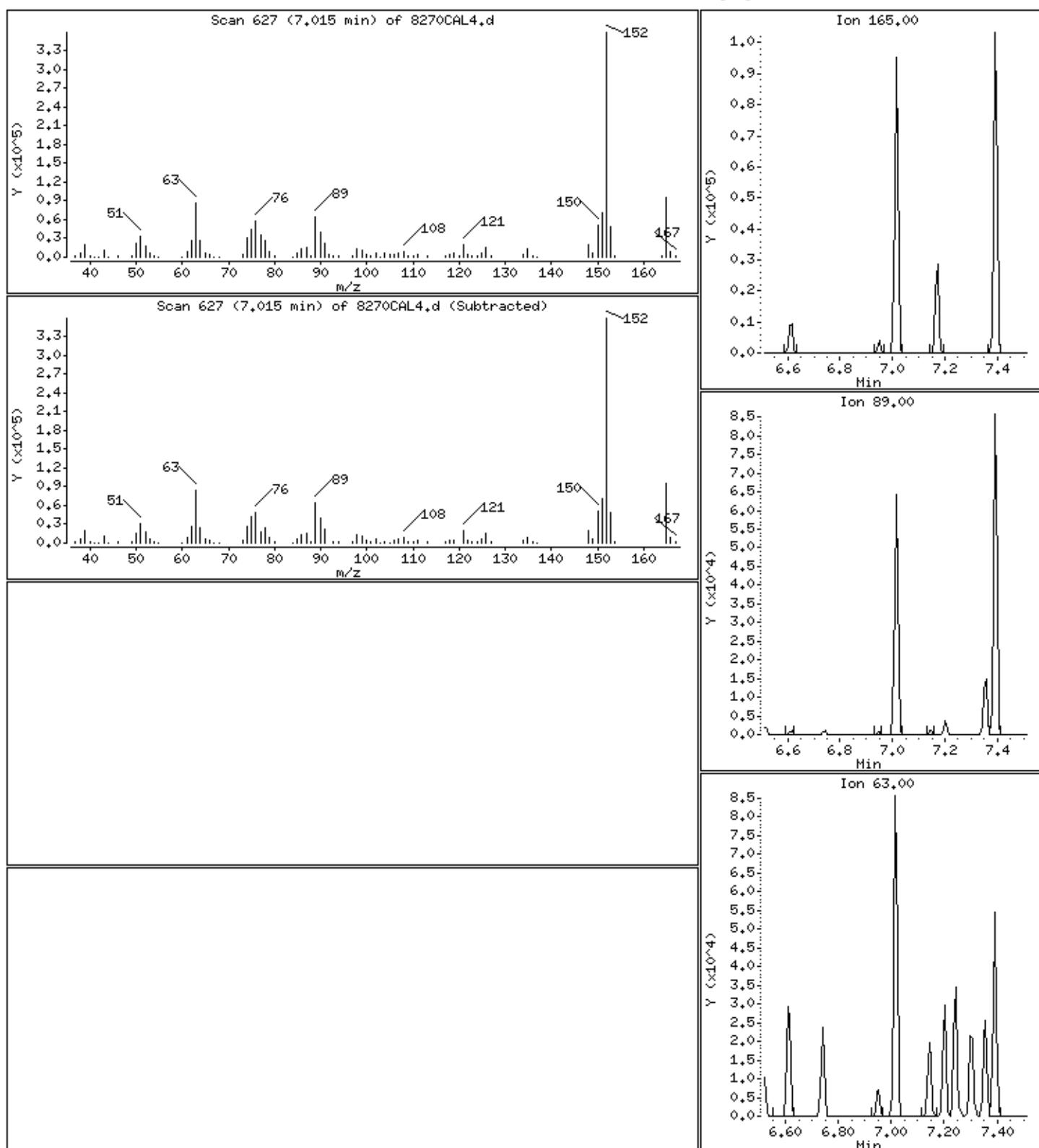
Operator: MJ

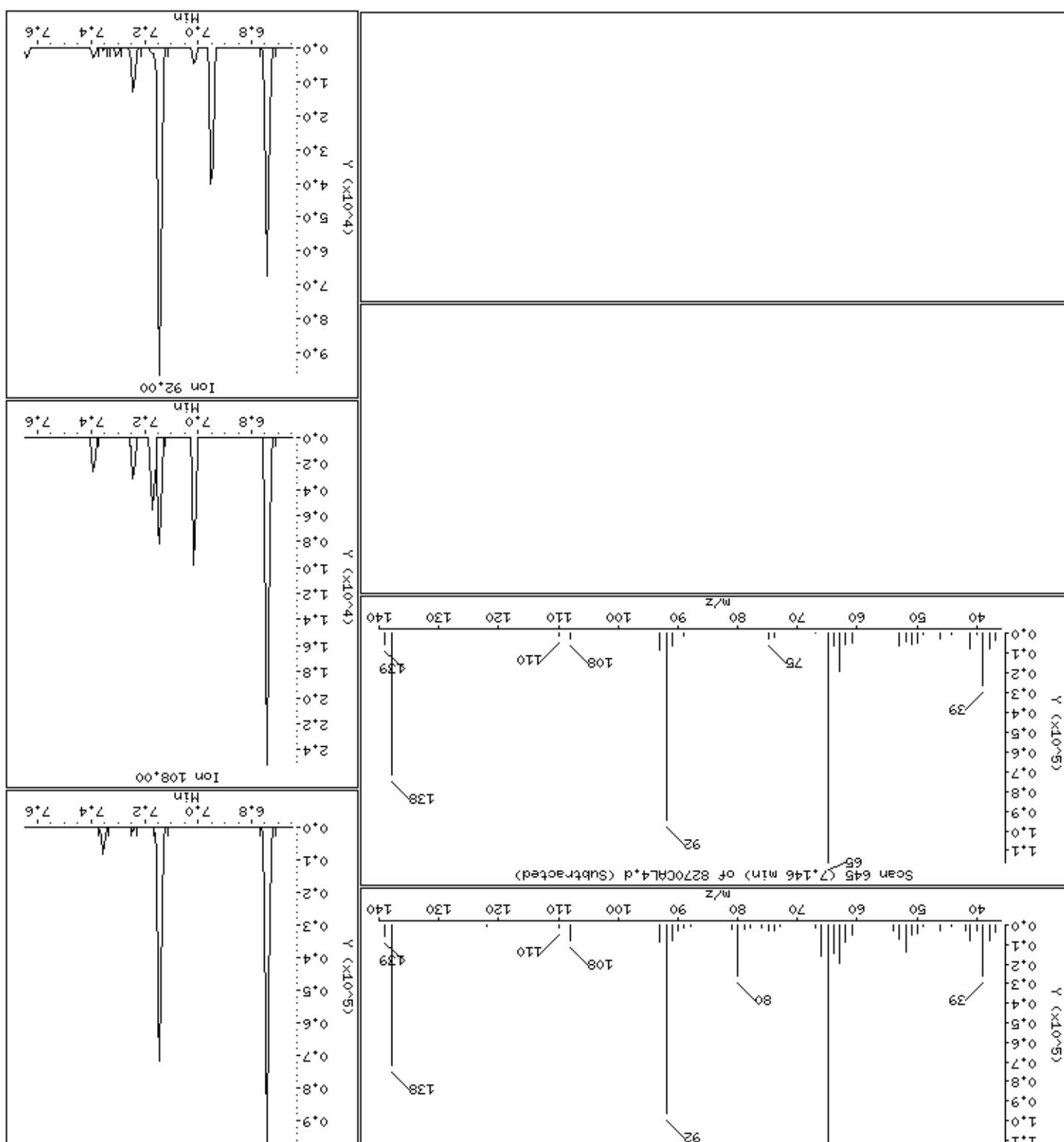
Column phase: HPMS-5

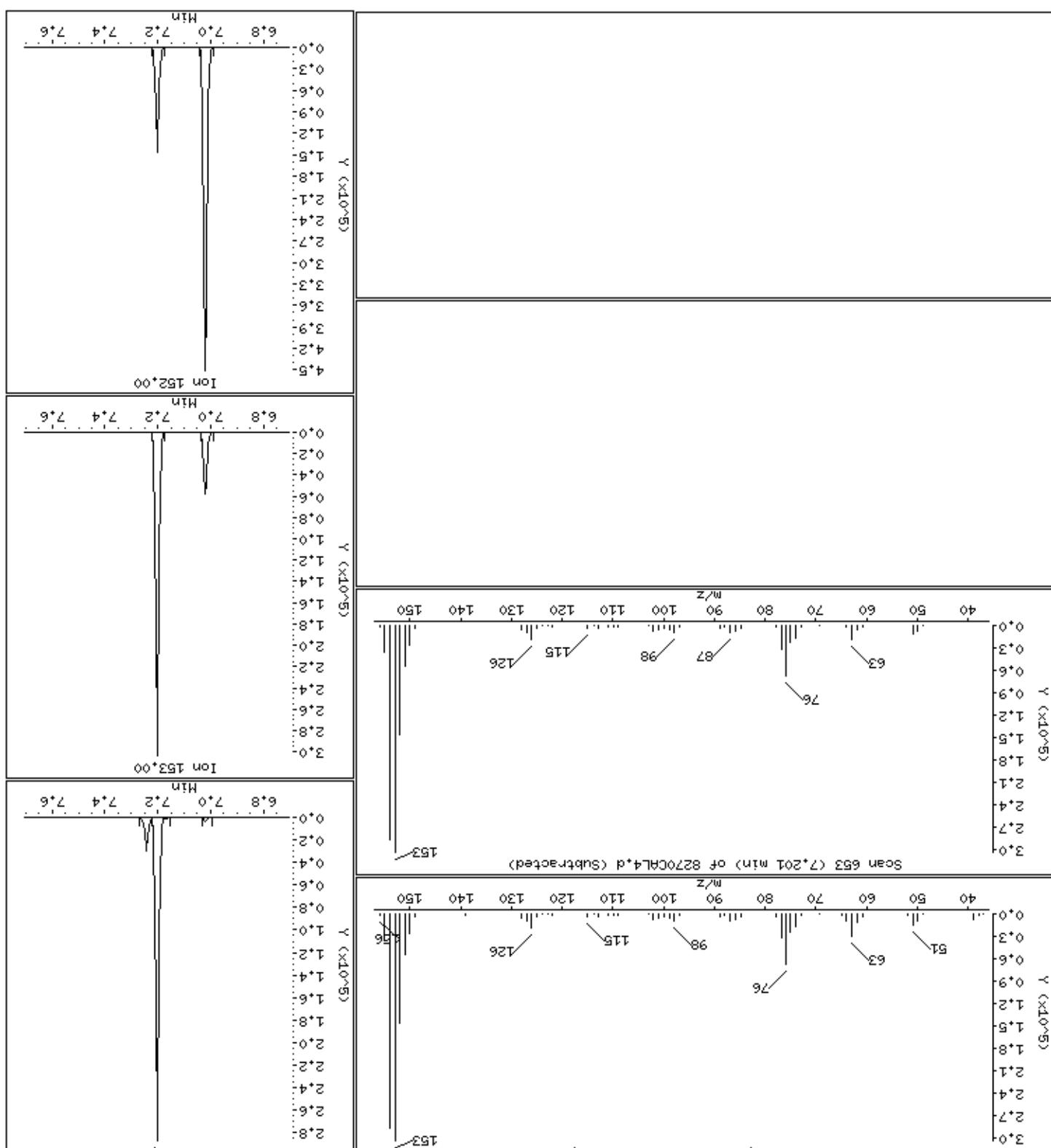
Column diameter: 0.25

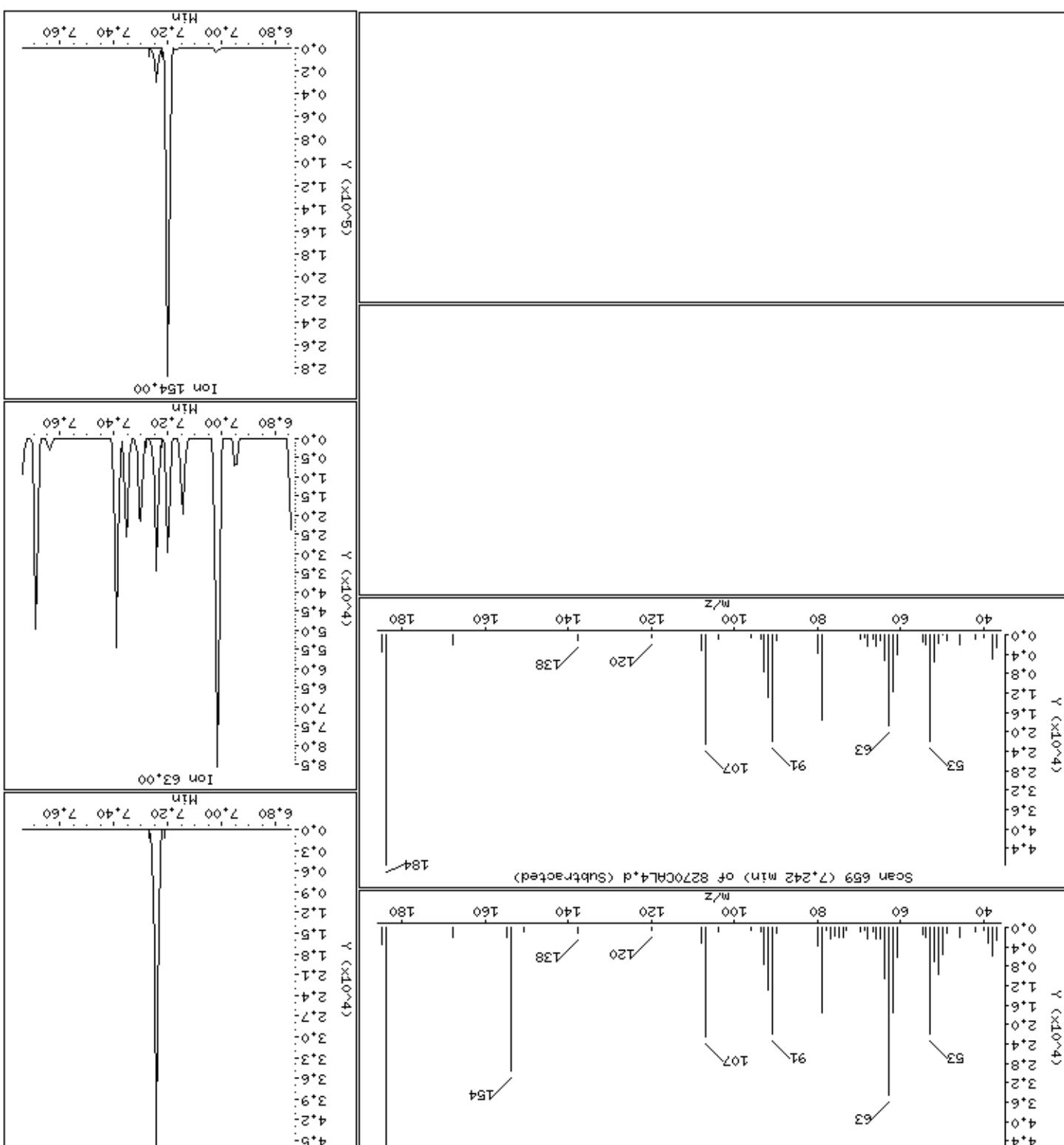
67 2,6-Dinitrotoluene

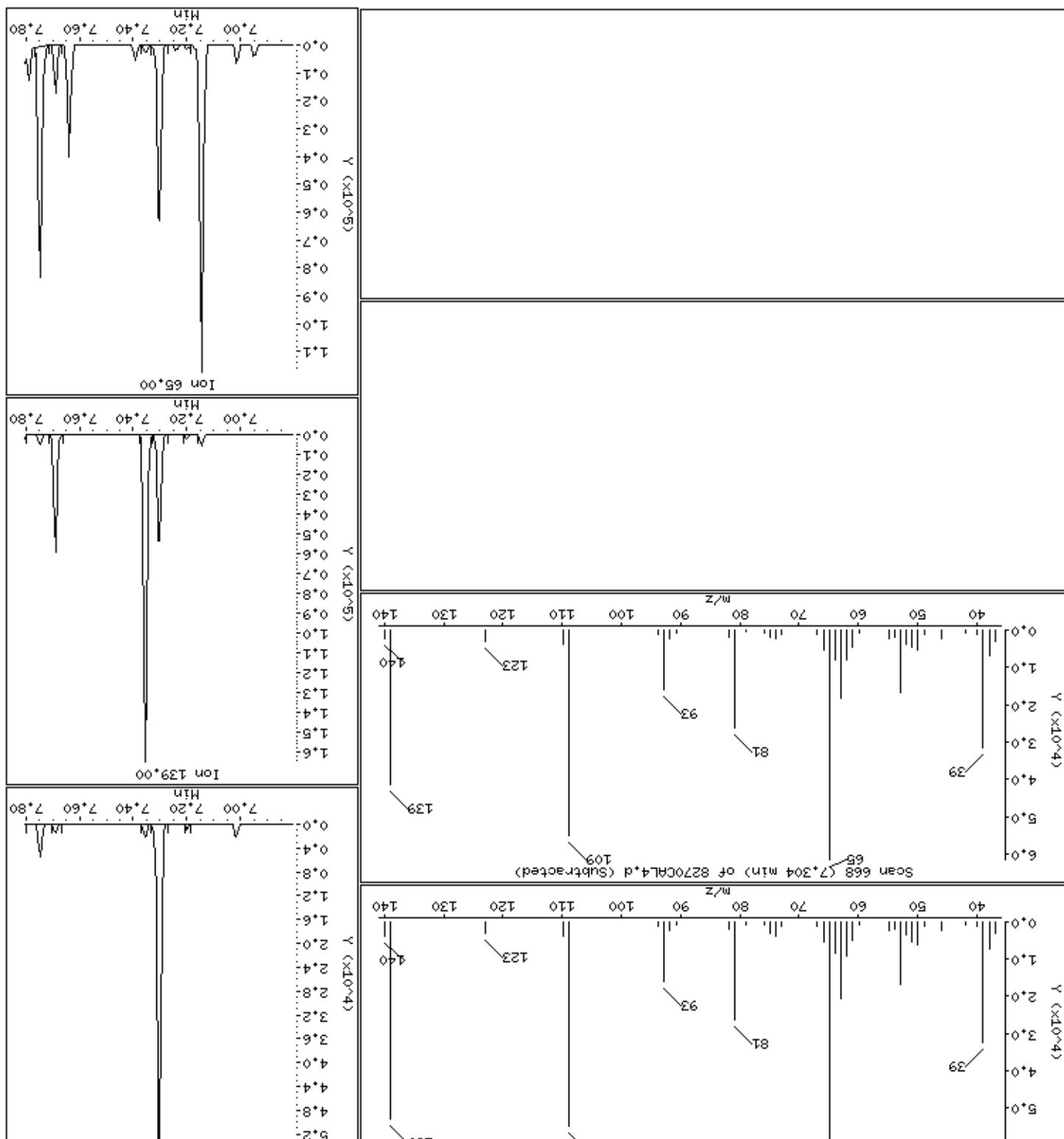
Concentration: 43.7 ug/kg

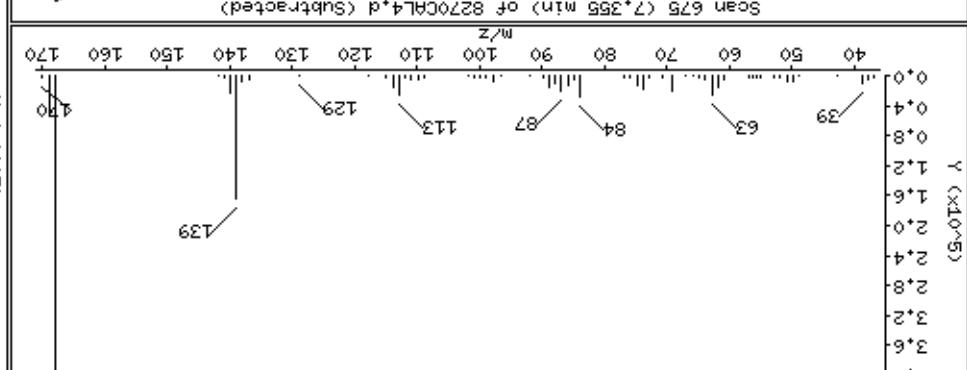
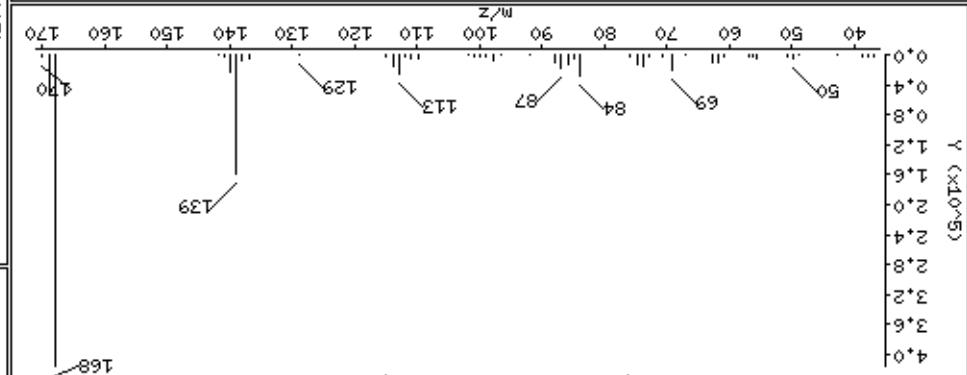
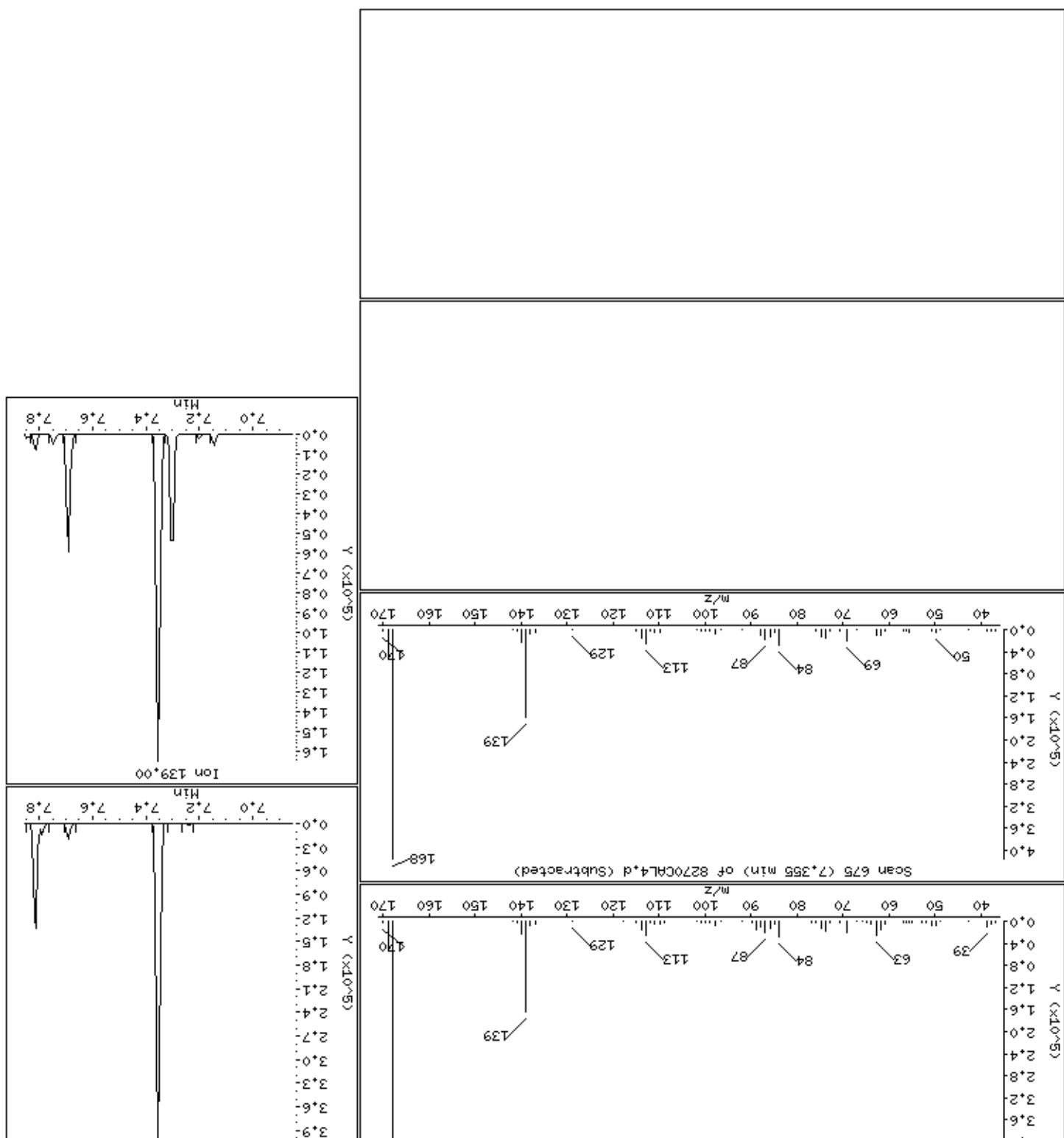












Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

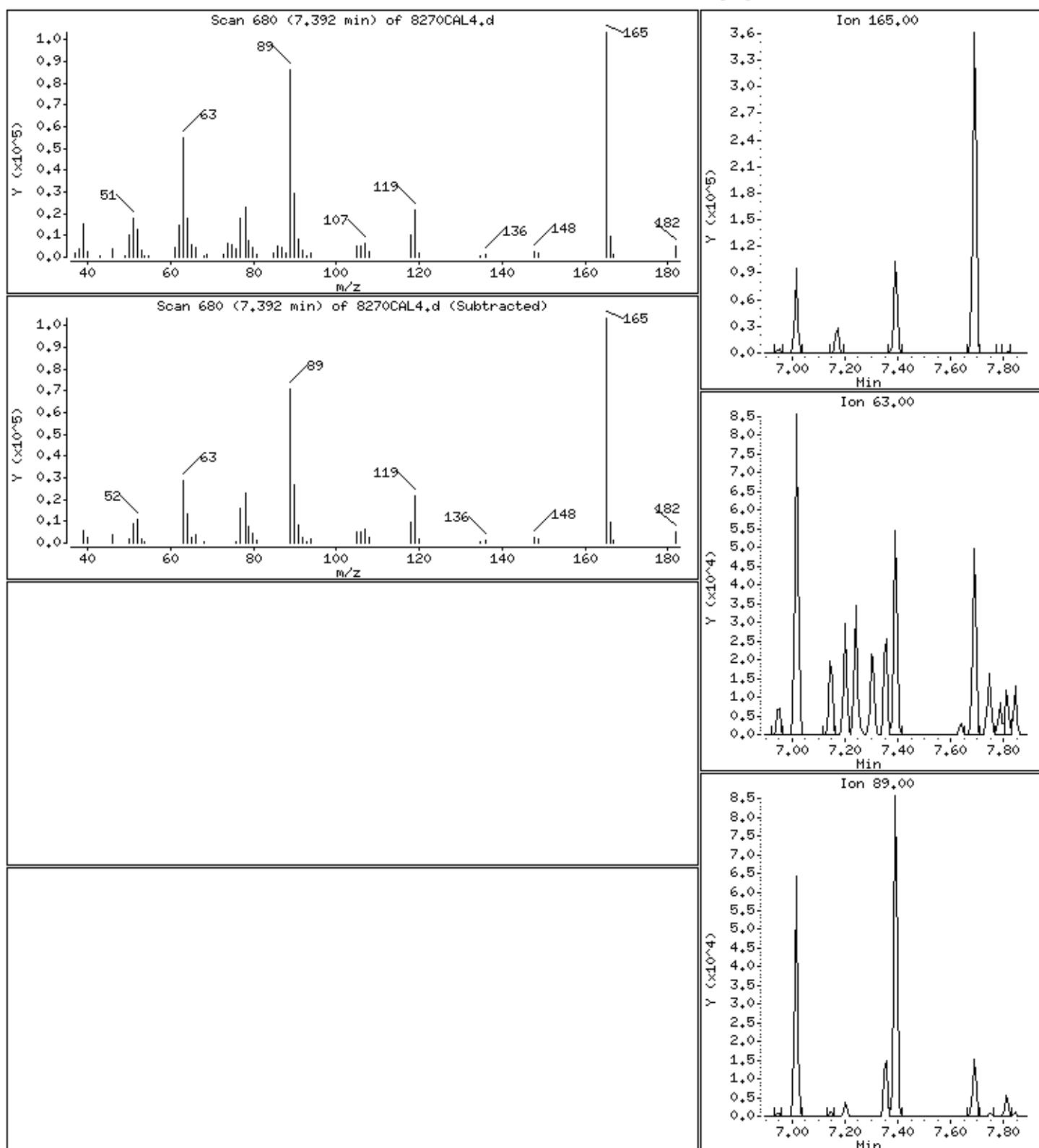
Operator: MJ

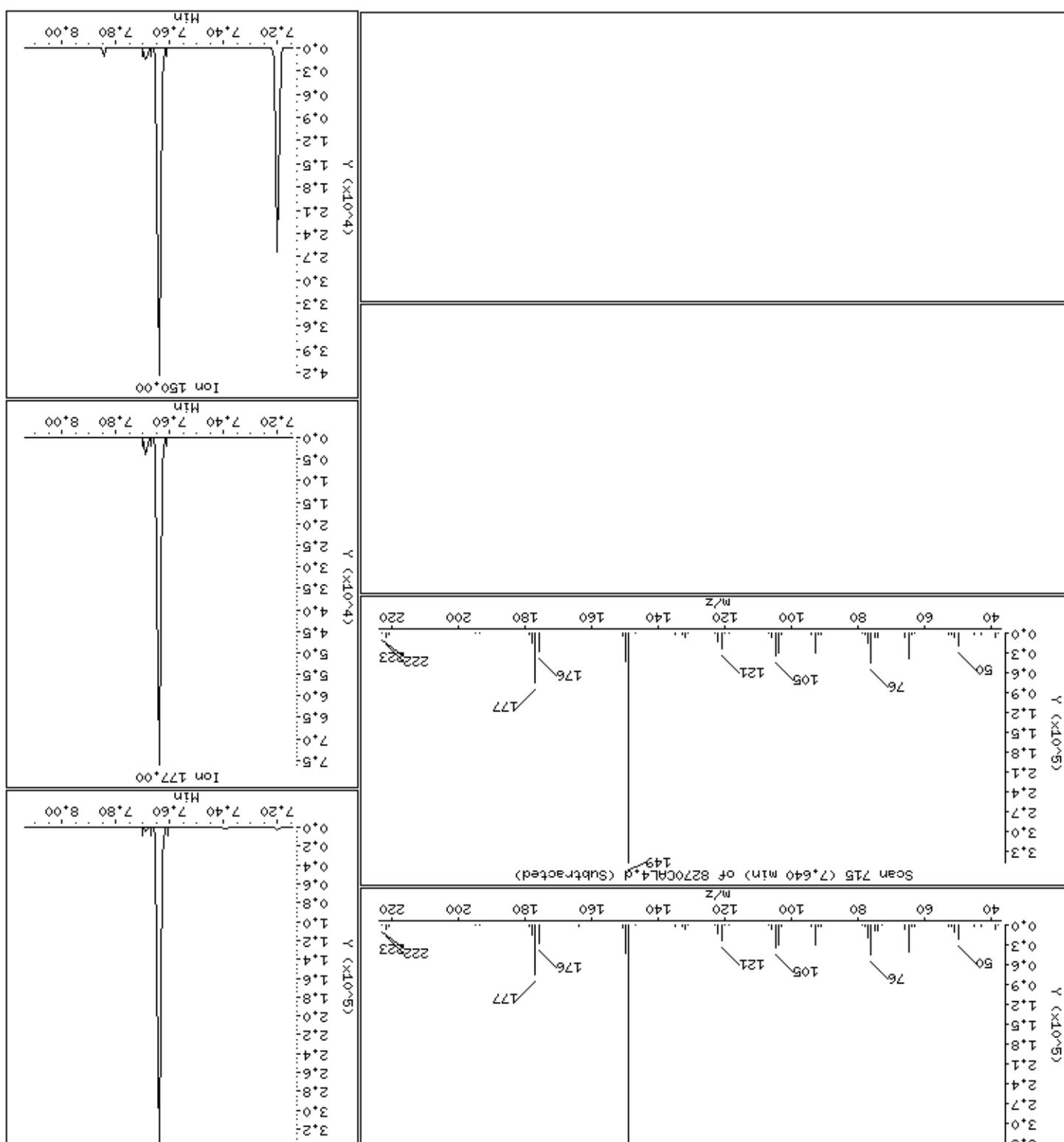
Column phase: HPMS-5

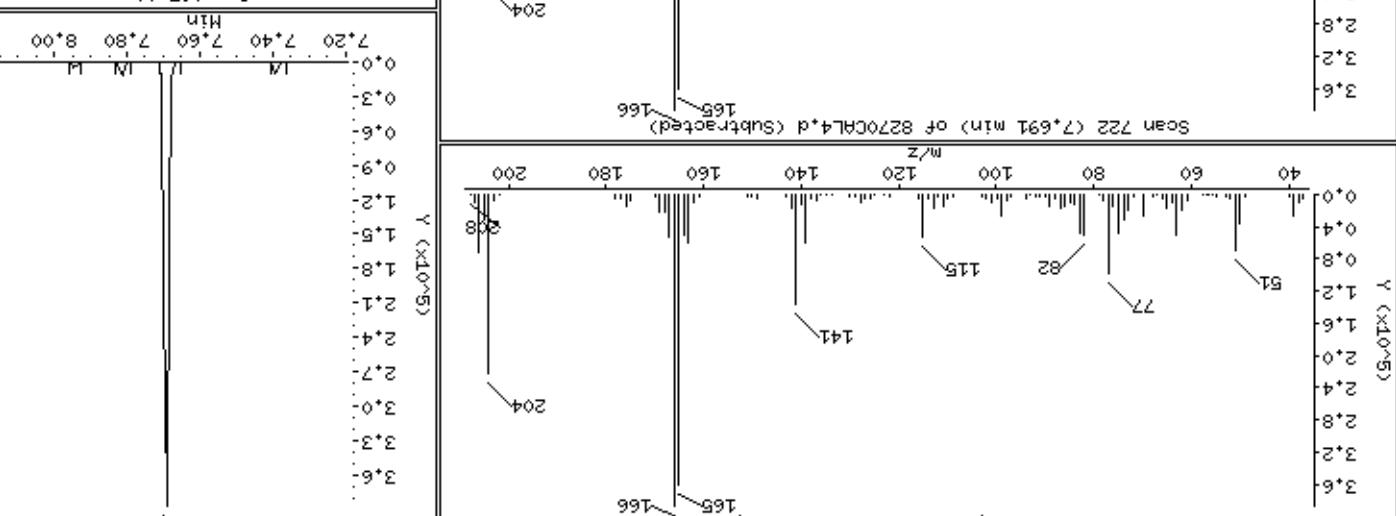
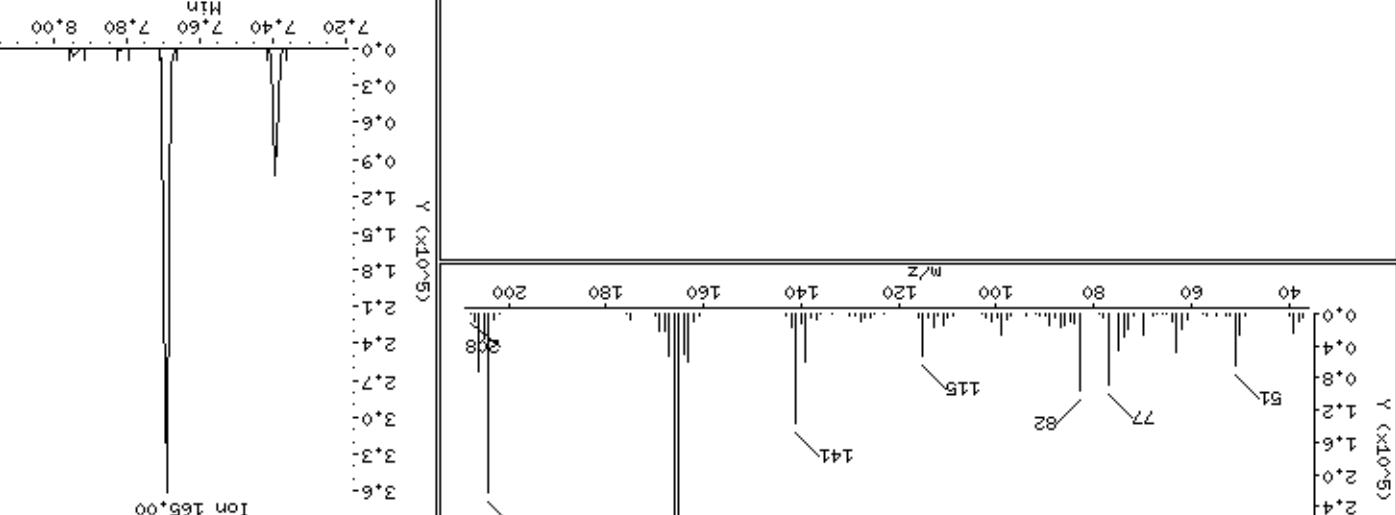
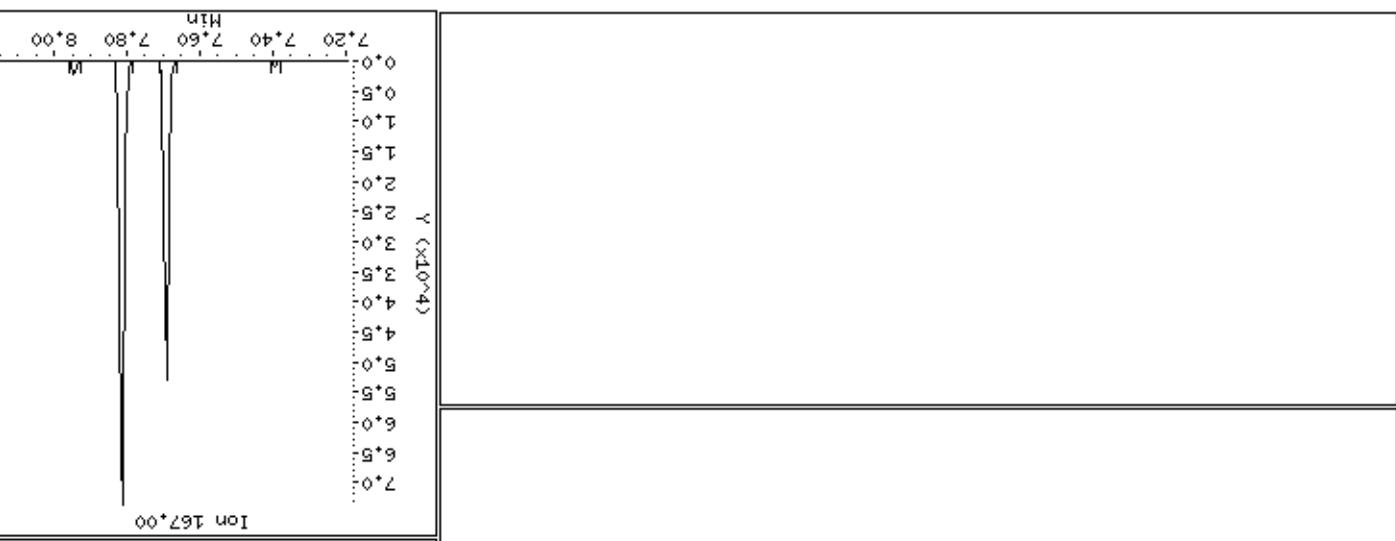
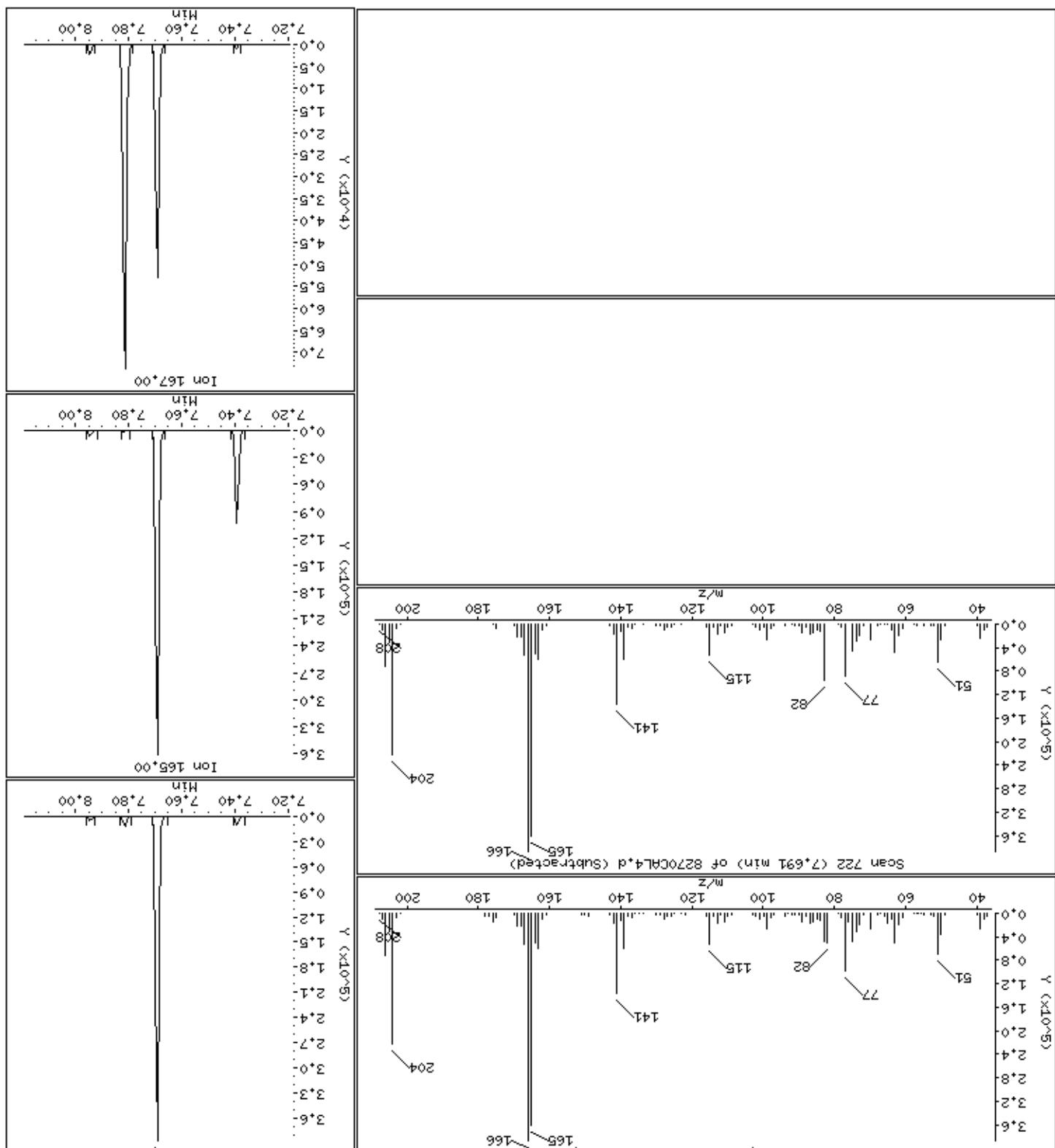
Column diameter: 0.25

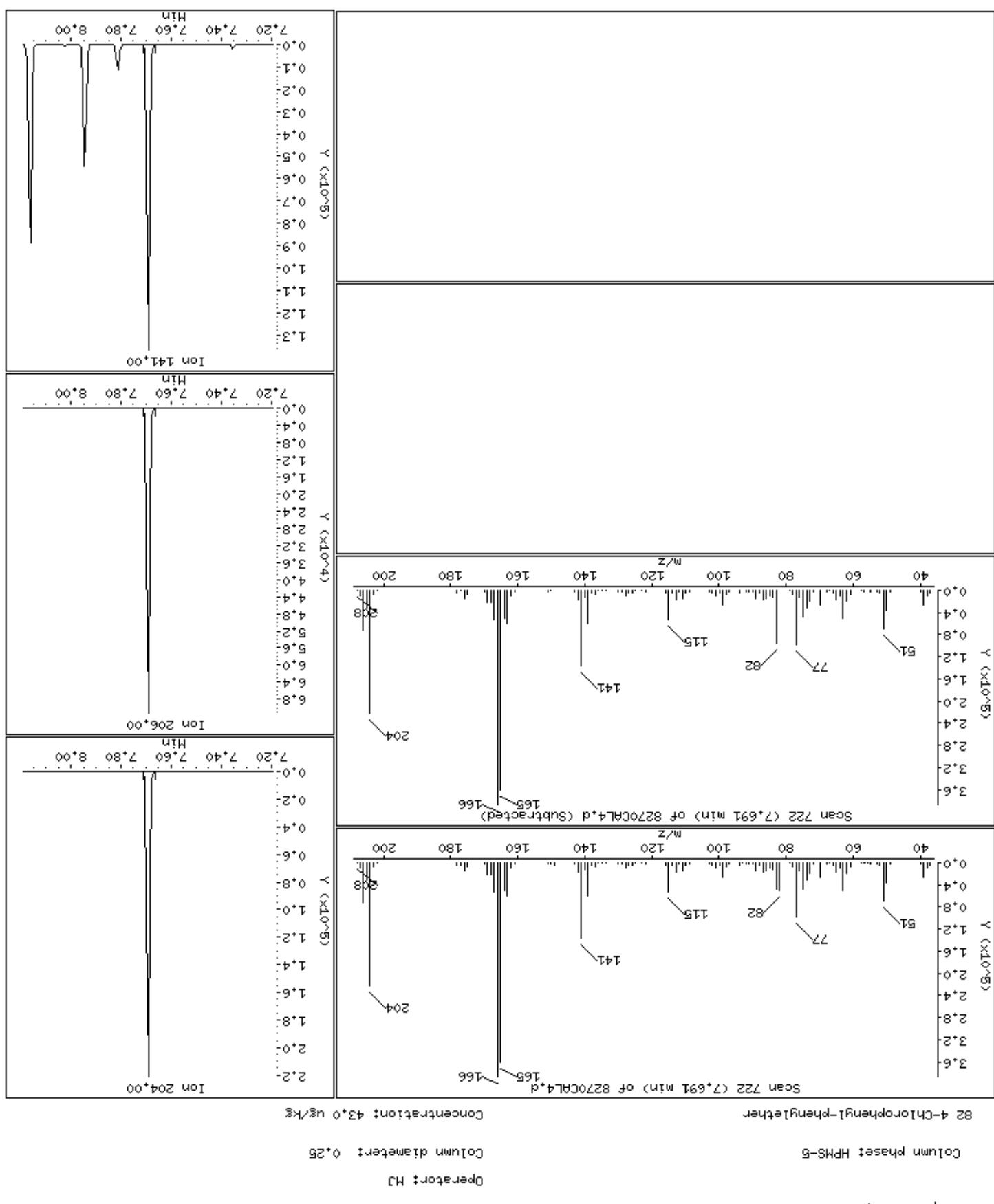
76 2,4-Dinitrotoluene

Concentration: 42.8 ug/kg

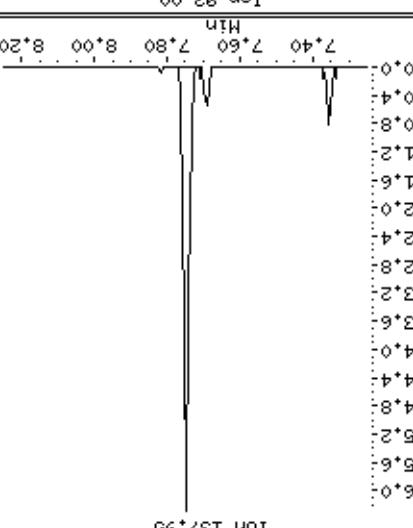
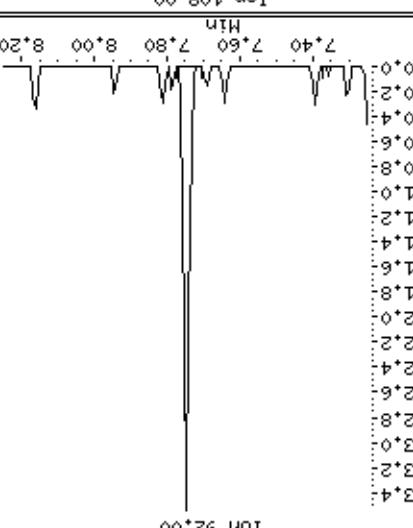
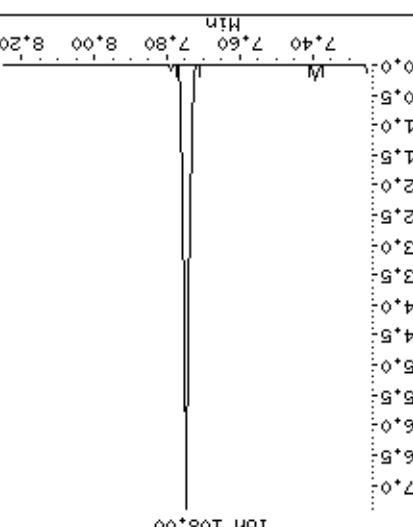
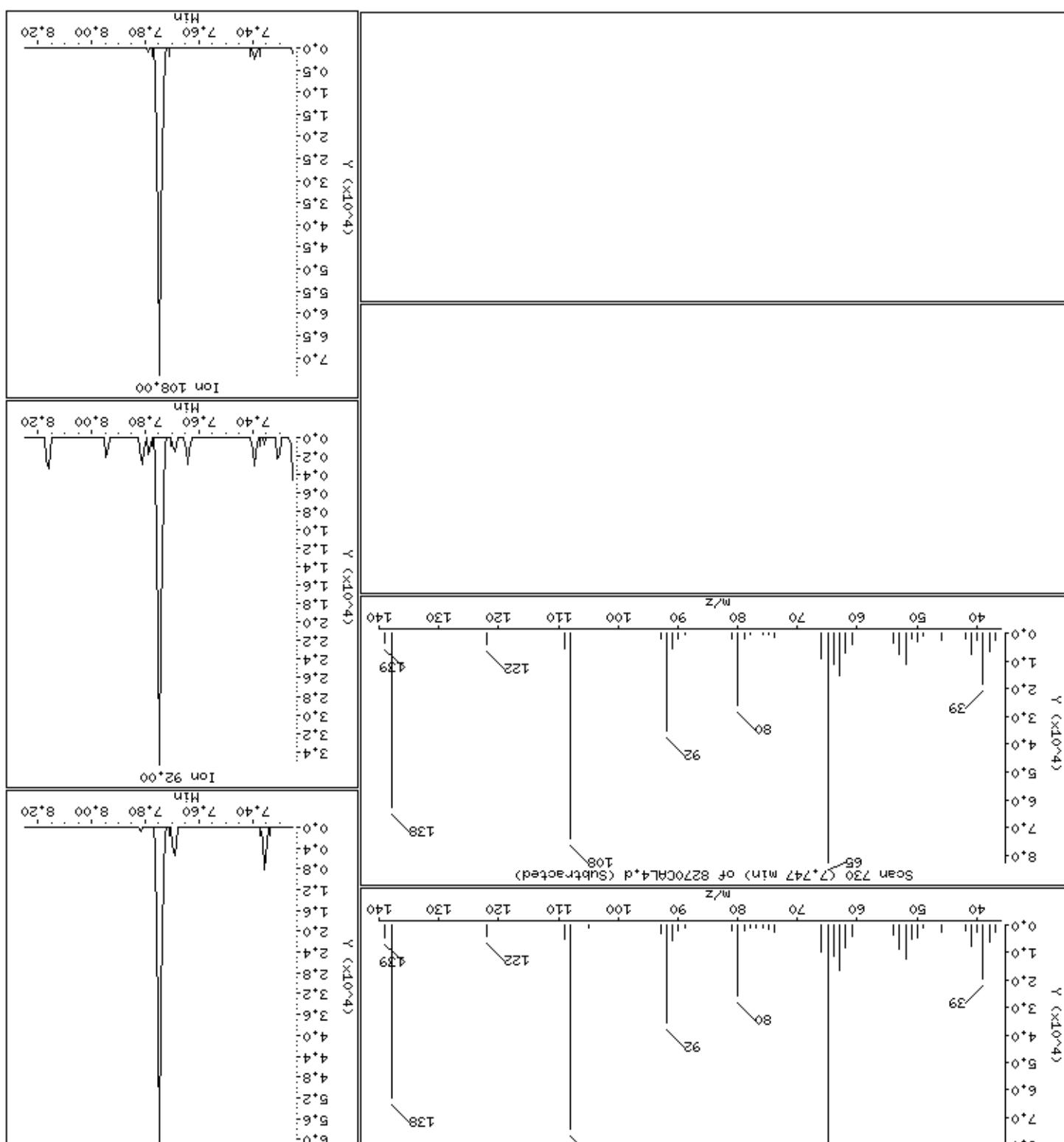








96 aged



Mass spectrum showing relative abundance (%) versus m/z for the sample at a concentration of 43.3 ng/kg. The base peak is at m/z 198. Other significant peaks are labeled at m/z 168, 121, 105, 77, and 51.

Scan 736 (7.789 min) of 8270CL4+d

Concentration: 43.3 ng/kg

Ion 198.00

Ion 121.00

Ion 105.00

Ion 77.00

Ion 51.00

7.40 7.60 7.80 8.00 8.20 Min

Scan 736 (7.789 min) of 8270CL4+d (Subtracted)

Concentration: 43.3 ng/kg

Ion 198.00

Ion 121.00

Ion 105.00

Ion 77.00

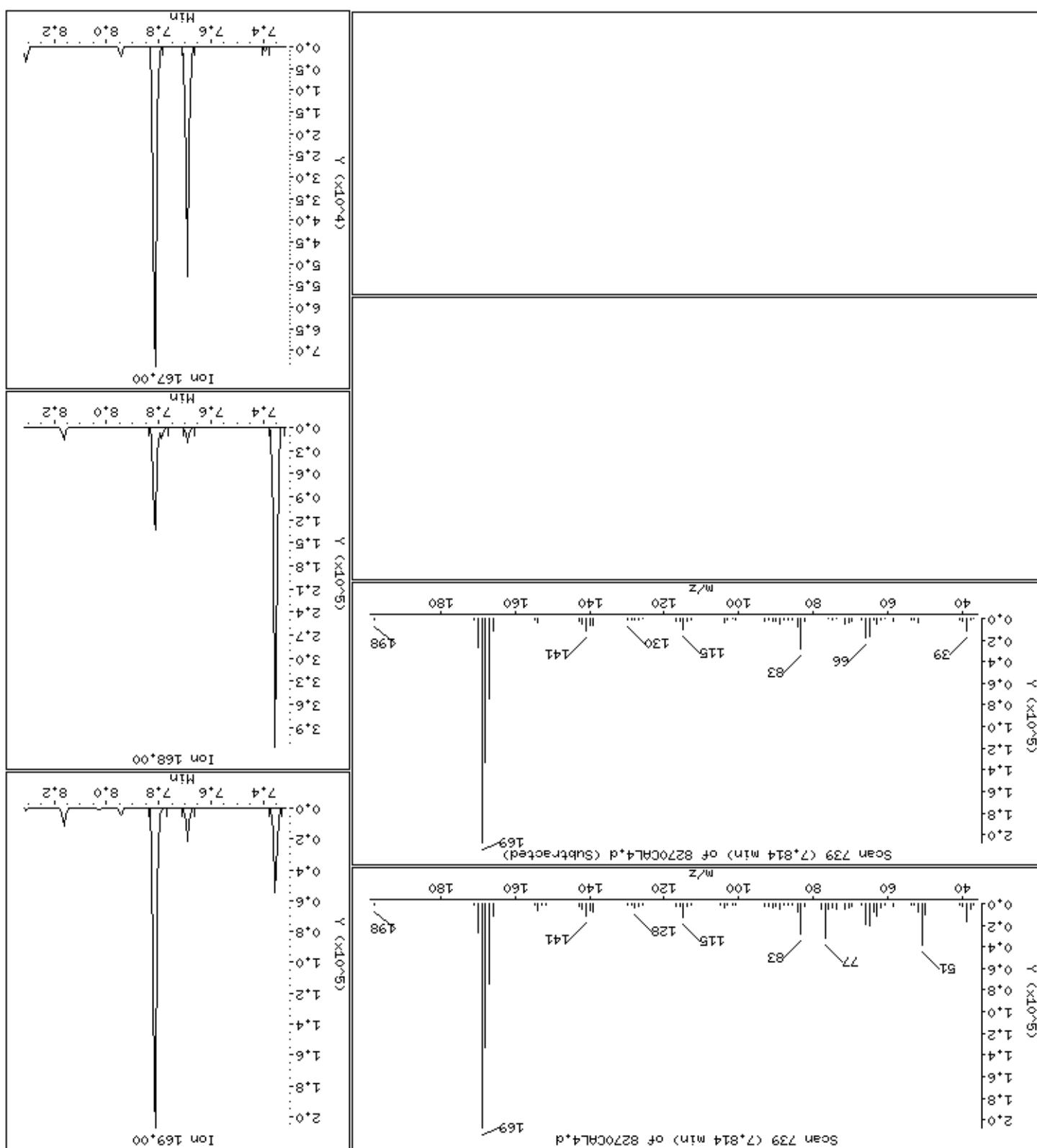
Ion 51.00

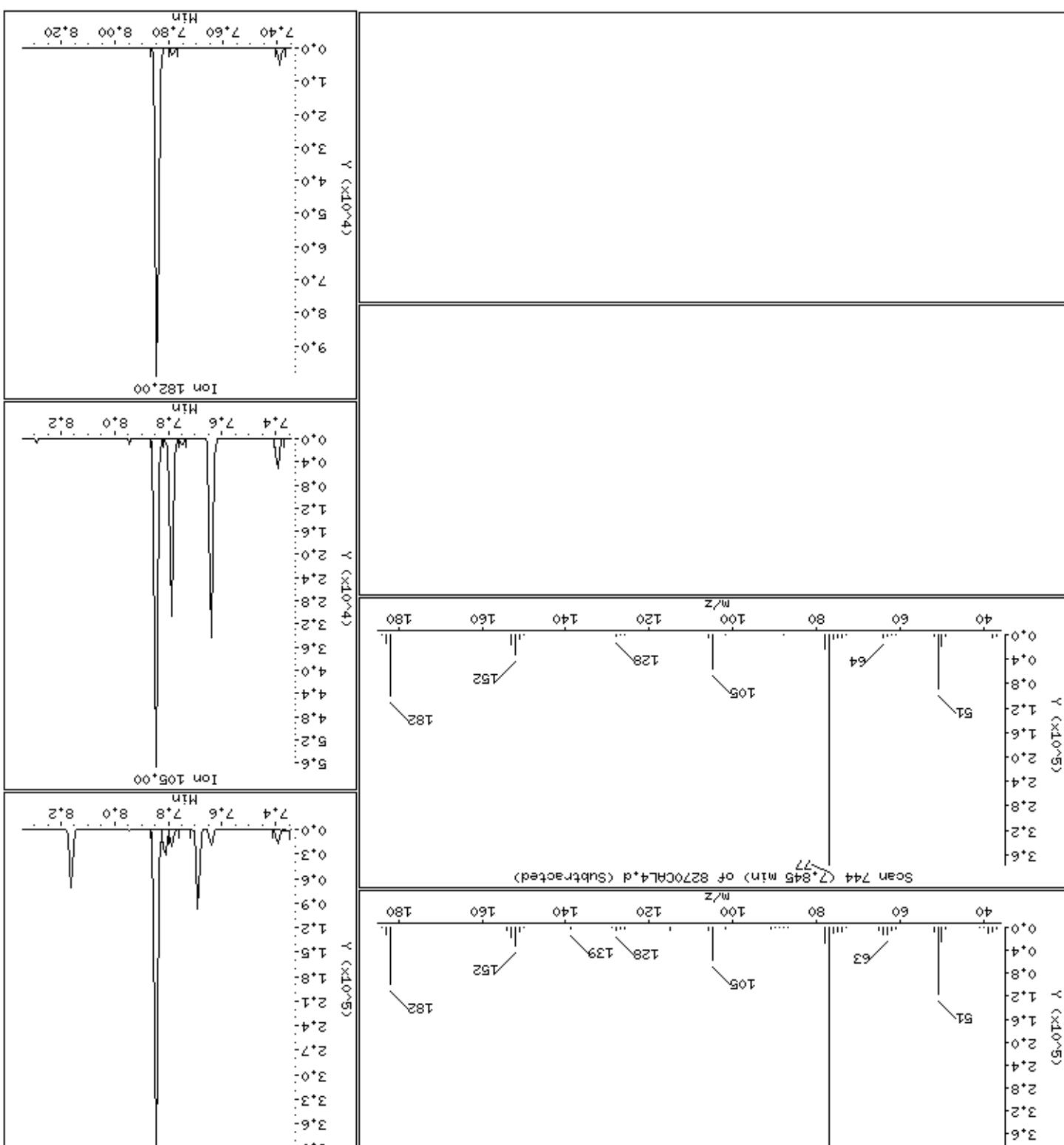
7.40 7.60 7.80 8.00 8.20 Min

7.40 7.60 7.80 8.00 8.20 Min

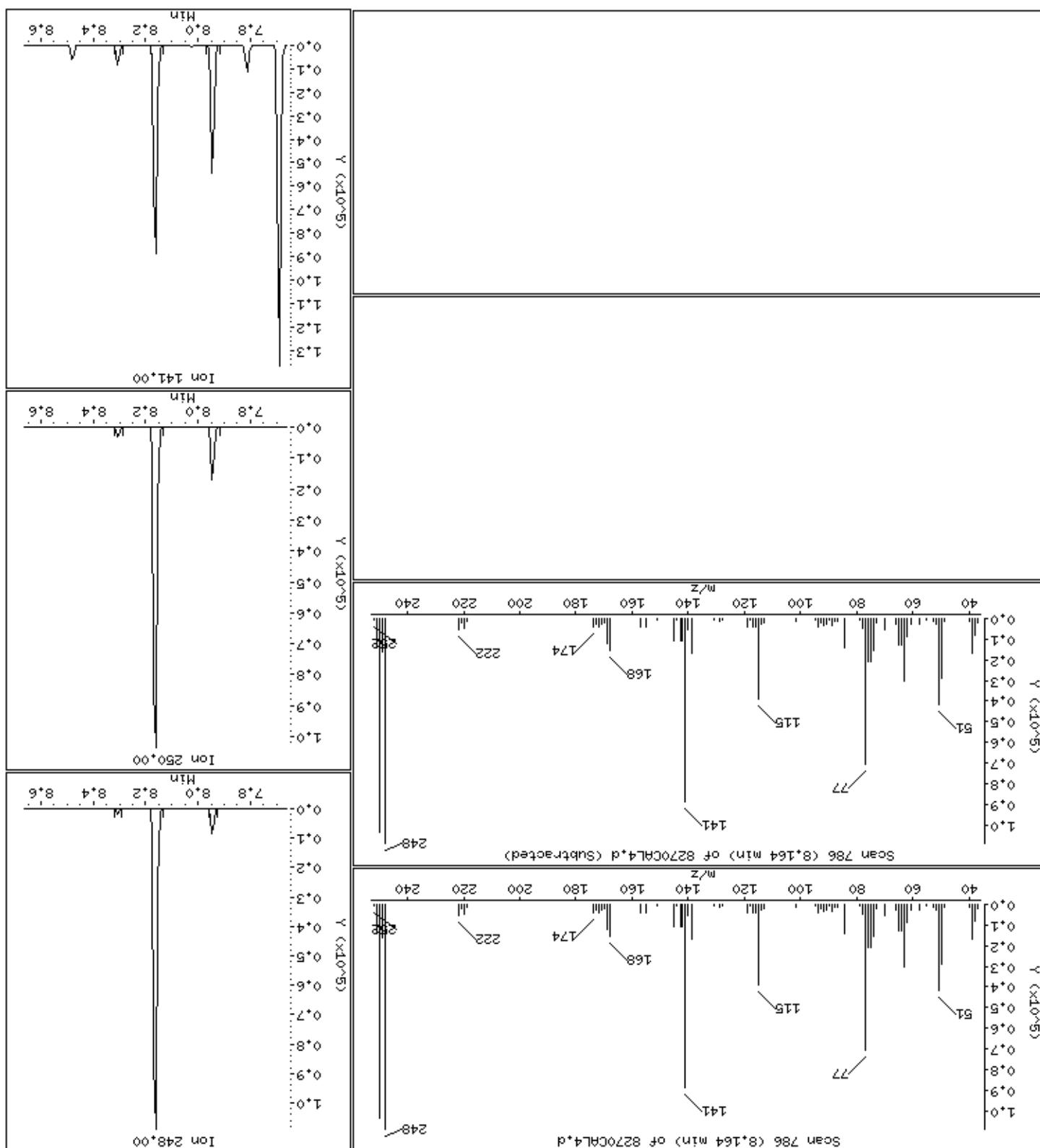
Data file: \\\\$ecode\DD\chem\msd04\1\411145521\1\8270C44.d Page 68

Date : 14-NOV-2012 23:43 Client ID: 8270CCLA4
Instrument: msd04.i Sample Info: 47766
Operator: HS Column phase: HPS-5
Column diameter: 0.25 Concentration: 45.7 ug/Kg
96-N-Nitrosodiphenylamine

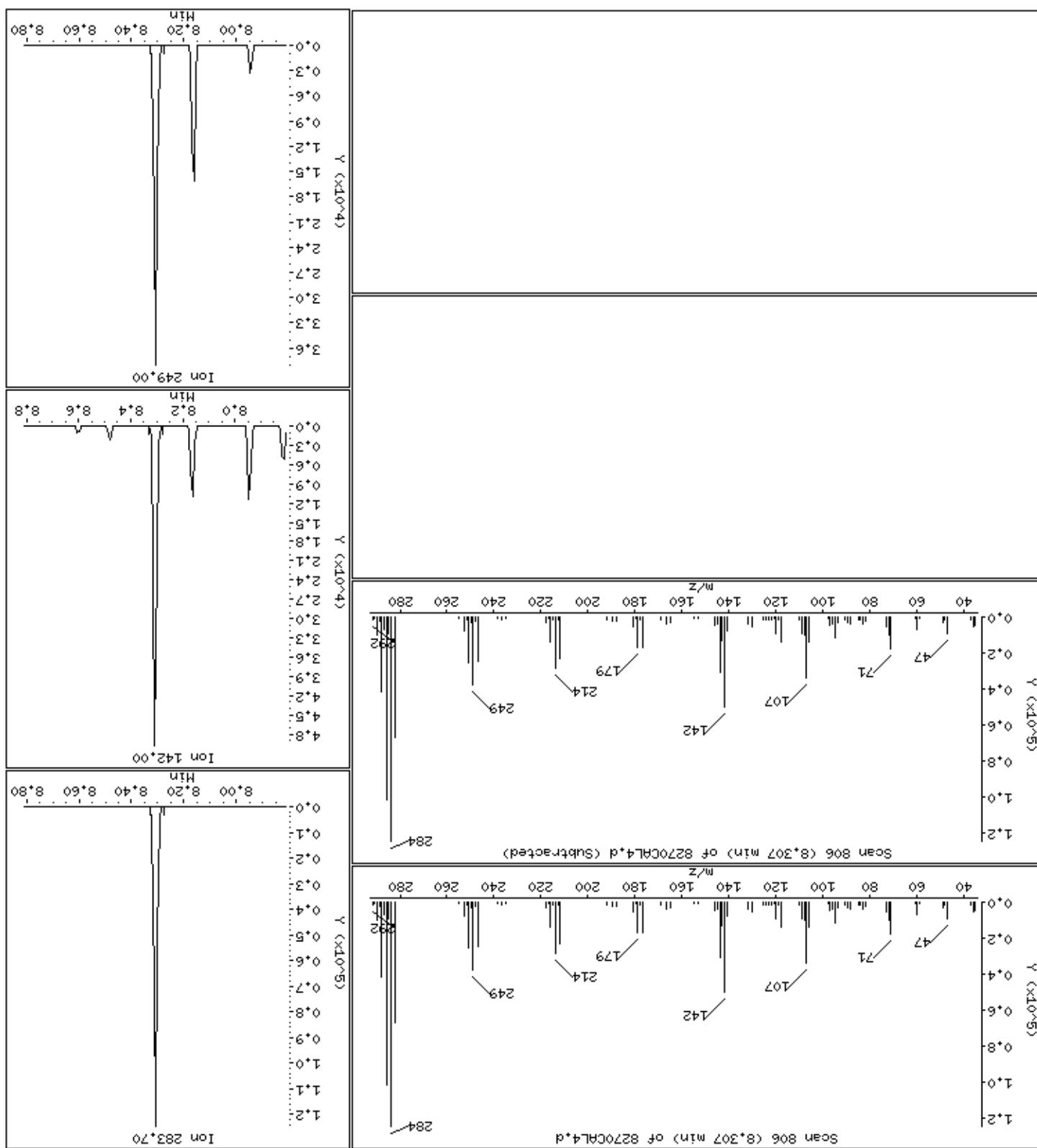


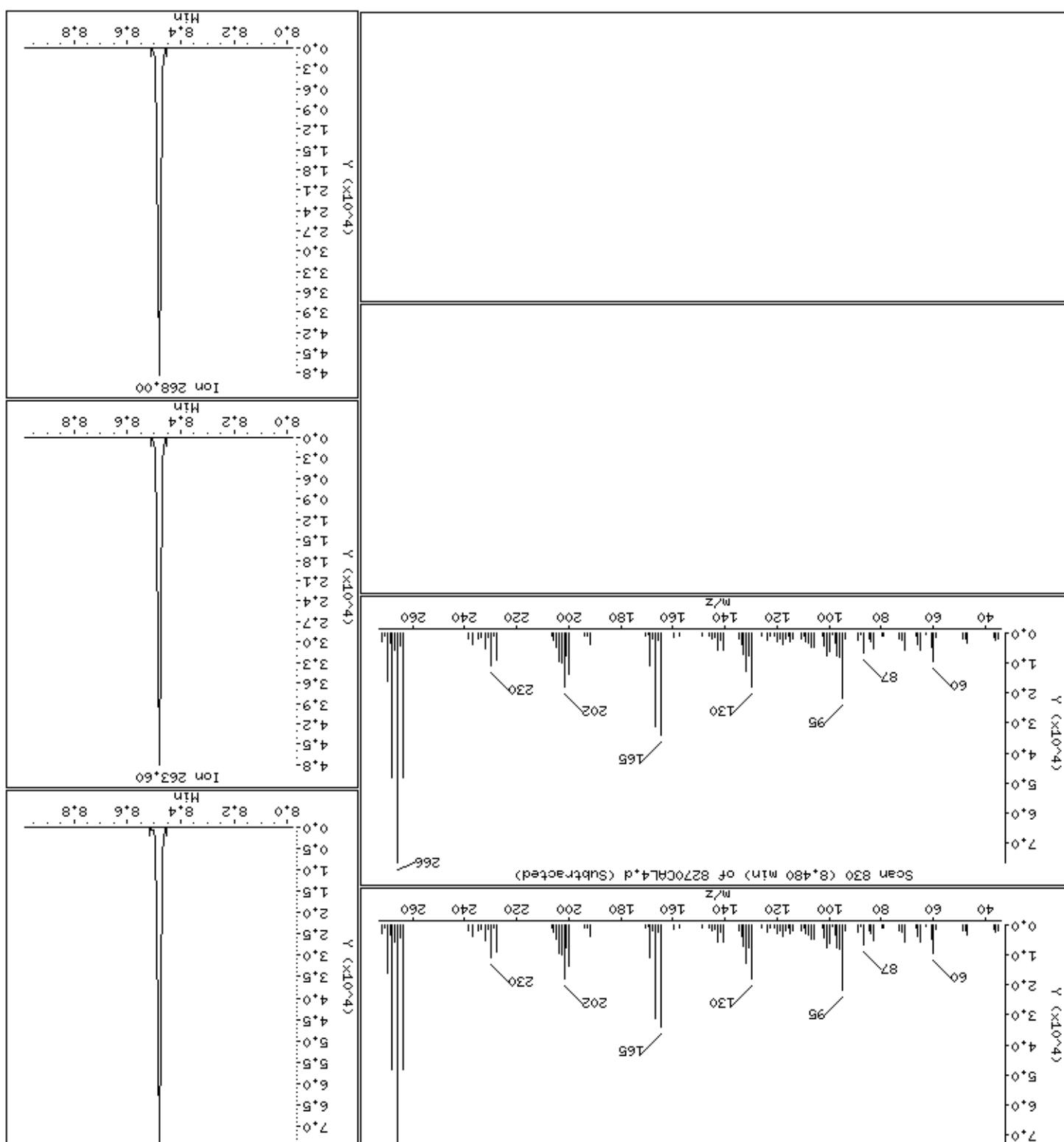


Date : 14-NOV-2012 23:43 Client ID: 8270C4L4
Instrument: msd04+,1 Sample Info: 47766
Client ID: 8270C4L4
Instrument: msd04+,1
Sample Info: 47766
Operator: HJ Column Phases: HPM-S-5
Column diameter: 0.25 mm Concentration: 45.6 ug/kg
93 4-Bromophenylphenylether Scan 786 (8.164 min) of 8270C4L4.d Ion 248.00



94 Hexachlorobenzene
Sample Info: 47766
Instrument ID: msd0441
Client ID: 8270C4LA
Sample Info: 47766
Operator: HS
Column phase: HPM-S-5
Column diameter: 0.25
Concentration: 444.3 ug/Kg
Scan 806 (8.307 min) of 8270C4LA.d





Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

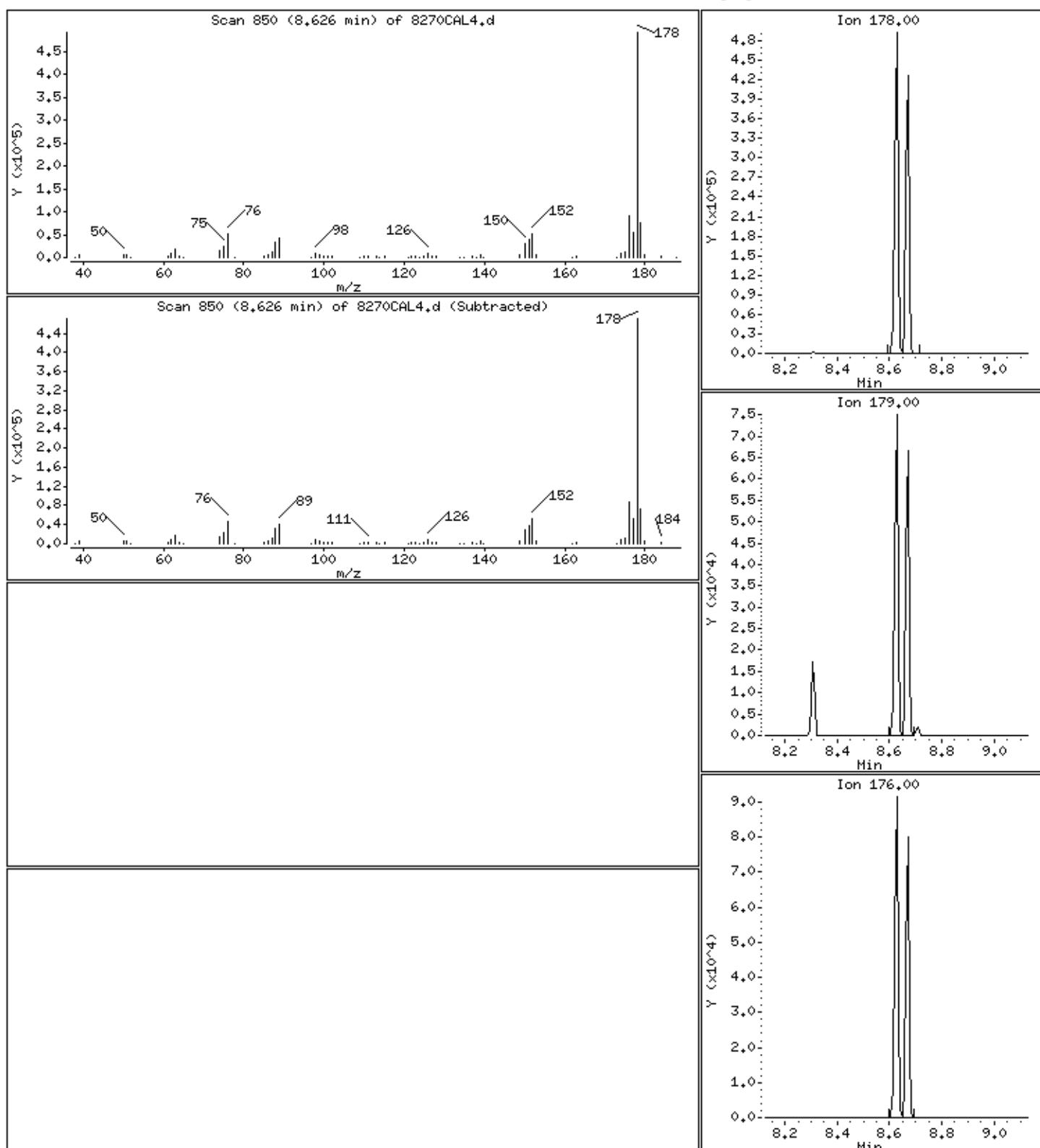
Operator: MJ

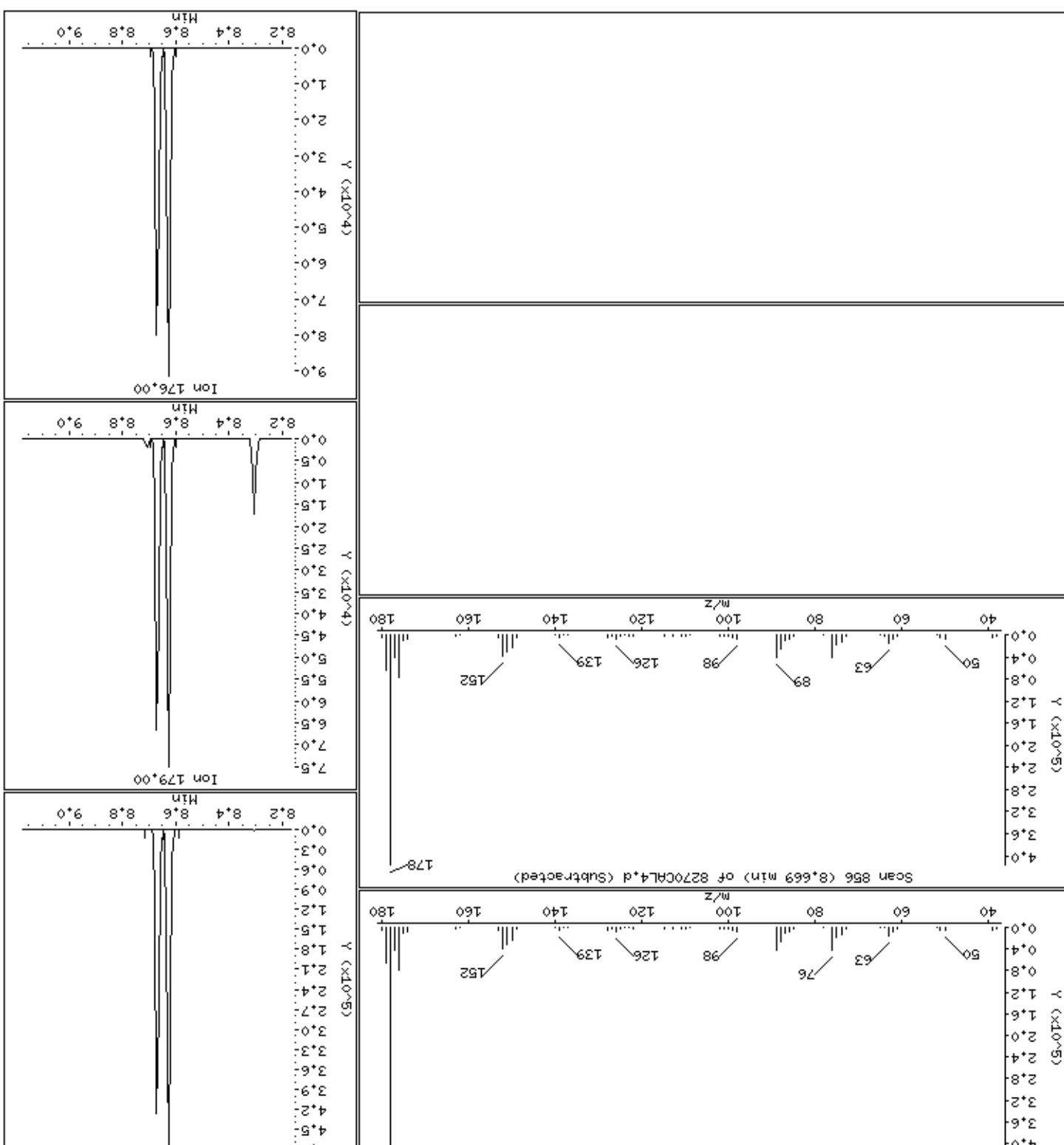
Column phase: HPMS-5

Column diameter: 0.25

101 Phenanthrene

Concentration: 44.2 ug/kg





Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

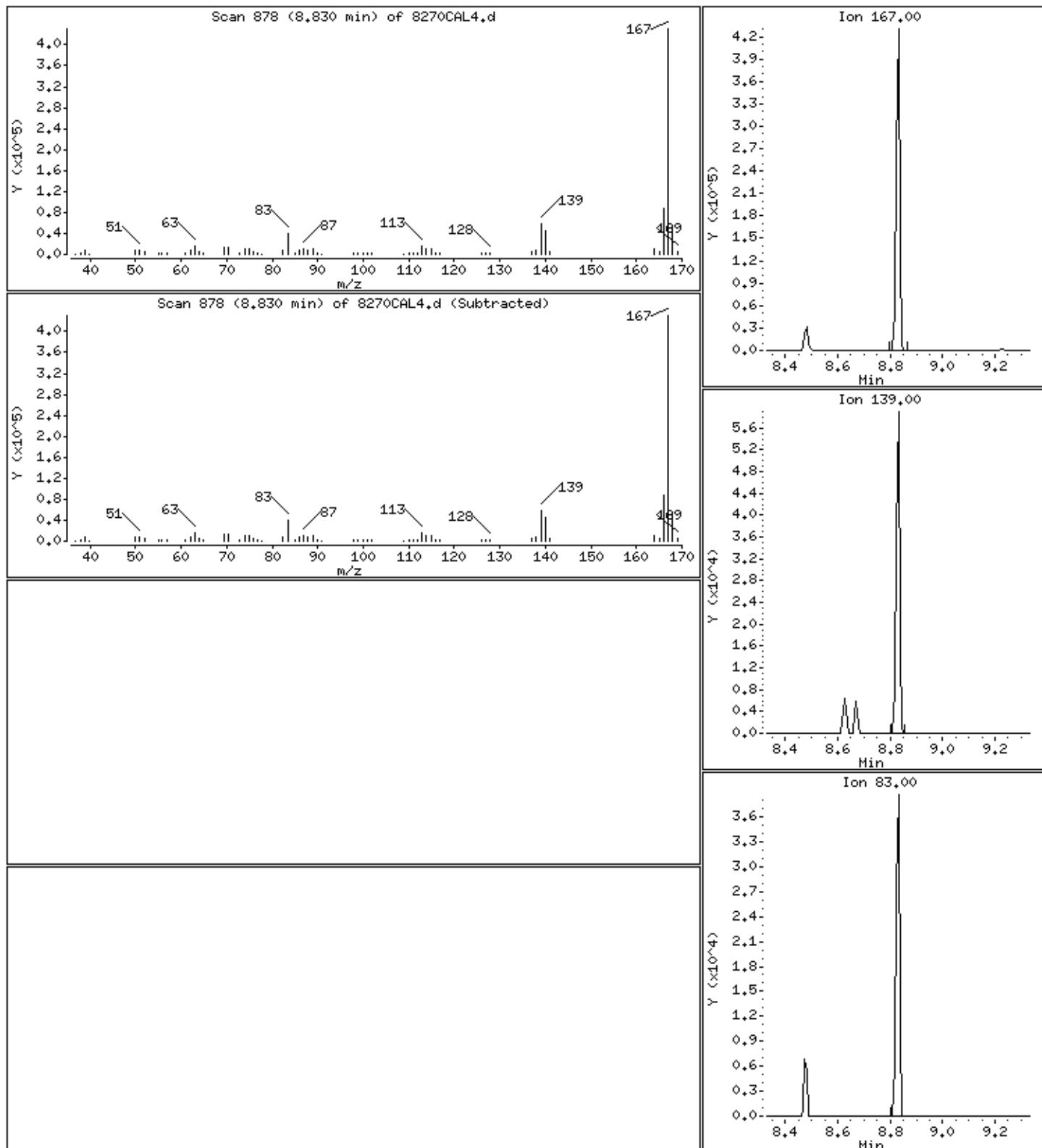
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

104 Carbazole

Concentration: 45.4 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

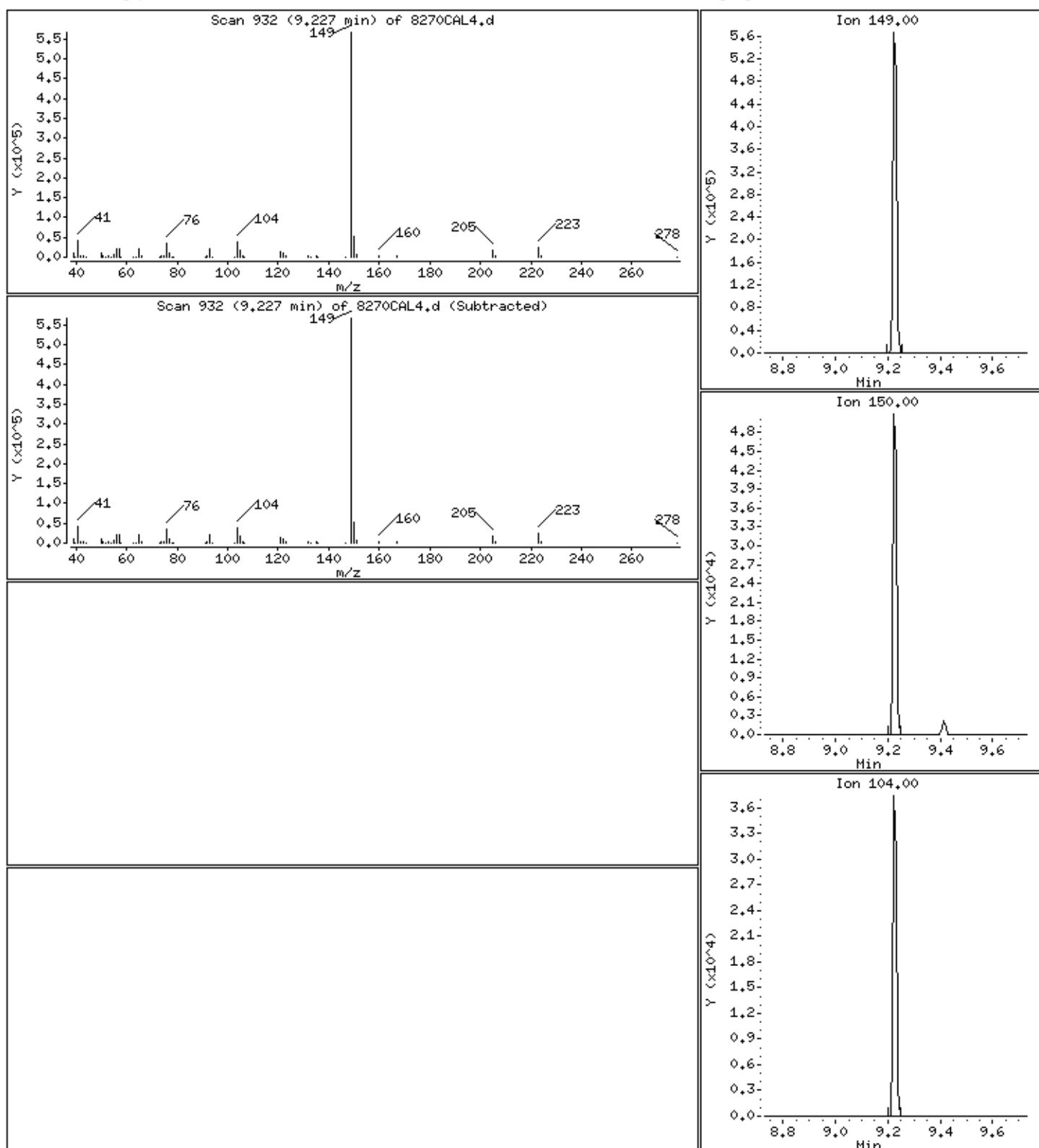
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

105 Di-n-butylphthalate

Concentration: 44.8 ug/kg



Data File: \S\ecd\dd\chem\msd4\!\\$411445sc1\b\\$270crl4.d Page 68

Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

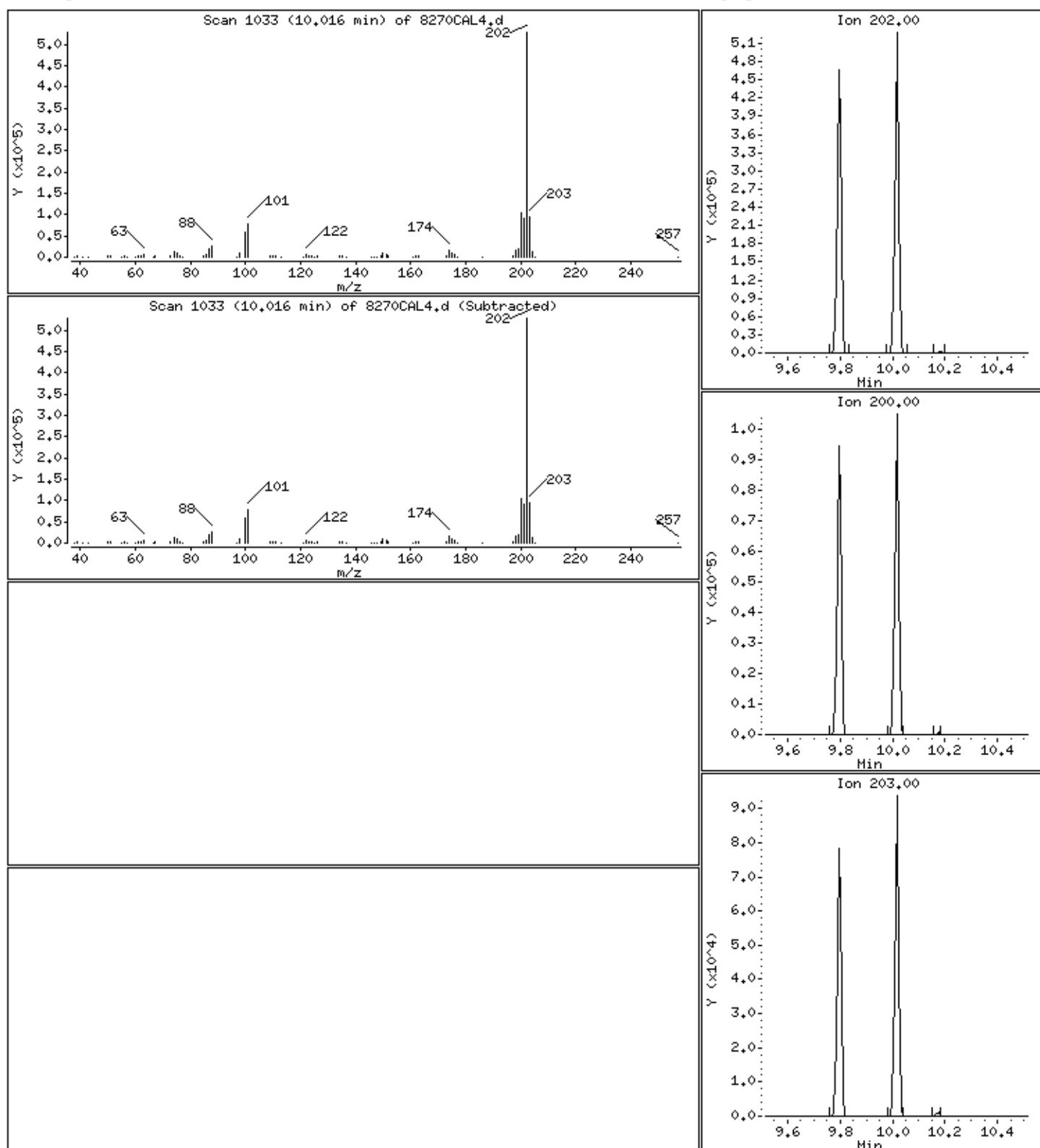
Operator: MJ

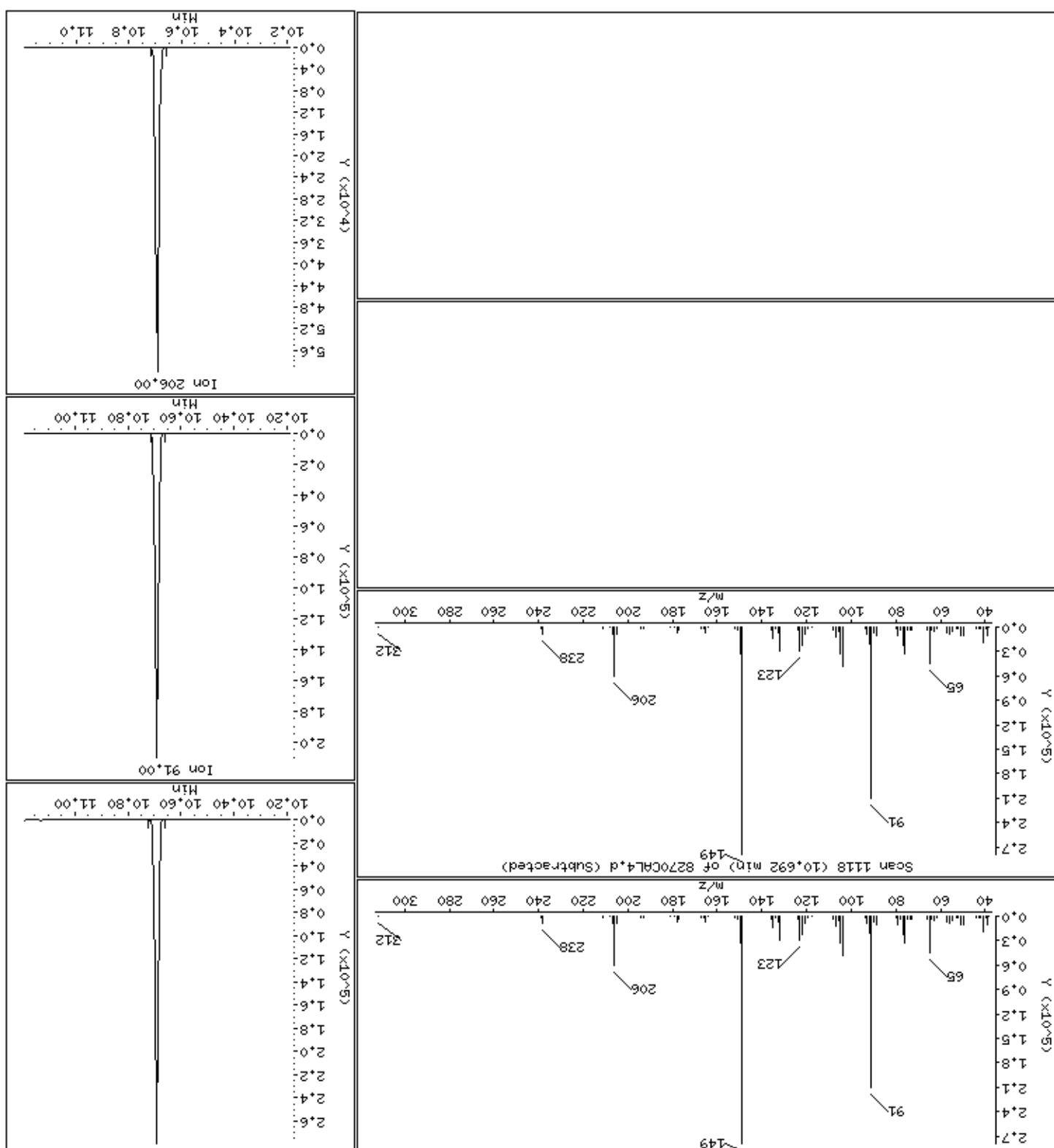
Column phase: HPMS-5

Column diameter: 0.25

111 Pyrene

Concentration: 45.8 ug/kg





Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

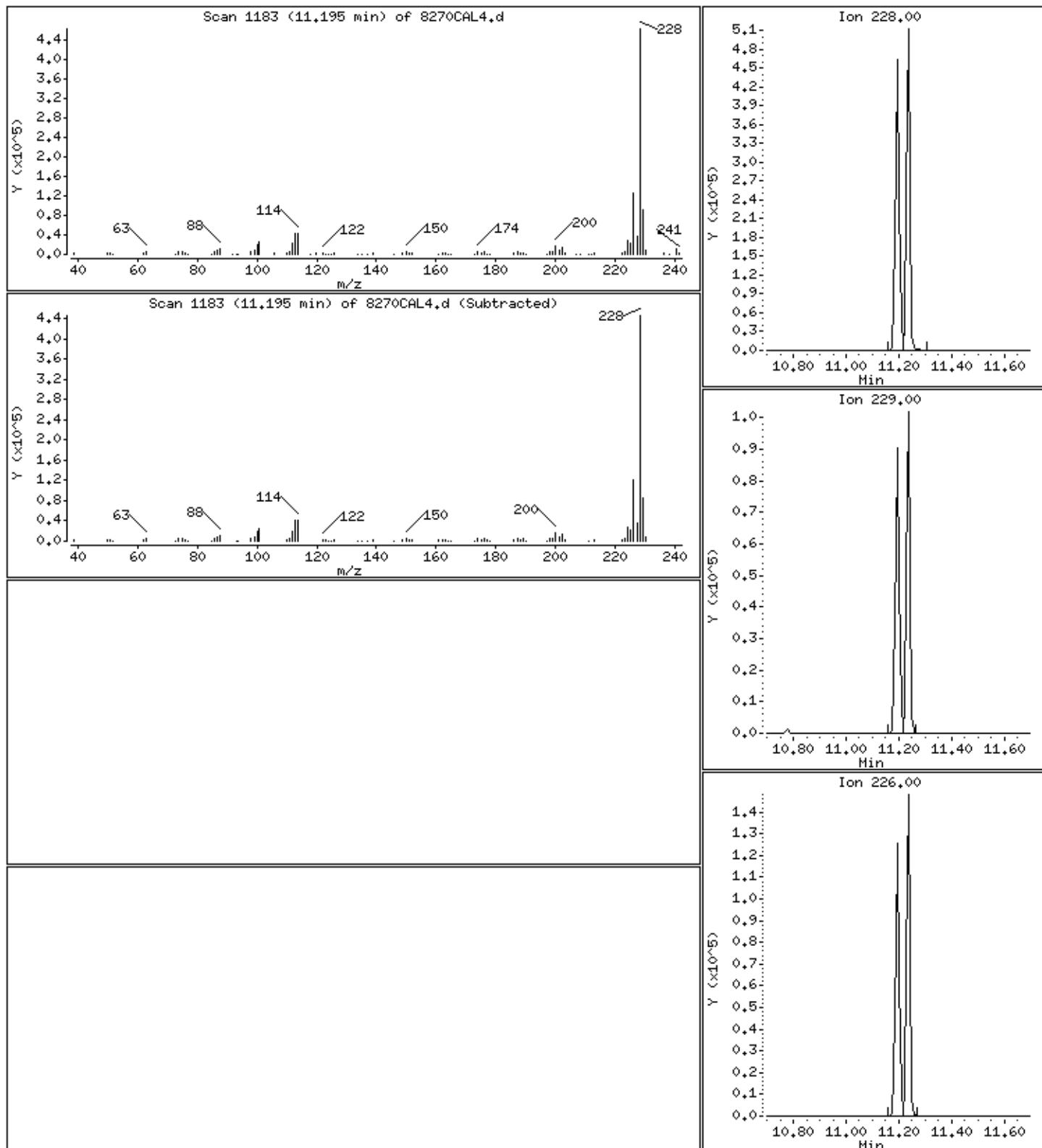
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

120 Benzo[alanthracene

Concentration: 43.4 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

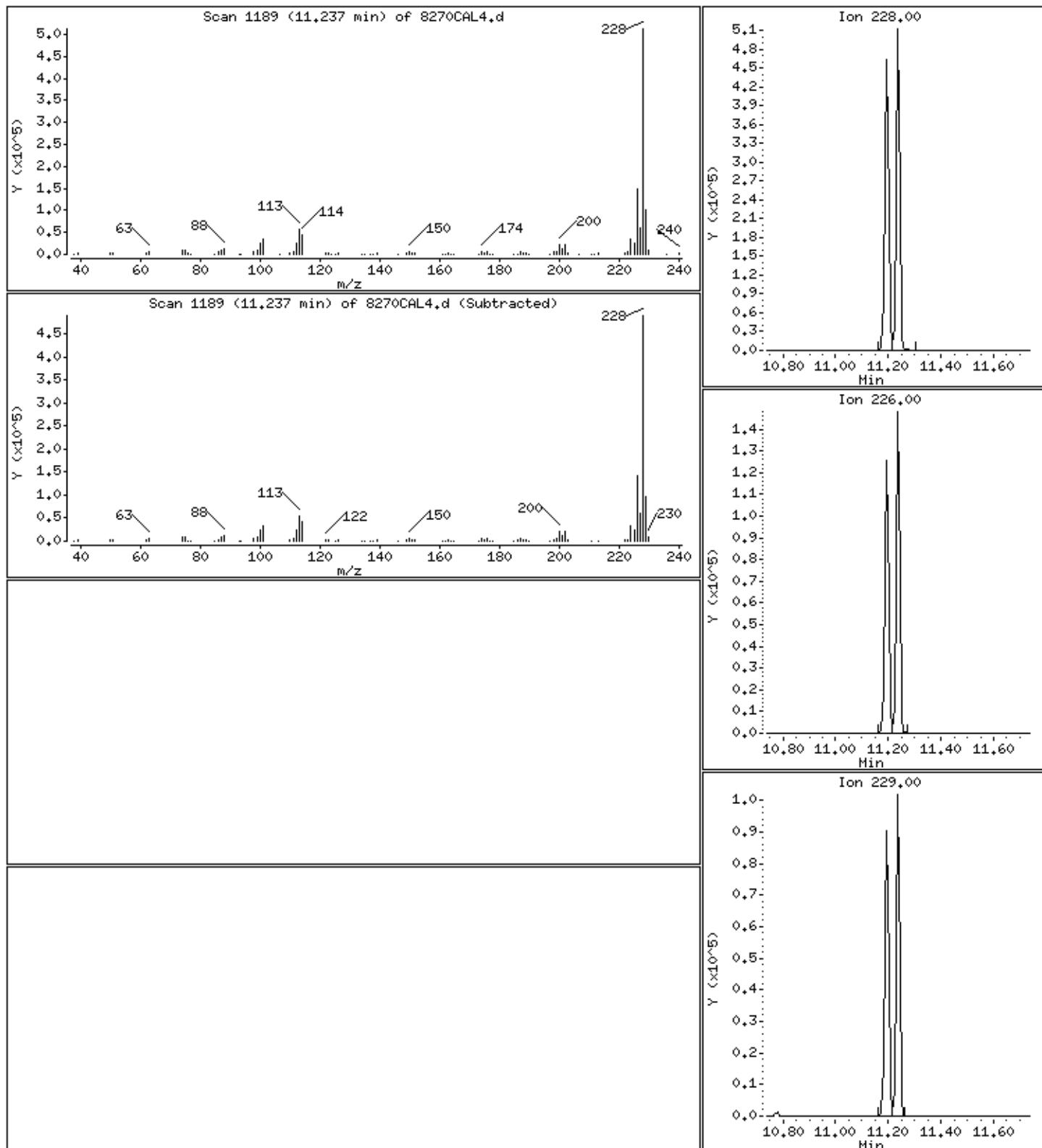
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

123 Chrysene

Concentration: 43.7 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

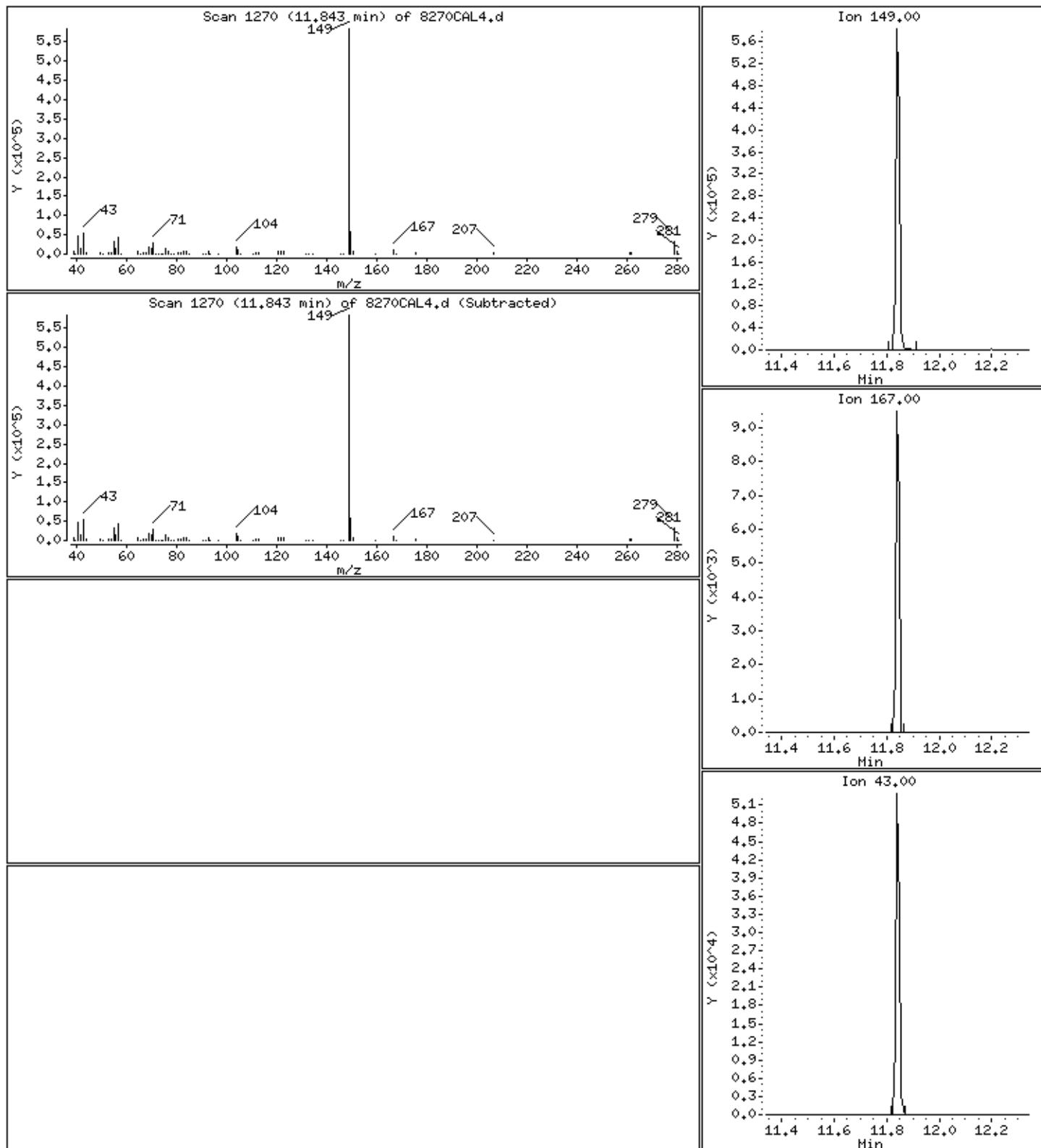
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

125 Di-n-octylphthalate

Concentration: 48.5 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

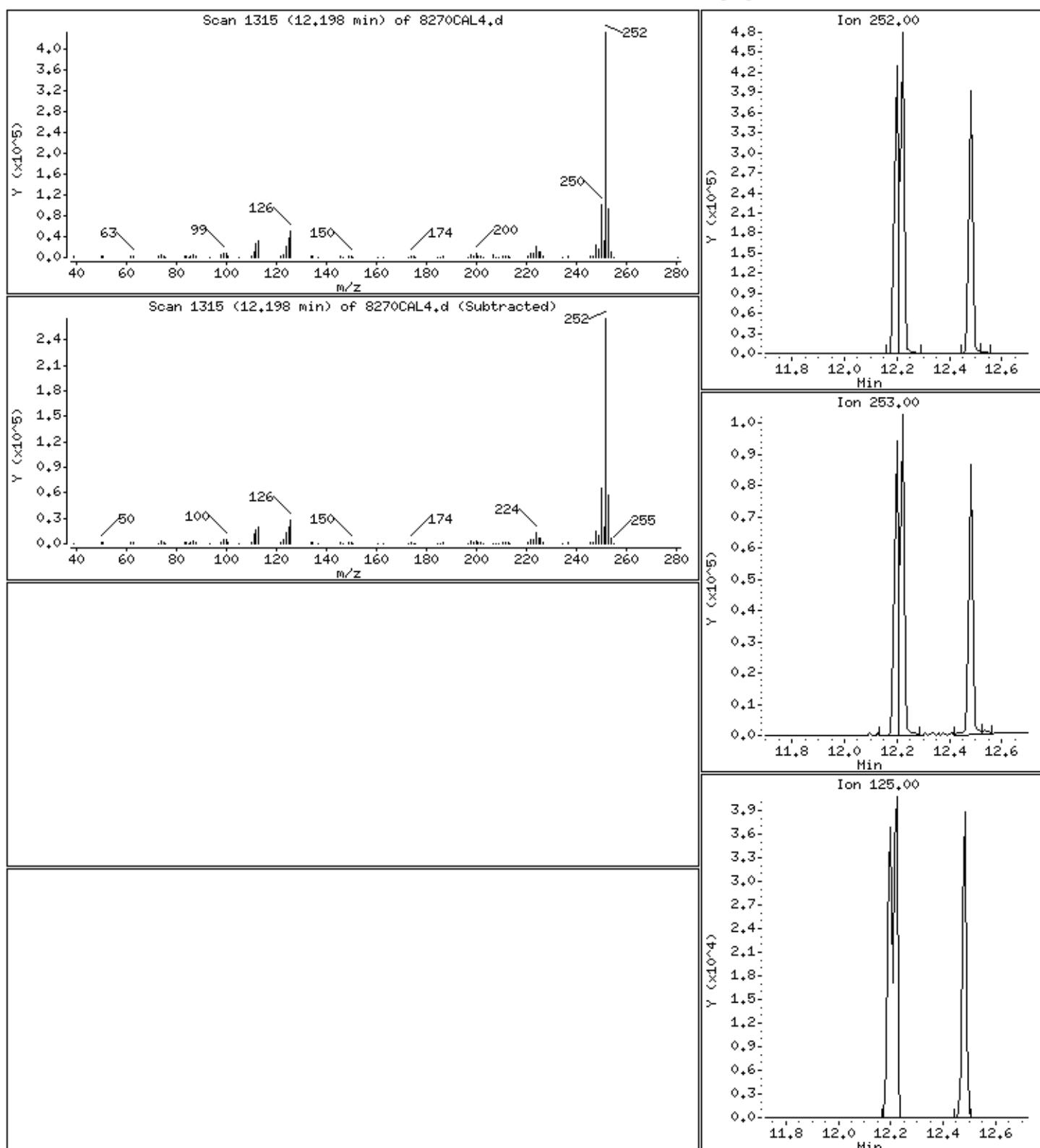
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

127 Benzo[b]fluoranthene

Concentration: 43.0 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

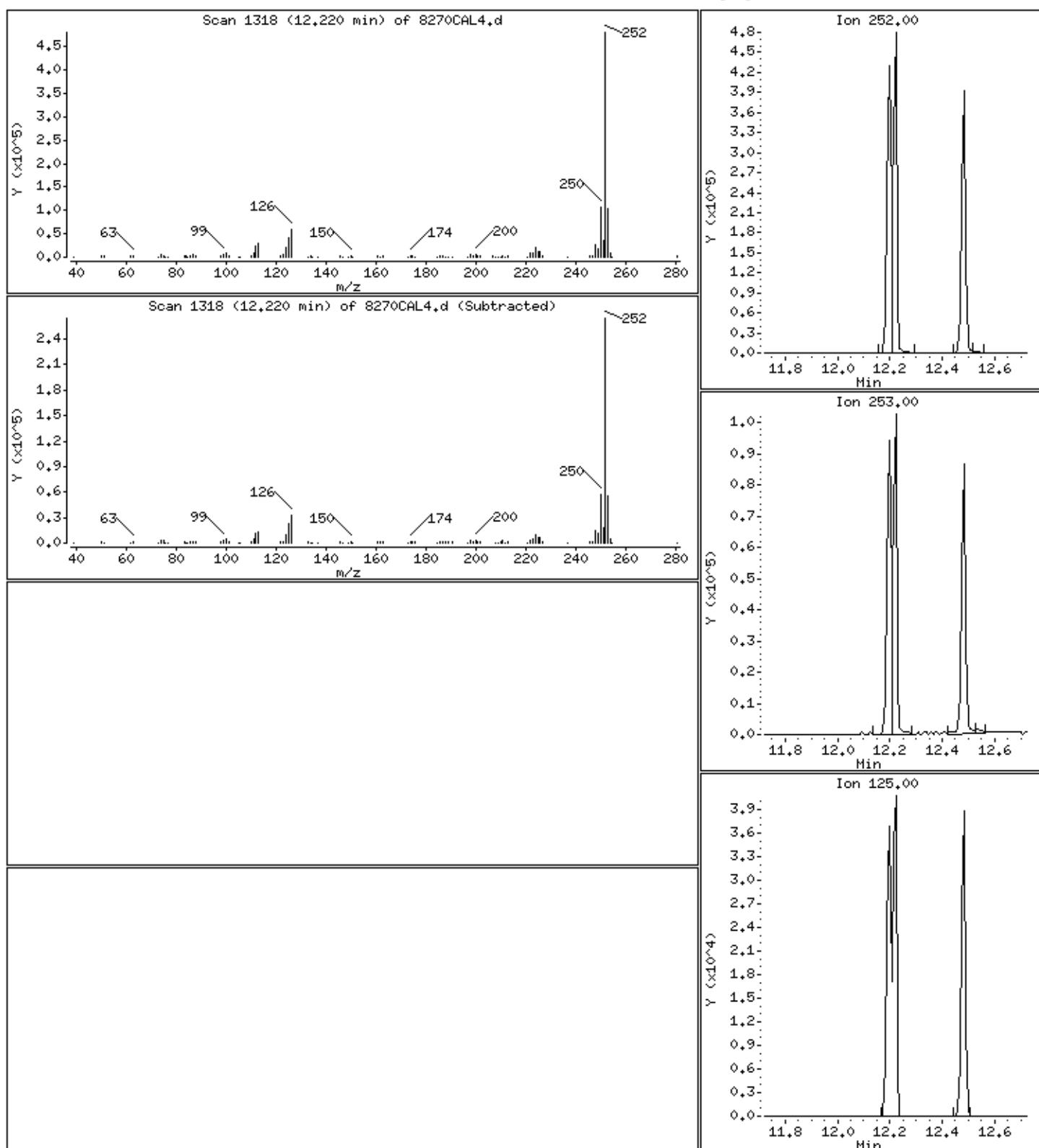
Operator: MJ

Column phase: HPMS-5

Column diameter: 0.25

128 Benzo[k]fluoranthene

Concentration: 42.0 ug/kg



Date : 14-NOV-2012 23:43

Client ID: 8270CAL4

Instrument: smsd04.i

Sample Info: 47766

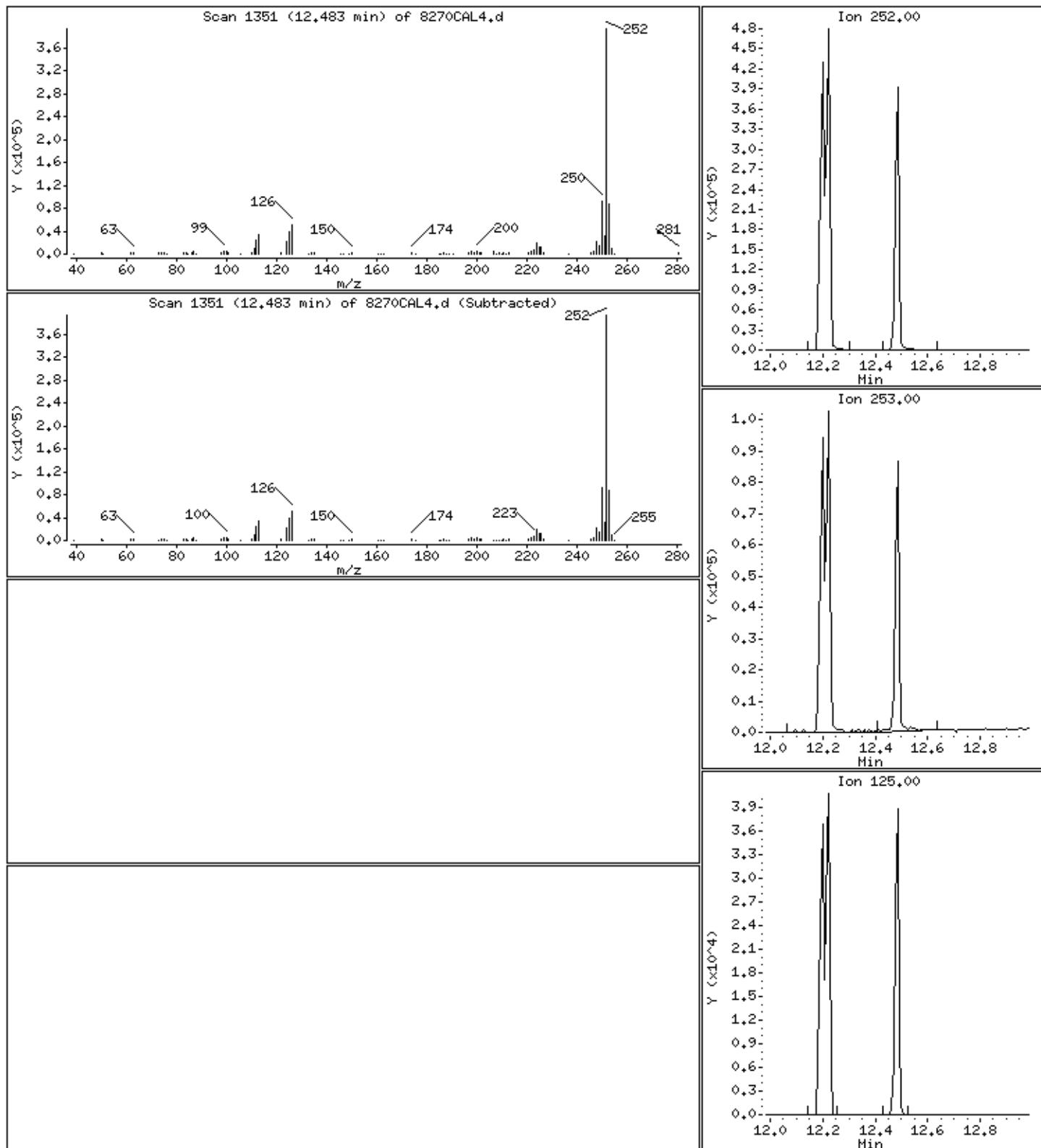
Operator: MJ

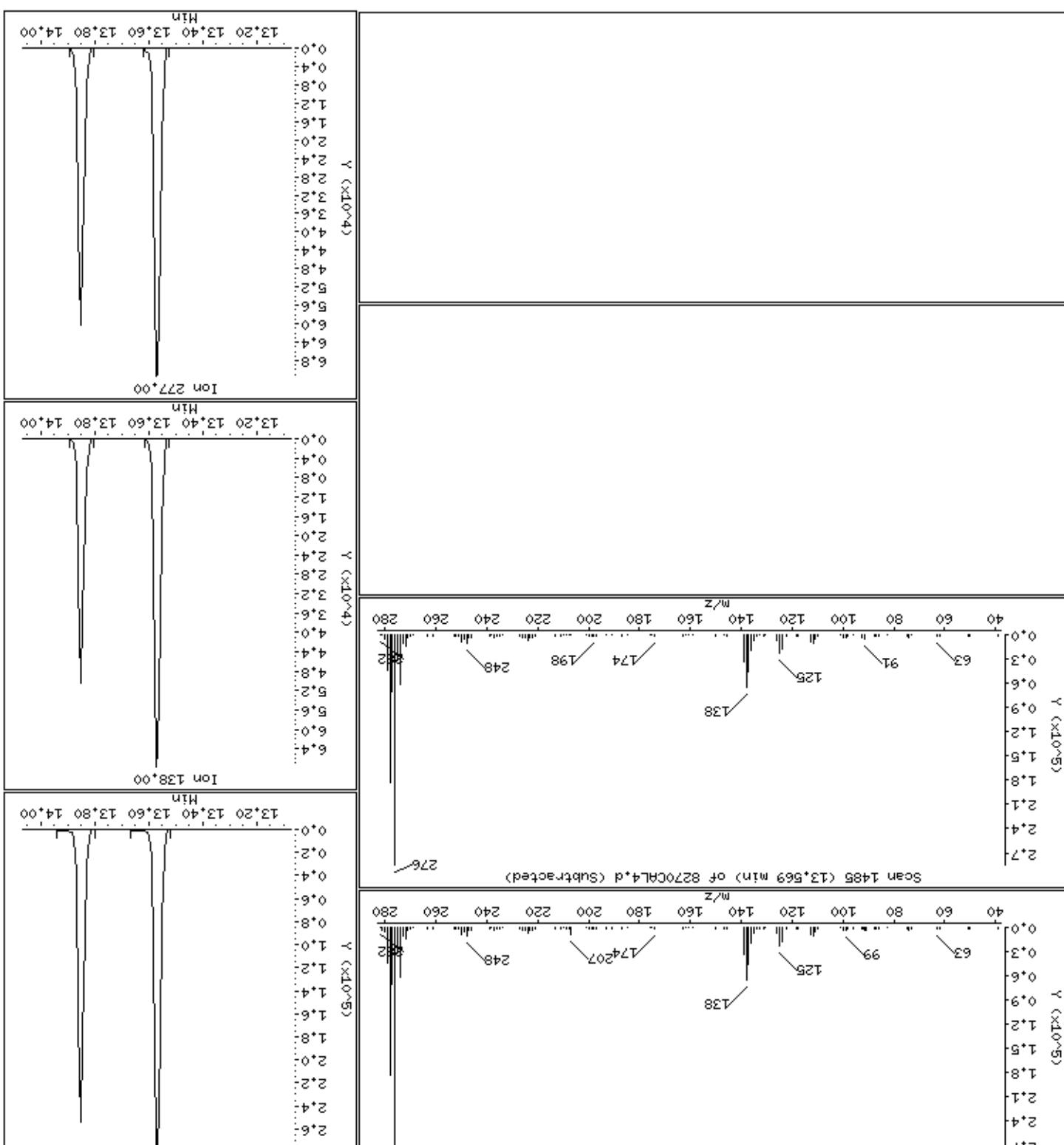
Column phase: HPMS-5

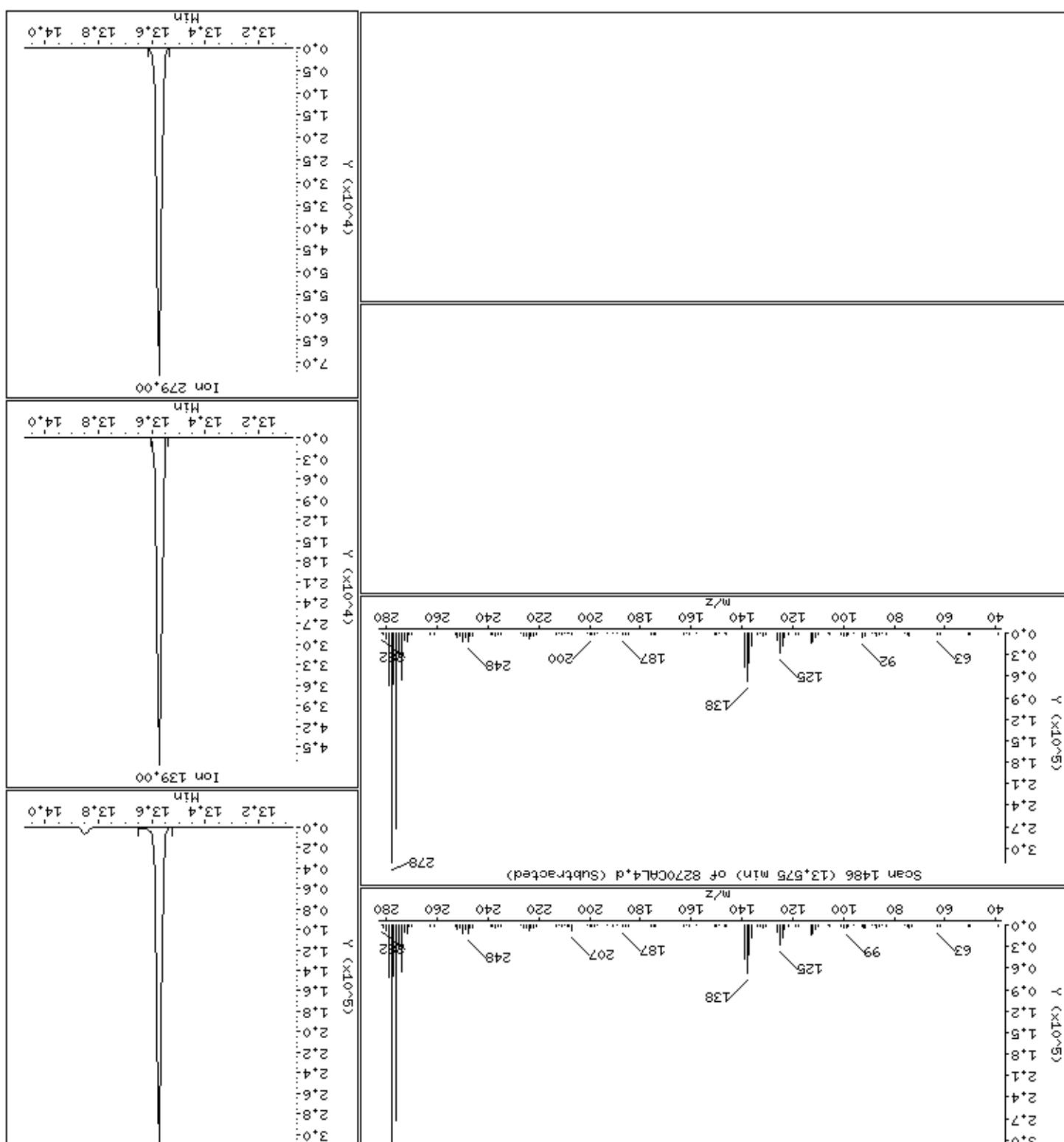
Column diameter: 0.25

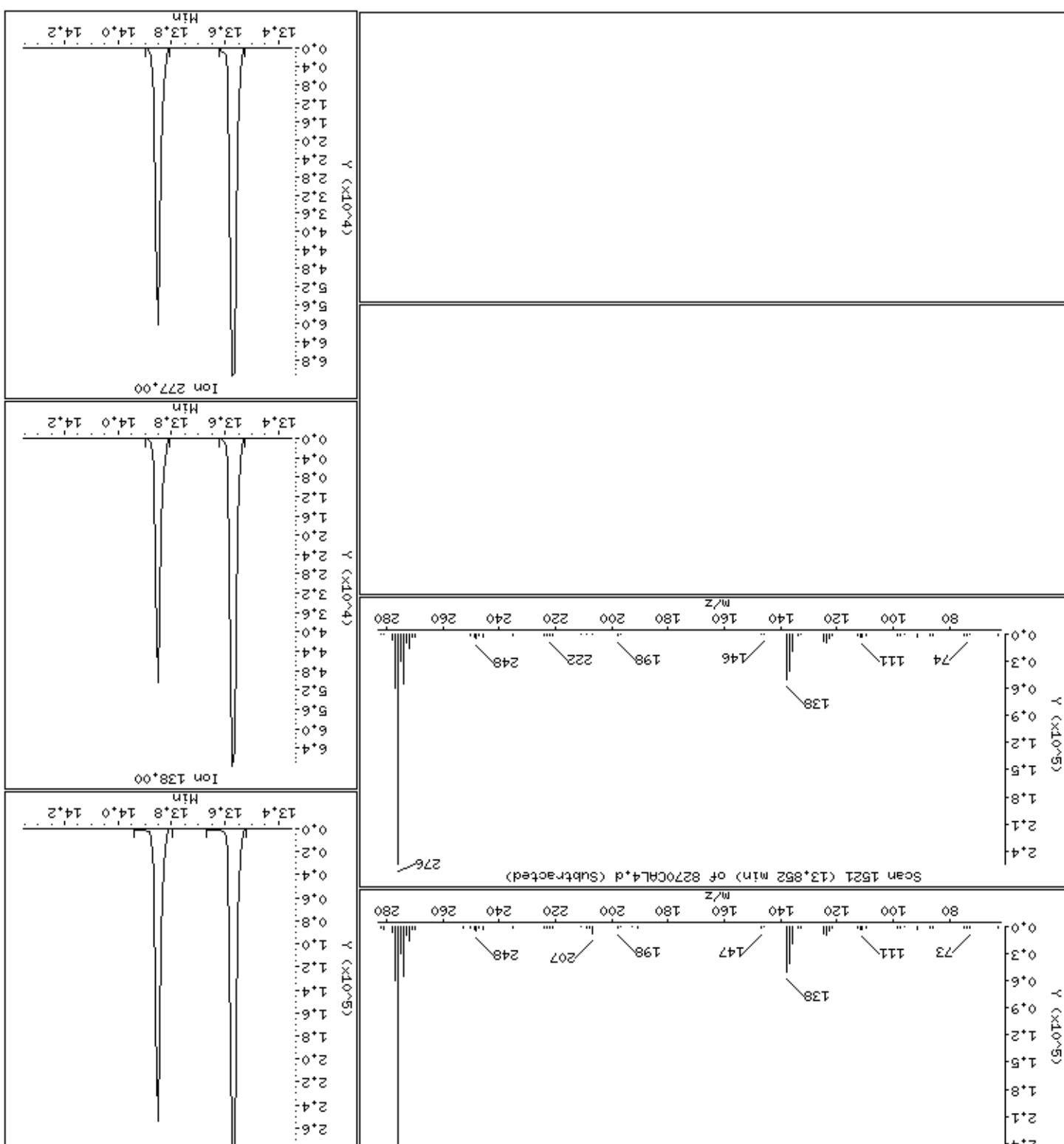
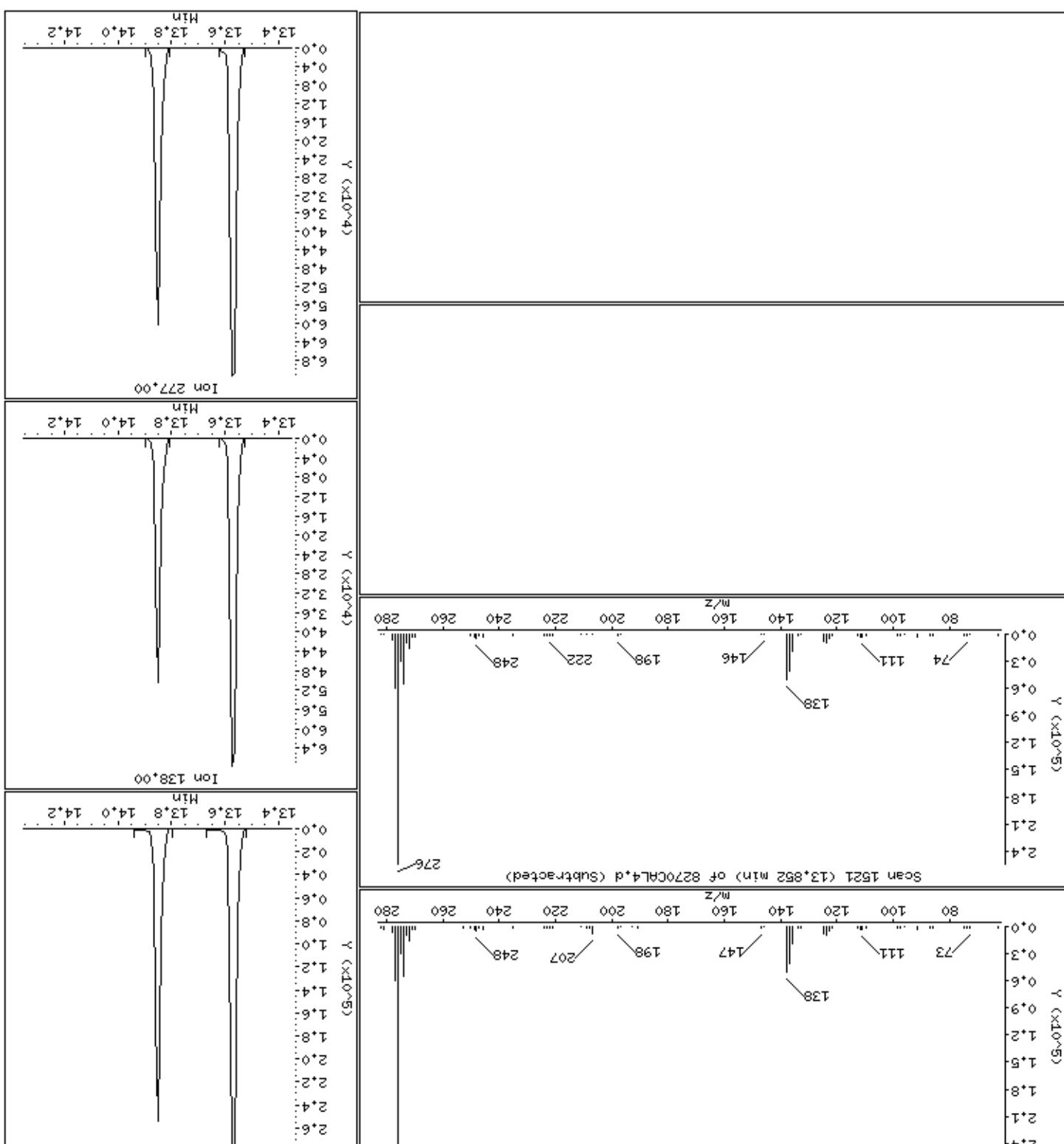
129 Benzo[a]pyrene

Concentration: 42.8 ug/kg









PEL Laboratories, Inc.

Data file : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\8270CAL3.d
Lab Smp Id: 47767 Client Smp ID: 8270CAL3
Inj Date : 15-NOV-2012 00:04 MS Autotune Date: 07-MAR-2012 16:32
Operator : MJ Inst ID: smsd04.i
Smp Info : 47767
Misc Info :
Comment :
Method : \\Svecd04\DD\chem\smsd04.i\S41114SScal.b\8270bcs.m
Meth Date : 26-Nov-2012 13:58 smsd04.i Quant Type: ISTD
Cal Date : 15-OCT-2012 14:41 Cal File: AP9CAL3.d
Als bottle: 25 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8270caln.sub
Target Version: 4.14 Sample Matrix: SOIL

Concentration Formula: Amt * DF * (1/((Ws * (1-(M/100)))/1000))*Vf * CpndVar

Name	Value	Description
DF	1.000	Dilution Factor
Ws	15.000	Weight of sample extracted (g)
M	0.00000	% Moisture
Vf	1.000	Final Volume
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	REL RT	MASS	RESPONSE (ug/ml)	CAL-AMT (ug/ml)	ON-COL (ug/ml)	TARGET RANGE
2.230	2.228 (0.519)	79	61474	20.0000	18.9	80.00- 120.00	100.00
2.230	2.228 (0.519)	52	39683		35.30-	95.30	64.55
<hr/>							
M 16 Cresols (Total) CAS #: 1319-77-3							
			107667	40.0000			(a)
<hr/>							
1 N-Nitrosodimethylamine CAS #: 62-75-9							
2.220	2.220 (0.517)	42	27528	20.0000	19.1	80.00- 120.00	100.00
2.221	2.220 (0.517)	74	36196		97.07-	157.07	131.49
2.221	2.221 (0.517)	44	1670		0.00-	34.98	6.07
<hr/>							
\$ 6 2-Fluorophenol (SURR) CAS #: 367-12-4							
3.245	3.246 (0.756)	112	108488	40.0000	37.4	80.00- 120.00	100.00
3.245	3.246 (0.756)	64	71830		32.62-	92.62	66.21
<hr/>							
\$ 11 Phenol-d5 (SURR) CAS #: 4165-62-2							
4.001	4.006 (0.931)	99	135619	40.0000	36.8	80.00- 120.00	100.00
4.000	4.006 (0.931)	42	27643		0.00-	49.74	20.38
4.000	4.006 (0.931)	71	58510		12.66-	72.66	43.14
<hr/>							

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
13 Phenol						CAS #: 108-95-2		
4.011	4.016 (0.934)	94	79943	20.0000	18.8	80.00-	120.00	100.00
4.011	4.016 (0.934)	65	25745		0.94-	60.94		32.20
4.010	4.015 (0.933)	66	42310		21.40-	81.40		52.93
<hr/>								
10 Aniline						CAS #: 62-53-3		
4.044	4.046 (0.941)	93	80314	20.0000	20.0	80.00-	120.00	100.00
4.044	4.046 (0.941)	65	17157		0.00-	50.97		21.36
4.043	4.046 (0.941)	66	33382		12.95-	72.95		41.56
<hr/>								
14 Bis(2-Chloroethyl)ether						CAS #: 111-44-4		
4.089	4.094 (0.952)	93	56055	20.0000	19.6	80.00-	120.00	100.00
4.089	4.093 (0.952)	63	41976		43.04-	103.04		74.88
4.090	4.094 (0.952)	95	18161		1.90-	61.90		32.40
<hr/>								
15 2-Chlorophenol						CAS #: 95-57-8		
4.140	4.142 (0.964)	128	53507	20.0000	19.3	80.00-	120.00	100.00
4.140	4.142 (0.964)	64	29117		24.14-	84.14		54.42
4.140	4.142 (0.964)	130	17849		2.15-	62.15		33.36
<hr/>								
17 1,3-Dichlorobenzene						CAS #: 541-73-1		
4.266	4.267 (0.993)	146	63310	20.0000	19.1	80.00-	120.00	100.00
4.266	4.267 (0.993)	148	41445		34.15-	94.15		65.46
4.266	4.267 (0.993)	111	30395		14.34-	74.34		48.01
<hr/>								
* 18 1,4-Dichlorobenzene-d4						CAS #: 3855-82-1		
4.296	4.294 (1.000)	152	87947	40.0000		80.00-	120.00	100.00
4.295	4.294 (1.000)	115	56261		34.81-	94.81		63.97
4.296	4.294 (1.000)	150	150844		126.51-	186.51		171.52
<hr/>								
19 1,4-Dichlorobenzene						CAS #: 106-46-7		
4.310	4.311 (1.003)	146	65940	20.0000	19.1	80.00-	120.00	100.00
4.310	4.311 (1.003)	148	42776		36.10-	96.10		64.87
4.310	4.311 (1.003)	111	29625		14.95-	74.95		44.93
<hr/>								
21 Benzyl alcohol						CAS #: 100-51-6		
4.427	4.429 (1.031)	108	34782	20.0000	18.6	80.00-	120.00	100.00
4.427	4.429 (1.031)	79	54518		126.03-	186.03		156.74
4.427	4.429 (1.031)	77	37809		76.75-	136.75		108.70
<hr/>								
20 1,2-Dichlorobenzene						CAS #: 95-50-1		
4.478	4.478 (1.042)	146	62448	20.0000	19.6	80.00-	120.00	100.00
4.478	4.478 (1.042)	148	39253		33.36-	93.36		62.86
4.478	4.478 (1.042)	111	28234		18.07-	78.07		45.21
<hr/>								
22 2-Methylphenol						CAS #: 95-48-7		
4.536	4.538 (1.056)	107	43465	20.0000	19.2	80.00-	120.00	100.00
4.536	4.538 (1.056)	108	49746		83.56-	143.56		114.45
4.536	4.538 (1.056)	79	25913		27.79-	87.79		59.62
<hr/>								
23 2,2'-oxybis(1-chloropropane)						CAS #: 108-60-1		
4.570	4.571 (1.064)	45	72596	20.0000	20.2	80.00-	120.00	100.00
4.569	4.571 (1.064)	77	12391		0.00-	47.34		17.07

RT	EXP RT	REL RT	MASS	AMOUNTS		TARGET	RANGE	RATIO
				CAL-AMT	ON-COL			
=====	=====	=====	=====	=====	=====	=====	=====	=====
23 2,2'-oxybis(1-chloropropane) (continued)								
4.570	4.571 (1.064)	121	19665			0.00-	56.71	27.09

28 4-Methylphenol					CAS #:	106-44-5		
4.664	4.668 (1.086)	107	64202	20.0000	18.8	80.00-	120.00	100.00
4.664	4.668 (1.086)	108	51655		51.88-	111.88		80.46
4.663	4.668 (1.086)	79	17563		0.00-	57.76		27.36

26 N-Nitrosodinpropylamine					CAS #:	621-64-7		
4.693	4.699 (1.093)	70	46237	20.0000	19.0	80.00-	120.00	100.00
4.693	4.699 (1.093)	42	24736		21.53-	81.53		53.50
4.693	4.699 (1.093)	130	9774		0.00-	51.40		21.14

30 Hexachloroethane					CAS #:	67-72-1		
4.753	4.753 (1.107)	117	28130	20.0000	19.3	80.00-	120.00	100.00
4.754	4.754 (1.107)	201	26105		63.39-	123.39		92.80
4.754	4.754 (1.107)	199	17178		26.40-	86.40		61.07

\$ 31 Nitrobenzene-d5 (SURR)					CAS #:	4165-60-0		
4.816	4.818 (0.881)	82	72532	20.0000	19.4	80.00-	120.00	100.00
4.816	4.818 (0.881)	128	25460		6.68-	66.68		35.10
4.816	4.818 (0.881)	54	34647		19.12-	79.12		47.77

32 Nitrobenzene					CAS #:	98-95-3		
4.832	4.834 (0.884)	77	74206	20.0000	20.1	80.00-	120.00	100.00
4.833	4.835 (0.884)	123	26383		6.73-	66.73		35.55
4.832	4.834 (0.884)	65	10648		0.00-	43.84		14.35

34 Isophorone					CAS #:	78-59-1		
5.041	5.046 (0.923)	82	121888	20.0000	19.1	80.00-	120.00	100.00
5.041	5.047 (0.923)	138	18600		0.00-	45.91		15.26
5.041	5.046 (0.923)	95	8791		0.00-	37.77		7.21

35 2-Nitrophenol					CAS #:	88-75-5		
5.127	5.128 (0.938)	139	28905	20.0000	18.6	80.00-	120.00	100.00
5.127	5.127 (0.938)	65	19171		33.65-	93.65		66.32
5.126	5.127 (0.938)	109	12729		13.08-	73.08		44.04

36 2,4-Dimethylphenol					CAS #:	105-67-9		
5.154	5.158 (0.943)	122	42197	20.0000	18.2	80.00-	120.00	100.00
5.154	5.158 (0.943)	107	55802		100.42-	160.42		132.24
5.154	5.158 (0.943)	121	24695		27.73-	87.73		58.52

38 Bis(2-Chloroethoxy)methane					CAS #:	111-91-1		
5.248	5.252 (0.960)	93	71240	20.0000	19.4	80.00-	120.00	100.00
5.248	5.252 (0.960)	95	22592		2.66-	62.66		31.71
5.248	5.252 (0.961)	123	8753		0.00-	43.79		12.29

40 Benzoic Acid					CAS #:	65-85-0		
5.235	5.267 (0.958)	122	25666	20.0000	21.7	80.00-	120.00	100.00
5.233	5.267 (0.958)	105	35651		114.27-	174.27		138.90
5.234	5.267 (0.958)	77	30864		94.81-	154.81		120.25
