ENCLOSURE 5

LABORATORY DATA PACKAGE

(632 Sheets)

TETRA TECH

ANALYTICAL REPORT

Job Number: 280-50614-1

Job Description: Francis Street Assessment

For:
Tetra Tech EM Inc.
1955 Evergreen Blvd.
Bldg. 200; Suite 300
Duluth, GA 30096

Attention: Mr. John Schendel

Approved for release.
DiLea R Griego
Project Manager I
1/8/2014 10:50 AM

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01/08/2014

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The Lab Certification ID# is E87667.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

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CASE NARRATIVE
Client: Tetra Tech EM Inc.
Project: Francis Street Assessment
Report Number: 280-50614-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 12/21/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.4º C, 2.7º C, 4.2º C and 5.0º C.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) WITH INCREMENTAL SAMPLE PREPARATION - METHOD 8270C

The following samples were air dried and sieved per the procedure; however, the sample contained material that would not pass through the sieve. This material was removed and not extracted. The material appeared to be rocks: FSA-SD-CO (280-50614-8), FSA-SD-DU01 (280-50614-12), FSA-SD-DU01 (280-50614-12 MS), FSA-SD-DU01 (280-50614-12 MSD), FSA-SD-DU02 (280-50614-13), FSA-SD-DU03-A (280-50614-9), FSA-SD-DU03-A (280-50614-9 DU), FSA-SD-DU03-A (280-50614-9 TRL), FSA-SD-DU03-B (280-50614-10), FSA-SD-DU03-C (280-50614-11), FSA-SD-DU04-A (280-50614-5), FSA-SD-DU04-A (280-50614-5 DU), FSA-SD-DU04-A (280-50614-5 TRL), FSA-SD-DU04-B (280-50614-6), FSA-SD-DU04-C (280-50614-7), FSA-SD-DU05 (280-50614-4).

The following samples were analyzed at dilutions due to high concentrations of target compounds. These samples were also analyzed undiluted or at a lesser dilution in order to achieve the lowest possible reporting limits for each analyte: FSA-SD-DU03-A (280-50614-9), FSA-SD-DU03-B (280-50614-10), FSA-SD-DU03-C (280-50614-11), FSA-SD-DU01 (280-50614-12) and FSA-SD-DU02 (280-50614-13). Reporting limits have been adjusted relative to the dilution required.

The surrogate recovery could not be calculated for the diluted analysis of samples FSA-SD-DU03-C (280-50614-11), FSA-SD-DU01 (280-50614-12) and FSA-SD-DU02 (280-50614-13), because the extract was diluted beyond the ability to quantitate a recovery.

Surrogate Terphenyl-d14 was recovered above the QC control limits in the undiluted analysis of sample FSA-SD-DU05 (280-50614-4). This anomaly is due to obvious matrix interferences; therefore, corrective action is deemed unnecessary. Sample data should be considered biased high.

The matrix spike / matrix spike duplicate (MS/MSD) samples associated with preparation batch 280-206899 were performed on FSA-SD-DU01 (280-50614-12) and exhibited recoveries outside control limits for several analytes. The MS aliquot exhibited surrogate recoveries outside control limits for Terphenyl-d14 and the MS/MSD exhibited RPD values outside control limits for Fluoranthene, Phenanthrene and Pyrene. The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount. In addition, concentrations were present above the instrument calibration range for some compounds. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

The sample duplicate analysis performed for FSA-SD-DU04-A (280-50614-5) exhibited RPD data outside the QC control limits for several analytes. In addition, the triplicate performed on this sample exhibited %RSD values outside control limit for multiple analytes due to the non-homogeneity of the sample. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

The sample triplicate analysis performed for FSA-SD-DU03-A (280-50614-9 TRL) exhibited surrogate recoveries outside the QC control limits for Terphenyl-d14. In addition, the %RSD values were outside control limits for multiple analytes, due to the matrix interference. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other difficulties were encountered.

SEMIVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM) - METHOD 8270C (SO)

The following samples were analyzed at dilutions due to high concentrations of target compounds. These samples were also analyzed at a lesser dilution in order to achieve the lowest possible reporting limits for each analyte: FSA-SF-SCW (280-50614-2) and FSA-SF-SCW-DUP (280-50614-3). As such, the surrogate recoveries could not be reliably calculated, because the extract was diluted beyond the ability to quantitate a recovery. Reporting limits have been adjusted relative to the dilution required.

The matrix spike / matrix spike duplicate (MS/MSD) samples associated with preparation batch 280-207028 were performed on FSA-SF-CT (280-50614-1) and exhibited recoveries outside control limits for multiple analytes. In addition, the MS/MSD exhibited RPD values outside control limits for Fluorene. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other difficulties were encountered.

POLYCYCLIC AROMATIC HYDROCARBONS (PAHS) - METHOD 8270C (AQ)

Surrogate Terphenyl-d14 was recovered above the QC control limits in sample FSA-FB-01 (280-50614-14). This is an indicator that data may be biased high. As the sample does not contain any detectable concentrations for constituents associated with this surrogate, corrective action is deemed unnecessary. Usability of the sample data is not compromised.

The LCS/LCSD exhibited a percent recovery above the QC control limits for Terphenyl-d14. This is an indicator that data may be biased high. As no detectable concentrations are present in the associated samples, corrective action is deemed unnecessary. Usability of the sample data is not compromised.

Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 280-206688. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data.

No other difficulties were encountered.

PERCENT SOLIDS

No difficulties were encountered.

DATA REPORTING QUALIFIERS

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	F3	Duplicate RPD exceeds the control limit
	F1	MS and/or MSD Recovery exceeds the control limits
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	F2	MS/MSD RPD exceeds control limits
	E	Result exceeded calibration range.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
	X	Surrogate is outside control limits

SAMPLE SUMMARY

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-50614-1	FSA-SF-CT	Solid	12/19/2013 0855	12/21/2013 1200
280-50614-1MS	FSA-SF-CT	Solid	12/19/2013 0855	12/21/2013 1200
280-50614-1MSD	FSA-SF-CT	Solid	12/19/2013 0855	12/21/2013 1200
280-50614-2	FSA-SF-SCW	Solid	12/19/2013 0912	12/21/2013 1200
280-50614-3	FSA-SF-SCW-DUP	Solid	12/19/2013 0918	12/21/2013 1200
280-50614-4	FSA-SD-DU05	Solid	12/19/2013 1045	12/21/2013 1200
280-50614-5	FSA-SD-DU04-A	Solid	12/19/2013 1235	12/21/2013 1200
280-50614-5DU	FSA-SD-DU04-A	Solid	12/19/2013 1235	12/21/2013 1200
280-50614-5TRL	FSA-SD-DU04-A	Solid	12/19/2013 1235	12/21/2013 1200
280-50614-6	FSA-SD-DU04-B	Solid	12/19/2013 1240	12/21/2013 1200
280-50614-7	FSA-SD-DU04-C	Solid	12/19/2013 1245	12/21/2013 1200
280-50614-8	FSA-SD-CO	Solid	12/19/2013 1120	12/21/2013 1200
280-50614-9	FSA-SD-DU03-A	Solid	12/19/2013 1500	12/21/2013 1200
280-50614-9DU	FSA-SD-DU03-A	Solid	12/19/2013 1500	12/21/2013 1200
280-50614-9TRL	FSA-SD-DU03-A	Solid	12/19/2013 1500	12/21/2013 1200
280-50614-10	FSA-SD-DU03-B	Solid	12/19/2013 1505	12/21/2013 1200
280-50614-11	FSA-SD-DU03-C	Solid	12/19/2013 1510	12/21/2013 1200
280-50614-12	FSA-SD-DU01	Solid	12/19/2013 1545	12/21/2013 1200
280-50614-12MS	FSA-SD-DU01	Solid	12/19/2013 1545	12/21/2013 1200
280-50614-12MSD	FSA-SD-DU01	Solid	12/19/2013 1545	12/21/2013 1200
280-50614-13	FSA-SD-DU02	Solid	12/19/2013 1610	12/21/2013 1200
280-50614-14FB	FSA-FB-01	Water	12/19/2013 1615	12/21/2013 1200
280-50614-15EB	FSA-EB-01	Water	12/19/2013 1620	12/21/2013 1200

EXECUTIVE SUMMARY - Detections

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-50614-1	**FSA-SF-CT**					
Benzo[b]fluoranthene		130000		12000	ng/Kg	8270C SIM
Benzo[a]pyrene		77000		12000	ng/Kg	8270C SIM
Benzo[a]anthracene		58000		12000	ng/Kg	8270C SIM
Benzo[k]fluoranthene		43000		12000	ng/Kg	8270C SIM
Benzo[g,h,i]perylene		63000		12000	ng/Kg	8270C SIM
Phenanthrene		94000		12000	ng/Kg	8270C SIM
Anthracene		22000		12000	ng/Kg	8270C SIM
Dibenz(a,h)anthracene		16000		12000	ng/Kg	8270C SIM
Chrysene		75000		12000	ng/Kg	8270C SIM
Acenaphthene		11000	J	12000	ng/Kg	8270C SIM
Acenaphthylene		35000		12000	ng/Kg	8270C SIM
Fluoranthene		160000		12000	ng/Kg	8270C SIM
Fluorene		14000		12000	ng/Kg	8270C SIM
Pyrene		160000		12000	ng/Kg	8270C SIM
Indeno[1,2,3-cd]pyrene		64000		12000	ng/Kg	8270C SIM
2-Methylnaphthalene		39000		12000	ng/Kg	8270C SIM
Naphthalene		76000		12000	ng/Kg	8270C SIM
Percent Moisture		60		0.10	%	Moisture
280-50614-2	**FSA-SF-SCW**					
Benzo[b]fluoranthene		3100000		310000	ng/Kg	8270C SIM
Benzo[a]pyrene		1800000		310000	ng/Kg	8270C SIM
Benzo[a]anthracene		1600000		310000	ng/Kg	8270C SIM
Benzo[k]fluoranthene		1100000		310000	ng/Kg	8270C SIM
Benzo[g,h,i]perylene		1400000		310000	ng/Kg	8270C SIM
Phenanthrene		3000000		310000	ng/Kg	8270C SIM
Anthracene		760000		24000	ng/Kg	8270C SIM
Dibenz(a,h)anthracene		440000		24000	ng/Kg	8270C SIM
Chrysene		2300000		310000	ng/Kg	8270C SIM
Acenaphthene		130000		24000	ng/Kg	8270C SIM
Acenaphthylene		570000		310000	ng/Kg	8270C SIM
Fluoranthene		4800000		310000	ng/Kg	8270C SIM
Fluorene		360000		24000	ng/Kg	8270C SIM
Pyrene		4500000		310000	ng/Kg	8270C SIM
Indeno[1,2,3-cd]pyrene		1600000		310000	ng/Kg	8270C SIM
2-Methylnaphthalene		560000		24000	ng/Kg	8270C SIM
Naphthalene		540000		24000	ng/Kg	8270C SIM
Percent Moisture		20		0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-50614-3	**FSA-SF-SCW-DUP**					
Benzo[b]fluoranthene		3100000		280000	ng/Kg	8270C SIM
Benzo[a]pyrene		2100000		280000	ng/Kg	8270C SIM
Benzo[a]anthracene		2100000		280000	ng/Kg	8270C SIM
Benzo[k]fluoranthene		1100000		280000	ng/Kg	8270C SIM
Benzo[g,h,i]perylene		1500000		280000	ng/Kg	8270C SIM
Phenanthrene		4200000		280000	ng/Kg	8270C SIM
Anthracene		560000		22000	ng/Kg	8270C SIM
Dibenz(a,h)anthracene		410000		22000	ng/Kg	8270C SIM
Chrysene		2800000		280000	ng/Kg	8270C SIM
Acenaphthene		54000		22000	ng/Kg	8270C SIM
Acenaphthylene		690000		22000	ng/Kg	8270C SIM
Fluoranthene		5300000		280000	ng/Kg	8270C SIM
Fluorene		120000		22000	ng/Kg	8270C SIM
Pyrene		5800000		280000	ng/Kg	8270C SIM
Indeno[1,2,3-cd]pyrene		1700000		280000	ng/Kg	8270C SIM
2-Methylnaphthalene		470000		22000	ng/Kg	8270C SIM
Naphthalene		400000		22000	ng/Kg	8270C SIM
Percent Moisture		17		0.10	%	Moisture
280-50614-4	**FSA-SD-DU05**					
Benzo[b]fluoranthene		20000		4900	ng/Kg	8270C SIM
Benzo[a]pyrene		15000		4900	ng/Kg	8270C SIM
Benzo[a]anthracene		13000		4900	ng/Kg	8270C SIM
Benzo[k]fluoranthene		8000		4900	ng/Kg	8270C SIM
Benzo[g,h,i]perylene		12000		4900	ng/Kg	8270C SIM
Phenanthrene		6100		4900	ng/Kg	8270C SIM
Anthracene		2600	J	4900	ng/Kg	8270C SIM
Dibenz(a,h)anthracene		3100	J	4900	ng/Kg	8270C SIM
Chrysene		16000		4900	ng/Kg	8270C SIM
Acenaphthene		910	J	4900	ng/Kg	8270C SIM
Acenaphthylene		2700	J	4900	ng/Kg	8270C SIM
Fluoranthene		20000		4900	ng/Kg	8270C SIM
Fluorene		1700	J	4900	ng/Kg	8270C SIM
Pyrene		27000		4900	ng/Kg	8270C SIM
Indeno[1,2,3-cd]pyrene		11000		4900	ng/Kg	8270C SIM
2-Methylnaphthalene		3900	J	4900	ng/Kg	8270C SIM
Naphthalene		3600	J	4900	ng/Kg	8270C SIM
Percent Moisture		0.29		0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-50614-5	**FSA-SD-DU04-A**					
Benzo[b]fluoranthene		39000		4800	ng/Kg	8270C SIM
Benzo[a]pyrene		23000		4800	ng/Kg	8270C SIM
Benzo[a]anthracene		16000		4800	ng/Kg	8270C SIM
Benzo[k]fluoranthene		13000		4800	ng/Kg	8270C SIM
Benzo[g,h,i]perylene		22000		4800	ng/Kg	8270C SIM
Phenanthrene		10000		4800	ng/Kg	8270C SIM
Anthracene		4300	J	4800	ng/Kg	8270C SIM
Dibenz(a,h)anthracene		5300		4800	ng/Kg	8270C SIM
Chrysene		21000		4800	ng/Kg	8270C SIM
Acenaphthene		740	J	4800	ng/Kg	8270C SIM
Acenaphthylene		4400	J	4800	ng/Kg	8270C SIM
Fluoranthene		29000		4800	ng/Kg	8270C SIM
Fluorene		2200	J	4800	ng/Kg	8270C SIM
Pyrene		32000		4800	ng/Kg	8270C SIM
Indeno[1,2,3-cd]pyrene		22000		4800	ng/Kg	8270C SIM
2-Methylnaphthalene		3300	J	4800	ng/Kg	8270C SIM
Naphthalene		4100	J	4800	ng/Kg	8270C SIM
Percent Moisture		0.20		0.10	%	Moisture
280-50614-6	**FSA-SD-DU04-B**					
Benzo[b]fluoranthene		39000		4700	ng/Kg	8270C SIM
Benzo[a]pyrene		24000		4700	ng/Kg	8270C SIM
Benzo[a]anthracene		16000		4700	ng/Kg	8270C SIM
Benzo[k]fluoranthene		12000		4700	ng/Kg	8270C SIM
Benzo[g,h,i]perylene		22000		4700	ng/Kg	8270C SIM
Phenanthrene		9200		4700	ng/Kg	8270C SIM
Anthracene		5400		4700	ng/Kg	8270C SIM
Dibenz(a,h)anthracene		6000		4700	ng/Kg	8270C SIM
Chrysene		21000		4700	ng/Kg	8270C SIM
Acenaphthene		1200	J	4700	ng/Kg	8270C SIM
Acenaphthylene		5300		4700	ng/Kg	8270C SIM
Fluoranthene		28000		4700	ng/Kg	8270C SIM
Fluorene		2600	J	4700	ng/Kg	8270C SIM
Pyrene		35000		4700	ng/Kg	8270C SIM
Indeno[1,2,3-cd]pyrene		22000		4700	ng/Kg	8270C SIM
2-Methylnaphthalene		4100	J	4700	ng/Kg	8270C SIM
Naphthalene		5300		4700	ng/Kg	8270C SIM
Percent Moisture		0.19		0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-50614-7	**FSA-SD-DU04-C**					
Benzo[b]fluoranthene		53000		4900	ng/Kg	8270C SIM
Benzo[a]pyrene		35000		4900	ng/Kg	8270C SIM
Benzo[a]anthracene		24000		4900	ng/Kg	8270C SIM
Benzo[k]fluoranthene		17000		4900	ng/Kg	8270C SIM
Benzo[g,h,i]perylene		30000		4900	ng/Kg	8270C SIM
Phenanthrene		12000		4900	ng/Kg	8270C SIM
Anthracene		6100		4900	ng/Kg	8270C SIM
Dibenz(a,h)anthracene		7300		4900	ng/Kg	8270C SIM
Chrysene		31000		4900	ng/Kg	8270C SIM
Acenaphthene		1400	J	4900	ng/Kg	8270C SIM
Acenaphthylene		6600		4900	ng/Kg	8270C SIM
Fluoranthene		38000		4900	ng/Kg	8270C SIM
Fluorene		3000	J	4900	ng/Kg	8270C SIM
Pyrene		41000		4900	ng/Kg	8270C SIM
Indeno[1,2,3-cd]pyrene		30000		4900	ng/Kg	8270C SIM
2-Methylnaphthalene		4200	J	4900	ng/Kg	8270C SIM
Naphthalene		5800		4900	ng/Kg	8270C SIM
Percent Moisture		0.00		0.10	%	Moisture
280-50614-8	**FSA-SD-CO**					
Benzo[b]fluoranthene		10000		4800	ng/Kg	8270C SIM
Benzo[a]pyrene		6000		4800	ng/Kg	8270C SIM
Benzo[a]anthracene		4500	J	4800	ng/Kg	8270C SIM
Benzo[k]fluoranthene		3000	J	4800	ng/Kg	8270C SIM
Benzo[g,h,i]perylene		5400		4800	ng/Kg	8270C SIM
Phenanthrene		6000		4800	ng/Kg	8270C SIM
Anthracene		1800	J	4800	ng/Kg	8270C SIM
Chrysene		6800		4800	ng/Kg	8270C SIM
Acenaphthene		9500		4800	ng/Kg	8270C SIM
Acenaphthylene		1200	J	4800	ng/Kg	8270C SIM
Fluoranthene		10000		4800	ng/Kg	8270C SIM
Fluorene		17000		4800	ng/Kg	8270C SIM
Pyrene		14000		4800	ng/Kg	8270C SIM
Indeno[1,2,3-cd]pyrene		5100		4800	ng/Kg	8270C SIM
2-Methylnaphthalene		2200	J	4800	ng/Kg	8270C SIM
Naphthalene		3300	J	4800	ng/Kg	8270C SIM
Percent Moisture		0.00		0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-50614-9	**FSA-SD-DU03-A**					
Benzo[b]fluoranthene		670000		24000	ng/Kg	8270C SIM
Benzo[a]pyrene		290000		24000	ng/Kg	8270C SIM
Benzo[a]anthracene		190000		24000	ng/Kg	8270C SIM
Benzo[k]fluoranthene		210000		24000	ng/Kg	8270C SIM
Benzo[g,h,i]perylene		260000		24000	ng/Kg	8270C SIM
Phenanthrene		140000		4900	ng/Kg	8270C SIM
Anthracene		100000		4900	ng/Kg	8270C SIM
Dibenz(a,h)anthracene		75000		4900	ng/Kg	8270C SIM
Chrysene		270000		24000	ng/Kg	8270C SIM
Acenaphthene		8000		4900	ng/Kg	8270C SIM
Acenaphthylene		100000		4900	ng/Kg	8270C SIM
Fluoranthene		340000		24000	ng/Kg	8270C SIM
Fluorene		13000		4900	ng/Kg	8270C SIM
Pyrene		400000		24000	ng/Kg	8270C SIM
Indeno[1,2,3-cd]pyrene		290000		24000	ng/Kg	8270C SIM
2-Methylnaphthalene		73000		4900	ng/Kg	8270C SIM
Naphthalene		53000		4900	ng/Kg	8270C SIM
Percent Moisture		1.0		0.10	%	Moisture
280-50614-10	**FSA-SD-DU03-B**					
Benzo[b]fluoranthene		630000		25000	ng/Kg	8270C SIM
Benzo[a]pyrene		280000		25000	ng/Kg	8270C SIM
Benzo[a]anthracene		180000		25000	ng/Kg	8270C SIM
Benzo[k]fluoranthene		200000		25000	ng/Kg	8270C SIM
Benzo[g,h,i]perylene		240000		25000	ng/Kg	8270C SIM
Phenanthrene		95000		4900	ng/Kg	8270C SIM
Anthracene		110000		4900	ng/Kg	8270C SIM
Dibenz(a,h)anthracene		75000		4900	ng/Kg	8270C SIM
Chrysene		250000		25000	ng/Kg	8270C SIM
Acenaphthene		8300		4900	ng/Kg	8270C SIM
Acenaphthylene		93000		4900	ng/Kg	8270C SIM
Fluoranthene		310000		25000	ng/Kg	8270C SIM
Fluorene		11000		4900	ng/Kg	8270C SIM
Pyrene		370000		25000	ng/Kg	8270C SIM
Indeno[1,2,3-cd]pyrene		270000		25000	ng/Kg	8270C SIM
2-Methylnaphthalene		44000		4900	ng/Kg	8270C SIM
Naphthalene		39000		4900	ng/Kg	8270C SIM
Percent Moisture		1.0		0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-50614-11	**FSA-SD-DU03-C**					
Benzo[b]fluoranthene		690000		46000	ng/Kg	8270C SIM
Benzo[a]pyrene		290000		46000	ng/Kg	8270C SIM
Benzo[a]anthracene		180000		46000	ng/Kg	8270C SIM
Benzo[k]fluoranthene		220000		46000	ng/Kg	8270C SIM
Benzo[g,h,i]perylene		270000		46000	ng/Kg	8270C SIM
Phenanthrene		87000		4600	ng/Kg	8270C SIM
Anthracene		110000		4600	ng/Kg	8270C SIM
Dibenz(a,h)anthracene		78000		4600	ng/Kg	8270C SIM
Chrysene		260000		46000	ng/Kg	8270C SIM
Acenaphthene		8600		4600	ng/Kg	8270C SIM
Acenaphthylene		95000		4600	ng/Kg	8270C SIM
Fluoranthene		310000		46000	ng/Kg	8270C SIM
Fluorene		11000		4600	ng/Kg	8270C SIM
Pyrene		370000		46000	ng/Kg	8270C SIM
Indeno[1,2,3-cd]pyrene		290000		46000	ng/Kg	8270C SIM
2-Methylnaphthalene		48000		4600	ng/Kg	8270C SIM
Naphthalene		44000		4600	ng/Kg	8270C SIM
Percent Moisture		1.1		0.10	%	Moisture
280-50614-12	**FSA-SD-DU01**					
Benzo[b]fluoranthene		1500000		46000	ng/Kg	8270C SIM
Benzo[a]pyrene		580000		23000	ng/Kg	8270C SIM
Benzo[a]anthracene		370000		23000	ng/Kg	8270C SIM
Benzo[k]fluoranthene		430000		23000	ng/Kg	8270C SIM
Benzo[g,h,i]perylene		540000		23000	ng/Kg	8270C SIM
Phenanthrene		230000		23000	ng/Kg	8270C SIM
Anthracene		230000		23000	ng/Kg	8270C SIM
Dibenz(a,h)anthracene		150000		23000	ng/Kg	8270C SIM
Chrysene		510000		23000	ng/Kg	8270C SIM
Acenaphthene		12000	J	23000	ng/Kg	8270C SIM
Acenaphthylene		200000		23000	ng/Kg	8270C SIM
Fluoranthene		580000		23000	ng/Kg	8270C SIM
Fluorene		21000	J	23000	ng/Kg	8270C SIM
Pyrene		670000		23000	ng/Kg	8270C SIM
Indeno[1,2,3-cd]pyrene		600000		23000	ng/Kg	8270C SIM
2-Methylnaphthalene		110000		23000	ng/Kg	8270C SIM
Naphthalene		85000		23000	ng/Kg	8270C SIM
Percent Moisture		1.2		0.10	%	Moisture

EXECUTIVE SUMMARY - Detections

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-50614-13	**FSA-SD-DU02**					
Benzo[b]fluoranthene		760000		24000	ng/Kg	8270C SIM
Benzo[a]pyrene		390000		24000	ng/Kg	8270C SIM
Benzo[a]anthracene		320000		24000	ng/Kg	8270C SIM
Benzo[k]fluoranthene		240000		24000	ng/Kg	8270C SIM
Benzo[g,h,i]perylene		310000		24000	ng/Kg	8270C SIM
Phenanthrene		480000		24000	ng/Kg	8270C SIM
Anthracene		140000		24000	ng/Kg	8270C SIM
Dibenz(a,h)anthracene		87000		24000	ng/Kg	8270C SIM
Chrysene		420000		24000	ng/Kg	8270C SIM
Acenaphthene		21000	J	24000	ng/Kg	8270C SIM
Acenaphthylene		150000		24000	ng/Kg	8270C SIM
Fluoranthene		790000		48000	ng/Kg	8270C SIM
Fluorene		32000		24000	ng/Kg	8270C SIM
Pyrene		780000		48000	ng/Kg	8270C SIM
Indeno[1,2,3-cd]pyrene		340000		24000	ng/Kg	8270C SIM
2-Methylnaphthalene		130000		24000	ng/Kg	8270C SIM
Naphthalene		120000		24000	ng/Kg	8270C SIM
Percent Moisture		1.1		0.10	%	Moisture

METHOD SUMMARY

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
PAHs by GCMS (SIM)	TAL DEN	SW846 8270C SIM	
Microwave Extraction	TAL DEN		SW846 3546
PAHs by GCMS (SIM)	TAL DEN	SW846 8270C SIM	
Incremental Sample Preparation	TAL DEN		EPA Increm, Prep
Microwave Extraction	TAL DEN		SW846 3546
Percent Moisture	TAL DEN	EPA Moisture	
Percent Moisture	TAL DEN	EPA Moisture	
Incremental Sample Preparation	TAL DEN		EPA Increm, Prep
Matrix: Water			
PAHs by GCMS (SIM)	TAL DEN	SW846 8270C SIM	
Liquid-Liquid Extraction (Separatory Funnel)	TAL DEN		SW846 3510C

Lab References:

TAL DEN = TestAmerica Denver

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Method	Analyst	Analyst ID
SW846 8270C SIM	Vasquez, Karla G	KGV
EPA Moisture	Neeley, Beth A	BAN

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SF-CT**

Lab Sample ID: 280-50614-1 Date Sampled: 12/19/2013 0855
Client Matrix: Solid % Moisture: 59.8 Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-207028	Lab File ID:	X4_8919.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	01/02/2014 1541			Final Weight/Volume:	1000 uL
Prep Date:	12/30/2013 1955			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		130000		2900	12000
Benzo[a]pyrene		77000		1800	12000
Benzo[a]anthracene		58000		2200	12000
Benzo[k]fluoranthene		43000		2400	12000
Benzo[g,h,i]perylene		63000		2600	12000
Phenanthrene		94000		2600	12000
Anthracene		22000		1700	12000
Dibenz(a,h)anthracene		16000		3100	12000
Chrysene		75000		2400	12000
Acenaphthene		11000	J	380	12000
Acenaphthylene		35000		410	12000
Fluoranthene		160000		2400	12000
Fluorene		14000		1100	12000
Pyrene		160000		2600	12000
Indeno[1,2,3-cd]pyrene		64000		2600	12000
2-Methylnaphthalene		39000		740	12000
Naphthalene		76000		780	12000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	69		39 - 120
Nitrobenzene-d5	85		42 - 120
Terphenyl-d14	72		35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SF-SCW**

Lab Sample ID: 280-50614-2 Date Sampled: 12/19/2013 0912
Client Matrix: Solid % Moisture: 20.2 Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-207028	Lab File ID:	X4_8922.D
Dilution:	4.0			Initial Weight/Volume:	30.7 g
Analysis Date:	01/02/2014 1705			Final Weight/Volume:	1000 uL
Prep Date:	12/30/2013 1955			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ng/Kg)	Qualifier	MDL	RL
Anthracene		760000		3500	24000
Dibenz(a,h)anthracene		440000		6400	24000
Acenaphthene		130000		780	24000
Fluorene		360000		2300	24000
2-Methylnaphthalene		560000		1500	24000
Naphthalene		540000		1600	24000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	66	D	39 - 120
Nitrobenzene-d5	75	D	42 - 120
Terphenyl-d14	120	D	35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SF-SCW**

Lab Sample ID: 280-50614-2 Date Sampled: 12/19/2013 0912
Client Matrix: Solid % Moisture: 20.2 Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207515	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-207028	Lab File ID:	X4_8948.D
Dilution:	50			Initial Weight/Volume:	30.7 g
Analysis Date:	01/06/2014 1225	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date:	12/30/2013 1955			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		3100000		73000	310000
Benzo[a]pyrene		1800000		45000	310000
Benzo[a]anthracene		1600000		55000	310000
Benzo[k]fluoranthene		1100000		61000	310000
Benzo[g,h,i]perylene		1400000		67000	310000
Phenanthrene		3000000		67000	310000
Chrysene		2300000		61000	310000
Acenaphthylene		570000		10000	310000
Fluoranthene		4800000		61000	310000
Pyrene		4500000		67000	310000
Indeno[1,2,3-cd]pyrene		1600000		67000	310000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	0	D X	39 - 120
Nitrobenzene-d5	0	D X	42 - 120
Terphenyl-d14	0	D X	35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SF-SCW-DUP**

Lab Sample ID: 280-50614-3 Date Sampled: 12/19/2013 0918
Client Matrix: Solid % Moisture: 16.9 Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-207028	Lab File ID:	X4_8923.D
Dilution:	4.0			Initial Weight/Volume:	32.2 g
Analysis Date:	01/02/2014 1733			Final Weight/Volume:	1000 uL
Prep Date:	12/30/2013 1955			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ng/Kg)	Qualifier	MDL	RL
Anthracene		560000		3200	22000
Dibenz(a,h)anthracene		410000		5800	22000
Acenaphthene		54000		720	22000
Acenaphthylene		690000		760	22000
Fluorene		120000		2100	22000
2-Methylnaphthalene		470000		1400	22000
Naphthalene		400000		1500	22000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	79	D	39 - 120
Nitrobenzene-d5	99	D	42 - 120
Terphenyl-d14	148	X D	35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SF-SCW-DUP**

Lab Sample ID: 280-50614-3 Date Sampled: 12/19/2013 0918
Client Matrix: Solid % Moisture: 16.9 Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207515	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-207028	Lab File ID:	X4_8949.D
Dilution:	50			Initial Weight/Volume:	32.2 g
Analysis Date:	01/06/2014 1252	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date:	12/30/2013 1955			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		3100000		67000	280000
Benzo[a]pyrene		2100000		41000	280000
Benzo[a]anthracene		2100000		50000	280000
Benzo[k]fluoranthene		1100000		56000	280000
Benzo[g,h,i]perylene		1500000		62000	280000
Phenanthrene		4200000		62000	280000
Chrysene		2800000		56000	280000
Fluoranthene		5300000		56000	280000
Pyrene		5800000		62000	280000
Indeno[1,2,3-cd]pyrene		1700000		62000	280000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	0	D X	39 - 120
Nitrobenzene-d5	0	D X	42 - 120
Terphenyl-d14	0	D X	35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU05**

Lab Sample ID: 280-50614-4 Date Sampled: 12/19/2013 1045
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8903.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.60 g
Analysis Date:	12/31/2013 2208			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		20000		1200	4900
Benzo[a]pyrene		15000		730	4900
Benzo[a]anthracene		13000		880	4900
Benzo[k]fluoranthene		8000		980	4900
Benzo[g,h,i]perylene		12000		1100	4900
Phenanthrene		6100		1100	4900
Anthracene		2600	J	710	4900
Dibenz(a,h)anthracene		3100	J	1300	4900
Chrysene		16000		980	4900
Acenaphthene		910	J	160	4900
Acenaphthylene		2700	J	170	4900
Fluoranthene		20000		980	4900
Fluorene		1700	J	460	4900
Pyrene		27000		1100	4900
Indeno[1,2,3-cd]pyrene		11000		1100	4900
2-Methylnaphthalene		3900	J	300	4900
Naphthalene		3600	J	320	4900

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	79		39 - 120
Nitrobenzene-d5	77		42 - 120
Terphenyl-d14	135	X	35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU04-A**

Lab Sample ID: 280-50614-5 Date Sampled: 12/19/2013 1235
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8904.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.94 g
Analysis Date:	12/31/2013 2236			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		39000		1200	4800
Benzo[a]pyrene		23000		720	4800
Benzo[a]anthracene		16000		870	4800
Benzo[k]fluoranthene		13000		970	4800
Benzo[g,h,i]perylene		22000		1100	4800
Phenanthrene		10000		1100	4800
Anthracene		4300	J	700	4800
Dibenz(a,h)anthracene		5300		1300	4800
Chrysene		21000		970	4800
Acenaphthene		740	J	160	4800
Acenaphthylene		4400	J	160	4800
Fluoranthene		29000		970	4800
Fluorene		2200	J	460	4800
Pyrene		32000		1100	4800
Indeno[1,2,3-cd]pyrene		22000		1100	4800
2-Methylnaphthalene		3300	J	300	4800
Naphthalene		4100	J	320	4800

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	79		39 - 120
Nitrobenzene-d5	79		42 - 120
Terphenyl-d14	118		35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU04-B**

Lab Sample ID: 280-50614-6 Date Sampled: 12/19/2013 1240
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8907.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	31.67 g
Analysis Date:	12/31/2013 2359			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		39000		1100	4700
Benzo[a]pyrene		24000		700	4700
Benzo[a]anthracene		16000		850	4700
Benzo[k]fluoranthene		12000		950	4700
Benzo[g,h,i]perylene		22000		1000	4700
Phenanthrene		9200		1000	4700
Anthracene		5400		680	4700
Dibenz(a,h)anthracene		6000		1200	4700
Chrysene		21000		950	4700
Acenaphthene		1200	J	150	4700
Acenaphthylene		5300		160	4700
Fluoranthene		28000		950	4700
Fluorene		2600	J	450	4700
Pyrene		35000		1000	4700
Indeno[1,2,3-cd]pyrene		22000		1000	4700
2-Methylnaphthalene		4100	J	290	4700
Naphthalene		5300		310	4700

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	75		39 - 120
Nitrobenzene-d5	81		42 - 120
Terphenyl-d14	95		35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU04-C**

Lab Sample ID: 280-50614-7 Date Sampled: 12/19/2013 1245
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8908.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.38 g
Analysis Date:	01/01/2014 0027			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		53000		1200	4900
Benzo[a]pyrene		35000		730	4900
Benzo[a]anthracene		24000		890	4900
Benzo[k]fluoranthene		17000		990	4900
Benzo[g,h,i]perylene		30000		1100	4900
Phenanthrene		12000		1100	4900
Anthracene		6100		710	4900
Dibenz(a,h)anthracene		7300		1300	4900
Chrysene		31000		990	4900
Acenaphthene		1400	J	160	4900
Acenaphthylene		6600		170	4900
Fluoranthene		38000		990	4900
Fluorene		3000	J	460	4900
Pyrene		41000		1100	4900
Indeno[1,2,3-cd]pyrene		30000		1100	4900
2-Methylnaphthalene		4200	J	310	4900
Naphthalene		5800		320	4900

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	80		39 - 120
Nitrobenzene-d5	87		42 - 120
Terphenyl-d14	94		35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-CO**

Lab Sample ID: 280-50614-8 Date Sampled: 12/19/2013 1120
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8909.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	31.00 g
Analysis Date:	01/01/2014 0055			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		10000		1200	4800
Benzo[a]pyrene		6000		720	4800
Benzo[a]anthracene		4500	J	870	4800
Benzo[k]fluoranthene		3000	J	970	4800
Benzo[g,h,i]perylene		5400		1100	4800
Phenanthrene		6000		1100	4800
Anthracene		1800	J	700	4800
Dibenz(a,h)anthracene		ND		1300	4800
Chrysene		6800		970	4800
Acenaphthene		9500		150	4800
Acenaphthylene		1200	J	160	4800
Fluoranthene		10000		970	4800
Fluorene		17000		450	4800
Pyrene		14000		1100	4800
Indeno[1,2,3-cd]pyrene		5100		1100	4800
2-Methylnaphthalene		2200	J	300	4800
Naphthalene		3300	J	320	4800

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	82		39 - 120
Nitrobenzene-d5	94		42 - 120
Terphenyl-d14	103		35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU03-A**

Lab Sample ID: 280-50614-9 Date Sampled: 12/19/2013 1500
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8910.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.79 g
Analysis Date:	01/01/2014 0123			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Phenanthrene		140000		1100	4900
Anthracene		100000		700	4900
Dibenz(a,h)anthracene		75000		1300	4900
Acenaphthene		8000		160	4900
Acenaphthylene		100000		170	4900
Fluorene		13000		460	4900
2-Methylnaphthalene		73000		300	4900
Naphthalene		53000		320	4900

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	75		39 - 120
Nitrobenzene-d5	108		42 - 120
Terphenyl-d14	111		35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU03-A**

Lab Sample ID: 280-50614-9 Date Sampled: 12/19/2013 1500
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8924.D
Dilution:	5.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.79 g
Analysis Date:	01/02/2014 1801	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		670000		5800	24000
Benzo[a]pyrene		290000		3600	24000
Benzo[a]anthracene		190000		4400	24000
Benzo[k]fluoranthene		210000		4900	24000
Benzo[g,h,i]perylene		260000		5400	24000
Chrysene		270000		4900	24000
Fluoranthene		340000		4900	24000
Pyrene		400000		5400	24000
Indeno[1,2,3-cd]pyrene		290000		5400	24000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	72	D	39 - 120
Nitrobenzene-d5	76	D	42 - 120
Terphenyl-d14	113	D	35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU03-B**

Lab Sample ID: 280-50614-10 Date Sampled: 12/19/2013 1505
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8929.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.58 g
Analysis Date:	01/02/2014 2020			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Phenanthrene		95000		1100	4900
Anthracene		110000		710	4900
Dibenz(a,h)anthracene		75000		1300	4900
Acenaphthene		8300		160	4900
Acenaphthylene		93000		170	4900
Fluorene		11000		460	4900
2-Methylnaphthalene		44000		300	4900
Naphthalene		39000		320	4900

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	67		39 - 120
Nitrobenzene-d5	71		42 - 120
Terphenyl-d14	101		35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU03-B**

Lab Sample ID: 280-50614-10 Date Sampled: 12/19/2013 1505
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207515	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8950.D
Dilution:	5.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.58 g
Analysis Date:	01/06/2014 1320	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		630000		5900	25000
Benzo[a]pyrene		280000		3600	25000
Benzo[a]anthracene		180000		4400	25000
Benzo[k]fluoranthene		200000		4900	25000
Benzo[g,h,i]perylene		240000		5400	25000
Chrysene		250000		4900	25000
Fluoranthene		310000		4900	25000
Pyrene		370000		5400	25000
Indeno[1,2,3-cd]pyrene		270000		5400	25000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	66	D	39 - 120
Nitrobenzene-d5	62	D	42 - 120
Terphenyl-d14	103	D	35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU03-C**

Lab Sample ID: 280-50614-11 Date Sampled: 12/19/2013 1510
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8930.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	32.84 g
Analysis Date:	01/02/2014 2048			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Phenanthrene		87000		1000	4600
Anthracene		110000		660	4600
Dibenz(a,h)anthracene		78000		1200	4600
Acenaphthene		8600		150	4600
Acenaphthylene		95000		160	4600
Fluorene		11000		430	4600
2-Methylnaphthalene		48000		280	4600
Naphthalene		44000		300	4600

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	76		39 - 120
Nitrobenzene-d5	89		42 - 120
Terphenyl-d14	99		35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU03-C**

Lab Sample ID: 280-50614-11 Date Sampled: 12/19/2013 1510
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207515	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8951.D
Dilution:	10	Leach Batch:	280-206728	Initial Weight/Volume:	32.84 g
Analysis Date:	01/06/2014 1348	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		690000		11000	46000
Benzo[a]pyrene		290000		6800	46000
Benzo[a]anthracene		180000		8200	46000
Benzo[k]fluoranthene		220000		9100	46000
Benzo[g,h,i]perylene		270000		10000	46000
Chrysene		260000		9100	46000
Fluoranthene		310000		9100	46000
Pyrene		370000		10000	46000
Indeno[1,2,3-cd]pyrene		290000		10000	46000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	78	D	39 - 120
Nitrobenzene-d5	0	D X	42 - 120
Terphenyl-d14	0	D X	35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU01**

Lab Sample ID: 280-50614-12 Date Sampled: 12/19/2013 1545
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8931.D
Dilution:	5.0	Leach Batch:	280-206728	Initial Weight/Volume:	32.86 g
Analysis Date:	01/02/2014 2116			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[a]pyrene		580000		3400	23000
Benzo[a]anthracene		370000		4100	23000
Benzo[k]fluoranthene		430000		4600	23000
Benzo[g,h,i]perylene		540000		5000	23000
Phenanthrene		230000		5000	23000
Anthracene		230000		3300	23000
Dibenz(a,h)anthracene		150000		5900	23000
Chrysene		510000		4600	23000
Acenaphthene		12000	J	730	23000
Acenaphthylene		200000		780	23000
Fluoranthene		580000		4600	23000
Fluorene		21000	J	2100	23000
Pyrene		670000		5000	23000
Indeno[1,2,3-cd]pyrene		600000		5000	23000
2-Methylnaphthalene		110000		1400	23000
Naphthalene		85000		1500	23000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	62	D	39 - 120
Nitrobenzene-d5	75	D	42 - 120
Terphenyl-d14	111	D	35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU01**

Lab Sample ID: 280-50614-12 Date Sampled: 12/19/2013 1545
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207515	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8952.D
Dilution:	10	Leach Batch:	280-206728	Initial Weight/Volume:	32.86 g
Analysis Date:	01/06/2014 1416	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		1500000		11000	46000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	71	D	39 - 120
Nitrobenzene-d5	0	D X	42 - 120
Terphenyl-d14	0	D X	35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU02**

Lab Sample ID: 280-50614-13 Date Sampled: 12/19/2013 1610
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8934.D
Dilution:	5.0	Leach Batch:	280-206728	Initial Weight/Volume:	31.18 g
Analysis Date:	01/02/2014 2240			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		760000		5800	24000
Benzo[a]pyrene		390000		3600	24000
Benzo[a]anthracene		320000		4300	24000
Benzo[k]fluoranthene		240000		4800	24000
Benzo[g,h,i]perylene		310000		5300	24000
Phenanthrene		480000		5300	24000
Anthracene		140000		3500	24000
Dibenz(a,h)anthracene		87000		6300	24000
Chrysene		420000		4800	24000
Acenaphthene		21000	J	770	24000
Acenaphthylene		150000		820	24000
Fluorene		32000		2300	24000
Indeno[1,2,3-cd]pyrene		340000		5300	24000
2-Methylnaphthalene		130000		1500	24000
Naphthalene		120000		1600	24000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	75	D	39 - 120
Nitrobenzene-d5	90	D	42 - 120
Terphenyl-d14	122	D	35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU02**

Lab Sample ID: 280-50614-13 Date Sampled: 12/19/2013 1610
Client Matrix: Solid Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207515	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8953.D
Dilution:	10	Leach Batch:	280-206728	Initial Weight/Volume:	31.18 g
Analysis Date:	01/06/2014 1443	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Fluoranthene		790000		9600	48000
Pyrene		780000		11000	48000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	70	D	39 - 120
Nitrobenzene-d5	0	D X	42 - 120
Terphenyl-d14	117	D	35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-FB-01**

Lab Sample ID: 280-50614-14FB Date Sampled: 12/19/2013 1615
Client Matrix: Water Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3510C	Prep Batch:	280-206688	Lab File ID:	X4_8899.D
Dilution:	1.0			Initial Weight/Volume:	871.4 mL
Analysis Date:	12/31/2013 2016			Final Weight/Volume:	1000 uL
Prep Date:	12/26/2013 1746			Injection Volume:	1 uL

Analyte	Result (ng/L)	Qualifier	MDL	RL
Benzo[b]fluoranthene	ND		3.9	110
Benzo[a]pyrene	ND		5.9	110
Benzo[a]anthracene	ND		3.7	110
Benzo[k]fluoranthene	ND		5.8	110
Benzo[g,h,i]perylene	ND		4.1	110
Phenanthrene	ND		11	110
Anthracene	ND		16	110
Dibenz(a,h)anthracene	ND		5.5	110
Chrysene	ND		3.7	110
Acenaphthene	ND		12	110
Acenaphthylene	ND		11	110
Fluoranthene	ND		5.2	110
Fluorene	ND		22	110
Pyrene	ND		9.3	110
Indeno[1,2,3-cd]pyrene	ND		17	110
2-Methylnaphthalene	ND		5.9	110
Naphthalene	ND		6.1	110

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	74		42 - 120
Nitrobenzene-d5	82		43 - 120
Terphenyl-d14	132	X	47 - 120

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Client Sample ID: **FSA-EB-01**

Lab Sample ID: 280-50614-15EB Date Sampled: 12/19/2013 1620
Client Matrix: Water Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3510C	Prep Batch:	280-206688	Lab File ID:	X4_8900.D
Dilution:	1.0			Initial Weight/Volume:	944.9 mL
Analysis Date:	12/31/2013 2044			Final Weight/Volume:	1000 uL
Prep Date:	12/26/2013 1746			Injection Volume:	1 uL

Analyte	Result (ng/L)	Qualifier	MDL	RL
Benzo[b]fluoranthene	ND		3.6	110
Benzo[a]pyrene	ND		5.4	110
Benzo[a]anthracene	ND		3.4	110
Benzo[k]fluoranthene	ND		5.3	110
Benzo[g,h,i]perylene	ND		3.8	110
Phenanthrene	ND		10	110
Anthracene	ND		15	110
Dibenz(a,h)anthracene	ND		5.1	110
Chrysene	ND		3.4	110
Acenaphthene	ND		11	110
Acenaphthylene	ND		11	110
Fluoranthene	ND		4.8	110
Fluorene	ND		20	110
Pyrene	ND		8.6	110
Indeno[1,2,3-cd]pyrene	ND		16	110
2-Methylnaphthalene	ND		5.5	110
Naphthalene	ND		5.6	110

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	54		42 - 120
Nitrobenzene-d5	50		43 - 120
Terphenyl-d14	112		47 - 120

General Chemistry

Client Sample ID: **FSA-SF-CT**

Lab Sample ID: 280-50614-1 Date Sampled: 12/19/2013 0855

Client Matrix: Solid Date Received: 12/21/2013 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	60		%	0.10	0.10	1.0	Moisture

Analysis Batch: 280-206801 Analysis Date: 12/27/2013 1232 DryWt Corrected: N

General Chemistry

Client Sample ID: **FSA-SF-SCW**

Lab Sample ID: 280-50614-2 Date Sampled: 12/19/2013 0912
Client Matrix: Solid Date Received: 12/21/2013 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	20		%	0.10	0.10	1.0	Moisture

Analysis Batch: 280-206801 Analysis Date: 12/27/2013 1232 DryWt Corrected: N

General Chemistry

Client Sample ID: **FSA-SF-SCW-DUP**

Lab Sample ID: 280-50614-3 Date Sampled: 12/19/2013 0918

Client Matrix: Solid Date Received: 12/21/2013 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	17		%	0.10	0.10	1.0	Moisture

Analysis Batch: 280-206801 Analysis Date: 12/27/2013 1232 DryWt Corrected: N

General Chemistry

Client Sample ID: **FSA-SD-DU05**

Lab Sample ID: 280-50614-4 Date Sampled: 12/19/2013 1045

Client Matrix: Solid Date Received: 12/21/2013 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	0.29		%	0.10	0.10	1.0	Moisture

Analysis Batch: 280-206954 Analysis Date: 12/30/2013 1057 DryWt Corrected: N

General Chemistry

Client Sample ID: **FSA-SD-DU04-A**

Lab Sample ID: 280-50614-5 Date Sampled: 12/19/2013 1235
Client Matrix: Solid Date Received: 12/21/2013 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	0.20		%	0.10	0.10	1.0	Moisture

Analysis Batch: 280-206954 Analysis Date: 12/30/2013 1057 DryWt Corrected: N

General Chemistry

Client Sample ID: **FSA-SD-DU04-B**

Lab Sample ID: 280-50614-6 Date Sampled: 12/19/2013 1240
Client Matrix: Solid Date Received: 12/21/2013 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	0.19		%	0.10	0.10	1.0	Moisture

Analysis Batch: 280-206954 Analysis Date: 12/30/2013 1057 DryWt Corrected: N

General Chemistry

Client Sample ID: **FSA-SD-DU04-C**

Lab Sample ID: 280-50614-7 Date Sampled: 12/19/2013 1245
Client Matrix: Solid Date Received: 12/21/2013 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	0.00		%	0.10	0.10	1.0	Moisture

Analysis Batch: 280-206954 Analysis Date: 12/30/2013 1057 DryWt Corrected: N

General Chemistry

Client Sample ID: **FSA-SD-CO**

Lab Sample ID: 280-50614-8 Date Sampled: 12/19/2013 1120

Client Matrix: Solid Date Received: 12/21/2013 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	0.00		%	0.10	0.10	1.0	Moisture

Analysis Batch: 280-206954 Analysis Date: 12/30/2013 1057 DryWt Corrected: N

General Chemistry

Client Sample ID: **FSA-SD-DU03-A**

Lab Sample ID: 280-50614-9 Date Sampled: 12/19/2013 1500
Client Matrix: Solid Date Received: 12/21/2013 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	1.0		%	0.10	0.10	1.0	Moisture

Analysis Batch: 280-206954 Analysis Date: 12/30/2013 1057 DryWt Corrected: N

General Chemistry

Client Sample ID: **FSA-SD-DU03-B**

Lab Sample ID: 280-50614-10 Date Sampled: 12/19/2013 1505
Client Matrix: Solid Date Received: 12/21/2013 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	1.0		%	0.10	0.10	1.0	Moisture

Analysis Batch: 280-206954 Analysis Date: 12/30/2013 1057 DryWt Corrected: N

General Chemistry

Client Sample ID: **FSA-SD-DU03-C**

Lab Sample ID: 280-50614-11 Date Sampled: 12/19/2013 1510
Client Matrix: Solid Date Received: 12/21/2013 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	1.1		%	0.10	0.10	1.0	Moisture

Analysis Batch: 280-206954 Analysis Date: 12/30/2013 1057 DryWt Corrected: N

General Chemistry

Client Sample ID: **FSA-SD-DU01**

Lab Sample ID: 280-50614-12 Date Sampled: 12/19/2013 1545
Client Matrix: Solid Date Received: 12/21/2013 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	1.2		%	0.10	0.10	1.0	Moisture

Analysis Batch: 280-206954 Analysis Date: 12/30/2013 1057 DryWt Corrected: N

General Chemistry

Client Sample ID: **FSA-SD-DU02**

Lab Sample ID: 280-50614-13 Date Sampled: 12/19/2013 1610
Client Matrix: Solid Date Received: 12/21/2013 1200

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Moisture	1.1		%	0.10	0.10	1.0	Moisture

Analysis Batch: 280-206954 Analysis Date: 12/30/2013 1057 DryWt Corrected: N

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Method Blank - Batch: 280-206688

Method: 8270C SIM
Preparation: 3510C

Lab Sample ID:	MB 280-206688/1-A	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Client Matrix:	Water	Prep Batch:	280-206688	Lab File ID:	X4_8896.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	12/31/2013 1851	Units:	ng/L	Final Weight/Volume:	1000 uL
Prep Date:	12/26/2013 1746			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Benzo[b]fluoranthene	ND		3.4	100
Benzo[a]pyrene	ND		5.1	100
Benzo[a]anthracene	ND		3.2	100
Benzo[k]fluoranthene	ND		5.1	100
Benzo[g,h,i]perylene	ND		3.6	100
Phenanthrene	ND		9.8	100
Anthracene	ND		14	100
Dibenz(a,h)anthracene	ND		4.8	100
Chrysene	ND		3.2	100
Acenaphthene	ND		11	100
Acenaphthylene	ND		10	100
Fluoranthene	ND		4.5	100
Fluorene	ND		19	100
Pyrene	ND		8.1	100
Indeno[1,2,3-cd]pyrene	ND		15	100
2-Methylnaphthalene	ND		5.2	100
Naphthalene	ND		5.3	100

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	63	42 - 120
Nitrobenzene-d5	74	43 - 120
Terphenyl-d14	117	47 - 120

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-206688

Method: 8270C SIM
Preparation: 3510C

LCS Lab Sample ID:	LCS 280-206688/2-A	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Client Matrix:	Water	Prep Batch:	280-206688	Lab File ID:	X4_8897.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	12/31/2013 1919	Units:	ng/L	Final Weight/Volume:	1000 uL
Prep Date:	12/26/2013 1746			Injection Volume:	1 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-206688/3-A	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Client Matrix:	Water	Prep Batch:	280-206688	Lab File ID:	X4_8898.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	12/31/2013 1947	Units:	ng/L	Final Weight/Volume:	1000 uL
Prep Date:	12/26/2013 1746			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzo[b]fluoranthene	97	96	44 - 120	1	28		
Benzo[a]pyrene	90	87	38 - 120	3	21		
Benzo[a]anthracene	87	88	42 - 120	1	40		
Benzo[k]fluoranthene	99	97	43 - 120	1	28		
Benzo[g,h,i]perylene	99	99	39 - 120	0	23		
Phenanthrene	72	88	46 - 120	19	42		
Anthracene	74	86	28 - 120	15	50		
Dibenz(a,h)anthracene	97	94	27 - 126	3	25		
Chrysene	100	101	35 - 120	1	41		
Acenaphthene	59	77	47 - 120	28	50		
Acenaphthylene	57	75	39 - 120	27	50		
Fluoranthene	93	100	46 - 120	8	24		
Fluorene	61	81	49 - 120	28	50		
Pyrene	96	104	49 - 120	8	22		
Indeno[1,2,3-cd]pyrene	94	95	38 - 120	1	25		
Naphthalene	53	64	37 - 120	19	50		

Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits
2-Fluorobiphenyl	57		73		42 - 120
Nitrobenzene-d5	52		76		43 - 120
Terphenyl-d14	122	X	124	X	47 - 120

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-206688

Method: 8270C SIM
Preparation: 3510C

LCS Lab Sample ID:	LCS 280-206688/2-A	Units:	ng/L	LCSD Lab Sample ID:	LCSD 280-206688/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	12/31/2013 1919			Analysis Date:	12/31/2013 1947
Prep Date:	12/26/2013 1746			Prep Date:	12/26/2013 1746
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Benzo[b]fluoranthene	900	900	877	864
Benzo[a]pyrene	900	900	811	786
Benzo[a]anthracene	900	900	786	793
Benzo[k]fluoranthene	900	900	887	876
Benzo[g,h,i]perylene	900	900	891	887
Phenanthrene	900	900	651	790
Anthracene	900	900	667	775
Dibenz(a,h)anthracene	900	900	872	849
Chrysene	900	900	900	909
Acenaphthene	900	900	527	696
Acenaphthylene	900	900	511	674
Fluoranthene	900	900	836	903
Fluorene	900	900	551	730
Pyrene	900	900	867	935
Indeno[1,2,3-cd]pyrene	900	900	848	853
Naphthalene	900	900	476	579

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Method Blank - Batch: 280-206899

Method: 8270C SIM
Preparation: 3546

Lab Sample ID:	MB 280-206899/1-A	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-206899	Lab File ID:	X4_8901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.21 g
Analysis Date:	12/31/2013 2112	Units:	ng/Kg	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Benzo[b]fluoranthene	ND		1100	4700
Benzo[a]pyrene	ND		690	4700
Benzo[a]anthracene	ND		840	4700
Benzo[k]fluoranthene	ND		930	4700
Benzo[g,h,i]perylene	ND		1000	4700
Phenanthrene	ND		1000	4700
Anthracene	ND		670	4700
Dibenz(a,h)anthracene	ND		1200	4700
Chrysene	ND		930	4700
Acenaphthene	ND		150	4700
Acenaphthylene	ND		160	4700
Fluoranthene	ND		930	4700
Fluorene	ND		440	4700
Pyrene	ND		1000	4700
Indeno[1,2,3-cd]pyrene	ND		1000	4700
2-Methylnaphthalene	ND		290	4700
Naphthalene	ND		300	4700

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	92	39 - 120
Nitrobenzene-d5	86	42 - 120
Terphenyl-d14	101	35 - 124

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Lab Control Sample - Batch: 280-206899

Method: 8270C SIM
Preparation: 3546

Lab Sample ID:	LCS 280-206899/2-A	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-206899	Lab File ID:	X4_8902.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.84 g
Analysis Date:	12/31/2013 2140	Units:	ng/Kg	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzo[b]fluoranthene	27400	25700	94	37 - 120	
Benzo[a]pyrene	27400	23300	85	20 - 120	
Benzo[a]anthracene	27400	23200	85	36 - 120	
Benzo[k]fluoranthene	27400	26000	95	46 - 120	
Benzo[g,h,i]perylene	27400	27300	100	20 - 123	
Phenanthrene	27400	25200	92	44 - 120	
Anthracene	27400	24200	88	43 - 120	
Dibenz(a,h)anthracene	27400	26700	97	20 - 120	
Chrysene	27400	27100	99	34 - 120	
Acenaphthene	27400	25200	92	35 - 120	
Acenaphthylene	27400	23800	87	41 - 120	
Fluoranthene	27400	25300	92	45 - 120	
Fluorene	27400	24700	90	44 - 120	
Pyrene	27400	25400	93	43 - 120	
Indeno[1,2,3-cd]pyrene	27400	25900	94	20 - 127	
Naphthalene	27400	26500	97	44 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	93	39 - 120
Nitrobenzene-d5	87	42 - 120
Terphenyl-d14	109	35 - 124

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-206899

Method: 8270C SIM
Preparation: 3546

MS Lab Sample ID:	280-50614-12	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-206899	Lab File ID:	X4_8932.D
Dilution:	5.0	Leach Batch:	280-206728	Initial Weight/Volume:	32.14 g
Analysis Date:	01/02/2014 2144			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

MSD Lab Sample ID:	280-50614-12	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-206899	Lab File ID:	X4_8933.D
Dilution:	5.0	Leach Batch:	280-206728	Initial Weight/Volume:	31.74 g
Analysis Date:	01/02/2014 2212			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzo[b]fluoranthene	977	104	37 - 120	16	28	E 4	E 4
Benzo[a]pyrene	615	46	20 - 120	24	30	4	4
Benzo[a]anthracene	625	52	36 - 120	34	40	4	4
Benzo[k]fluoranthene	473	89	46 - 120	21	28	4	4
Benzo[g,h,i]perylene	465	61	20 - 123	18	30	4	4
Phenanthrene	1105	144	44 - 120	66	42	4	4 F2
Anthracene	227	31	43 - 120	20	50	4	4
Dibenz(a,h)anthracene	184	62	20 - 120	18	25	4	4
Chrysene	607	7	34 - 120	28	41	4	4
Acenaphthene	113	98	35 - 120	10	50		
Acenaphthylene	326	104	41 - 120	24	50	4	4
Fluoranthene	1818	125	45 - 120	56	30	E 4	4 F2
Fluorene	155	84	44 - 120	36	50	F1	
Pyrene	1469	171	43 - 120	40	30	E 4	4 F2
Indeno[1,2,3-cd]pyrene	522	21	20 - 127	21	50	4	4
Naphthalene	145	111	44 - 120	8	50	F1	

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
2-Fluorobiphenyl	71	D	68	D	39 - 120
Nitrobenzene-d5	82	D	81	D	42 - 120
Terphenyl-d14	129	D X	112	D	35 - 124

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-206899

Method: 8270C SIM
Preparation: 3546

MS Lab Sample ID:	280-50614-12	Units:	ng/Kg	MSD Lab Sample ID:	280-50614-12
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	5.0			Dilution:	5.0
Analysis Date:	01/02/2014 2144			Analysis Date:	01/02/2014 2212
Prep Date:	12/29/2013 1049			Prep Date:	12/29/2013 1049
Leach Date:	12/27/2013 0735			Leach Date:	12/27/2013 0735

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Benzo[b]fluoranthene	1300000		28000	28400	1620000	E 4	1380000	E 4
Benzo[a]pyrene	580000		28000	28400	757000	4	597000	4
Benzo[a]anthracene	370000		28000	28400	549000	4	388000	4
Benzo[k]fluoranthene	430000		28000	28400	558000	4	451000	4
Benzo[g,h,i]perylene	540000		28000	28400	669000	4	556000	4
Phenanthrene	230000		28000	28400	544000	4	275000	4 F2
Anthracene	230000		28000	28400	298000	4	244000	4
Dibenz(a,h)anthracene	150000		28000	28400	202000	4	169000	4
Chrysene	510000		28000	28400	683000	4	515000	4
Acenaphthene	12000	J	28000	28400	43200		39300	
Acenaphthylene	200000		28000	28400	294000	4	232000	4
Fluoranthene	580000		28000	28400	1080000	E 4	611000	4 F2
Fluorene	21000	J	28000	28400	64100	F1	44500	
Pyrene	670000		28000	28400	1090000	E 4	723000	4 F2
Indeno[1,2,3-cd]pyrene	600000		28000	28400	746000	4	606000	4
Naphthalene	85000		28000	28400	126000	F1	116000	

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Duplicate - Batch: 280-206899 **Method: 8270C SIM**
Preparation: 3546

Lab Sample ID:	280-50614-5	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-206899	Lab File ID:	X4_8905.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	31.13 g
Analysis Date:	12/31/2013 2304	Units:	ng/Kg	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Benzo[b]fluoranthene	39000		98400	85	50	F3
Benzo[a]pyrene	23000		77400	107	50	F3
Benzo[a]anthracene	16000		56400	111	50	F3
Benzo[k]fluoranthene	13000		34700	88	50	F3
Benzo[g,h,i]perylene	22000		55800	87	50	F3
Phenanthrene	10000		12400	20	50	
Anthracene	4300	J	8020	60	50	
Dibenz(a,h)anthracene	5300		12700	83	50	F3
Chrysene	21000		73900	111	50	F3
Acenaphthene	740	J	1500	68	50	J
Acenaphthylene	4400	J	8550	64	50	
Fluoranthene	29000		64600	77	50	F3
Fluorene	2200	J	3000	29	50	J
Pyrene	32000		74100	78	50	F3
Indeno[1,2,3-cd]pyrene	22000		57200	90	50	F3
2-Methylnaphthalene	3300	J	5870	57	50	
Naphthalene	4100	J	8850	73	50	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	79	39 - 120
Nitrobenzene-d5	83	42 - 120
Terphenyl-d14	104	35 - 124

Triplicate - Batch: 280-206899 **Method: 8270C SIM**
Preparation: 3546

Lab Sample ID:	280-50614-5	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-206899	Lab File ID:	X4_8906.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	31.87 g
Analysis Date:	12/31/2013 2332	Units:	ng/Kg	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

	Sample		Duplicate		Triplicate			
Analyte	Result	Qual	Result	Qual	Result	Qual	%RSD	Limit
Benzo[b]fluoranthene	39000		98400		35600		50	15
Benzo[a]pyrene	23000		77400		20800		64	15
Benzo[a]anthracene	16000		56400		13300		69	15
Benzo[k]fluoranthene	13000		34700		10900		54	15
Benzo[g,h,i]perylene	22000		55800		19900		51	15
Phenanthrene	10000		12400		9160		13	15

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Triplicate - Batch: 280-206899 **Method: 8270C SIM**
Preparation: 3546

Lab Sample ID:	280-50614-5	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-206899	Lab File ID:	X4_8906.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	31.87 g
Analysis Date:	12/31/2013 2332	Units:	ng/Kg	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

	Sample		Duplicate		Triplicate			
Analyte	Result	Qual	Result	Qual	Result	Qual	%RSD	Limit
Anthracene	4300	J	8020		4370	J	31	15
Dibenz(a,h)anthracene	5300		12700		5090		46	15
Chrysene	21000		73900		17900		68	15
Acenaphthene	740	J	1500	J	769	J	35	15
Acenaphthylene	4400	J	8550		4350	J	34	15
Fluoranthene	29000		64600		22900		48	15
Fluorene	2200	J	3000	J	2150	J	15	15
Pyrene	32000		74100		27100		47	15
Indeno[1,2,3-cd]pyrene	22000		57200		20000		52	15
2-Methylnaphthalene	3300	J	5870		4470	J	24	15
Naphthalene	4100	J	8850		5140		34	15

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	78	39 - 120
Nitrobenzene-d5	84	42 - 120
Terphenyl-d14	96	35 - 124

Duplicate - Batch: 280-206899 **Method: 8270C SIM**
Preparation: 3546

Lab Sample ID:	280-50614-9	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-206899	Lab File ID:	X4_8925.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.69 g
Analysis Date:	01/02/2014 1829	Units:	ng/Kg	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Phenanthrene	140000		95900	39	50	
Anthracene	92000		101000	10	50	
Dibenz(a,h)anthracene	75000		76700	2	50	
Acenaphthene	11000	J	7900	30	50	
Acenaphthylene	100000		96900	6	50	
Fluorene	13000	J	12000	5	50	
2-Methylnaphthalene	69000		62000	10	50	
Naphthalene	47000		49900	6	50	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	79	39 - 120
Nitrobenzene-d5	83	42 - 120
Terphenyl-d14	104	35 - 124

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Duplicate - Batch: 280-206899 **Method: 8270C SIM**
Preparation: 3546

Lab Sample ID:	280-50614-9DL	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-206899	Lab File ID:	X4_8926.D
Dilution:	5.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.69 g
Analysis Date:	01/02/2014 1857	Units:	ng/Kg	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049	Run Type:	DL	Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Benzo[b]fluoranthene	670000	607000	10	50	
Benzo[a]pyrene	290000	257000	12	50	
Benzo[a]anthracene	190000	172000	11	50	
Benzo[k]fluoranthene	210000	180000	14	50	
Benzo[g,h,i]perylene	260000	227000	13	50	
Chrysene	270000	238000	11	50	
Fluoranthene	340000	267000	23	50	
Pyrene	400000	331000	18	50	
Indeno[1,2,3-cd]pyrene	290000	249000	14	50	

Surrogate	% Rec		Acceptance Limits
2-Fluorobiphenyl	69	D	39 - 120
Nitrobenzene-d5	65	D	42 - 120
Terphenyl-d14	102	D	35 - 124

Triplicate - Batch: 280-206899 **Method: 8270C SIM**
Preparation: 3546

Lab Sample ID:	280-50614-9	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-206899	Lab File ID:	X4_8927.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.16 g
Analysis Date:	01/02/2014 1924	Units:	ng/Kg	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

	Sample		Duplicate		Triplicate			
Analyte	Result	Qual	Result	Qual	Result	Qual	%RSD	Limit
Phenanthrene	140000		91100		86000		24	15
Anthracene	92000		82500		102000		9	15
Dibenz(a,h)anthracene	75000		65500		73900		6	15
Acenaphthene	11000	J	10200	J	6880		18	15
Acenaphthylene	100000		92400		85400		8	15
Fluorene	13000	J	12400	J	11000		6	15
2-Methylnaphthalene	69000		52800		47300		16	15
Naphthalene	47000		40700		40500		7	15

Surrogate	% Rec		Acceptance Limits
2-Fluorobiphenyl	74		39 - 120
Nitrobenzene-d5	74		42 - 120
Terphenyl-d14	131	X	35 - 124

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Triplicate - Batch: 280-206899

Method: 8270C SIM
Preparation: 3546

Lab Sample ID:	280-50614-9DL	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-206899	Lab File ID:	X4_8928.D
Dilution:	5.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.16 g
Analysis Date:	01/02/2014 1952	Units:	ng/Kg	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049	Run Type:	DL	Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

	Sample		Duplicate		Triplicate			
Analyte	Result	Qual	Result	Qual	Result	Qual	%RSD	Limit
Benzo[b]fluoranthene	670000		607000		661000		4	15
Benzo[a]pyrene	290000		257000		283000		5	15
Benzo[a]anthracene	190000		172000		187000		5	15
Benzo[k]fluoranthene	210000		180000		210000		7	15
Benzo[g,h,i]perylene	260000		227000		255000		6	15
Chrysene	270000		238000		259000		5	15
Fluoranthene	340000		267000		293000		10	15
Pyrene	400000		331000		358000		7	15
Indeno[1,2,3-cd]pyrene	290000		249000		282000		6	15

Surrogate	% Rec		Acceptance Limits
2-Fluorobiphenyl	78	D	39 - 120
Nitrobenzene-d5	73	D	42 - 120
Terphenyl-d14	141	D X	35 - 124

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Method Blank - Batch: 280-207028

Method: 8270C SIM
Preparation: 3546

Lab Sample ID:	MB 280-207028/1-A	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-207028	Lab File ID:	X4_8917.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.0 g
Analysis Date:	01/02/2014 1425	Units:	ng/Kg	Final Weight/Volume:	1000 uL
Prep Date:	12/30/2013 1955			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Benzo[b]fluoranthene	ND		1100	4700
Benzo[a]pyrene	ND		690	4700
Benzo[a]anthracene	ND		840	4700
Benzo[k]fluoranthene	ND		940	4700
Benzo[g,h,i]perylene	ND		1000	4700
Phenanthrene	ND		1000	4700
Anthracene	ND		680	4700
Dibenz(a,h)anthracene	ND		1200	4700
Chrysene	ND		940	4700
Acenaphthene	ND		150	4700
Acenaphthylene	ND		160	4700
Fluoranthene	ND		940	4700
Fluorene	ND		440	4700
Pyrene	ND		1000	4700
Indeno[1,2,3-cd]pyrene	ND		1000	4700
2-Methylnaphthalene	ND		290	4700
Naphthalene	ND		310	4700

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	95	39 - 120
Nitrobenzene-d5	95	42 - 120
Terphenyl-d14	115	35 - 124

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Lab Control Sample - Batch: 280-207028

Method: 8270C SIM
Preparation: 3546

Lab Sample ID:	LCS 280-207028/2-A	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-207028	Lab File ID:	X4_8918.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	01/02/2014 1513	Units:	ng/Kg	Final Weight/Volume:	1000 uL
Prep Date:	12/30/2013 1955			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzo[b]fluoranthene	29800	27800	93	37 - 120	
Benzo[a]pyrene	29800	27300	91	20 - 120	
Benzo[a]anthracene	29800	25800	86	36 - 120	
Benzo[k]fluoranthene	29800	28100	94	46 - 120	
Benzo[g,h,i]perylene	29800	28300	95	20 - 123	
Phenanthrene	29800	26400	88	44 - 120	
Anthracene	29800	26500	89	43 - 120	
Dibenz(a,h)anthracene	29800	28300	95	20 - 120	
Chrysene	29800	27400	92	34 - 120	
Acenaphthene	29800	26200	88	35 - 120	
Acenaphthylene	29800	26500	89	41 - 120	
Fluoranthene	29800	27700	93	45 - 120	
Fluorene	29800	26100	88	44 - 120	
Pyrene	29800	27800	93	43 - 120	
Indeno[1,2,3-cd]pyrene	29800	27900	94	20 - 127	
Naphthalene	29800	28100	94	44 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	90	39 - 120
Nitrobenzene-d5	91	42 - 120
Terphenyl-d14	110	35 - 124

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-207028

Method: 8270C SIM
Preparation: 3546

MS Lab Sample ID:	280-50614-1	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-207028	Lab File ID:	X4_8920.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.0 g
Analysis Date:	01/02/2014 1609			Final Weight/Volume:	1000 uL
Prep Date:	12/30/2013 1955			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-50614-1	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Client Matrix:	Solid	Prep Batch:	280-207028	Lab File ID:	X4_8921.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.3 g
Analysis Date:	01/02/2014 1637			Final Weight/Volume:	1000 uL
Prep Date:	12/30/2013 1955			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzo[b]fluoranthene	126	146	37 - 120	7	28	F1	F1
Benzo[a]pyrene	112	121	20 - 120	6	30		F1
Benzo[a]anthracene	98	109	36 - 120	7	40		
Benzo[k]fluoranthene	107	113	46 - 120	5	28		
Benzo[g,h,i]perylene	102	106	20 - 123	3	30		
Phenanthrene	114	146	44 - 120	13	42		F1
Anthracene	85	99	43 - 120	13	50		
Dibenz(a,h)anthracene	82	82	20 - 120	1	25		
Chrysene	135	149	34 - 120	7	41	F1	F1
Acenaphthene	108	123	35 - 120	14	50		F1
Acenaphthylene	93	106	41 - 120	10	50		
Fluoranthene	148	187	45 - 120	11	30	F1	F1
Fluorene	105	216	44 - 120	64	50		F1 F2
Pyrene	142	184	43 - 120	12	30	F1	F1
Indeno[1,2,3-cd]pyrene	124	127	20 - 127	2	50		
Naphthalene	82	84	44 - 120	2	50		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorobiphenyl	74	70	39 - 120
Nitrobenzene-d5	104	105	42 - 120
Terphenyl-d14	91	93	35 - 124

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-207028

Method: 8270C SIM
Preparation: 3546

MS Lab Sample ID:	280-50614-1	Units:	ng/Kg	MSD Lab Sample ID:	280-50614-1
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	01/02/2014 1609			Analysis Date:	01/02/2014 1637
Prep Date:	12/30/2013 1955			Prep Date:	12/30/2013 1955
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Benzo[b]fluoranthene	130000		69900	71400	216000	F1	232000	F1
Benzo[a]pyrene	77000		69900	71400	155000		163000	F1
Benzo[a]anthracene	58000		69900	71400	126000		136000	
Benzo[k]fluoranthene	43000		69900	71400	118000		124000	
Benzo[g,h,i]perylene	63000		69900	71400	134000		138000	
Phenanthrene	94000		69900	71400	174000		199000	F1
Anthracene	22000		69900	71400	80900		92400	
Dibenz(a,h)anthracene	16000		69900	71400	73300		74100	
Chrysene	75000		69900	71400	170000	F1	182000	F1
Acenaphthene	11000	J	69900	71400	85900		98700	F1
Acenaphthylene	35000		69900	71400	99500		110000	
Fluoranthene	160000		69900	71400	263000	F1	294000	F1
Fluorene	14000		69900	71400	86900		168000	F1 F2
Pyrene	160000		69900	71400	258000	F1	290000	F1
Indeno[1,2,3-cd]pyrene	64000		69900	71400	151000		154000	
Naphthalene	76000		69900	71400	134000		137000	

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Duplicate - Batch: 280-206954

Method: Moisture
Preparation: N/A

Lab Sample ID:	280-50614-B-5-A DU	Analysis Batch:	280-206954	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	
Analysis Date:	12/30/2013 1057	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	12/27/2013 0735				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture		0.097			

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-206688					
LCS 280-206688/2-A	Lab Control Sample	T	Water	3510C	
LCSD 280-206688/3-A	Lab Control Sample Duplicate	T	Water	3510C	
MB 280-206688/1-A	Method Blank	T	Water	3510C	
280-50614-14FB	FSA-FB-01	T	Water	3510C	
280-50614-15EB	FSA-EB-01	T	Water	3510C	
Prep Batch: 280-206728					
280-50614-4	FSA-SD-DU05	T	Solid	Increm, Prep	
280-50614-5	FSA-SD-DU04-A	T	Solid	Increm, Prep	
280-50614-5DU	Duplicate	T	Solid	Increm, Prep	
280-50614-5TRL	Triplicate	T	Solid	Increm, Prep	
280-50614-6	FSA-SD-DU04-B	T	Solid	Increm, Prep	
280-50614-7	FSA-SD-DU04-C	T	Solid	Increm, Prep	
280-50614-8	FSA-SD-CO	T	Solid	Increm, Prep	
280-50614-9	FSA-SD-DU03-A	T	Solid	Increm, Prep	
280-50614-9DL	FSA-SD-DU03-A	T	Solid	Increm, Prep	
280-50614-9DU	Duplicate	T	Solid	Increm, Prep	
280-50614-9DUDL	Duplicate	T	Solid	Increm, Prep	
280-50614-9TRL	Triplicate	T	Solid	Increm, Prep	
280-50614-9TRLDL	Triplicate	T	Solid	Increm, Prep	
280-50614-10	FSA-SD-DU03-B	T	Solid	Increm, Prep	
280-50614-10DL	FSA-SD-DU03-B	T	Solid	Increm, Prep	
280-50614-11	FSA-SD-DU03-C	T	Solid	Increm, Prep	
280-50614-11DL	FSA-SD-DU03-C	T	Solid	Increm, Prep	
280-50614-12	FSA-SD-DU01	T	Solid	Increm, Prep	
280-50614-12DL	FSA-SD-DU01	T	Solid	Increm, Prep	
280-50614-12MS	Matrix Spike	T	Solid	Increm, Prep	
280-50614-12MSD	Matrix Spike Duplicate	T	Solid	Increm, Prep	
280-50614-13	FSA-SD-DU02	T	Solid	Increm, Prep	
280-50614-13DL	FSA-SD-DU02	T	Solid	Increm, Prep	

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-206899					
LCS 280-206899/2-A	Lab Control Sample	T	Solid	3546	
MB 280-206899/1-A	Method Blank	T	Solid	3546	
280-50614-4	FSA-SD-DU05	T	Solid	3546	280-206728
280-50614-5	FSA-SD-DU04-A	T	Solid	3546	280-206728
280-50614-5DU	Duplicate	T	Solid	3546	280-206728
280-50614-5TRL	Triplicate	T	Solid	3546	280-206728
280-50614-6	FSA-SD-DU04-B	T	Solid	3546	280-206728
280-50614-7	FSA-SD-DU04-C	T	Solid	3546	280-206728
280-50614-8	FSA-SD-CO	T	Solid	3546	280-206728
280-50614-9	FSA-SD-DU03-A	T	Solid	3546	280-206728
280-50614-9DL	FSA-SD-DU03-A	T	Solid	3546	280-206728
280-50614-9DU	Duplicate	T	Solid	3546	280-206728
280-50614-9DUDL	Duplicate	T	Solid	3546	280-206728
280-50614-9TRL	Triplicate	T	Solid	3546	280-206728
280-50614-9TRLDL	Triplicate	T	Solid	3546	280-206728
280-50614-10	FSA-SD-DU03-B	T	Solid	3546	280-206728
280-50614-10DL	FSA-SD-DU03-B	T	Solid	3546	280-206728
280-50614-11	FSA-SD-DU03-C	T	Solid	3546	280-206728
280-50614-11DL	FSA-SD-DU03-C	T	Solid	3546	280-206728
280-50614-12	FSA-SD-DU01	T	Solid	3546	280-206728
280-50614-12DL	FSA-SD-DU01	T	Solid	3546	280-206728
280-50614-12MS	Matrix Spike	T	Solid	3546	280-206728
280-50614-12MSD	Matrix Spike Duplicate	T	Solid	3546	280-206728
280-50614-13	FSA-SD-DU02	T	Solid	3546	280-206728
280-50614-13DL	FSA-SD-DU02	T	Solid	3546	280-206728
Prep Batch: 280-207028					
LCS 280-207028/2-A	Lab Control Sample	T	Solid	3546	
MB 280-207028/1-A	Method Blank	T	Solid	3546	
280-50614-1	FSA-SF-CT	T	Solid	3546	
280-50614-1MS	Matrix Spike	T	Solid	3546	
280-50614-1MSD	Matrix Spike Duplicate	T	Solid	3546	
280-50614-2	FSA-SF-SCW	T	Solid	3546	
280-50614-2DL	FSA-SF-SCW	T	Solid	3546	
280-50614-3	FSA-SF-SCW-DUP	T	Solid	3546	
280-50614-3DL	FSA-SF-SCW-DUP	T	Solid	3546	

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Analysis Batch:280-207101					
LCS 280-206688/2-A	Lab Control Sample	T	Water	8270C SIM	280-206688
LCSD 280-206688/3-A	Lab Control Sample Duplicate	T	Water	8270C SIM	280-206688
MB 280-206688/1-A	Method Blank	T	Water	8270C SIM	280-206688
LCS 280-206899/2-A	Lab Control Sample	T	Solid	8270C SIM	280-206899
MB 280-206899/1-A	Method Blank	T	Solid	8270C SIM	280-206899
280-50614-4	FSA-SD-DU05	T	Solid	8270C SIM	280-206899
280-50614-5	FSA-SD-DU04-A	T	Solid	8270C SIM	280-206899
280-50614-5DU	Duplicate	T	Solid	8270C SIM	280-206899
280-50614-5TRL	Triplicate	T	Solid	8270C SIM	280-206899
280-50614-6	FSA-SD-DU04-B	T	Solid	8270C SIM	280-206899
280-50614-7	FSA-SD-DU04-C	T	Solid	8270C SIM	280-206899
280-50614-8	FSA-SD-CO	T	Solid	8270C SIM	280-206899
280-50614-9	FSA-SD-DU03-A	T	Solid	8270C SIM	280-206899
280-50614-14FB	FSA-FB-01	T	Water	8270C SIM	280-206688
280-50614-15EB	FSA-EB-01	T	Water	8270C SIM	280-206688
Analysis Batch:280-207236					
LCS 280-207028/2-A	Lab Control Sample	T	Solid	8270C SIM	280-207028
MB 280-207028/1-A	Method Blank	T	Solid	8270C SIM	280-207028
280-50614-1	FSA-SF-CT	T	Solid	8270C SIM	280-207028
280-50614-1MS	Matrix Spike	T	Solid	8270C SIM	280-207028
280-50614-1MSD	Matrix Spike Duplicate	T	Solid	8270C SIM	280-207028
280-50614-2	FSA-SF-SCW	T	Solid	8270C SIM	280-207028
280-50614-3	FSA-SF-SCW-DUP	T	Solid	8270C SIM	280-207028
280-50614-9DL	FSA-SD-DU03-A	T	Solid	8270C SIM	280-206899
280-50614-9DU	Duplicate	T	Solid	8270C SIM	280-206899
280-50614-9DUDL	Duplicate	T	Solid	8270C SIM	280-206899
280-50614-9TRL	Triplicate	T	Solid	8270C SIM	280-206899
280-50614-9TRLDL	Triplicate	T	Solid	8270C SIM	280-206899
280-50614-10	FSA-SD-DU03-B	T	Solid	8270C SIM	280-206899
280-50614-11	FSA-SD-DU03-C	T	Solid	8270C SIM	280-206899
280-50614-12	FSA-SD-DU01	T	Solid	8270C SIM	280-206899
280-50614-12MS	Matrix Spike	T	Solid	8270C SIM	280-206899
280-50614-12MSD	Matrix Spike Duplicate	T	Solid	8270C SIM	280-206899
280-50614-13	FSA-SD-DU02	T	Solid	8270C SIM	280-206899
Analysis Batch:280-207515					
280-50614-2DL	FSA-SF-SCW	T	Solid	8270C SIM	280-207028
280-50614-3DL	FSA-SF-SCW-DUP	T	Solid	8270C SIM	280-207028
280-50614-10DL	FSA-SD-DU03-B	T	Solid	8270C SIM	280-206899
280-50614-11DL	FSA-SD-DU03-C	T	Solid	8270C SIM	280-206899
280-50614-12DL	FSA-SD-DU01	T	Solid	8270C SIM	280-206899
280-50614-13DL	FSA-SD-DU02	T	Solid	8270C SIM	280-206899

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Report Basis					
T = Total					
General Chemistry					
Prep Batch: 280-206728					
280-50614-4	FSA-SD-DU05	T	Solid	Increm, Prep	
280-50614-B-5-A DUDU	Duplicate	T	Solid	Increm, Prep	
280-50614-5	FSA-SD-DU04-A	T	Solid	Increm, Prep	
280-50614-6	FSA-SD-DU04-B	T	Solid	Increm, Prep	
280-50614-7	FSA-SD-DU04-C	T	Solid	Increm, Prep	
280-50614-8	FSA-SD-CO	T	Solid	Increm, Prep	
280-50614-9	FSA-SD-DU03-A	T	Solid	Increm, Prep	
280-50614-10	FSA-SD-DU03-B	T	Solid	Increm, Prep	
280-50614-11	FSA-SD-DU03-C	T	Solid	Increm, Prep	
280-50614-12	FSA-SD-DU01	T	Solid	Increm, Prep	
280-50614-13	FSA-SD-DU02	T	Solid	Increm, Prep	
Analysis Batch:280-206801					
280-50614-1	FSA-SF-CT	T	Solid	Moisture	
280-50614-2	FSA-SF-SCW	T	Solid	Moisture	
280-50614-3	FSA-SF-SCW-DUP	T	Solid	Moisture	
Analysis Batch:280-206954					
280-50614-4	FSA-SD-DU05	T	Solid	Moisture	
280-50614-B-5-A DUDU	Duplicate	T	Solid	Moisture	
280-50614-5	FSA-SD-DU04-A	T	Solid	Moisture	
280-50614-6	FSA-SD-DU04-B	T	Solid	Moisture	
280-50614-7	FSA-SD-DU04-C	T	Solid	Moisture	
280-50614-8	FSA-SD-CO	T	Solid	Moisture	
280-50614-9	FSA-SD-DU03-A	T	Solid	Moisture	
280-50614-10	FSA-SD-DU03-B	T	Solid	Moisture	
280-50614-11	FSA-SD-DU03-C	T	Solid	Moisture	
280-50614-12	FSA-SD-DU01	T	Solid	Moisture	
280-50614-13	FSA-SD-DU02	T	Solid	Moisture	

Report Basis
T = Total

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Laboratory Chronicle

Lab ID: 280-50614-1 **Client ID:** FSA-SF-CT

Sample Date/Time: 12/19/2013 08:55 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-B-1-A		280-207236	280-207028	12/30/2013 19:55	1	TAL DEN	RJM
A:8270C SIM	280-50614-B-1-A		280-207236	280-207028	01/02/2014 15:41	1	TAL DEN	KGV
A:Moisture	280-50614-B-1		280-206801		12/27/2013 12:32	1	TAL DEN	BAN

Lab ID: 280-50614-1 **Client ID:** FSA-SF-CT

Sample Date/Time: 12/19/2013 08:55 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-B-1-B MS		280-207236	280-207028	12/30/2013 19:55	1	TAL DEN	RJM
A:8270C SIM	280-50614-B-1-B MS		280-207236	280-207028	01/02/2014 16:09	1	TAL DEN	KGV

Lab ID: 280-50614-1 **Client ID:** FSA-SF-CT

Sample Date/Time: 12/19/2013 08:55 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-B-1-C MSD		280-207236	280-207028	12/30/2013 19:55	1	TAL DEN	RJM
A:8270C SIM	280-50614-B-1-C MSD		280-207236	280-207028	01/02/2014 16:37	1	TAL DEN	KGV

Lab ID: 280-50614-2 **Client ID:** FSA-SF-SCW

Sample Date/Time: 12/19/2013 09:12 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-A-2-A		280-207236	280-207028	12/30/2013 19:55	4	TAL DEN	RJM
A:8270C SIM	280-50614-A-2-A		280-207236	280-207028	01/02/2014 17:05	4	TAL DEN	KGV
P:3546	280-50614-A-2-A	DL	280-207515	280-207028	12/30/2013 19:55	50	TAL DEN	RJM
A:8270C SIM	280-50614-A-2-A	DL	280-207515	280-207028	01/06/2014 12:25	50	TAL DEN	KGV
A:Moisture	280-50614-A-2		280-206801		12/27/2013 12:32	1	TAL DEN	BAN

Lab ID: 280-50614-3 **Client ID:** FSA-SF-SCW-DUP

Sample Date/Time: 12/19/2013 09:18 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-A-3-A		280-207236	280-207028	12/30/2013 19:55	4	TAL DEN	RJM
A:8270C SIM	280-50614-A-3-A		280-207236	280-207028	01/02/2014 17:33	4	TAL DEN	KGV
P:3546	280-50614-A-3-A	DL	280-207515	280-207028	12/30/2013 19:55	50	TAL DEN	RJM
A:8270C SIM	280-50614-A-3-A	DL	280-207515	280-207028	01/06/2014 12:52	50	TAL DEN	KGV
A:Moisture	280-50614-B-3		280-206801		12/27/2013 12:32	1	TAL DEN	BAN

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Laboratory Chronicle

Lab ID: 280-50614-4 **Client ID:** FSA-SD-DU05

Sample Date/Time: 12/19/2013 10:45 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-A-4-B		280-207101	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	280-50614-A-4-B		280-207101	280-206899	12/31/2013 22:08	1	TAL DEN	KGV
A:Moisture	280-50614-A-4-A		280-206954		12/30/2013 10:57	1	TAL DEN	BAN

Lab ID: 280-50614-5 **Client ID:** FSA-SD-DU04-A

Sample Date/Time: 12/19/2013 12:35 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-A-5-B		280-207101	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	280-50614-A-5-B		280-207101	280-206899	12/31/2013 22:36	1	TAL DEN	KGV
A:Moisture	280-50614-A-5-A		280-206954		12/30/2013 10:57	1	TAL DEN	BAN

Lab ID: 280-50614-5 **Client ID:** FSA-SD-DU04-A

Sample Date/Time: 12/19/2013 12:35 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-B-5-C DU		280-207101	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	280-50614-B-5-C DU		280-207101	280-206899	12/31/2013 23:04	1	TAL DEN	KGV
A:Moisture	280-50614-B-5-A DU		280-206954		12/30/2013 10:57	1	TAL DEN	BAN

Lab ID: 280-50614-5 **Client ID:** FSA-SD-DU04-A

Sample Date/Time: 12/19/2013 12:35 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-B-5-D TRL		280-207101	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	280-50614-B-5-D TRL		280-207101	280-206899	12/31/2013 23:32	1	TAL DEN	KGV

Lab ID: 280-50614-6 **Client ID:** FSA-SD-DU04-B

Sample Date/Time: 12/19/2013 12:40 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-A-6-B		280-207101	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	280-50614-A-6-B		280-207101	280-206899	12/31/2013 23:59	1	TAL DEN	KGV
A:Moisture	280-50614-A-6-A		280-206954		12/30/2013 10:57	1	TAL DEN	BAN

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Laboratory Chronicle

Lab ID: 280-50614-7 **Client ID:** FSA-SD-DU04-C

Sample Date/Time: 12/19/2013 12:45 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-A-7-B		280-207101	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	280-50614-A-7-B		280-207101	280-206899	01/01/2014 00:27	1	TAL DEN	KGV
A:Moisture	280-50614-A-7-A		280-206954		12/30/2013 10:57	1	TAL DEN	BAN

Lab ID: 280-50614-8 **Client ID:** FSA-SD-CO

Sample Date/Time: 12/19/2013 11:20 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-A-8-B		280-207101	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	280-50614-A-8-B		280-207101	280-206899	01/01/2014 00:55	1	TAL DEN	KGV
A:Moisture	280-50614-A-8-A		280-206954		12/30/2013 10:57	1	TAL DEN	BAN

Lab ID: 280-50614-9 **Client ID:** FSA-SD-DU03-A

Sample Date/Time: 12/19/2013 15:00 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-A-9-B		280-207101	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	280-50614-A-9-B		280-207101	280-206899	01/01/2014 01:23	1	TAL DEN	KGV
P:3546	280-50614-A-9-B	DL	280-207236	280-206899	12/29/2013 10:49	5	TAL DEN	CDC
A:8270C SIM	280-50614-A-9-B	DL	280-207236	280-206899	01/02/2014 18:01	5	TAL DEN	KGV
A:Moisture	280-50614-A-9-A		280-206954		12/30/2013 10:57	1	TAL DEN	BAN

Lab ID: 280-50614-9 **Client ID:** FSA-SD-DU03-A

Sample Date/Time: 12/19/2013 15:00 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-B-9-C DU		280-207236	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	280-50614-B-9-C DU		280-207236	280-206899	01/02/2014 18:29	1	TAL DEN	KGV
P:3546	280-50614-B-9-C DU	DL	280-207236	280-206899	12/29/2013 10:49	5	TAL DEN	CDC
A:8270C SIM	280-50614-B-9-C DU	DL	280-207236	280-206899	01/02/2014 18:57	5	TAL DEN	KGV

Lab ID: 280-50614-9 **Client ID:** FSA-SD-DU03-A

Sample Date/Time: 12/19/2013 15:00 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-B-9-D TRL		280-207236	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	280-50614-B-9-D TRL		280-207236	280-206899	01/02/2014 19:24	1	TAL DEN	KGV
P:3546	280-50614-B-9-D TRL	DL	280-207236	280-206899	12/29/2013 10:49	5	TAL DEN	CDC
A:8270C SIM	280-50614-B-9-D TRL	DL	280-207236	280-206899	01/02/2014 19:52	5	TAL DEN	KGV

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Laboratory Chronicle

Lab ID: 280-50614-10 **Client ID:** FSA-SD-DU03-B

Sample Date/Time: 12/19/2013 15:05 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-A-10-B		280-207236	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	280-50614-A-10-B		280-207236	280-206899	01/02/2014 20:20	1	TAL DEN	KGV
P:3546	280-50614-A-10-B	DL	280-207515	280-206899	12/29/2013 10:49	5	TAL DEN	CDC
A:8270C SIM	280-50614-A-10-B	DL	280-207515	280-206899	01/06/2014 13:20	5	TAL DEN	KGV
A:Moisture	280-50614-A-10-A		280-206954		12/30/2013 10:57	1	TAL DEN	BAN

Lab ID: 280-50614-11 **Client ID:** FSA-SD-DU03-C

Sample Date/Time: 12/19/2013 15:10 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-A-11-B		280-207236	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	280-50614-A-11-B		280-207236	280-206899	01/02/2014 20:48	1	TAL DEN	KGV
P:3546	280-50614-A-11-B	DL	280-207515	280-206899	12/29/2013 10:49	10	TAL DEN	CDC
A:8270C SIM	280-50614-A-11-B	DL	280-207515	280-206899	01/06/2014 13:48	10	TAL DEN	KGV
A:Moisture	280-50614-A-11-A		280-206954		12/30/2013 10:57	1	TAL DEN	BAN

Lab ID: 280-50614-12 **Client ID:** FSA-SD-DU01

Sample Date/Time: 12/19/2013 15:45 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-A-12-B		280-207236	280-206899	12/29/2013 10:49	5	TAL DEN	CDC
A:8270C SIM	280-50614-A-12-B		280-207236	280-206899	01/02/2014 21:16	5	TAL DEN	KGV
P:3546	280-50614-A-12-B	DL	280-207515	280-206899	12/29/2013 10:49	10	TAL DEN	CDC
A:8270C SIM	280-50614-A-12-B	DL	280-207515	280-206899	01/06/2014 14:16	10	TAL DEN	KGV
A:Moisture	280-50614-A-12-A		280-206954		12/30/2013 10:57	1	TAL DEN	BAN

Lab ID: 280-50614-12 **Client ID:** FSA-SD-DU01

Sample Date/Time: 12/19/2013 15:45 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-B-12-C MS		280-207236	280-206899	12/29/2013 10:49	5	TAL DEN	CDC
A:8270C SIM	280-50614-B-12-C MS		280-207236	280-206899	01/02/2014 21:44	5	TAL DEN	KGV

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Laboratory Chronicle

Lab ID: 280-50614-12 **Client ID:** FSA-SD-DU01

Sample Date/Time: 12/19/2013 15:45 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-B-12-D MSD		280-207236	280-206899	12/29/2013 10:49	5	TAL DEN	CDC
A:8270C SIM	280-50614-B-12-D MSD		280-207236	280-206899	01/02/2014 22:12	5	TAL DEN	KGV

Lab ID: 280-50614-13 **Client ID:** FSA-SD-DU02

Sample Date/Time: 12/19/2013 16:10 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3546	280-50614-A-13-B		280-207236	280-206899	12/29/2013 10:49	5	TAL DEN	CDC
A:8270C SIM	280-50614-A-13-B		280-207236	280-206899	01/02/2014 22:40	5	TAL DEN	KGV
P:3546	280-50614-A-13-B	DL	280-207515	280-206899	12/29/2013 10:49	10	TAL DEN	CDC
A:8270C SIM	280-50614-A-13-B	DL	280-207515	280-206899	01/06/2014 14:43	10	TAL DEN	KGV
A:Moisture	280-50614-A-13-A		280-206954		12/30/2013 10:57	1	TAL DEN	BAN

Lab ID: 280-50614-14 **Client ID:** FSA-FB-01

Sample Date/Time: 12/19/2013 16:15 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	280-50614-B-14-A		280-207101	280-206688	12/26/2013 17:46	1	TAL DEN	IBM
A:8270C SIM	280-50614-B-14-A		280-207101	280-206688	12/31/2013 20:16	1	TAL DEN	KGV

Lab ID: 280-50614-15 **Client ID:** FSA-EB-01

Sample Date/Time: 12/19/2013 16:20 Received Date/Time: 12/21/2013 12:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	280-50614-A-15-A		280-207101	280-206688	12/26/2013 17:46	1	TAL DEN	IBM
A:8270C SIM	280-50614-A-15-A		280-207101	280-206688	12/31/2013 20:44	1	TAL DEN	KGV

Lab ID: MB **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	MB 280-206688/1-A		280-207101	280-206688	12/26/2013 17:46	1	TAL DEN	IBM
A:8270C SIM	MB 280-206688/1-A		280-207101	280-206688	12/31/2013 18:51	1	TAL DEN	KGV
P:3546	MB 280-206899/1-A		280-207101	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	MB 280-206899/1-A		280-207101	280-206899	12/31/2013 21:12	1	TAL DEN	KGV
P:3546	MB 280-207028/1-A		280-207236	280-207028	12/30/2013 19:55	1	TAL DEN	RJM
A:8270C SIM	MB 280-207028/1-A		280-207236	280-207028	01/02/2014 14:25	1	TAL DEN	KGV

Client: Tetra Tech EM Inc. Job Number: 280-50614-1

Laboratory Chronicle

Lab ID: **LCS** **Client ID:** **N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	LCS 280-206688/2-A		280-207101	280-206688	12/26/2013 17:46	1	TAL DEN	IBM
A:8270C SIM	LCS 280-206688/2-A		280-207101	280-206688	12/31/2013 19:19	1	TAL DEN	KGV
P:3546	LCS 280-206899/2-A		280-207101	280-206899	12/29/2013 10:49	1	TAL DEN	CDC
A:8270C SIM	LCS 280-206899/2-A		280-207101	280-206899	12/31/2013 21:40	1	TAL DEN	KGV
P:3546	LCS 280-207028/2-A		280-207236	280-207028	12/30/2013 19:55	1	TAL DEN	RJM
A:8270C SIM	LCS 280-207028/2-A		280-207236	280-207028	01/02/2014 15:13	1	TAL DEN	KGV

Lab ID: **LCSD** **Client ID:** **N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	LCSD 280-206688/3-A		280-207101	280-206688	12/26/2013 17:46	1	TAL DEN	IBM
A:8270C SIM	LCSD 280-206688/3-A		280-207101	280-206688	12/31/2013 19:47	1	TAL DEN	KGV

Lab References:
TAL DEN = TestAmerica Denver

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 203266

Lab Sample ID: STD0020 280-203266/3 IC Client Sample ID:

Date Analyzed: 11/30/13 09:01 Lab File ID: X4_8609.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	2.10	Assign Peak	vasquezk	11/30/13 07:26
Nitrobenzene-d5	4.19	Assign Peak	vasquezk	11/30/13 07:26
Naphthalene	4.78	Assign Peak	vasquezk	11/30/13 07:26
2-Fluorobiphenyl	5.63	Assign Peak	vasquezk	11/30/13 07:26
Acenaphthylene	6.12	Assign Peak	vasquezk	11/30/13 07:26
Acenaphthene	6.26	Assign Peak	vasquezk	11/30/13 07:26
N-Nitrosodiphenylamine	6.77	Assign Peak	vasquezk	11/30/13 07:26
Phenanthrene	7.55	Assign Peak	vasquezk	11/30/13 07:26
Anthracene	7.60	Assign Peak	vasquezk	11/30/13 07:26
Fluoranthene	8.97	Assign Peak	vasquezk	11/30/13 07:26
Pyrene	9.35	Assign Peak	vasquezk	11/30/13 07:26
Terphenyl-d14	9.53	Assign Peak	vasquezk	11/30/13 07:26
Benzo[a]anthracene	11.92	Assign Peak	vasquezk	11/30/13 07:26
Chrysene	12.02	Assign Peak	vasquezk	11/30/13 07:26
Indeno[1,2,3-cd]pyrene	19.10	Split Peak	vasquezk	11/30/13 07:26
Dibenz(a,h)anthracene	19.14	Assign Peak	vasquezk	11/30/13 07:26

Lab Sample ID: STD0100 280-203266/4 IC Client Sample ID:

Date Analyzed: 11/30/13 09:30 Lab File ID: X4_8610.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.10	Split Peak	vasquezk	12/01/13 07:03

Lab Sample ID: STD0300 280-203266/5 IC Client Sample ID:

Date Analyzed: 11/30/13 09:57 Lab File ID: X4_8611.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.09	Split Peak	vasquezk	12/01/13 07:03

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 203266

Lab Sample ID: ICIS 280-203266/6 Client Sample ID:

Date Analyzed: 11/30/13 10:25 Lab File ID: X4_8612.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.09	Split Peak	vasquezk	12/01/13 07:03

Lab Sample ID: STD1200 280-203266/7 IC Client Sample ID:

Date Analyzed: 11/30/13 10:53 Lab File ID: X4_8613.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.09	Split Peak	vasquezk	12/01/13 07:03

Lab Sample ID: STD2500 280-203266/8 IC Client Sample ID:

Date Analyzed: 11/30/13 11:21 Lab File ID: X4_8614.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.09	Split Peak	vasquezk	12/01/13 05:55

Lab Sample ID: STD5000 280-203266/9 IC Client Sample ID:

Date Analyzed: 11/30/13 11:48 Lab File ID: X4_8615.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.09	Split Peak	vasquezk	12/01/13 07:03

Lab Sample ID: ICV 280-203266/11 Client Sample ID:

Date Analyzed: 11/30/13 12:44 Lab File ID: X4_8617.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.09	Split Peak	vasquezk	12/01/13 05:59

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 207101

Lab Sample ID: CCV 280-207101/2 Client Sample ID:

Date Analyzed: 12/31/13 13:57 Lab File ID: X4_8886.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.11	Split Peak	vasquezk	01/02/14 08:52

Lab Sample ID: LCS 280-206688/2-A Client Sample ID:

Date Analyzed: 12/31/13 19:19 Lab File ID: X4_8897.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.11	Split Peak	vasquezk	01/02/14 09:01

Lab Sample ID: LCSD 280-206688/3-A Client Sample ID:

Date Analyzed: 12/31/13 19:47 Lab File ID: X4_8898.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.11	Split Peak	vasquezk	01/02/14 09:01

Lab Sample ID: LCS 280-206899/2-A Client Sample ID:

Date Analyzed: 12/31/13 21:40 Lab File ID: X4_8902.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.11	Split Peak	vasquezk	01/02/14 09:02

Lab Sample ID: 280-50614-4 Client Sample ID: FSA-SD-DU05

Date Analyzed: 12/31/13 22:08 Lab File ID: X4_8903.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.02	Split Peak	vasquezk	01/02/14 09:08
Benzo[k]fluoranthene	15.34	Split Peak	vasquezk	01/02/14 09:08

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 207101

Lab Sample ID: 280-50614-5 Client Sample ID: FSA-SD-DU04-A

Date Analyzed: 12/31/13 22:36 Lab File ID: X4_8904.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.02	Split Peak	vasquezk	01/02/14 09:09

Lab Sample ID: 280-50614-5 TRL Client Sample ID: FSA-SD-DU04-A TRL

Date Analyzed: 12/31/13 23:32 Lab File ID: X4_8906.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.02	Split Peak	vasquezk	01/02/14 09:10

Lab Sample ID: 280-50614-6 Client Sample ID: FSA-SD-DU04-B

Date Analyzed: 12/31/13 23:59 Lab File ID: X4_8907.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.02	Split Peak	vasquezk	01/02/14 09:11
Dibenz(a,h)anthracene	19.14	Assign Peak	vasquezk	01/02/14 09:11

Lab Sample ID: 280-50614-7 Client Sample ID: FSA-SD-DU04-C

Date Analyzed: 01/01/14 00:27 Lab File ID: X4_8908.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.02	Split Peak	vasquezk	01/02/14 09:11

Lab Sample ID: 280-50614-8 Client Sample ID: FSA-SD-CO

Date Analyzed: 01/01/14 00:55 Lab File ID: X4_8909.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.02	Split Peak	vasquezk	01/02/14 09:11

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 207236

Lab Sample ID: CCV 280-207236/2 Client Sample ID:

Date Analyzed: 01/02/14 13:45 Lab File ID: X4_8916.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.12	Split Peak	vasquezk	01/02/14 12:13

Lab Sample ID: LCS 280-207028/2-A Client Sample ID:

Date Analyzed: 01/02/14 15:13 Lab File ID: X4_8918.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.12	Split Peak	vasquezk	01/03/14 09:34

Lab Sample ID: 280-50614-1 Client Sample ID: FSA-SF-CT

Date Analyzed: 01/02/14 15:41 Lab File ID: X4_8919.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorene	6.70	Assign Peak	vasquezk	01/06/14 10:11
Chrysene	12.03	Split Peak	vasquezk	01/03/14 14:06

Lab Sample ID: 280-50614-9 DL Client Sample ID: FSA-SD-DU03-A DL

Date Analyzed: 01/02/14 18:01 Lab File ID: X4_8924.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.03	Split Peak	vasquezk	01/06/14 08:57

Lab Sample ID: 280-50614-9 DU DL Client Sample ID: FSA-SD-DU03-A DU DL

Date Analyzed: 01/02/14 18:57 Lab File ID: X4_8926.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.03	Split Peak	vasquezk	01/06/14 08:58

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 207236

Lab Sample ID: 280-50614-9 TRL DL Client Sample ID: FSA-SD-DU03-A TRL DL

Date Analyzed: 01/02/14 19:52 Lab File ID: X4_8928.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.03	Split Peak	vasquezk	01/06/14 09:00

Lab Sample ID: 280-50614-12 Client Sample ID: FSA-SD-DU01

Date Analyzed: 01/02/14 21:16 Lab File ID: X4_8931.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.04	Split Peak	vasquezk	01/06/14 09:46

Lab Sample ID: 280-50614-12 MS Client Sample ID: FSA-SD-DU01 MS

Date Analyzed: 01/02/14 21:44 Lab File ID: X4_8932.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.04	Split Peak	vasquezk	01/06/14 09:55

Lab Sample ID: 280-50614-12 MSD Client Sample ID: FSA-SD-DU01 MSD

Date Analyzed: 01/02/14 22:12 Lab File ID: X4_8933.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.04	Split Peak	vasquezk	01/06/14 09:55

Lab Sample ID: 280-50614-13 Client Sample ID: FSA-SD-DU02

Date Analyzed: 01/02/14 22:40 Lab File ID: X4_8934.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.04	Split Peak	vasquezk	01/06/14 09:56

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 207515

Lab Sample ID: CCV 280-207515/2 Client Sample ID:

Date Analyzed: 01/06/14 11:54 Lab File ID: X4_8947.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.13	Split Peak	vasquezk	01/06/14 10:37

Lab Sample ID: 280-50614-10 DL Client Sample ID: FSA-SD-DU03-B DL

Date Analyzed: 01/06/14 13:20 Lab File ID: X4_8950.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.03	Split Peak	vasquezk	01/06/14 13:42

Lab Sample ID: 280-50614-11 DL Client Sample ID: FSA-SD-DU03-C DL

Date Analyzed: 01/06/14 13:48 Lab File ID: X4_8951.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.03	Split Peak	vasquezk	01/06/14 13:43

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 207515

Lab Sample ID: CCV 280-207515/2 Client Sample ID:

Date Analyzed: 01/06/14 11:54 Lab File ID: X4_8947.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.13	Split Peak	vasquezk	01/06/14 10:37

Lab Sample ID: 280-50614-10 DL Client Sample ID: FSA-SD-DU03-B DL

Date Analyzed: 01/06/14 13:20 Lab File ID: X4_8950.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.03	Split Peak	vasquezk	01/06/14 13:42

Lab Sample ID: 280-50614-11 DL Client Sample ID: FSA-SD-DU03-C DL

Date Analyzed: 01/06/14 13:48 Lab File ID: X4_8951.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.03	Split Peak	vasquezk	01/06/14 13:43

gpks 1/6/14

8270C SIM

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 207101

Lab Sample ID: 280-50614-5 Client Sample ID: FSA-SD-DU04-A

Date Analyzed: 12/31/13 22:36 Lab File ID: X4_8904.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.02	Split Peak	vasquezk	01/02/14 09:09

Lab Sample ID: 280-50614-5 TRL Client Sample ID: FSA-SD-DU04-A TRL

Date Analyzed: 12/31/13 23:32 Lab File ID: X4_8906.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.02	Split Peak	vasquezk	01/02/14 09:10

Lab Sample ID: 280-50614-6 Client Sample ID: FSA-SD-DU04-B

Date Analyzed: 12/31/13 23:59 Lab File ID: X4_8907.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.02	Split Peak	vasquezk	01/02/14 09:11
Dibenz(a,h)anthracene	19.14	Assign Peak	vasquezk	01/02/14 09:11

Lab Sample ID: 280-50614-7 Client Sample ID: FSA-SD-DU04-C

Date Analyzed: 01/01/14 00:27 Lab File ID: X4_8908.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.02	Split Peak	vasquezk	01/02/14 09:11

Lab Sample ID: 280-50614-8 Client Sample ID: FSA-SD-CO

Date Analyzed: 01/01/14 00:55 Lab File ID: X4_8909.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.02	Split Peak	vasquezk	01/02/14 09:11

GMY 1/6/14

8270C SIM

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 207236

Lab Sample ID: CCV 280-207236/2 Client Sample ID:

Date Analyzed: 01/02/14 13:45 Lab File ID: X4_8916.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.12	Split Peak	vasquezk	01/02/14 12:13

Lab Sample ID: LCS 280-207028/2-A Client Sample ID:

Date Analyzed: 01/02/14 15:13 Lab File ID: X4_8918.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.12	Split Peak	vasquezk	01/03/14 09:34

Lab Sample ID: 280-50614-1 Client Sample ID: FSA-SF-CT

Date Analyzed: 01/02/14 15:41 Lab File ID: X4_8919.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorene	6.70	Assign Peak	vasquezk	01/06/14 10:11
Chrysene	12.03	Split Peak	vasquezk	01/03/14 14:06

Lab Sample ID: 280-50614-9 DL Client Sample ID: FSA-SD-DU03-A DL

Date Analyzed: 01/02/14 18:01 Lab File ID: X4_8924.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.03	Split Peak	vasquezk	01/06/14 08:57

Lab Sample ID: 280-50614-9 DU DL Client Sample ID: FSA-SD-DU03-A DU DL

Date Analyzed: 01/02/14 18:57 Lab File ID: X4_8926.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.03	Split Peak	vasquezk	01/06/14 08:58

gms 1/6/14

8270C SIM

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 207236

Lab Sample ID: 280-50614-9 TRL DL Client Sample ID: FSA-SD-DU03-A TRL DL

Date Analyzed: 01/02/14 19:52 Lab File ID: X4_8928.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.03	Split Peak	vasquezk	01/06/14 09:00

Lab Sample ID: 280-50614-12 Client Sample ID: FSA-SD-DU01

Date Analyzed: 01/02/14 21:16 Lab File ID: X4_8931.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.04	Split Peak	vasquezk	01/06/14 09:46

Lab Sample ID: 280-50614-12 MS Client Sample ID: FSA-SD-DU01 MS

Date Analyzed: 01/02/14 21:44 Lab File ID: X4_8932.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.04	Split Peak	vasquezk	01/06/14 09:55

Lab Sample ID: 280-50614-12 MSD Client Sample ID: FSA-SD-DU01 MSD

Date Analyzed: 01/02/14 22:12 Lab File ID: X4_8933.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.04	Split Peak	vasquezk	01/06/14 09:55

Lab Sample ID: 280-50614-13 Client Sample ID: FSA-SD-DU02

Date Analyzed: 01/02/14 22:40 Lab File ID: X4_8934.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.04	Split Peak	vasquezk	01/06/14 09:56

gvm 1/6/14

8270C SIM

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 203266

Lab Sample ID: STD0020 280-203266/3 IC Client Sample ID:

Date Analyzed: 11/30/13 09:01 Lab File ID: X4_8609.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	2.10	Assign Peak	vasquezk	11/30/13 07:26
Nitrobenzene-d5	4.19	Assign Peak	vasquezk	11/30/13 07:26
Naphthalene	4.78	Assign Peak	vasquezk	11/30/13 07:26
2-Fluorobiphenyl	5.63	Assign Peak	vasquezk	11/30/13 07:26
Acenaphthylene	6.12	Assign Peak	vasquezk	11/30/13 07:26
Acenaphthene	6.26	Assign Peak	vasquezk	11/30/13 07:26
N-Nitrosodiphenylamine	6.77	Assign Peak	vasquezk	11/30/13 07:26
Phenanthrene	7.55	Assign Peak	vasquezk	11/30/13 07:26
Anthracene	7.60	Assign Peak	vasquezk	11/30/13 07:26
Fluoranthene	8.97	Assign Peak	vasquezk	11/30/13 07:26
Pyrene	9.35	Assign Peak	vasquezk	11/30/13 07:26
Terphenyl-d14	9.53	Assign Peak	vasquezk	11/30/13 07:26
Benzo[a]anthracene	11.92	Assign Peak	vasquezk	11/30/13 07:26
Chrysene	12.02	Assign Peak	vasquezk	11/30/13 07:26
Indeno[1,2,3-cd]pyrene	19.10	Split Peak	vasquezk	11/30/13 07:26
Dibenz(a,h)anthracene	19.14	Assign Peak	vasquezk	11/30/13 07:26

Lab Sample ID: STD0100 280-203266/4 IC Client Sample ID:

Date Analyzed: 11/30/13 09:30 Lab File ID: X4_8610.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.10	Split Peak	vasquezk	12/01/13 07:03

Lab Sample ID: STD0300 280-203266/5 IC Client Sample ID:

Date Analyzed: 11/30/13 09:57 Lab File ID: X4_8611.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.09	Split Peak	vasquezk	12/01/13 07:03

gmy 1/6/14

8270C SIM

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 203266

Lab Sample ID: ICIS 280-203266/6 Client Sample ID:

Date Analyzed: 11/30/13 10:25 Lab File ID: X4_8612.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.09	Split Peak	vasquezk	12/01/13 07:03

Lab Sample ID: STD1200 280-203266/7 IC Client Sample ID:

Date Analyzed: 11/30/13 10:53 Lab File ID: X4_8613.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.09	Split Peak	vasquezk	12/01/13 07:03

Lab Sample ID: STD2500 280-203266/8 IC Client Sample ID:

Date Analyzed: 11/30/13 11:21 Lab File ID: X4_8614.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.09	Split Peak	vasquezk	12/01/13 05:55

Lab Sample ID: STD5000 280-203266/9 IC Client Sample ID:

Date Analyzed: 11/30/13 11:48 Lab File ID: X4_8615.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.09	Split Peak	vasquezk	12/01/13 07:03

Lab Sample ID: ICV 280-203266/11 Client Sample ID:

Date Analyzed: 11/30/13 12:44 Lab File ID: X4_8617.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.09	Split Peak	vasquezk	12/01/13 05:59

gms 1/6/14

8270C SIM

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Analysis Batch Number: 207101

Lab Sample ID: CCV 280-207101/2 Client Sample ID:

Date Analyzed: 12/31/13 13:57 Lab File ID: X4_8886.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.11	Split Peak	vasquezk	01/02/14 08:52

Lab Sample ID: LCS 280-206688/2-A Client Sample ID:

Date Analyzed: 12/31/13 19:19 Lab File ID: X4_8897.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.11	Split Peak	vasquezk	01/02/14 09:01

Lab Sample ID: LCSD 280-206688/3-A Client Sample ID:

Date Analyzed: 12/31/13 19:47 Lab File ID: X4_8898.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.11	Split Peak	vasquezk	01/02/14 09:01

Lab Sample ID: LCS 280-206899/2-A Client Sample ID:

Date Analyzed: 12/31/13 21:40 Lab File ID: X4_8902.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	19.11	Split Peak	vasquezk	01/02/14 09:02

Lab Sample ID: 280-50614-4 Client Sample ID: FSA-SD-DU05

Date Analyzed: 12/31/13 22:08 Lab File ID: X4_8903.D GC Column: Vf-5MS (30.25) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chrysene	12.02	Split Peak	vasquezk	01/02/14 09:08
Benzo[k]fluoranthene	15.34	Split Peak	vasquezk	01/02/14 09:08

gms 1/6/14

8270C SIM

Method 8270C SIM

Semivolatile Organic Compounds (GC/MS SIM) by Method 8270C (SIM)

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Vf-5MS (30.2 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	NBZ	#	FBP	#	TPH	#
FSA-SF-CT	280-50614-1	85		69		72	
FSA-SF-SCW	280-50614-2	75	D	66	D	120	D
FSA-SF-SCW DL	280-50614-2 DL	0	D X	0	D X	0	D X
FSA-SF-SCW-DUP	280-50614-3	99	D	79	D	148	X D
FSA-SF-SCW-DUP DL	280-50614-3 DL	0	D X	0	D X	0	D X
FSA-SD-DU05	280-50614-4	77		79		135	X
FSA-SD-DU04-A	280-50614-5	79		79		118	
FSA-SD-DU04-B	280-50614-6	81		75		95	
FSA-SD-DU04-C	280-50614-7	87		80		94	
FSA-SD-CO	280-50614-8	94		82		103	
FSA-SD-DU03-A	280-50614-9	108		75		111	
FSA-SD-DU03-A DL	280-50614-9 DL	76	D	72	D	113	D
FSA-SD-DU03-B	280-50614-10	71		67		101	
FSA-SD-DU03-B DL	280-50614-10 DL	62	D	66	D	103	D
FSA-SD-DU03-C	280-50614-11	89		76		99	
FSA-SD-DU03-C DL	280-50614-11 DL	0	D X	78	D	0	D X
FSA-SD-DU01	280-50614-12	75	D	62	D	111	D
FSA-SD-DU01 DL	280-50614-12 DL	0	D X	71	D	0	D X
FSA-SD-DU02	280-50614-13	90	D	75	D	122	D
FSA-SD-DU02 DL	280-50614-13 DL	0	D X	70	D	117	D
	MB 280-206899/1-A	86		92		101	
	MB 280-207028/1-A	95		95		115	
	LCS 280-206899/2-A	87		93		109	
	LCS 280-207028/2-A	91		90		110	
FSA-SF-CT MS	280-50614-1 MS	104		74		91	
FSA-SD-DU01 MS	280-50614-12 MS	82	D	71	D	129	D X
FSA-SF-CT MSD	280-50614-1 MSD	105		70		93	
FSA-SD-DU01 MSD	280-50614-12 MSD	81	D	68	D	112	D
FSA-SD-DU04-A DU	280-50614-5 DU	83		79		104	
FSA-SD-DU03-A DU	280-50614-9 DU	83		79		104	
FSA-SD-DU03-A DU DL	280-50614-9 DU DL	65	D	69	D	102	D
FSA-SD-DU04-A TRL	280-50614-5 TRL	84		78		96	

	QC LIMITS
NBZ = Nitrobenzene-d5	42-120
FBP = 2-Fluorobiphenyl	39-120
TPH = Terphenyl-d14	35-124

Column to be used to flag recovery values

FORM II 8270C SIM

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Vf-5MS (30.2 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	NBZ	#	FBP	#	TPH	#
FSA-SD-DU03-A TRL	280-50614-9 TRL	74		74		131	X
FSA-SD-DU03-A TRL DL	280-50614-9 TRL DL	73	D	78	D	141 D	X

	QC LIMITS
NBZ = Nitrobenzene-d5	42-120
FBP = 2-Fluorobiphenyl	39-120
TPH = Terphenyl-d14	35-124

Column to be used to flag recovery values

FORM II 8270C SIM

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Vf-5MS (30.2 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	NBZ #	FBP #	TPH #
FSA-FB-01	280-50614-14	82	74	132 X
FSA-EB-01	280-50614-15	50	54	112
	MB 280-206688/1-A	74	63	117
	LCS 280-206688/2-A	52	57	122 X
	LCSD 280-206688/3-A	76	73	124 X

	QC LIMITS
NBZ = Nitrobenzene-d5	43-120
FBP = 2-Fluorobiphenyl	42-120
TPH = Terphenyl-d14	47-120

Column to be used to flag recovery values

FORM II 8270C SIM

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Water Level: Low Lab File ID: X4_8897.D

Lab ID: LCS 280-206688/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Benzo[b]fluoranthene	900	877	97	44-120	
Benzo[a]pyrene	900	811	90	38-120	
Benzo[a]anthracene	900	786	87	42-120	
Benzo[k]fluoranthene	900	887	99	43-120	
Benzo[g,h,i]perylene	900	891	99	39-120	
Phenanthrene	900	651	72	46-120	
Anthracene	900	667	74	28-120	
Dibenz(a,h)anthracene	900	872	97	27-126	
Chrysene	900	900	100	35-120	
Acenaphthene	900	527	59	47-120	
Acenaphthylene	900	511	57	39-120	
Fluoranthene	900	836	93	46-120	
Fluorene	900	551	61	49-120	
Pyrene	900	867	96	49-120	
Indeno[1,2,3-cd]pyrene	900	848	94	38-120	
Naphthalene	900	476	53	37-120	

Column to be used to flag recovery and RPD values

FORM III 8270C SIM

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X4_8902.D

Lab ID: LCS 280-206899/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/Kg)	LCS CONCENTRATION (ng/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[b]fluoranthene	27400	25700	94	37-120	
Benzo[a]pyrene	27400	23300	85	20-120	
Benzo[a]anthracene	27400	23200	85	36-120	
Benzo[k]fluoranthene	27400	26000	95	46-120	
Benzo[g,h,i]perylene	27400	27300	100	20-123	
Phenanthrene	27400	25200	92	44-120	
Anthracene	27400	24200	88	43-120	
Dibenz(a,h)anthracene	27400	26700	97	20-120	
Chrysene	27400	27100	99	34-120	
Acenaphthene	27400	25200	92	35-120	
Acenaphthylene	27400	23800	87	41-120	
Fluoranthene	27400	25300	92	45-120	
Fluorene	27400	24700	90	44-120	
Pyrene	27400	25400	93	43-120	
Indeno[1,2,3-cd]pyrene	27400	25900	94	20-127	
Naphthalene	27400	26500	97	44-120	

Column to be used to flag recovery and RPD values

FORM III 8270C SIM

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X4_8918.D

Lab ID: LCS 280-207028/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/Kg)	LCS CONCENTRATION (ng/Kg)	LCS % REC	QC LIMITS REC	#
Benzo[b]fluoranthene	29800	27800	93	37-120	
Benzo[a]pyrene	29800	27300	91	20-120	
Benzo[a]anthracene	29800	25800	86	36-120	
Benzo[k]fluoranthene	29800	28100	94	46-120	
Benzo[g,h,i]perylene	29800	28300	95	20-123	
Phenanthrene	29800	26400	88	44-120	
Anthracene	29800	26500	89	43-120	
Dibenz(a,h)anthracene	29800	28300	95	20-120	
Chrysene	29800	27400	92	34-120	
Acenaphthene	29800	26200	88	35-120	
Acenaphthylene	29800	26500	89	41-120	
Fluoranthene	29800	27700	93	45-120	
Fluorene	29800	26100	88	44-120	
Pyrene	29800	27800	93	43-120	
Indeno[1,2,3-cd]pyrene	29800	27900	94	20-127	
Naphthalene	29800	28100	94	44-120	

Column to be used to flag recovery and RPD values

FORM III 8270C SIM

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Water Level: Low Lab File ID: X4_8898.D

Lab ID: LCSD 280-206688/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[b]fluoranthene	900	864	96	1	28	44-120	
Benzo[a]pyrene	900	786	87	3	21	38-120	
Benzo[a]anthracene	900	793	88	1	40	42-120	
Benzo[k]fluoranthene	900	876	97	1	28	43-120	
Benzo[g,h,i]perylene	900	887	99	0	23	39-120	
Phenanthrene	900	790	88	19	42	46-120	
Anthracene	900	775	86	15	50	28-120	
Dibenz(a,h)anthracene	900	849	94	3	25	27-126	
Chrysene	900	909	101	1	41	35-120	
Acenaphthene	900	696	77	28	50	47-120	
Acenaphthylene	900	674	75	27	50	39-120	
Fluoranthene	900	903	100	8	24	46-120	
Fluorene	900	730	81	28	50	49-120	
Pyrene	900	935	104	8	22	49-120	
Indeno[1,2,3-cd]pyrene	900	853	95	1	25	38-120	
Naphthalene	900	579	64	19	50	37-120	

Column to be used to flag recovery and RPD values

FORM III 8270C SIM

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X4_8920.D

Lab ID: 280-50614-1 MS Client ID: FSA-SF-CT MS

COMPOUND	SPIKE ADDED (ng/Kg)	SAMPLE CONCENTRATION (ng/Kg)	MS CONCENTRATION (ng/Kg)	MS % REC	QC LIMITS REC	#
Benzo[b]fluoranthene	69900	130000	216000	126	37-120	F1
Benzo[a]pyrene	69900	77000	155000	112	20-120	
Benzo[a]anthracene	69900	58000	126000	98	36-120	
Benzo[k]fluoranthene	69900	43000	118000	107	46-120	
Benzo[g,h,i]perylene	69900	63000	134000	102	20-123	
Phenanthrene	69900	94000	174000	114	44-120	
Anthracene	69900	22000	80900	85	43-120	
Dibenz(a,h)anthracene	69900	16000	73300	82	20-120	
Chrysene	69900	75000	170000	135	34-120	F1
Acenaphthene	69900	11000 J	85900	108	35-120	
Acenaphthylene	69900	35000	99500	93	41-120	
Fluoranthene	69900	160000	263000	148	45-120	F1
Fluorene	69900	14000	86900	105	44-120	
Pyrene	69900	160000	258000	142	43-120	F1
Indeno[1,2,3-cd]pyrene	69900	64000	151000	124	20-127	
Naphthalene	69900	76000	134000	82	44-120	

Column to be used to flag recovery and RPD values

FORM III 8270C SIM

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X4_8932.D

Lab ID: 280-50614-12 MS Client ID: FSA-SD-DU01 MS

COMPOUND	SPIKE ADDED (ng/Kg)	SAMPLE CONCENTRATION (ng/Kg)	MS CONCENTRATION (ng/Kg)	MS % REC	QC LIMITS REC	#
Benzo[b]fluoranthene	28000	1300000	1620000	977	37-120	E 4
Benzo[a]pyrene	28000	580000	757000	615	20-120	4
Benzo[a]anthracene	28000	370000	549000	625	36-120	4
Benzo[k]fluoranthene	28000	430000	558000	473	46-120	4
Benzo[g,h,i]perylene	28000	540000	669000	465	20-123	4
Phenanthrene	28000	230000	544000	1105	44-120	4
Anthracene	28000	230000	298000	227	43-120	4
Dibenz(a,h)anthracene	28000	150000	202000	184	20-120	4
Chrysene	28000	510000	683000	607	34-120	4
Acenaphthene	28000	12000 J	43200	113	35-120	
Acenaphthylene	28000	200000	294000	326	41-120	4
Fluoranthene	28000	580000	1080000	1818	45-120	E 4
Fluorene	28000	21000 J	64100	155	44-120	F1
Pyrene	28000	670000	1090000	1469	43-120	E 4
Indeno[1,2,3-cd]pyrene	28000	600000	746000	522	20-127	4
Naphthalene	28000	85000	126000	145	44-120	F1

Column to be used to flag recovery and RPD values

FORM III 8270C SIM

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X4_8921.D

Lab ID: 280-50614-1 MSD Client ID: FSA-SF-CT MSD

COMPOUND	SPIKE ADDED (ng/Kg)	MSD CONCENTRATION (ng/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[b]fluoranthene	71400	232000	146	7	28	37-120	F1
Benzo[a]pyrene	71400	163000	121	6	30	20-120	F1
Benzo[a]anthracene	71400	136000	109	7	40	36-120	
Benzo[k]fluoranthene	71400	124000	113	5	28	46-120	
Benzo[g,h,i]perylene	71400	138000	106	3	30	20-123	
Phenanthrene	71400	199000	146	13	42	44-120	F1
Anthracene	71400	92400	99	13	50	43-120	
Dibenz(a,h)anthracene	71400	74100	82	1	25	20-120	
Chrysene	71400	182000	149	7	41	34-120	F1
Acenaphthene	71400	98700	123	14	50	35-120	F1
Acenaphthylene	71400	110000	106	10	50	41-120	
Fluoranthene	71400	294000	187	11	30	45-120	F1
Fluorene	71400	168000	216	64	50	44-120	F1 F2
Pyrene	71400	290000	184	12	30	43-120	F1
Indeno[1,2,3-cd]pyrene	71400	154000	127	2	50	20-127	
Naphthalene	71400	137000	84	2	50	44-120	

Column to be used to flag recovery and RPD values

FORM III 8270C SIM

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X4_8933.D

Lab ID: 280-50614-12 MSD Client ID: FSA-SD-DU01 MSD

COMPOUND	SPIKE ADDED (ng/Kg)	MSD CONCENTRATION (ng/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Benzo[b]fluoranthene	28400	1380000	104	16	28	37-120	E 4
Benzo[a]pyrene	28400	597000	46	24	30	20-120	4
Benzo[a]anthracene	28400	388000	52	34	40	36-120	4
Benzo[k]fluoranthene	28400	451000	89	21	28	46-120	4
Benzo[g,h,i]perylene	28400	556000	61	18	30	20-123	4
Phenanthrene	28400	275000	144	66	42	44-120	4 F2
Anthracene	28400	244000	31	20	50	43-120	4
Dibenz(a,h)anthracene	28400	169000	62	18	25	20-120	4
Chrysene	28400	515000	7	28	41	34-120	4
Acenaphthene	28400	39300	98	10	50	35-120	
Acenaphthylene	28400	232000	104	24	50	41-120	4
Fluoranthene	28400	611000	125	56	30	45-120	4 F2
Fluorene	28400	44500	84	36	50	44-120	
Pyrene	28400	723000	171	40	30	43-120	4 F2
Indeno[1,2,3-cd]pyrene	28400	606000	21	21	50	20-127	4
Naphthalene	28400	116000	111	8	50	44-120	

Column to be used to flag recovery and RPD values

FORM III 8270C SIM

GC/MS SEMI VOA TRIPLICATE SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X4_8906.D

Lab ID: 280-50614-5 TRL Client ID: FSA-SD-DU04-A TRL

COMPOUND	SAMPLE CONC. (ng/Kg)	DUPLICATE CONC. (ng/Kg)	TRIPLICATE CONC. (ng/Kg)	%RSD	%RSD LIMIT	#
Benzo[b]fluoranthene	39000	98400	35600	50	15	
Benzo[a]pyrene	23000	77400	20800	64	15	
Benzo[a]anthracene	16000	56400	13300	69	15	
Benzo[k]fluoranthene	13000	34700	10900	54	15	
Benzo[g,h,i]perylene	22000	55800	19900	51	15	
Phenanthrene	10000	12400	9160	13	15	
Anthracene	4300 J	8020	4370 J	31	15	
Dibenz(a,h)anthracene	5300	12700	5090	46	15	
Chrysene	21000	73900	17900	68	15	
Acenaphthene	740 J	1500 J	769 J	35	15	
Acenaphthylene	4400 J	8550	4350 J	34	15	
Fluoranthene	29000	64600	22900	48	15	
Fluorene	2200 J	3000 J	2150 J	15	15	
Pyrene	32000	74100	27100	47	15	
Indeno[1,2,3-cd]pyrene	22000	57200	20000	52	15	
2-Methylnaphthalene	3300 J	5870	4470 J	24	15	
Naphthalene	4100 J	8850	5140	34	15	

Column to be used to flag %RSD values

8270C SIM

GC/MS SEMI VOA TRIPLICATE SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X4_8927.D

Lab ID: 280-50614-9 TRL Client ID: FSA-SD-DU03-A TRL

COMPOUND	SAMPLE CONC. (ng/Kg)	DUPLICATE CONC. (ng/Kg)	TRIPLICATE CONC. (ng/Kg)	%RSD	%RSD LIMIT	#
Phenanthrene	140000	91100	86000	24	15	
Anthracene	92000	82500	102000	9	15	
Dibenz(a,h)anthracene	75000	65500	73900	6	15	
Acenaphthene	11000 J	10200 J	6880	18	15	
Acenaphthylene	100000	92400	85400	8	15	
Fluorene	13000 J	12400 J	11000	6	15	
2-Methylnaphthalene	69000	52800	47300	16	15	
Naphthalene	47000	40700	40500	7	15	

Column to be used to flag %RSD values

8270C SIM

GC/MS SEMI VOA TRIPLICATE SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: X4_8928.D

Lab ID: 280-50614-9 TRL DL Client ID: FSA-SD-DU03-A TRL DL

COMPOUND	SAMPLE CONC. (ng/Kg)	DUPLICATE CONC. (ng/Kg)	TRIPLICATE CONC. (ng/Kg)	%RSD	%RSD LIMIT	#
Benzo[b]fluoranthene	670000	607000	661000	4	15	
Benzo[a]pyrene	290000	257000	283000	5	15	
Benzo[a]anthracene	190000	172000	187000	5	15	
Benzo[k]fluoranthene	210000	180000	210000	7	15	
Benzo[g,h,i]perylene	260000	227000	255000	6	15	
Chrysene	270000	238000	259000	5	15	
Fluoranthene	340000	267000	293000	10	15	
Pyrene	400000	331000	358000	7	15	
Indeno[1,2,3-cd]pyrene	290000	249000	282000	6	15	

Column to be used to flag %RSD values

8270C SIM

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Lab File ID: X4_8896.D Lab Sample ID: MB 280-206688/1-A

Matrix: Water Date Extracted: 12/26/2013 17:46

Instrument ID: SMS_X4 Date Analyzed: 12/31/2013 18:51

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-206688/2-A	X4_8897.D	12/31/2013 19:19
	LCSD 280-206688/3-A	X4_8898.D	12/31/2013 19:47
FSA-FB-01	280-50614-14	X4_8899.D	12/31/2013 20:16
FSA-EB-01	280-50614-15	X4_8900.D	12/31/2013 20:44

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Lab File ID: X4_8901.D Lab Sample ID: MB 280-206899/1-A

Matrix: Solid Date Extracted: 12/29/2013 10:49

Instrument ID: SMS_X4 Date Analyzed: 12/31/2013 21:12

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-206899/2-A	X4_8902.D	12/31/2013 21:40
FSA-SD-DU05	280-50614-4	X4_8903.D	12/31/2013 22:08
FSA-SD-DU04-A	280-50614-5	X4_8904.D	12/31/2013 22:36
FSA-SD-DU04-A DU	280-50614-5 DU	X4_8905.D	12/31/2013 23:04
FSA-SD-DU04-A TRL	280-50614-5 TRL	X4_8906.D	12/31/2013 23:32
FSA-SD-DU04-B	280-50614-6	X4_8907.D	12/31/2013 23:59
FSA-SD-DU04-C	280-50614-7	X4_8908.D	01/01/2014 00:27
FSA-SD-CO	280-50614-8	X4_8909.D	01/01/2014 00:55
FSA-SD-DU03-A	280-50614-9	X4_8910.D	01/01/2014 01:23
FSA-SD-DU03-A DL	280-50614-9 DL	X4_8924.D	01/02/2014 18:01
FSA-SD-DU03-A DU	280-50614-9 DU	X4_8925.D	01/02/2014 18:29
FSA-SD-DU03-A DU DL	280-50614-9 DU DL	X4_8926.D	01/02/2014 18:57
FSA-SD-DU03-A TRL	280-50614-9 TRL	X4_8927.D	01/02/2014 19:24
FSA-SD-DU03-A TRL DL	280-50614-9 TRL DL	X4_8928.D	01/02/2014 19:52
FSA-SD-DU03-B	280-50614-10	X4_8929.D	01/02/2014 20:20
FSA-SD-DU03-C	280-50614-11	X4_8930.D	01/02/2014 20:48
FSA-SD-DU01	280-50614-12	X4_8931.D	01/02/2014 21:16
FSA-SD-DU01 MS	280-50614-12 MS	X4_8932.D	01/02/2014 21:44
FSA-SD-DU01 MSD	280-50614-12 MSD	X4_8933.D	01/02/2014 22:12
FSA-SD-DU02	280-50614-13	X4_8934.D	01/02/2014 22:40
FSA-SD-DU03-B DL	280-50614-10 DL	X4_8950.D	01/06/2014 13:20
FSA-SD-DU03-C DL	280-50614-11 DL	X4_8951.D	01/06/2014 13:48
FSA-SD-DU01 DL	280-50614-12 DL	X4_8952.D	01/06/2014 14:16
FSA-SD-DU02 DL	280-50614-13 DL	X4_8953.D	01/06/2014 14:43

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Lab File ID: X4_8917.D Lab Sample ID: MB 280-207028/1-A

Matrix: Solid Date Extracted: 12/30/2013 19:55

Instrument ID: SMS_X4 Date Analyzed: 01/02/2014 14:25

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-207028/2-A	X4_8918.D	01/02/2014 15:13
FSA-SF-CT	280-50614-1	X4_8919.D	01/02/2014 15:41
FSA-SF-CT MS	280-50614-1 MS	X4_8920.D	01/02/2014 16:09
FSA-SF-CT MSD	280-50614-1 MSD	X4_8921.D	01/02/2014 16:37
FSA-SF-SCW	280-50614-2	X4_8922.D	01/02/2014 17:05
FSA-SF-SCW-DUP	280-50614-3	X4_8923.D	01/02/2014 17:33
FSA-SF-SCW DL	280-50614-2 DL	X4_8948.D	01/06/2014 12:25
FSA-SF-SCW-DUP DL	280-50614-3 DL	X4_8949.D	01/06/2014 12:52

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Lab File ID: X4_8608.D DFTPP Injection Date: 11/30/2013

Instrument ID: SMS_X4 DFTPP Injection Time: 08:47

Analysis Batch No.: 203266

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	38.5	
68	Less than 2.0 % of mass 69	0.7	(1.6)1
69	Mass 69 relative abundance	42.6	
70	Less than 2.0 % of mass 69	0.2	(0.4)1
127	40.0 - 60.0 % of mass 198	51.5	
197	Less than 1.0 % of mass 198	0.1	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.8	
275	10.0 - 30.0 % of mass 198	24.1	
365	Greater than 1.0 % of mass 198	2.8	
441	Present but less than mass 443	11.6	(73.3)3
442	Greater than 40.0 % of mass 198	81.9	
443	17.0 - 23.0 % of mass 442	15.9	(19.4)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD0020 280-203266/3	X4_8609.D	11/30/2013	09:01
	STD0100 280-203266/4	X4_8610.D	11/30/2013	09:30
	STD0300 280-203266/5	X4_8611.D	11/30/2013	09:57
	ICIS 280-203266/6	X4_8612.D	11/30/2013	10:25
	STD1200 280-203266/7	X4_8613.D	11/30/2013	10:53
	STD2500 280-203266/8	X4_8614.D	11/30/2013	11:21
	STD5000 280-203266/9	X4_8615.D	11/30/2013	11:48
	STD10000 280-203266/10	X4_8616.D	11/30/2013	12:16
	ICV 280-203266/11	X4_8617.D	11/30/2013	12:44

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Lab File ID: X4_8885.D DFTPP Injection Date: 12/31/2013

Instrument ID: SMS_X4 DFTPP Injection Time: 13:43

Analysis Batch No.: 207101

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	42.0	
68	Less than 2.0 % of mass 69	0.8	(1.7)1
69	Mass 69 relative abundance	44.9	
70	Less than 2.0 % of mass 69	0.2	(0.5)1
127	40.0 - 60.0 % of mass 198	50.4	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.7	
275	10.0 - 30.0 % of mass 198	26.1	
365	Greater than 1.0 % of mass 198	3.5	
441	Present but less than mass 443	13.3	(75.1)3
442	Greater than 40.0 % of mass 198	93.2	
443	17.0 - 23.0 % of mass 442	17.7	(19.0)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-207101/2	X4_8886.D	12/31/2013	13:57
	MB 280-206688/1-A	X4_8896.D	12/31/2013	18:51
	LCS 280-206688/2-A	X4_8897.D	12/31/2013	19:19
	LCSD 280-206688/3-A	X4_8898.D	12/31/2013	19:47
FSA-FB-01	280-50614-14	X4_8899.D	12/31/2013	20:16
FSA-EB-01	280-50614-15	X4_8900.D	12/31/2013	20:44
	MB 280-206899/1-A	X4_8901.D	12/31/2013	21:12
	LCS 280-206899/2-A	X4_8902.D	12/31/2013	21:40
FSA-SD-DU05	280-50614-4	X4_8903.D	12/31/2013	22:08
FSA-SD-DU04-A	280-50614-5	X4_8904.D	12/31/2013	22:36
FSA-SD-DU04-A DU	280-50614-5 DU	X4_8905.D	12/31/2013	23:04
FSA-SD-DU04-A TRL	280-50614-5 TRL	X4_8906.D	12/31/2013	23:32
FSA-SD-DU04-B	280-50614-6	X4_8907.D	12/31/2013	23:59
FSA-SD-DU04-C	280-50614-7	X4_8908.D	01/01/2014	00:27
FSA-SD-CO	280-50614-8	X4_8909.D	01/01/2014	00:55
FSA-SD-DU03-A	280-50614-9	X4_8910.D	01/01/2014	01:23

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Lab File ID: X4_8915.D DFTPP Injection Date: 01/02/2014

Instrument ID: SMS_X4 DFTPP Injection Time: 13:20

Analysis Batch No.: 207236

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	38.8	
68	Less than 2.0 % of mass 69	0.7	(1.6)1
69	Mass 69 relative abundance	41.8	
70	Less than 2.0 % of mass 69	0.2	(0.4)1
127	40.0 - 60.0 % of mass 198	48.4	
197	Less than 1.0 % of mass 198	0.3	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.5	
275	10.0 - 30.0 % of mass 198	27.7	
365	Greater than 1.0 % of mass 198	3.9	
441	Present but less than mass 443	16.0	(73.0)3
442	Greater than 40.0 % of mass 198	113.3	
443	17.0 - 23.0 % of mass 442	21.9	(19.3)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-207236/2	X4_8916.D	01/02/2014	13:45
	MB 280-207028/1-A	X4_8917.D	01/02/2014	14:25
	LCS 280-207028/2-A	X4_8918.D	01/02/2014	15:13
FSA-SF-CT	280-50614-1	X4_8919.D	01/02/2014	15:41
FSA-SF-CT MS	280-50614-1 MS	X4_8920.D	01/02/2014	16:09
FSA-SF-CT MSD	280-50614-1 MSD	X4_8921.D	01/02/2014	16:37
FSA-SF-SCW	280-50614-2	X4_8922.D	01/02/2014	17:05
FSA-SF-SCW-DUP	280-50614-3	X4_8923.D	01/02/2014	17:33
FSA-SD-DU03-A DL	280-50614-9 DL	X4_8924.D	01/02/2014	18:01
FSA-SD-DU03-A DU	280-50614-9 DU	X4_8925.D	01/02/2014	18:29
FSA-SD-DU03-A DU DL	280-50614-9 DU DL	X4_8926.D	01/02/2014	18:57
FSA-SD-DU03-A TRL	280-50614-9 TRL	X4_8927.D	01/02/2014	19:24
FSA-SD-DU03-A TRL DL	280-50614-9 TRL DL	X4_8928.D	01/02/2014	19:52
FSA-SD-DU03-B	280-50614-10	X4_8929.D	01/02/2014	20:20
FSA-SD-DU03-C	280-50614-11	X4_8930.D	01/02/2014	20:48
FSA-SD-DU01	280-50614-12	X4_8931.D	01/02/2014	21:16
FSA-SD-DU01 MS	280-50614-12 MS	X4_8932.D	01/02/2014	21:44
FSA-SD-DU01 MSD	280-50614-12 MSD	X4_8933.D	01/02/2014	22:12
FSA-SD-DU02	280-50614-13	X4_8934.D	01/02/2014	22:40

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Lab File ID: X4_8946.D DFTPP Injection Date: 01/06/2014

Instrument ID: SMS_X4 DFTPP Injection Time: 11:13

Analysis Batch No.: 207515

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	39.1	
68	Less than 2.0 % of mass 69	0.7	(1.7)1
69	Mass 69 relative abundance	41.6	
70	Less than 2.0 % of mass 69	0.2	(0.5)1
127	40.0 - 60.0 % of mass 198	49.1	
197	Less than 1.0 % of mass 198	0.1	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.4	
275	10.0 - 30.0 % of mass 198	27.9	
365	Greater than 1.0 % of mass 198	3.9	
441	Present but less than mass 443	16.0	(74.9)3
442	Greater than 40.0 % of mass 198	111.8	
443	17.0 - 23.0 % of mass 442	21.3	(19.1)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-207515/2	X4_8947.D	01/06/2014	11:54
FSA-SF-SCW DL	280-50614-2 DL	X4_8948.D	01/06/2014	12:25
FSA-SF-SCW-DUP DL	280-50614-3 DL	X4_8949.D	01/06/2014	12:52
FSA-SD-DU03-B DL	280-50614-10 DL	X4_8950.D	01/06/2014	13:20
FSA-SD-DU03-C DL	280-50614-11 DL	X4_8951.D	01/06/2014	13:48
FSA-SD-DU01 DL	280-50614-12 DL	X4_8952.D	01/06/2014	14:16
FSA-SD-DU02 DL	280-50614-13 DL	X4_8953.D	01/06/2014	14:43

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Sample No.: ICIS 280-203266/6 Date Analyzed: 11/30/2013 10:25

Instrument ID: SMS_X4 GC Column: Vf-5MS (30.25) ID: 0.25(mm)

Lab File ID (Standard): X4_8612.D Heated Purge: (Y/N) N

Calibration ID: 16353

		ANT		PHN		CRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		29160	6.23	52292	7.53	51657	11.94
UPPER LIMIT		58320	6.73	104584	8.03	103314	12.44
LOWER LIMIT		14580	5.73	26146	7.03	25829	11.44
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-203266/11		22263	6.23	39619	7.53	38623	11.94
MB 280-206688/1-A		19059	6.23	37390	7.53	43275	11.96
LCS 280-206688/2-A		18679	6.23	34885	7.53	43500	11.95
LCSD 280-206688/3-A		18039	6.23	35644	7.53	43869	11.95
280-50614-14	FSA-FB-01	18182	6.23	36797	7.53	42011	11.96
280-50614-15	FSA-EB-01	19195	6.23	38770	7.53	42941	11.95
MB 280-206899/1-A		20197	6.23	36977	7.53	37684	11.95
LCS 280-206899/2-A		20780	6.23	38098	7.53	39898	11.95
280-50614-4	FSA-SD-DU05	21203	6.23	38775	7.53	46496	11.95
280-50614-5	FSA-SD-DU04-A	23133	6.23	40868	7.53	46610	11.95
280-50614-5 DU	FSA-SD-DU04-A DU	24860	6.23	42984	7.53	46508	11.95
280-50614-5 TRL	FSA-SD-DU04-A TRL	25126	6.23	43225	7.53	48161	11.95
280-50614-6	FSA-SD-DU04-B	22746	6.23	40553	7.53	46974	11.95
280-50614-7	FSA-SD-DU04-C	24410	6.23	45056	7.53	48253	11.95
280-50614-8	FSA-SD-CO	22942	6.23	40903	7.53	48223	11.95
280-50614-9	FSA-SD-DU03-A	23892	6.23	46052	7.53	53163	11.96
CCV 280-207236/2		15344	6.24	29741	7.53	37517	11.96
MB 280-207028/1-A		17662	6.24	32305	7.53	35827	11.96
LCS 280-207028/2-A		18819	6.24	35505	7.53	39296	11.96
280-50614-1	FSA-SF-CT	23648	6.23	38750	7.53	43045	11.96
280-50614-1 MS	FSA-SF-CT MS	23814	6.23	38844	7.53	45466	11.95
280-50614-1 MSD	FSA-SF-CT MSD	24995	6.23	38629	7.53	47419	11.96
280-50614-2	FSA-SF-SCW	21598	6.23	41726	7.53	53515	11.96
280-50614-3	FSA-SF-SCW-DUP	21592	6.23	42262	7.53	52018	11.96
280-50614-9 DL	FSA-SD-DU03-A DL	22837	6.23	44189	7.53	51470	11.96
280-50614-9 DU	FSA-SD-DU03-A DU	22472	6.23	44019	7.53	50934	11.96
280-50614-9 DU DL	FSA-SD-DU03-A DU DL	20327	6.23	41122	7.53	49622	11.96
280-50614-9 TRL	FSA-SD-DU03-A TRL	23185	6.23	41472	7.53	48749	11.96

ANT = Acenaphthene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C SIM

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Sample No.: ICIS 280-203266/6 Date Analyzed: 11/30/2013 10:25

Instrument ID: SMS_X4 GC Column: Vf-5MS (30.25) ID: 0.25(mm)

Lab File ID (Standard): X4_8612.D Heated Purge: (Y/N) N

Calibration ID: 16353

		ANT		PHN		CRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		29160	6.23	52292	7.53	51657	11.94
UPPER LIMIT		58320	6.73	104584	8.03	103314	12.44
LOWER LIMIT		14580	5.73	26146	7.03	25829	11.44
LAB SAMPLE ID	CLIENT SAMPLE ID						
280-50614-9 TRL DL	FSA-SD-DU03-A TRL DL	22336	6.23	43160	7.53	49230	11.96
280-50614-10	FSA-SD-DU03-B	23089	6.23	43381	7.53	50763	11.96
280-50614-11	FSA-SD-DU03-C	23116	6.23	44858	7.53	51015	11.96
280-50614-12	FSA-SD-DU01	23865	6.23	43638	7.53	51219	11.96
280-50614-12 MS	FSA-SD-DU01 MS	23612	6.23	44031	7.53	50956	11.96
280-50614-12 MSD	FSA-SD-DU01 MSD	22225	6.23	43440	7.53	51448	11.96
280-50614-13	FSA-SD-DU02	22318	6.24	43203	7.53	51986	11.96
CCV 280-207515/2		15462	6.24	31687	7.54	39656	11.98
280-50614-2 DL	FSA-SF-SCW DL	17798	6.24	36266	7.53	44388	11.96
280-50614-3 DL	FSA-SF-SCW-DUP DL	18415	6.23	36088	7.53	43714	11.96
280-50614-10 DL	FSA-SD-DU03-B DL	20624	6.23	39428	7.53	48157	11.96
280-50614-11 DL	FSA-SD-DU03-C DL	19380	6.23	37891	7.53	45828	11.96
280-50614-12 DL	FSA-SD-DU01 DL	21279	6.23	40461	7.53	48478	11.96
280-50614-13 DL	FSA-SD-DU02 DL	21073	6.23	40968	7.53	47655	11.96

ANT = Acenaphthene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C SIM

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SF-CT | Lab Sample ID: 280-50614-1

Matrix: Solid | Lab File ID: X4_8919.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 08:55

Extract. Method: 3546 | Date Extracted: 12/30/2013 19:55

Sample wt/vol: 31.1(g) | Date Analyzed: 01/02/2014 15:41

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 59.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	130000		12000	2900
50-32-8	Benzo[a]pyrene	77000		12000	1800
56-55-3	Benzo[a]anthracene	58000		12000	2200
207-08-9	Benzo[k]fluoranthene	43000		12000	2400
191-24-2	Benzo[g,h,i]perylene	63000		12000	2600
85-01-8	Phenanthrene	94000		12000	2600
120-12-7	Anthracene	22000		12000	1700
53-70-3	Dibenz(a,h)anthracene	16000		12000	3100
218-01-9	Chrysene	75000		12000	2400
83-32-9	Acenaphthene	11000	J	12000	380
208-96-8	Acenaphthylene	35000		12000	410
206-44-0	Fluoranthene	160000		12000	2400
86-73-7	Fluorene	14000		12000	1100
129-00-0	Pyrene	160000		12000	2600
193-39-5	Indeno[1,2,3-cd]pyrene	64000		12000	2600
91-57-6	2-Methylnaphthalene	39000		12000	740
91-20-3	Naphthalene	76000		12000	780

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	69		39-120
4165-60-0	Nitrobenzene-d5	85		42-120
1718-51-0	Terphenyl-d14	72		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D
Lims ID: 280-50614-B-1-A Lab Sample ID: 280-50614-1
Client ID: FSA-SF-CT
Sample Type: Client
Inject. Date: 02-Jan-2014 15:41:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-0018755-005
Misc. Info.: 280-50614-b-1-a =280-50614-B-1-A
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:11:12 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 10:09:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	96	23648	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	99	38750	600.0	
* 3 Chrysene-d12	240	11.956	11.964	-0.008	98	43045	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.189	-0.006	100	11241	424.8	
$ 5 2-Fluorobiphenyl	172	5.626	5.633	-0.007	100	19197	344.0	
$ 6 Terphenyl-d14	244	9.522	9.532	-0.010	95	16882	359.8	
42 1,4-Dioxane	88		2.100					
7 N-Nitrosodimethylamine	42		2.219					
14 Naphthalene	128	4.780	4.786	-0.006	100	69173	956.0	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	100	24694	482.6	
16 1-Methylnaphthalene	142	5.429	5.433	-0.004	100	17392	370.4	
17 Dimethyl phthalate	163	5.942	5.949	-0.007	99	27713	464.7	
19 Acenaphthylene	152	6.120	6.119	0.001	84	34375	435.9	
20 Acenaphthene	153	6.262	6.269	-0.007	92	6513	132.4	
18 Dibenzofuran	168	6.396	6.408	-0.012	90	58956	816.5	
21 Diethyl phthalate	149	6.521	6.527	-0.006	91	1476	24.8	
22 Fluorene	166	6.696	6.702	-0.006	0	10101	171.8	M
23 N-Nitrosodiphenylamine	169		6.771					
24 Phenanthrene	178	7.548	7.553	-0.005	97	93794	1181.1	
25 Anthracene	178	7.597	7.602	-0.005	79	21356	273.2	
26 Di-n-butyl phthalate	149	7.987	7.992	-0.005	92	21148	218.2	
27 Fluoranthene	202	8.974	8.979	-0.005	100	172625	2004.2	
28 Pyrene	202	9.348	9.359	-0.011	100	176167	1982.3	
29 Butyl benzyl phthalate	149		10.438					
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.821	-0.008	98	54423	972.3	
31 Benzo[a]anthracene	228	11.916	11.932	-0.016	99	63219	722.6	
32 Chrysene	228	12.027	12.035	-0.008	100	78106	944.1	M
33 Di-n-octyl phthalate	149		13.879					
34 Benzo[b]fluoranthene	252	15.257	15.264	-0.007	100	127967	1596.8	
35 Benzo[k]fluoranthene	252	15.343	15.357	-0.014	98	44513	540.0	
36 Benzo[a]pyrene	252	16.382	16.397	-0.015	99	74433	958.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.115	19.118	-0.003	99	61077	798.9	
37 Dibenz(a,h)anthracene	278	19.141	19.152	-0.011	67	15219	197.0	
39 Benzo[g,h,i]perylene	276	19.588	19.592	-0.004	100	64279	783.2	
41 Pentachlorophenol	266		0.0					
43 Benzidine	184		0.0					
45 Morpholine	1		0.0					
8 Pentachlorophenol_T	266		4.202					
10 Benzidine_T	184		5.323					
12 4,4'-DDD	235		5.753					
11 4,4'-DDE	246		5.795					
13 4,4'-DDT	235		6.075					
S 44 TPAH	1		0.0					

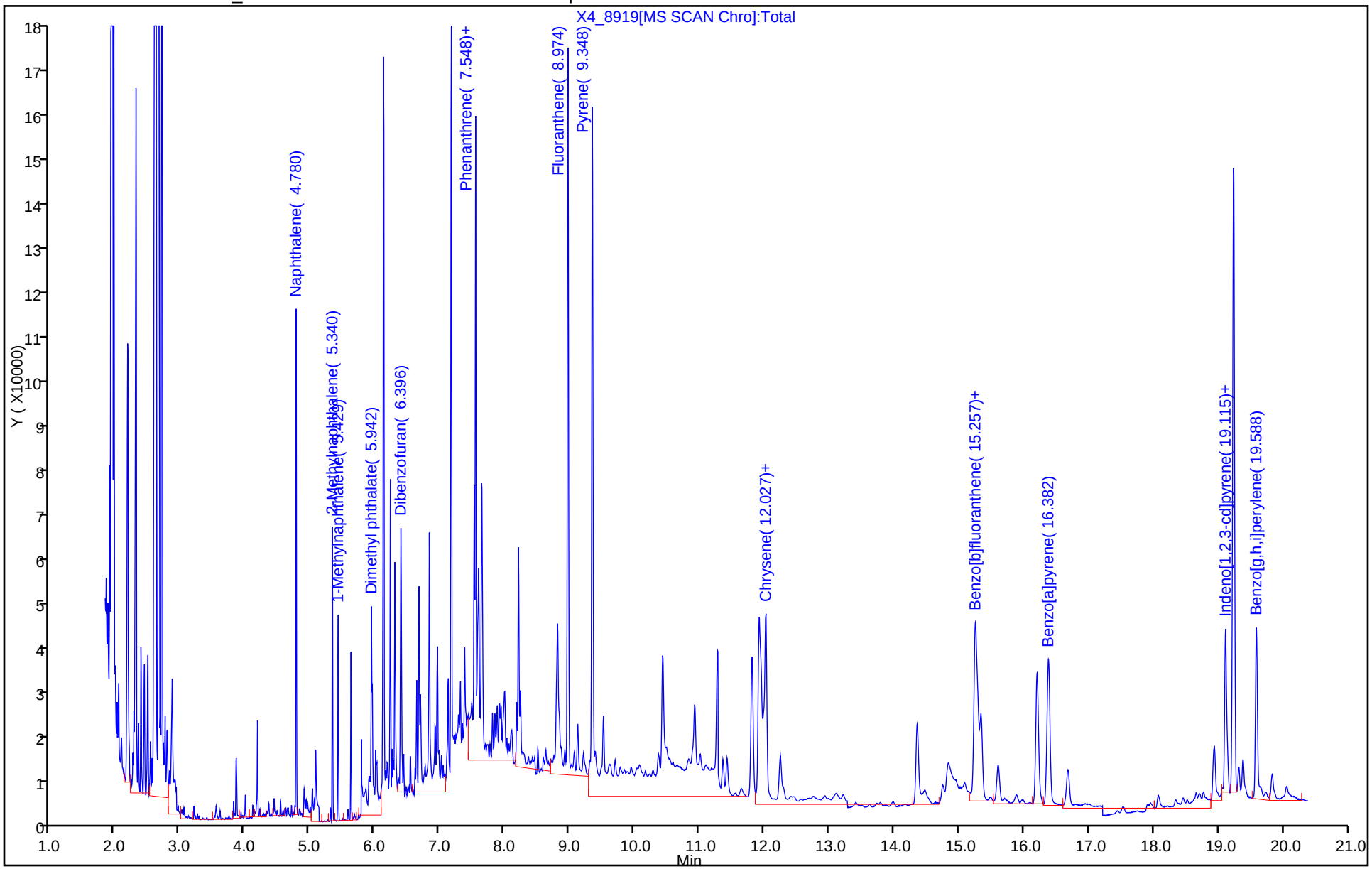
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1	Worklist Smp#:	5
Client ID:	FSA-SF-CT				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

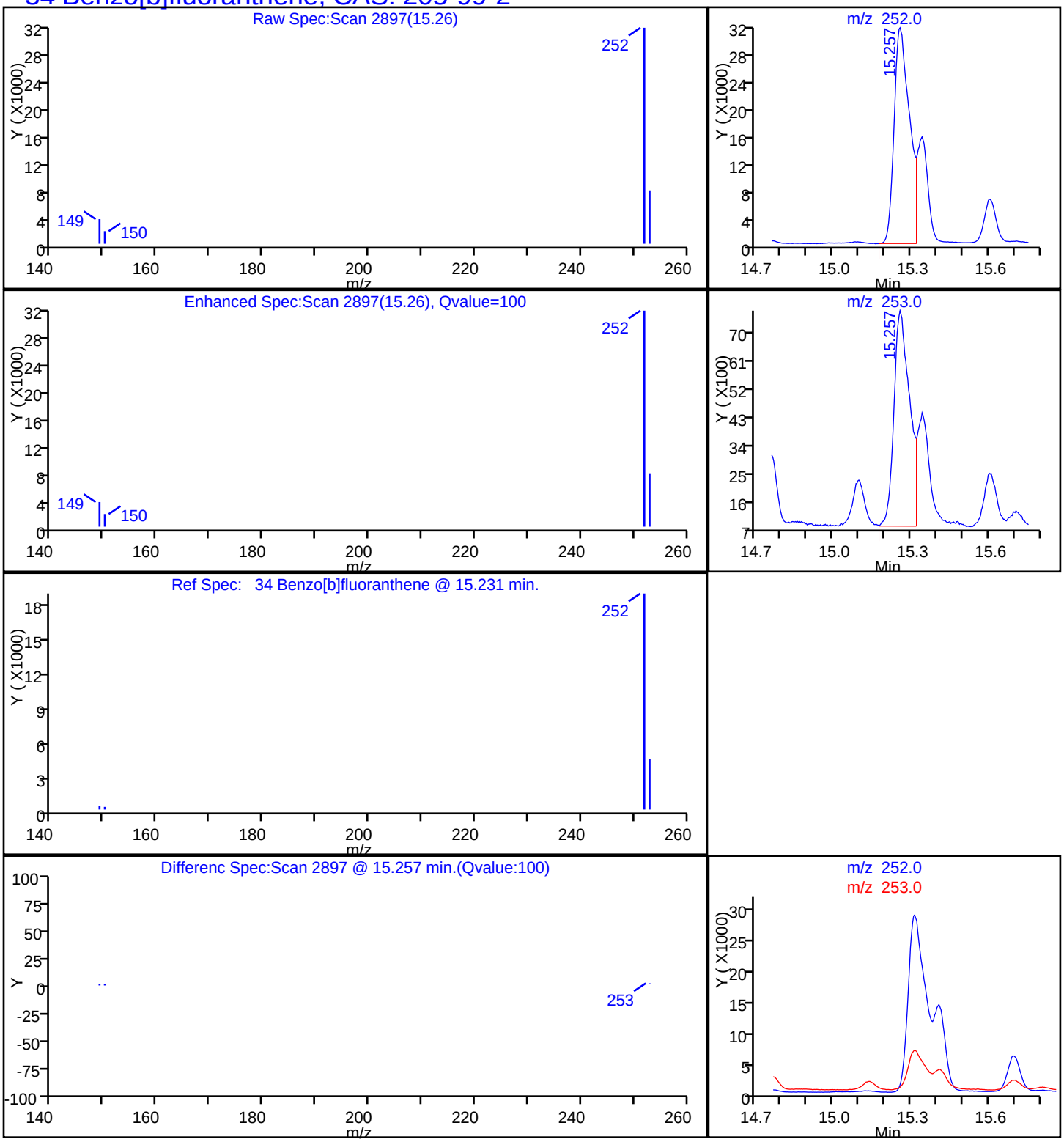


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

34 Benzo[b]fluoranthene, CAS: 205-99-2

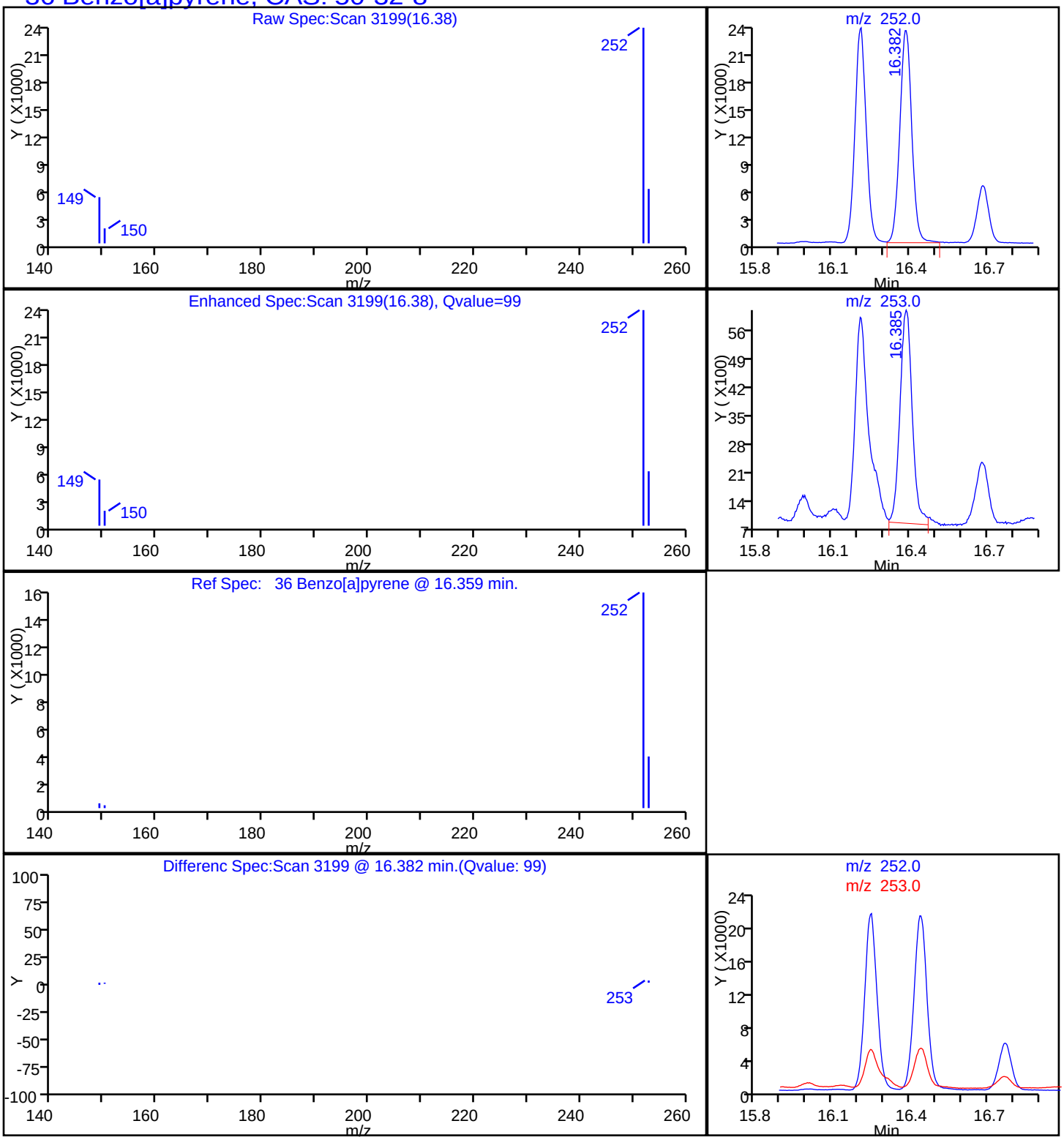


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[a]pyrene, CAS: 50-32-8

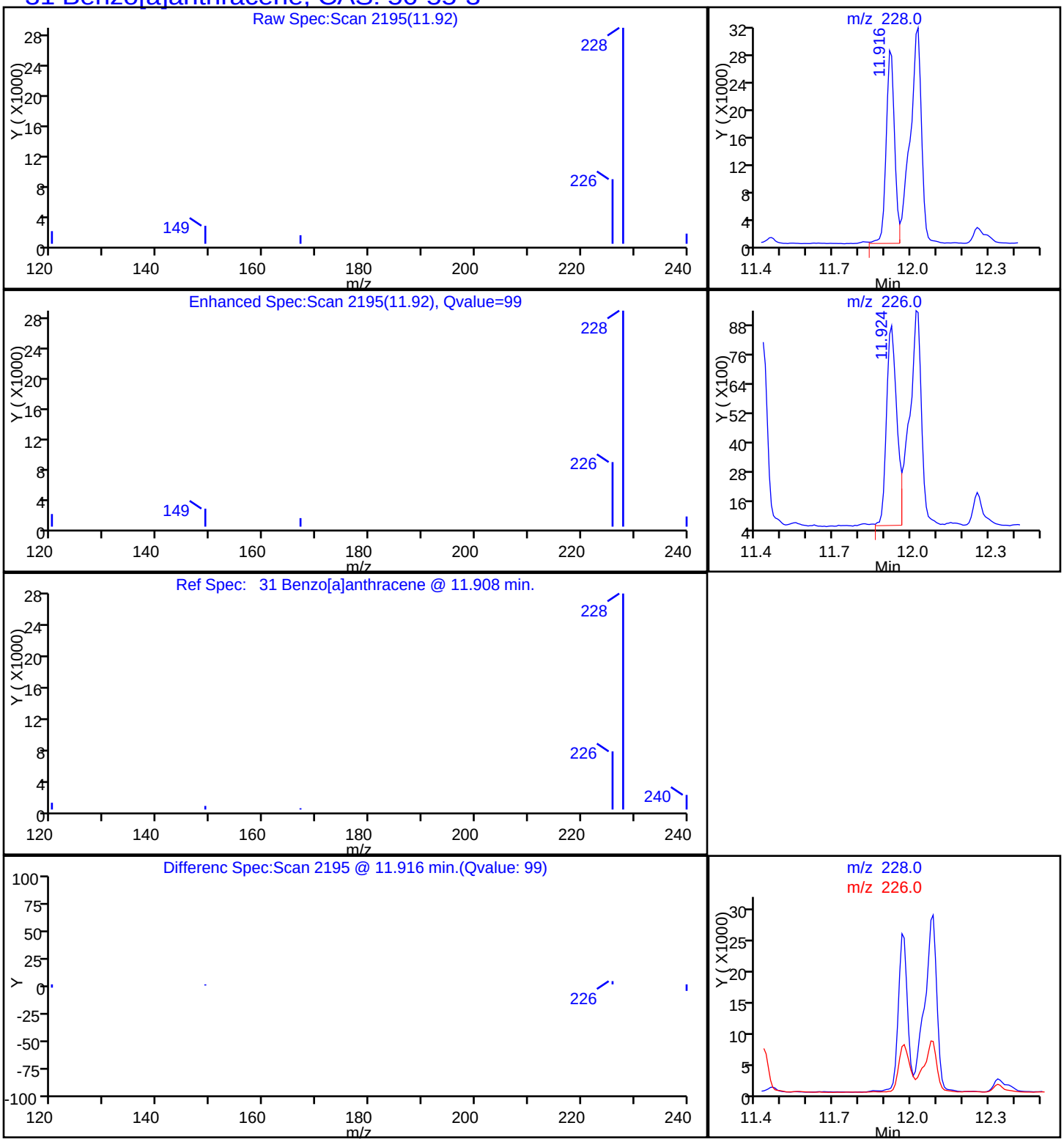


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3

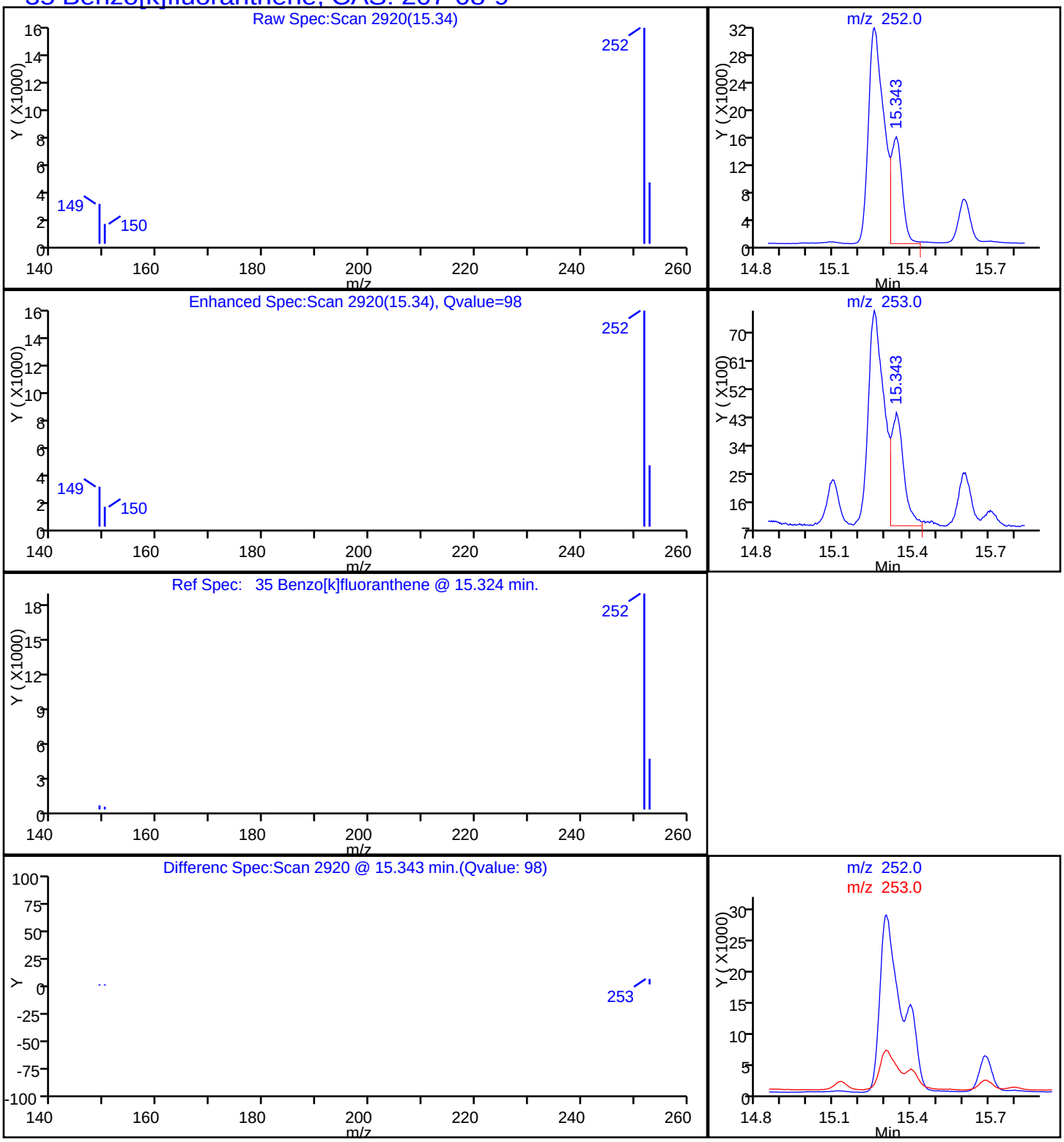


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9

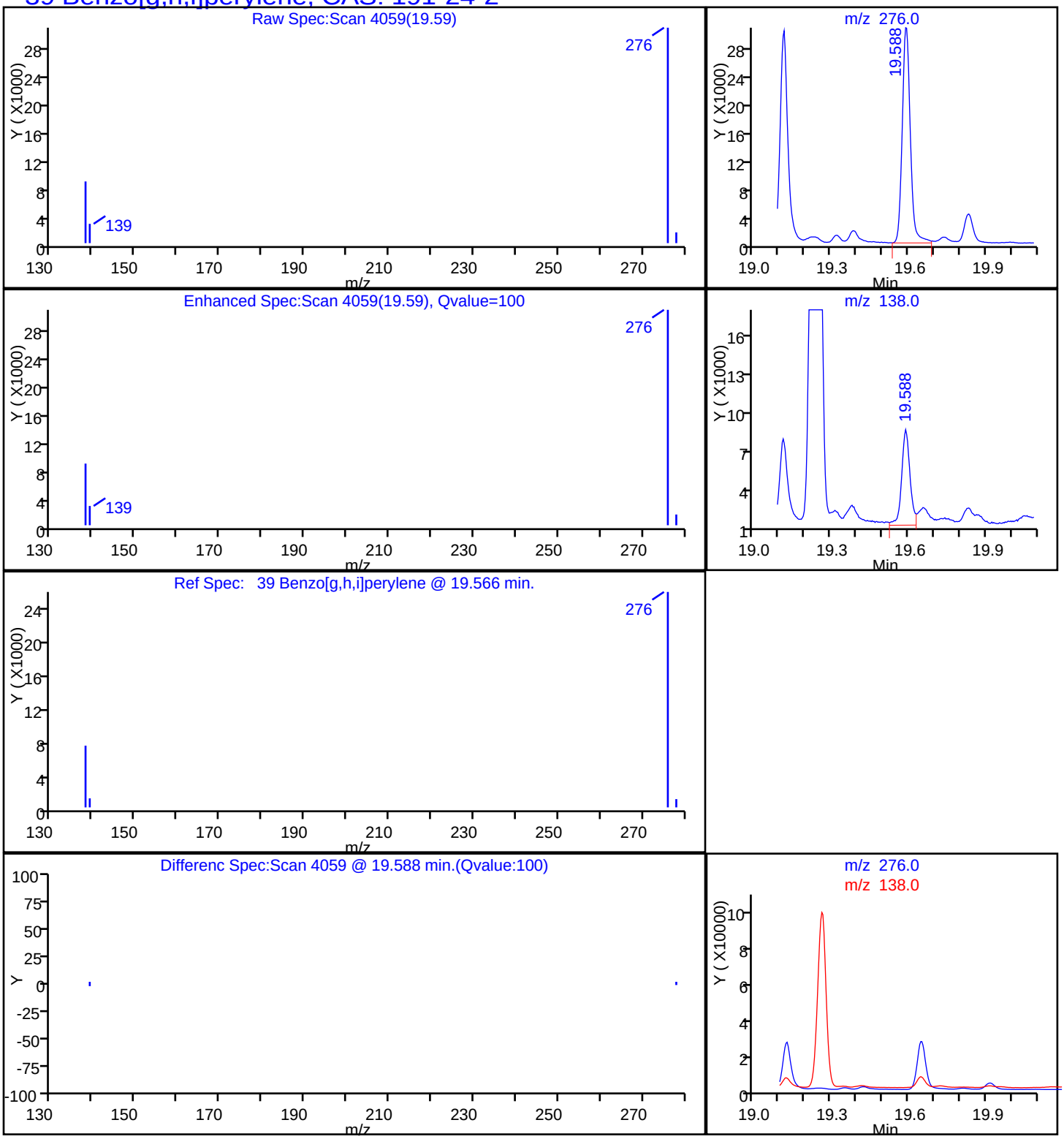


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[g,h,i]perylene, CAS: 191-24-2

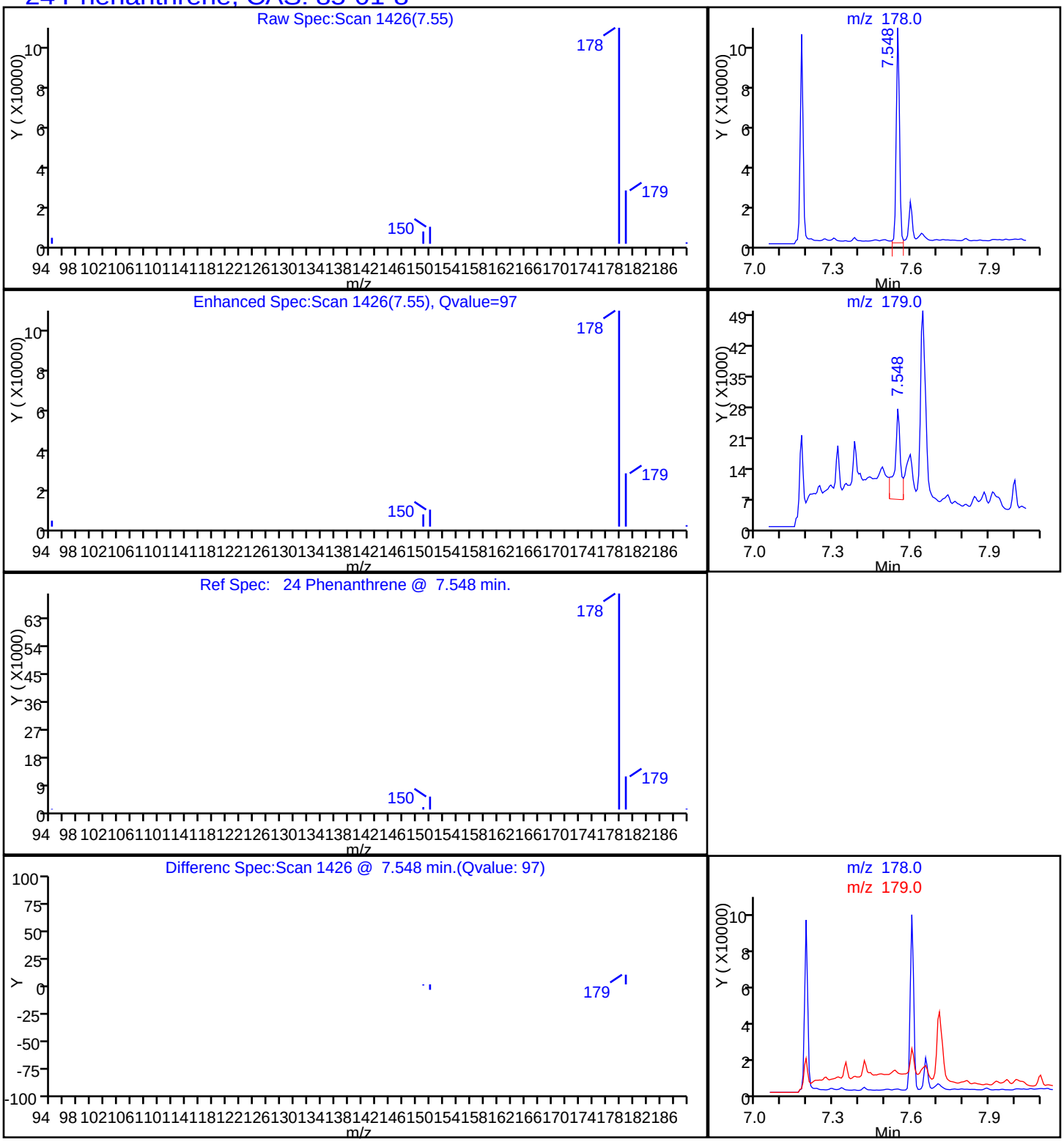


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8

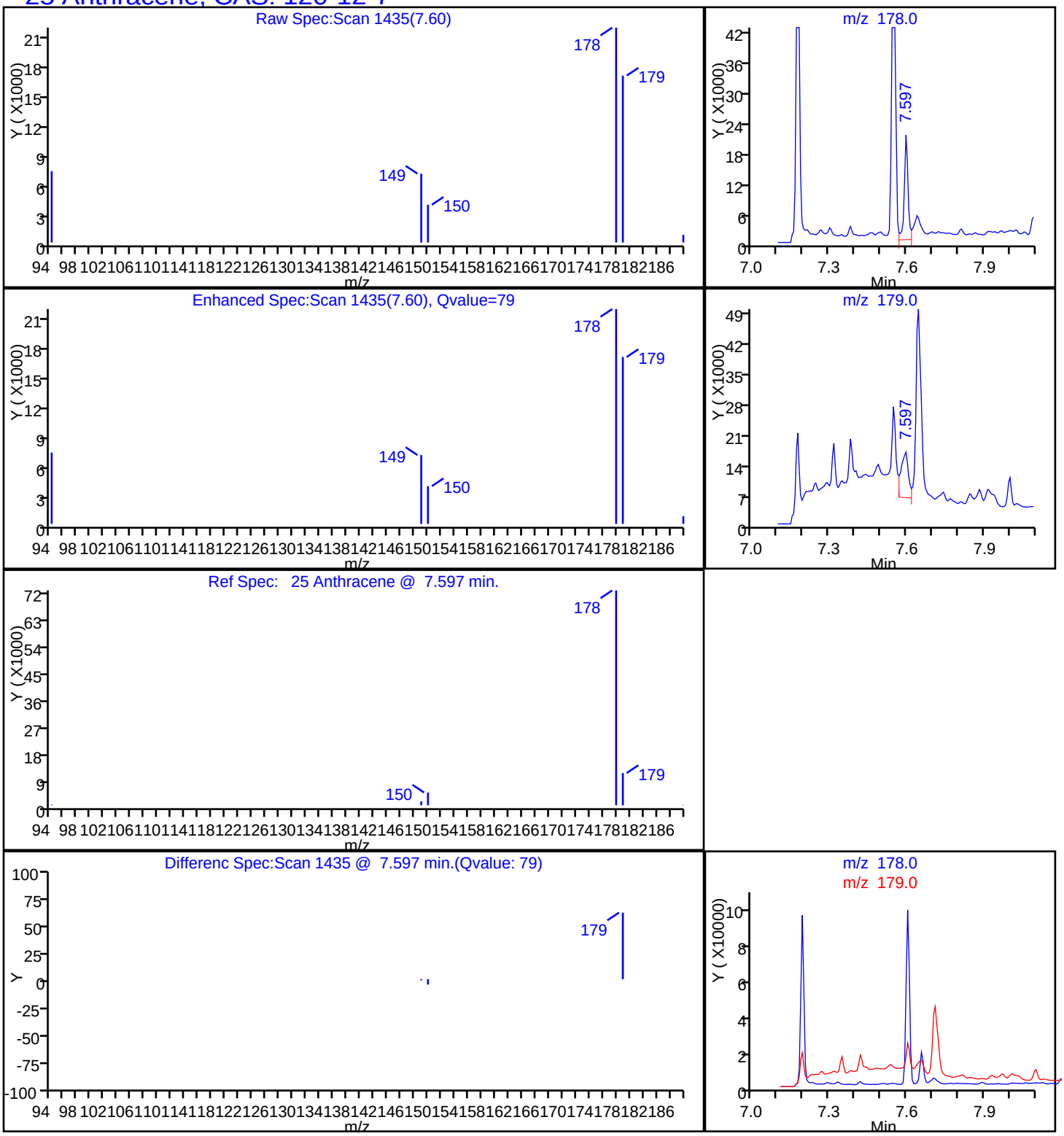


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7

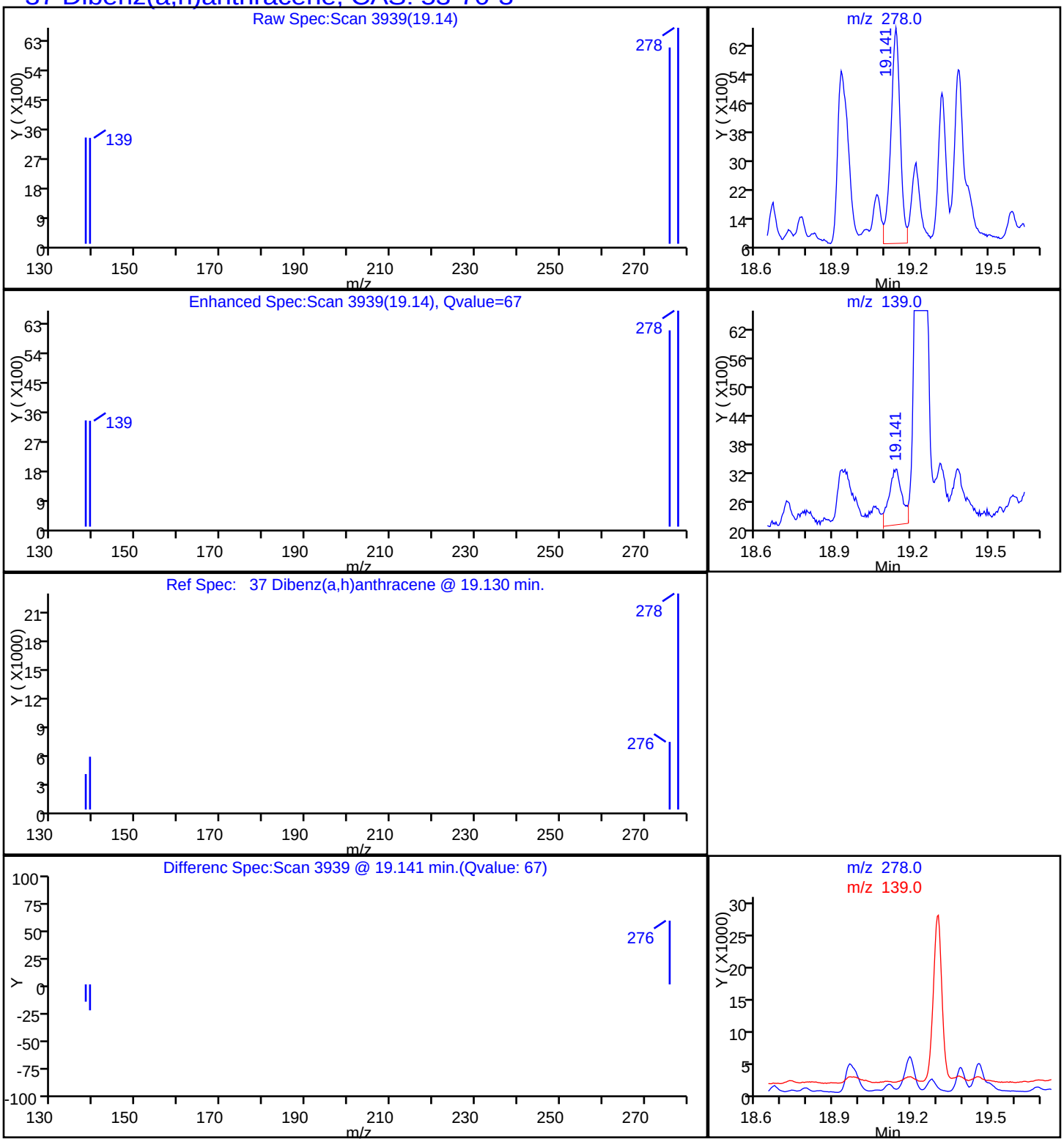


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3

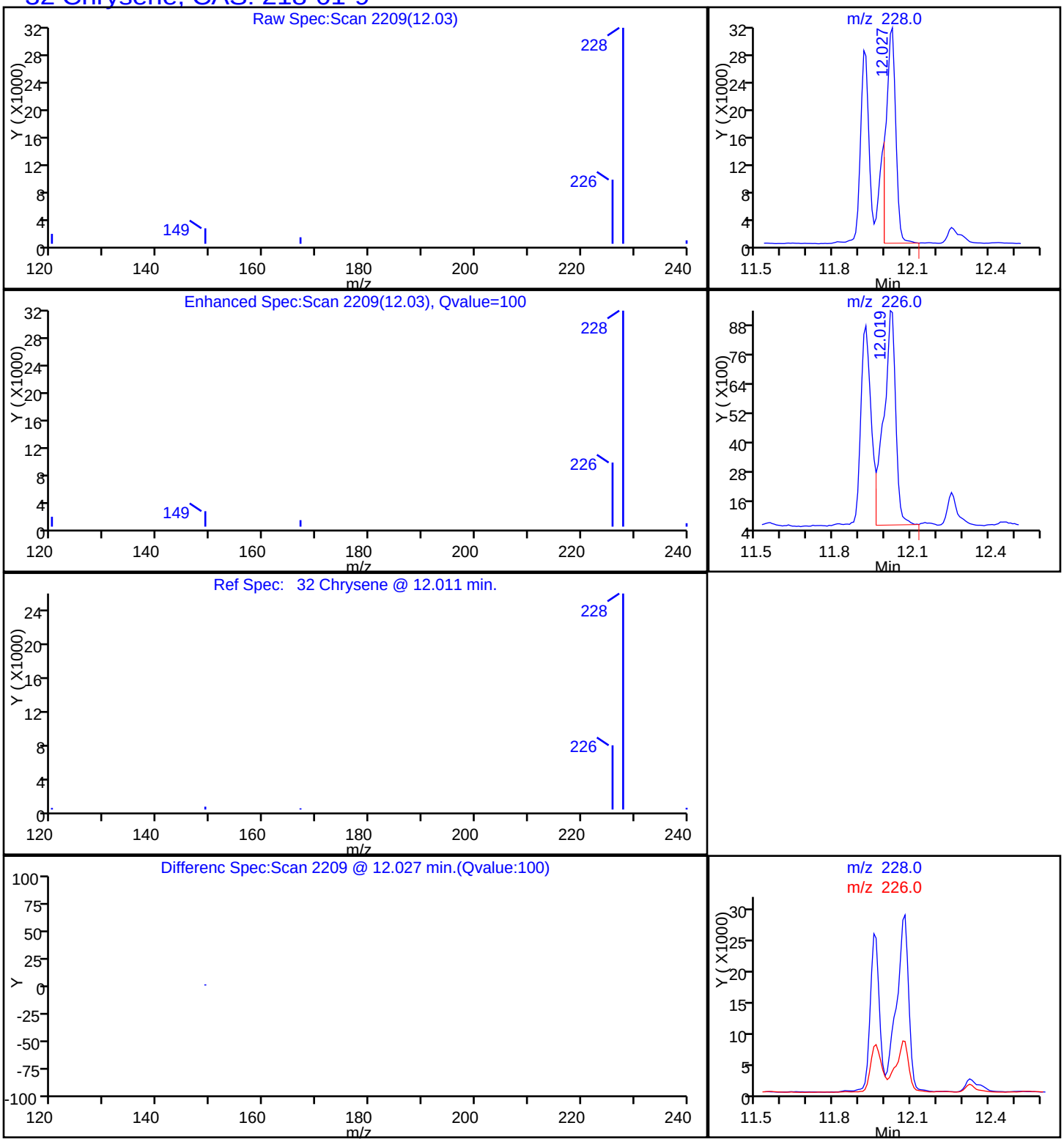


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

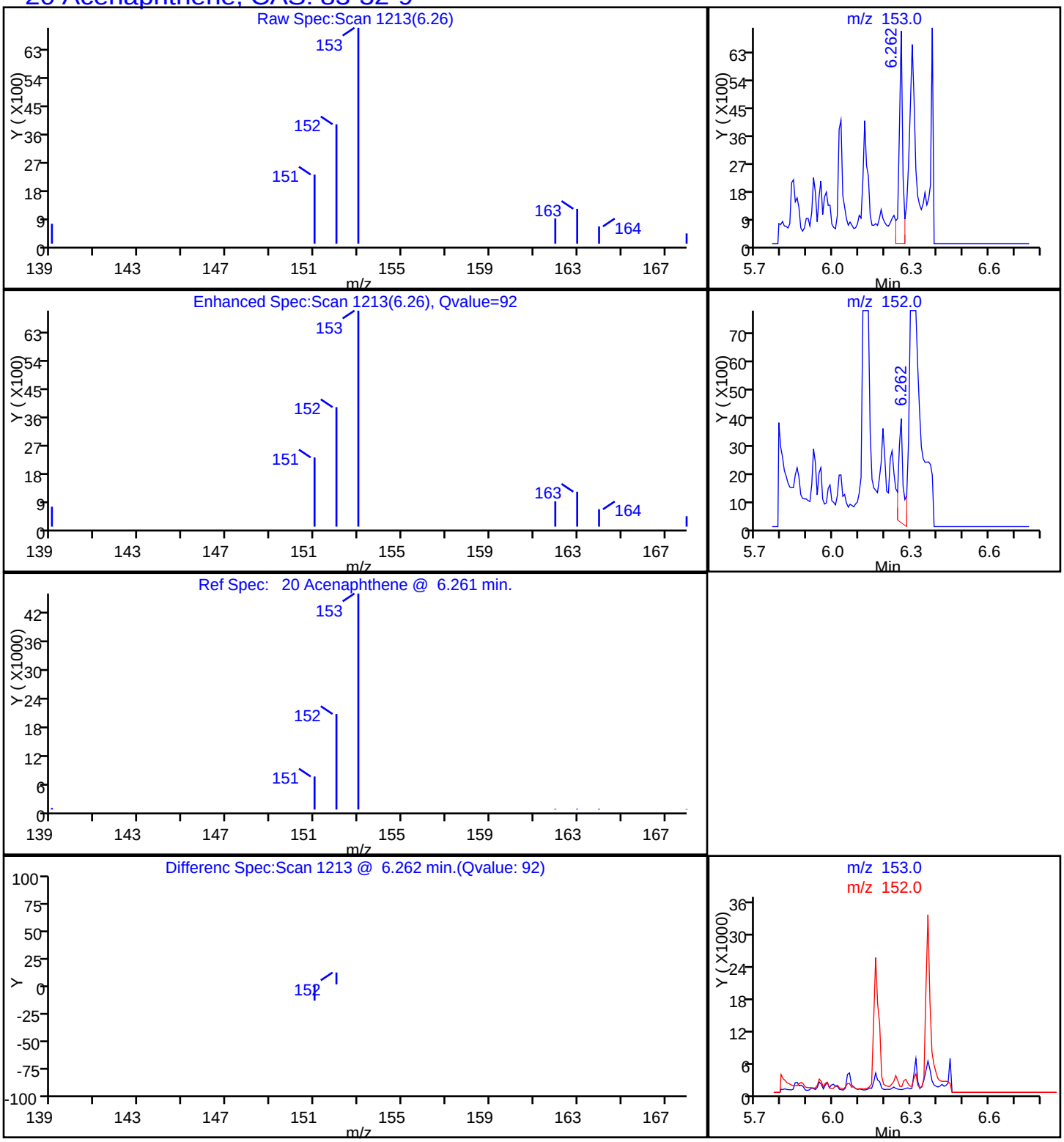


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9

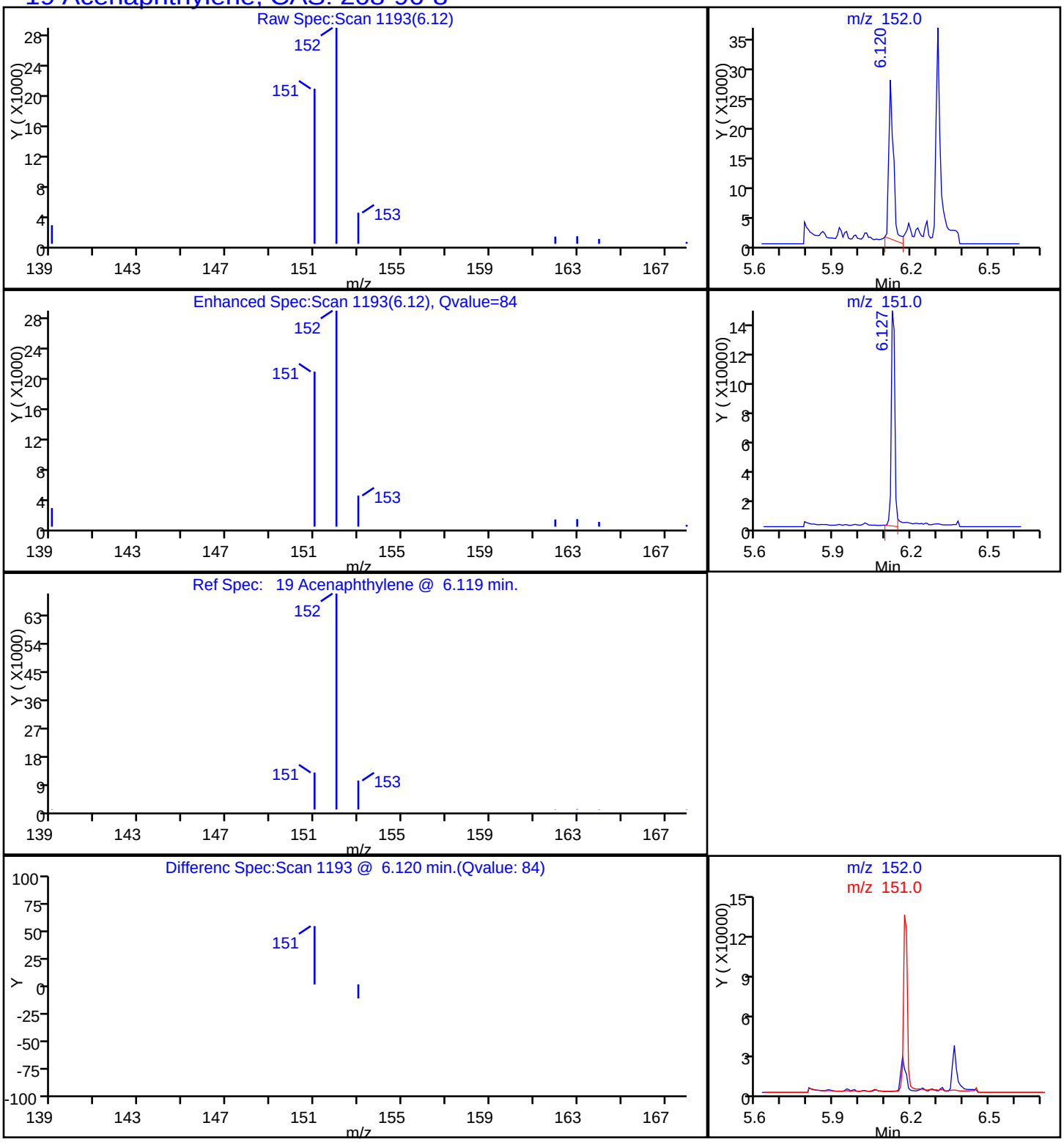


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

19 Acenaphthylene, CAS: 208-96-8

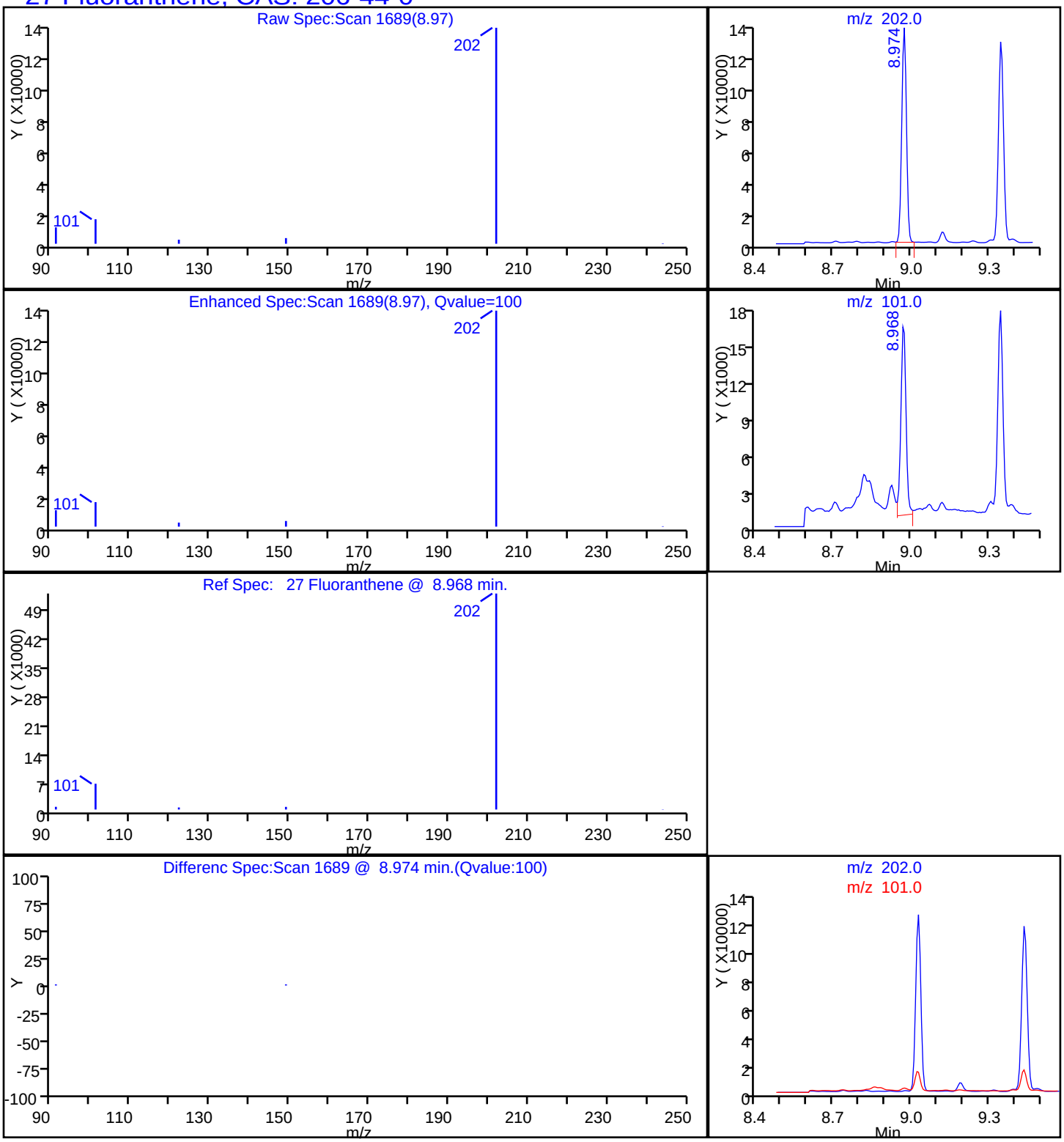


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0

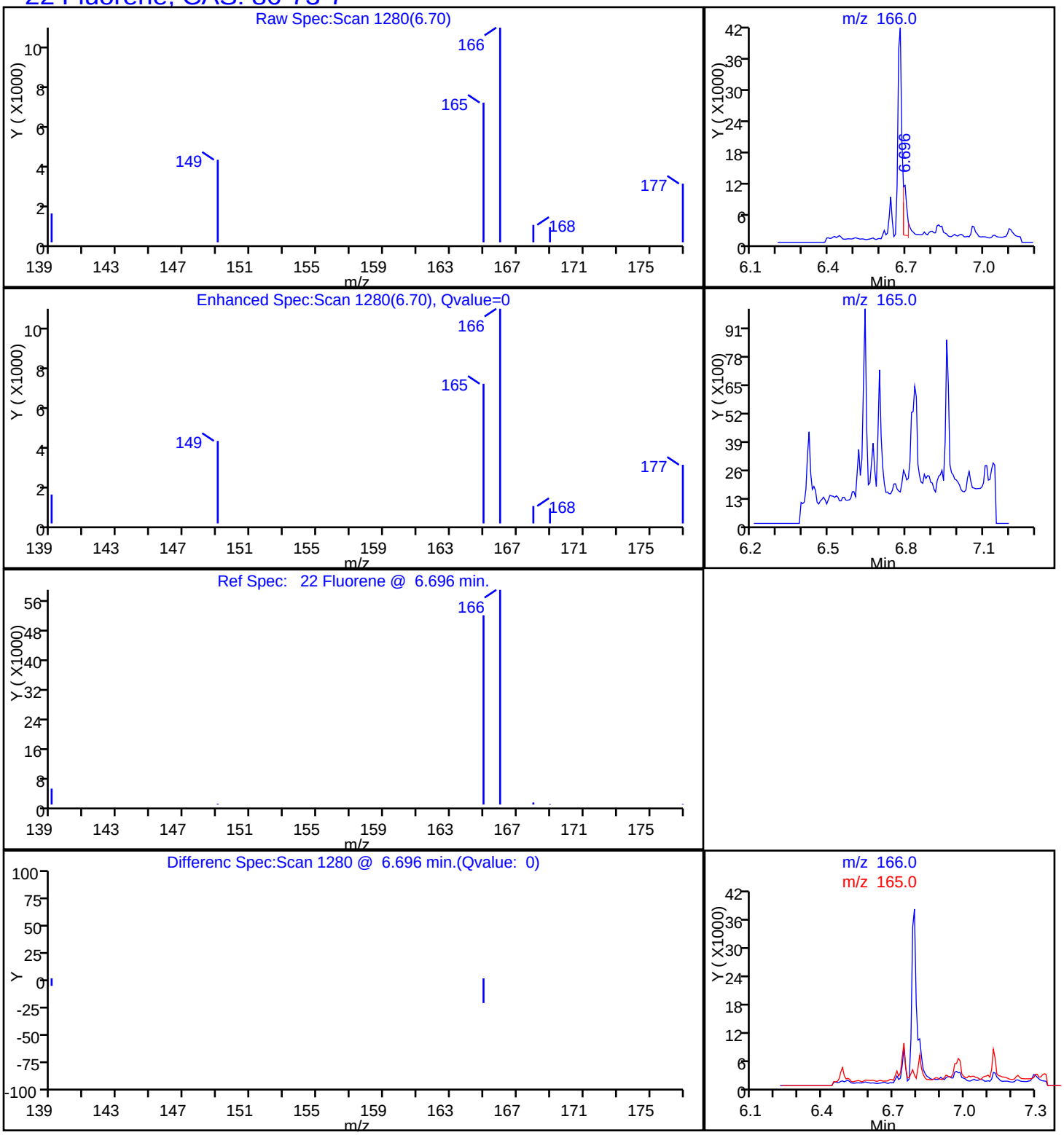


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7

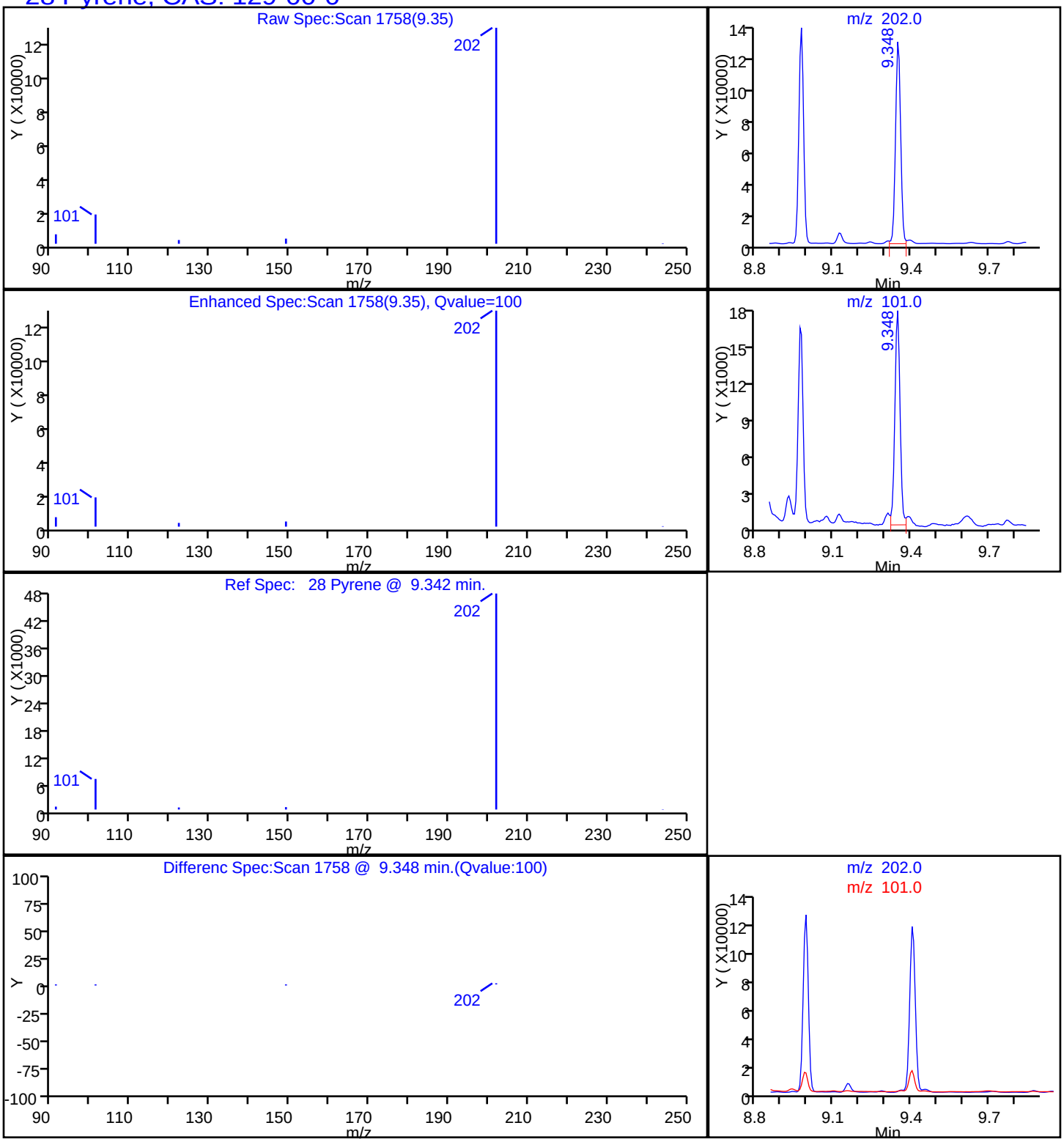


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0

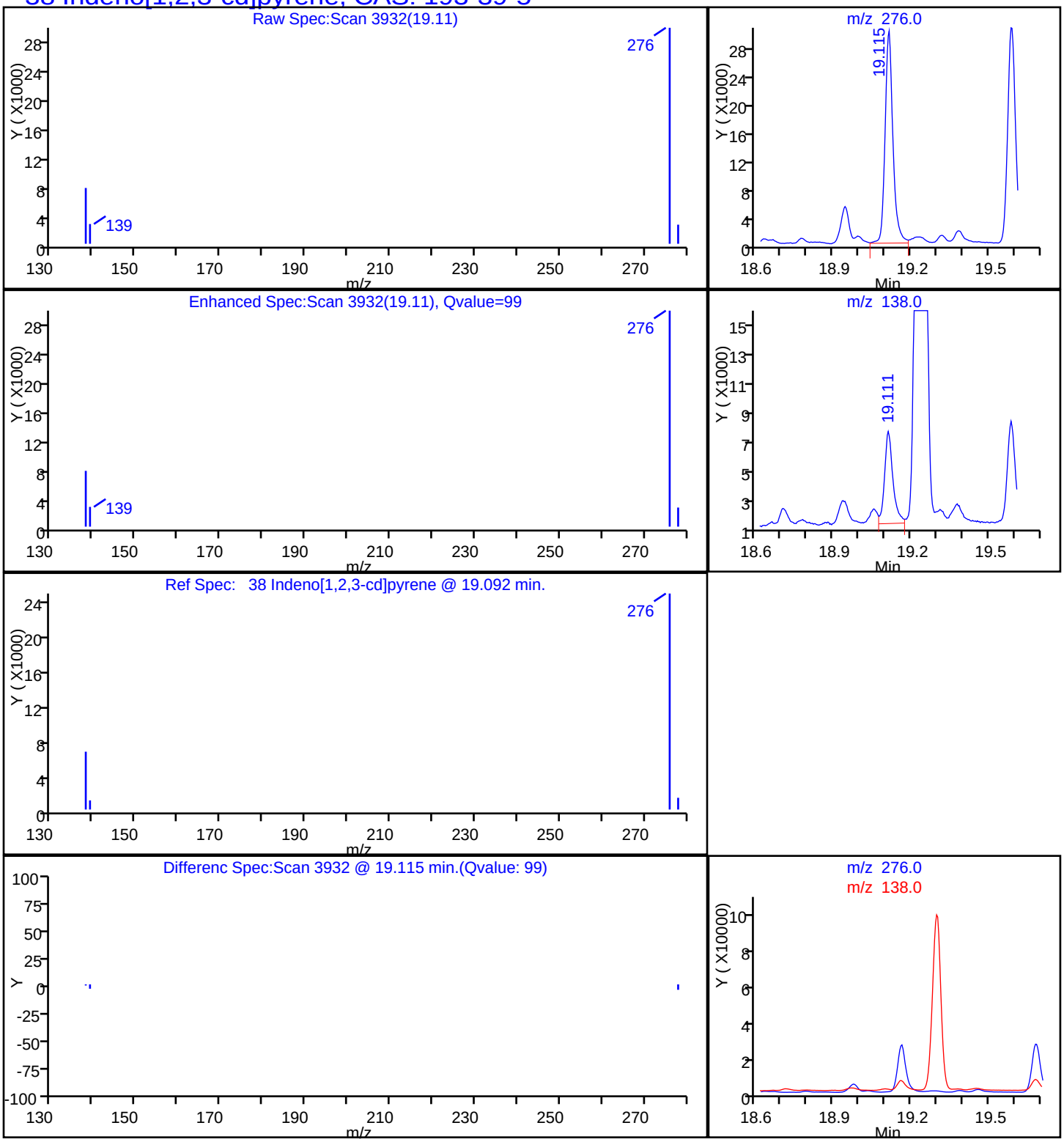


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

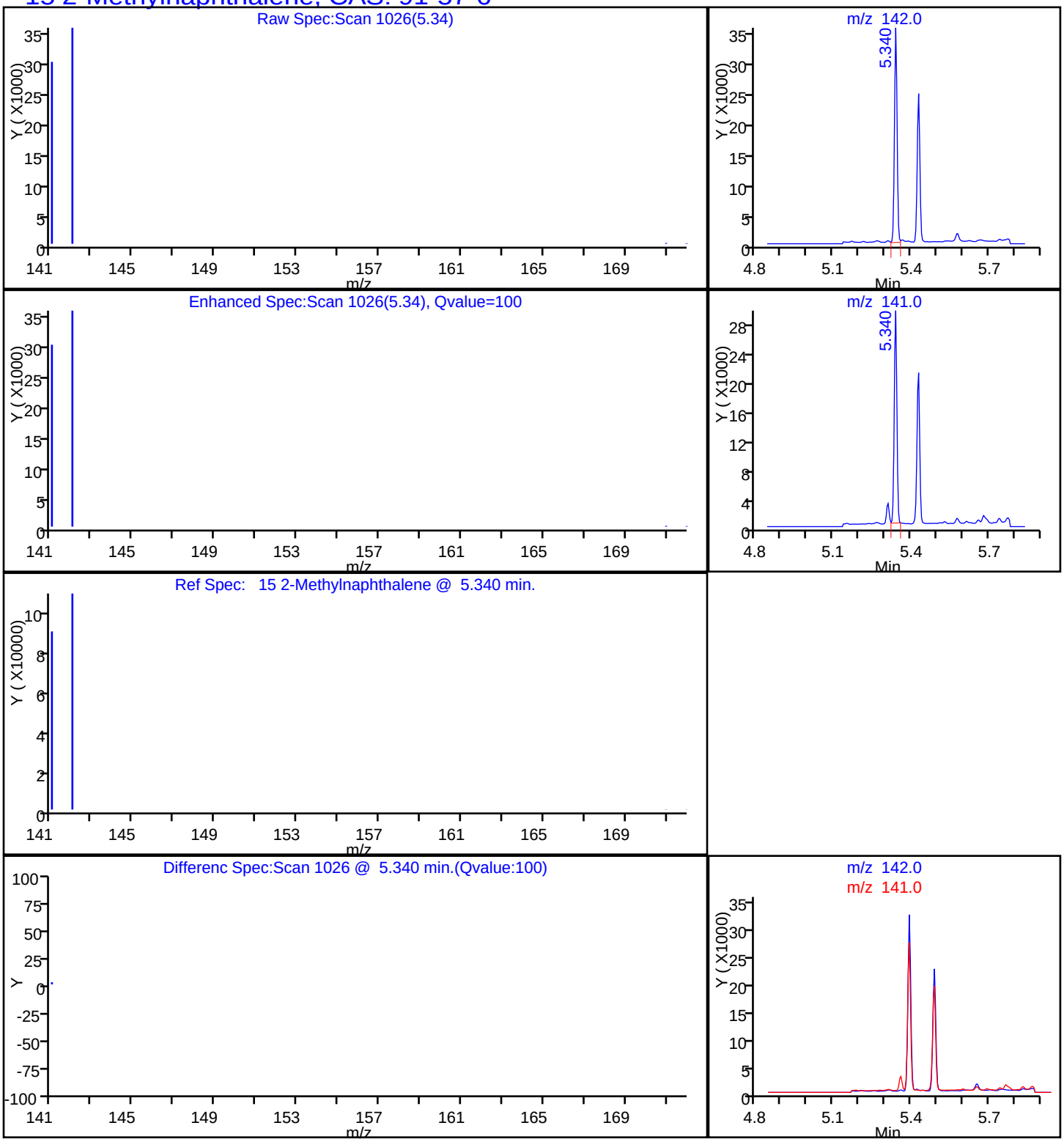


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 2-Methylnaphthalene, CAS: 91-57-6

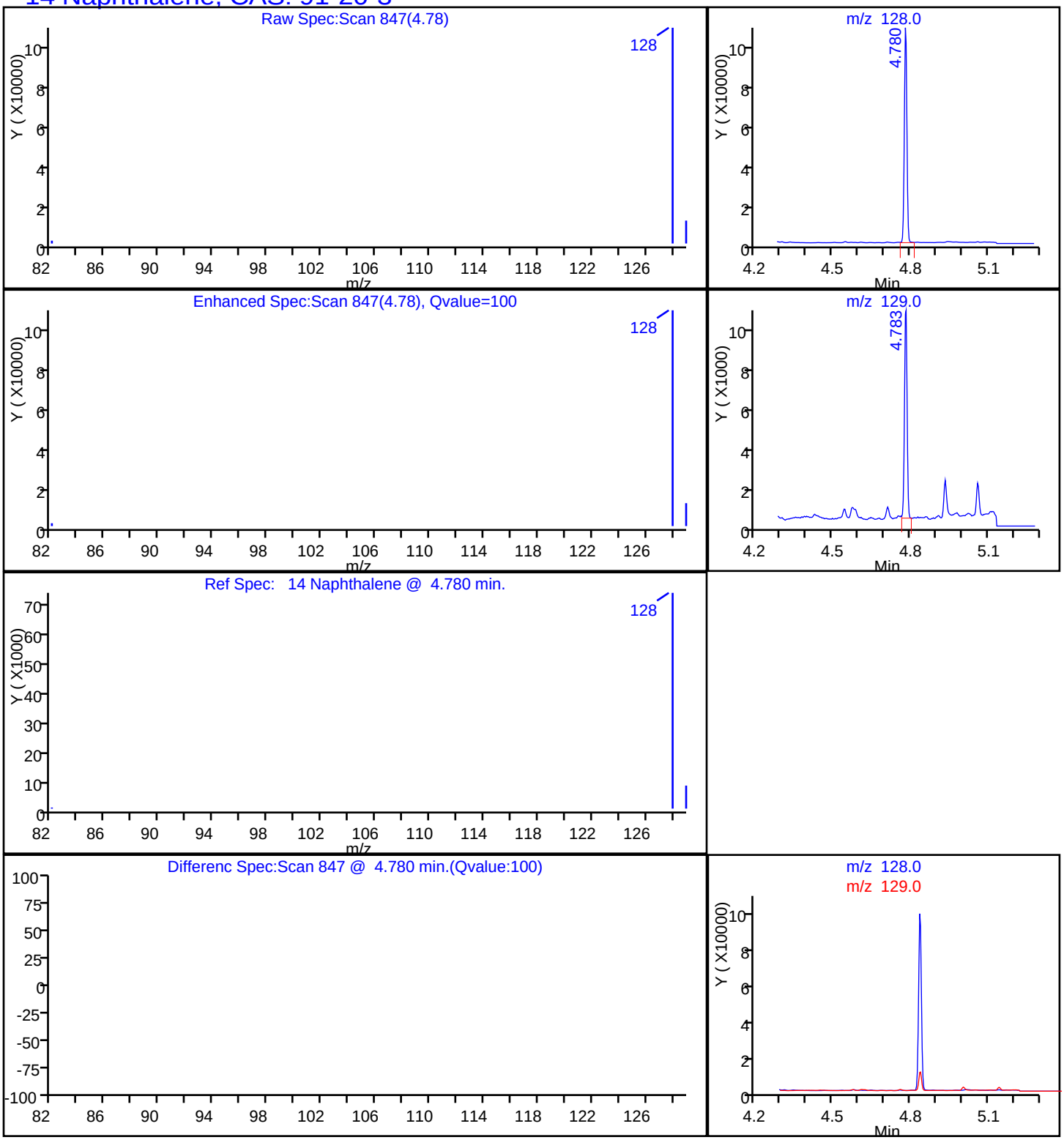


Report Date: 06-Jan-2014 10:11:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3



Manual Integration/User Assign Peak Report

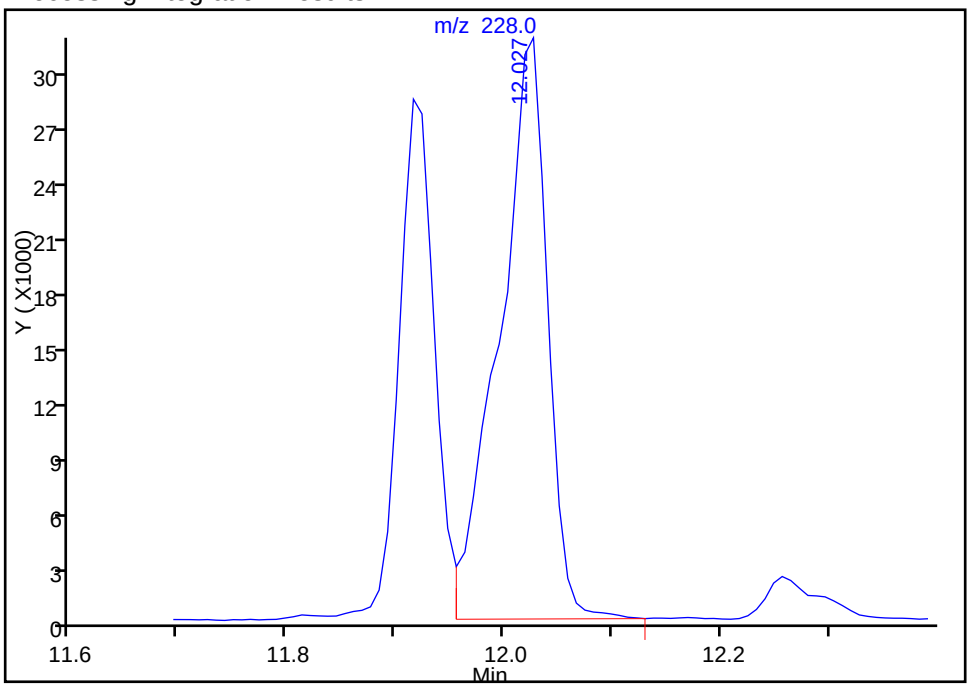
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

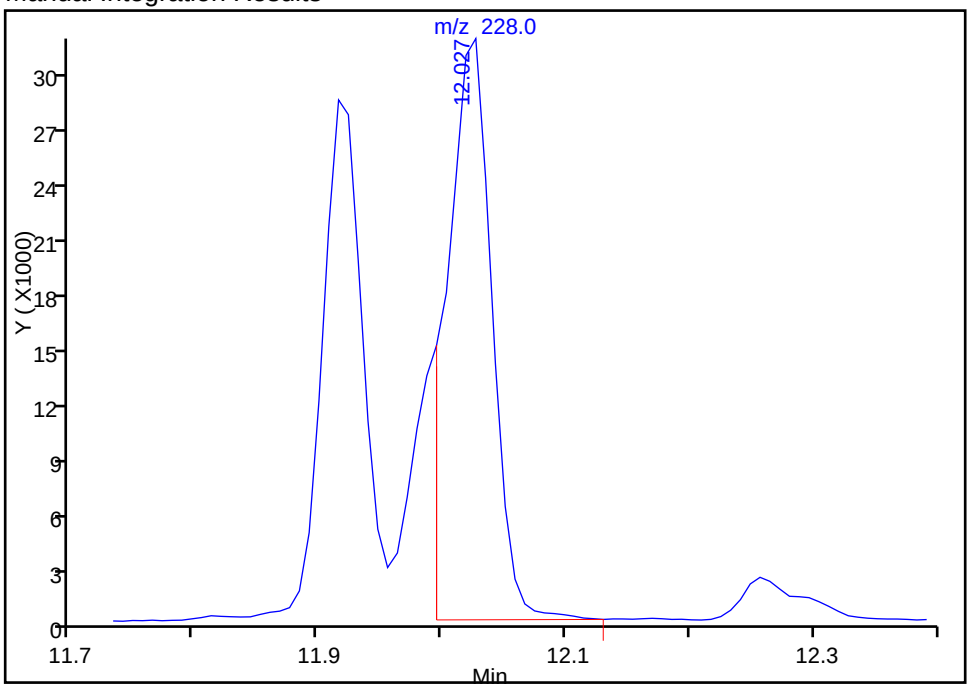
Processing Integration Results

RT: 12.03
Response: 95239
Amount: 1151.1972



Manual Integration Results

RT: 12.03
Response: 78106
Amount: 944.1028



Reviewer: vasquezk, 03-Jan-2014 14:06:43
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

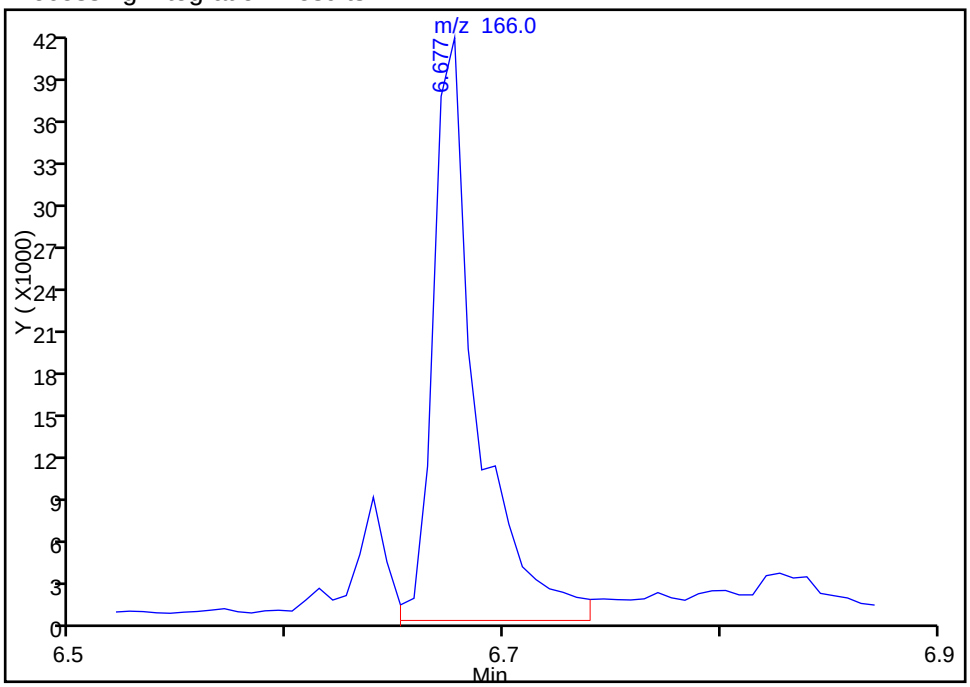
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8919.D				
Injection Date:	02-Jan-2014 15:41:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-1-A	Lab Sample ID:	280-50614-1		
Client ID:	FSA-SF-CT				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7

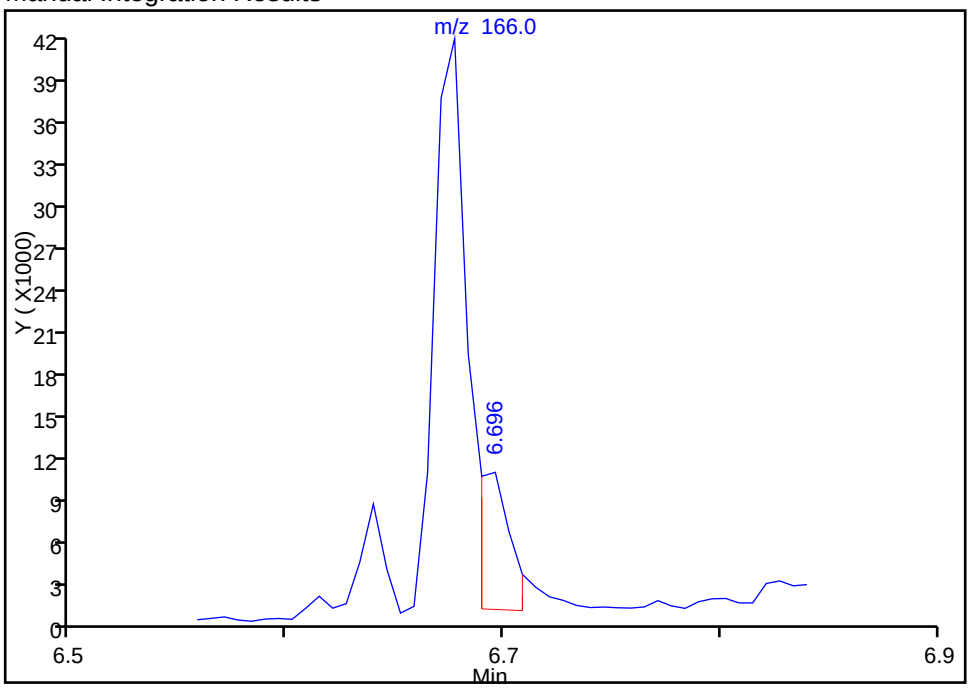
Processing Integration Results

RT: 6.68
Response: 57713
Amount: 981.6802



Manual Integration Results

RT: 6.70
Response: 10101
Amount: 171.8149



Reviewer: vasquezk, 06-Jan-2014 10:11:12
Audit Action: Manually Integrated
Audit Reason: Assign Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SF-SCW | Lab Sample ID: 280-50614-2

Matrix: Solid | Lab File ID: X4_8922.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 09:12

Extract. Method: 3546 | Date Extracted: 12/30/2013 19:55

Sample wt/vol: 30.7(g) | Date Analyzed: 01/02/2014 17:05

Con. Extract Vol.: 1000(uL) | Dilution Factor: 4

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 20.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	760000		24000	3500
53-70-3	Dibenz(a,h)anthracene	440000		24000	6400
83-32-9	Acenaphthene	130000		24000	780
86-73-7	Fluorene	360000		24000	2300
91-57-6	2-Methylnaphthalene	560000		24000	1500
91-20-3	Naphthalene	540000		24000	1600

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	66	D	39-120
4165-60-0	Nitrobenzene-d5	75	D	42-120
1718-51-0	Terphenyl-d14	120	D	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8922.D
Lims ID: 280-50614-A-2-A Lab Sample ID: 280-50614-2
Client ID: FSA-SF-SCW
Sample Type: Client
Inject. Date: 02-Jan-2014 17:05:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 4.0000
Sample Info: 280-0018755-008
Misc. Info.: 280-50614-a-2-a =280-50614-A-2-A
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 03-Jan-2014 14:41:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	96	21598	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	99	41726	600.0	
* 3 Chrysene-d12	240	11.956	11.964	-0.008	16	53515	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	98	2275	94.1	
$ 5 2-Fluorobiphenyl	172	5.626	5.633	-0.007	99	4216	82.7	
$ 6 Terphenyl-d14	244	9.521	9.532	-0.011	76	7588	150.2	
14 Naphthalene	128	4.783	4.786	-0.003	100	216511	3276.2	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	98	160260	3429.2	
19 Acenaphthylene	152	6.119	6.119	0.0	100	383075	5319.1	E
20 Acenaphthene	153	6.261	6.269	-0.008	97	35300	785.8	
22 Fluorene	166	6.696	6.702	-0.006	96	117185	2182.5	
24 Phenanthrene	178	7.548	7.553	-0.005	100	2384552	27885	E
25 Anthracene	178	7.597	7.602	-0.005	99	391031	4645.3	
27 Fluoranthene	202	8.979	8.979	0.0	100	3316157	35756	E
28 Pyrene	202	9.353	9.359	-0.006	100	3840677	40135	E
31 Benzo[a]anthracene	228	11.924	11.932	-0.008	98	1524938	14019	E
32 Chrysene	228	12.027	12.035	-0.008	100	1902987	18502	E
34 Benzo[b]fluoranthene	252	15.268	15.264	0.004	100	2018954	20264	E
35 Benzo[k]fluoranthene	252	15.350	15.357	-0.007	100	724135	7065.5	E
36 Benzo[a]pyrene	252	16.397	16.397	0.0	100	1369498	14184	E
38 Indeno[1,2,3-cd]pyrene	276	19.118	19.118	0.0	98	969177	10197	E
37 Dibenz(a,h)anthracene	278	19.144	19.152	-0.008	75	257432	2680.2	
39 Benzo[g,h,i]perylene	276	19.596	19.592	0.004	98	928907	9104.4	E

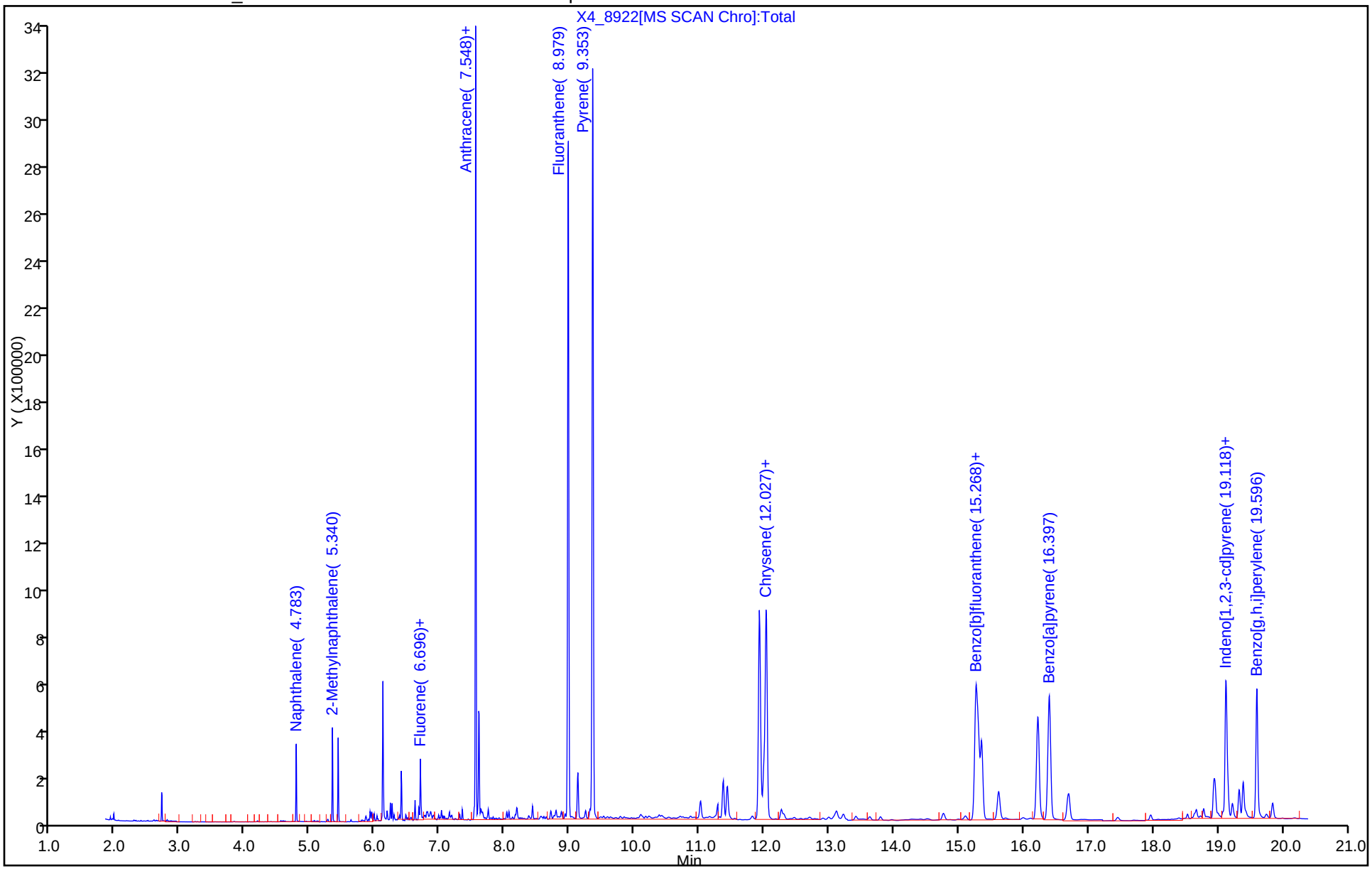
QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount

Report Date: 06-Jan-2014 10:06:03 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8922.D				
Injection Date:	02-Jan-2014 17:05:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2	Worklist Smp#:	8
Client ID:	FSA-SF-SCW				
Injection Vol:	1.0 ul	Dil. Factor:	4.0000	ALS Bottle#:	8
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

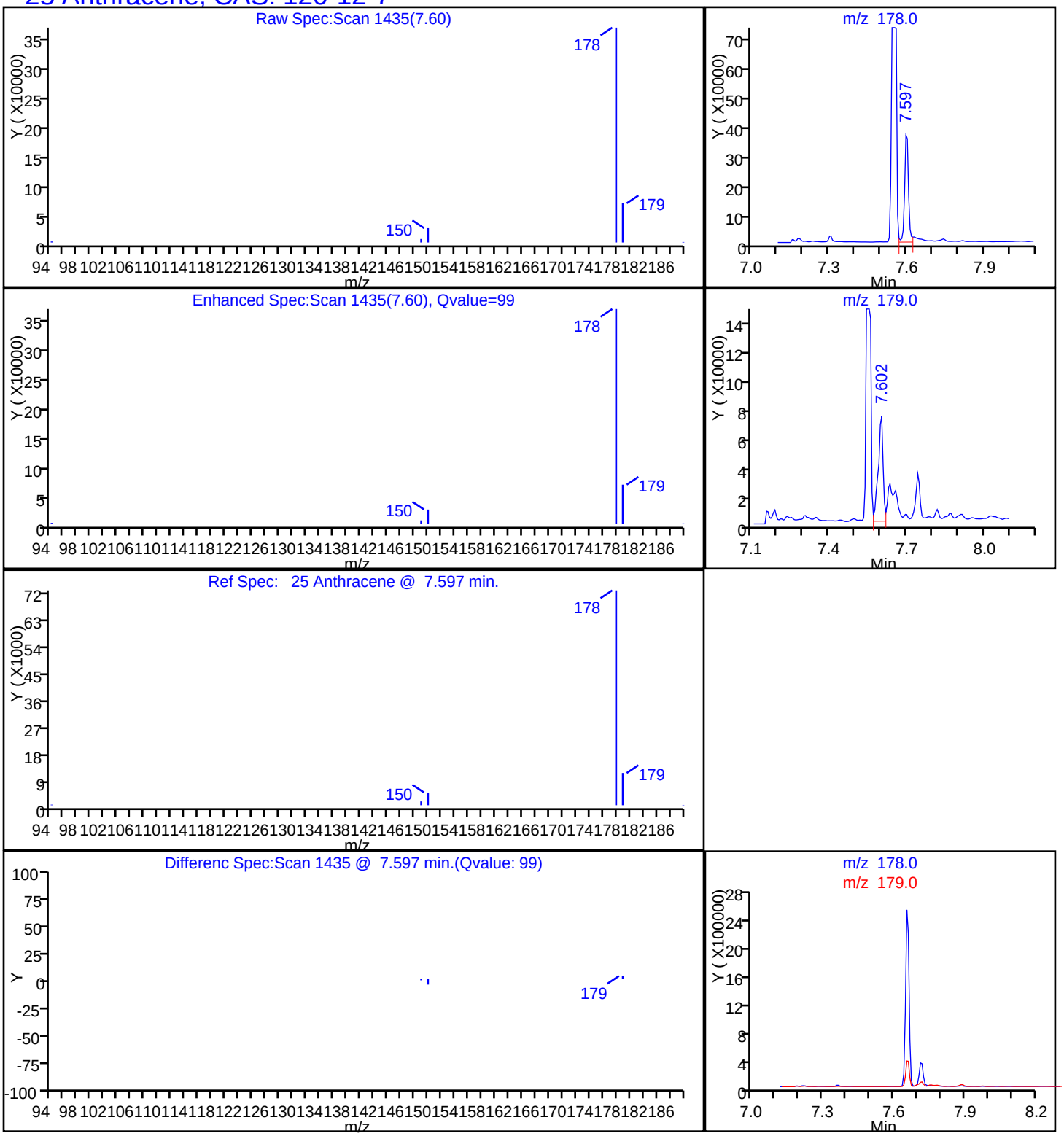


Report Date: 06-Jan-2014 10:06:03 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8922.D				
Injection Date:	02-Jan-2014 17:05:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	4.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7

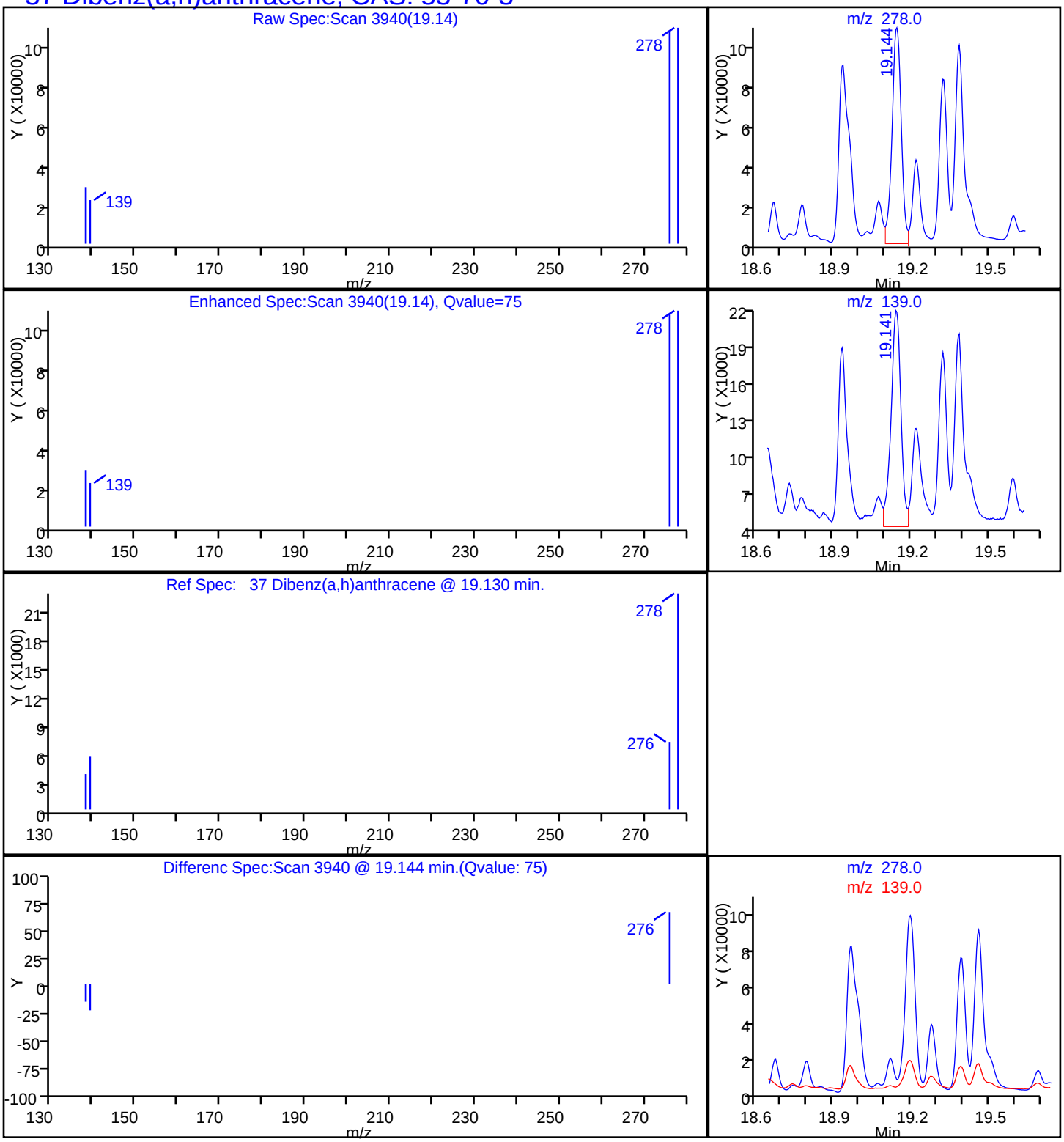


Report Date: 06-Jan-2014 10:06:04 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8922.D				
Injection Date:	02-Jan-2014 17:05:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	4.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3

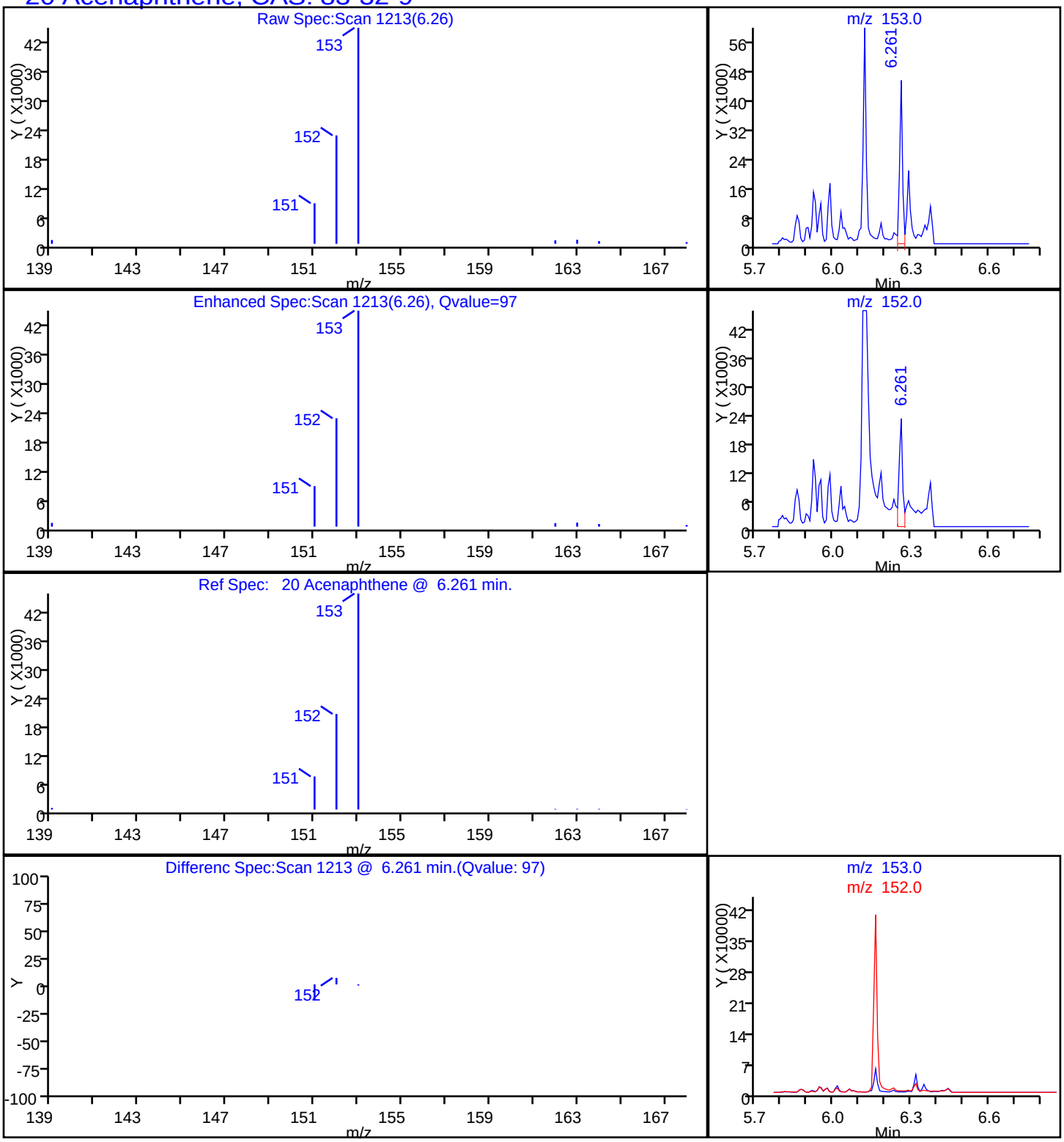


Report Date: 06-Jan-2014 10:06:03 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8922.D				
Injection Date:	02-Jan-2014 17:05:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	4.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9

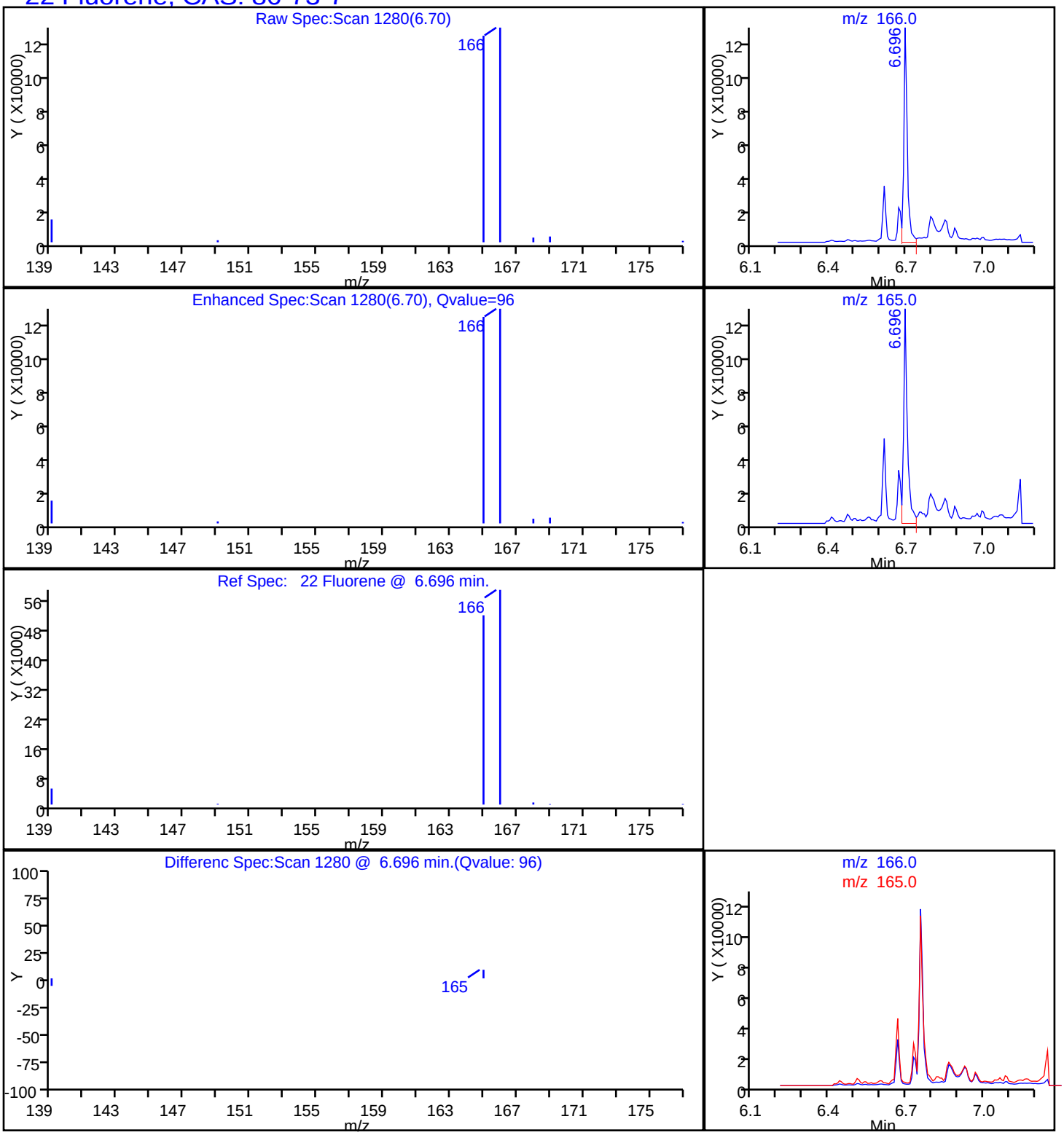


Report Date: 06-Jan-2014 10:06:03 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8922.D				
Injection Date:	02-Jan-2014 17:05:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	4.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7

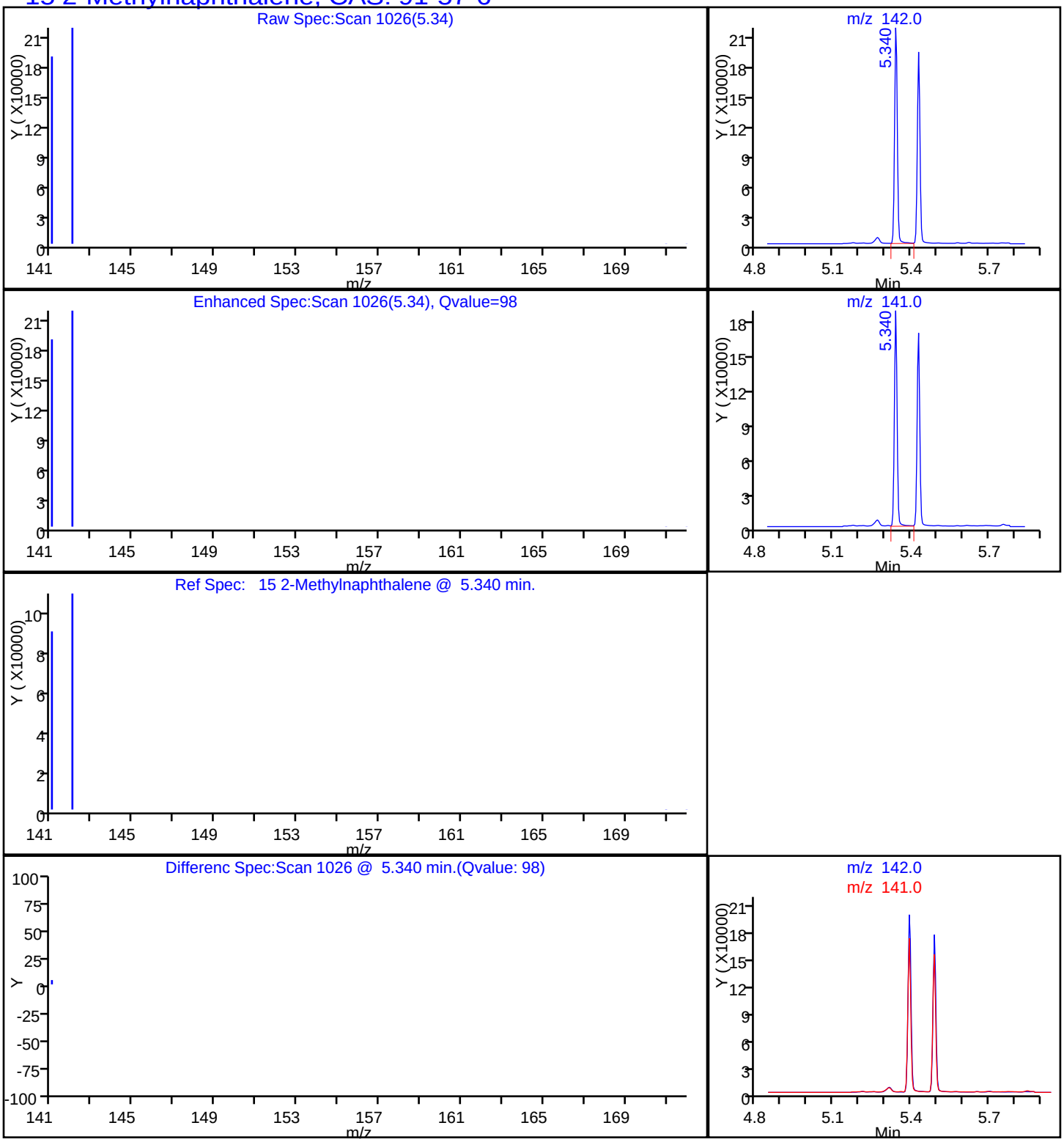


Report Date: 06-Jan-2014 10:06:03 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8922.D				
Injection Date:	02-Jan-2014 17:05:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	4.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 2-Methylnaphthalene, CAS: 91-57-6

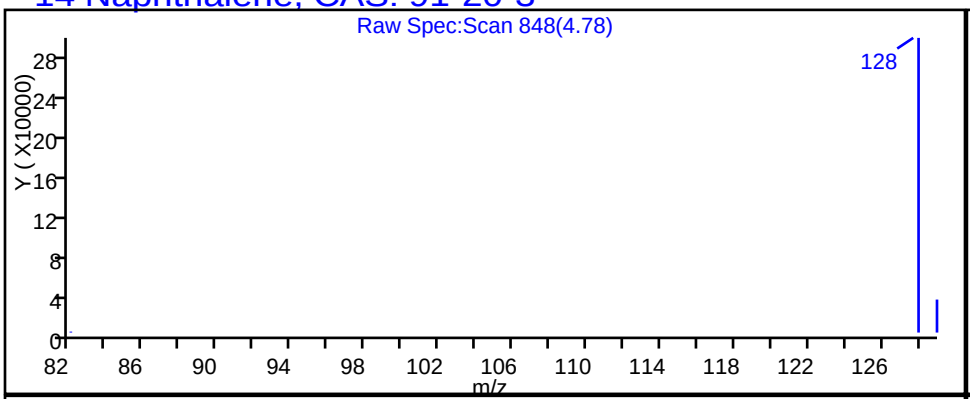


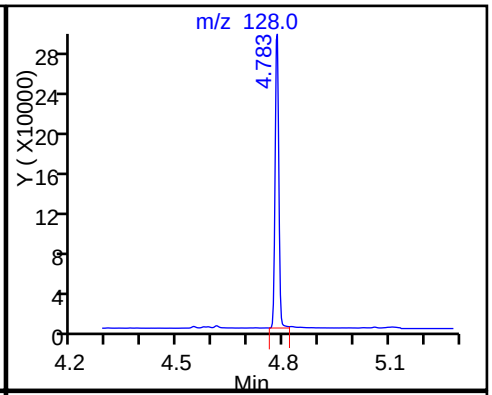
Report Date: 06-Jan-2014 10:06:03 Chrom Revision: 2.1 15-Oct-2013 07:52:24

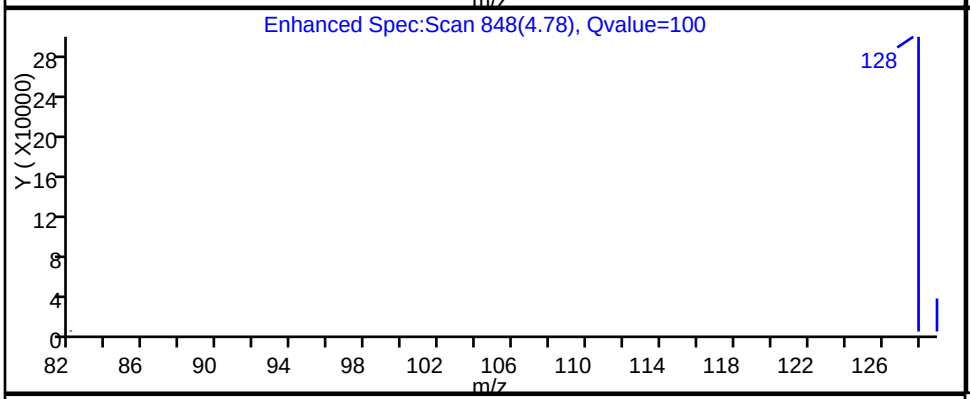
TestAmerica Denver

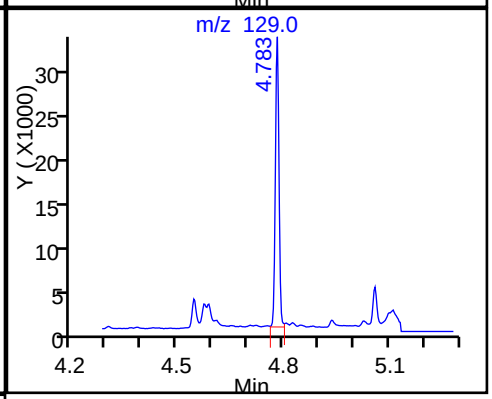
Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8922.D				
Injection Date:	02-Jan-2014 17:05:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	4.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

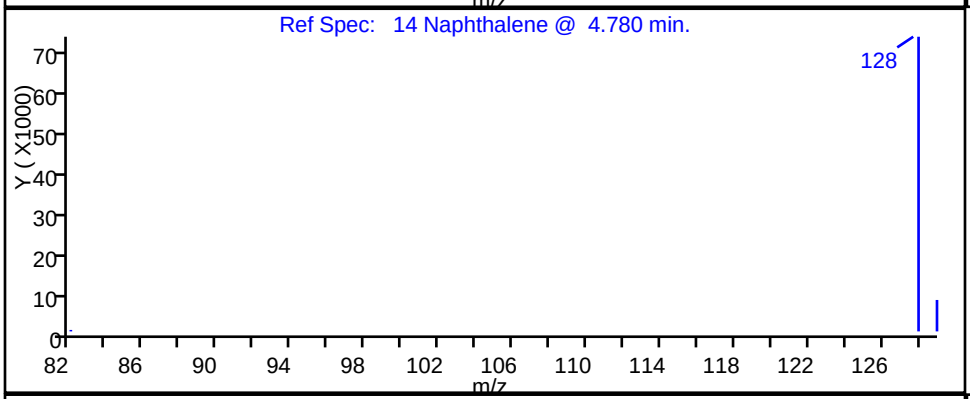
14 Naphthalene, CAS: 91-20-3

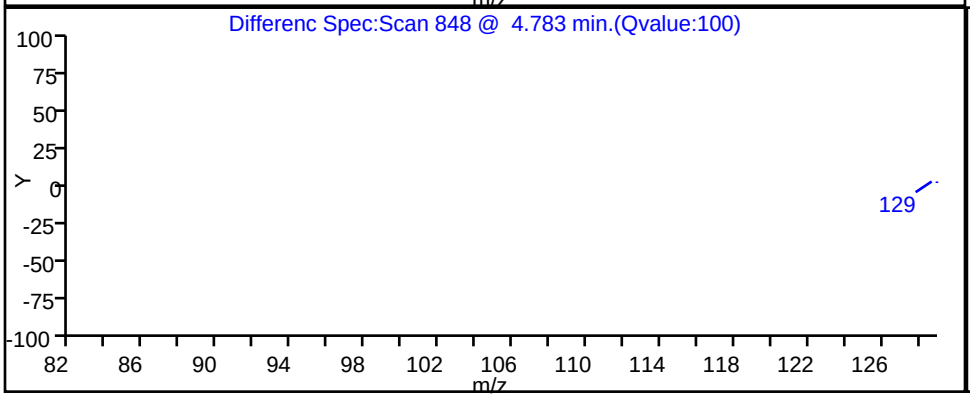


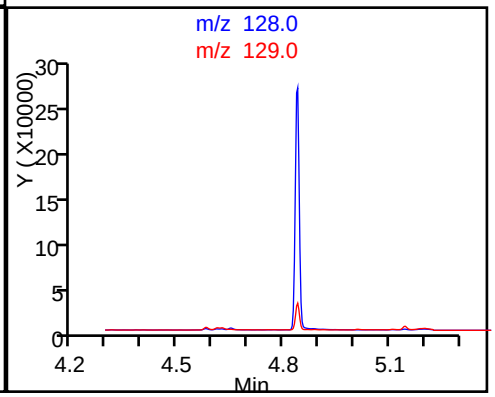












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SF-SCW DL | Lab Sample ID: 280-50614-2 DL

Matrix: Solid | Lab File ID: X4_8948.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 09:12

Extract. Method: 3546 | Date Extracted: 12/30/2013 19:55

Sample wt/vol: 30.7(g) | Date Analyzed: 01/06/2014 12:25

Con. Extract Vol.: 1000(uL) | Dilution Factor: 50

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 20.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207515 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	3100000		310000	73000
50-32-8	Benzo[a]pyrene	1800000		310000	45000
56-55-3	Benzo[a]anthracene	1600000		310000	55000
207-08-9	Benzo[k]fluoranthene	1100000		310000	61000
191-24-2	Benzo[g,h,i]perylene	1400000		310000	67000
85-01-8	Phenanthrene	3000000		310000	67000
218-01-9	Chrysene	2300000		310000	61000
208-96-8	Acenaphthylene	570000		310000	10000
206-44-0	Fluoranthene	4800000		310000	61000
129-00-0	Pyrene	4500000		310000	67000
193-39-5	Indeno[1,2,3-cd]pyrene	1600000		310000	67000

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	0	D X	39-120
4165-60-0	Nitrobenzene-d5	0	D X	42-120
1718-51-0	Terphenyl-d14	0	D X	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8948.D
Lims ID: 280-50614-A-2-A Lab Sample ID: 280-50614-2
Client ID: FSA-SF-SCW
Sample Type: Client
Inject. Date: 06-Jan-2014 12:25:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 50.0000
Sample Info: 280-50614-a-2-a
Misc. Info.: 280-50614-a-2-a,50, =280-50614-A-2-A,50,
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 13:44:04 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

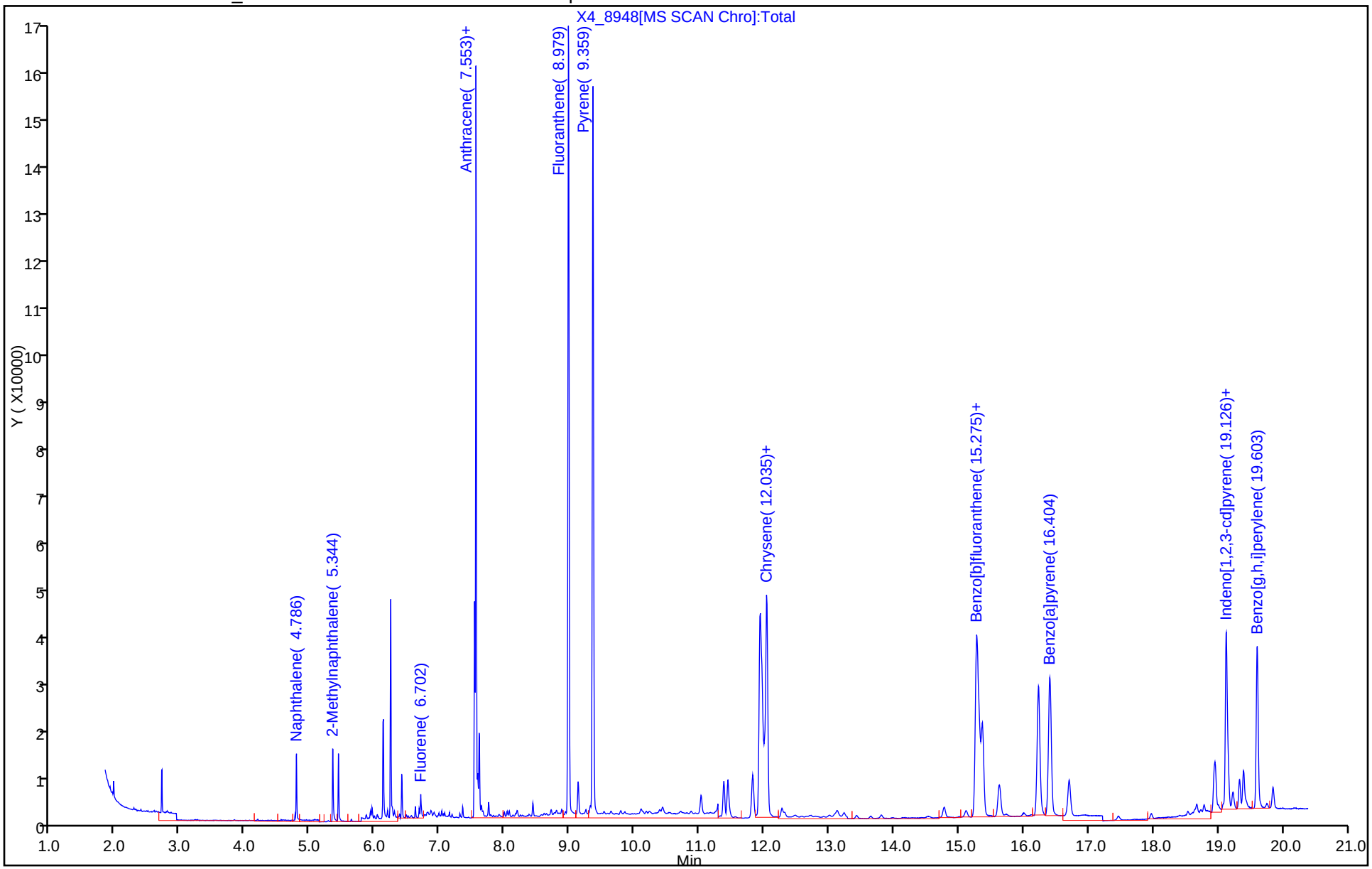
First Level Reviewer: vasquezk Date: 06-Jan-2014 10:57:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.240	6.240	0.0	96	17798	600.0	
* 1 Phenanthrene-d10	188	7.532	7.537	-0.005	100	36266	600.0	
* 3 Chrysene-d12	240	11.964	11.980	-0.016	96	44388	600.0	
$ 4 Nitrobenzene-d5	82		4.189					
$ 5 2-Fluorobiphenyl	172		5.633					
$ 6 Terphenyl-d14	244		9.538					
14 Naphthalene	128	4.786	4.786	0.0	100	9802	180.0	
15 2-Methylnaphthalene	142	5.347	5.347	0.0	100	8155	211.8	
19 Acenaphthylene	152	6.127	6.127	0.0	100	16609	279.9	
20 Acenaphthene	153	6.382	6.269	0.113	74	543	14.7	
22 Fluorene	166	6.702	6.702	0.0	95	2269	51.3	
24 Phenanthrene	178	7.553	7.559	-0.006	100	109469	1472.9	
25 Anthracene	178	7.602	7.608	-0.006	99	14988	204.9	
27 Fluoranthene	202	8.979	8.990	-0.011	100	189674	2353.0	
28 Pyrene	202	9.359	9.364	-0.005	100	181699	2184.6	
31 Benzo[a]anthracene	228	11.932	11.948	-0.016	99	69105	765.9	
32 Chrysene	228	12.035	12.051	-0.016	100	97699	1145.2	
34 Benzo[b]fluoranthene	252	15.275	15.287	-0.012	100	124251	1503.5	
35 Benzo[k]fluoranthene	252	15.365	15.376	-0.011	100	43865	516.0	
36 Benzo[a]pyrene	252	16.404	16.419	-0.015	100	71605	894.1	
38 Indeno[1,2,3-cd]pyrene	276	19.122	19.130	-0.008	99	60937	772.9	
37 Dibenz(a,h)anthracene	278	19.152	19.167	-0.015	74	14651	183.9	
39 Benzo[g,h,i]perylene	276	19.603	19.611	-0.008	99	59049	697.7	

Report Date: 06-Jan-2014 13:44:04 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8948.D				
Injection Date:	06-Jan-2014 12:25:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2	Worklist Smp#:	3
Client ID:	FSA-SF-SCW				
Injection Vol:	1.0 ul	Dil. Factor:	50.0000	ALS Bottle#:	3
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

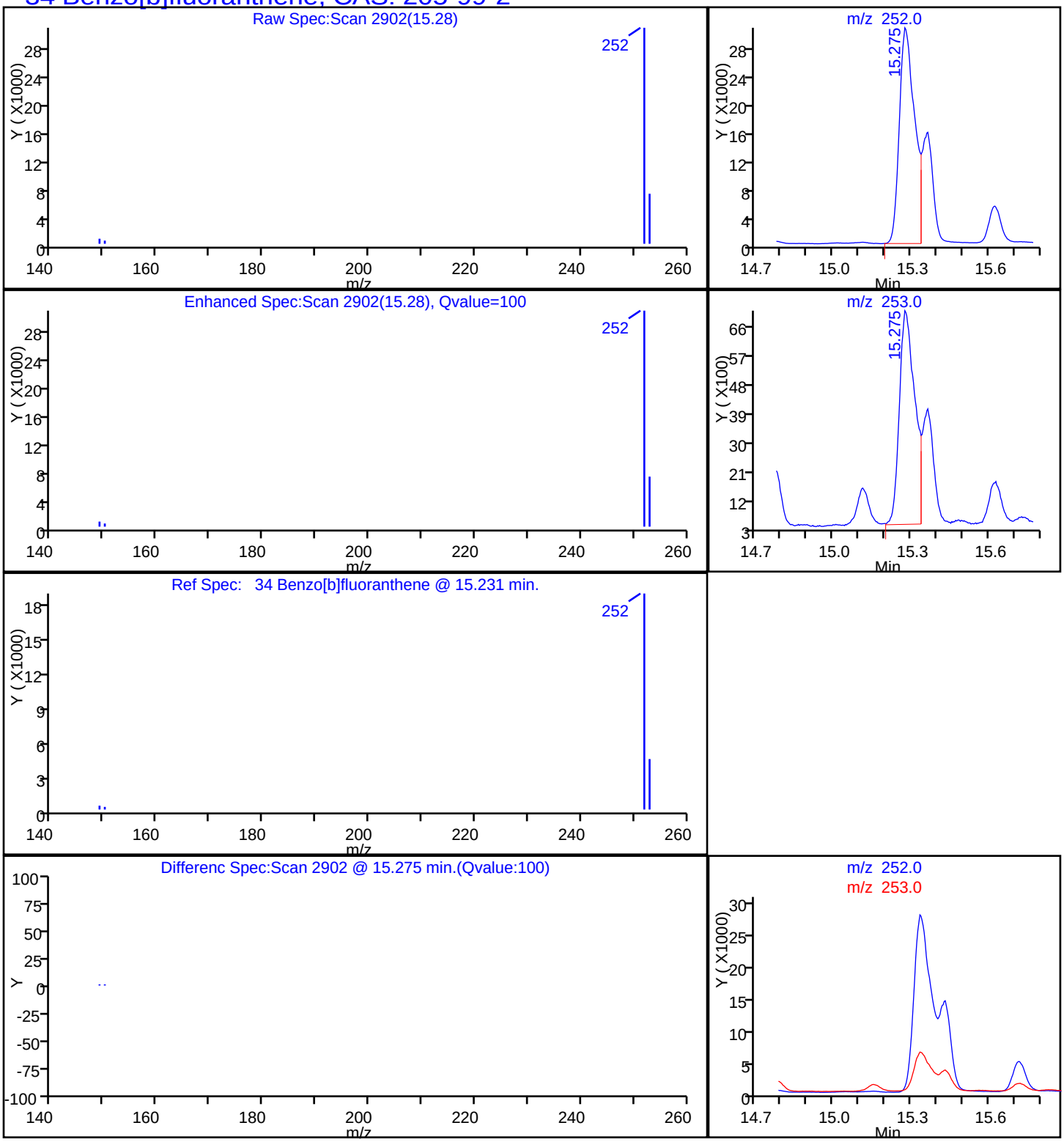


Report Date: 06-Jan-2014 13:44:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8948.D				
Injection Date:	06-Jan-2014 12:25:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

34 Benzo[b]fluoranthene, CAS: 205-99-2

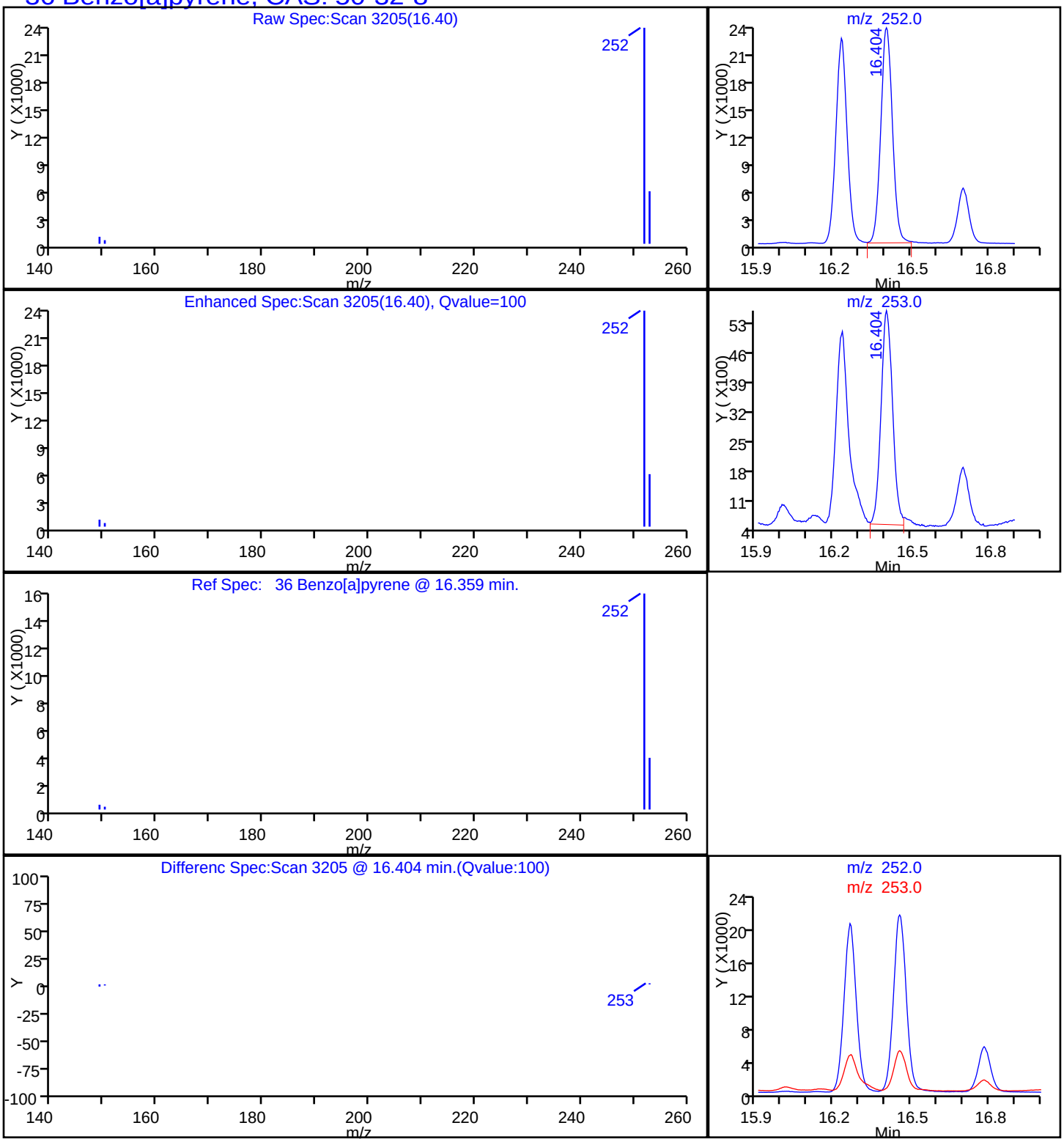


Report Date: 06-Jan-2014 13:44:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8948.D				
Injection Date:	06-Jan-2014 12:25:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[a]pyrene, CAS: 50-32-8

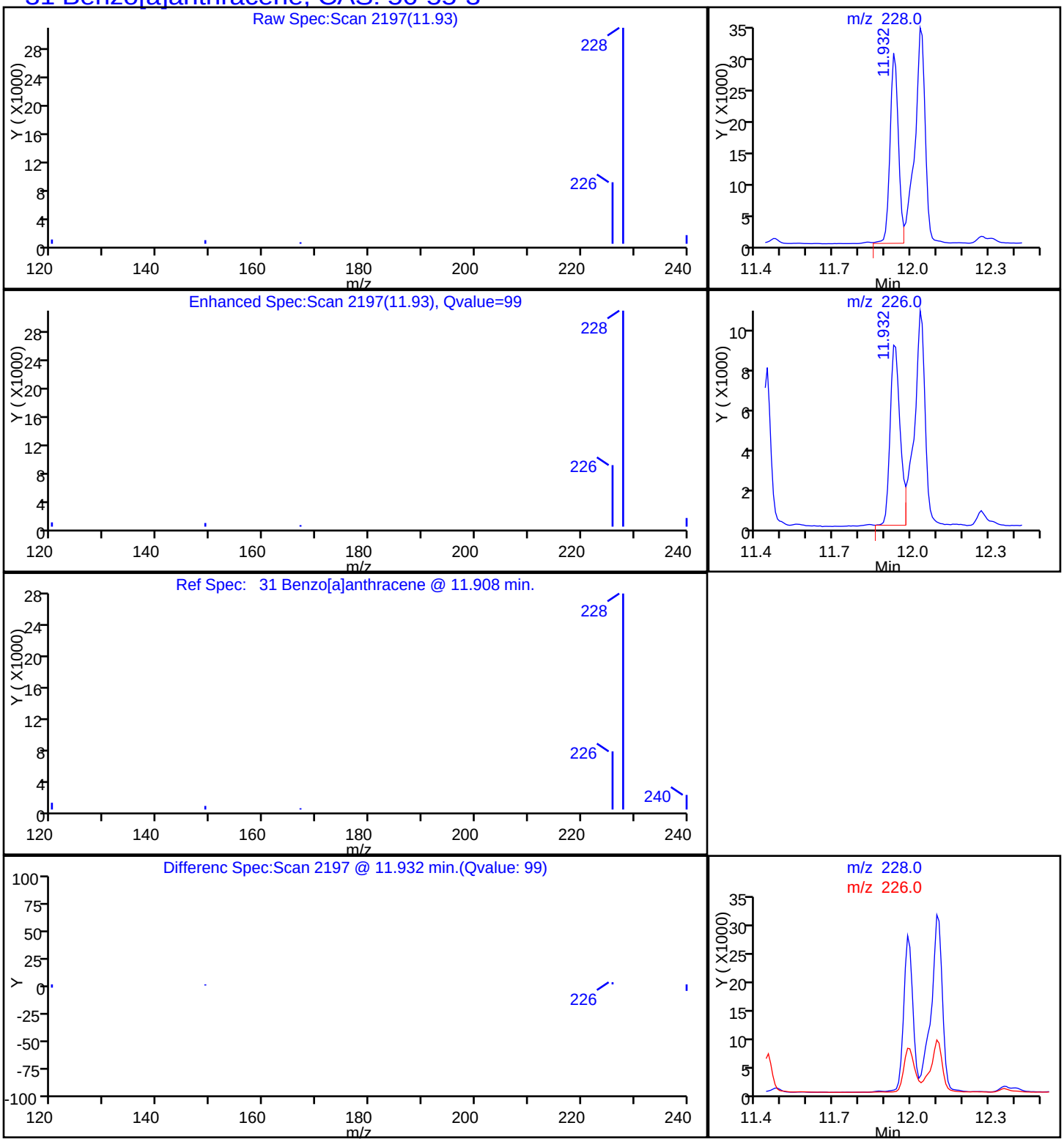


Report Date: 06-Jan-2014 13:44:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8948.D				
Injection Date:	06-Jan-2014 12:25:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3

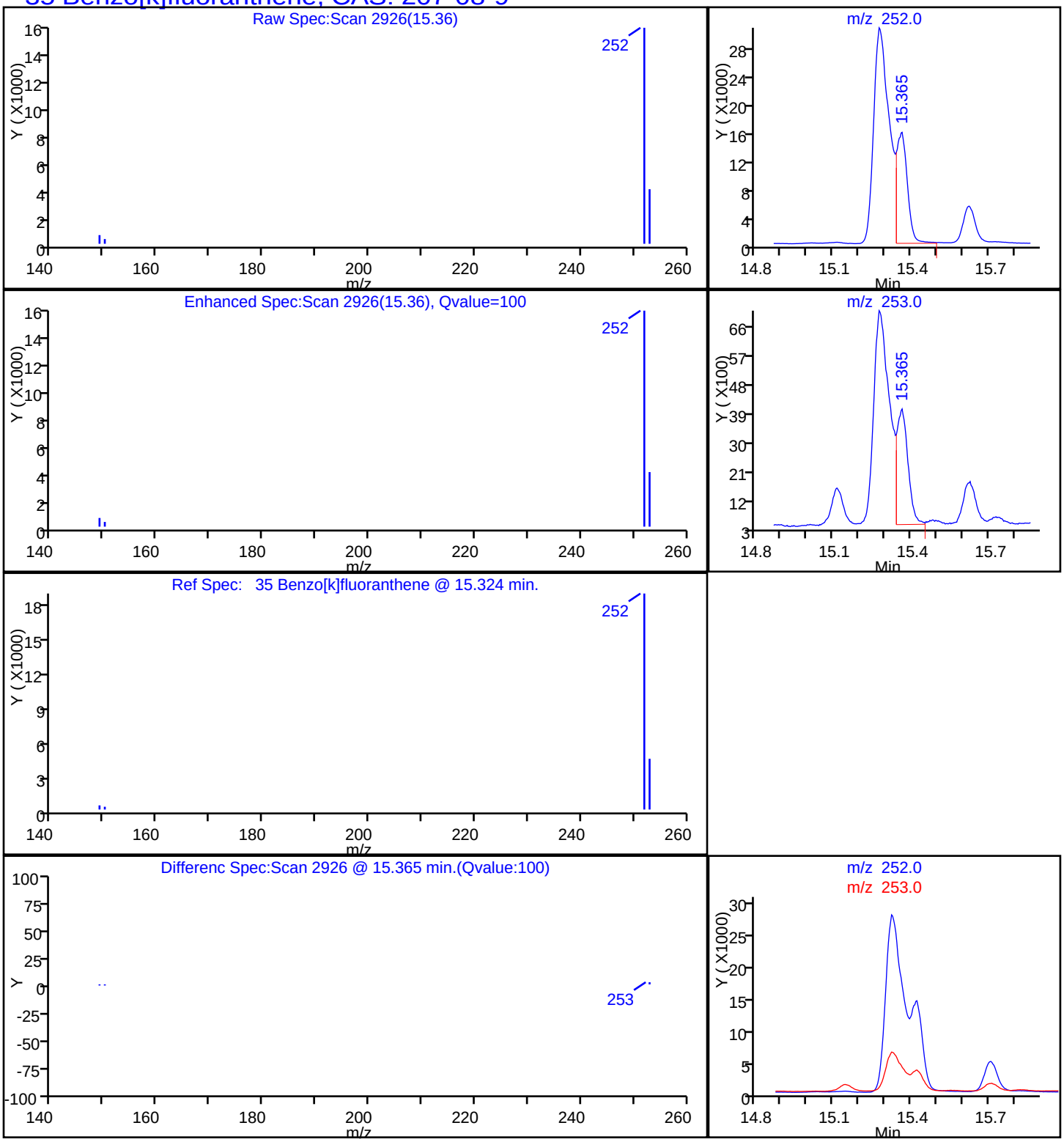


Report Date: 06-Jan-2014 13:44:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8948.D				
Injection Date:	06-Jan-2014 12:25:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9

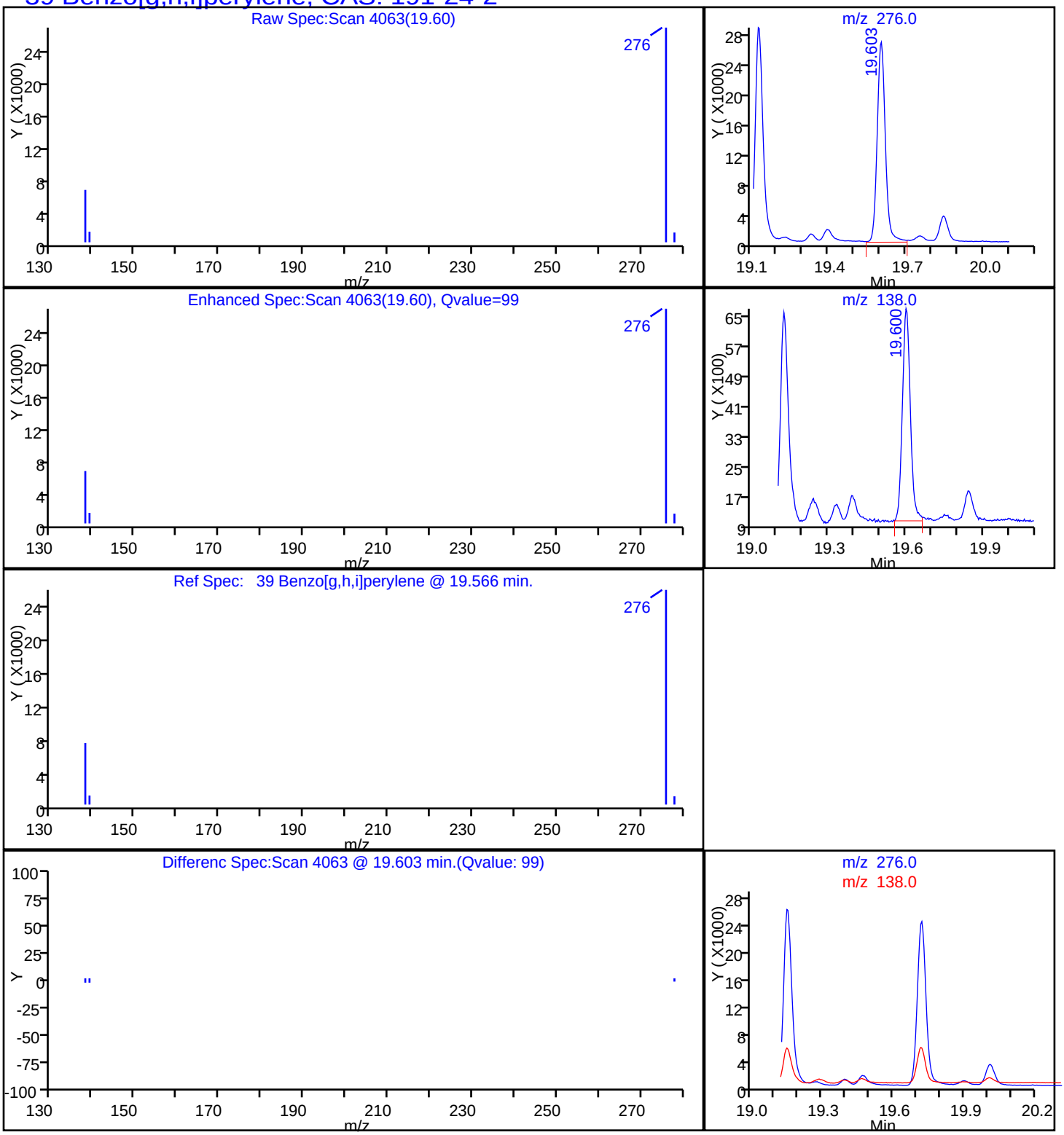


Report Date: 06-Jan-2014 13:44:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8948.D				
Injection Date:	06-Jan-2014 12:25:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[g,h,i]perylene, CAS: 191-24-2

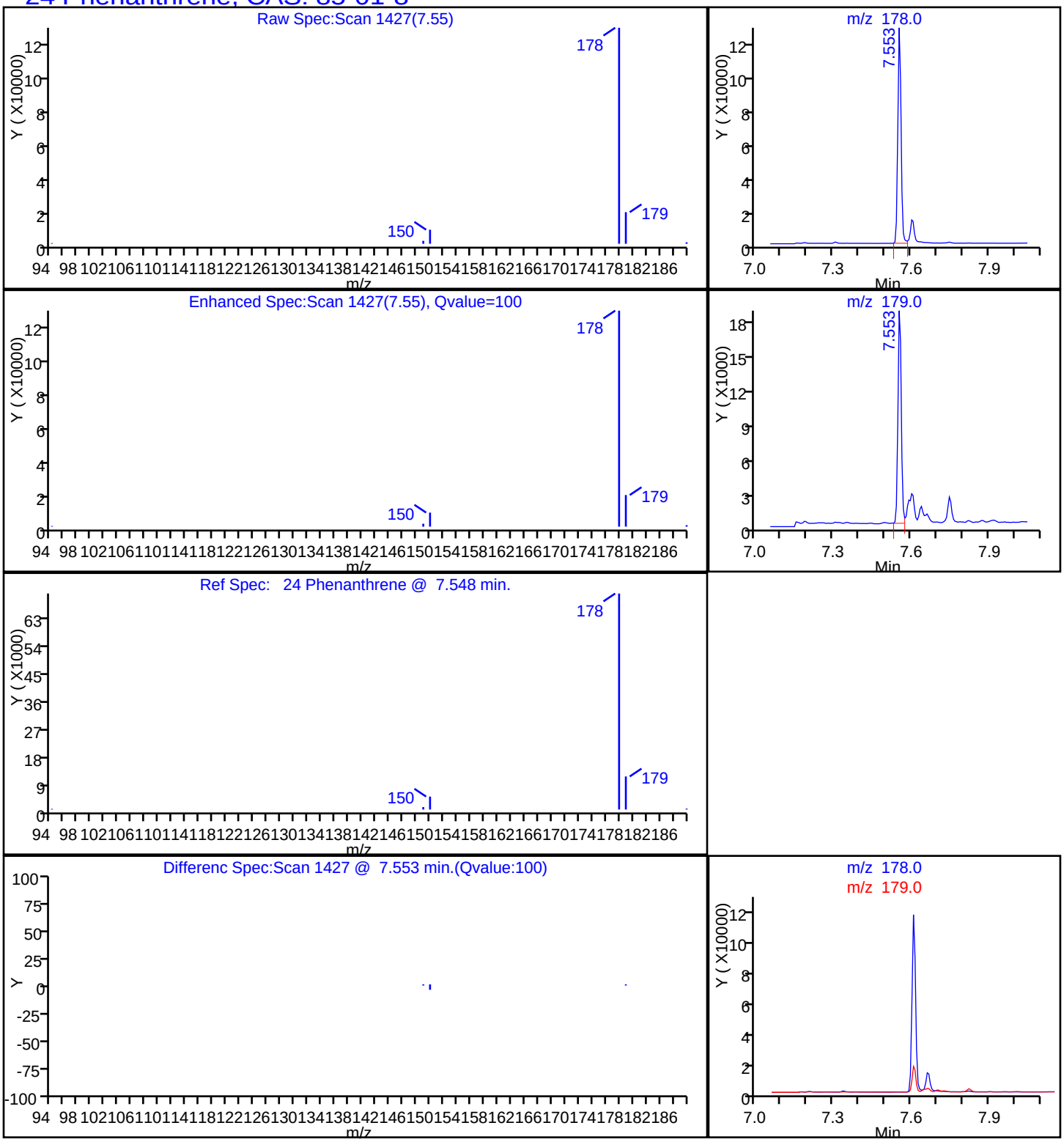


Report Date: 06-Jan-2014 13:44:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8948.D				
Injection Date:	06-Jan-2014 12:25:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8

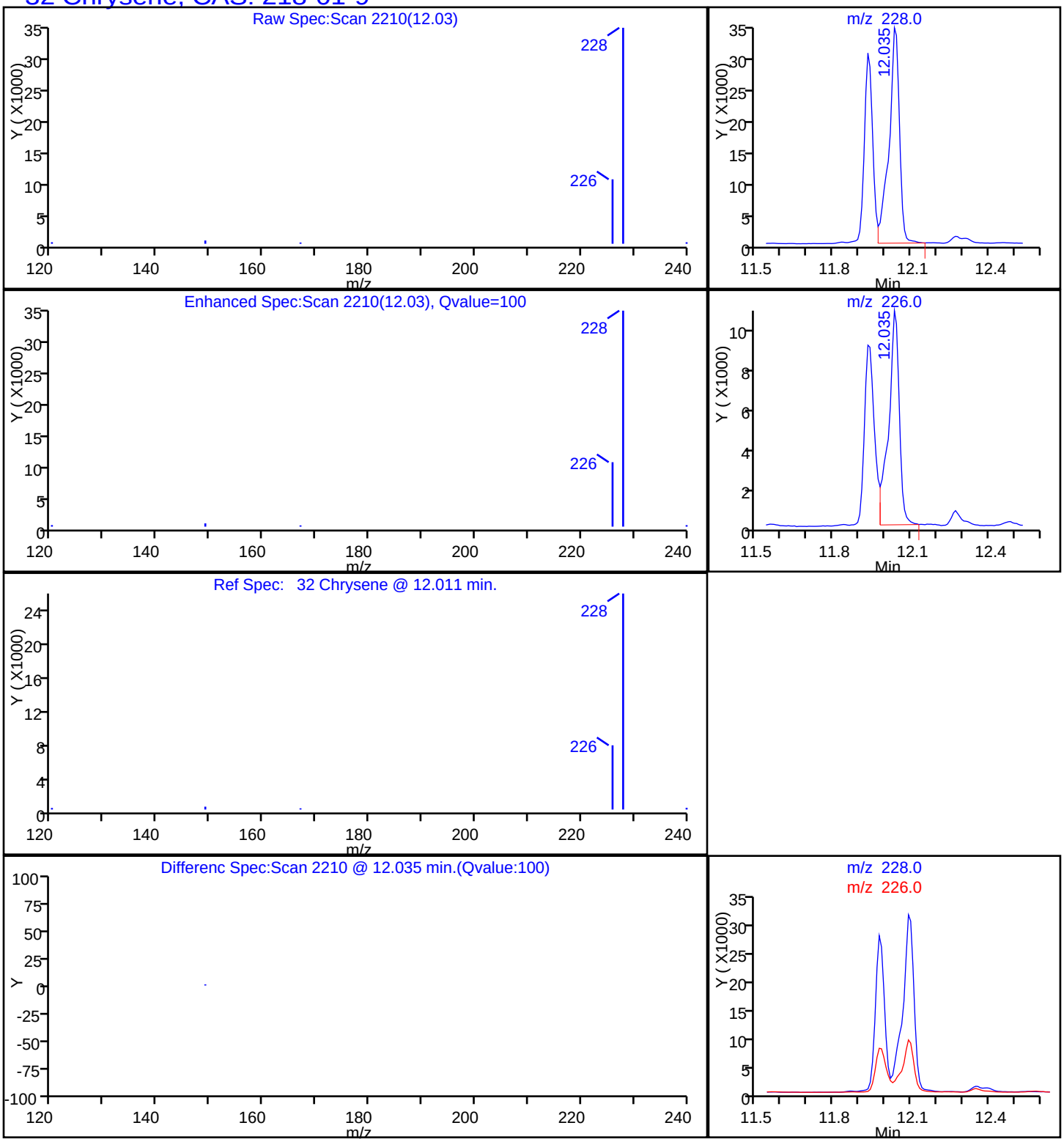


Report Date: 06-Jan-2014 13:44:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8948.D				
Injection Date:	06-Jan-2014 12:25:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

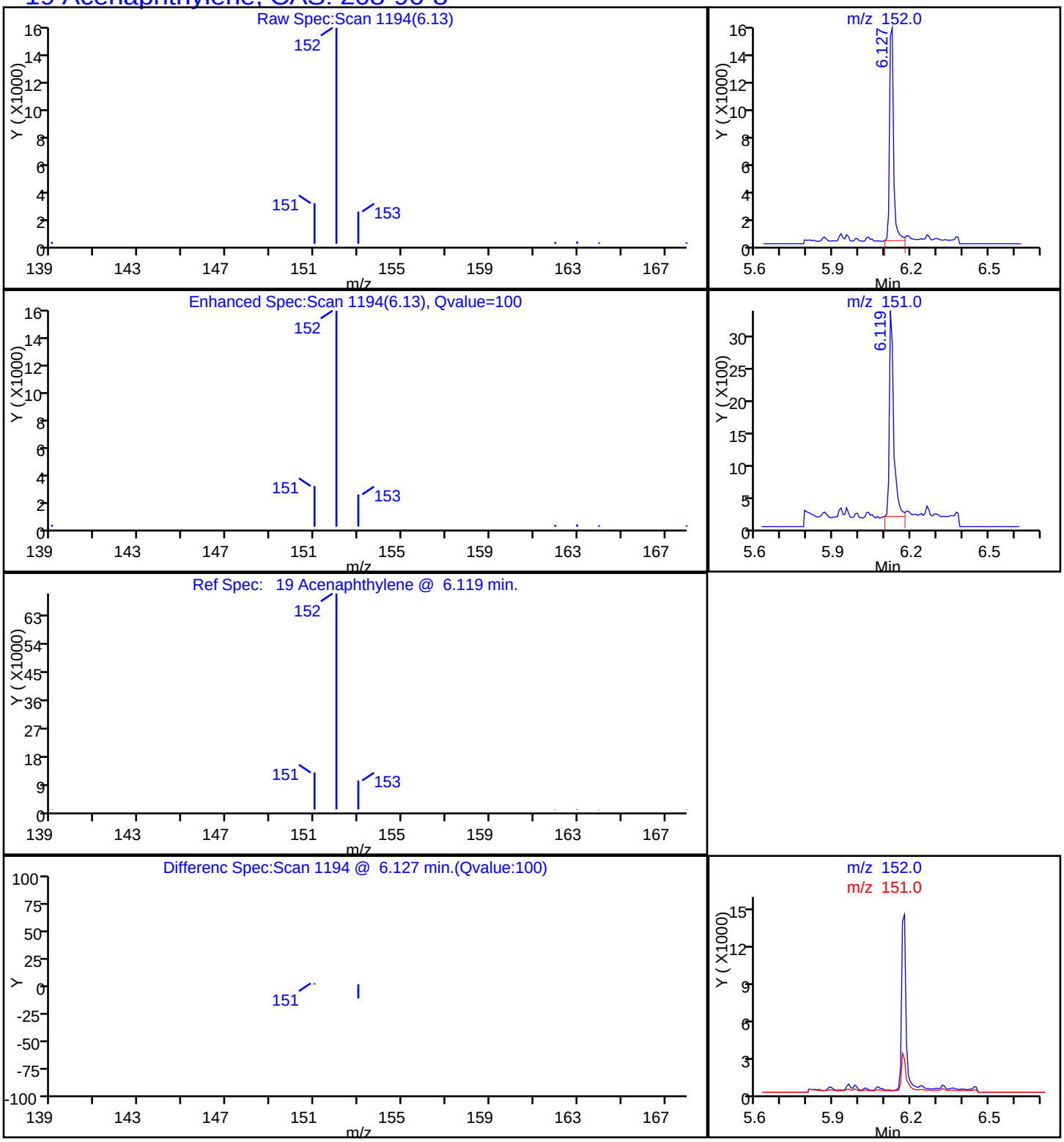


Report Date: 06-Jan-2014 13:44:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8948.D				
Injection Date:	06-Jan-2014 12:25:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

19 Acenaphthylene, CAS: 208-96-8

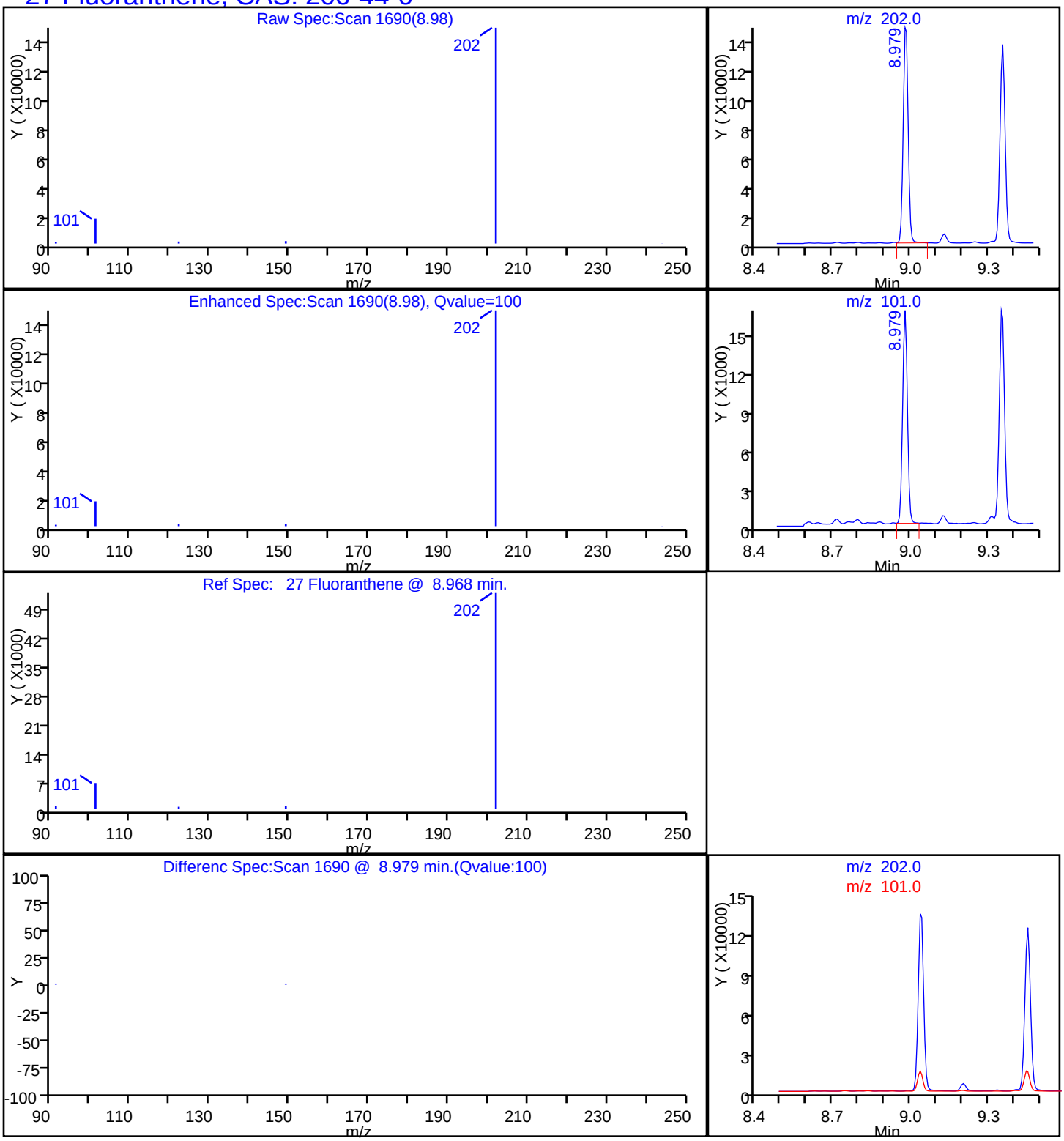


Report Date: 06-Jan-2014 13:44:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8948.D				
Injection Date:	06-Jan-2014 12:25:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0

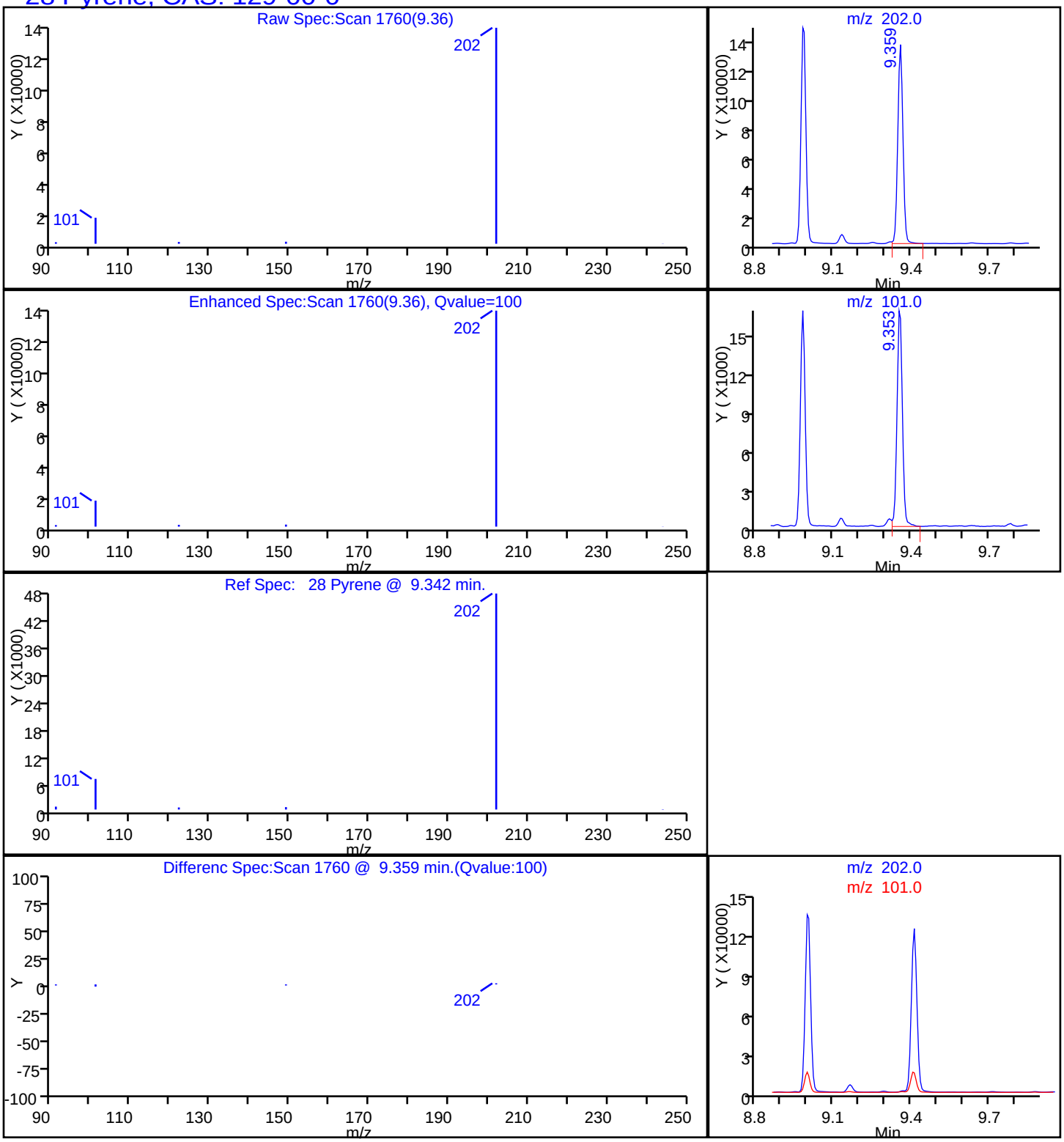


Report Date: 06-Jan-2014 13:44:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8948.D				
Injection Date:	06-Jan-2014 12:25:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0

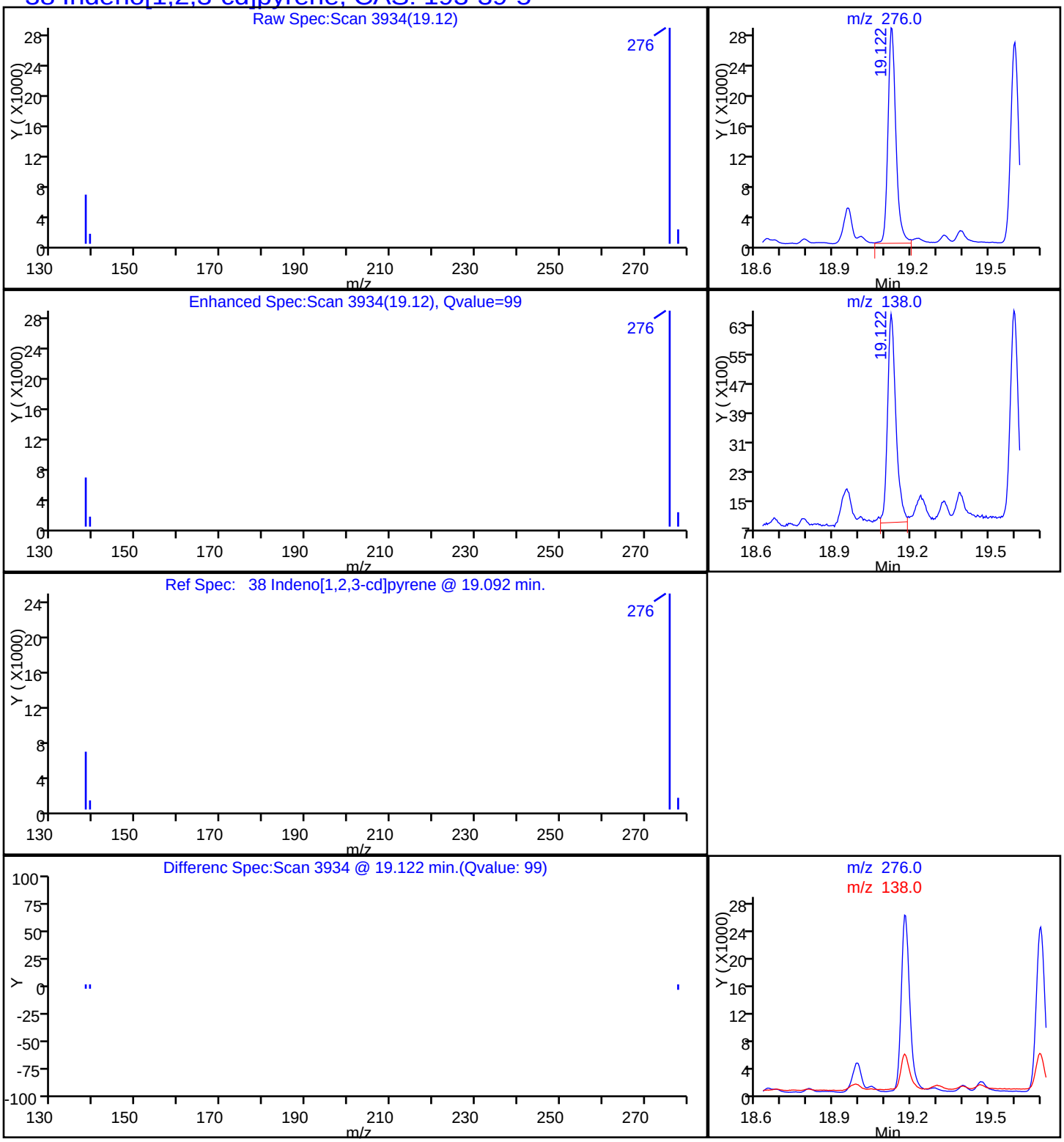


Report Date: 06-Jan-2014 13:44:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8948.D				
Injection Date:	06-Jan-2014 12:25:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-2-A	Lab Sample ID:	280-50614-2		
Client ID:	FSA-SF-SCW				
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SF-SCW-DUP | Lab Sample ID: 280-50614-3

Matrix: Solid | Lab File ID: X4_8923.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 09:18

Extract. Method: 3546 | Date Extracted: 12/30/2013 19:55

Sample wt/vol: 32.2(g) | Date Analyzed: 01/02/2014 17:33

Con. Extract Vol.: 1000(uL) | Dilution Factor: 4

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
120-12-7	Anthracene	560000		22000	3200
53-70-3	Dibenz(a,h)anthracene	410000		22000	5800
83-32-9	Acenaphthene	54000		22000	720
208-96-8	Acenaphthylene	690000		22000	760
86-73-7	Fluorene	120000		22000	2100
91-57-6	2-Methylnaphthalene	470000		22000	1400
91-20-3	Naphthalene	400000		22000	1500

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	79	D	39-120
4165-60-0	Nitrobenzene-d5	99	D	42-120
1718-51-0	Terphenyl-d14	148	X D	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8923.D
Lims ID: 280-50614-A-3-A Lab Sample ID: 280-50614-3
Client ID: FSA-SF-SCW-DUP
Sample Type: Client
Inject. Date: 02-Jan-2014 17:33:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 4.0000
Sample Info: 280-0018755-009
Misc. Info.: 280-50614-a-3-a =280-50614-A-3-A
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 03-Jan-2014 15:55:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	94	21592	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	99	42262	600.0	
* 3 Chrysene-d12	240	11.956	11.964	-0.008	20	52018	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	100	3002	124.2	
$ 5 2-Fluorobiphenyl	172	5.626	5.633	-0.007	99	5053	99.2	
$ 6 Terphenyl-d14	244	9.521	9.532	-0.011	87	9447	184.6	
14 Naphthalene	128	4.780	4.786	-0.006	100	177676	2689.3	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	98	146962	3145.5	
19 Acenaphthylene	152	6.119	6.119	0.0	100	332297	4615.3	
20 Acenaphthene	153	6.261	6.269	-0.008	94	16354	364.1	
22 Fluorene	166	6.696	6.702	-0.006	95	44871	835.9	
24 Phenanthrene	178	7.548	7.553	-0.005	100	1863336	21514	E
25 Anthracene	178	7.597	7.602	-0.005	100	320554	3759.7	
27 Fluoranthene	202	8.979	8.979	0.0	100	3288250	35005	E
28 Pyrene	202	9.353	9.359	-0.006	100	3180150	32811	E
31 Benzo[a]anthracene	228	11.924	11.932	-0.008	99	1273469	12044	E
32 Chrysene	228	12.027	12.035	-0.008	100	1716192	17166	E
34 Benzo[b]fluoranthene	252	15.272	15.264	0.008	100	2198557	22702	E
35 Benzo[k]fluoranthene	252	15.354	15.357	-0.003	100	754967	7578.4	E
36 Benzo[a]pyrene	252	16.397	16.397	0.0	100	1288875	13733	E
38 Indeno[1,2,3-cd]pyrene	276	19.122	19.118	0.004	98	1057288	11444	E
37 Dibenz(a,h)anthracene	278	19.148	19.152	-0.004	80	259040	2774.5	
39 Benzo[g,h,i]perylene	276	19.600	19.592	0.008	98	993464	10017	E

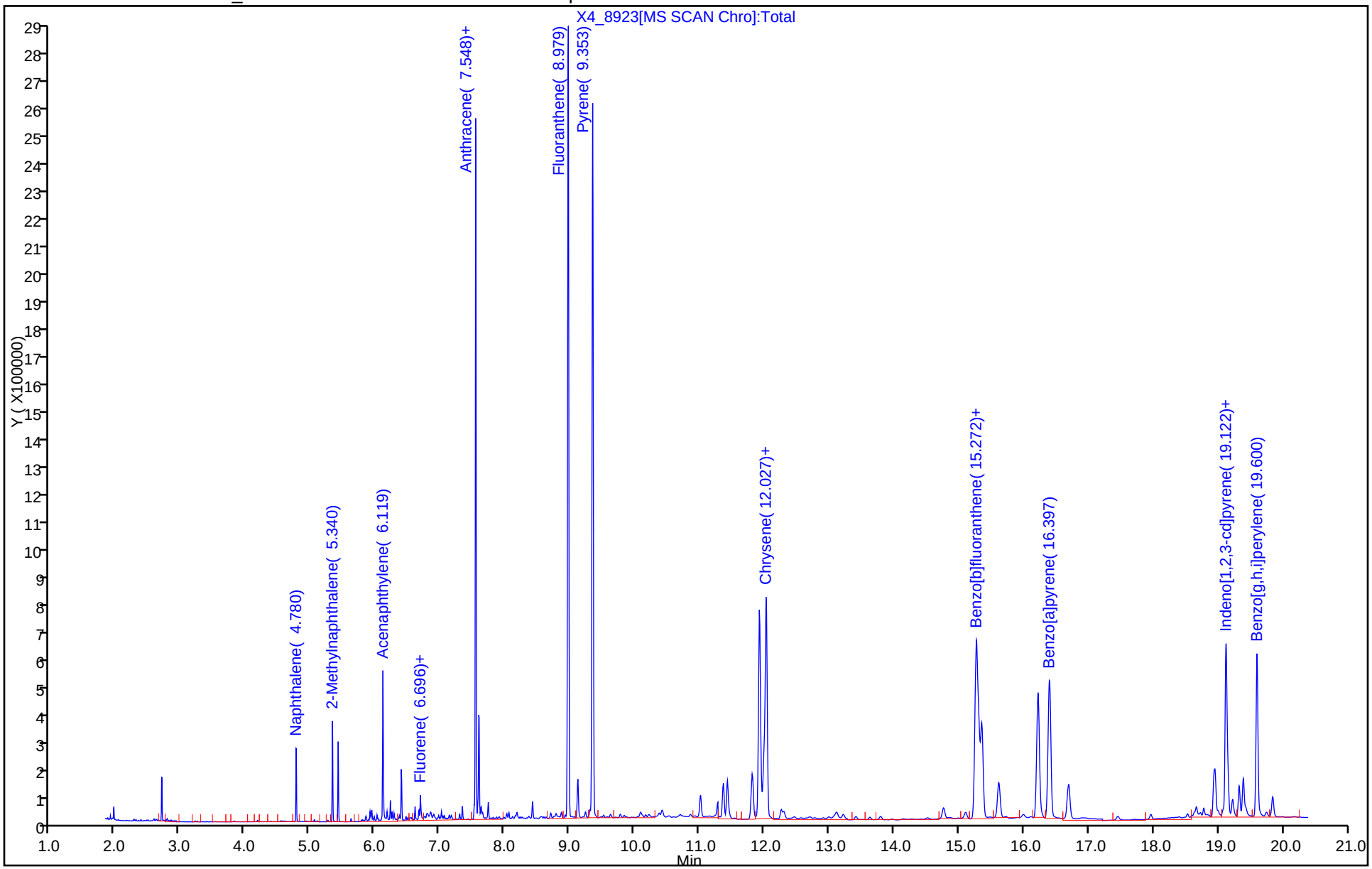
QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount

Report Date: 06-Jan-2014 10:06:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8923.D				
Injection Date:	02-Jan-2014 17:33:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3	Worklist Smp#:	9
Client ID:	FSA-SF-SCW-DUP				
Injection Vol:	1.0 ul	Dil. Factor:	4.0000	ALS Bottle#:	9
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

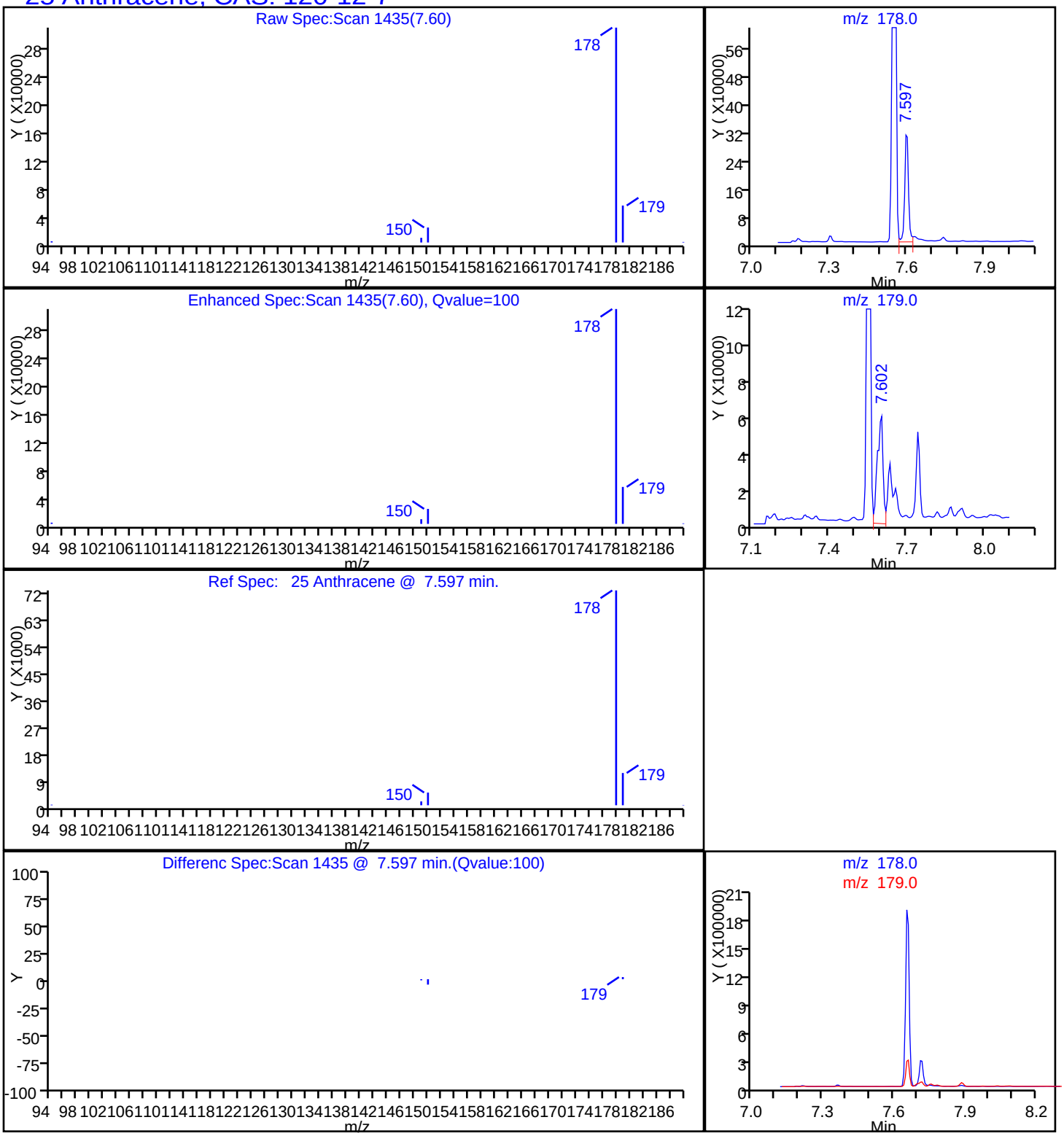


Report Date: 06-Jan-2014 10:06:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8923.D				
Injection Date:	02-Jan-2014 17:33:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	4.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7

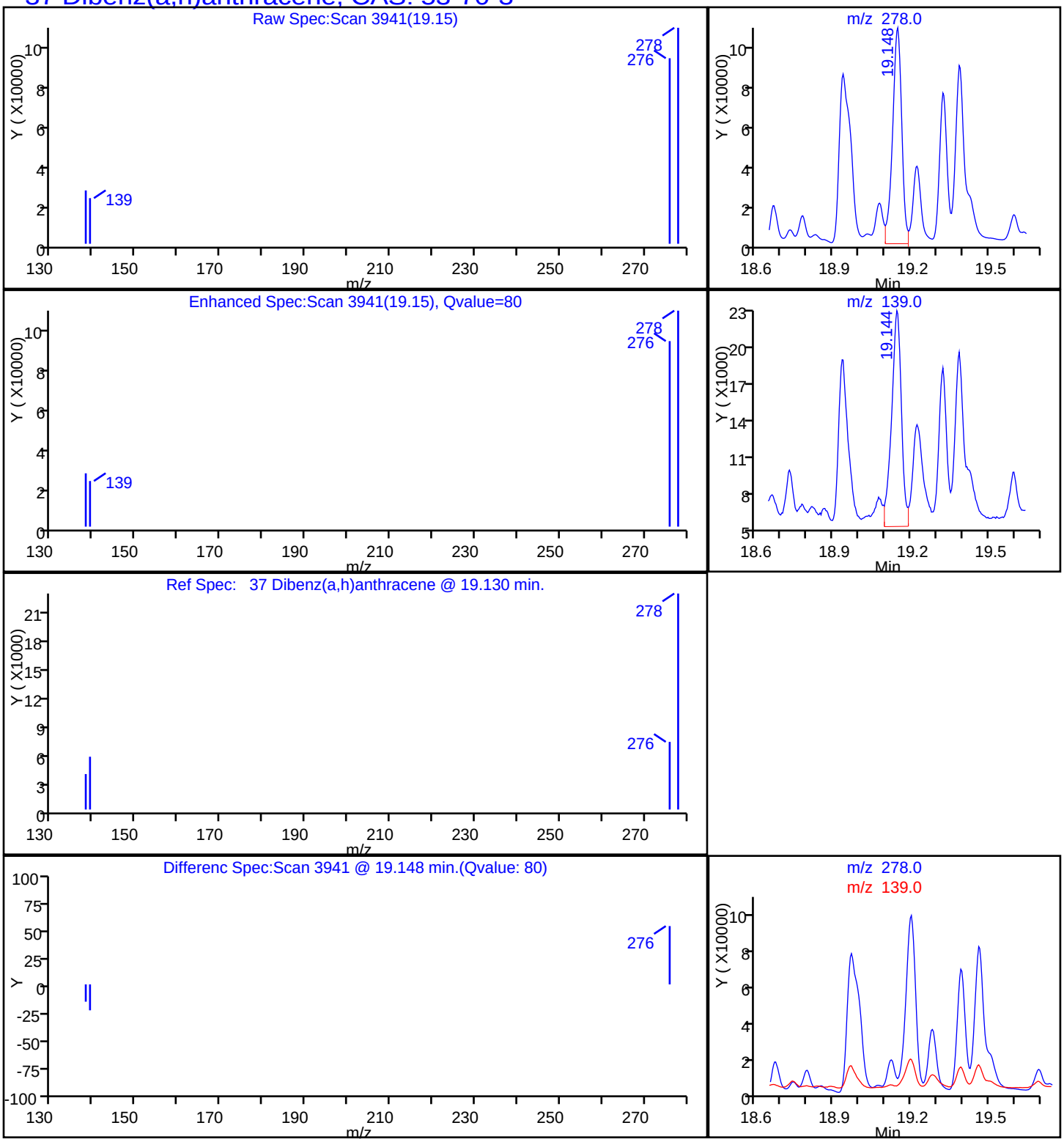


Report Date: 06-Jan-2014 10:06:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8923.D				
Injection Date:	02-Jan-2014 17:33:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	4.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3

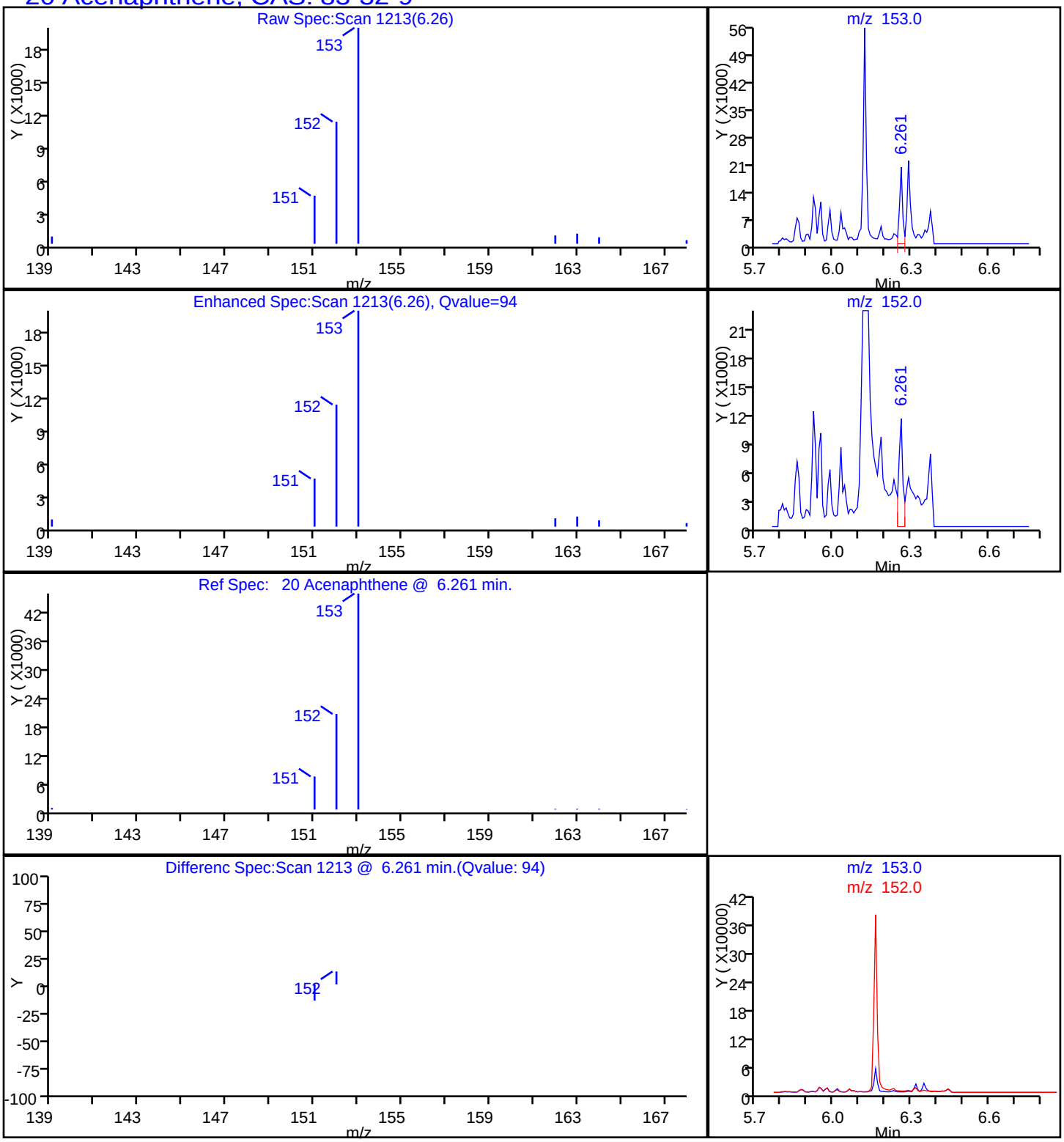


Report Date: 06-Jan-2014 10:06:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8923.D				
Injection Date:	02-Jan-2014 17:33:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	4.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9

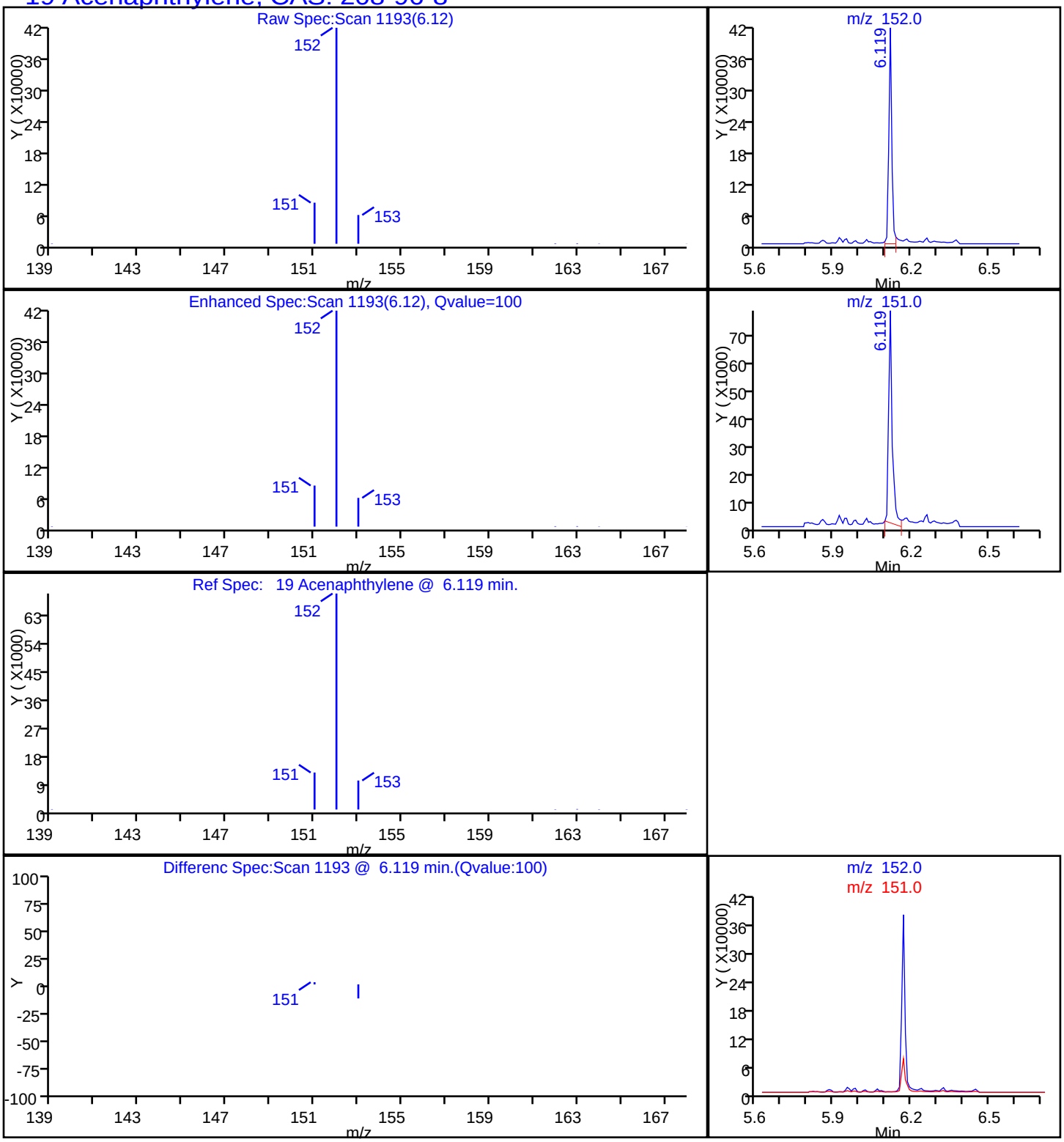


Report Date: 06-Jan-2014 10:06:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8923.D				
Injection Date:	02-Jan-2014 17:33:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	4.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

19 Acenaphthylene, CAS: 208-96-8



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TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8923.D				
Injection Date:	02-Jan-2014 17:33:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	4.0000		
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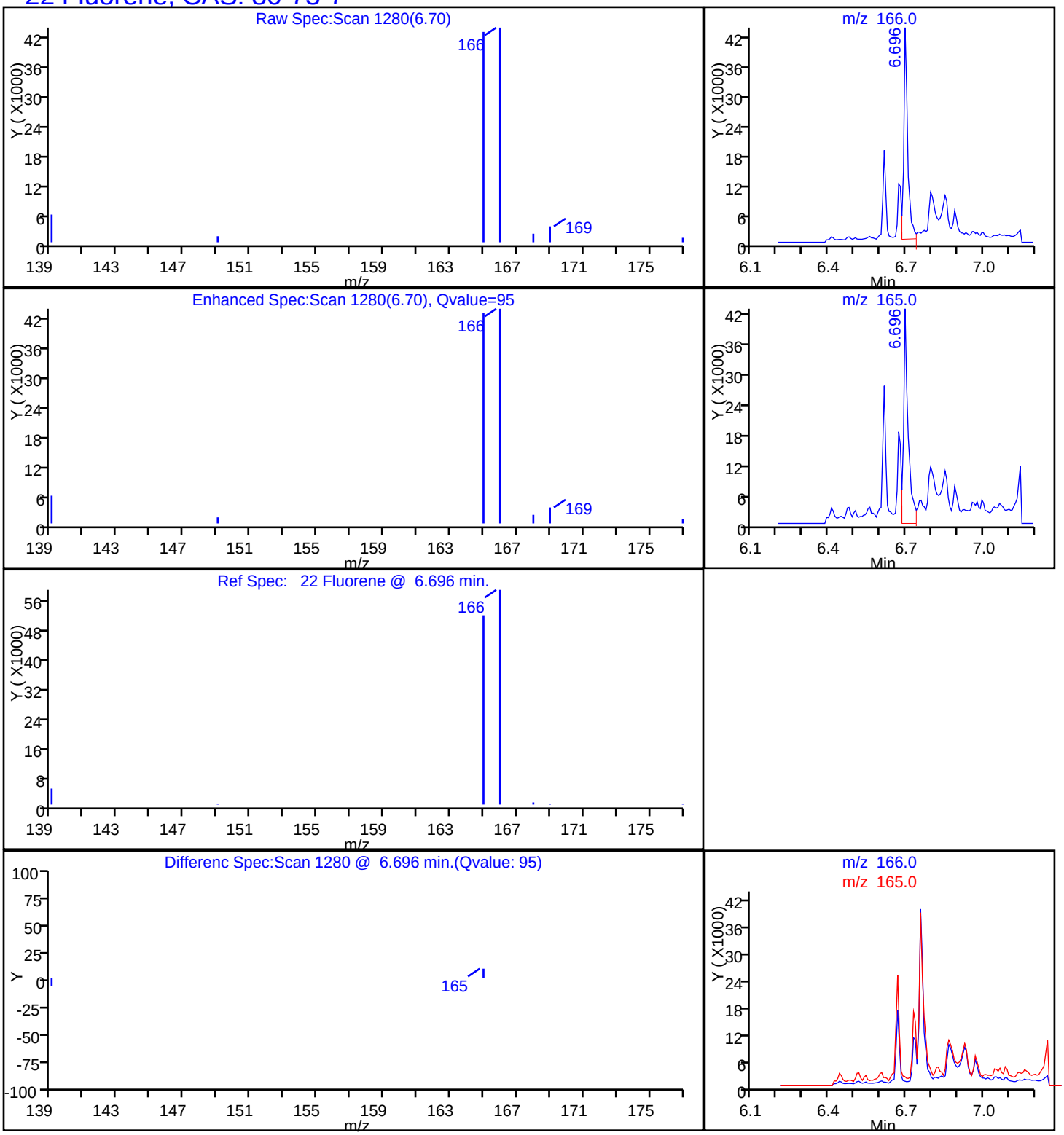
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7

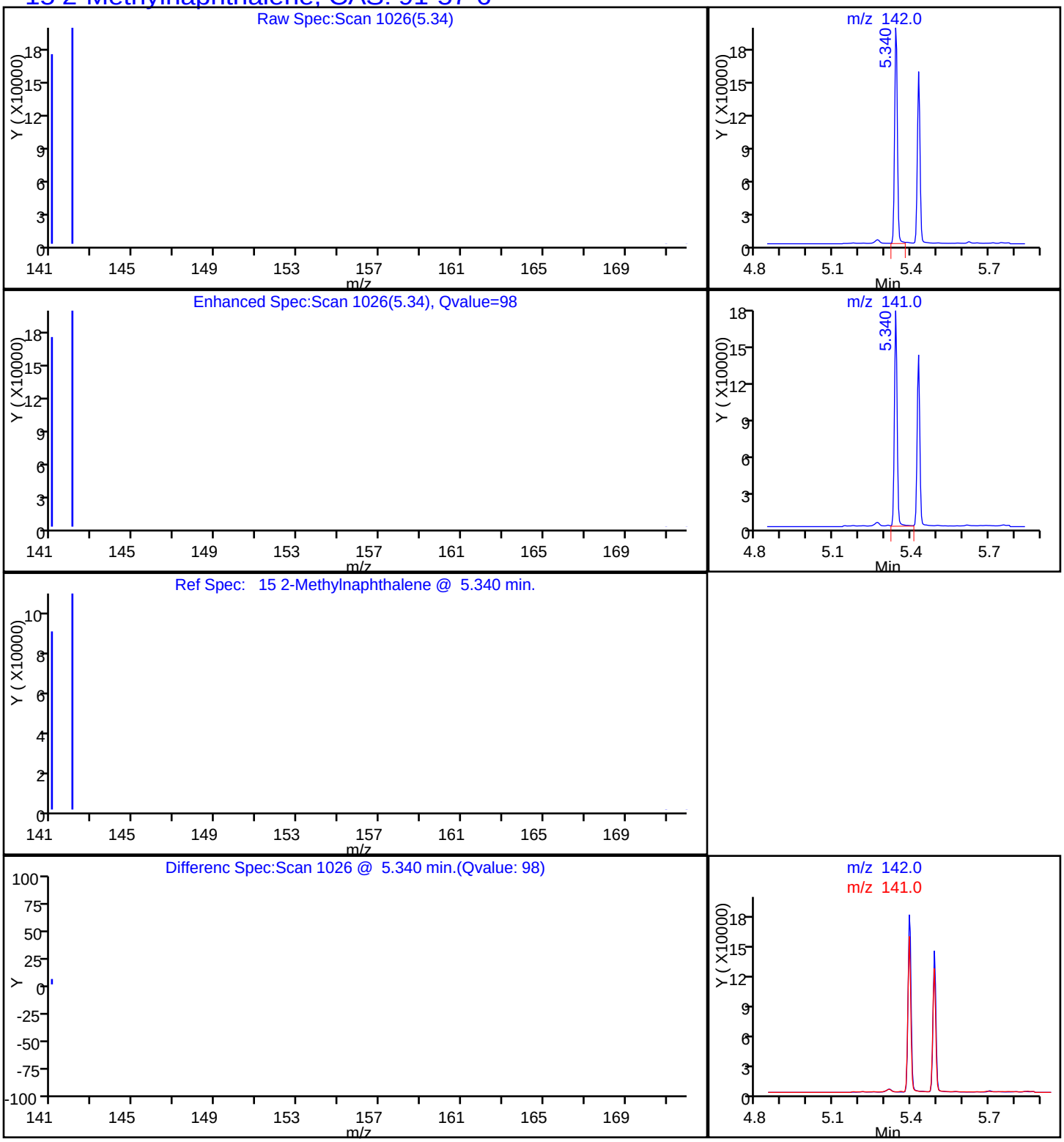


Report Date: 06-Jan-2014 10:06:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8923.D				
Injection Date:	02-Jan-2014 17:33:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	4.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 2-Methylnaphthalene, CAS: 91-57-6

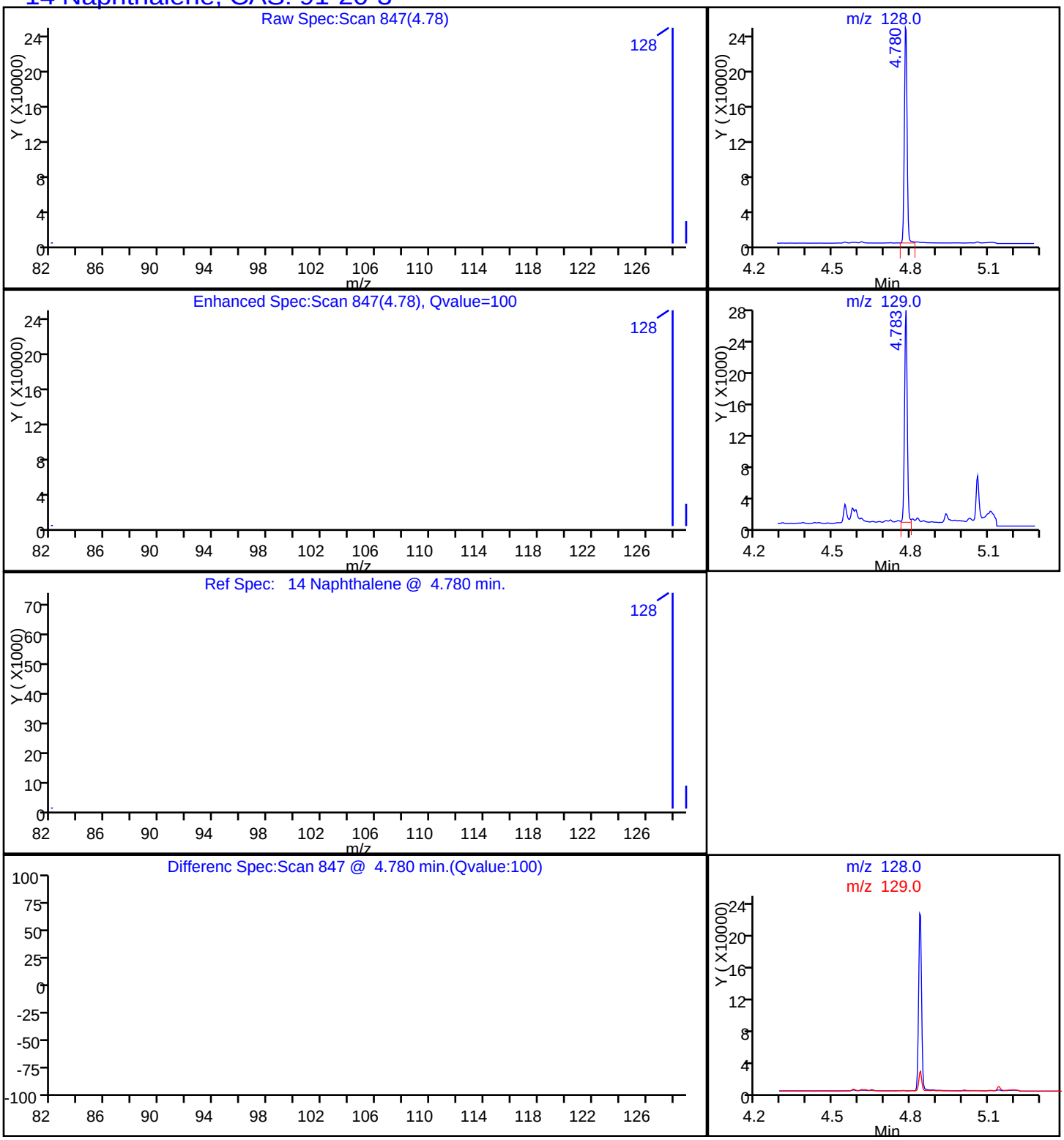


Report Date: 06-Jan-2014 10:06:05 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8923.D				
Injection Date:	02-Jan-2014 17:33:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	4.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SF-SCW-DUP DL | Lab Sample ID: 280-50614-3 DL

Matrix: Solid | Lab File ID: X4_8949.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 09:18

Extract. Method: 3546 | Date Extracted: 12/30/2013 19:55

Sample wt/vol: 32.2(g) | Date Analyzed: 01/06/2014 12:52

Con. Extract Vol.: 1000(uL) | Dilution Factor: 50

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207515 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	3100000		280000	67000
50-32-8	Benzo[a]pyrene	2100000		280000	41000
56-55-3	Benzo[a]anthracene	2100000		280000	50000
207-08-9	Benzo[k]fluoranthene	1100000		280000	56000
191-24-2	Benzo[g,h,i]perylene	1500000		280000	62000
85-01-8	Phenanthrene	4200000		280000	62000
218-01-9	Chrysene	2800000		280000	56000
206-44-0	Fluoranthene	5300000		280000	56000
129-00-0	Pyrene	5800000		280000	62000
193-39-5	Indeno[1,2,3-cd]pyrene	1700000		280000	62000

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	0	D X	39-120
4165-60-0	Nitrobenzene-d5	0	D X	42-120
1718-51-0	Terphenyl-d14	0	D X	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8949.D
Lims ID: 280-50614-A-3-A Lab Sample ID: 280-50614-3
Client ID: FSA-SF-SCW-DUP
Sample Type: Client
Inject. Date: 06-Jan-2014 12:52:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 50.0000
Sample Info: 280-50614-a-3-a
Misc. Info.: 280-50614-a-3-a,50, =280-50614-A-3-A,50,
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 13:44:04 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

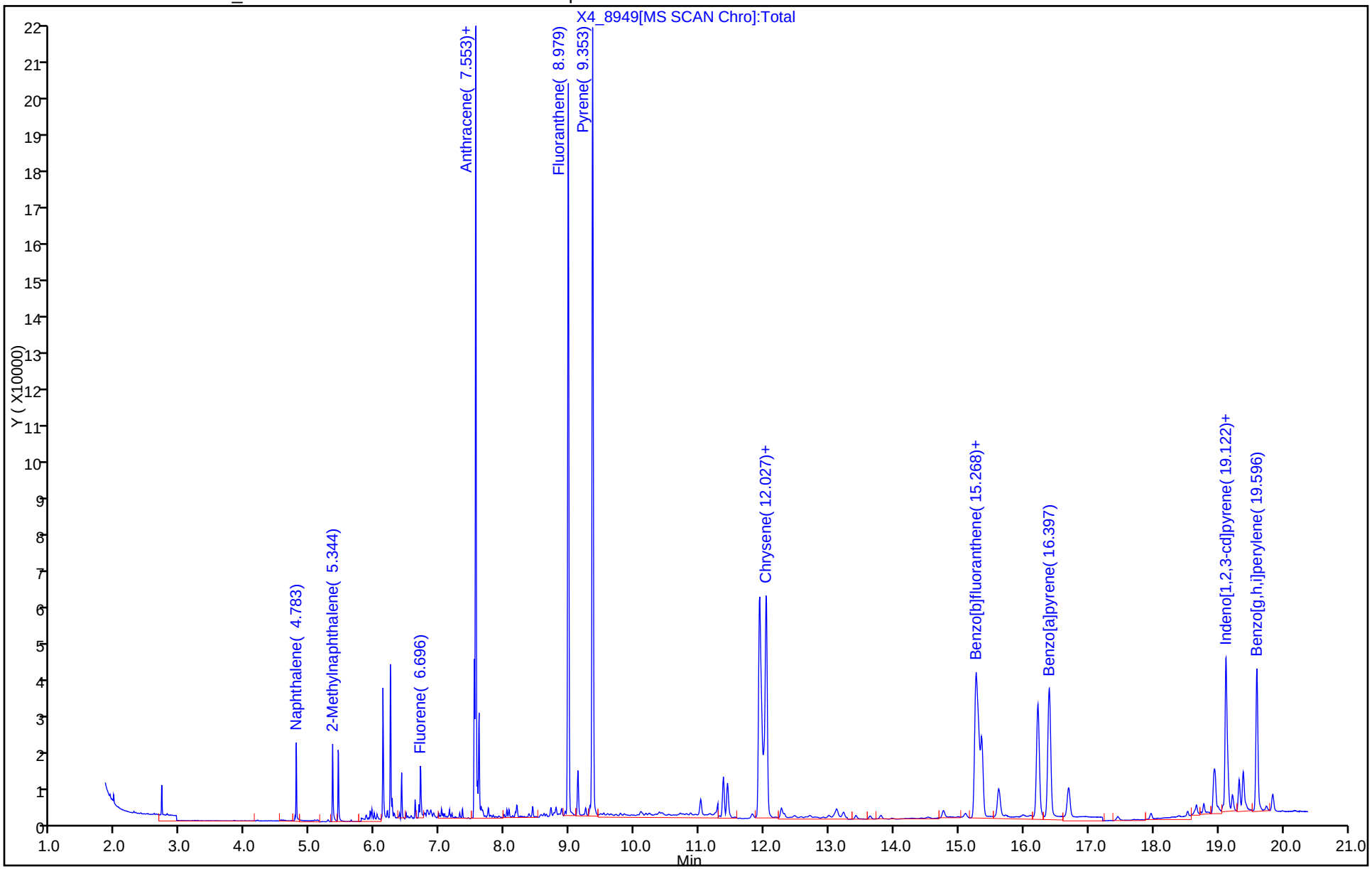
First Level Reviewer: vasquezk Date: 06-Jan-2014 13:42:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	92	18415	600.0	
* 1 Phenanthrene-d10	188	7.526	7.537	-0.011	100	36088	600.0	
* 3 Chrysene-d12	240	11.956	11.980	-0.024	93	43714	600.0	
$ 4 Nitrobenzene-d5	82		4.189					
$ 5 2-Fluorobiphenyl	172		5.633					
$ 6 Terphenyl-d14	244		9.538					
14 Naphthalene	128	4.783	4.786	-0.003	100	14490	257.2	
15 2-Methylnaphthalene	142	5.344	5.347	-0.003	100	10579	265.5	
19 Acenaphthylene	152	6.119	6.127	-0.008	99	23249	378.6	
20 Acenaphthene	153	6.261	6.269	-0.008	93	2143	55.9	
22 Fluorene	166	6.702	6.702	0.0	99	7318	159.8	
24 Phenanthrene	178	7.553	7.559	-0.006	100	164451	2223.6	
25 Anthracene	178	7.602	7.608	-0.006	99	24520	336.8	
27 Fluoranthene	202	8.979	8.990	-0.011	100	225978	2817.2	
28 Pyrene	202	9.353	9.364	-0.011	100	258554	3124.0	
31 Benzo[a]anthracene	228	11.924	11.948	-0.024	99	98920	1113.3	
32 Chrysene	228	12.027	12.051	-0.024	100	127382	1516.2	
34 Benzo[b]fluoranthene	252	15.268	15.287	-0.019	100	136010	1671.2	
35 Benzo[k]fluoranthene	252	15.350	15.376	-0.026	100	47936	572.6	
36 Benzo[a]pyrene	252	16.397	16.419	-0.022	100	89995	1141.0	
38 Indeno[1,2,3-cd]pyrene	276	19.118	19.130	-0.012	99	68865	887.0	
37 Dibenz(a,h)anthracene	278	19.148	19.167	-0.019	80	18245	232.5	
39 Benzo[g,h,i]perylene	276	19.596	19.611	-0.015	99	67072	804.8	

Report Date: 06-Jan-2014 13:44:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8949.D				
Injection Date:	06-Jan-2014 12:52:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3	Worklist Smp#:	4
Client ID:	FSA-SF-SCW-DUP				
Injection Vol:	1.0 ul	Dil. Factor:	50.0000	ALS Bottle#:	4
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

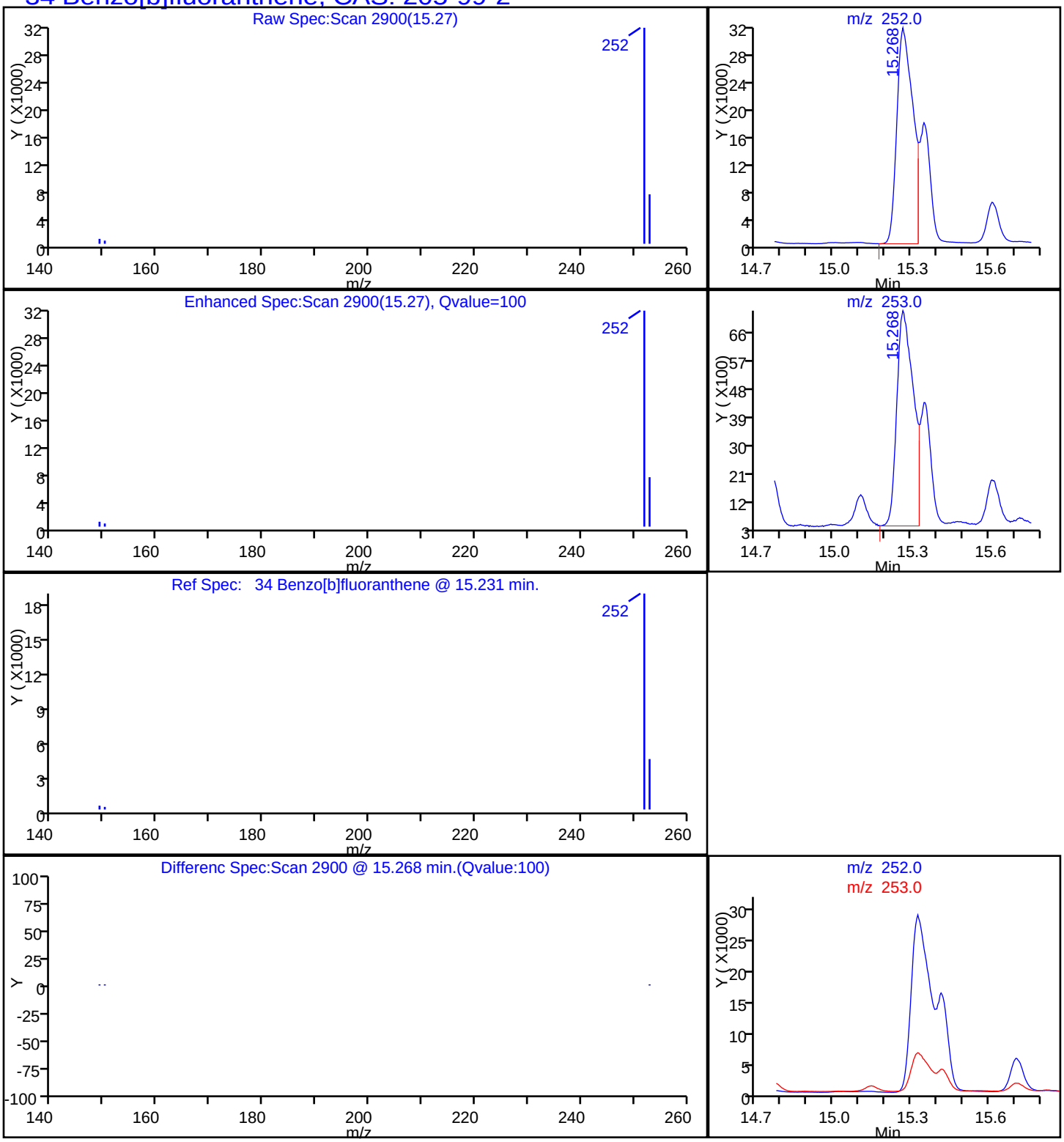


Report Date: 06-Jan-2014 13:44:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8949.D				
Injection Date:	06-Jan-2014 12:52:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

34 Benzo[b]fluoranthene, CAS: 205-99-2

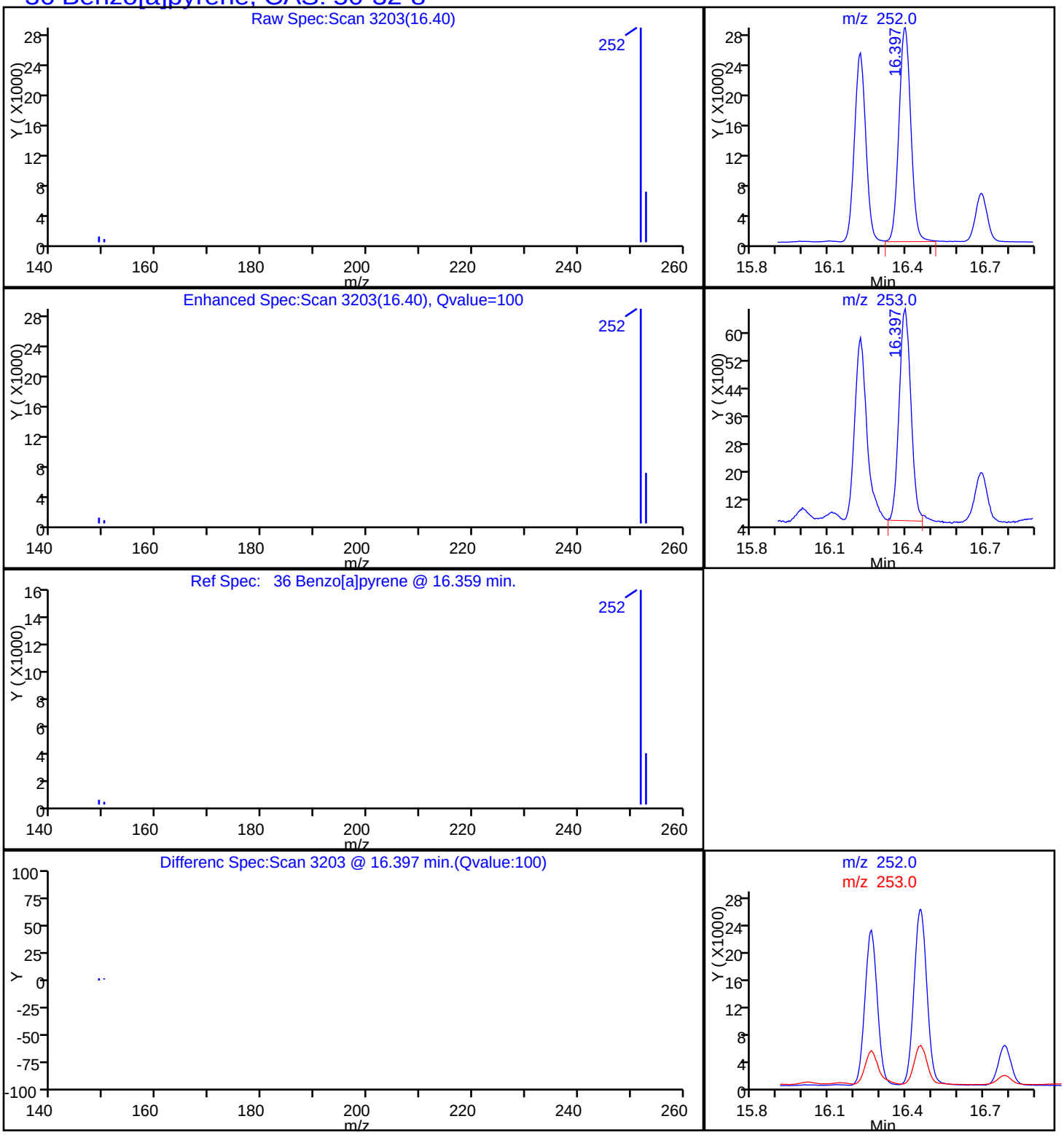


Report Date: 06-Jan-2014 13:44:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8949.D				
Injection Date:	06-Jan-2014 12:52:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[a]pyrene, CAS: 50-32-8

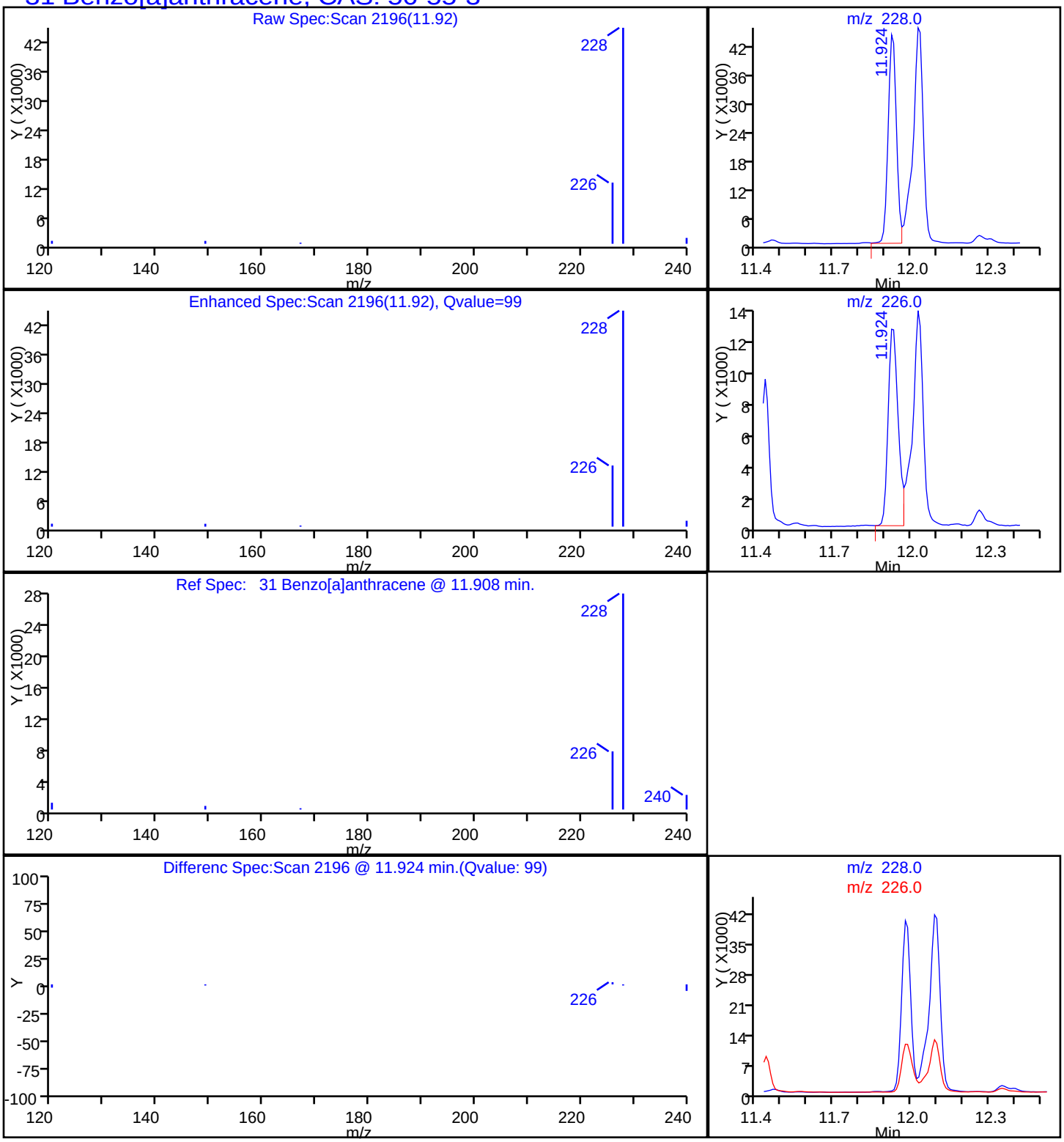


Report Date: 06-Jan-2014 13:44:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8949.D				
Injection Date:	06-Jan-2014 12:52:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3

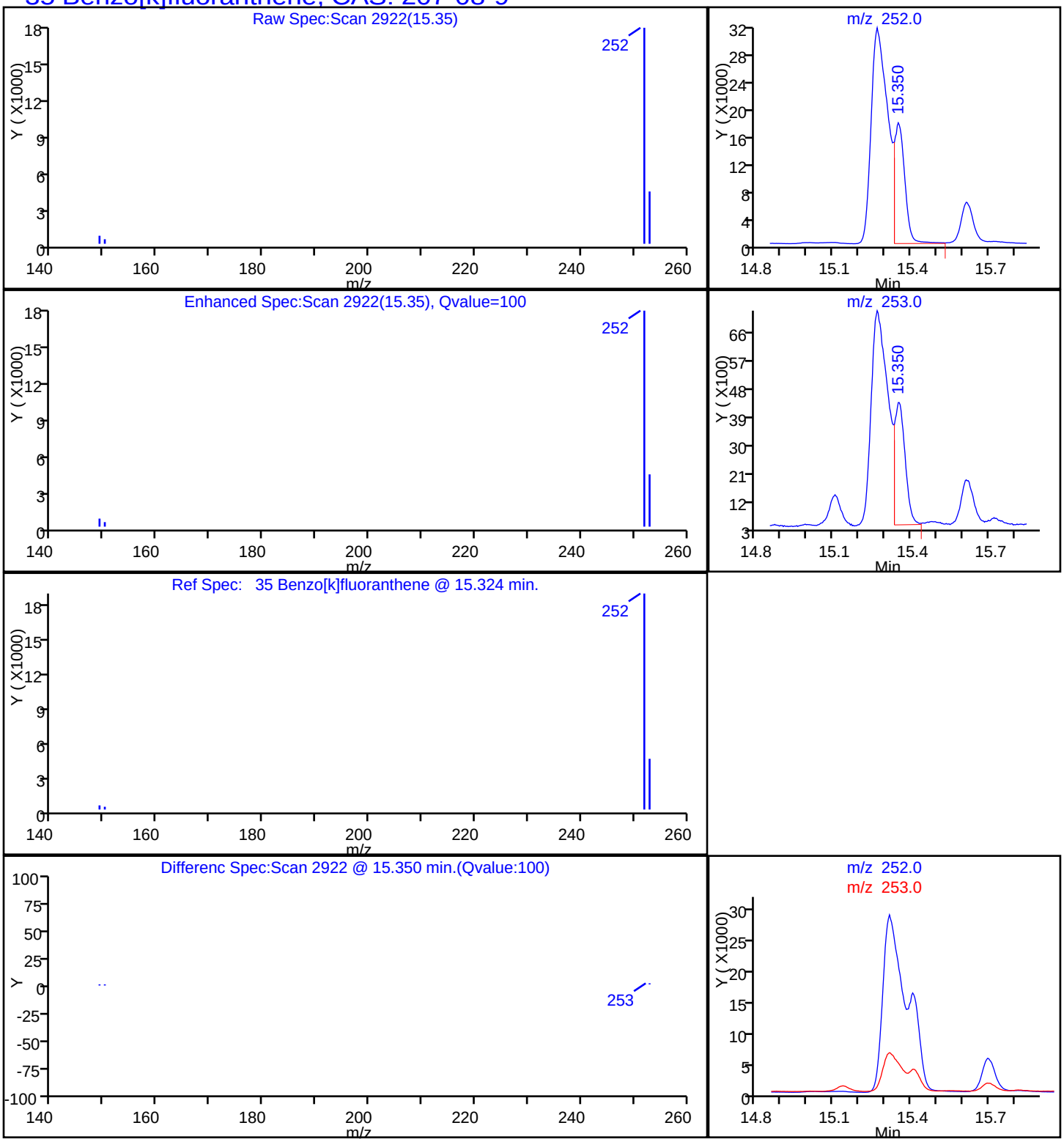


Report Date: 06-Jan-2014 13:44:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8949.D				
Injection Date:	06-Jan-2014 12:52:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9

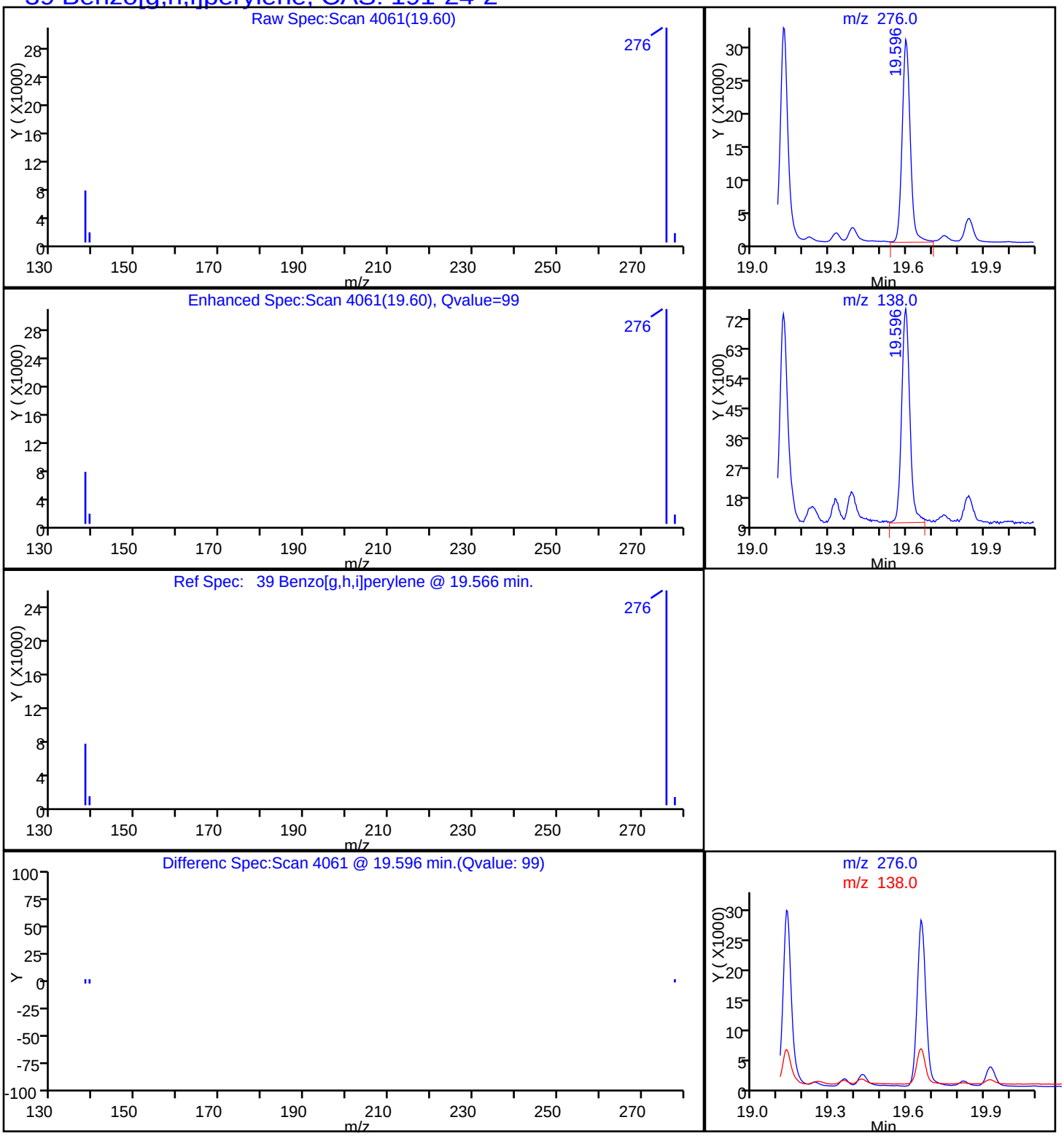


Report Date: 06-Jan-2014 13:44:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8949.D				
Injection Date:	06-Jan-2014 12:52:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[g,h,i]perylene, CAS: 191-24-2

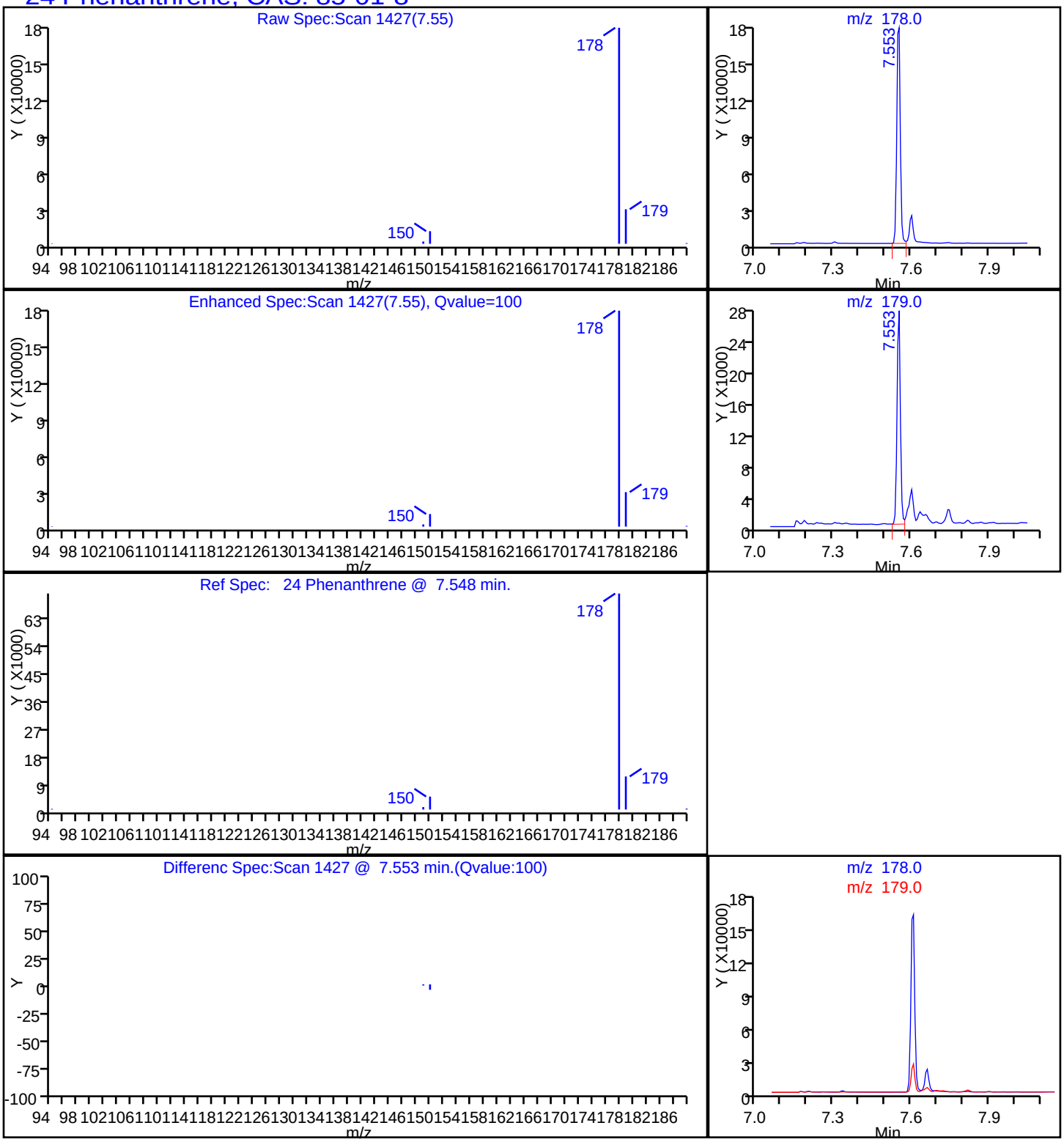


Report Date: 06-Jan-2014 13:44:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8949.D				
Injection Date:	06-Jan-2014 12:52:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8

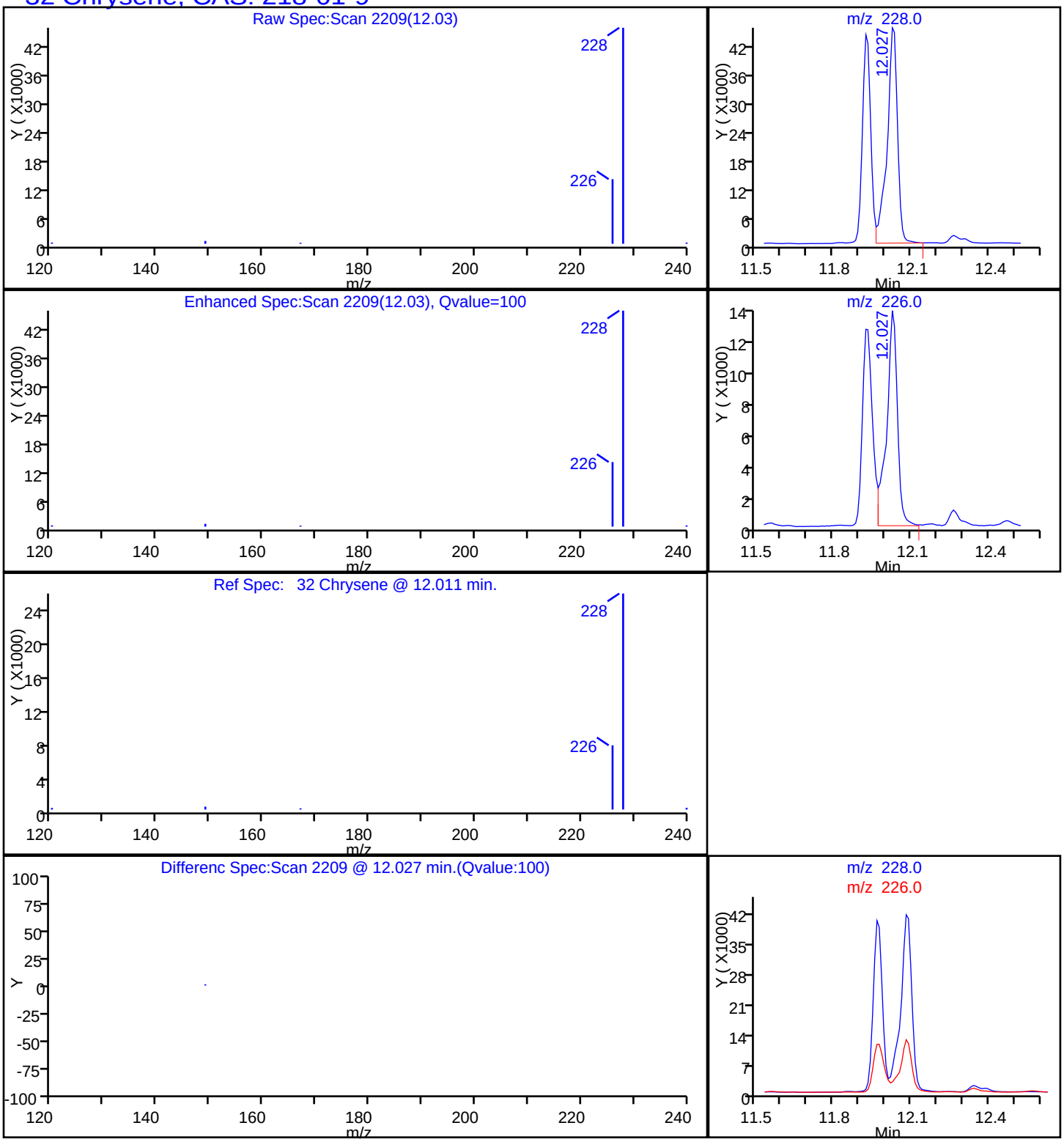


Report Date: 06-Jan-2014 13:44:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8949.D				
Injection Date:	06-Jan-2014 12:52:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

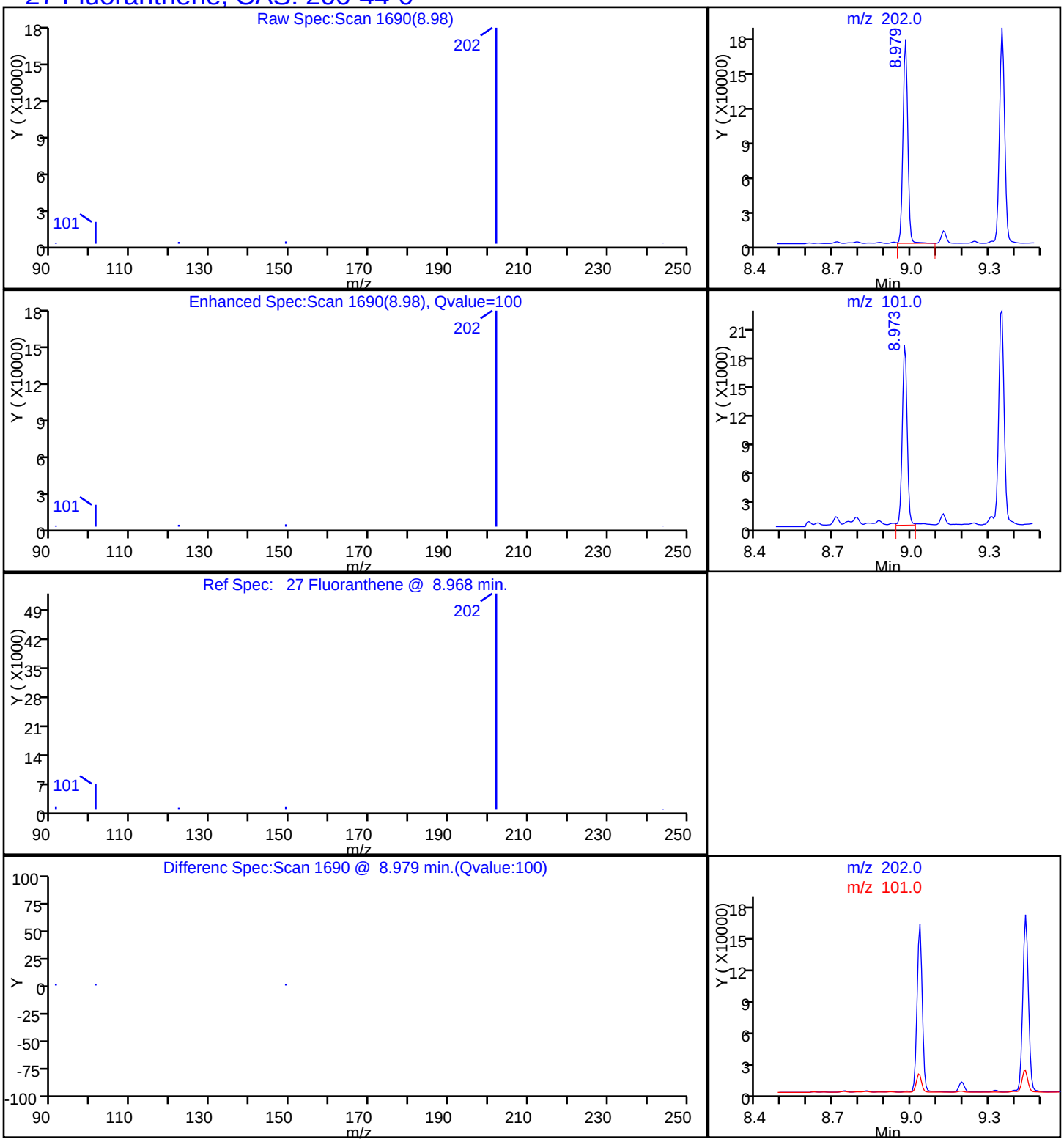


Report Date: 06-Jan-2014 13:44:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8949.D				
Injection Date:	06-Jan-2014 12:52:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0

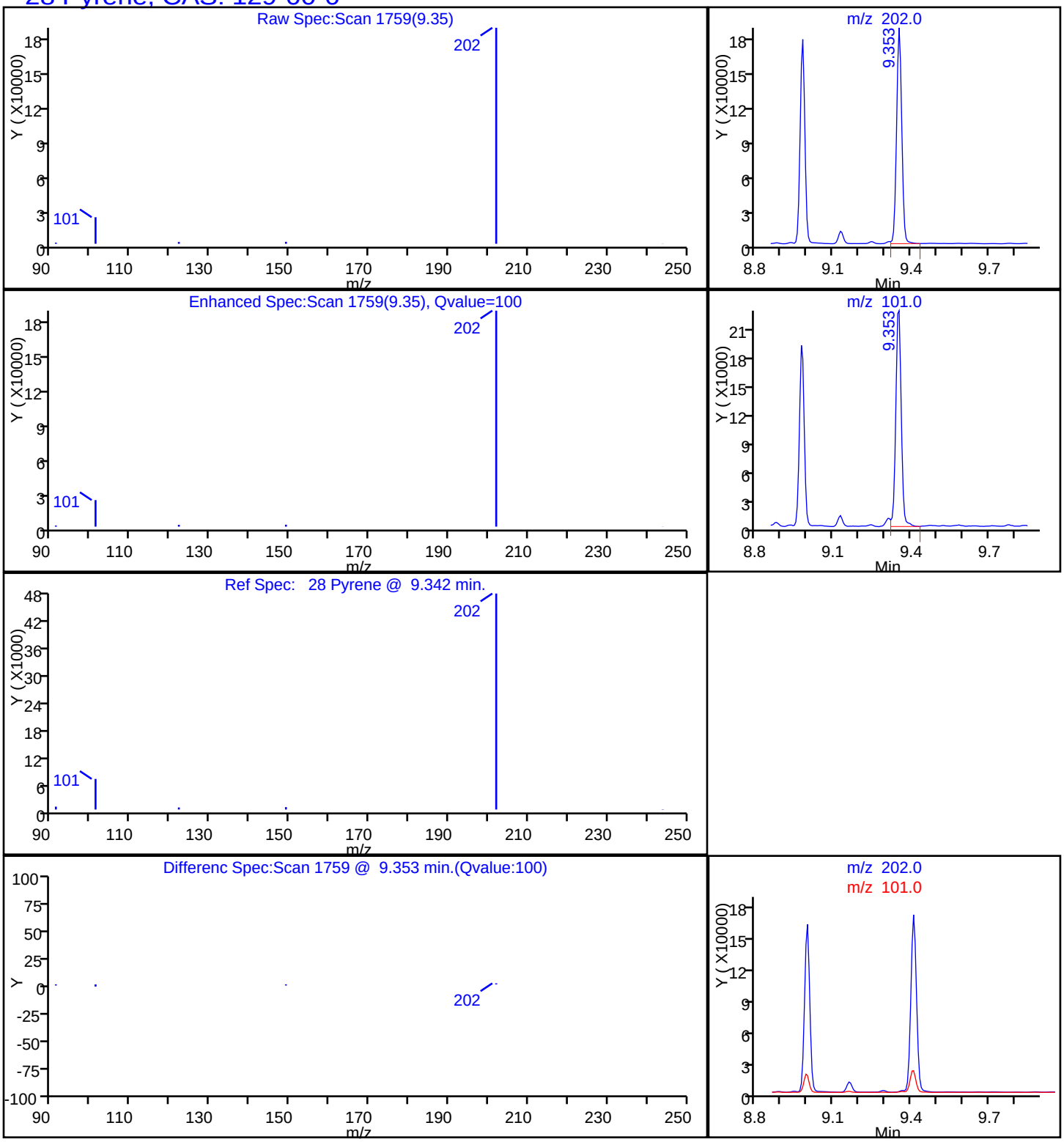


Report Date: 06-Jan-2014 13:44:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8949.D				
Injection Date:	06-Jan-2014 12:52:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0

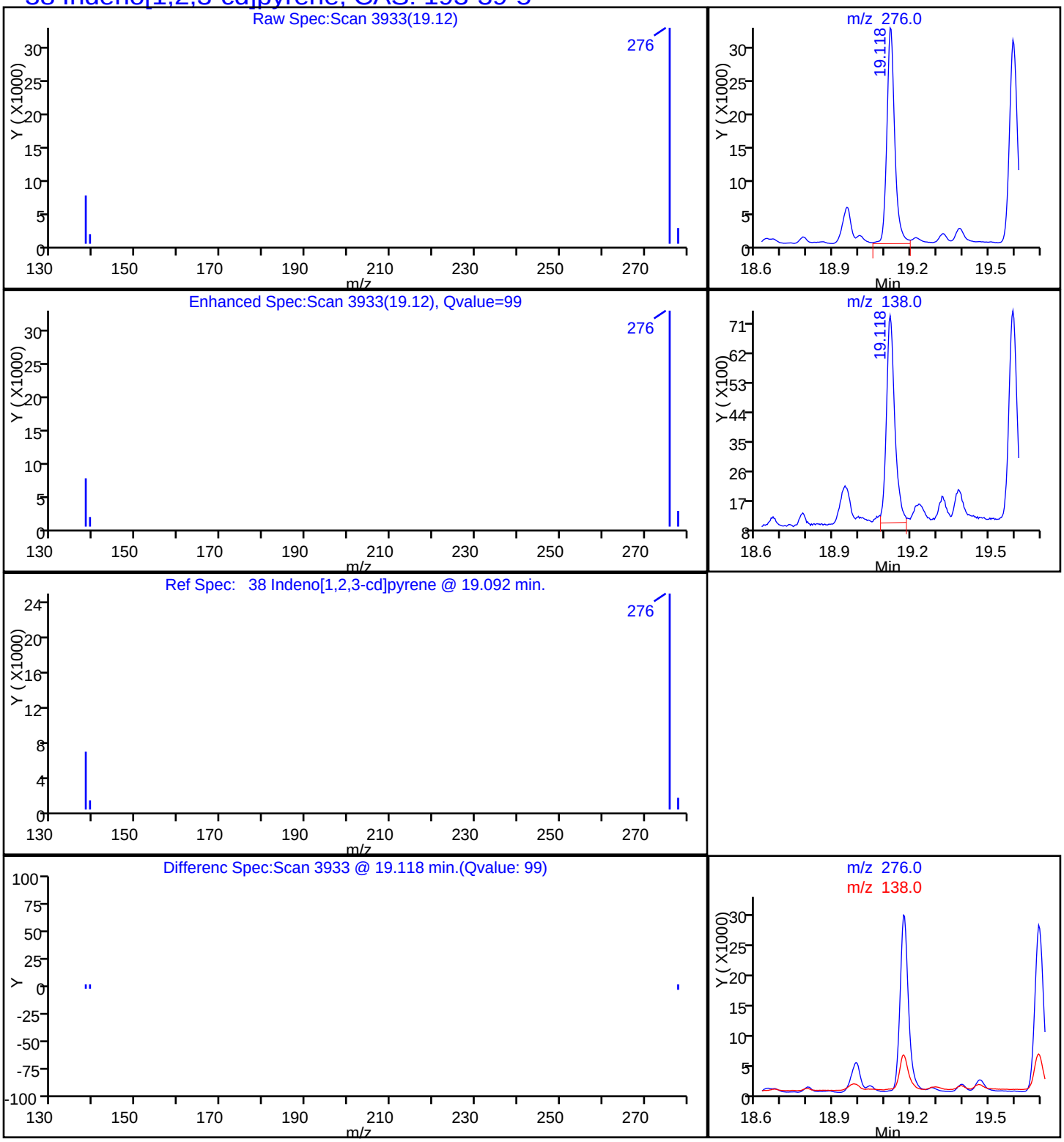


Report Date: 06-Jan-2014 13:44:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8949.D				
Injection Date:	06-Jan-2014 12:52:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-3-A	Lab Sample ID:	280-50614-3		
Client ID:	FSA-SF-SCW-DUP				
Operator ID:	VASQUEZK	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU05 | Lab Sample ID: 280-50614-4

Matrix: Solid | Lab File ID: X4_8903.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 10:45

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 30.60(g) | Date Analyzed: 12/31/2013 22:08

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207101 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	20000		4900	1200
50-32-8	Benzo[a]pyrene	15000		4900	730
56-55-3	Benzo[a]anthracene	13000		4900	880
207-08-9	Benzo[k]fluoranthene	8000		4900	980
191-24-2	Benzo[g,h,i]perylene	12000		4900	1100
85-01-8	Phenanthrene	6100		4900	1100
120-12-7	Anthracene	2600	J	4900	710
53-70-3	Dibenz(a,h)anthracene	3100	J	4900	1300
218-01-9	Chrysene	16000		4900	980
83-32-9	Acenaphthene	910	J	4900	160
208-96-8	Acenaphthylene	2700	J	4900	170
206-44-0	Fluoranthene	20000		4900	980
86-73-7	Fluorene	1700	J	4900	460
129-00-0	Pyrene	27000		4900	1100
193-39-5	Indeno[1,2,3-cd]pyrene	11000		4900	1100
91-57-6	2-Methylnaphthalene	3900	J	4900	300
91-20-3	Naphthalene	3600	J	4900	320

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	79		39-120
4165-60-0	Nitrobenzene-d5	77		42-120
1718-51-0	Terphenyl-d14	135	X	35-124

Report Date: 02-Jan-2014 09:28:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D
Lims ID: 280-50614-A-4-B Lab Sample ID: 280-50614-4
Client ID: FSA-SD-DU05
Sample Type: Client
Inject. Date: 31-Dec-2013 22:08:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-50614-a-4-b
Misc. Info.: 280-50614-a-4-b =280-50614-A-4-B
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 09:08:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	100	21203	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	38775	600.0	
* 3 Chrysene-d12	240	11.948	11.956	-0.008	99	46496	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.186	-0.003	99	9180	386.9	
$ 5 2-Fluorobiphenyl	172	5.626	5.630	-0.004	100	19789	395.5	
$ 6 Terphenyl-d14	244	9.516	9.527	-0.011	99	31616	673.5	
14 Naphthalene	128	4.780	4.783	-0.003	100	7075	109.1	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	99	5450	118.8	
19 Acenaphthylene	152	6.119	6.119	0.0	99	5831	82.5	
20 Acenaphthene	153	6.261	6.261	0.0	94	1230	27.9	
22 Fluorene	166	6.696	6.696	0.0	94	2720	51.6	
24 Phenanthrene	178	7.548	7.553	-0.005	99	14892	187.4	
25 Anthracene	178	7.597	7.602	-0.005	93	6281	80.3	
27 Fluoranthene	202	8.968	8.979	-0.011	100	52987	614.8	
28 Pyrene	202	9.348	9.353	-0.005	100	74246	834.9	
31 Benzo[a]anthracene	228	11.916	11.924	-0.008	97	36364	384.8	
32 Chrysene	228	12.019	12.027	-0.008	100	43647	488.4	M
34 Benzo[b]fluoranthene	252	15.253	15.253	0.0	99	53241	615.0	
35 Benzo[k]fluoranthene	252	15.335	15.342	-0.007	99	21668	243.3	M
36 Benzo[a]pyrene	252	16.374	16.385	-0.011	99	37420	446.1	
38 Indeno[1,2,3-cd]pyrene	276	19.107	19.111	-0.004	98	27597	334.2	
37 Dibenz(a,h)anthracene	278	19.137	19.148	-0.011	60	8026	96.2	
39 Benzo[g,h,i]perylene	276	19.585	19.584	0.001	100	33007	372.3	

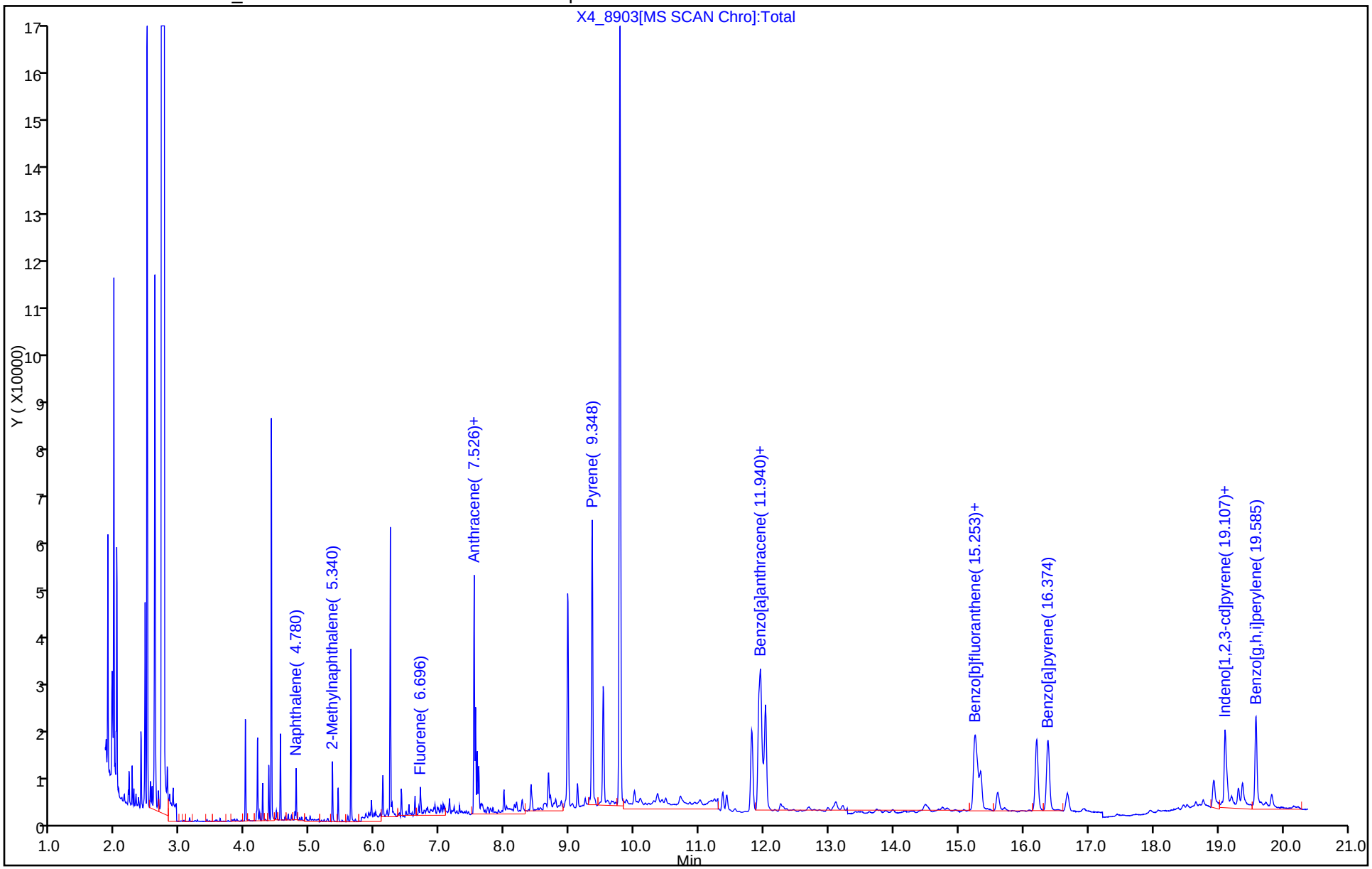
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 02-Jan-2014 09:28:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
Injection Date:	31-Dec-2013 22:08:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4	Worklist Smp#:	19
Client ID:	FSA-SD-DU05				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

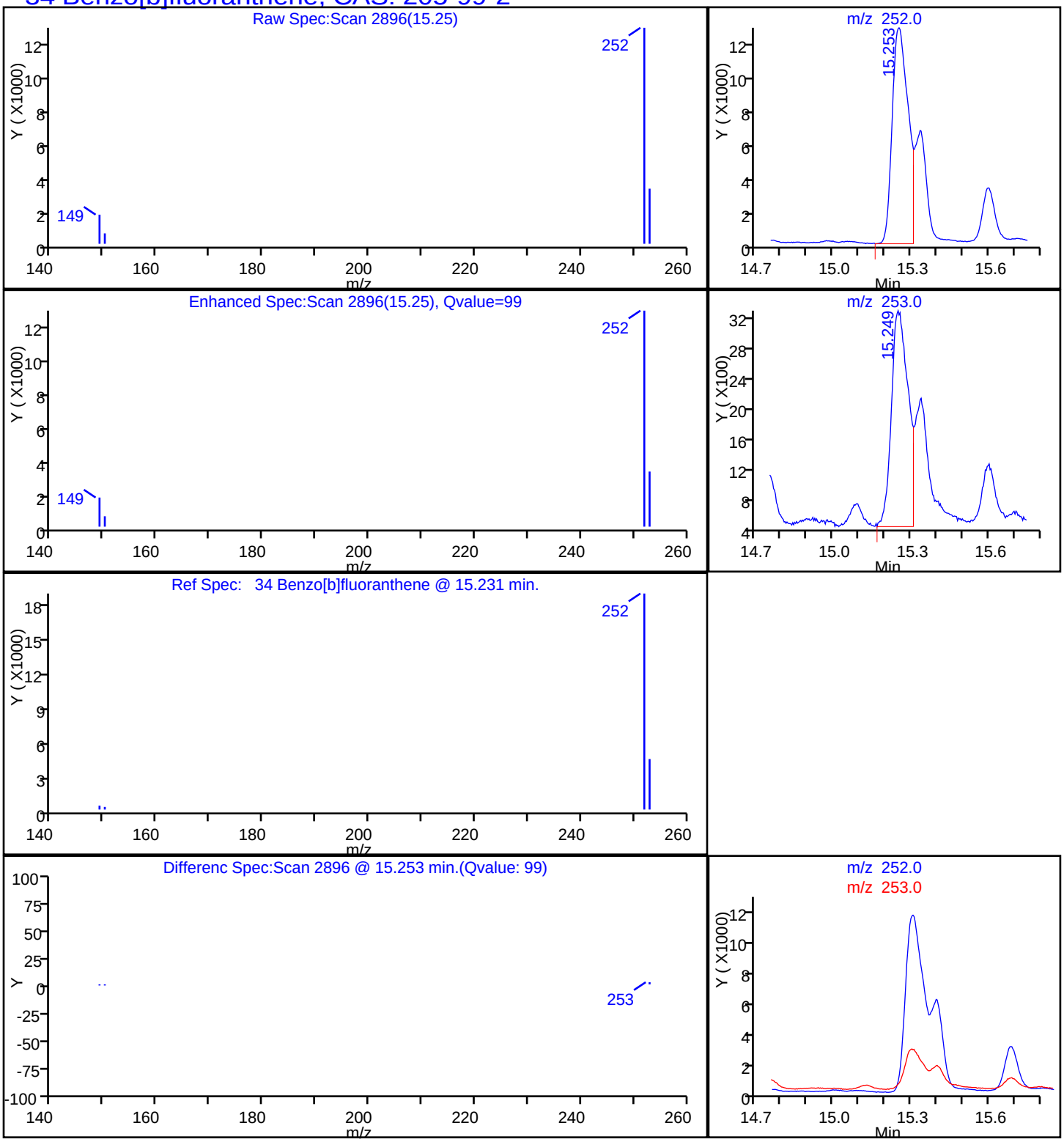


Report Date: 02-Jan-2014 09:28:16 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
Injection Date:	31-Dec-2013 22:08:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

34 Benzo[b]fluoranthene, CAS: 205-99-2

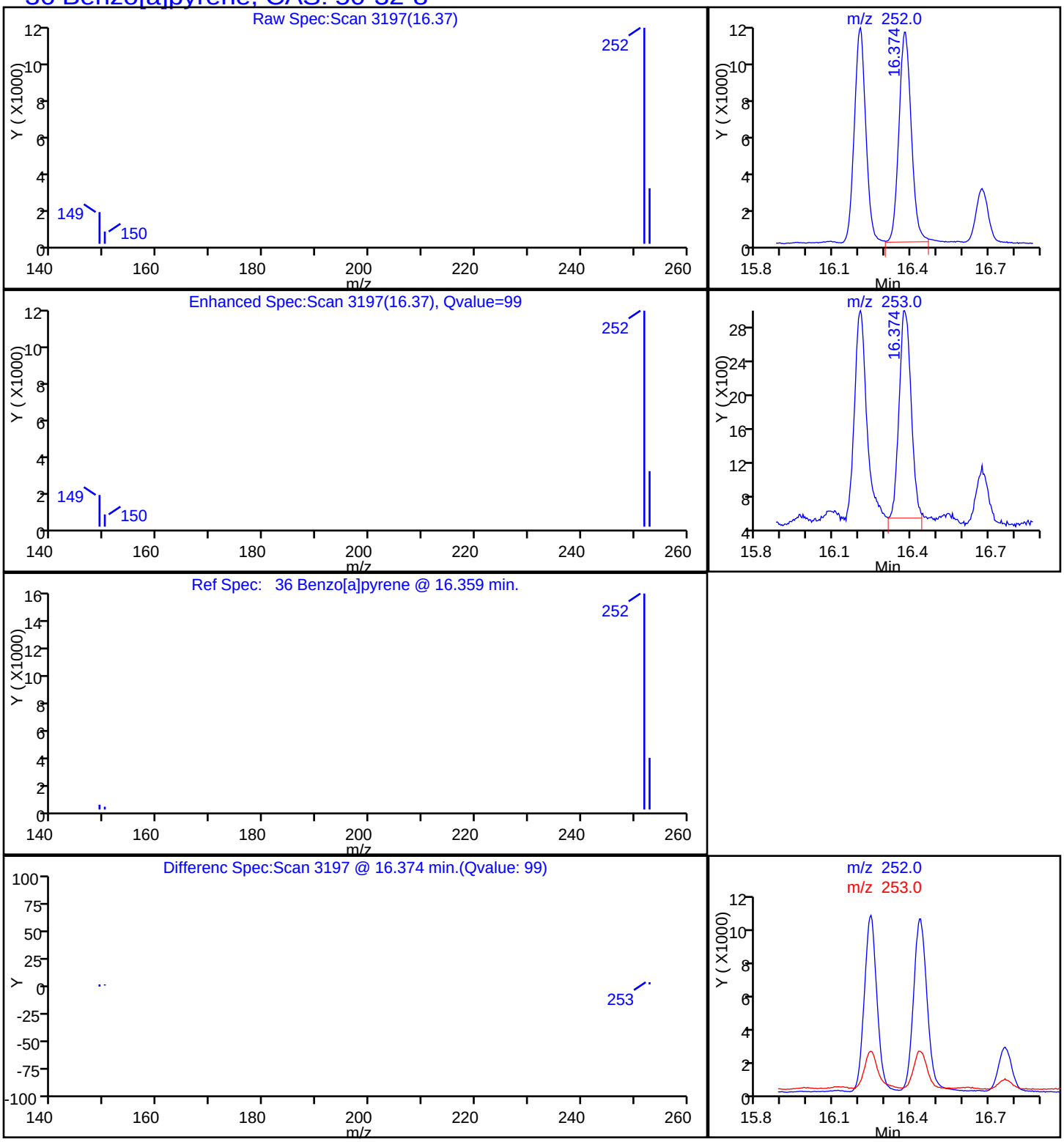


Report Date: 02-Jan-2014 09:28:16 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
Injection Date:	31-Dec-2013 22:08:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[a]pyrene, CAS: 50-32-8



Report Date: 02-Jan-2014 09:28:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
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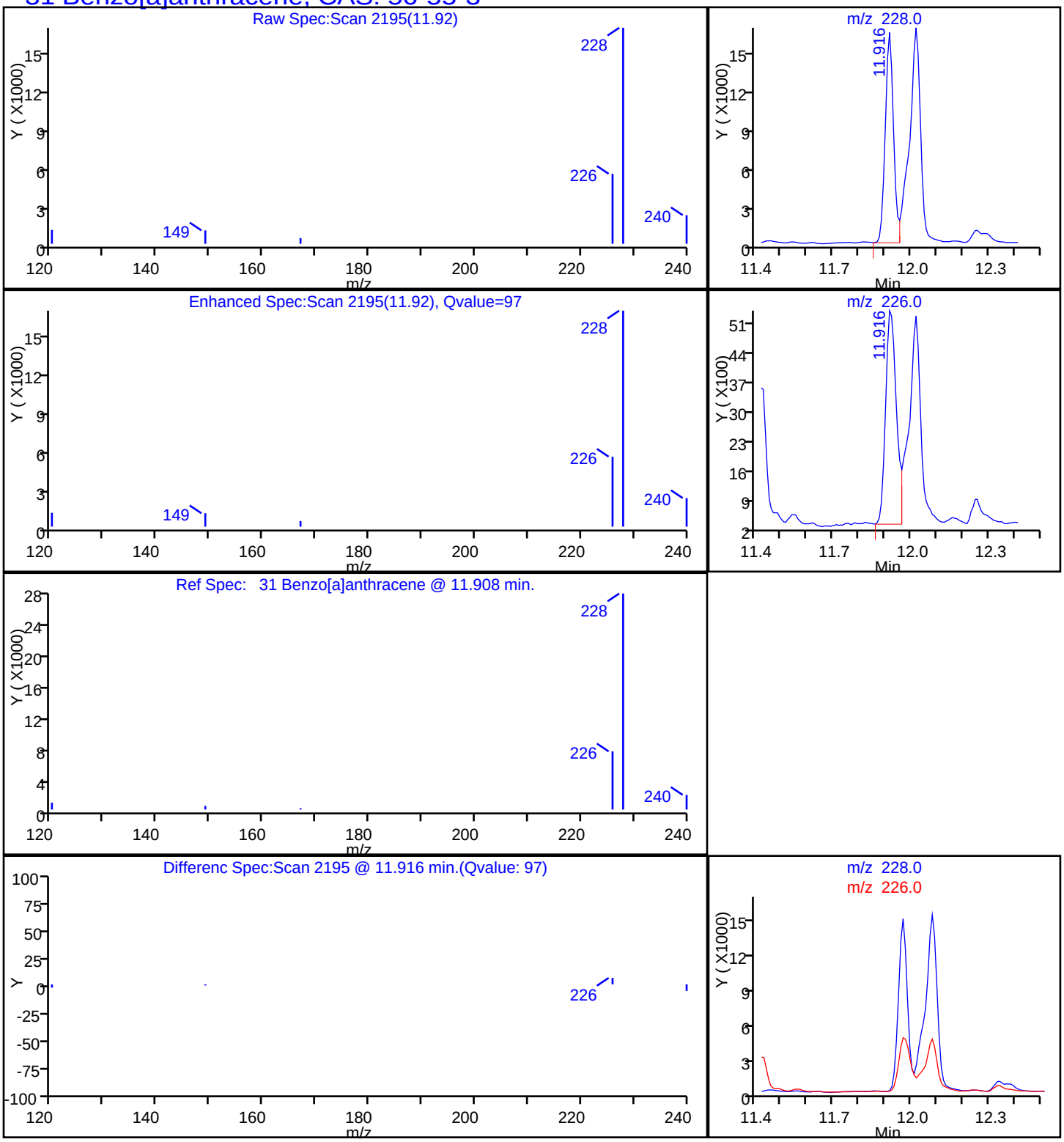
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3



Report Date: 02-Jan-2014 09:28:16 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
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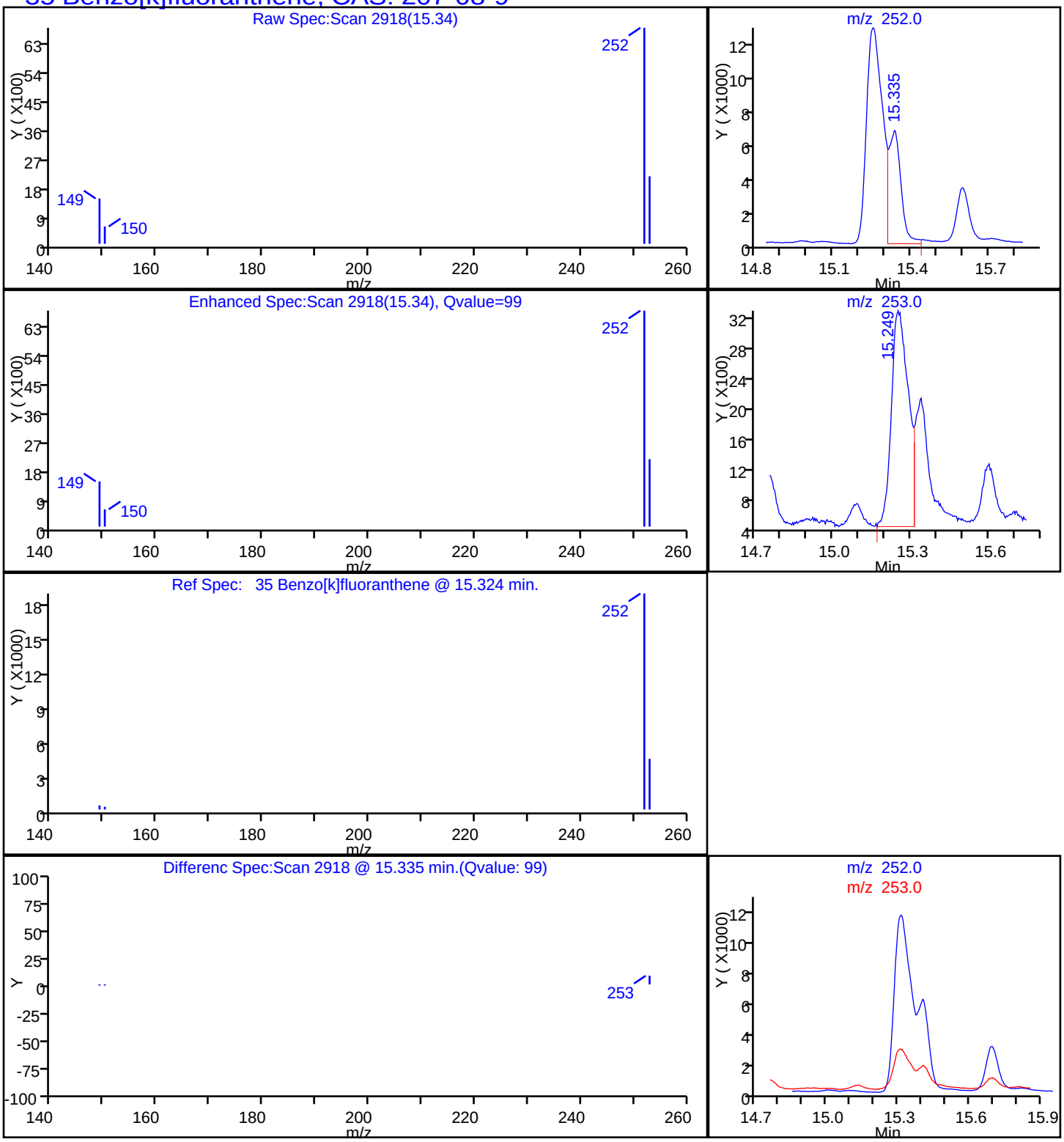
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9



Report Date: 02-Jan-2014 09:28:16 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
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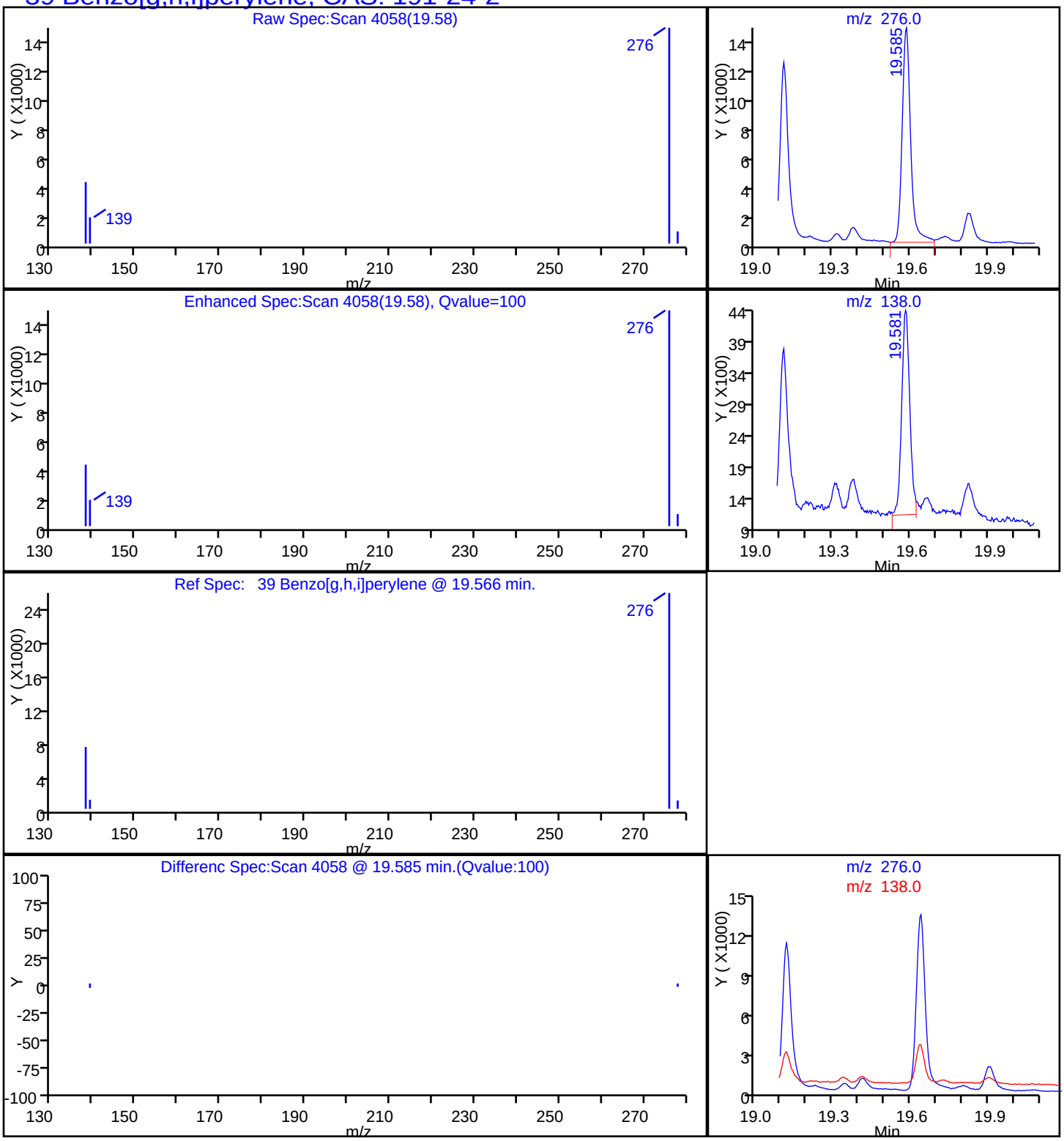
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[g,h,i]perylene, CAS: 191-24-2



Report Date: 02-Jan-2014 09:28:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
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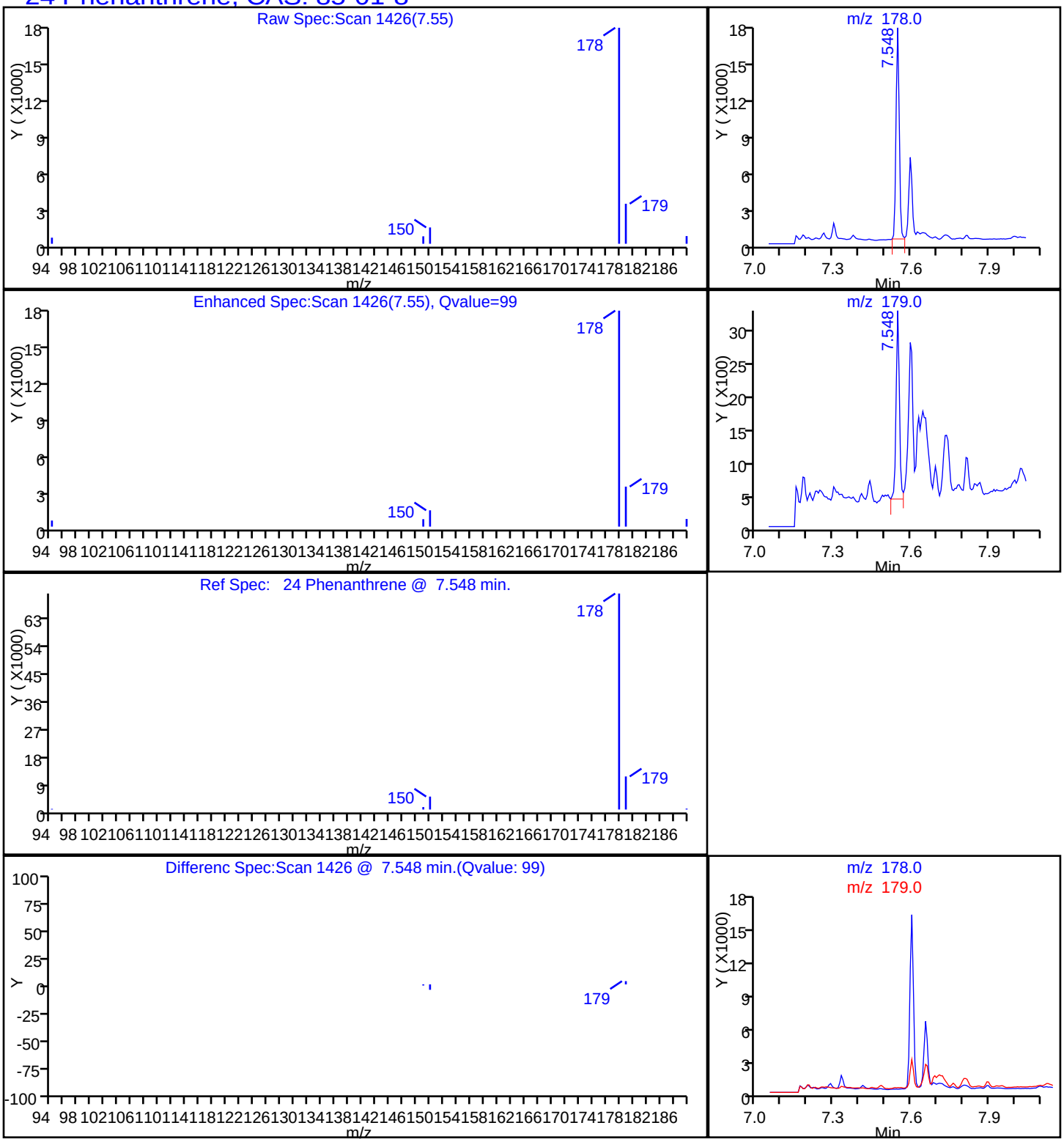
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8

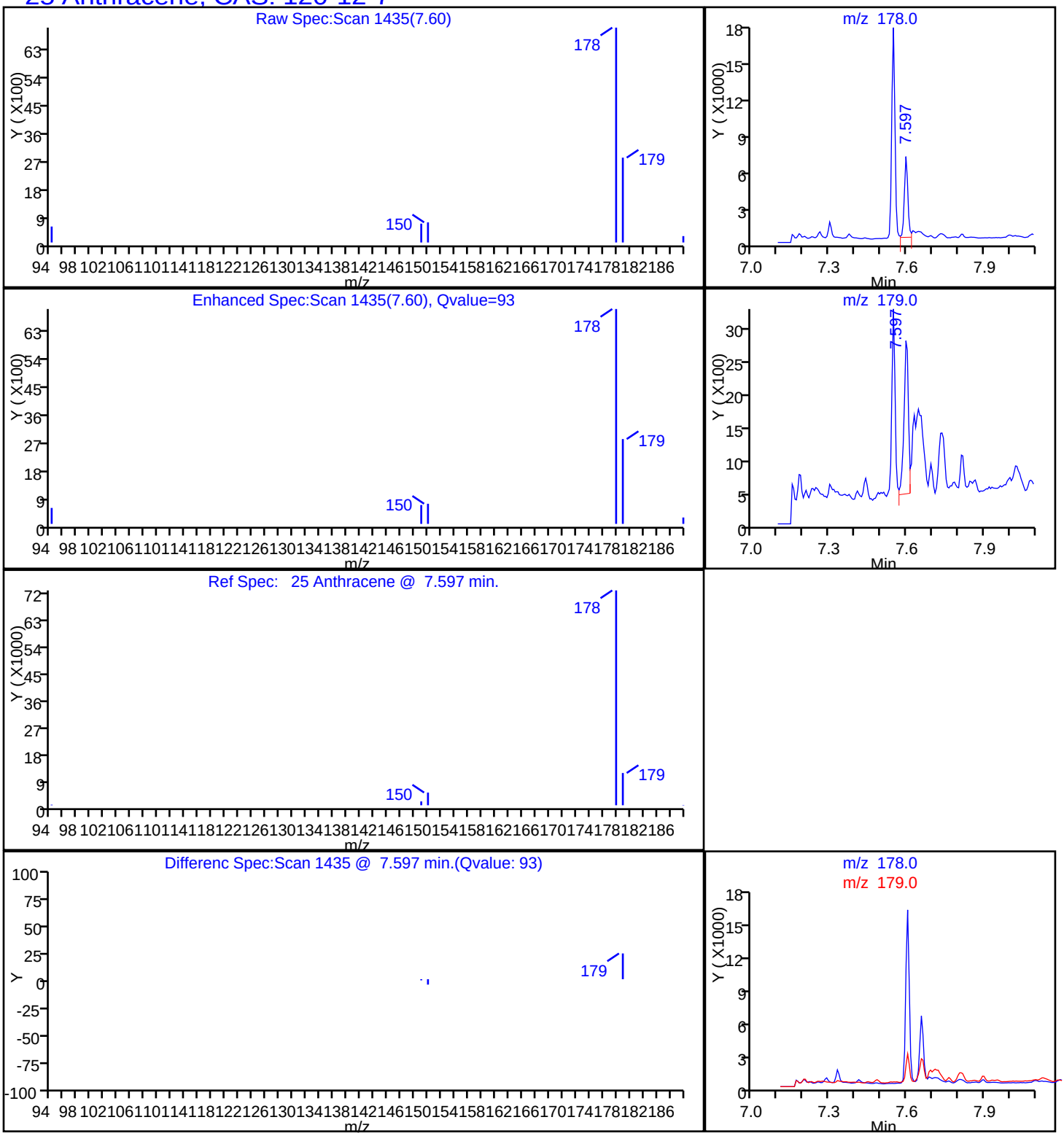


Report Date: 02-Jan-2014 09:28:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
Injection Date:	31-Dec-2013 22:08:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7



Report Date: 02-Jan-2014 09:28:16 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
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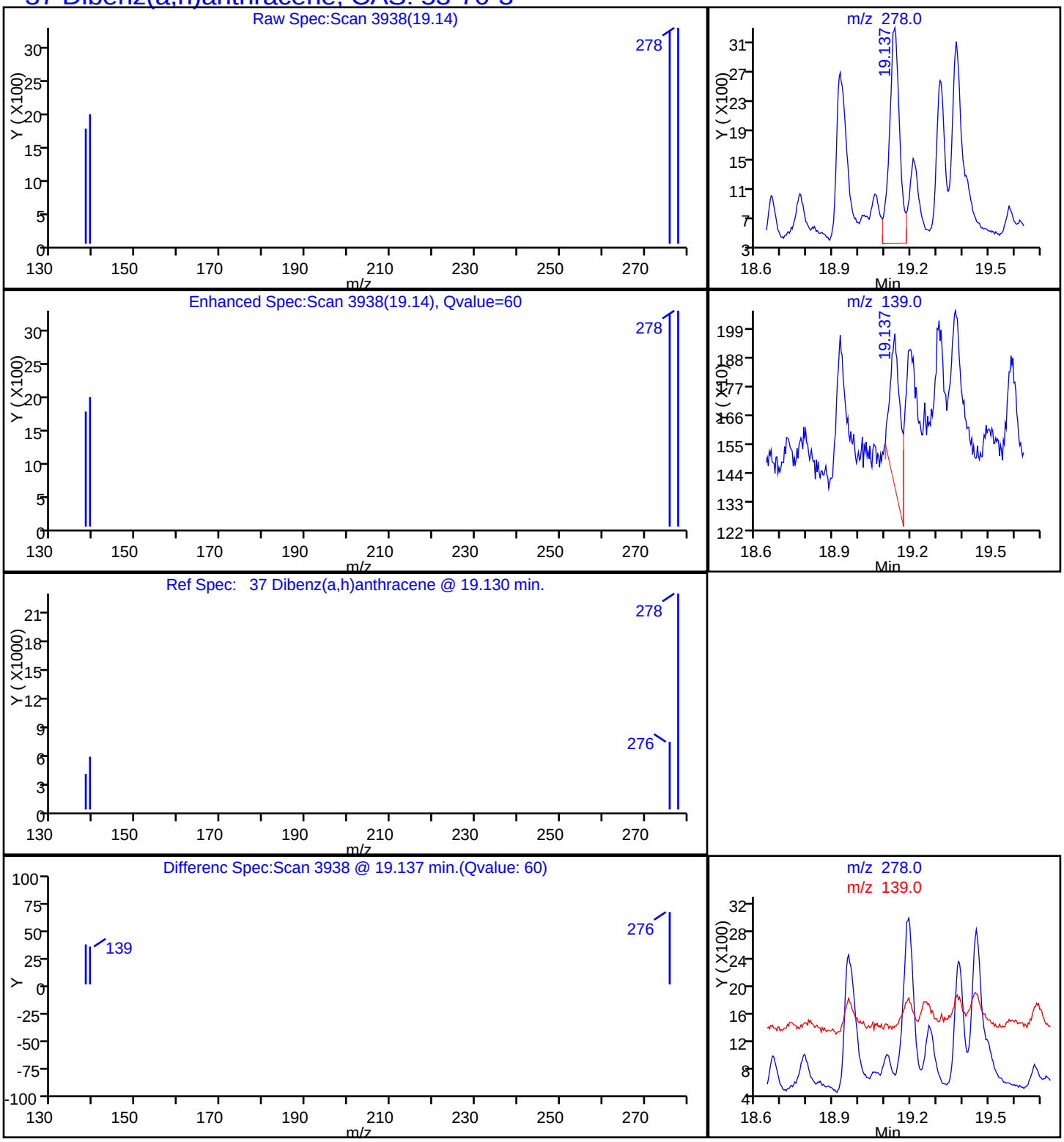
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3



Report Date: 02-Jan-2014 09:28:16 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
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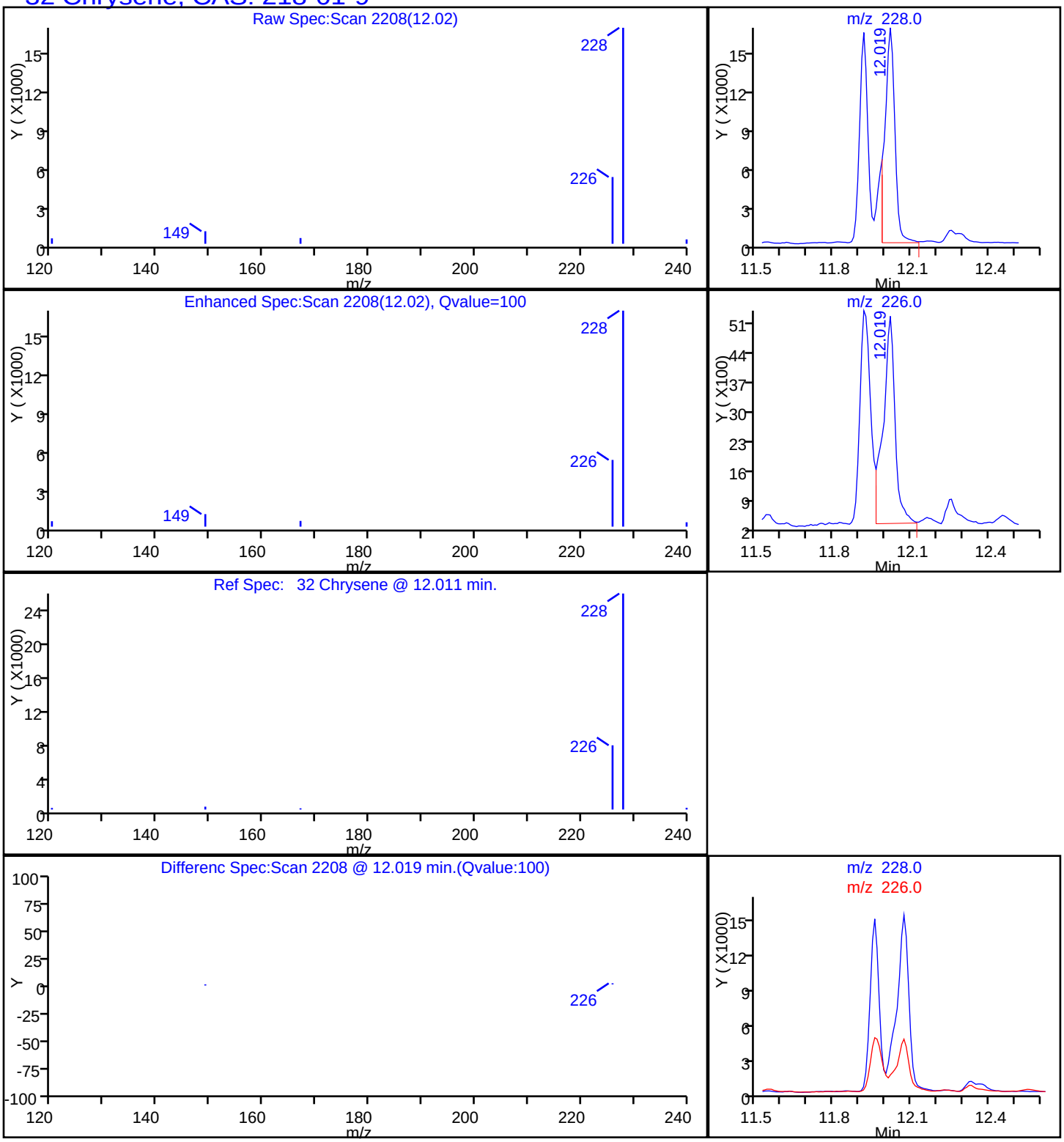
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9



Report Date: 02-Jan-2014 09:28:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
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Client ID:	FSA-SD-DU05				
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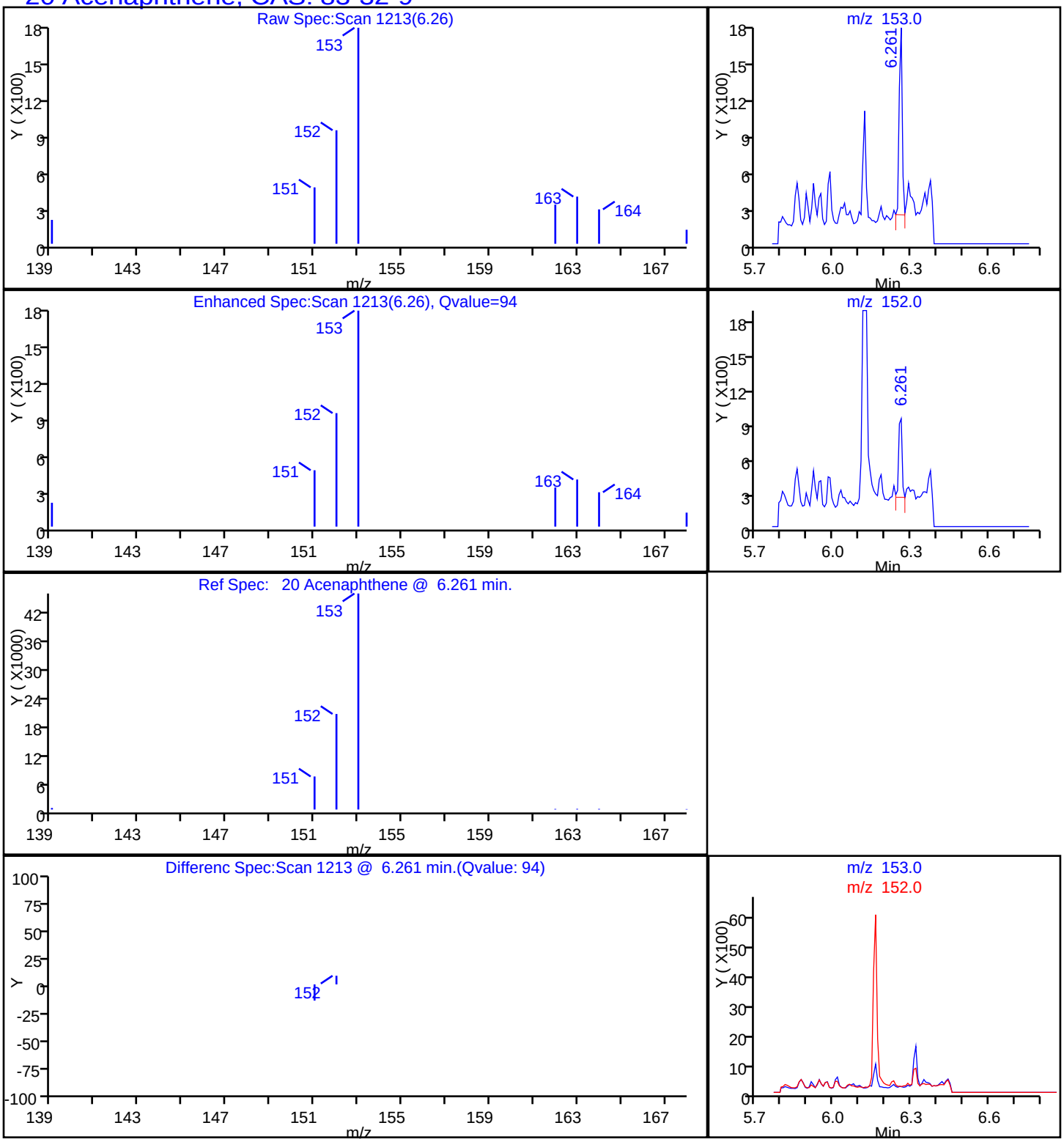
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9



Report Date: 02-Jan-2014 09:28:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
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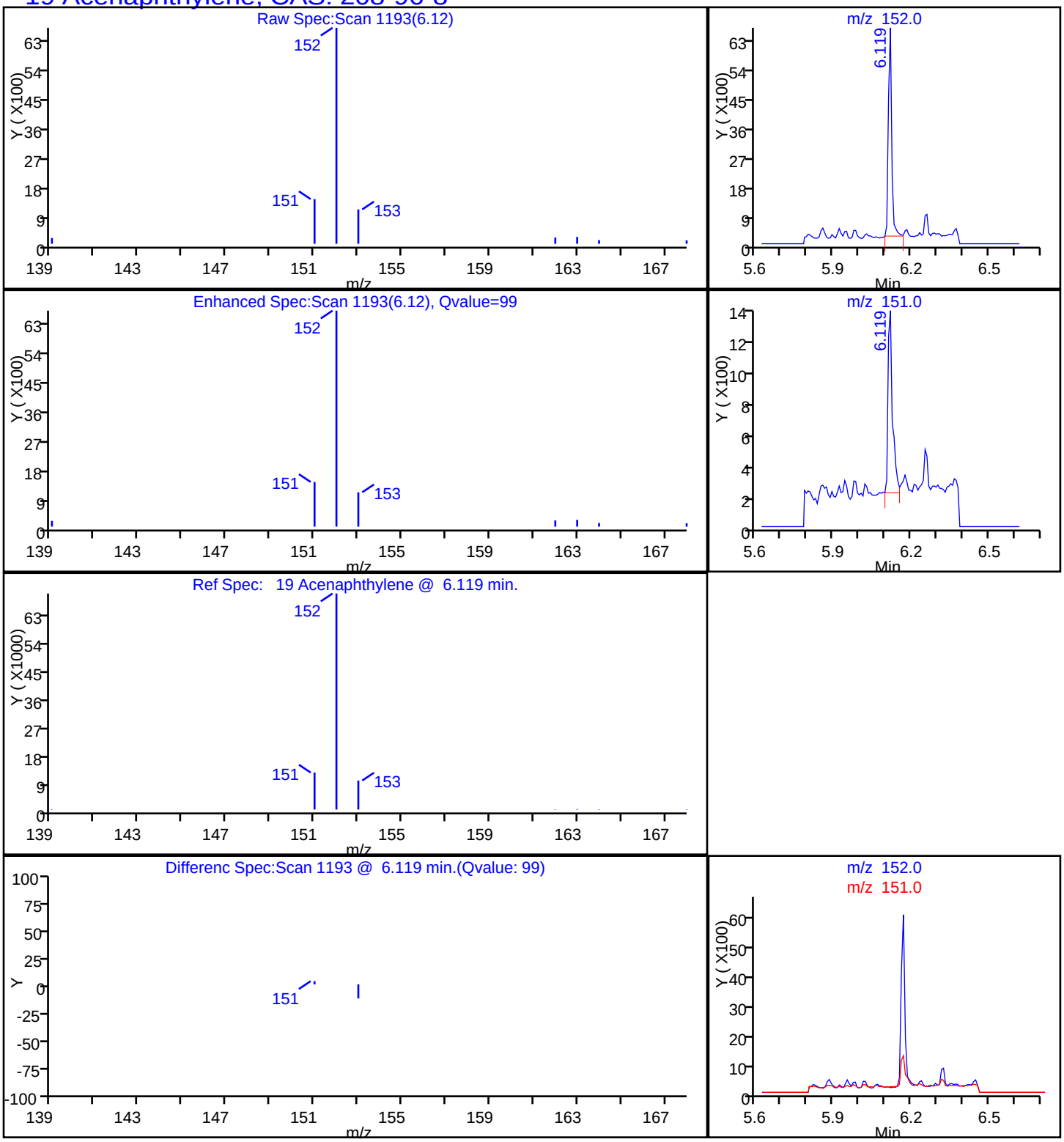
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

19 Acenaphthylene, CAS: 208-96-8



Report Date: 02-Jan-2014 09:28:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
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Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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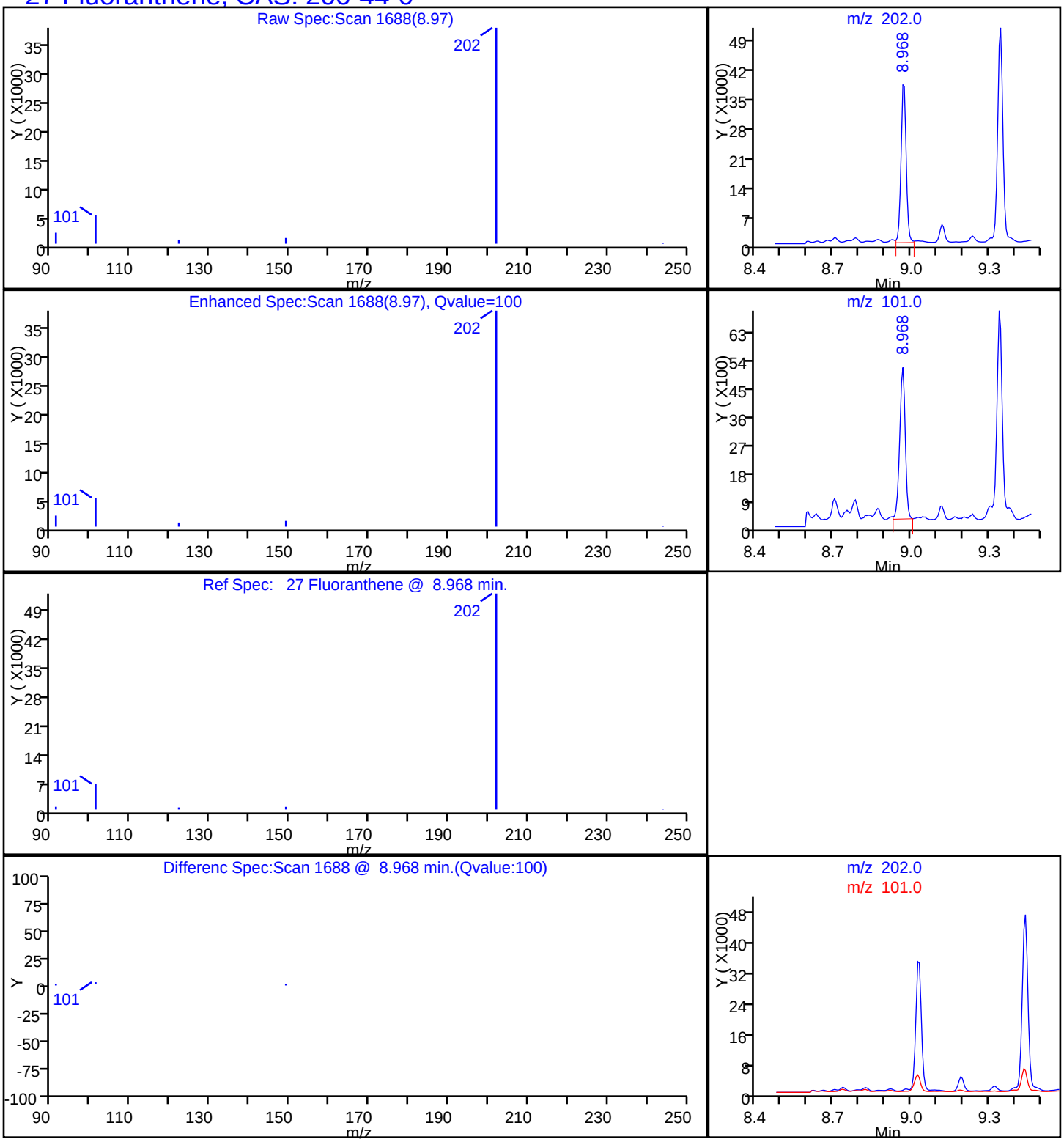
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0



Report Date: 02-Jan-2014 09:28:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
Injection Date:	31-Dec-2013 22:08:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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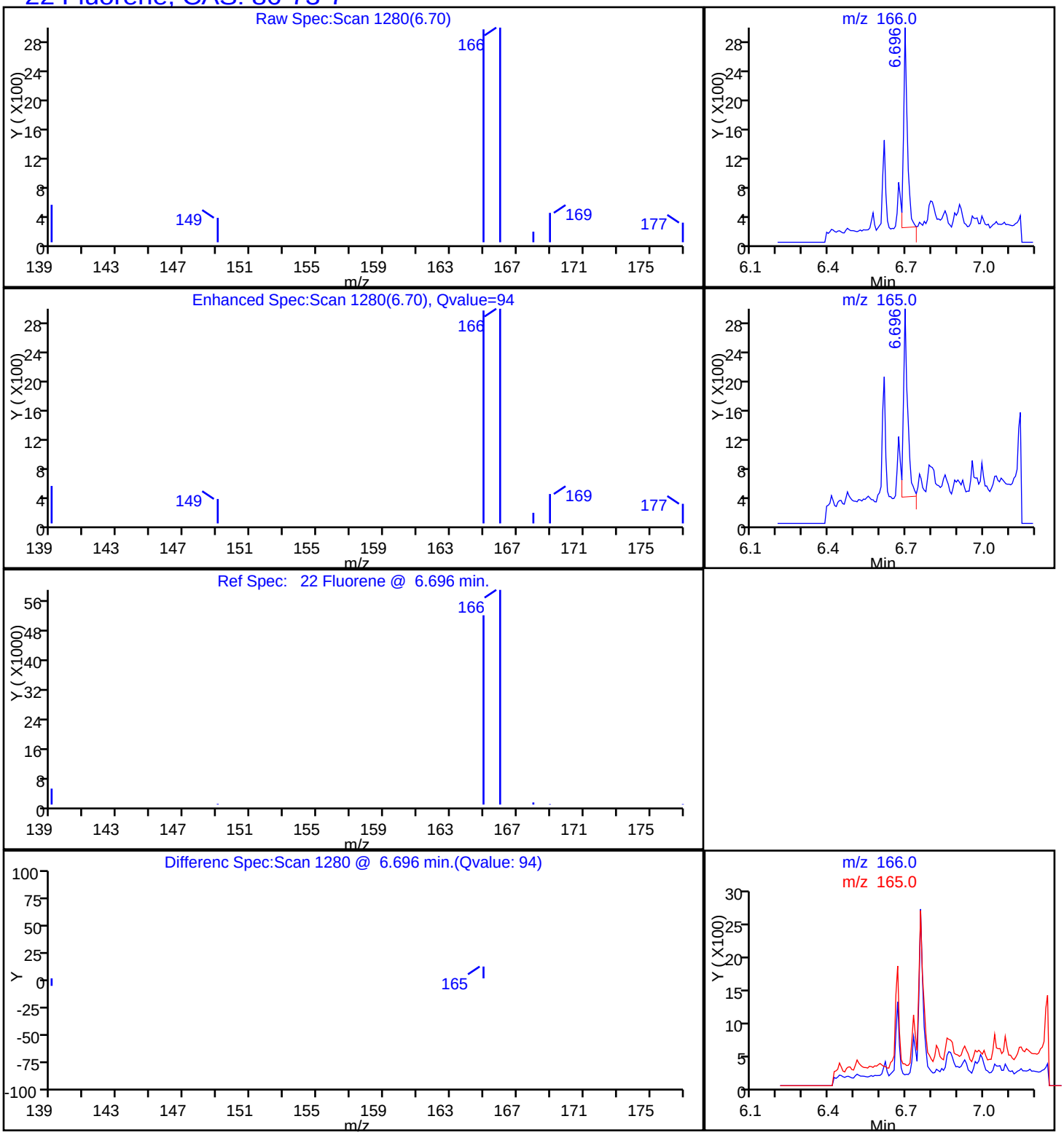
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7



Report Date: 02-Jan-2014 09:28:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
Injection Date:	31-Dec-2013 22:08:30	Instrument ID:	SMS_X4		
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Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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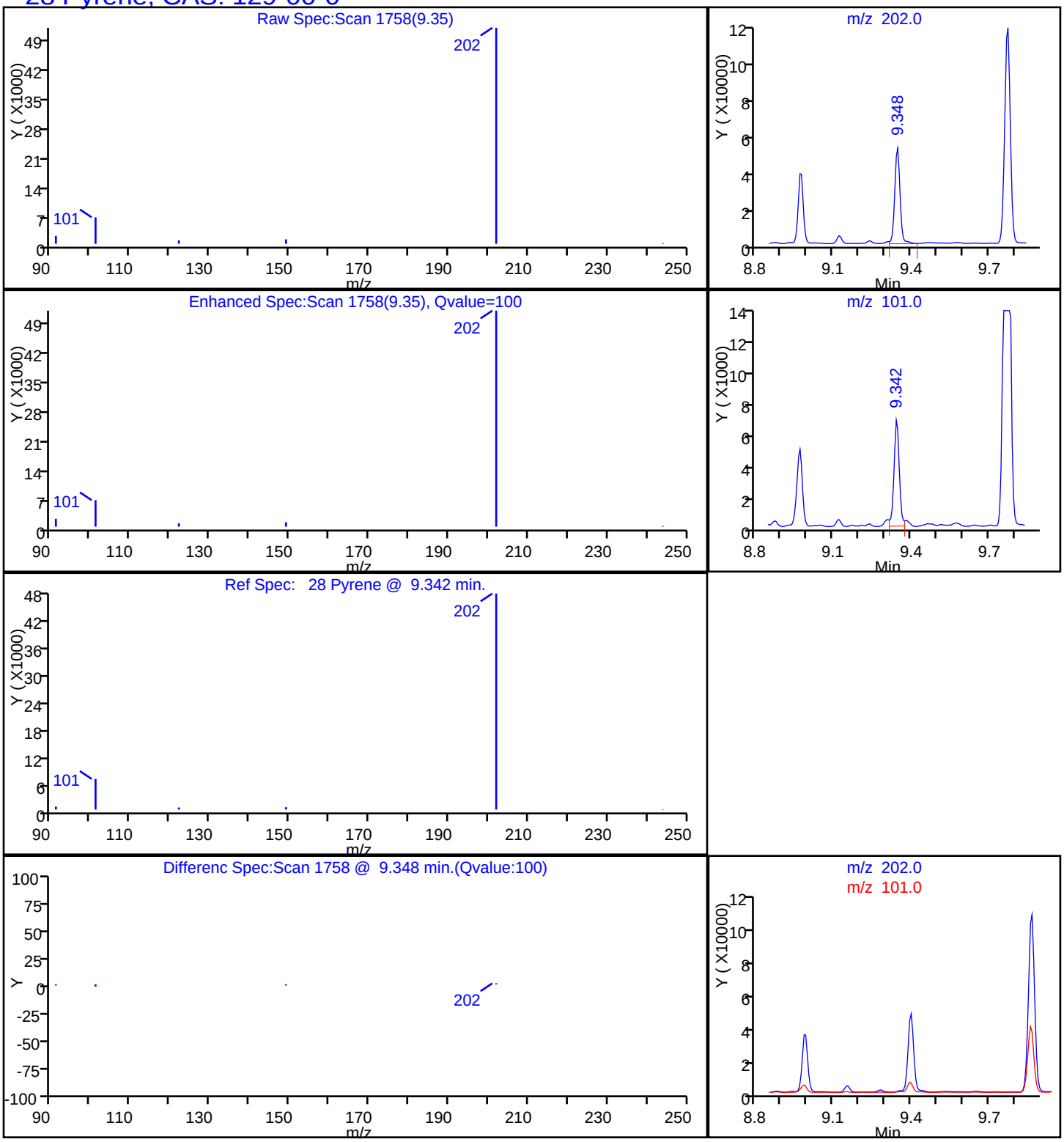
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0



Report Date: 02-Jan-2014 09:28:16 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
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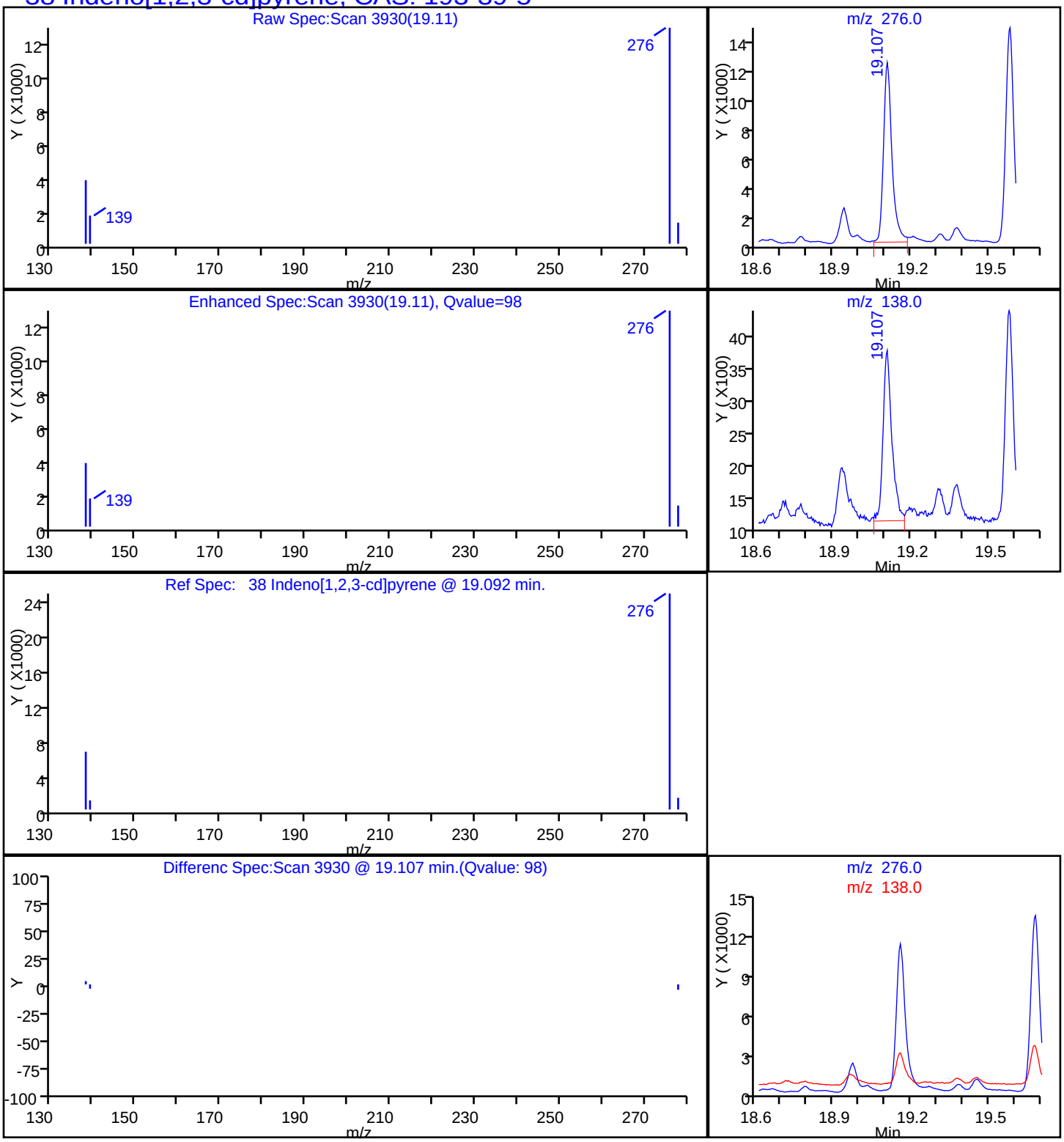
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

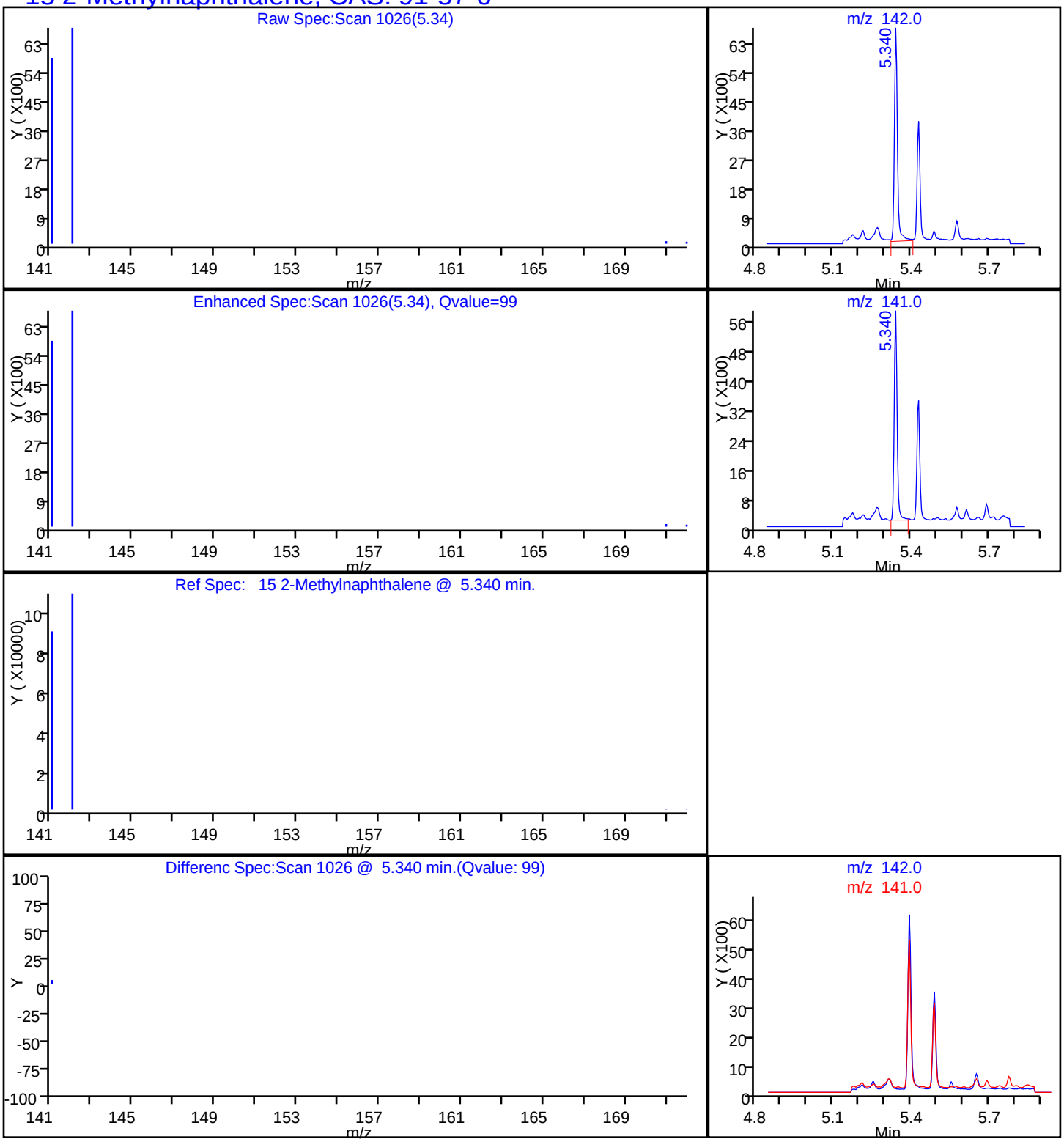


Report Date: 02-Jan-2014 09:28:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
Injection Date:	31-Dec-2013 22:08:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 2-Methylnaphthalene, CAS: 91-57-6



Report Date: 02-Jan-2014 09:28:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

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Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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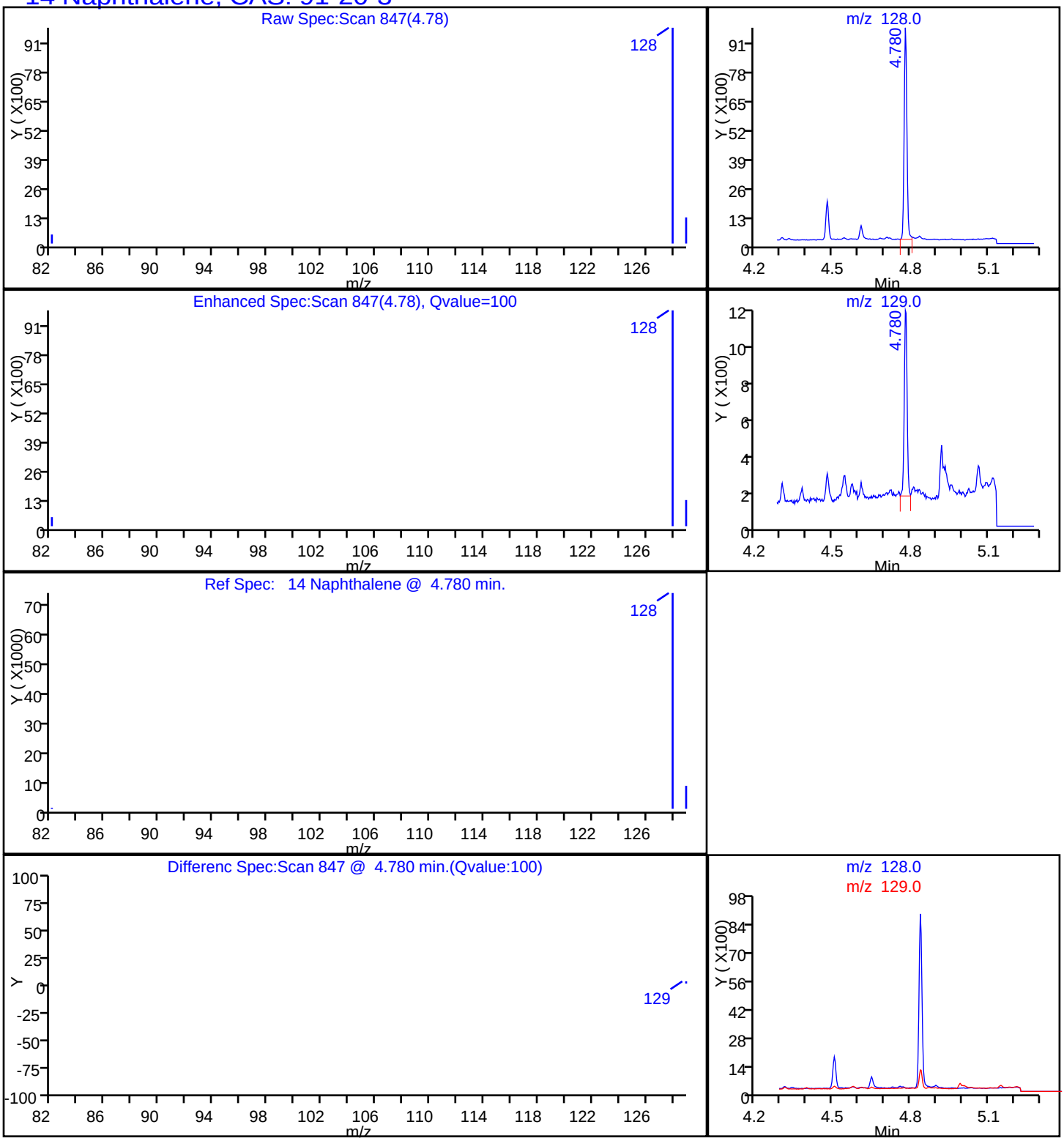
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3



Manual Integration/User Assign Peak Report

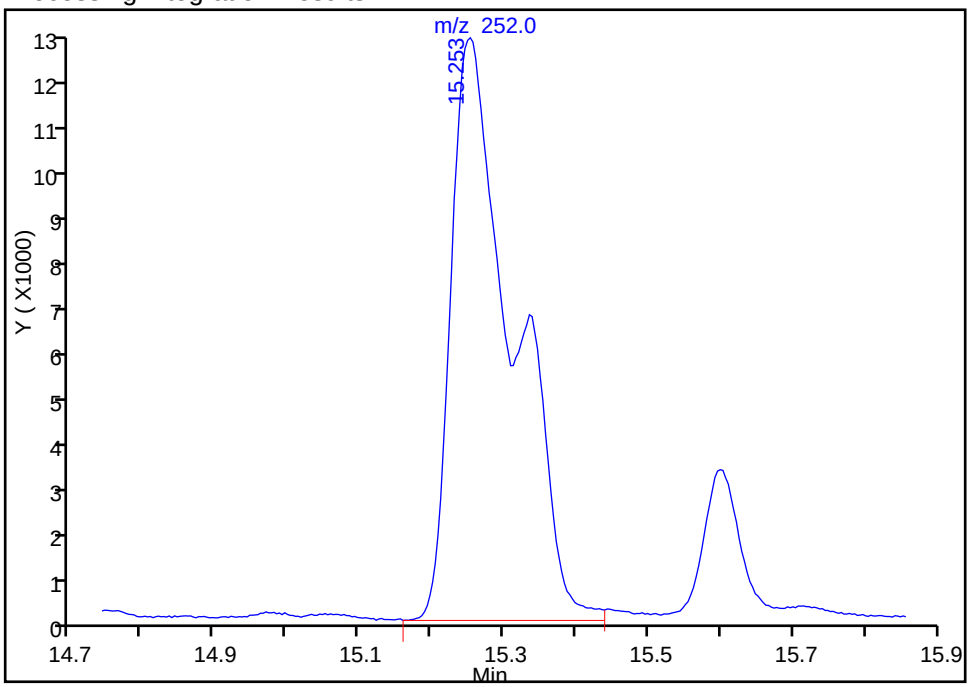
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
Injection Date:	31-Dec-2013 22:08:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9

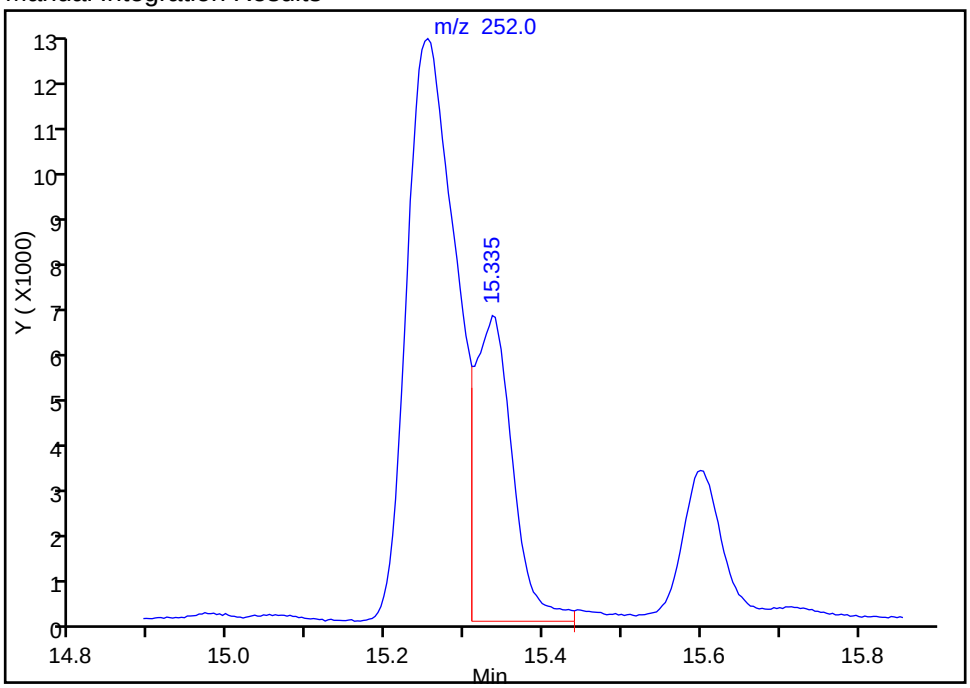
Processing Integration Results

RT: 15.25
Response: 73701
Amount: 827.6729



Manual Integration Results

RT: 15.34
Response: 21668
Amount: 243.3348



Reviewer: vasquezk, 02-Jan-2014 09:08:47
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

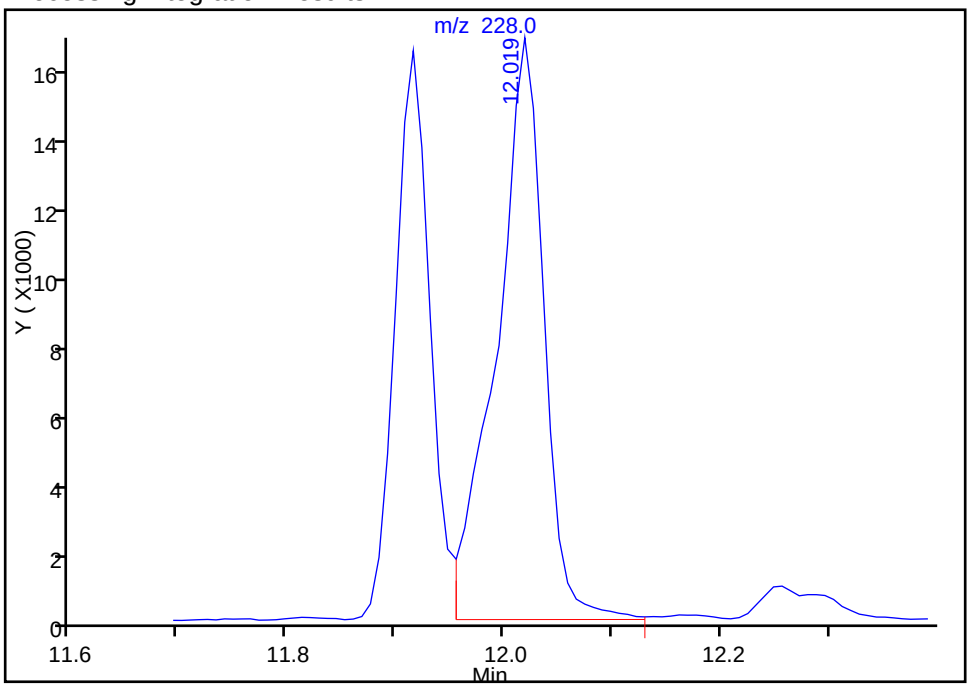
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8903.D				
Injection Date:	31-Dec-2013 22:08:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-4-B	Lab Sample ID:	280-50614-4		
Client ID:	FSA-SD-DU05				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

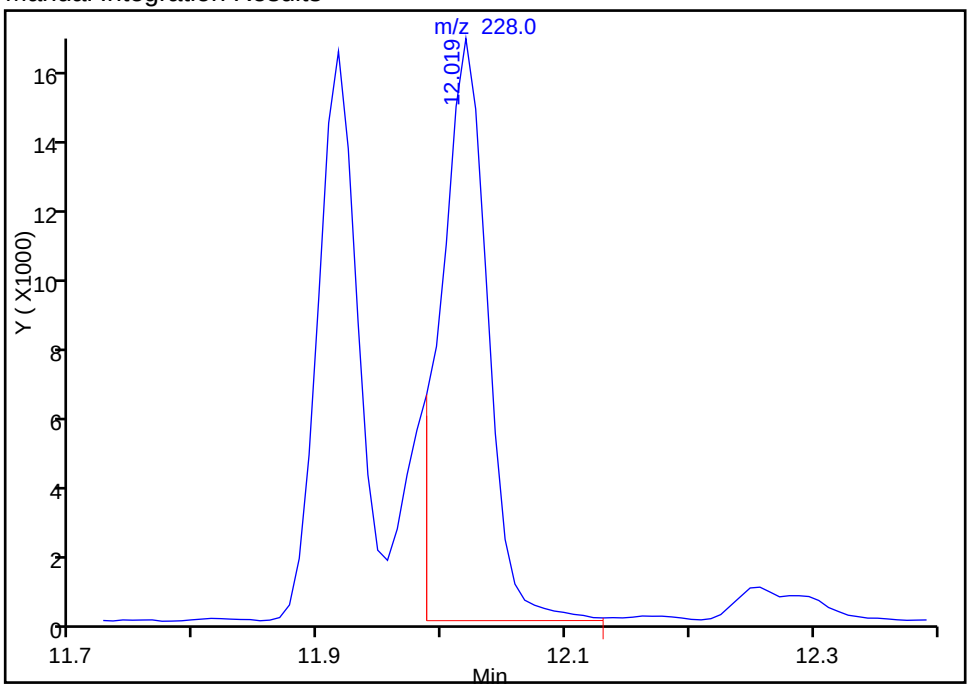
Processing Integration Results

RT: 12.02
Response: 50249
Amount: 562.3017



Manual Integration Results

RT: 12.02
Response: 43647
Amount: 488.4233



Reviewer: vasquezk, 02-Jan-2014 09:08:47
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU04-A | Lab Sample ID: 280-50614-5

Matrix: Solid | Lab File ID: X4_8904.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 12:35

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 30.94(g) | Date Analyzed: 12/31/2013 22:36

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207101 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	39000		4800	1200
50-32-8	Benzo[a]pyrene	23000		4800	720
56-55-3	Benzo[a]anthracene	16000		4800	870
207-08-9	Benzo[k]fluoranthene	13000		4800	970
191-24-2	Benzo[g,h,i]perylene	22000		4800	1100
85-01-8	Phenanthrene	10000		4800	1100
120-12-7	Anthracene	4300	J	4800	700
53-70-3	Dibenz(a,h)anthracene	5300		4800	1300
218-01-9	Chrysene	21000		4800	970
83-32-9	Acenaphthene	740	J	4800	160
208-96-8	Acenaphthylene	4400	J	4800	160
206-44-0	Fluoranthene	29000		4800	970
86-73-7	Fluorene	2200	J	4800	460
129-00-0	Pyrene	32000		4800	1100
193-39-5	Indeno[1,2,3-cd]pyrene	22000		4800	1100
91-57-6	2-Methylnaphthalene	3300	J	4800	300
91-20-3	Naphthalene	4100	J	4800	320

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	79		39-120
4165-60-0	Nitrobenzene-d5	79		42-120
1718-51-0	Terphenyl-d14	118		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D
Lims ID: 280-50614-A-5-B Lab Sample ID: 280-50614-5
Client ID: FSA-SD-DU04-A
Sample Type: Client
Inject. Date: 31-Dec-2013 22:36:30 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-50614-a-5-b
Misc. Info.: 280-50614-a-5-b =280-50614-A-5-B
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 09:09:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	100	23133	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	40868	600.0	
* 3 Chrysene-d12	240	11.948	11.956	-0.008	99	46610	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.186	0.0	100	10289	397.4	
$ 5 2-Fluorobiphenyl	172	5.626	5.630	-0.004	100	21476	393.5	
$ 6 Terphenyl-d14	244	9.516	9.527	-0.011	99	29148	589.1	
14 Naphthalene	128	4.780	4.783	-0.003	100	9024	127.5	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	99	5043	100.7	
19 Acenaphthylene	152	6.119	6.119	0.0	99	10514	136.3	
20 Acenaphthene	153	6.262	6.261	0.001	91	1101	22.9	
22 Fluorene	166	6.696	6.696	0.0	96	3998	69.5	
24 Phenanthrene	178	7.548	7.553	-0.005	100	26216	313.0	
25 Anthracene	178	7.597	7.602	-0.005	96	10963	133.0	
27 Fluoranthene	202	8.974	8.979	-0.005	100	80524	886.5	
28 Pyrene	202	9.348	9.353	-0.005	100	94005	1003.0	
31 Benzo[a]anthracene	228	11.916	11.924	-0.008	98	47333	499.6	
32 Chrysene	228	12.019	12.027	-0.008	100	58613	654.3	M
34 Benzo[b]fluoranthene	252	15.246	15.253	-0.007	100	106010	1221.6	
35 Benzo[k]fluoranthene	252	15.331	15.342	-0.011	98	37071	415.3	
36 Benzo[a]pyrene	252	16.374	16.385	-0.011	100	60667	721.4	
38 Indeno[1,2,3-cd]pyrene	276	19.107	19.111	-0.004	98	55637	672.1	
37 Dibenz(a,h)anthracene	278	19.137	19.148	-0.011	54	13668	163.4	
39 Benzo[g,h,i]perylene	276	19.588	19.584	0.004	97	60359	679.2	

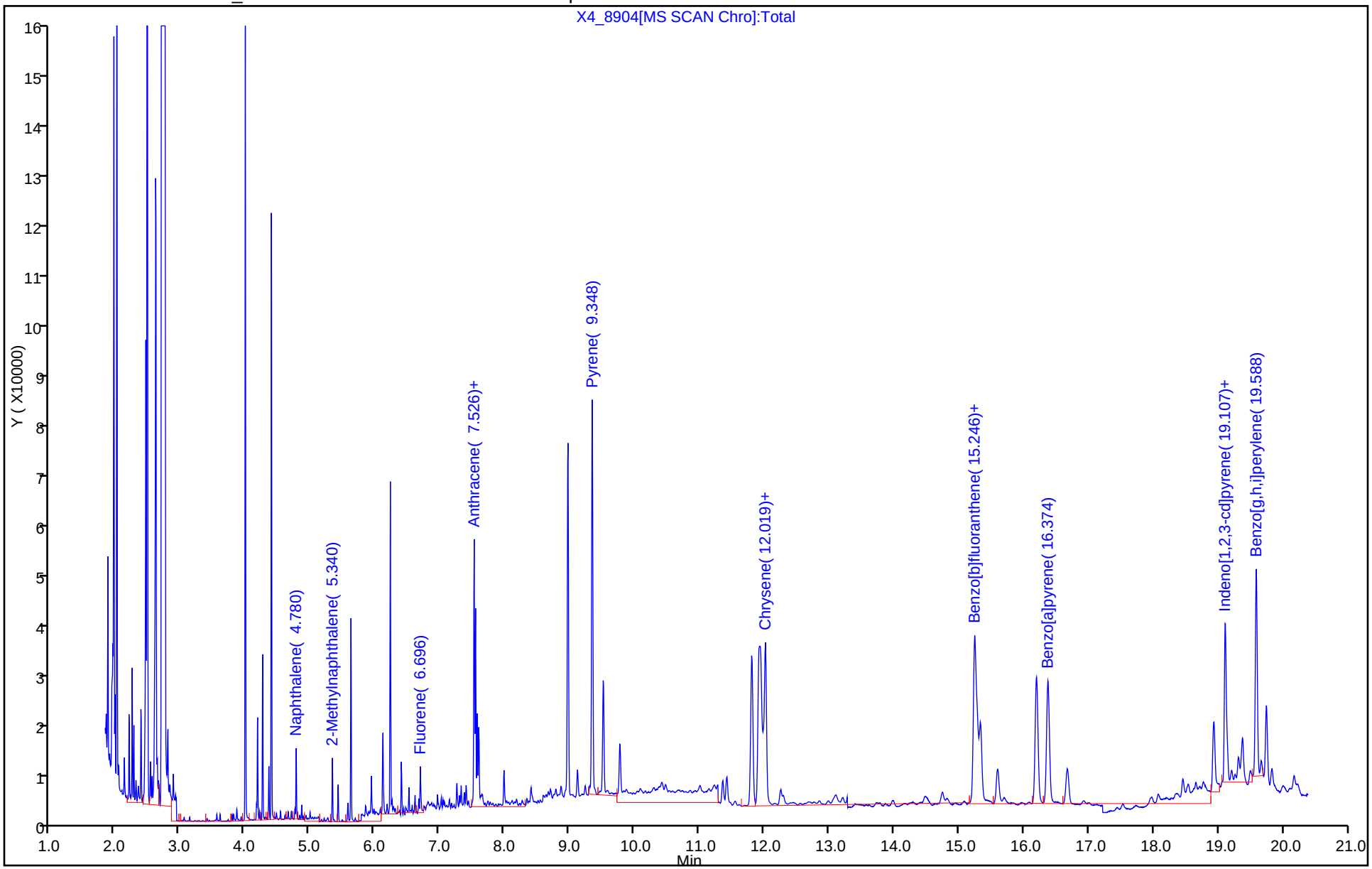
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 02-Jan-2014 09:28:16 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
Injection Date:	31-Dec-2013 22:36:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-5-B	Lab Sample ID:	280-50614-5	Worklist Smp#:	20
Client ID:	FSA-SD-DU04-A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

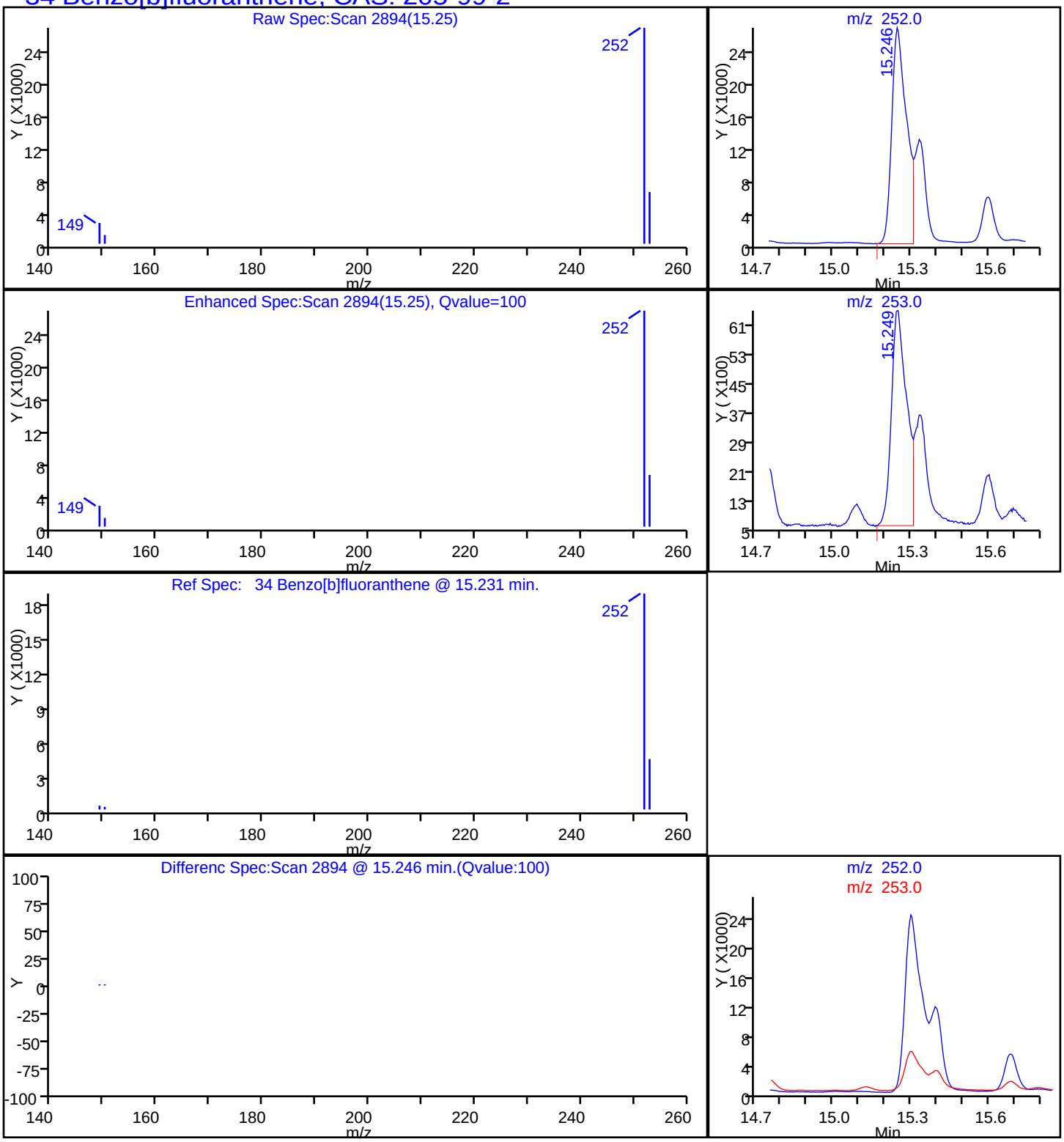


Report Date: 02-Jan-2014 09:28:17 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
Injection Date:	31-Dec-2013 22:36:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-5-B	Lab Sample ID:	280-50614-5		
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

34 Benzo[b]fluoranthene, CAS: 205-99-2

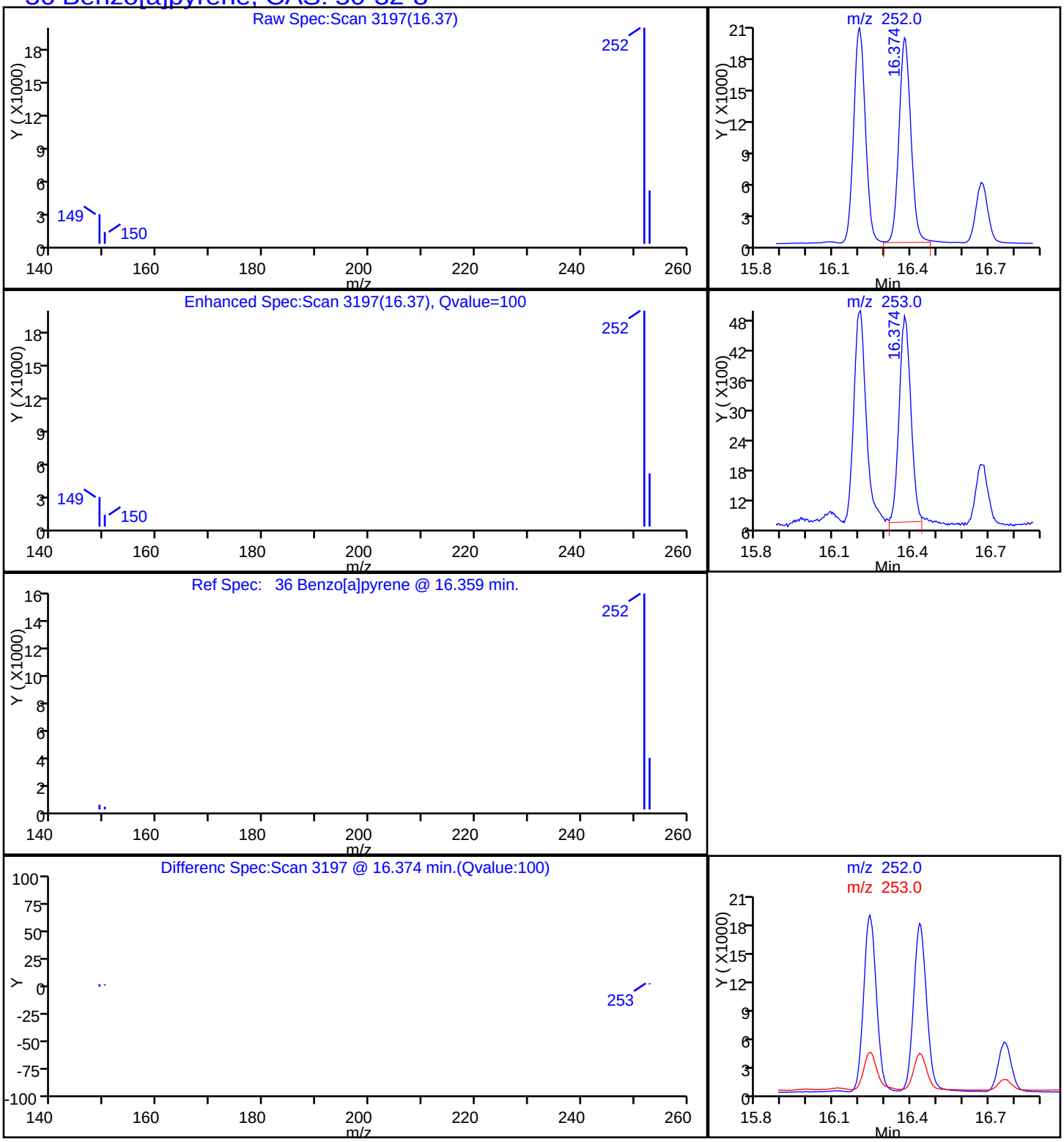


Report Date: 02-Jan-2014 09:28:17 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
Injection Date:	31-Dec-2013 22:36:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-5-B	Lab Sample ID:	280-50614-5		
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[a]pyrene, CAS: 50-32-8



Report Date: 02-Jan-2014 09:28:17 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
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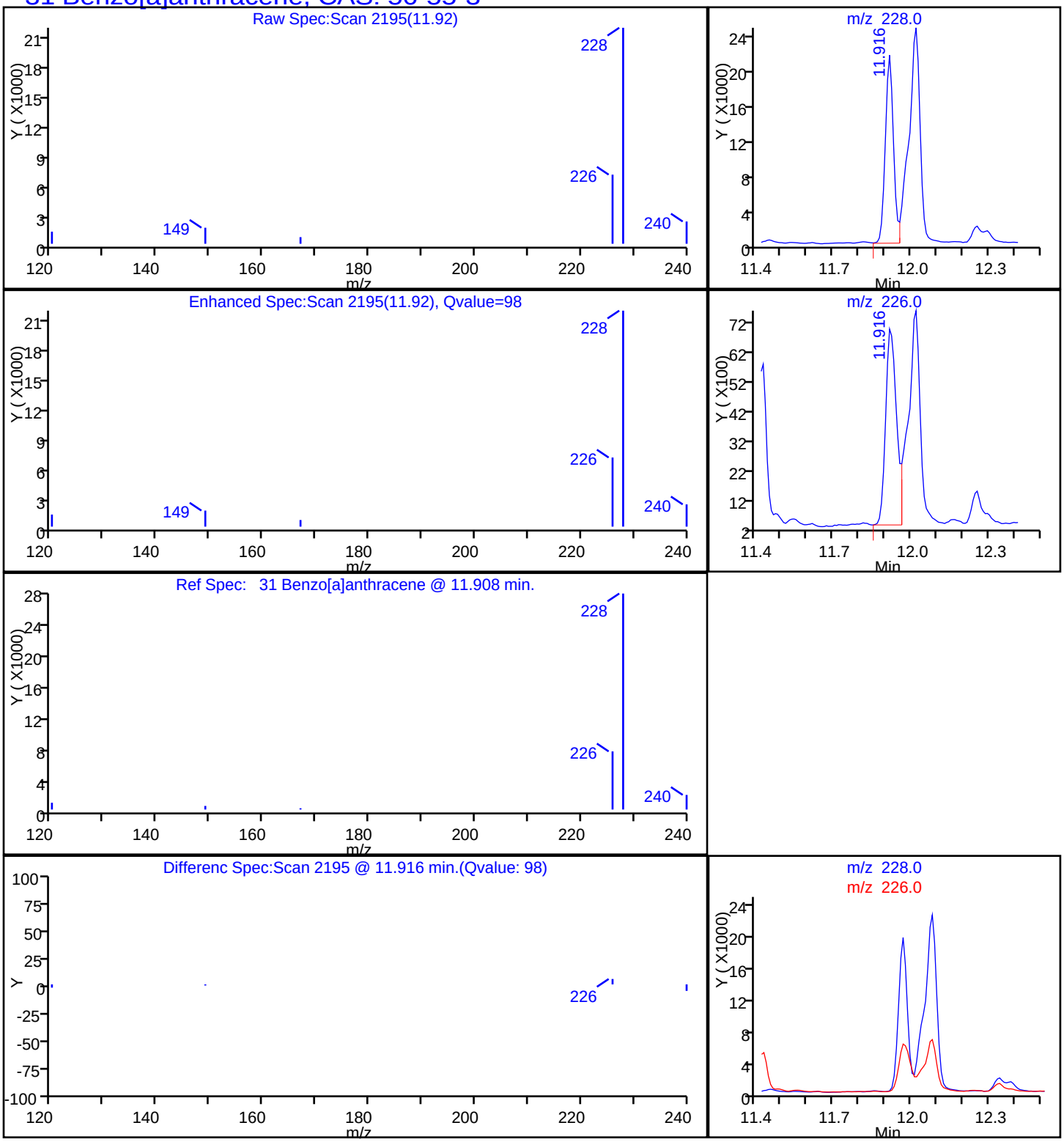
Lims ID:	280-50614-A-5-B	Lab Sample ID:	280-50614-5		
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3



Report Date: 02-Jan-2014 09:28:17 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

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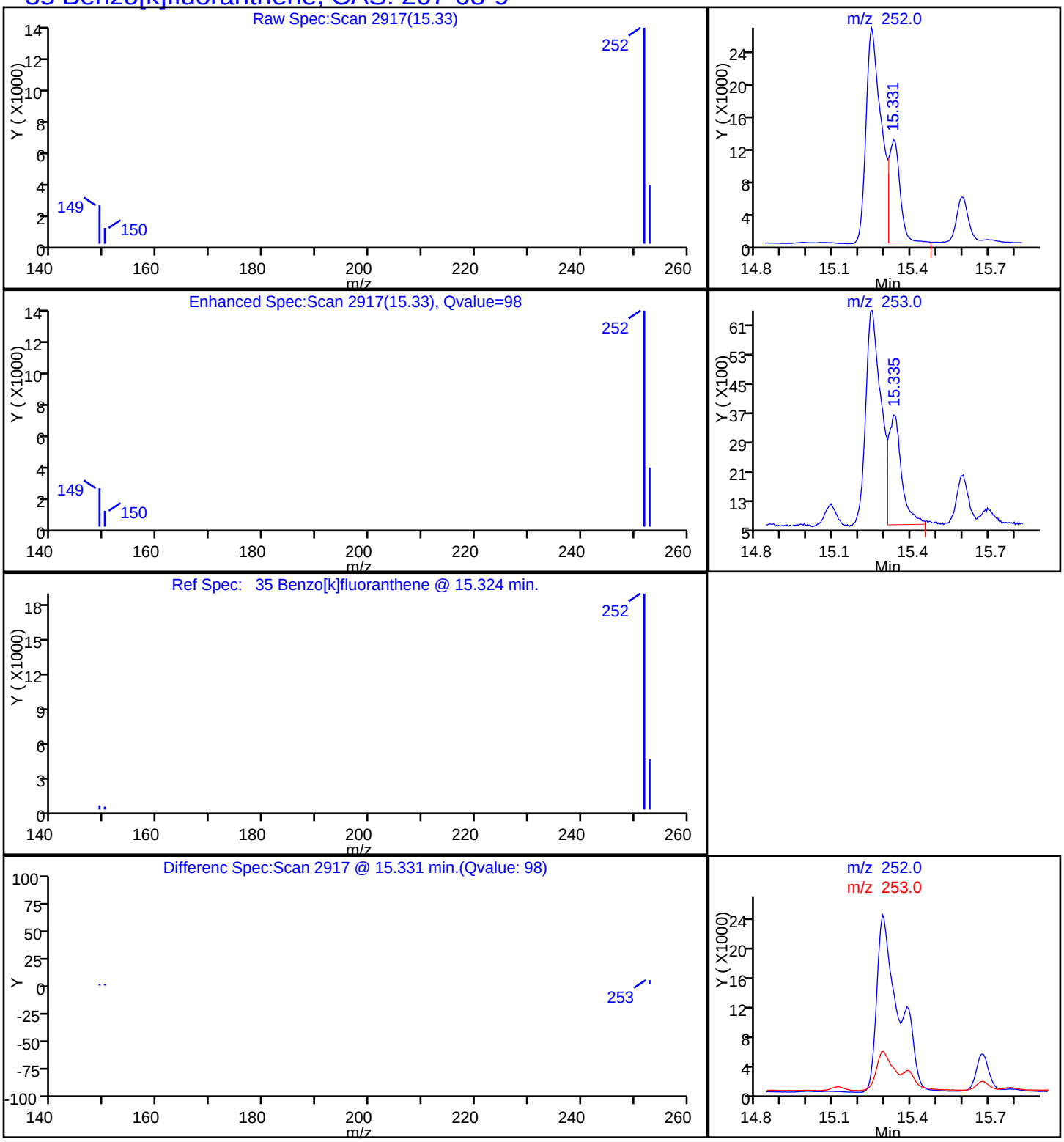
Lims ID:	280-50614-A-5-B	Lab Sample ID:	280-50614-5		
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9



Report Date: 02-Jan-2014 09:28:17 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
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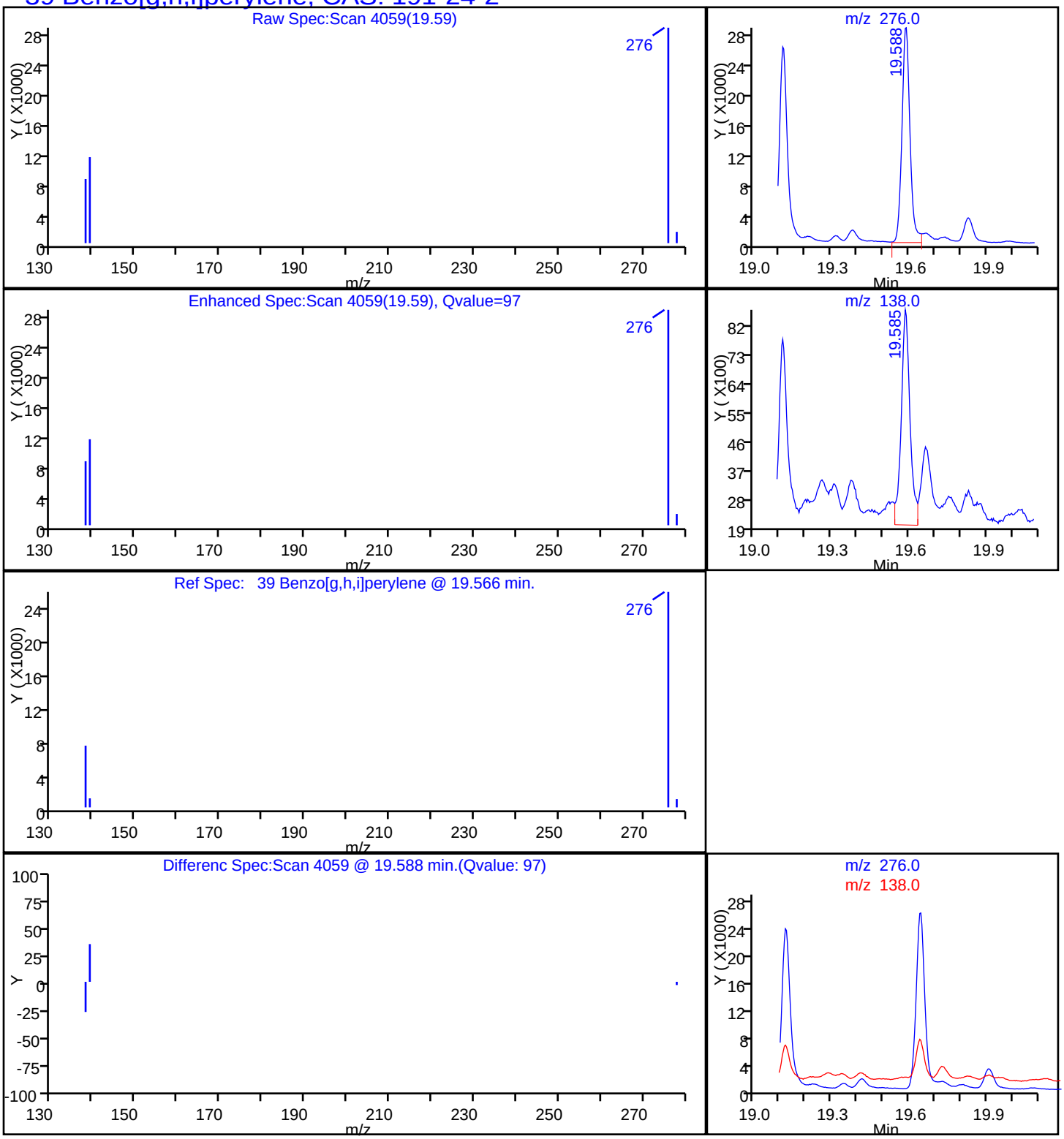
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[g,h,i]perylene, CAS: 191-24-2



Report Date: 02-Jan-2014 09:28:16 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
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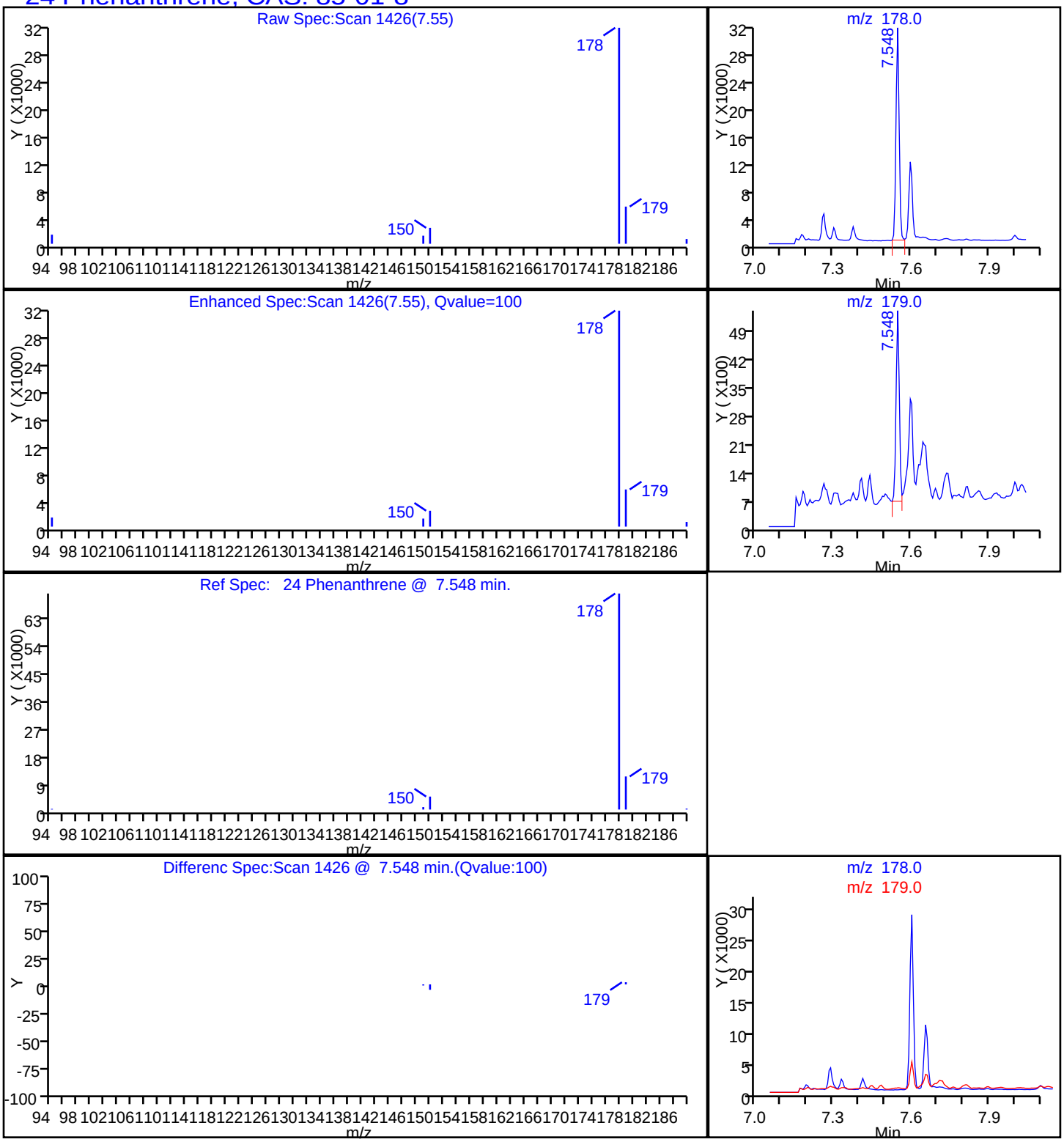
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8



Report Date: 02-Jan-2014 09:28:16 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
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Lims ID:	280-50614-A-5-B	Lab Sample ID:	280-50614-5		
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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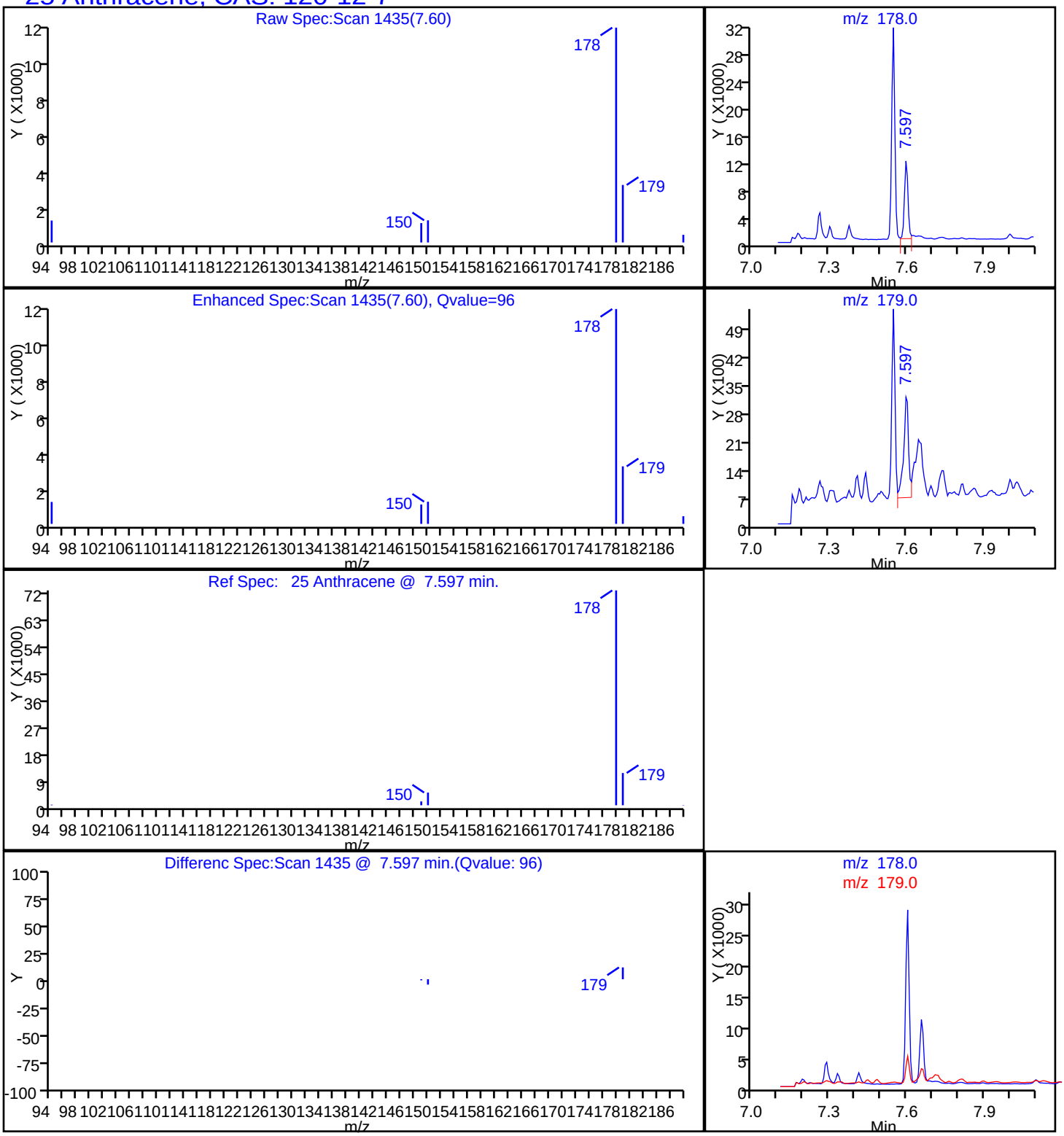
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7



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TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
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Client ID:	FSA-SD-DU04-A				
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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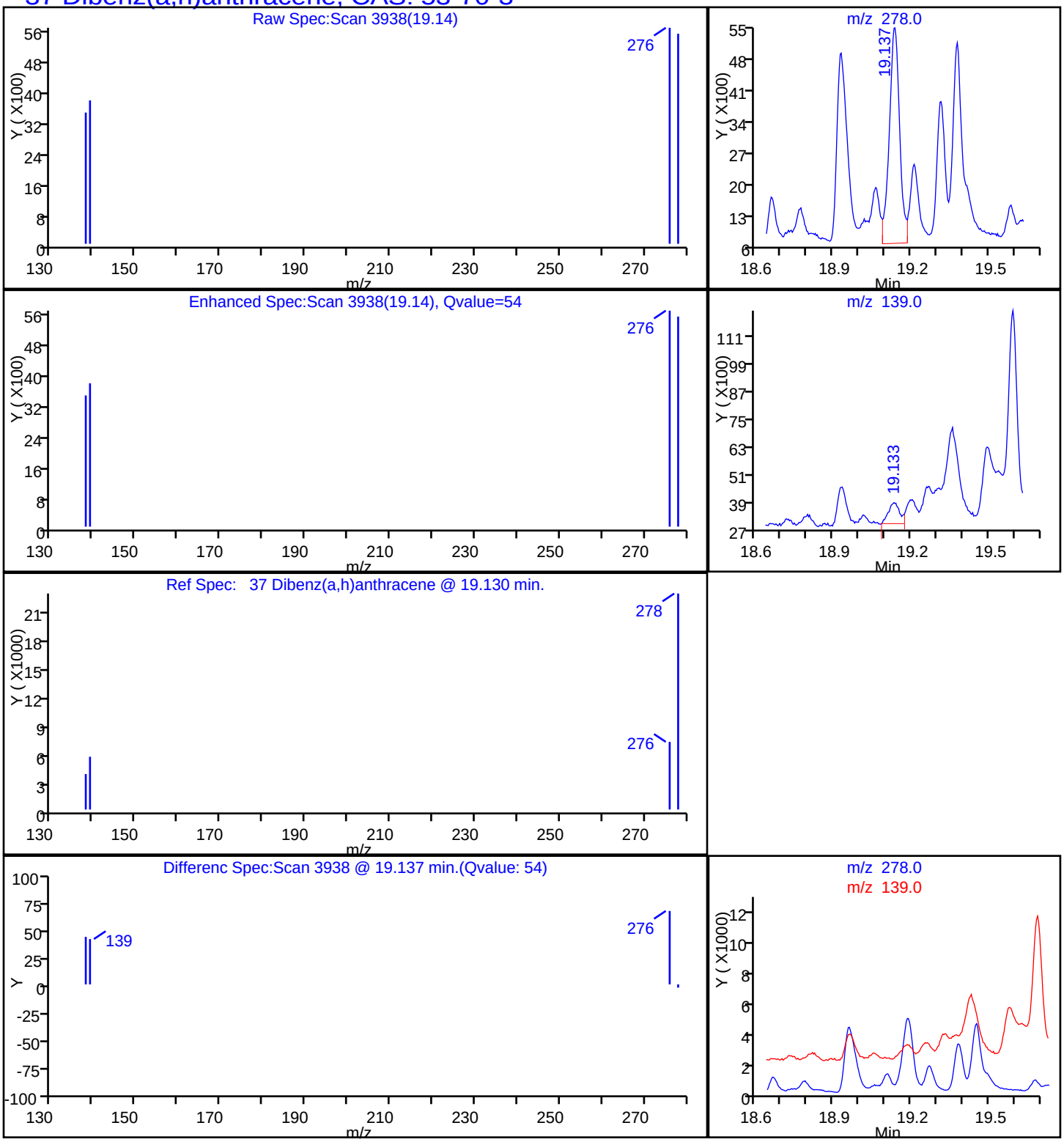
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3



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TestAmerica Denver

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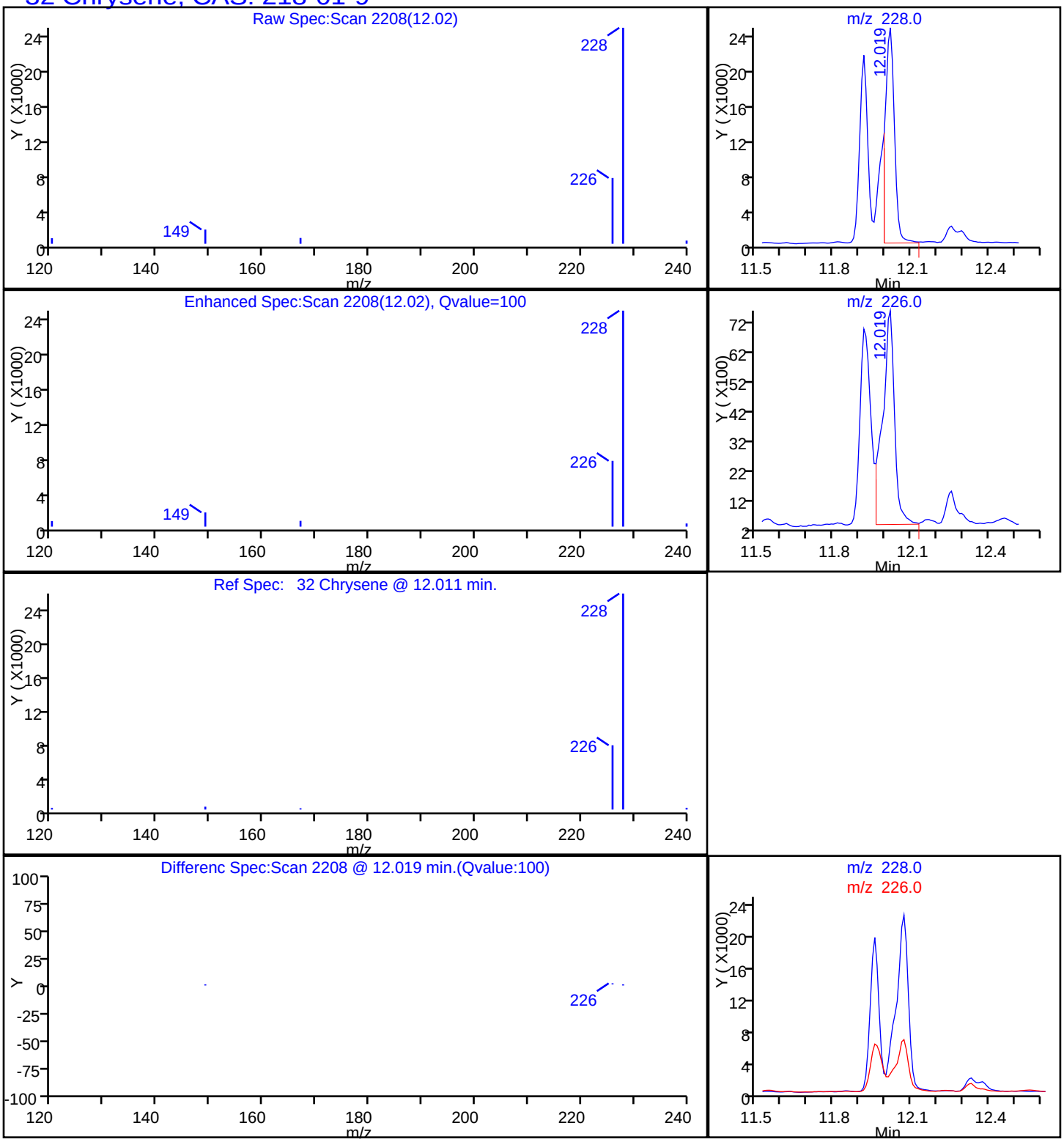
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9



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TestAmerica Denver

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Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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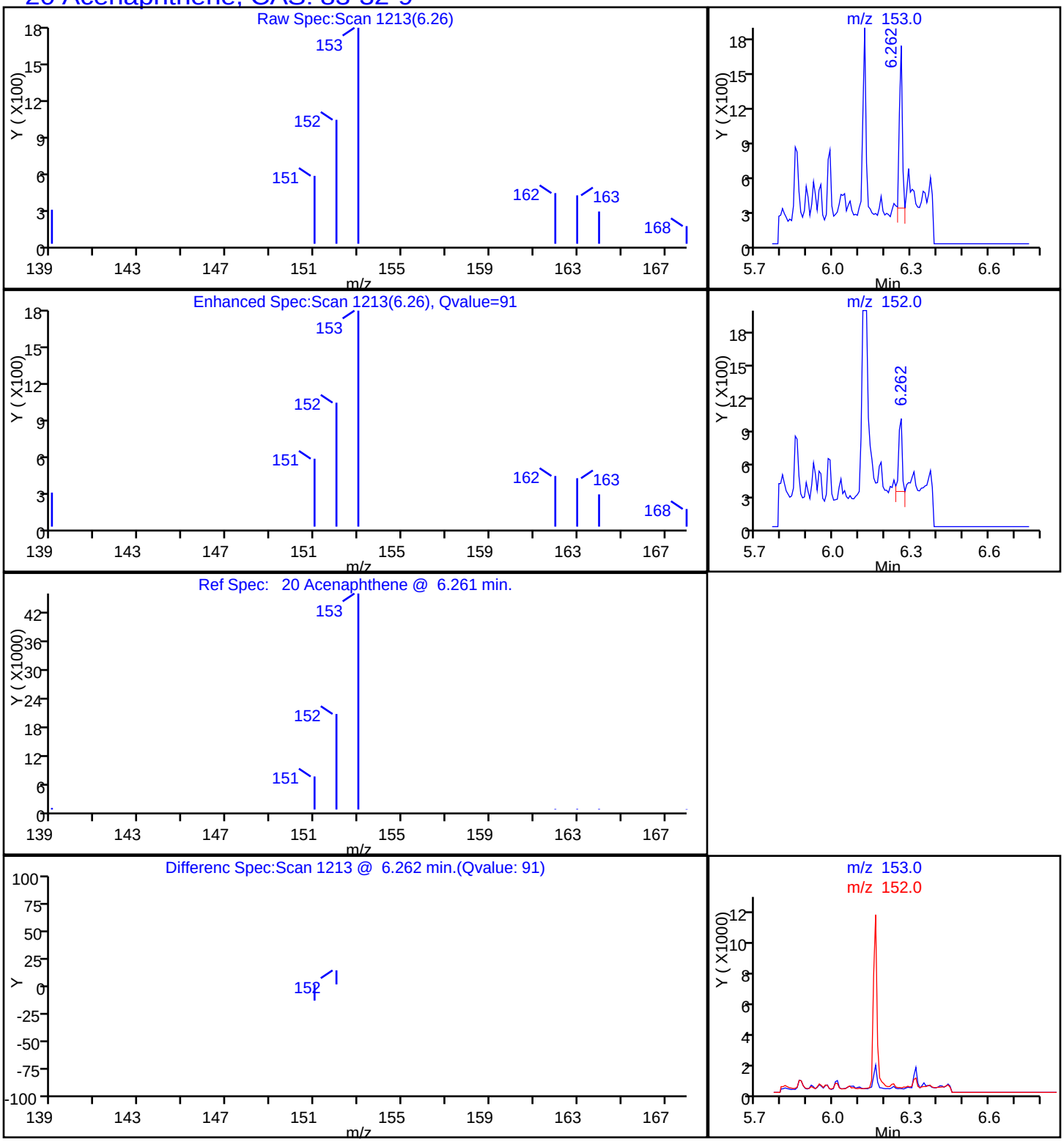
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9



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TestAmerica Denver

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Client ID:	FSA-SD-DU04-A				
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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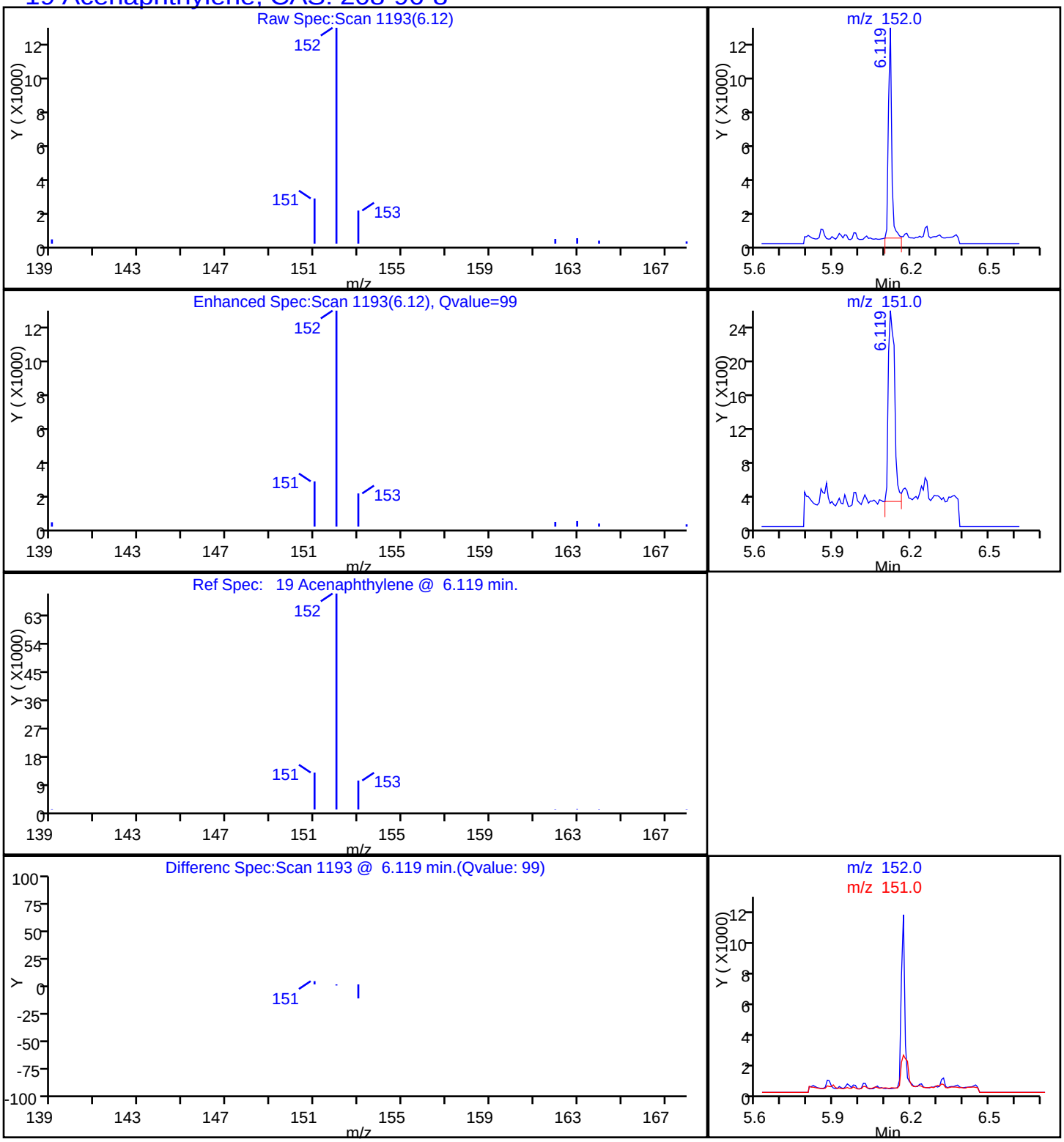
19 Acenaphthylene, CAS: 208-96-8



Report Date: 02-Jan-2014 09:28:17 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
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Lims ID:	280-50614-A-5-B	Lab Sample ID:	280-50614-5		
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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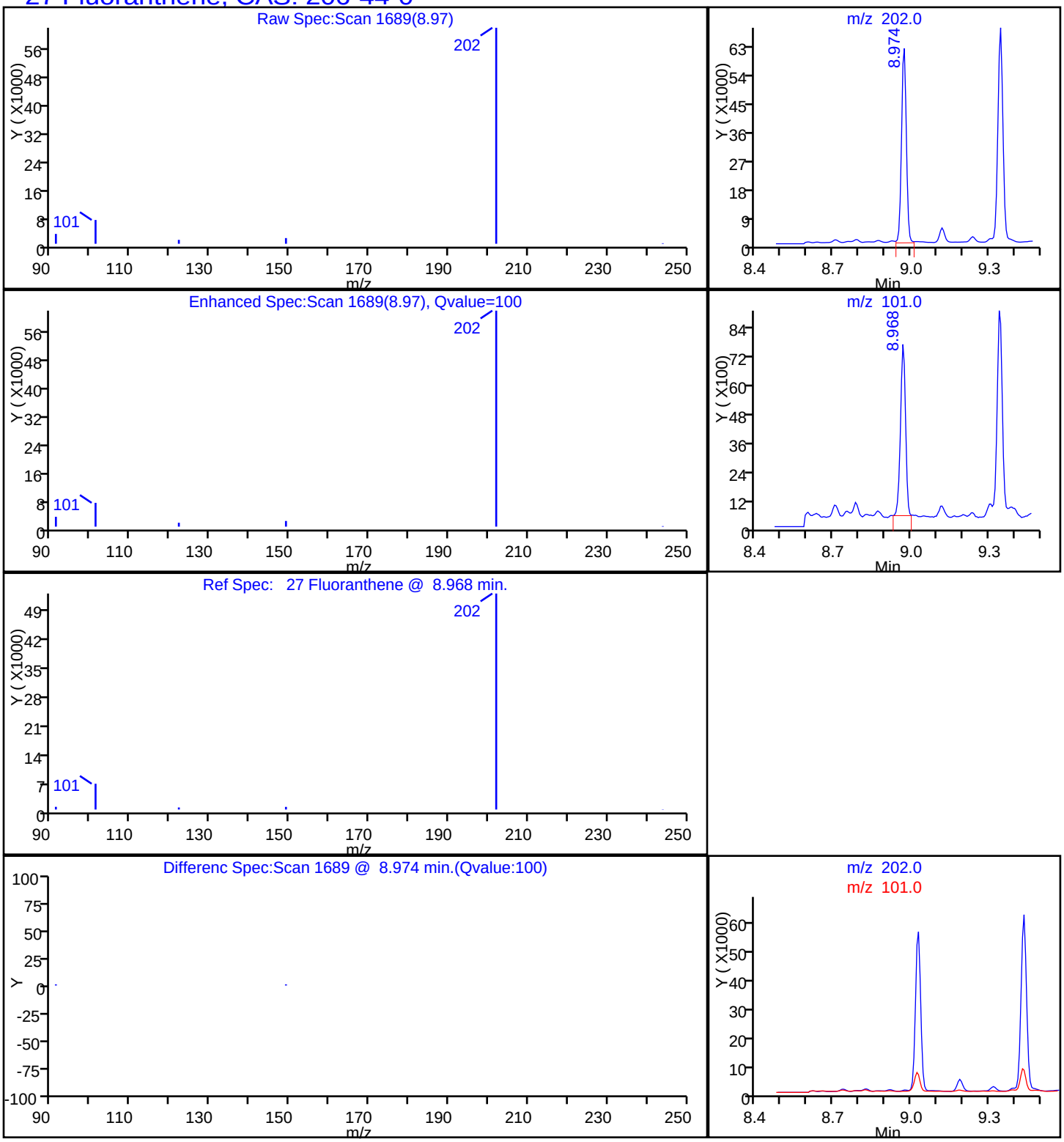
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0



Report Date: 02-Jan-2014 09:28:16 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
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Lims ID:	280-50614-A-5-B	Lab Sample ID:	280-50614-5		
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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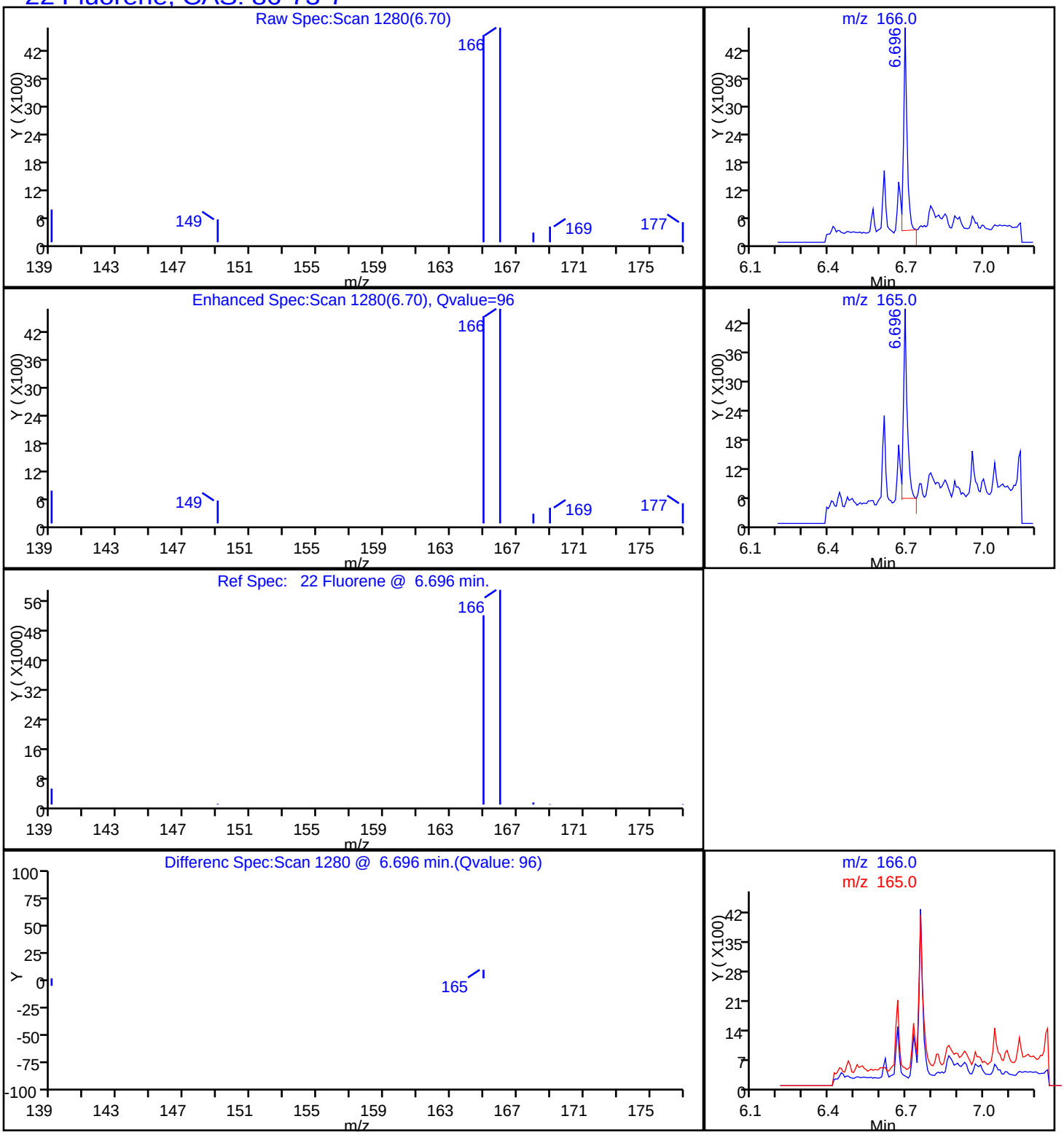
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7



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TestAmerica Denver

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Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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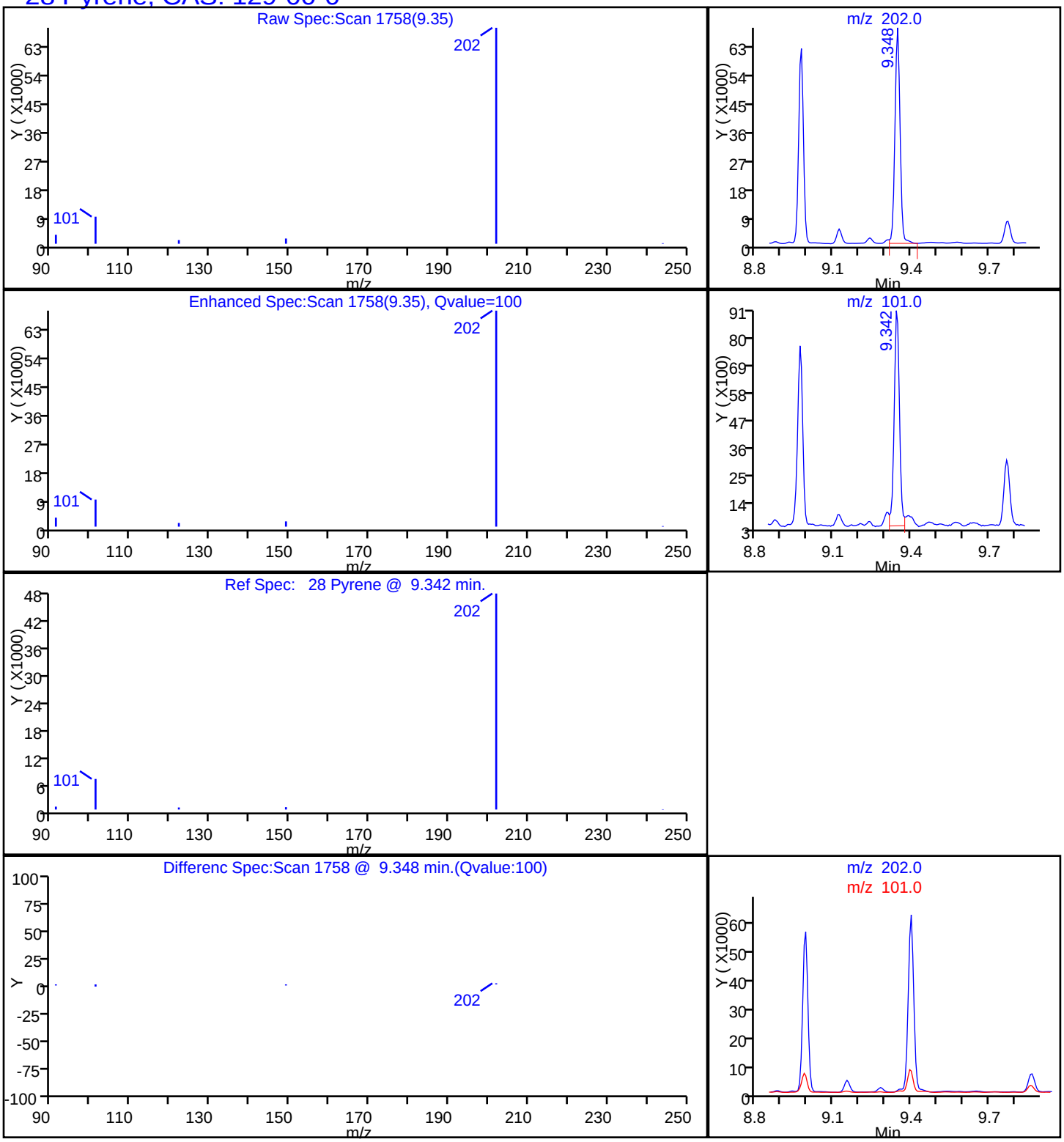
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0



Report Date: 02-Jan-2014 09:28:17 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
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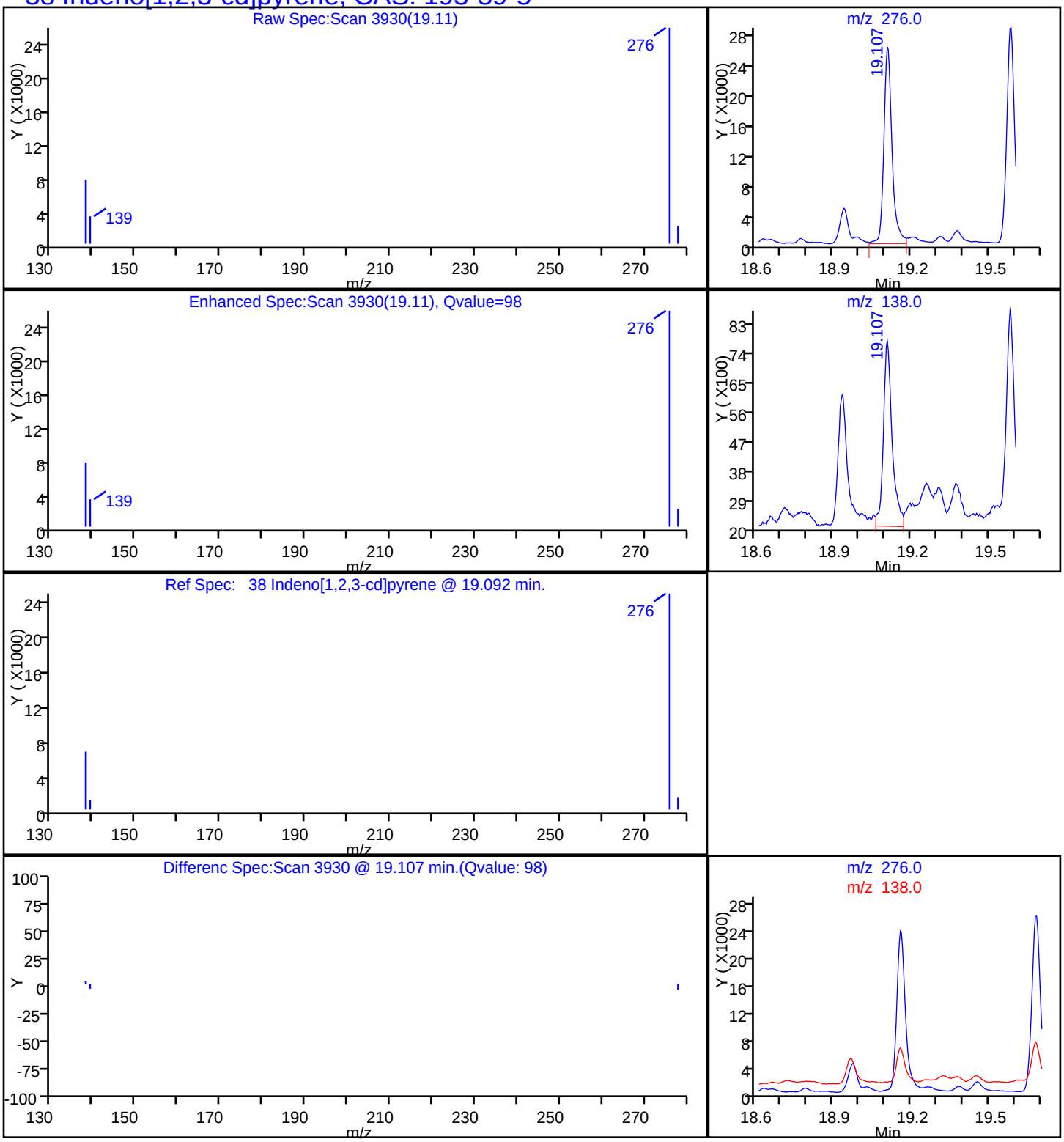
Lims ID:	280-50614-A-5-B	Lab Sample ID:	280-50614-5		
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

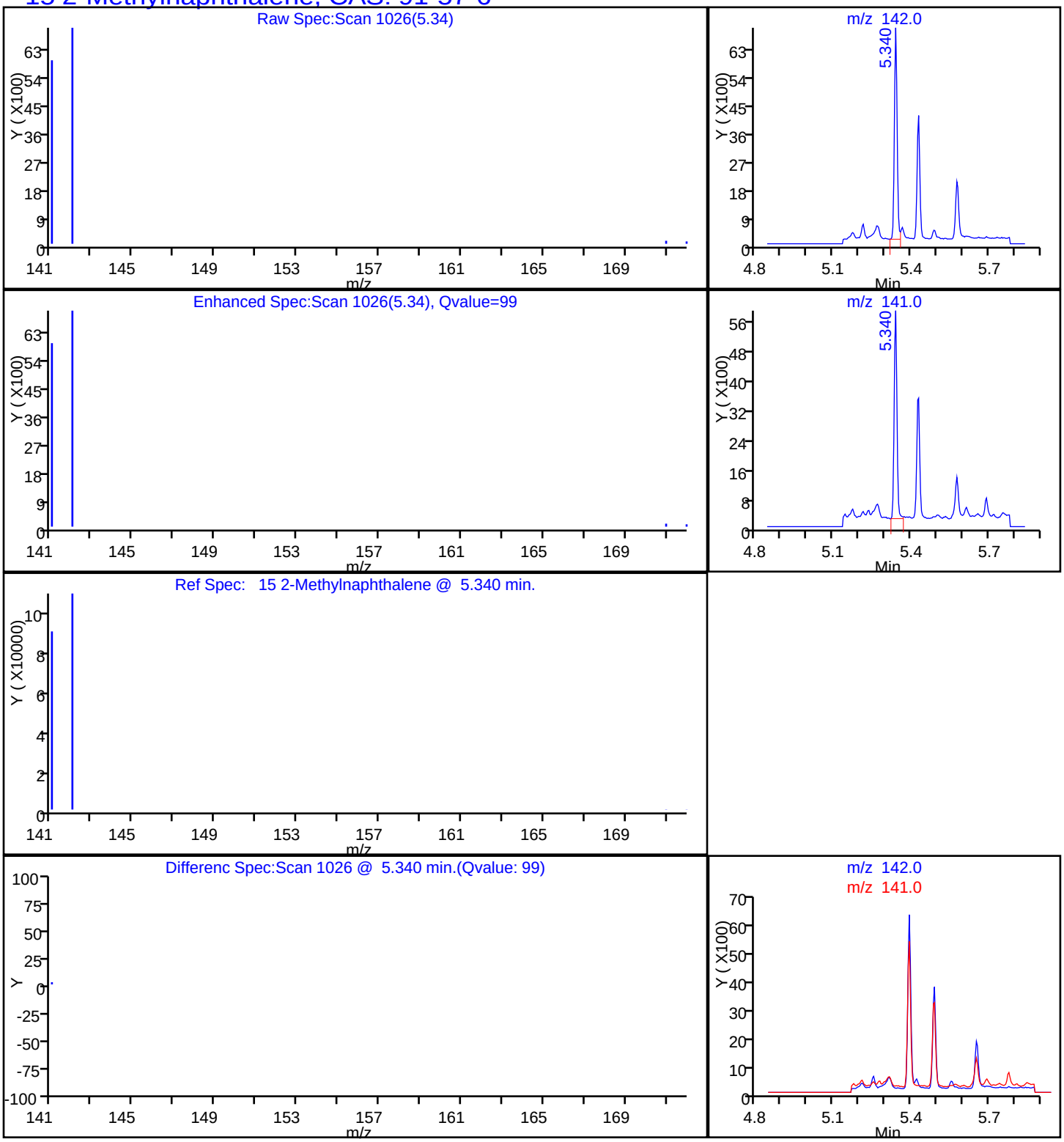


Report Date: 02-Jan-2014 09:28:16 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
Injection Date:	31-Dec-2013 22:36:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-5-B	Lab Sample ID:	280-50614-5		
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 2-Methylnaphthalene, CAS: 91-57-6



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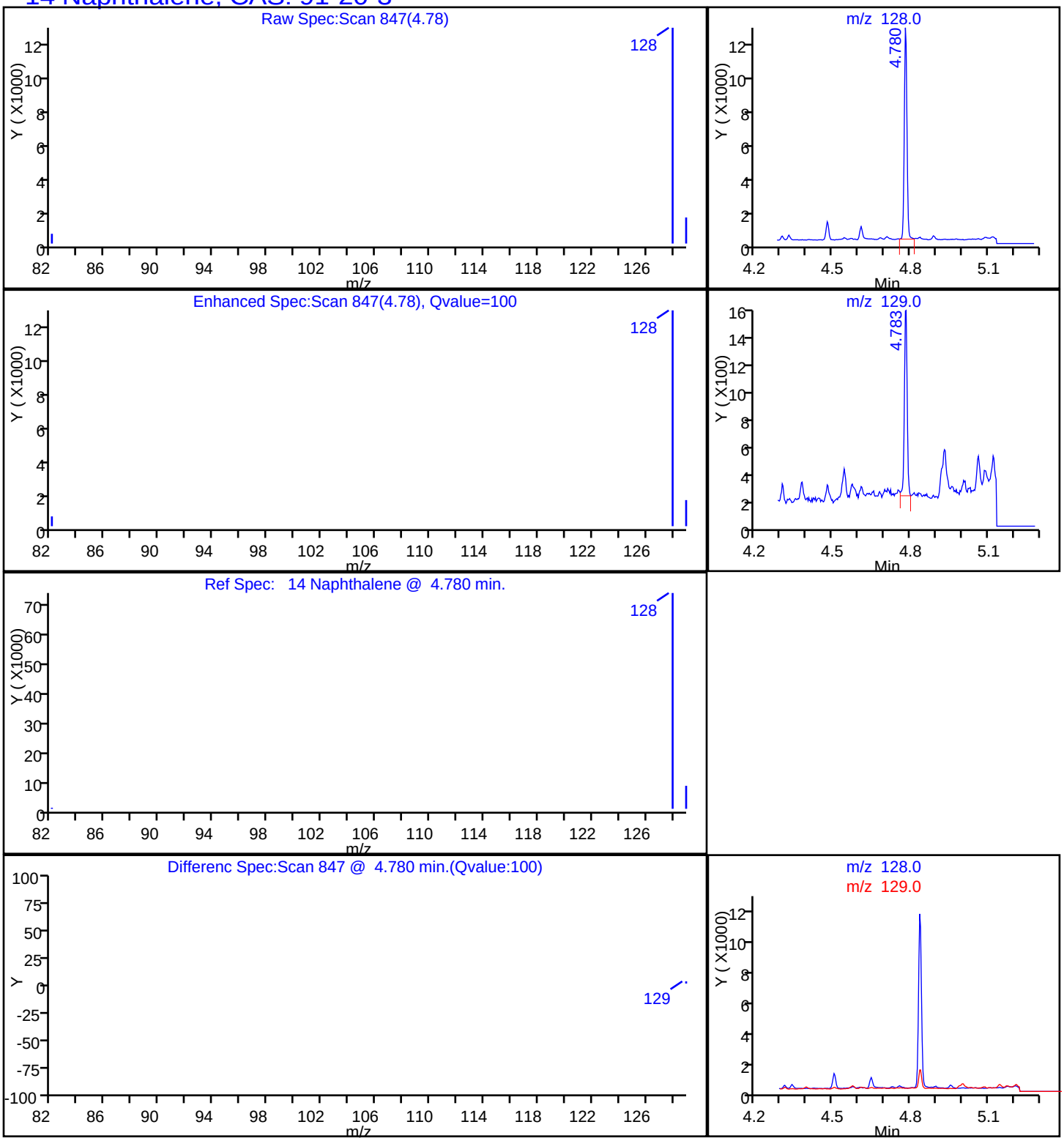
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
Injection Date:	31-Dec-2013 22:36:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-5-B	Lab Sample ID:	280-50614-5		
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3



Manual Integration/User Assign Peak Report

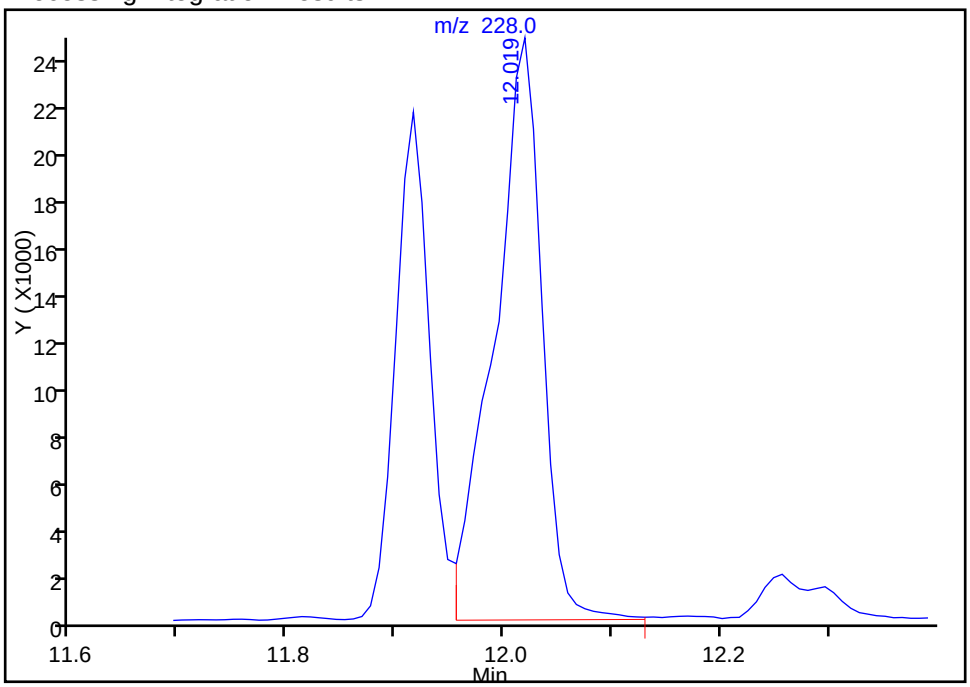
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8904.D				
Injection Date:	31-Dec-2013 22:36:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-5-B	Lab Sample ID:	280-50614-5		
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

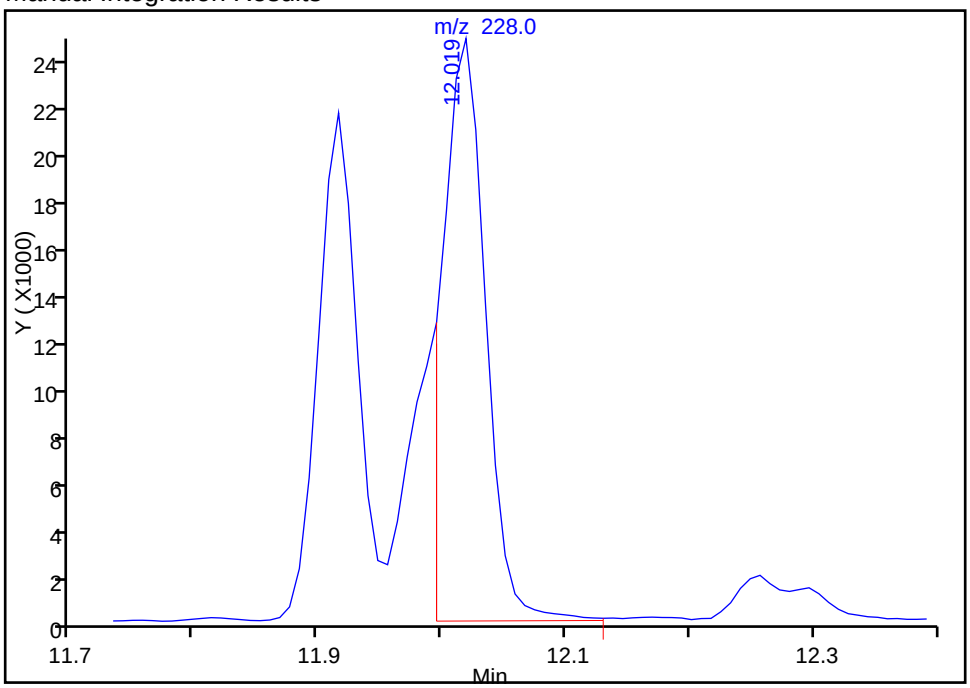
Processing Integration Results

RT: 12.02
Response: 74404
Amount: 830.5672



Manual Integration Results

RT: 12.02
Response: 58613
Amount: 654.2933



Reviewer: vasquezk, 02-Jan-2014 09:09:15
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU04-B | Lab Sample ID: 280-50614-6

Matrix: Solid | Lab File ID: X4_8907.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 12:40

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 31.67(g) | Date Analyzed: 12/31/2013 23:59

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207101 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	39000		4700	1100
50-32-8	Benzo[a]pyrene	24000		4700	700
56-55-3	Benzo[a]anthracene	16000		4700	850
207-08-9	Benzo[k]fluoranthene	12000		4700	950
191-24-2	Benzo[g,h,i]perylene	22000		4700	1000
85-01-8	Phenanthrene	9200		4700	1000
120-12-7	Anthracene	5400		4700	680
53-70-3	Dibenz(a,h)anthracene	6000		4700	1200
218-01-9	Chrysene	21000		4700	950
83-32-9	Acenaphthene	1200	J	4700	150
208-96-8	Acenaphthylene	5300		4700	160
206-44-0	Fluoranthene	28000		4700	950
86-73-7	Fluorene	2600	J	4700	450
129-00-0	Pyrene	35000		4700	1000
193-39-5	Indeno[1,2,3-cd]pyrene	22000		4700	1000
91-57-6	2-Methylnaphthalene	4100	J	4700	290
91-20-3	Naphthalene	5300		4700	310

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	75		39-120
4165-60-0	Nitrobenzene-d5	81		42-120
1718-51-0	Terphenyl-d14	95		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D
Lims ID: 280-50614-A-6-B Lab Sample ID: 280-50614-6
Client ID: FSA-SD-DU04-B
Sample Type: Client
Inject. Date: 31-Dec-2013 23:59:30 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-50614-a-6-b
Misc. Info.: 280-50614-a-6-b =280-50614-A-6-B
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 09:11:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	100	22746	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	40553	600.0	
* 3 Chrysene-d12	240	11.948	11.956	-0.008	97	46974	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.186	0.0	100	10297	404.5	
$ 5 2-Fluorobiphenyl	172	5.626	5.630	-0.004	100	20096	374.4	
$ 6 Terphenyl-d14	244	9.522	9.527	-0.005	98	23294	474.4	
14 Naphthalene	128	4.780	4.783	-0.003	100	11721	168.4	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	98	6354	129.1	
19 Acenaphthylene	152	6.119	6.119	0.0	99	12730	167.8	
20 Acenaphthene	153	6.262	6.261	0.001	91	1761	37.2	
22 Fluorene	166	6.696	6.696	0.0	95	4634	81.9	
24 Phenanthrene	178	7.548	7.553	-0.005	99	24185	291.0	
25 Anthracene	178	7.597	7.602	-0.005	95	13868	169.5	
27 Fluoranthene	202	8.973	8.979	-0.006	100	80772	896.1	
28 Pyrene	202	9.348	9.353	-0.005	100	101735	1093.9	
31 Benzo[a]anthracene	228	11.916	11.924	-0.008	98	49131	514.6	
32 Chrysene	228	12.019	12.027	-0.008	100	59842	662.8	M
34 Benzo[b]fluoranthene	252	15.257	15.253	0.004	100	106915	1222.5	
35 Benzo[k]fluoranthene	252	15.335	15.342	-0.007	97	34566	384.2	
36 Benzo[a]pyrene	252	16.382	16.385	-0.003	99	65236	769.7	
38 Indeno[1,2,3-cd]pyrene	276	19.111	19.111	0.0	97	57758	692.3	
37 Dibenz(a,h)anthracene	278	19.141	19.148	-0.007	56	15913	188.7	a
39 Benzo[g,h,i]perylene	276	19.588	19.584	0.004	98	61620	688.0	

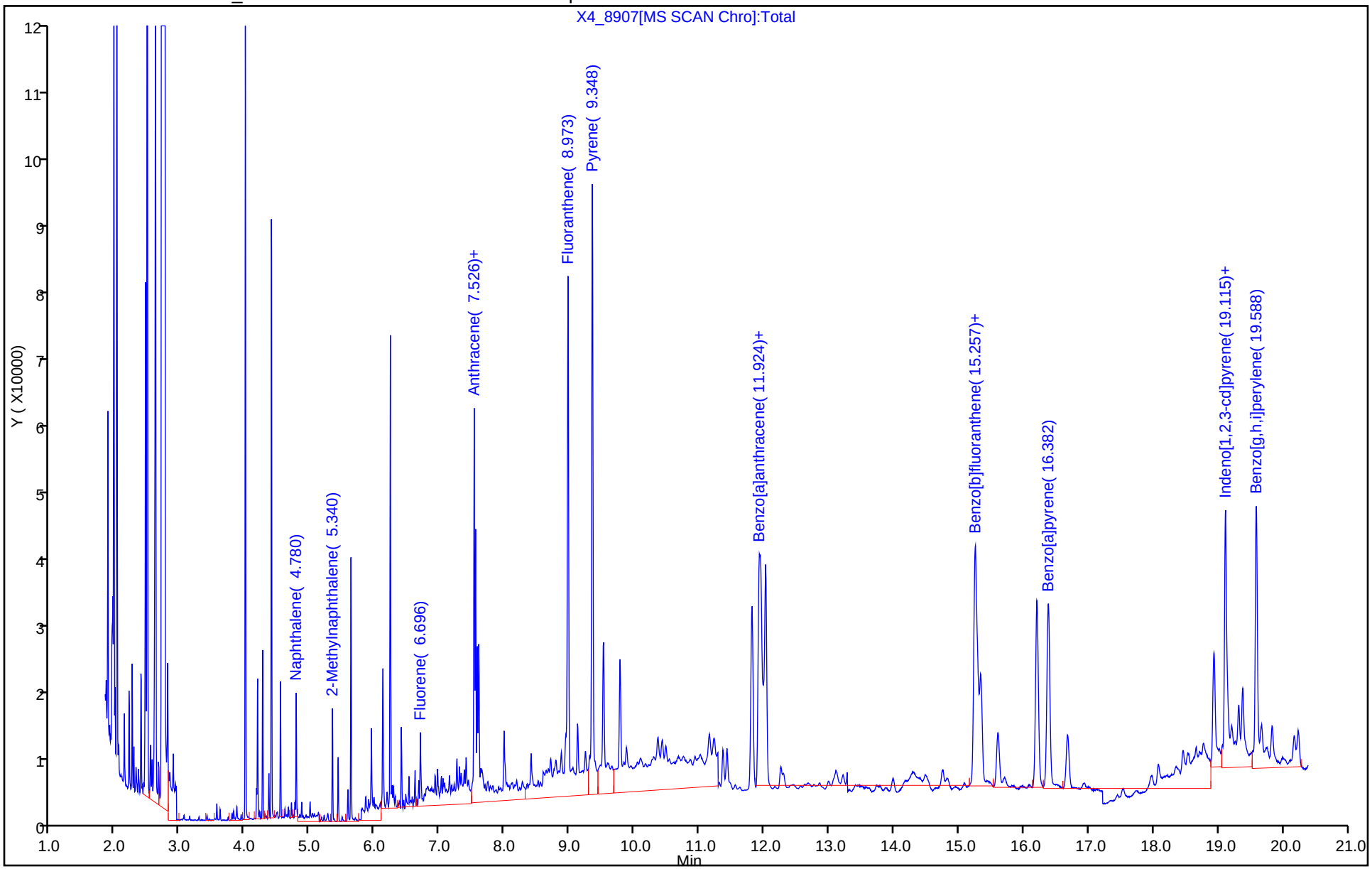
QC Flag Legend

Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 02-Jan-2014 09:28:18 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6	Worklist Smp#:	23
Client ID:	FSA-SD-DU04-B				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

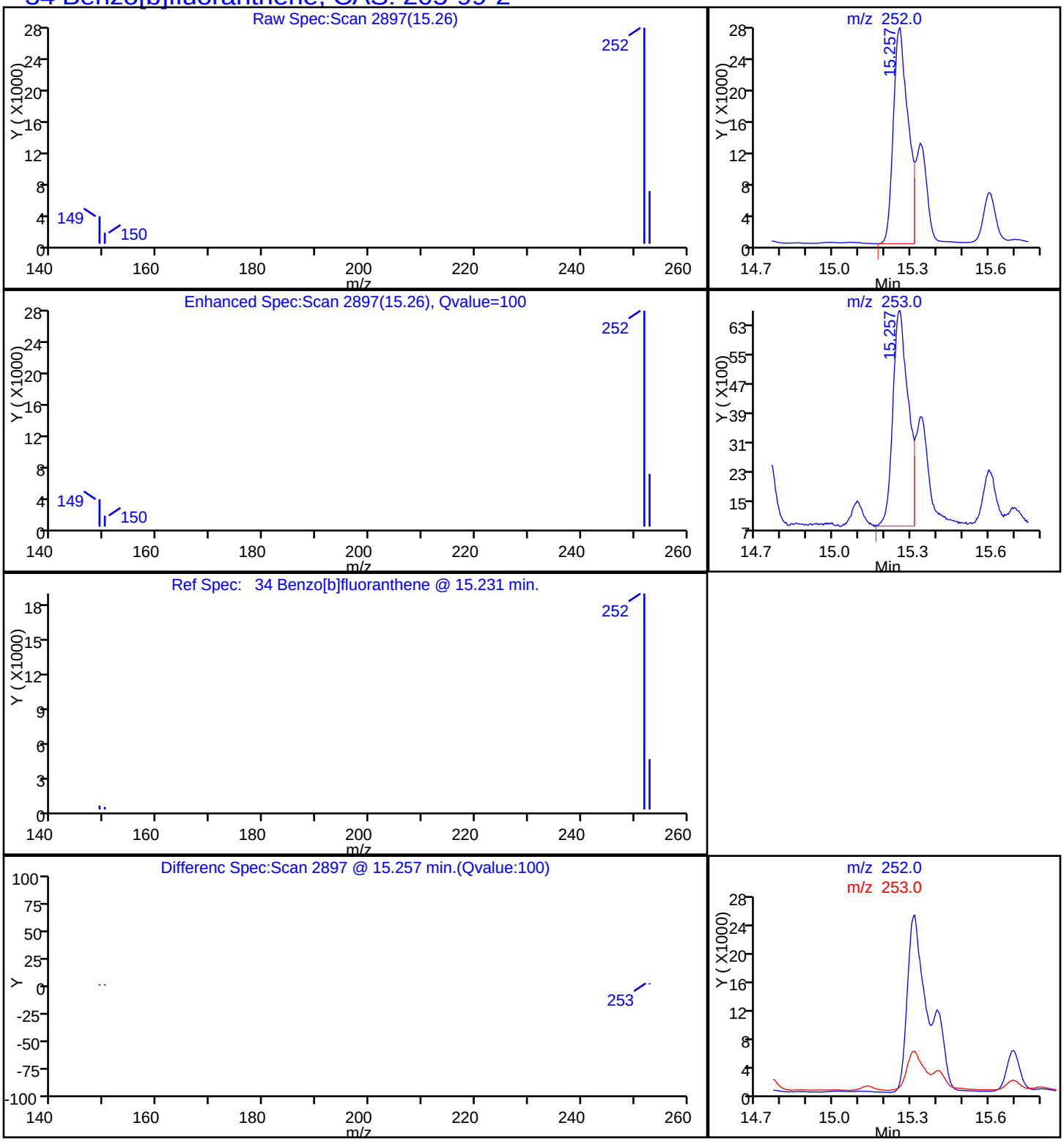


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

34 Benzo[b]fluoranthene, CAS: 205-99-2

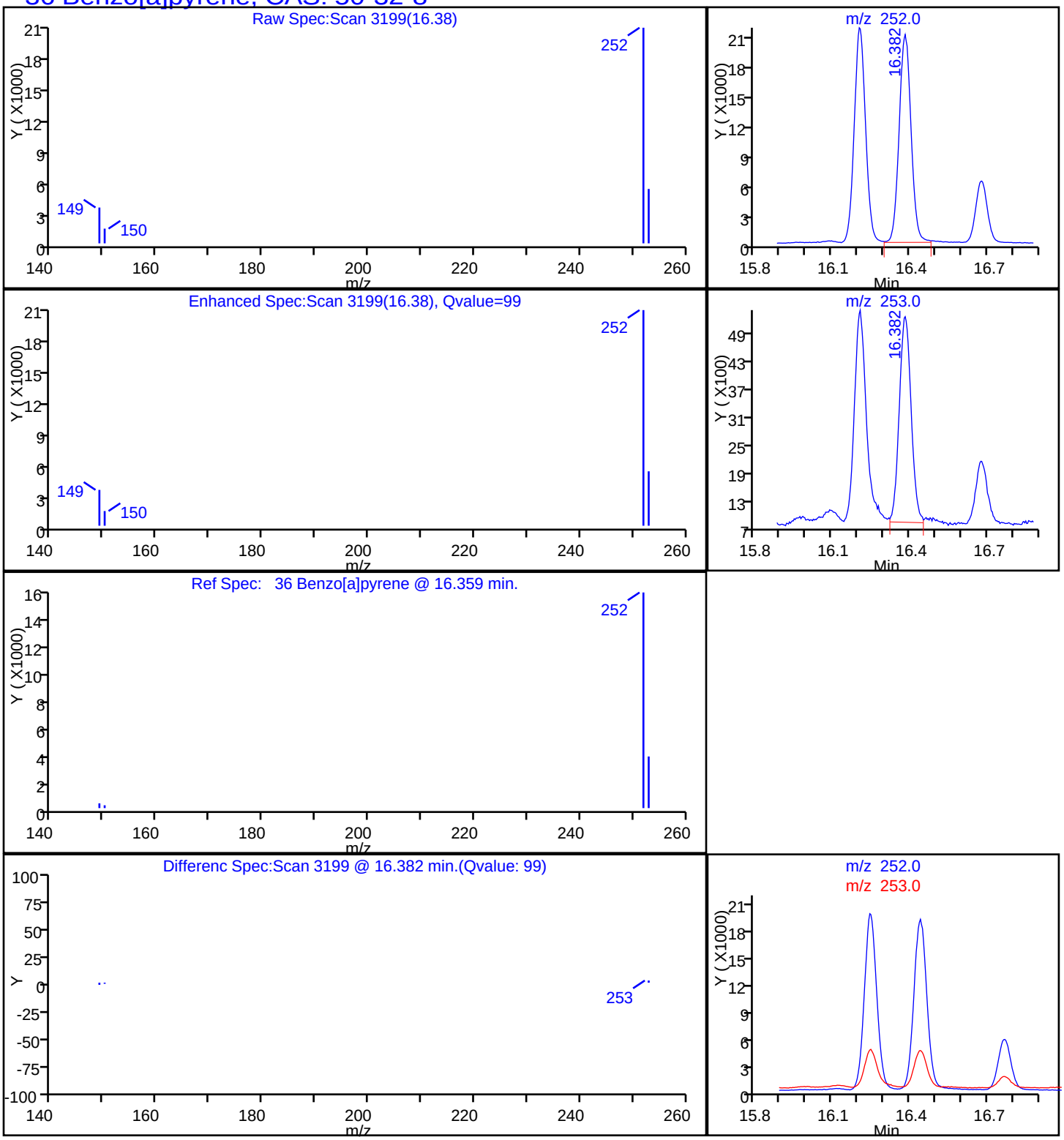


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[a]pyrene, CAS: 50-32-8

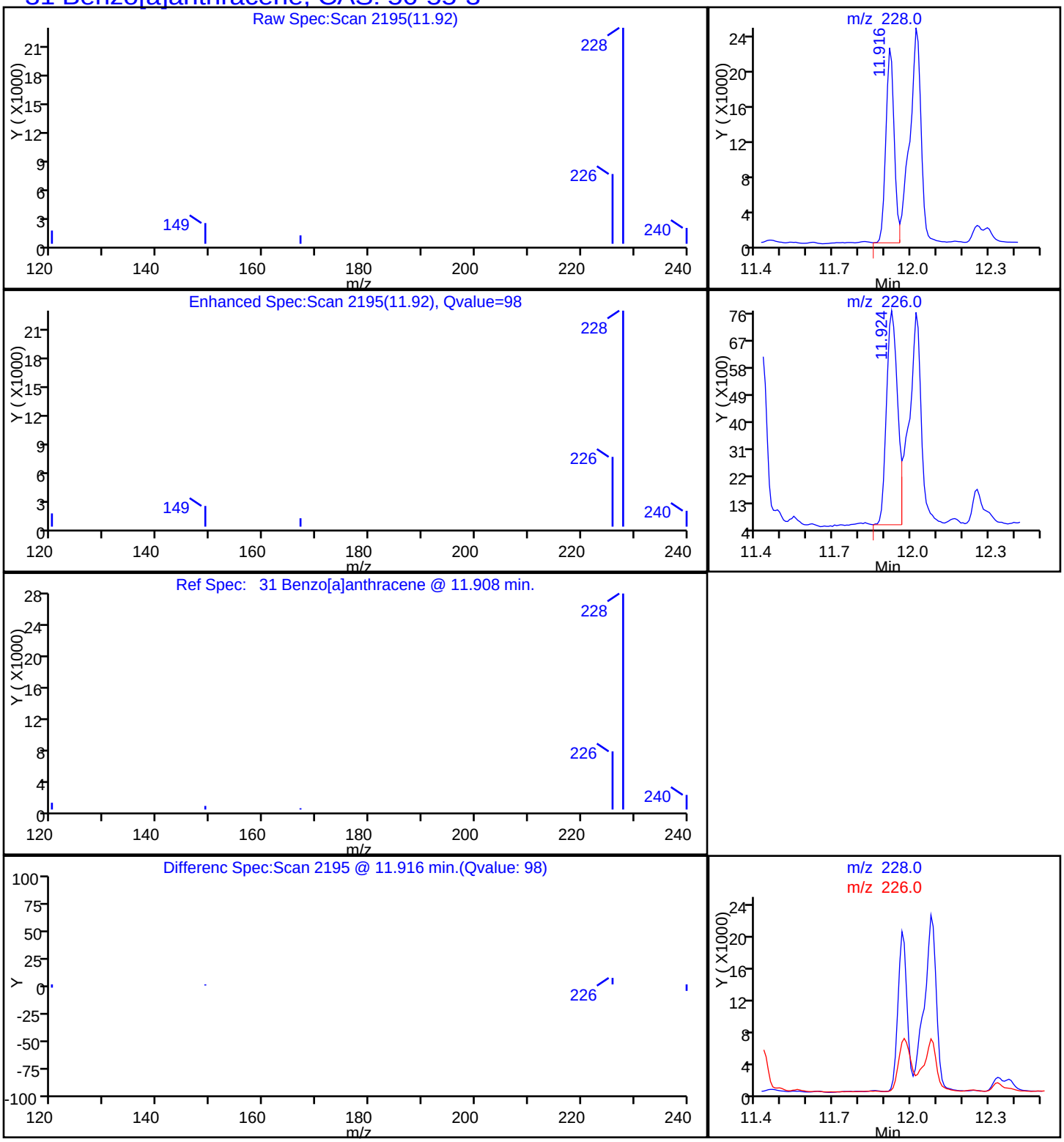


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3

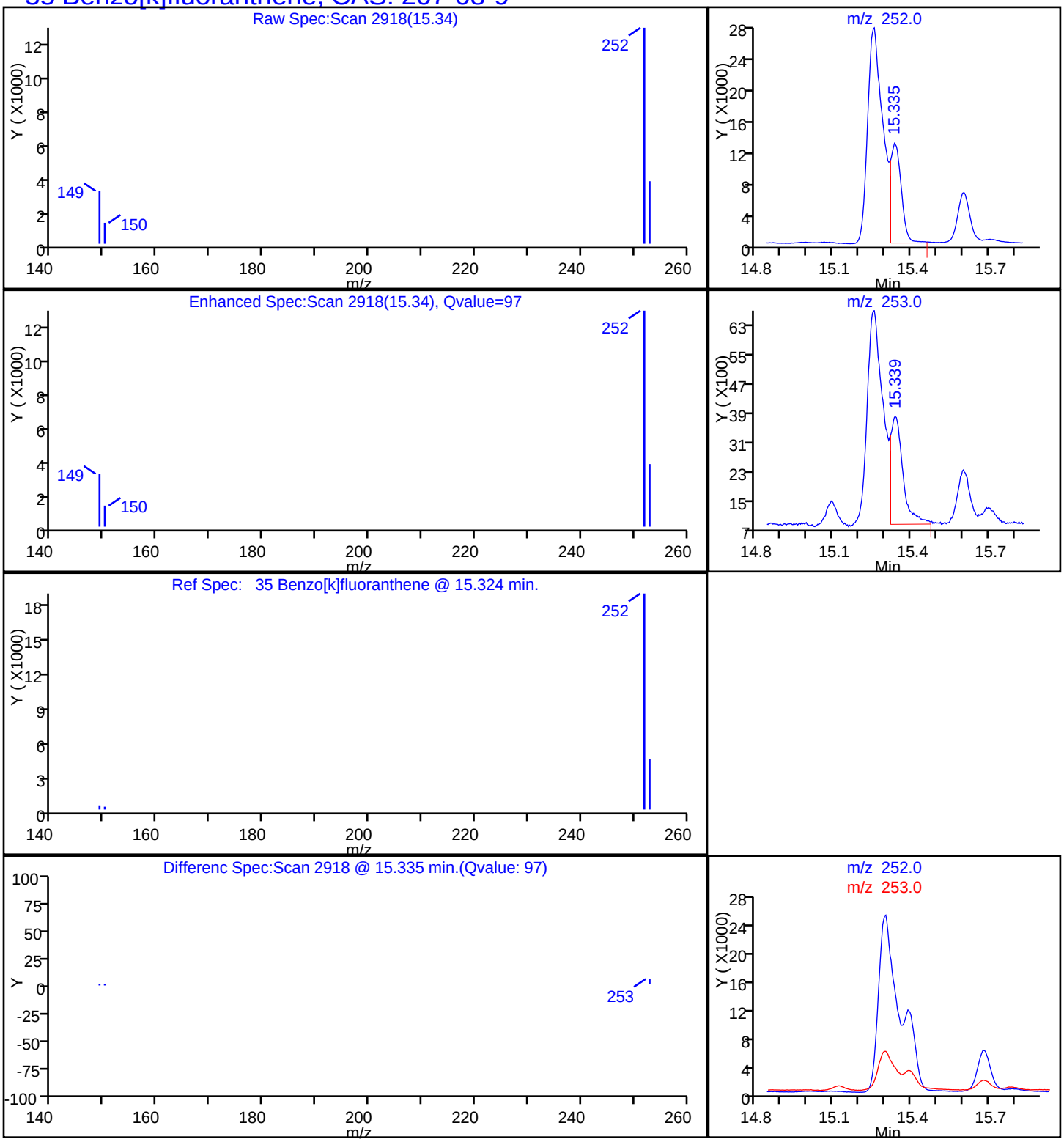


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9

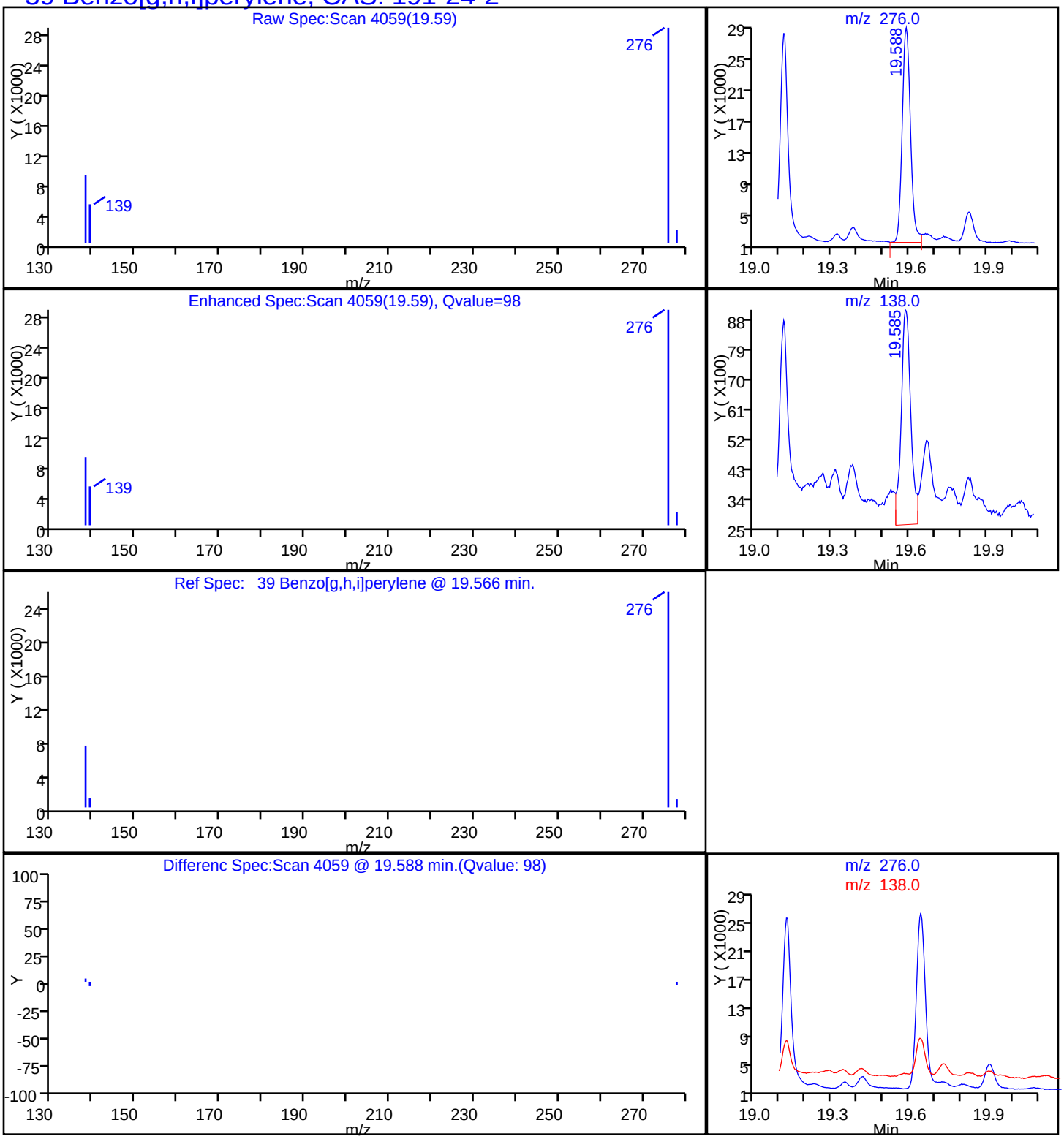


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[g,h,i]perylene, CAS: 191-24-2

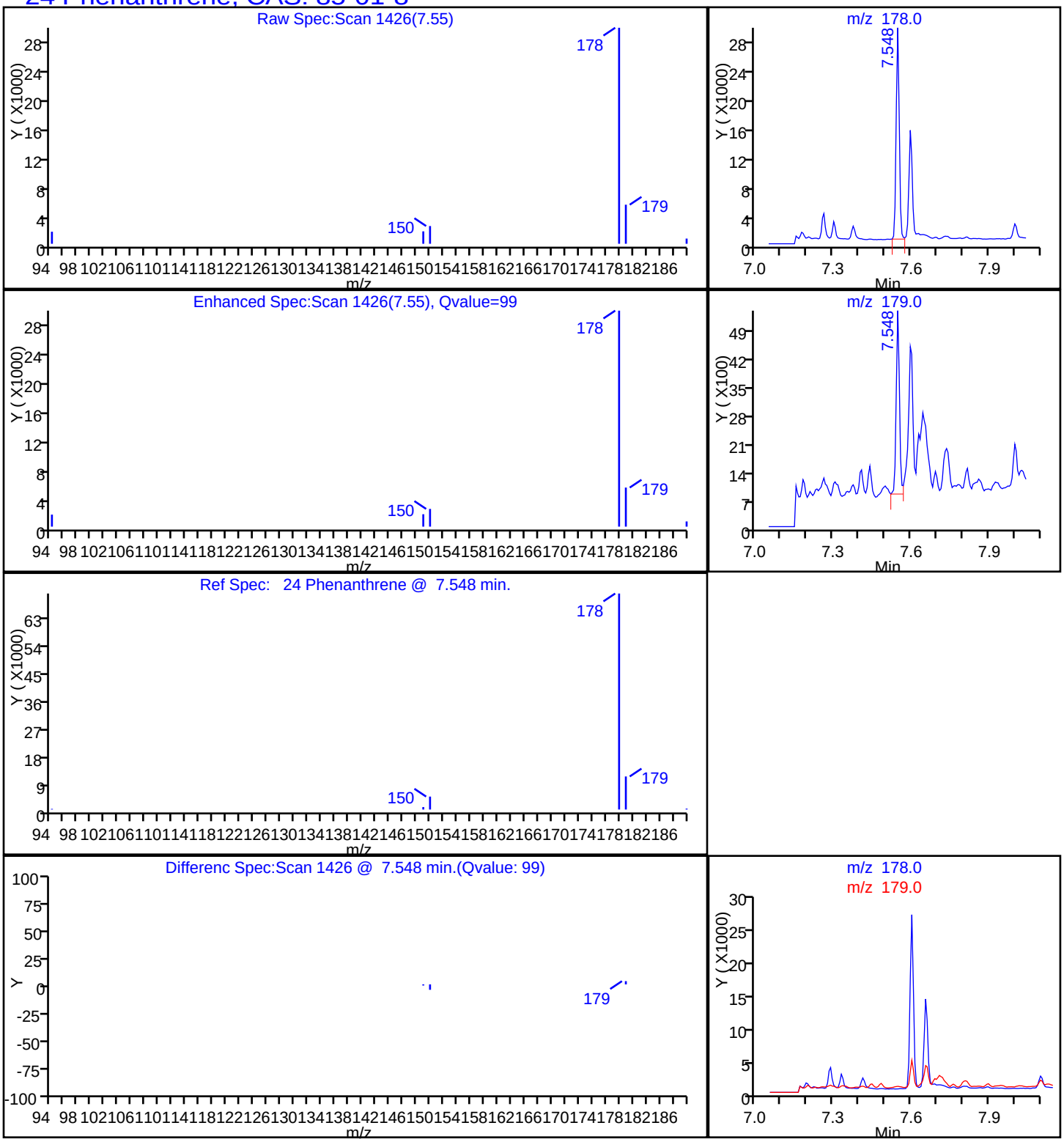


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8

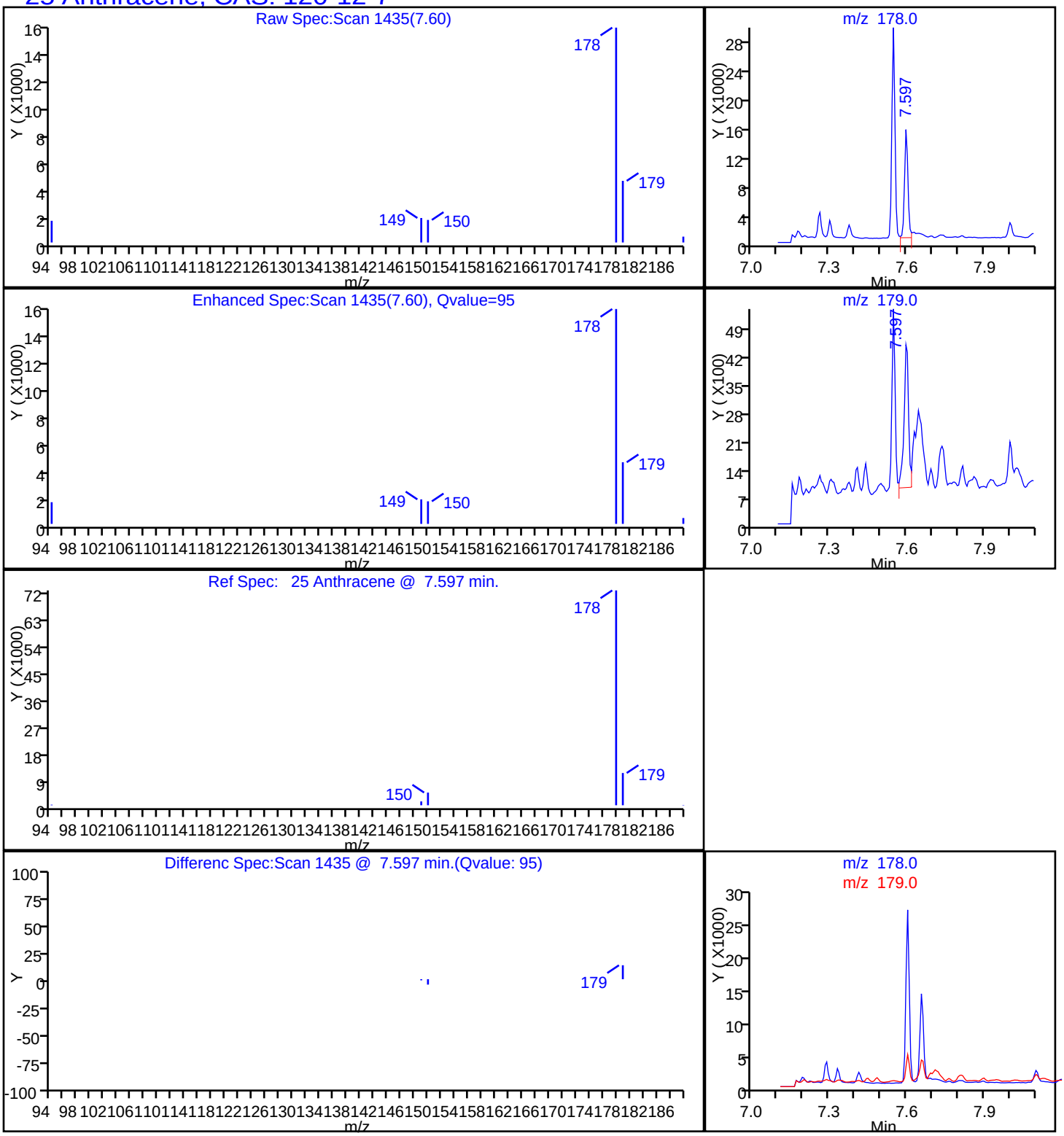


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7

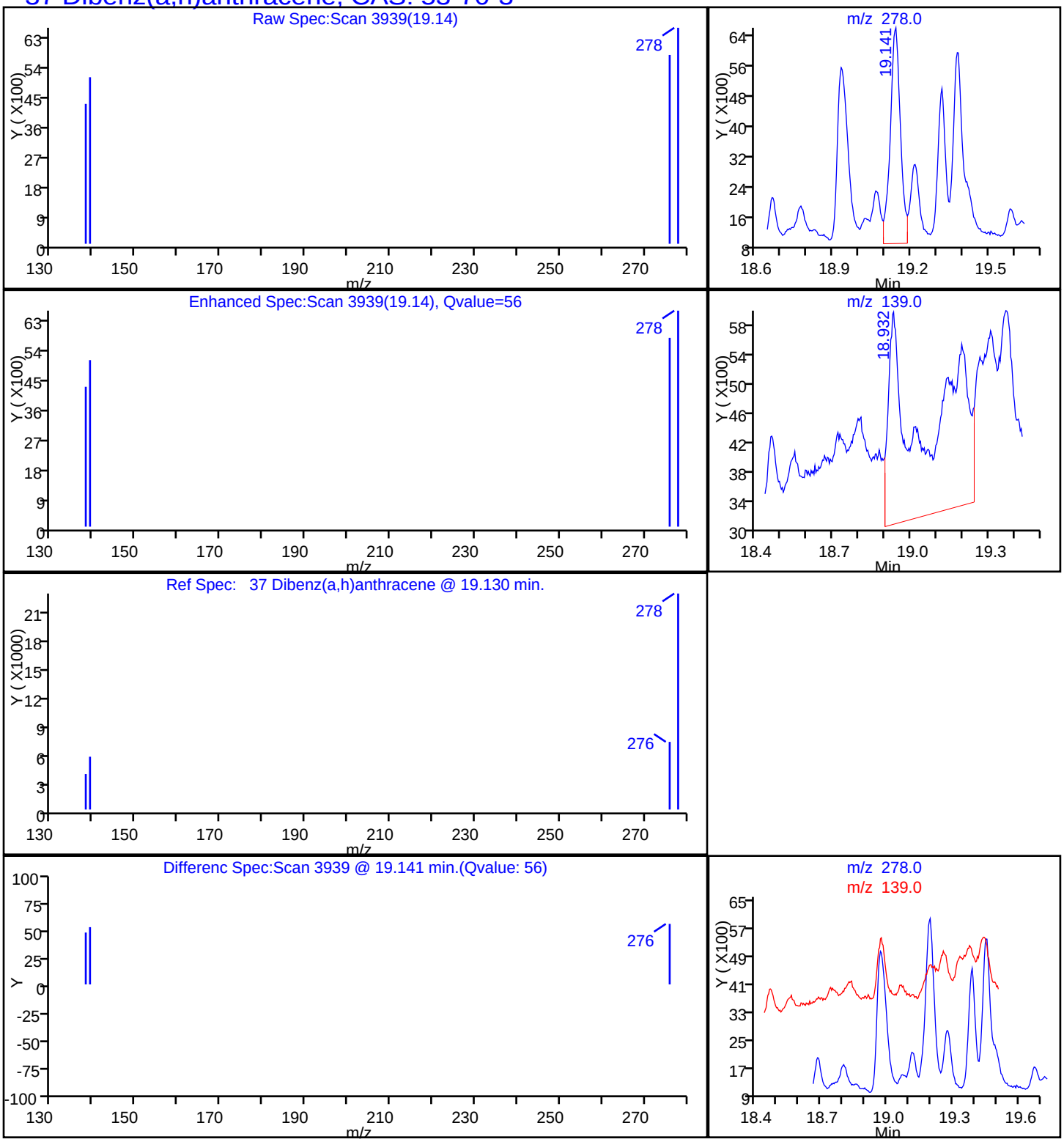


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3

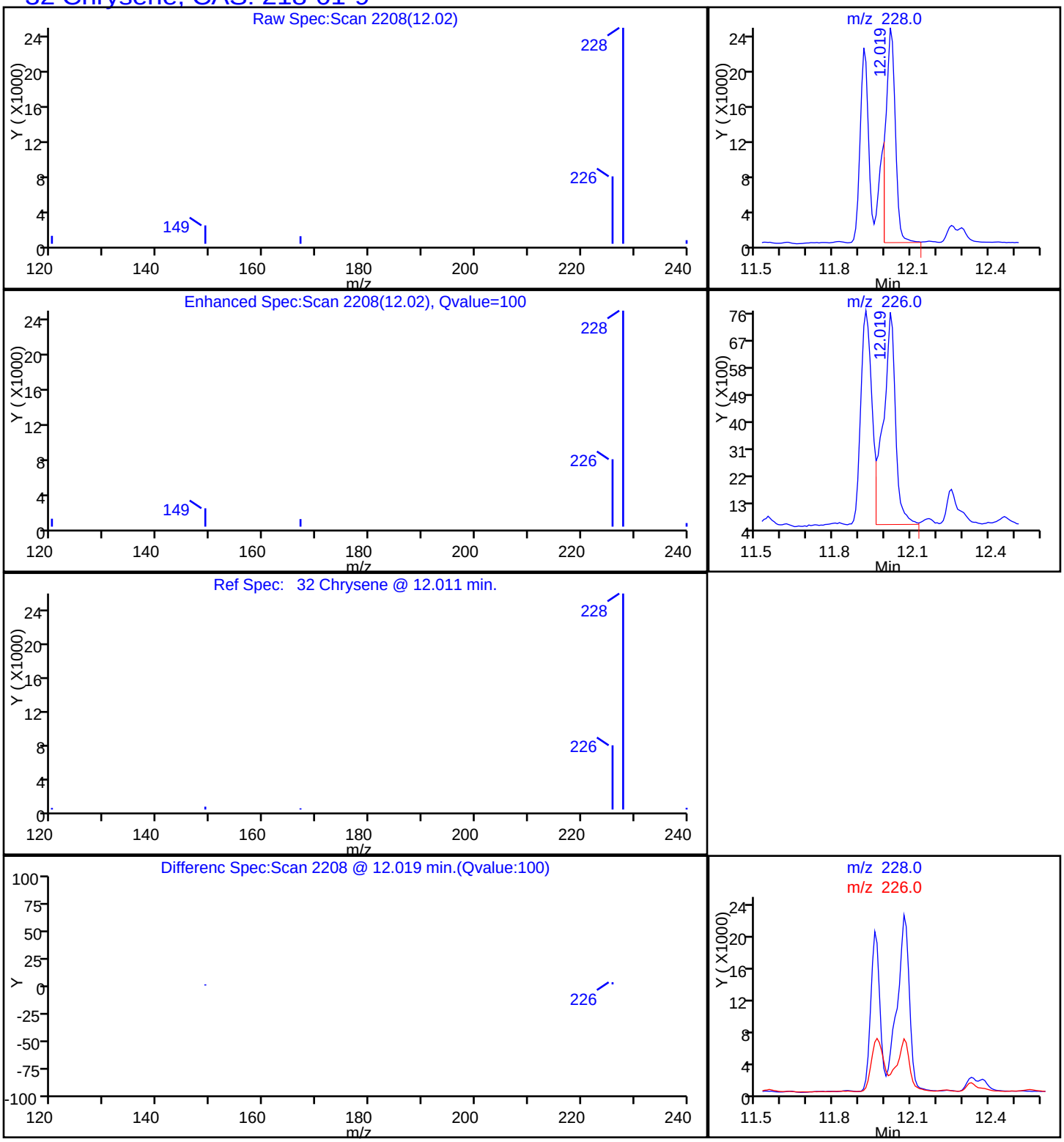


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

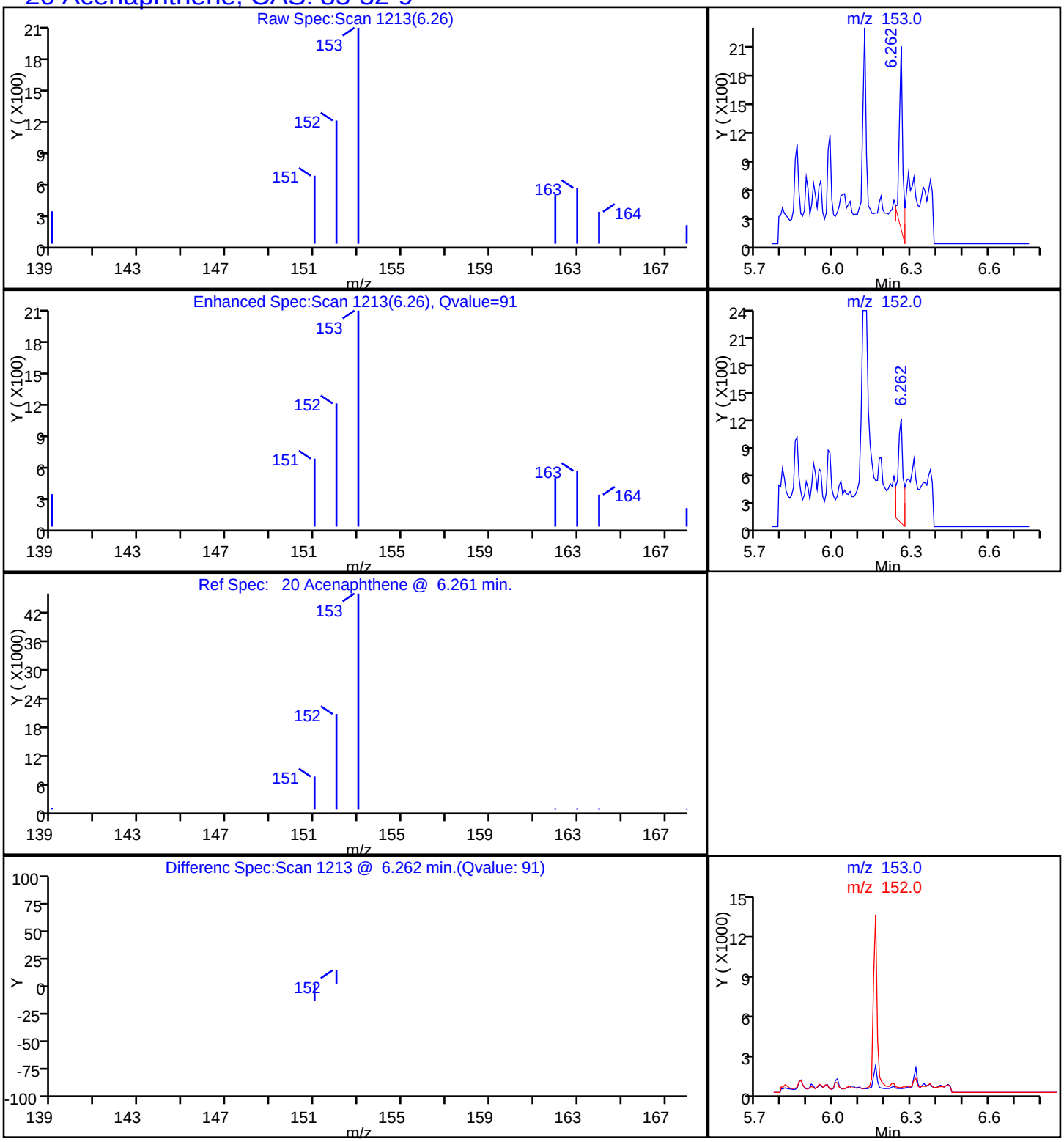


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9

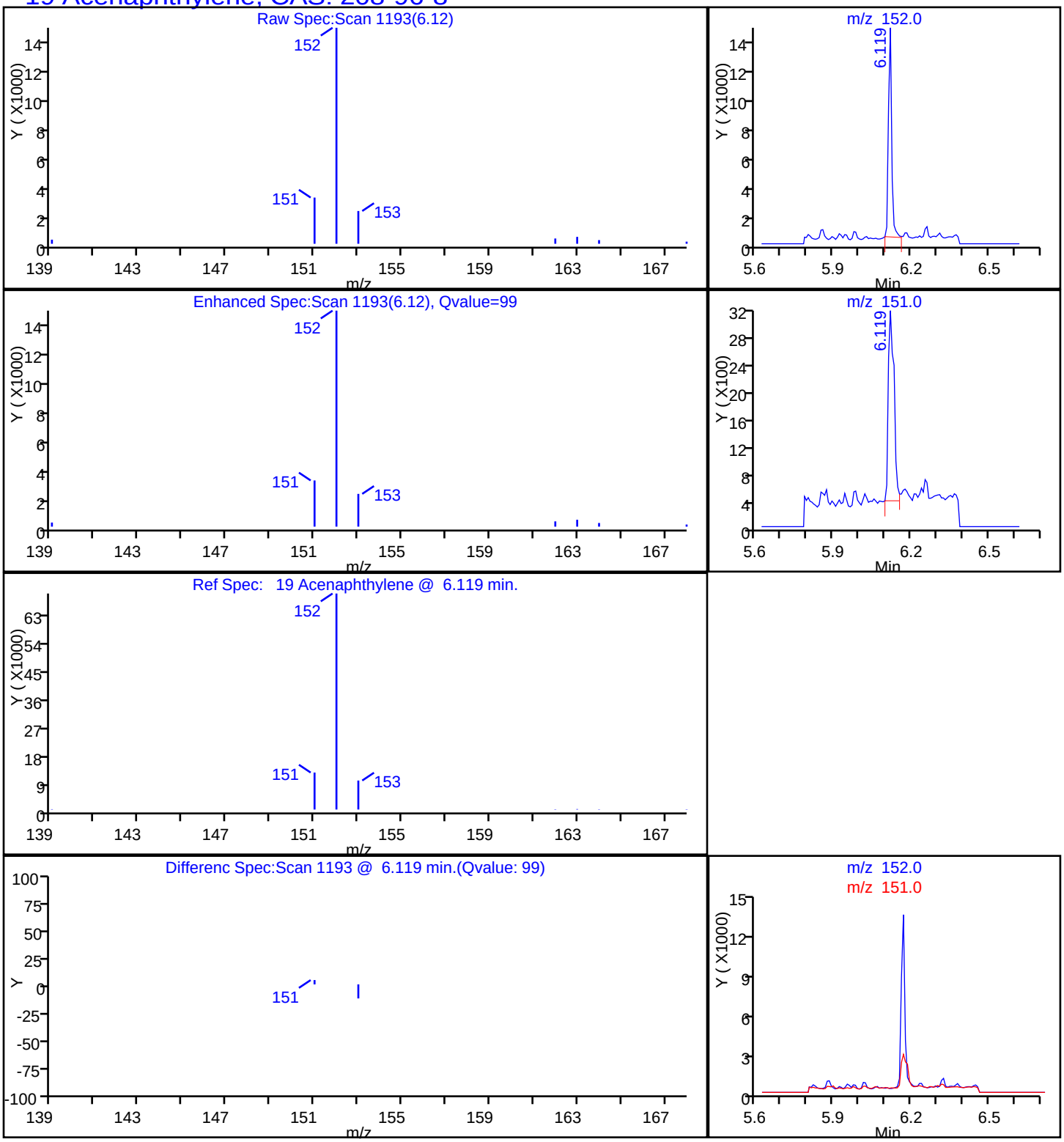


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

19 Acenaphthylene, CAS: 208-96-8

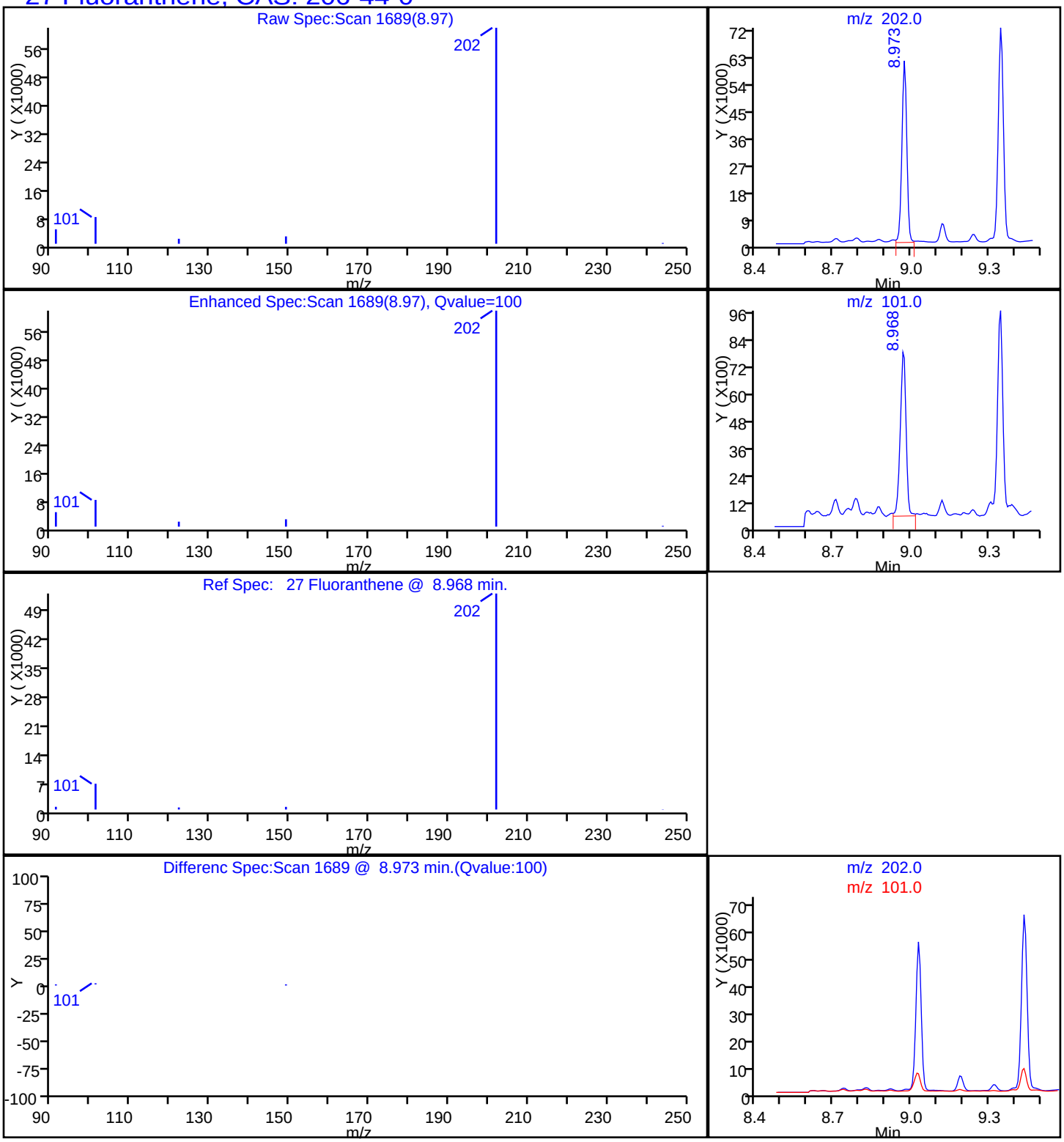


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0

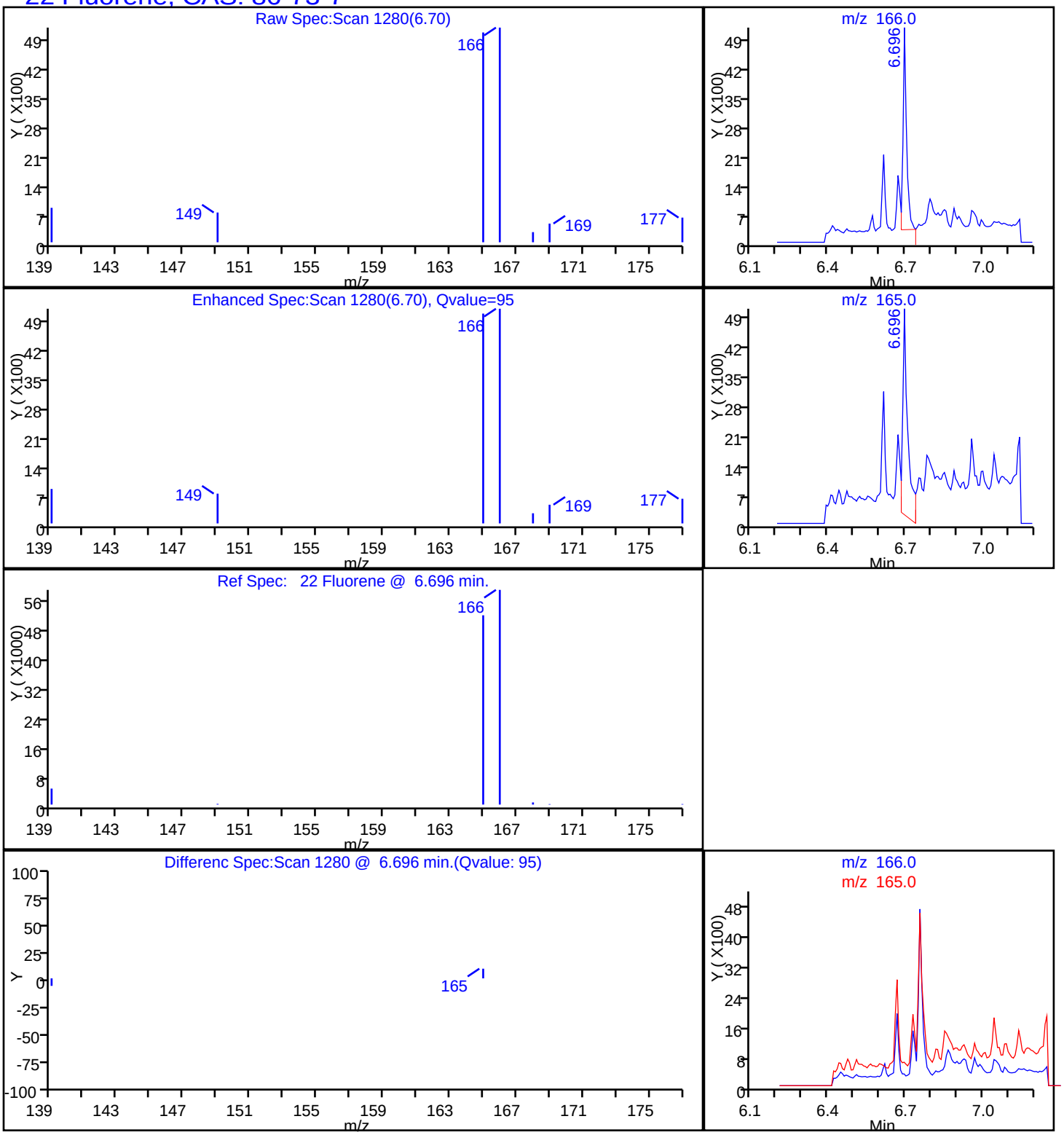


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7

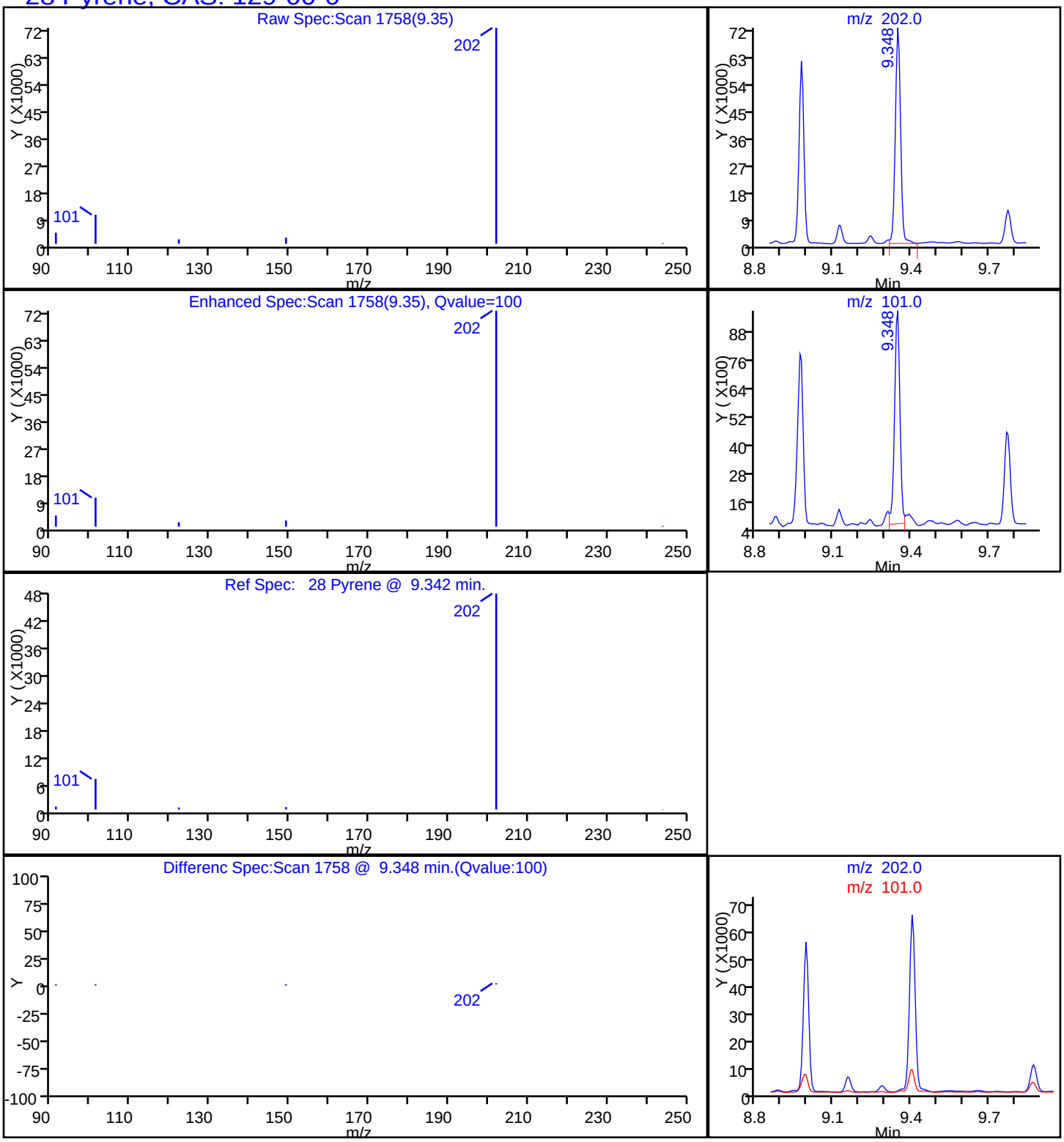


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0

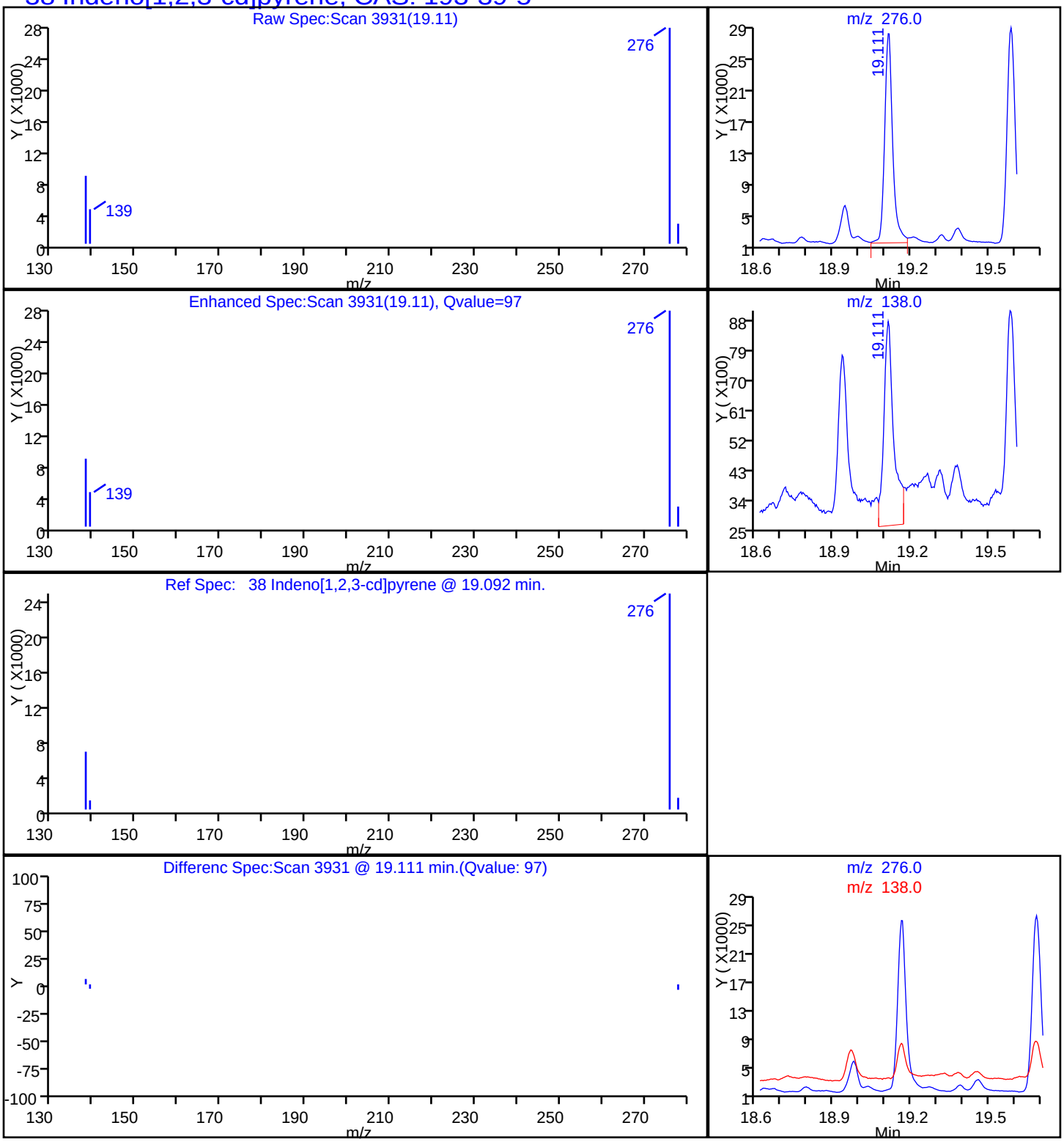


Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

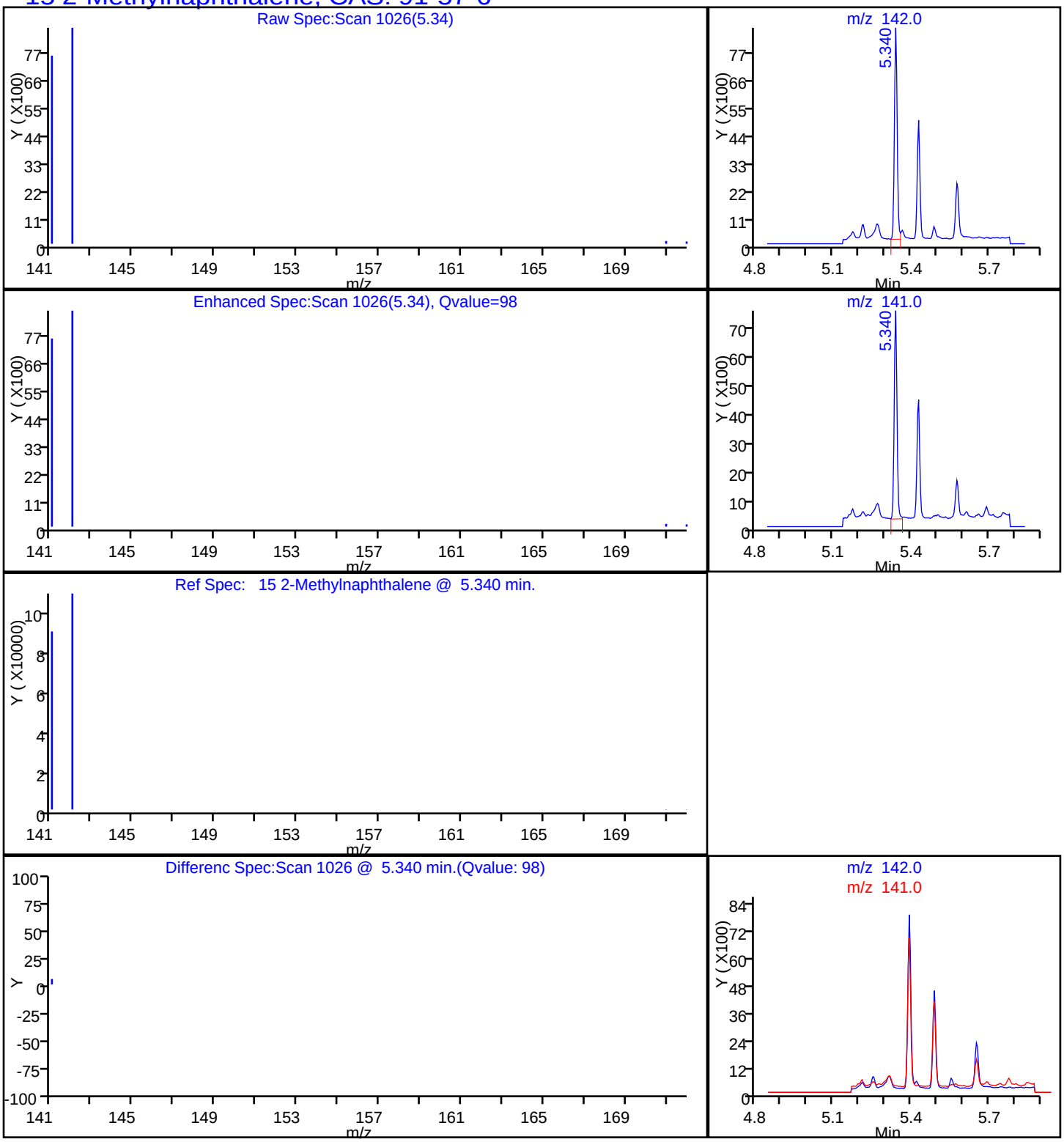


Report Date: 02-Jan-2014 09:28:18 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 2-Methylnaphthalene, CAS: 91-57-6

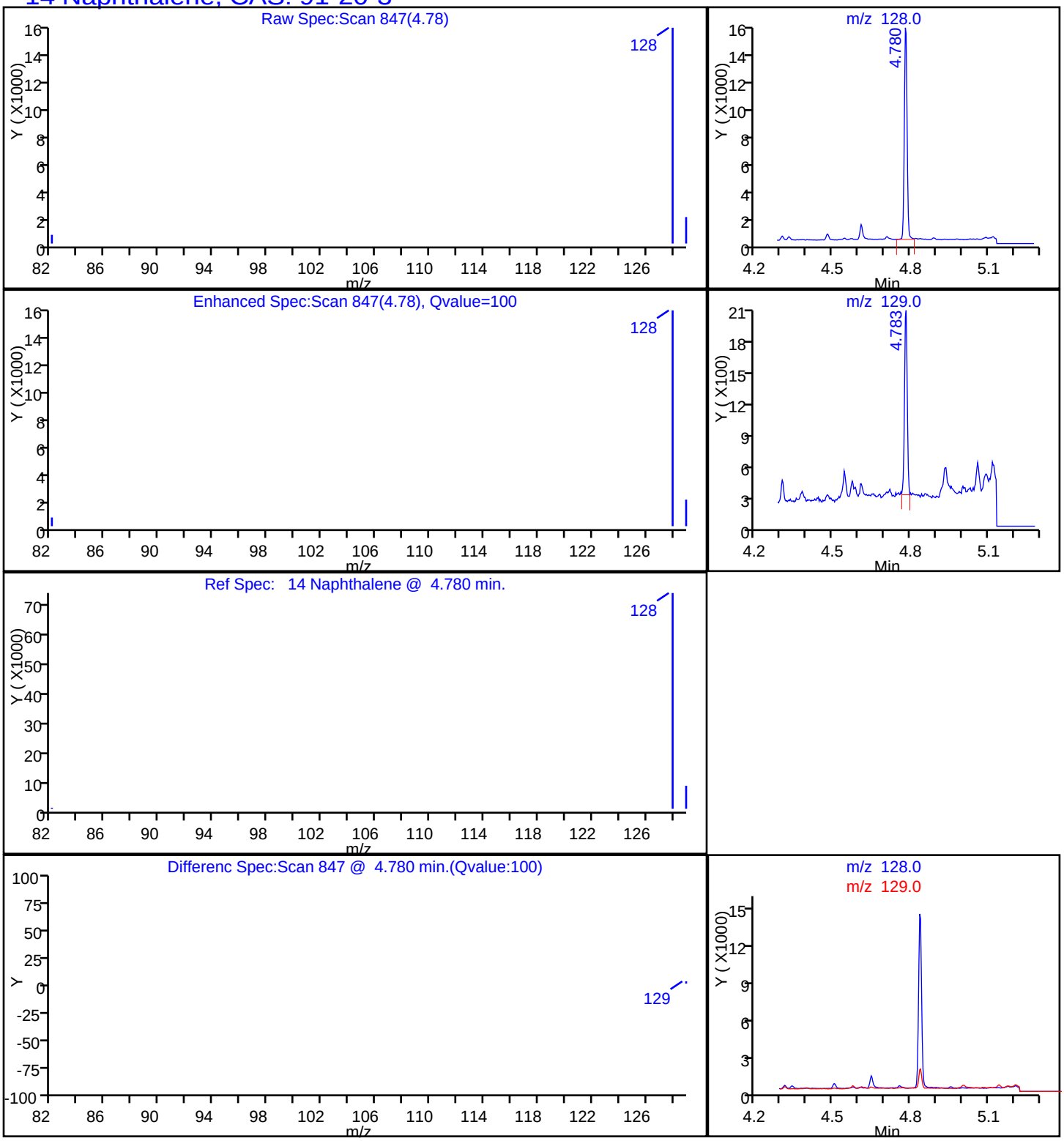


Report Date: 02-Jan-2014 09:28:18 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3



Manual Integration/User Assign Peak Report

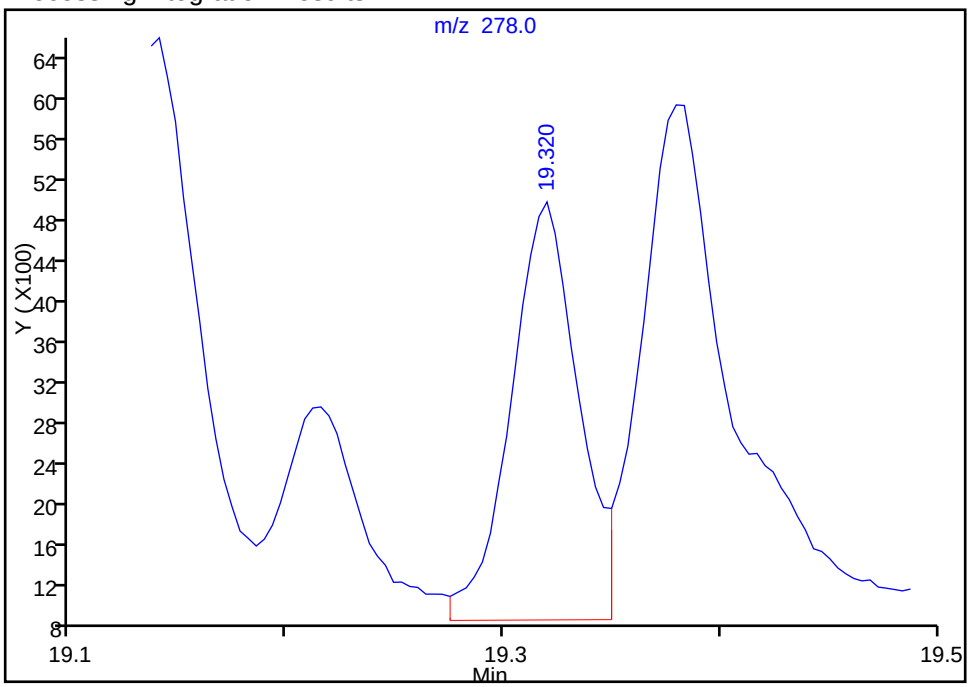
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3

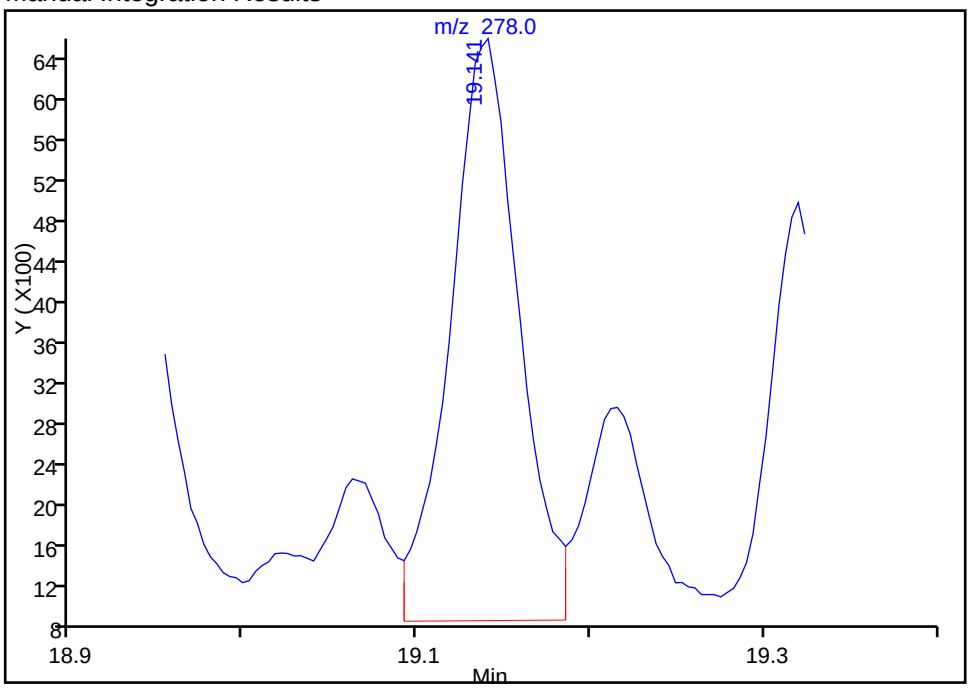
Processing Integration Results

RT: 19.32
Response: 9034
Amount: 107.1511



Manual Integration Results

RT: 19.14
Response: 15913
Amount: 188.7420



Reviewer: vasquezk, 02-Jan-2014 09:11:00
Audit Action: Assigned Compound ID
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

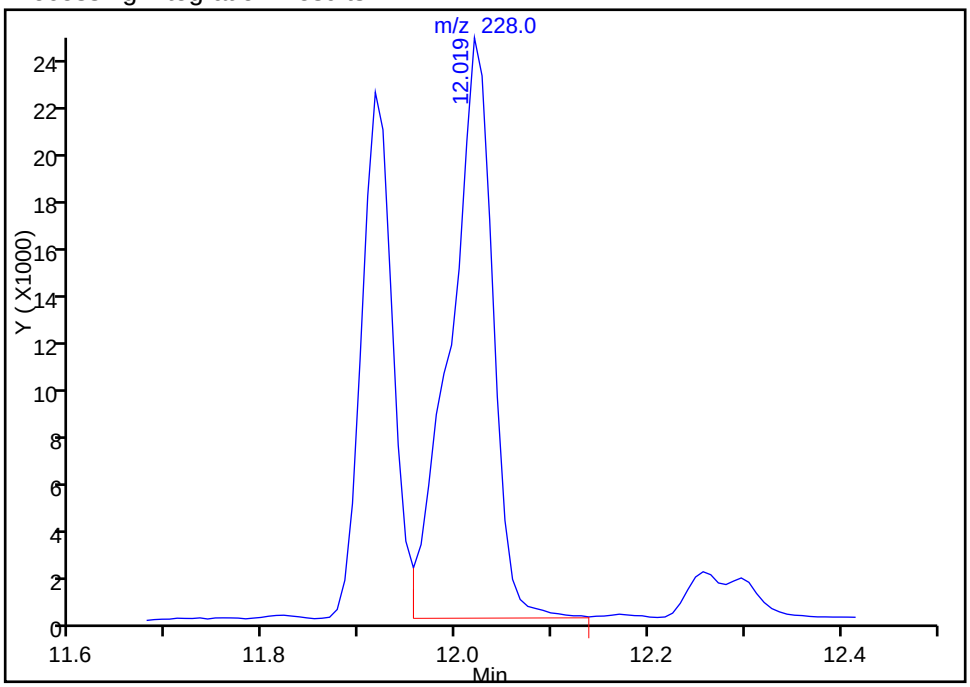
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8907.D				
Injection Date:	31-Dec-2013 23:59:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-6-B	Lab Sample ID:	280-50614-6		
Client ID:	FSA-SD-DU04-B				
Operator ID:	VASQUEZK	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

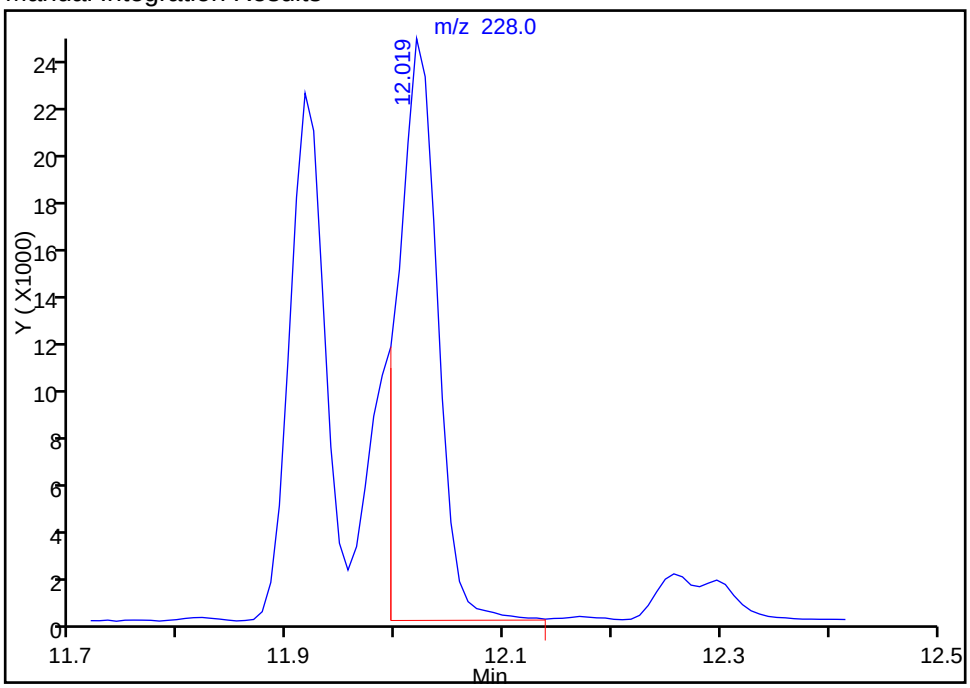
Processing Integration Results

RT: 12.02
Response: 73718
Amount: 816.5327



Manual Integration Results

RT: 12.02
Response: 59842
Amount: 662.8361



Reviewer: vasquezk, 02-Jan-2014 09:11:00
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU04-C | Lab Sample ID: 280-50614-7

Matrix: Solid | Lab File ID: X4_8908.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 12:45

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 30.38(g) | Date Analyzed: 01/01/2014 00:27

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207101 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	53000		4900	1200
50-32-8	Benzo[a]pyrene	35000		4900	730
56-55-3	Benzo[a]anthracene	24000		4900	890
207-08-9	Benzo[k]fluoranthene	17000		4900	990
191-24-2	Benzo[g,h,i]perylene	30000		4900	1100
85-01-8	Phenanthrene	12000		4900	1100
120-12-7	Anthracene	6100		4900	710
53-70-3	Dibenz(a,h)anthracene	7300		4900	1300
218-01-9	Chrysene	31000		4900	990
83-32-9	Acenaphthene	1400	J	4900	160
208-96-8	Acenaphthylene	6600		4900	170
206-44-0	Fluoranthene	38000		4900	990
86-73-7	Fluorene	3000	J	4900	460
129-00-0	Pyrene	41000		4900	1100
193-39-5	Indeno[1,2,3-cd]pyrene	30000		4900	1100
91-57-6	2-Methylnaphthalene	4200	J	4900	310
91-20-3	Naphthalene	5800		4900	320

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	80		39-120
4165-60-0	Nitrobenzene-d5	87		42-120
1718-51-0	Terphenyl-d14	94		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D
Lims ID: 280-50614-A-7-B Lab Sample ID: 280-50614-7
Client ID: FSA-SD-DU04-C
Sample Type: Client
Inject. Date: 01-Jan-2014 00:27:30 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-50614-a-7-b
Misc. Info.: 280-50614-a-7-b =280-50614-A-7-B
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 09:11:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	98	24410	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	45056	600.0	
* 3 Chrysene-d12	240	11.948	11.956	-0.008	96	48253	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.186	0.0	100	11903	435.7	
$ 5 2-Fluorobiphenyl	172	5.626	5.630	-0.004	100	23182	402.5	
$ 6 Terphenyl-d14	244	9.522	9.527	-0.005	99	25774	472.5	
14 Naphthalene	128	4.783	4.783	0.0	100	13261	177.5	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	98	6817	129.1	
19 Acenaphthylene	152	6.120	6.119	0.001	99	16437	201.9	
20 Acenaphthene	153	6.262	6.261	0.001	90	2217	43.7	
22 Fluorene	166	6.696	6.696	0.0	94	5489	90.5	
24 Phenanthrene	178	7.548	7.553	-0.005	100	34386	372.4	
25 Anthracene	178	7.597	7.602	-0.005	97	16917	186.1	
27 Fluoranthene	202	8.974	8.979	-0.005	100	115263	1150.9	
28 Pyrene	202	9.348	9.353	-0.005	100	128034	1239.1	
31 Benzo[a]anthracene	228	11.916	11.924	-0.008	98	70911	723.0	
32 Chrysene	228	12.019	12.027	-0.008	100	86708	935.0	M
34 Benzo[b]fluoranthene	252	15.253	15.253	0.0	100	145083	1615.0	
35 Benzo[k]fluoranthene	252	15.339	15.342	-0.003	99	48739	527.4	
36 Benzo[a]pyrene	252	16.378	16.385	-0.007	100	91578	1051.9	
38 Indeno[1,2,3-cd]pyrene	276	19.115	19.111	0.004	98	77195	900.7	
37 Dibenz(a,h)anthracene	278	19.141	19.148	-0.007	57	19285	222.7	
39 Benzo[g,h,i]perylene	276	19.592	19.584	0.008	99	83343	905.9	

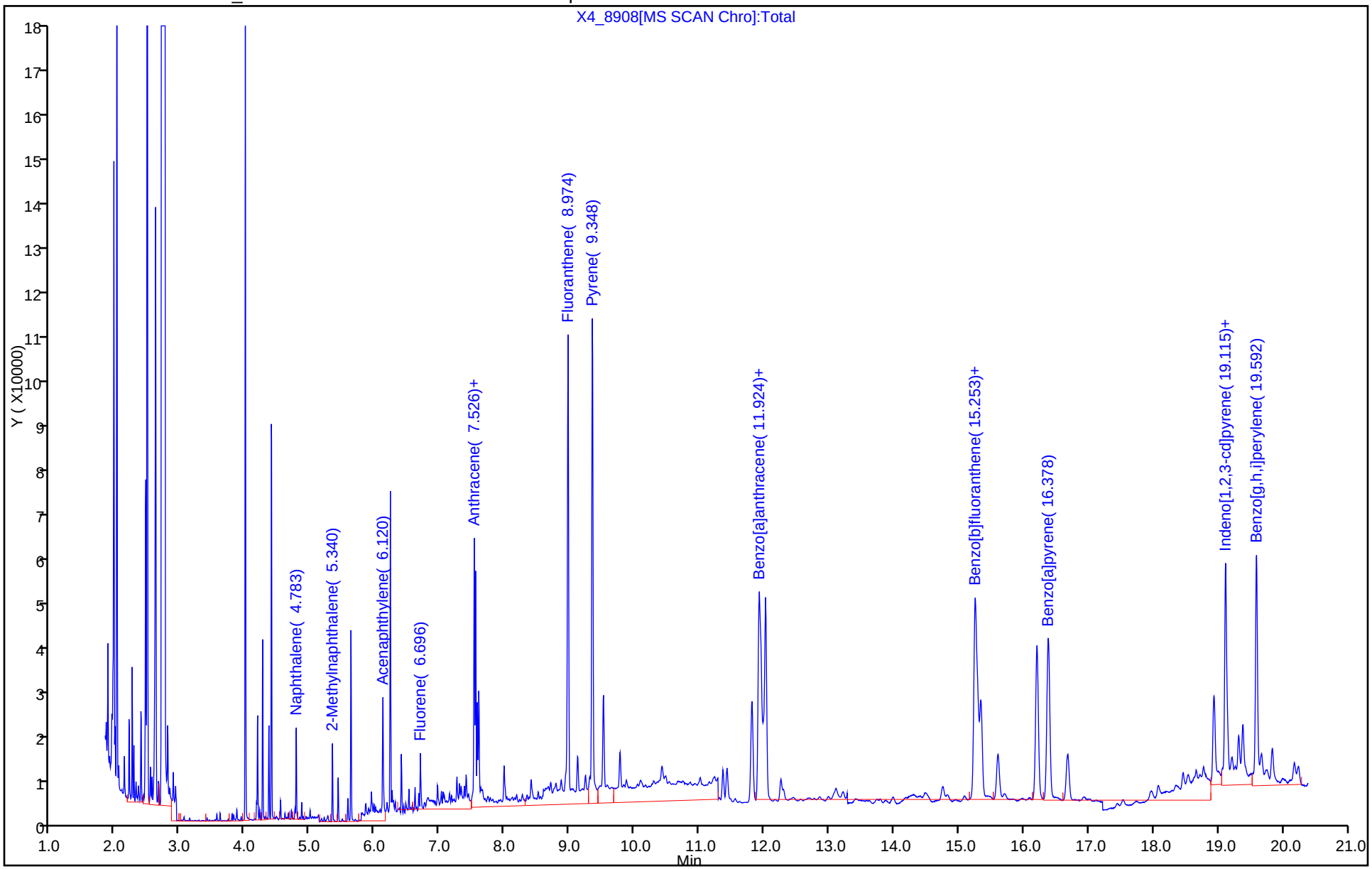
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 02-Jan-2014 09:28:19 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7	Worklist Smp#:	24
Client ID:	FSA-SD-DU04-C				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

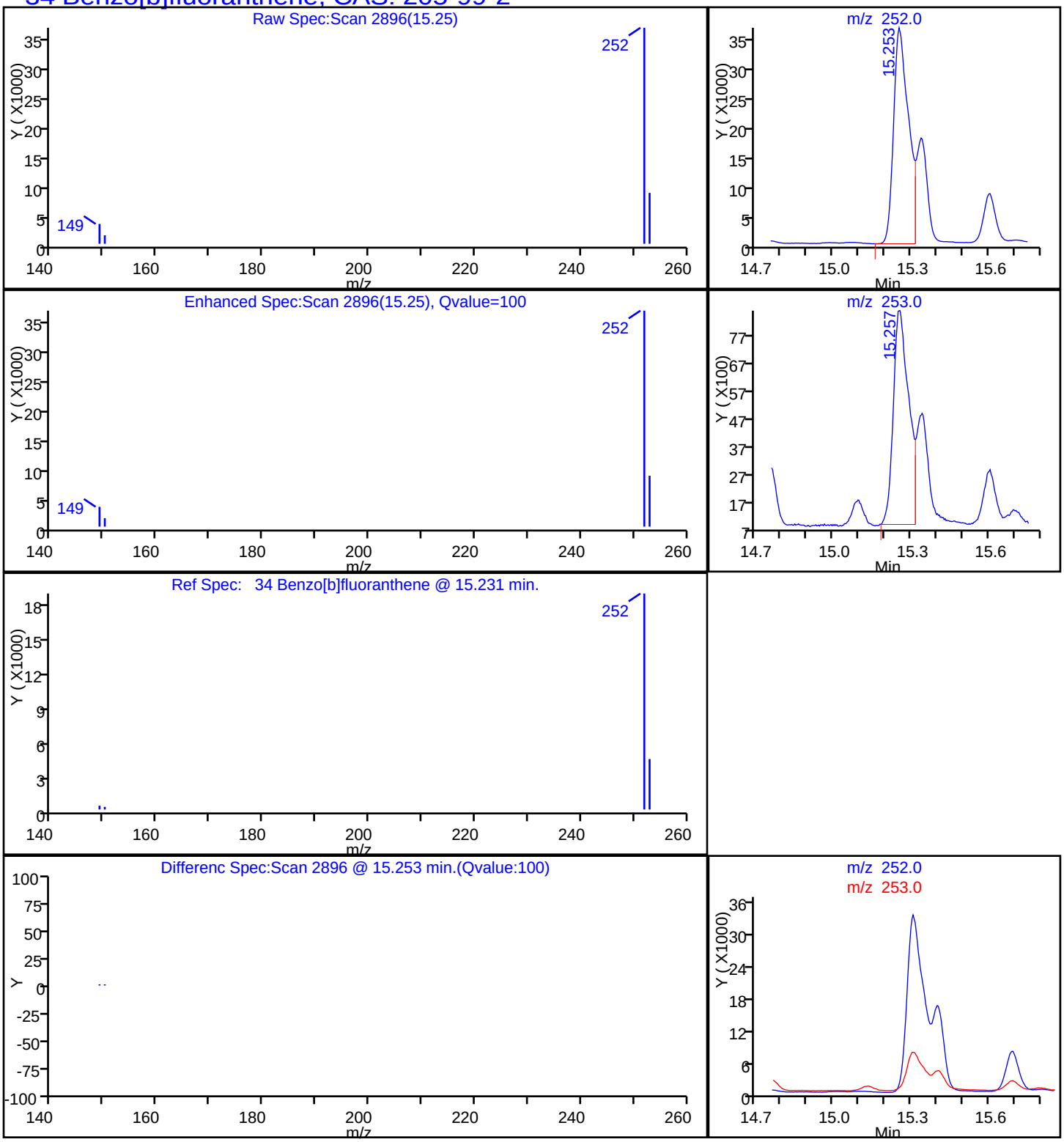


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

34 Benzo[b]fluoranthene, CAS: 205-99-2

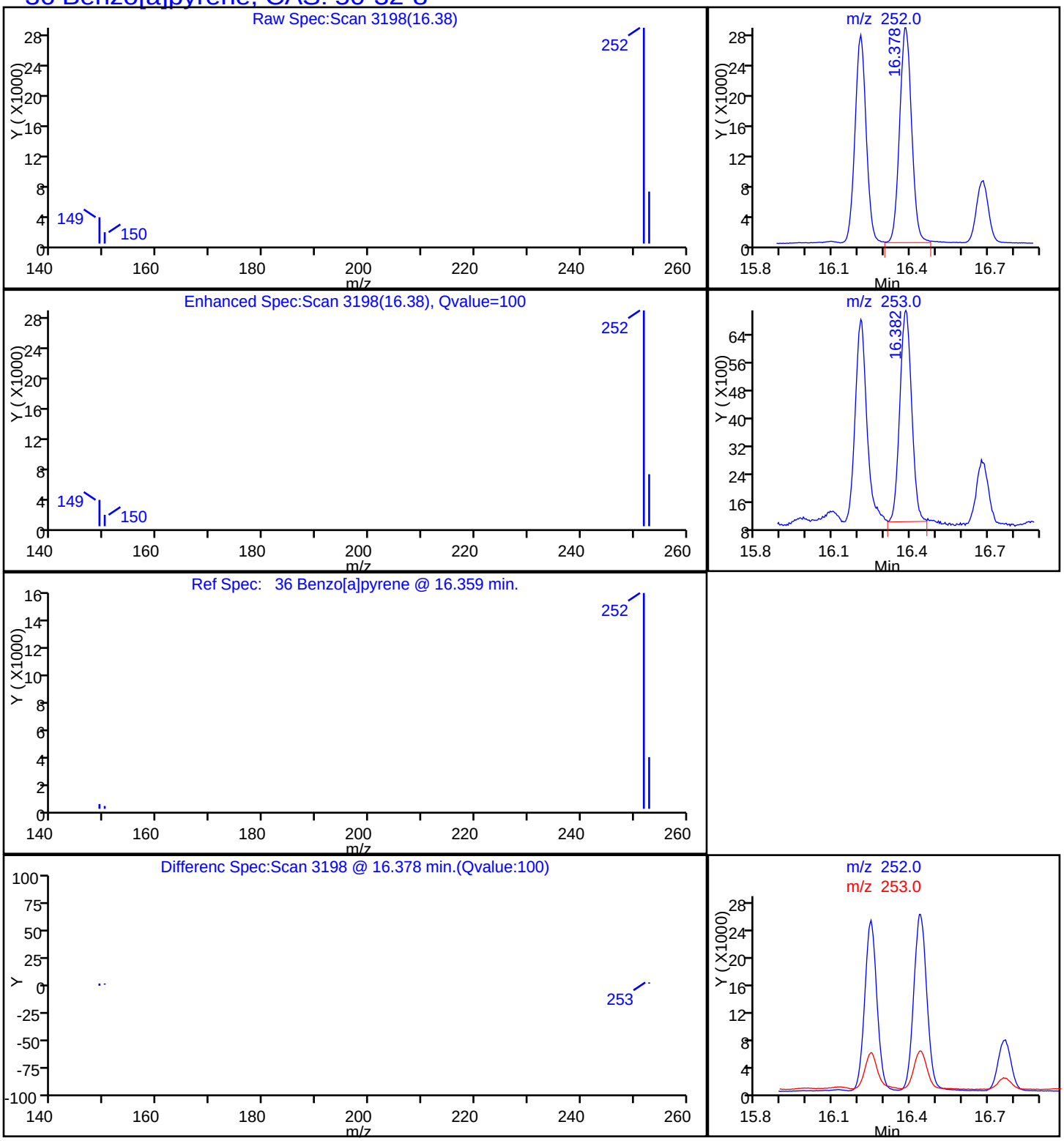


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[a]pyrene, CAS: 50-32-8

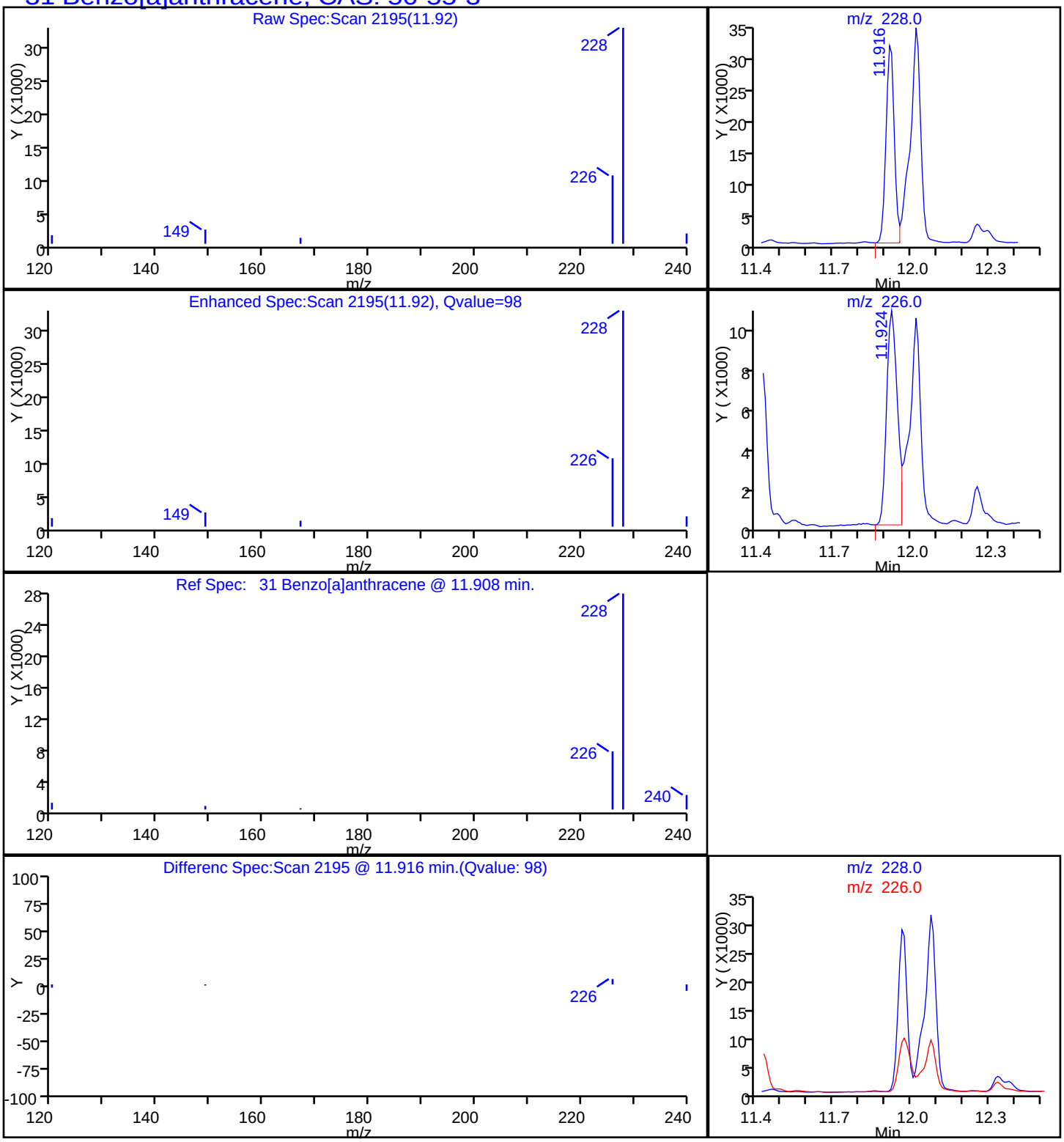


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3

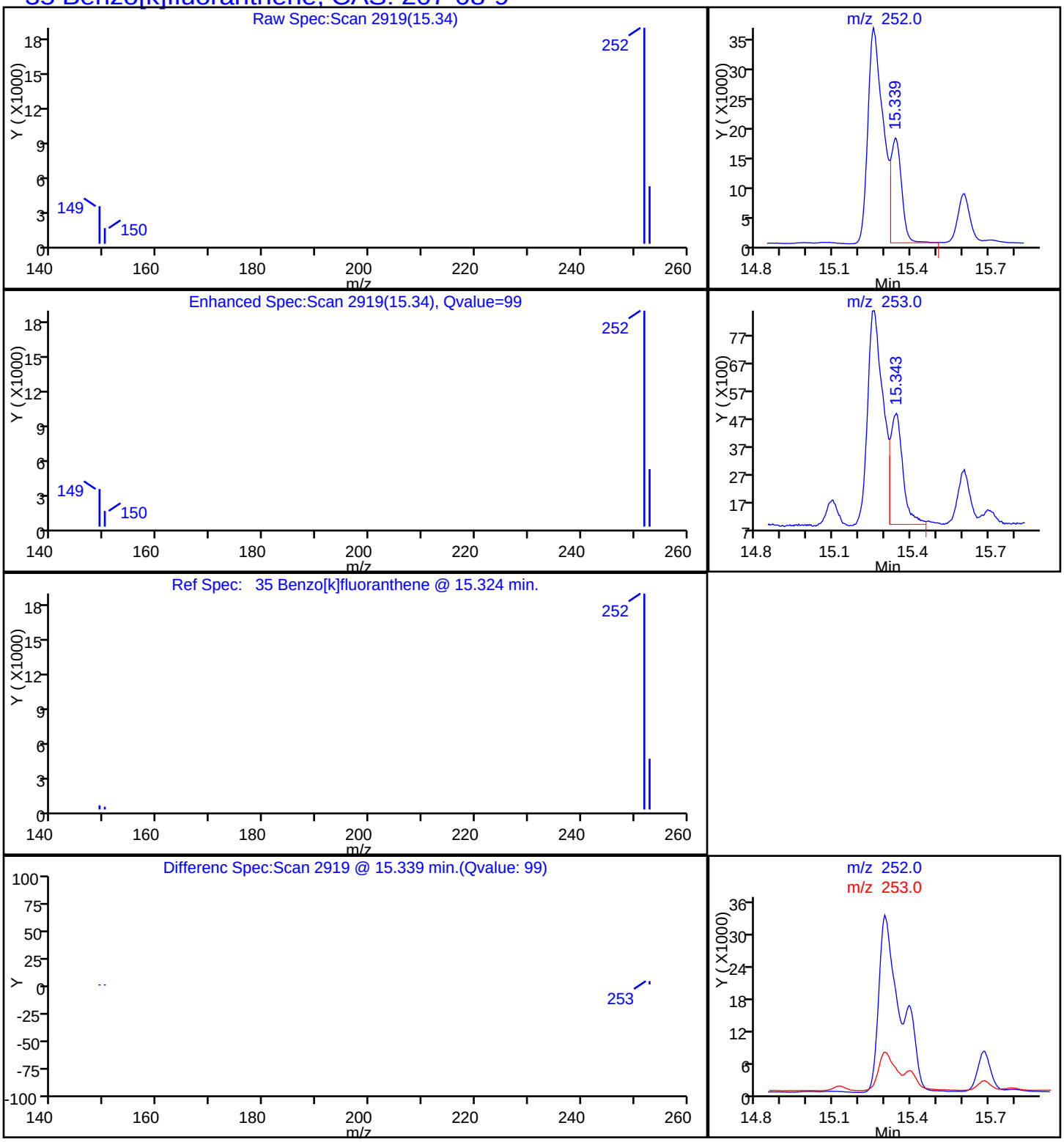


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9

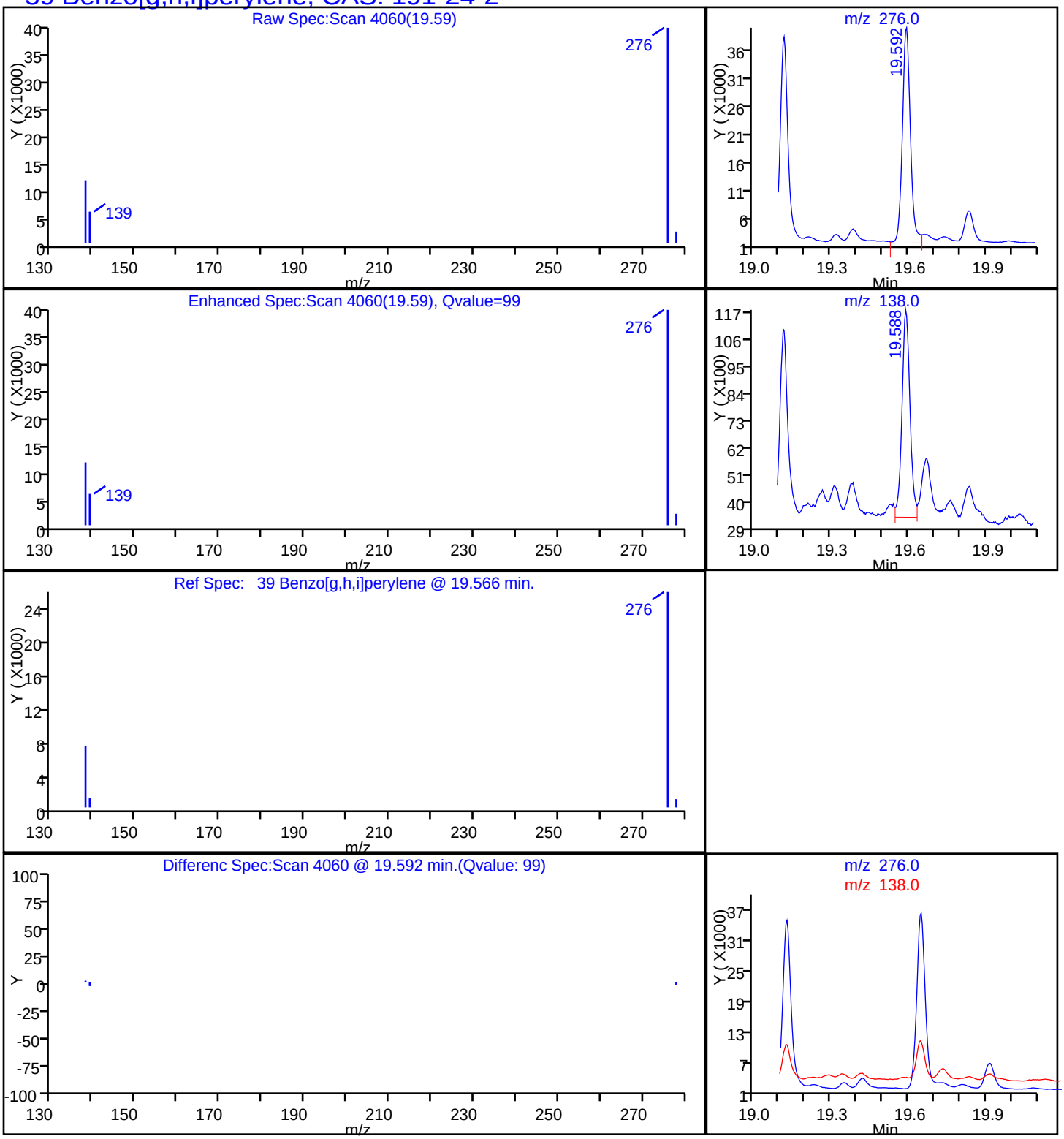


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[g,h,i]perylene, CAS: 191-24-2

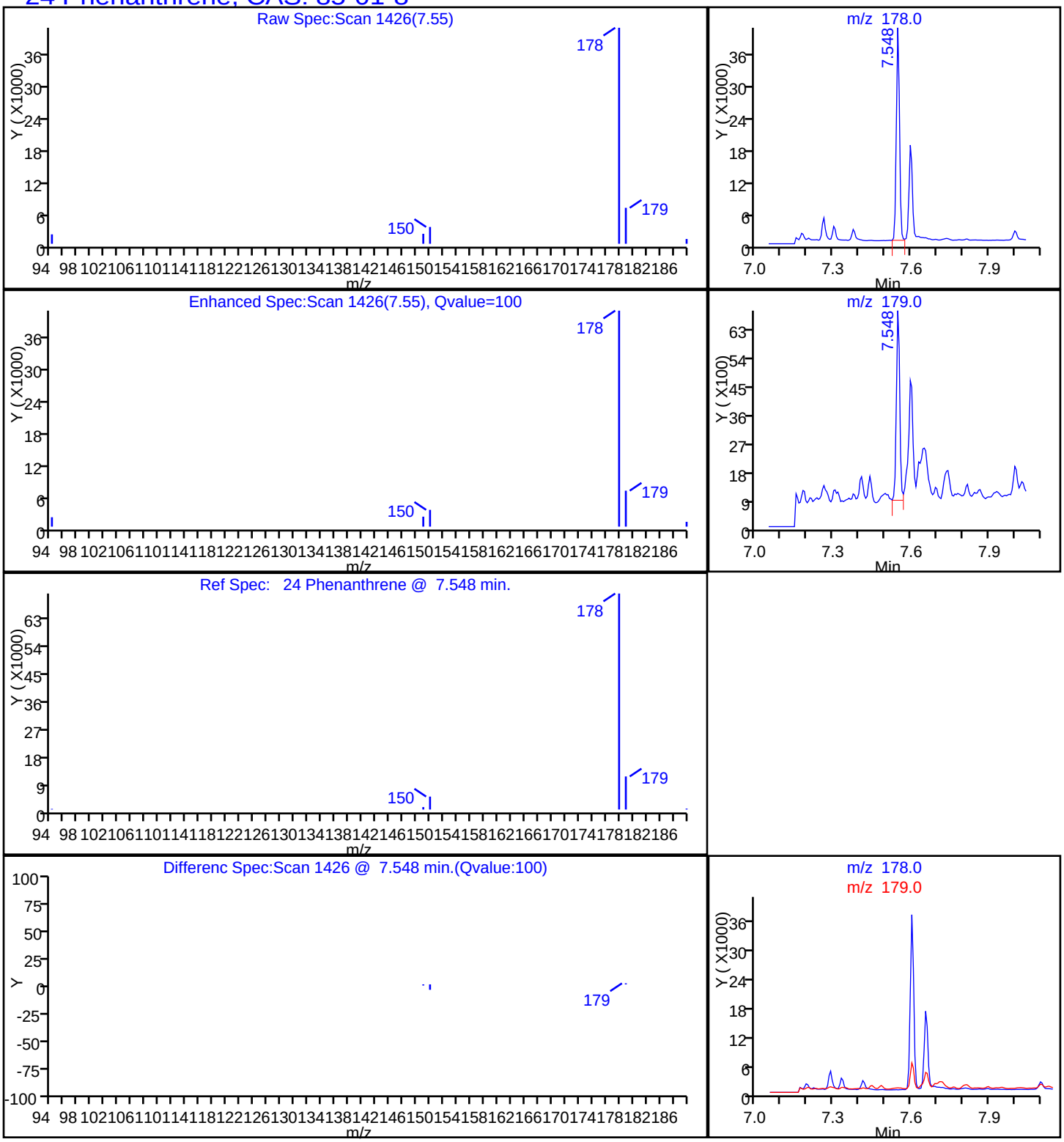


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8

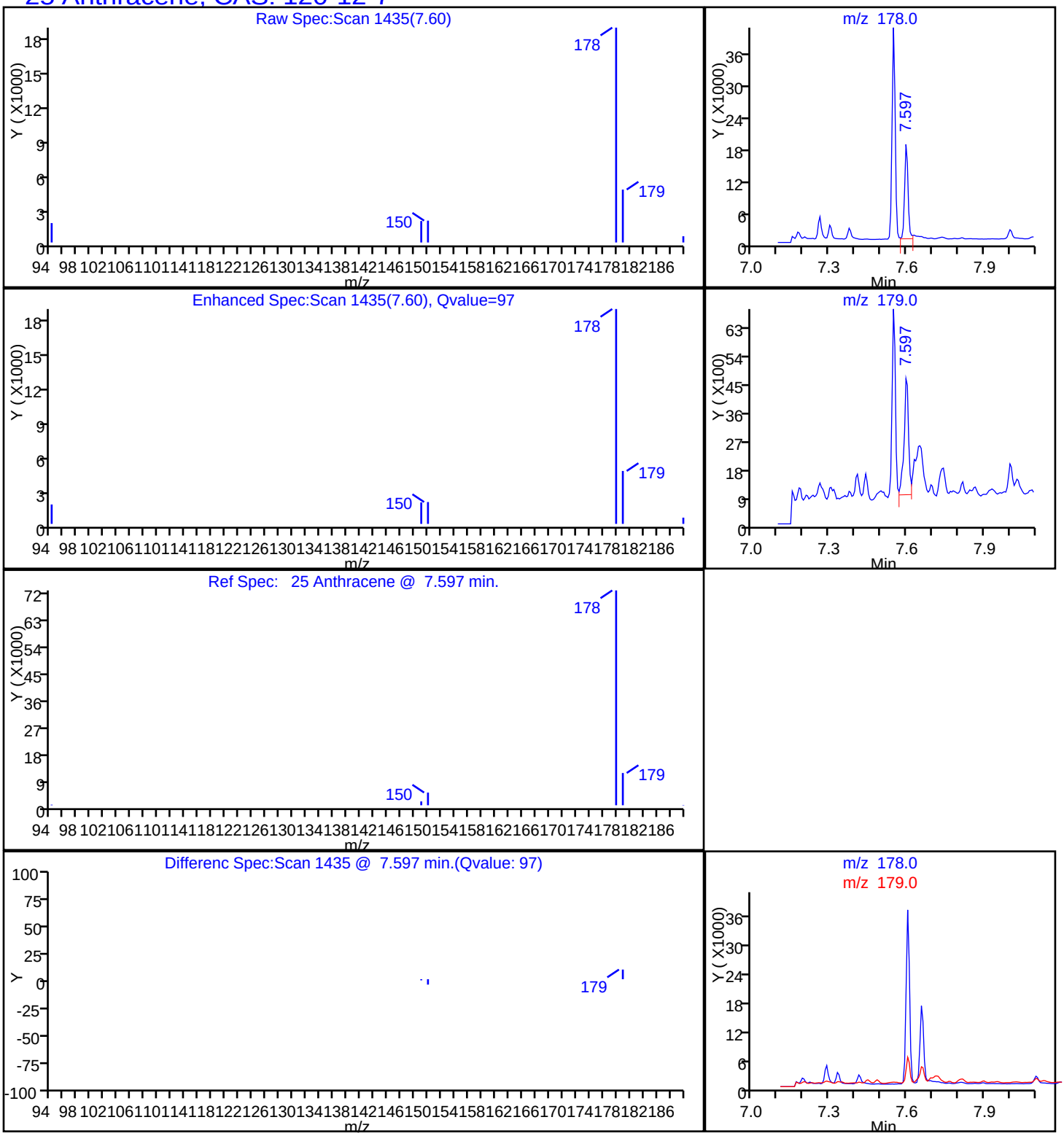


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7

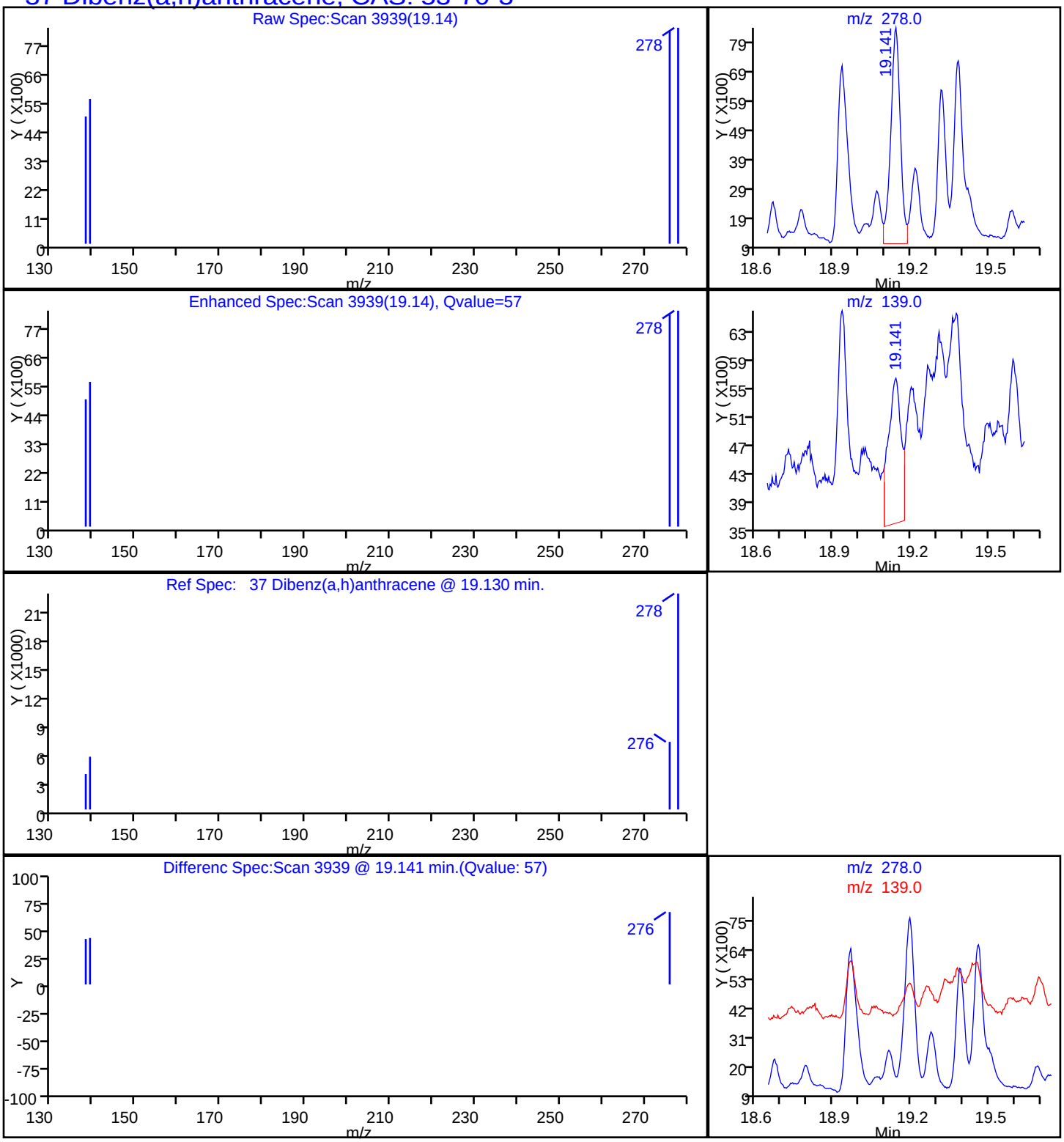


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3

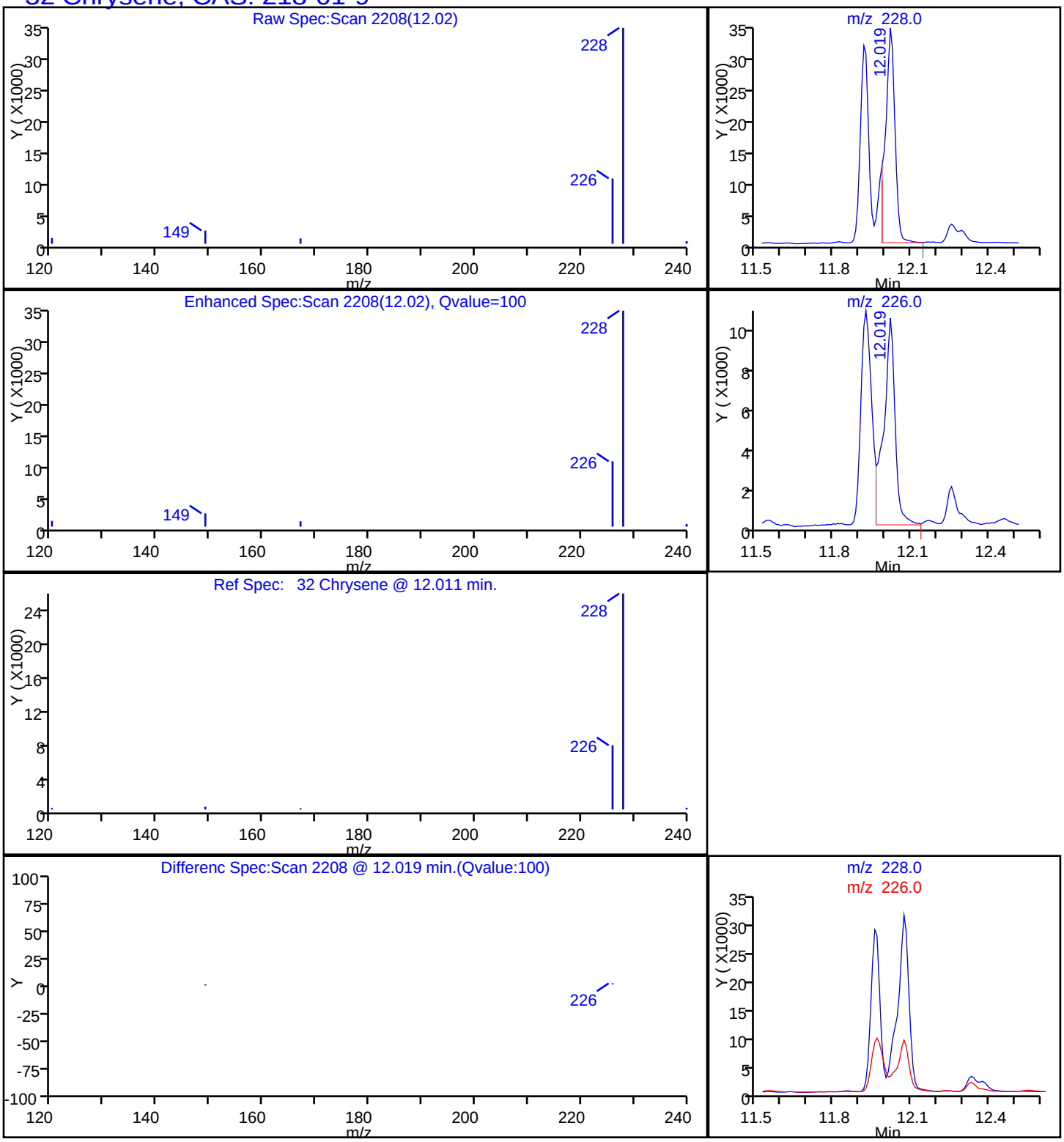


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

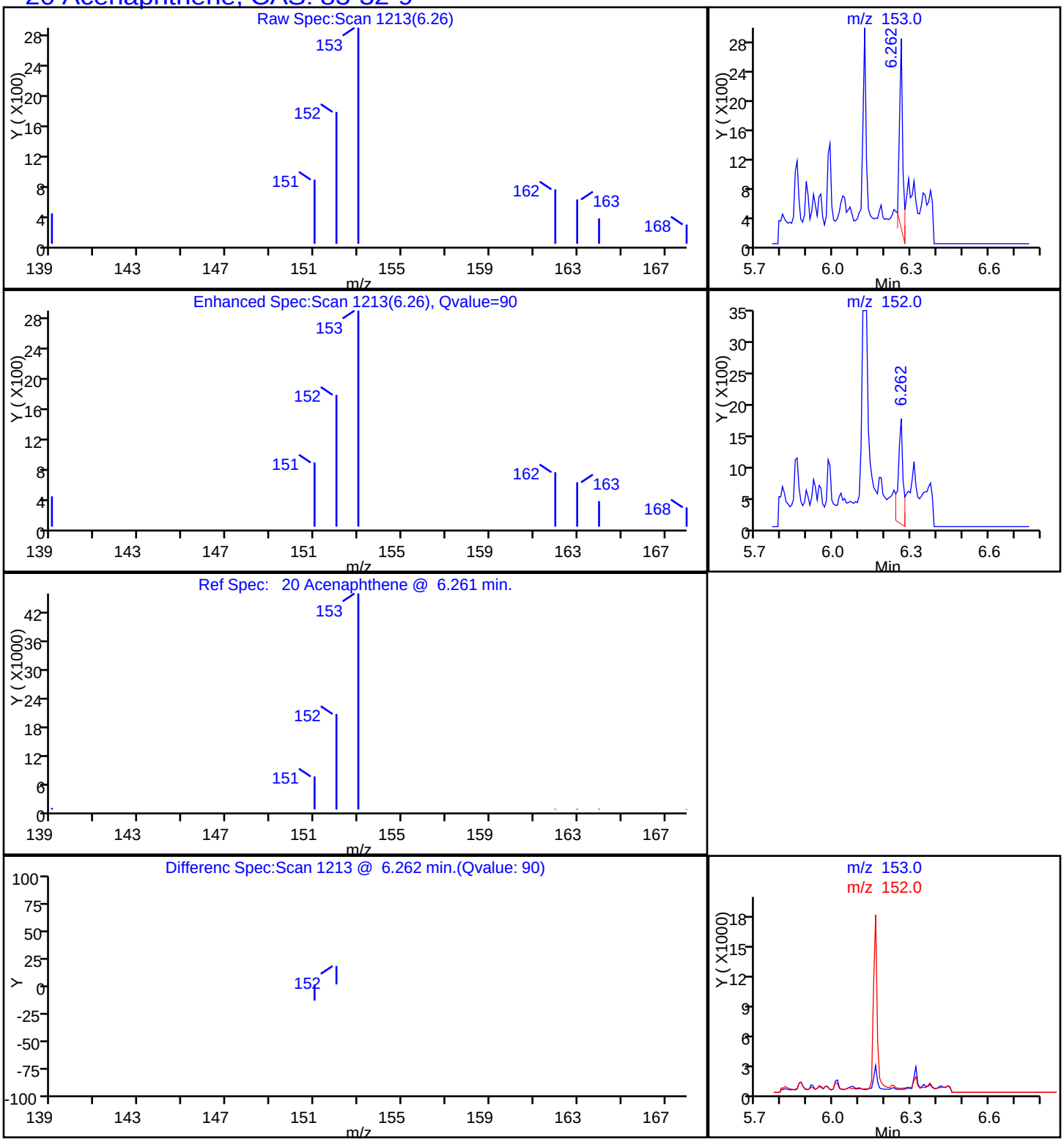


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9

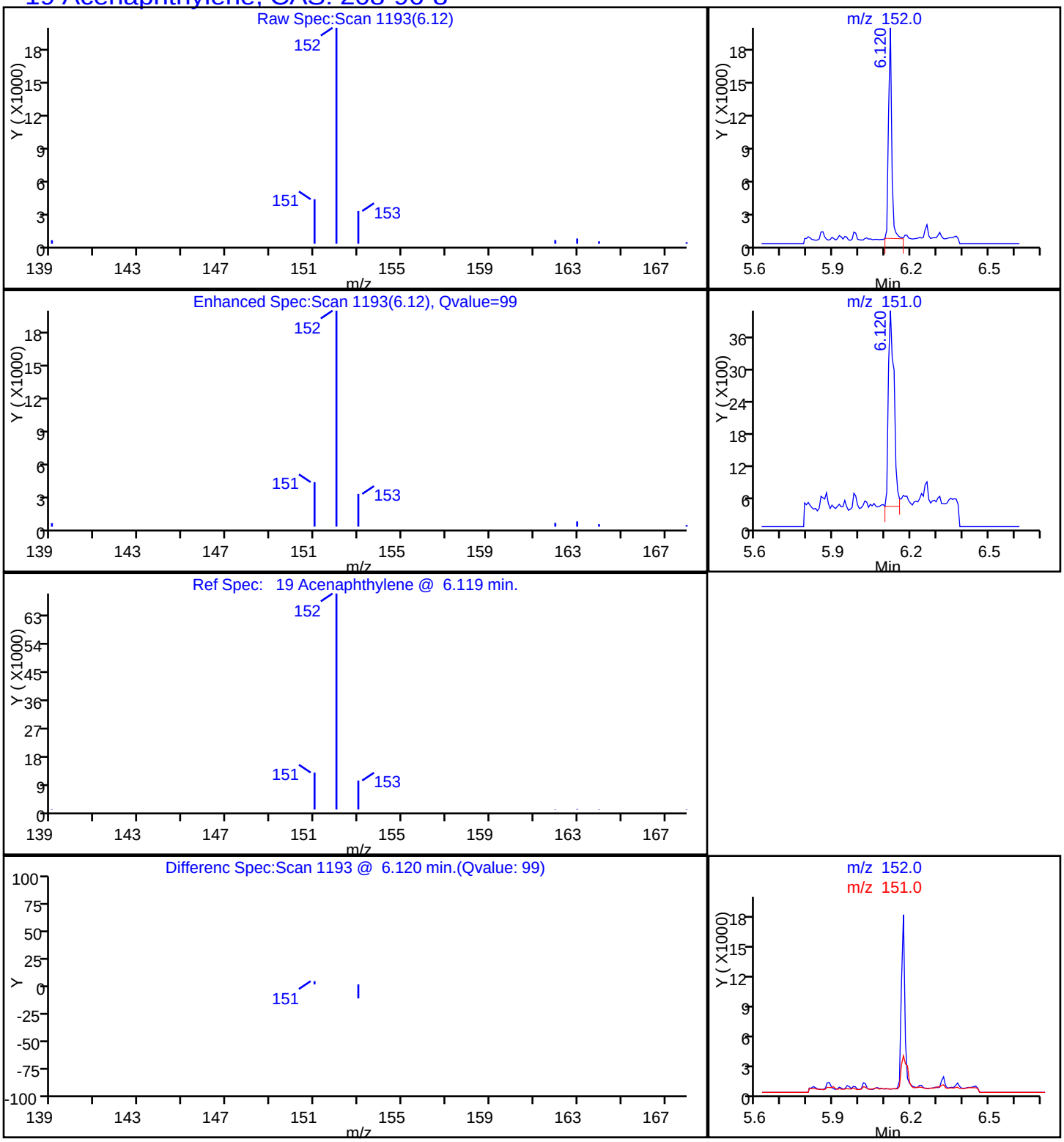


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

19 Acenaphthylene, CAS: 208-96-8

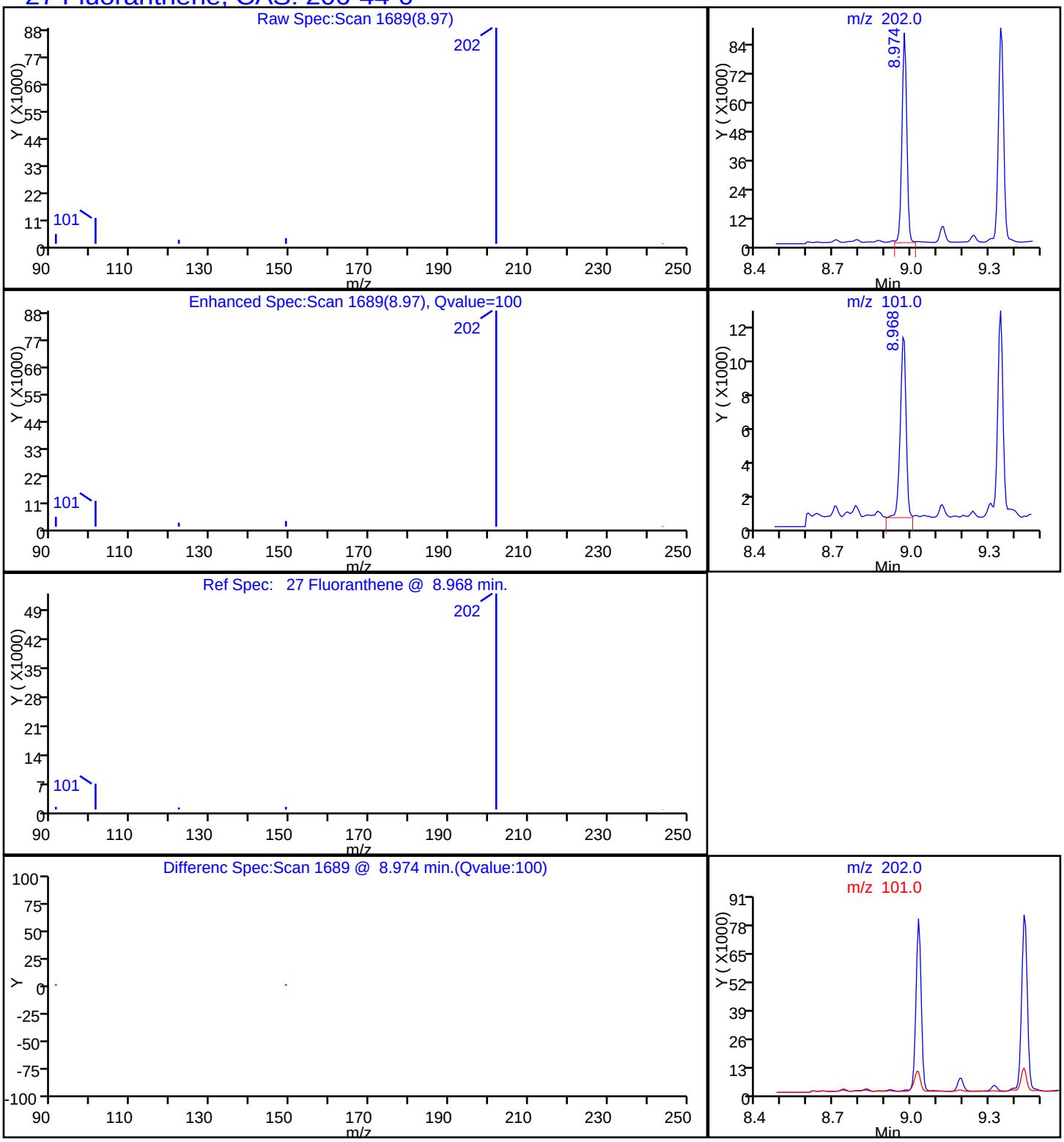


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0

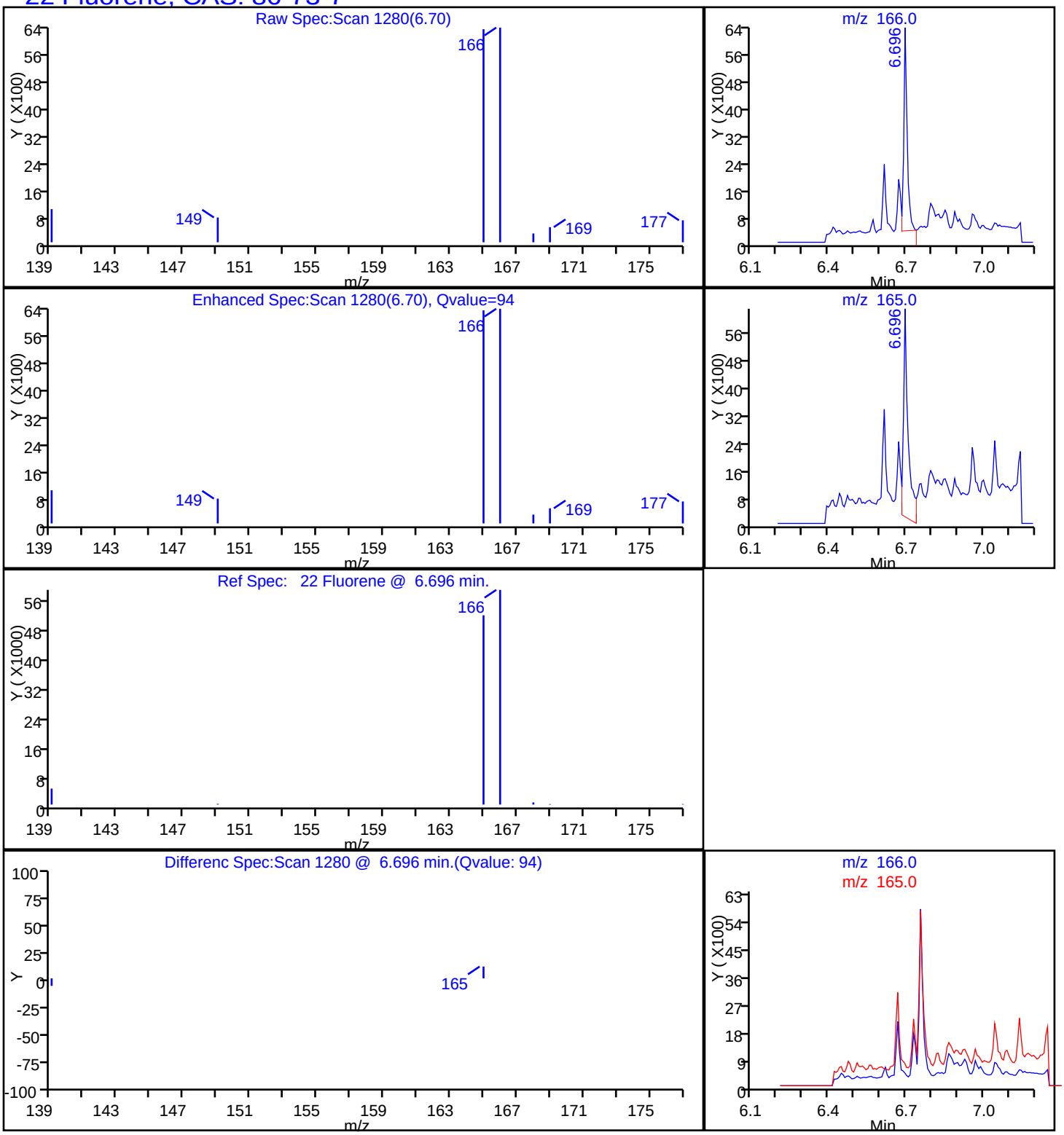


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7

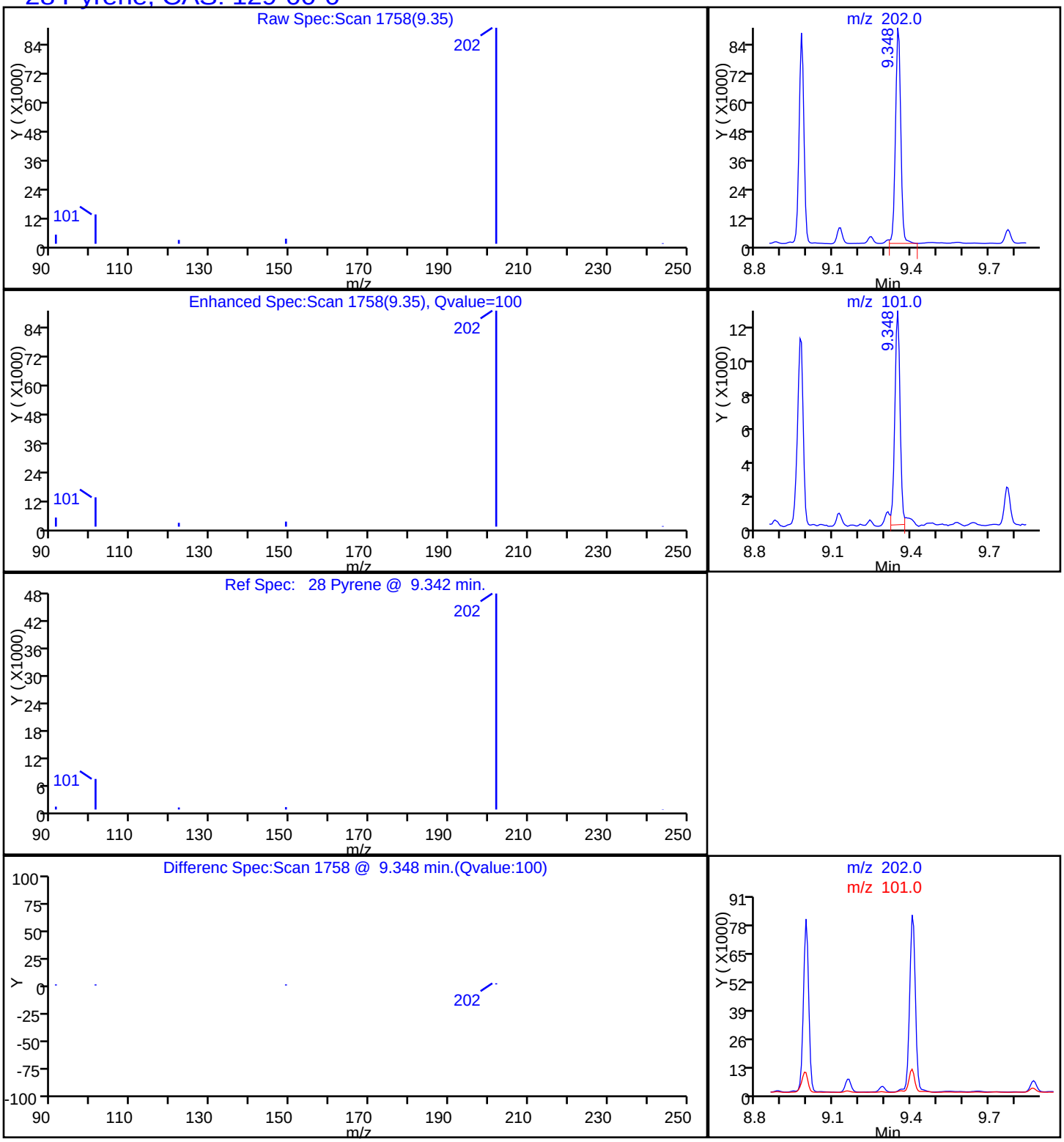


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0

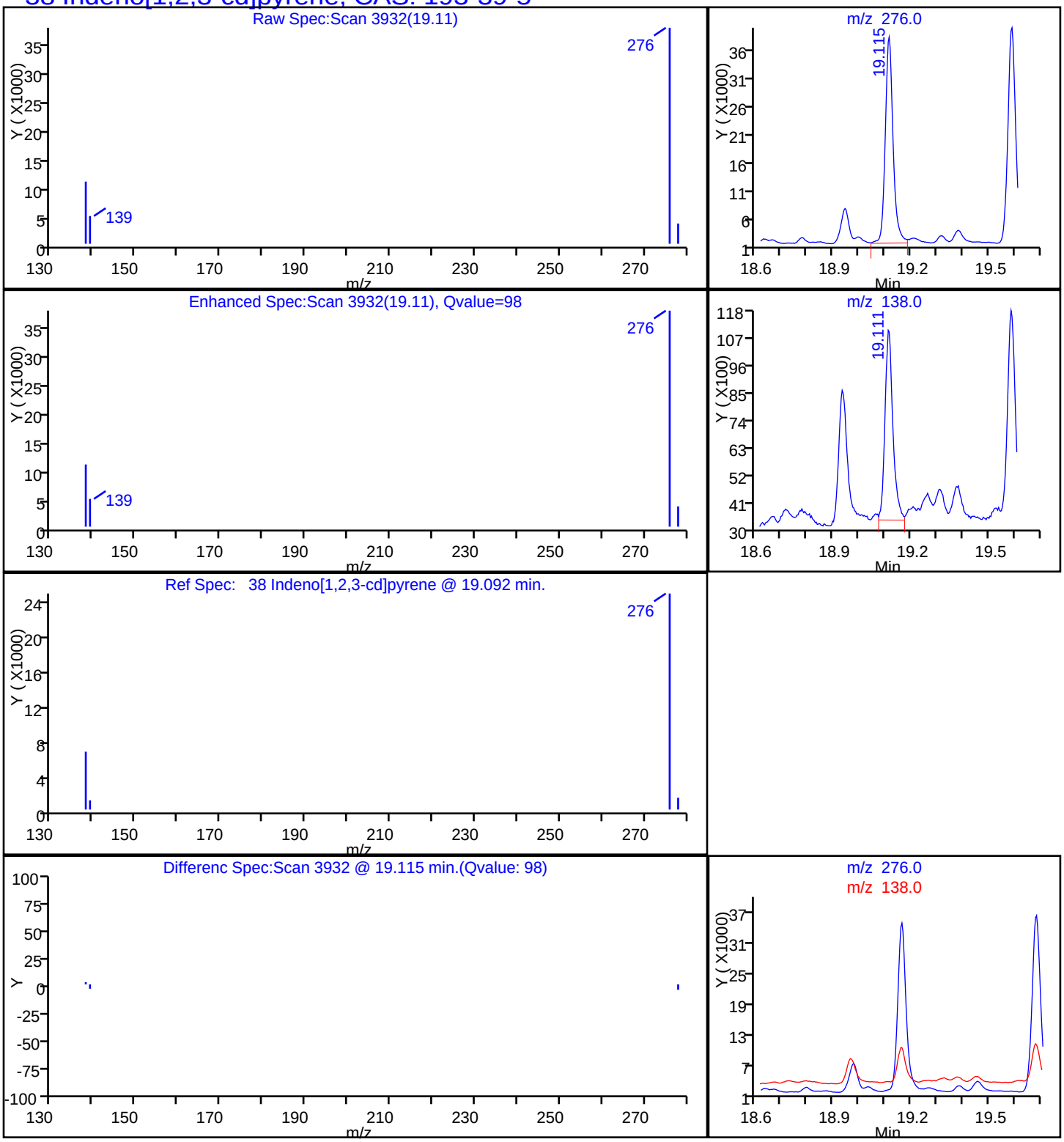


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

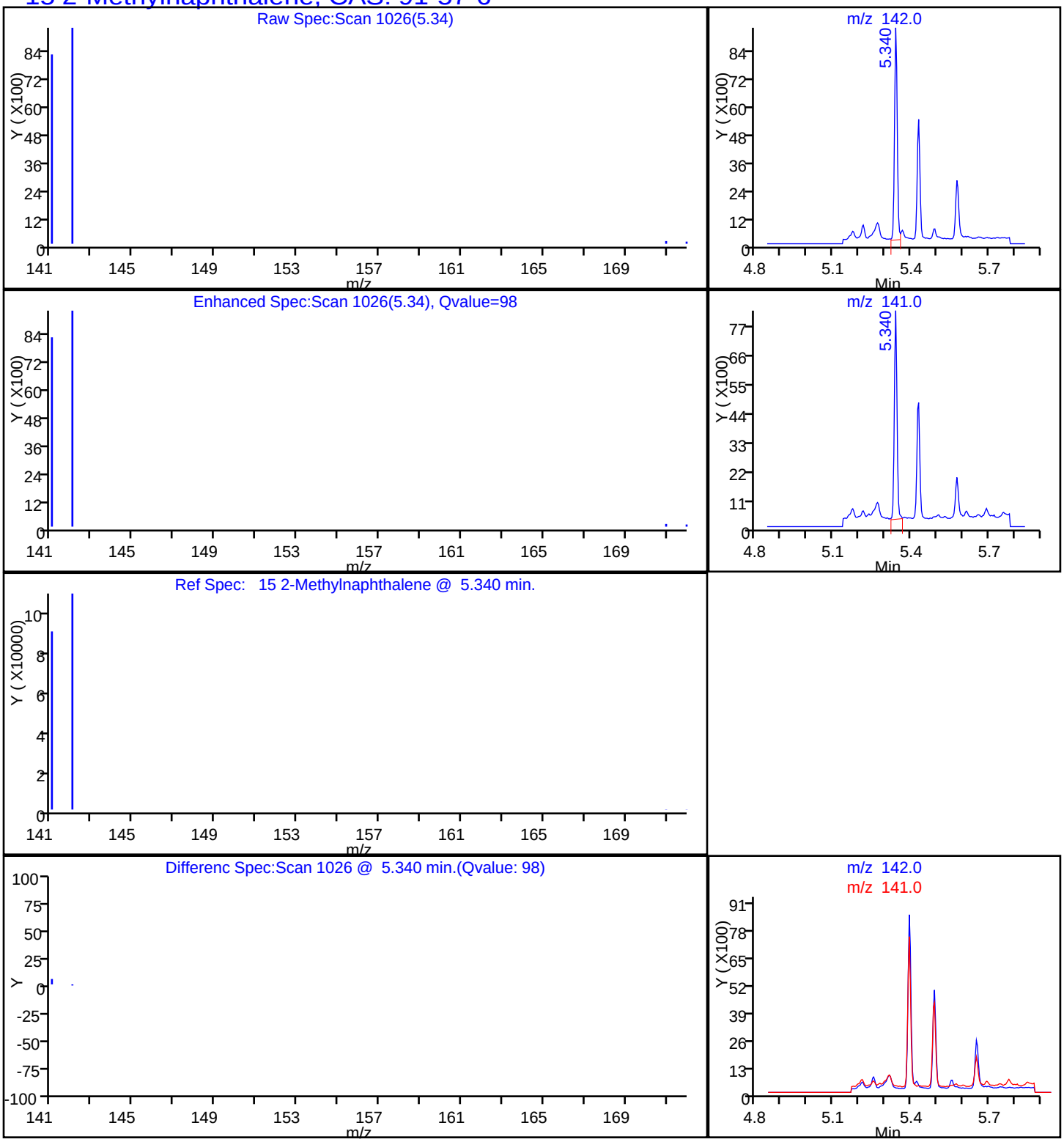


Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 2-Methylnaphthalene, CAS: 91-57-6

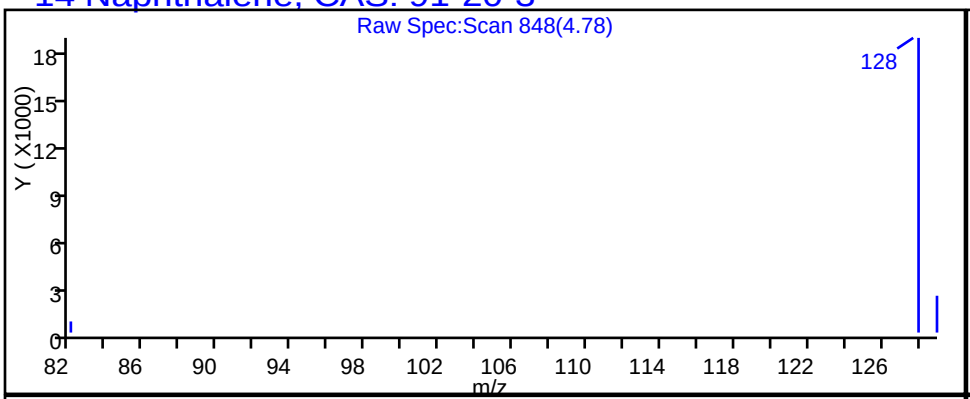


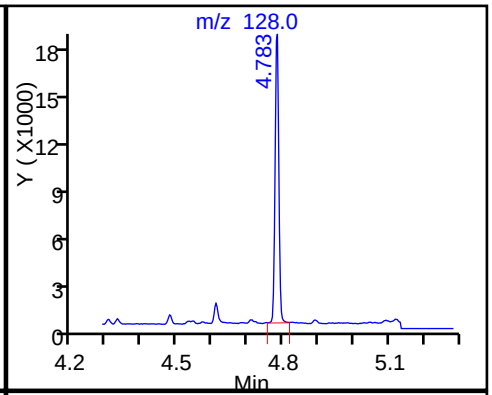
Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

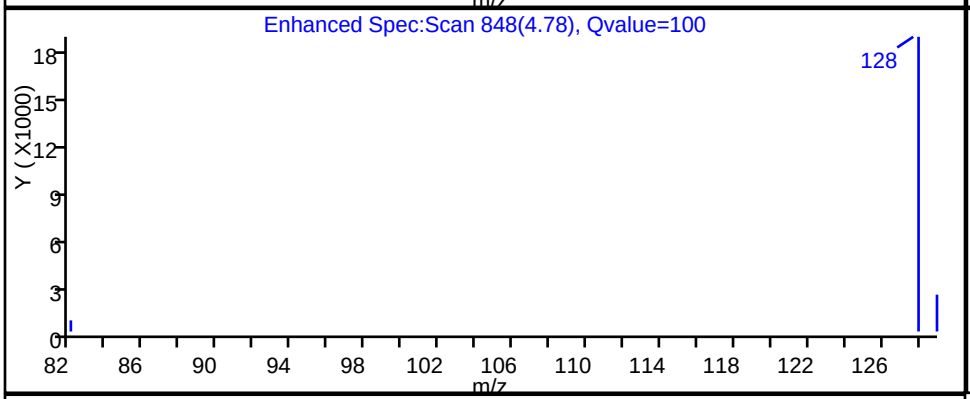
TestAmerica Denver

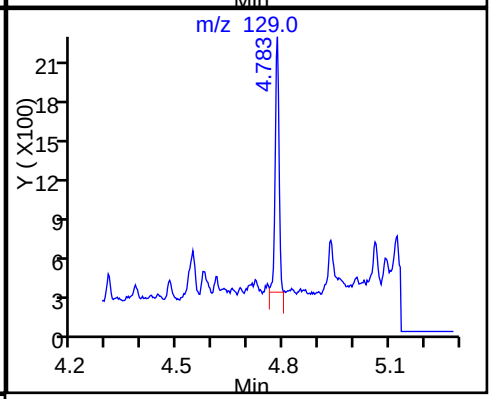
Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

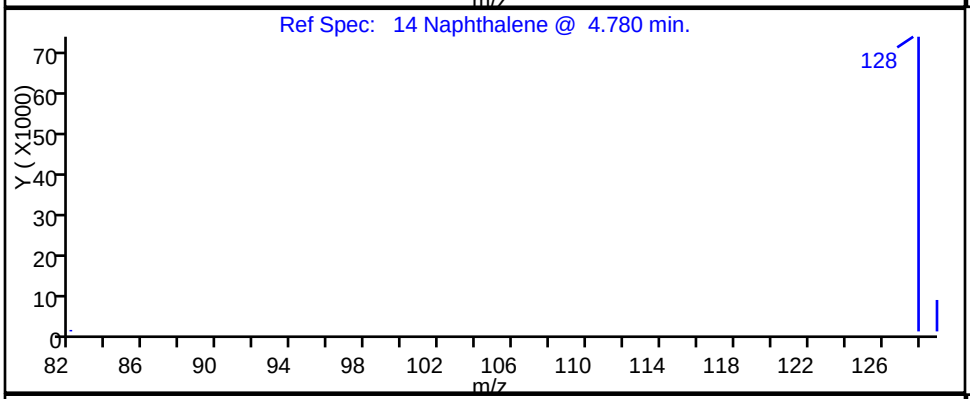
14 Naphthalene, CAS: 91-20-3

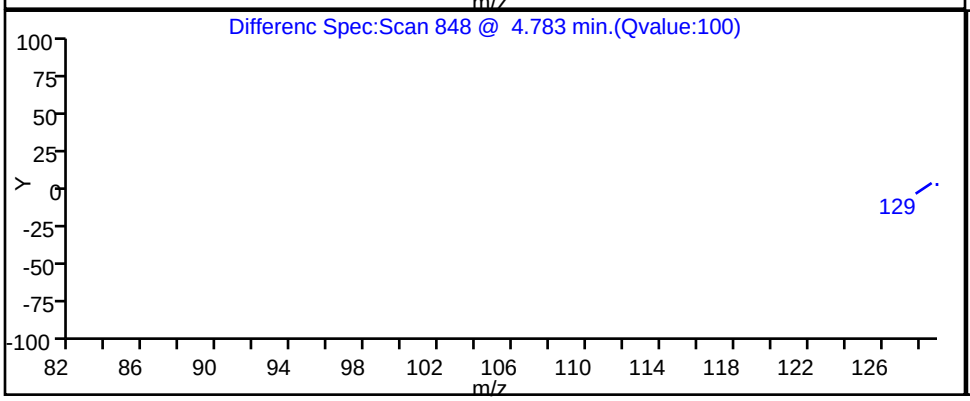


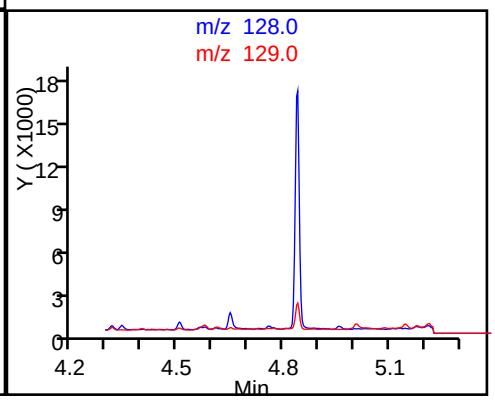












Manual Integration/User Assign Peak Report

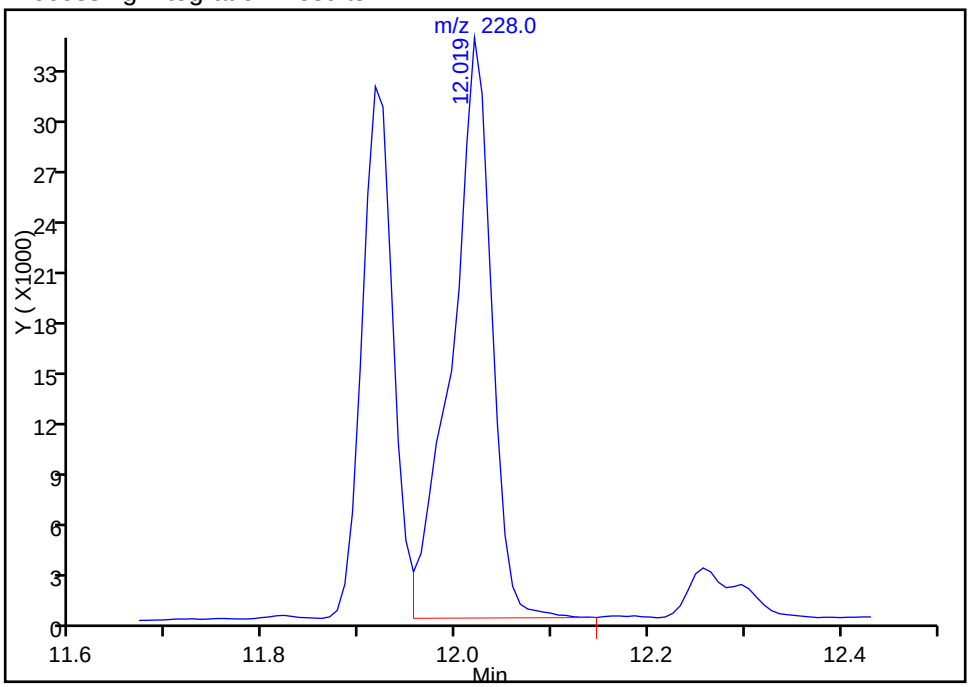
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8908.D				
Injection Date:	01-Jan-2014 00:27:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-7-B	Lab Sample ID:	280-50614-7		
Client ID:	FSA-SD-DU04-C				
Operator ID:	VASQUEZK	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

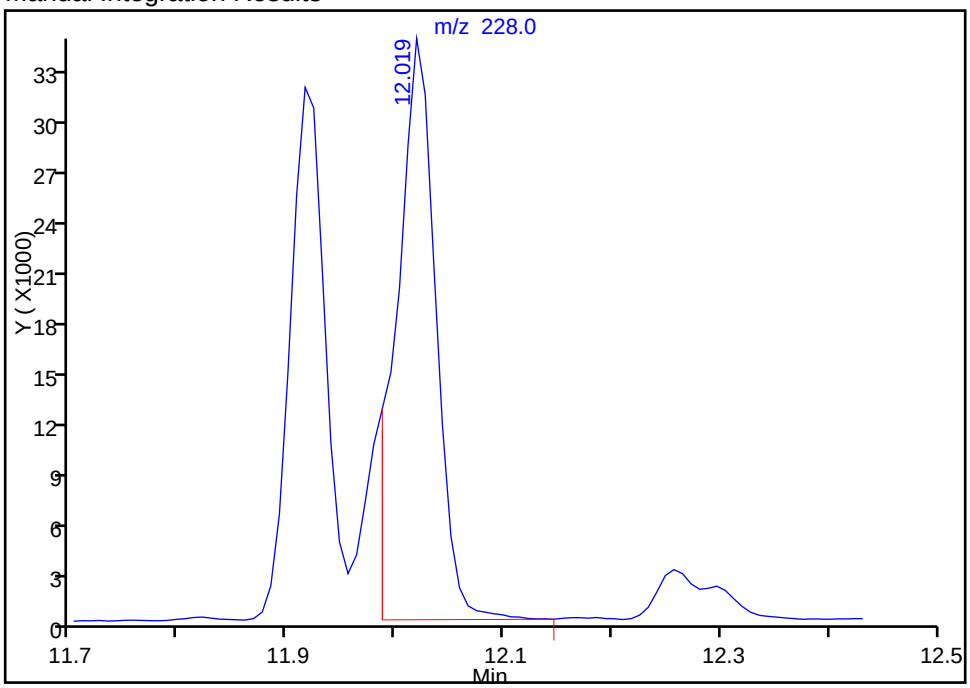
Processing Integration Results

RT: 12.02
Response: 98094
Amount: 1057.7322



Manual Integration Results

RT: 12.02
Response: 86708
Amount: 934.9587



Reviewer: vasquezk, 02-Jan-2014 09:11:22
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-CO | Lab Sample ID: 280-50614-8

Matrix: Solid | Lab File ID: X4_8909.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 11:20

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 31.00(g) | Date Analyzed: 01/01/2014 00:55

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207101 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	10000		4800	1200
50-32-8	Benzo[a]pyrene	6000		4800	720
56-55-3	Benzo[a]anthracene	4500	J	4800	870
207-08-9	Benzo[k]fluoranthene	3000	J	4800	970
191-24-2	Benzo[g,h,i]perylene	5400		4800	1100
85-01-8	Phenanthrene	6000		4800	1100
120-12-7	Anthracene	1800	J	4800	700
53-70-3	Dibenz(a,h)anthracene	ND		4800	1300
218-01-9	Chrysene	6800		4800	970
83-32-9	Acenaphthene	9500		4800	150
208-96-8	Acenaphthylene	1200	J	4800	160
206-44-0	Fluoranthene	10000		4800	970
86-73-7	Fluorene	17000		4800	450
129-00-0	Pyrene	14000		4800	1100
193-39-5	Indeno[1,2,3-cd]pyrene	5100		4800	1100
91-57-6	2-Methylnaphthalene	2200	J	4800	300
91-20-3	Naphthalene	3300	J	4800	320

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	82		39-120
4165-60-0	Nitrobenzene-d5	94		42-120
1718-51-0	Terphenyl-d14	103		35-124

Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D
Lims ID: 280-50614-A-8-B Lab Sample ID: 280-50614-8
Client ID: FSA-SD-CO
Sample Type: Client
Inject. Date: 01-Jan-2014 00:55:30 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-50614-a-8-b
Misc. Info.: 280-50614-a-8-b =280-50614-A-8-B
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 09:11:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	100	22942	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	40903	600.0	
* 3 Chrysene-d12	240	11.948	11.956	-0.008	98	48223	600.0	
$ 4 Nitrobenzene-d5	82	4.189	4.186	0.003	100	12085	470.7	
$ 5 2-Fluorobiphenyl	172	5.626	5.630	-0.004	100	22234	410.7	
$ 6 Terphenyl-d14	244	9.521	9.527	-0.006	99	25516	515.3	
14 Naphthalene	128	4.783	4.783	0.0	100	7202	102.6	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	96	3359	67.7	
19 Acenaphthylene	152	6.119	6.119	0.0	97	2828	37.0	
20 Acenaphthene	153	6.261	6.261	0.0	99	14032	294.1	
22 Fluorene	166	6.696	6.696	0.0	98	29636	519.6	
24 Phenanthrene	178	7.548	7.553	-0.005	99	15681	187.1	
25 Anthracene	178	7.597	7.602	-0.005	93	4570	55.4	
27 Fluoranthene	202	8.973	8.979	-0.006	100	29372	323.1	
28 Pyrene	202	9.348	9.353	-0.005	100	39527	421.4	
31 Benzo[a]anthracene	228	11.916	11.924	-0.008	95	13820	141.0	
32 Chrysene	228	12.019	12.027	-0.008	99	19562	211.1	M
34 Benzo[b]fluoranthene	252	15.253	15.253	0.0	97	27719	308.7	
35 Benzo[k]fluoranthene	252	15.335	15.342	-0.007	92	8491	91.9	
36 Benzo[a]pyrene	252	16.378	16.385	-0.007	95	16126	185.3	
38 Indeno[1,2,3-cd]pyrene	276	19.111	19.111	0.0	90	13485	157.4	
37 Dibenz(a,h)anthracene	278		19.148					
39 Benzo[g,h,i]perylene	276	19.585	19.584	0.001	91	15320	166.6	

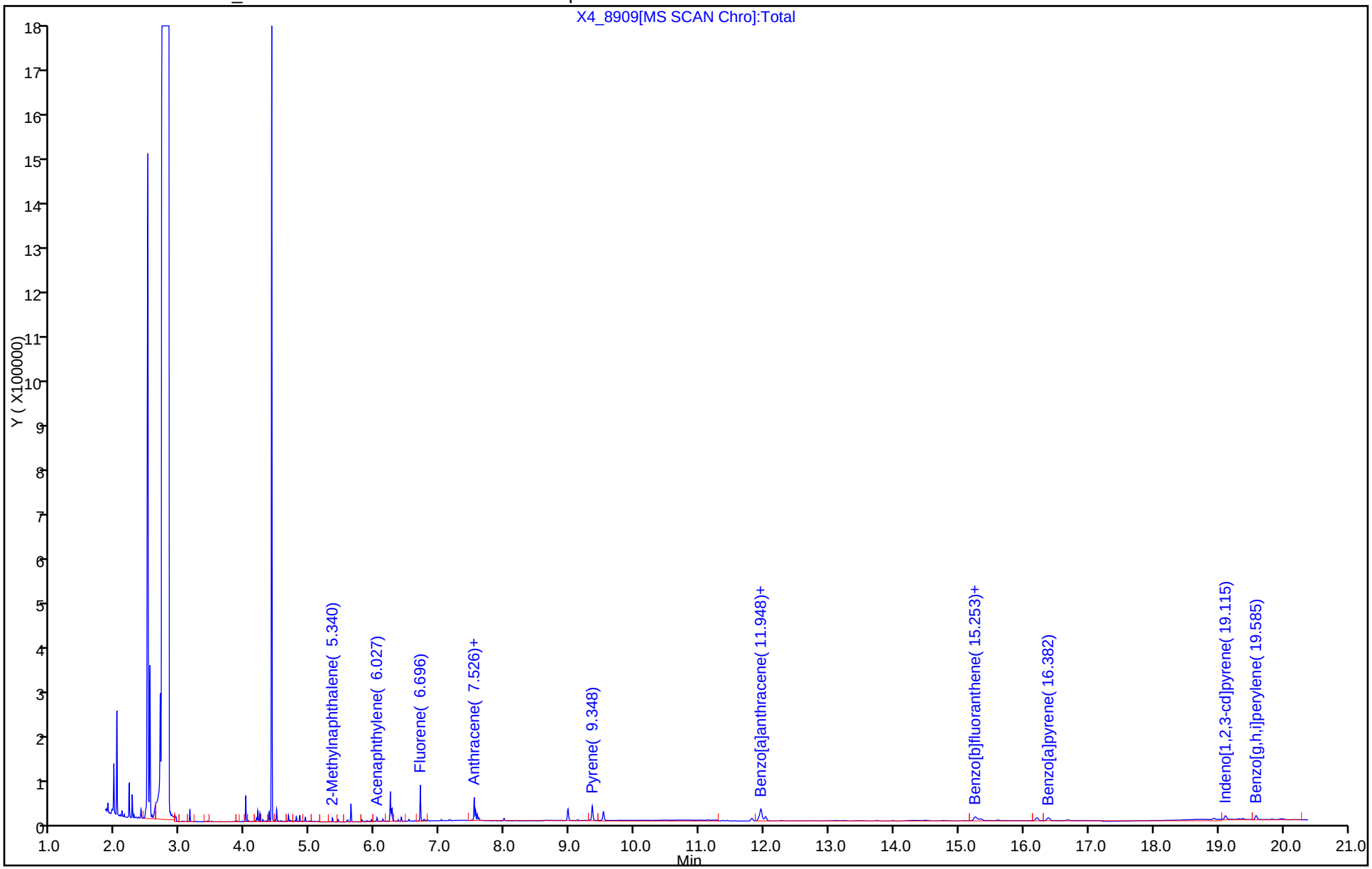
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 02-Jan-2014 09:28:20 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8	Worklist Smp#:	25
Client ID:	FSA-SD-CO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

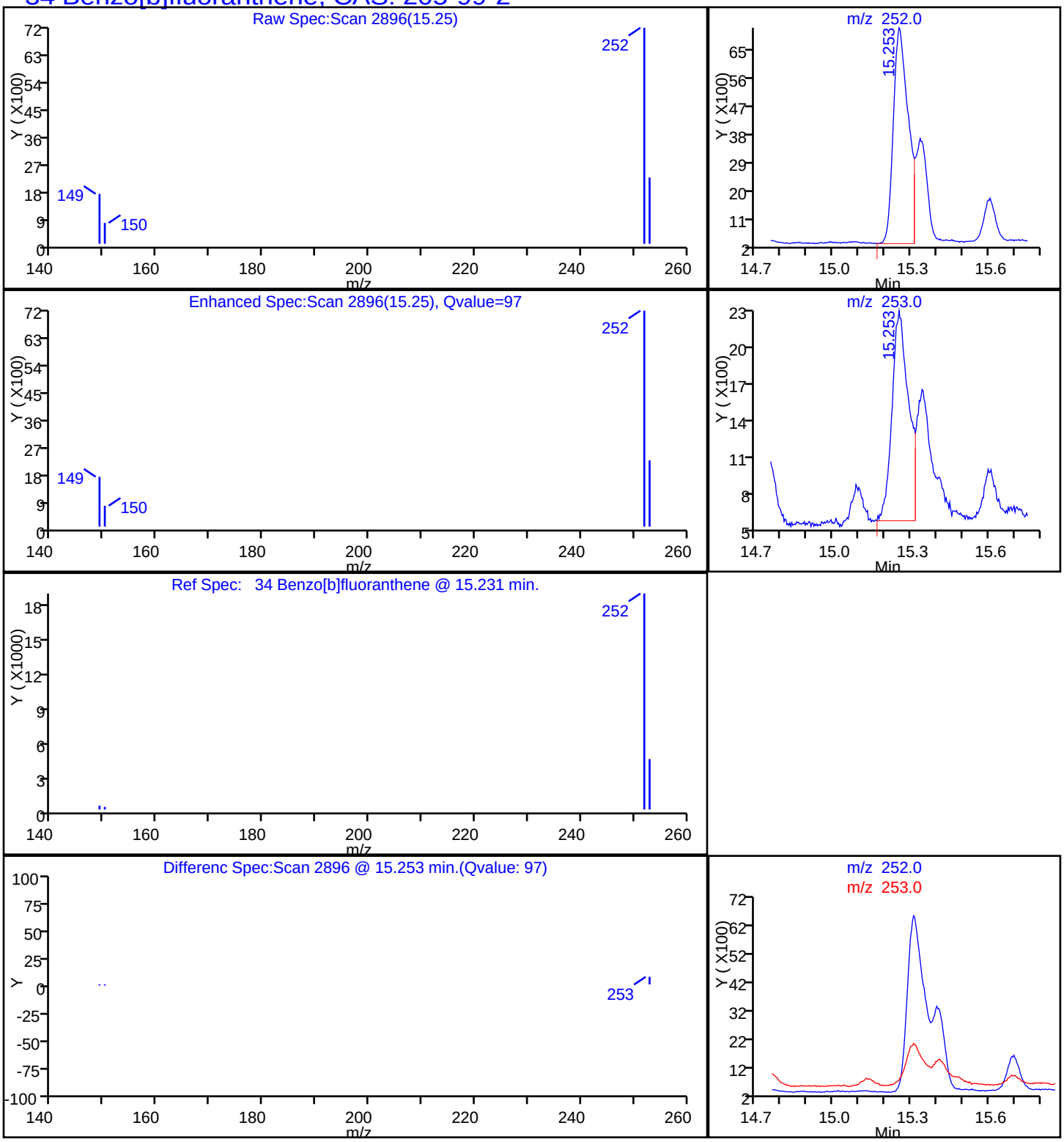


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

34 Benzo[b]fluoranthene, CAS: 205-99-2

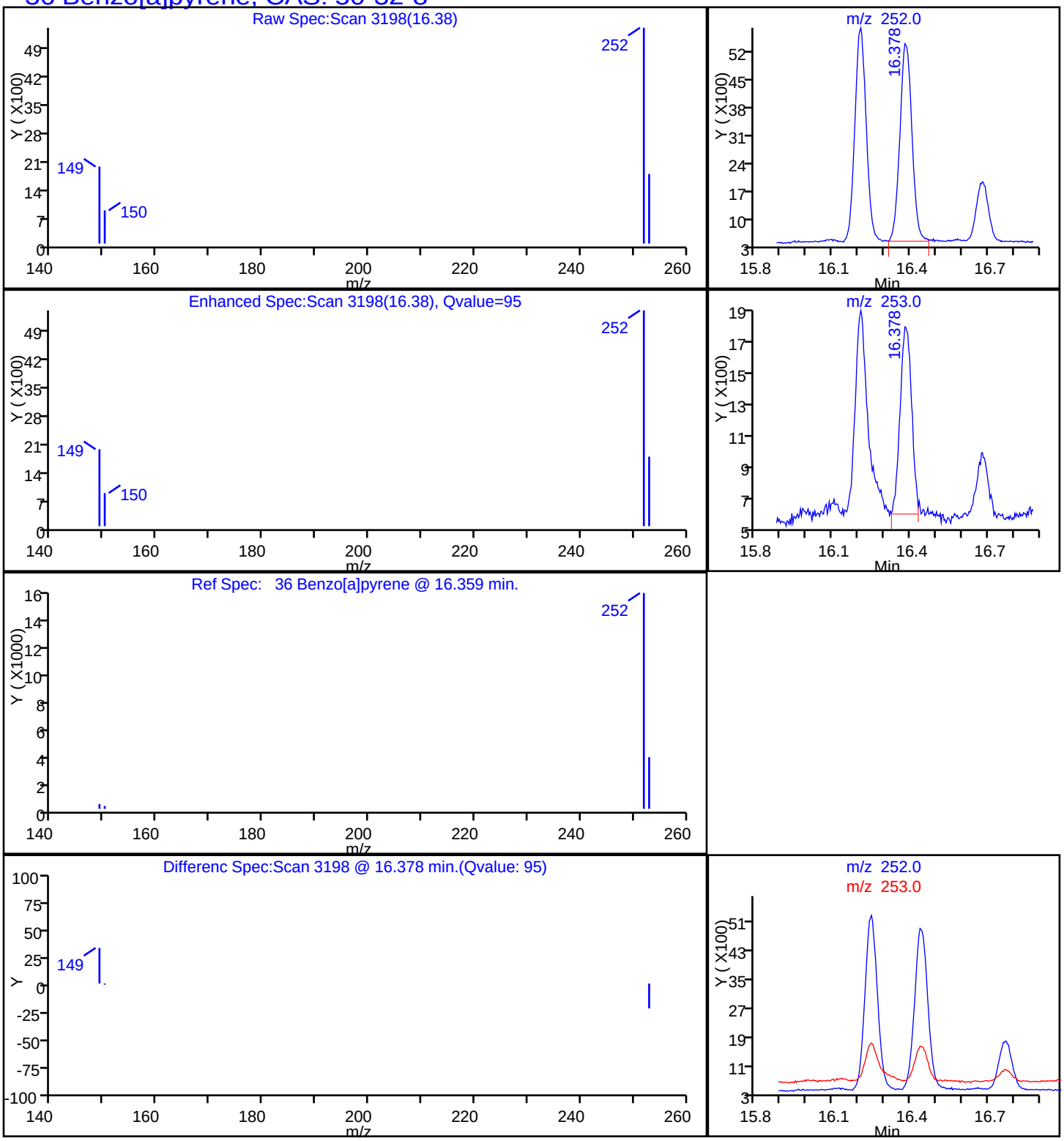


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[a]pyrene, CAS: 50-32-8

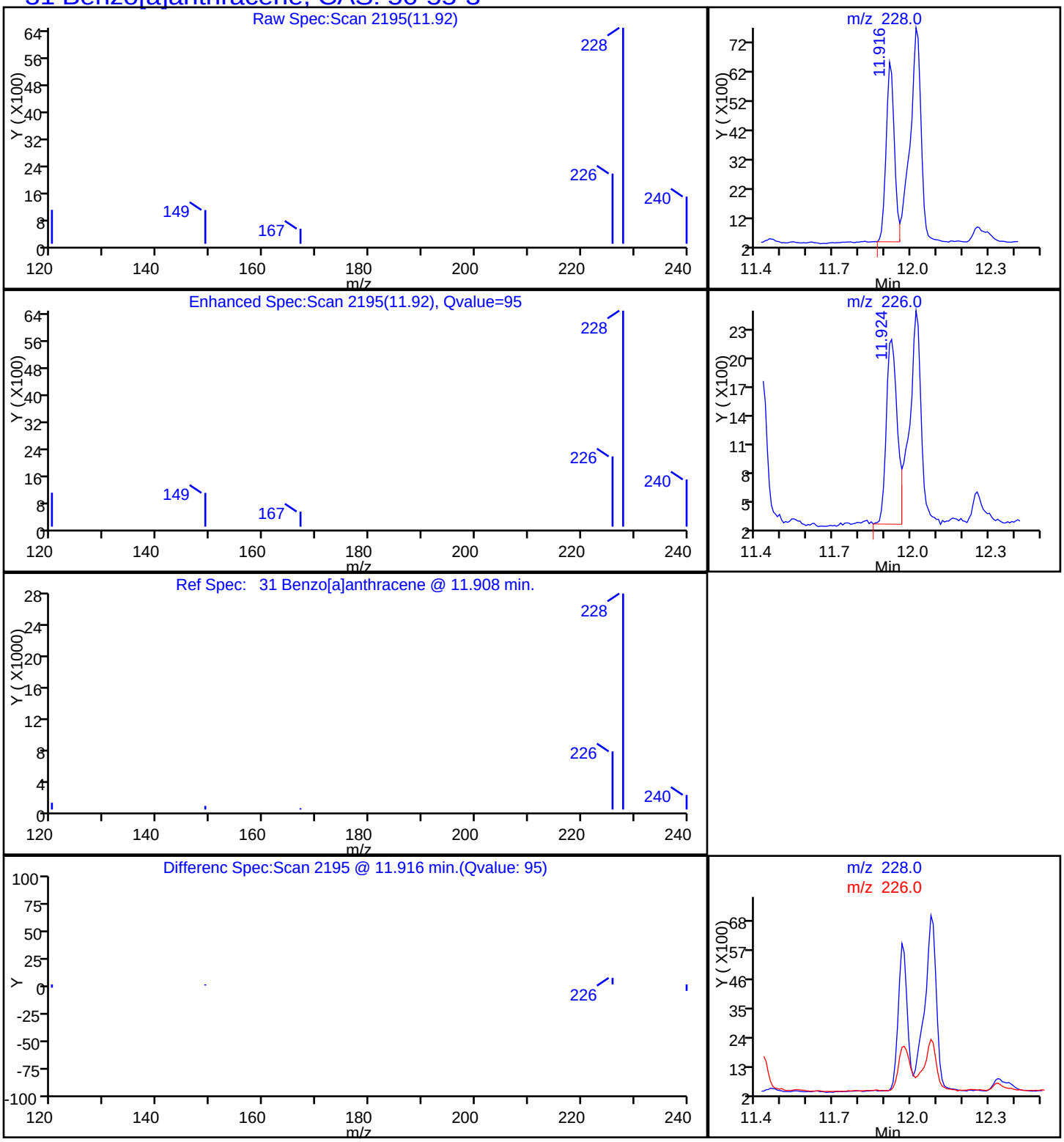


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3

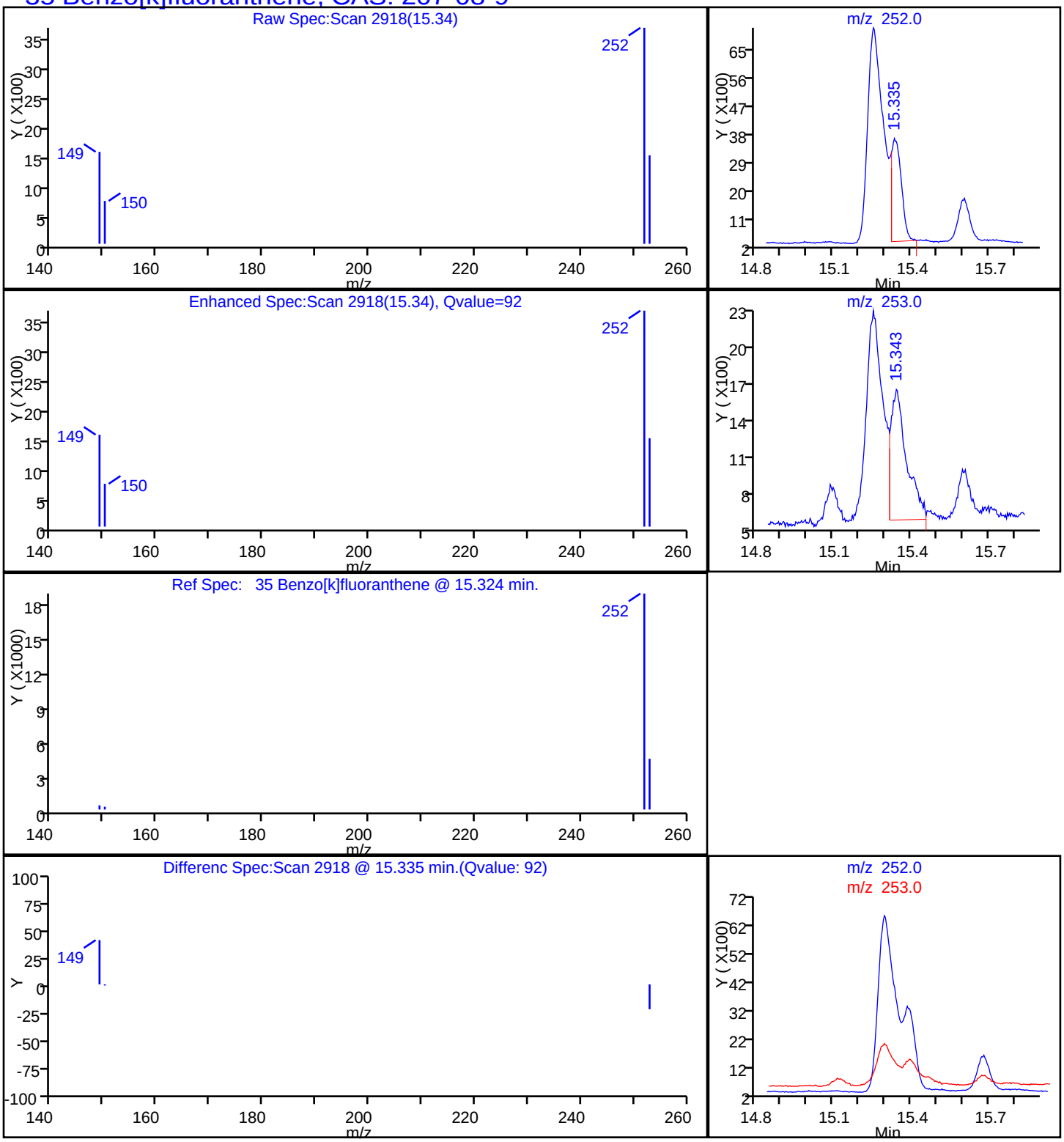


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9

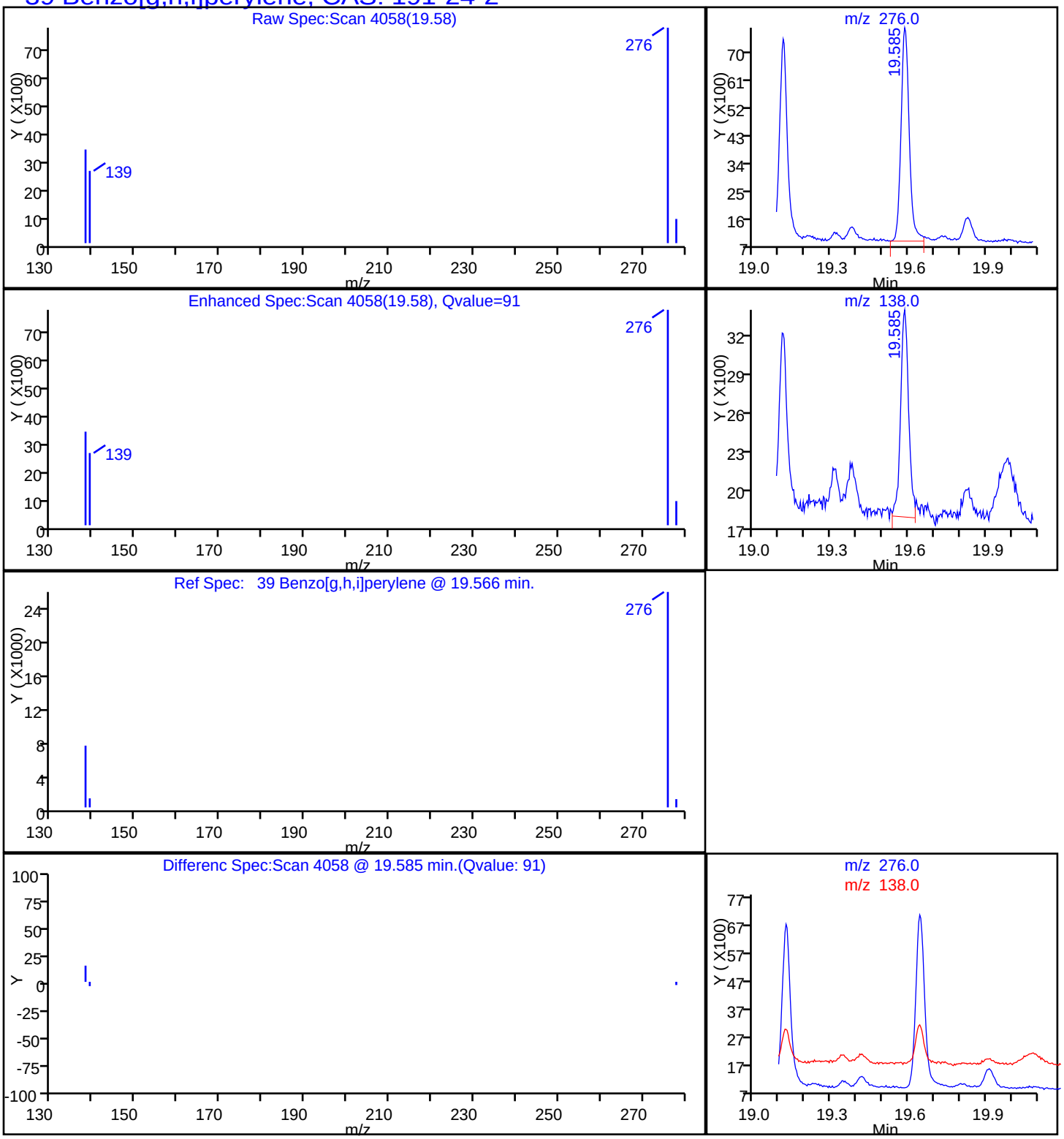


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[g,h,i]perylene, CAS: 191-24-2

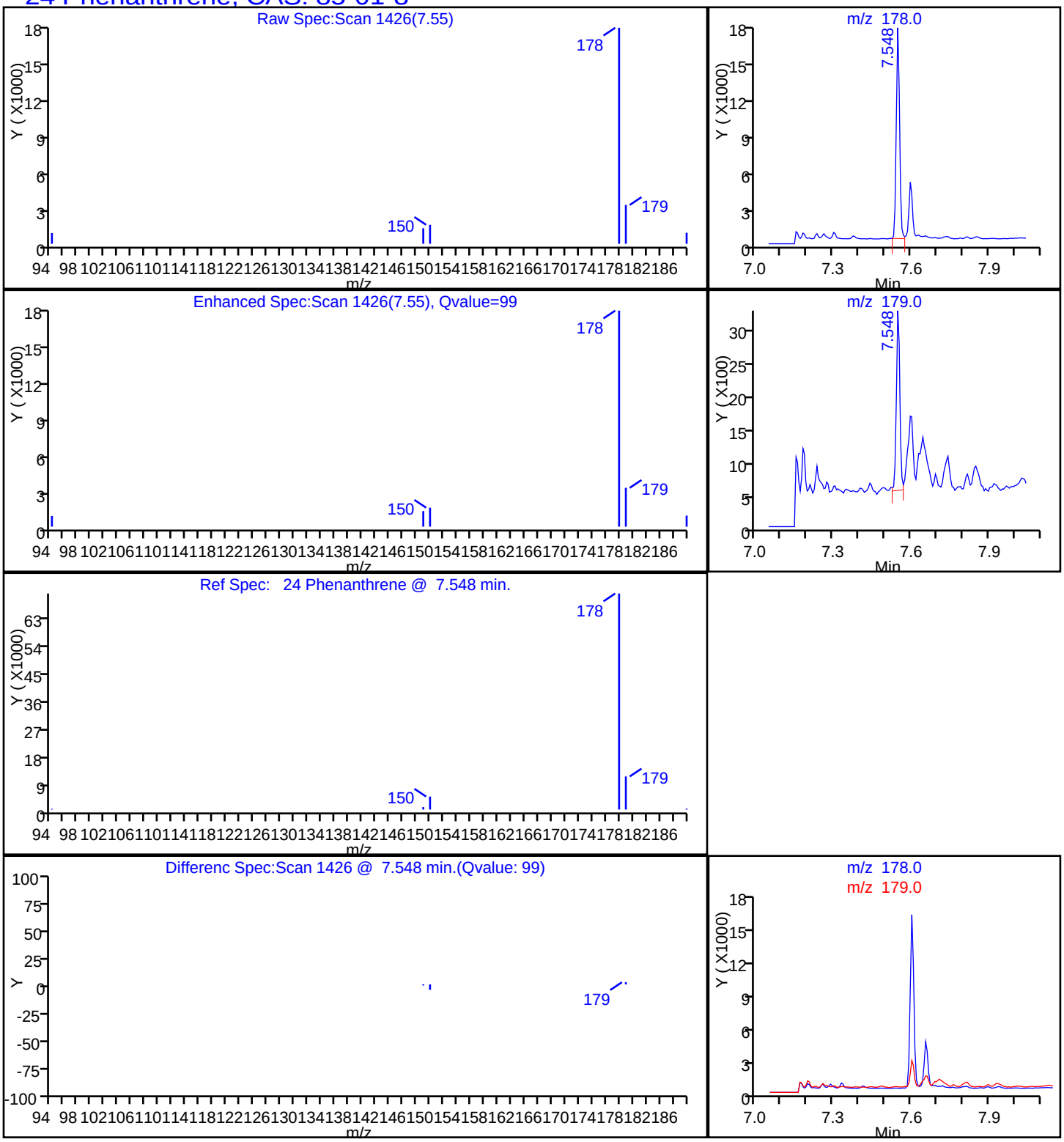


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8

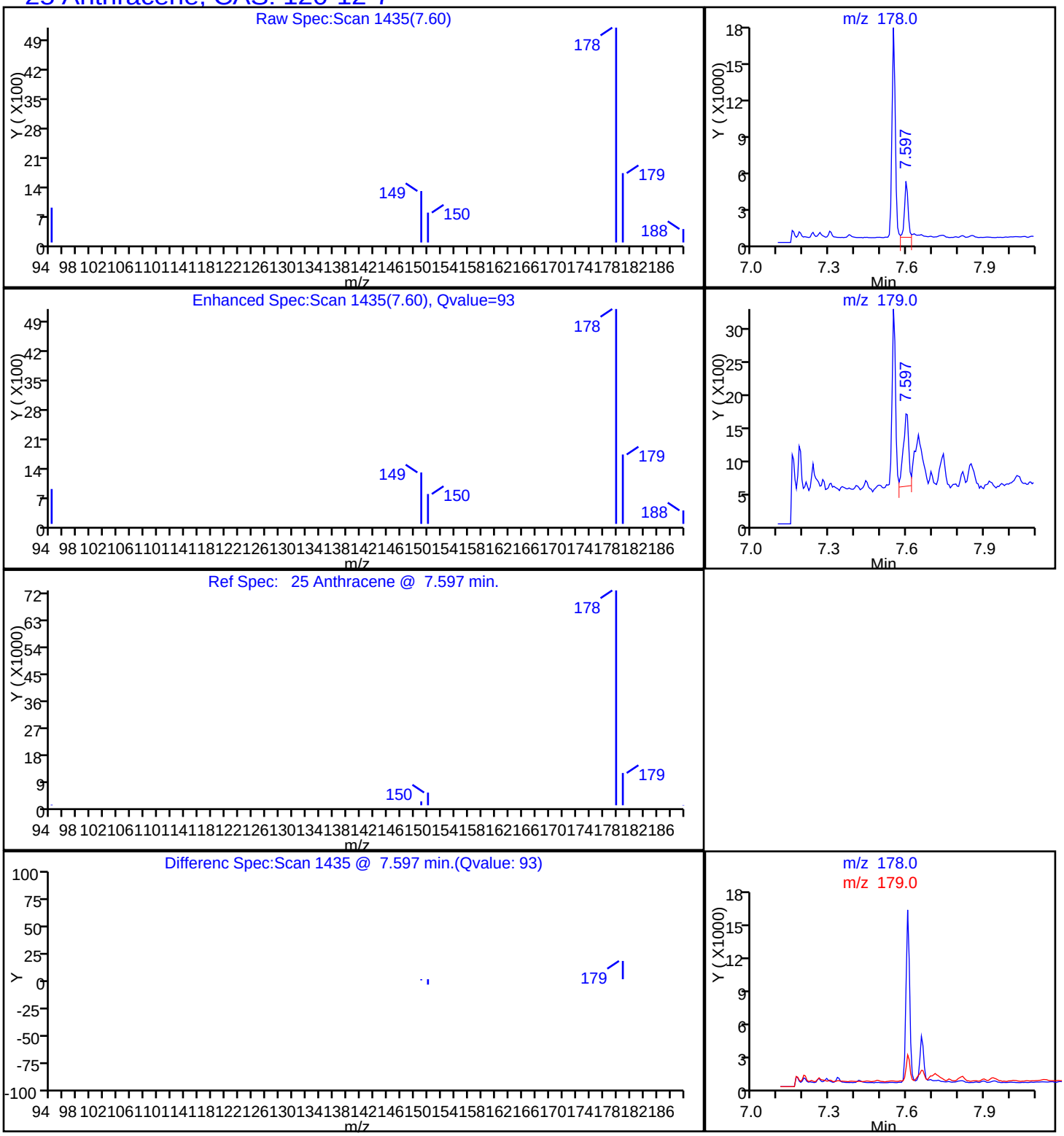


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7

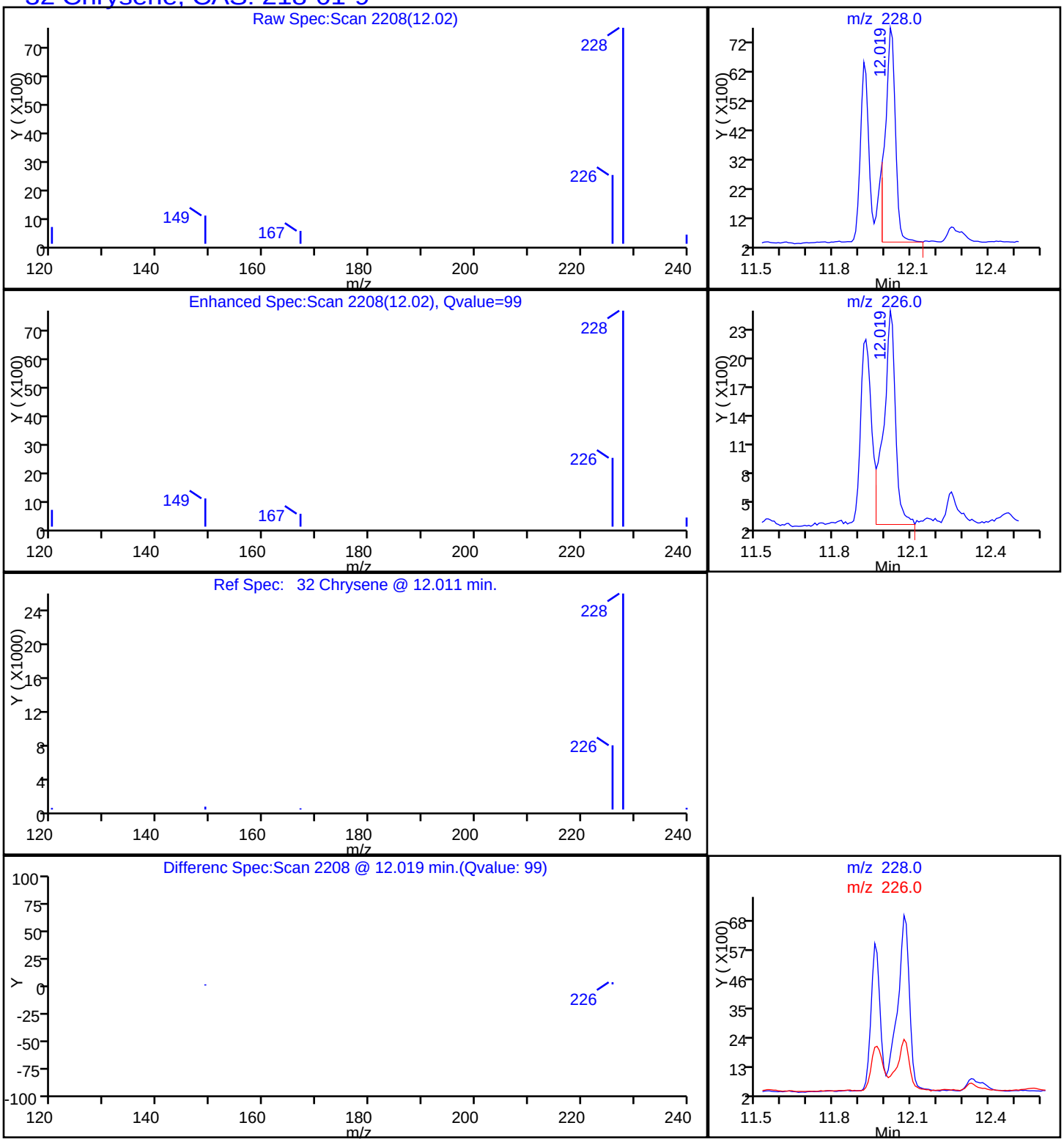


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

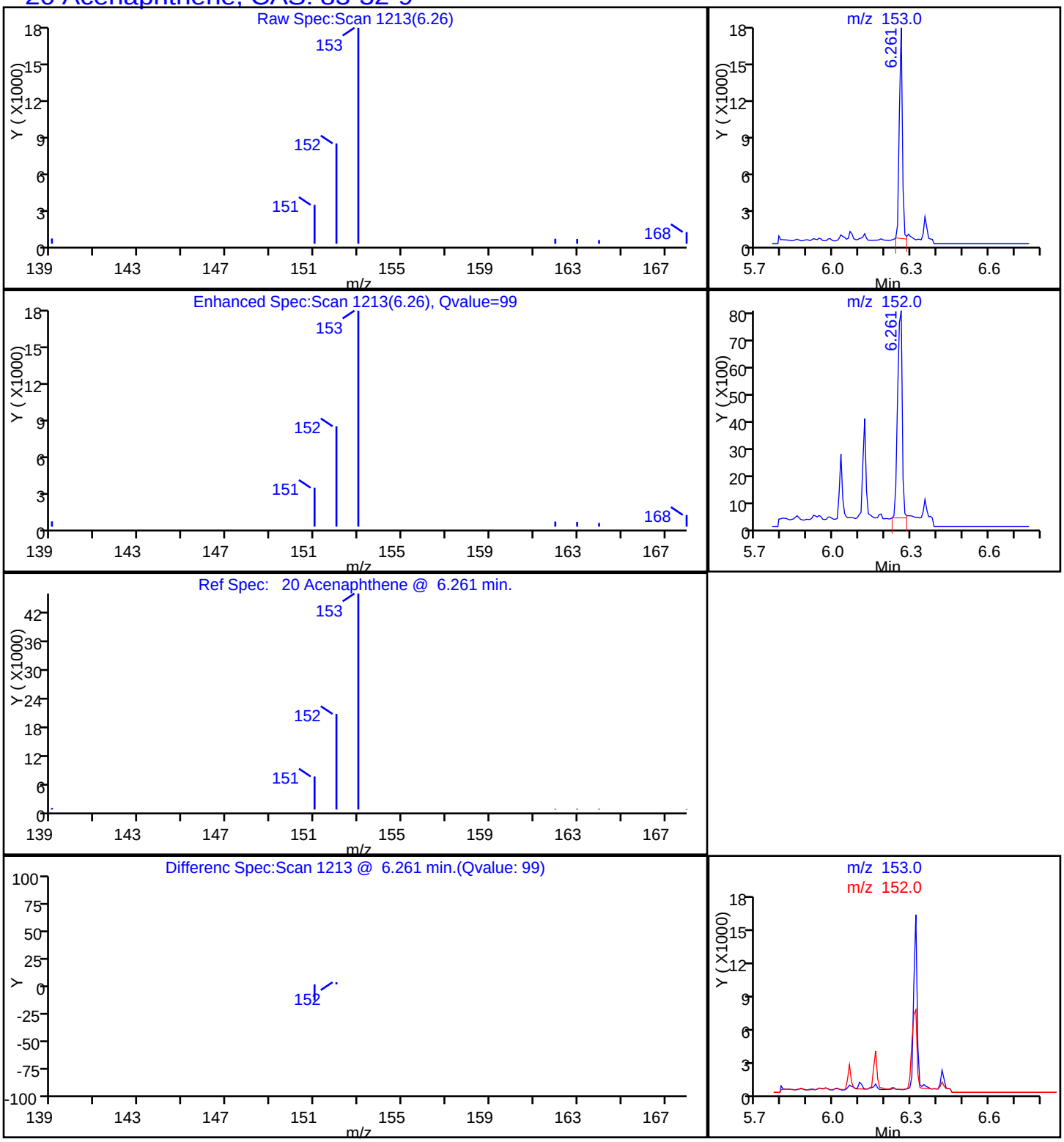


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9

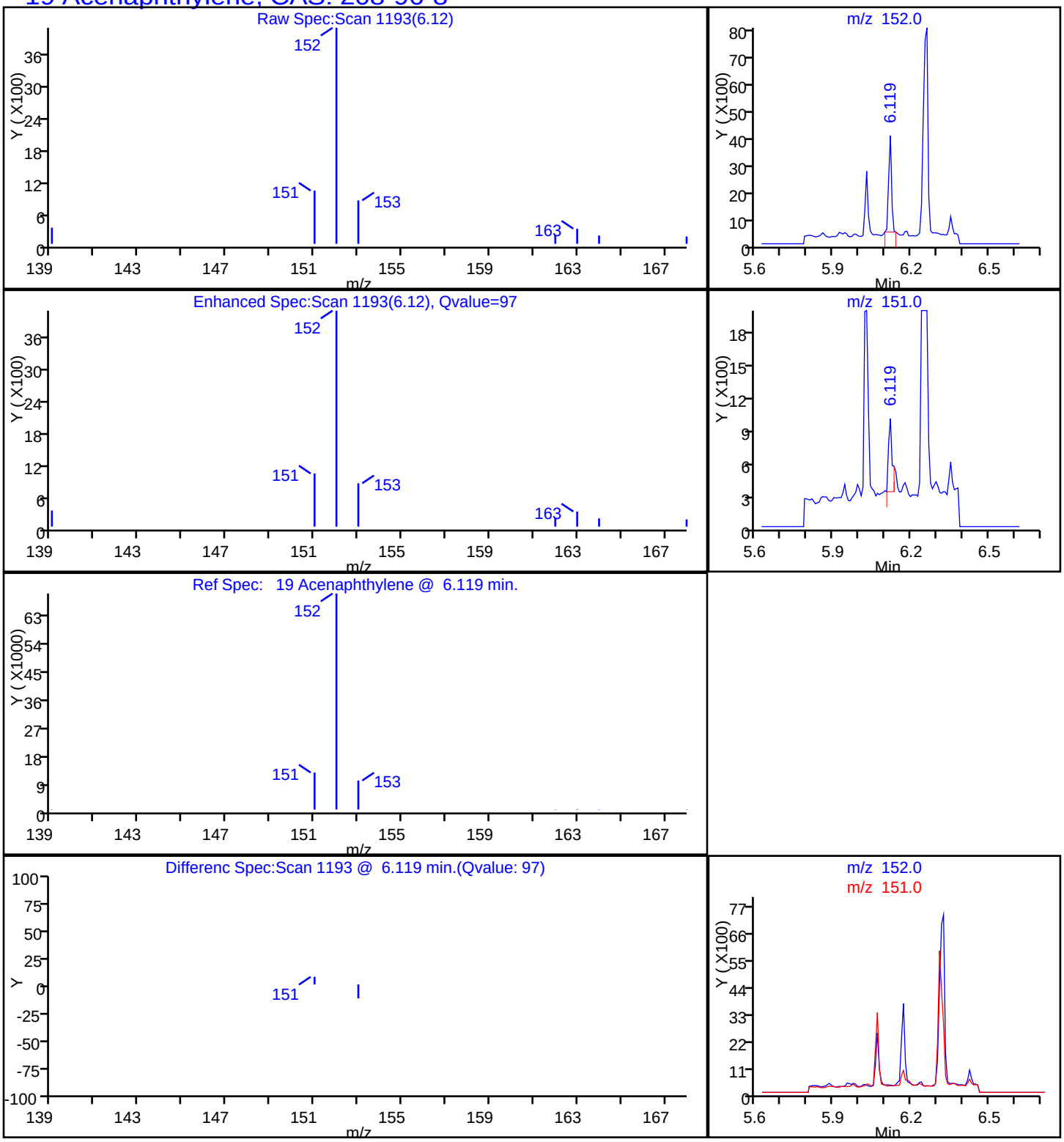


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

19 Acenaphthylene, CAS: 208-96-8

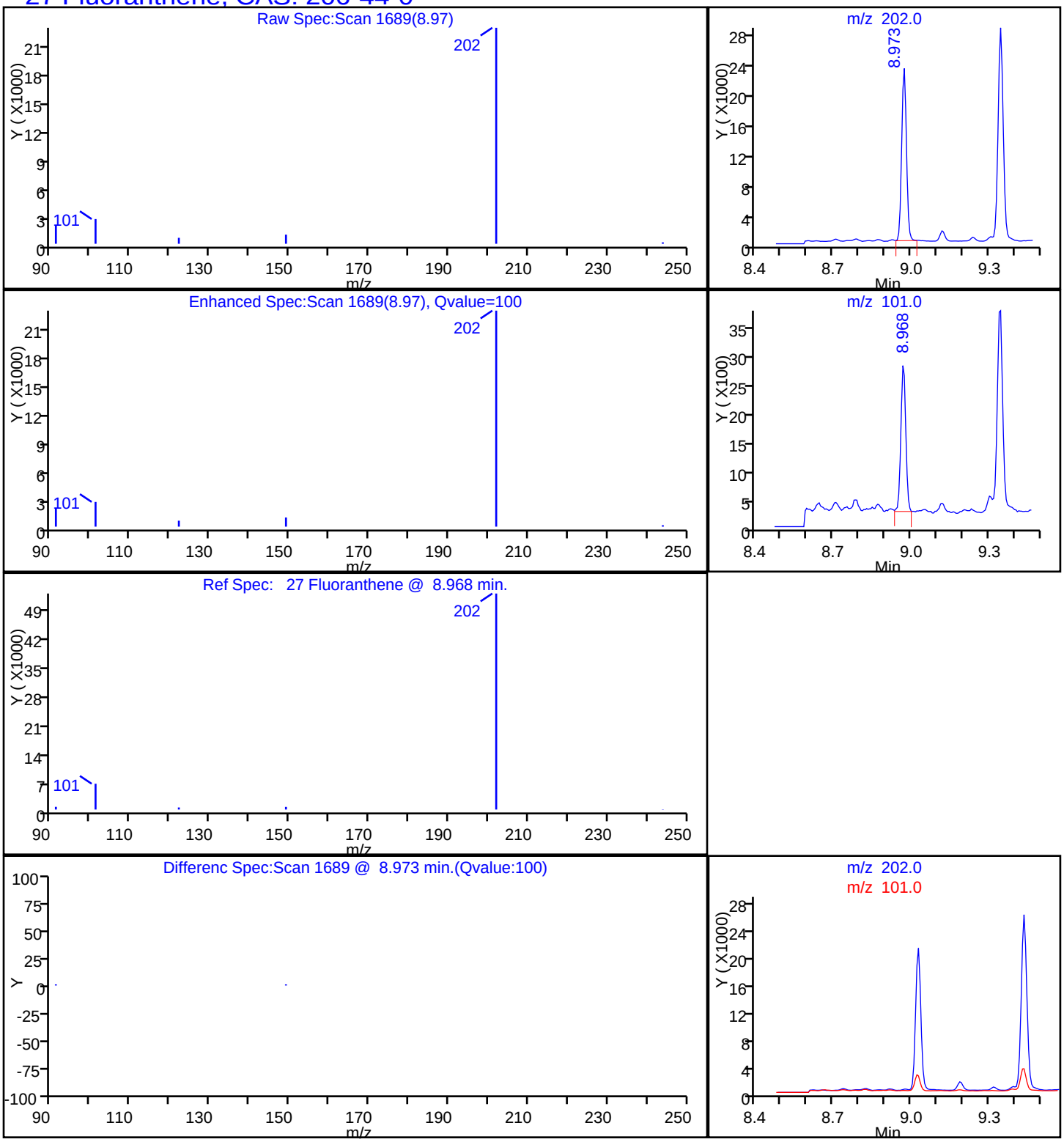


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0

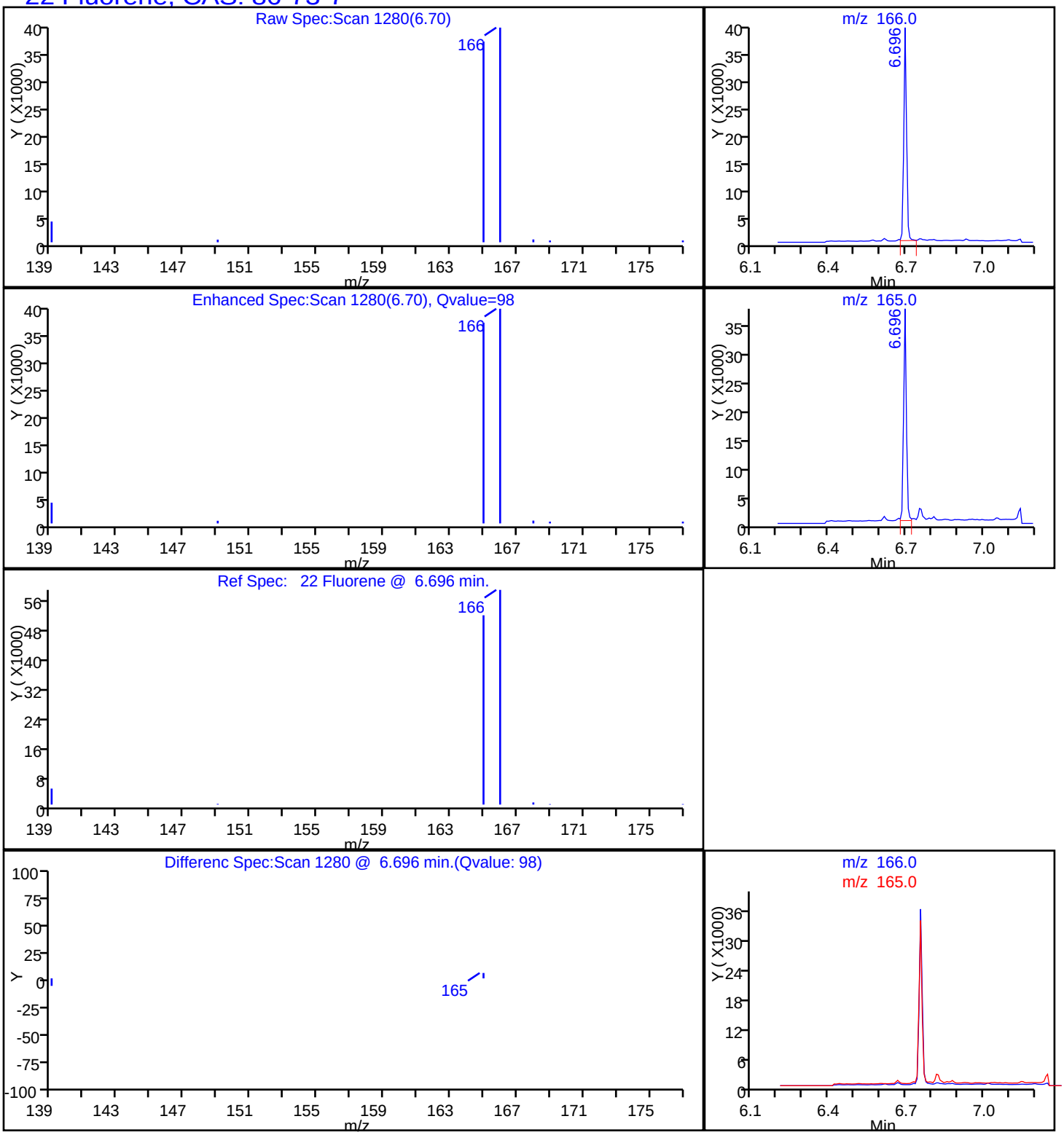


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7

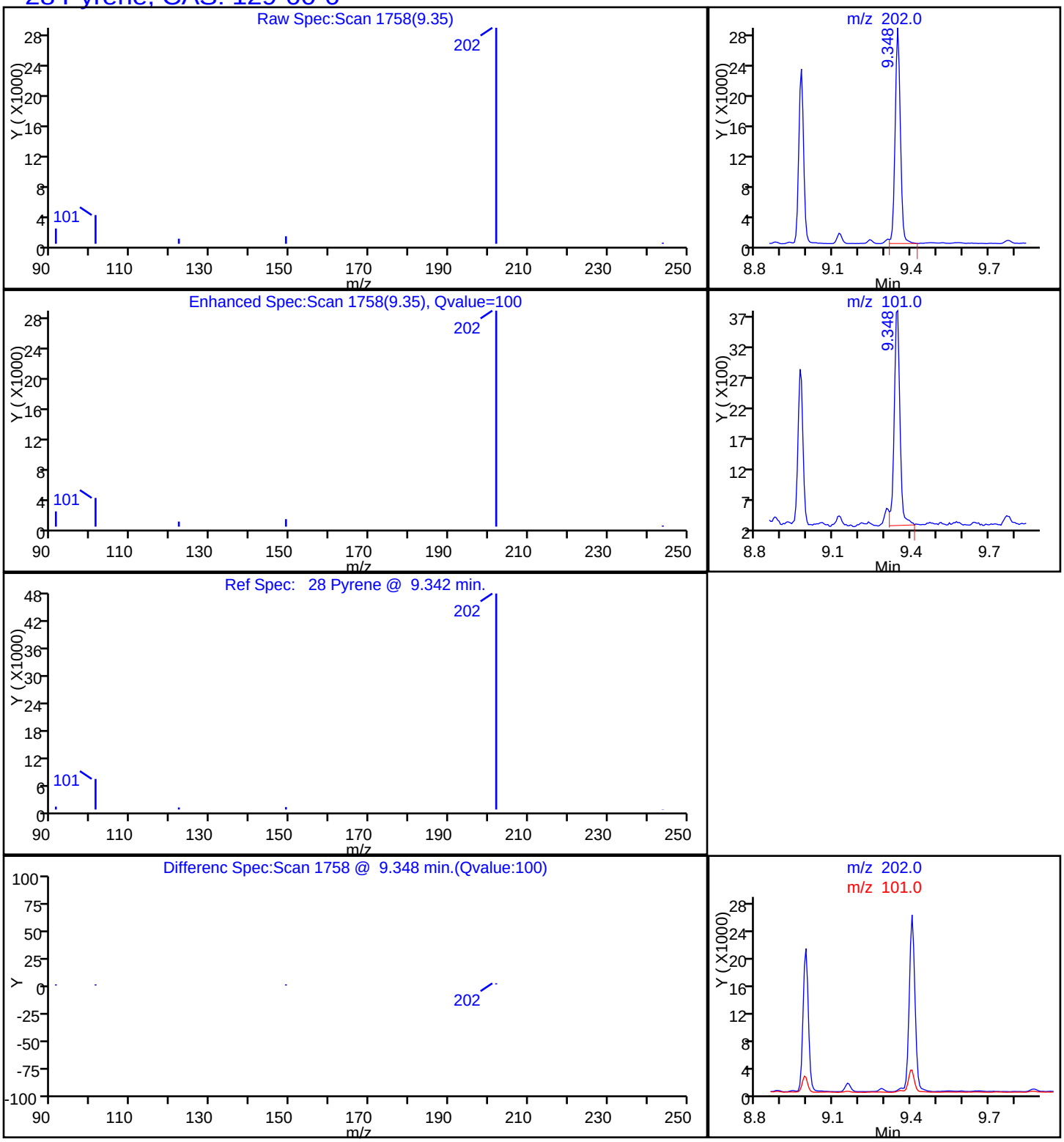


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0

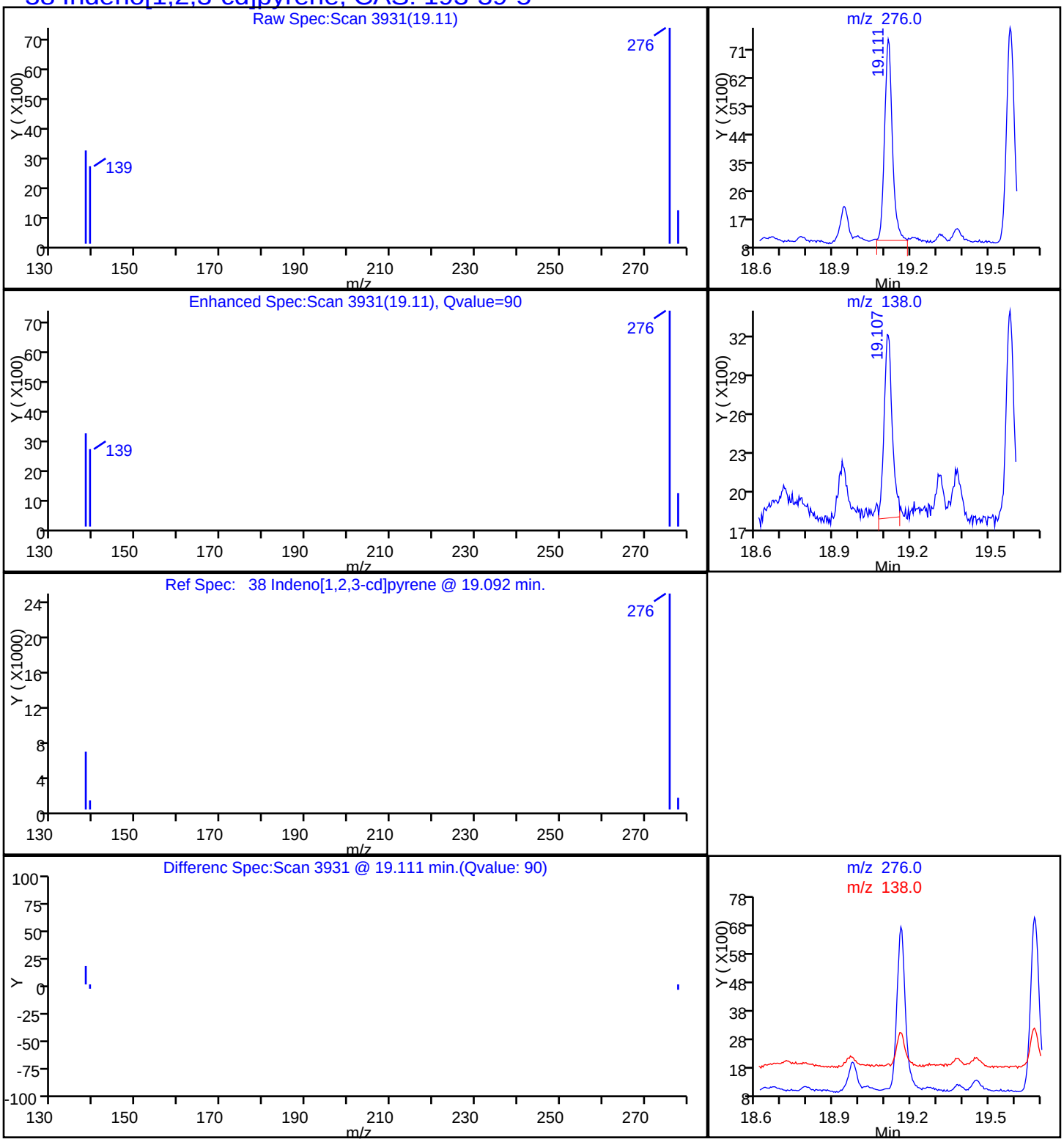


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

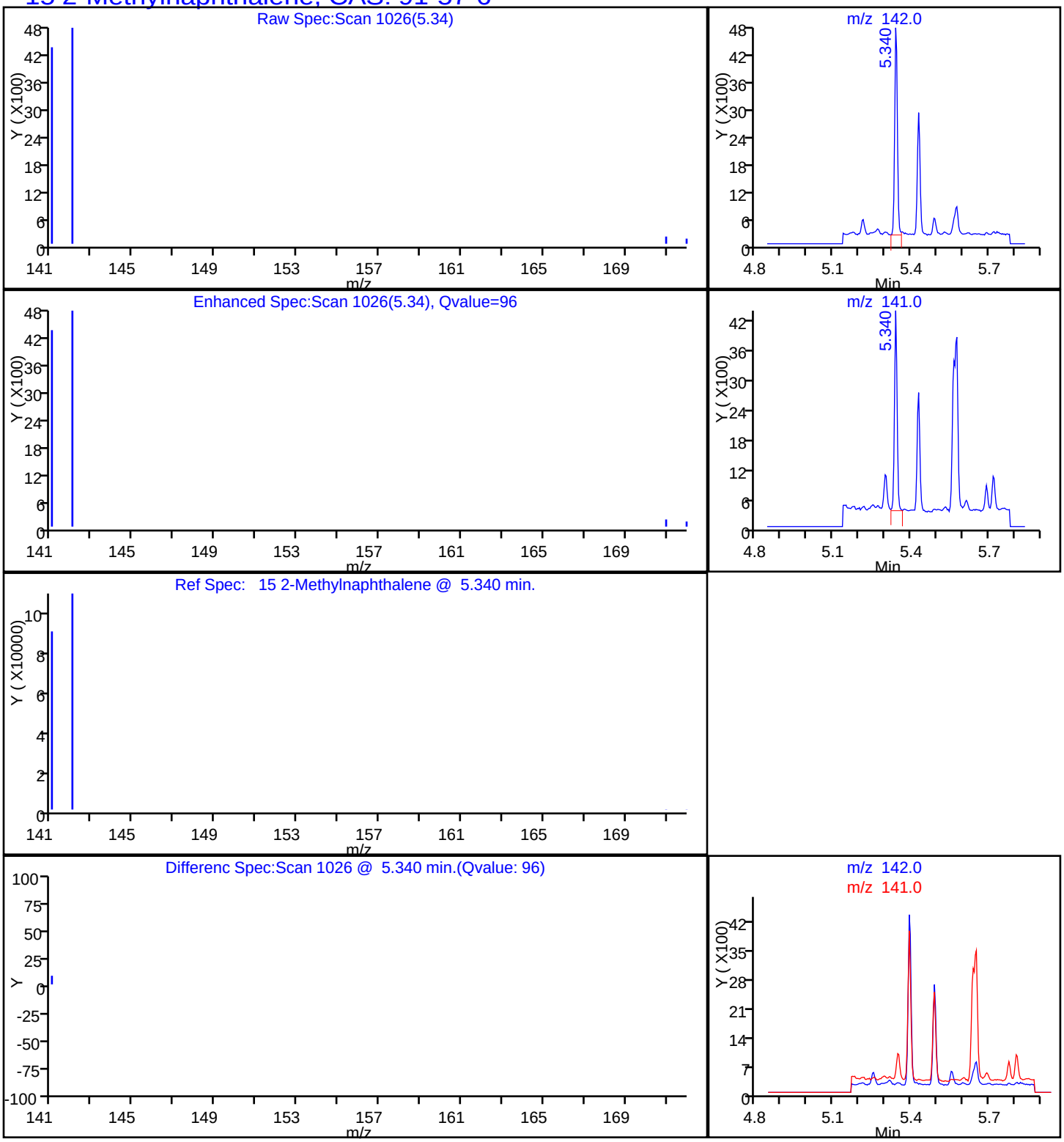


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 2-Methylnaphthalene, CAS: 91-57-6

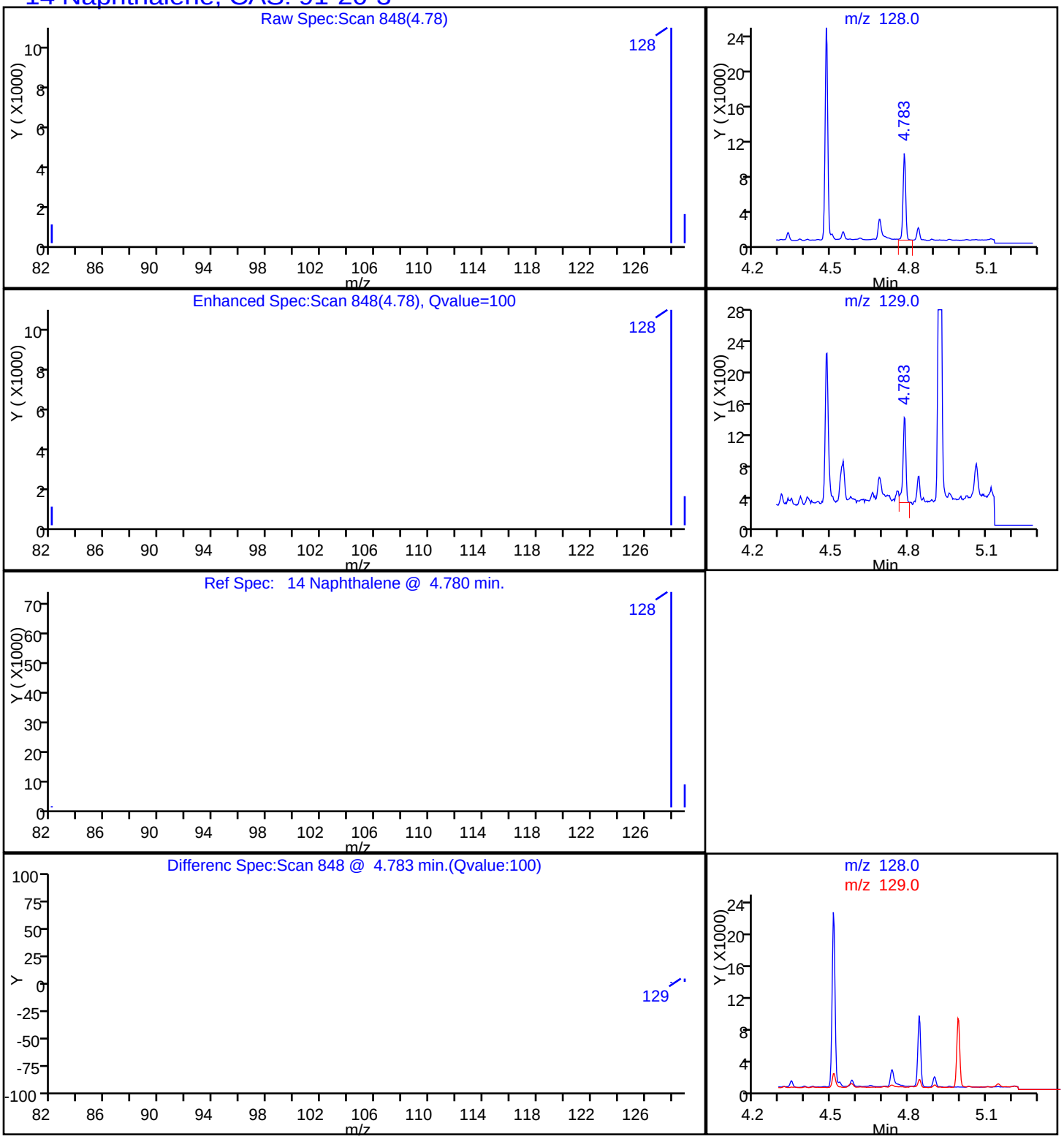


Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3



Manual Integration/User Assign Peak Report

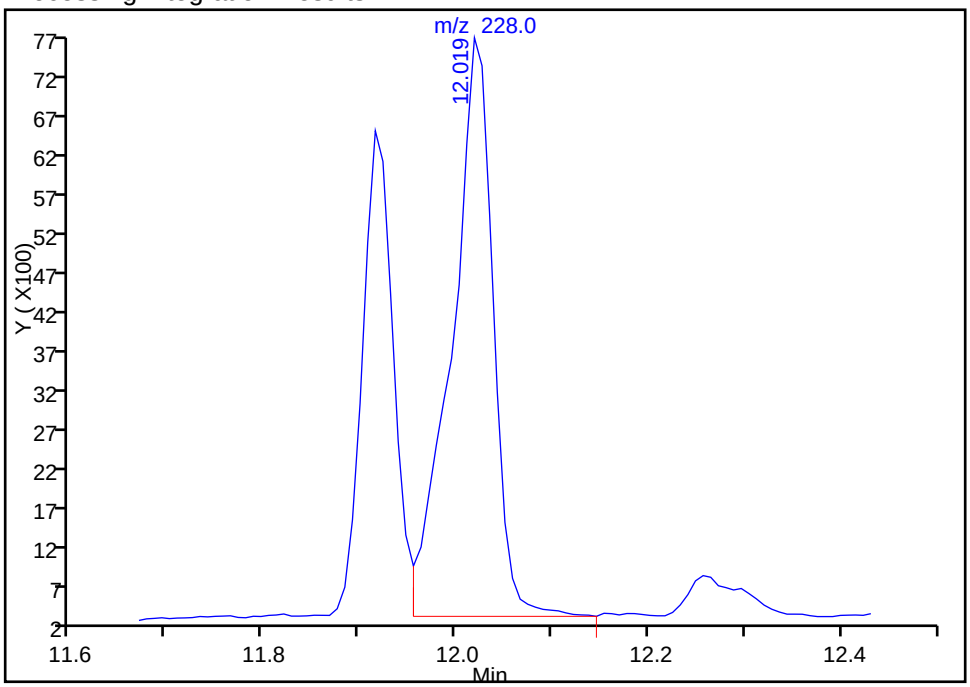
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8909.D				
Injection Date:	01-Jan-2014 00:55:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-8-B	Lab Sample ID:	280-50614-8		
Client ID:	FSA-SD-CO				
Operator ID:	VASQUEZK	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

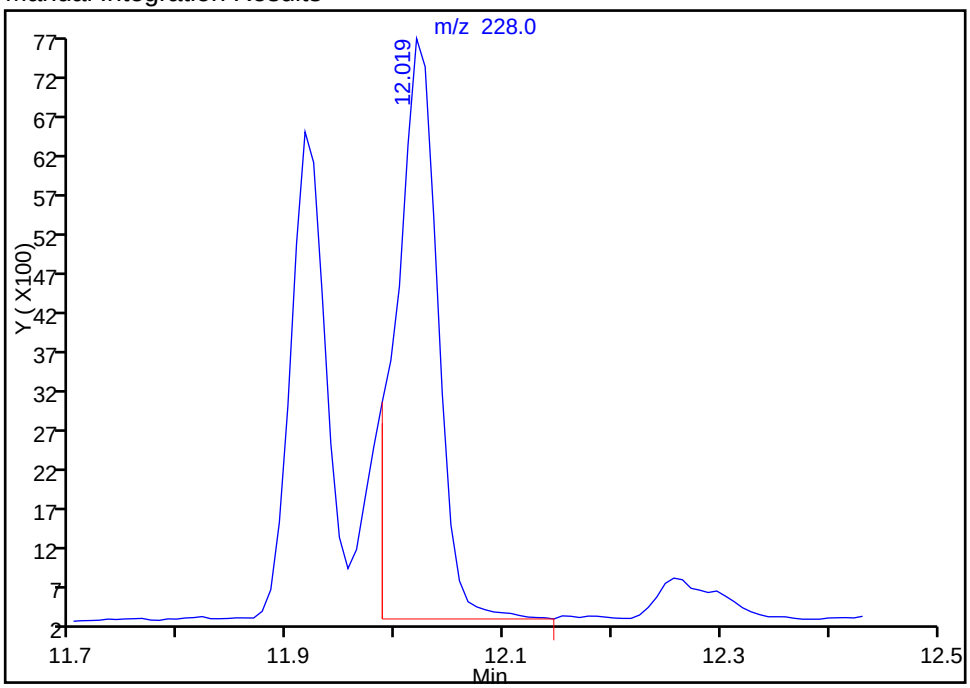
Processing Integration Results

RT: 12.02
Response: 22053
Amount: 237.9420



Manual Integration Results

RT: 12.02
Response: 19562
Amount: 211.0652



Reviewer: vasquezk, 02-Jan-2014 09:11:51
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU03-A | Lab Sample ID: 280-50614-9

Matrix: Solid | Lab File ID: X4_8910.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:00

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 30.79(g) | Date Analyzed: 01/01/2014 01:23

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207101 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
85-01-8	Phenanthrene	140000		4900	1100
120-12-7	Anthracene	100000		4900	700
53-70-3	Dibenz(a,h)anthracene	75000		4900	1300
83-32-9	Acenaphthene	8000		4900	160
208-96-8	Acenaphthylene	100000		4900	170
86-73-7	Fluorene	13000		4900	460
91-57-6	2-Methylnaphthalene	73000		4900	300
91-20-3	Naphthalene	53000		4900	320

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	75		39-120
4165-60-0	Nitrobenzene-d5	108		42-120
1718-51-0	Terphenyl-d14	111		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8910.D
Lims ID: 280-50614-A-9-B Lab Sample ID: 280-50614-9
Client ID: FSA-SD-DU03-A
Sample Type: Client
Inject. Date: 01-Jan-2014 01:23:30 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-50614-a-9-b
Misc. Info.: 280-50614-a-9-b =280-50614-A-9-B
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 09:12:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	86	23892	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	99	46052	600.0	
* 3 Chrysene-d12	240	11.956	11.956	0.0	54	53163	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.186	0.0	97	14410	538.9	
$ 5 2-Fluorobiphenyl	172	5.626	5.630	-0.004	100	21043	373.3	
$ 6 Terphenyl-d14	244	9.521	9.527	-0.006	97	31031	556.6	
14 Naphthalene	128	4.783	4.783	0.0	100	119597	1635.9	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	100	116940	2262.0	
19 Acenaphthylene	152	6.119	6.119	0.0	100	253737	3184.9	
20 Acenaphthene	153	6.261	6.261	0.0	93	12238	246.3	
22 Fluorene	166	6.696	6.696	0.0	95	23048	388.0	
24 Phenanthrene	178	7.548	7.553	-0.005	100	407610	4318.9	
25 Anthracene	178	7.597	7.602	-0.005	100	289419	3115.2	
27 Fluoranthene	202	8.979	8.979	0.0	100	1037179	10133	E
28 Pyrene	202	9.353	9.353	0.0	100	1265033	11978	E
31 Benzo[a]anthracene	228	11.924	11.924	0.0	98	647375	5990.9	E
32 Chrysene	228	12.027	12.027	0.0	100	811090	7938.1	EM
34 Benzo[b]fluoranthene	252	15.260	15.253	0.007	100	2101998	21237	E
35 Benzo[k]fluoranthene	252	15.346	15.342	0.004	100	670745	6587.9	E
36 Benzo[a]pyrene	252	16.393	16.385	0.008	100	889721	9275.8	E
38 Indeno[1,2,3-cd]pyrene	276	19.122	19.111	0.011	99	866470	9176.3	E
37 Dibenz(a,h)anthracene	278	19.148	19.148	0.0	76	221163	2317.8	
39 Benzo[g,h,i]perylene	276	19.603	19.584	0.019	99	838056	8268.3	E

QC Flag Legend

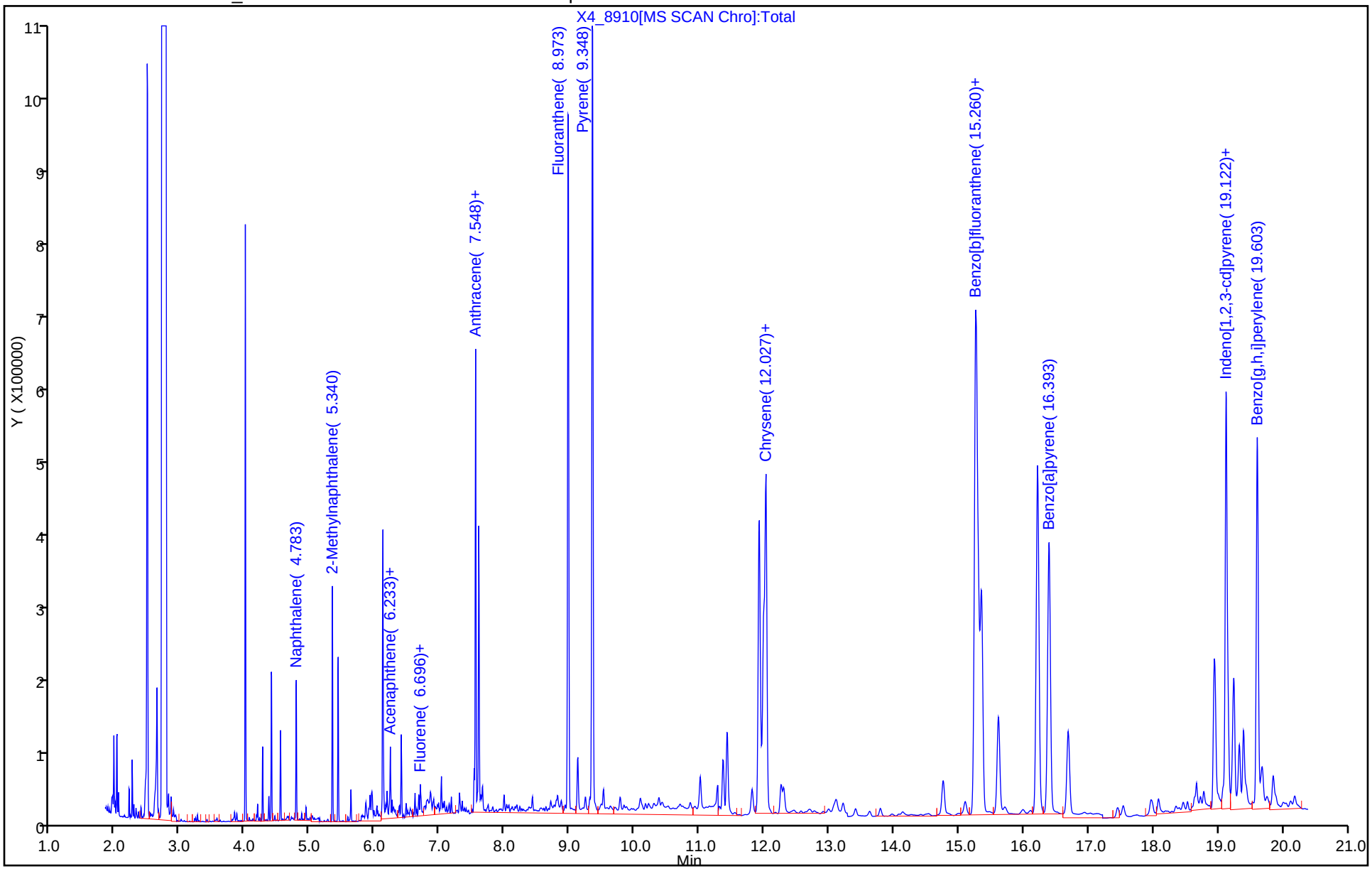
Processing Flags
E - Exceeded Maximum Amount

Review Flags
M - Manually Integrated

Report Date: 02-Jan-2014 09:28:21 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8910.D				
Injection Date:	01-Jan-2014 01:23:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9	Worklist Smp#:	26
Client ID:	FSA-SD-DU03-A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

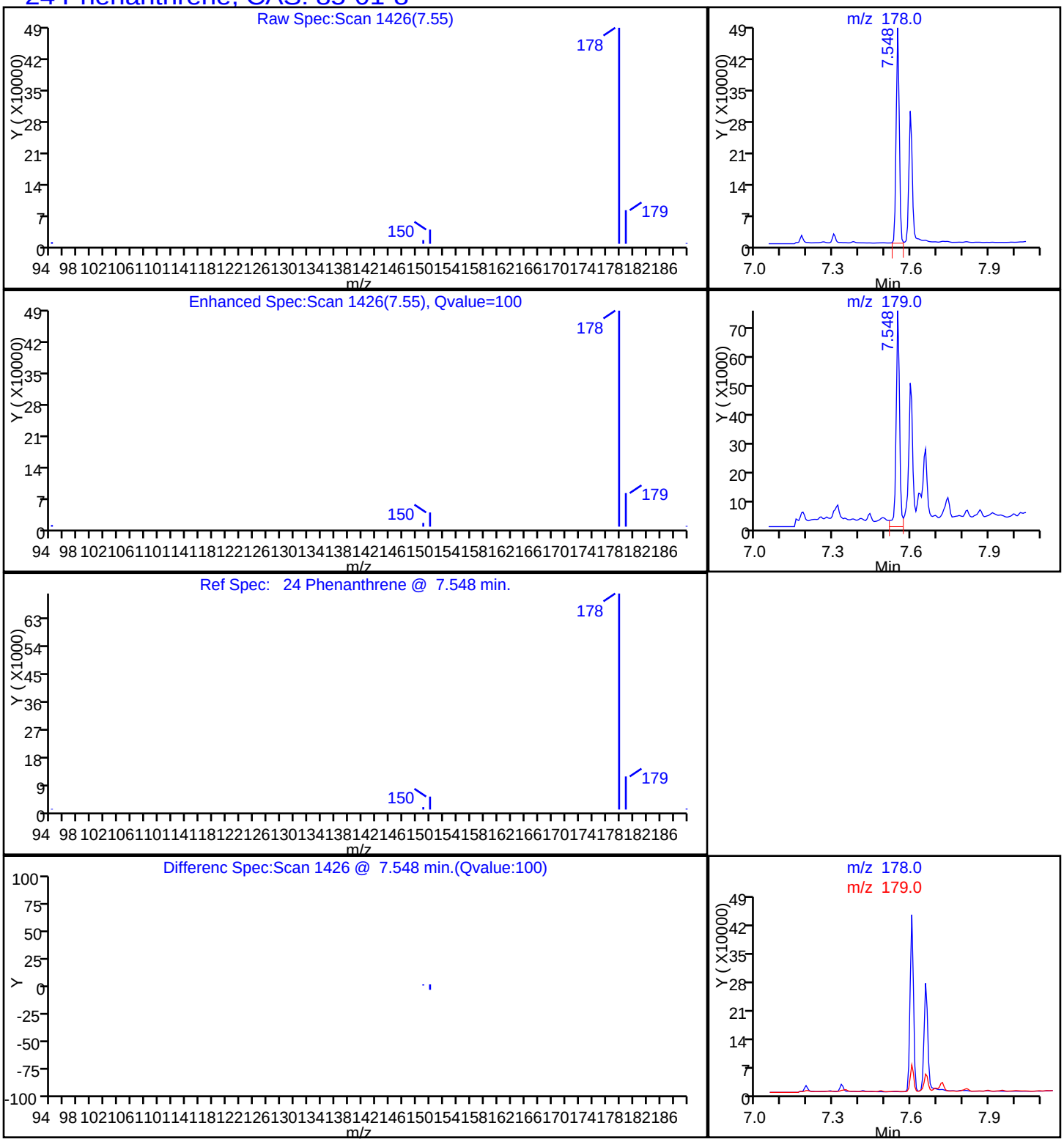


Report Date: 02-Jan-2014 09:28:22 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8910.D				
Injection Date:	01-Jan-2014 01:23:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8

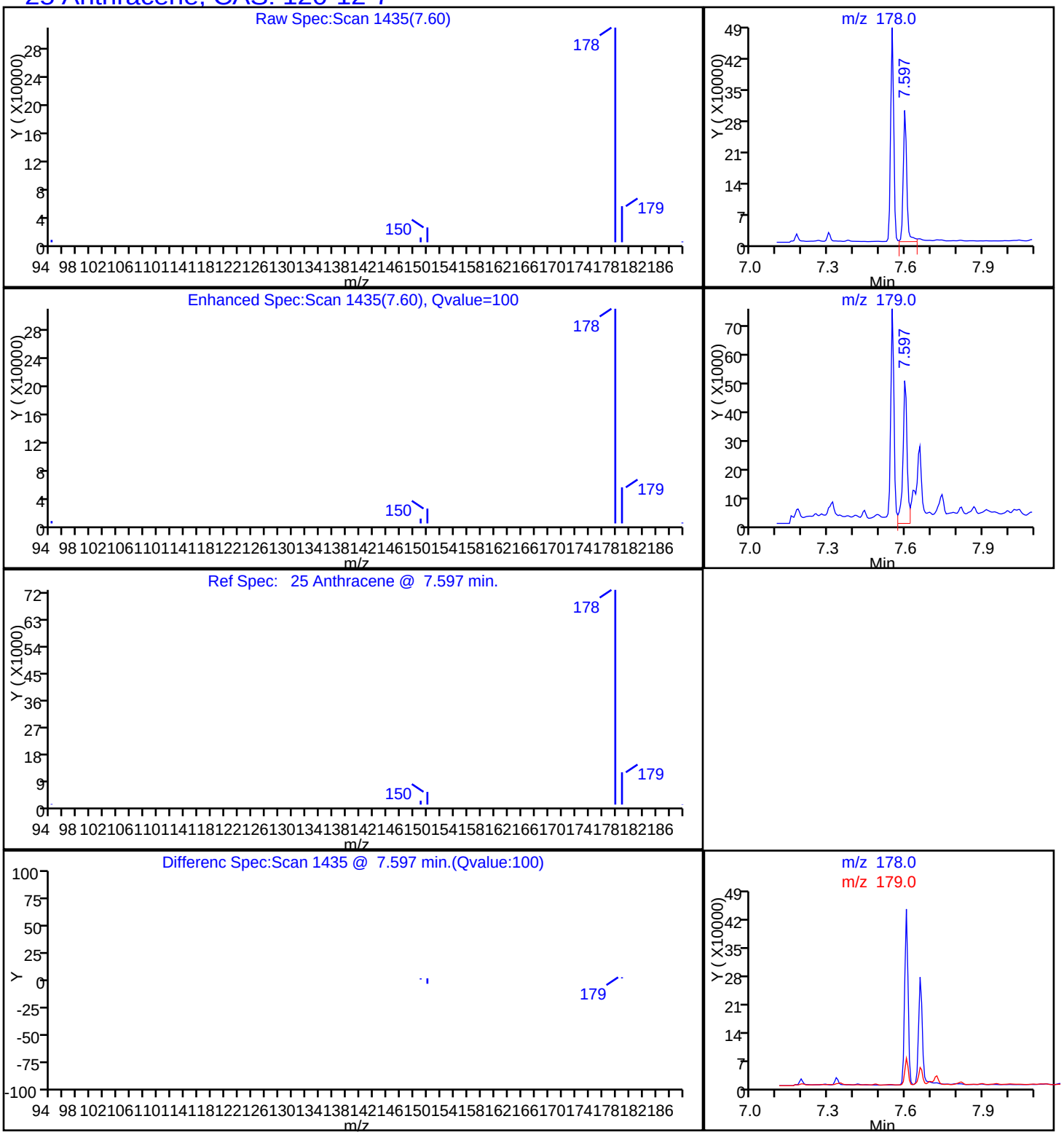


Report Date: 02-Jan-2014 09:28:22 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8910.D				
Injection Date:	01-Jan-2014 01:23:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7

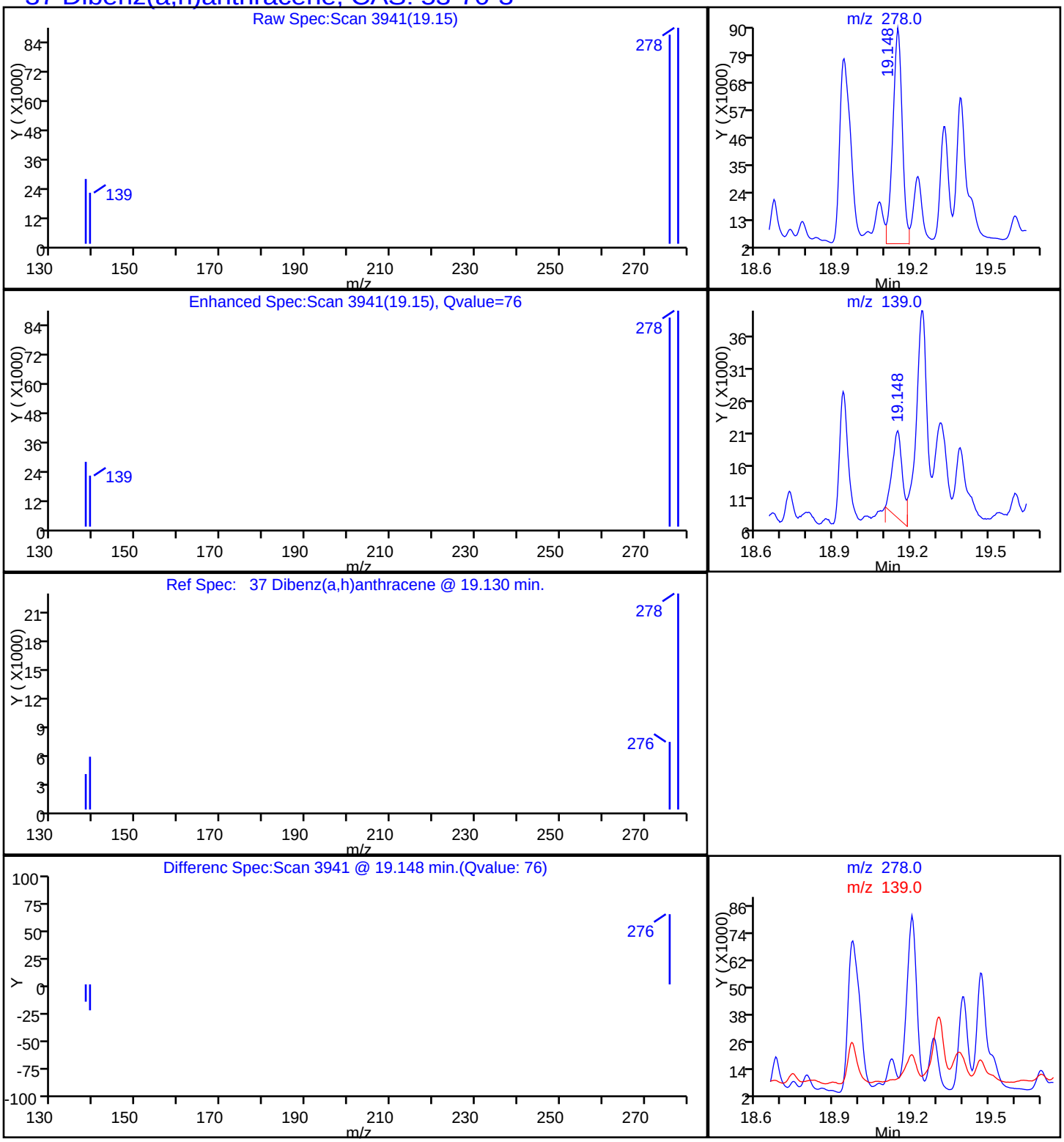


Report Date: 02-Jan-2014 09:28:22 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8910.D				
Injection Date:	01-Jan-2014 01:23:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3



Report Date: 02-Jan-2014 09:28:22 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8910.D				
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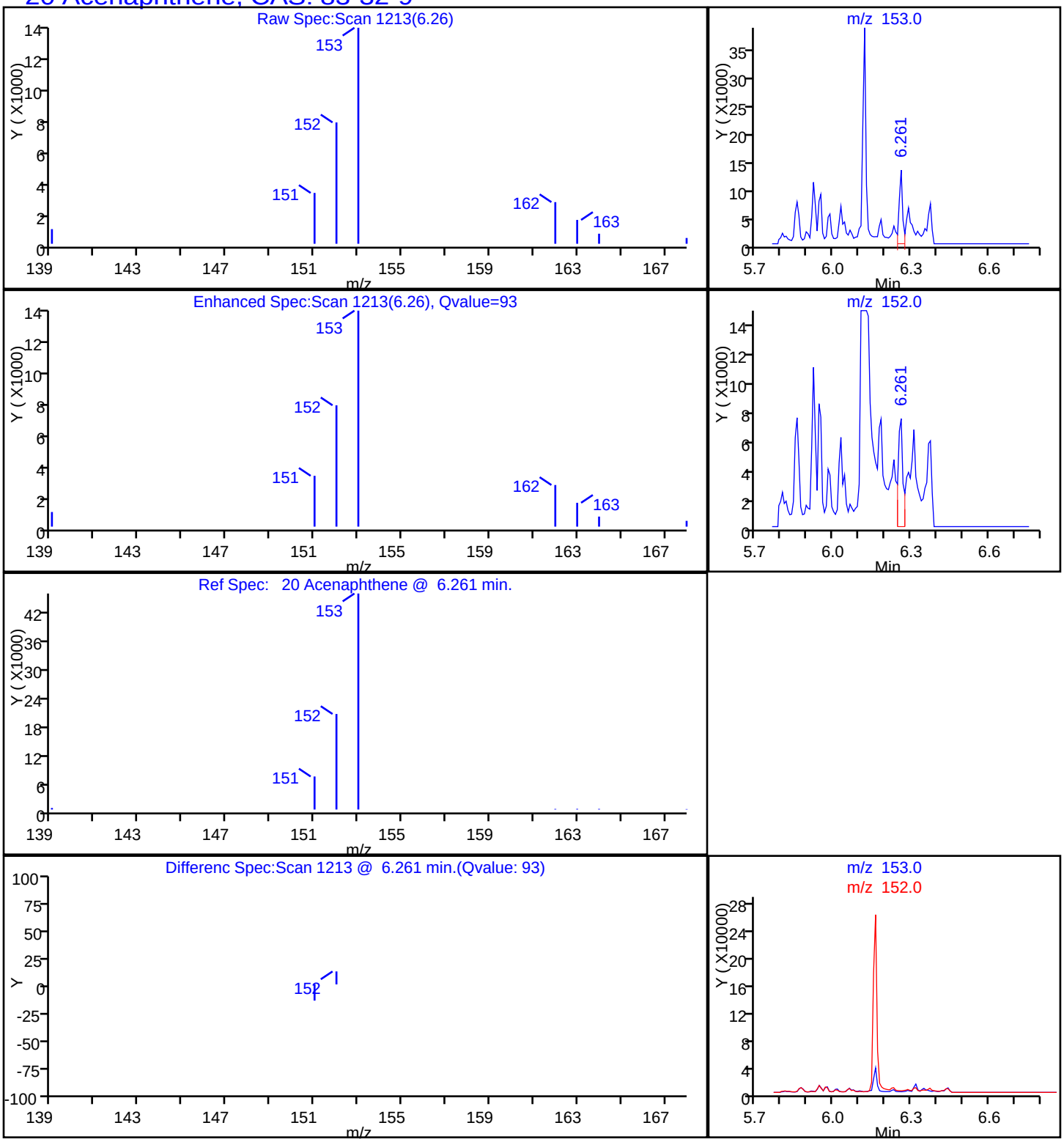
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9

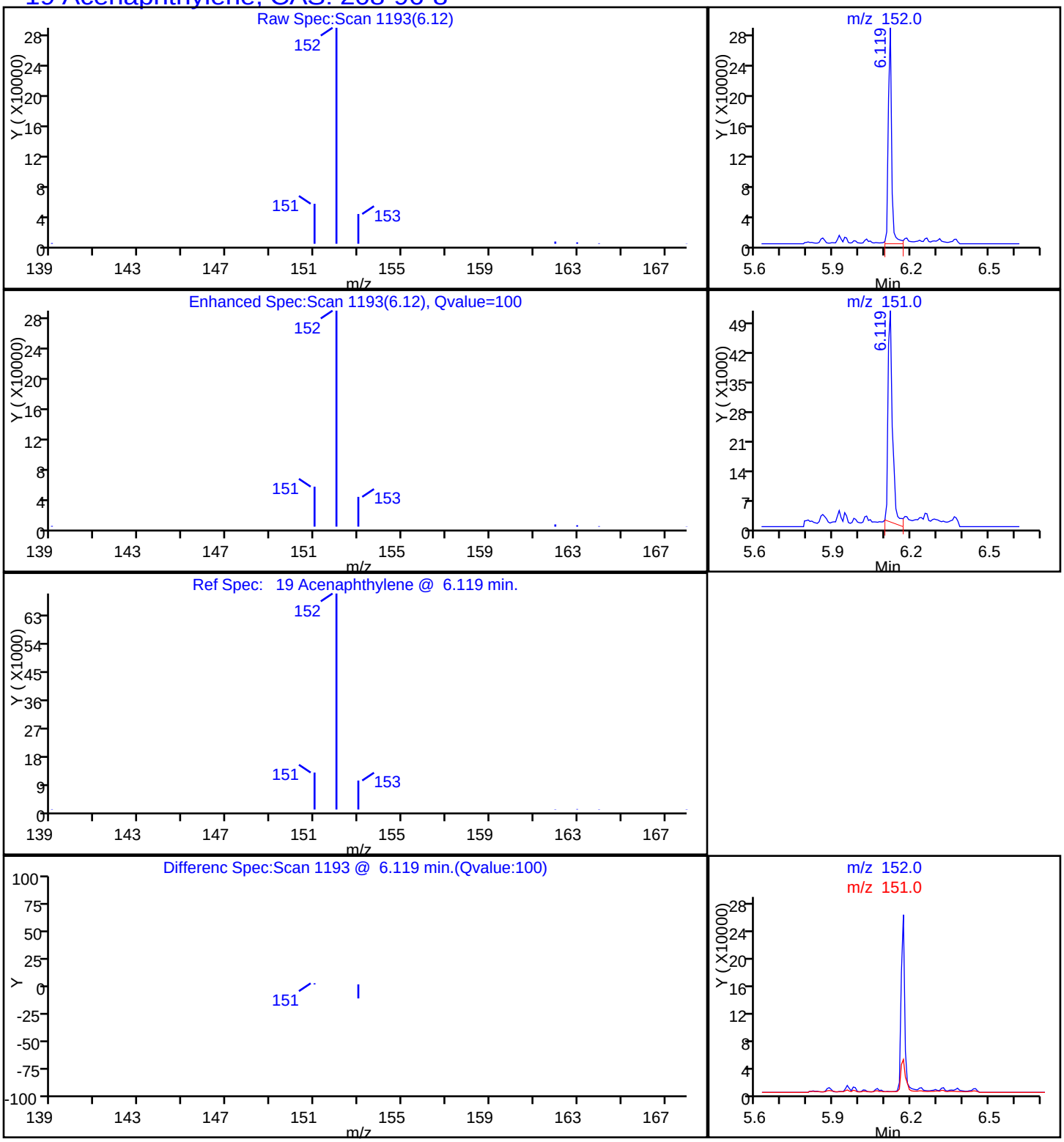


Report Date: 02-Jan-2014 09:28:22 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8910.D				
Injection Date:	01-Jan-2014 01:23:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

19 Acenaphthylene, CAS: 208-96-8



Report Date: 02-Jan-2014 09:28:22 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

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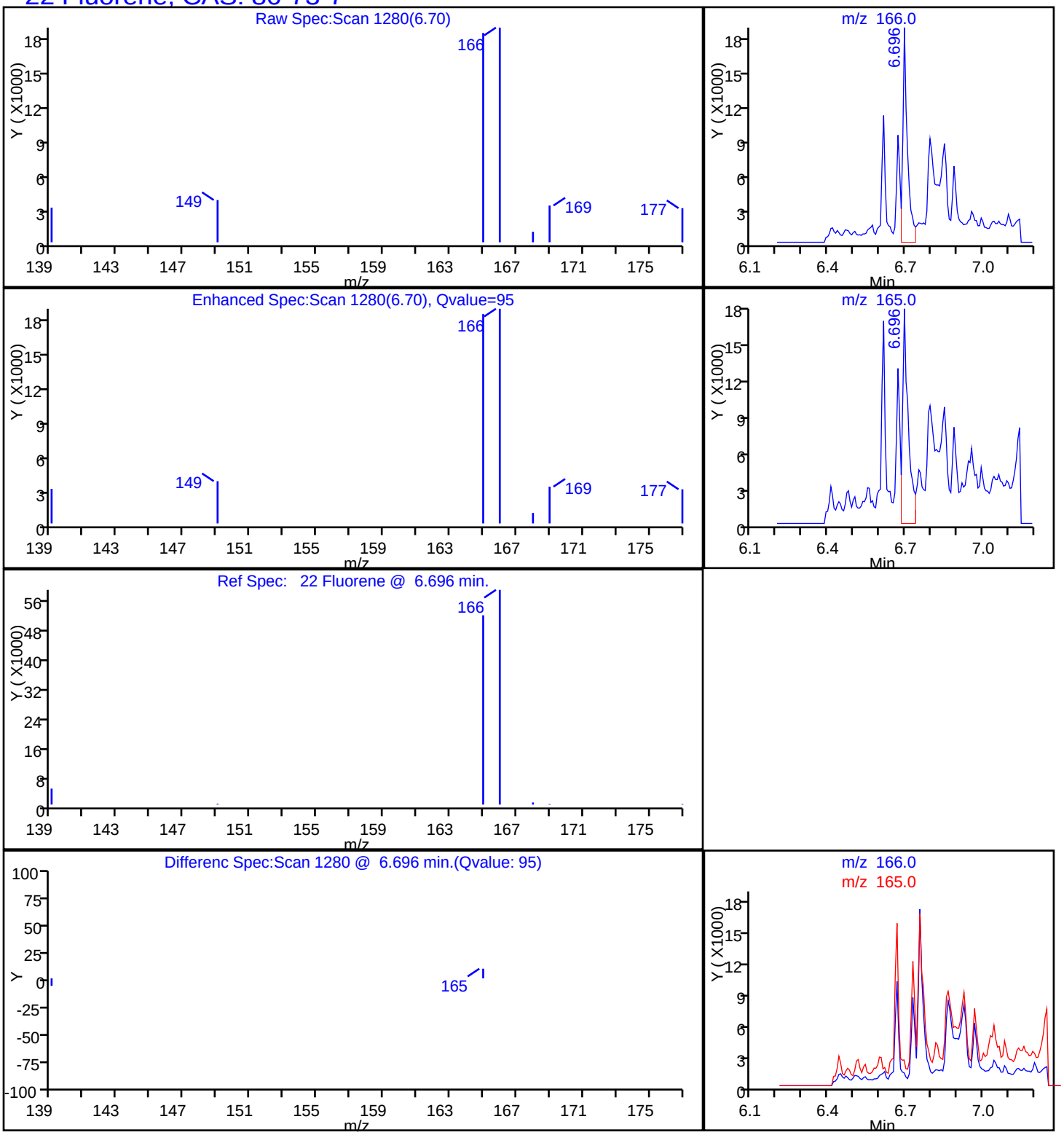
Injection Date:	01-Jan-2014 01:23:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7

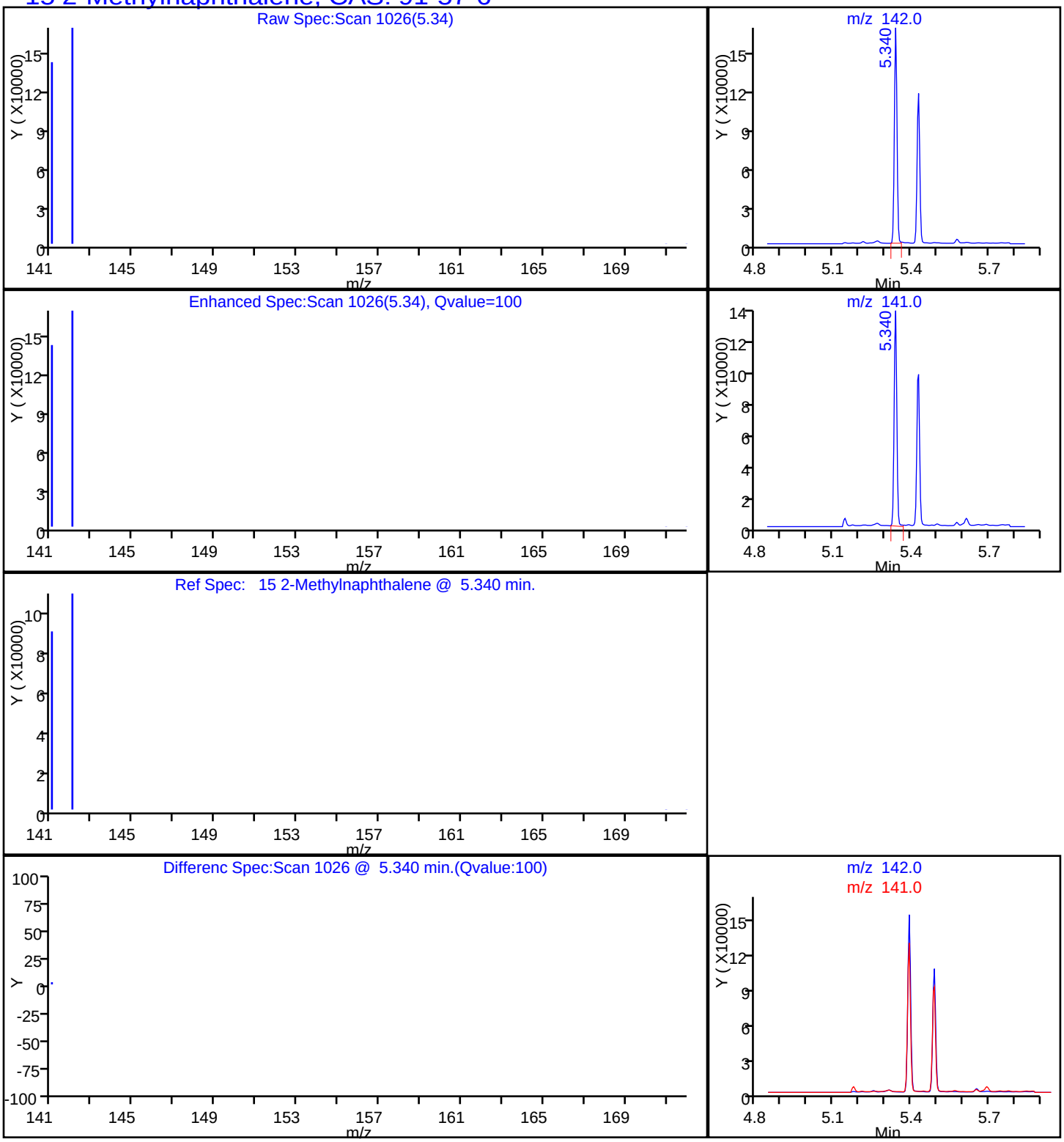


Report Date: 02-Jan-2014 09:28:22 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8910.D				
Injection Date:	01-Jan-2014 01:23:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 2-Methylnaphthalene, CAS: 91-57-6



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TestAmerica Denver

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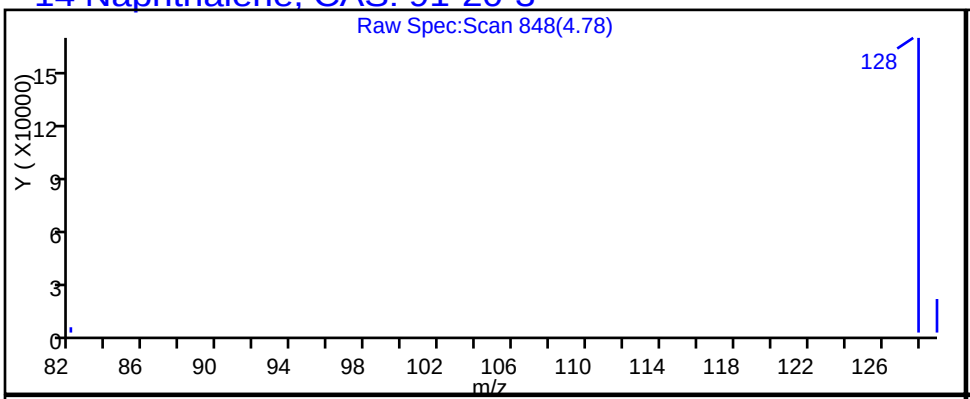
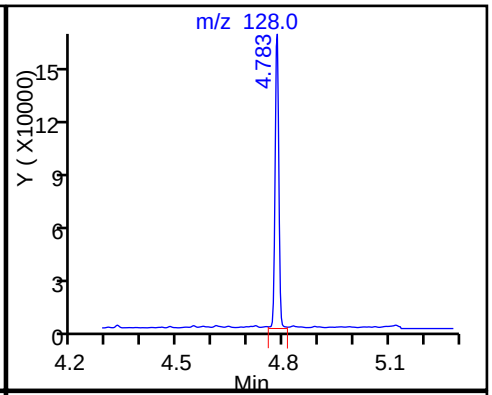
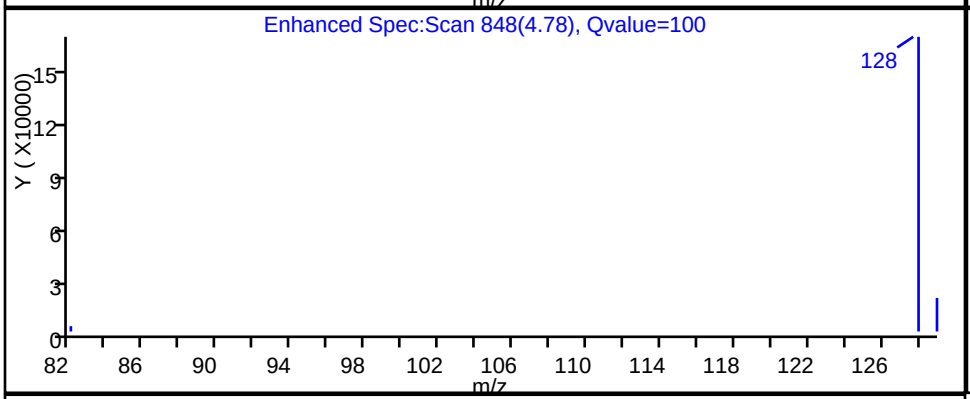
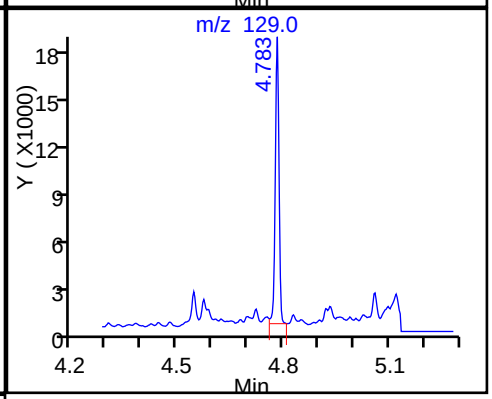
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

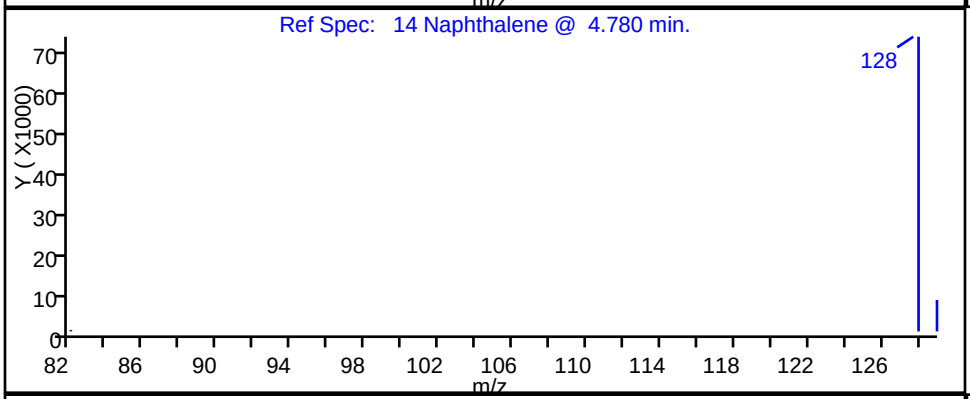
14 Naphthalene, CAS: 91-20-3

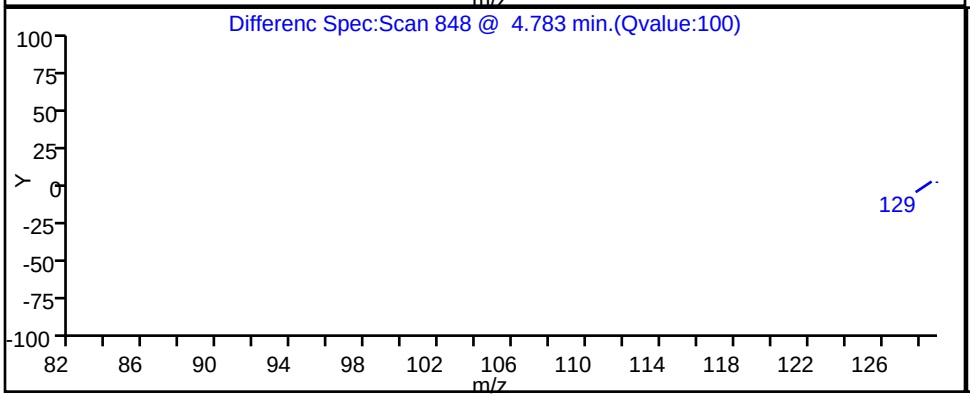


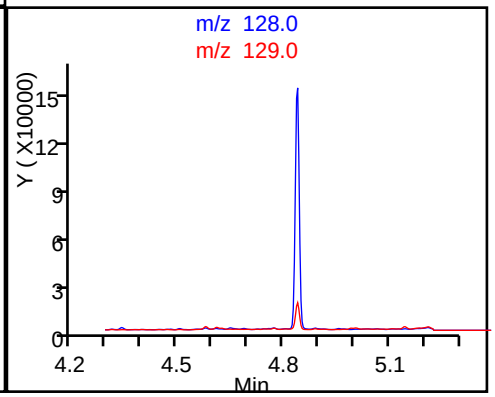












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU03-A DL | Lab Sample ID: 280-50614-9 DL

Matrix: Solid | Lab File ID: X4_8924.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:00

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 30.79(g) | Date Analyzed: 01/02/2014 18:01

Con. Extract Vol.: 1000(uL) | Dilution Factor: 5

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	670000		24000	5800
50-32-8	Benzo[a]pyrene	290000		24000	3600
56-55-3	Benzo[a]anthracene	190000		24000	4400
207-08-9	Benzo[k]fluoranthene	210000		24000	4900
191-24-2	Benzo[g,h,i]perylene	260000		24000	5400
218-01-9	Chrysene	270000		24000	4900
206-44-0	Fluoranthene	340000		24000	4900
129-00-0	Pyrene	400000		24000	5400
193-39-5	Indeno[1,2,3-cd]pyrene	290000		24000	5400

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	72	D	39-120
4165-60-0	Nitrobenzene-d5	76	D	42-120
1718-51-0	Terphenyl-d14	113	D	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8924.D
Lims ID: 280-50614-A-9-B Lab Sample ID: 280-50614-9
Client ID: FSA-SD-DU03-A
Sample Type: Client
Inject. Date: 02-Jan-2014 18:01:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-0018755-010
Misc. Info.: 280-50614-a-9-b,5, =280-50614-A-9-B,5,
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 08:57:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	93	22837	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	99	44189	600.0	
* 3 Chrysene-d12	240	11.956	11.964	-0.008	93	51470	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	98	1943	76.0	
$ 5 2-Fluorobiphenyl	172	5.626	5.633	-0.007	99	3905	72.5	
$ 6 Terphenyl-d14	244	9.521	9.532	-0.011	91	6063	113.3	
14 Naphthalene	128	4.783	4.786	-0.003	100	20235	289.6	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	98	20914	423.2	
19 Acenaphthylene	152	6.119	6.119	0.0	100	48412	635.7	
20 Acenaphthene	153	6.261	6.269	-0.008	88	3135	66.0	
22 Fluorene	166	6.696	6.702	-0.006	89	4393	77.4	
24 Phenanthrene	178	7.548	7.553	-0.005	100	79552	878.4	
25 Anthracene	178	7.602	7.602	0.0	99	50290	564.1	
27 Fluoranthene	202	8.979	8.979	0.0	100	203236	2069.2	
28 Pyrene	202	9.353	9.359	-0.006	100	246939	2436.7	
31 Benzo[a]anthracene	228	11.924	11.932	-0.008	99	123369	1179.2	
32 Chrysene	228	12.027	12.035	-0.008	100	161634	1633.9	M
34 Benzo[b]fluoranthene	252	15.264	15.264	0.0	100	394053	4112.2	
35 Benzo[k]fluoranthene	252	15.346	15.357	-0.011	100	126257	1280.9	
36 Benzo[a]pyrene	252	16.393	16.397	-0.004	100	165496	1782.1	
38 Indeno[1,2,3-cd]pyrene	276	19.118	19.118	0.0	99	161963	1771.7	
37 Dibenz(a,h)anthracene	278	19.144	19.152	-0.008	69	42855	463.9	
39 Benzo[g,h,i]perylene	276	19.596	19.592	0.004	99	155860	1588.3	

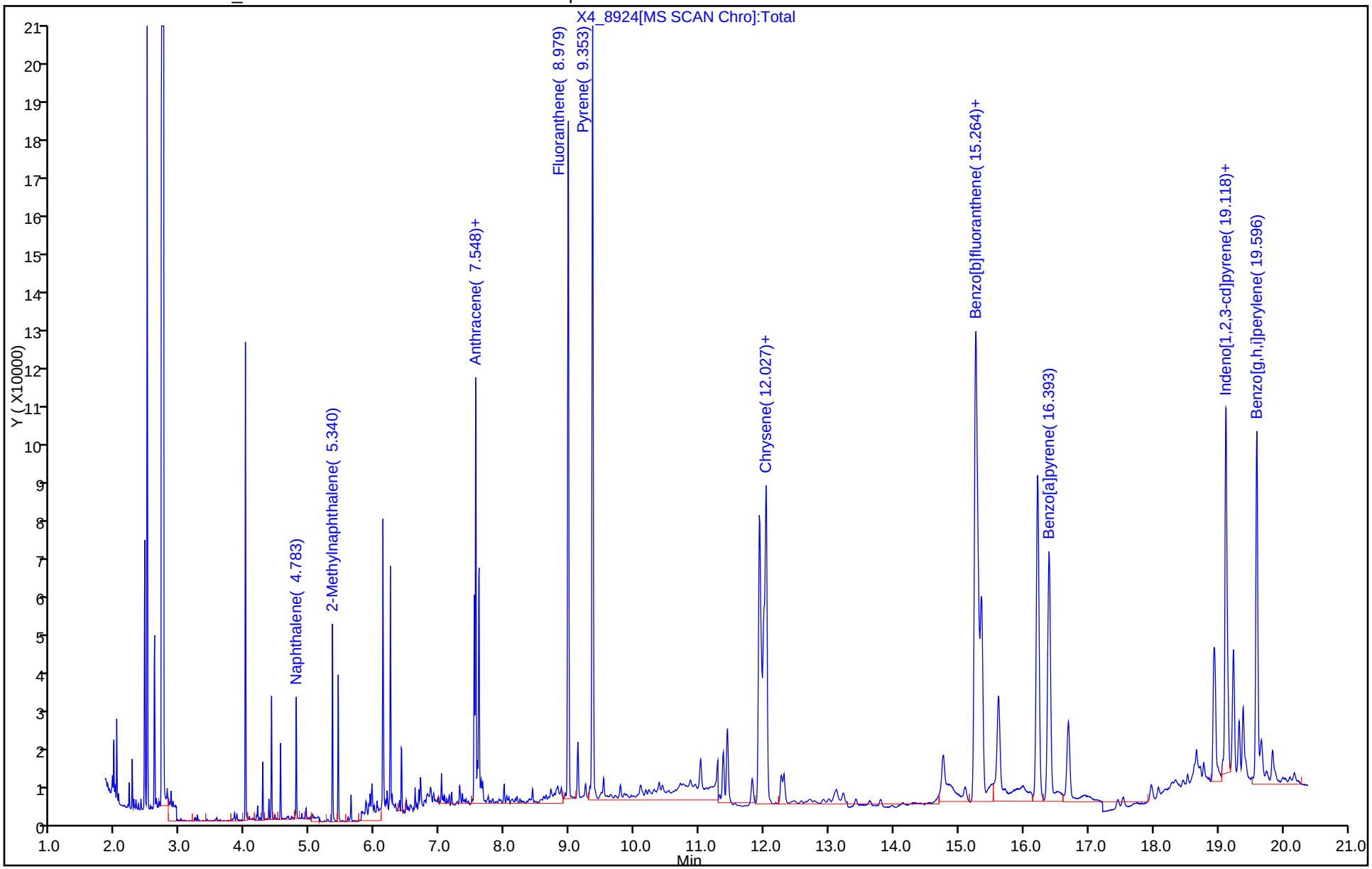
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:06:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8924.D				
Injection Date:	02-Jan-2014 18:01:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9	Worklist Smp#:	10
Client ID:	FSA-SD-DU03-A				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	10
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

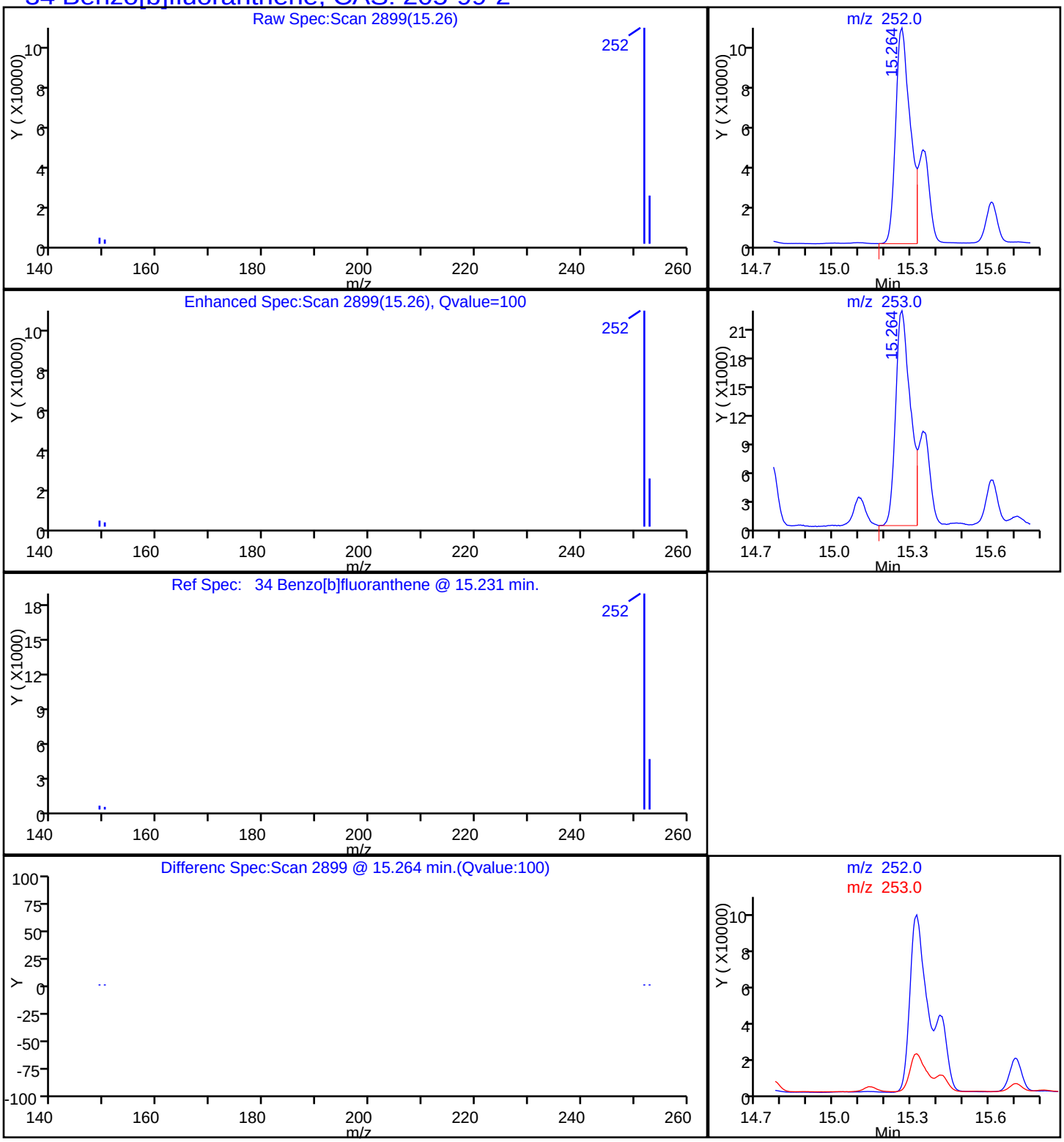


Report Date: 06-Jan-2014 10:06:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8924.D				
Injection Date:	02-Jan-2014 18:01:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

34 Benzo[b]fluoranthene, CAS: 205-99-2

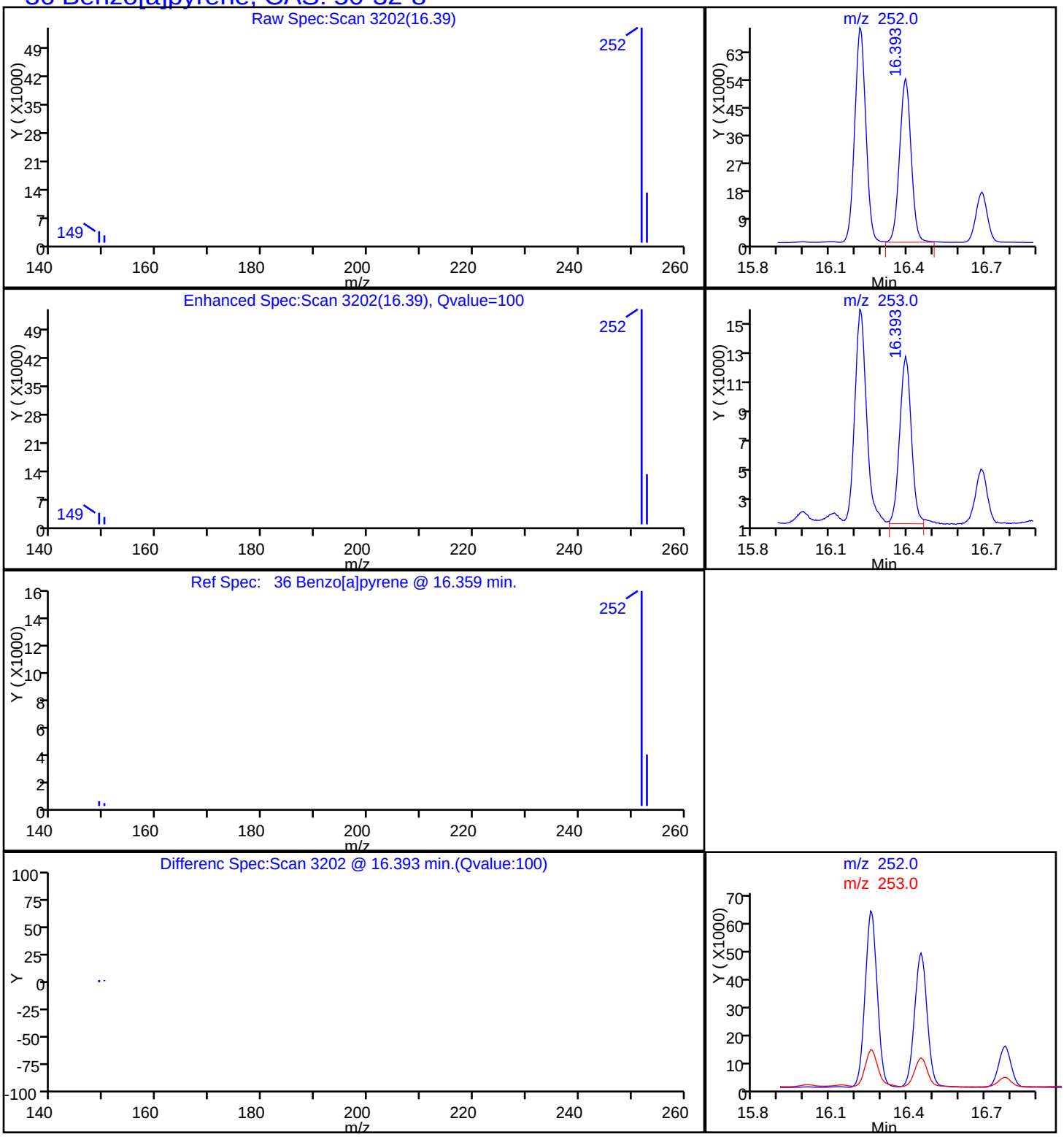


Report Date: 06-Jan-2014 10:06:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8924.D				
Injection Date:	02-Jan-2014 18:01:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[a]pyrene, CAS: 50-32-8

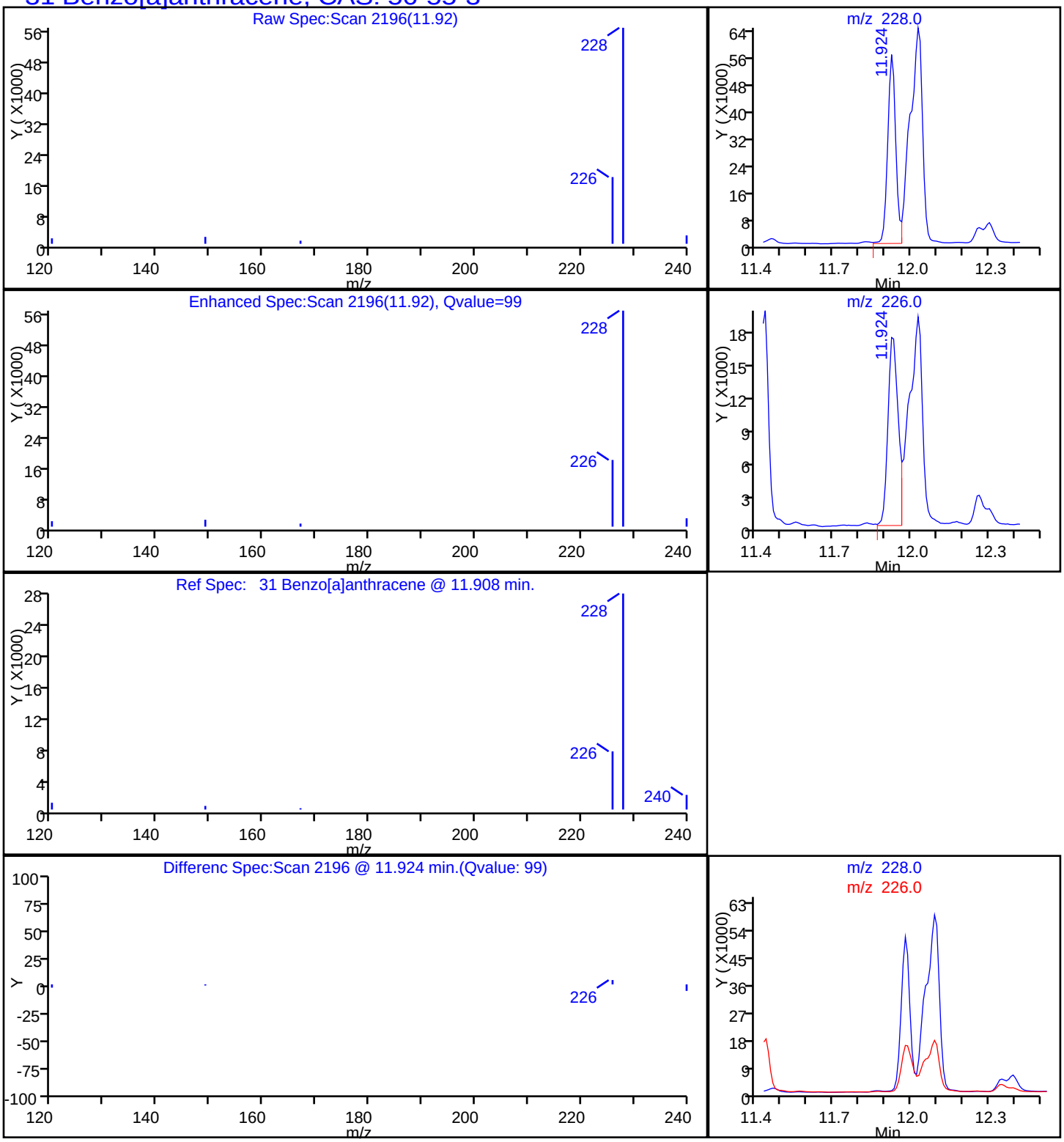


Report Date: 06-Jan-2014 10:06:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8924.D				
Injection Date:	02-Jan-2014 18:01:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3



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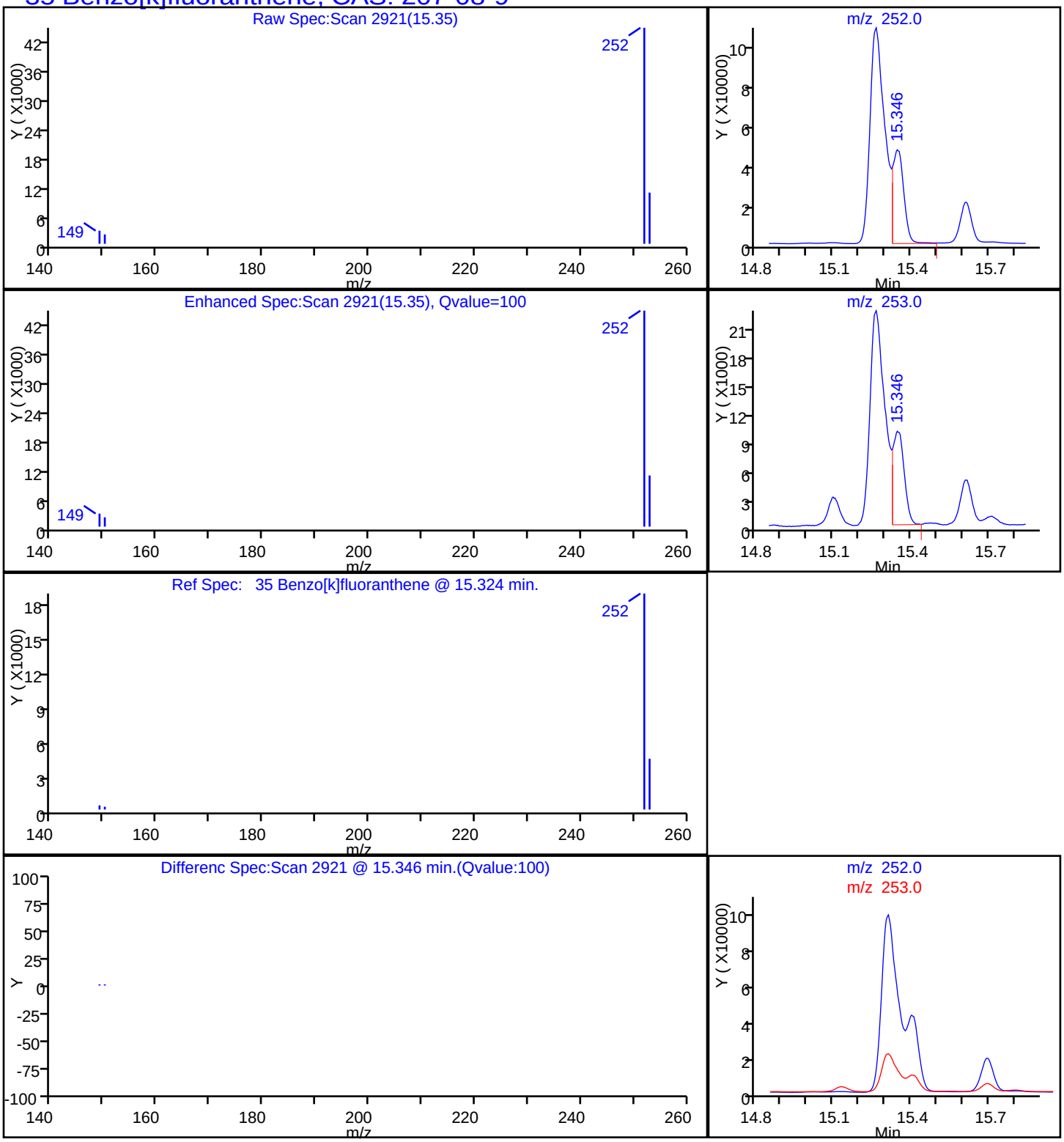
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8924.D				
Injection Date:	02-Jan-2014 18:01:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9



Report Date: 06-Jan-2014 10:06:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

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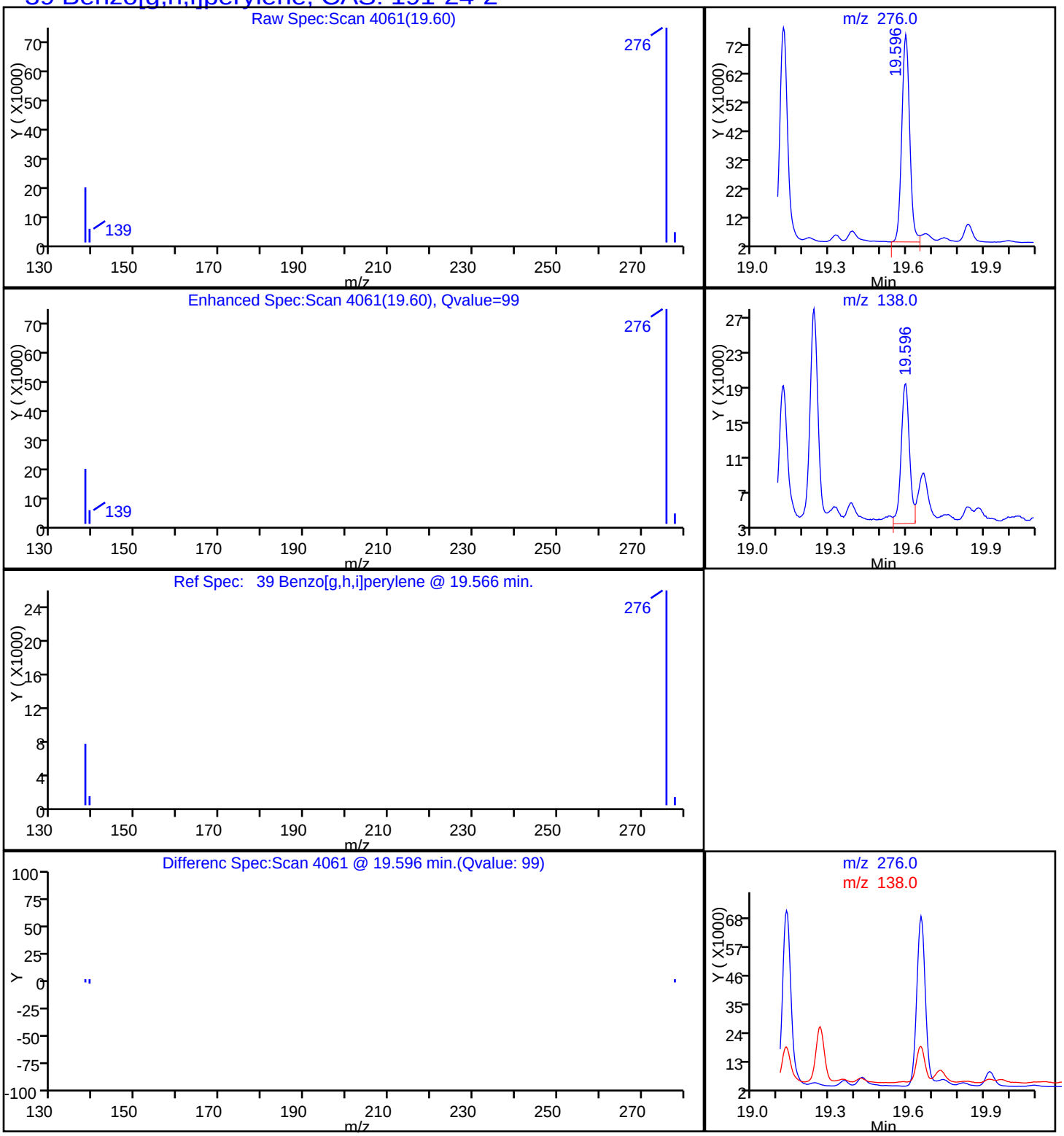
Injection Date:	02-Jan-2014 18:01:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[g,h,i]perylene, CAS: 191-24-2



Report Date: 06-Jan-2014 10:06:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

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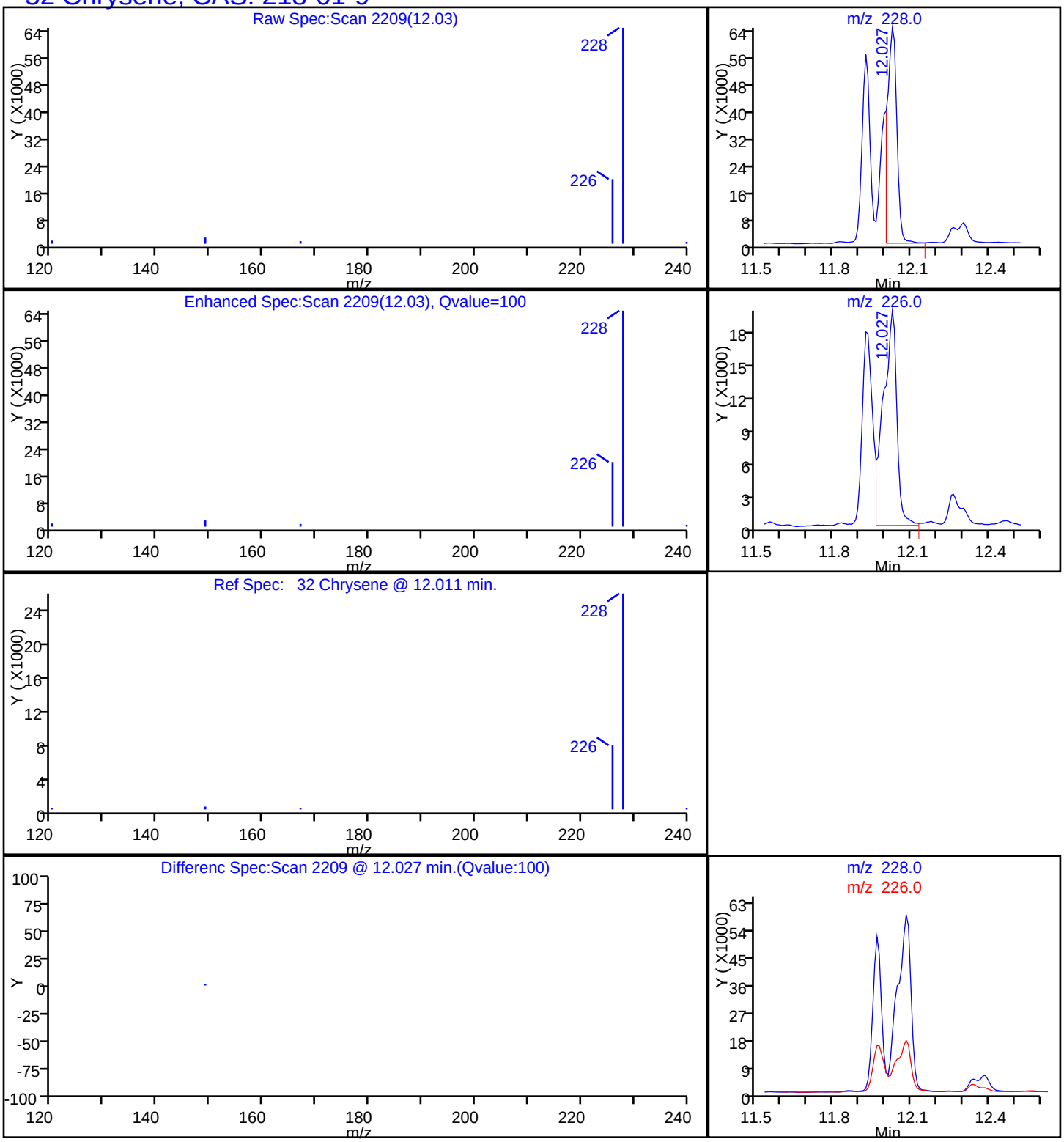
Injection Date:	02-Jan-2014 18:01:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

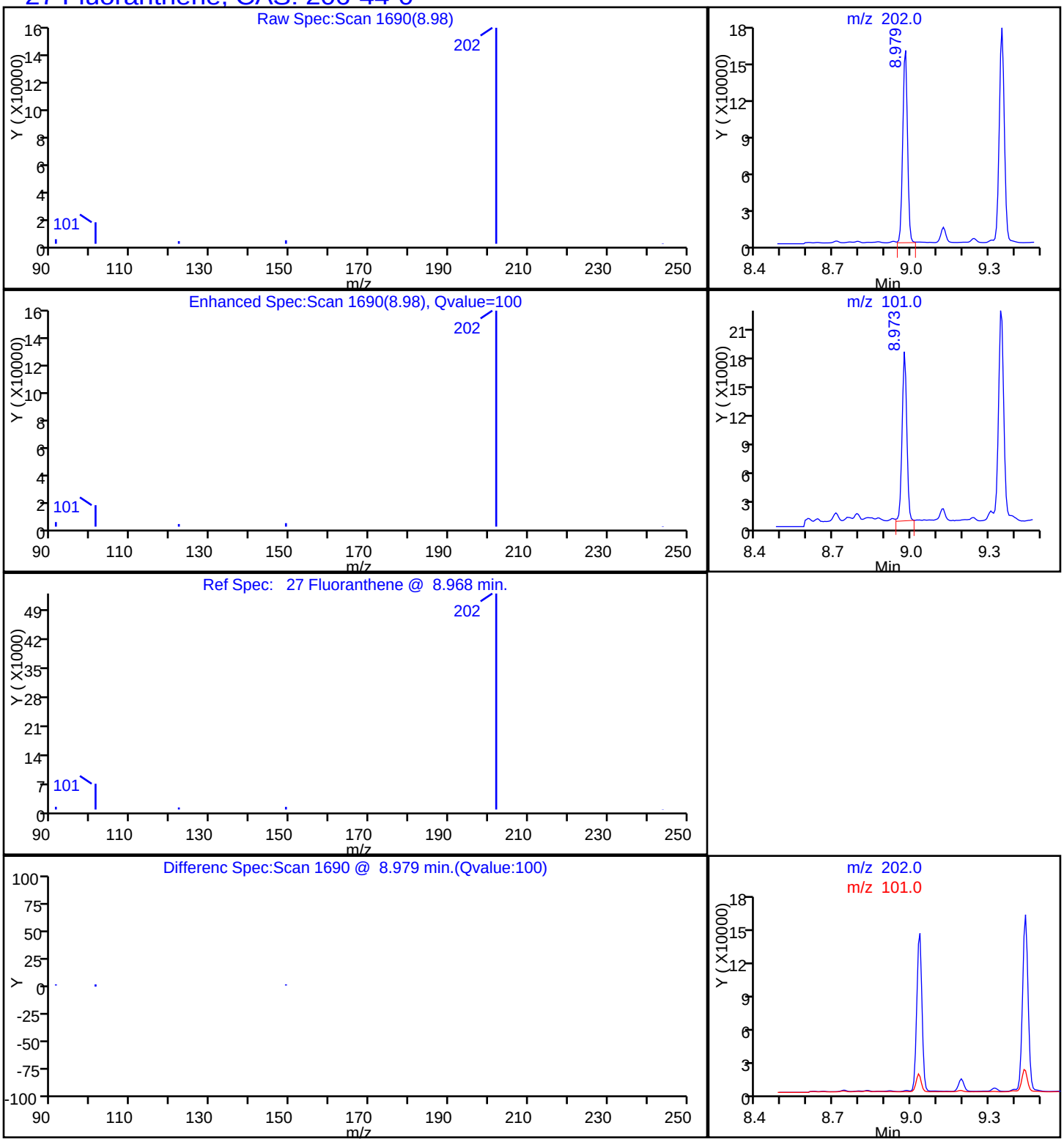


Report Date: 06-Jan-2014 10:06:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8924.D				
Injection Date:	02-Jan-2014 18:01:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0

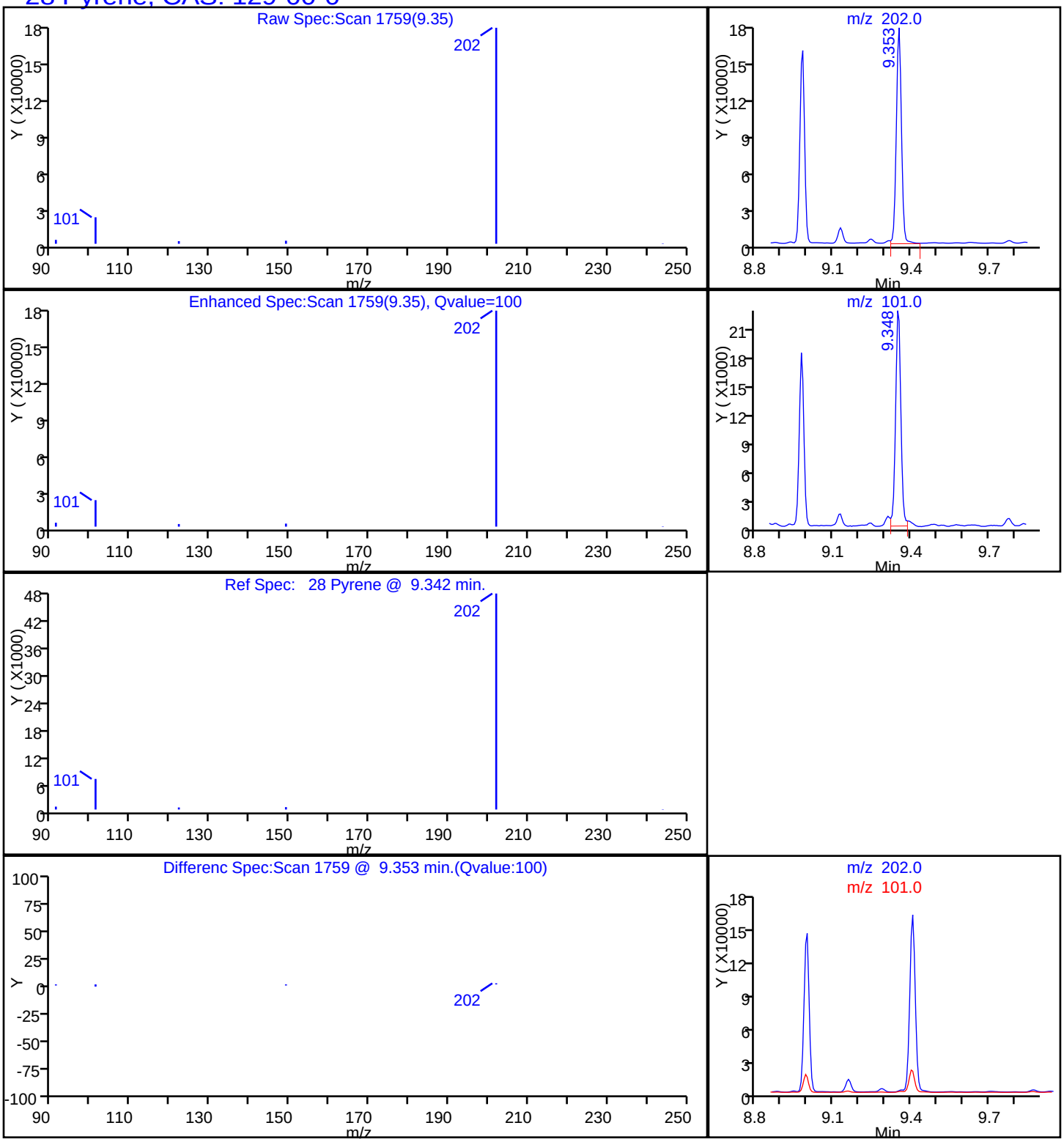


Report Date: 06-Jan-2014 10:06:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8924.D				
Injection Date:	02-Jan-2014 18:01:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0

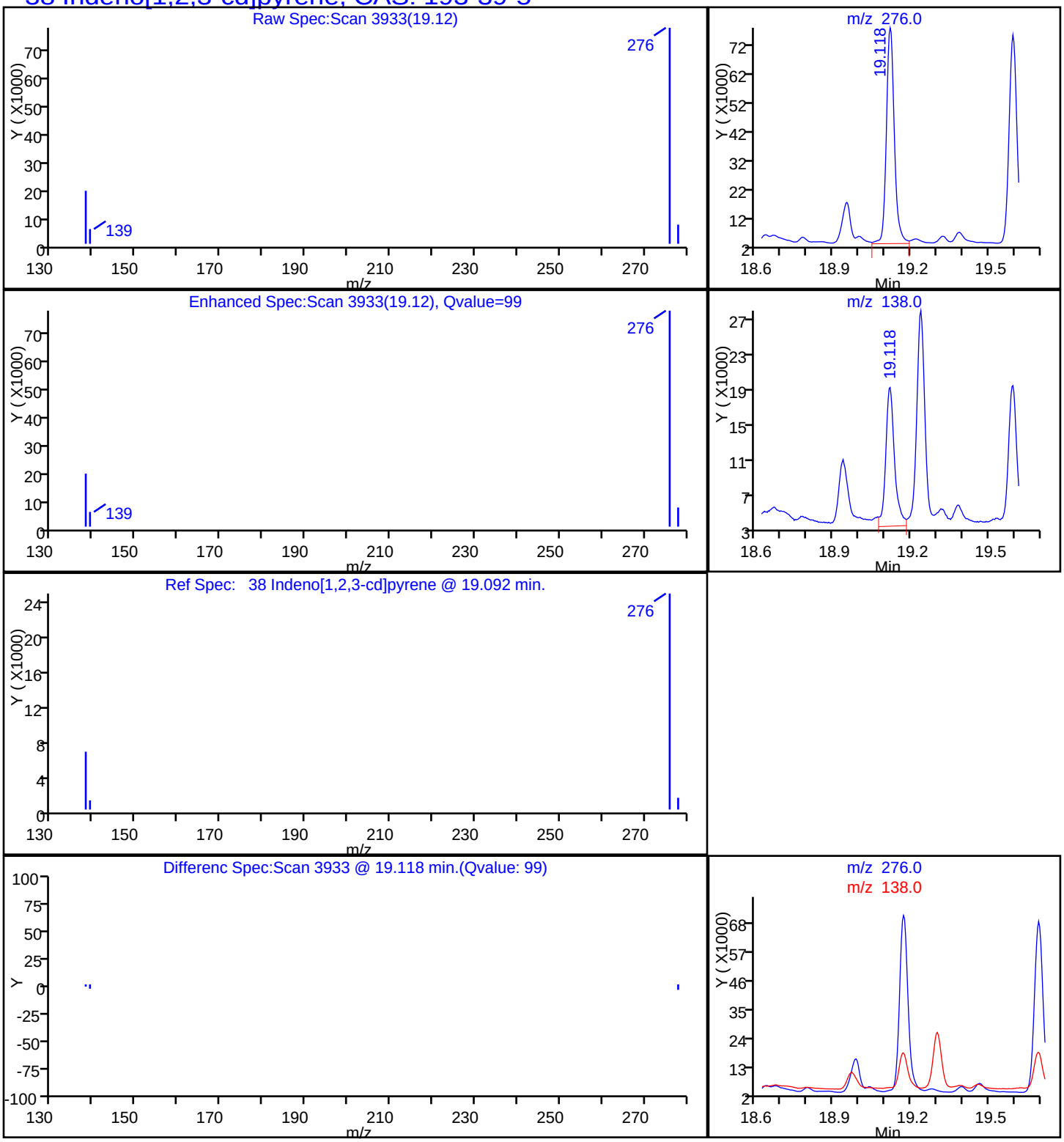


Report Date: 06-Jan-2014 10:06:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8924.D				
Injection Date:	02-Jan-2014 18:01:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



Manual Integration/User Assign Peak Report

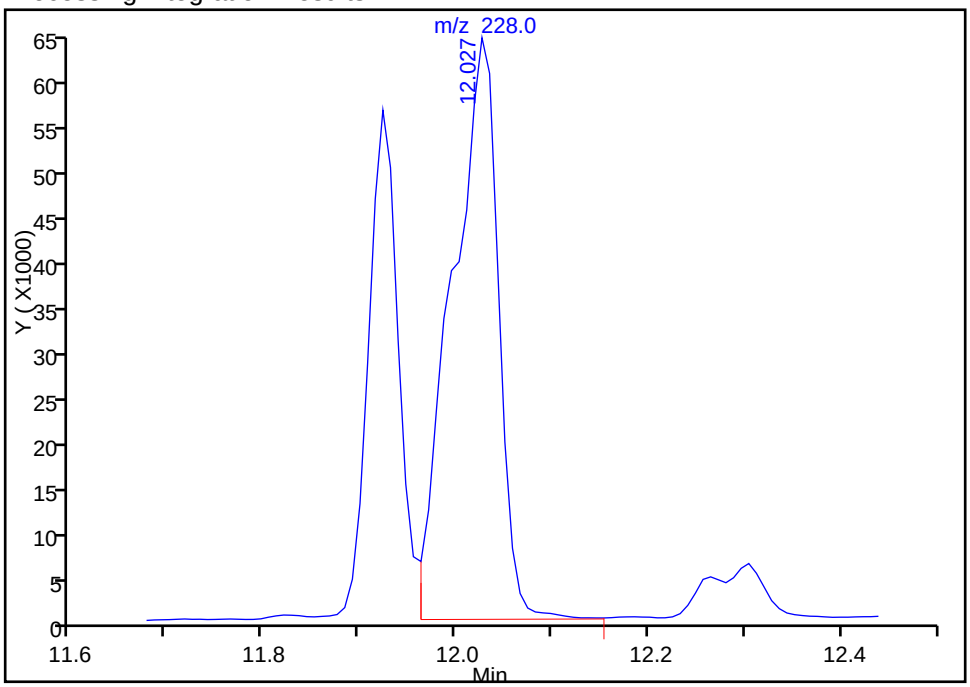
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8924.D				
Injection Date:	02-Jan-2014 18:01:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-9-B	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

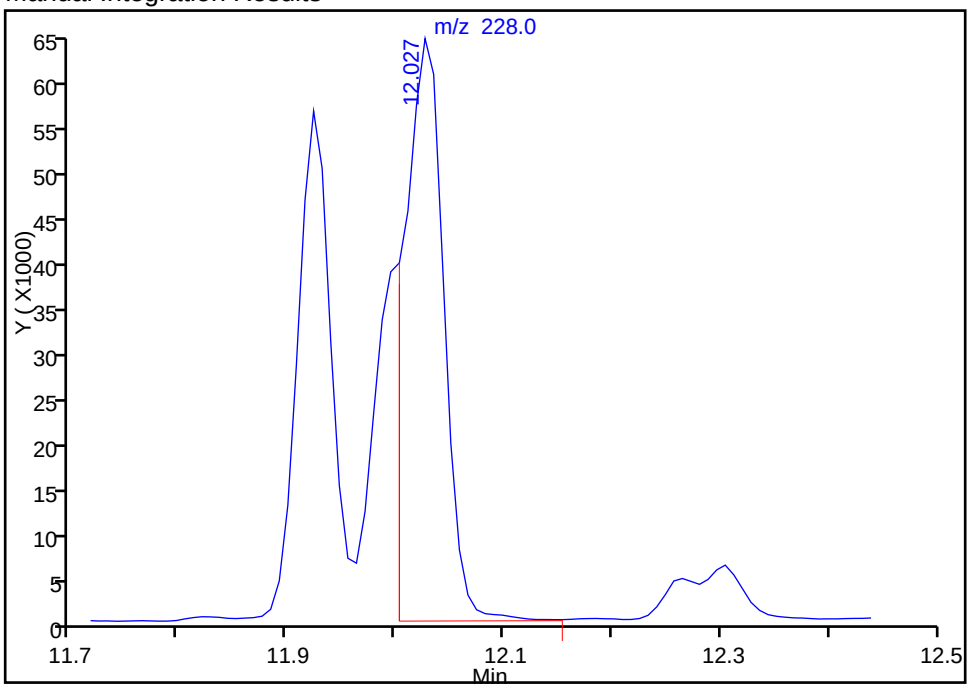
Processing Integration Results

RT: 12.03
Response: 215196
Amount: 2175.3925



Manual Integration Results

RT: 12.03
Response: 161634
Amount: 1633.9402



Reviewer: vasquezk, 06-Jan-2014 08:57:18
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU03-B | Lab Sample ID: 280-50614-10

Matrix: Solid | Lab File ID: X4_8929.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:05

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 30.58(g) | Date Analyzed: 01/02/2014 20:20

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
85-01-8	Phenanthrene	95000		4900	1100
120-12-7	Anthracene	110000		4900	710
53-70-3	Dibenz(a,h)anthracene	75000		4900	1300
83-32-9	Acenaphthene	8300		4900	160
208-96-8	Acenaphthylene	93000		4900	170
86-73-7	Fluorene	11000		4900	460
91-57-6	2-Methylnaphthalene	44000		4900	300
91-20-3	Naphthalene	39000		4900	320

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	67		39-120
4165-60-0	Nitrobenzene-d5	71		42-120
1718-51-0	Terphenyl-d14	101		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8929.D
Lims ID: 280-50614-A-10-B Lab Sample ID: 280-50614-10
Client ID: FSA-SD-DU03-B
Sample Type: Client
Inject. Date: 02-Jan-2014 20:20:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-0018755-015
Misc. Info.: 280-50614-a-10-b =280-50614-A-10-B
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 09:01:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	84	23089	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	98	43381	600.0	
* 3 Chrysene-d12	240	11.964	11.964	0.0	55	50763	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	99	9233	357.3	
$ 5 2-Fluorobiphenyl	172	5.630	5.633	-0.003	100	18216	334.4	
$ 6 Terphenyl-d14	244	9.521	9.532	-0.011	95	26529	505.1	
14 Naphthalene	128	4.783	4.786	-0.003	100	83365	1180.0	
15 2-Methylnaphthalene	142	5.344	5.344	0.0	99	67789	1356.9	
19 Acenaphthylene	152	6.119	6.119	0.0	100	218378	2836.4	
20 Acenaphthene	153	6.261	6.269	-0.008	92	12149	253.0	
22 Fluorene	166	6.696	6.702	-0.006	91	18926	329.7	
24 Phenanthrene	178	7.548	7.553	-0.005	100	256937	2890.0	
25 Anthracene	178	7.602	7.602	0.0	100	296074	3383.0	
27 Fluoranthene	202	8.979	8.979	0.0	100	912190	9460.3	E
28 Pyrene	202	9.353	9.359	-0.006	100	1143572	11494	E
31 Benzo[a]anthracene	228	11.932	11.932	0.0	98	643015	6231.9	E
32 Chrysene	228	12.035	12.035	0.0	100	785611	8052.3	EM
34 Benzo[b]fluoranthene	252	15.275	15.264	0.011	100	1936209	20487	E
35 Benzo[k]fluoranthene	252	15.361	15.357	0.004	100	624995	6428.8	E
36 Benzo[a]pyrene	252	16.404	16.397	0.007	100	846517	9242.6	E
38 Indeno[1,2,3-cd]pyrene	276	19.129	19.118	0.011	99	816344	9054.2	E
37 Dibenz(a,h)anthracene	278	19.156	19.152	0.004	73	209333	2297.5	
39 Benzo[g,h,i]perylene	276	19.614	19.592	0.022	99	782137	8081.4	E

QC Flag Legend

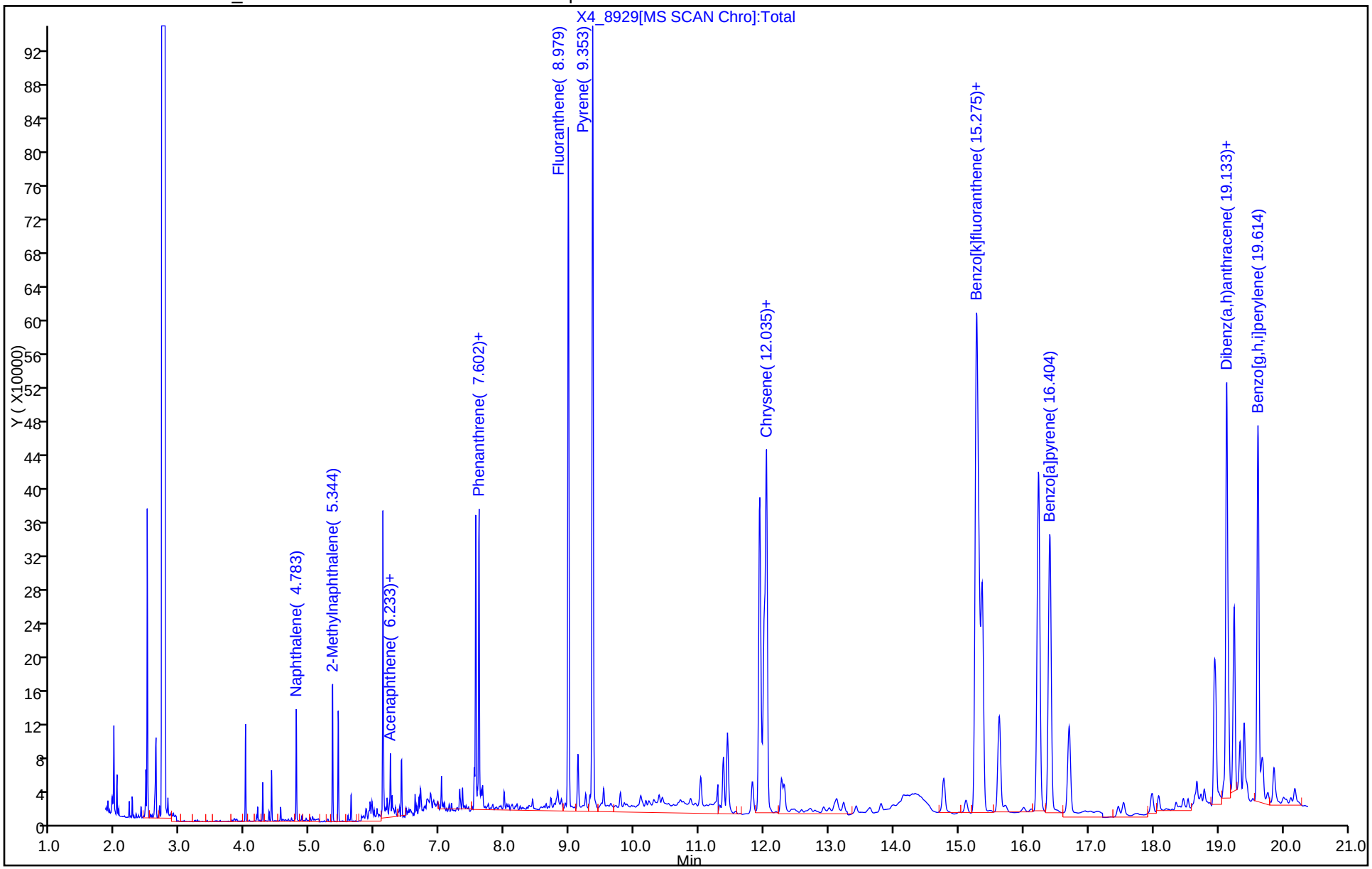
Processing Flags
E - Exceeded Maximum Amount

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:06:09 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8929.D				
Injection Date:	02-Jan-2014 20:20:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10	Worklist Smp#:	15
Client ID:	FSA-SD-DU03-B				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

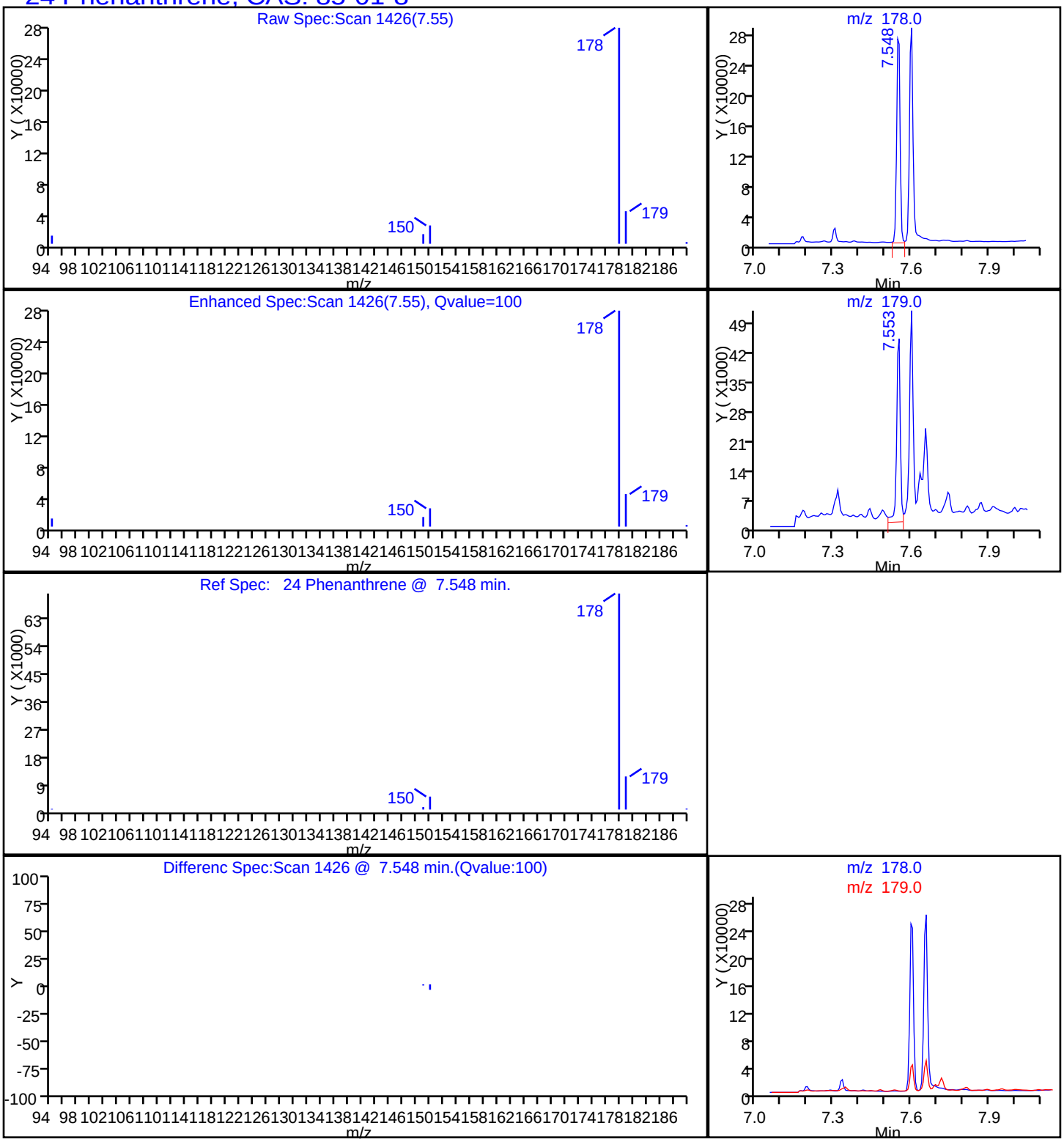


Report Date: 06-Jan-2014 10:06:09 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8929.D				
Injection Date:	02-Jan-2014 20:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8

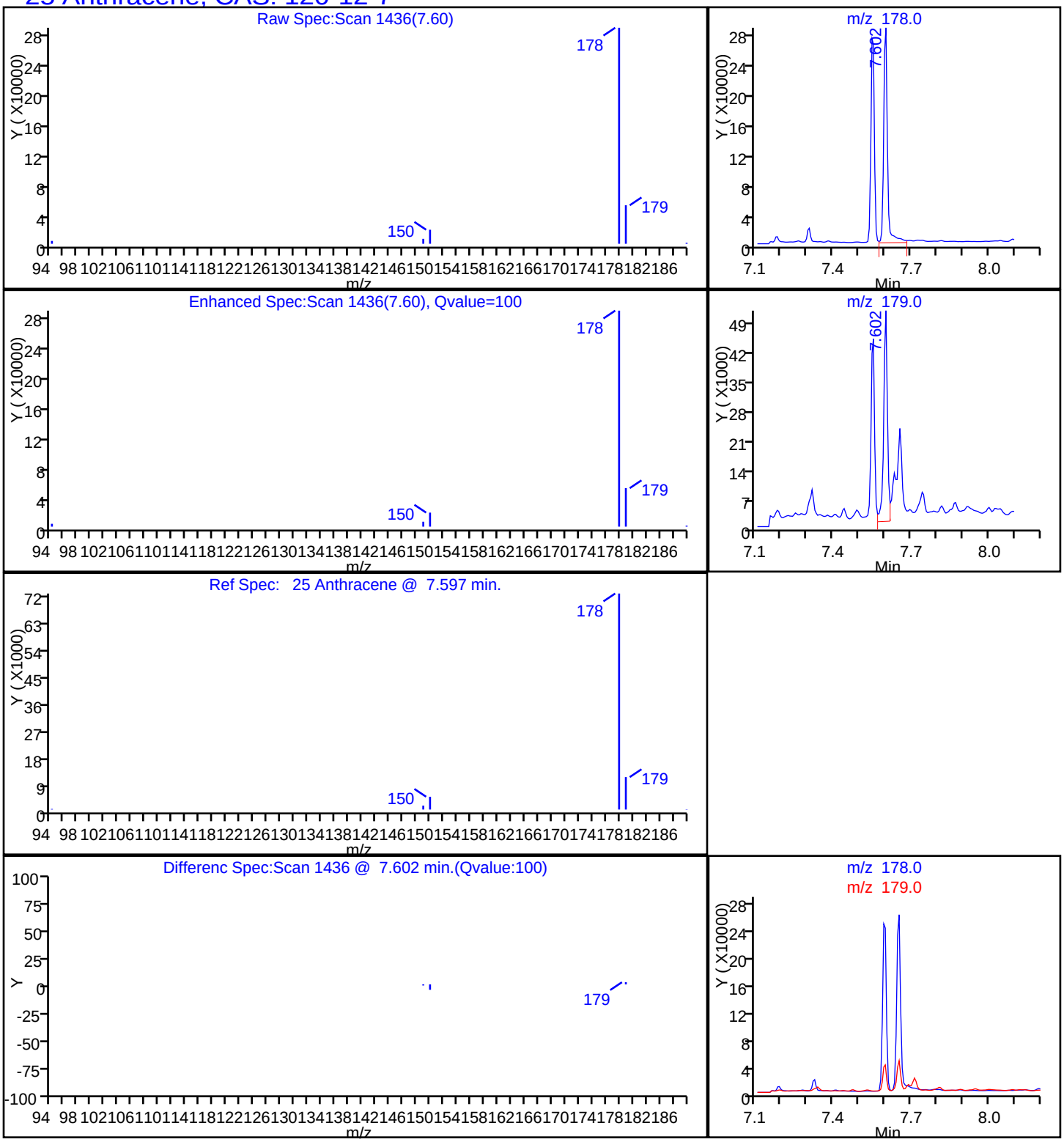


Report Date: 06-Jan-2014 10:06:09 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8929.D				
Injection Date:	02-Jan-2014 20:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7

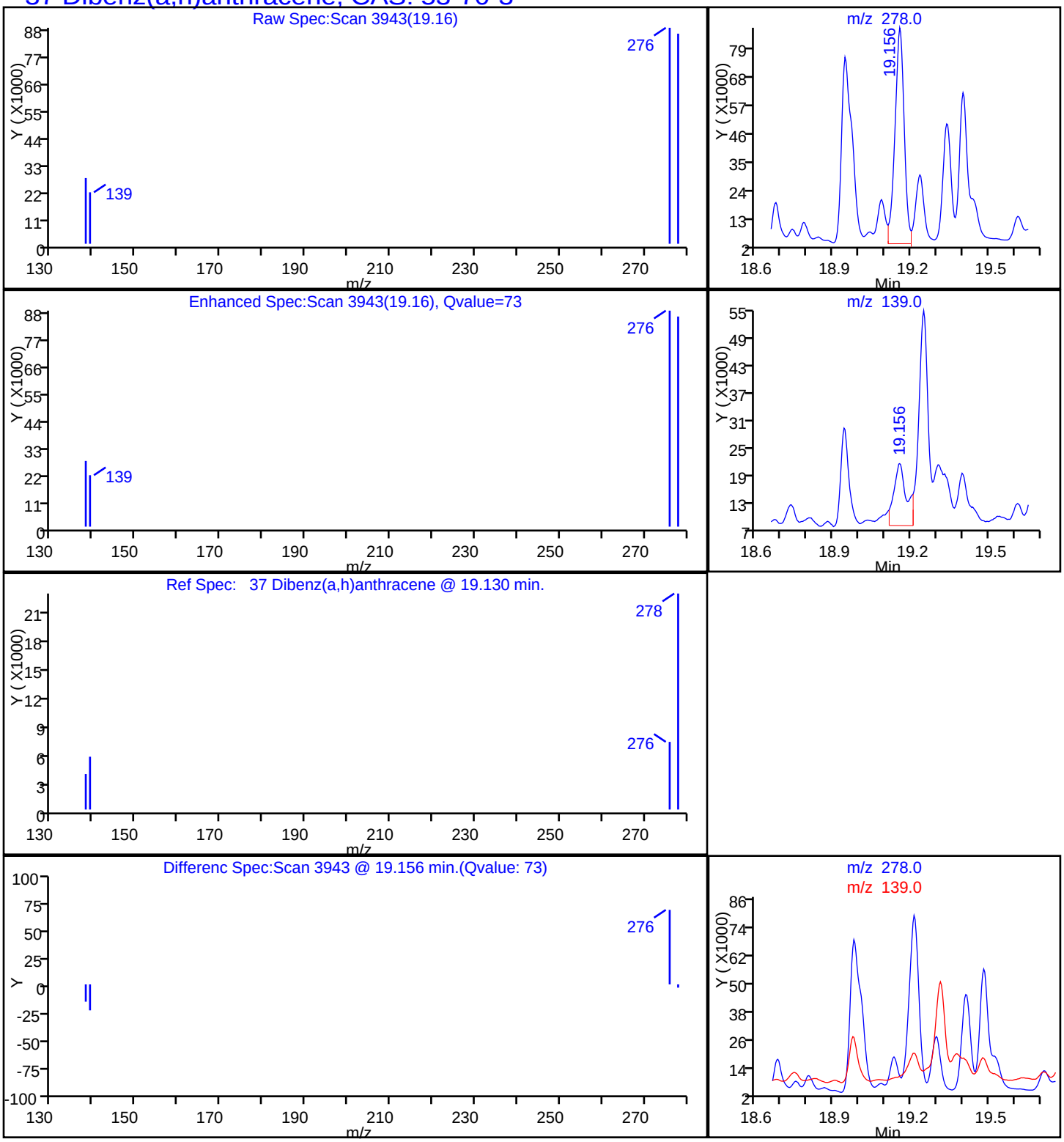


Report Date: 06-Jan-2014 10:06:09 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8929.D				
Injection Date:	02-Jan-2014 20:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3

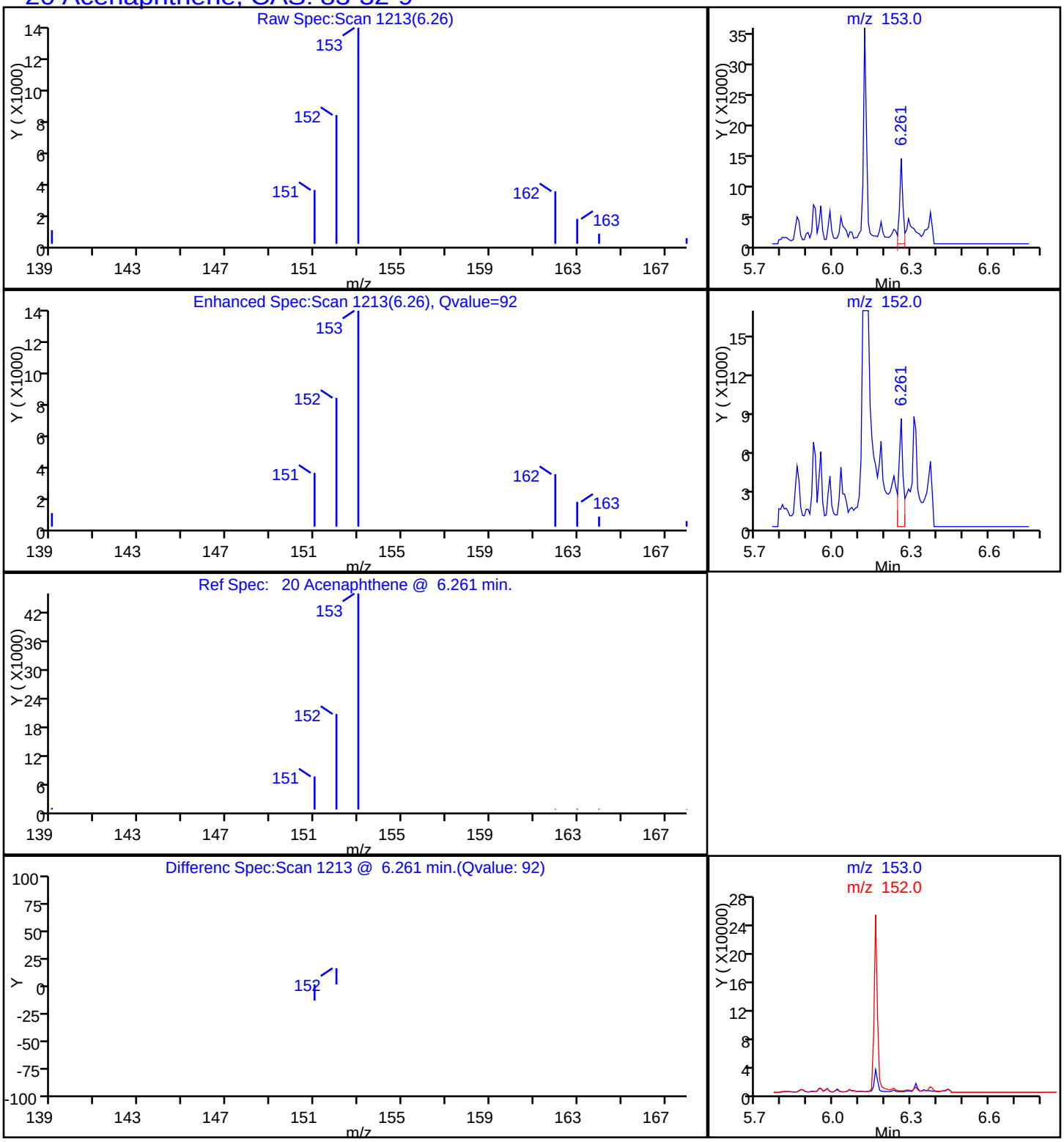


Report Date: 06-Jan-2014 10:06:09 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8929.D				
Injection Date:	02-Jan-2014 20:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9

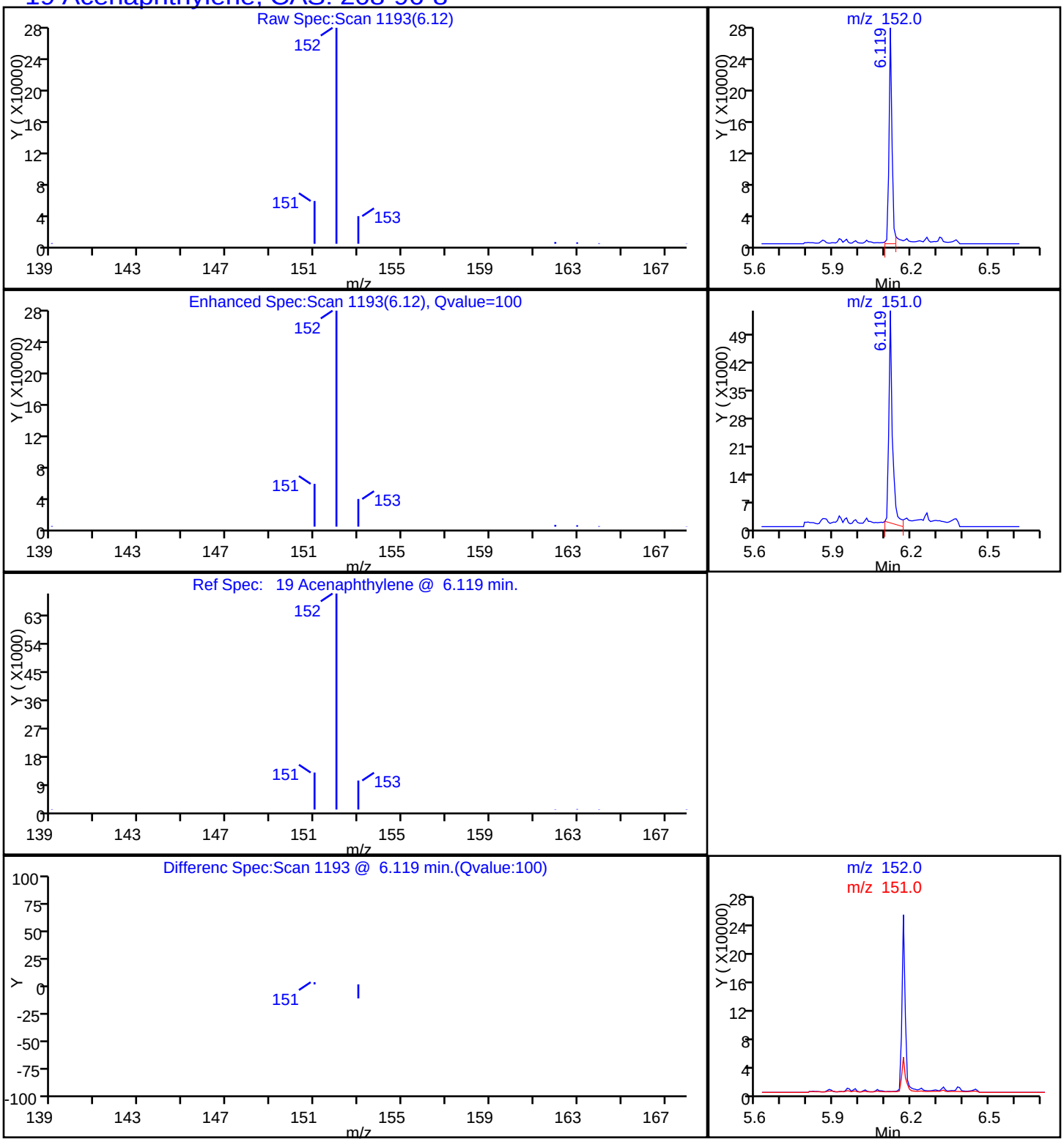


Report Date: 06-Jan-2014 10:06:09 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8929.D				
Injection Date:	02-Jan-2014 20:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

19 Acenaphthylene, CAS: 208-96-8

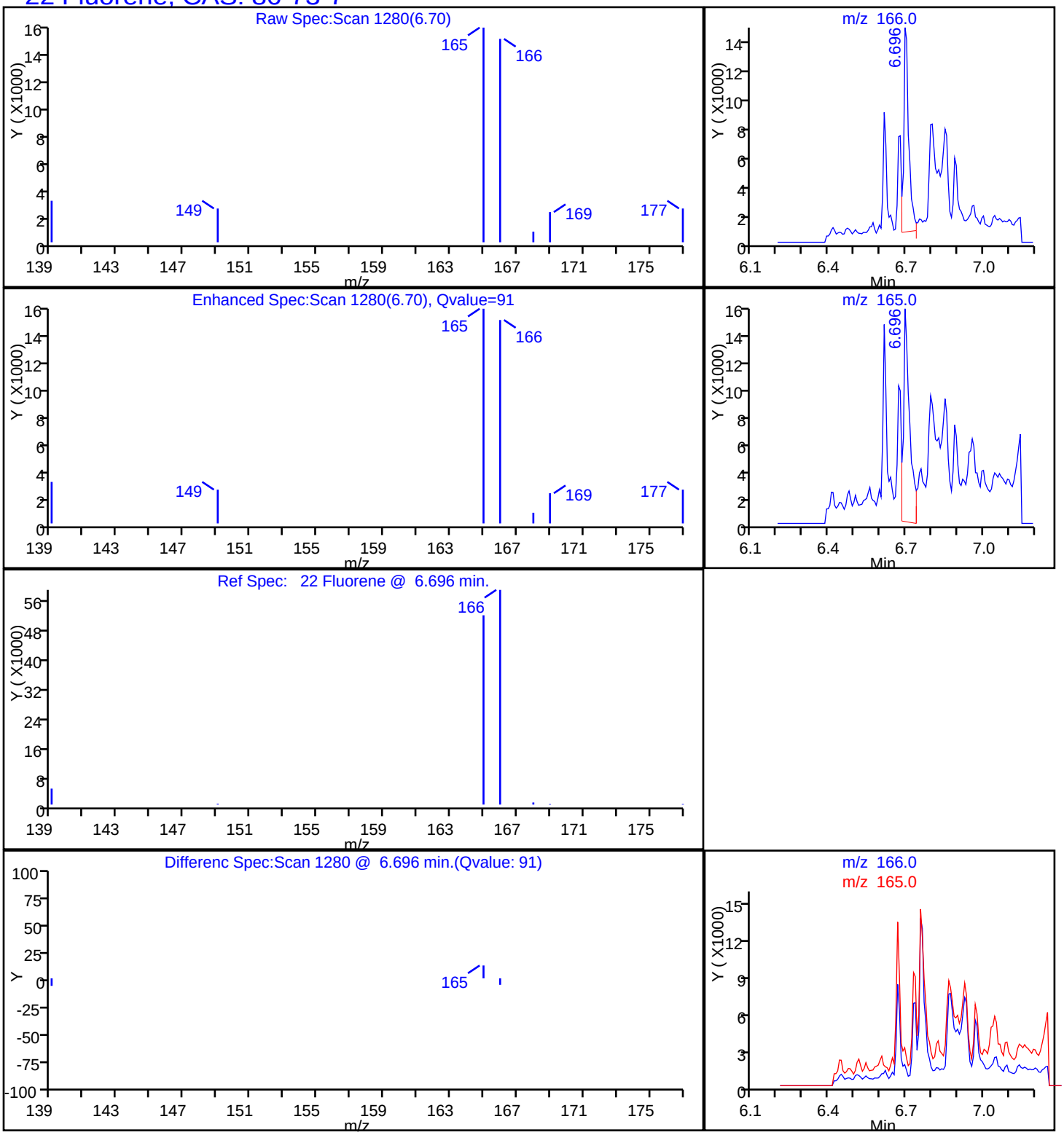


Report Date: 06-Jan-2014 10:06:09 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8929.D				
Injection Date:	02-Jan-2014 20:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7

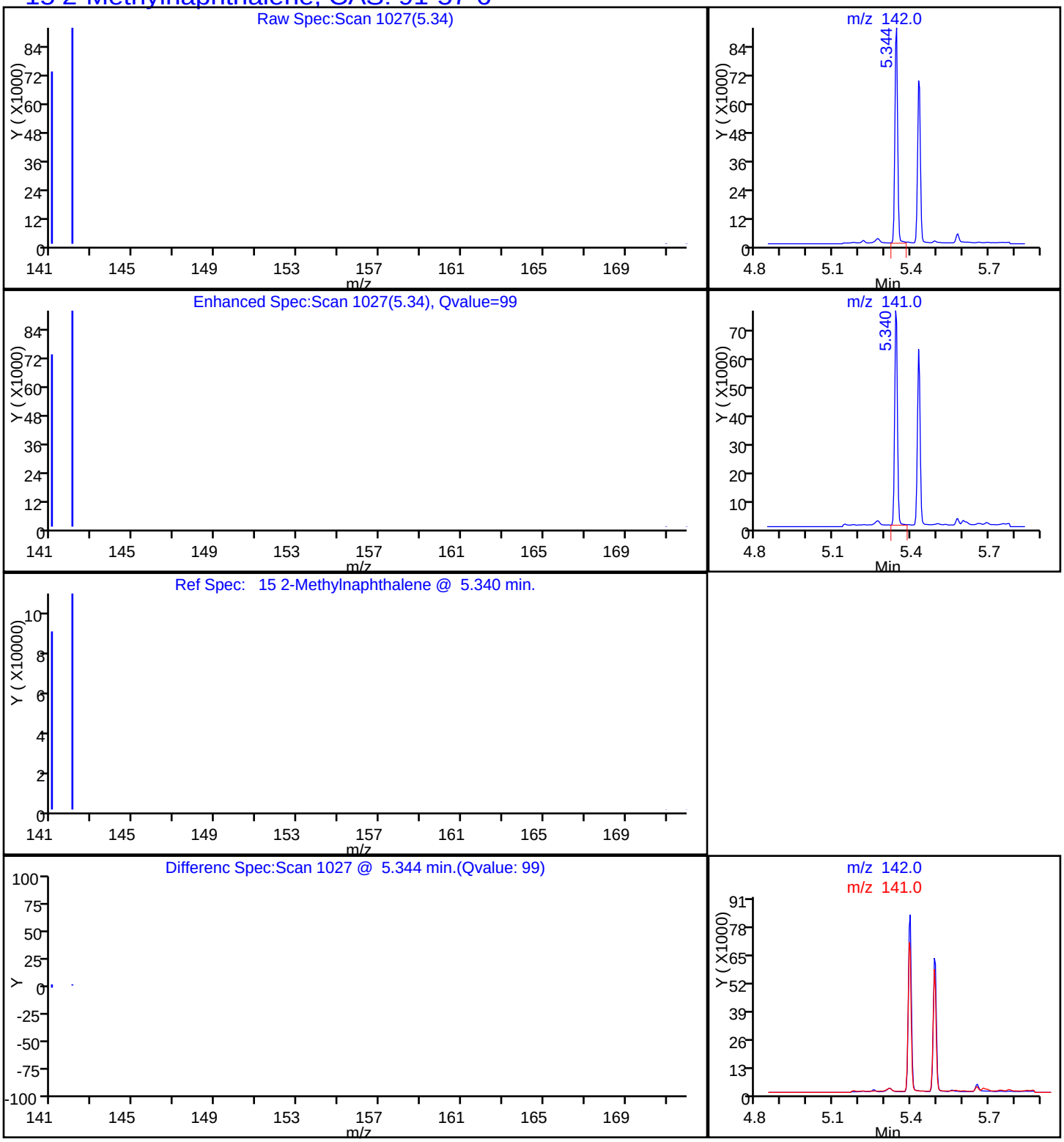


Report Date: 06-Jan-2014 10:06:09 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8929.D				
Injection Date:	02-Jan-2014 20:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 2-Methylnaphthalene, CAS: 91-57-6

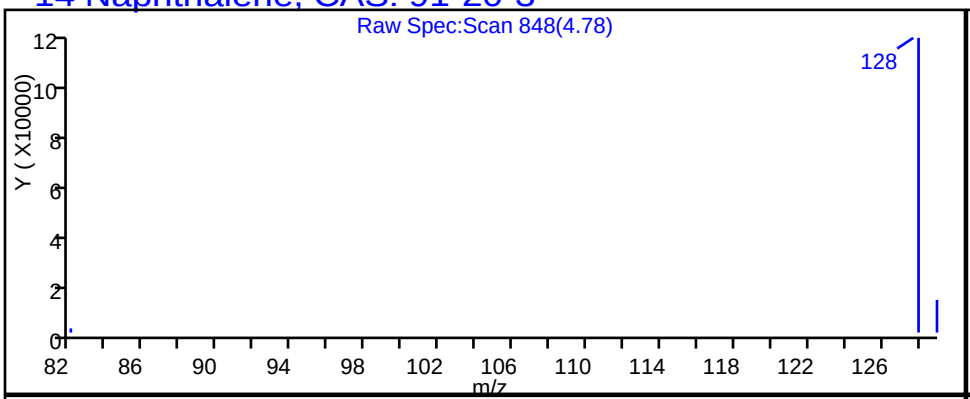


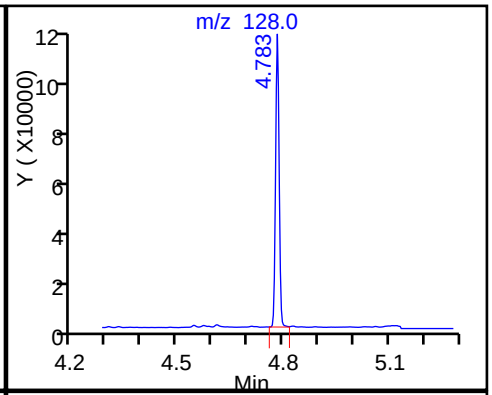
Report Date: 06-Jan-2014 10:06:09 Chrom Revision: 2.1 15-Oct-2013 07:52:24

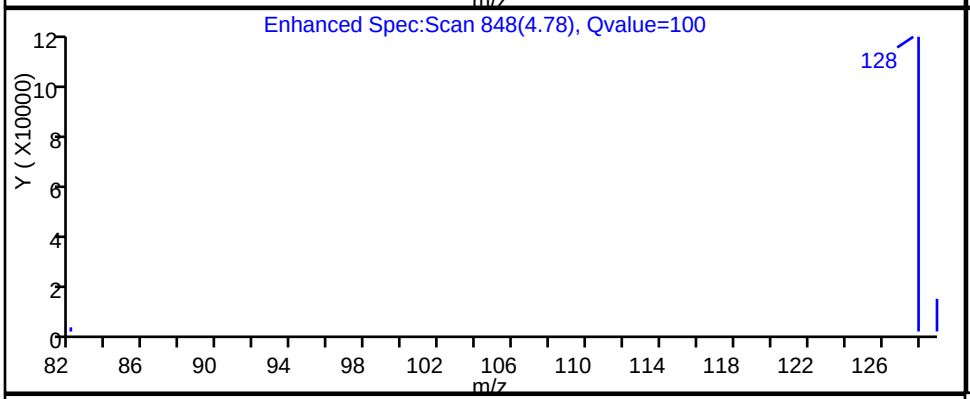
TestAmerica Denver

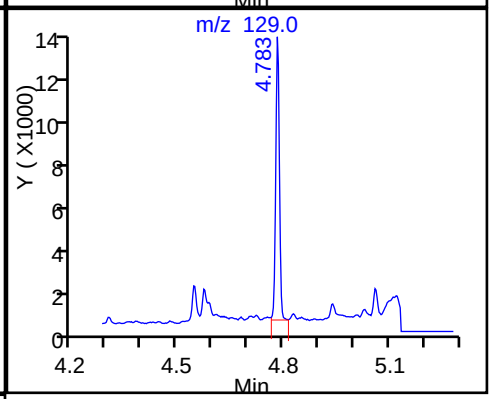
Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8929.D				
Injection Date:	02-Jan-2014 20:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

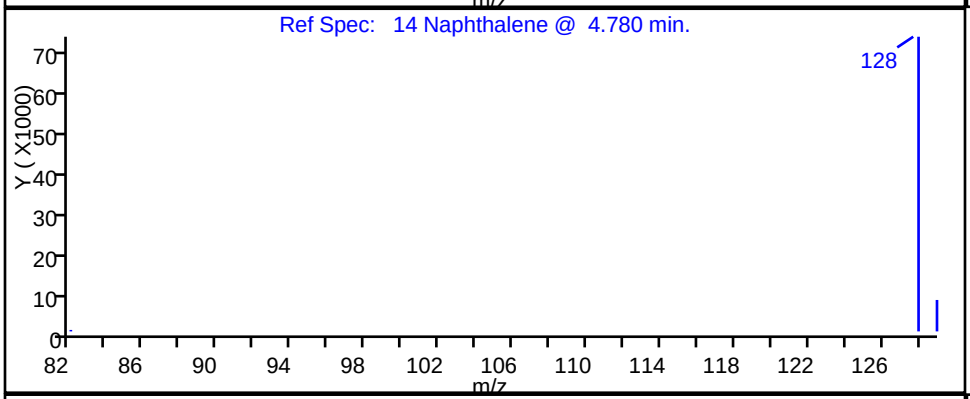
14 Naphthalene, CAS: 91-20-3

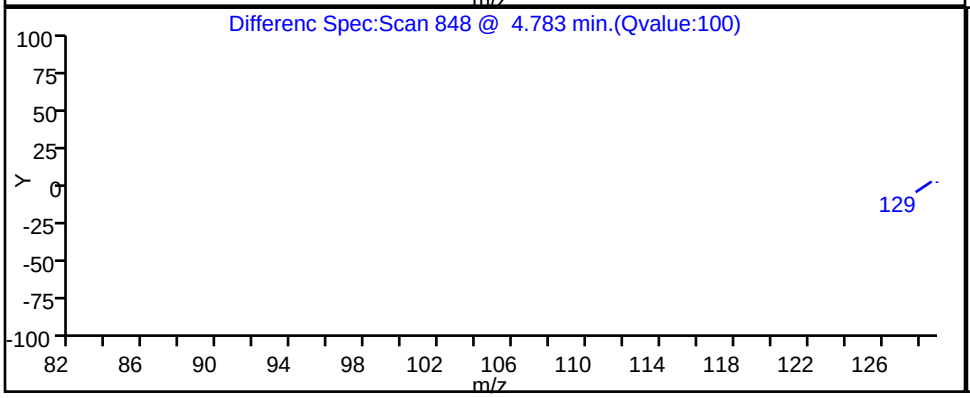


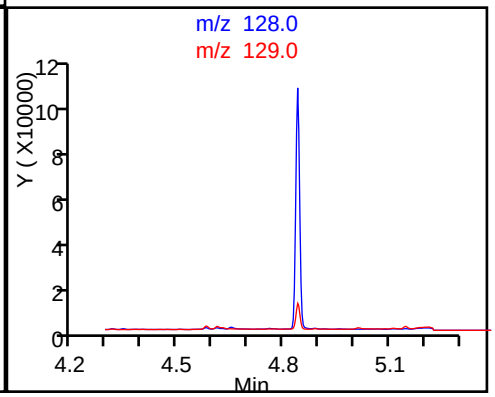












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU03-B DL | Lab Sample ID: 280-50614-10 DL

Matrix: Solid | Lab File ID: X4_8950.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:05

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 30.58(g) | Date Analyzed: 01/06/2014 13:20

Con. Extract Vol.: 1000(uL) | Dilution Factor: 5

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207515 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	630000		25000	5900
50-32-8	Benzo[a]pyrene	280000		25000	3600
56-55-3	Benzo[a]anthracene	180000		25000	4400
207-08-9	Benzo[k]fluoranthene	200000		25000	4900
191-24-2	Benzo[g,h,i]perylene	240000		25000	5400
218-01-9	Chrysene	250000		25000	4900
206-44-0	Fluoranthene	310000		25000	4900
129-00-0	Pyrene	370000		25000	5400
193-39-5	Indeno[1,2,3-cd]pyrene	270000		25000	5400

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	66	D	39-120
4165-60-0	Nitrobenzene-d5	62	D	42-120
1718-51-0	Terphenyl-d14	103	D	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8950.D
Lims ID: 280-50614-A-10-B Lab Sample ID: 280-50614-10
Client ID: FSA-SD-DU03-B
Sample Type: Client
Inject. Date: 06-Jan-2014 13:20:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-0018806-005
Misc. Info.: 280-50614-a-10-b,5, =280-50614-A-10-B,5,
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 13:44:04 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 12:12:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	90	20624	600.0	
* 1 Phenanthrene-d10	188	7.526	7.537	-0.011	99	39428	600.0	
* 3 Chrysene-d12	240	11.956	11.980	-0.024	93	48157	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	100	1433	62.1	
$ 5 2-Fluorobiphenyl	172	5.626	5.633	-0.007	99	3207	65.9	
$ 6 Terphenyl-d14	244	9.521	9.538	-0.017	94	4896	102.6	
14 Naphthalene	128	4.783	4.786	-0.003	100	13652	216.3	
15 2-Methylnaphthalene	142	5.344	5.347	-0.003	99	11545	258.7	
19 Acenaphthylene	152	6.119	6.127	-0.008	100	35236	512.4	
20 Acenaphthene	153	6.261	6.269	-0.008	90	1429	33.3	
22 Fluorene	166	6.696	6.702	-0.006	89	2653	51.7	
24 Phenanthrene	178	7.553	7.559	-0.006	100	46433	574.6	
25 Anthracene	178	7.602	7.608	-0.006	99	36545	459.4	
27 Fluoranthene	202	8.979	8.990	-0.011	100	165729	1891.1	
28 Pyrene	202	9.353	9.364	-0.011	100	203813	2254.0	
31 Benzo[a]anthracene	228	11.924	11.948	-0.024	99	109472	1118.4	
32 Chrysene	228	12.027	12.051	-0.024	100	143905	1554.8	M
34 Benzo[b]fluoranthene	252	15.264	15.287	-0.023	100	343446	3830.7	
35 Benzo[k]fluoranthene	252	15.354	15.376	-0.022	100	110559	1198.8	
36 Benzo[a]pyrene	252	16.397	16.419	-0.022	100	146571	1686.9	
38 Indeno[1,2,3-cd]pyrene	276	19.122	19.130	-0.008	98	140973	1648.2	
37 Dibenz(a,h)anthracene	278	19.148	19.167	-0.019	75	36205	418.9	
39 Benzo[g,h,i]perylene	276	19.599	19.611	-0.012	99	136404	1485.7	

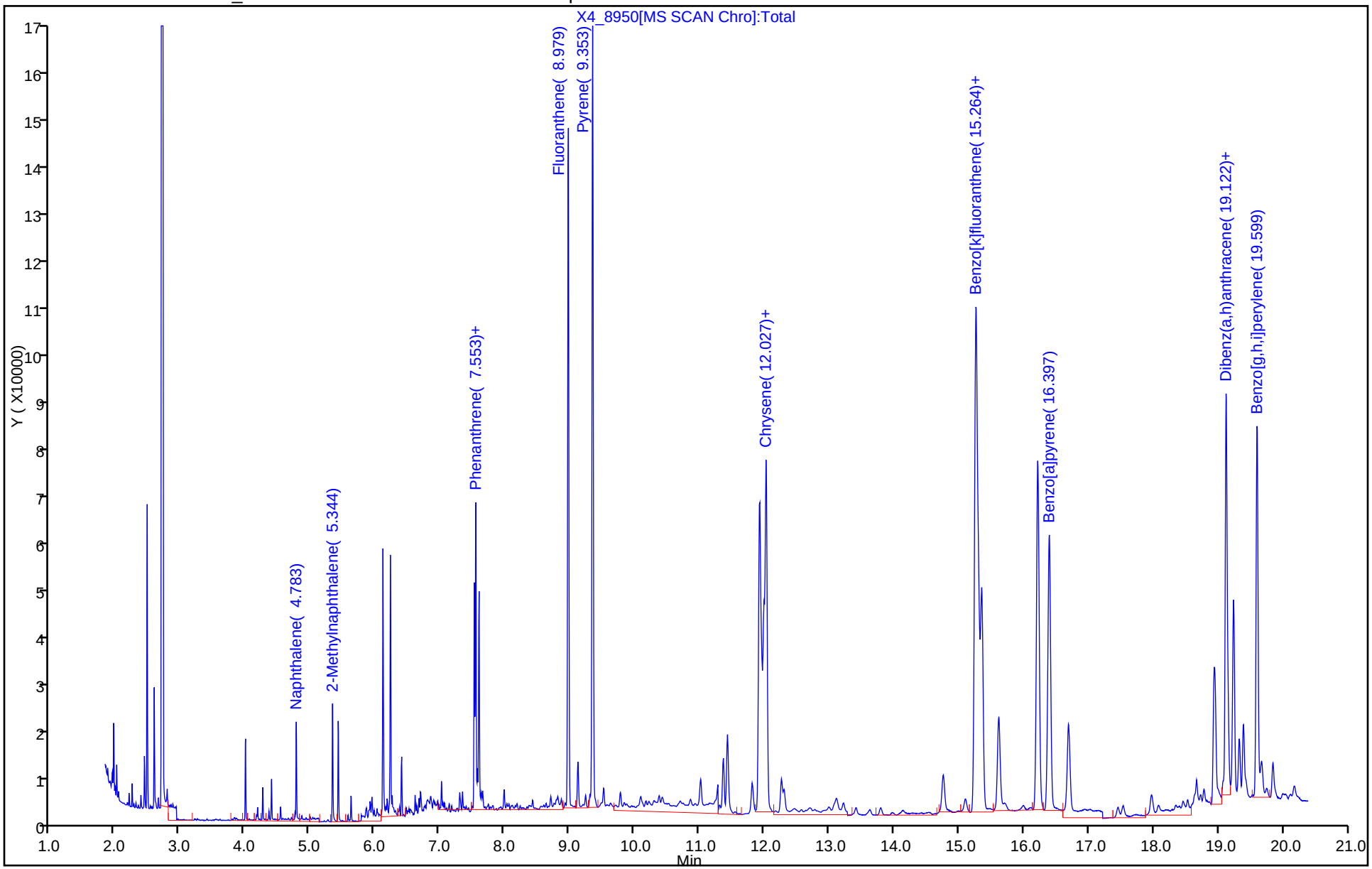
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 13:44:07 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8950.D				
Injection Date:	06-Jan-2014 13:20:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10	Worklist Smp#:	5
Client ID:	FSA-SD-DU03-B				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	5
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

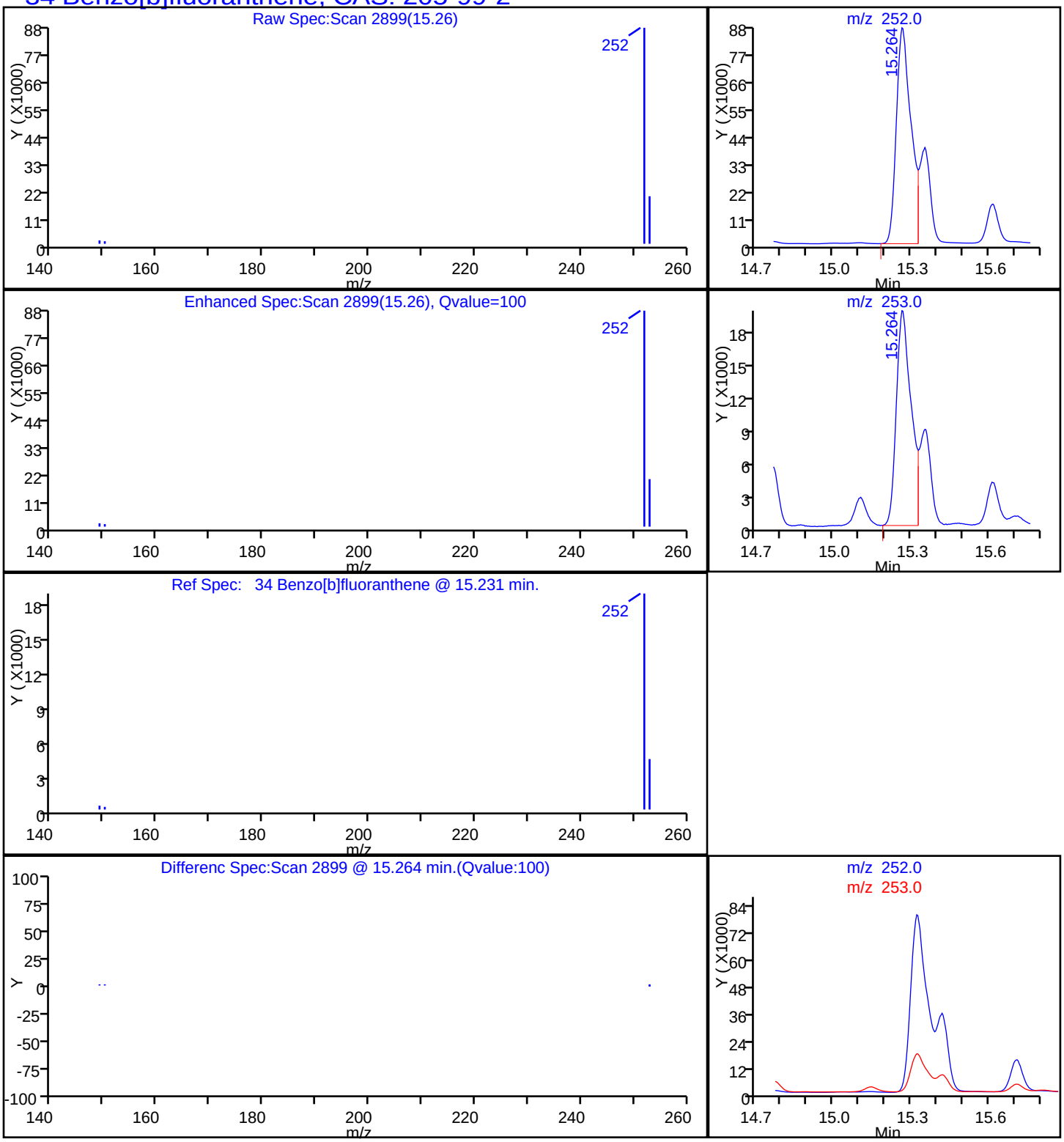


Report Date: 06-Jan-2014 13:44:07 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8950.D				
Injection Date:	06-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

34 Benzo[b]fluoranthene, CAS: 205-99-2

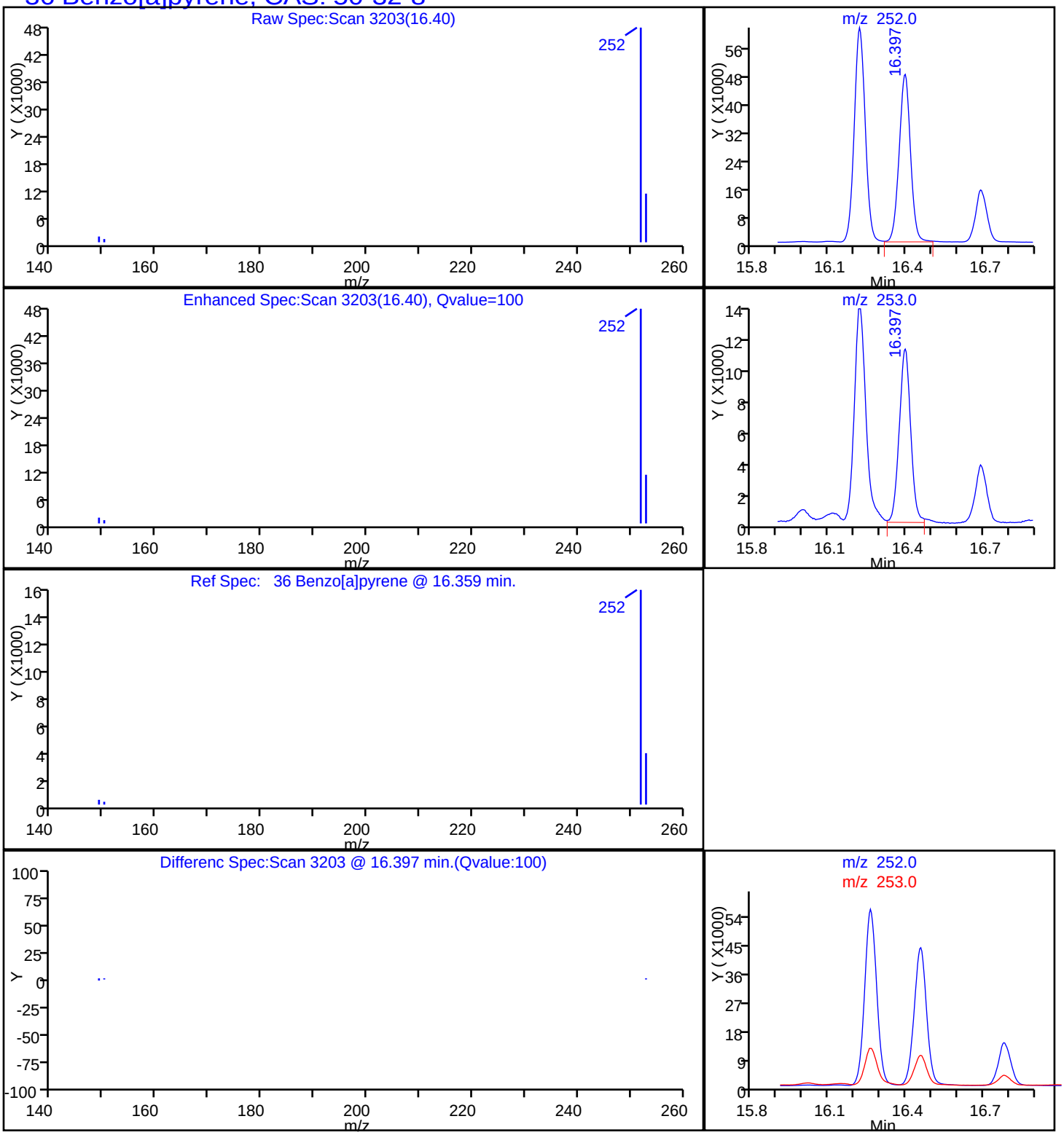


Report Date: 06-Jan-2014 13:44:07 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8950.D				
Injection Date:	06-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[a]pyrene, CAS: 50-32-8

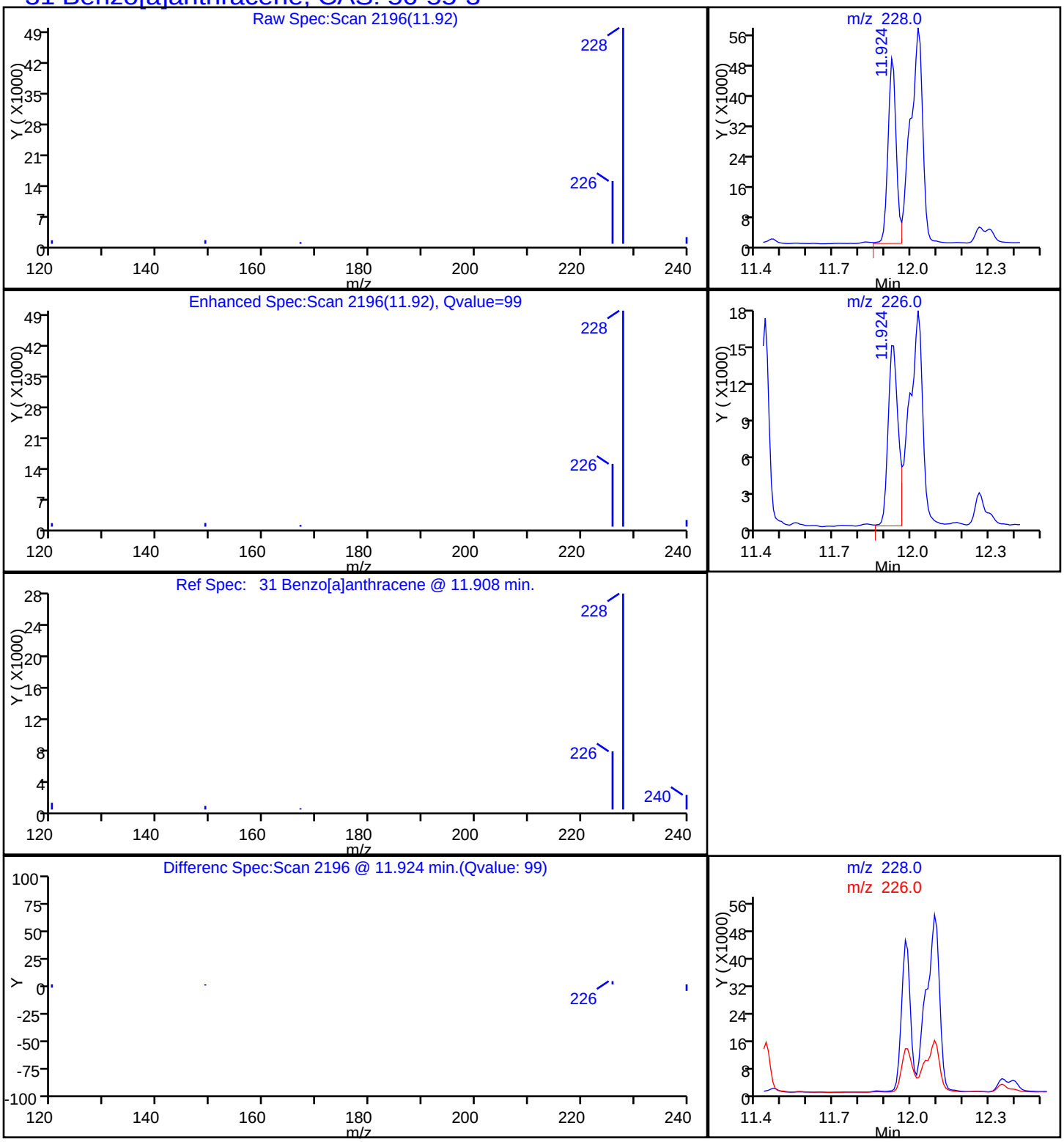


Report Date: 06-Jan-2014 13:44:07 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8950.D				
Injection Date:	06-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3

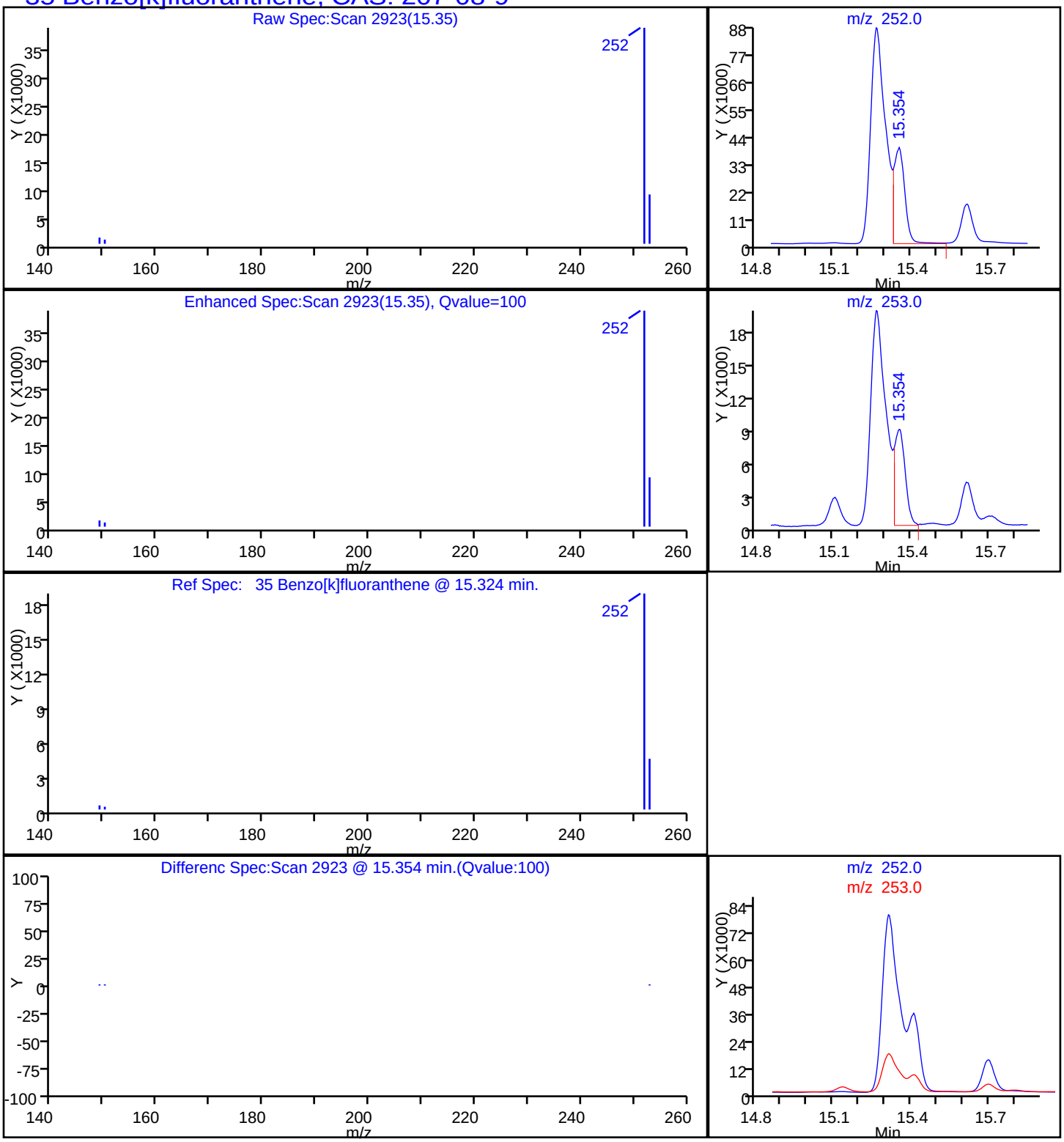


Report Date: 06-Jan-2014 13:44:07 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8950.D				
Injection Date:	06-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9

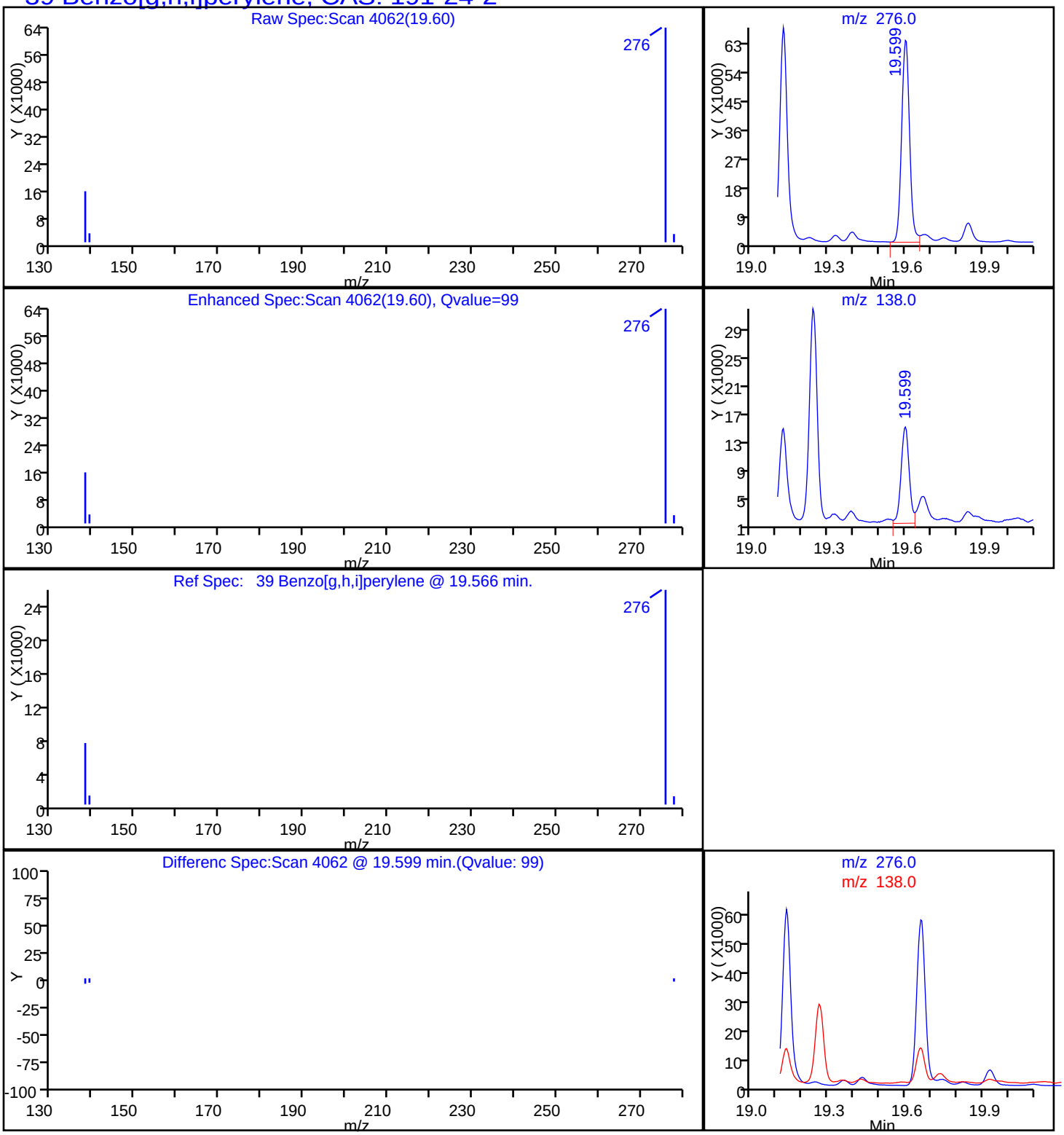


Report Date: 06-Jan-2014 13:44:07 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8950.D				
Injection Date:	06-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[g,h,i]perylene, CAS: 191-24-2

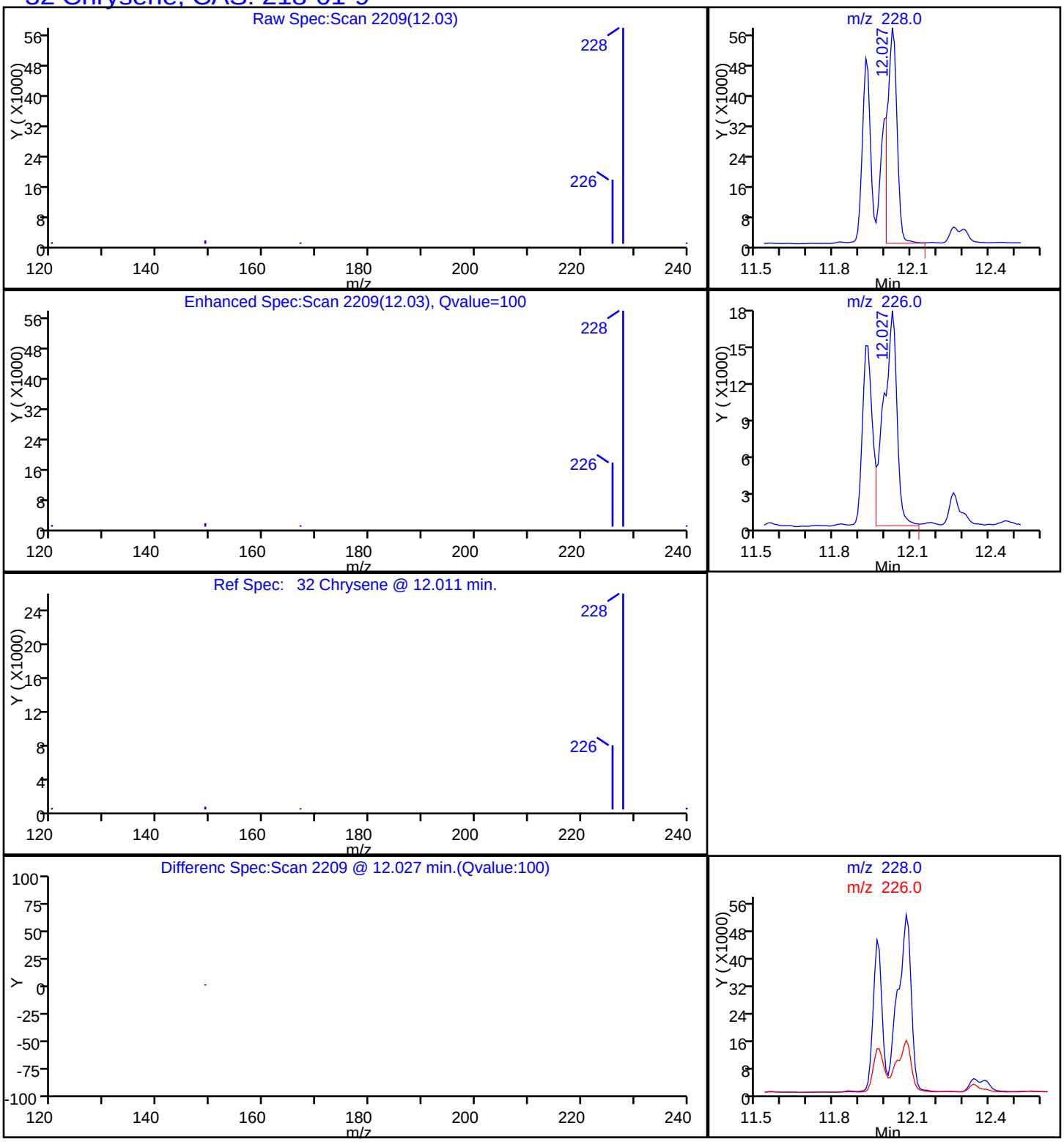


Report Date: 06-Jan-2014 13:44:07 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8950.D				
Injection Date:	06-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

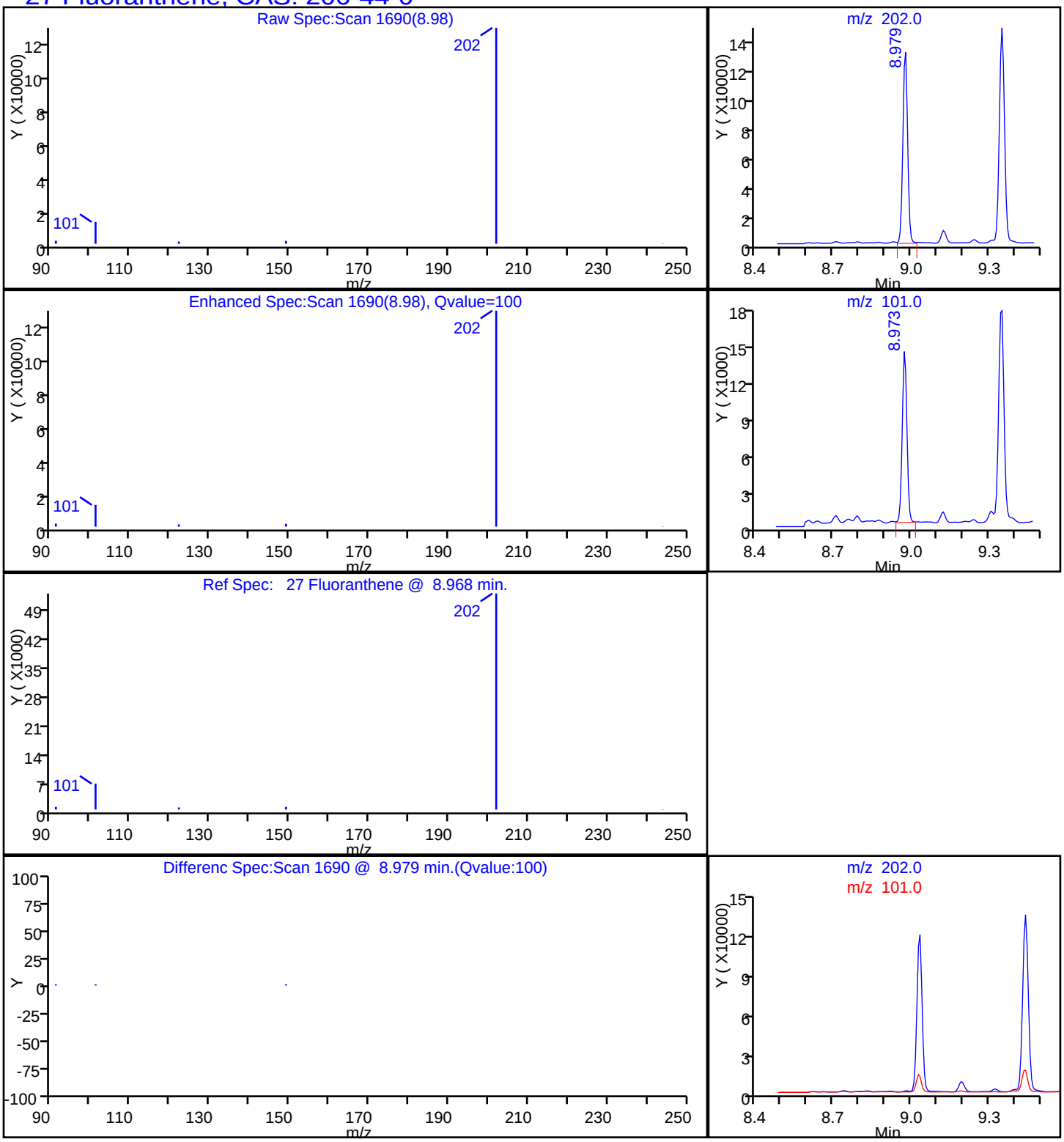


Report Date: 06-Jan-2014 13:44:07 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8950.D				
Injection Date:	06-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0

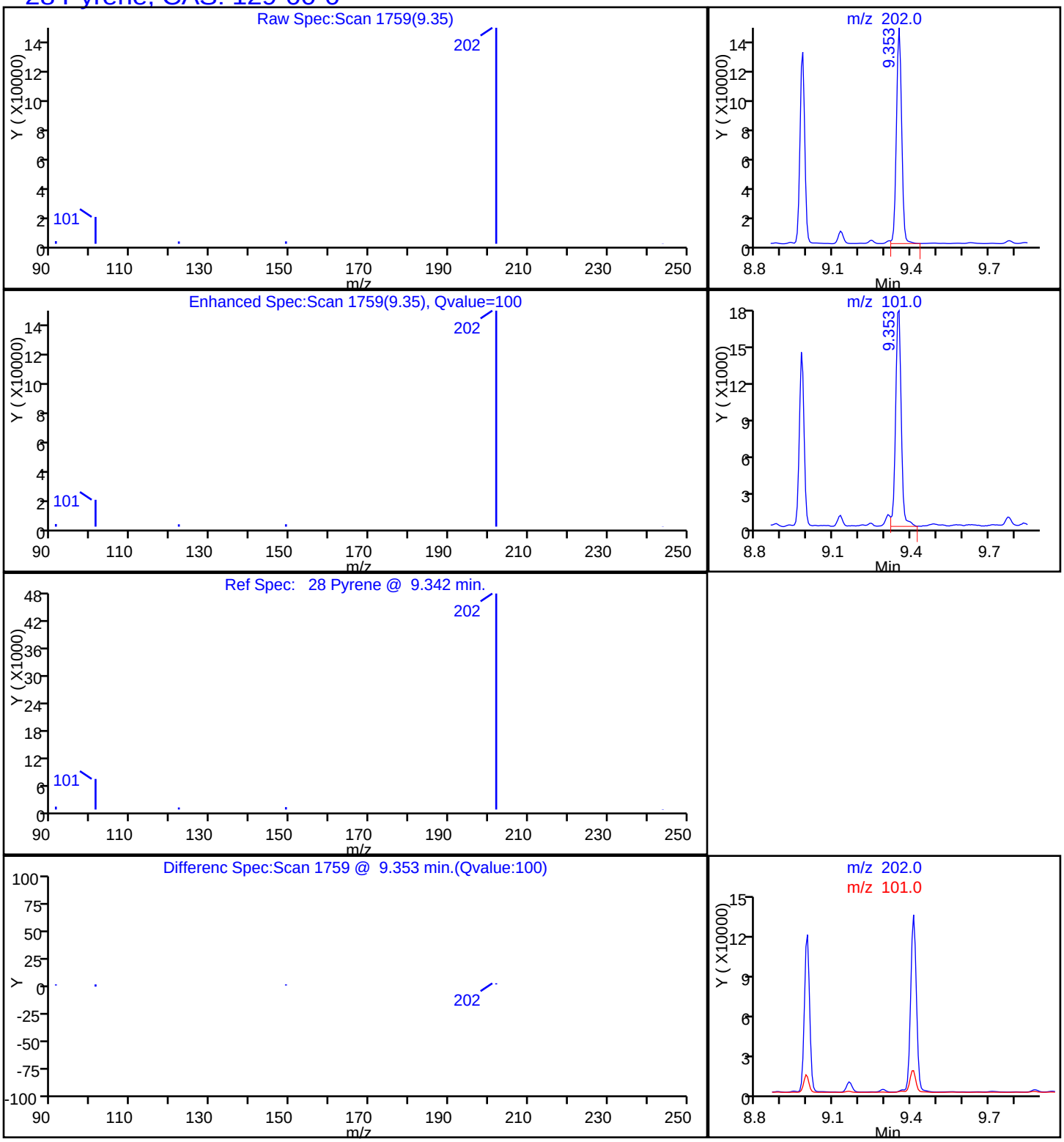


Report Date: 06-Jan-2014 13:44:07 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8950.D				
Injection Date:	06-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0

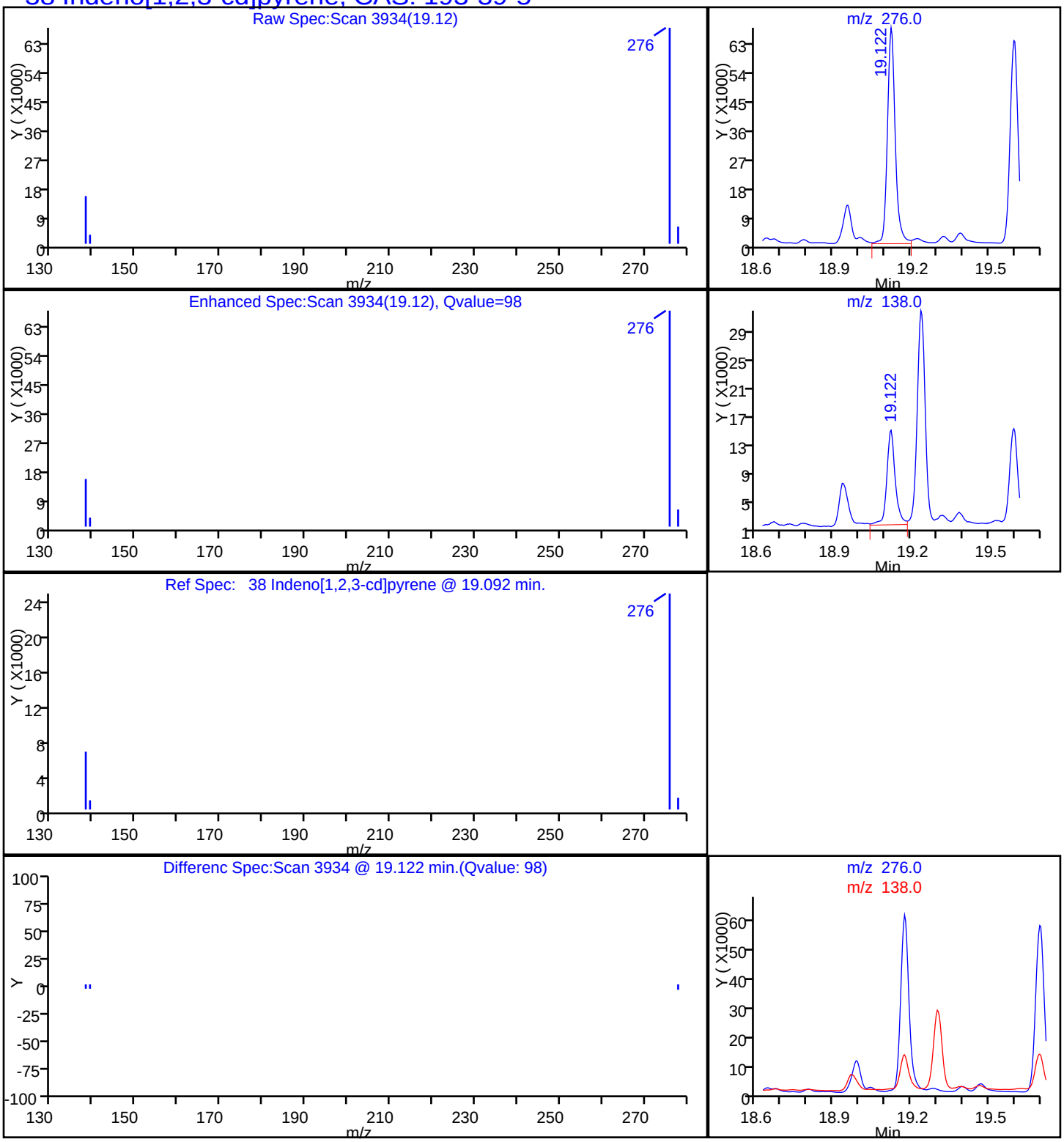


Report Date: 06-Jan-2014 13:44:07 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8950.D				
Injection Date:	06-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



Manual Integration/User Assign Peak Report

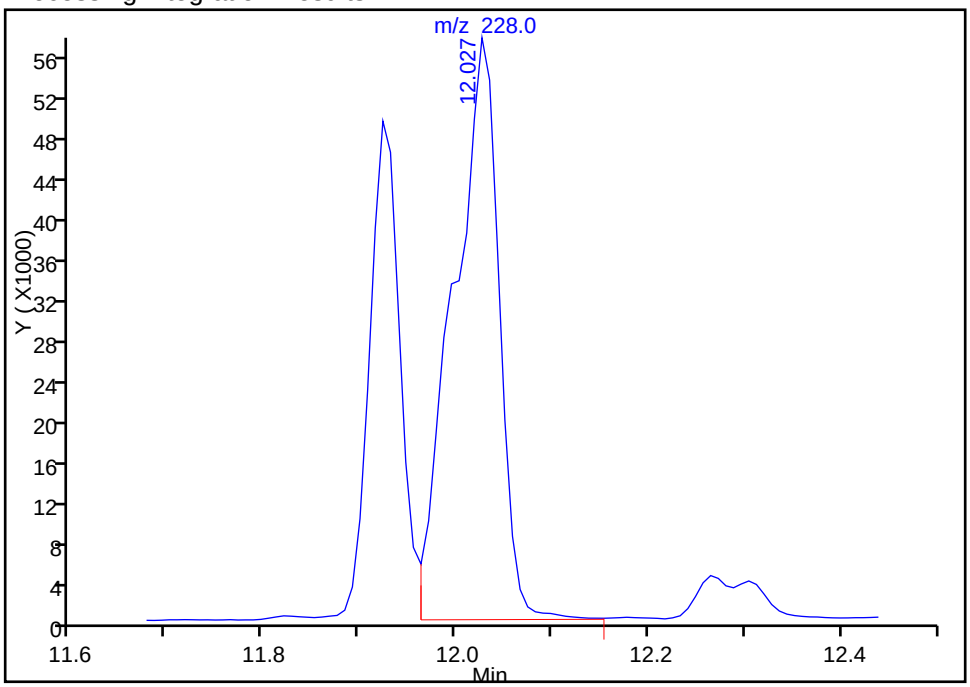
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8950.D				
Injection Date:	06-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-10-B	Lab Sample ID:	280-50614-10		
Client ID:	FSA-SD-DU03-B				
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

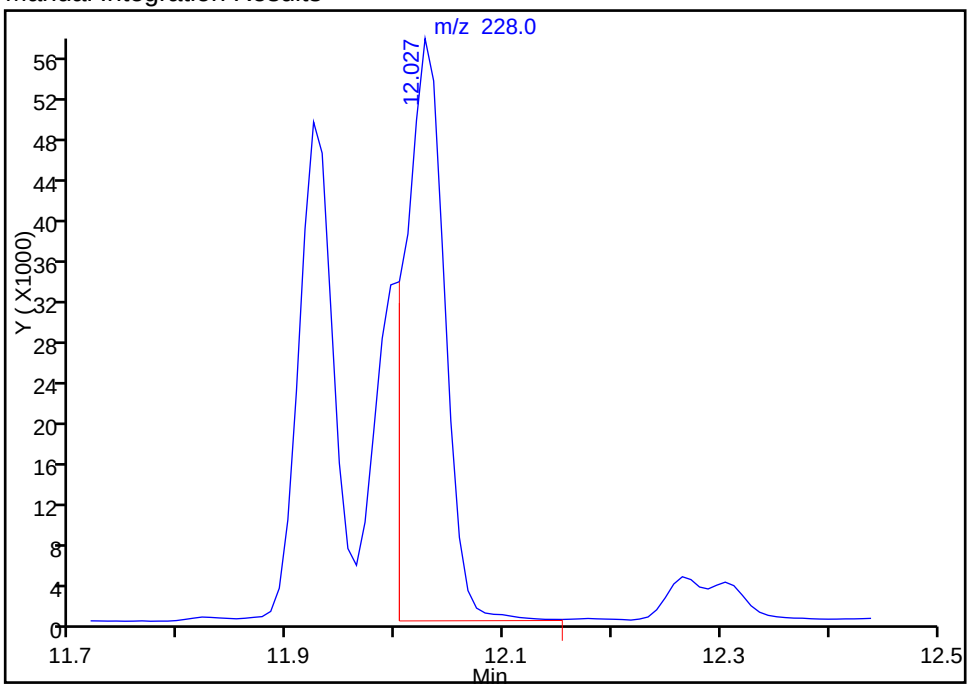
Processing Integration Results

RT: 12.03
Response: 188751
Amount: 2039.3297



Manual Integration Results

RT: 12.03
Response: 143905
Amount: 1554.7983



Reviewer: vasquezk, 06-Jan-2014 13:42:57
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU03-C | Lab Sample ID: 280-50614-11

Matrix: Solid | Lab File ID: X4_8930.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:10

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 32.84(g) | Date Analyzed: 01/02/2014 20:48

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
85-01-8	Phenanthrene	87000		4600	1000
120-12-7	Anthracene	110000		4600	660
53-70-3	Dibenz(a,h)anthracene	78000		4600	1200
83-32-9	Acenaphthene	8600		4600	150
208-96-8	Acenaphthylene	95000		4600	160
86-73-7	Fluorene	11000		4600	430
91-57-6	2-Methylnaphthalene	48000		4600	280
91-20-3	Naphthalene	44000		4600	300

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	76		39-120
4165-60-0	Nitrobenzene-d5	89		42-120
1718-51-0	Terphenyl-d14	99		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8930.D
Lims ID: 280-50614-A-11-B Lab Sample ID: 280-50614-11
Client ID: FSA-SD-DU03-C
Sample Type: Client
Inject. Date: 02-Jan-2014 20:48:30 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-0018755-016
Misc. Info.: 280-50614-a-11-b =280-50614-A-11-B
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 09:12:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	84	23116	600.0	
* 1 Phenanthrene-d10	188	7.532	7.532	0.0	99	44858	600.0	
* 3 Chrysene-d12	240	11.964	11.964	0.0	49	51015	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	99	11474	443.5	
$ 5 2-Fluorobiphenyl	172	5.630	5.633	-0.003	100	20732	380.1	
$ 6 Terphenyl-d14	244	9.527	9.532	-0.005	94	26761	492.8	
14 Naphthalene	128	4.783	4.786	-0.003	100	101728	1438.2	
15 2-Methylnaphthalene	142	5.344	5.344	0.0	99	78466	1568.7	
19 Acenaphthylene	152	6.119	6.119	0.0	99	239570	3108.0	
20 Acenaphthene	153	6.261	6.269	-0.008	90	13584	282.5	
22 Fluorene	166	6.702	6.702	0.0	96	21186	368.7	
24 Phenanthrene	178	7.553	7.553	0.0	100	261819	2848.0	
25 Anthracene	178	7.602	7.602	0.0	100	317319	3506.4	
27 Fluoranthene	202	8.979	8.979	0.0	100	908391	9110.7	E
28 Pyrene	202	9.359	9.359	0.0	100	1150102	11179	E
31 Benzo[a]anthracene	228	11.932	11.932	0.0	98	644734	6217.7	E
32 Chrysene	228	12.035	12.035	0.0	100	823073	8394.6	EM
34 Benzo[b]fluoranthene	252	15.279	15.264	0.015	100	2144869	22583	E
35 Benzo[k]fluoranthene	252	15.361	15.357	0.004	100	637088	6520.8	E
36 Benzo[a]pyrene	252	16.404	16.397	0.007	100	909228	9878.2	E
38 Indeno[1,2,3-cd]pyrene	276	19.133	19.118	0.015	99	885865	9776.8	E
37 Dibenz(a,h)anthracene	278	19.159	19.152	0.007	78	233365	2548.7	
39 Benzo[g,h,i]perylene	276	19.614	19.592	0.022	99	847288	8711.4	E

QC Flag Legend

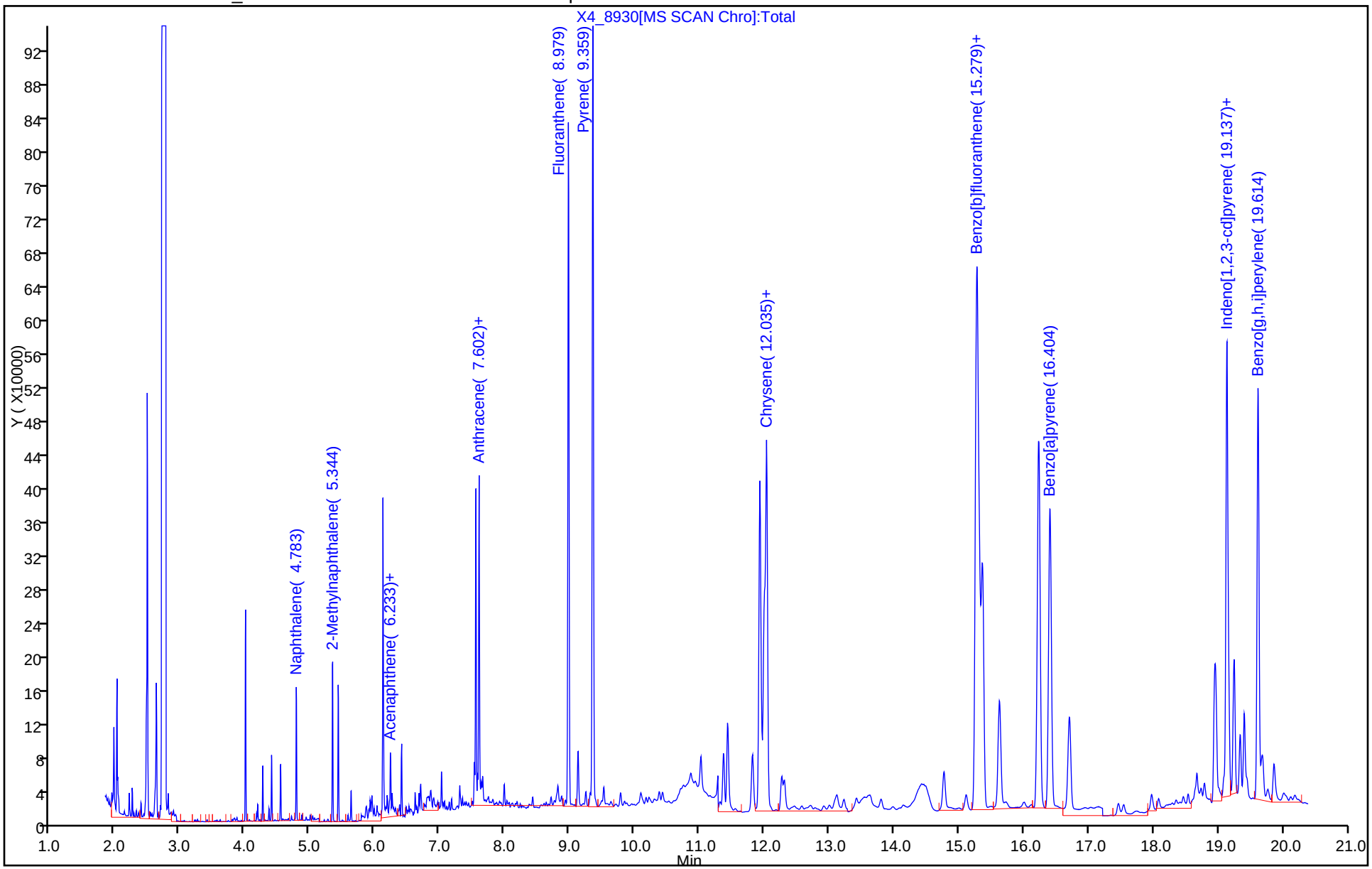
Processing Flags
E - Exceeded Maximum Amount

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:06:10 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8930.D				
Injection Date:	02-Jan-2014 20:48:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11	Worklist Smp#:	16
Client ID:	FSA-SD-DU03-C				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

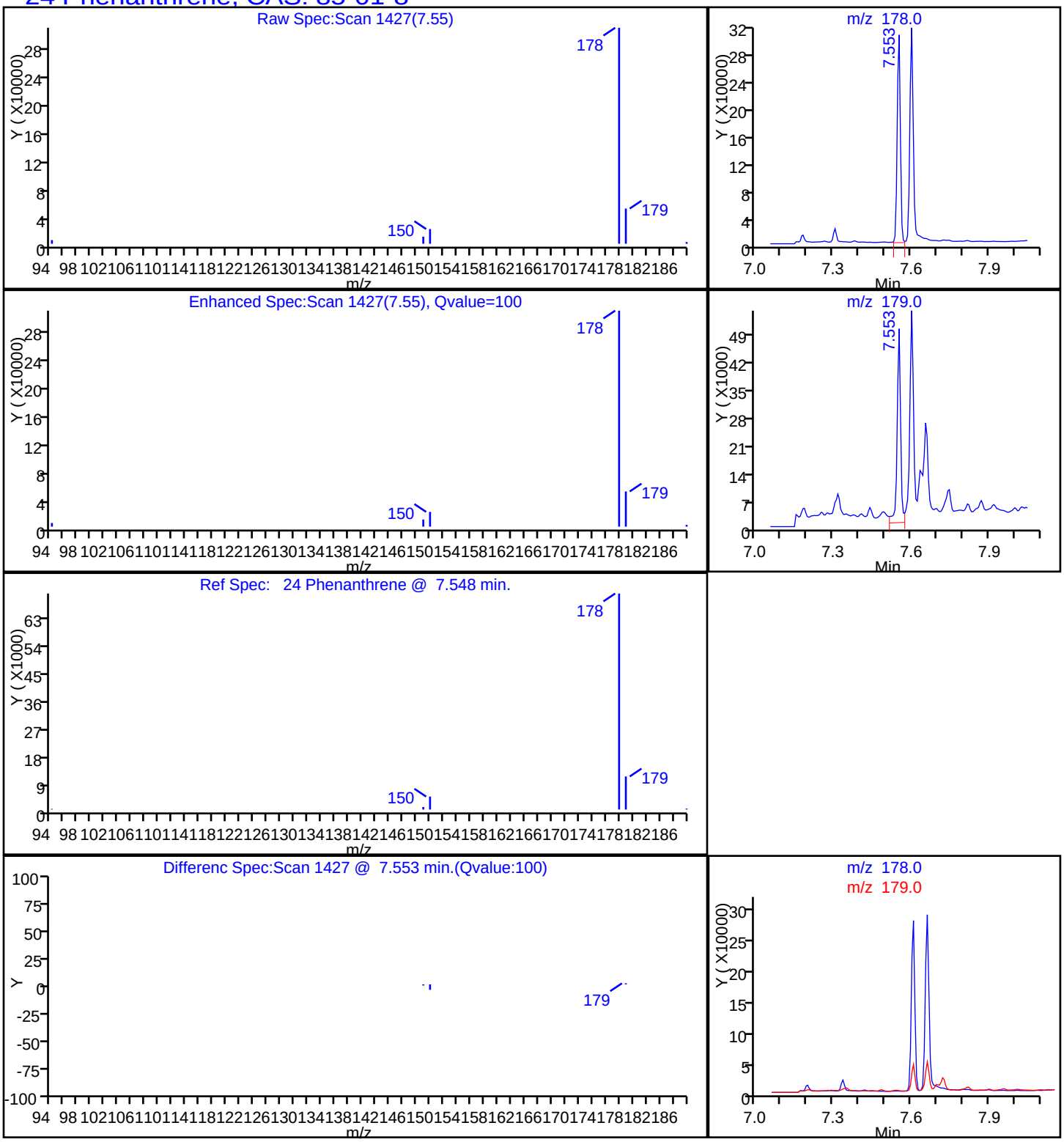


Report Date: 06-Jan-2014 10:06:10 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8930.D				
Injection Date:	02-Jan-2014 20:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8

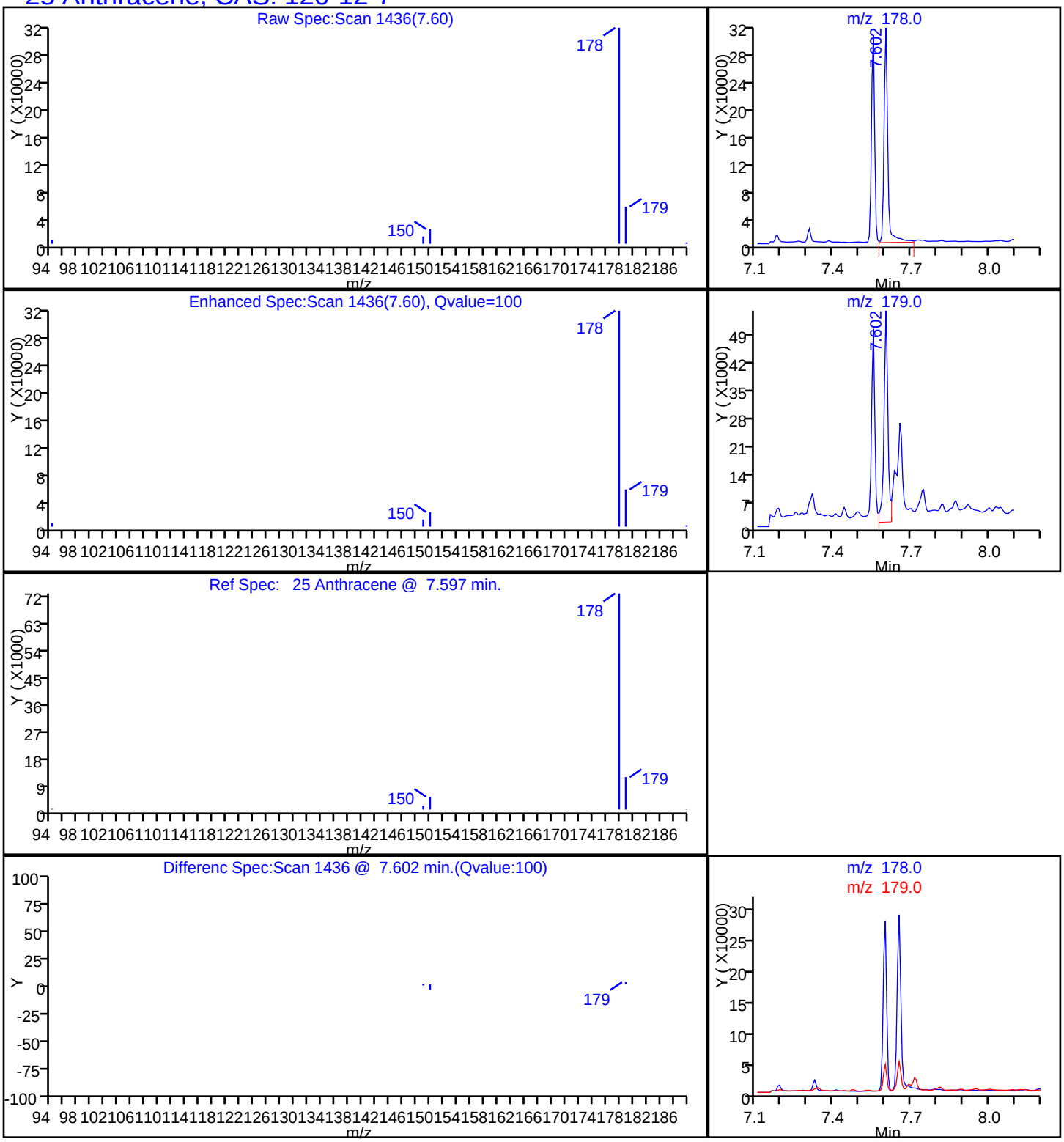


Report Date: 06-Jan-2014 10:06:10 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8930.D				
Injection Date:	02-Jan-2014 20:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7

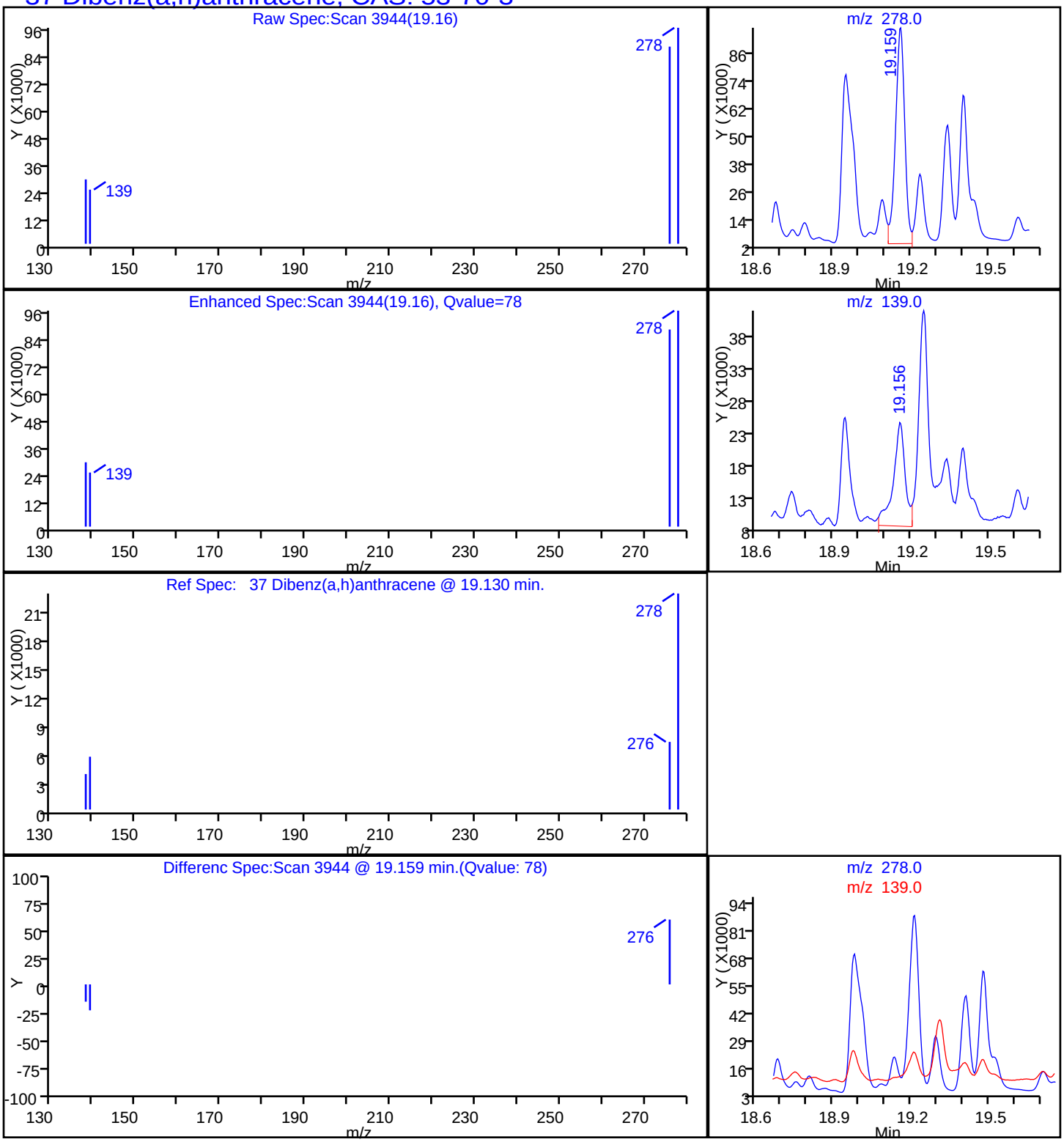


Report Date: 06-Jan-2014 10:06:10 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8930.D				
Injection Date:	02-Jan-2014 20:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3

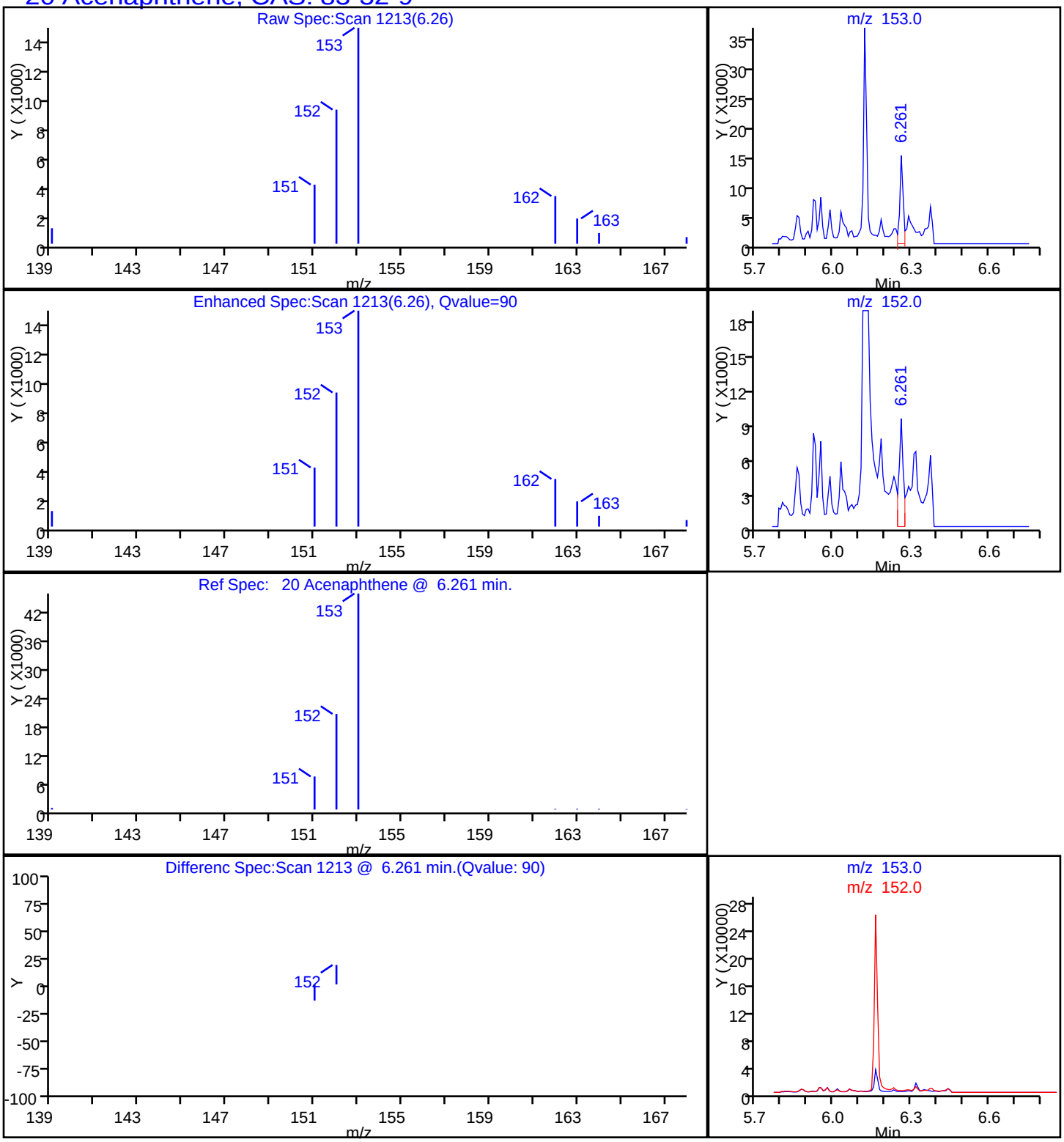


Report Date: 06-Jan-2014 10:06:10 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8930.D				
Injection Date:	02-Jan-2014 20:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9

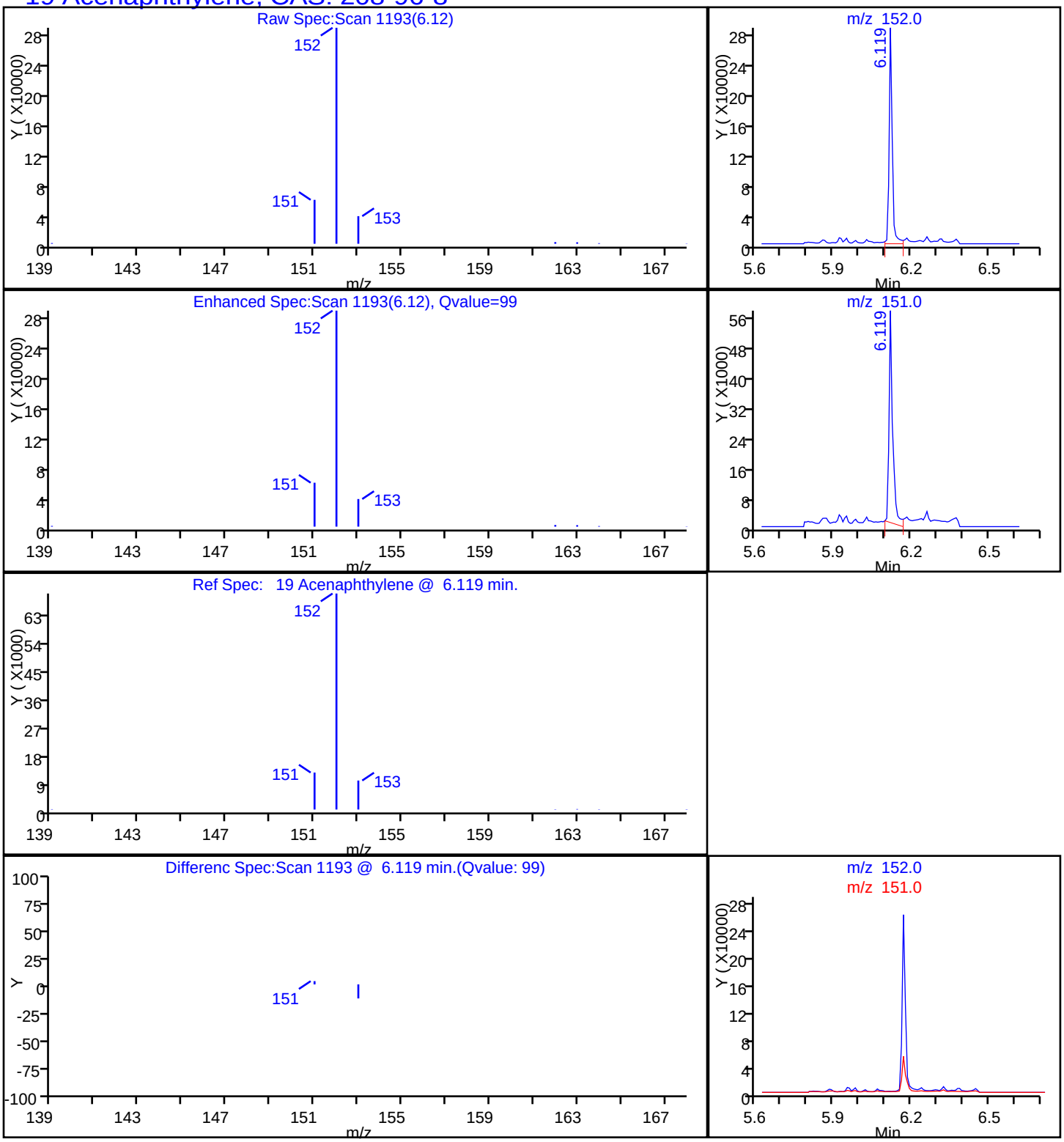


Report Date: 06-Jan-2014 10:06:10 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8930.D				
Injection Date:	02-Jan-2014 20:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

19 Acenaphthylene, CAS: 208-96-8

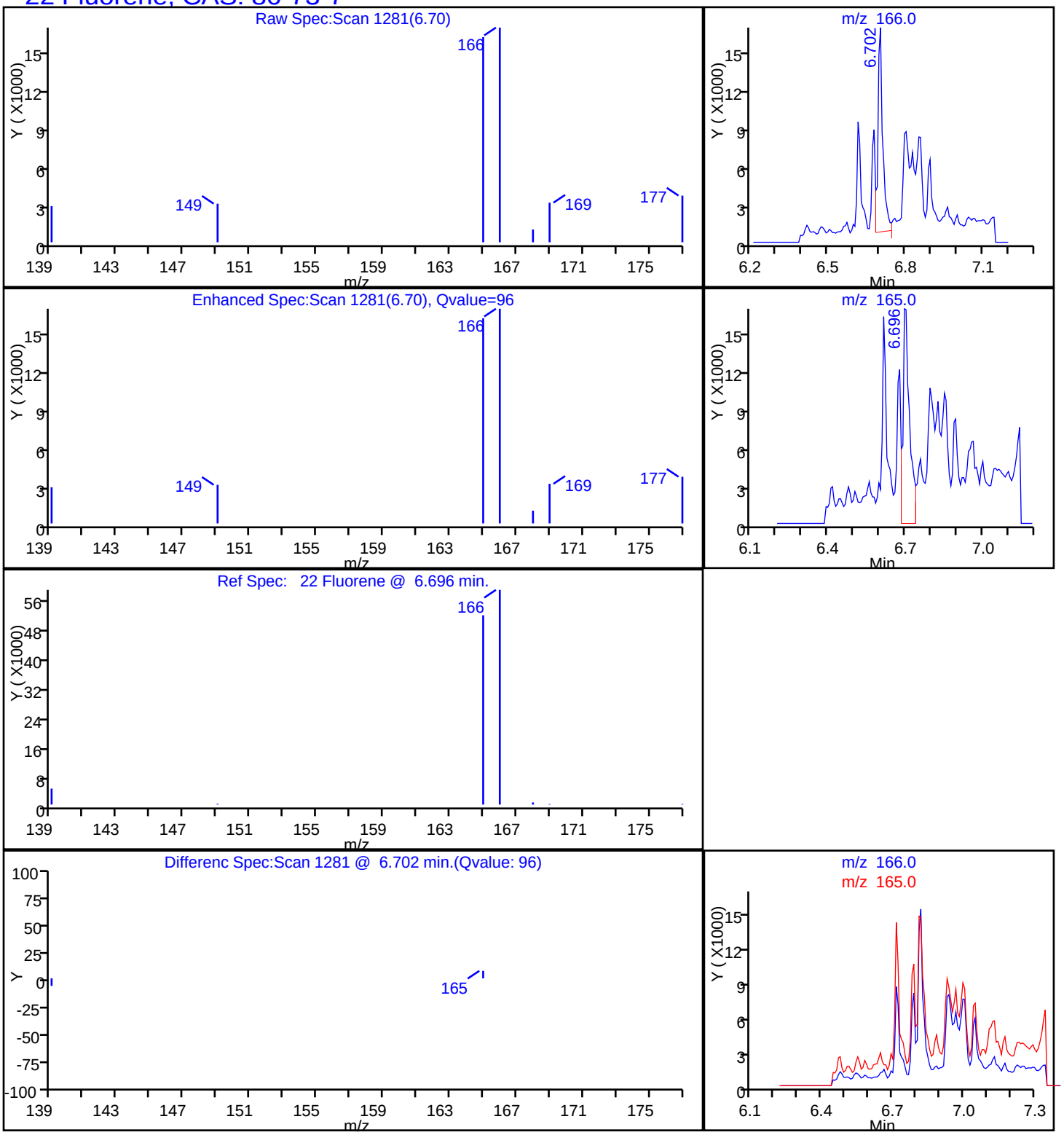


Report Date: 06-Jan-2014 10:06:10 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8930.D				
Injection Date:	02-Jan-2014 20:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7

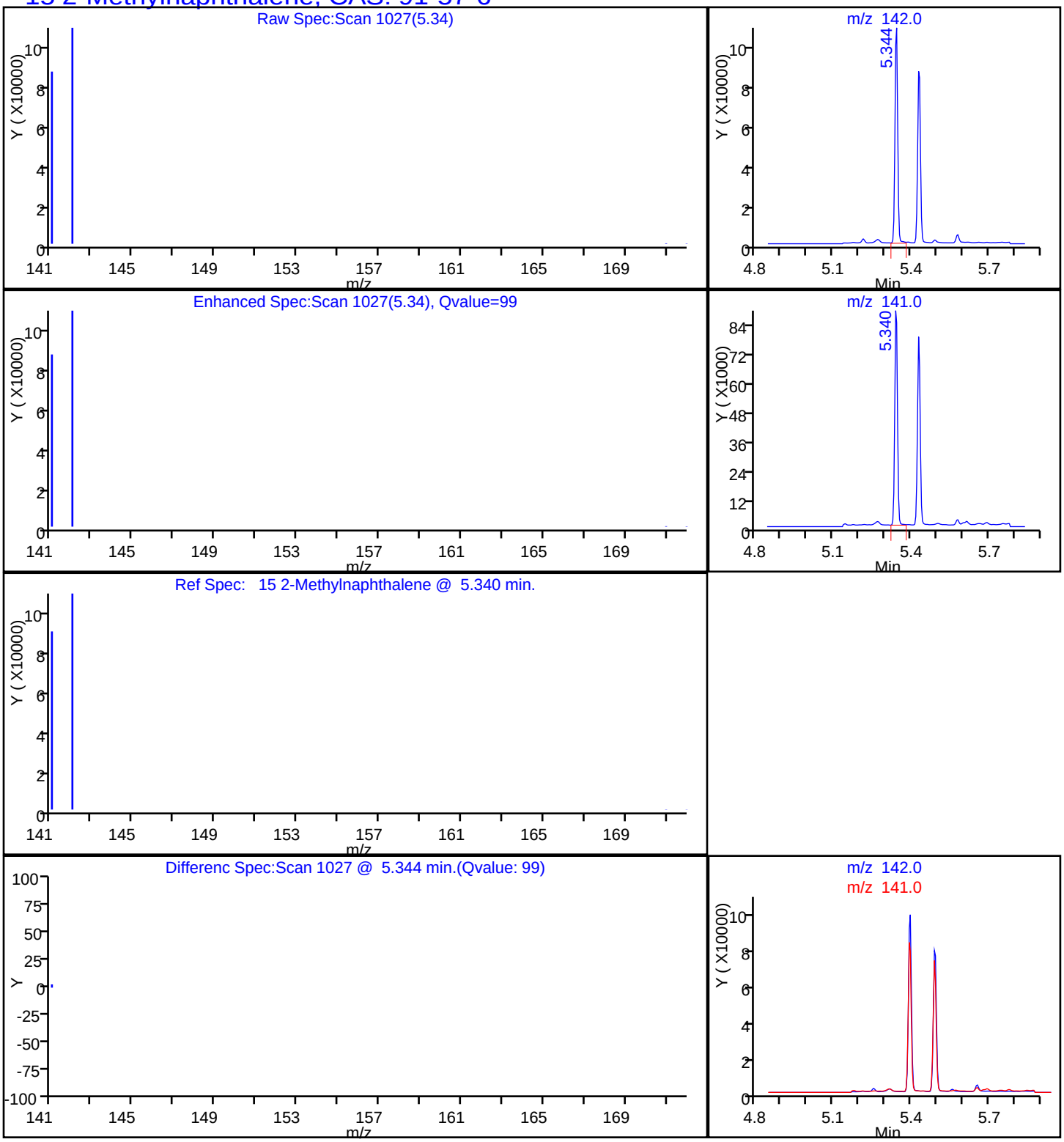


Report Date: 06-Jan-2014 10:06:10 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8930.D				
Injection Date:	02-Jan-2014 20:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 2-Methylnaphthalene, CAS: 91-57-6

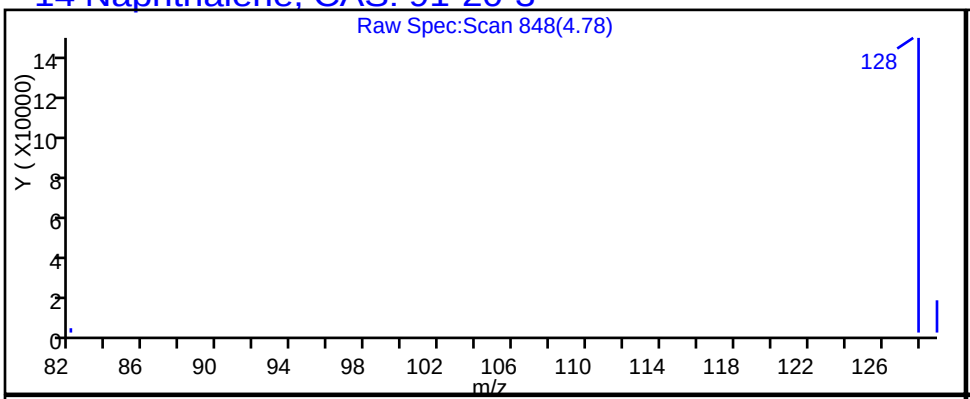


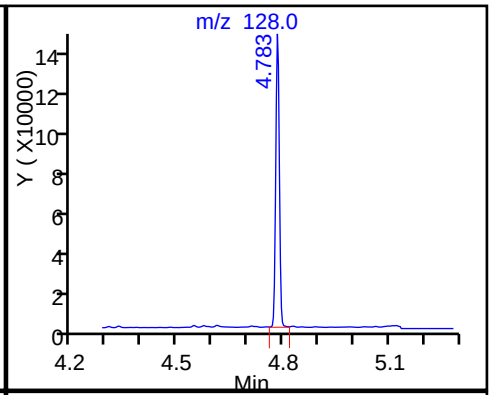
Report Date: 06-Jan-2014 10:06:10 Chrom Revision: 2.1 15-Oct-2013 07:52:24

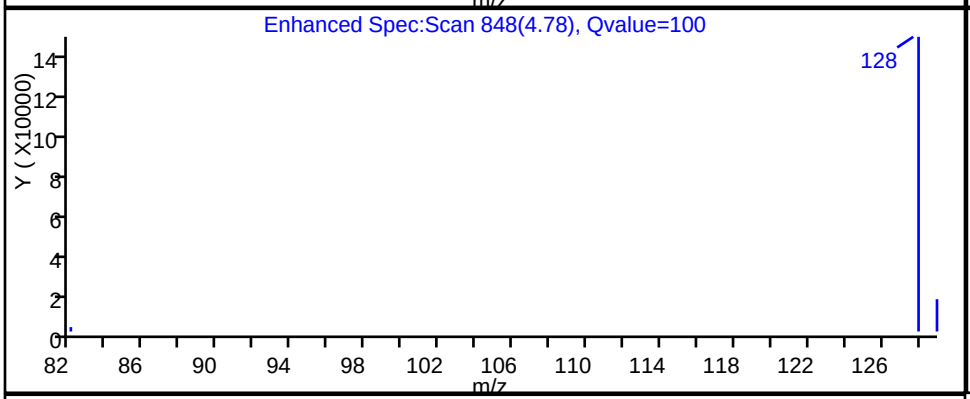
TestAmerica Denver

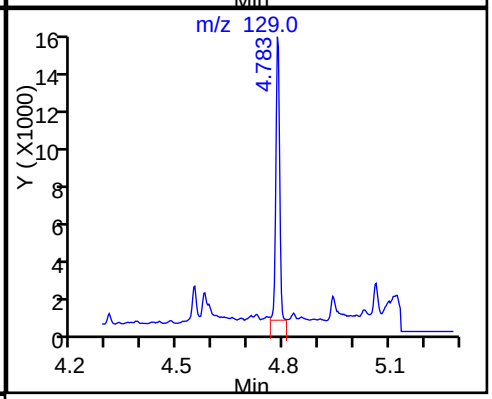
Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8930.D				
Injection Date:	02-Jan-2014 20:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

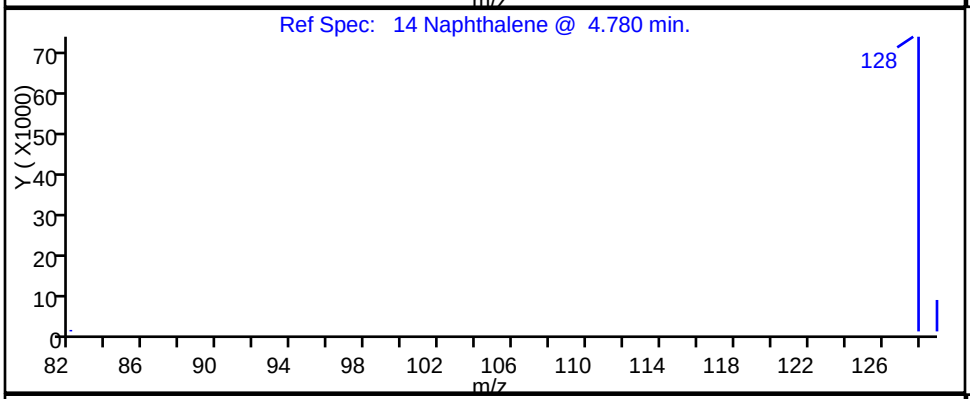
14 Naphthalene, CAS: 91-20-3

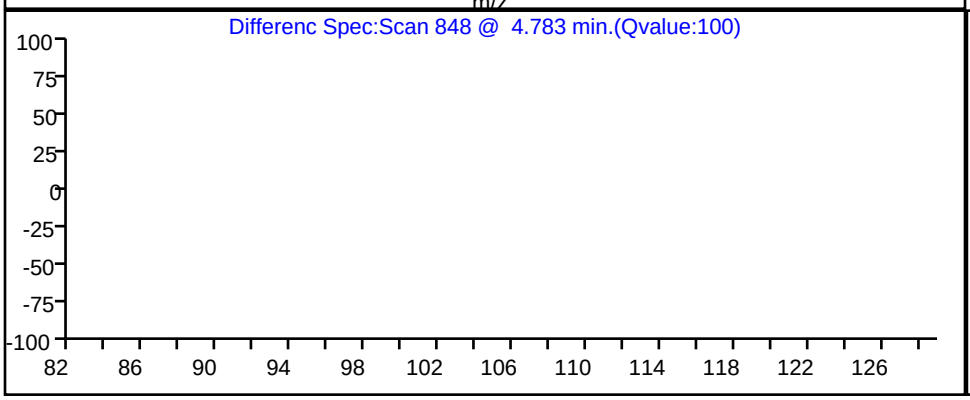


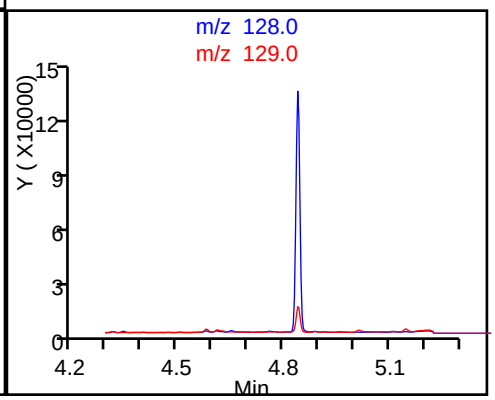












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU03-C DL | Lab Sample ID: 280-50614-11 DL

Matrix: Solid | Lab File ID: X4_8951.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:10

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 32.84(g) | Date Analyzed: 01/06/2014 13:48

Con. Extract Vol.: 1000(uL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207515 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	690000		46000	11000
50-32-8	Benzo[a]pyrene	290000		46000	6800
56-55-3	Benzo[a]anthracene	180000		46000	8200
207-08-9	Benzo[k]fluoranthene	220000		46000	9100
191-24-2	Benzo[g,h,i]perylene	270000		46000	10000
218-01-9	Chrysene	260000		46000	9100
206-44-0	Fluoranthene	310000		46000	9100
129-00-0	Pyrene	370000		46000	10000
193-39-5	Indeno[1,2,3-cd]pyrene	290000		46000	10000

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	78	D	39-120
4165-60-0	Nitrobenzene-d5	0	D X	42-120
1718-51-0	Terphenyl-d14	0	D X	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8951.D
Lims ID: 280-50614-A-11-B Lab Sample ID: 280-50614-11
Client ID: FSA-SD-DU03-C
Sample Type: Client
Inject. Date: 06-Jan-2014 13:48:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 280-0018806-006
Misc. Info.: 280-50614-a-11-b,10, =280-50614-A-11-B,10,
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 13:44:04 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 13:43:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	94	19380	600.0	
* 1 Phenanthrene-d10	188	7.532	7.537	-0.005	100	37891	600.0	
* 3 Chrysene-d12	240	11.955	11.980	-0.025	98	45828	600.0	
$ 4 Nitrobenzene-d5	82		4.189					
$ 5 2-Fluorobiphenyl	172	5.629	5.633	-0.004	100	1774	38.8	
$ 6 Terphenyl-d14	244		9.538					
14 Naphthalene	128	4.783	4.786	-0.003	100	8138	137.2	
15 2-Methylnaphthalene	142	5.343	5.347	-0.004	100	6536	155.9	
19 Acenaphthylene	152	6.119	6.127	-0.008	100	18426	285.1	
20 Acenaphthene	153		6.269					
22 Fluorene	166	6.702	6.702	0.0	91	1612	33.5	
24 Phenanthrene	178	7.553	7.559	-0.006	100	24900	320.7	
25 Anthracene	178	7.602	7.608	-0.006	99	19372	253.4	
27 Fluoranthene	202	8.979	8.990	-0.011	100	86130	1022.7	
28 Pyrene	202	9.353	9.364	-0.011	100	106977	1231.0	
31 Benzo[a]anthracene	228	11.924	11.948	-0.024	99	56037	601.6	
32 Chrysene	228	12.027	12.051	-0.024	100	76031	863.2	M
34 Benzo[b]fluoranthene	252	15.264	15.287	-0.023	100	194443	2279.0	
35 Benzo[k]fluoranthene	252	15.350	15.376	-0.026	100	64362	733.3	
36 Benzo[a]pyrene	252	16.393	16.419	-0.026	100	79848	965.7	
38 Indeno[1,2,3-cd]pyrene	276	19.122	19.130	-0.008	98	77873	956.7	
37 Dibenz(a,h)anthracene	278	19.148	19.167	-0.019	77	20442	248.5	
39 Benzo[g,h,i]perylene	276	19.596	19.611	-0.015	99	76392	874.3	

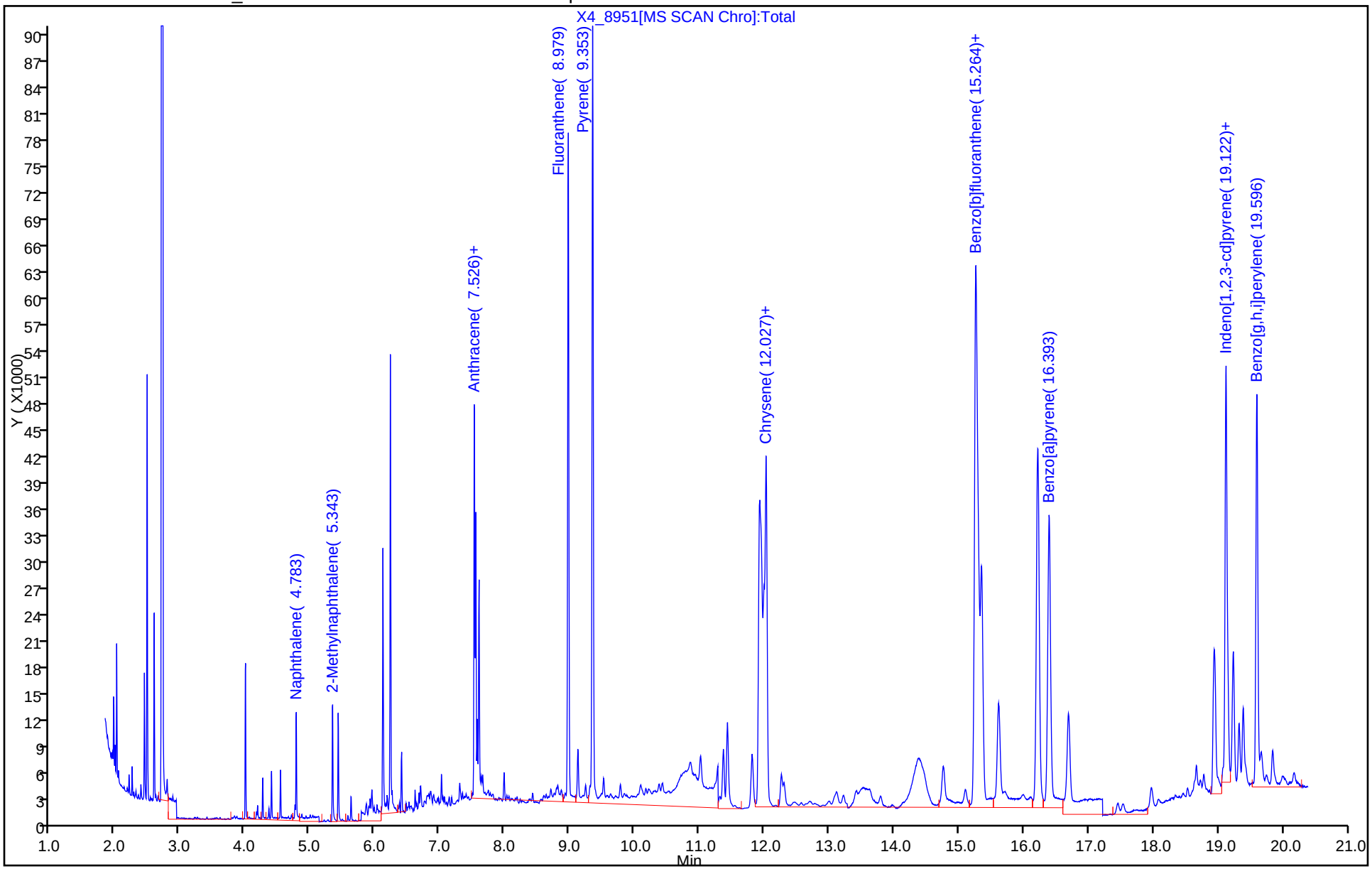
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 13:44:08 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8951.D				
Injection Date:	06-Jan-2014 13:48:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11	Worklist Smp#:	6
Client ID:	FSA-SD-DU03-C				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	6
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



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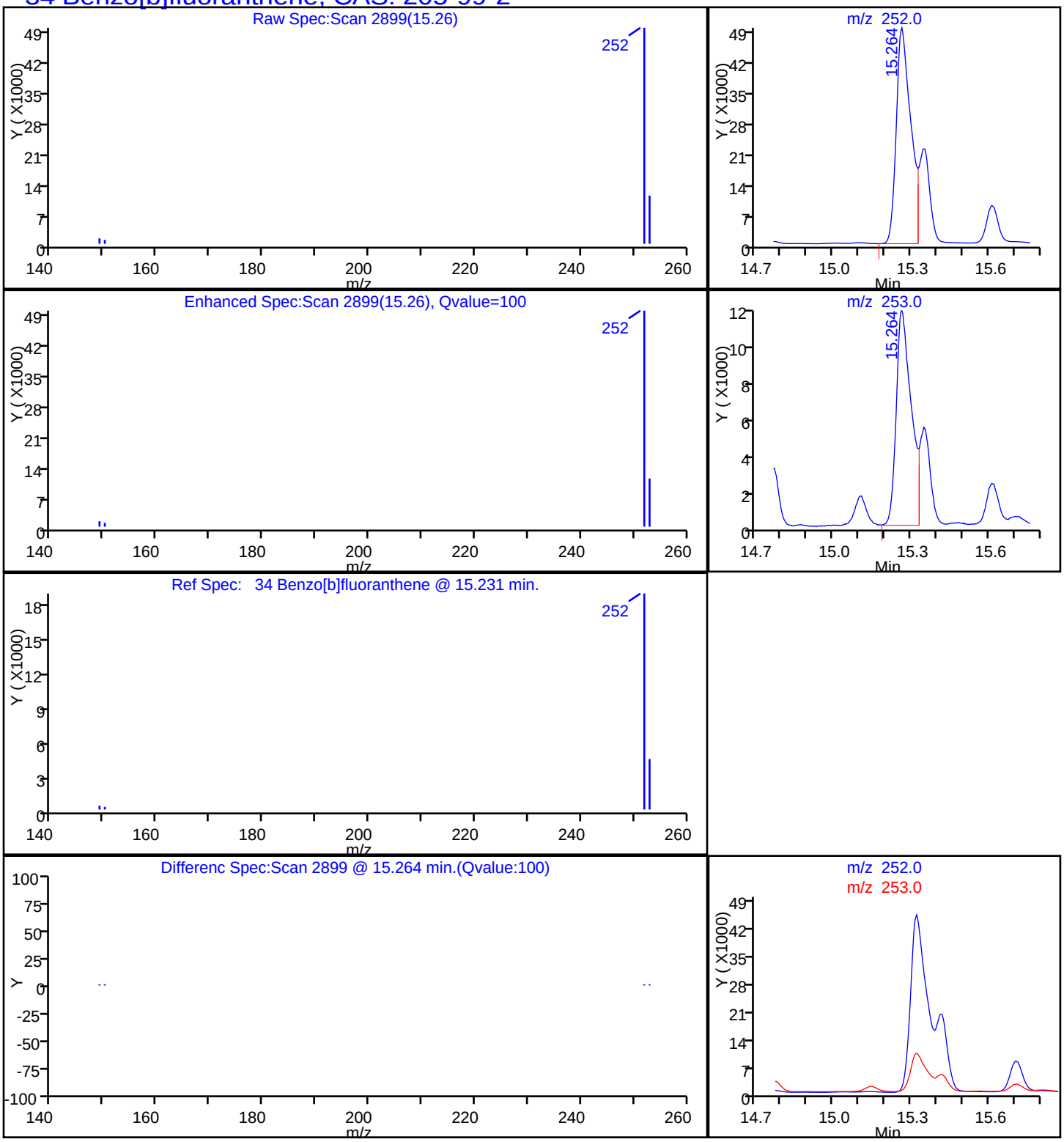
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8951.D				
Injection Date:	06-Jan-2014 13:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

34 Benzo[b]fluoranthene, CAS: 205-99-2

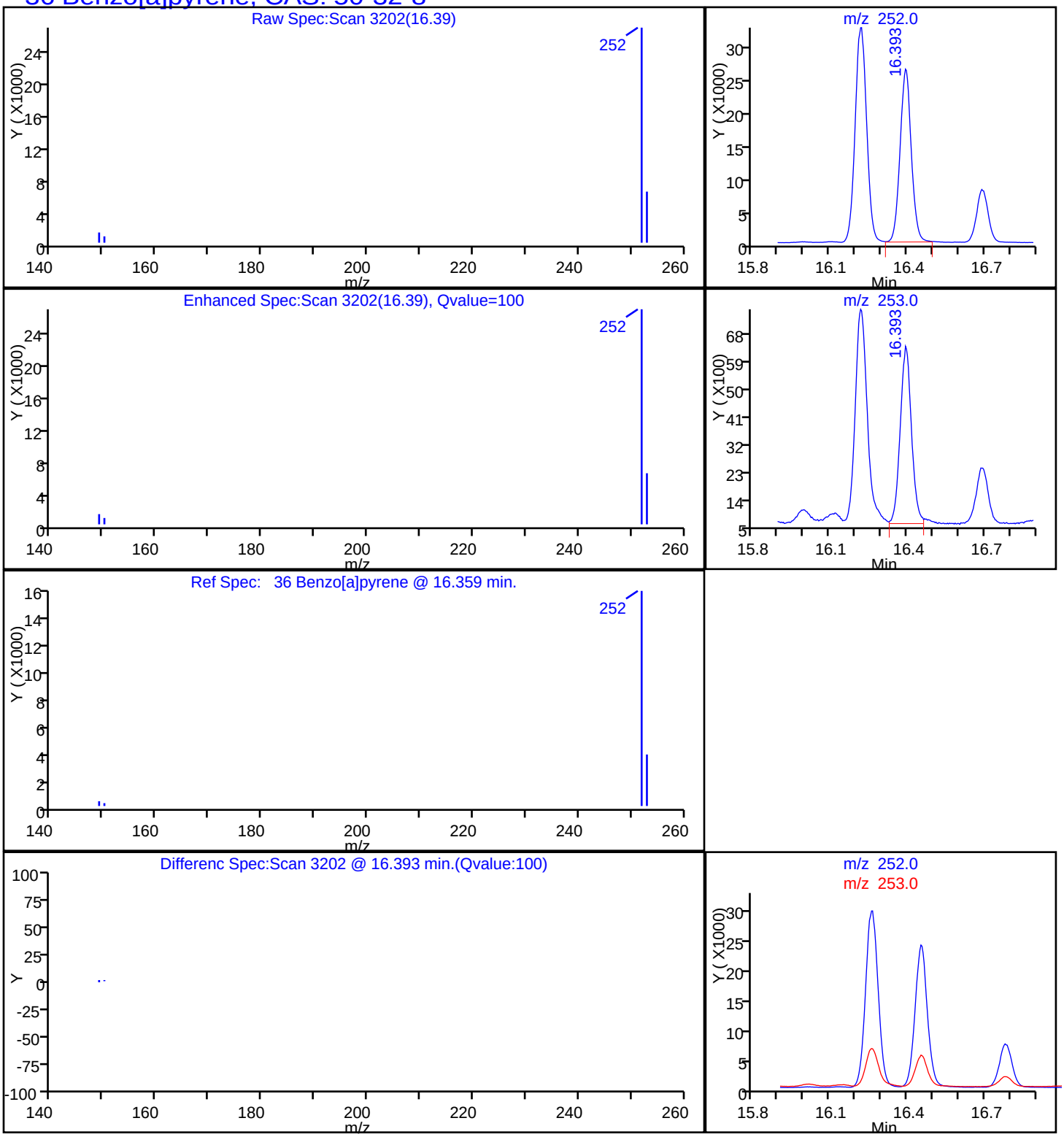


Report Date: 06-Jan-2014 13:44:08 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8951.D				
Injection Date:	06-Jan-2014 13:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[a]pyrene, CAS: 50-32-8



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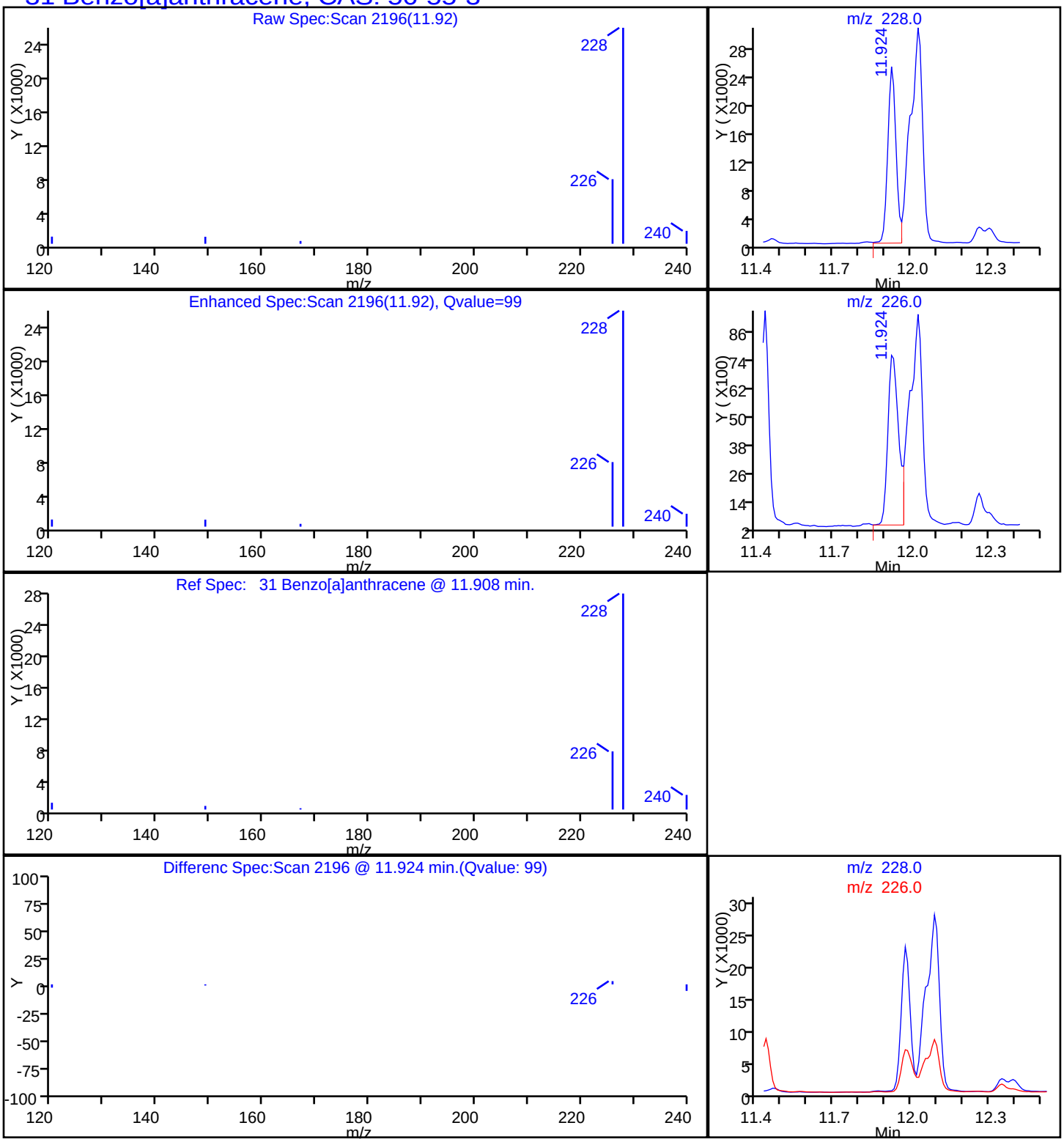
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8951.D				
Injection Date:	06-Jan-2014 13:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3



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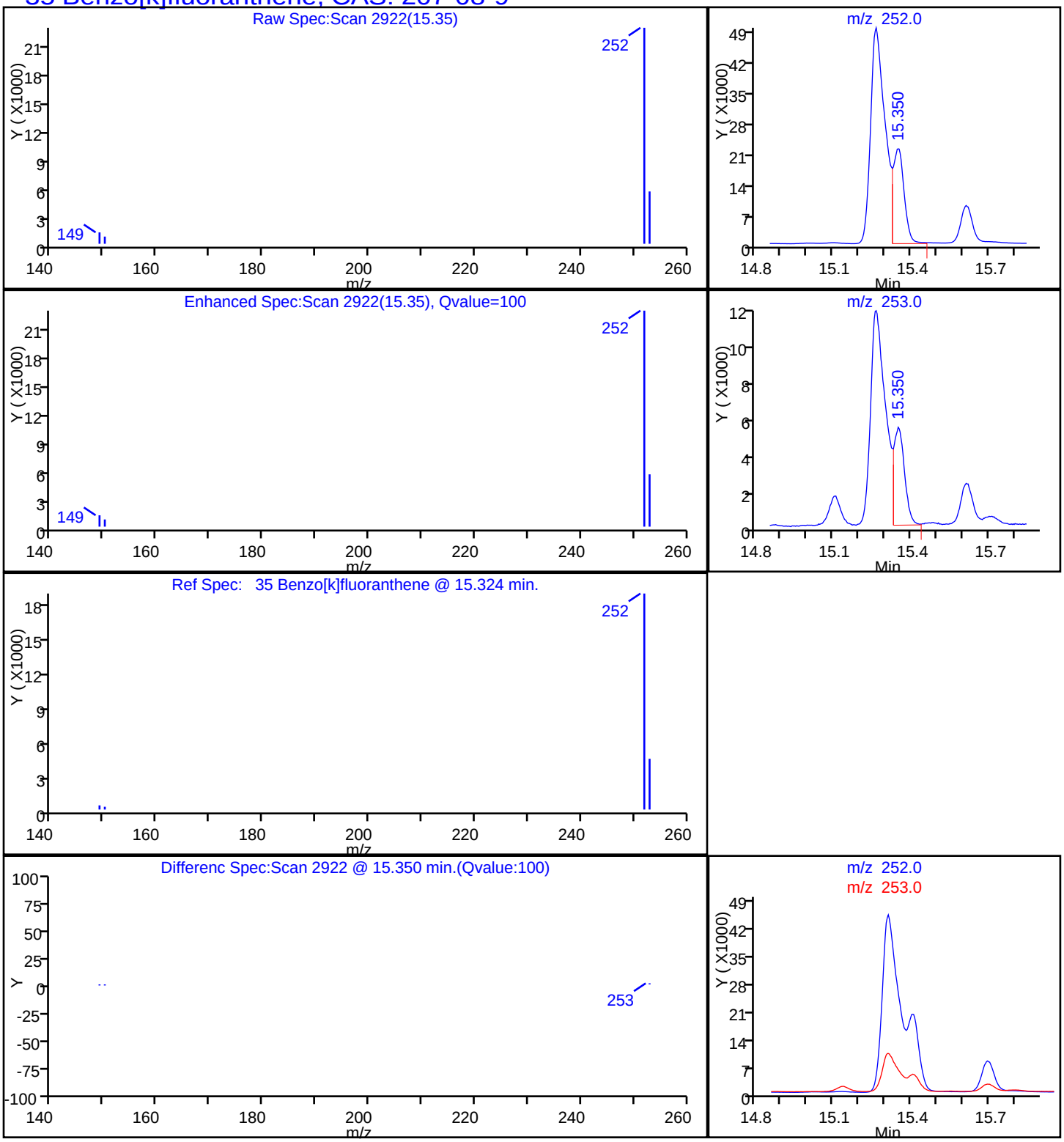
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8951.D				
Injection Date:	06-Jan-2014 13:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9

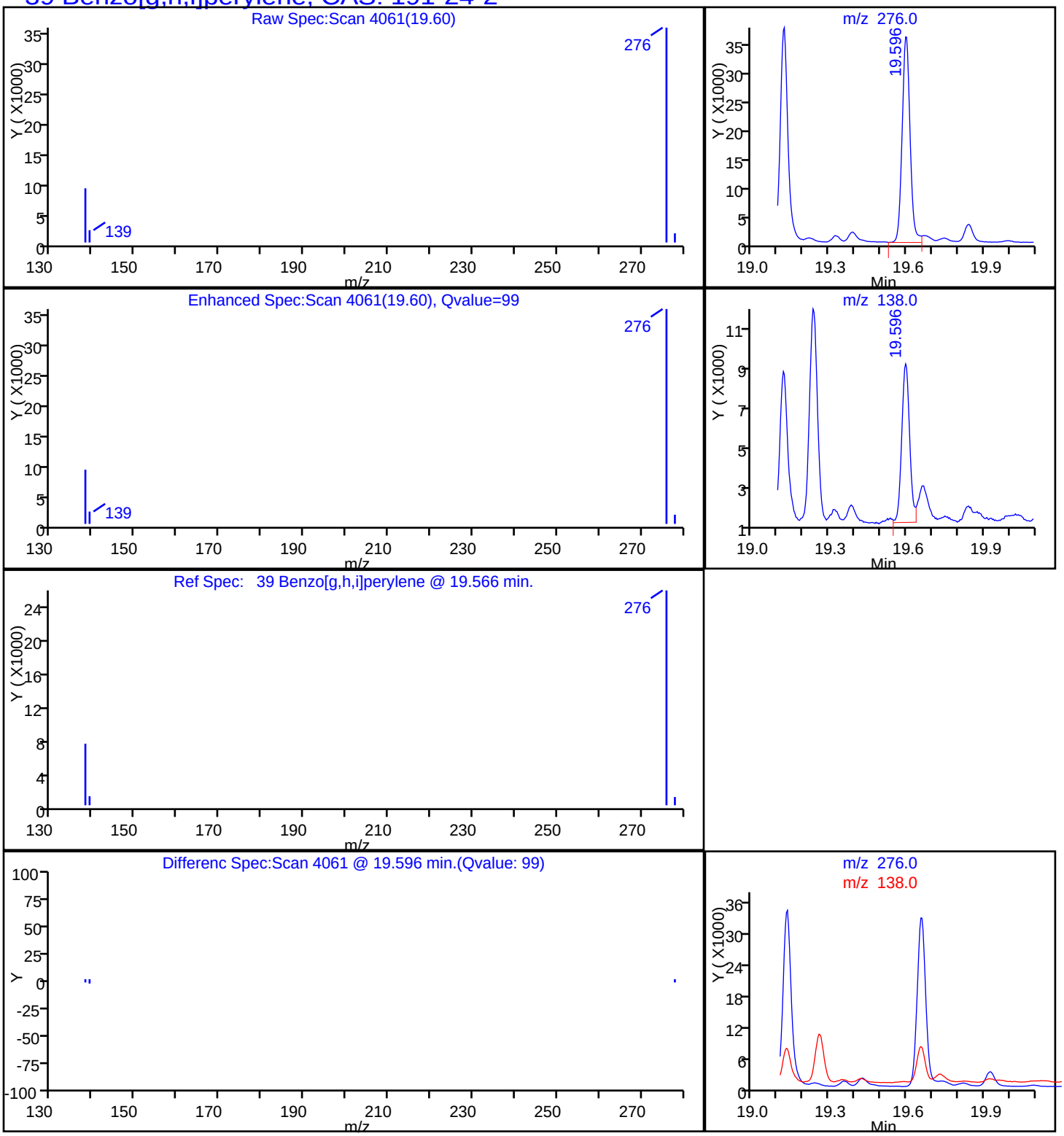


Report Date: 06-Jan-2014 13:44:09 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8951.D				
Injection Date:	06-Jan-2014 13:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[g,h,i]perylene, CAS: 191-24-2

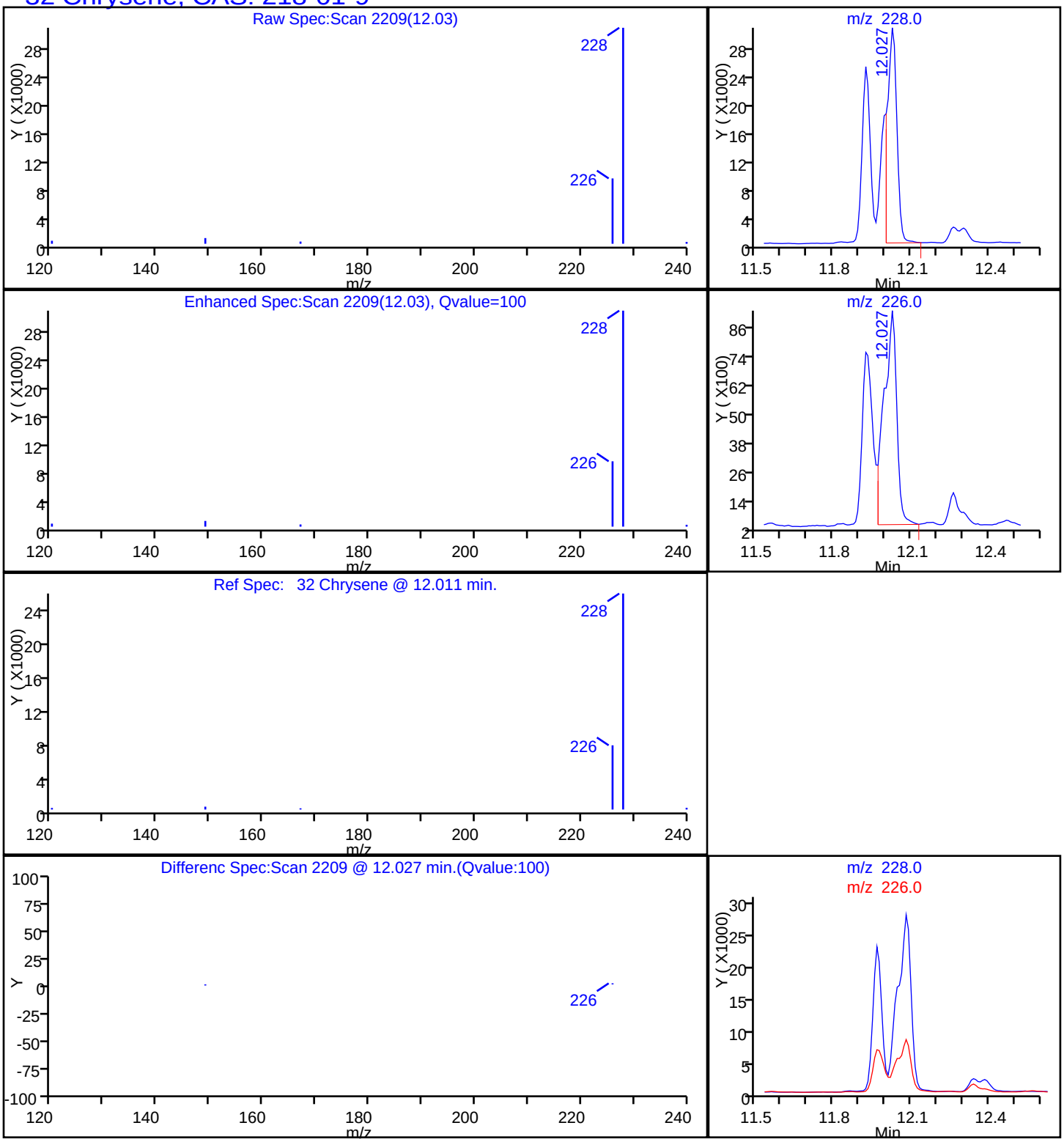


Report Date: 06-Jan-2014 13:44:08 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8951.D				
Injection Date:	06-Jan-2014 13:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9



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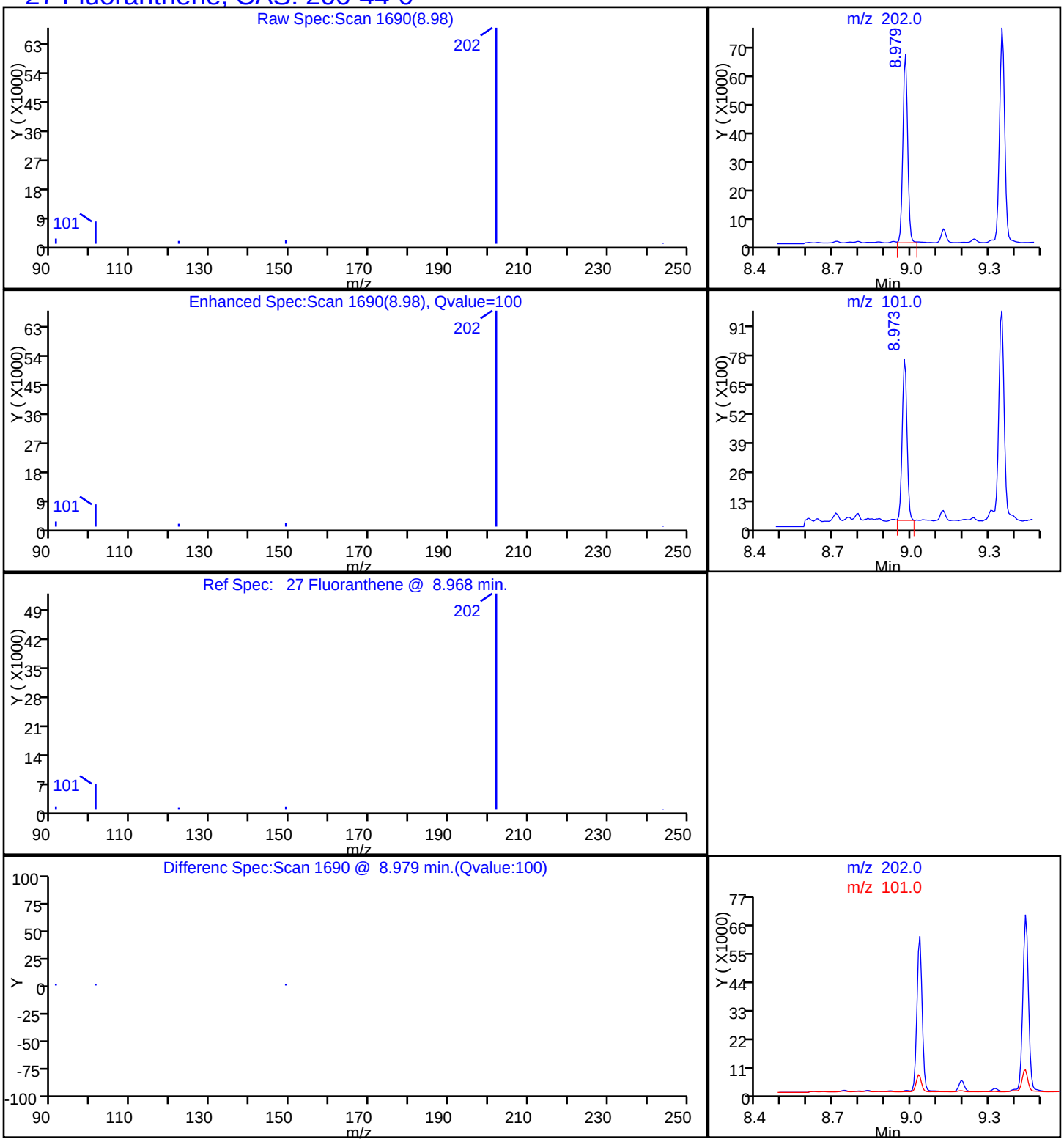
Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8951.D				
Injection Date:	06-Jan-2014 13:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0

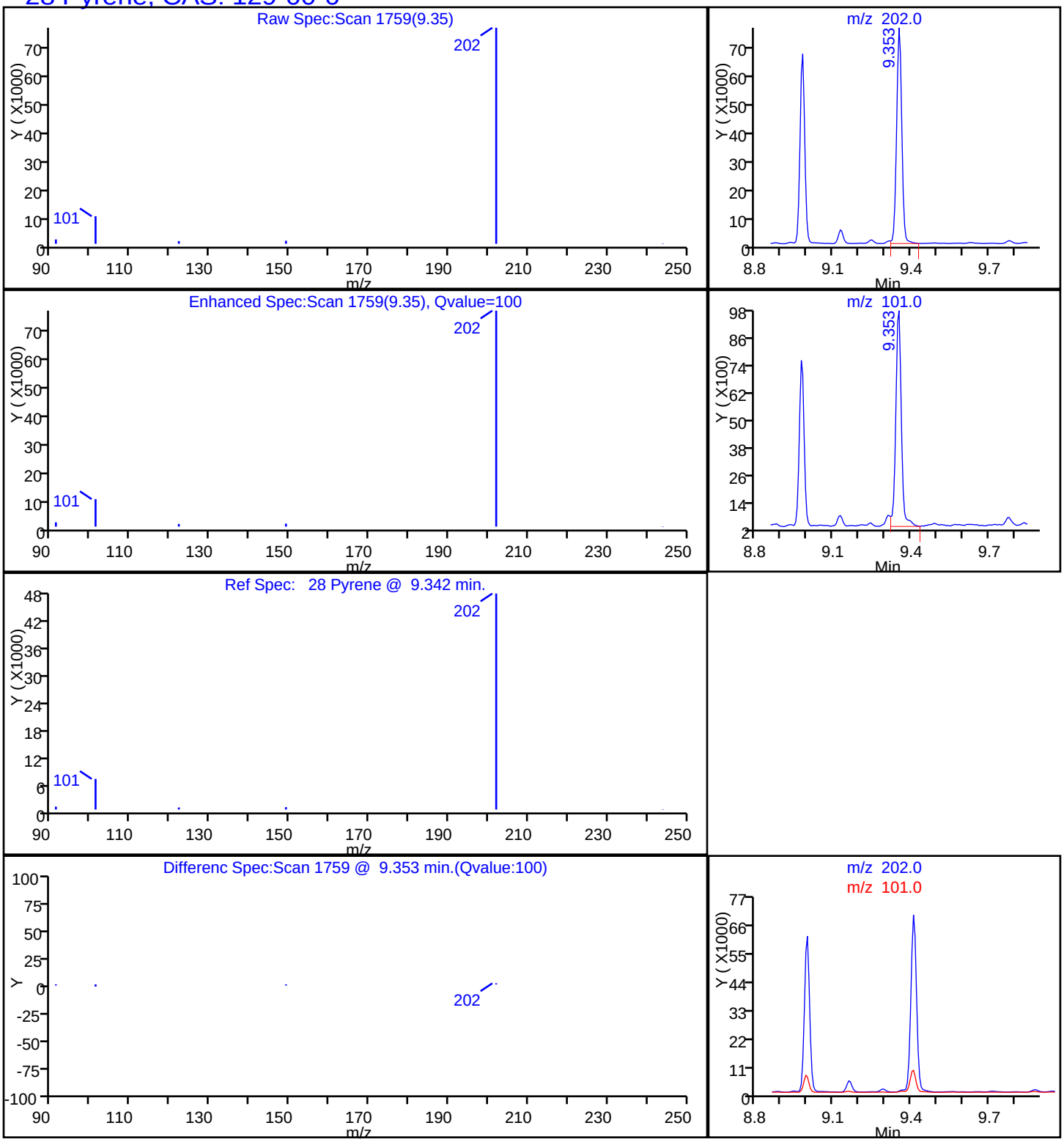


Report Date: 06-Jan-2014 13:44:08 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8951.D				
Injection Date:	06-Jan-2014 13:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0

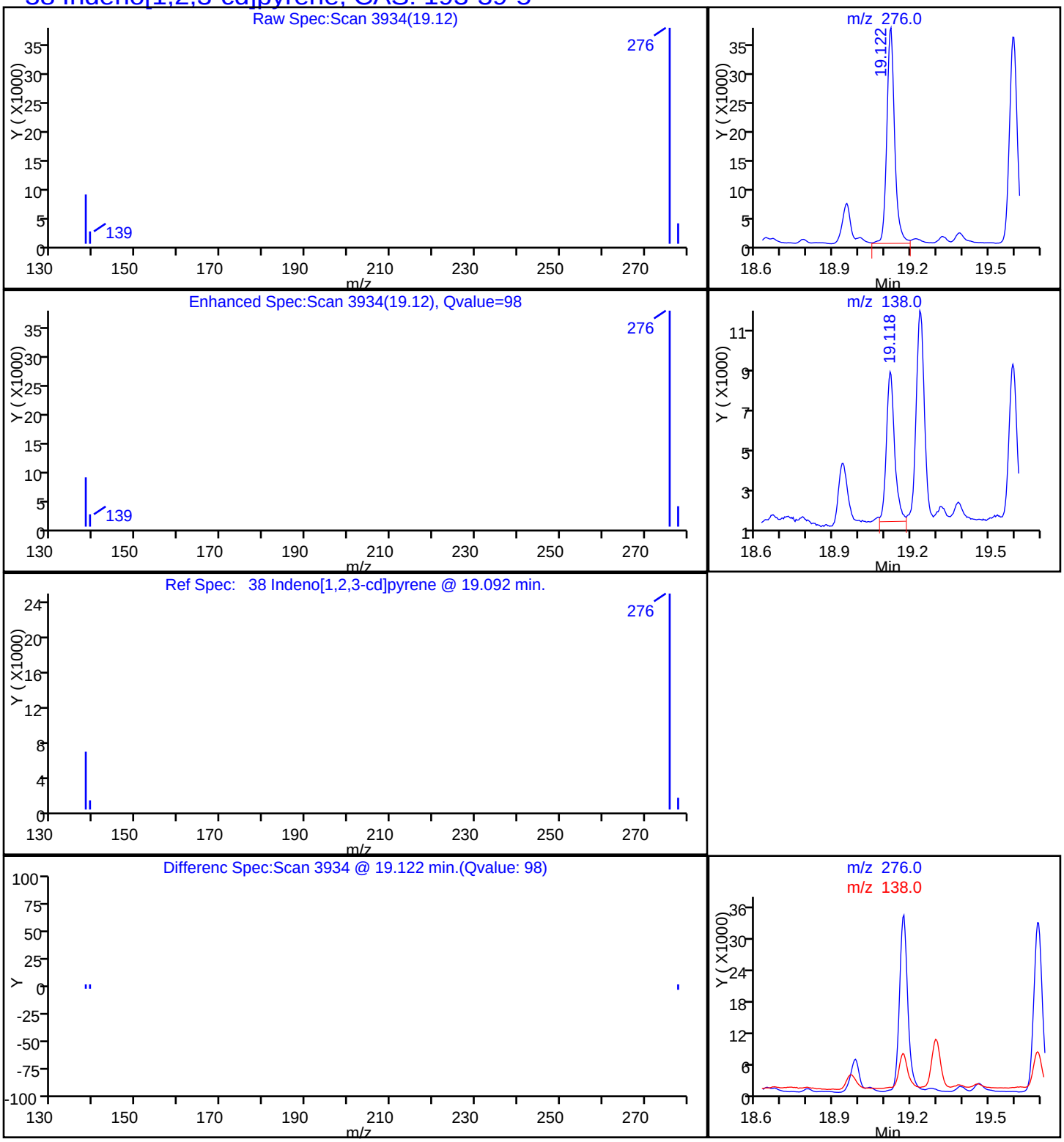


Report Date: 06-Jan-2014 13:44:08 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8951.D				
Injection Date:	06-Jan-2014 13:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



Manual Integration/User Assign Peak Report

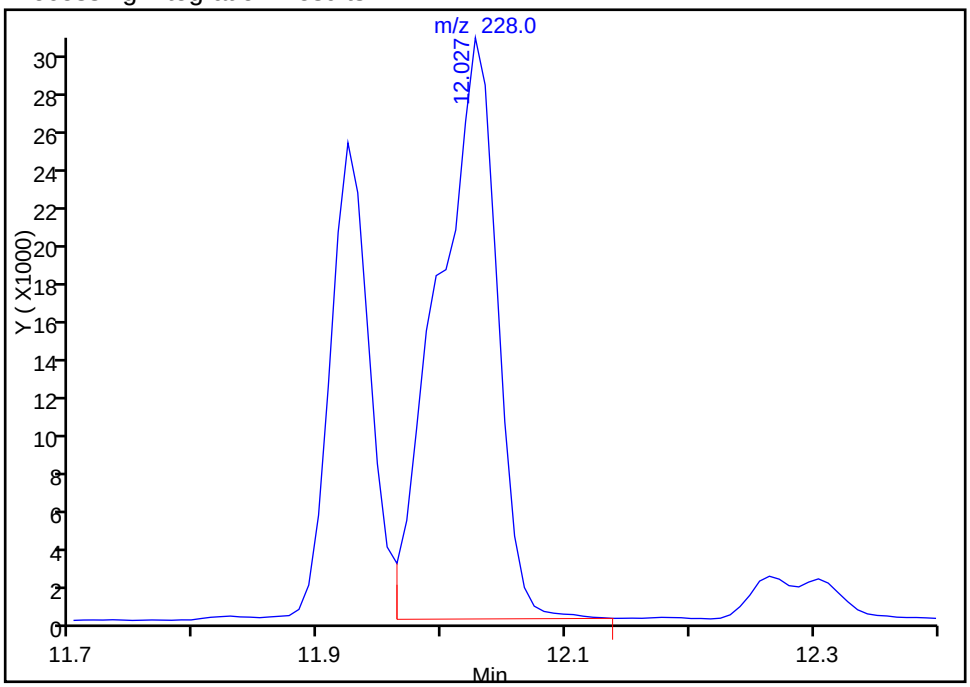
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8951.D				
Injection Date:	06-Jan-2014 13:48:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-11-B	Lab Sample ID:	280-50614-11		
Client ID:	FSA-SD-DU03-C				
Operator ID:	VASQUEZK	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

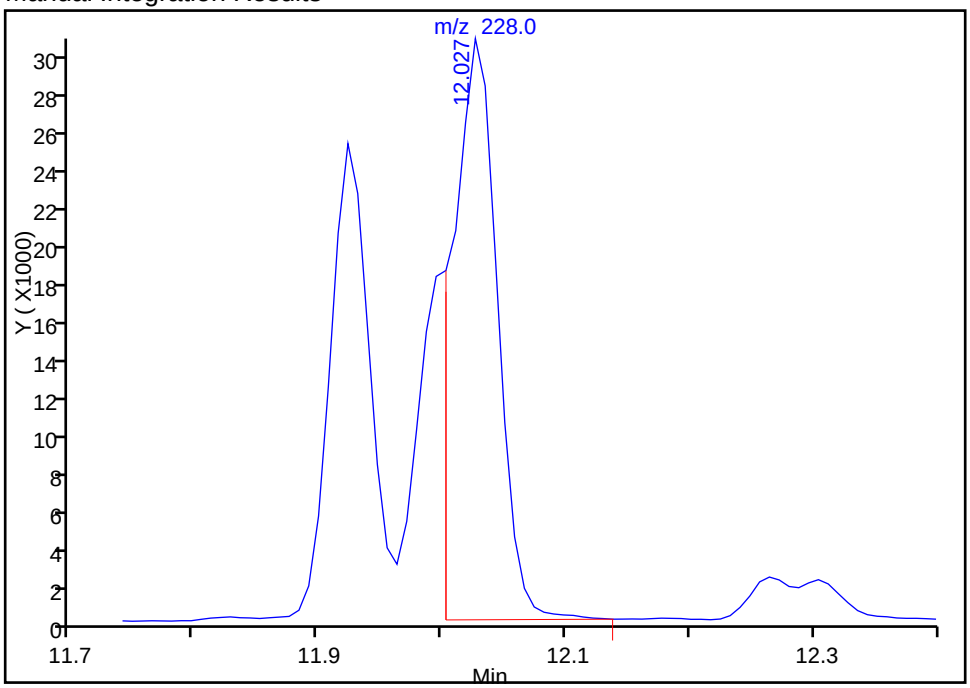
Processing Integration Results

RT: 12.03
Response: 100206
Amount: 1137.6808



Manual Integration Results

RT: 12.03
Response: 76031
Amount: 863.2119



Reviewer: vasquezk, 06-Jan-2014 13:43:20
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU01 | Lab Sample ID: 280-50614-12

Matrix: Solid | Lab File ID: X4_8931.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:45

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 32.86(g) | Date Analyzed: 01/02/2014 21:16

Con. Extract Vol.: 1000(uL) | Dilution Factor: 5

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
50-32-8	Benzo[a]pyrene	580000		23000	3400
56-55-3	Benzo[a]anthracene	370000		23000	4100
207-08-9	Benzo[k]fluoranthene	430000		23000	4600
191-24-2	Benzo[g,h,i]perylene	540000		23000	5000
85-01-8	Phenanthrene	230000		23000	5000
120-12-7	Anthracene	230000		23000	3300
53-70-3	Dibenz(a,h)anthracene	150000		23000	5900
218-01-9	Chrysene	510000		23000	4600
83-32-9	Acenaphthene	12000	J	23000	730
208-96-8	Acenaphthylene	200000		23000	780
206-44-0	Fluoranthene	580000		23000	4600
86-73-7	Fluorene	21000	J	23000	2100
129-00-0	Pyrene	670000		23000	5000
193-39-5	Indeno[1,2,3-cd]pyrene	600000		23000	5000
91-57-6	2-Methylnaphthalene	110000		23000	1400
91-20-3	Naphthalene	85000		23000	1500

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	62	D	39-120
4165-60-0	Nitrobenzene-d5	75	D	42-120
1718-51-0	Terphenyl-d14	111	D	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D
Lims ID: 280-50614-A-12-B Lab Sample ID: 280-50614-12
Client ID: FSA-SD-DU01
Sample Type: Client
Inject. Date: 02-Jan-2014 21:16:30 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-0018755-017
Misc. Info.: 280-50614-a-12-b,5, =280-50614-A-12-B,5,
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 09:46:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	83	23865	600.0	
* 1 Phenanthrene-d10	188	7.532	7.532	0.0	99	43638	600.0	
* 3 Chrysene-d12	240	11.964	11.964	0.0	82	51219	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	98	2009	75.2	
$ 5 2-Fluorobiphenyl	172	5.630	5.633	-0.003	100	3509	62.3	
$ 6 Terphenyl-d14	244	9.527	9.532	-0.005	56	5889	111.5	
42 1,4-Dioxane	88		2.100					
7 N-Nitrosodimethylamine	42		2.219					
14 Naphthalene	128	4.783	4.786	-0.003	100	40759	558.2	
15 2-Methylnaphthalene	142	5.344	5.344	0.0	99	37508	726.3	
16 1-Methylnaphthalene	142	5.433	5.433	0.0	99	29967	632.4	
17 Dimethyl phthalate	163	5.949	5.949	0.0	69	2919	48.5	
19 Acenaphthylene	152	6.119	6.119	0.0	99	105805	1329.6	
20 Acenaphthene	153	6.261	6.269	-0.008	87	3772	76.0	
18 Dibenzofuran	168	6.408	6.408	0.0	97	24274	333.1	
21 Diethyl phthalate	149	6.521	6.527	-0.006	91	2032	33.8	
22 Fluorene	166	6.702	6.702	0.0	93	8027	135.3	
23 N-Nitrosodiphenylamine	169	6.765	6.771	-0.006	87	5393	138.0	
24 Phenanthrene	178	7.553	7.553	0.0	100	137761	1540.4	
25 Anthracene	178	7.602	7.602	0.0	99	135880	1543.5	
26 Di-n-butyl phthalate	149	7.992	7.992	0.0	94	6120	56.1	
27 Fluoranthene	202	8.984	8.979	0.005	100	367079	3784.5	
28 Pyrene	202	9.359	9.359	0.0	100	443319	4429.7	
29 Butyl benzyl phthalate	149	10.444	10.438	0.006	59	4125	90.6	
30 Bis(2-ethylhexyl) phthalate	149	11.821	11.821	0.0	70	41550	659.1	
31 Benzo[a]anthracene	228	11.932	11.932	0.0	99	255724	2456.3	
32 Chrysene	228	12.035	12.035	0.0	100	331738	3369.9	M
33 Di-n-octyl phthalate	149		13.879					
34 Benzo[b]fluoranthene	252	15.275	15.264	0.011	100	843675	8847.5	E
35 Benzo[k]fluoranthene	252	15.361	15.357	0.004	100	274335	2796.7	
36 Benzo[a]pyrene	252	16.404	16.397	0.007	100	354873	3840.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.126	19.118	0.008	99	358793	3944.0	
37 Dibenz(a,h)anthracene	278	19.148	19.152	-0.004	63	91123	991.2	
39 Benzo[g,h,i]perylene	276	19.603	19.592	0.011	99	345768	3540.8	
43 Benzidine	184		0.0					
45 Morpholine	1		0.0					
41 Pentachlorophenol	266		0.0					
8 Pentachlorophenol_T	266		4.202					
10 Benzidine_T	184		5.323					
12 4,4'-DDD	235		5.753					
11 4,4'-DDE	246		5.795					
13 4,4'-DDT	235		6.075					
S 44 TPAH	1		0.0					

QC Flag Legend

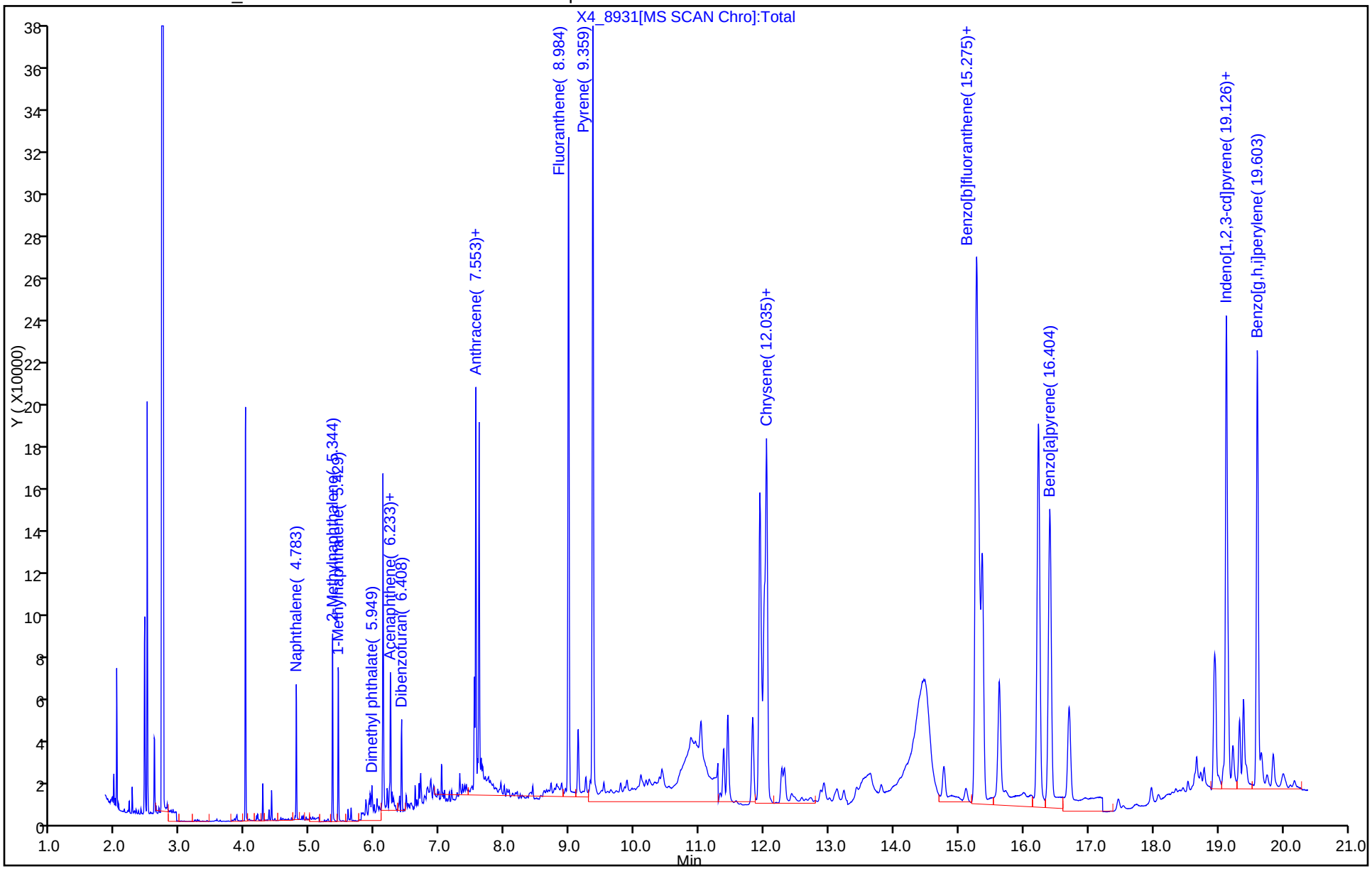
Processing Flags
E - Exceeded Maximum Amount

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:06:11 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12	Worklist Smp#:	17
Client ID:	FSA-SD-DU01				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	17
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

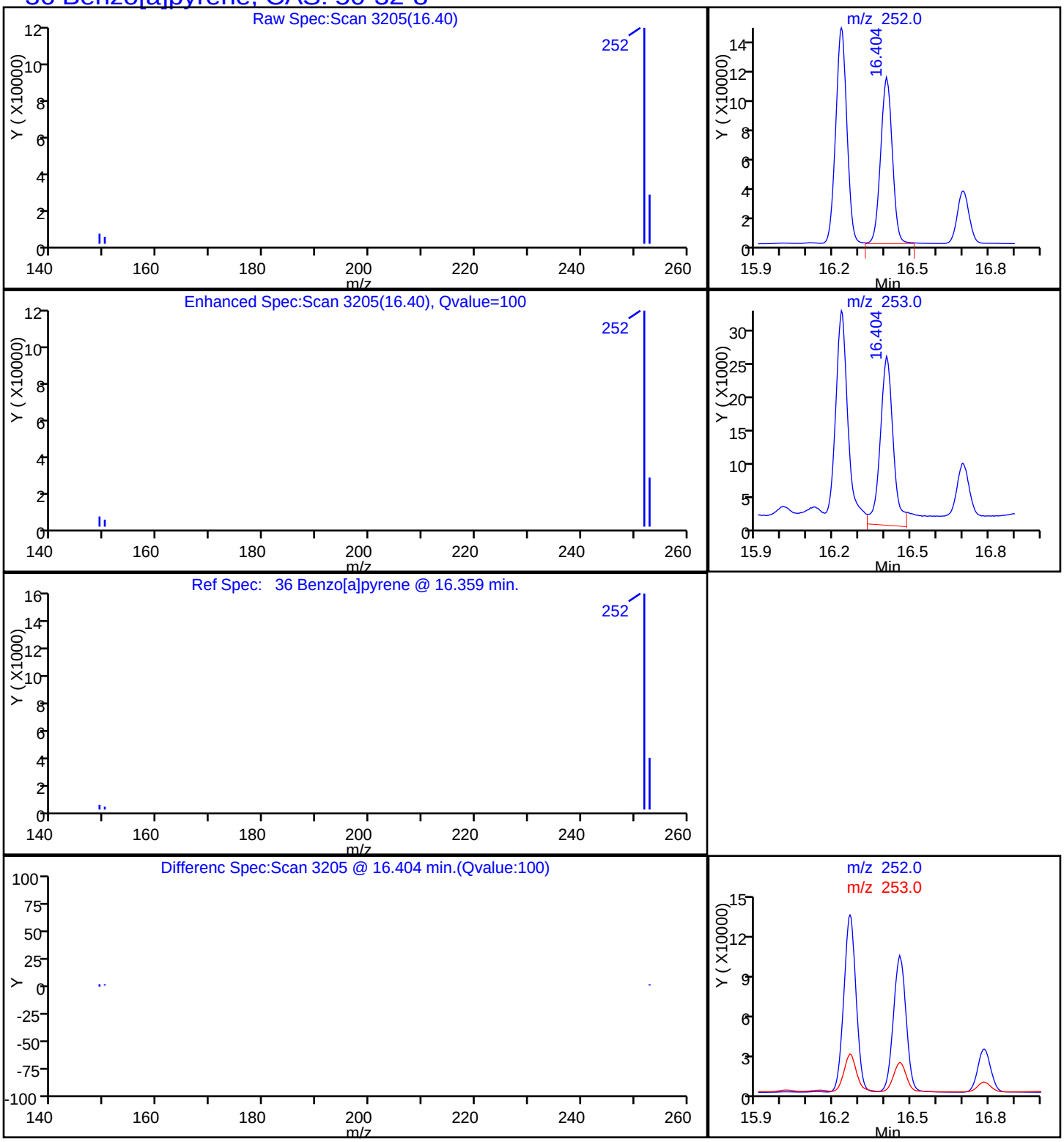


Report Date: 06-Jan-2014 10:06:12 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[a]pyrene, CAS: 50-32-8

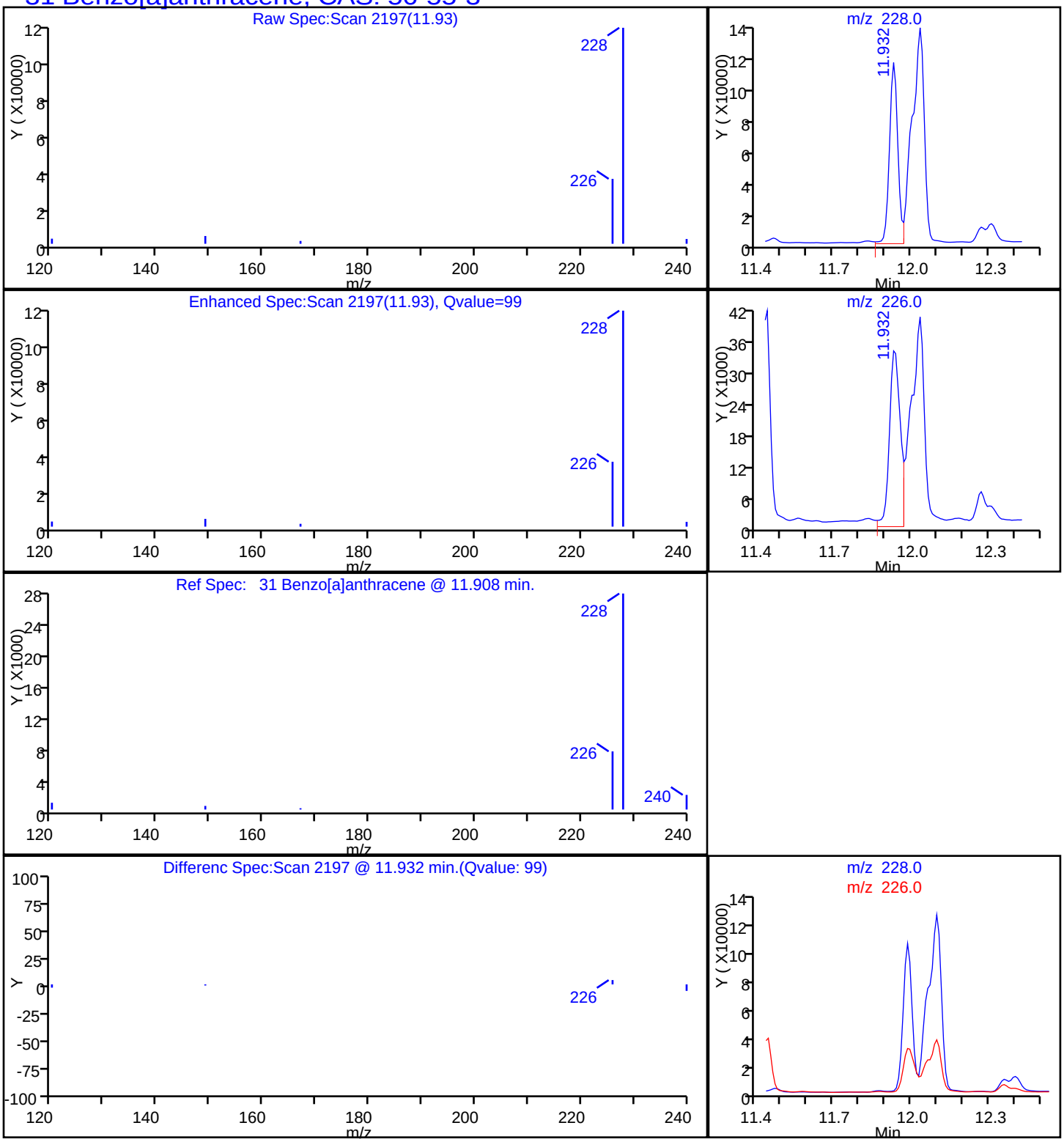


Report Date: 06-Jan-2014 10:06:12 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3



Report Date: 06-Jan-2014 10:06:12 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

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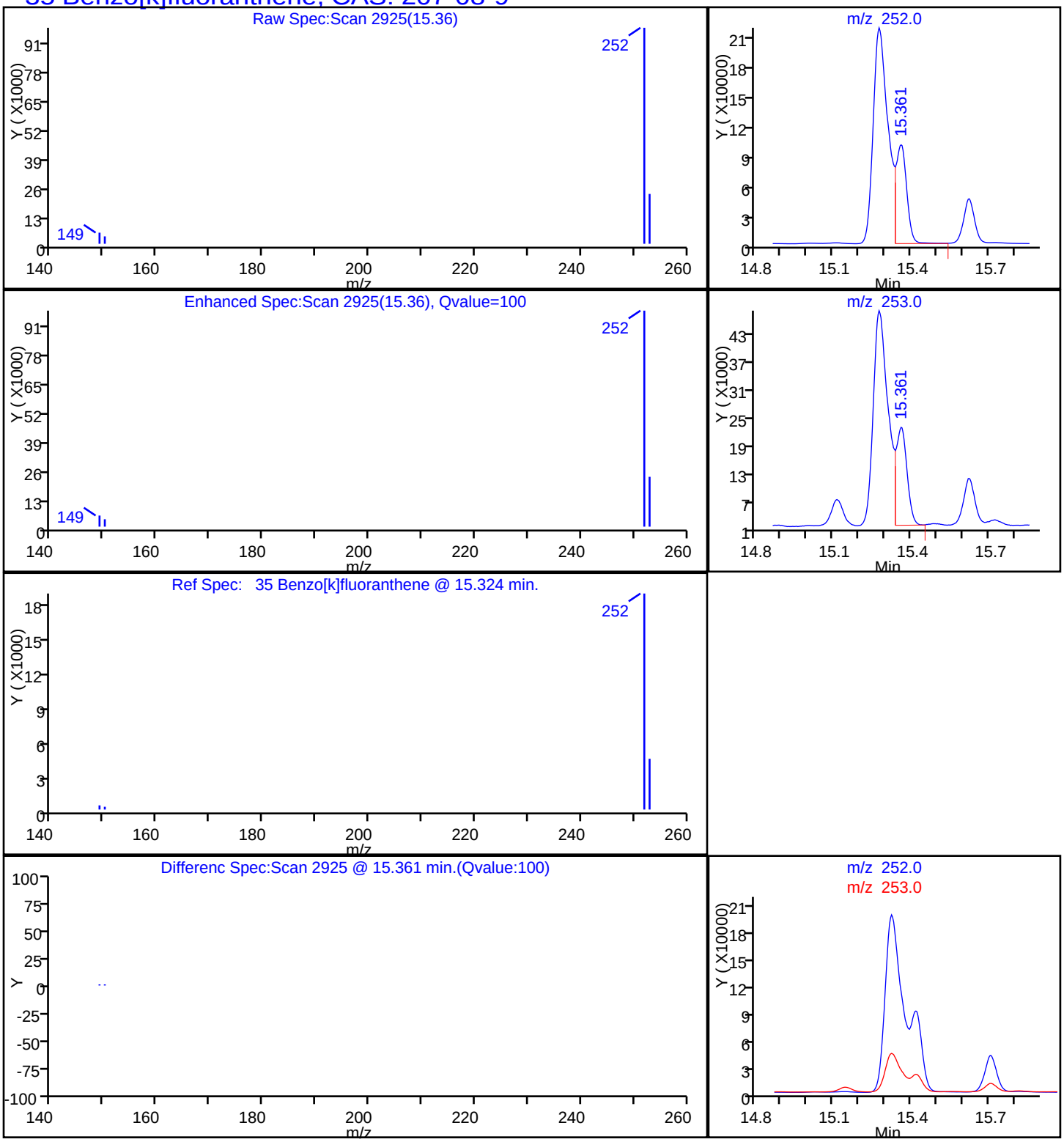
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9



Report Date: 06-Jan-2014 10:06:12 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
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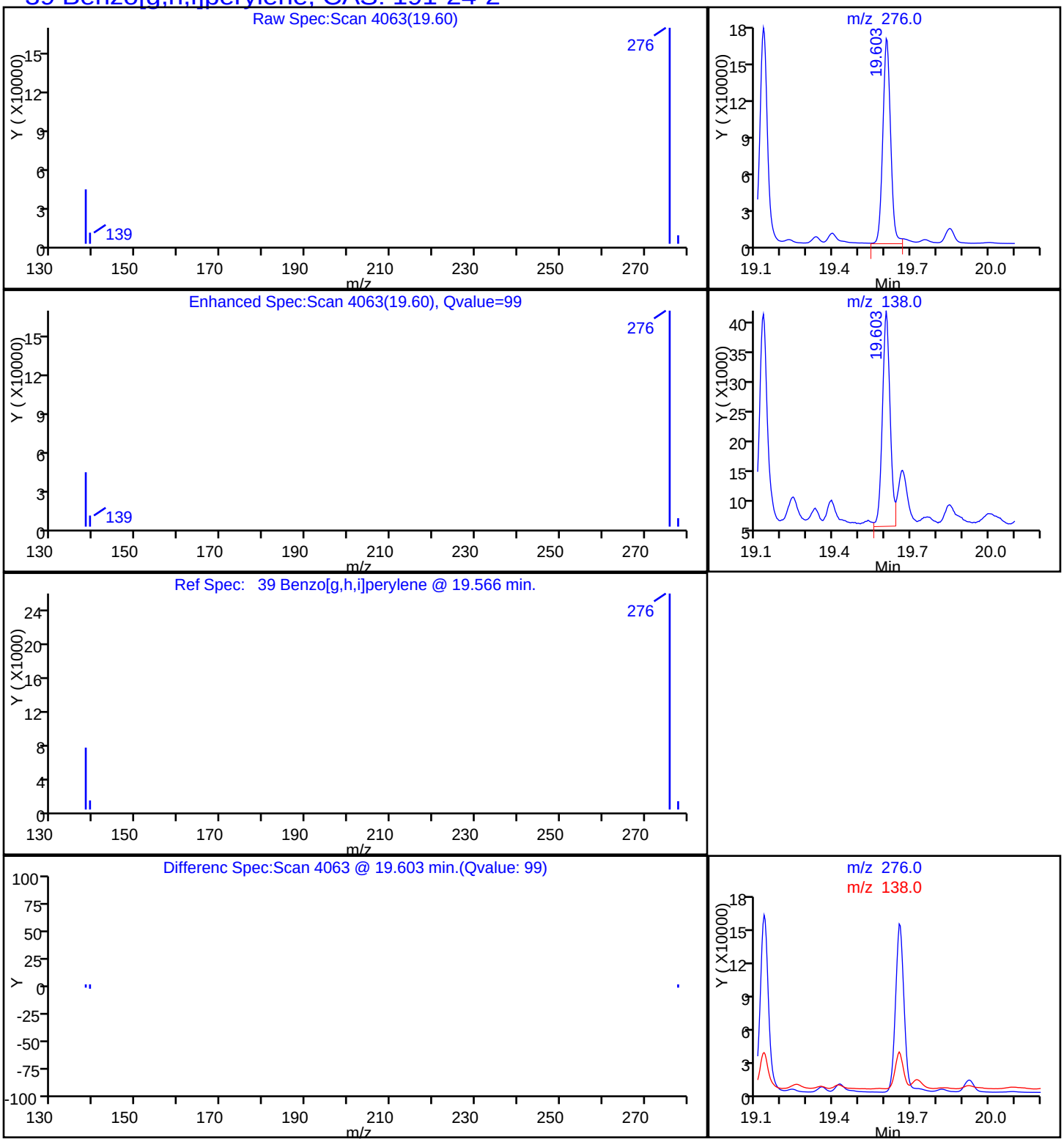
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[g,h,i]perylene, CAS: 191-24-2

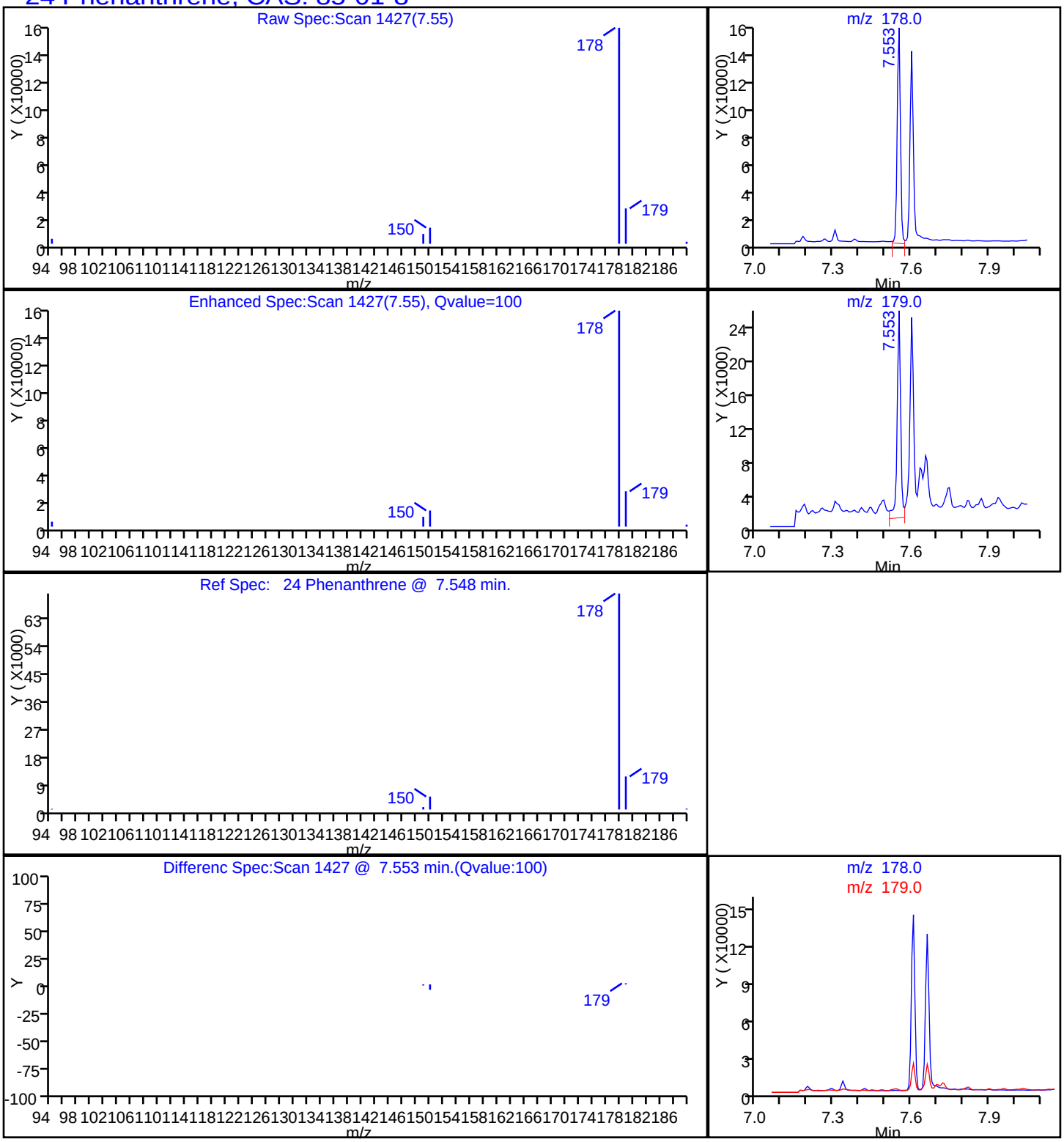


Report Date: 06-Jan-2014 10:06:11 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8

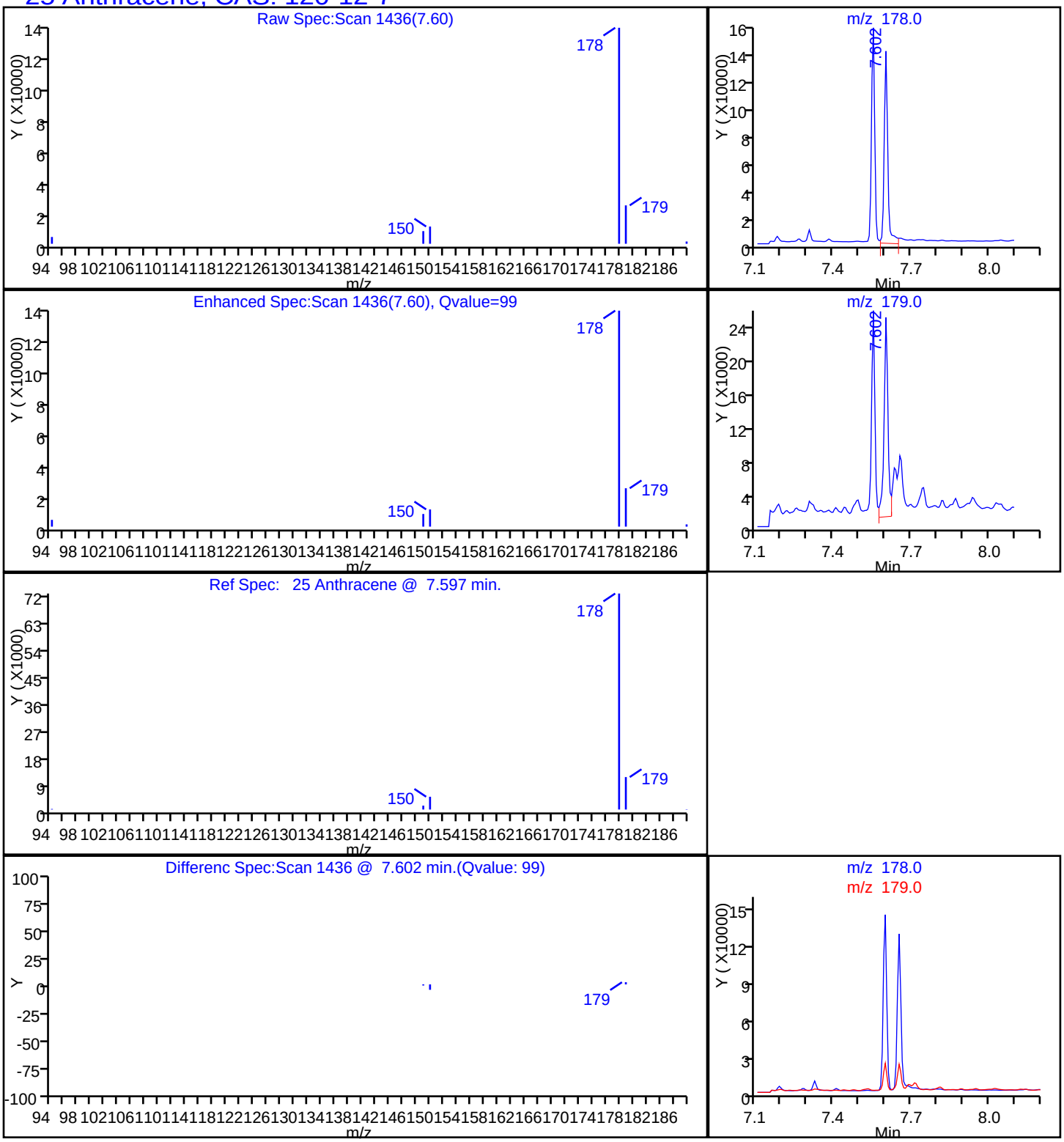


Report Date: 06-Jan-2014 10:06:11 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7

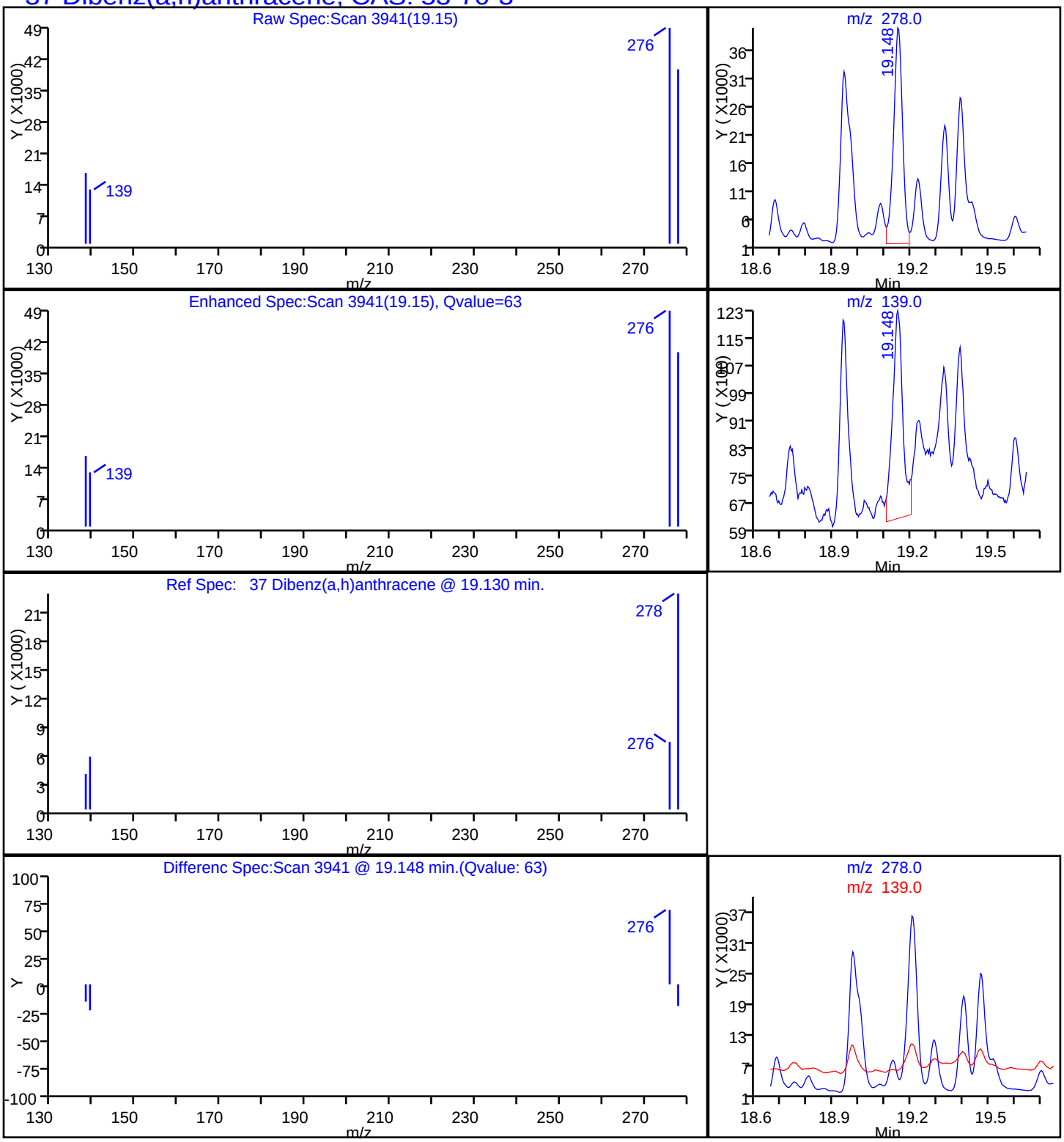


Report Date: 06-Jan-2014 10:06:12 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3

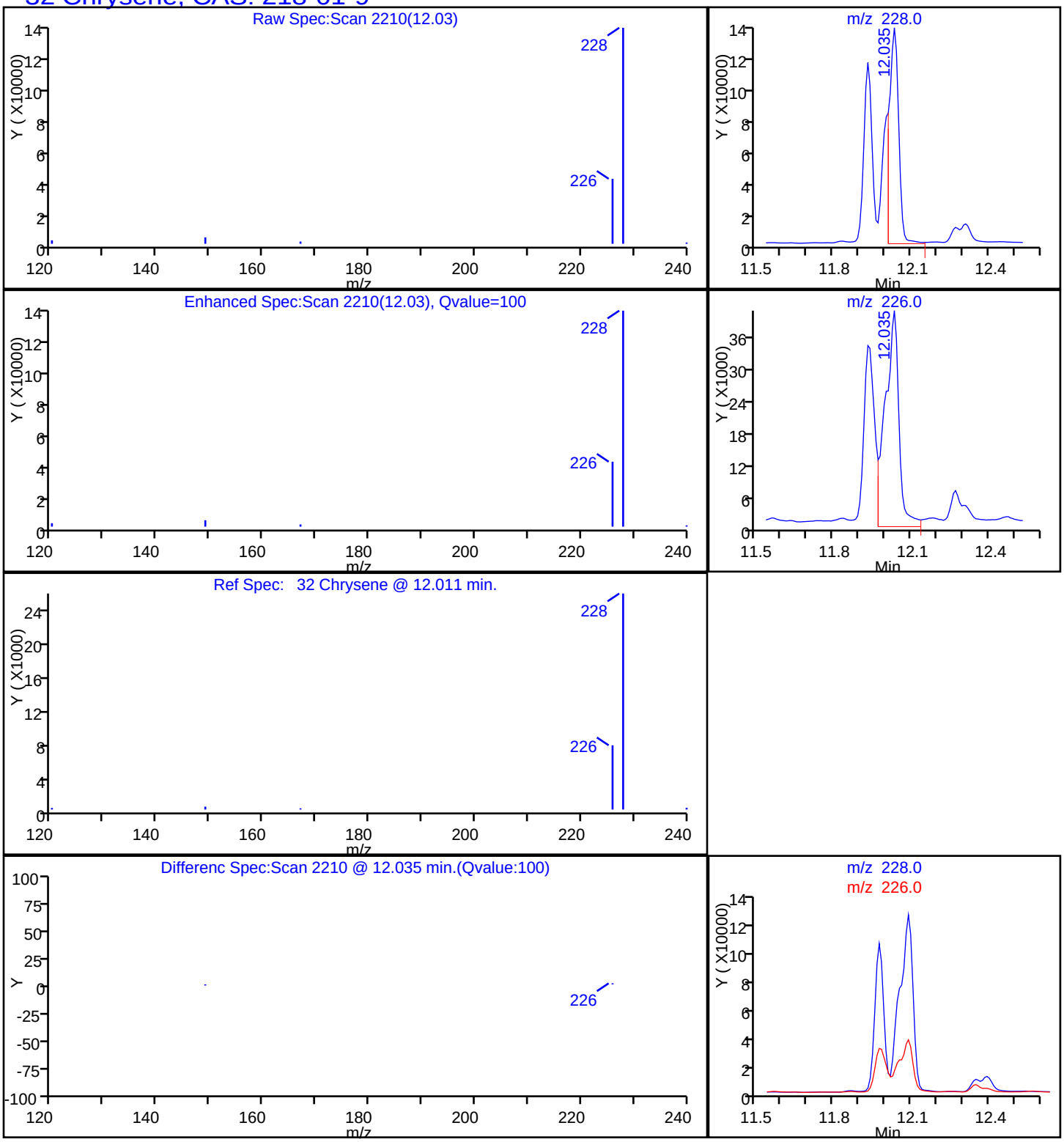


Report Date: 06-Jan-2014 10:06:12 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

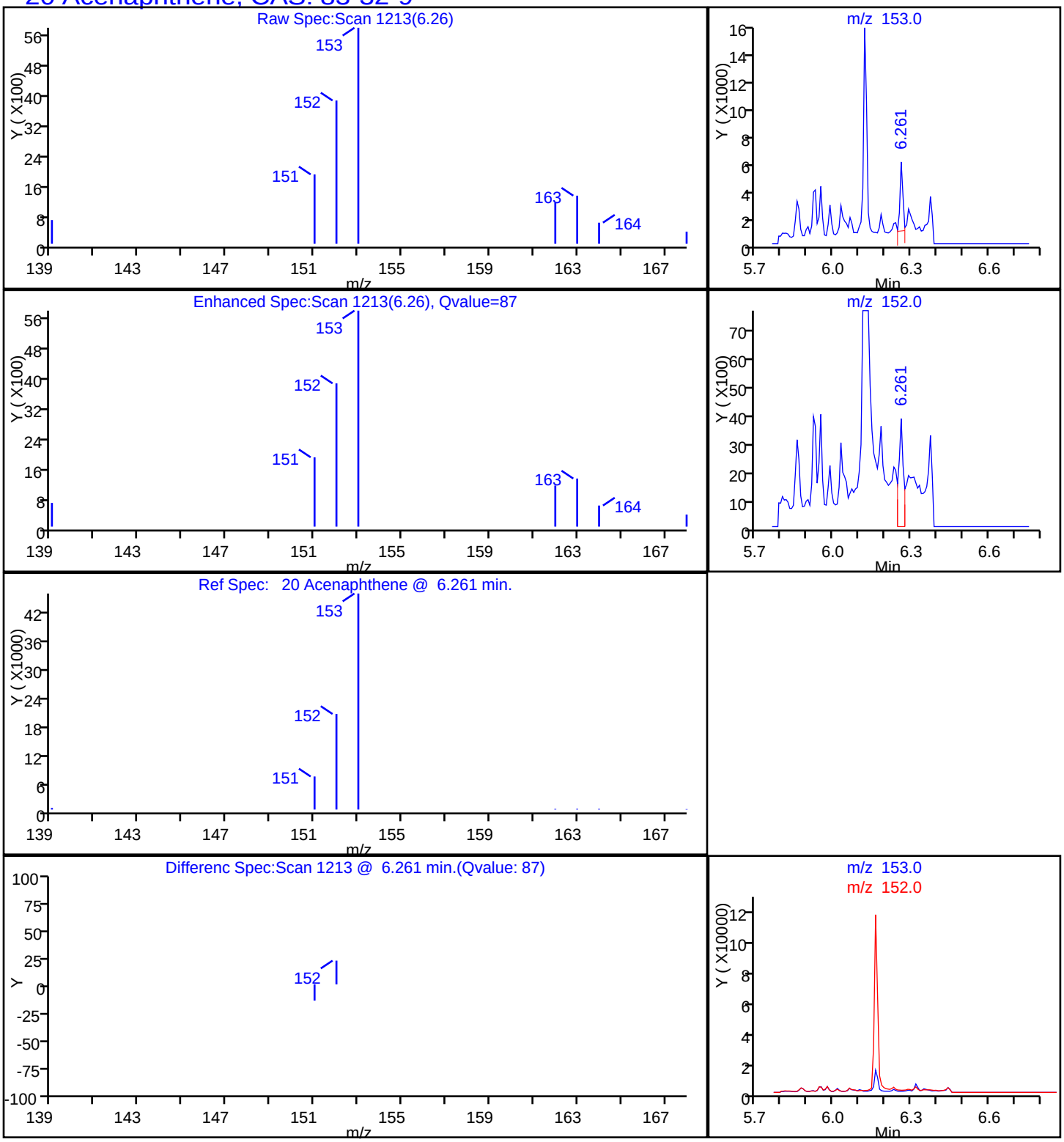


Report Date: 06-Jan-2014 10:06:11 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9

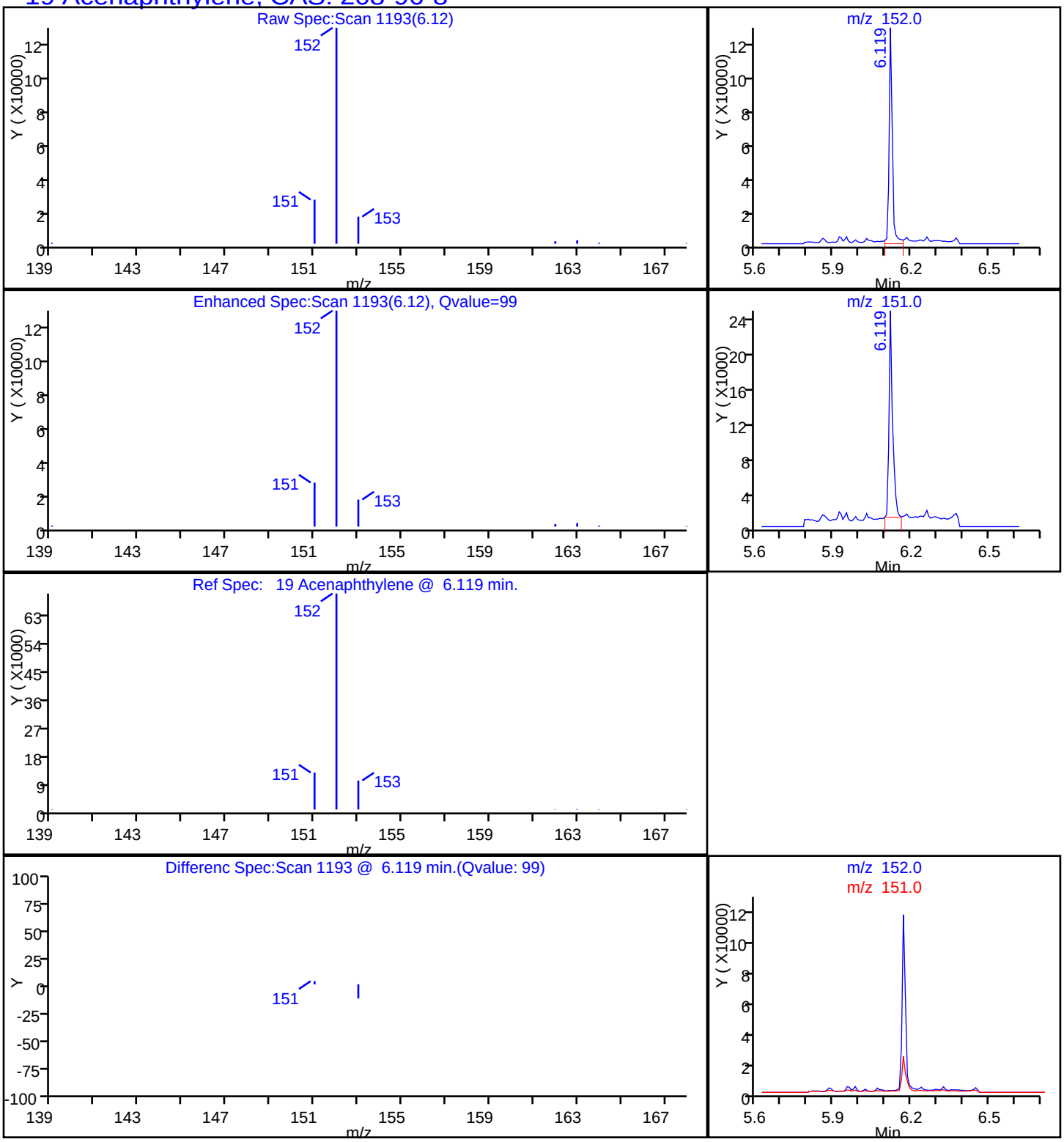


Report Date: 06-Jan-2014 10:06:11 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

19 Acenaphthylene, CAS: 208-96-8

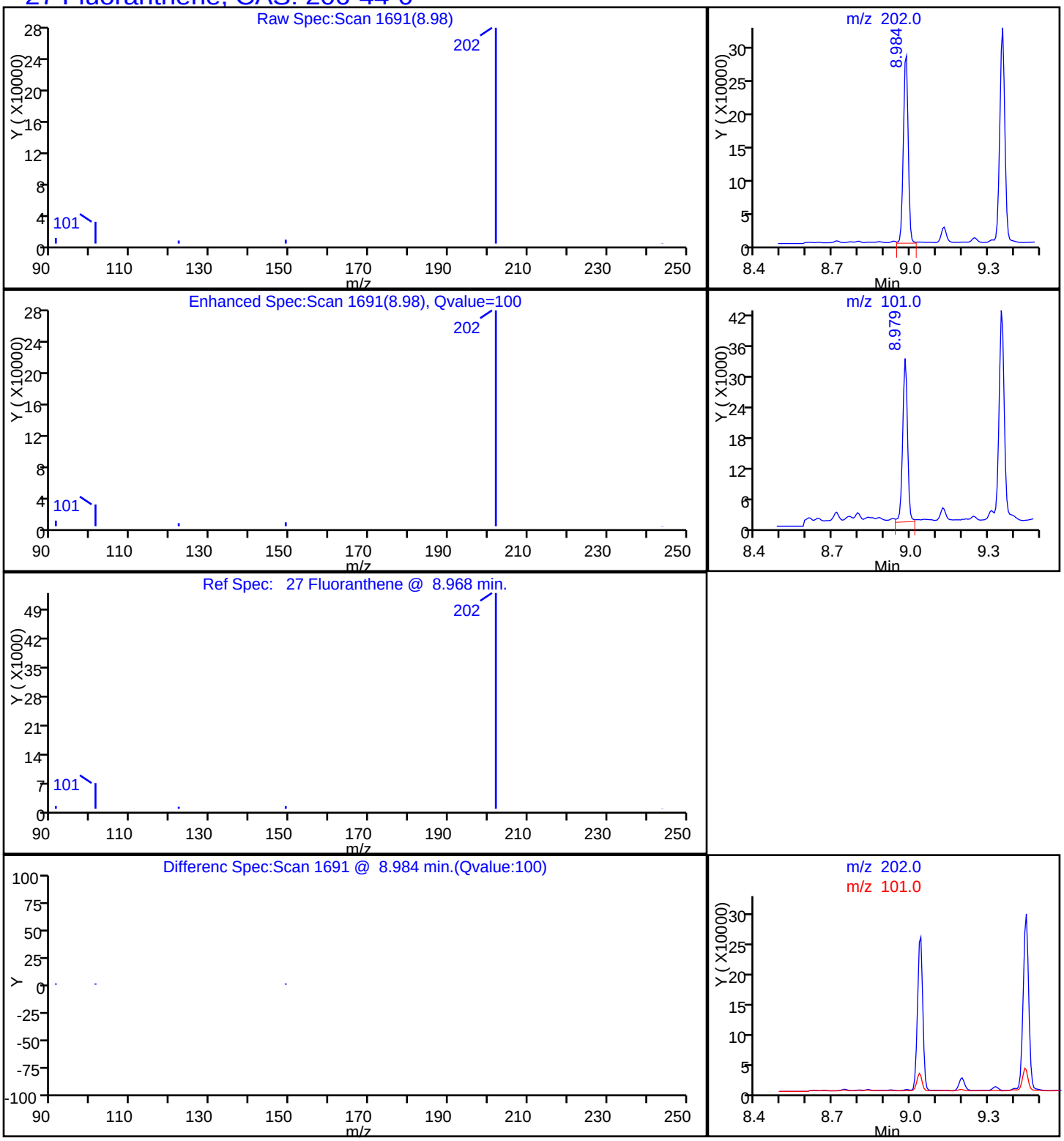


Report Date: 06-Jan-2014 10:06:11 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0

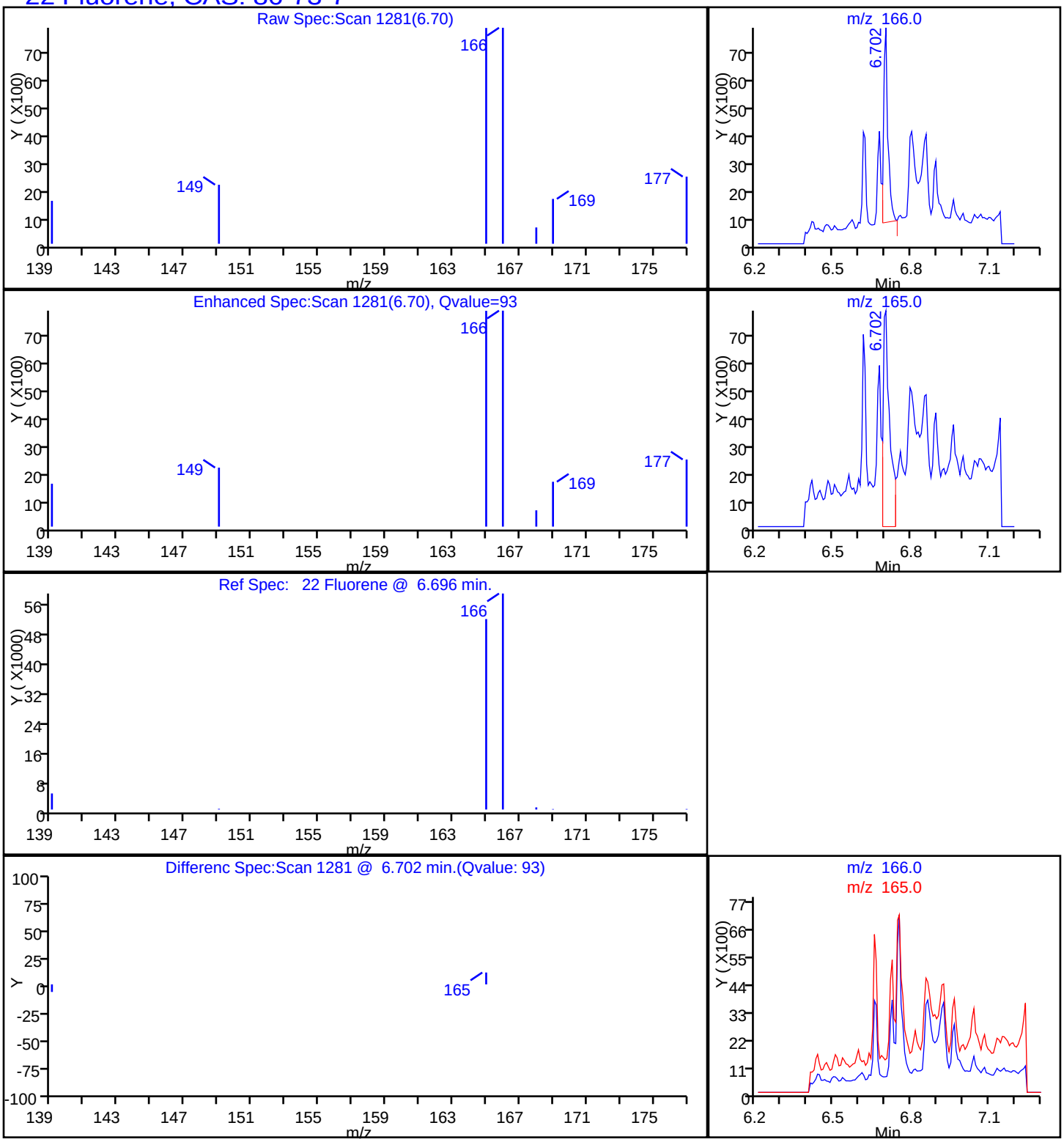


Report Date: 06-Jan-2014 10:06:11 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7

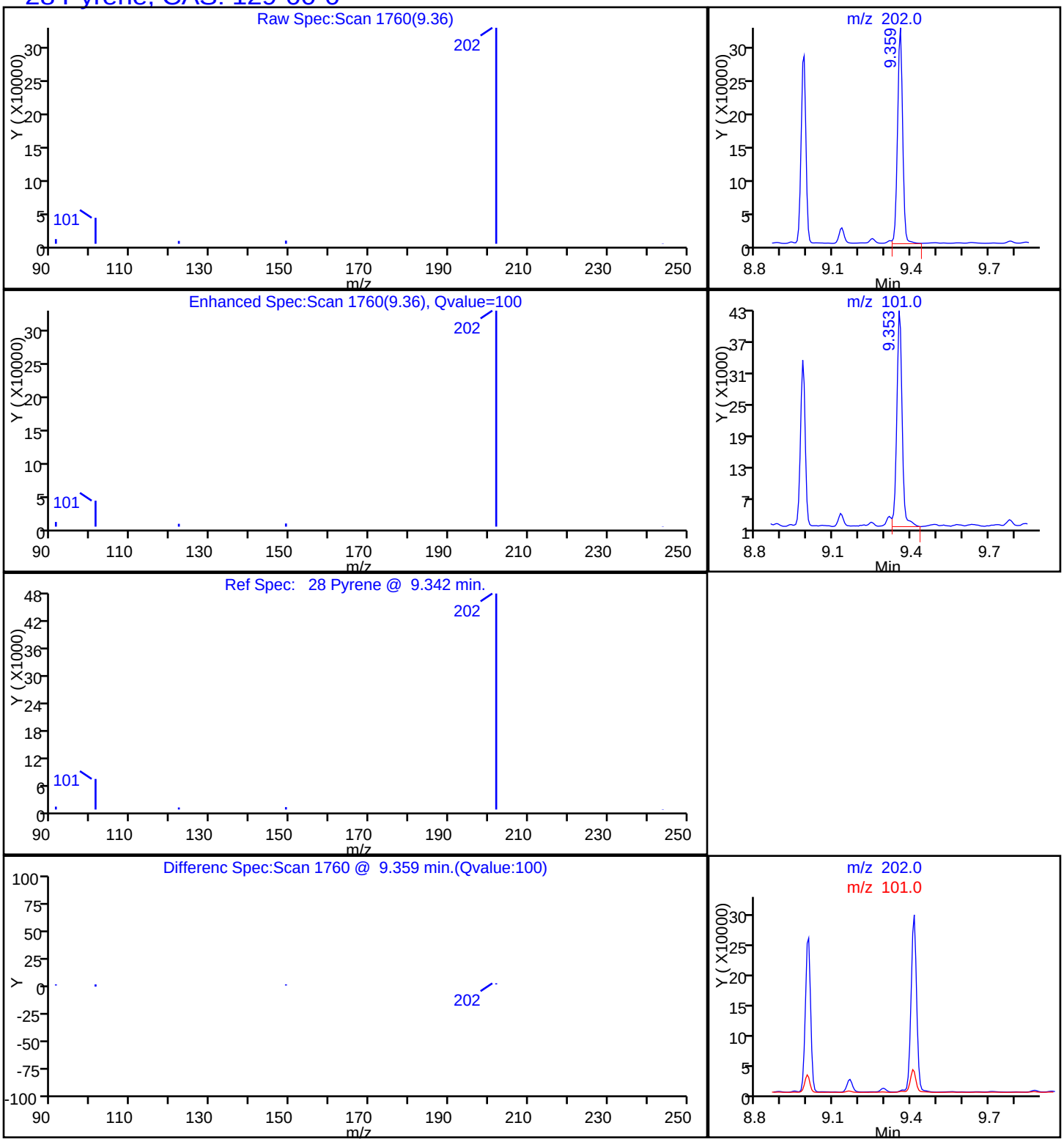


Report Date: 06-Jan-2014 10:06:11 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0

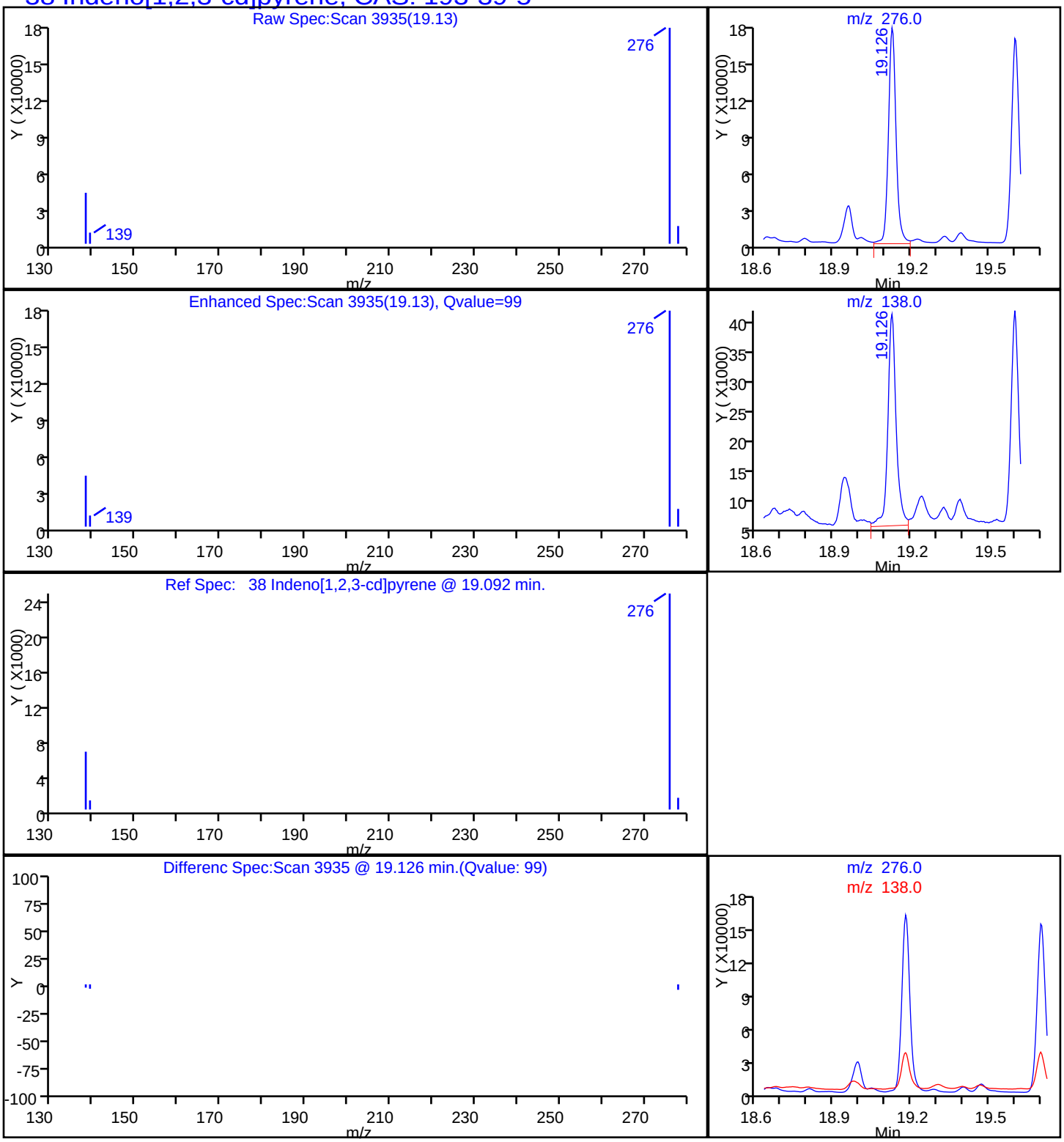


Report Date: 06-Jan-2014 10:06:12 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

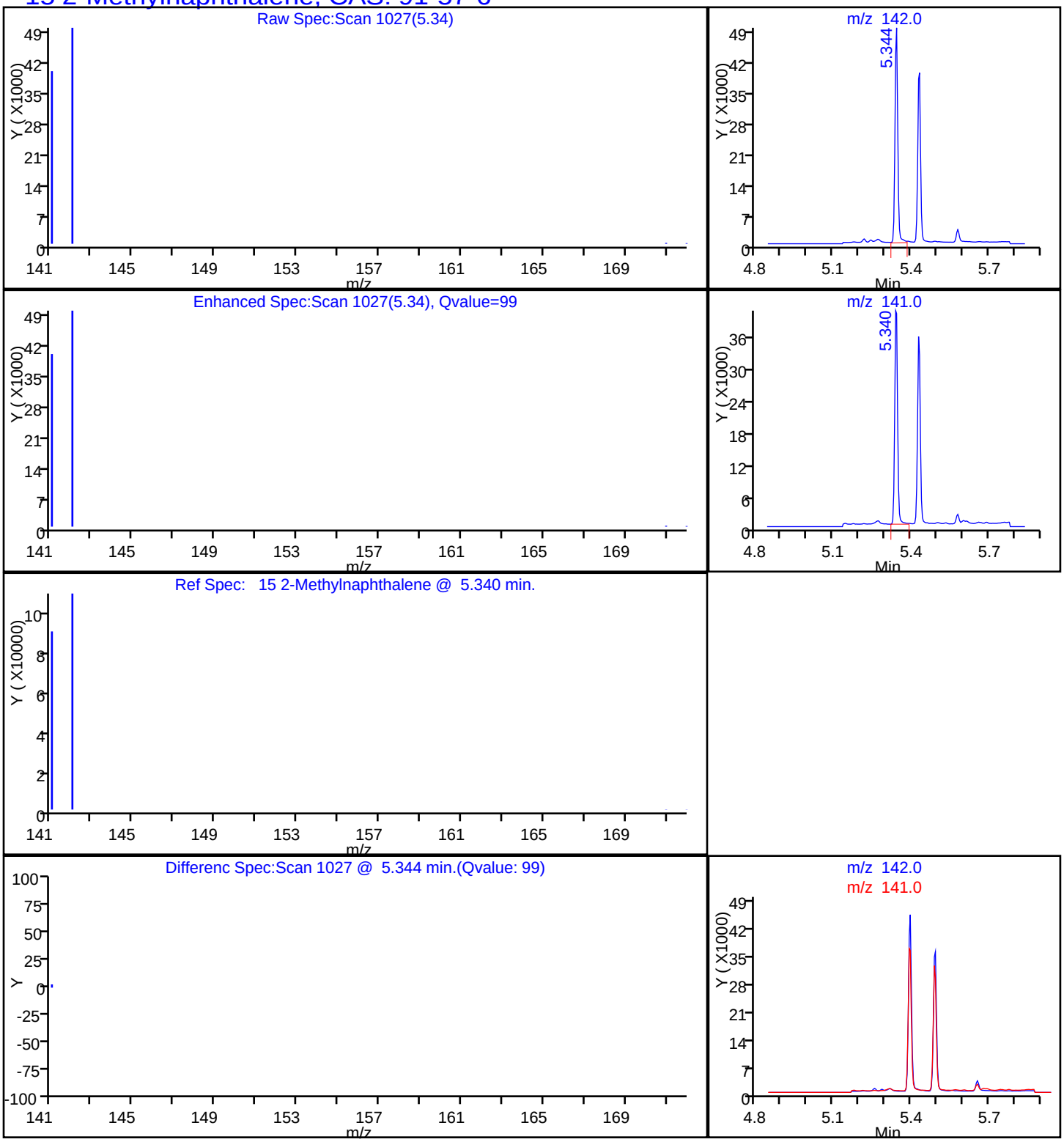


Report Date: 06-Jan-2014 10:06:11 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 2-Methylnaphthalene, CAS: 91-57-6

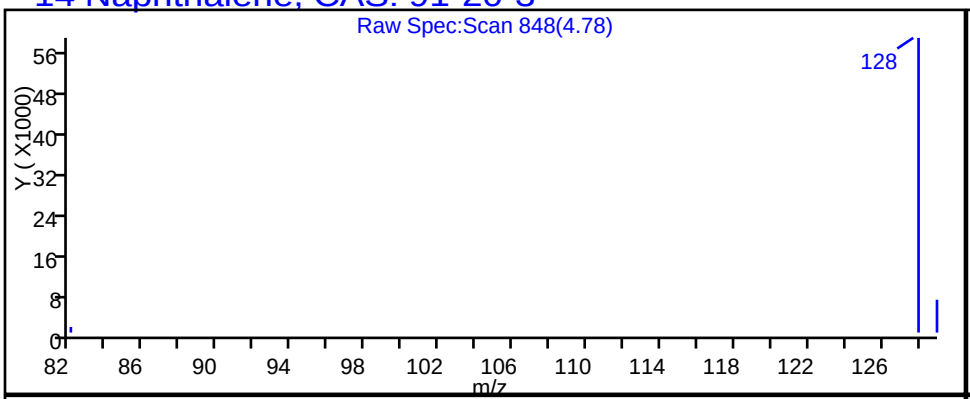


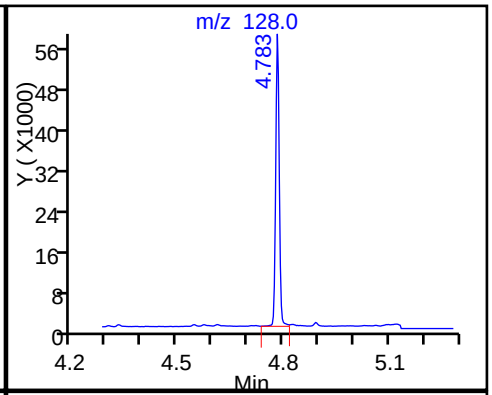
Report Date: 06-Jan-2014 10:06:11 Chrom Revision: 2.1 15-Oct-2013 07:52:24

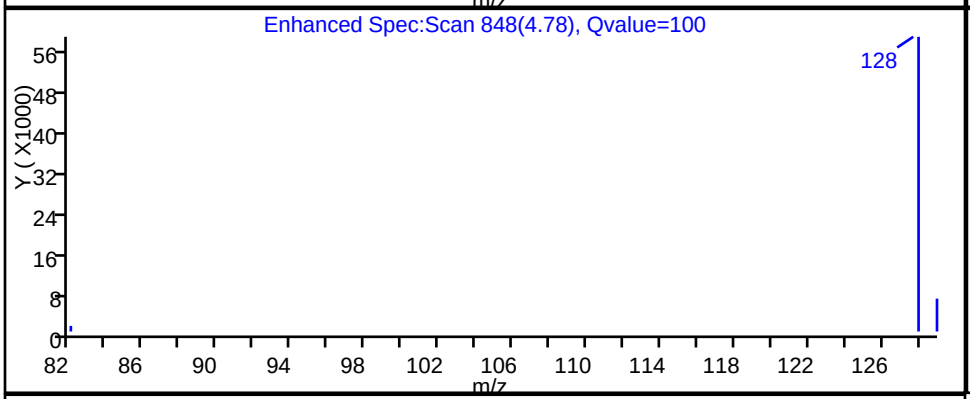
TestAmerica Denver

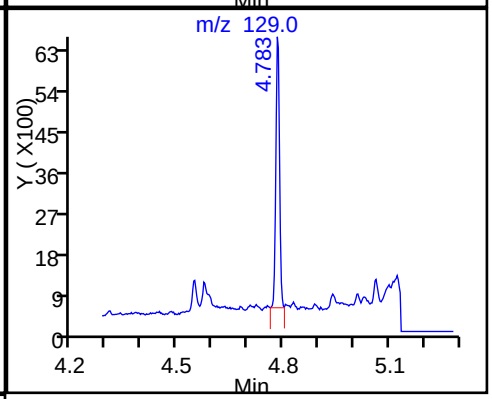
Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

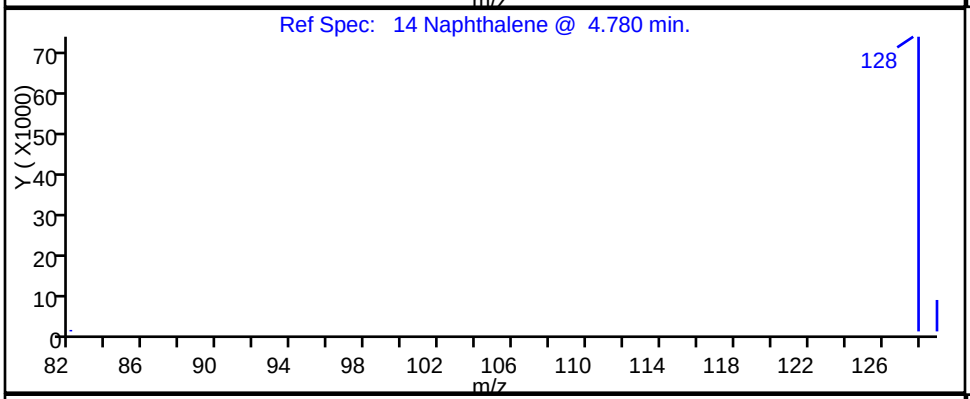
14 Naphthalene, CAS: 91-20-3

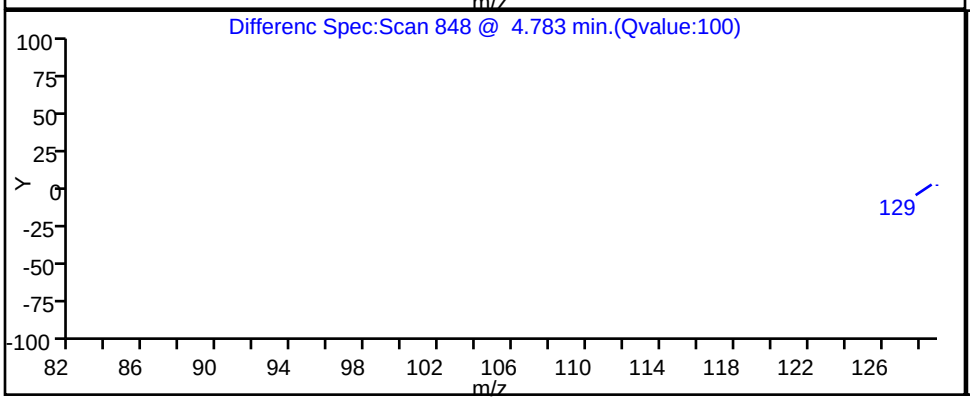


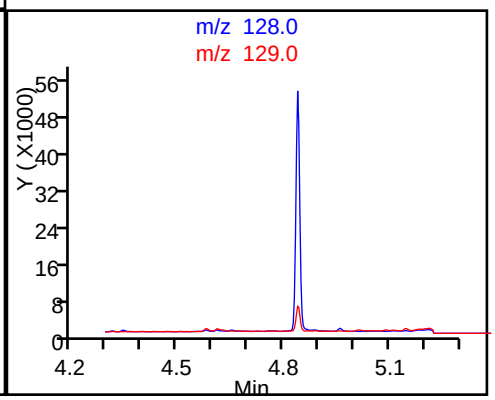












Manual Integration/User Assign Peak Report

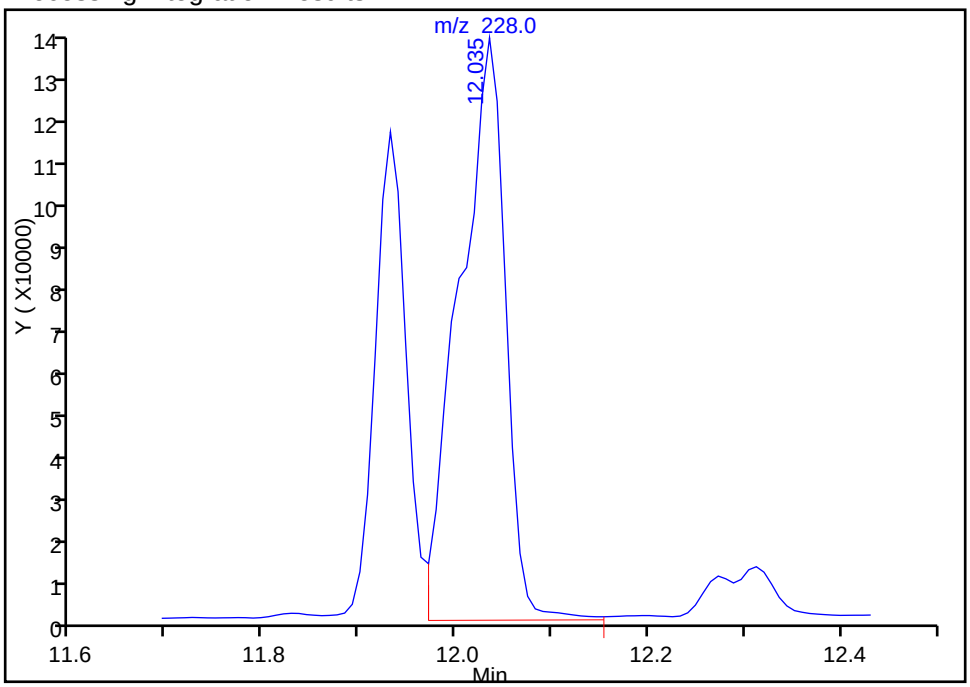
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8931.D				
Injection Date:	02-Jan-2014 21:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

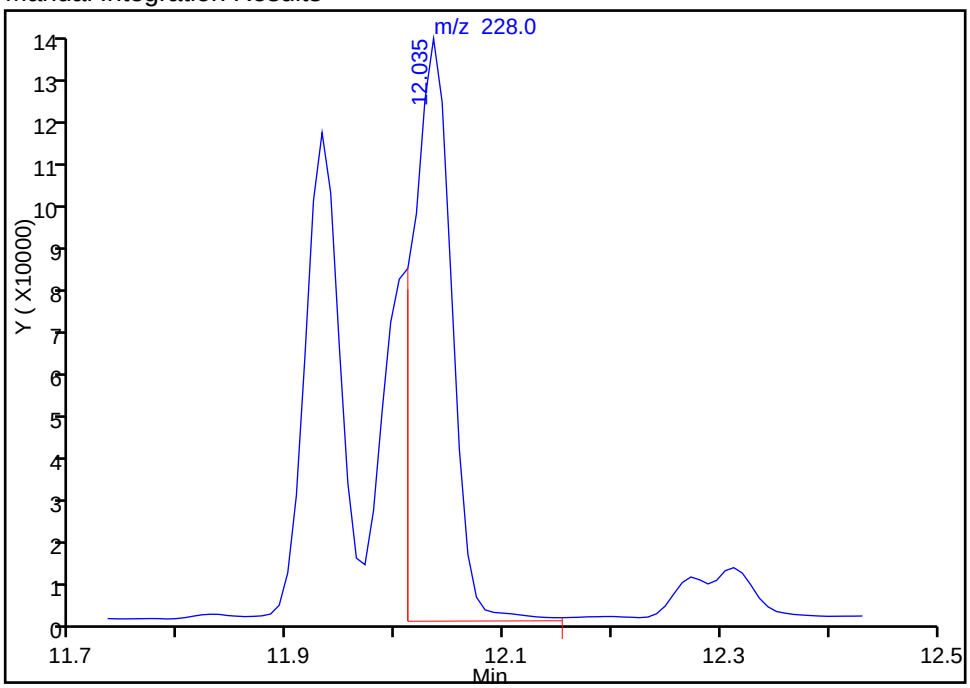
Processing Integration Results

RT: 12.03
Response: 442325
Amount: 4493.3266



Manual Integration Results

RT: 12.03
Response: 331738
Amount: 3369.9366



Reviewer: vasquezk, 06-Jan-2014 09:46:12
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU01 DL | Lab Sample ID: 280-50614-12 DL

Matrix: Solid | Lab File ID: X4_8952.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:45

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 32.86(g) | Date Analyzed: 01/06/2014 14:16

Con. Extract Vol.: 1000(uL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207515 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	1500000		46000	11000

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	71	D	39-120
4165-60-0	Nitrobenzene-d5	0	D X	42-120
1718-51-0	Terphenyl-d14	0	D X	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8952.D
Lims ID: 280-50614-A-12-B Lab Sample ID: 280-50614-12
Client ID: FSA-SD-DU01
Sample Type: Client
Inject. Date: 06-Jan-2014 14:16:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 280-0018806-007
Misc. Info.: 280-50614-a-12-b,10, =280-50614-A-12-B,10,
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 13:44:04 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 13:00:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	89	21279	600.0	
* 1 Phenanthrene-d10	188	7.526	7.537	-0.011	99	40461	600.0	
* 3 Chrysene-d12	240	11.956	11.980	-0.024	92	48478	600.0	
$ 4 Nitrobenzene-d5	82		4.189					
$ 5 2-Fluorobiphenyl	172	5.630	5.633	-0.003	100	1776	35.4	
$ 6 Terphenyl-d14	244		9.538					
14 Naphthalene	128	4.783	4.786	-0.003	100	19106	293.4	
15 2-Methylnaphthalene	142	5.344	5.347	-0.003	99	17809	386.8	
19 Acenaphthylene	152	6.119	6.127	-0.008	100	45249	637.7	
20 Acenaphthene	153	6.261	6.269	-0.008	89	2395	54.1	
22 Fluorene	166	6.696	6.702	-0.006	90	3497	66.1	
24 Phenanthrene	178	7.548	7.559	-0.011	100	65731	792.7	
25 Anthracene	178	7.602	7.608	-0.006	99	50292	616.1	
27 Fluoranthene	202	8.979	8.990	-0.011	100	181118	2013.9	
28 Pyrene	202	9.353	9.364	-0.011	100	219826	2369.0	
31 Benzo[a]anthracene	228	11.924	11.948	-0.024	99	123266	1251.0	
32 Chrysene	228	12.027	12.051	-0.024	100	168930	1813.1	M
34 Benzo[b]fluoranthene	252	15.264	15.287	-0.023	100	438597	4859.6	
35 Benzo[k]fluoranthene	252	15.354	15.376	-0.022	100	135086	1455.0	
36 Benzo[a]pyrene	252	16.397	16.419	-0.022	100	179751	2055.1	
38 Indeno[1,2,3-cd]pyrene	276	19.122	19.130	-0.008	98	179962	2090.1	
37 Dibenz(a,h)anthracene	278	19.148	19.167	-0.019	75	45193	519.4	
39 Benzo[g,h,i]perylene	276	19.600	19.611	-0.011	98	178978	1936.5	

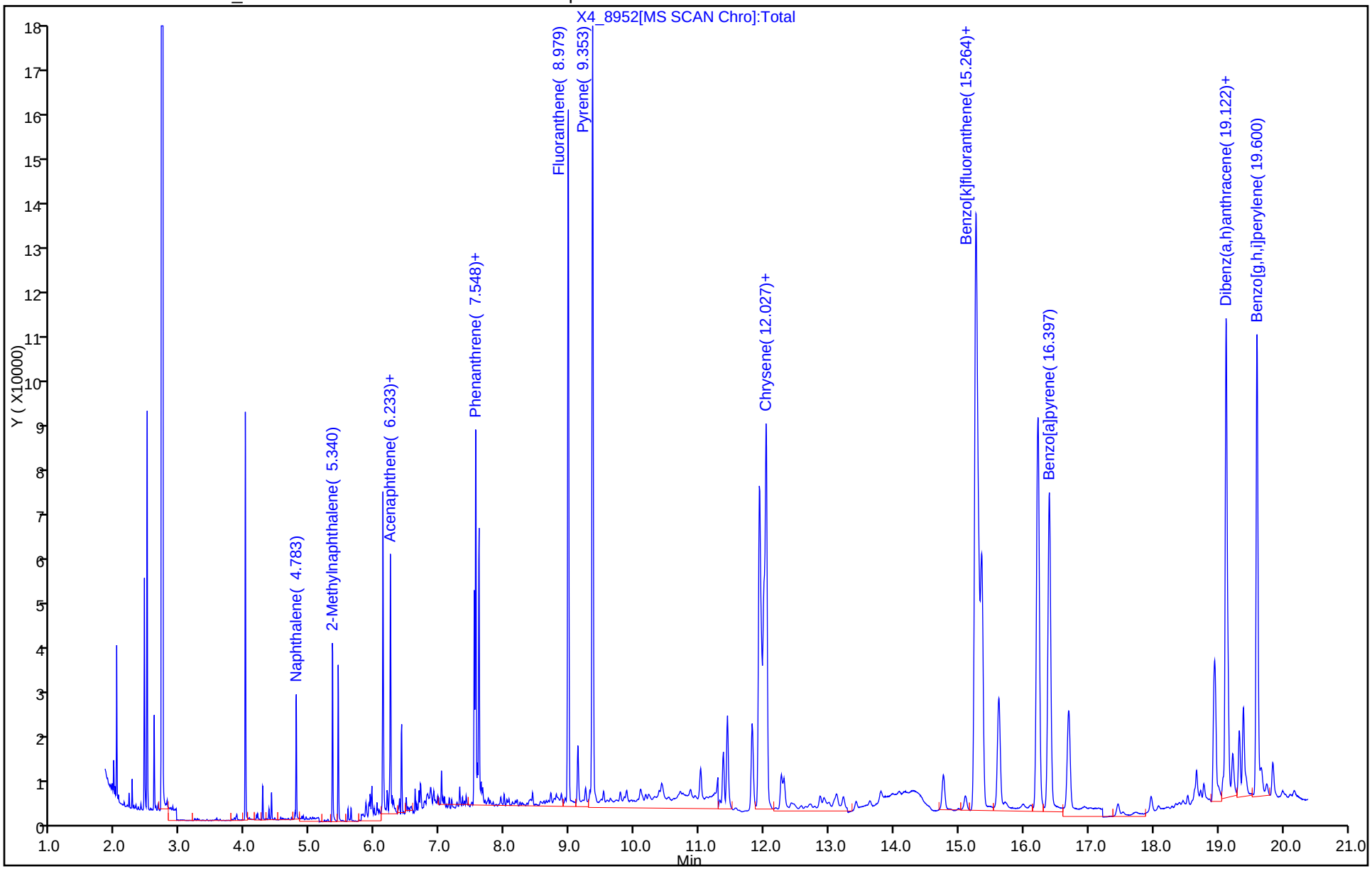
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 13:44:09 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8952.D				
Injection Date:	06-Jan-2014 14:16:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12	Worklist Smp#:	7
Client ID:	FSA-SD-DU01				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	7
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

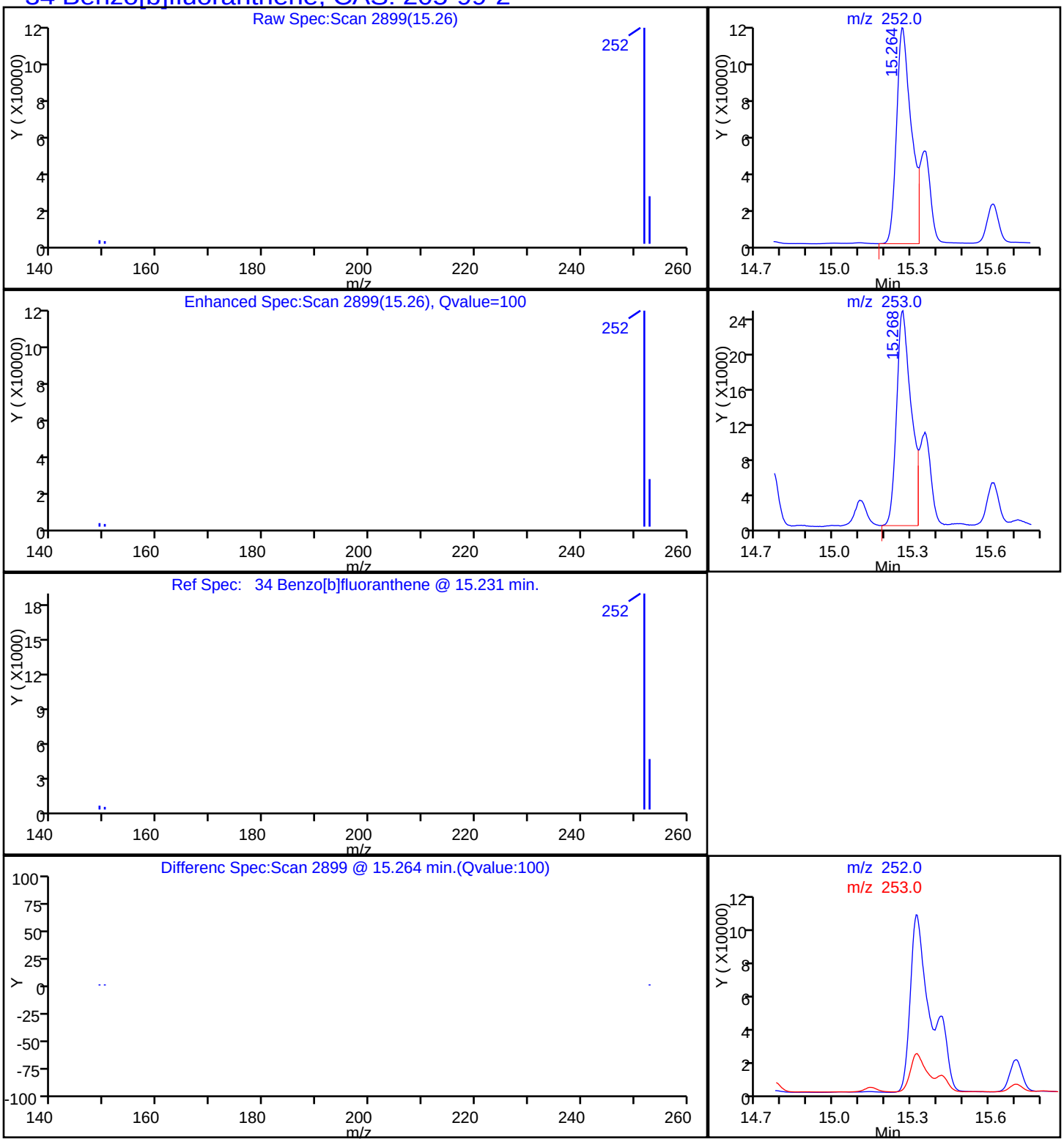


Report Date: 06-Jan-2014 13:44:09 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8952.D				
Injection Date:	06-Jan-2014 14:16:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-12-B	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

34 Benzo[b]fluoranthene, CAS: 205-99-2



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU02 | Lab Sample ID: 280-50614-13

Matrix: Solid | Lab File ID: X4_8934.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 16:10

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 31.18(g) | Date Analyzed: 01/02/2014 22:40

Con. Extract Vol.: 1000(uL) | Dilution Factor: 5

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	760000		24000	5800
50-32-8	Benzo[a]pyrene	390000		24000	3600
56-55-3	Benzo[a]anthracene	320000		24000	4300
207-08-9	Benzo[k]fluoranthene	240000		24000	4800
191-24-2	Benzo[g,h,i]perylene	310000		24000	5300
85-01-8	Phenanthrene	480000		24000	5300
120-12-7	Anthracene	140000		24000	3500
53-70-3	Dibenz(a,h)anthracene	87000		24000	6300
218-01-9	Chrysene	420000		24000	4800
83-32-9	Acenaphthene	21000	J	24000	770
208-96-8	Acenaphthylene	150000		24000	820
86-73-7	Fluorene	32000		24000	2300
193-39-5	Indeno[1,2,3-cd]pyrene	340000		24000	5300
91-57-6	2-Methylnaphthalene	130000		24000	1500
91-20-3	Naphthalene	120000		24000	1600

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	75	D	39-120
4165-60-0	Nitrobenzene-d5	90	D	42-120
1718-51-0	Terphenyl-d14	122	D	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D
Lims ID: 280-50614-A-13-B Lab Sample ID: 280-50614-13
Client ID: FSA-SD-DU02
Sample Type: Client
Inject. Date: 02-Jan-2014 22:40:30 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-0018755-020
Misc. Info.: 280-50614-a-13-b,5, =280-50614-A-13-B,5,
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 09:56:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.240	6.240	0.0	90	22318	600.0	
* 1 Phenanthrene-d10	188	7.532	7.532	0.0	100	43203	600.0	
* 3 Chrysene-d12	240	11.964	11.964	0.0	83	51986	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	99	2257	90.4	
$ 5 2-Fluorobiphenyl	172	5.630	5.633	-0.003	100	3956	75.1	
$ 6 Terphenyl-d14	244	9.527	9.532	-0.005	48	6367	121.7	
14 Naphthalene	128	4.783	4.786	-0.003	100	50432	738.5	
15 2-Methylnaphthalene	142	5.344	5.344	0.0	99	39751	823.1	
19 Acenaphthylene	152	6.119	6.119	0.0	99	71399	959.4	
20 Acenaphthene	153	6.261	6.269	-0.008	90	6184	133.2	
22 Fluorene	166	6.702	6.702	0.0	97	10972	197.8	
24 Phenanthrene	178	7.553	7.553	0.0	100	263842	2979.9	
25 Anthracene	178	7.602	7.602	0.0	98	74246	851.9	
27 Fluoranthene	202	8.979	8.979	0.0	100	511186	5323.3	E
28 Pyrene	202	9.359	9.359	0.0	100	517988	5227.9	E
31 Benzo[a]anthracene	228	11.932	11.932	0.0	99	211505	2001.6	
32 Chrysene	228	12.035	12.035	0.0	100	262856	2630.8	M
34 Benzo[b]fluoranthene	252	15.279	15.264	0.015	100	457852	4730.6	
35 Benzo[k]fluoranthene	252	15.361	15.357	0.004	99	151348	1520.2	
36 Benzo[a]pyrene	252	16.408	16.397	0.011	100	228838	2439.8	
38 Indeno[1,2,3-cd]pyrene	276	19.130	19.118	0.012	99	196077	2123.6	
37 Dibenz(a,h)anthracene	278	19.156	19.152	0.004	70	50735	543.7	
39 Benzo[g,h,i]perylene	276	19.607	19.592	0.015	99	191112	1928.2	

QC Flag Legend

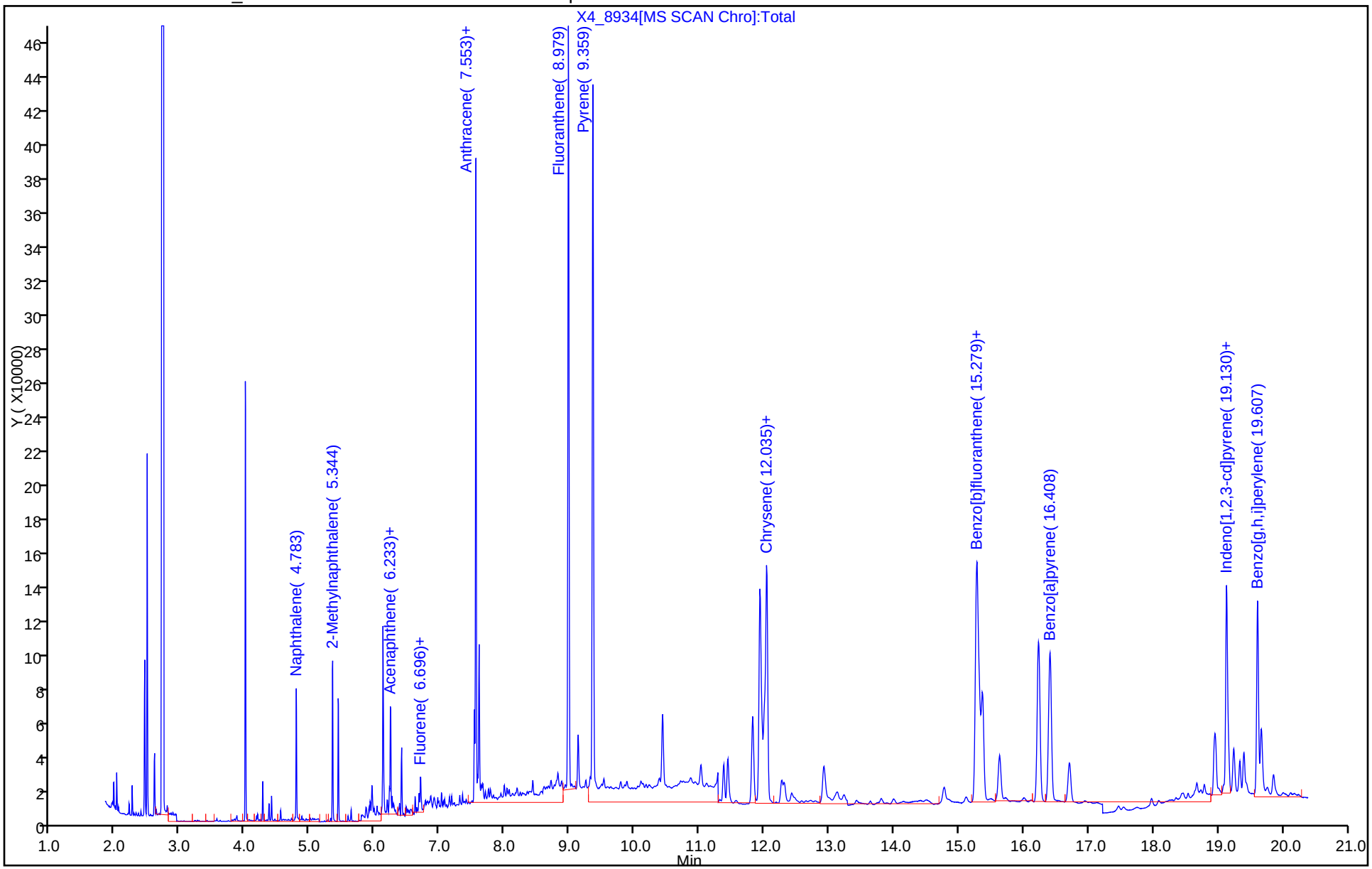
Processing Flags
E - Exceeded Maximum Amount

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:06:13 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13	Worklist Smp#:	20
Client ID:	FSA-SD-DU02				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	20
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

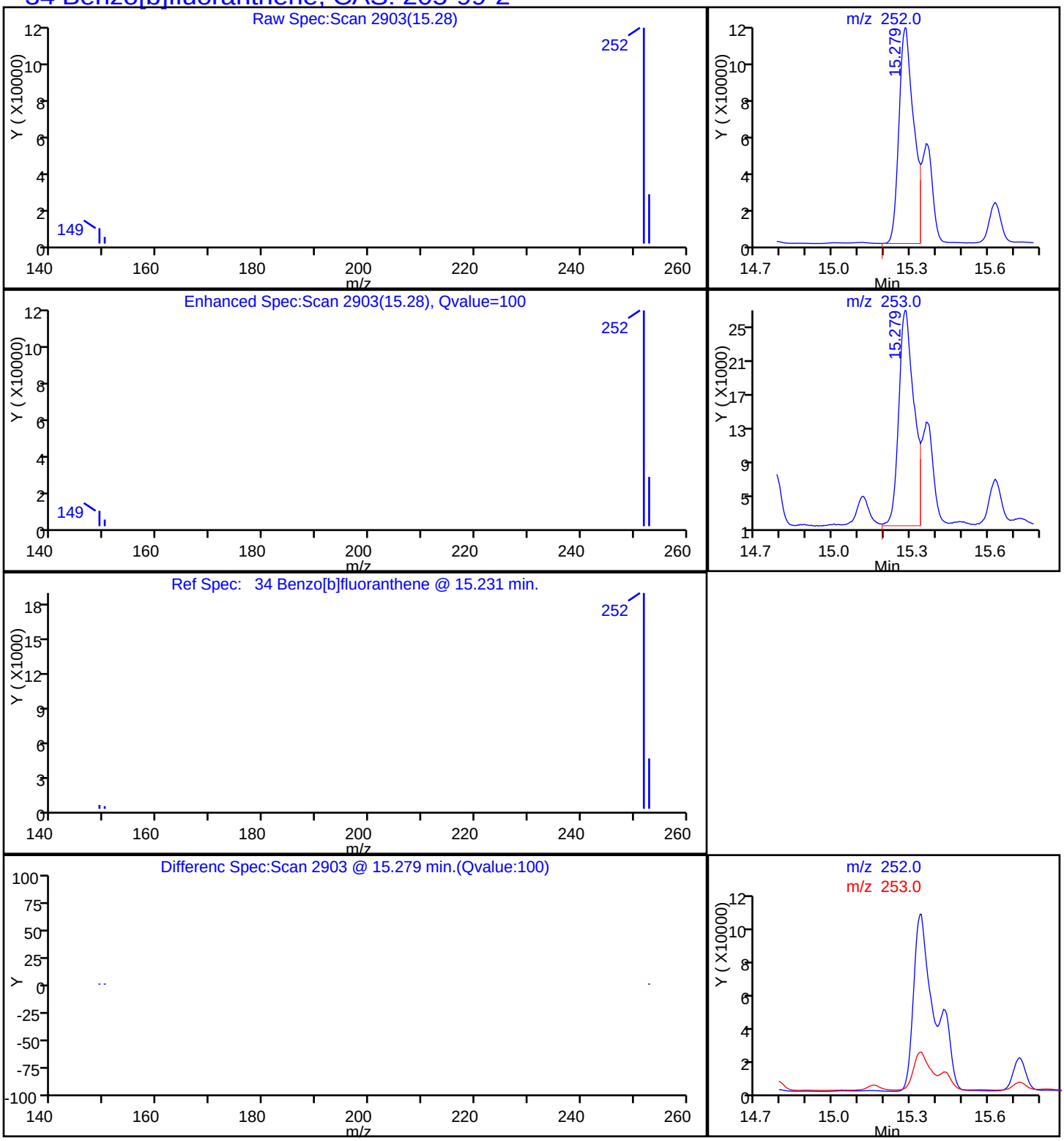


Report Date: 06-Jan-2014 10:06:14 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

34 Benzo[b]fluoranthene, CAS: 205-99-2

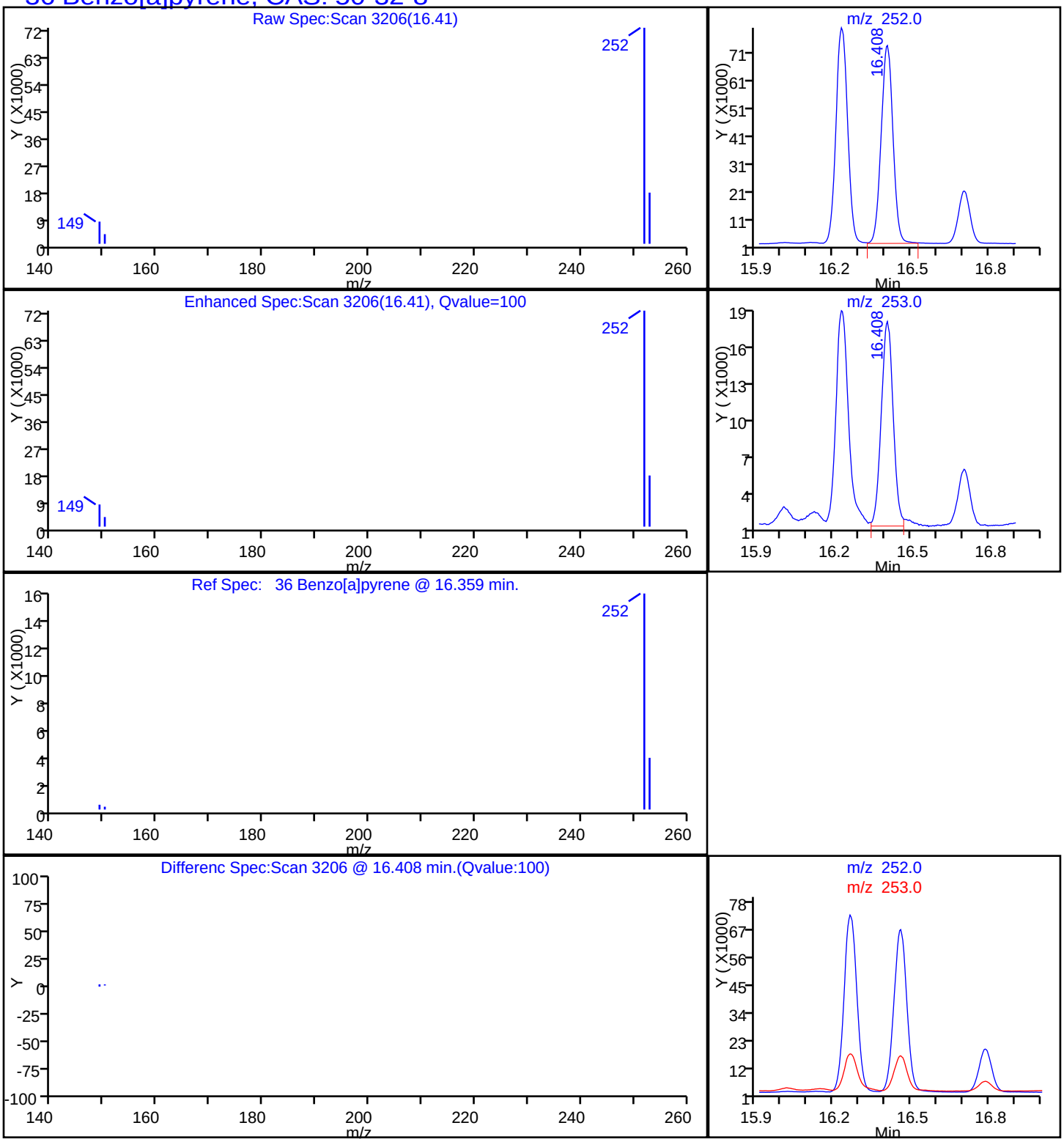


Report Date: 06-Jan-2014 10:06:14 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[a]pyrene, CAS: 50-32-8

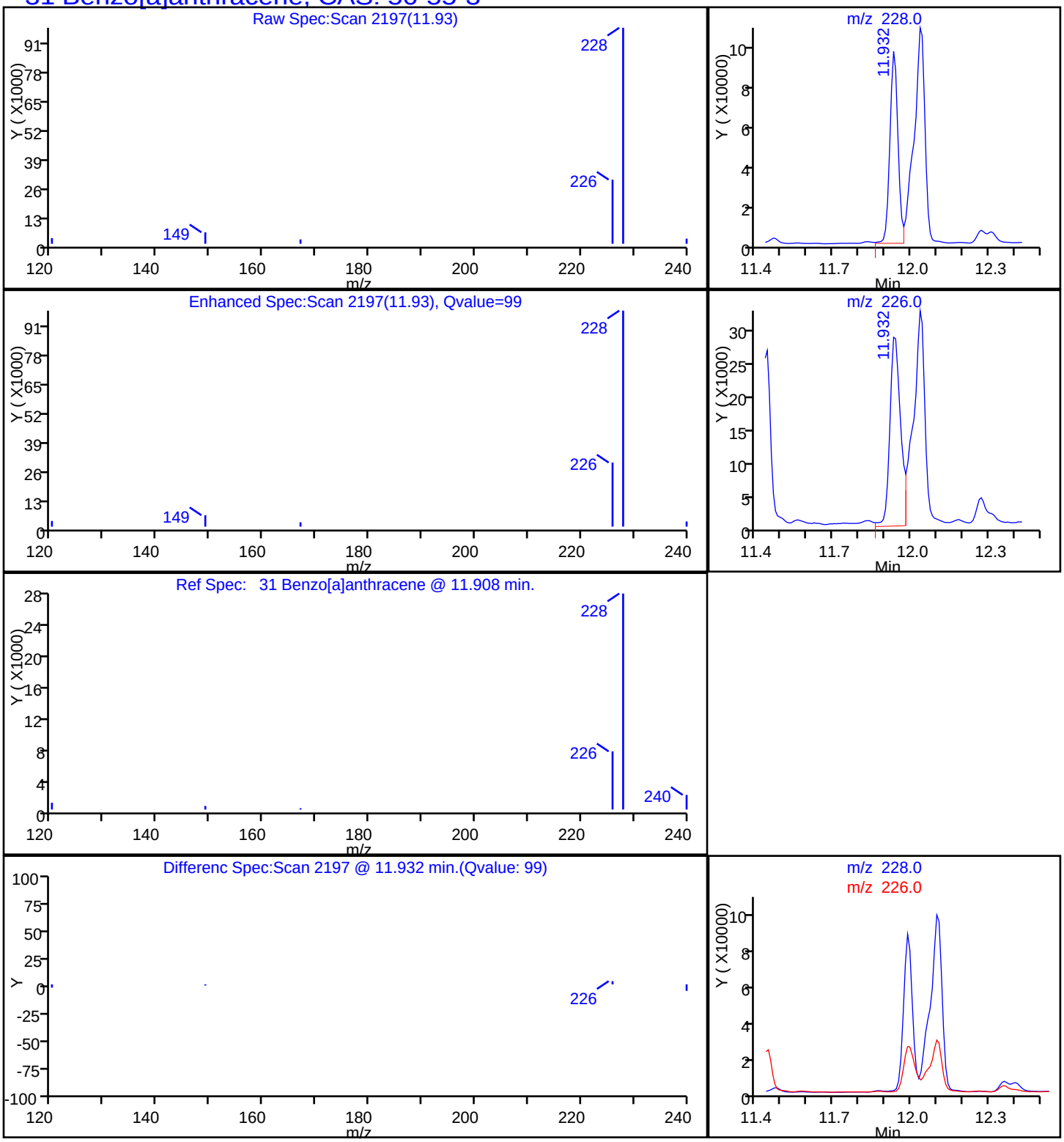


Report Date: 06-Jan-2014 10:06:14 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3

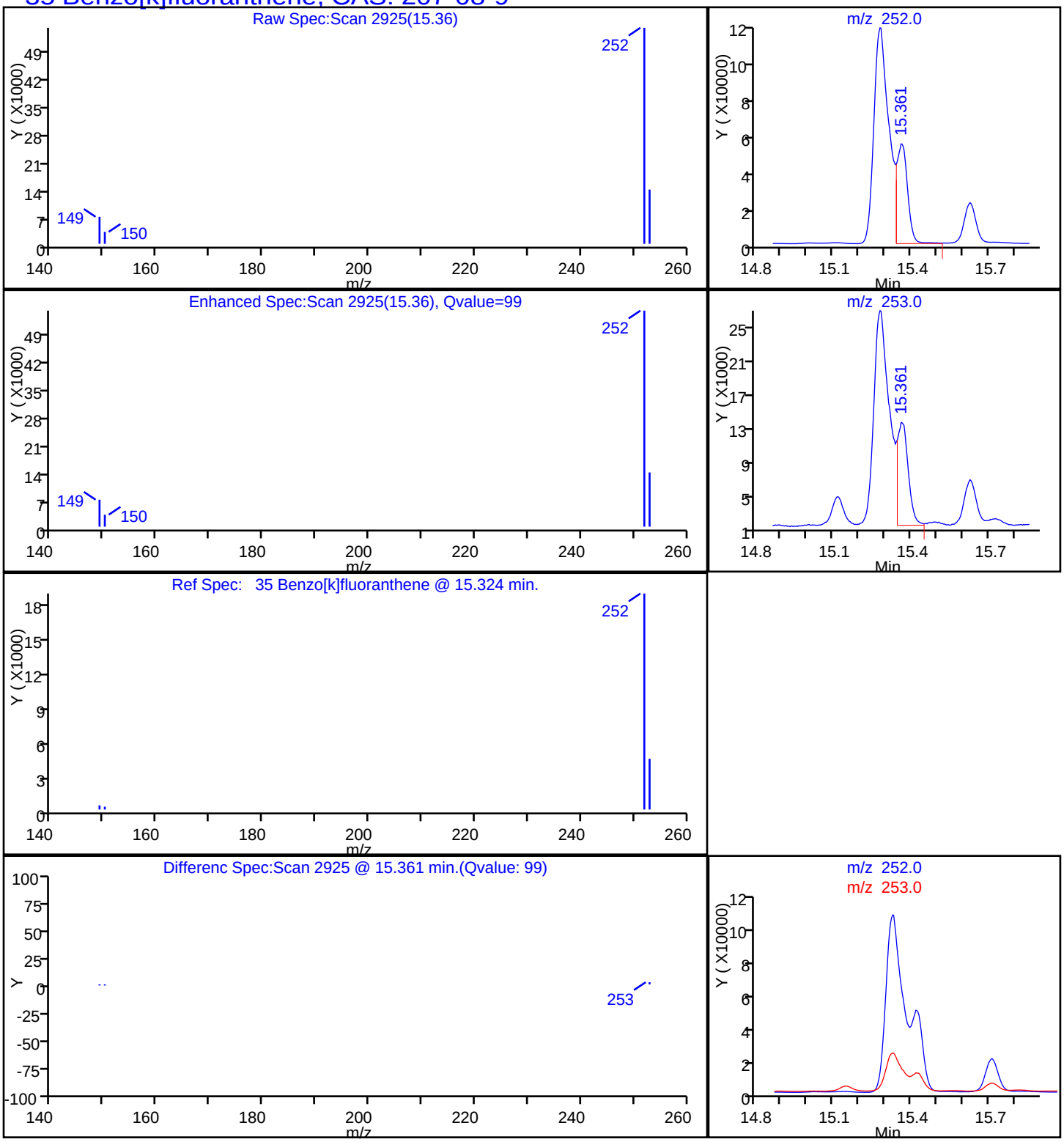


Report Date: 06-Jan-2014 10:06:14 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[k]fluoranthene, CAS: 207-08-9

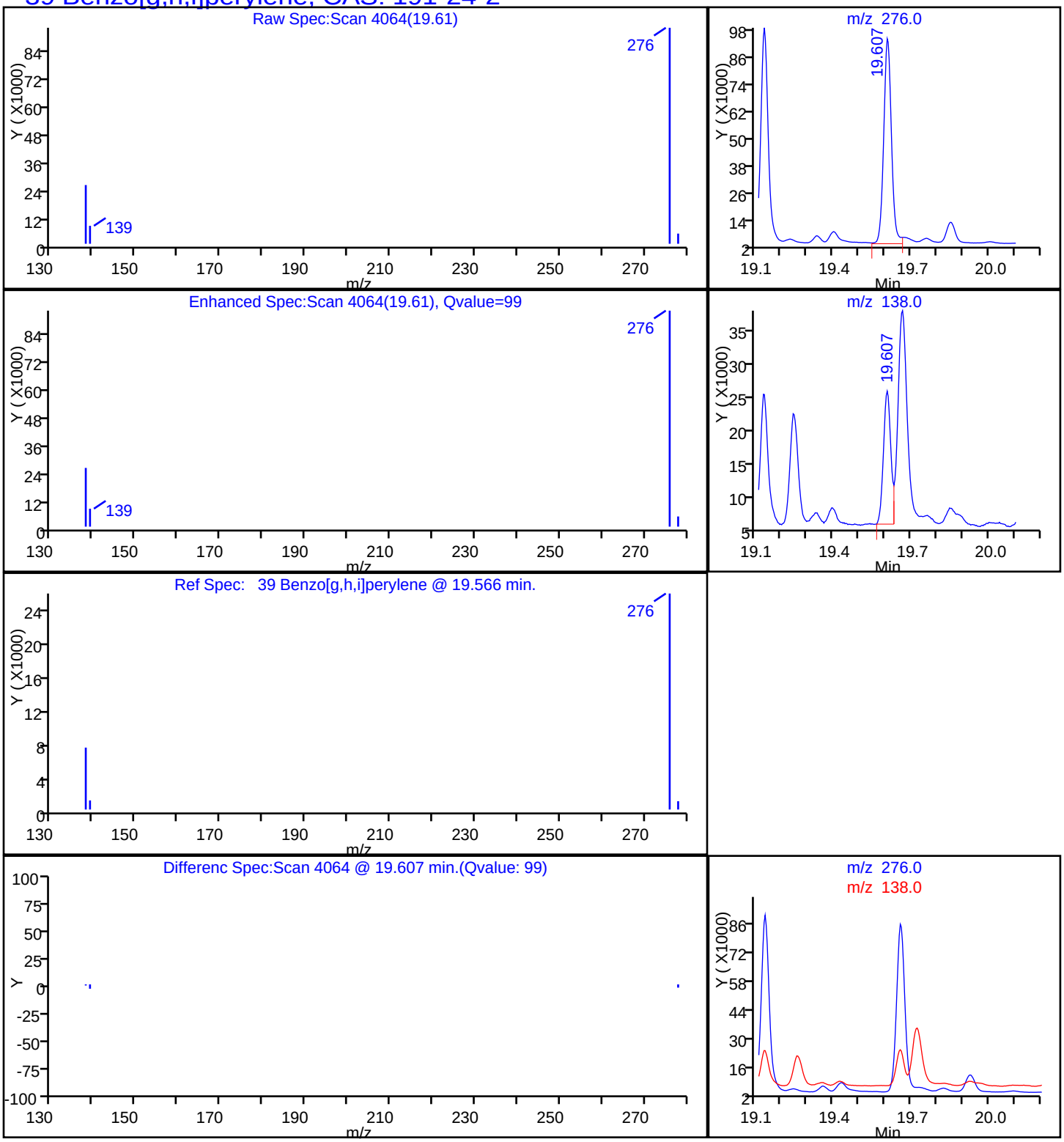


Report Date: 06-Jan-2014 10:06:14 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[g,h,i]perylene, CAS: 191-24-2

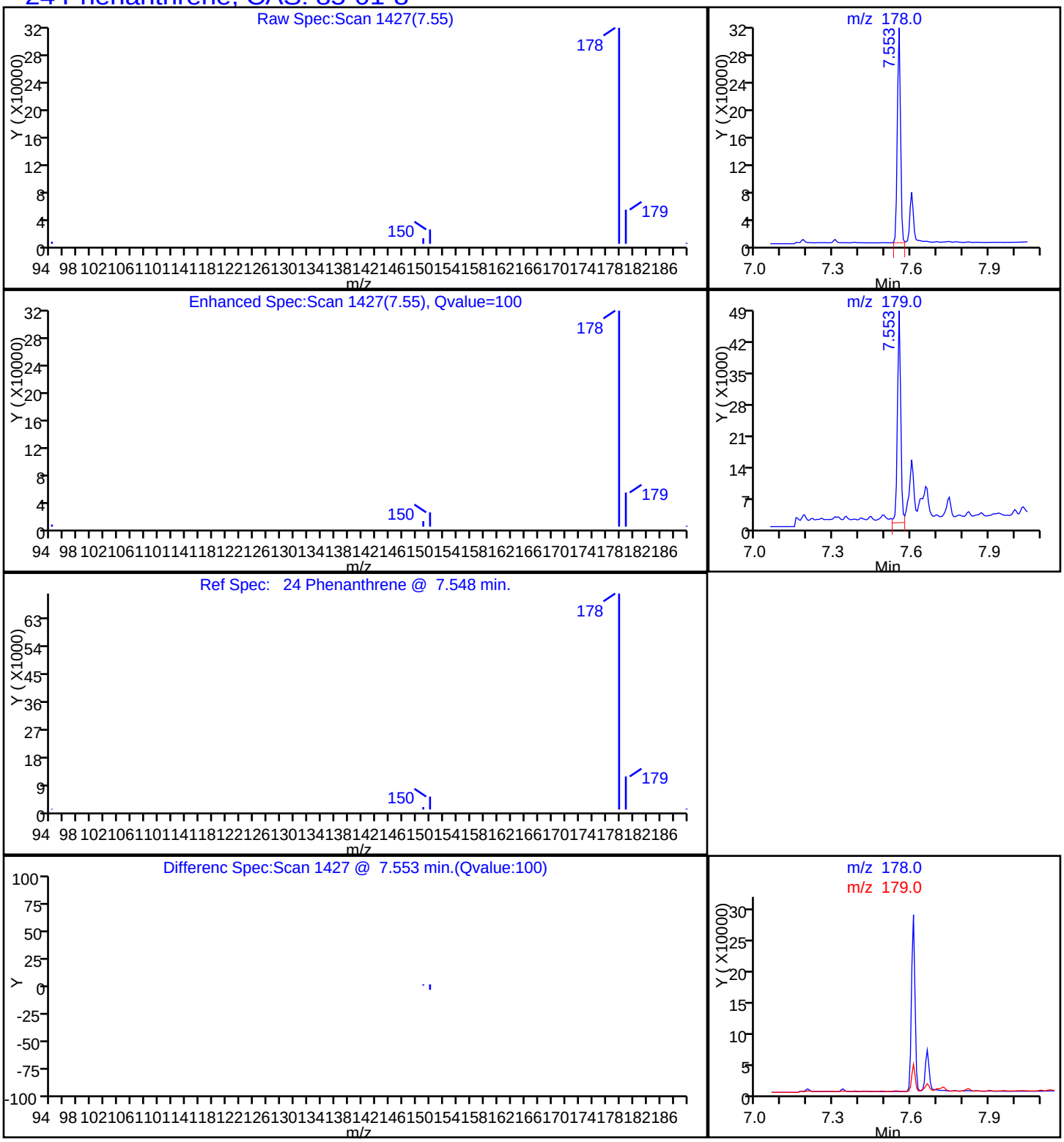


Report Date: 06-Jan-2014 10:06:14 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8

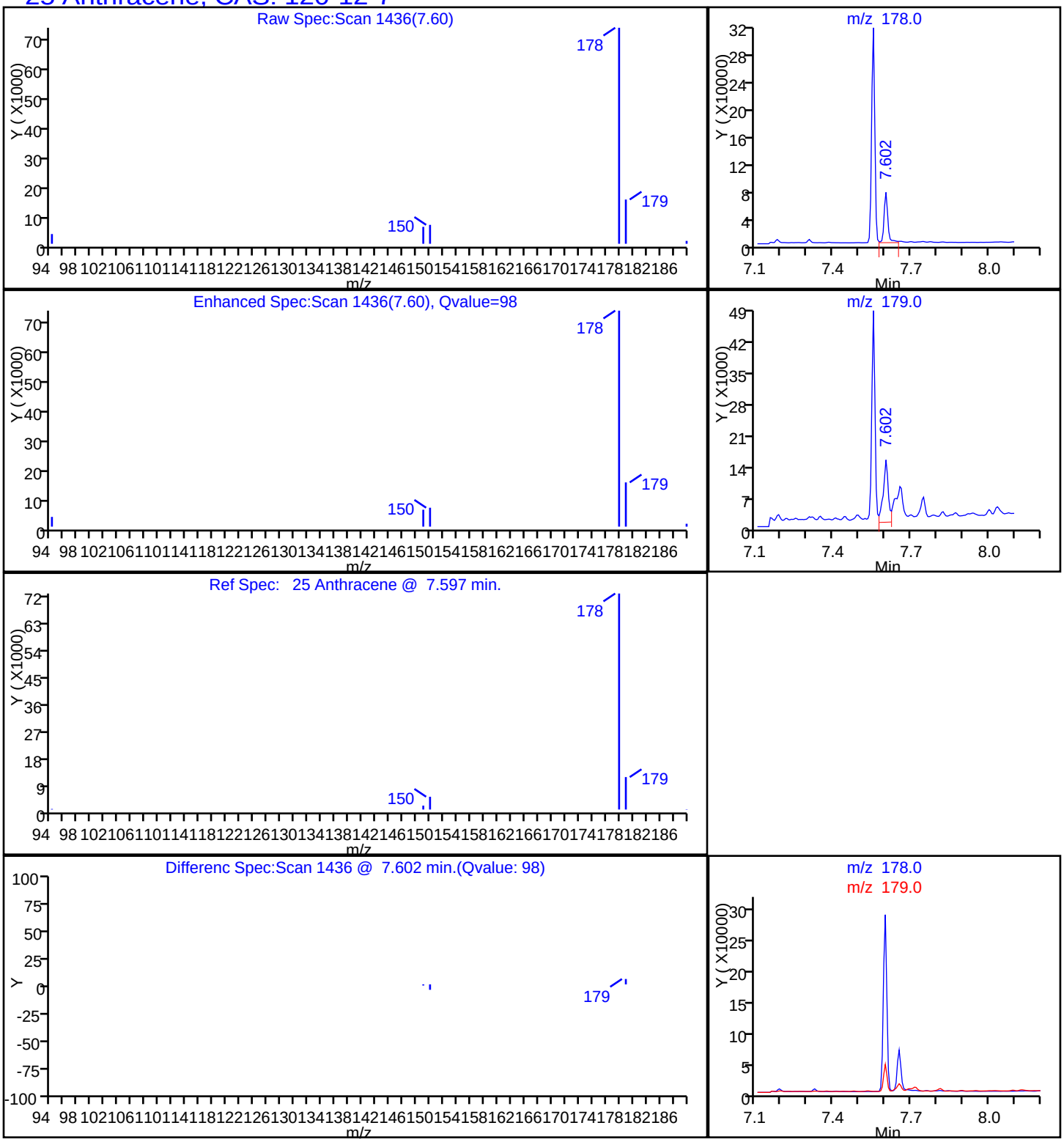


Report Date: 06-Jan-2014 10:06:14 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7

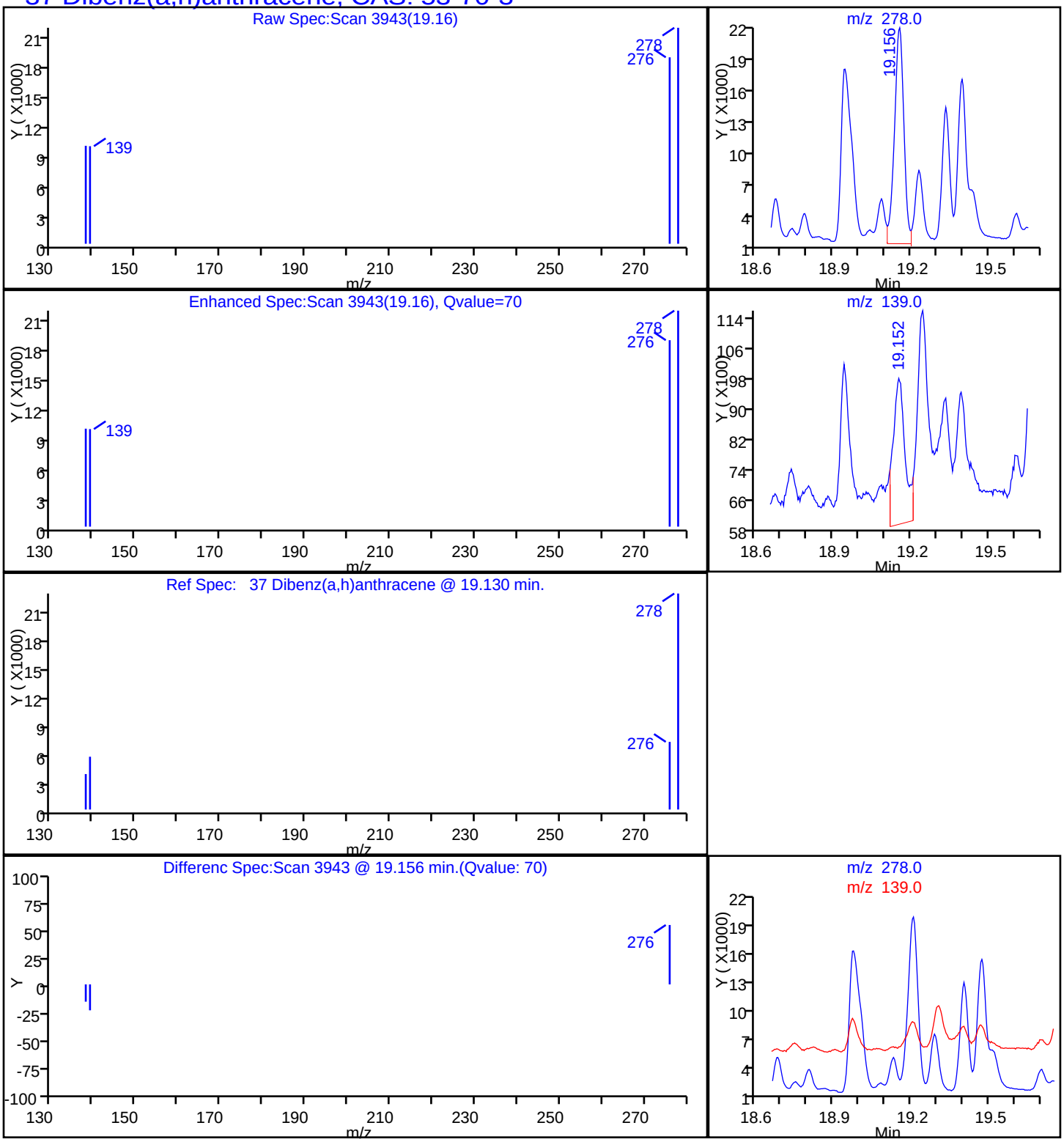


Report Date: 06-Jan-2014 10:06:14 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3

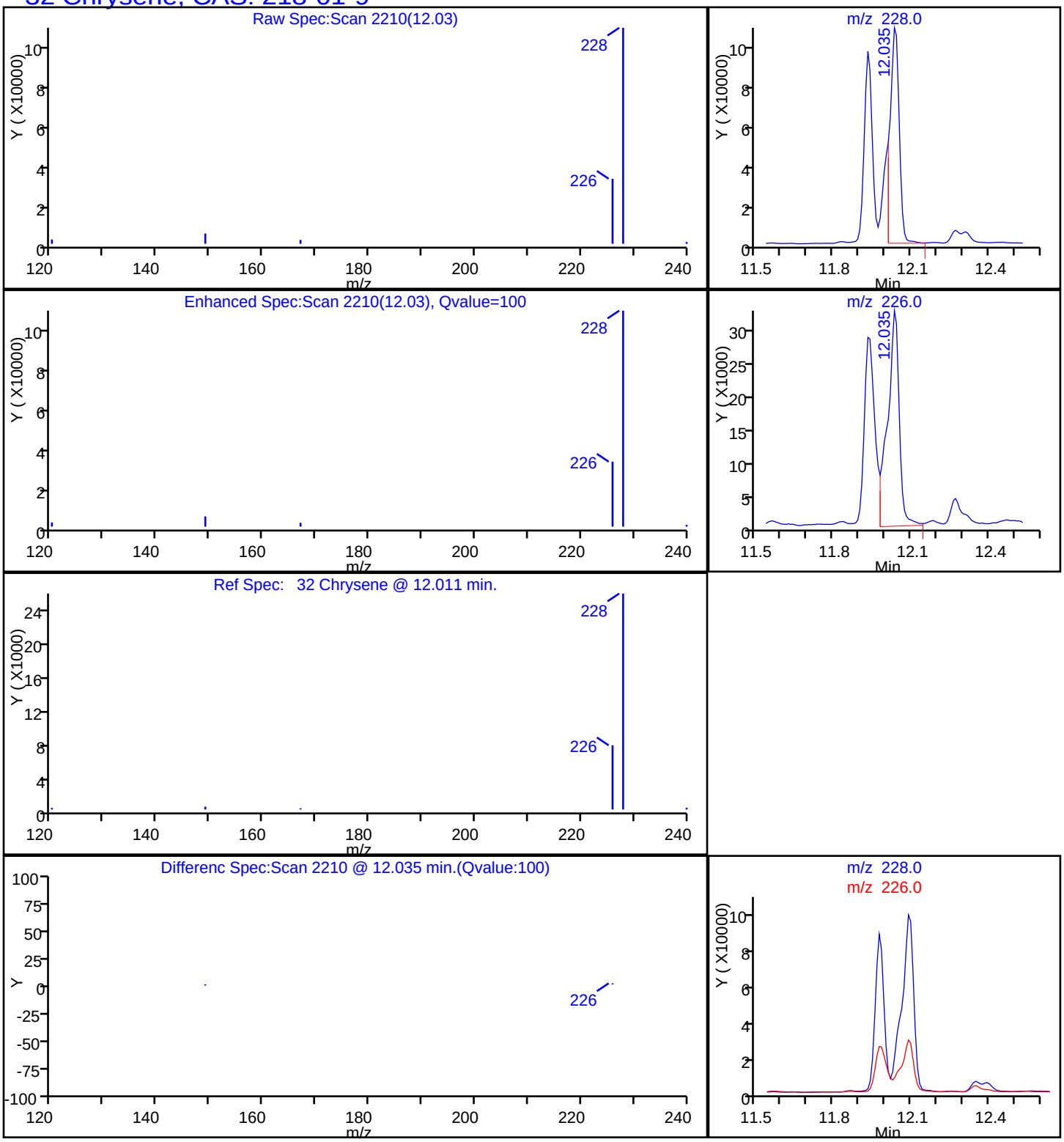


Report Date: 06-Jan-2014 10:06:14 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9



Report Date: 06-Jan-2014 10:06:13 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

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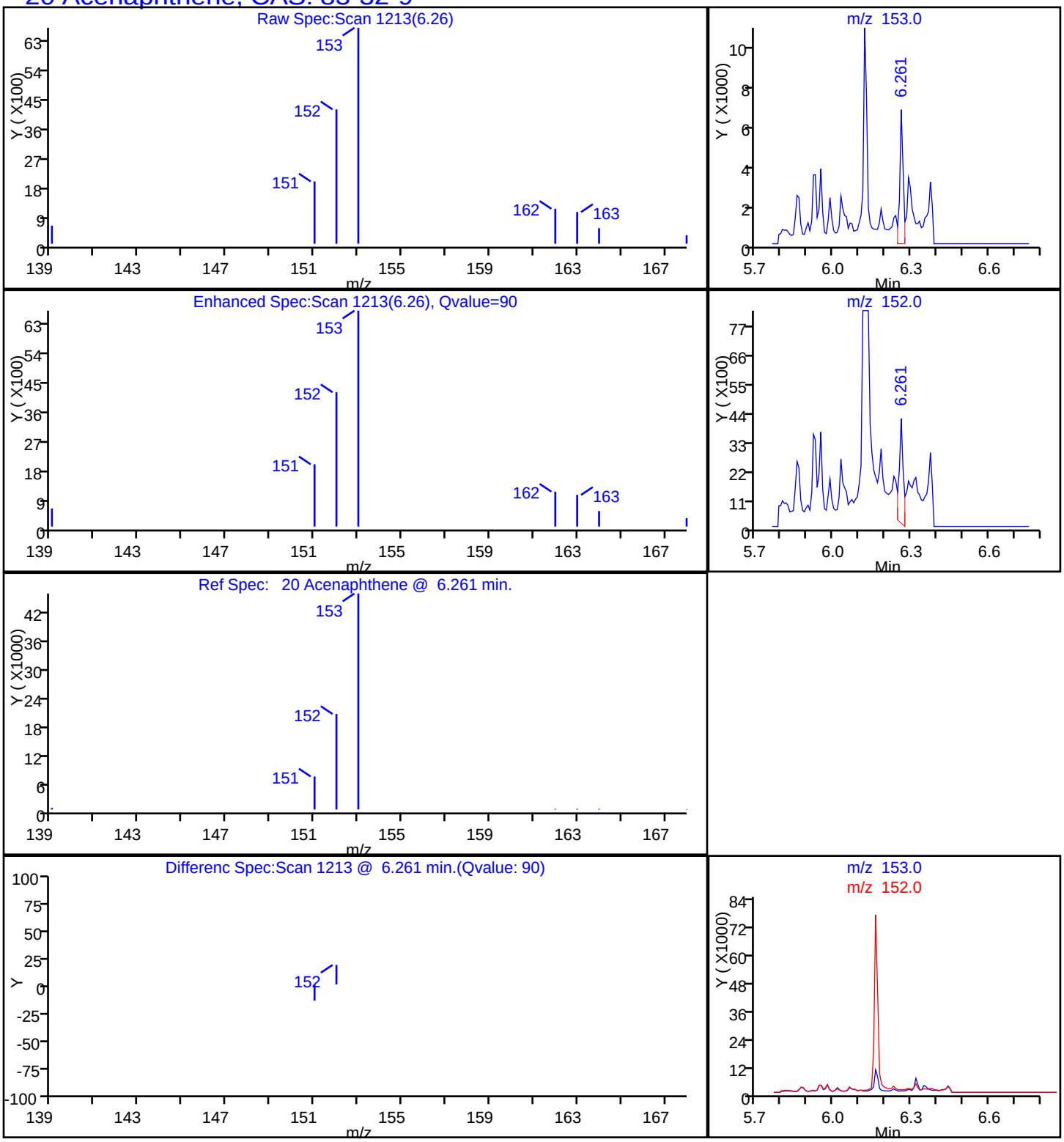
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9

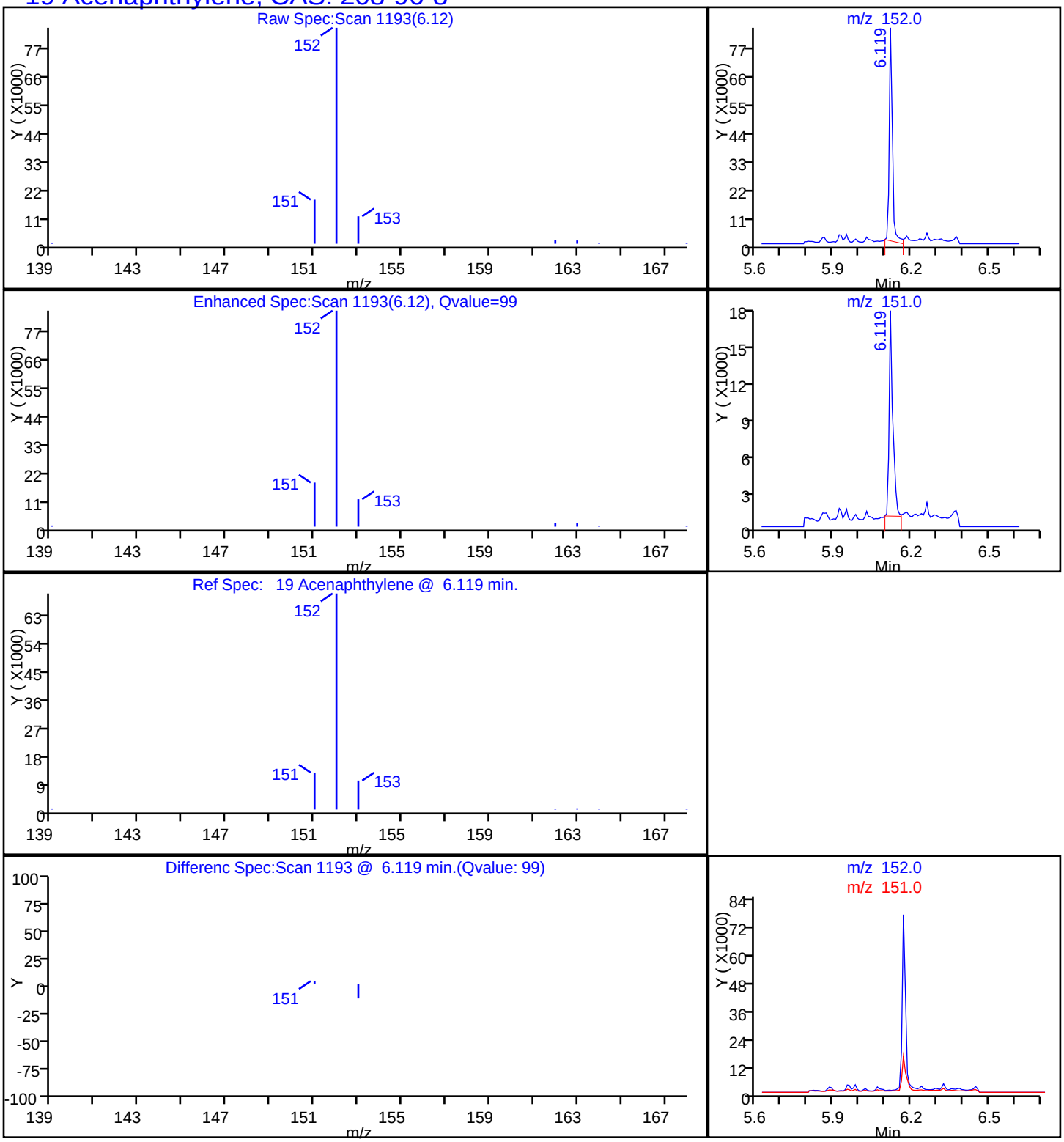


Report Date: 06-Jan-2014 10:06:13 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

19 Acenaphthylene, CAS: 208-96-8

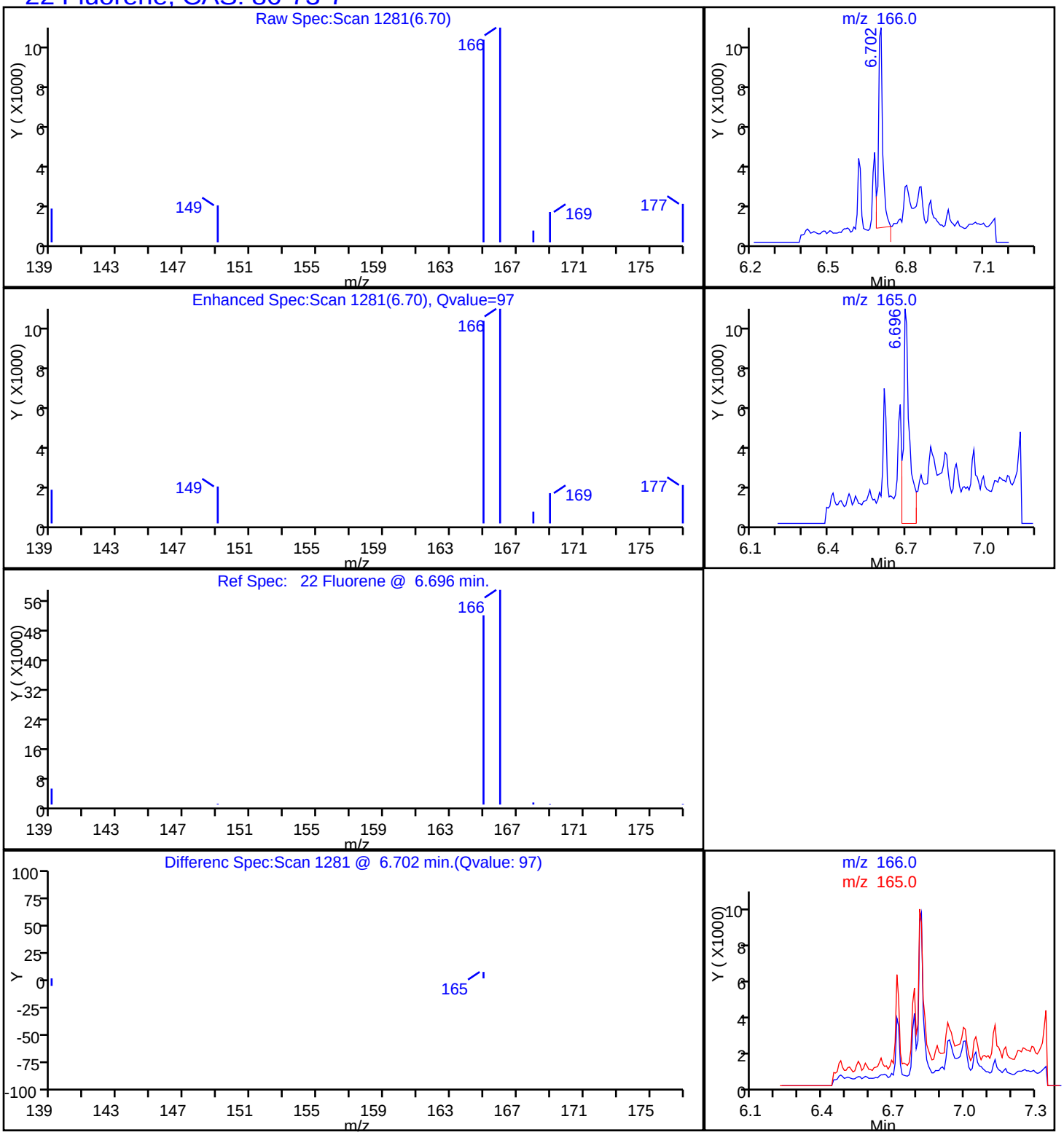


Report Date: 06-Jan-2014 10:06:13 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Fluorene, CAS: 86-73-7

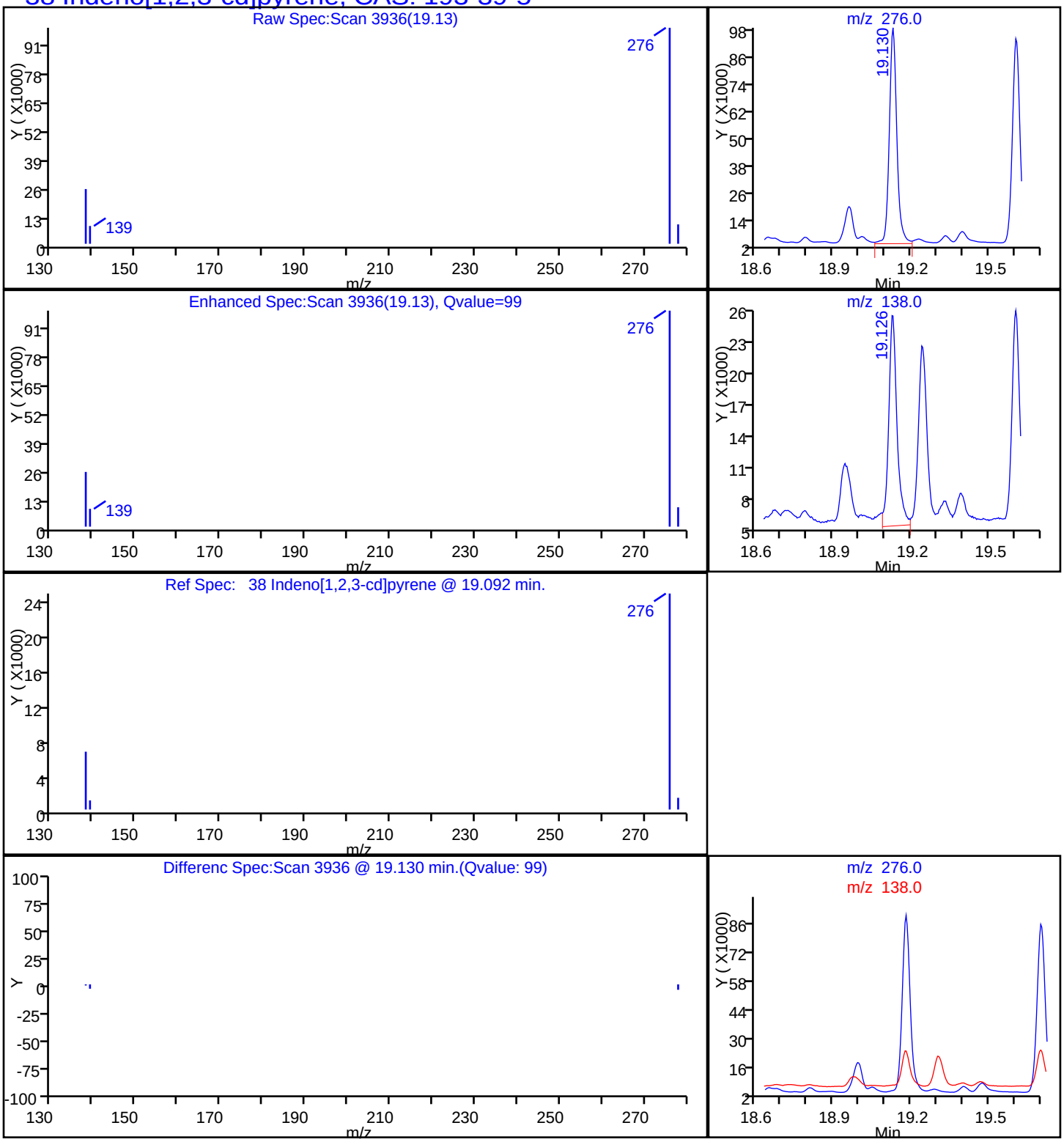


Report Date: 06-Jan-2014 10:06:14 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

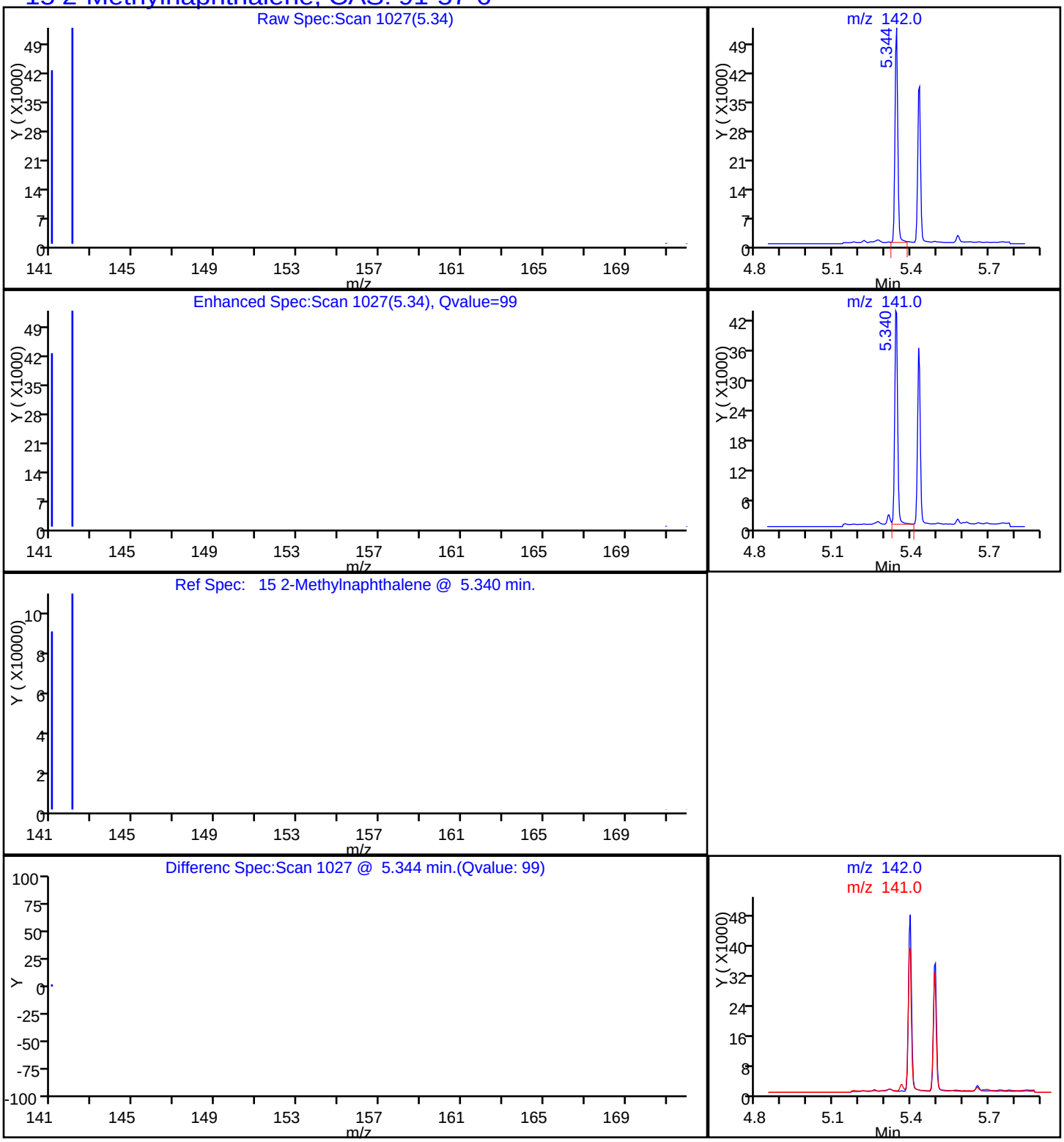


Report Date: 06-Jan-2014 10:06:13 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 2-Methylnaphthalene, CAS: 91-57-6

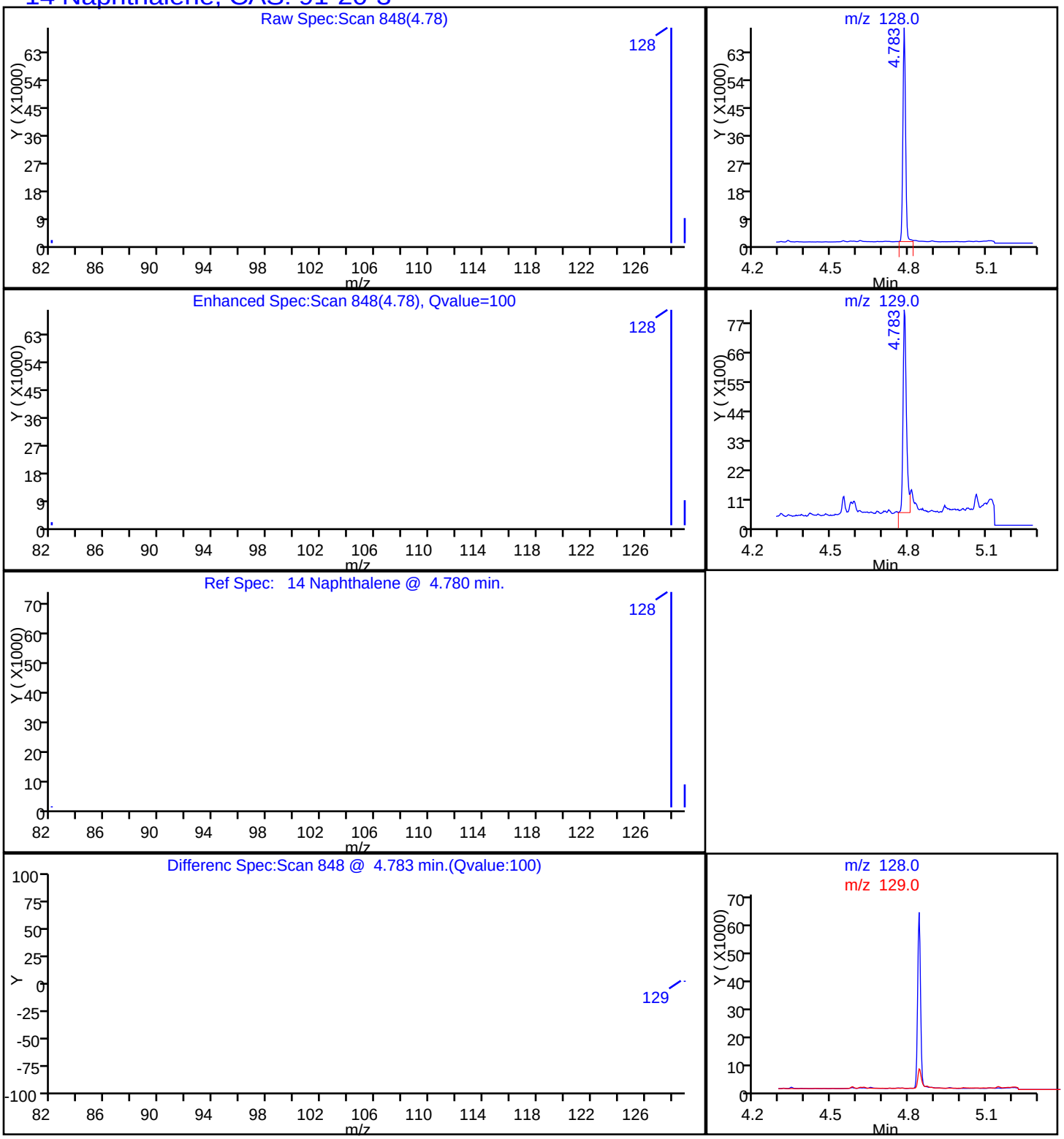


Report Date: 06-Jan-2014 10:06:13 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3



Manual Integration/User Assign Peak Report

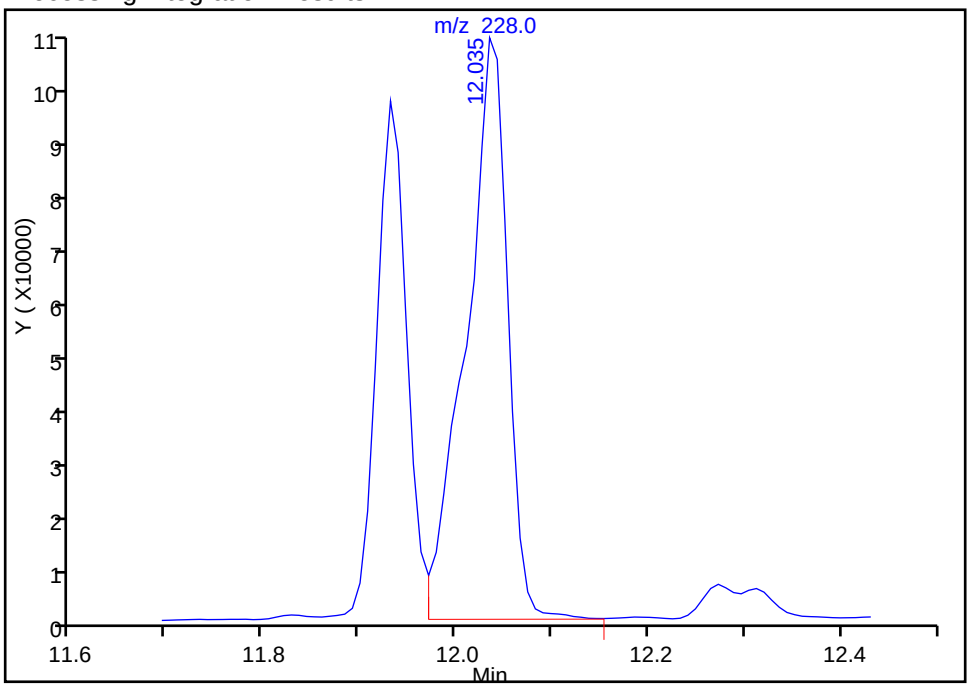
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8934.D				
Injection Date:	02-Jan-2014 22:40:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

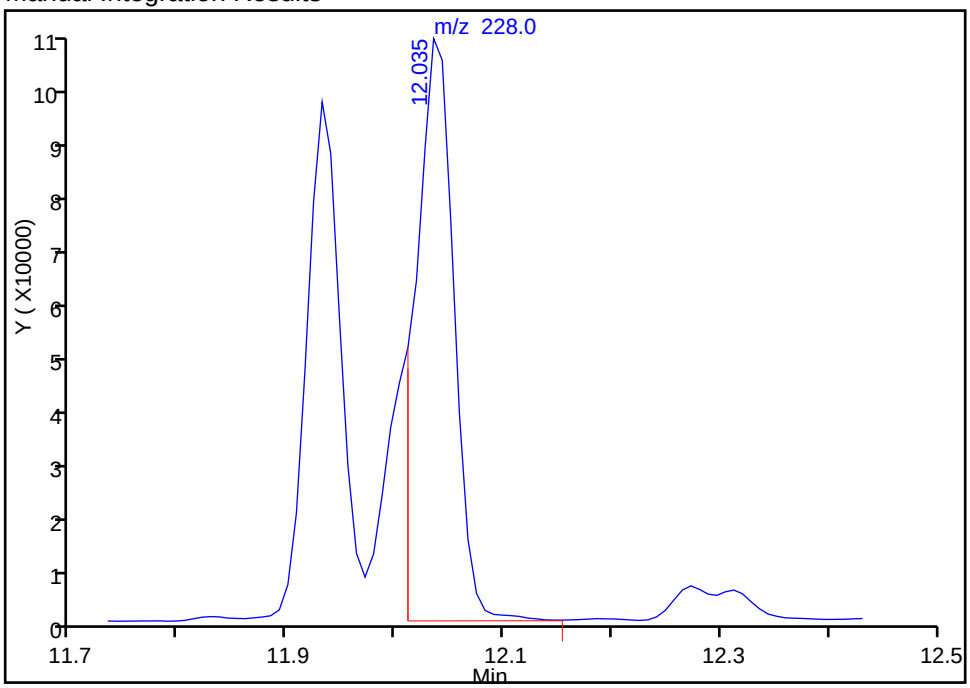
Processing Integration Results

RT: 12.03
Response: 321809
Amount: 3220.8417



Manual Integration Results

RT: 12.03
Response: 262856
Amount: 2630.8076



Reviewer: vasquezk, 06-Jan-2014 09:56:12
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU02 DL | Lab Sample ID: 280-50614-13 DL

Matrix: Solid | Lab File ID: X4_8953.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 16:10

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 31.18(g) | Date Analyzed: 01/06/2014 14:43

Con. Extract Vol.: 1000(uL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207515 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
206-44-0	Fluoranthene	790000		48000	9600
129-00-0	Pyrene	780000		48000	11000

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	70	D	39-120
4165-60-0	Nitrobenzene-d5	0	D X	42-120
1718-51-0	Terphenyl-d14	117	D	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8953.D
Lims ID: 280-50614-A-13-B Lab Sample ID: 280-50614-13
Client ID: FSA-SD-DU02
Sample Type: Client
Inject. Date: 06-Jan-2014 14:43:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 280-0018806-008
Misc. Info.: 280-50614-a-13-b,10, =280-50614-A-13-B,10,
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 13:44:04 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 13:42:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	87	21073	600.0	
* 1 Phenanthrene-d10	188	7.532	7.537	-0.005	100	40968	600.0	
* 3 Chrysene-d12	240	11.964	11.980	-0.016	97	47655	600.0	
$ 4 Nitrobenzene-d5	82		4.189					
$ 5 2-Fluorobiphenyl	172	5.630	5.633	-0.003	100	1752	35.2	
$ 6 Terphenyl-d14	244	9.527	9.538	-0.011	47	2894	58.3	
14 Naphthalene	128	4.783	4.786	-0.003	100	23459	363.8	
15 2-Methylnaphthalene	142	5.344	5.347	-0.003	99	18311	401.6	
19 Acenaphthylene	152	6.119	6.127	-0.008	100	29659	422.1	
20 Acenaphthene	153	6.261	6.269	-0.008	91	1922	43.9	
22 Fluorene	166	6.696	6.702	-0.006	91	4694	89.6	
24 Phenanthrene	178	7.553	7.559	-0.006	100	120219	1431.9	
25 Anthracene	178	7.602	7.608	-0.006	98	28327	342.7	
27 Fluoranthene	202	8.979	8.990	-0.011	100	224716	2467.8	
28 Pyrene	202	9.353	9.364	-0.011	100	229630	2444.0	
31 Benzo[a]anthracene	228	11.932	11.948	-0.016	99	93324	963.5	
32 Chrysene	228	12.035	12.051	-0.016	100	112619	1229.6	M
34 Benzo[b]fluoranthene	252	15.272	15.287	-0.015	100	205988	2321.7	
35 Benzo[k]fluoranthene	252	15.357	15.376	-0.019	99	66699	730.8	
36 Benzo[a]pyrene	252	16.400	16.419	-0.019	100	101495	1180.4	
38 Indeno[1,2,3-cd]pyrene	276	19.122	19.130	-0.008	99	84743	1001.2	
37 Dibenz(a,h)anthracene	278	19.148	19.167	-0.019	66	22698	265.4	
39 Benzo[g,h,i]perylene	276	19.599	19.611	-0.012	99	86289	949.7	

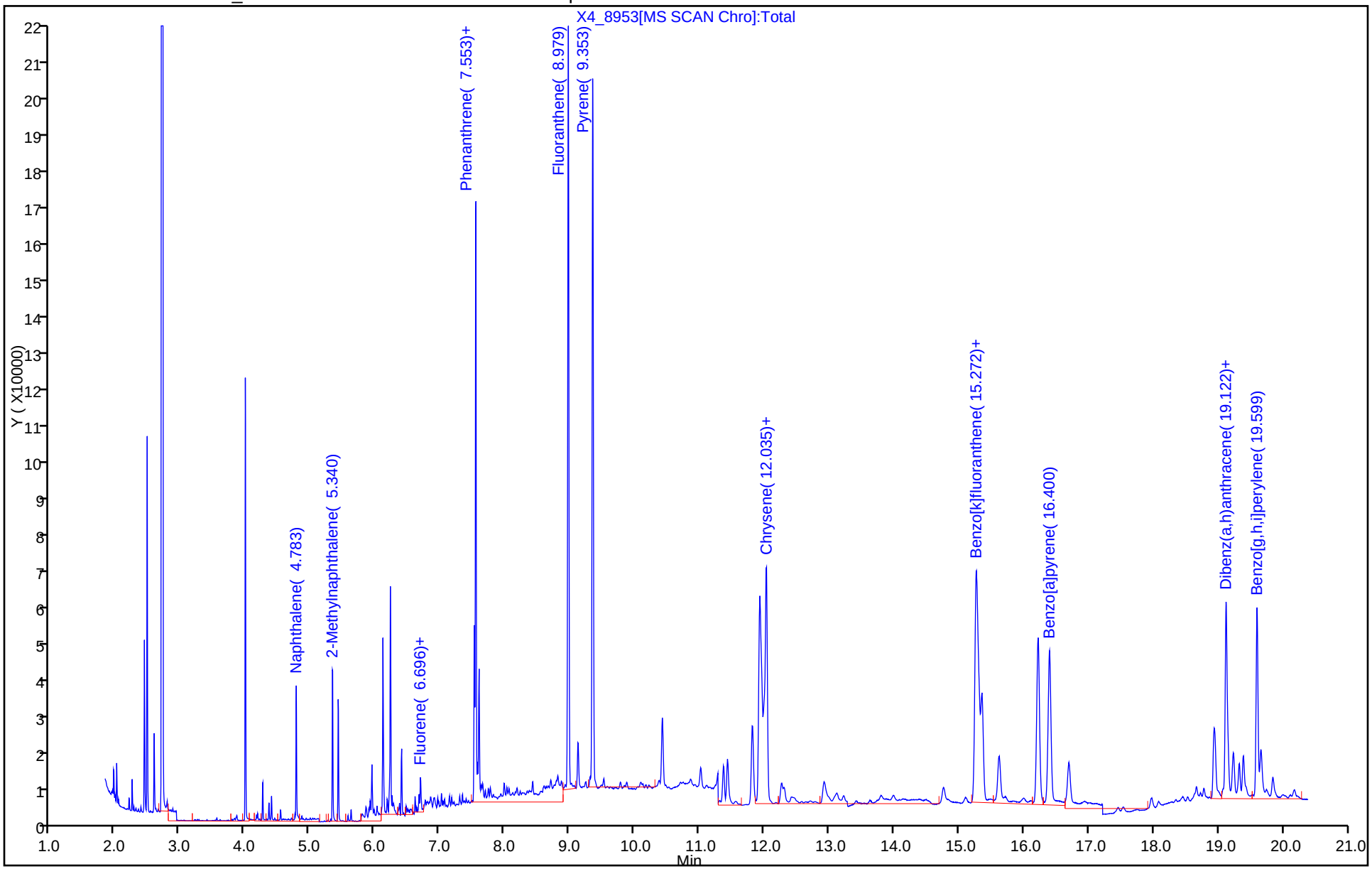
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 13:44:10 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8953.D				
Injection Date:	06-Jan-2014 14:43:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13	Worklist Smp#:	8
Client ID:	FSA-SD-DU02				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	8
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

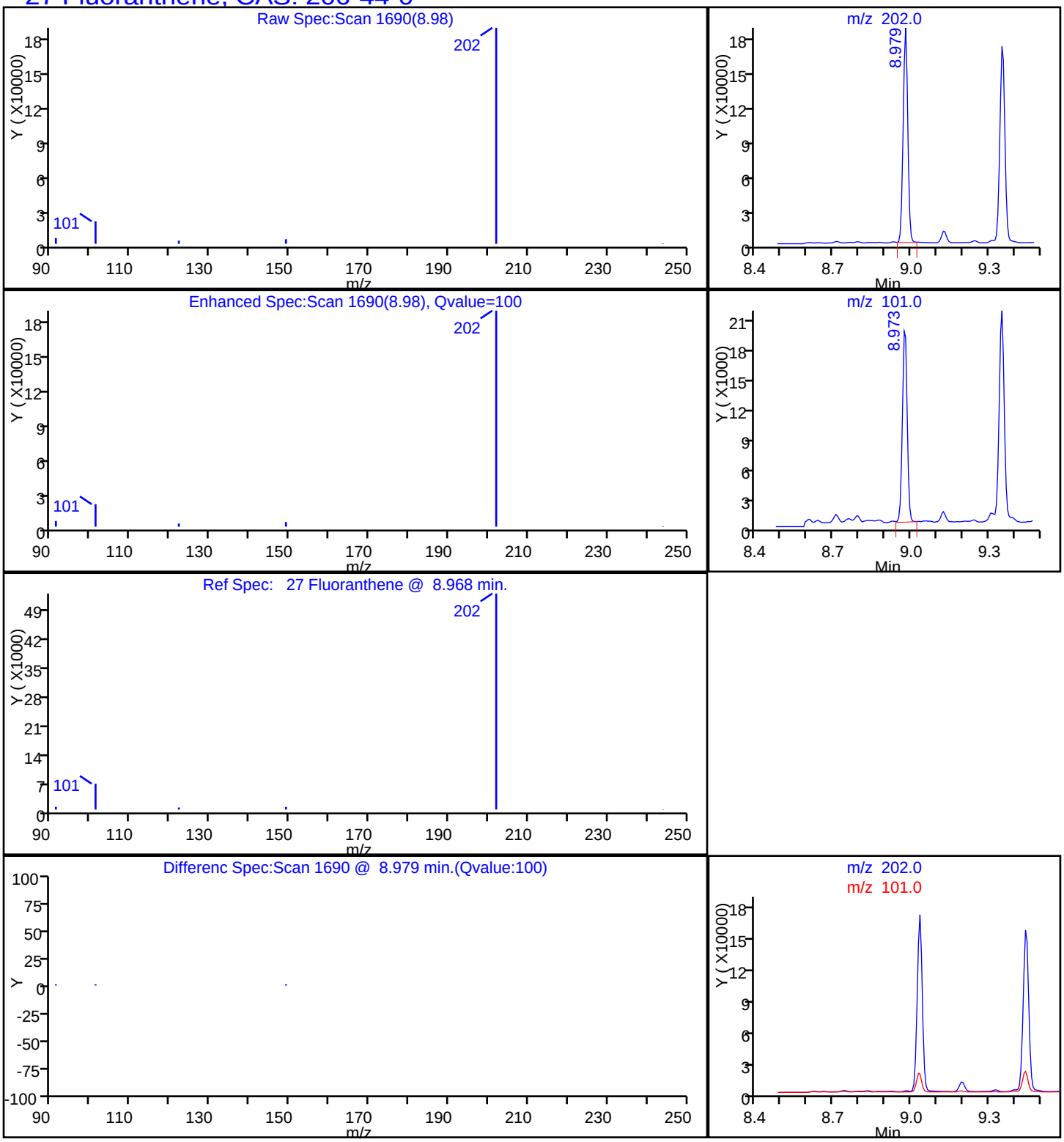


Report Date: 06-Jan-2014 13:44:10 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8953.D				
Injection Date:	06-Jan-2014 14:43:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0

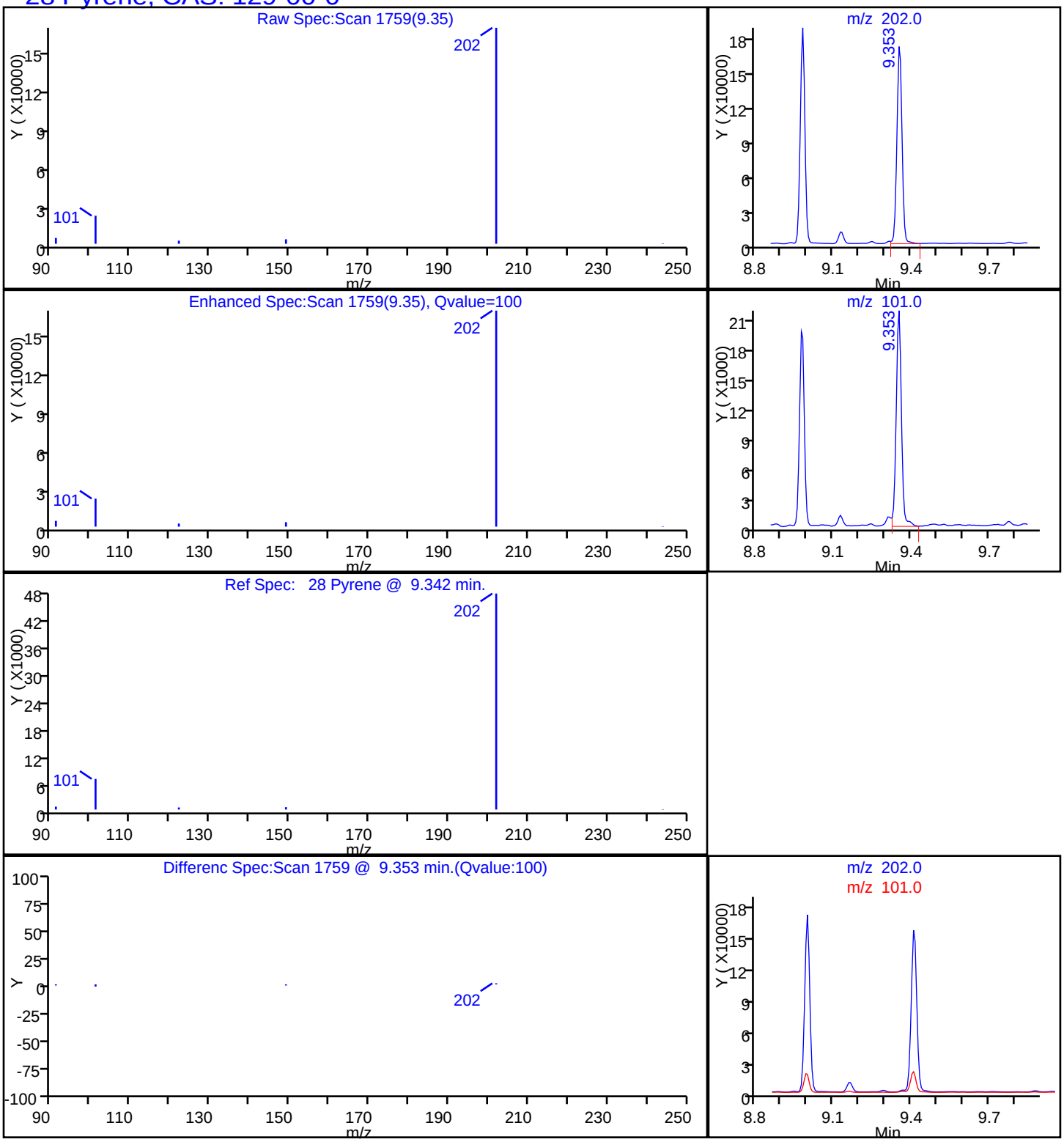


Report Date: 06-Jan-2014 13:44:10 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8953.D				
Injection Date:	06-Jan-2014 14:43:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-A-13-B	Lab Sample ID:	280-50614-13		
Client ID:	FSA-SD-DU02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-FB-01 | Lab Sample ID: 280-50614-14

Matrix: Water | Lab File ID: X4_8899.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 16:15

Extract. Method: 3510C | Date Extracted: 12/26/2013 17:46

Sample wt/vol: 871.4(mL) | Date Analyzed: 12/31/2013 20:16

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207101 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	ND		110	3.9
50-32-8	Benzo[a]pyrene	ND		110	5.9
56-55-3	Benzo[a]anthracene	ND		110	3.7
207-08-9	Benzo[k]fluoranthene	ND		110	5.8
191-24-2	Benzo[g,h,i]perylene	ND		110	4.1
85-01-8	Phenanthrene	ND		110	11
120-12-7	Anthracene	ND		110	16
53-70-3	Dibenz(a,h)anthracene	ND		110	5.5
218-01-9	Chrysene	ND		110	3.7
83-32-9	Acenaphthene	ND		110	12
208-96-8	Acenaphthylene	ND		110	11
206-44-0	Fluoranthene	ND		110	5.2
86-73-7	Fluorene	ND		110	22
129-00-0	Pyrene	ND		110	9.3
193-39-5	Indeno[1,2,3-cd]pyrene	ND		110	17
91-57-6	2-Methylnaphthalene	ND		110	5.9
91-20-3	Naphthalene	ND		110	6.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	74		42-120
4165-60-0	Nitrobenzene-d5	82		43-120
1718-51-0	Terphenyl-d14	132	X	47-120

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8899.D
Lims ID: 280-50614-B-14-A Lab Sample ID: 280-50614-14
Client ID: FSA-FB-01
Sample Type: Client
Inject. Date: 31-Dec-2013 20:16:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-50614-b-14-a
Misc. Info.: 280-50614-b-14-a =280-50614-B-14-A
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

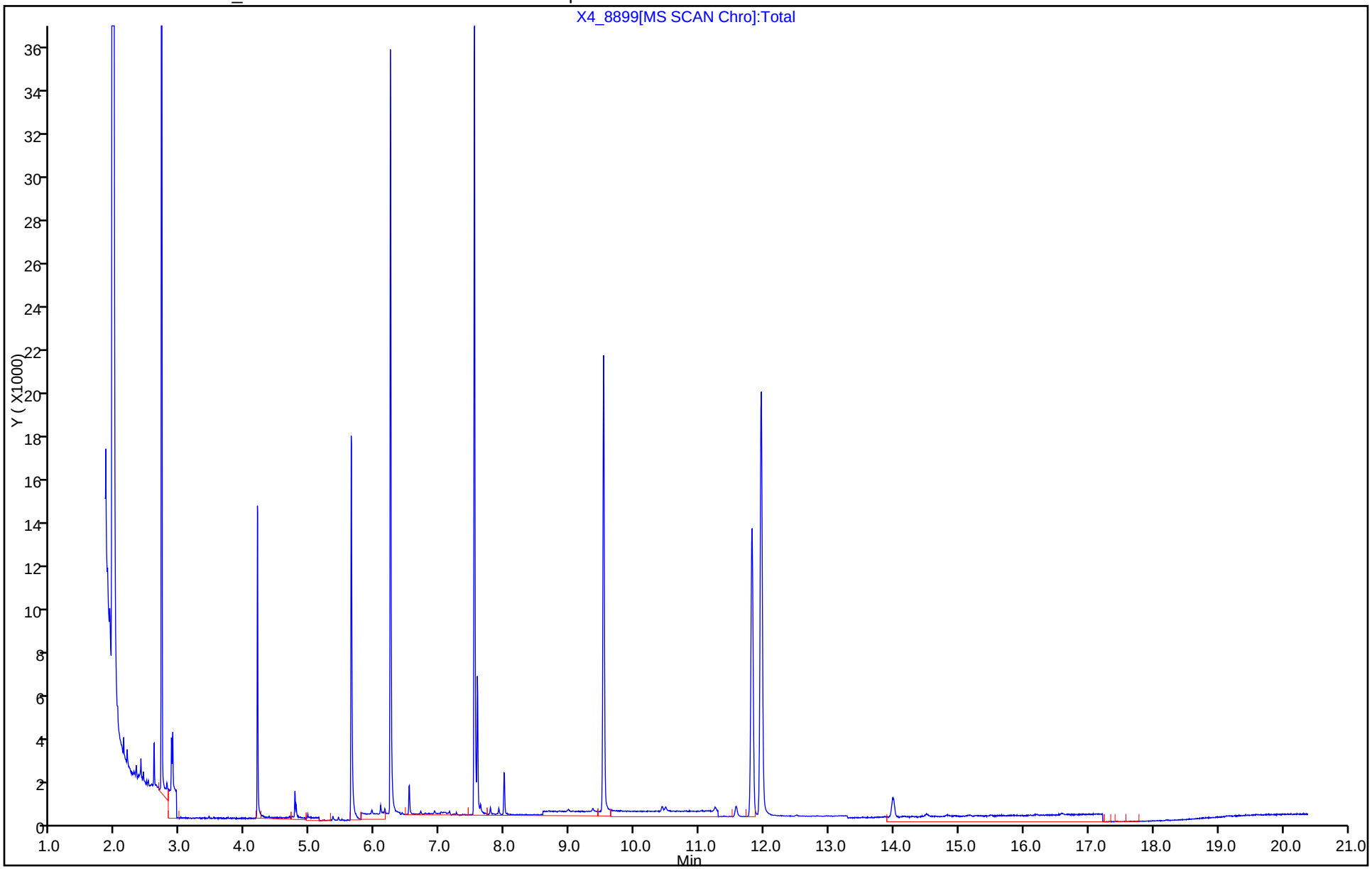
First Level Reviewer: vasquezk Date: 02-Jan-2014 09:02:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	93	18182	600.0	
* 1 Phenanthrene-d10	188	7.532	7.532	0.0	100	36797	600.0	
* 3 Chrysene-d12	240	11.956	11.956	0.0	96	42011	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.186	-0.003	100	8359	410.8	
$ 5 2-Fluorobiphenyl	172	5.630	5.630	0.0	100	15915	371.0	
$ 6 Terphenyl-d14	244	9.521	9.527	-0.006	99	29394	659.8	
14 Naphthalene	128		4.783					
15 2-Methylnaphthalene	142		5.344					
19 Acenaphthylene	152		6.119					
20 Acenaphthene	153		6.261					
22 Fluorene	166		6.696					
24 Phenanthrene	178		7.553					
25 Anthracene	178		7.602					
27 Fluoranthene	202		8.979					
28 Pyrene	202		9.353					
31 Benzo[a]anthracene	228		11.924					
32 Chrysene	228		12.027					
34 Benzo[b]fluoranthene	252		15.253					
35 Benzo[k]fluoranthene	252		15.342					
36 Benzo[a]pyrene	252		16.385					
38 Indeno[1,2,3-cd]pyrene	276		19.111					
37 Dibenz(a,h)anthracene	278		19.148					
39 Benzo[g,h,i]perylene	276		19.584					

Report Date: 02-Jan-2014 09:28:13 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8899.D				
Injection Date:	31-Dec-2013 20:16:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-B-14-A	Lab Sample ID:	280-50614-14	Worklist Smp#:	15
Client ID:	FSA-FB-01				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-EB-01 | Lab Sample ID: 280-50614-15

Matrix: Water | Lab File ID: X4_8900.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 16:20

Extract. Method: 3510C | Date Extracted: 12/26/2013 17:46

Sample wt/vol: 944.9(mL) | Date Analyzed: 12/31/2013 20:44

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207101 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	ND		110	3.6
50-32-8	Benzo[a]pyrene	ND		110	5.4
56-55-3	Benzo[a]anthracene	ND		110	3.4
207-08-9	Benzo[k]fluoranthene	ND		110	5.3
191-24-2	Benzo[g,h,i]perylene	ND		110	3.8
85-01-8	Phenanthrene	ND		110	10
120-12-7	Anthracene	ND		110	15
53-70-3	Dibenz(a,h)anthracene	ND		110	5.1
218-01-9	Chrysene	ND		110	3.4
83-32-9	Acenaphthene	ND		110	11
208-96-8	Acenaphthylene	ND		110	11
206-44-0	Fluoranthene	ND		110	4.8
86-73-7	Fluorene	ND		110	20
129-00-0	Pyrene	ND		110	8.6
193-39-5	Indeno[1,2,3-cd]pyrene	ND		110	16
91-57-6	2-Methylnaphthalene	ND		110	5.5
91-20-3	Naphthalene	ND		110	5.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	54		42-120
4165-60-0	Nitrobenzene-d5	50		43-120
1718-51-0	Terphenyl-d14	112		47-120

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8900.D
Lims ID: 280-50614-A-15-A Lab Sample ID: 280-50614-15
Client ID: FSA-EB-01
Sample Type: Client
Inject. Date: 31-Dec-2013 20:44:30 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-50614-a-15-a
Misc. Info.: 280-50614-a-15-a =280-50614-A-15-A
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

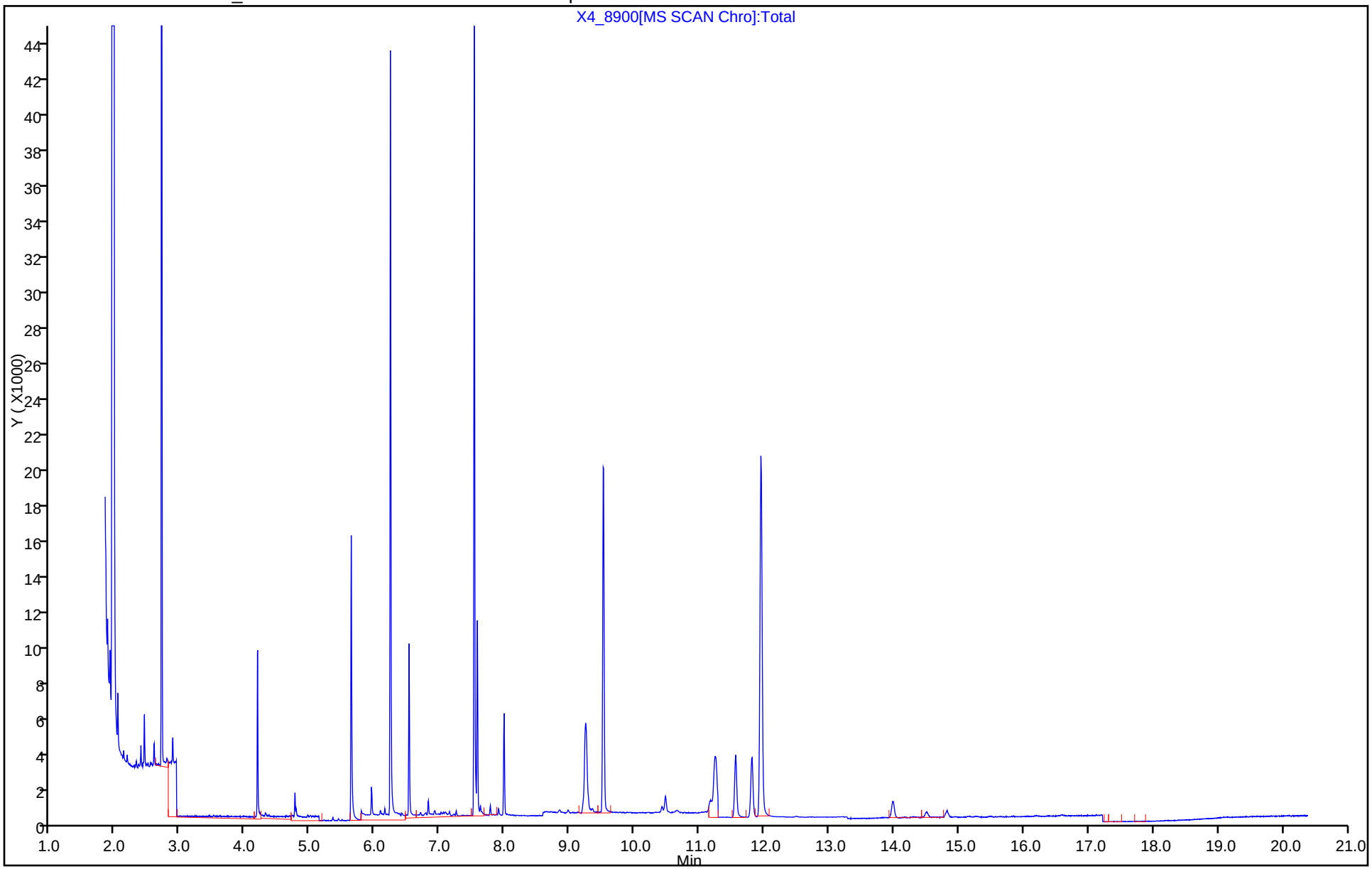
First Level Reviewer: vasquezk Date: 02-Jan-2014 09:02:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	94	19195	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	38770	600.0	
* 3 Chrysene-d12	240	11.948	11.956	-0.008	96	42941	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.186	-0.003	99	5323	247.8	
$ 5 2-Fluorobiphenyl	172	5.630	5.630	0.0	100	12278	271.1	
$ 6 Terphenyl-d14	244	9.522	9.527	-0.005	99	26379	562.0	
14 Naphthalene	128		4.783					
15 2-Methylnaphthalene	142		5.344					
19 Acenaphthylene	152		6.119					
20 Acenaphthene	153		6.261					
22 Fluorene	166		6.696					
24 Phenanthrene	178		7.553					
25 Anthracene	178		7.602					
27 Fluoranthene	202		8.979					
28 Pyrene	202		9.353					
31 Benzo[a]anthracene	228		11.924					
32 Chrysene	228		12.027					
34 Benzo[b]fluoranthene	252		15.253					
35 Benzo[k]fluoranthene	252		15.342					
36 Benzo[a]pyrene	252		16.385					
38 Indeno[1,2,3-cd]pyrene	276		19.111					
37 Dibenz(a,h)anthracene	278		19.148					
39 Benzo[g,h,i]perylene	276		19.584					

Report Date: 02-Jan-2014 09:28:14 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8900.D				
Injection Date:	31-Dec-2013 20:44:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-A-15-A	Lab Sample ID:	280-50614-15	Worklist Smp#:	16
Client ID:	FSA-EB-01				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-50614-1 Analy Batch No.: 203266

SDG No.:

Instrument ID: SMS_X4 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2013 09:01 Calibration End Date: 11/30/2013 12:16 Calibration ID: 16353

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD10000 280-203266/10	X4_8616.D
Level 2	STD0020 280-203266/3	X4_8609.D
Level 3	STD0100 280-203266/4	X4_8610.D
Level 4	STD0300 280-203266/5	X4_8611.D
Level 5	ICIS 280-203266/6	X4_8612.D
Level 6	STD1200 280-203266/7	X4_8613.D
Level 7	STD2500 280-203266/8	X4_8614.D
Level 8	STD5000 280-203266/9	X4_8615.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	+++++ 0.2311	0.3308 0.2273	0.2910 0.2301	0.2419	0.2227	Ave		0.2536			0.0500	16.0		20.0			
N-Nitrosodimethylamine	+++++ 0.3150	 0.3190	0.3716 0.3216	0.3366	0.3229	Ave		0.3311			0.0500	6.4		20.0			
Naphthalene	+++++ 1.7504	2.0890 1.7929	1.8860 1.8094	1.7616	1.7620	Ave		1.8359			0.0500	6.6		15.0			
2-Methylnaphthalene	+++++ 1.2496	1.4403 1.2891	1.3146 1.2875	1.2511	1.2558	Ave		1.2983			0.0500	5.2		15.0			
1-Methylnaphthalene	+++++ 1.1463	1.2959 1.1954	1.2030 1.1970	1.1492	1.1531	Ave		1.1914			0.0500	4.4		15.0			
Dimethyl phthalate	1.4632 1.5006	 1.5597	1.5537 1.5253	1.4848	1.5054	Ave		1.5133			0.0500	2.3		20.0			
Acenaphthylene	+++++ 1.9425	2.1424 2.0304	2.0154 2.0204	1.9229	1.9310	Ave		2.0007			0.0500	3.9		15.0			
Acenaphthene	+++++ 1.1836	1.4519 1.2499	1.2317 1.2233	1.2002	1.1953	Ave		1.2480			0.0500	7.4		15.0			
Dibenzofuran	+++++ 1.7709	2.0399 1.8583	1.8169 1.8177	1.7542	1.7661	Ave		1.8320			0.0500	5.4		15.0			
Diethyl phthalate	1.4550 1.4976	 1.5599	1.5448 1.5191	1.4891	1.5076	Ave		1.5104			0.0500	2.3		20.0			
Fluorene	+++++ 1.4407	1.6599 1.5177	1.4864 1.4742	1.4177	1.4448	Ave		1.4916			0.0500	5.4		15.0			
N-Nitrosodiphenylamine	+++++ 0.5123	0.6296 0.5071	0.5784 0.4711	0.5313	0.5319	Ave		0.5374			0.0500	9.7		20.0			
Phenanthrene	+++++ 1.1782	1.4338 1.2268	1.2249 1.2134	1.1579	1.1723	Ave		1.2296			0.0500	7.6		15.0			
Anthracene	+++++ 1.1833	1.2696 1.2529	1.2058 1.2439	1.1463	1.1712	Ave		1.2104			0.0500	3.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-50614-1 Analy Batch No.: 203266

SDG No.:

Instrument ID: SMS_X4 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2013 09:01 Calibration End Date: 11/30/2013 12:16 Calibration ID: 16353

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Di-n-butyl phthalate	1.5113 1.4734	 1.5474	1.5254 1.5301	1.4550	1.4601	Ave		1.5004			0.0500	2.5		20.0			
Fluoranthene	+++++ 1.2968	1.4250 1.3474	1.3916 1.3302	1.2598	1.2846	Ave		1.3336			0.0500	4.4		15.0			
Pyrene	+++++ 1.3299	1.5310 1.3717	1.4395 1.3639	1.2866	1.3097	Ave		1.3760			0.0500	6.1		15.0			
Butyl benzyl phthalate	0.6728 0.6179	 0.6443	0.6403 0.6515	0.5686	0.5882	Ave		0.6262			0.0500	5.9		20.0			
Bis(2-ethylhexyl) phthalate	0.9199 0.8391	 0.8477	1.0143 0.8685	0.7766	0.8009	Ave		0.8667			0.0500	9.2		20.0			
Benzo[a]anthracene	+++++ 1.1594	1.3794 1.2307	1.2406 1.2034	1.1610	1.1625	Ave		1.2196			0.0500	6.4		15.0			
Chrysene	+++++ 1.1022	1.2929 1.1606	1.1672 1.1428	1.1111	1.0953	Ave		1.1532			0.0500	5.9		15.0			
Di-n-octyl phthalate	1.4462 1.2672	 1.3469	1.1953 1.3901	1.1214	1.1889	Ave		1.2794			0.0500	9.3		20.0			
Benzo[b]fluoranthene	+++++ 1.0759	1.3112 1.0811	1.1762 1.0731	1.0516	1.0503	Ave		1.1171			0.0500	8.6		15.0			
Benzo[k]fluoranthene	+++++ 1.1091	1.3320 1.1395	1.1871 1.1340	1.0647	1.0772	Ave		1.1491			0.0500	7.9		15.0			
Benzo[a]pyrene	+++++ 1.0404	1.2489 1.0468	1.1555 1.0451	1.0223	1.0190	Ave		1.0825			0.0500	8.0		15.0			
Indeno[1,2,3-cd]pyrene	+++++ 1.0584	1.2688 0.9691	1.1732 0.9830	0.9903	1.0170	Ave		1.0657			0.0500	11.0		15.0			
Dibenz(a,h)anthracene	+++++ 1.0746	1.1557 1.0184	1.2162 1.0177	1.0501	1.0055	Ave		1.0769			0.0500	7.4		15.0			
Benzo[g,h,i]perylene	+++++ 1.1242	1.3636 1.0565	1.2806 1.0541	1.0514	1.0770	Ave		1.1439			0.0500	11.0		15.0			
Nitrobenzene-d5	0.6615 0.6379	0.7613 0.6645	0.6978 0.6791	0.6302	0.6393	Ave		0.6715			0.0500	6.4		15.0			
2-Fluorobiphenyl	1.3706 1.3707	1.5747 1.4315	1.4259 1.4181	1.3651	1.3692	Ave		1.4157			0.0500	5.0		15.0			
Terphenyl-d14	0.7415 0.7036	0.7866 0.7347	0.7474 0.7332	0.6787	0.6856	Ave		0.7264			0.0500	4.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-50614-1 Analy Batch No.: 203266

SDG No.:

Instrument ID: SMS_X4 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2013 09:01 Calibration End Date: 11/30/2013 12:16 Calibration ID: 16353

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD10000 280-203266/10	X4_8616.D
Level 2	STD0020 280-203266/3	X4_8609.D
Level 3	STD0100 280-203266/4	X4_8610.D
Level 4	STD0300 280-203266/5	X4_8611.D
Level 5	ICIS 280-203266/6	X4_8612.D
Level 6	STD1200 280-203266/7	X4_8613.D
Level 7	STD2500 280-203266/8	X4_8614.D
Level 8	STD5000 280-203266/9	X4_8615.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	ANT	Ave	+++++ 9393	229 21933	884 42197	2650	6494	+++++ 1200	20.0 2500	100 5000	300	600
N-Nitrosodimethylamine	ANT	Ave	+++++ 12801	 30779	1129 58970	3688	9416	+++++ 1200	 2500	100 5000	300	600
Naphthalene	ANT	Ave	+++++ 71144	1446 172977	5730 331820	19301	51381	+++++ 1200	20.0 2500	100 5000	300	600
2-Methylnaphthalene	ANT	Ave	+++++ 101576	1994 248735	7988 472220	27416	73239	+++++ 2400	40.0 5000	200 10000	600	1200
1-Methylnaphthalene	ANT	Ave	+++++ 46592	897 115335	3655 219507	12591	33623	+++++ 1200	20.0 2500	100 5000	300	600
Dimethyl phthalate	ANT	Ave	1049018 121984	 300954	9441 559446	32536	87794	20000 2400	 5000	200 10000	600	1200
Acenaphthylene	ANT	Ave	+++++ 78950	1483 195892	6123 370508	21068	56308	+++++ 1200	20.0 2500	100 5000	300	600
Acenaphthene	ANT	Ave	+++++ 48107	1005 120587	3742 224326	13150	34856	+++++ 1200	20.0 2500	100 5000	300	600
Dibenzofuran	ANT	Ave	+++++ 71975	1412 179287	5520 333327	19220	51500	+++++ 1200	20.0 2500	100 5000	300	600
Diethyl phthalate	ANT	Ave	1043168 121740	 300988	9387 557148	32630	87924	20000 2400	 5000	200 10000	600	1200
Fluorene	ANT	Ave	+++++ 58555	1149 146424	4516 270345	15533	42130	+++++ 1200	20.0 2500	100 5000	300	600
N-Nitrosodiphenylamine	PHN	Ave	+++++ 37084	790 86618	3135 149670	10309	27814	+++++ 1200	20.0 2500	100 5000	300	600
Phenanthrene	PHN	Ave	+++++ 85284	1799 209558	6639 385535	22467	61304	+++++ 1200	20.0 2500	100 5000	300	600
Anthracene	PHN	Ave	+++++ 85654	1593 214010	6535 395221	22243	61247	+++++ 1200	20.0 2500	100 5000	300	600
Di-n-butyl phthalate	PHN	Ave	1864263 213294	 528631	16535 972297	56466	152703	20000 2400	 5000	200 10000	600	1200

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-50614-1 Analy Batch No.: 203266

SDG No.:

Instrument ID: SMS_X4 GC Column: Vf-5MS (30.2 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2013 09:01 Calibration End Date: 11/30/2013 12:16 Calibration ID: 16353

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Fluoranthene	PHN	Ave	+++++ 93866	1788 230150	7542 422644	24445	67173	+++++ 1200	20.0 2500	100 5000	300	600
Pyrene	PHN	Ave	+++++ 96265	1921 234296	7802 433340	24964	68487	+++++ 1200	20.0 2500	100 5000	300	600
Butyl benzyl phthalate	PHN	Ave	829953 89458	 220111	6941 413971	22064	61516	20000 2400	 5000	200 10000	600	1200
Bis(2-ethylhexyl) phthalate	PHN	Ave	1134807 121480	 289583	10995 551861	30139	83757	20000 2400	 5000	200 10000	600	1200
Benzo[a]anthracene	CRY	Ave	+++++ 86611	1659 209014	7067 389663	21660	60049	+++++ 1200	20.0 2500	100 5000	300	600
Chrysene	CRY	Ave	+++++ 82338	1555 197117	6649 370061	20729	56578	+++++ 1200	20.0 2500	100 5000	300	600
Di-n-octyl phthalate	CRY	Ave	1921171 189325	 457501	13618 900269	41843	122831	20000 2400	 5000	200 10000	600	1200
Benzo[b]fluoranthene	CRY	Ave	+++++ 80371	1577 183612	6700 347463	19620	54253	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[k]fluoranthene	CRY	Ave	+++++ 82857	1602 193523	6762 367193	19863	55645	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[a]pyrene	CRY	Ave	+++++ 77721	1502 177777	6582 338400	19072	52638	+++++ 1200	20.0 2500	100 5000	300	600
Indeno[1,2,3-cd]pyrene	CRY	Ave	+++++ 79064	1526 164584	6683 318289	18476	52534	+++++ 1200	20.0 2500	100 5000	300	600
Dibenz(a,h)anthracene	CRY	Ave	+++++ 80279	1390 172957	6928 329533	19592	51943	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[g,h,i]perylene	CRY	Ave	+++++ 83984	1640 179433	7295 341320	19616	55634	+++++ 1200	20.0 2500	100 5000	300	600
Nitrobenzene-d5	ANT	Ave	237110 25927	527 64112	2120 124540	6905	18642	10000 1200	20.0 2500	100 5000	300	600
2-Fluorobiphenyl	ANT	Ave	491312 55712	1090 138109	4332 260058	14957	39925	10000 1200	20.0 2500	100 5000	300	600
Terphenyl-d14	PHN	Ave	457318 50927	987 125501	4051 232958	13170	35849	10000 1200	20.0 2500	100 5000	300	600

Curve Type Legend:
Ave = Average ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D
Lims ID: STD0020 Lab Sample ID:
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Nov-2013 09:01:30 ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD0020
Operator ID: VASQUEZK Instrument ID: SMS_X4
Sublist: chrom-SMSX4_SIMX*sub1

Method: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 01-Dec-2013 08:07:49 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 30-Nov-2013 07:26:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.240	6.240	0.0	91	20766	600.0	
* 1 Phenanthrene-d10	188	7.532	7.532	0.0	100	37641	600.0	
* 3 Chrysene-d12	240	11.948	11.948	0.0	97	36081	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.186	0.0	1	527	22.7	M
$ 5 2-Fluorobiphenyl	172	5.633	5.633	0.0	0	1090	22.2	M
$ 6 Terphenyl-d14	244	9.527	9.527	0.0	0	987	21.7	M
42 1,4-Dioxane	88	2.100	2.100	0.0	75	229	26.1	M
7 N-Nitrosodimethylamine	42	2.224	2.224	0.0	85	303	26.4	
14 Naphthalene	128	4.783	4.783	0.0	0	1446	22.8	M
15 2-Methylnaphthalene	142	5.347	5.347	0.0	100	1994	44.4	
16 1-Methylnaphthalene	142	5.433	5.433	0.0	97	897	21.8	
17 Dimethyl phthalate	163		5.942					
19 Acenaphthylene	152	6.119	6.119	0.0	0	1483	21.4	M
20 Acenaphthene	153	6.261	6.261	0.0	0	1005	23.3	M
18 Dibenzofuran	168	6.408	6.408	0.0	98	1412	22.3	
21 Diethyl phthalate	149		6.521					
22 Fluorene	166	6.702	6.702	0.0	98	1149	22.3	
23 N-Nitrosodiphenylamine	169	6.771	6.771	0.0	0	790	23.4	M
24 Phenanthrene	178	7.553	7.553	0.0	0	1799	23.3	M
25 Anthracene	178	7.602	7.602	0.0	0	1593	21.0	M
26 Di-n-butyl phthalate	149		7.987					M
27 Fluoranthene	202	8.973	8.973	0.0	0	1788	21.4	M
28 Pyrene	202	9.353	9.353	0.0	0	1921	22.3	M
29 Butyl benzyl phthalate	149		10.428					
30 Bis(2-ethylhexyl) phthalate	149		11.813					
31 Benzo[a]anthracene	228	11.916	11.916	0.0	0	1659	22.6	M
32 Chrysene	228	12.019	12.019	0.0	0	1555	22.4	M
33 Di-n-octyl phthalate	149		13.864					
34 Benzo[b]fluoranthene	252	15.242	15.242	0.0	77	1577	23.5	
35 Benzo[k]fluoranthene	252	15.331	15.331	0.0	77	1602	23.2	
36 Benzo[a]pyrene	252	16.374	16.374	0.0	67	1502	23.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.100	19.100	0.0	71	1526	23.8	M
37 Dibenz(a,h)anthracene	278	19.137	19.137	0.0	0	1390	21.5	M
39 Benzo[g,h,i]perylene	276	19.573	19.573	0.0	68	1640	23.8	

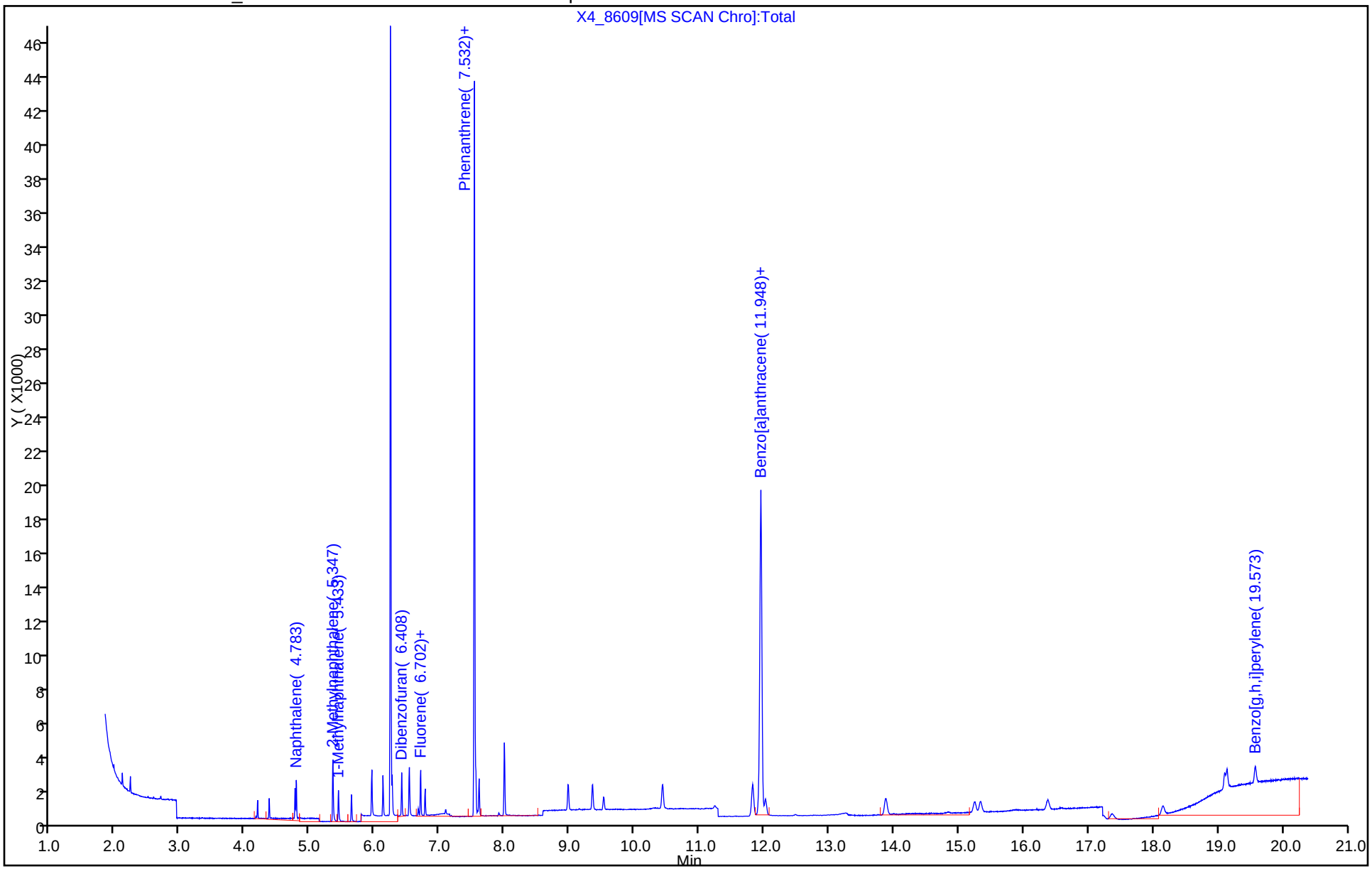
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 01-Dec-2013 08:07:49 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	STD0020	Lab Sample ID:		Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

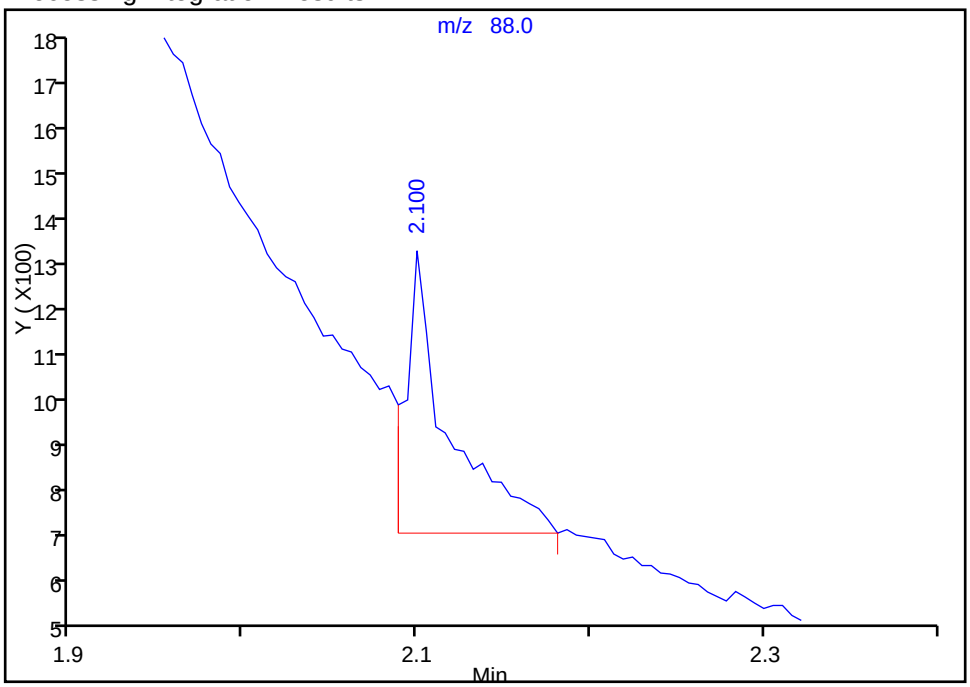
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

42 1,4-Dioxane, CAS: 123-91-1

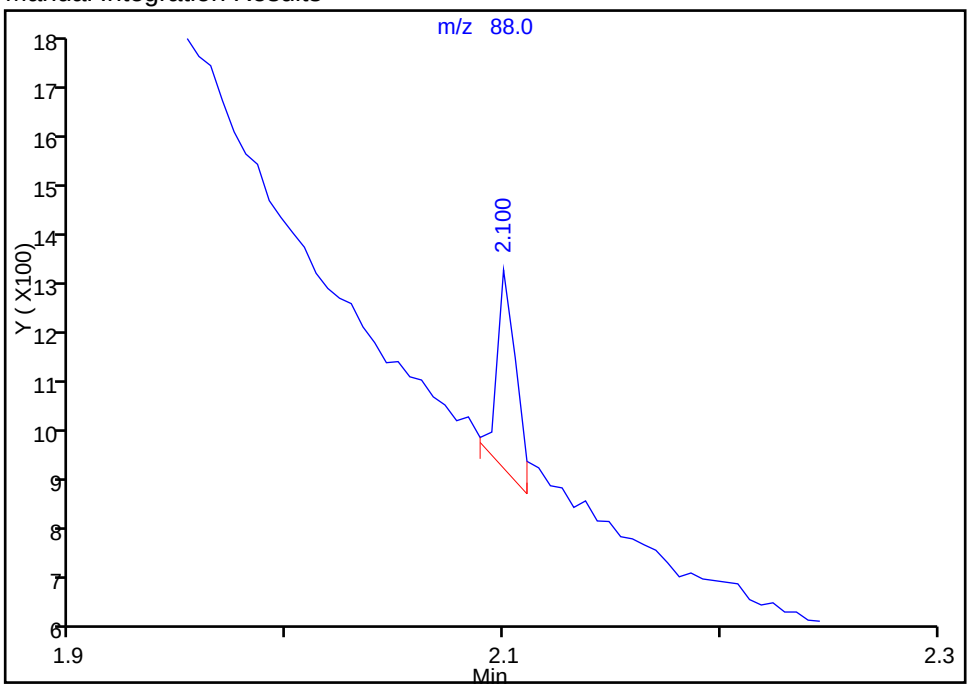
Processing Integration Results

RT: 2.10
Response: 971
Amount: 73.184856



Manual Integration Results

RT: 2.10
Response: 229
Amount: 26.094999



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

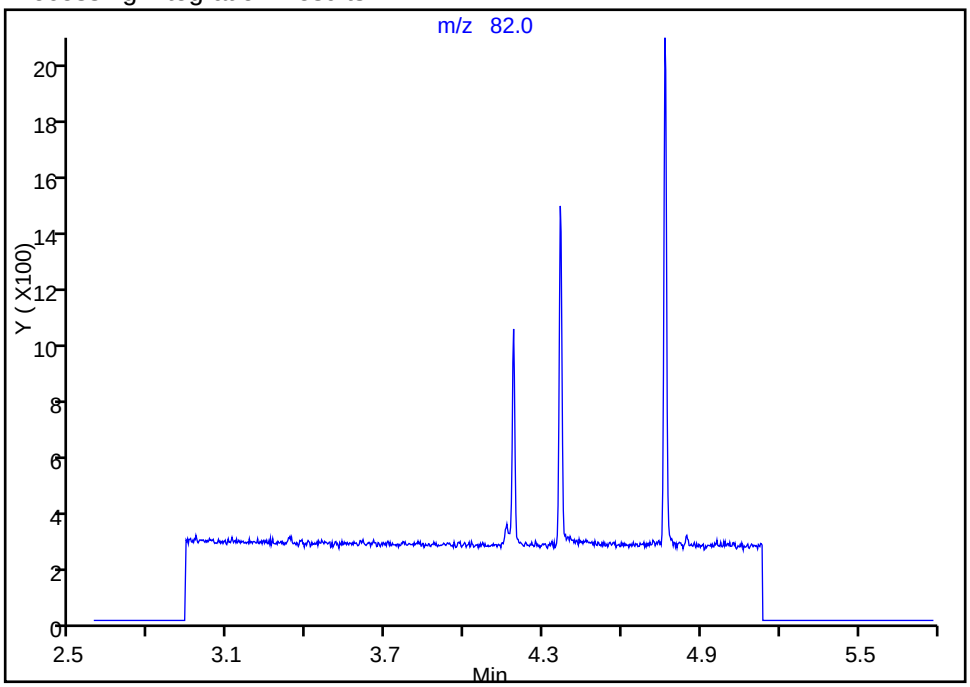
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

$ 4 Nitrobenzene-d5, CAS: 4165-60-0

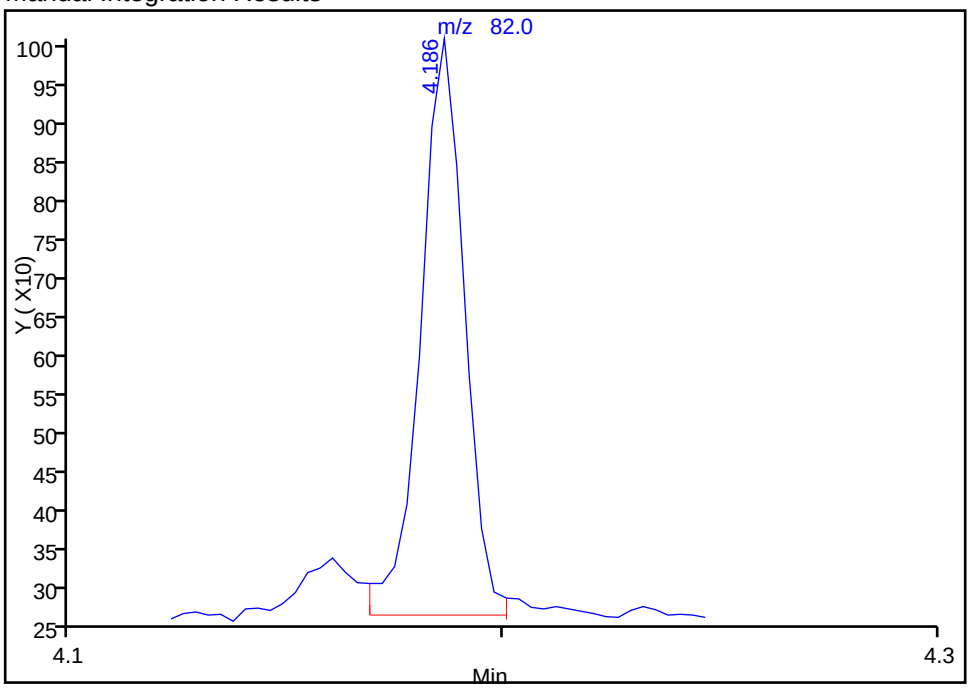
Not Detected
Expected RT: 4.19

Processing Integration Results



RT: 4.19
Response: 527
Amount: 22.677293

Manual Integration Results



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

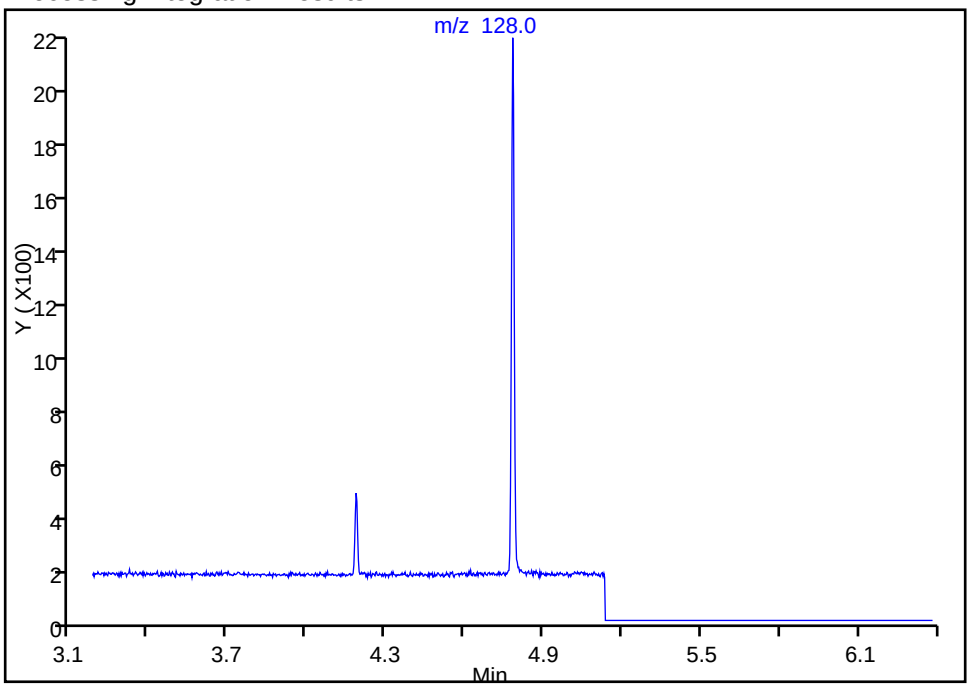
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3

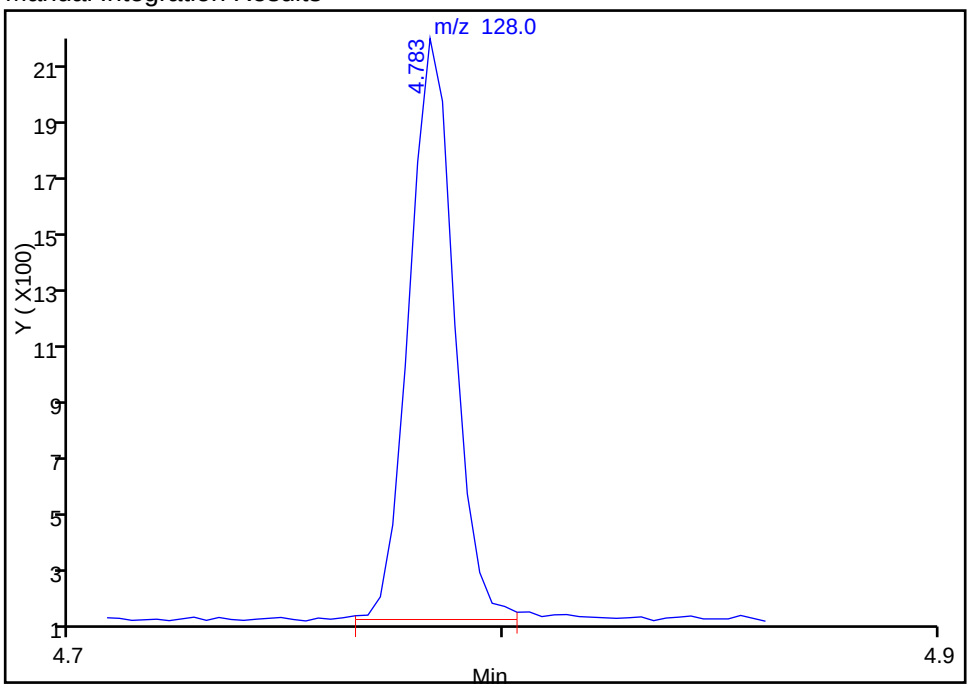
Not Detected
Expected RT: 4.78

Processing Integration Results



RT: 4.78
Response: 1446
Amount: 22.756991

Manual Integration Results



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

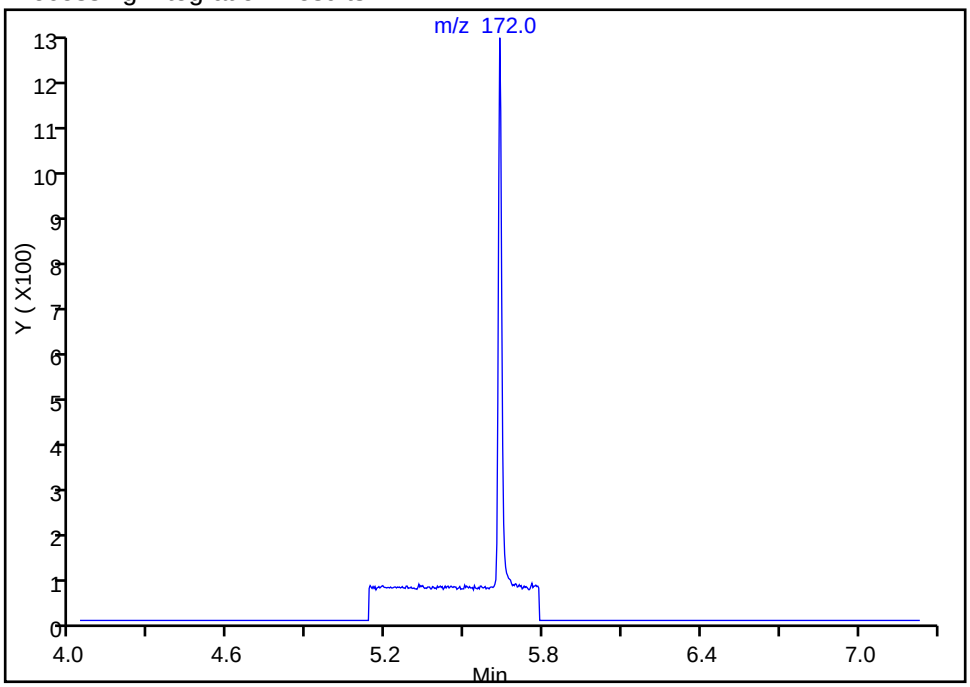
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

$ 5 2-Fluorobiphenyl, CAS: 321-60-8

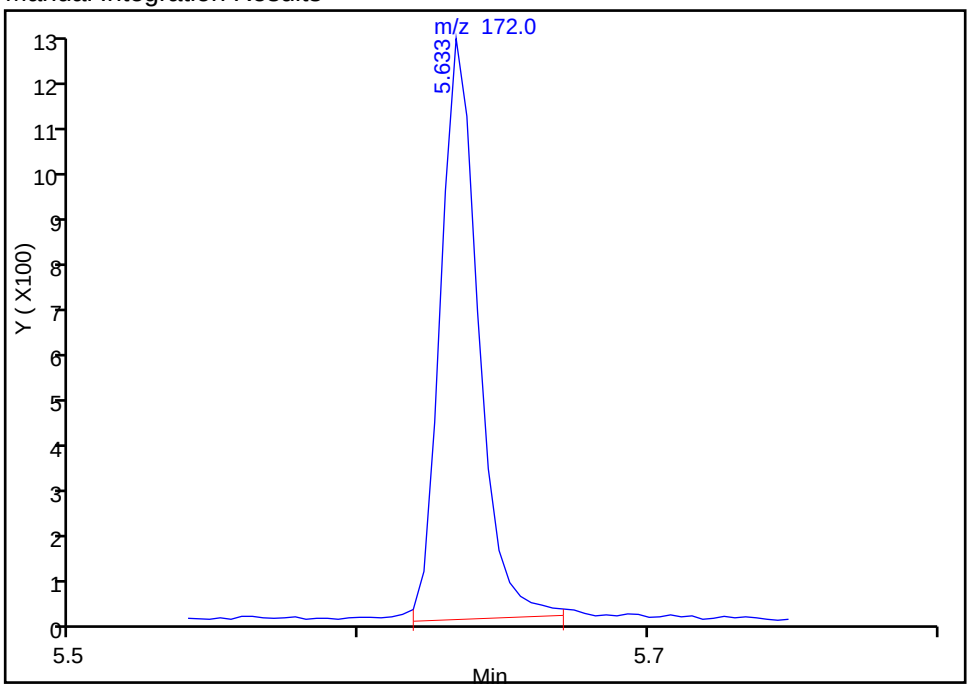
Processing Integration Results

Not Detected
Expected RT: 5.63



Manual Integration Results

RT: 5.63
Response: 1090
Amount: 22.245752



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

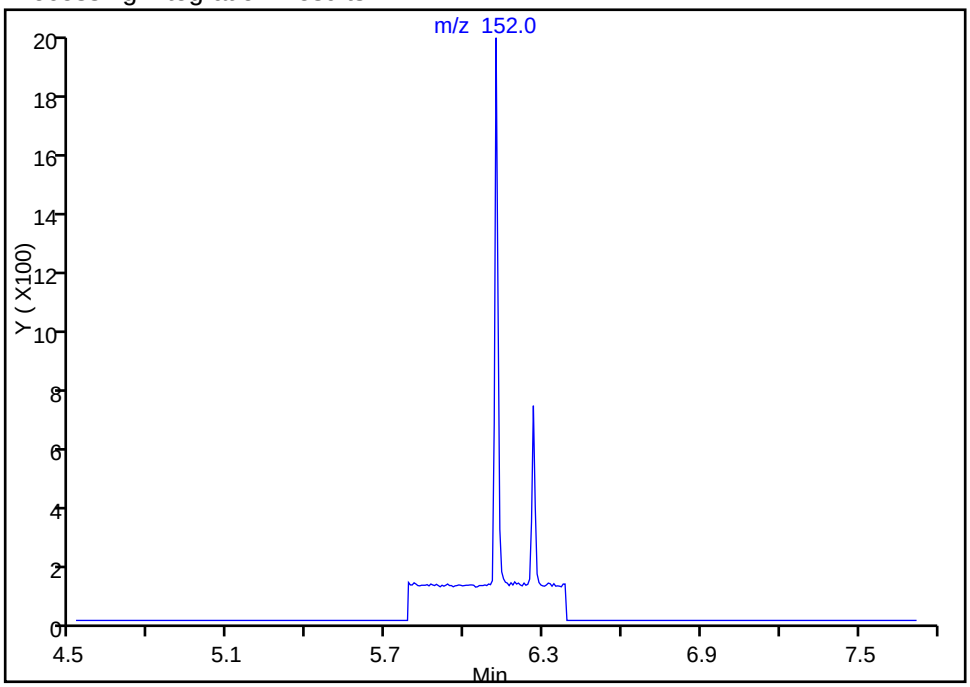
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

19 Acenaphthylene, CAS: 208-96-8

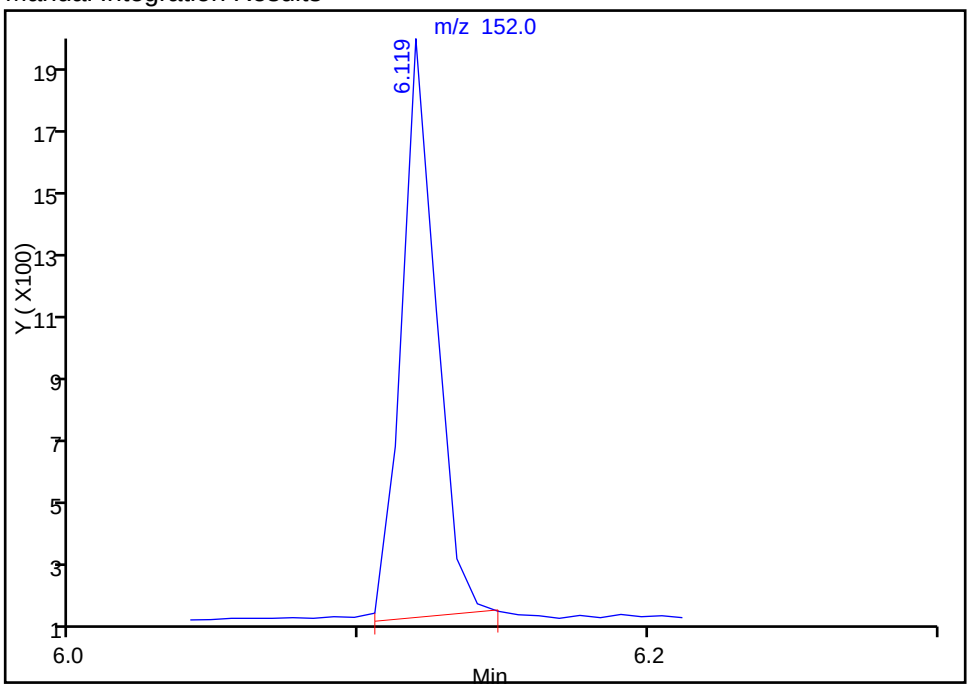
Not Detected
Expected RT: 6.12

Processing Integration Results



RT: 6.12
Response: 1483
Amount: 21.416844

Manual Integration Results



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

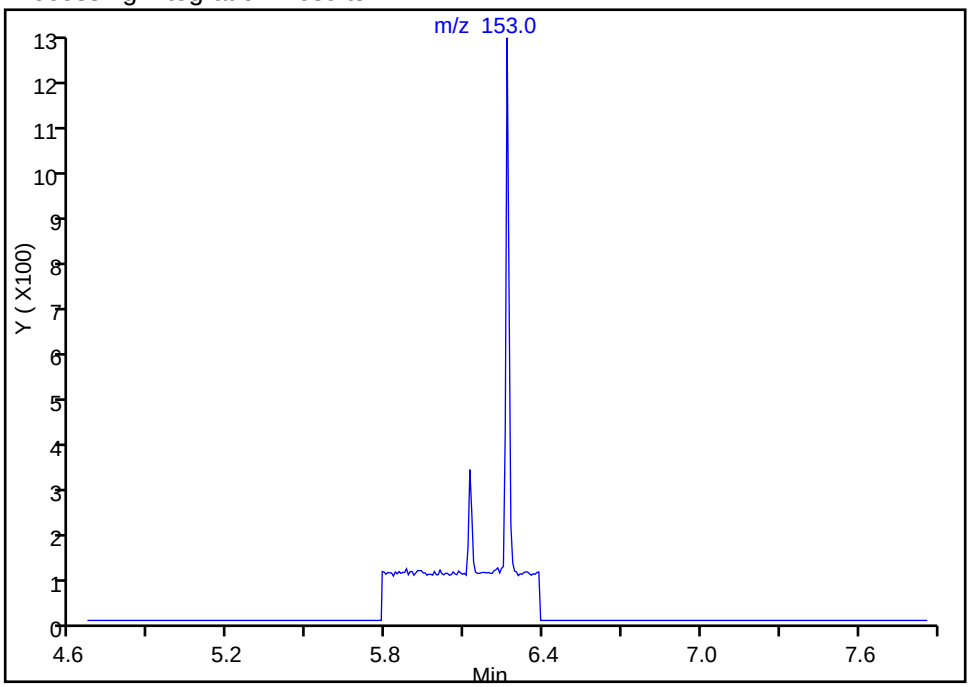
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthene, CAS: 83-32-9

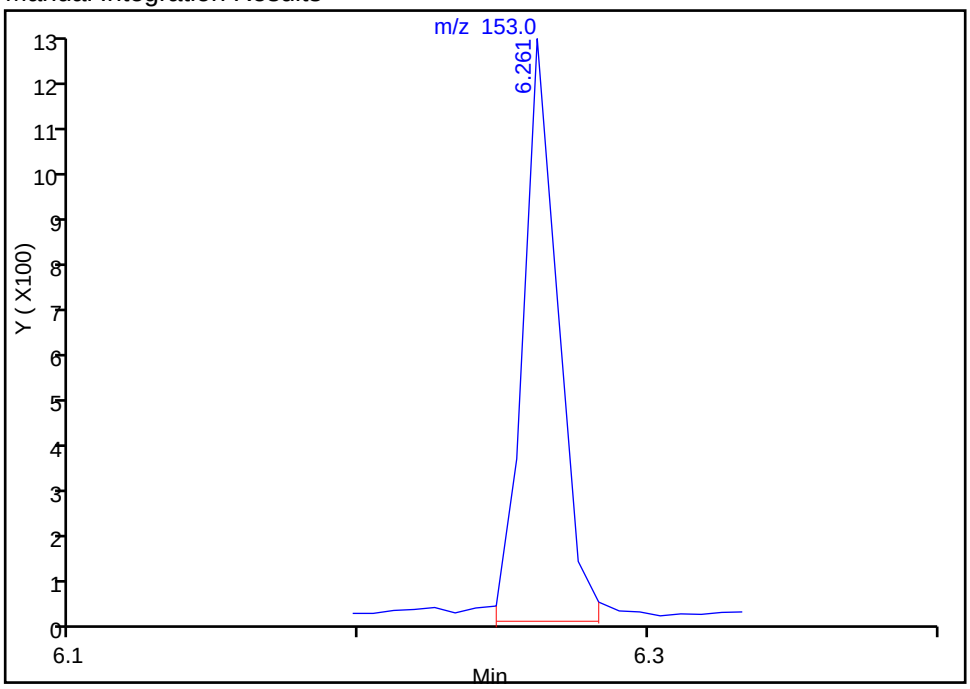
Not Detected
Expected RT: 6.26

Processing Integration Results



RT: 6.26
Response: 1005
Amount: 23.267906

Manual Integration Results



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

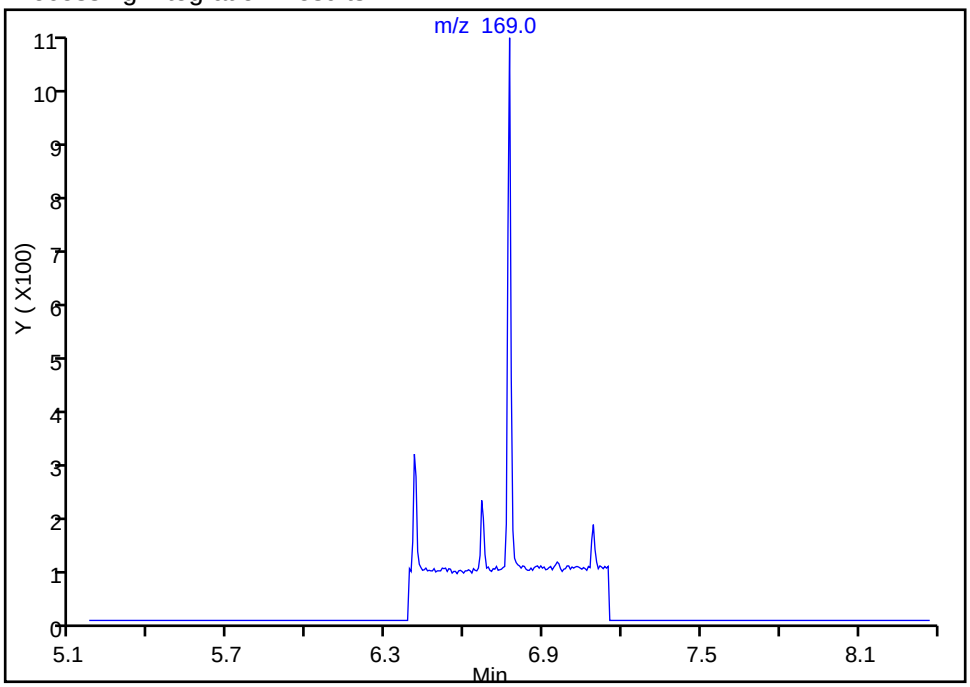
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 N-Nitrosodiphenylamine, CAS: 86-30-6

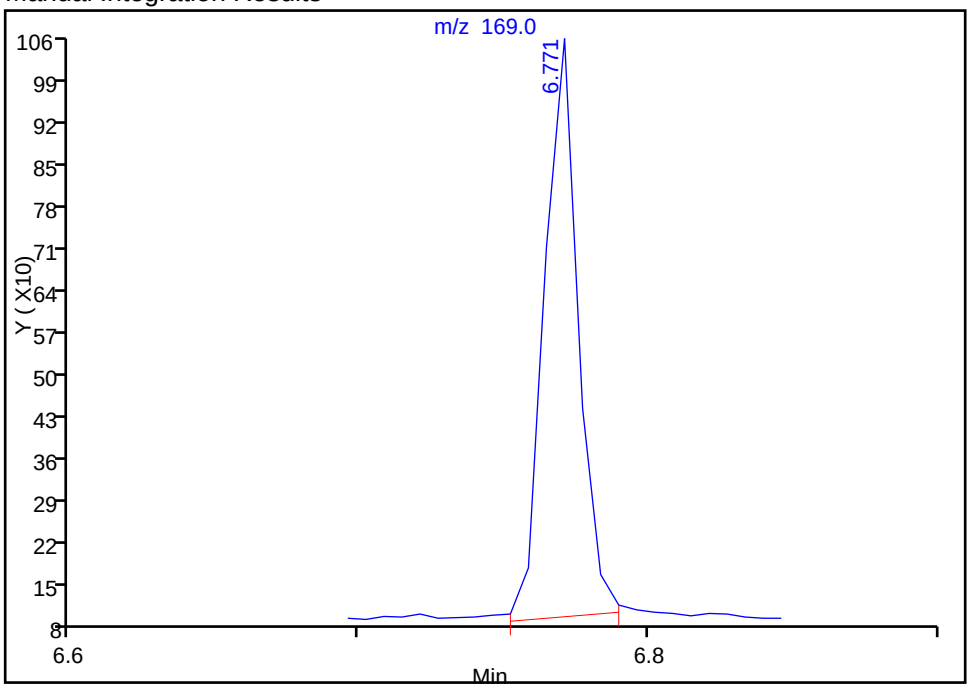
Not Detected
Expected RT: 6.77

Processing Integration Results



RT: 6.77
Response: 790
Amount: 23.432908

Manual Integration Results



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

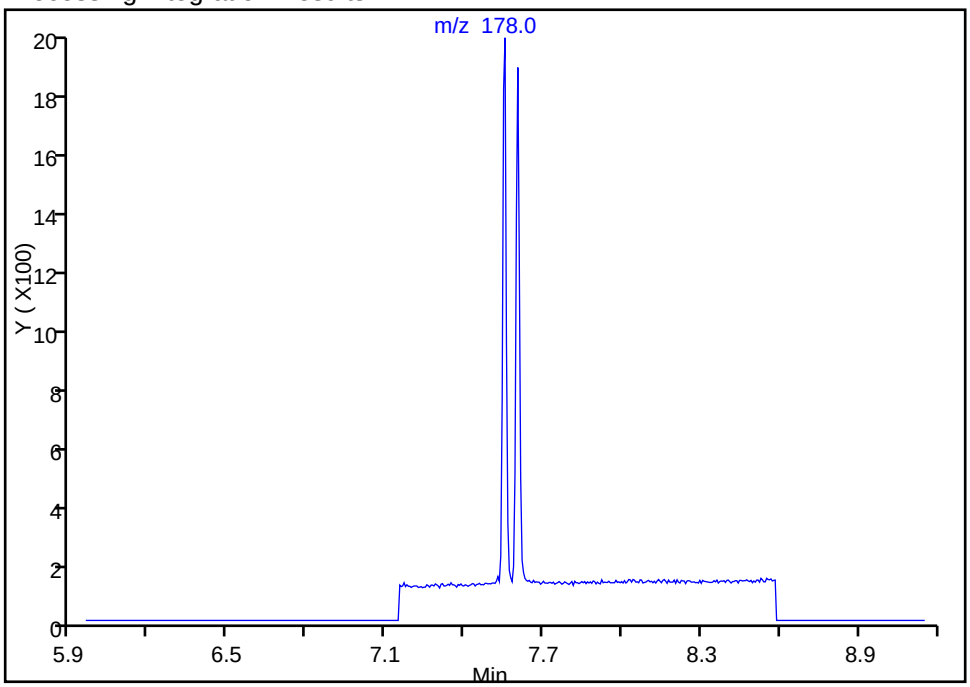
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

24 Phenanthrene, CAS: 85-01-8

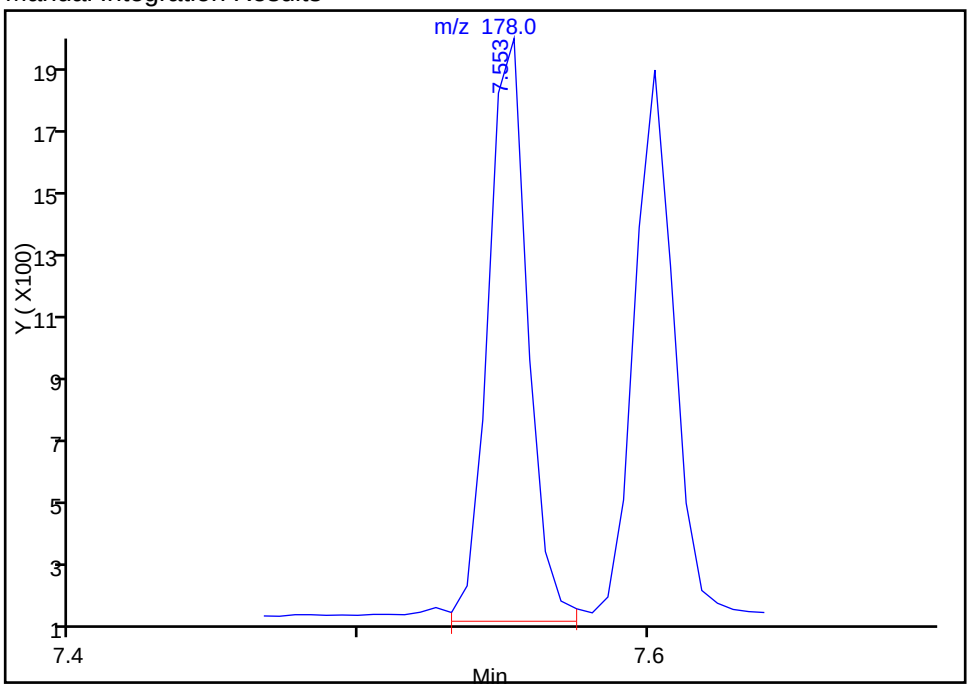
Not Detected
Expected RT: 7.55

Processing Integration Results



Manual Integration Results

RT: 7.55
Response: 1799
Amount: 23.320877



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

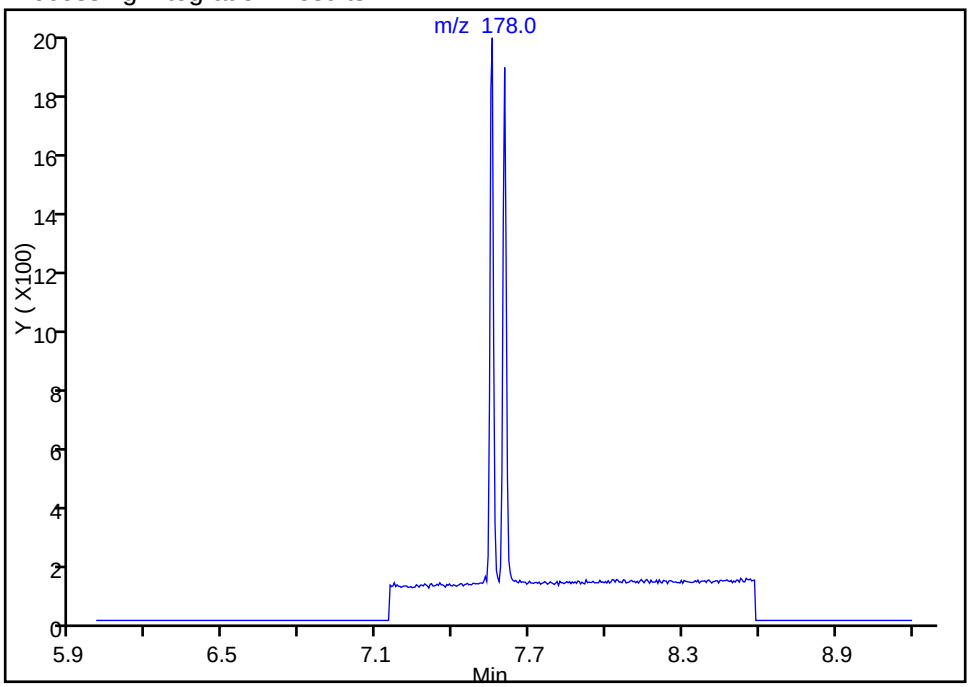
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Anthracene, CAS: 120-12-7

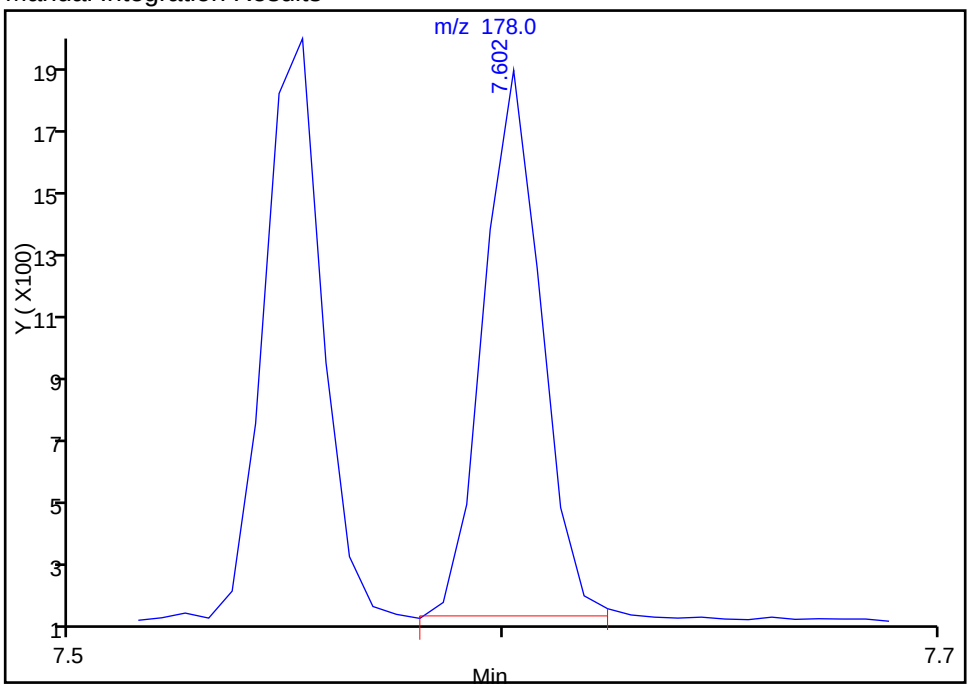
Processing Integration Results

Not Detected
Expected RT: 7.60



Manual Integration Results

RT: 7.60
Response: 1593
Amount: 20.977871



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

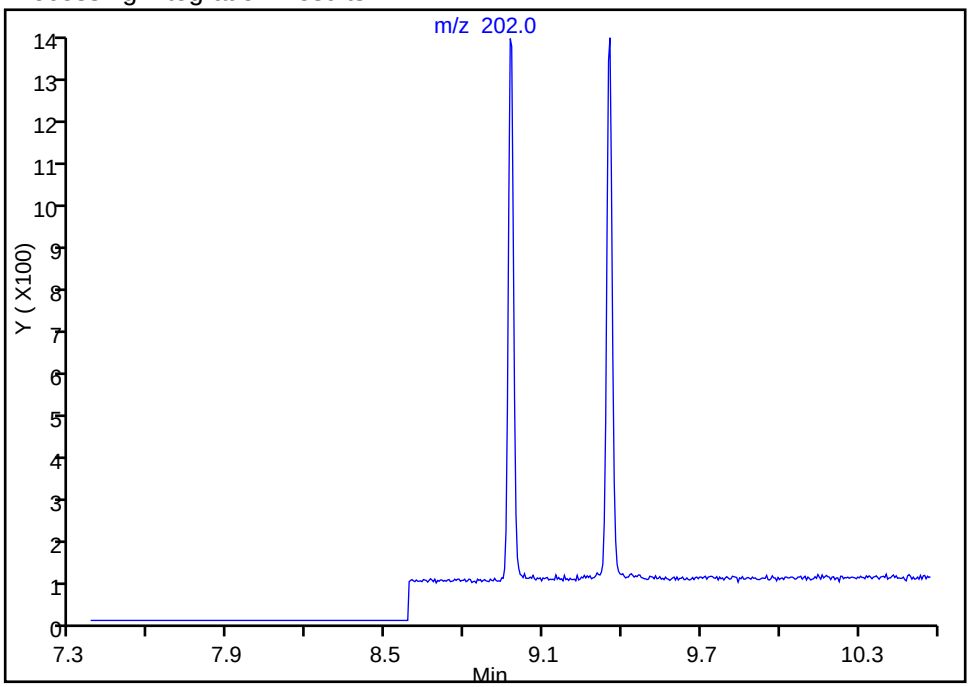
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Fluoranthene, CAS: 206-44-0

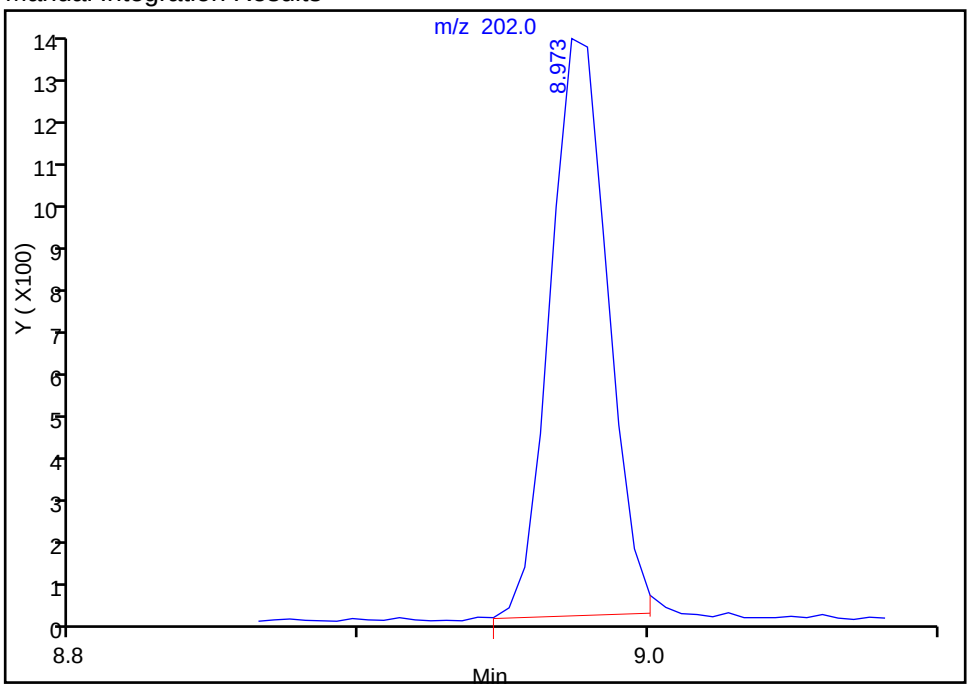
Not Detected
Expected RT: 8.97

Processing Integration Results



RT: 8.97
Response: 1788
Amount: 21.370945

Manual Integration Results



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

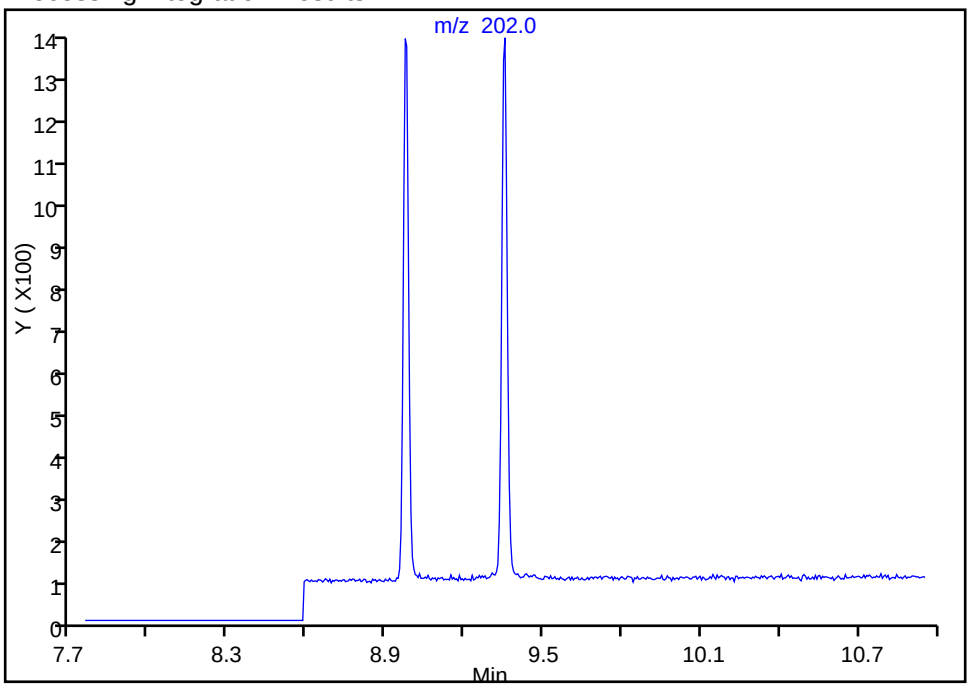
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Pyrene, CAS: 129-00-0

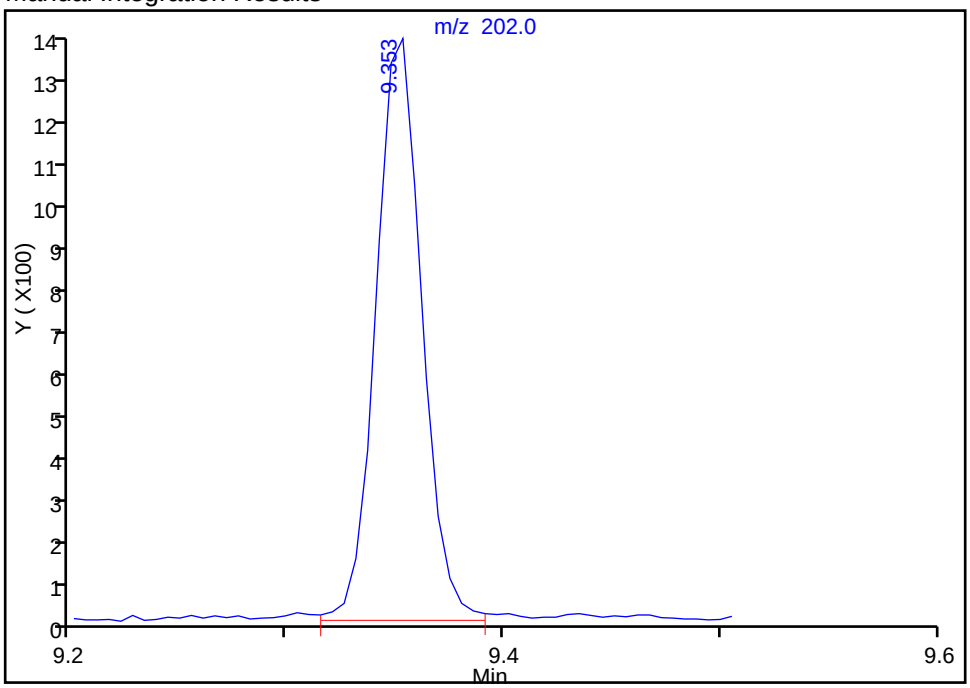
Not Detected
Expected RT: 9.35

Processing Integration Results



Manual Integration Results

RT: 9.35
Response: 1921
Amount: 22.252827



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

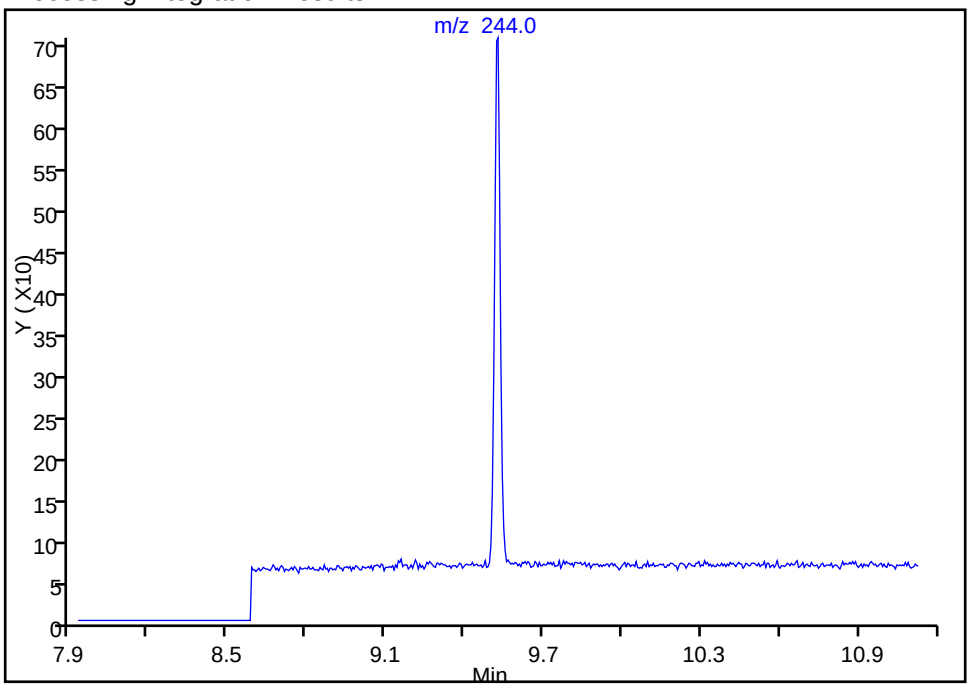
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

$ 6 Terphenyl-d14, CAS: 1718-51-0

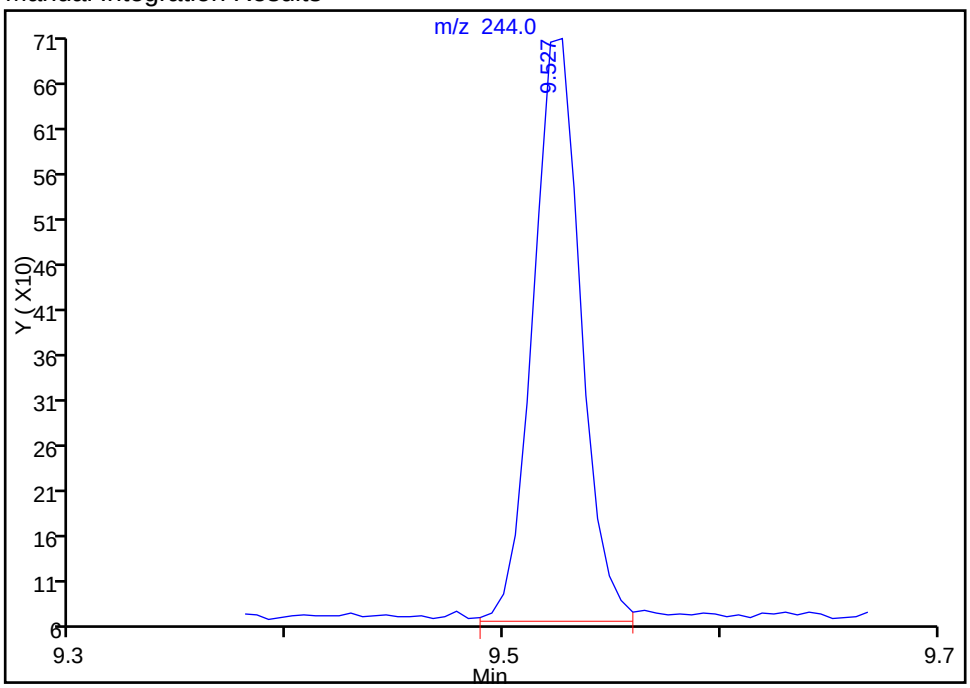
Not Detected
Expected RT: 9.53

Processing Integration Results



RT: 9.53
Response: 987
Amount: 21.658132

Manual Integration Results



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

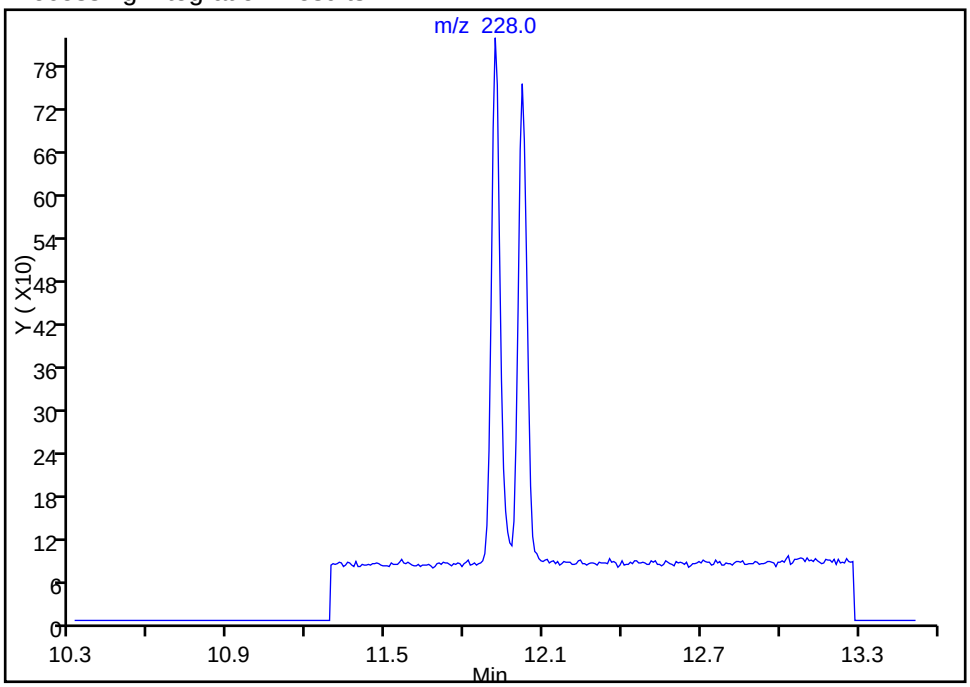
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Benzo[a]anthracene, CAS: 56-55-3

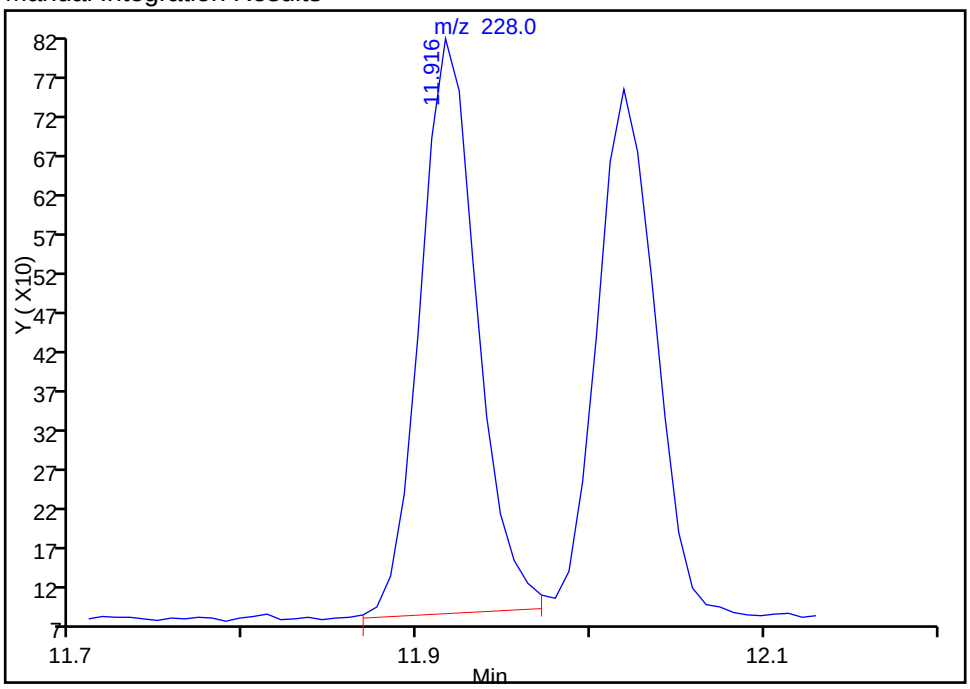
Processing Integration Results

Not Detected
Expected RT: 11.92



Manual Integration Results

RT: 11.92
Response: 1659
Amount: 22.621187



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

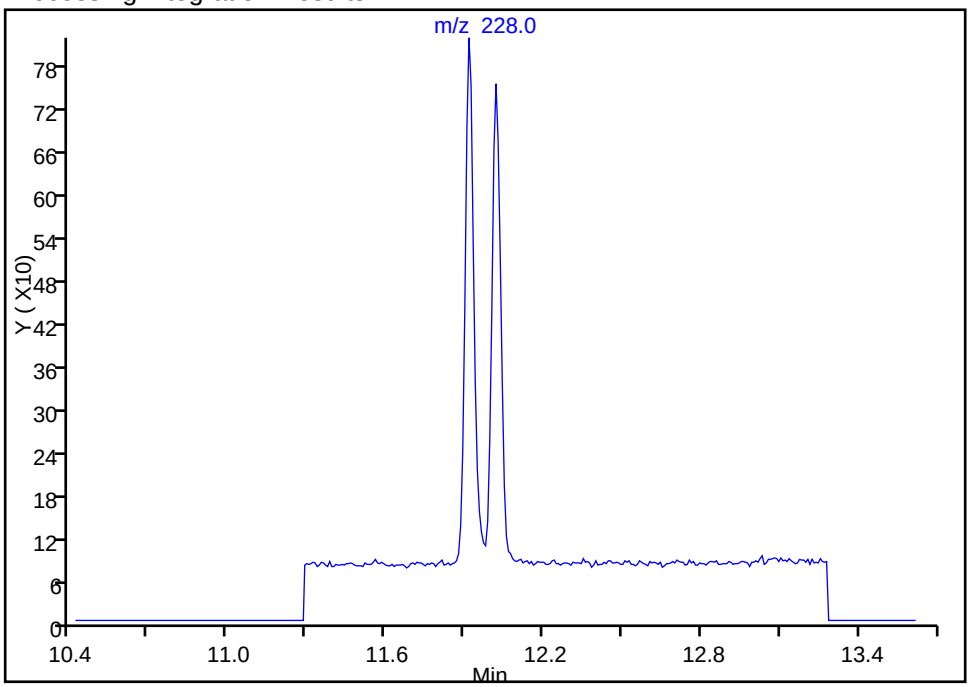
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

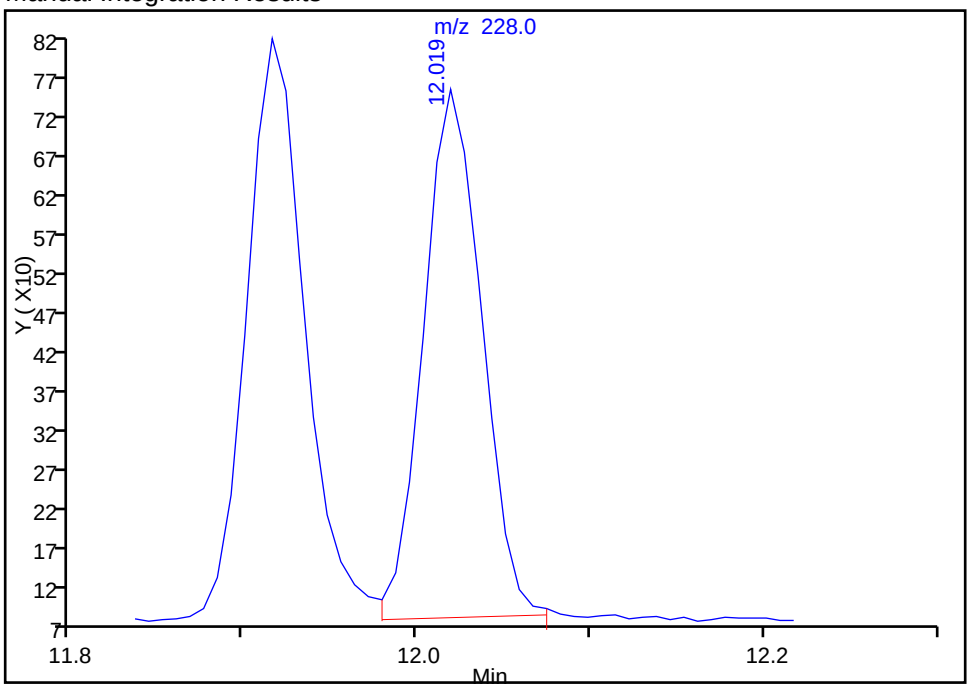
Not Detected
Expected RT: 12.02

Processing Integration Results



RT: 12.02
Response: 1555
Amount: 22.423811

Manual Integration Results



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

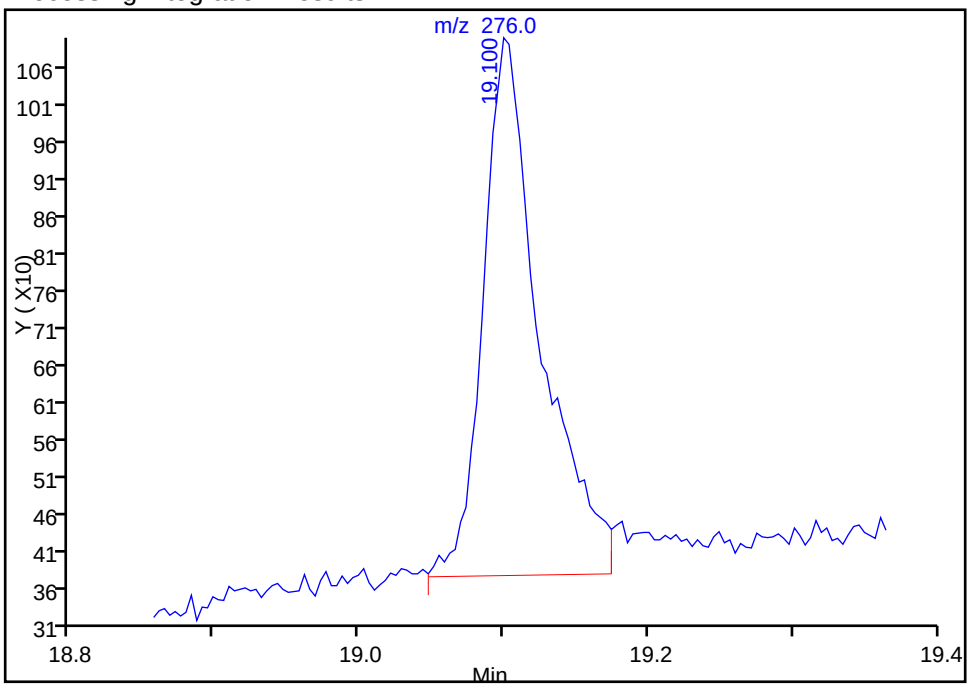
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

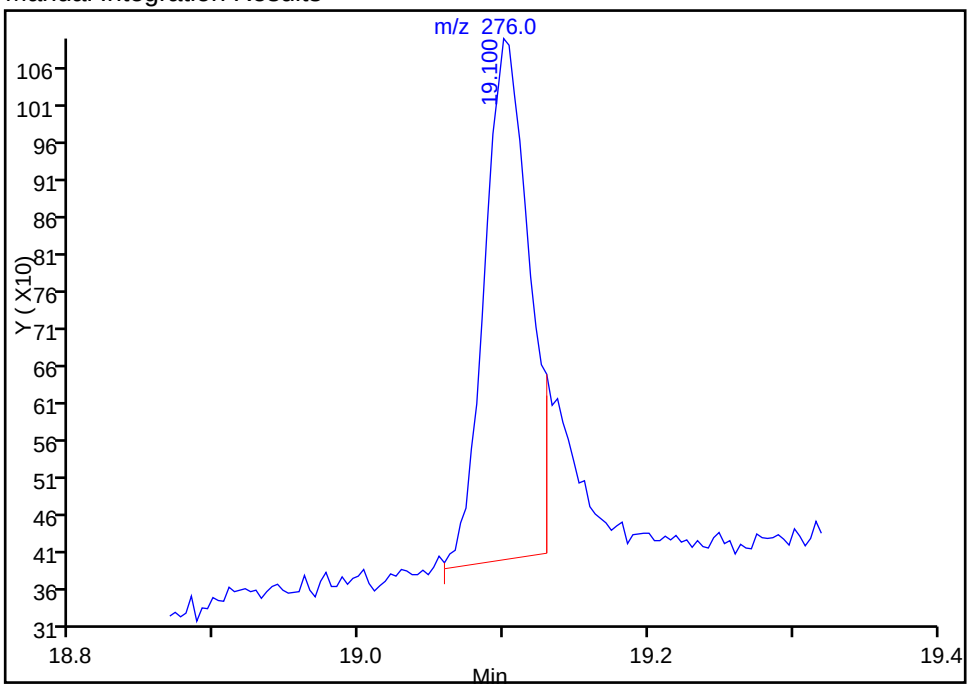
Processing Integration Results

RT: 19.10
Response: 1999
Amount: 25.091929



Manual Integration Results

RT: 19.10
Response: 1526
Amount: 23.812328



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

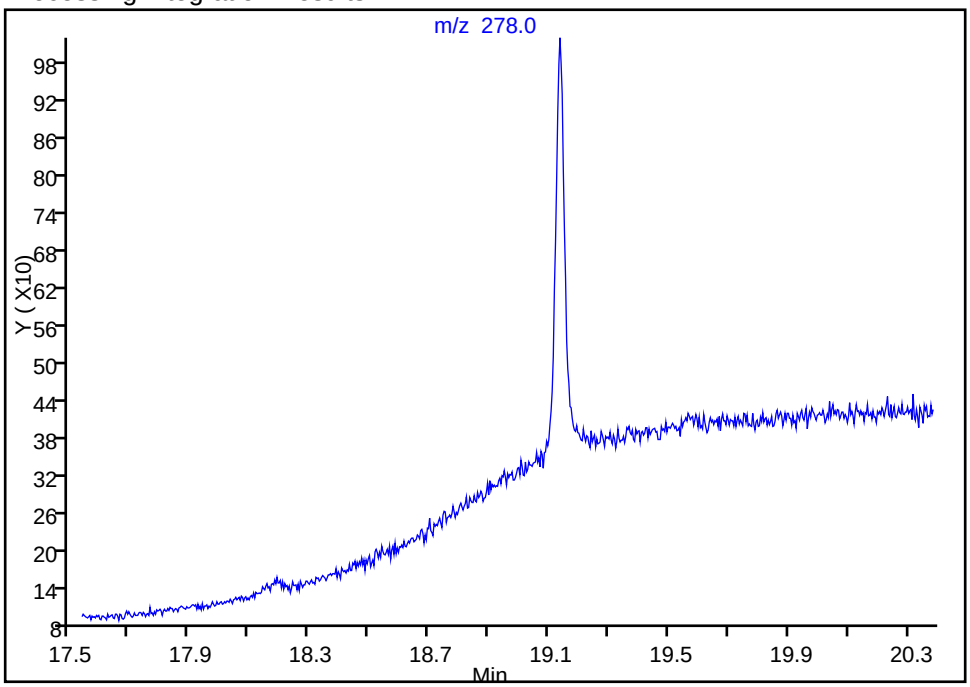
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8609.D				
Injection Date:	30-Nov-2013 09:01:30	Instrument ID:	SMS_X4		
Lims ID:	STD0020	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Dibenz(a,h)anthracene, CAS: 53-70-3

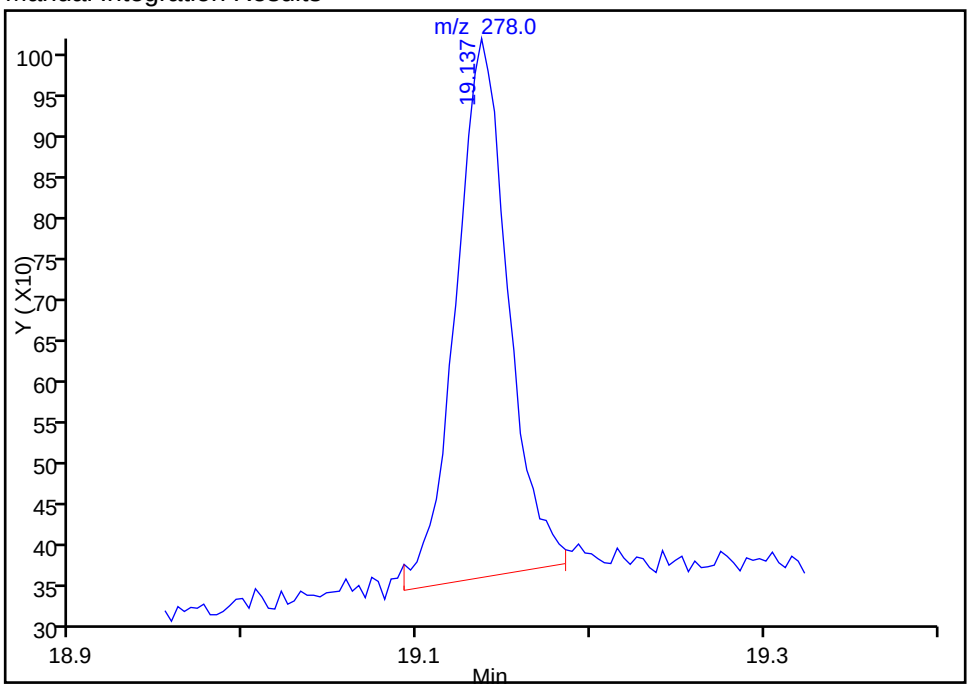
Processing Integration Results

Not Detected
Expected RT: 19.14



Manual Integration Results

RT: 19.14
Response: 1390
Amount: 21.463977



Reviewer: vasquezk, 30-Nov-2013 07:26:05
Audit Action: Manually Integrated
Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8610.D
Lims ID: STD0100 Lab Sample ID:
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Nov-2013 09:30:30 ALS Bottle#: 3 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD0100
Operator ID: VASQUEZK Instrument ID: SMS_X4
Sublist: chrom-SMSX4_SIMX*sub1

Method: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 01-Dec-2013 08:07:50 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 01-Dec-2013 05:54:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	93	18229	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	32519	600.0	
* 3 Chrysene-d12	240	11.948	11.948	0.0	97	34178	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.186	0.0	99	2120	103.9	
$ 5 2-Fluorobiphenyl	172	5.633	5.633	0.0	100	4332	100.7	
$ 6 Terphenyl-d14	244	9.521	9.527	-0.006	98	4051	102.9	
42 1,4-Dioxane	88	2.100	2.100	0.0	82	884	114.8	
7 N-Nitrosodimethylamine	42	2.219	2.224	-0.005	93	1129	112.2	
14 Naphthalene	128	4.783	4.783	0.0	100	5730	102.7	
15 2-Methylnaphthalene	142	5.344	5.347	-0.003	99	7988	202.5	
16 1-Methylnaphthalene	142	5.433	5.433	0.0	100	3655	101.0	
17 Dimethyl phthalate	163	5.949	5.942	0.007	100	9441	205.4	
19 Acenaphthylene	152	6.119	6.119	0.0	99	6123	100.7	
20 Acenaphthene	153	6.261	6.261	0.0	96	3742	98.7	
18 Dibenzofuran	168	6.408	6.408	0.0	97	5520	99.2	
21 Diethyl phthalate	149	6.521	6.521	-0.001	99	9387	204.6	
22 Fluorene	166	6.696	6.702	-0.006	94	4516	99.7	
23 N-Nitrosodiphenylamine	169	6.771	6.771	0.0	99	3135	107.6	
24 Phenanthrene	178	7.548	7.553	-0.005	100	6639	99.6	
25 Anthracene	178	7.602	7.602	0.0	100	6535	99.6	
26 Di-n-butyl phthalate	149	7.992	7.987	0.005	100	16535	203.3	
27 Fluoranthene	202	8.973	8.973	0.0	100	7542	104.3	
28 Pyrene	202	9.348	9.353	-0.005	100	7802	104.6	
29 Butyl benzyl phthalate	149	10.433	10.428	0.005	94	6941	204.5	
30 Bis(2-ethylhexyl) phthalate	149	11.821	11.813	0.008	100	10995	234.1	
31 Benzo[a]anthracene	228	11.916	11.916	0.0	93	7067	101.7	
32 Chrysene	228	12.019	12.019	0.0	99	6649	101.2	
33 Di-n-octyl phthalate	149	13.871	13.864	0.007	100	13618	186.9	
34 Benzo[b]fluoranthene	252	15.242	15.242	0.0	94	6700	105.3	
35 Benzo[k]fluoranthene	252	15.331	15.331	0.0	95	6762	103.3	
36 Benzo[a]pyrene	252	16.367	16.374	-0.007	93	6582	106.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.100	19.100	0.0	93	6683	110.1	M
37 Dibenz(a,h)anthracene	278	19.133	19.137	-0.004	86	6928	112.9	
39 Benzo[g,h,i]perylene	276	19.570	19.573	-0.003	92	7295	112.0	

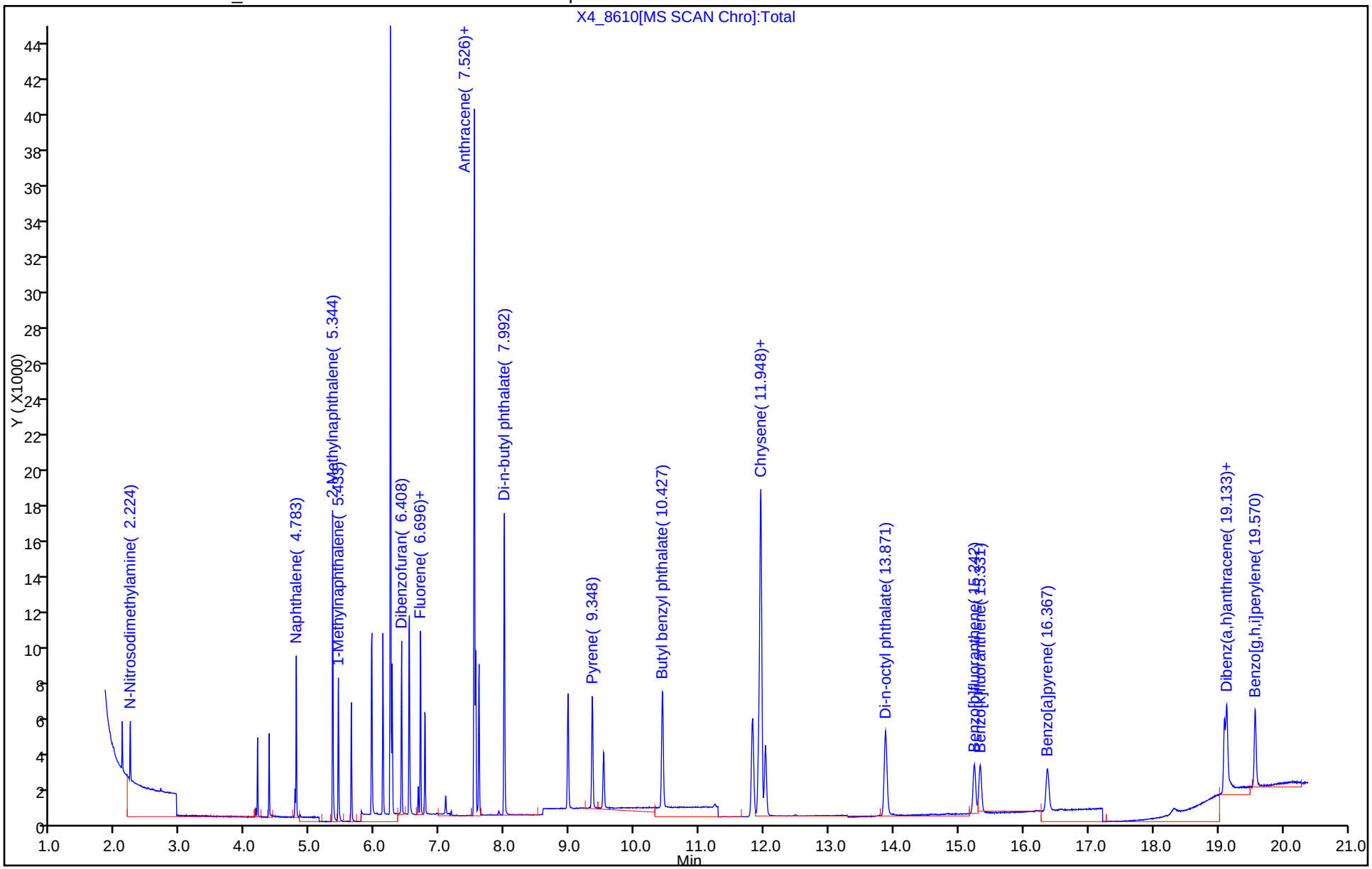
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 01-Dec-2013 08:07:50 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8610.D				
Injection Date:	30-Nov-2013 09:30:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	STD0100	Lab Sample ID:		Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

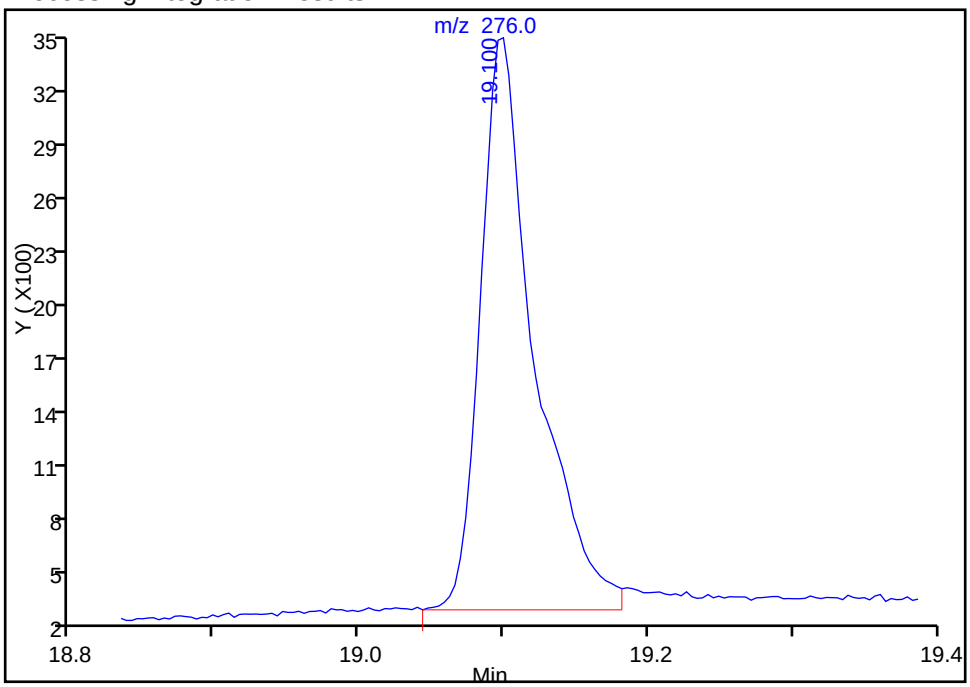
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8610.D				
Injection Date:	30-Nov-2013 09:30:30	Instrument ID:	SMS_X4		
Lims ID:	STD0100	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

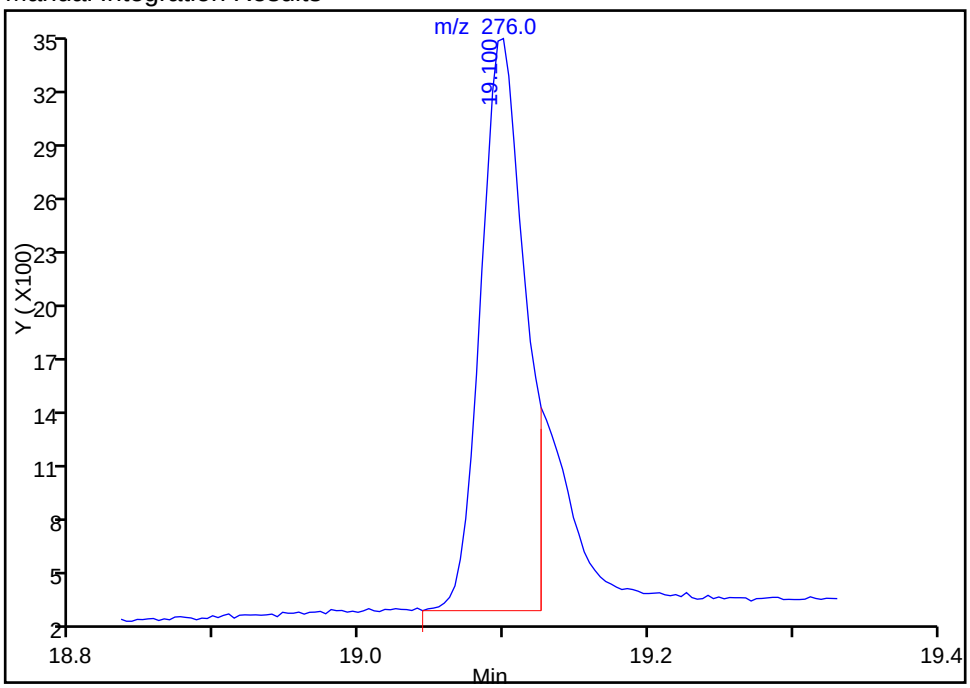
Processing Integration Results

RT: 19.10
Response: 8200
Amount: 113.4715



Manual Integration Results

RT: 19.10
Response: 6683
Amount: 110.0907



Reviewer: vasquezk, 01-Dec-2013 07:03:07
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8611.D
Lims ID: STD0300 Lab Sample ID:
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Nov-2013 09:57:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD0300
Operator ID: VASQUEZK Instrument ID: SMS_X4
Sublist: chrom-SMSX4_SIMX*sub1

Method: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 01-Dec-2013 08:07:51 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 01-Dec-2013 05:54:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	100	21913	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	38807	600.0	
* 3 Chrysene-d12	240	11.940	11.948	-0.008	99	37313	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.186	-0.003	100	6905	281.6	
$ 5 2-Fluorobiphenyl	172	5.630	5.633	-0.003	100	14957	289.3	
$ 6 Terphenyl-d14	244	9.521	9.527	-0.006	100	13170	280.3	
42 1,4-Dioxane	88	2.100	2.100	0.0	95	2650	286.2	
7 N-Nitrosodimethylamine	42	2.219	2.224	-0.005	93	3688	305.0	
14 Naphthalene	128	4.780	4.783	-0.003	100	19301	287.9	
15 2-Methylnaphthalene	142	5.340	5.347	-0.007	100	27416	578.2	
16 1-Methylnaphthalene	142	5.429	5.433	-0.004	100	12591	289.4	
17 Dimethyl phthalate	163	5.942	5.942	0.0	100	32536	588.7	
19 Acenaphthylene	152	6.119	6.119	0.0	100	21068	288.3	
20 Acenaphthene	153	6.261	6.261	0.0	99	13150	288.5	
18 Dibenzofuran	168	6.402	6.408	-0.006	97	19220	287.3	
21 Diethyl phthalate	149	6.521	6.521	0.0	100	32630	591.5	
22 Fluorene	166	6.696	6.702	-0.006	99	15533	285.1	
23 N-Nitrosodiphenylamine	169	6.765	6.771	-0.006	99	10309	296.6	
24 Phenanthrene	178	7.548	7.553	-0.005	100	22467	282.5	
25 Anthracene	178	7.597	7.602	-0.005	100	22243	284.1	
26 Di-n-butyl phthalate	149	7.987	7.987	0.0	100	56466	581.9	
27 Fluoranthene	202	8.973	8.973	0.0	100	24445	283.4	
28 Pyrene	202	9.348	9.353	-0.005	100	24964	280.5	
29 Butyl benzyl phthalate	149	10.427	10.428	-0.001	97	22064	544.7	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.813	0.0	100	30139	537.6	
31 Benzo[a]anthracene	228	11.908	11.916	-0.008	100	21660	285.6	
32 Chrysene	228	12.011	12.019	-0.008	100	20729	289.1	
33 Di-n-octyl phthalate	149	13.864	13.864	0.0	100	41843	525.9	
34 Benzo[b]fluoranthene	252	15.231	15.242	-0.011	99	19620	282.4	
35 Benzo[k]fluoranthene	252	15.324	15.331	-0.007	99	19863	278.0	
36 Benzo[a]pyrene	252	16.359	16.374	-0.015	99	19072	283.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.092	19.100	-0.008	98	18476	278.8	M
37 Dibenz(a,h)anthracene	278	19.129	19.137	-0.008	96	19592	292.5	
39 Benzo[g,h,i]perylene	276	19.566	19.573	-0.007	98	19616	275.7	

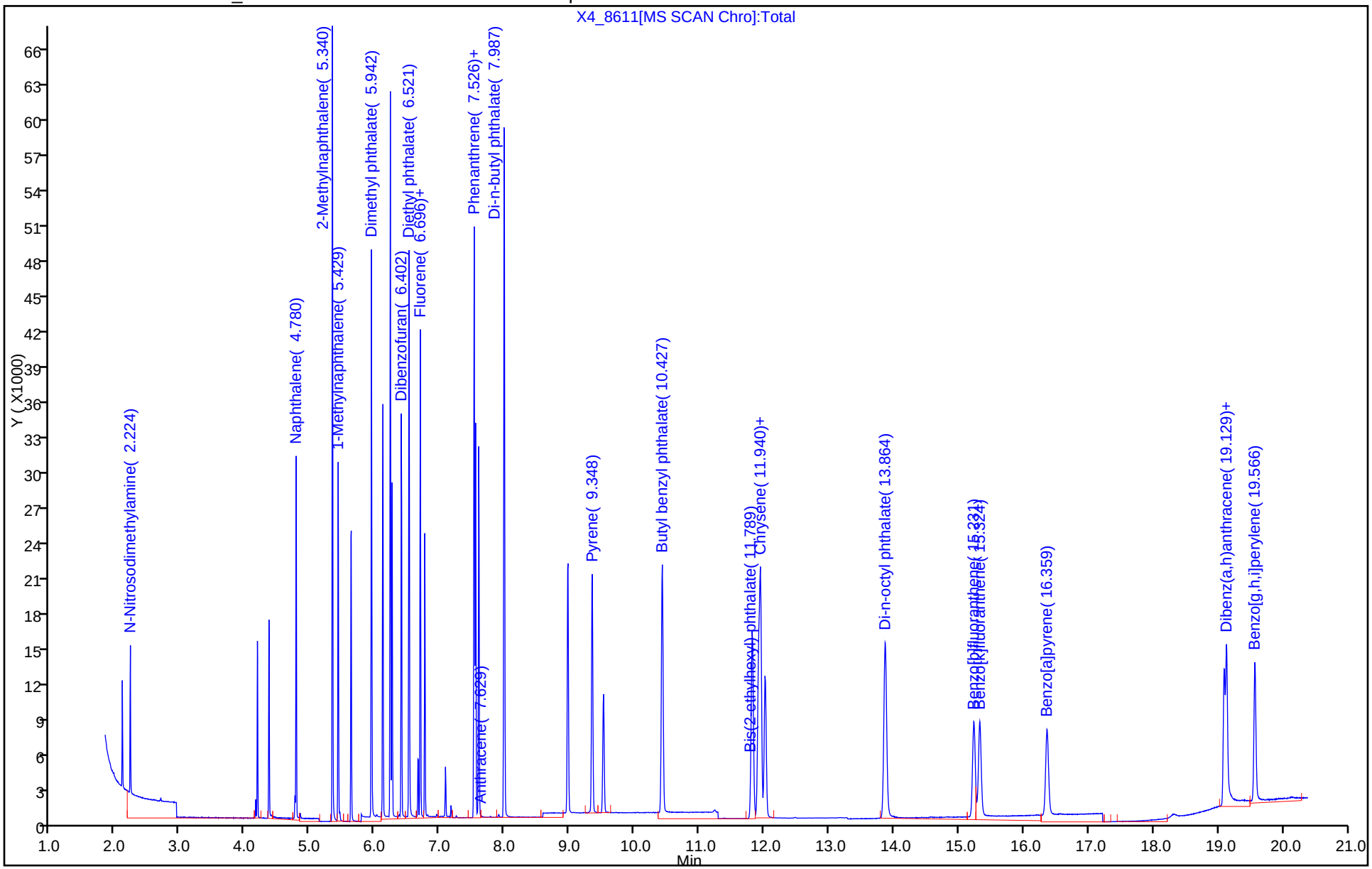
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 01-Dec-2013 08:07:51 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8611.D				
Injection Date:	30-Nov-2013 09:57:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	STD0300	Lab Sample ID:		Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

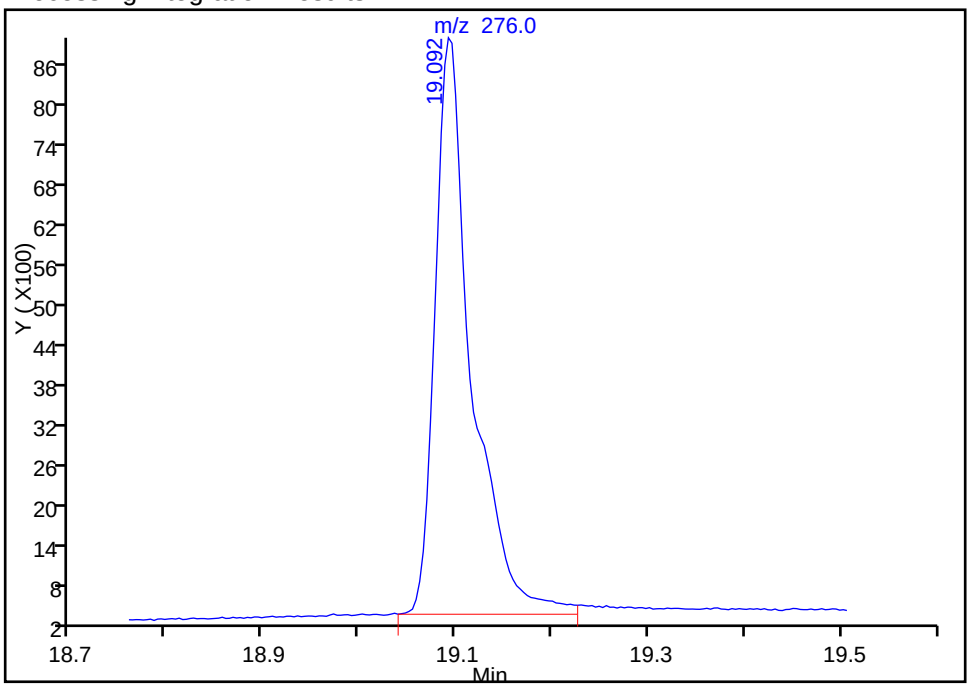
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8611.D				
Injection Date:	30-Nov-2013 09:57:30	Instrument ID:	SMS_X4		
Lims ID:	STD0300	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

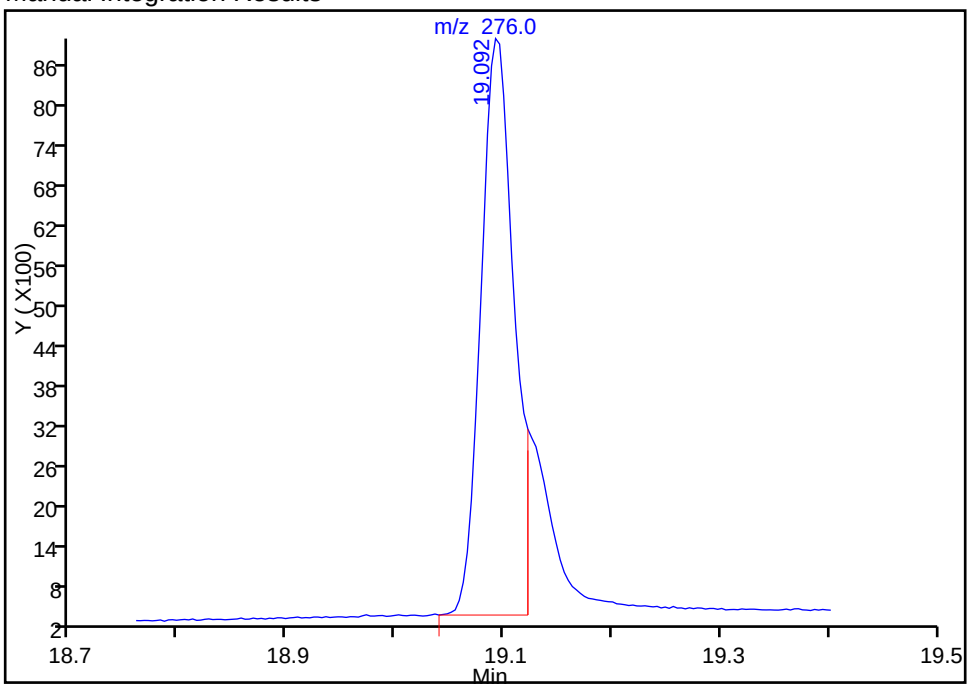
Processing Integration Results

RT: 19.09
Response: 22853
Amount: 298.6249



Manual Integration Results

RT: 19.09
Response: 18476
Amount: 278.7877



Reviewer: vasquezk, 01-Dec-2013 07:03:16
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8612.D
Lims ID: ICIS STD0600 Lab Sample ID:
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 30-Nov-2013 10:25:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICIS STD0600
Operator ID: VASQUEZK Instrument ID: SMS_X4
Sublist: chrom-SMSX4_SIMX*sub1

Method: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 01-Dec-2013 08:07:52 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 01-Dec-2013 05:49:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	100	29160	600.0	
* 1 Phenanthrene-d10	188	7.526	7.526	0.0	100	52292	600.0	
* 3 Chrysene-d12	240	11.940	11.940	0.0	100	51657	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.183	0.0	100	18642	571.3	
$ 5 2-Fluorobiphenyl	172	5.626	5.626	0.0	100	39925	580.3	
$ 6 Terphenyl-d14	244	9.516	9.516	0.0	100	35849	566.2	
42 1,4-Dioxane	88	2.100	2.100	0.0	100	6494	527.0	
7 N-Nitrosodimethylamine	42	2.219	2.219	0.0	100	9416	585.1	
14 Naphthalene	128	4.780	4.780	0.0	100	51381	575.9	
15 2-Methylnaphthalene	142	5.340	5.340	0.0	100	73239	1160.7	
16 1-Methylnaphthalene	142	5.429	5.429	0.0	100	33623	580.7	
17 Dimethyl phthalate	163	5.942	5.942	0.0	100	87794	1193.8	
19 Acenaphthylene	152	6.119	6.119	0.0	100	56308	579.1	
20 Acenaphthene	153	6.261	6.261	0.0	100	34856	574.7	
18 Dibenzofuran	168	6.402	6.402	0.0	100	51500	578.4	
21 Diethyl phthalate	149	6.521	6.521	0.0	100	87924	1197.7	
22 Fluorene	166	6.696	6.696	0.0	100	42130	581.2	
23 N-Nitrosodiphenylamine	169	6.765	6.765	0.0	100	27814	593.9	
24 Phenanthrene	178	7.548	7.548	0.0	100	61304	572.0	
25 Anthracene	178	7.597	7.597	0.0	100	61247	580.6	
26 Di-n-butyl phthalate	149	7.987	7.987	0.0	100	152703	1167.8	
27 Fluoranthene	202	8.968	8.968	0.0	100	67173	577.9	
28 Pyrene	202	9.342	9.342	0.0	100	68487	571.1	
29 Butyl benzyl phthalate	149	10.428	10.428	0.0	100	61516	1127.1	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.813	0.0	100	83757	1108.8	
31 Benzo[a]anthracene	228	11.908	11.908	0.0	100	60049	571.9	
32 Chrysene	228	12.011	12.011	0.0	100	56578	569.9	
33 Di-n-octyl phthalate	149	13.864	13.864	0.0	100	122831	1115.1	
34 Benzo[b]fluoranthene	252	15.231	15.231	0.0	100	54253	564.1	
35 Benzo[k]fluoranthene	252	15.324	15.324	0.0	100	55645	562.5	
36 Benzo[a]pyrene	252	16.359	16.359	0.0	100	52638	564.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.092	19.092	0.0	100	52534	572.6	M
37 Dibenz(a,h)anthracene	278	19.130	19.130	0.0	100	51943	560.2	
39 Benzo[g,h,i]perylene	276	19.566	19.566	0.0	100	55634	564.9	

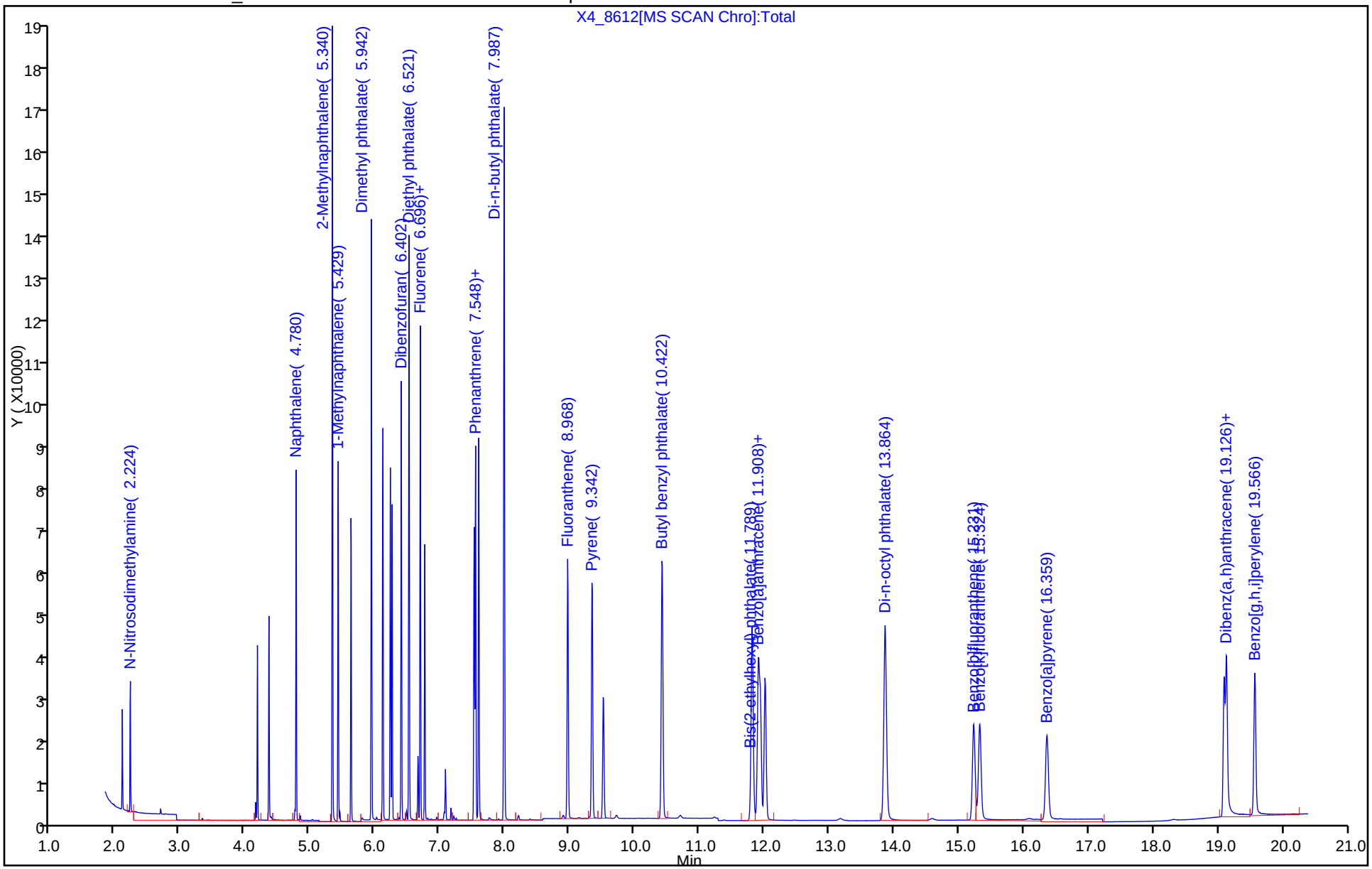
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 01-Dec-2013 08:07:52 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8612.D				
Injection Date:	30-Nov-2013 10:25:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	ICIS STD0600	Lab Sample ID:		Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

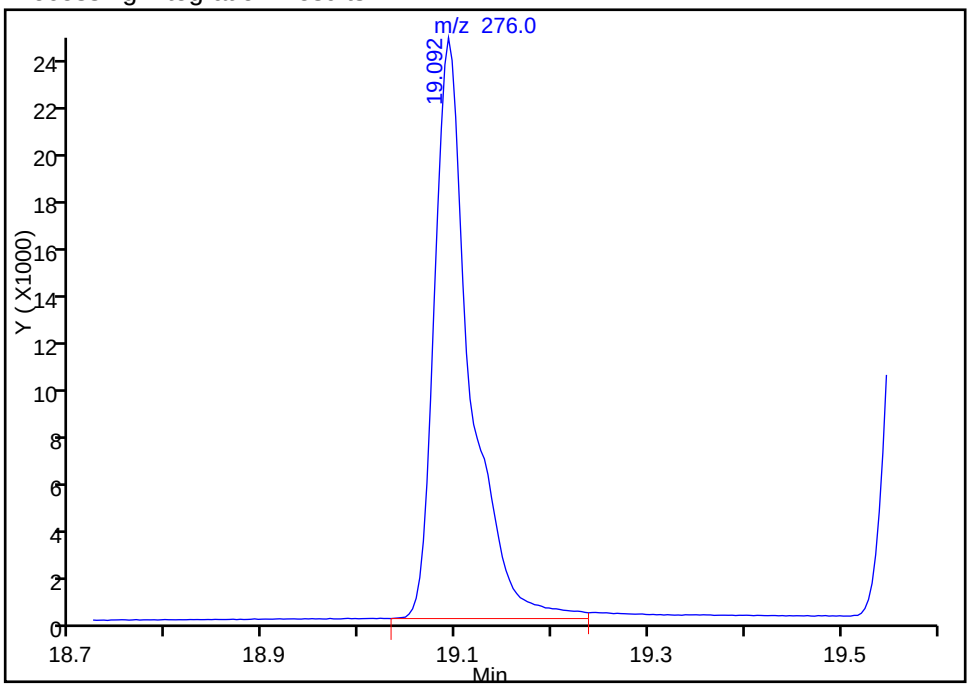
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8612.D				
Injection Date:	30-Nov-2013 10:25:30	Instrument ID:	SMS_X4		
Lims ID:	ICIS STD0600	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	5	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

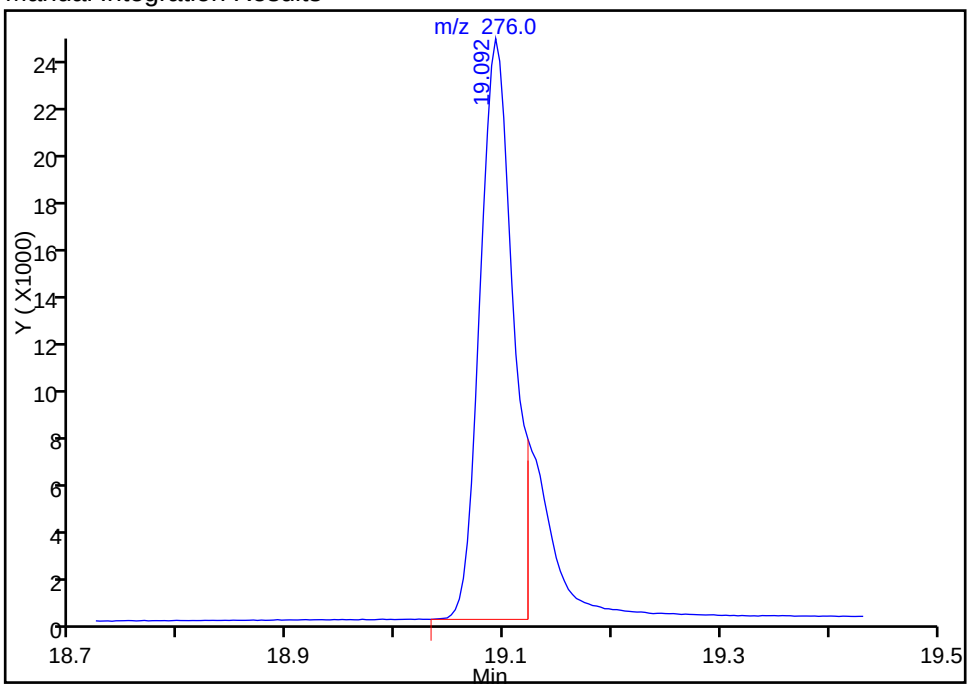
Processing Integration Results

RT: 19.09
Response: 63875
Amount: 619.7793



Manual Integration Results

RT: 19.09
Response: 52534
Amount: 572.5813



Reviewer: vasquezk, 01-Dec-2013 07:03:24
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8613.D
Lims ID: STD1200 Lab Sample ID:
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Nov-2013 10:53:30 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1200
Operator ID: VASQUEZK Instrument ID: SMS_X4
Sublist: chrom-SMSX4_SIMX*sub1

Method: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 01-Dec-2013 08:07:53 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 01-Dec-2013 05:55:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	99	20322	600.0	
* 1 Phenanthrene-d10	188	7.526	7.526	0.0	100	36192	600.0	
* 3 Chrysene-d12	240	11.940	11.940	0.0	95	37352	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.183	0.0	100	25927	1140.0	
$ 5 2-Fluorobiphenyl	172	5.626	5.626	0.0	100	55712	1161.9	
$ 6 Terphenyl-d14	244	9.521	9.516	0.005	100	50927	1162.3	
42 1,4-Dioxane	88	2.100	2.100	0.0	96	9393	1093.7	
7 N-Nitrosodimethylamine	42	2.219	2.219	0.0	96	12801	1141.4	
14 Naphthalene	128	4.780	4.780	0.0	100	71144	1144.1	
15 2-Methylnaphthalene	142	5.340	5.340	0.0	100	101576	2310.0	
16 1-Methylnaphthalene	142	5.429	5.429	0.0	100	46592	1154.6	
17 Dimethyl phthalate	163	5.942	5.942	0.0	100	121984	2380.0	
19 Acenaphthylene	152	6.119	6.119	0.0	100	78950	1165.1	
20 Acenaphthene	153	6.261	6.261	0.0	100	48107	1138.1	
18 Dibenzofuran	168	6.402	6.402	0.0	100	71975	1160.0	
21 Diethyl phthalate	149	6.521	6.521	0.0	100	121740	2379.6	
22 Fluorene	166	6.696	6.696	0.0	100	58555	1159.0	
23 N-Nitrosodiphenylamine	169	6.765	6.765	0.0	100	37084	1144.0	
24 Phenanthrene	178	7.548	7.548	0.0	100	85284	1149.8	
25 Anthracene	178	7.597	7.597	0.0	100	85654	1173.1	
26 Di-n-butyl phthalate	149	7.987	7.987	0.0	100	213294	2356.8	
27 Fluoranthene	202	8.968	8.968	0.0	100	93866	1166.8	
28 Pyrene	202	9.342	9.342	0.0	100	96265	1159.8	
29 Butyl benzyl phthalate	149	10.428	10.428	0.0	100	89458	2368.2	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.813	0.0	100	121480	2323.6	
31 Benzo[a]anthracene	228	11.908	11.908	0.0	100	86611	1140.8	
32 Chrysene	228	12.011	12.011	0.0	100	82338	1146.9	
33 Di-n-octyl phthalate	149	13.868	13.864	0.004	100	189325	2377.0	
34 Benzo[b]fluoranthene	252	15.234	15.231	0.003	100	80371	1155.8	
35 Benzo[k]fluoranthene	252	15.324	15.324	0.0	100	82857	1158.3	
36 Benzo[a]pyrene	252	16.363	16.359	0.004	100	77721	1153.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.092	19.092	0.0	100	79064	1191.8	M
37 Dibenz(a,h)anthracene	278	19.130	19.130	0.0	99	80279	1197.5	
39 Benzo[g,h,i]perylene	276	19.566	19.566	0.0	100	83984	1179.3	

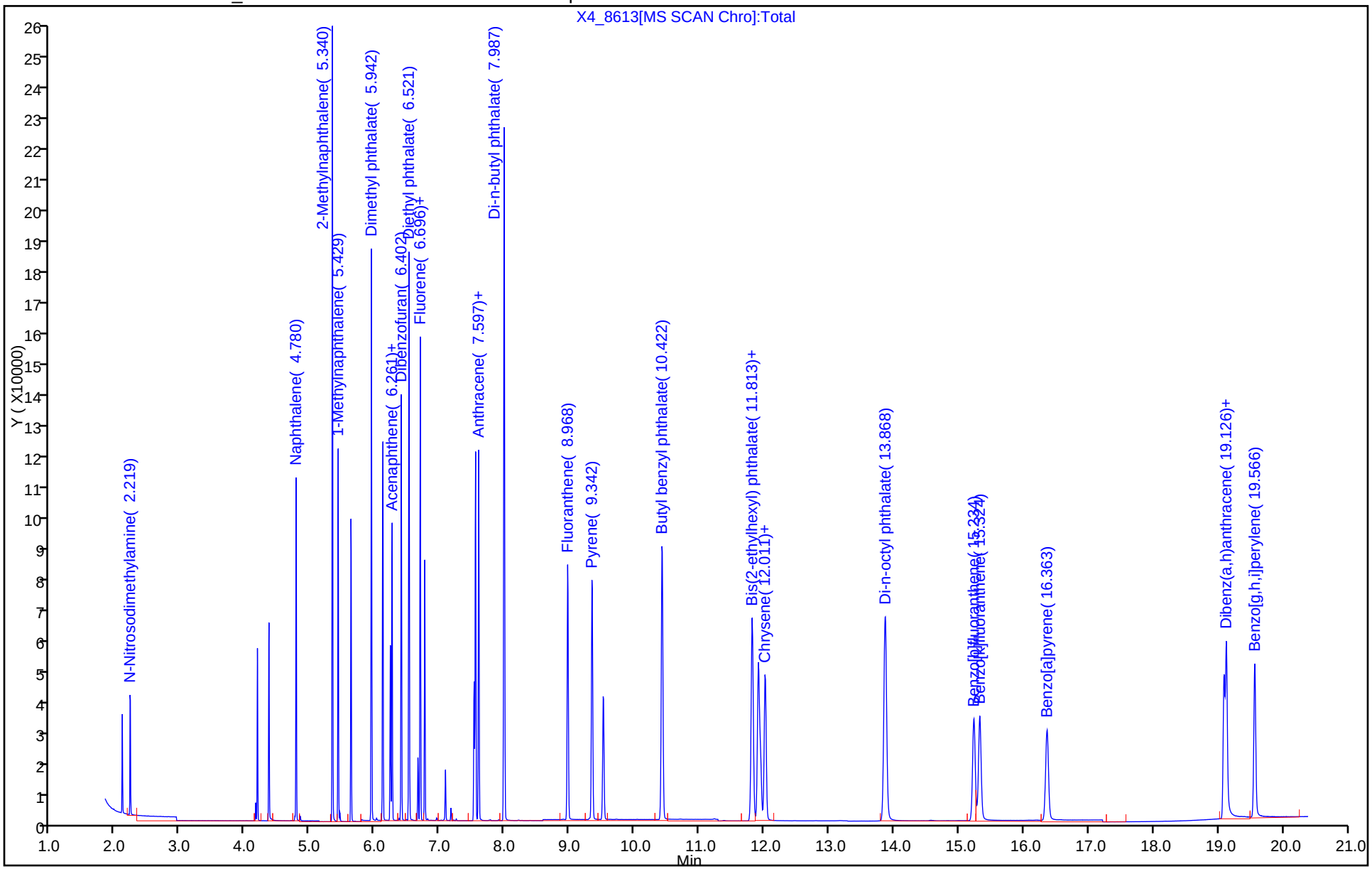
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 01-Dec-2013 08:07:53 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8613.D				
Injection Date:	30-Nov-2013 10:53:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	STD1200	Lab Sample ID:		Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

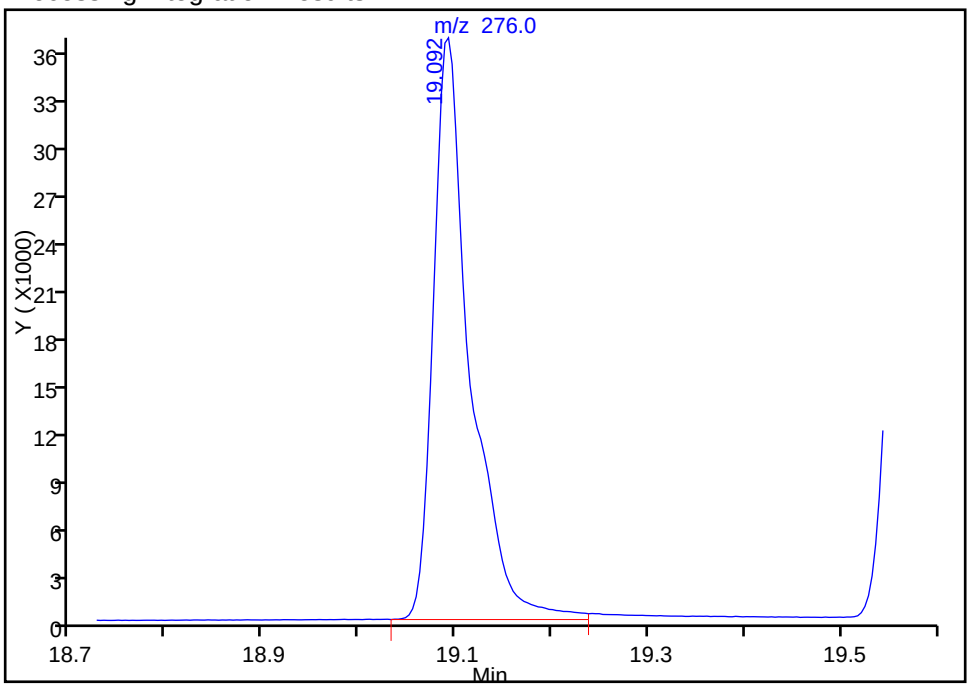
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8613.D				
Injection Date:	30-Nov-2013 10:53:30	Instrument ID:	SMS_X4		
Lims ID:	STD1200	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	6	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

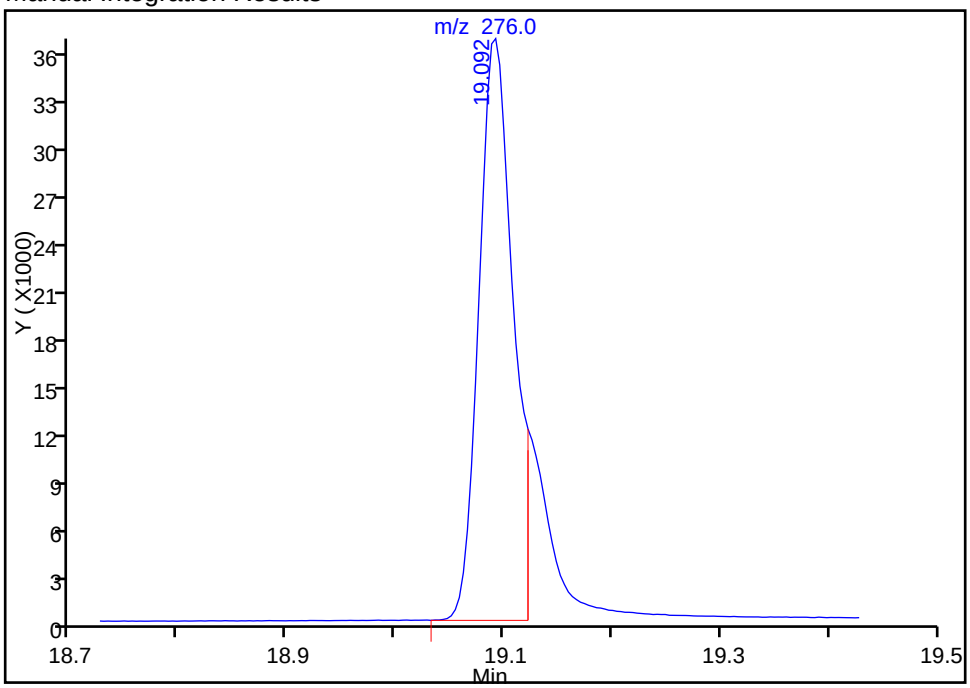
Processing Integration Results

RT: 19.09
Response: 95555
Amount: 1316.7559



Manual Integration Results

RT: 19.09
Response: 79064
Amount: 1191.7655



Reviewer: vasquezk, 01-Dec-2013 07:03:33
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8614.D
Lims ID: STD2500 Lab Sample ID:
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Nov-2013 11:21:30 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2500
Operator ID: VASQUEZK Instrument ID: SMS_X4
Sublist: chrom-SMSX4_SIMX*sub1

Method: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 01-Dec-2013 08:07:53 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 01-Dec-2013 05:55:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	99	23155	600.0	
* 1 Phenanthrene-d10	188	7.526	7.526	0.0	100	40995	600.0	
* 3 Chrysene-d12	240	11.940	11.940	0.0	89	40760	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.183	0.0	100	64112	2474.2	
$ 5 2-Fluorobiphenyl	172	5.626	5.626	0.0	100	138109	2527.8	
$ 6 Terphenyl-d14	244	9.516	9.516	0.0	100	125501	2528.6	
42 1,4-Dioxane	88	2.100	2.100	0.0	96	21933	2241.4	
7 N-Nitrosodimethylamine	42	2.219	2.219	0.0	95	30779	2408.7	
14 Naphthalene	128	4.780	4.780	0.0	100	172977	2441.4	
15 2-Methylnaphthalene	142	5.340	5.340	0.0	100	248735	4964.4	
16 1-Methylnaphthalene	142	5.429	5.429	0.0	99	115335	2508.4	
17 Dimethyl phthalate	163	5.942	5.942	0.0	100	300954	5153.4	
19 Acenaphthylene	152	6.120	6.119	0.001	100	195892	2537.1	
20 Acenaphthene	153	6.262	6.261	0.001	100	120587	2503.8	
18 Dibenzofuran	168	6.402	6.402	0.0	100	179287	2535.9	
21 Diethyl phthalate	149	6.521	6.521	0.0	100	300988	5163.6	
22 Fluorene	166	6.696	6.696	0.0	100	146424	2543.7	
23 N-Nitrosodiphenylamine	169	6.765	6.765	0.0	100	86618	2359.1	
24 Phenanthrene	178	7.548	7.548	0.0	100	209558	2494.3	
25 Anthracene	178	7.597	7.597	0.0	100	214010	2587.7	
26 Di-n-butyl phthalate	149	7.987	7.987	0.0	100	528631	5156.7	
27 Fluoranthene	202	8.968	8.968	0.0	100	230150	2525.8	
28 Pyrene	202	9.342	9.342	0.0	100	234296	2492.0	
29 Butyl benzyl phthalate	149	10.428	10.428	0.0	100	220111	5144.3	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.813	0.0	100	289583	4890.1	
31 Benzo[a]anthracene	228	11.908	11.908	0.0	99	209014	2522.8	
32 Chrysene	228	12.011	12.011	0.0	100	197117	2516.2	
33 Di-n-octyl phthalate	149	13.864	13.864	0.0	100	457501	5263.7	
34 Benzo[b]fluoranthene	252	15.231	15.231	0.0	100	183612	2419.6	
35 Benzo[k]fluoranthene	252	15.324	15.324	0.0	100	193523	2479.1	
36 Benzo[a]pyrene	252	16.359	16.359	0.0	100	177777	2417.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.092	19.092	0.0	99	164584	2273.4	M
37 Dibenz(a,h)anthracene	278	19.130	19.130	0.0	99	172957	2364.2	
39 Benzo[g,h,i]perylene	276	19.566	19.566	0.0	99	179433	2309.0	

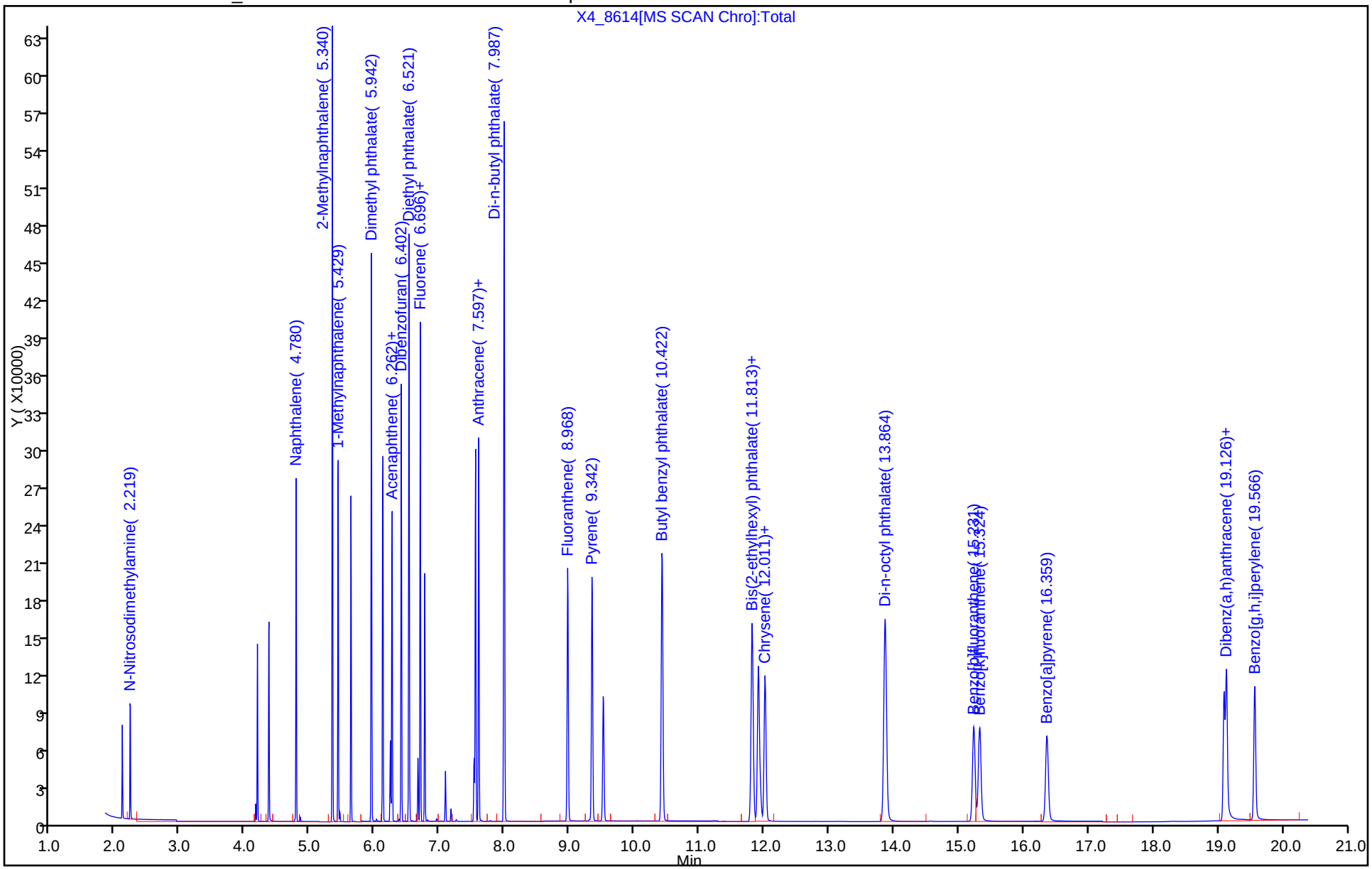
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 01-Dec-2013 08:07:54 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8614.D				
Injection Date:	30-Nov-2013 11:21:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	STD2500	Lab Sample ID:		Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

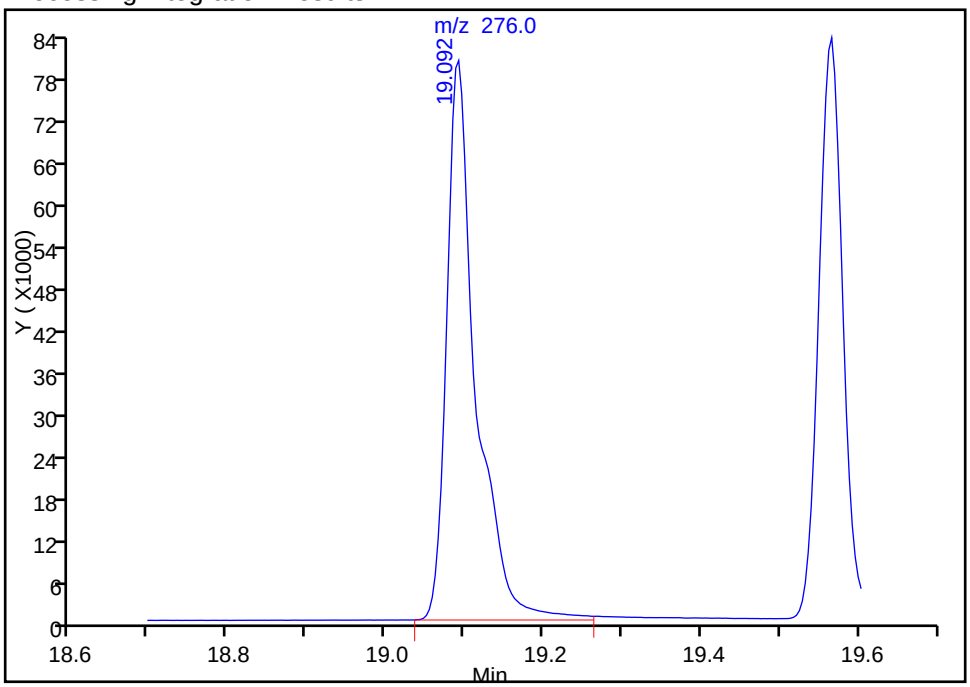
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8614.D				
Injection Date:	30-Nov-2013 11:21:30	Instrument ID:	SMS_X4		
Lims ID:	STD2500	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

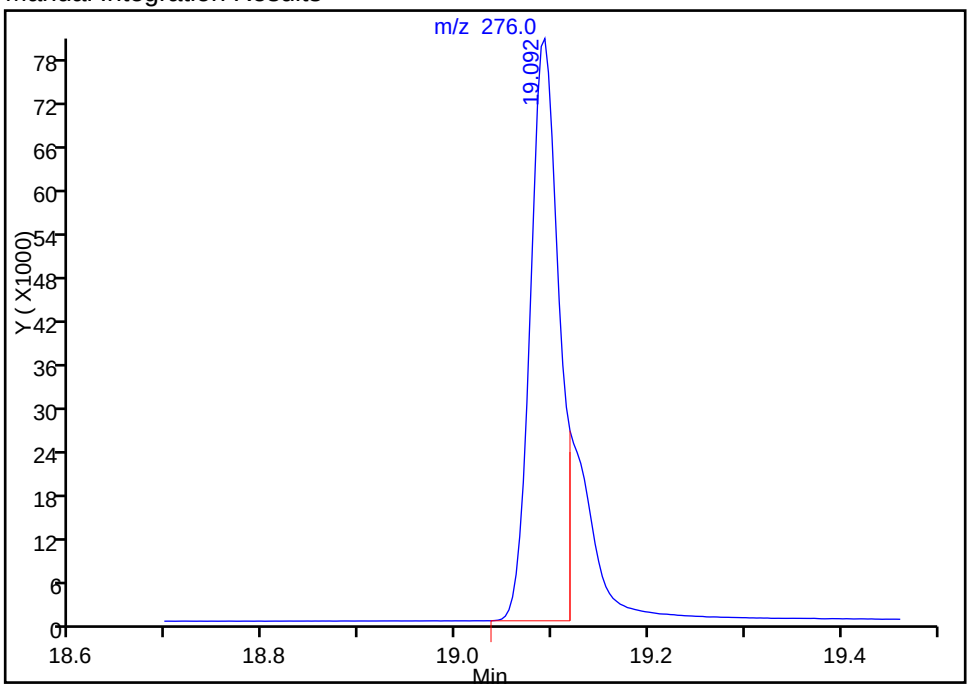
Processing Integration Results

RT: 19.09
Response: 206025
Amount: 2674.0062



Manual Integration Results

RT: 19.09
Response: 164584
Amount: 2273.4182



Reviewer: vasquezk, 01-Dec-2013 05:55:18
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8615.D
Lims ID: STD5000 Lab Sample ID:
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 30-Nov-2013 11:48:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5000
Operator ID: VASQUEZK Instrument ID: SMS_X4
Sublist: chrom-SMSX4_SIMX*sub1

Method: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 01-Dec-2013 08:07:54 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 01-Dec-2013 05:55:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	97	22006	600.0	
* 1 Phenanthrene-d10	188	7.526	7.526	0.0	100	38127	600.0	
* 3 Chrysene-d12	240	11.940	11.940	0.0	66	38857	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.183	0.0	100	124540	5057.1	
$ 5 2-Fluorobiphenyl	172	5.626	5.626	0.0	100	260058	5008.4	
$ 6 Terphenyl-d14	244	9.516	9.516	0.0	100	232958	5046.7	
42 1,4-Dioxane	88	2.100	2.100	0.0	97	42197	4537.5	
7 N-Nitrosodimethylamine	42	2.219	2.219	0.0	96	58970	4855.9	
14 Naphthalene	128	4.780	4.780	0.0	100	331820	4927.9	
15 2-Methylnaphthalene	142	5.340	5.340	0.0	99	472220	9917.0	
16 1-Methylnaphthalene	142	5.429	5.429	0.0	99	219507	5023.4	
17 Dimethyl phthalate	163	5.942	5.942	0.0	100	559446	10080	
19 Acenaphthylene	152	6.112	6.119	-0.007	99	370508	5049.2	
20 Acenaphthene	153	6.262	6.261	0.001	100	224326	4901.0	
18 Dibenzofuran	168	6.402	6.402	0.0	99	333327	4960.9	
21 Diethyl phthalate	149	6.521	6.521	0.0	99	557148	10057	
22 Fluorene	166	6.696	6.696	0.0	99	270345	4941.6	
23 N-Nitrosodiphenylamine	169	6.765	6.765	0.0	100	149670	4382.9	
24 Phenanthrene	178	7.548	7.548	0.0	100	385535	4934.1	
25 Anthracene	178	7.597	7.597	0.0	100	395221	5138.2	
26 Di-n-butyl phthalate	149	7.987	7.987	0.0	100	972297	10198	
27 Fluoranthene	202	8.968	8.968	0.0	100	422644	4987.2	
28 Pyrene	202	9.342	9.342	0.0	100	433340	4955.8	
29 Butyl benzyl phthalate	149	10.428	10.428	0.0	100	413971	10403	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.813	0.0	100	551861	10020	
31 Benzo[a]anthracene	228	11.908	11.908	0.0	99	389663	4933.6	
32 Chrysene	228	12.011	12.011	0.0	100	370061	4955.2	
33 Di-n-octyl phthalate	149	13.864	13.864	0.0	100	900269	10865	
34 Benzo[b]fluoranthene	252	15.231	15.231	0.0	100	347463	4803.1	
35 Benzo[k]fluoranthene	252	15.324	15.324	0.0	100	367193	4934.3	
36 Benzo[a]pyrene	252	16.356	16.359	-0.003	99	338400	4826.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.092	19.092	0.0	99	318289	4611.9	M
37 Dibenz(a,h)anthracene	278	19.126	19.130	-0.004	99	329533	4725.0	
39 Benzo[g,h,i]perylene	276	19.566	19.566	0.0	99	341320	4607.3	

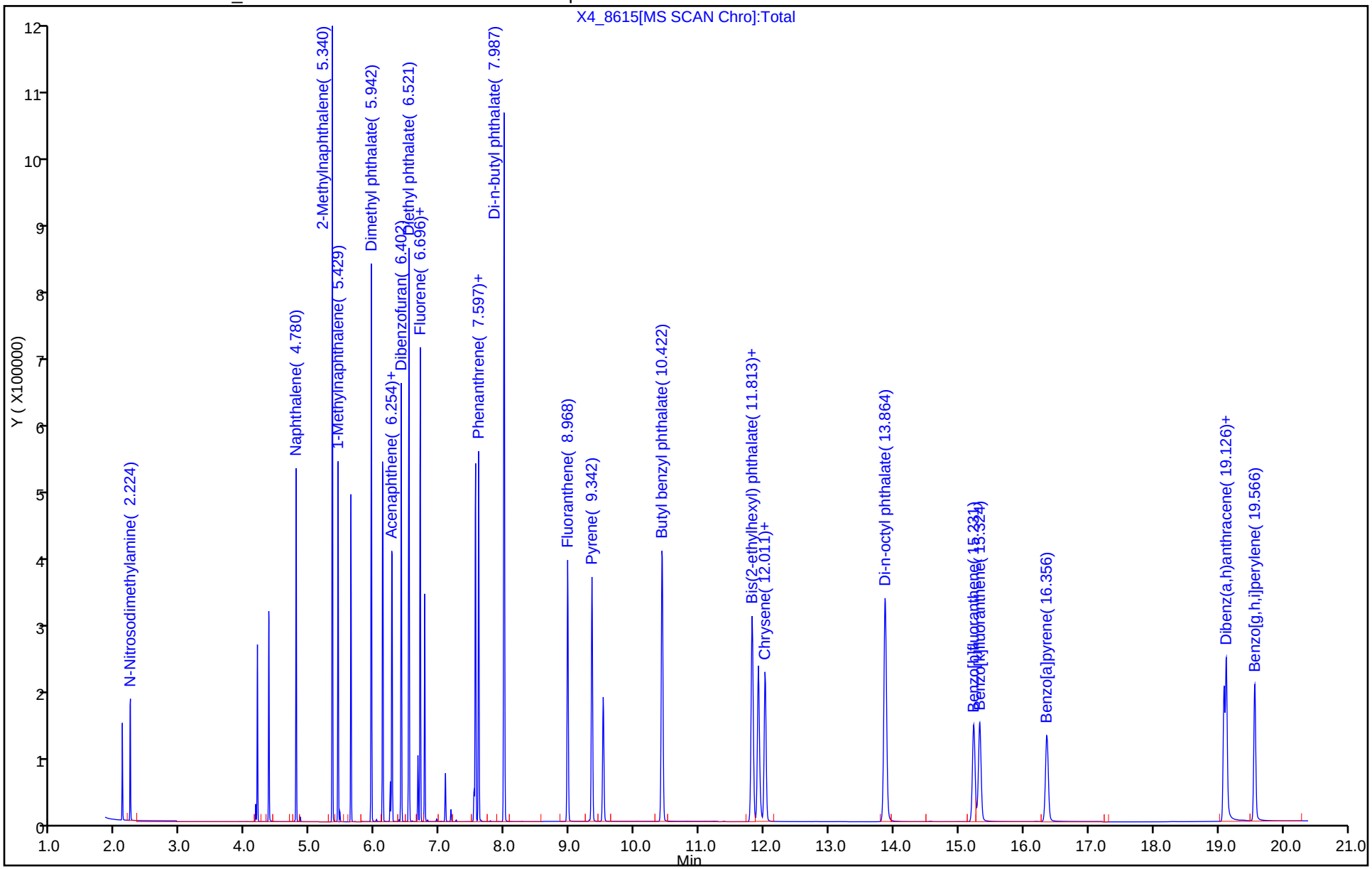
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 01-Dec-2013 08:07:54 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8615.D				
Injection Date:	30-Nov-2013 11:48:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	STD5000	Lab Sample ID:		Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

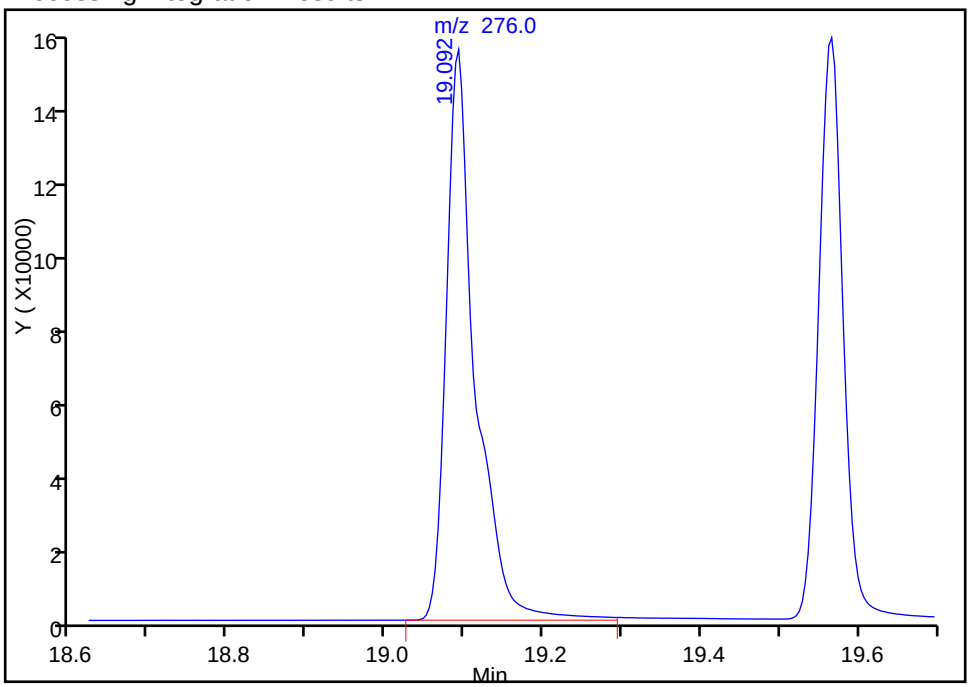
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8615.D				
Injection Date:	30-Nov-2013 11:48:30	Instrument ID:	SMS_X4		
Lims ID:	STD5000	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

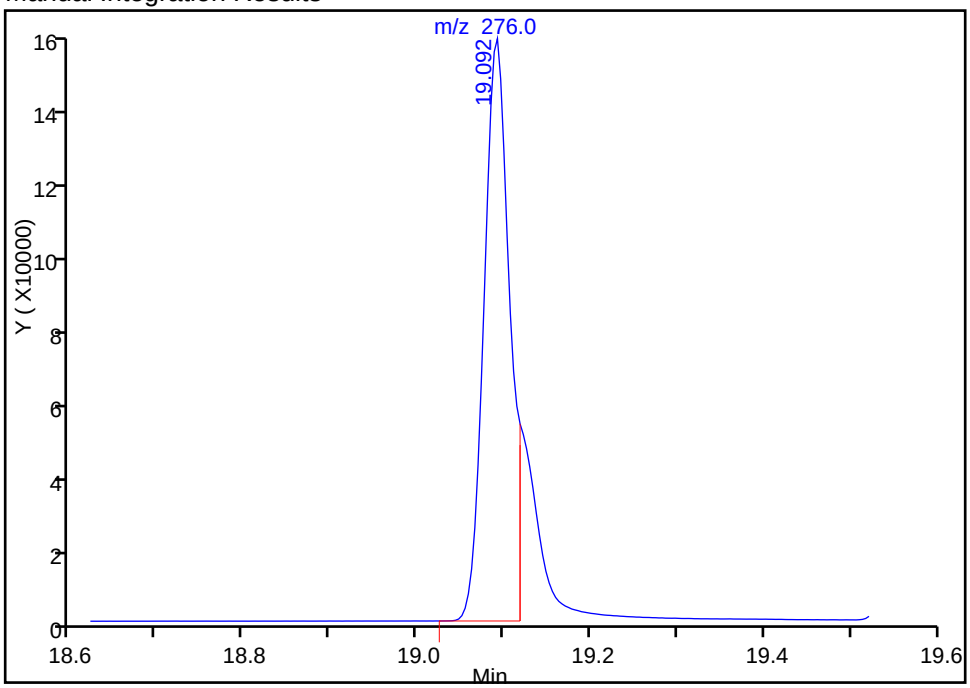
Processing Integration Results

RT: 19.09
Response: 394507
Amount: 5541.4016



Manual Integration Results

RT: 19.09
Response: 318289
Amount: 4611.8827



Reviewer: vasquezk, 01-Dec-2013 07:03:51
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D
Lims ID: STD10000 Lab Sample ID:
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 30-Nov-2013 12:16:30 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD10000
Operator ID: VASQUEZK Instrument ID: SMS_X4
Sublist: chrom-SMSX4_SIMX*sub1

Method: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 01-Dec-2013 08:07:55 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 01-Dec-2013 05:55:53

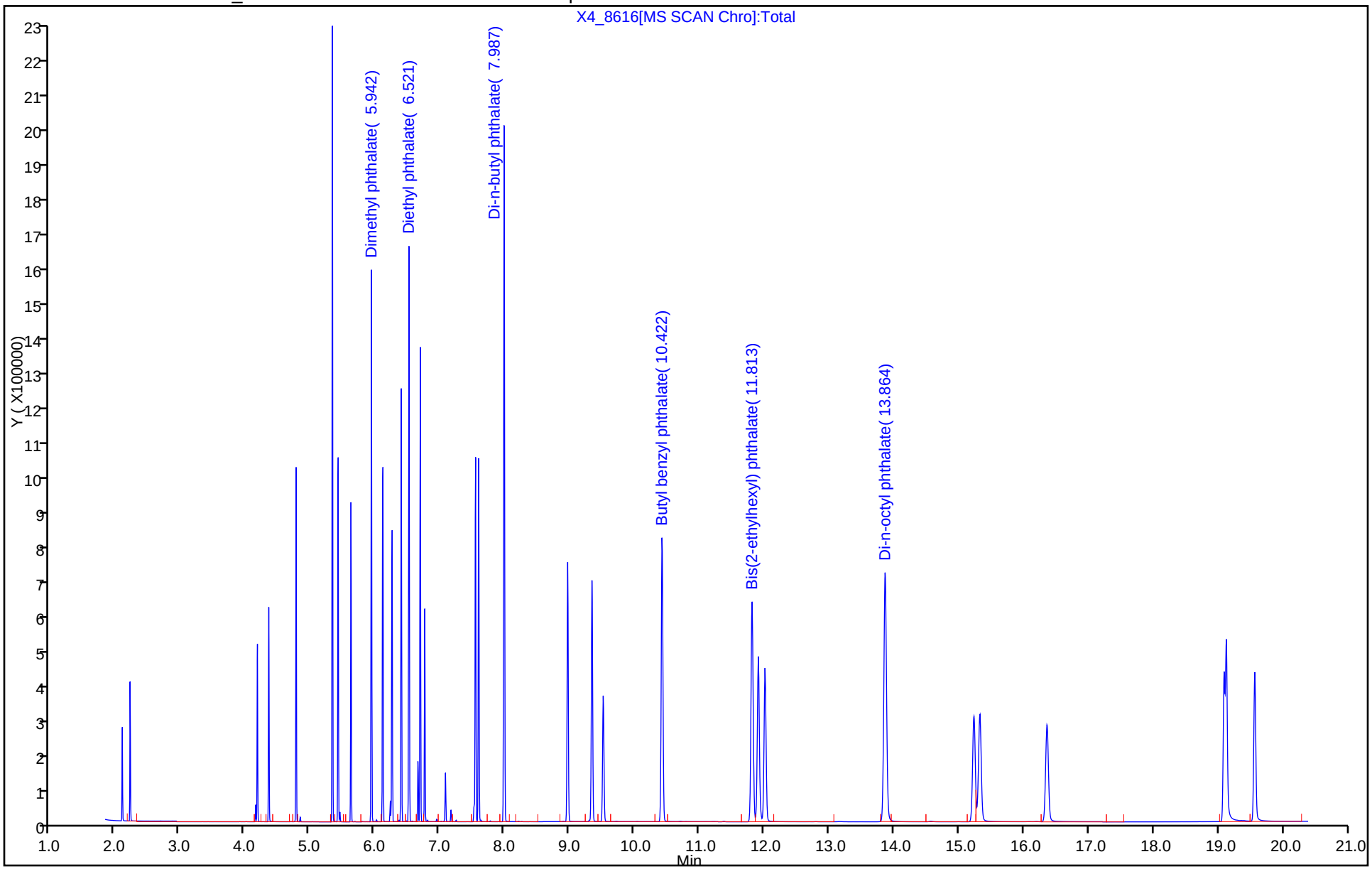
Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	99	21508	600.0	
* 1 Phenanthrene-d10	188	7.526	7.526	0.0	100	37007	600.0	
* 3 Chrysene-d12	240	11.940	11.940	0.0	45	39853	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.183	0.0	99	237110	9851.1	
$ 5 2-Fluorobiphenyl	172	5.626	5.626	0.0	100	491312	9681.2	
$ 6 Terphenyl-d14	244	9.516	9.516	0.0	100	457318	10207	
42 1,4-Dioxane	88		2.100					
7 N-Nitrosodimethylamine	42		2.219					
14 Naphthalene	128		4.780					
15 2-Methylnaphthalene	142		5.340					
16 1-Methylnaphthalene	142		5.429					
17 Dimethyl phthalate	163	5.942	5.942	0.0	100	1049018	19338	
19 Acenaphthylene	152		6.119					
20 Acenaphthene	153		6.261					
18 Dibenzofuran	168		6.402					
21 Diethyl phthalate	149	6.521	6.521	0.0	100	1043168	19266	
22 Fluorene	166		6.696					
23 N-Nitrosodiphenylamine	169		6.765					
24 Phenanthrene	178		7.548					
25 Anthracene	178		7.597					
26 Di-n-butyl phthalate	149	7.987	7.987	0.0	100	1864263	20145	
27 Fluoranthene	202		8.968					
28 Pyrene	202		9.342					
29 Butyl benzyl phthalate	149	10.422	10.428	-0.006	99	829953	21488	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.813	0.0	100	1134807	21228	
31 Benzo[a]anthracene	228		11.908					
32 Chrysene	228		12.011					
33 Di-n-octyl phthalate	149	13.864	13.864	0.0	100	1921171	22607	
34 Benzo[b]fluoranthene	252		15.231					
35 Benzo[k]fluoranthene	252		15.324					
36 Benzo[a]pyrene	252		16.359					

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276		19.092					
37 Dibenz(a,h)anthracene	278		19.130					
39 Benzo[g,h,i]perylene	276		19.566					

Report Date: 01-Dec-2013 08:07:55 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D				
Injection Date:	30-Nov-2013 12:16:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	STD10000	Lab Sample ID:		Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Lab Sample ID: ICV 280-203266/11 Calibration Date: 11/30/2013 12:44

Instrument ID: SMS_X4 Calib Start Date: 11/30/2013 09:01

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 11/30/2013 12:16

Lab File ID: X4_8617.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Nitrosodimethylamine	Ave	0.3311	0.2688	0.0500	974000	1200000	-18.8	35.0
Naphthalene	Ave	1.836	1.600	0.0500	1050000	1200000	-12.8	35.0
2-Methylnaphthalene	Ave	1.298	1.096	0.0500	1010000	1200000	-15.6	35.0
1-Methylnaphthalene	Ave	1.191	1.045	0.0500	1050000	1200000	-12.3	35.0
Dimethyl phthalate	Ave	1.513	1.331	0.0500	1060000	1200000	-12.0	35.0
Acenaphthylene	Ave	2.001	1.796	0.0500	1080000	1200000	-10.2	35.0
Acenaphthene	Ave	1.248	1.117	0.0500	1070000	1200000	-10.5	35.0
Dibenzofuran	Ave	1.832	1.652	0.0500	1080000	1200000	-9.8	35.0
Diethyl phthalate	Ave	1.510	1.388	0.0500	1100000	1200000	-8.1	35.0
Fluorene	Ave	1.492	1.343	0.0500	1080000	1200000	-10.0	35.0
N-Nitrosodiphenylamine	Ave	0.5374	0.5484	0.0500	1220000	1200000	2.0	35.0
Phenanthrene	Ave	1.230	1.087	0.0500	1060000	1200000	-11.6	35.0
Anthracene	Ave	1.210	1.087	0.0500	1080000	1200000	-10.2	35.0
Di-n-butyl phthalate	Ave	1.500	1.271	0.0500	1020000	1200000	-15.3	35.0
Fluoranthene	Ave	1.334	1.183	0.0500	1060000	1200000	-11.3	35.0
Pyrene	Ave	1.376	1.212	0.0500	1060000	1200000	-11.9	35.0
Butyl benzyl phthalate	Ave	0.6262	0.4933	0.0500	945000	1200000	-21.2	35.0
Bis(2-ethylhexyl) phthalate	Ave	0.8667	0.6626	0.0500	917000	1200000	-23.6	35.0
Benzo[a]anthracene	Ave	1.220	1.086	0.0500	1070000	1200000	-11.0	35.0
Chrysene	Ave	1.153	1.070	0.0500	1110000	1200000	-7.3	35.0
Di-n-octyl phthalate	Ave	1.279	0.9071	0.0500	851000	1200000	-29.1	35.0
Benzo[b]fluoranthene	Ave	1.117	0.9425	0.0500	1010000	1200000	-15.6	35.0
Benzo[k]fluoranthene	Ave	1.149	0.9528	0.0500	995000	1200000	-17.1	35.0
Benzo[a]pyrene	Ave	1.083	0.8745	0.0500	969000	1200000	-19.2	35.0
Indeno[1,2,3-cd]pyrene	Ave	1.066	0.8655	0.0500	975000	1200000	-18.8	35.0
Dibenz(a,h)anthracene	Ave	1.077	0.8935	0.0500	996000	1200000	-17.0	35.0
Benzo[g,h,i]perylene	Ave	1.144	0.9453	0.0500	992000	1200000	-17.4	35.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8617.D
Lims ID: ICV Lab Sample ID: ICV 280-203267/11-A
Client ID:
Sample Type: ICV
Inject. Date: 30-Nov-2013 12:44:30 ALS Bottle#: 10 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: VASQUEZK Instrument ID: SMS_X4
Sublist:

Method: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 01-Dec-2013 08:36:45 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 01-Dec-2013 08:36:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	99	22263	600.0	
* 1 Phenanthrene-d10	188	7.526	7.526	0.0	100	39619	600.0	
* 3 Chrysene-d12	240	11.940	11.940	0.0	95	38623	600.0	
42 1,4-Dioxane	88	2.100	2.100	0.0	98	10616	1128.4	
7 N-Nitrosodimethylamine	42	2.219	2.219	0.0	99	11969	974.2	
14 Naphthalene	128	4.780	4.780	0.0	100	71246	1045.9	
15 2-Methylnaphthalene	142	5.340	5.340	0.0	100	48802	1013.1	
16 1-Methylnaphthalene	142	5.429	5.429	0.0	99	46546	1052.9	
17 Dimethyl phthalate	163	5.942	5.942	0.0	100	59274	1055.7	
19 Acenaphthylene	152	6.119	6.119	0.0	100	79977	1077.3	
20 Acenaphthene	153	6.261	6.261	0.0	100	49715	1073.6	
18 Dibenzofuran	168	6.402	6.402	0.0	100	73560	1082.1	
21 Diethyl phthalate	149	6.521	6.521	0.0	100	61824	1103.1	
22 Fluorene	166	6.696	6.696	0.0	100	59787	1080.2	
23 N-Nitrosodiphenylamine	169	6.765	6.765	0.0	100	43450	1224.5	
24 Phenanthrene	178	7.548	7.548	0.0	100	86120	1060.7	
25 Anthracene	178	7.597	7.597	0.0	100	86129	1077.6	
26 Di-n-butyl phthalate	149	7.987	7.987	0.0	100	100750	1016.9	
27 Fluoranthene	202	8.968	8.968	0.0	100	93745	1064.5	
28 Pyrene	202	9.348	9.342	0.006	100	96061	1057.2	
29 Butyl benzyl phthalate	149	10.428	10.428	0.0	99	39089	945.3	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.813	0.0	100	52499	917.3	
31 Benzo[a]anthracene	228	11.908	11.908	0.0	100	83858	1068.2	
32 Chrysene	228	12.011	12.011	0.0	100	82616	1113.0	
33 Di-n-octyl phthalate	149	13.868	13.864	0.004	100	70069	850.8	
34 Benzo[b]fluoranthene	252	15.231	15.231	0.0	100	72803	1012.5	
35 Benzo[k]fluoranthene	252	15.320	15.324	-0.004	100	73596	995.0	
36 Benzo[a]pyrene	252	16.363	16.359	0.004	100	67554	969.4	
38 Indeno[1,2,3-cd]pyrene	276	19.092	19.092	0.0	100	66858	974.6	M
37 Dibenz(a,h)anthracene	278	19.129	19.130	-0.001	100	69020	995.6	
39 Benzo[g,h,i]perylene	276	19.566	19.566	0.0	100	73018	991.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
41 Pentachlorophenol	266		0.0					

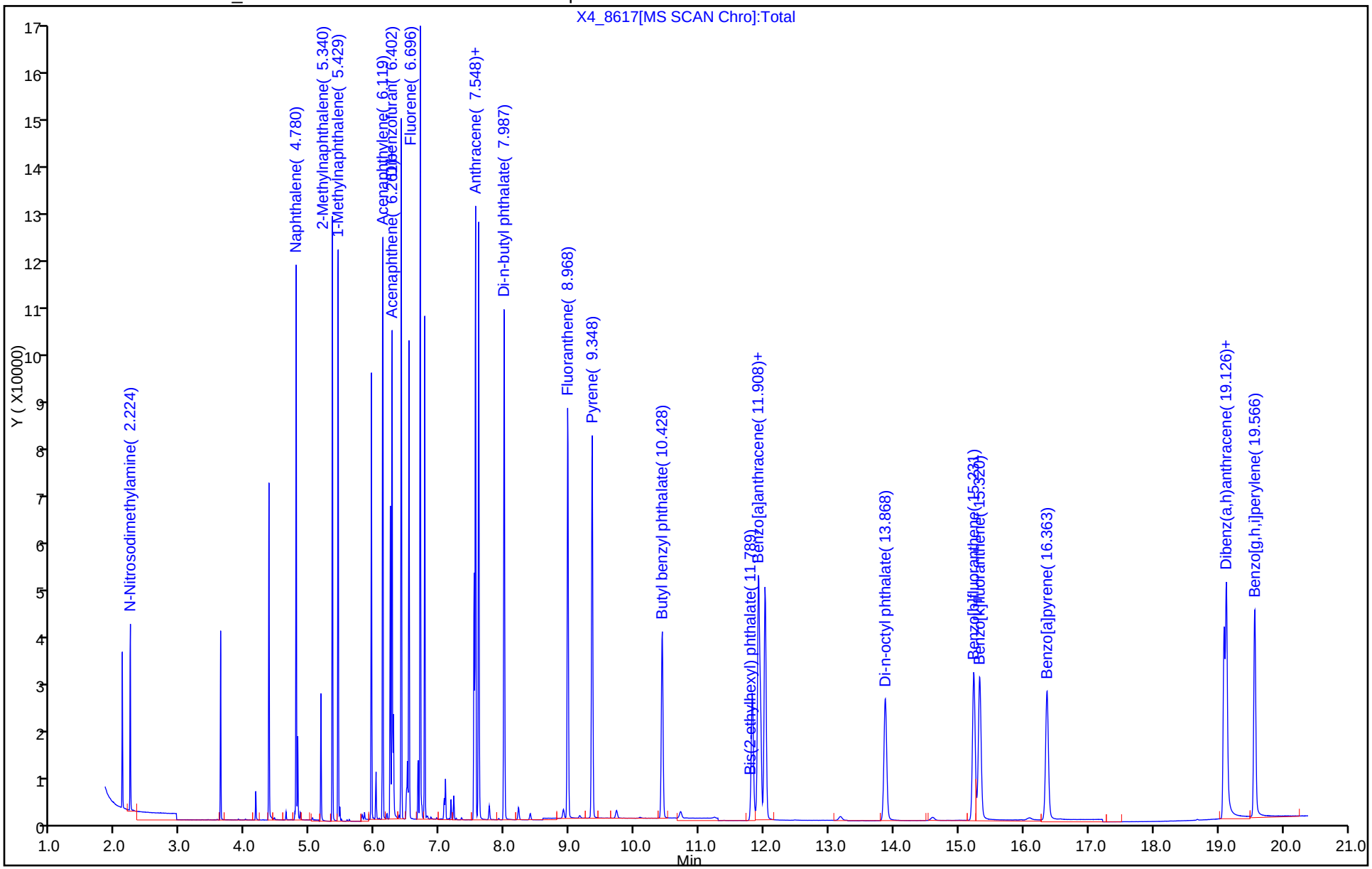
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 01-Dec-2013 08:36:57 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8617.D				
Injection Date:	30-Nov-2013 12:44:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	ICV	Lab Sample ID:	ICV 280-203267/11-A	Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

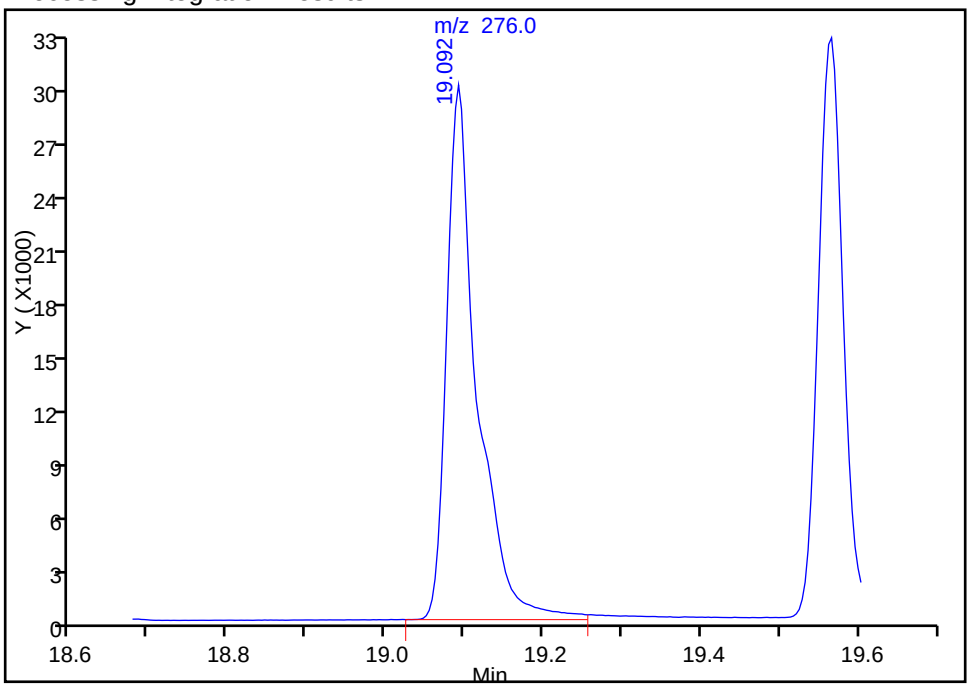
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8617.D				
Injection Date:	30-Nov-2013 12:44:30	Instrument ID:	SMS_X4		
Lims ID:	ICV	Lab Sample ID:	ICV 280-203267/11-A		
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

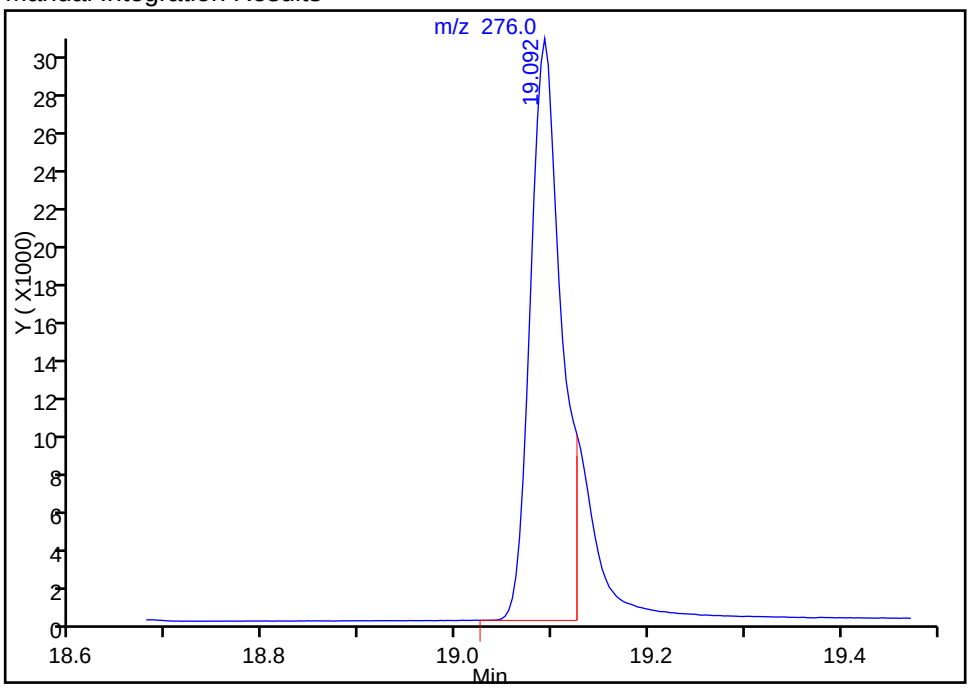
Processing Integration Results

RT: 19.09
Response: 79896
Amount: 1164.6755



Manual Integration Results

RT: 19.09
Response: 66858
Amount: 974.6154



Reviewer: vasquezk, 01-Dec-2013 05:59:07
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Lab Sample ID: CCV 280-207101/2 Calibration Date: 12/31/2013 13:57

Instrument ID: SMS_X4 Calib Start Date: 11/30/2013 09:01

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 11/30/2013 12:16

Lab File ID: X4_8886.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Nitrosodimethylamine	Ave	0.3311	0.3664	0.0500	664000	600000	10.6	35.0
Naphthalene	Ave	1.836	1.756	0.0500	574000	600000	-4.4	35.0
2-Methylnaphthalene	Ave	1.298	1.224	0.0500	1130000	1200000	-5.7	35.0
1-Methylnaphthalene	Ave	1.191	1.142	0.0500	575000	600000	-4.1	35.0
Dimethyl phthalate	Ave	1.513	1.438	0.0500	1140000	1200000	-5.0	35.0
Acenaphthylene	Ave	2.001	1.732	0.0500	520000	600000	-13.4	35.0
Acenaphthene	Ave	1.248	1.198	0.0500	576000	600000	-4.0	35.0
Dibenzofuran	Ave	1.832	1.790	0.0500	586000	600000	-2.3	35.0
Diethyl phthalate	Ave	1.510	1.453	0.0500	1150000	1200000	-3.8	35.0
Fluorene	Ave	1.492	1.457	0.0500	586000	600000	-2.3	35.0
N-Nitrosodiphenylamine	Ave	0.5374	0.5000	0.0500	558000	600000	-7.0	35.0
Phenanthrene	Ave	1.230	1.152	0.0500	562000	600000	-6.3	35.0
Anthracene	Ave	1.210	1.087	0.0500	539000	600000	-10.2	35.0
Di-n-butyl phthalate	Ave	1.500	1.192	0.0500	954000	1200000	-20.5	35.0
Fluoranthene	Ave	1.334	1.292	0.0500	581000	600000	-3.2	35.0
Pyrene	Ave	1.376	1.333	0.0500	581000	600000	-3.2	35.0
Butyl benzyl phthalate	Ave	0.6262	0.3976	0.0500	762000	1200000	-36.5*	35.0
Bis(2-ethylhexyl) phthalate	Ave	0.8667	0.4606	0.0500	638000	1200000	-46.9*	35.0
Benzo[a]anthracene	Ave	1.220	0.9800	0.0500	482000	600000	-19.6	35.0
Chrysene	Ave	1.153	1.080	0.0500	562000	600000	-6.3	35.0
Di-n-octyl phthalate	Ave	1.279	0.5605	0.0500	526000	1200000	-56.2*	35.0
Benzo[b]fluoranthene	Ave	1.117	1.040	0.0500	559000	600000	-6.9	35.0
Benzo[k]fluoranthene	Ave	1.149	1.128	0.0500	589000	600000	-1.8	35.0
Benzo[a]pyrene	Ave	1.083	0.8425	0.0500	467000	600000	-22.2	35.0
Indeno[1,2,3-cd]pyrene	Ave	1.066	1.020	0.0500	574000	600000	-4.3	35.0
Dibenz(a,h)anthracene	Ave	1.077	1.063	0.0500	592000	600000	-1.3	35.0
Benzo[g,h,i]perylene	Ave	1.144	1.166	0.0500	612000	600000	1.9	35.0
Nitrobenzene-d5	Ave	0.6715	0.5698	0.0500	509000	600000	-15.1	35.0
2-Fluorobiphenyl	Ave	1.416	1.408	0.0500	597000	600000	-0.5	35.0
Terphenyl-d14	Ave	0.7264	0.8344	0.0500	689000	600000	14.9	35.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8886.D
Lims ID: CCV Lab Sample ID:
Client ID:
Sample Type: CCV
Inject. Date: 31-Dec-2013 13:57:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: VASQUEZK Instrument ID: SMS_X4
Sublist: chrom-SMSX4_SIMX*sub1

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 12:15:15 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 12:15:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	93	16691	600.0	
* 1 Phenanthrene-d10	188	7.532	7.532	0.0	100	32710	600.0	
* 3 Chrysene-d12	240	11.956	11.956	0.0	99	39226	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.186	0.0	100	9510	509.1	
$ 5 2-Fluorobiphenyl	172	5.630	5.630	0.0	100	23502	596.8	
$ 6 Terphenyl-d14	244	9.527	9.527	0.0	99	27292	689.2	
42 1,4-Dioxane	88	2.100	2.100	0.0	86	4324	613.0	
7 N-Nitrosodimethylamine	42	2.219	2.219	0.0	96	6115	663.9	
14 Naphthalene	128	4.783	4.783	0.0	100	29301	573.7	
15 2-Methylnaphthalene	142	5.344	5.344	0.0	100	40874	1131.7	
16 1-Methylnaphthalene	142	5.429	5.429	0.0	97	19066	575.3	
17 Dimethyl phthalate	163	5.942	5.942	0.0	100	48003	1140.3	
19 Acenaphthylene	152	6.119	6.119	0.0	100	28915	519.5	
20 Acenaphthene	153	6.261	6.261	0.0	98	19997	576.0	
18 Dibenzofuran	168	6.408	6.408	0.0	98	29878	586.3	
21 Diethyl phthalate	149	6.521	6.521	0.0	99	48511	1154.5	
22 Fluorene	166	6.696	6.696	0.0	94	24321	586.1	
23 N-Nitrosodiphenylamine	169	6.771	6.771	0.0	100	16356	558.3	
24 Phenanthrene	178	7.553	7.553	0.0	100	37673	562.0	
25 Anthracene	178	7.602	7.602	0.0	100	35558	538.8	
26 Di-n-butyl phthalate	149	7.992	7.992	0.0	100	78003	953.6	
27 Fluoranthene	202	8.979	8.979	0.0	100	42246	581.1	
28 Pyrene	202	9.353	9.353	0.0	100	43591	581.1	
29 Butyl benzyl phthalate	149	10.427	10.427	0.0	96	26011	761.9	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.813	0.0	100	30132	637.7	
31 Benzo[a]anthracene	228	11.924	11.924	0.0	99	38442	482.1	
32 Chrysene	228	12.027	12.027	0.0	100	42363	561.9	
33 Di-n-octyl phthalate	149	13.864	13.864	0.0	100	43973	525.7	
34 Benzo[b]fluoranthene	252	15.253	15.253	0.0	100	40798	558.7	
35 Benzo[k]fluoranthene	252	15.342	15.342	0.0	100	44263	589.2	
36 Benzo[a]pyrene	252	16.385	16.385	0.0	100	33048	467.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.111	19.111	0.0	98	40013	574.3	M
37 Dibenz(a,h)anthracene	278	19.148	19.148	0.0	97	41692	592.2	
39 Benzo[g,h,i]perylene	276	19.584	19.584	0.0	98	45732	611.5	

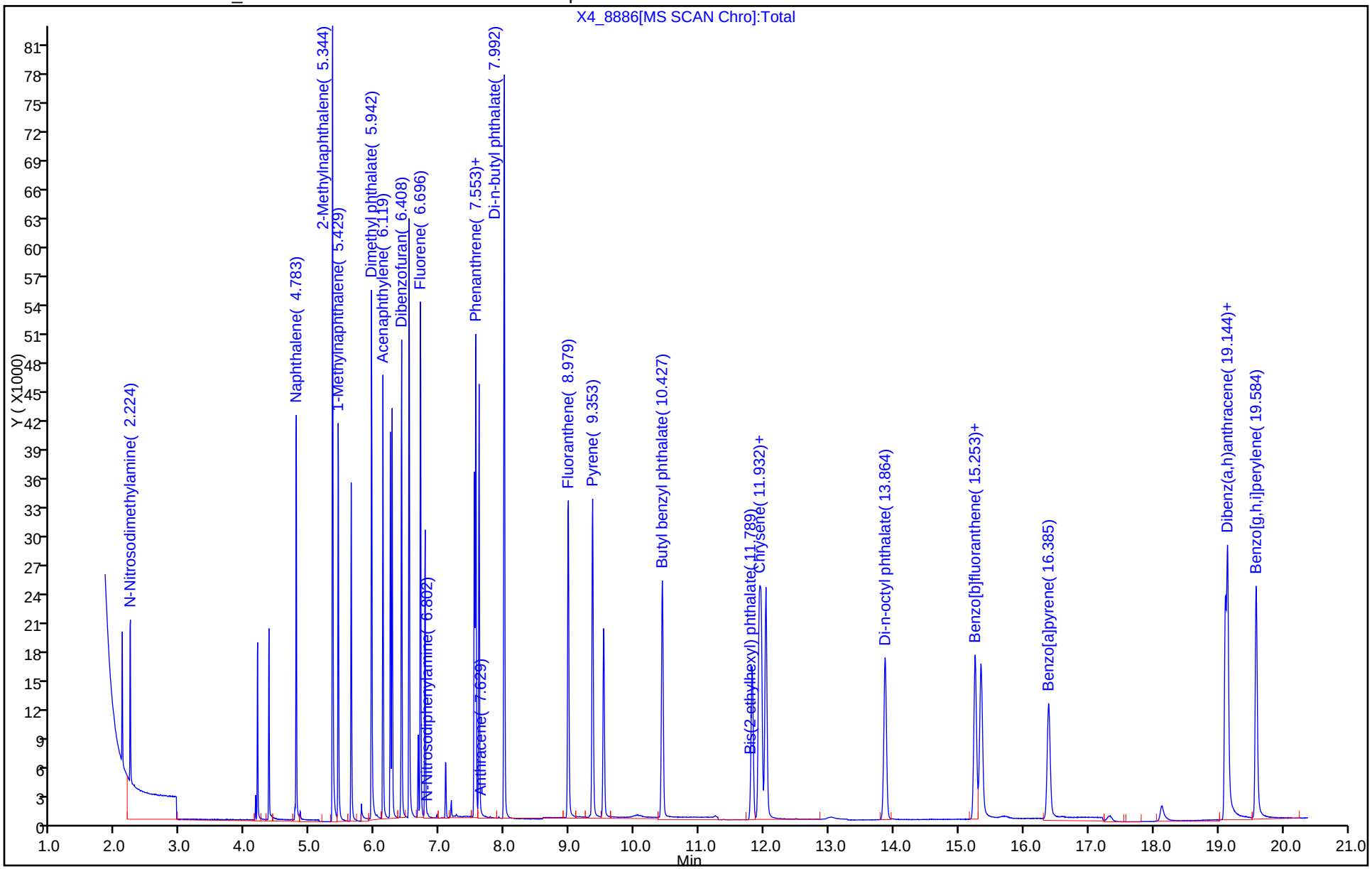
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 02-Jan-2014 12:15:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8886.D				
Injection Date:	31-Dec-2013 13:57:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	CCV	Lab Sample ID:		Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

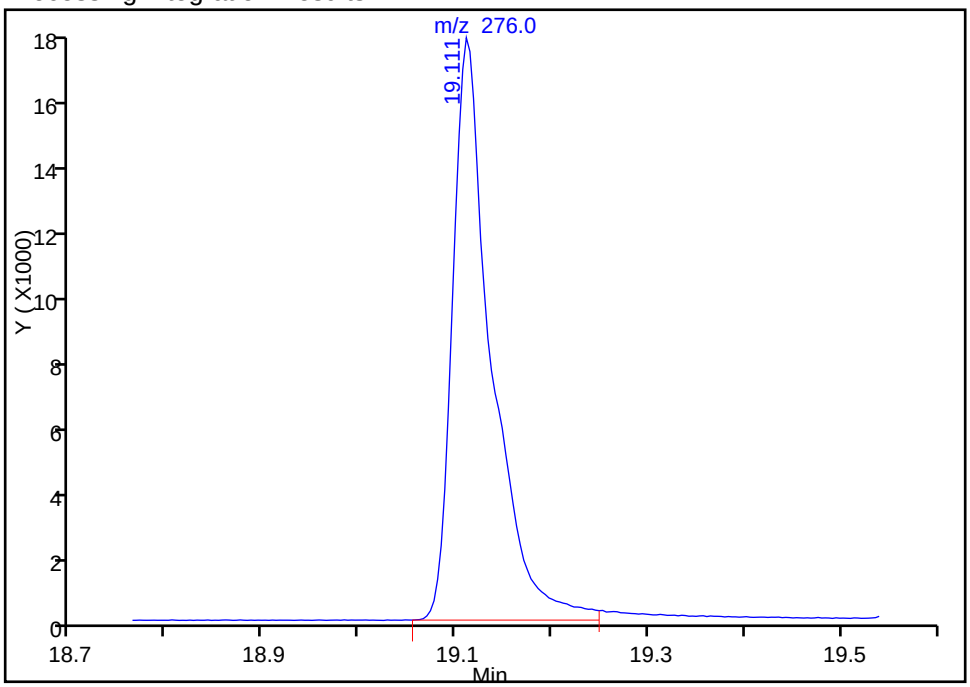
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8886.D				
Injection Date:	31-Dec-2013 13:57:30	Instrument ID:	SMS_X4		
Lims ID:	CCV	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

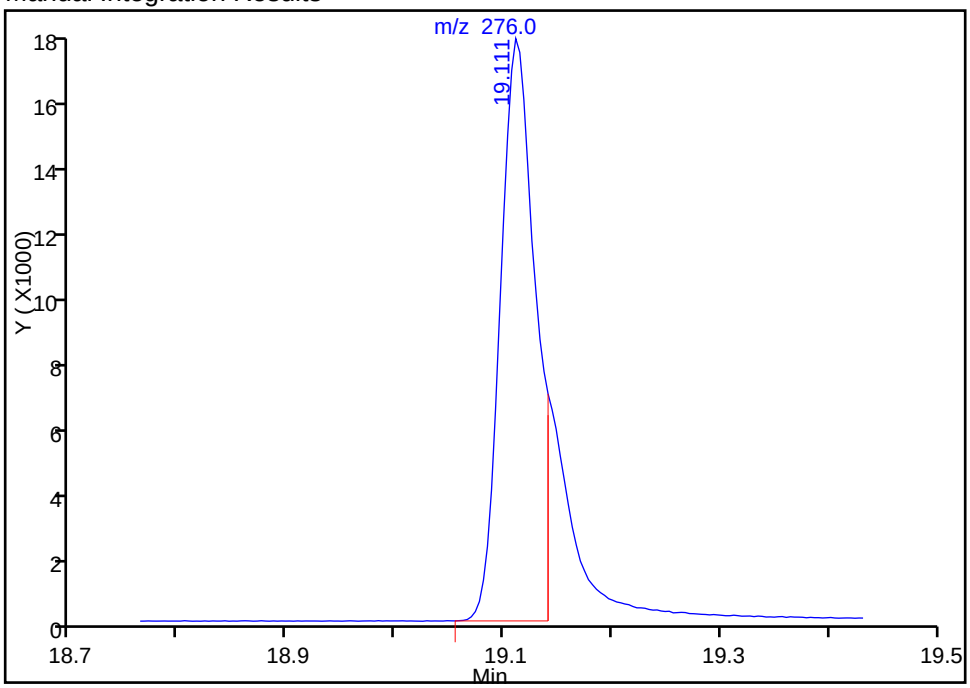
Processing Integration Results

RT: 19.11
Response: 50222
Amount: 720.8516



Manual Integration Results

RT: 19.11
Response: 40013
Amount: 574.3187



Reviewer: vasquezk, 02-Jan-2014 08:52:21
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Lab Sample ID: CCV 280-207236/2 Calibration Date: 01/02/2014 13:45

Instrument ID: SMS_X4 Calib Start Date: 11/30/2013 09:01

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 11/30/2013 12:16

Lab File ID: X4_8916.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.2536	0.2768	0.0500	655000	600000	9.2	35.0
N-Nitrosodimethylamine	Ave	0.3311	0.3894	0.0500	706000	600000	17.6	35.0
Naphthalene	Ave	1.836	1.741	0.0500	569000	600000	-5.1	35.0
2-Methylnaphthalene	Ave	1.298	1.233	0.0500	1140000	1200000	-5.1	35.0
1-Methylnaphthalene	Ave	1.191	1.137	0.0500	573000	600000	-4.5	35.0
Dimethyl phthalate	Ave	1.513	1.565	0.0500	1240000	1200000	3.4	35.0
Acenaphthylene	Ave	2.001	1.930	0.0500	579000	600000	-3.5	35.0
Acenaphthene	Ave	1.248	1.183	0.0500	569000	600000	-5.2	35.0
Dibenzofuran	Ave	1.832	1.781	0.0500	583000	600000	-2.8	35.0
Diethyl phthalate	Ave	1.510	1.613	0.0500	1280000	1200000	6.8	35.0
Fluorene	Ave	1.492	1.457	0.0500	586000	600000	-2.4	35.0
N-Nitrosodiphenylamine	Ave	0.5374	0.5100	0.0500	569000	600000	-5.1	35.0
Phenanthrene	Ave	1.230	1.152	0.0500	562000	600000	-6.3	35.0
Anthracene	Ave	1.210	1.183	0.0500	586000	600000	-2.3	35.0
Di-n-butyl phthalate	Ave	1.500	1.513	0.0500	1210000	1200000	0.8	35.0
Fluoranthene	Ave	1.334	1.392	0.0500	626000	600000	4.4	35.0
Pyrene	Ave	1.376	1.426	0.0500	622000	600000	3.7	35.0
Butyl benzyl phthalate	Ave	0.6262	0.6543	0.0500	1250000	1200000	4.5	35.0
Bis(2-ethylhexyl) phthalate	Ave	0.8667	0.9864	0.0500	1370000	1200000	13.8	35.0
Benzo[a]anthracene	Ave	1.220	1.122	0.0500	552000	600000	-8.0	35.0
Chrysene	Ave	1.153	1.091	0.0500	567000	600000	-5.4	35.0
Di-n-octyl phthalate	Ave	1.279	1.160	0.0500	1090000	1200000	-9.3	35.0
Benzo[b]fluoranthene	Ave	1.117	1.184	0.0500	636000	600000	6.0	35.0
Benzo[k]fluoranthene	Ave	1.149	1.252	0.0500	654000	600000	9.0	35.0
Benzo[a]pyrene	Ave	1.083	1.165	0.0500	646000	600000	7.7	35.0
Indeno[1,2,3-cd]pyrene	Ave	1.066	1.237	0.0500	697000	600000	16.1	35.0
Dibenz(a,h)anthracene	Ave	1.077	1.247	0.0500	695000	600000	15.8	35.0
Benzo[g,h,i]perylene	Ave	1.144	1.304	0.0500	684000	600000	14.0	35.0
Nitrobenzene-d5	Ave	0.6715	0.6455	0.0500	577000	600000	-3.9	35.0
2-Fluorobiphenyl	Ave	1.416	1.411	0.0500	598000	600000	-0.3	35.0
Terphenyl-d14	Ave	0.7264	0.8789	0.0500	726000	600000	21.0	35.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8916.D
Lims ID: CCV Lab Sample ID:
Client ID:
Sample Type: CCV
Inject. Date: 02-Jan-2014 13:45:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: VASQUEZK Instrument ID: SMS_X4
Sublist: chrom-SMSX4_SIMX*sub1

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 02-Jan-2014 12:13:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.240	6.240	0.0	95	15344	600.0	
* 1 Phenanthrene-d10	188	7.532	7.532	0.0	100	29741	600.0	
* 3 Chrysene-d12	240	11.964	11.964	0.0	100	37517	600.0	
$ 4 Nitrobenzene-d5	82	4.189	4.189	0.0	99	9904	576.8	
$ 5 2-Fluorobiphenyl	172	5.633	5.633	0.0	100	21649	598.0	
$ 6 Terphenyl-d14	244	9.532	9.532	0.0	99	26139	725.9	
42 1,4-Dioxane	88	2.100	2.100	0.0	90	4247	655.0	
7 N-Nitrosodimethylamine	42	2.219	2.219	0.0	99	5975	705.6	
14 Naphthalene	128	4.786	4.786	0.0	100	26720	569.1	
15 2-Methylnaphthalene	142	5.344	5.344	0.0	98	37824	1139.2	
16 1-Methylnaphthalene	142	5.433	5.433	0.0	97	17452	572.8	
17 Dimethyl phthalate	163	5.949	5.949	0.0	100	48017	1240.8	
19 Acenaphthylene	152	6.119	6.119	0.0	99	29618	578.9	
20 Acenaphthene	153	6.269	6.269	0.0	100	18154	568.8	
18 Dibenzofuran	168	6.408	6.408	0.0	99	27334	583.4	
21 Diethyl phthalate	149	6.527	6.527	0.0	99	49503	1281.6	
22 Fluorene	166	6.702	6.702	0.0	99	22349	585.9	
23 N-Nitrosodiphenylamine	169	6.771	6.771	0.0	99	15168	569.4	
24 Phenanthrene	178	7.553	7.553	0.0	100	34256	562.0	
25 Anthracene	178	7.602	7.602	0.0	100	35187	586.5	
26 Di-n-butyl phthalate	149	7.992	7.992	0.0	100	89996	1210.1	
27 Fluoranthene	202	8.979	8.979	0.0	100	41402	626.3	
28 Pyrene	202	9.359	9.359	0.0	100	42425	622.0	
29 Butyl benzyl phthalate	149	10.438	10.438	0.0	100	38919	1253.8	
30 Bis(2-ethylhexyl) phthalate	149	11.821	11.821	0.0	100	58674	1365.7	
31 Benzo[a]anthracene	228	11.932	11.932	0.0	100	42097	552.0	
32 Chrysene	228	12.035	12.035	0.0	100	40915	567.4	
33 Di-n-octyl phthalate	149	13.879	13.879	0.0	100	87053	1088.1	
34 Benzo[b]fluoranthene	252	15.264	15.264	0.0	100	44412	635.8	
35 Benzo[k]fluoranthene	252	15.357	15.357	0.0	100	46978	653.8	
36 Benzo[a]pyrene	252	16.397	16.397	0.0	100	43723	645.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.118	19.118	0.0	98	46416	696.6	M
37 Dibenz(a,h)anthracene	278	19.152	19.152	0.0	99	46776	694.7	
39 Benzo[g,h,i]perylene	276	19.592	19.592	0.0	99	48928	684.0	

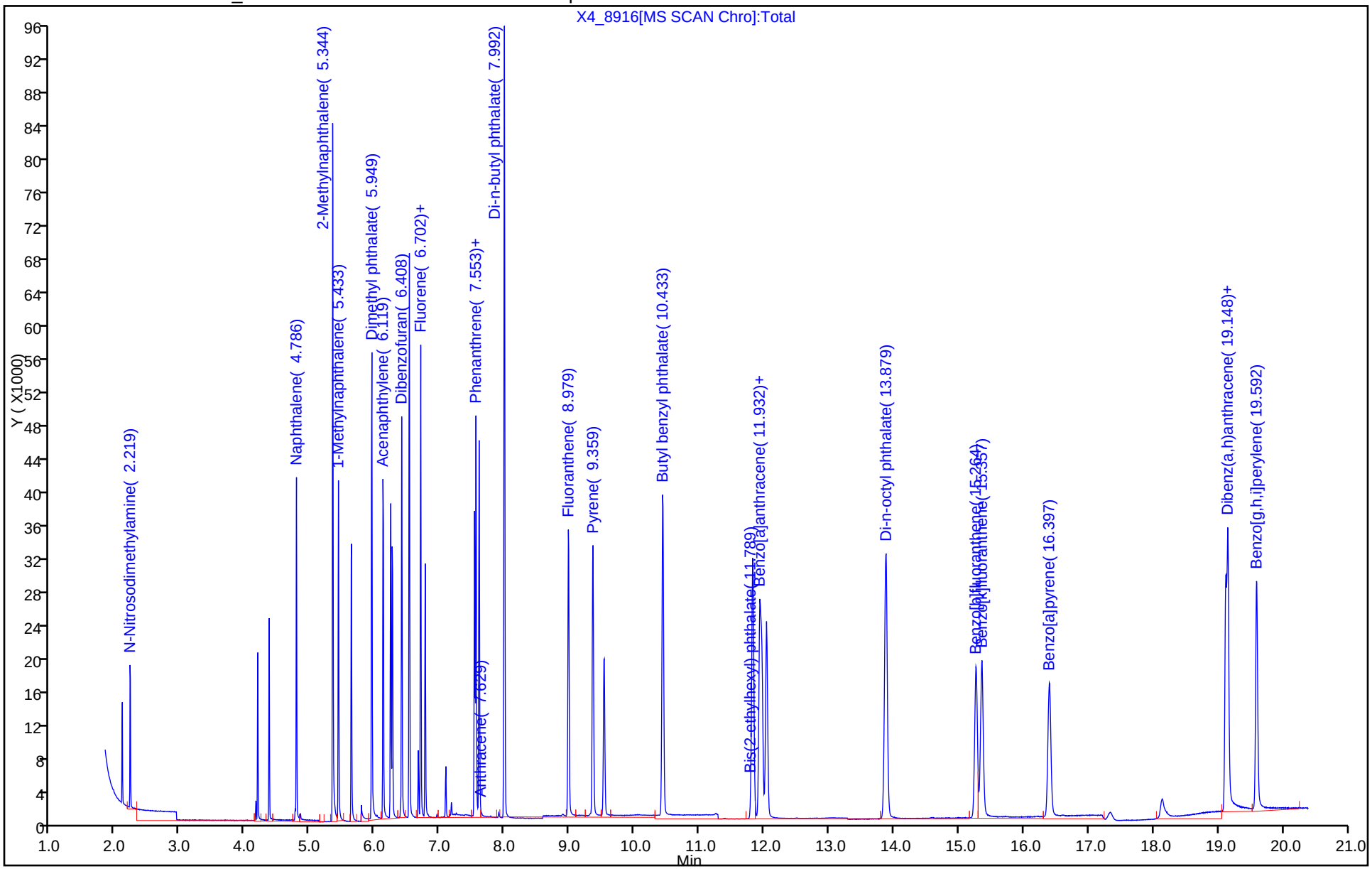
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:05:58 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8916.D				
Injection Date:	02-Jan-2014 13:45:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	CCV	Lab Sample ID:		Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

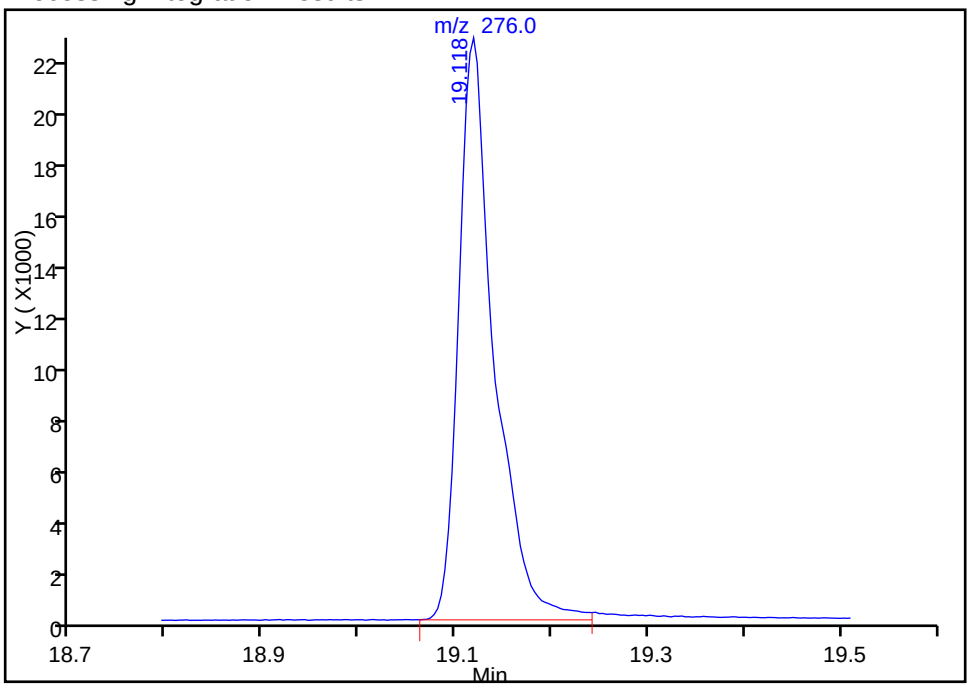
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8916.D				
Injection Date:	02-Jan-2014 13:45:30	Instrument ID:	SMS_X4		
Lims ID:	CCV	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

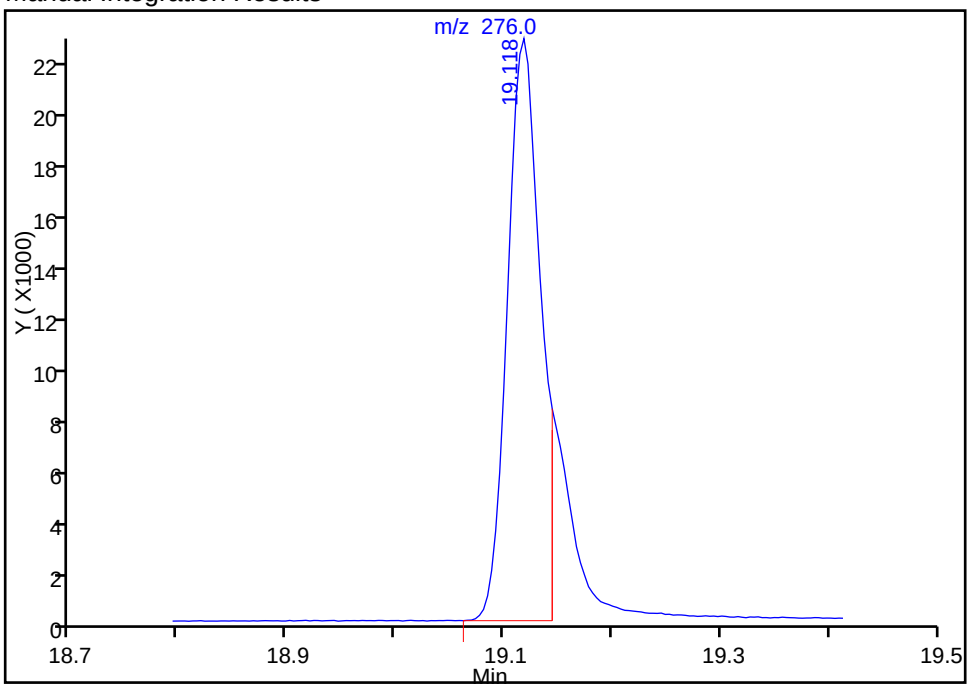
Processing Integration Results

RT: 19.12
Response: 56277
Amount: 844.5565



Manual Integration Results

RT: 19.12
Response: 46416
Amount: 696.5712



Reviewer: vasquezk, 02-Jan-2014 12:13:46
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Lab Sample ID: CCV 280-207515/2 Calibration Date: 01/06/2014 11:54

Instrument ID: SMS_X4 Calib Start Date: 11/30/2013 09:01

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 11/30/2013 12:16

Lab File ID: X4_8947.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.2536	0.2480	0.0500	587000	600000	-2.2	35.0
N-Nitrosodimethylamine	Ave	0.3311	0.3808	0.0500	690000	600000	15.0	35.0
Naphthalene	Ave	1.836	1.768	0.0500	578000	600000	-3.7	35.0
2-Methylnaphthalene	Ave	1.298	1.246	0.0500	1150000	1200000	-4.0	35.0
1-Methylnaphthalene	Ave	1.191	1.169	0.0500	589000	600000	-1.8	35.0
Dimethyl phthalate	Ave	1.513	1.633	0.0500	1300000	1200000	7.9	35.0
Acenaphthylene	Ave	2.001	1.956	0.0500	586000	600000	-2.3	35.0
Acenaphthene	Ave	1.248	1.268	0.0500	610000	600000	1.6	35.0
Dibenzofuran	Ave	1.832	1.831	0.0500	600000	600000	-0.0	35.0
Diethyl phthalate	Ave	1.510	1.692	0.0500	1340000	1200000	12.0	35.0
Fluorene	Ave	1.492	1.527	0.0500	614000	600000	2.4	35.0
N-Nitrosodiphenylamine	Ave	0.5374	0.5212	0.0500	582000	600000	-3.0	35.0
Phenanthrene	Ave	1.230	1.162	0.0500	567000	600000	-5.5	35.0
Anthracene	Ave	1.210	1.222	0.0500	606000	600000	0.9	35.0
Di-n-butyl phthalate	Ave	1.500	1.587	0.0500	1270000	1200000	5.7	35.0
Fluoranthene	Ave	1.334	1.399	0.0500	629000	600000	4.9	35.0
Pyrene	Ave	1.376	1.435	0.0500	626000	600000	4.3	35.0
Butyl benzyl phthalate	Ave	0.6262	0.6667	0.0500	1280000	1200000	6.5	35.0
Bis(2-ethylhexyl) phthalate	Ave	0.8667	0.9756	0.0500	1350000	1200000	12.6	35.0
Benzo[a]anthracene	Ave	1.220	1.130	0.0500	556000	600000	-7.4	35.0
Chrysene	Ave	1.153	1.078	0.0500	561000	600000	-6.5	35.0
Di-n-octyl phthalate	Ave	1.279	1.199	0.0500	1120000	1200000	-6.3	35.0
Benzo[b]fluoranthene	Ave	1.117	1.172	0.0500	629000	600000	4.9	35.0
Benzo[k]fluoranthene	Ave	1.149	1.251	0.0500	653000	600000	8.9	35.0
Benzo[a]pyrene	Ave	1.083	1.140	0.0500	632000	600000	5.3	35.0
Indeno[1,2,3-cd]pyrene	Ave	1.066	1.197	0.0500	674000	600000	12.3	35.0
Dibenz(a,h)anthracene	Ave	1.077	1.189	0.0500	662000	600000	10.4	35.0
Benzo[g,h,i]perylene	Ave	1.144	1.254	0.0500	658000	600000	9.6	35.0
Nitrobenzene-d5	Ave	0.6715	0.6431	0.0500	575000	600000	-4.2	35.0
2-Fluorobiphenyl	Ave	1.416	1.431	0.0500	606000	600000	1.1	35.0
Terphenyl-d14	Ave	0.7264	0.8823	0.0500	729000	600000	21.5	35.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8947.D
Lims ID: CCV Lab Sample ID:
Client ID:
Sample Type: CCV
Inject. Date: 06-Jan-2014 11:54:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: VASQUEZK Instrument ID: SMS_X4
Sublist: chrom-SMSX4_SIMX*sub1

Method: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 13:44:04 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 10:37:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.240	6.240	0.0	100	15462	600.0	
* 1 Phenanthrene-d10	188	7.537	7.537	0.0	100	31687	600.0	
* 3 Chrysene-d12	240	11.980	11.980	0.0	99	39656	600.0	
$ 4 Nitrobenzene-d5	82	4.189	4.189	0.0	100	9943	574.6	
$ 5 2-Fluorobiphenyl	172	5.633	5.633	0.0	100	22121	606.3	
$ 6 Terphenyl-d14	244	9.538	9.538	0.0	99	27957	728.7	
42 1,4-Dioxane	88	2.100	2.100	0.0	89	3834	586.8	
7 N-Nitrosodimethylamine	42	2.219	2.219	0.0	99	5888	690.1	
14 Naphthalene	128	4.786	4.786	0.0	100	27340	577.9	
15 2-Methylnaphthalene	142	5.347	5.347	0.0	100	38529	1151.6	
16 1-Methylnaphthalene	142	5.437	5.437	0.0	100	18082	588.9	
17 Dimethyl phthalate	163	5.949	5.949	0.0	100	50511	1295.3	
19 Acenaphthylene	152	6.127	6.127	0.0	100	30238	586.5	
20 Acenaphthene	153	6.269	6.269	0.0	100	19612	609.8	
18 Dibenzofuran	168	6.414	6.414	0.0	96	28304	599.5	
21 Diethyl phthalate	149	6.527	6.527	0.0	100	52325	1344.3	
22 Fluorene	166	6.702	6.702	0.0	96	23618	614.4	
23 N-Nitrosodiphenylamine	169	6.771	6.771	0.0	96	16516	581.9	
24 Phenanthrene	178	7.559	7.559	0.0	100	36810	566.8	
25 Anthracene	178	7.608	7.608	0.0	100	38707	605.5	
26 Di-n-butyl phthalate	149	7.998	7.998	0.0	100	100544	1268.9	
27 Fluoranthene	202	8.990	8.990	0.0	100	44333	629.5	
28 Pyrene	202	9.364	9.364	0.0	100	45461	625.6	
29 Butyl benzyl phthalate	149	10.444	10.444	0.0	99	42254	1277.6	
30 Bis(2-ethylhexyl) phthalate	149	11.829	11.829	0.0	100	61825	1350.7	
31 Benzo[a]anthracene	228	11.948	11.948	0.0	99	44804	555.8	
32 Chrysene	228	12.051	12.051	0.0	100	42748	560.9	
33 Di-n-octyl phthalate	149	13.890	13.890	0.0	100	95066	1124.2	
34 Benzo[b]fluoranthene	252	15.287	15.287	0.0	100	46473	629.5	
35 Benzo[k]fluoranthene	252	15.376	15.376	0.0	100	49606	653.2	
36 Benzo[a]pyrene	252	16.419	16.419	0.0	100	45218	632.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.130	19.130	0.0	99	47478	674.1	M
37 Dibenz(a,h)anthracene	278	19.167	19.167	0.0	99	47143	662.3	
39 Benzo[g,h,i]perylene	276	19.611	19.611	0.0	99	49713	657.5	

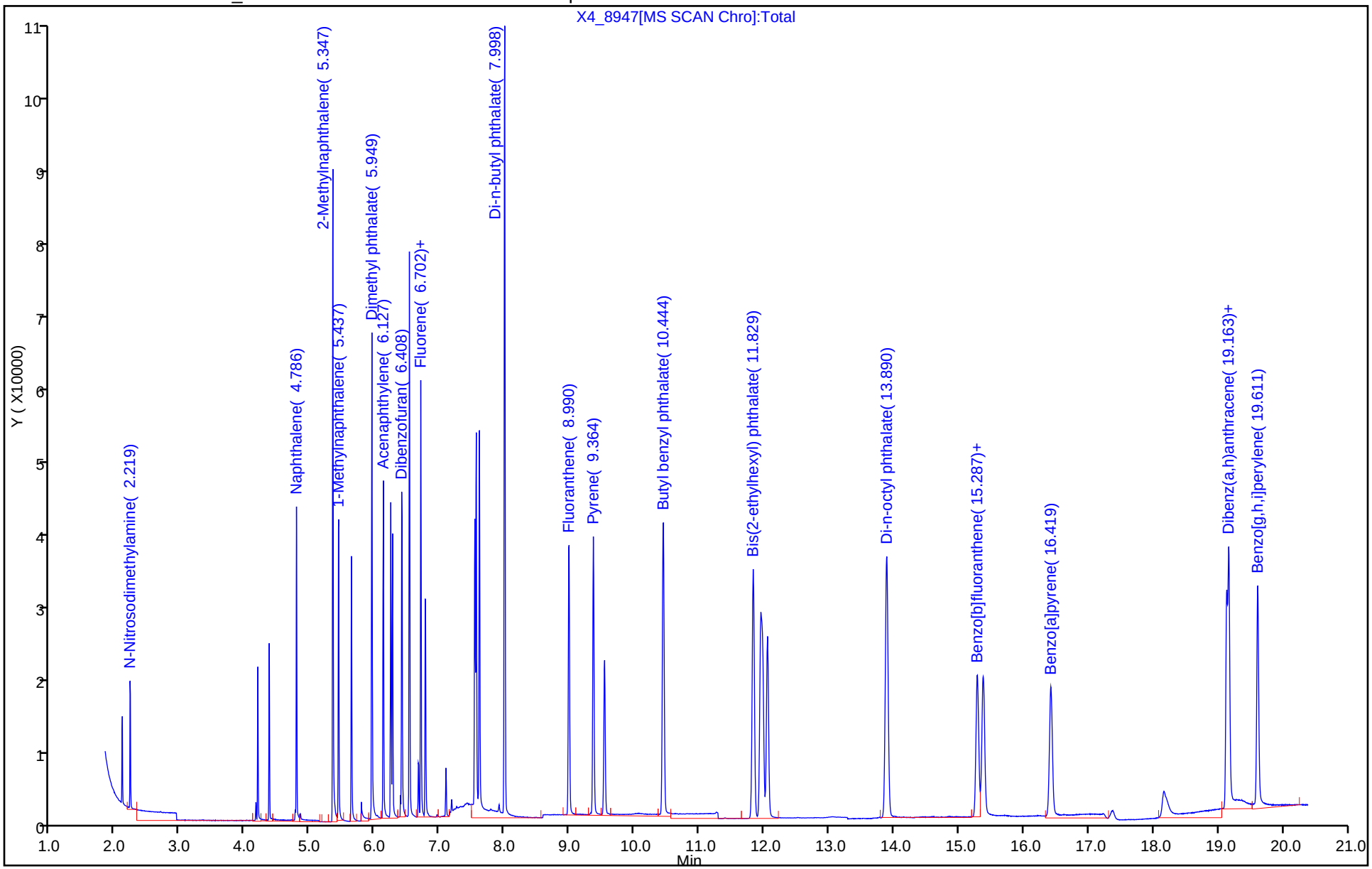
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 13:44:04 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8947.D				
Injection Date:	06-Jan-2014 11:54:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	CCV	Lab Sample ID:		Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

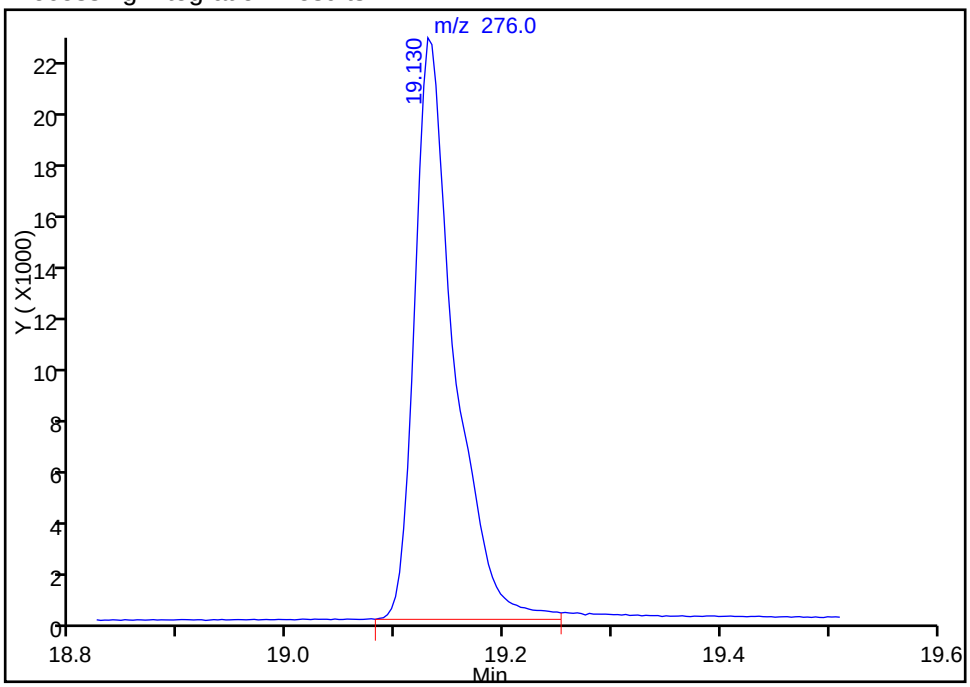
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8947.D				
Injection Date:	06-Jan-2014 11:54:30	Instrument ID:	SMS_X4		
Lims ID:	CCV	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

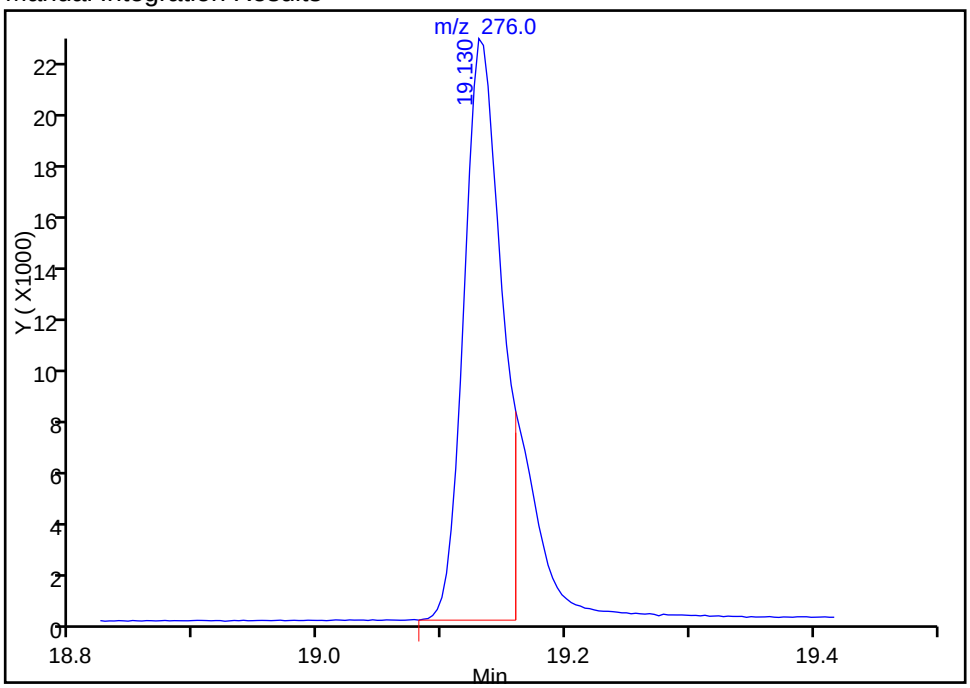
Processing Integration Results

RT: 19.13
Response: 57098
Amount: 810.6584



Manual Integration Results

RT: 19.13
Response: 47478
Amount: 674.0768



Reviewer: vasquezk, 06-Jan-2014 10:37:01
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8608.D
Lims ID: DFTPP Lab Sample ID:
Client ID:
Sample Type: DFTPP
Inject. Date: 30-Nov-2013 08:47:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 01-Dec-2013 08:07:47 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 30-Nov-2013 07:23:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
8 Pentachlorophenol_T	266	4.212	4.212	0.0	79	1023585	0	a
9 DFTPP								
10 Benzidine_T	184	5.348	5.348	0.0	96	6545124	0	a
12 4,4'-DDD	235	5.514	5.514	0.0	50	97	0	
13 4,4'-DDT	235	6.111	6.111	0.0	96	2774541	0	a
11 4,4'-DDE	246	5.416	5.416	0.0	46	59	0	

QC Flag Legend

Review Flags
M - Manually Integrated
a - User Assigned ID

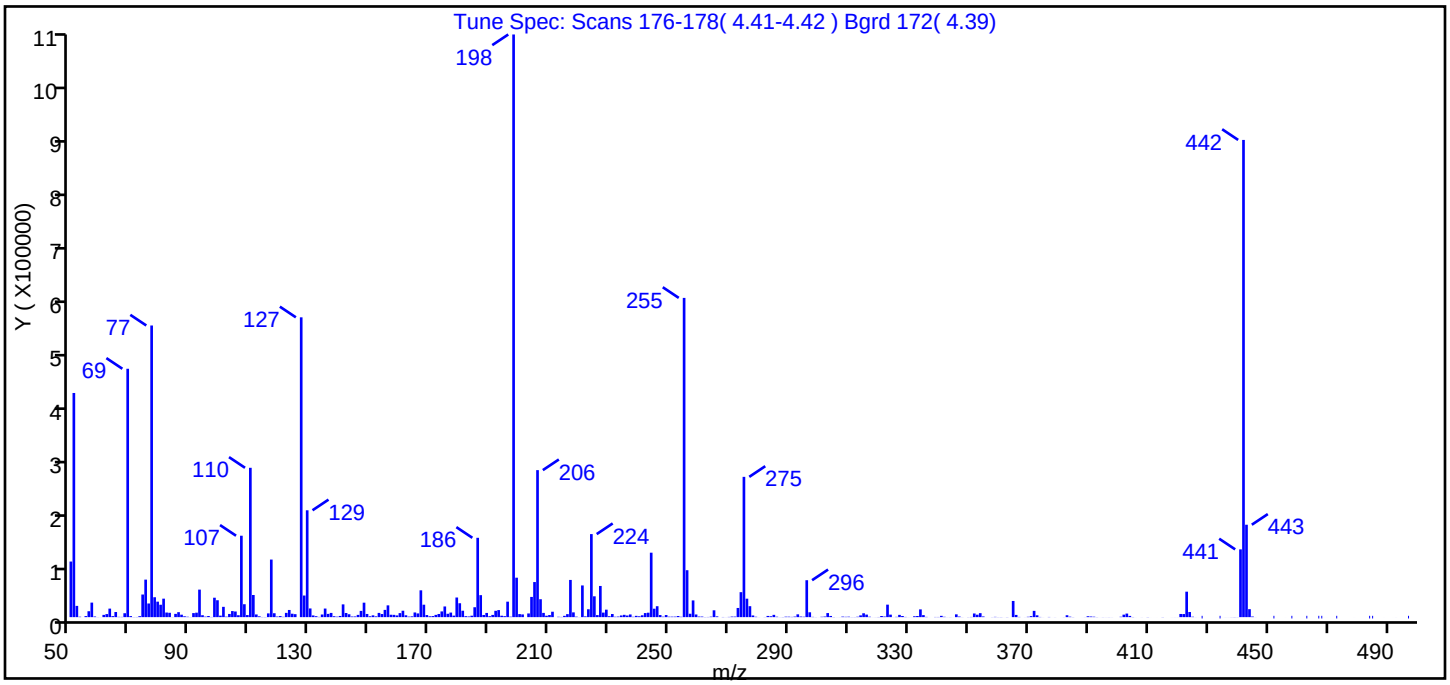
Report Date: 01-Dec-2013 08:07:48 Chrom Revision: 2.1 15-Oct-2013 07:52:24

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8608.D				
Injection Date:	30-Nov-2013 08:47:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Tune Method:	DFTPP Method 8270				

9 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	38.50
68	Less than 2.00% of mass 69	0.70 (1.60)
69	Present	42.60
70	Less than 2.00% of mass 69	0.20 (0.40)
127	40.00 - 60.00% of mass 198	51.50
197	Less than 1.00% of mass 198	0.10
199	5.00 - 9.00% of mass 198	6.80
275	10.00 - 30.00% of mass 198	24.10
365	Greater than 1.00% of mass 198	2.80
441	Present, but less than mass 443%	11.60 (73.30)
442	Greater than 40.00% of mass 198	81.90
443	17.00 - 23.00% of mass 442	15.90 (19.40)

Data File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8608.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 30-Nov-2013 08:47:30
Spectrum: Tune Spec: Scans 176-178(4.41-4.42) Bgrd 172(4.39)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 404

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	95792	153.00	7297	256.00	80872	359.00	459
51.00	386240	154.00	5372	257.00	5842	360.00	165
52.00	19400	155.00	12501	258.00	28832	361.00	201
53.00	721	156.00	20304	259.00	4595	362.00	31
55.00	1812	157.00	4127	260.00	1036	363.00	195
56.00	10208	158.00	3938	261.00	970	365.00	27888
57.00	25048	159.00	2960	262.00	234	366.00	3826
58.00	1103	160.00	6933	263.00	316	367.00	381
59.00	137	161.00	11066	264.00	830	369.00	74
60.00	84	162.00	3195	265.00	11778	370.00	601
61.00	3899	163.00	916	266.00	1312	371.00	1696
62.00	5275	164.00	1365	268.00	275	372.00	10826
63.00	14691	165.00	8045	269.00	89	373.00	3144
64.00	1771	166.00	6409	270.00	387	374.00	339
65.00	8852	167.00	46208	271.00	981	375.00	66
66.00	495	168.00	21432	272.00	938	377.00	316
67.00	410	169.00	3602	273.00	15818	378.00	17
68.00	6753	170.00	1475	274.00	43032	379.00	88
69.00	427968	171.00	1856	275.00	241728	380.00	6
70.00	1785	172.00	3909	276.00	31816	381.00	21
71.00	236	173.00	5444	277.00	18888	382.00	120
72.00	287	174.00	9885	278.00	2867	383.00	3267
73.00	1663	175.00	18408	279.00	669	384.00	797
74.00	38984	176.00	5812	280.00	98	385.00	186
75.00	64656	177.00	7865	282.00	163	386.00	4
76.00	23536	178.00	2606	283.00	2087	388.00	14
77.00	502528	179.00	33824	284.00	1485	389.00	101
78.00	34288	180.00	23944	285.00	3947	390.00	1544
79.00	26672	181.00	11051	286.00	748	391.00	1068
80.00	21360	182.00	1652	287.00	118	392.00	743
81.00	31848	183.00	1131	288.00	248	393.00	179
82.00	7944	184.00	2475	289.00	797	394.00	29
83.00	7510	185.00	17056	290.00	772	395.00	128

Report Date: 01-Dec-2013 08:07:48 Chrom Revision: 2.1 15-Oct-2013 07:52:24
Data File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8608.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 30-Nov-2013 08:47:30
Spectrum: Tune Spec: Scans 176-178(4.41-4.42) Bgrd 172(4.39)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 404

m/z	Y	m/z	Y	m/z	Y	m/z	Y
84.00	166	186.00	136704	291.00	442	396.00	75
85.00	5631	187.00	37888	292.00	966	397.00	130
86.00	8558	188.00	3727	293.00	4831	398.00	81
87.00	4214	189.00	7242	294.00	1042	401.00	654
88.00	1442	190.00	1609	295.00	711	402.00	4305
89.00	700	191.00	3840	296.00	63624	403.00	6160
90.00	173	192.00	10939	297.00	8367	404.00	2125
91.00	6977	193.00	12165	298.00	458	405.00	264
92.00	7691	194.00	2434	299.00	137	406.00	28
93.00	47432	195.00	1680	300.00	49	408.00	68
94.00	3294	196.00	26664	301.00	649	409.00	8
95.00	860	197.00	783	302.00	1048	410.00	206
96.00	1941	198.00	1003968	303.00	7019	411.00	20
97.00	312	199.00	67976	304.00	2053	412.00	11
98.00	33472	200.00	5278	305.00	243	413.00	17
99.00	29120	201.00	4699	306.00	66	415.00	199
100.00	2583	203.00	6347	307.00	98	416.00	10
101.00	17752	204.00	34832	308.00	927	418.00	42
102.00	831	205.00	60456	309.00	589	419.00	64
103.00	5501	206.00	253312	310.00	798	420.00	61
104.00	10476	207.00	30872	311.00	183	421.00	5466
105.00	9738	208.00	7313	312.00	205	422.00	5325
106.00	3310	209.00	2456	313.00	674	423.00	43888
107.00	140288	210.00	3658	314.00	3052	424.00	8827
108.00	22256	211.00	9340	315.00	6689	425.00	738
109.00	3596	213.00	623	316.00	4376	426.00	64
110.00	257344	214.00	380	317.00	743	427.00	27
111.00	38168	215.00	2240	318.00	59	428.00	1
112.00	4631	216.00	5162	319.00	112	433.00	13
113.00	1413	217.00	64112	320.00	275	434.00	1
114.00	283	218.00	8232	321.00	1968	435.00	34
115.00	261	219.00	837	322.00	1061	436.00	71
116.00	6460	220.00	138	323.00	21528	437.00	61
117.00	99224	221.00	54624	324.00	4297	438.00	141

Report Date: 01-Dec-2013 08:07:48 Chrom Revision: 2.1 15-Oct-2013 07:52:24
Data File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8608.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 30-Nov-2013 08:47:30
Spectrum: Tune Spec: Scans 176-178(4.41-4.42) Bgrd 172(4.39)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 404

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	6732	222.00	1317	325.00	107	439.00	217
119.00	1030	223.00	13588	326.00	490	440.00	146
120.00	1811	224.00	143104	327.00	3920	441.00	116768
121.00	533	225.00	35896	328.00	1969	442.00	822272
122.00	7342	226.00	3531	329.00	375	443.00	159232
123.00	12366	227.00	53736	330.00	93	444.00	13738
124.00	5891	228.00	7815	331.00	55	445.00	1053
125.00	5124	229.00	12892	332.00	1518	446.00	61
127.00	516608	230.00	1606	333.00	1957	449.00	11
128.00	37240	231.00	5385	334.00	13373	451.00	12
129.00	184128	232.00	679	335.00	3462	452.00	3
130.00	14978	233.00	979	336.00	427	454.00	7
131.00	2914	234.00	2893	337.00	30	456.00	17
132.00	1606	235.00	3982	338.00	4	458.00	2
133.00	408	236.00	2780	339.00	320	463.00	1
134.00	4545	237.00	4616	340.00	318	467.00	1
135.00	14804	238.00	597	341.00	2249	468.00	2
136.00	5605	239.00	2245	342.00	592	469.00	26
137.00	7287	240.00	1476	343.00	93	470.00	17
138.00	1567	241.00	3182	344.00	140	473.00	1
139.00	811	242.00	7030	345.00	34	474.00	5
140.00	2038	243.00	7639	346.00	4818	478.00	8
141.00	22016	244.00	111056	347.00	1023	479.00	19
142.00	7162	245.00	14527	348.00	117	480.00	5
143.00	4968	246.00	18832	349.00	12	482.00	8
144.00	1088	247.00	3607	350.00	171	484.00	2
145.00	1180	248.00	802	351.00	351	485.00	3
146.00	3885	249.00	3617	352.00	6309	489.00	13
147.00	10768	250.00	799	353.00	4209	492.00	11
148.00	24928	251.00	854	354.00	6868	493.00	36
149.00	5484	252.00	903	355.00	1146	495.00	6
150.00	1529	253.00	1917	356.00	35	496.00	5
151.00	3086	254.00	628	357.00	17	497.00	2
152.00	1333	255.00	550080	358.00	152	498.00	7

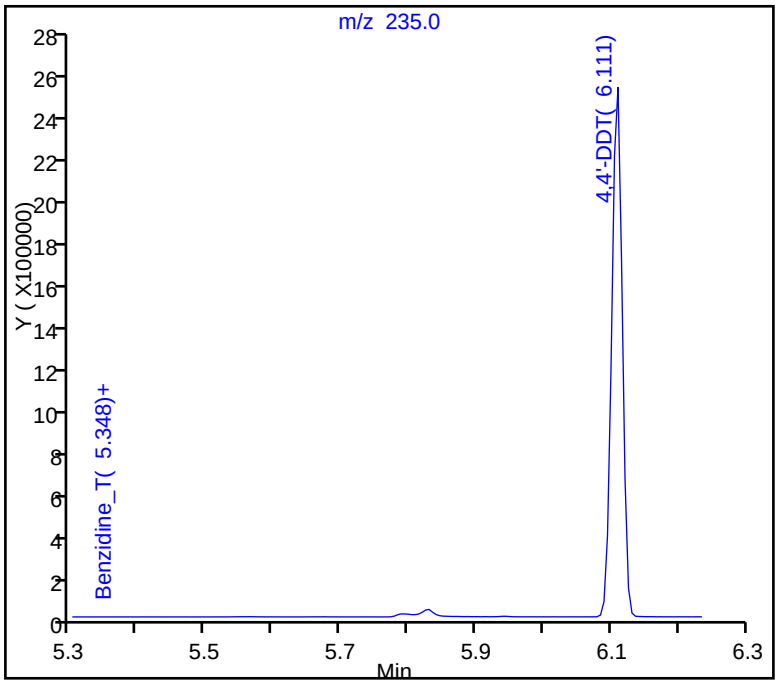
m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	6732	222.00	1317	325.00	107	439.00	217
119.00	1030	223.00	13588	326.00	490	440.00	146
120.00	1811	224.00	143104	327.00	3920	441.00	116768
121.00	533	225.00	35896	328.00	1969	442.00	822272
122.00	7342	226.00	3531	329.00	375	443.00	159232
123.00	12366	227.00	53736	330.00	93	444.00	13738
124.00	5891	228.00	7815	331.00	55	445.00	1053
125.00	5124	229.00	12892	332.00	1518	446.00	61
127.00	516608	230.00	1606	333.00	1957	449.00	11
128.00	37240	231.00	5385	334.00	13373	451.00	12
129.00	184128	232.00	679	335.00	3462	452.00	3
130.00	14978	233.00	979	336.00	427	454.00	7
131.00	2914	234.00	2893	337.00	30	456.00	17
132.00	1606	235.00	3982	338.00	4	458.00	2
133.00	408	236.00	2780	339.00	320	463.00	1
134.00	4545	237.00	4616	340.00	318	467.00	1
135.00	14804	238.00	597	341.00	2249	468.00	2
136.00	5605	239.00	2245	342.00	592	469.00	26
137.00	7287	240.00	1476	343.00	93	470.00	17
138.00	1567	241.00	3182	344.00	140	473.00	1
139.00	811	242.00	7030	345.00	34	474.00	5
140.00	2038	243.00	7639	346.00	4818	478.00	8
141.00	22016	244.00	111056	347.00	1023	479.00	19
142.00	7162	245.00	14527	348.00	117	480.00	5
143.00	4968	246.00	18832	349.00	12	482.00	8
144.00	1088	247.00	3607	350.00	171	484.00	2
145.00	1180	248.00	802	351.00	351	485.00	3
146.00	3885	249.00	3617	352.00	6309	489.00	13
147.00	10768	250.00	799	353.00	4209	492.00	11
148.00	24928	251.00	854	354.00	6868	493.00	36
149.00	5484	252.00	903	355.00	1146	495.00	6
150.00	1529	253.00	1917	356.00	35	496.00	5
151.00	3086	254.00	628	357.00	17	497.00	2
152.00	1333	255.00	550080	358.00	152	498.00	7

Breakdown Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8608.D				
Injection Date:	30-Nov-2013 08:47:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

13 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

13 4,4'-DDT, Area = 2774541
11 4,4'-DDE, Area = 59
12 4,4'-DDD, Area = 97

%Breakdown: 0.01%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Denver

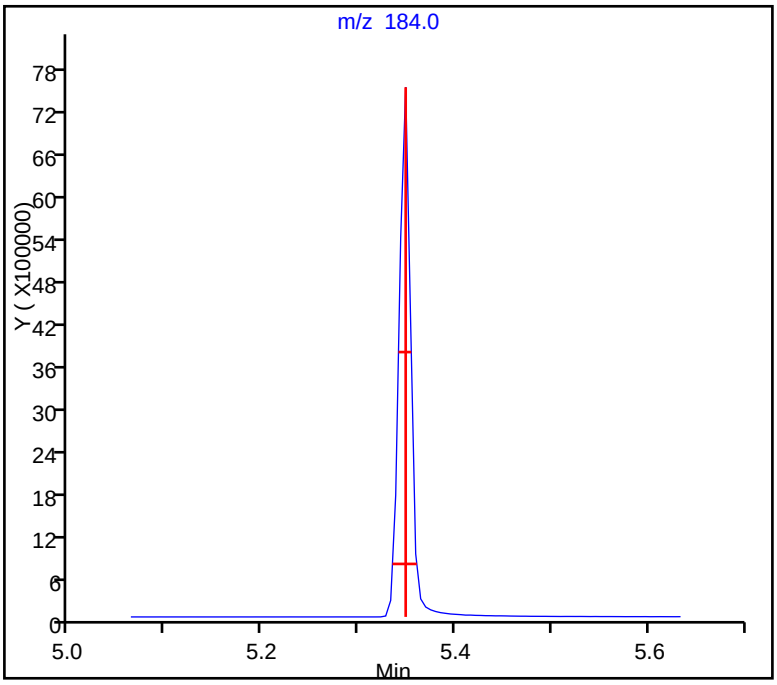
Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8608.D				
Injection Date:	30-Nov-2013 08:47:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

10 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.012 (min.)
Front Width = 0.014 (min.)

Tailing Factor = 0.8, Max. Tailing < 5.00
Passed



Peak Tailing Report

TestAmerica Denver

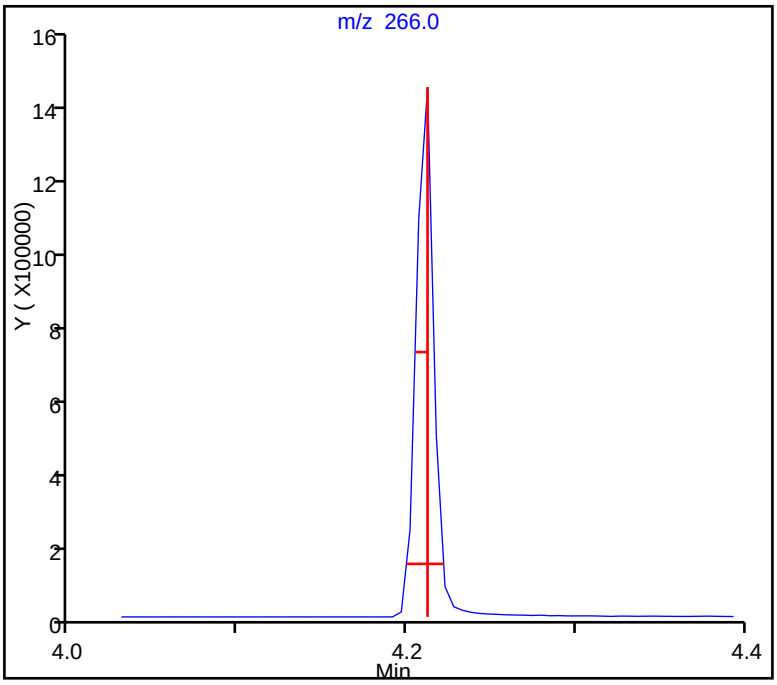
Data File:	\\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8608.D				
Injection Date:	30-Nov-2013 08:47:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

8 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.013 (min.)

Tailing Factor = 0.8, Max. Tailing < 3.00
Passed



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8885.D
Lims ID: DFTPP Lab Sample ID:
Client ID:
Sample Type: DFTPP
Inject. Date: 31-Dec-2013 13:43:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:05 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 31-Dec-2013 12:21:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
8 Pentachlorophenol_T	266	4.202	4.202	0.0	82	1076135	0	
9 DFTPP								
10 Benzidine_T	184	5.317	5.317	0.0	96	7338365	0	
12 4,4'-DDD	235	5.753	5.753	0.0	93	68127	0	
11 4,4'-DDE	246	5.795	5.795	0.0	53	5672	0	
13 4,4'-DDT	235	6.070	6.070	0.0	96	3614496	0	

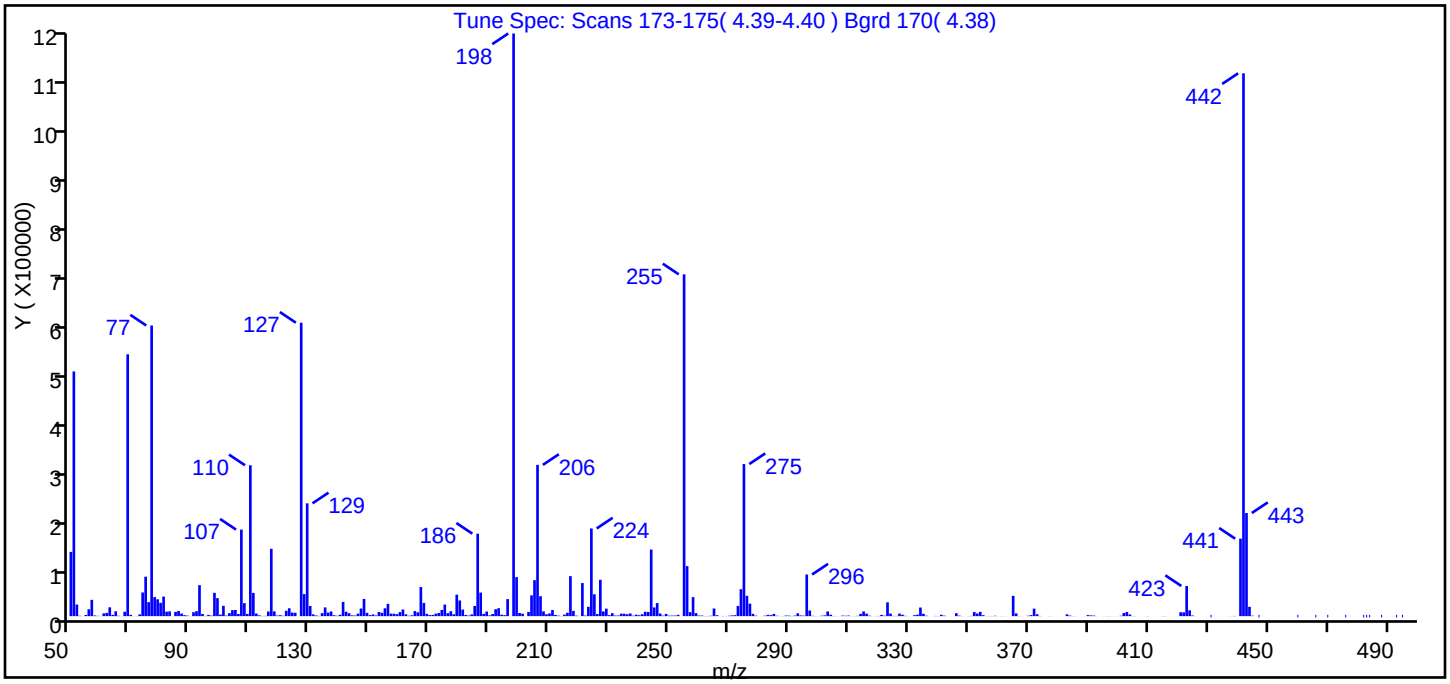
Report Date: 02-Jan-2014 09:28:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8885.D				
Injection Date:	31-Dec-2013 13:43:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Tune Method:	DFTPP Method 8270				

9 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	42.00
68	Less than 2.00% of mass 69	0.80 (1.70)
69	Present	44.90
70	Less than 2.00% of mass 69	0.20 (0.50)
127	40.00 - 60.00% of mass 198	50.40
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.70
275	10.00 - 30.00% of mass 198	26.10
365	Greater than 1.00% of mass 198	3.50
441	Present, but less than mass 443%	13.30 (75.10)
442	Greater than 40.00% of mass 198	93.20
443	17.00 - 23.00% of mass 442	17.70 (19.00)

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8885.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 31-Dec-2013 13:43:30
Spectrum: Tune Spec: Scans 173-175(4.39-4.40) Bgrd 170(4.38)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 409

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	128024	154.00	6714	261.00	1159	367.00	360
51.00	487680	155.00	15663	262.00	314	368.00	83
52.00	23128	156.00	24488	263.00	404	370.00	897
53.00	761	157.00	5029	264.00	780	371.00	2079
54.00	91	158.00	4841	265.00	15303	372.00	14941
55.00	2330	159.00	3956	266.00	1918	373.00	3819
56.00	13663	160.00	7932	267.00	99	374.00	428
57.00	32496	161.00	13239	268.00	373	375.00	29
58.00	1324	162.00	3705	269.00	177	376.00	11
59.00	578	163.00	804	270.00	803	377.00	248
60.00	117	164.00	1729	271.00	1551	378.00	84
61.00	5495	165.00	10048	272.00	1874	379.00	36
62.00	6462	166.00	7746	273.00	20344	380.00	21
63.00	17632	167.00	58008	274.00	53600	381.00	46
64.00	2530	168.00	26296	275.00	303104	382.00	8
65.00	9665	169.00	4574	276.00	40592	383.00	3695
66.00	746	170.00	2169	277.00	24912	384.00	1165
67.00	82	171.00	2499	278.00	4610	385.00	361
68.00	8762	172.00	4921	279.00	1071	386.00	106
69.00	521856	173.00	6364	280.00	42	387.00	36
70.00	2555	174.00	12329	281.00	61	388.00	99
71.00	143	175.00	23056	282.00	938	389.00	83
72.00	209	176.00	5933	283.00	2523	390.00	2103
73.00	3486	177.00	9826	284.00	1995	391.00	1502
74.00	47152	178.00	3762	285.00	4429	392.00	1136
75.00	78640	179.00	42720	286.00	773	393.00	128
76.00	27880	180.00	31280	287.00	138	394.00	15
77.00	579200	181.00	13115	288.00	228	395.00	86
78.00	38072	182.00	2334	289.00	1154	396.00	102
79.00	33640	183.00	1194	290.00	1105	397.00	249
80.00	26488	184.00	3390	291.00	389	398.00	136
81.00	38984	185.00	20344	292.00	1129	399.00	109
82.00	8961	186.00	164352	293.00	5680	400.00	66

Report Date: 02-Jan-2014 09:28:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24
Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8885.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 31-Dec-2013 13:43:30
Spectrum: Tune Spec: Scans 173-175(4.39-4.40) Bgrd 170(4.38)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 409

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	9493	187.00	46880	294.00	1403	401.00	800
84.00	82	188.00	4563	295.00	1067	402.00	6209
85.00	8389	189.00	9166	296.00	82968	403.00	8144
86.00	10350	190.00	1601	297.00	11236	404.00	3363
87.00	5108	191.00	4297	298.00	726	405.00	403
88.00	1941	192.00	13782	299.00	259	406.00	152
89.00	1031	193.00	15818	300.00	111	408.00	44
90.00	111	194.00	2827	301.00	908	409.00	111
91.00	7722	195.00	2000	302.00	1504	410.00	265
92.00	9886	196.00	33968	303.00	9333	411.00	66
93.00	61760	198.00	1161216	304.00	2822	412.00	5
94.00	4384	199.00	77800	305.00	416	413.00	27
95.00	508	200.00	6237	306.00	168	415.00	286
96.00	2444	201.00	4871	307.00	90	416.00	137
97.00	1099	203.00	8414	308.00	1134	417.00	19
98.00	46480	204.00	41424	309.00	813	419.00	85
99.00	35936	205.00	71712	310.00	1188	420.00	49
100.00	3129	206.00	301440	311.00	168	421.00	7776
101.00	20600	207.00	39744	312.00	208	422.00	7602
102.00	1101	208.00	9586	313.00	647	423.00	60096
103.00	6057	209.00	3755	314.00	4450	424.00	11587
104.00	11961	210.00	5324	315.00	9384	425.00	1322
105.00	12371	211.00	12391	316.00	4931	426.00	119
106.00	4282	212.00	2448	317.00	1041	427.00	28
107.00	172480	213.00	1068	318.00	114	430.00	66
108.00	25888	214.00	292	319.00	134	431.00	3
109.00	4413	215.00	3122	320.00	410	433.00	17
110.00	300672	216.00	6786	321.00	2501	434.00	52
111.00	46320	217.00	79720	322.00	954	435.00	66
112.00	5243	218.00	10467	323.00	27600	436.00	18
113.00	1649	219.00	1018	324.00	5122	437.00	104
114.00	432	221.00	65968	325.00	492	438.00	171
115.00	555	222.00	1213	326.00	455	439.00	415
116.00	9298	223.00	18584	327.00	5036	441.00	154368

Report Date: 02-Jan-2014 09:28:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24
Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8885.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 31-Dec-2013 13:43:30
Spectrum: Tune Spec: Scans 173-175(4.39-4.40) Bgrd 170(4.38)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 409

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	134144	224.00	174784	328.00	2763	442.00	1081856
118.00	9537	225.00	43592	329.00	633	443.00	205504
119.00	1254	226.00	4143	330.00	167	444.00	18616
120.00	1916	227.00	72464	332.00	1938	445.00	937
121.00	714	228.00	9374	333.00	2898	447.00	1
122.00	10751	229.00	14987	334.00	17160	456.00	23
123.00	15764	230.00	2036	335.00	4680	457.00	29
124.00	7111	231.00	5909	336.00	859	459.00	15
125.00	6695	232.00	1261	337.00	92	460.00	4
127.00	584832	233.00	1321	338.00	57	464.00	12
128.00	43864	234.00	4907	339.00	437	466.00	3
129.00	224832	235.00	4793	340.00	317	467.00	20
130.00	20232	236.00	3745	341.00	2774	468.00	21
131.00	3524	237.00	5322	342.00	989	469.00	20
132.00	1391	238.00	931	343.00	51	470.00	1
133.00	473	239.00	2882	344.00	53	471.00	20
134.00	5950	240.00	1839	346.00	5809	473.00	20
135.00	17400	241.00	3827	347.00	1009	474.00	11
136.00	7112	242.00	8657	348.00	251	475.00	49
137.00	9391	243.00	8306	349.00	66	476.00	1
138.00	1867	244.00	132736	350.00	193	478.00	51
139.00	842	245.00	17360	351.00	568	479.00	8
140.00	2746	246.00	26040	352.00	8095	480.00	25
141.00	28336	247.00	5288	353.00	5214	482.00	3
142.00	8742	248.00	1093	354.00	8535	483.00	1
143.00	5825	249.00	4508	355.00	1902	484.00	3
144.00	1623	250.00	983	356.00	116	485.00	22
145.00	1308	251.00	1154	357.00	352	488.00	4
146.00	4956	252.00	1229	358.00	225	490.00	54
147.00	15195	253.00	2550	359.00	742	492.00	9
148.00	34304	255.00	681152	360.00	91	493.00	2
149.00	6558	256.00	99704	361.00	213	495.00	4
150.00	2081	257.00	7991	362.00	110	496.00	17
151.00	3343	258.00	37864	363.00	103		

Report Date: 02-Jan-2014 09:28:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24
Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8885.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 31-Dec-2013 13:43:30
Spectrum: Tune Spec: Scans 173-175(4.39-4.40) Bgrd 170(4.38)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 409

m/z	Y	m/z	Y	m/z	Y	m/z	Y
152.00	1430	259.00	6039	365.00	40440		
153.00	8232	260.00	1207	366.00	5426		

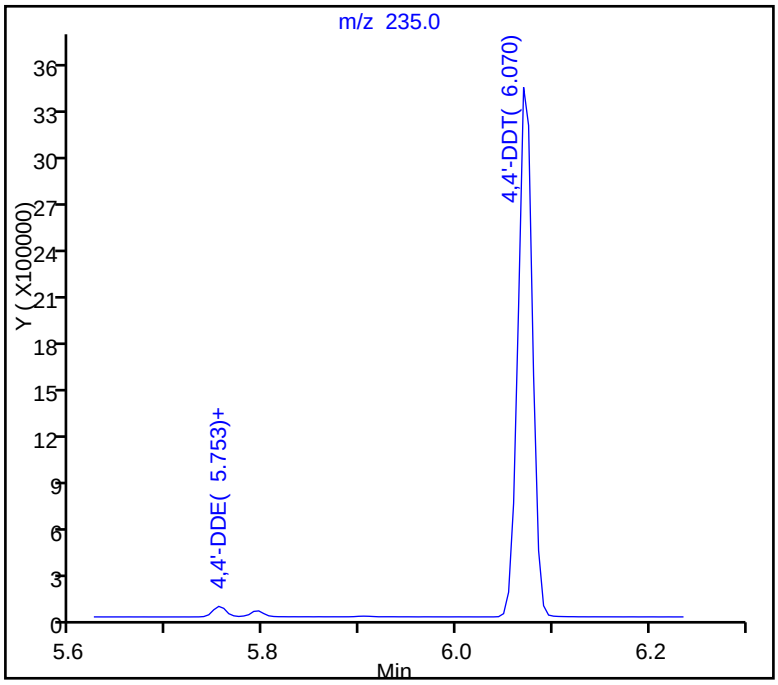
Report Date: 02-Jan-2014 09:28:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

Breakdown Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8885.D				
Injection Date:	31-Dec-2013 13:43:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

13 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

13 4,4'-DDT, Area = 3614496
11 4,4'-DDE, Area = 5672
12 4,4'-DDD, Area = 68127

%Breakdown: 2.00%, Max Limit: 20.00%
Passed

Report Date: 02-Jan-2014 09:28:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

Peak Tailing Report

TestAmerica Denver

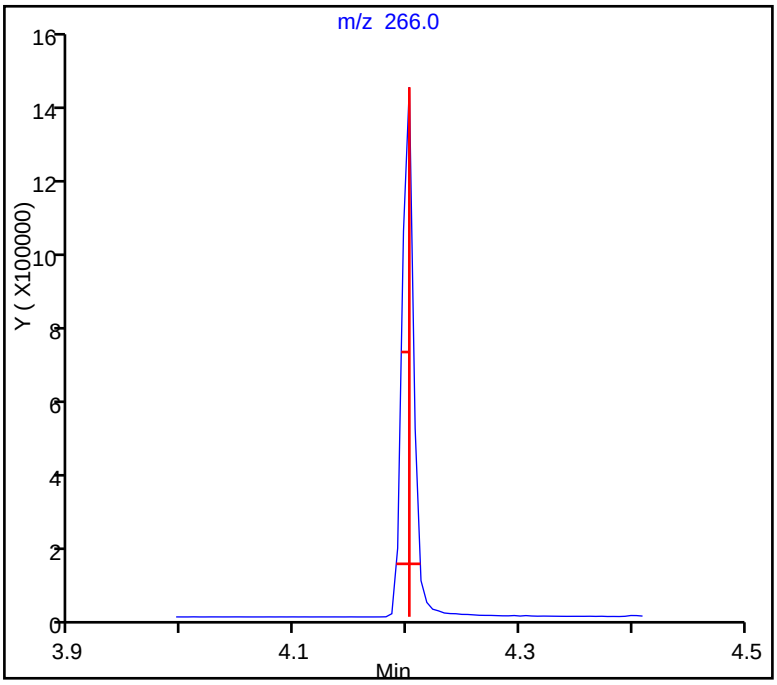
Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8885.D				
Injection Date:	31-Dec-2013 13:43:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

8 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.012 (min.)

Tailing Factor = 0.8, Max. Tailing < 3.00
Passed



Report Date: 02-Jan-2014 09:28:06 Chrom Revision: 2.1 15-Oct-2013 07:52:24

Peak Tailing Report

TestAmerica Denver

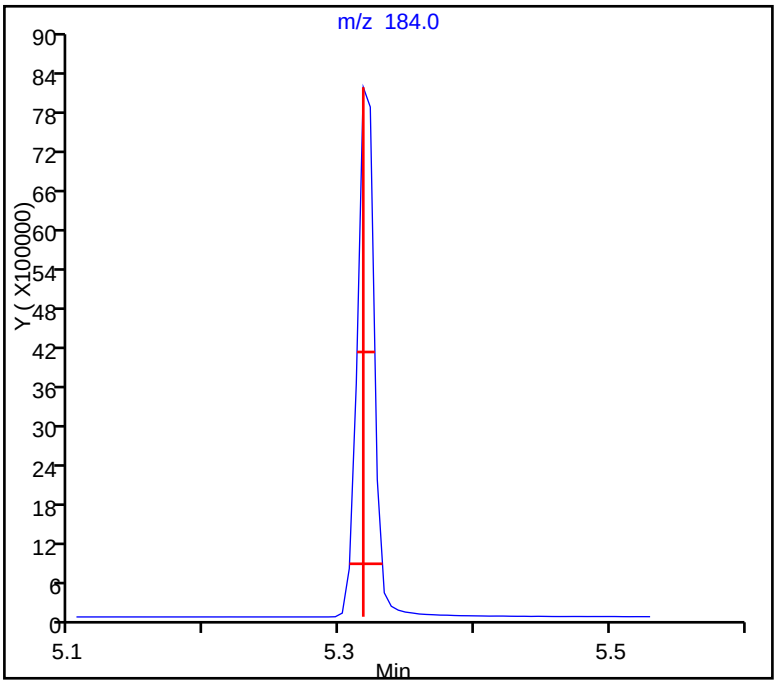
Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8885.D				
Injection Date:	31-Dec-2013 13:43:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

10 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.014 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 1.4, Max. Tailing < 5.00
Passed



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8915.D
Lims ID: DFTPP Lab Sample ID:
Client ID:
Sample Type: DFTPP
Inject. Date: 02-Jan-2014 13:20:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:56 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 02-Jan-2014 11:42:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
8 Pentachlorophenol_T	266	4.202	4.202	0.0	81	803025	0	
9 DFTPP								
10 Benzidine_T	184	5.323	5.323	0.0	96	6021738	0	
12 4,4'-DDD	235	5.753	5.753	0.0	88	79514	0	
11 4,4'-DDE	246	5.795	5.795	0.0	55	2763	0	
13 4,4'-DDT	235	6.075	6.075	0.0	97	2679219	0	

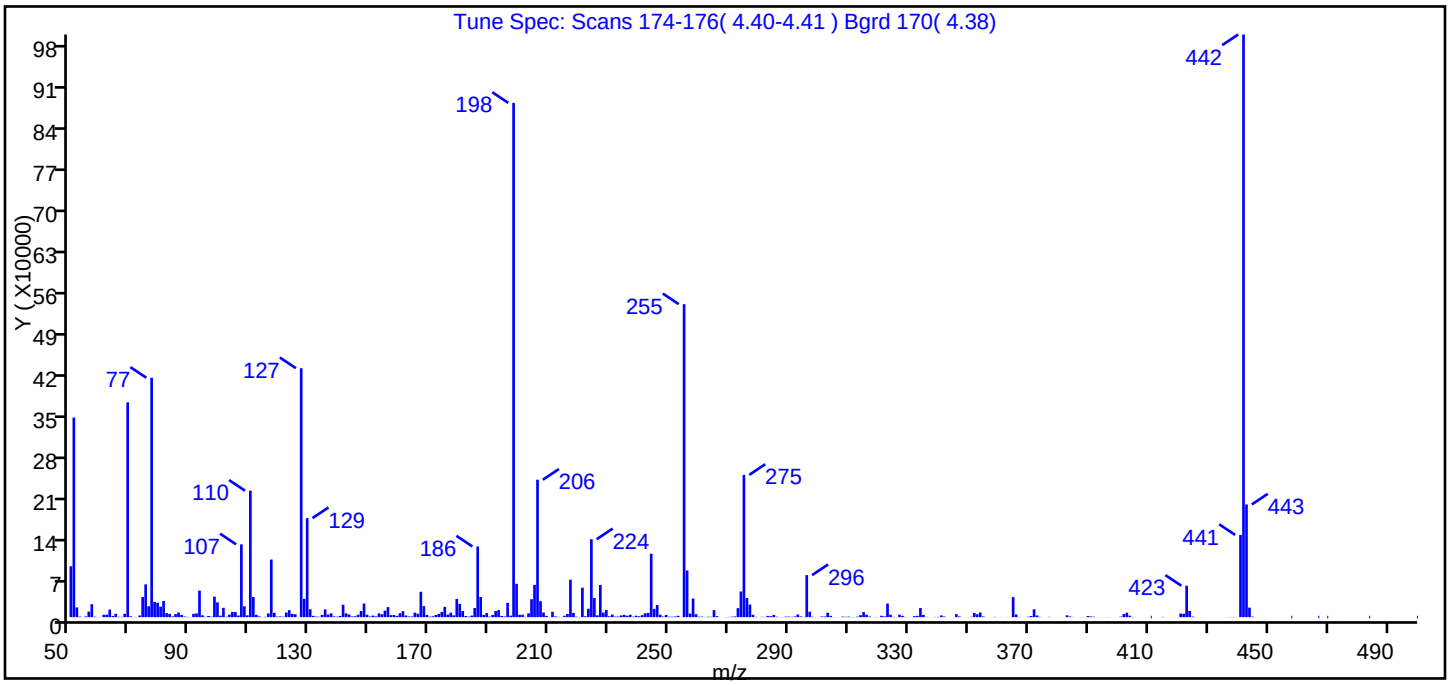
Report Date: 06-Jan-2014 10:05:57 Chrom Revision: 2.1 15-Oct-2013 07:52:24

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8915.D				
Injection Date:	02-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Tune Method:	DFTPP Method 8270				

9 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	38.80
68	Less than 2.00% of mass 69	0.70 (1.60)
69	Present	41.80
70	Less than 2.00% of mass 69	0.20 (0.40)
127	40.00 - 60.00% of mass 198	48.40
197	Less than 1.00% of mass 198	0.30
199	5.00 - 9.00% of mass 198	6.50
275	10.00 - 30.00% of mass 198	27.70
365	Greater than 1.00% of mass 198	3.90
441	Present, but less than mass 443%	16.00 (73.00)
442	Greater than 40.00% of mass 198	113.30
443	17.00 - 23.00% of mass 442	21.90 (19.30)

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8915.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 02-Jan-2014 13:20:30
Spectrum: Tune Spec: Scans 174-176(4.40-4.41) Bgrd 170(4.38)
Base Peak: 442.00
Minimum % Base Peak: 0
Number of Points: 412

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	86656	155.00	11110	260.00	738	372.00	13404
51.00	340096	156.00	17176	261.00	866	373.00	2894
52.00	16592	157.00	3454	262.00	295	374.00	462
53.00	891	158.00	3637	263.00	630	375.00	19
55.00	1353	159.00	2202	264.00	646	377.00	477
56.00	9460	160.00	6690	265.00	12009	378.00	97
57.00	22024	161.00	10070	266.00	1725	379.00	36
58.00	738	162.00	2847	269.00	197	380.00	57
59.00	254	163.00	1140	270.00	393	381.00	38
60.00	36	164.00	1117	271.00	799	382.00	38
61.00	4159	165.00	7590	272.00	1193	383.00	3094
62.00	4196	166.00	5863	273.00	15364	384.00	1164
63.00	12912	167.00	43192	274.00	43712	385.00	317
64.00	1901	168.00	18752	275.00	242432	386.00	47
65.00	5736	169.00	3761	276.00	32464	387.00	16
66.00	660	170.00	991	277.00	21344	388.00	268
67.00	502	171.00	1475	278.00	3993	389.00	101
68.00	5826	172.00	3689	279.00	543	390.00	1905
69.00	366016	173.00	5450	281.00	510	391.00	1196
70.00	1377	174.00	8852	282.00	400	392.00	727
71.00	119	175.00	17592	283.00	2187	393.00	132
72.00	183	176.00	4450	284.00	1606	394.00	91
73.00	2862	177.00	7677	285.00	3803	395.00	93
74.00	34360	178.00	3158	286.00	699	396.00	122
75.00	55840	179.00	31080	287.00	84	397.00	198
76.00	18624	180.00	22656	288.00	235	398.00	29
77.00	407936	181.00	10374	289.00	856	399.00	44
78.00	25968	182.00	1841	290.00	855	400.00	16
79.00	24432	183.00	922	291.00	548	401.00	982
80.00	17832	184.00	2696	292.00	1154	402.00	5226
81.00	27536	185.00	15673	293.00	4584	403.00	7613
82.00	6790	186.00	120432	294.00	1212	404.00	2485
83.00	5641	187.00	34272	295.00	466	405.00	378

Report Date: 06-Jan-2014 10:05:57 Chrom Revision: 2.1 15-Oct-2013 07:52:24
Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8915.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 02-Jan-2014 13:20:30
Spectrum: Tune Spec: Scans 174-176(4.40-4.41) Bgrd 170(4.38)
Base Peak: 442.00
Minimum % Base Peak: 0
Number of Points: 412

m/z	Y	m/z	Y	m/z	Y	m/z	Y
84.00	1233	188.00	3788	296.00	71592	406.00	40
85.00	5253	189.00	6840	297.00	9271	407.00	6
86.00	7896	190.00	980	298.00	603	408.00	14
87.00	3859	191.00	3696	299.00	125	409.00	11
88.00	1082	192.00	10365	300.00	98	410.00	51
89.00	501	193.00	11956	301.00	1073	411.00	3
90.00	186	194.00	2014	302.00	1130	414.00	92
91.00	5622	195.00	1132	303.00	7438	415.00	385
92.00	6367	196.00	24376	304.00	2153	416.00	96
93.00	45240	197.00	2559	305.00	243	419.00	104
94.00	3134	198.00	876288	306.00	179	420.00	87
95.00	630	199.00	56712	307.00	53	421.00	6061
96.00	2042	200.00	4052	308.00	965	422.00	5725
97.00	825	201.00	4004	309.00	667	423.00	53512
98.00	34928	202.00	513	310.00	893	424.00	10695
99.00	25240	203.00	6507	311.00	315	425.00	965
100.00	2430	204.00	30608	312.00	210	426.00	150
101.00	15906	205.00	54936	313.00	856	428.00	82
102.00	655	206.00	234176	314.00	3381	429.00	49
103.00	4471	207.00	27208	315.00	8616	433.00	50
104.00	9005	208.00	7876	316.00	4173	434.00	30
105.00	8632	209.00	2086	317.00	1040	435.00	25
106.00	2732	211.00	9079	318.00	133	436.00	110
107.00	124056	212.00	1164	319.00	344	437.00	161
108.00	18456	213.00	497	320.00	126	438.00	196
109.00	3059	214.00	297	321.00	2349	439.00	317
110.00	215424	215.00	2420	322.00	1346	441.00	140096
111.00	34288	216.00	5397	323.00	23096	442.00	992832
112.00	3934	217.00	63800	324.00	4275	443.00	192000
113.00	1257	218.00	7326	325.00	434	444.00	16210
114.00	222	219.00	770	326.00	249	445.00	864
115.00	517	220.00	325	327.00	4180	446.00	134
116.00	6340	221.00	50192	328.00	2247	447.00	44
117.00	98168	222.00	1550	329.00	399	450.00	9

Report Date: 06-Jan-2014 10:05:57 Chrom Revision: 2.1 15-Oct-2013 07:52:24
Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8915.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 02-Jan-2014 13:20:30
Spectrum: Tune Spec: Scans 174-176(4.40-4.41) Bgrd 170(4.38)
Base Peak: 442.00
Minimum % Base Peak: 0
Number of Points: 412

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	7293	223.00	14341	330.00	200	453.00	21
119.00	949	224.00	132800	331.00	64	454.00	35
120.00	1185	225.00	32528	332.00	1815	457.00	28
121.00	744	226.00	3068	333.00	2185	458.00	3
122.00	7818	227.00	54880	334.00	15581	459.00	21
123.00	11970	228.00	7769	335.00	3823	460.00	8
124.00	5593	229.00	12196	336.00	465	461.00	57
125.00	5019	230.00	1548	337.00	60	462.00	27
127.00	424192	231.00	4352	338.00	63	463.00	38
128.00	31176	232.00	908	339.00	349	464.00	10
129.00	168768	233.00	1054	340.00	449	467.00	3
130.00	13354	234.00	2923	341.00	2879	468.00	30
131.00	2125	235.00	3866	342.00	993	469.00	62
132.00	1011	236.00	2450	346.00	5134	470.00	1
133.00	586	237.00	4127	347.00	1231	471.00	12
134.00	3810	238.00	719	348.00	118	472.00	22
135.00	13135	239.00	2414	349.00	75	473.00	49
136.00	4512	240.00	1508	350.00	61	475.00	69
137.00	6484	241.00	3401	351.00	606	477.00	9
138.00	1204	242.00	6625	352.00	7027	478.00	12
139.00	876	243.00	7127	353.00	4778	479.00	10
140.00	2087	244.00	108016	354.00	7895	482.00	17
141.00	21104	245.00	14144	355.00	1177	483.00	31
142.00	6480	246.00	20704	357.00	68	484.00	1
143.00	4555	247.00	4194	358.00	106	486.00	20
144.00	1149	248.00	1024	359.00	482	487.00	7
145.00	1496	249.00	3678	360.00	88	488.00	19
146.00	4079	250.00	766	361.00	123	489.00	10
147.00	10453	251.00	751	362.00	20	490.00	44
148.00	23192	252.00	1076	363.00	112	491.00	24
149.00	4068	253.00	2313	364.00	127	492.00	23
150.00	1159	255.00	533248	365.00	34136	493.00	29
151.00	2681	256.00	79504	366.00	4526	497.00	7
152.00	1406	257.00	6173	367.00	376	498.00	59

Report Date: 06-Jan-2014 10:05:57 Chrom Revision: 2.1 15-Oct-2013 07:52:24
Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8915.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 02-Jan-2014 13:20:30
Spectrum: Tune Spec: Scans 174-176(4.40-4.41) Bgrd 170(4.38)
Base Peak: 442.00
Minimum % Base Peak: 0
Number of Points: 412

m/z	Y	m/z	Y	m/z	Y	m/z	Y
153.00	6426	258.00	31688	370.00	723	499.00	4
154.00	4866	259.00	5034	371.00	1965	500.00	3

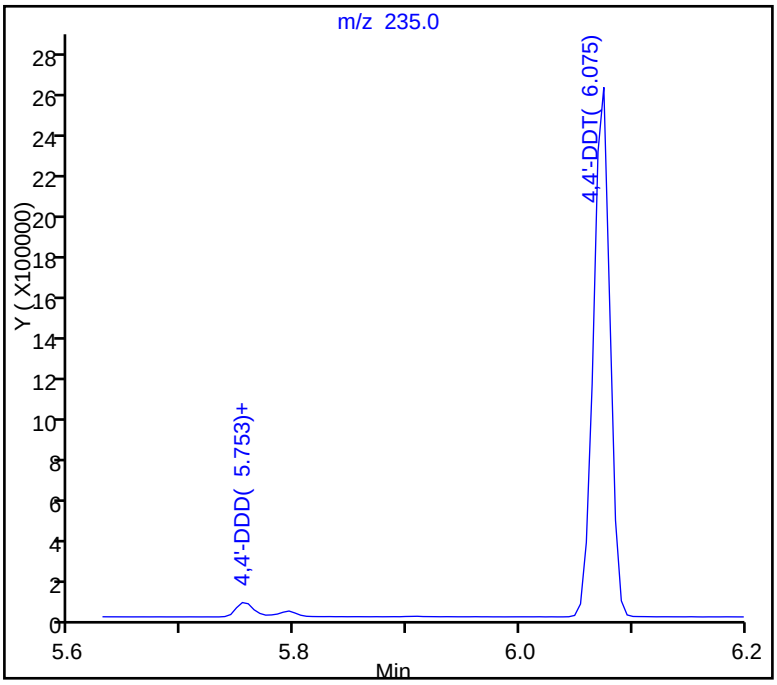
Report Date: 06-Jan-2014 10:05:57 Chrom Revision: 2.1 15-Oct-2013 07:52:24

Breakdown Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8915.D				
Injection Date:	02-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

13 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

13 4,4'-DDT, Area = 2679219
11 4,4'-DDE, Area = 2763
12 4,4'-DDD, Area = 79514

%Breakdown: 2.98%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Denver

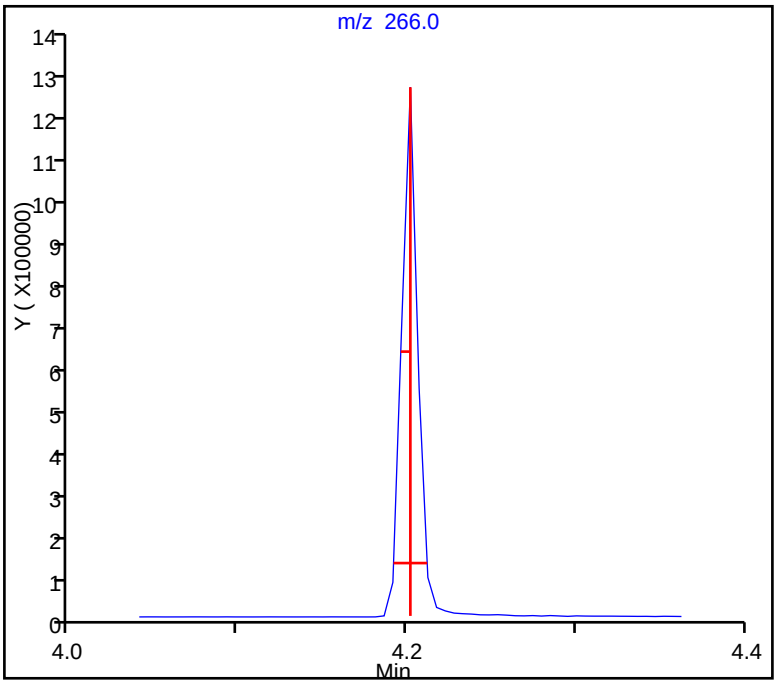
Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8915.D				
Injection Date:	02-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

8 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 1.0, Max. Tailing < 3.00
Passed



Peak Tailing Report

TestAmerica Denver

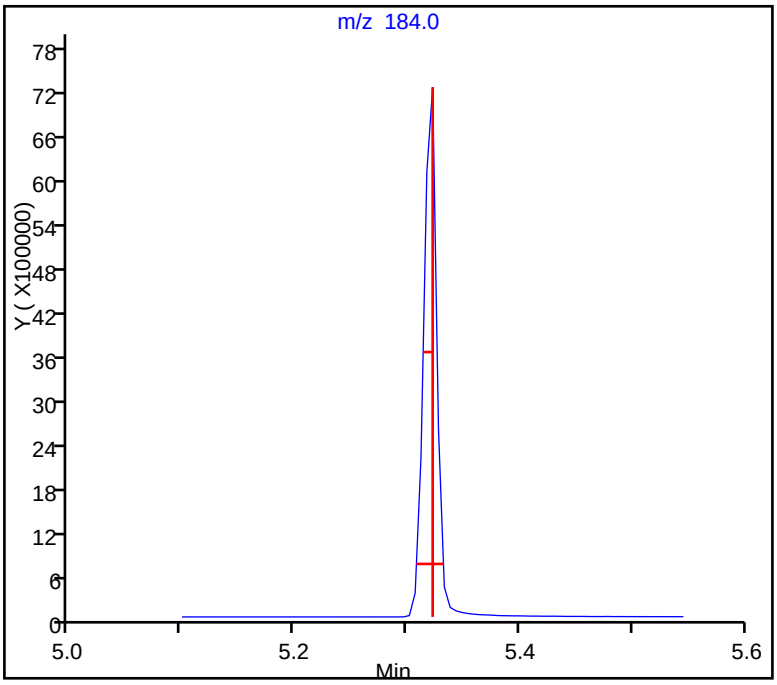
Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8915.D				
Injection Date:	02-Jan-2014 13:20:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

10 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.014 (min.)

Tailing Factor = 0.7, Max. Tailing < 5.00
Passed



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8946.D
Lims ID: DFTPP Lab Sample ID:
Client ID:
Sample Type: DFTPP
Inject. Date: 06-Jan-2014 11:13:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 13:44:03 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 09:51:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
8 Pentachlorophenol_T	266	4.202	4.202	0.0	81	833580	0	
9 DFTPP								
10 Benzidine_T	184	5.322	5.322	0.0	96	5963519	0	
12 4,4'-DDD	235	5.758	5.758	0.0	92	139314	0	
11 4,4'-DDE	246	5.795	5.795	0.0	55	4091	0	
13 4,4'-DDT	235	6.075	6.075	0.0	97	2593296	0	

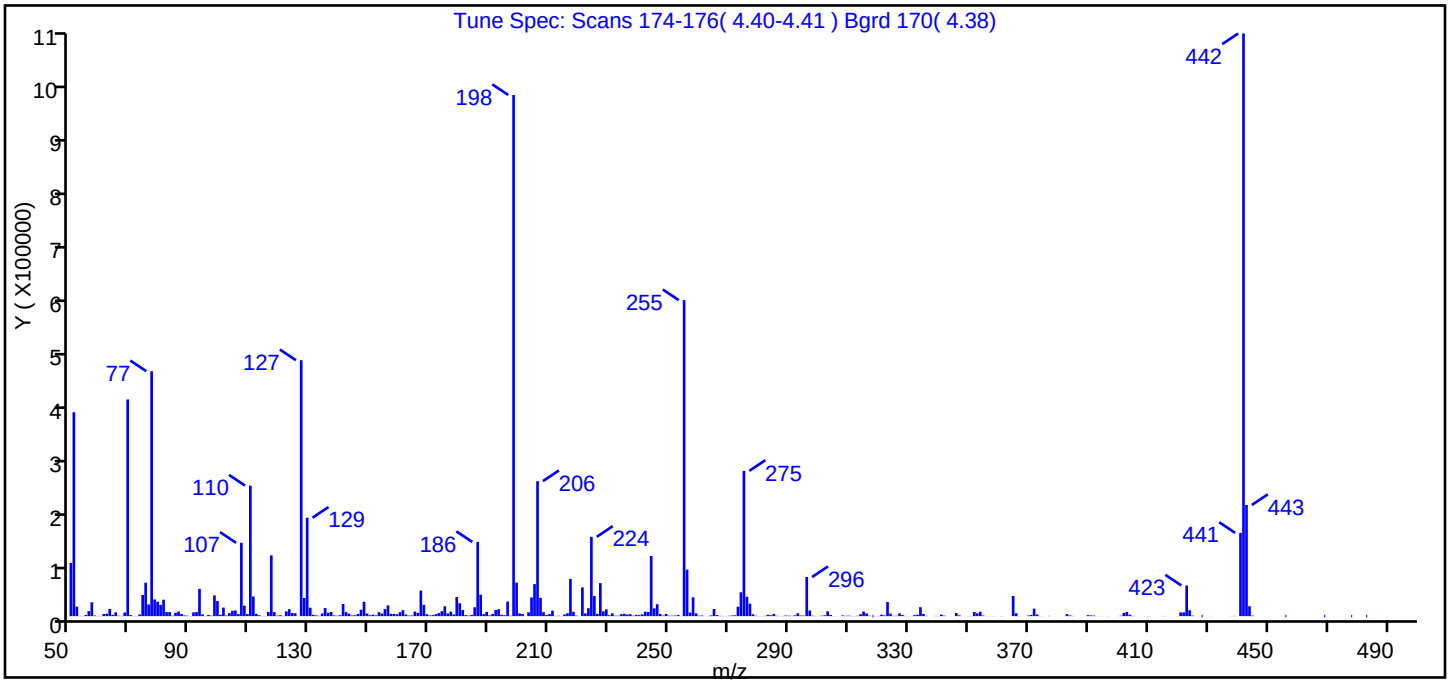
Report Date: 06-Jan-2014 13:44:03 Chrom Revision: 2.1 15-Oct-2013 07:52:24

MS Tune Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8946.D				
Injection Date:	06-Jan-2014 11:13:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Tune Method:	DFTPP Method 8270				

9 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	39.10
68	Less than 2.00% of mass 69	0.70 (1.70)
69	Present	41.60
70	Less than 2.00% of mass 69	0.20 (0.50)
127	40.00 - 60.00% of mass 198	49.10
197	Less than 1.00% of mass 198	0.10
199	5.00 - 9.00% of mass 198	6.40
275	10.00 - 30.00% of mass 198	27.90
365	Greater than 1.00% of mass 198	3.90
441	Present, but less than mass 443%	16.00 (74.90)
442	Greater than 40.00% of mass 198	111.80
443	17.00 - 23.00% of mass 442	21.30 (19.10)

Data File: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8946.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 06-Jan-2014 11:13:30
Spectrum: Tune Spec: Scans 174-176(4.40-4.41) Bgrd 170(4.38)
Base Peak: 442.00
Minimum % Base Peak: 0
Number of Points: 409

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	95432	154.00	4742	260.00	822	370.00	1061
51.00	365440	155.00	12538	261.00	1088	371.00	2067
52.00	17168	156.00	19400	263.00	391	372.00	13411
53.00	447	157.00	4150	264.00	1326	373.00	3037
54.00	124	158.00	3877	265.00	12766	374.00	342
55.00	2122	159.00	3332	266.00	1900	375.00	118
56.00	9052	160.00	6977	267.00	514	377.00	546
57.00	24784	161.00	10703	268.00	367	378.00	9
58.00	1114	162.00	2857	269.00	156	379.00	70
59.00	338	163.00	962	270.00	667	380.00	49
60.00	94	164.00	1255	271.00	1260	381.00	61
61.00	3835	165.00	8141	272.00	1527	382.00	24
62.00	4523	166.00	5820	273.00	16864	383.00	3688
63.00	12997	167.00	45824	274.00	42832	384.00	1242
64.00	2125	168.00	20200	275.00	260352	385.00	389
65.00	6897	169.00	3433	276.00	34832	388.00	65
66.00	672	170.00	1279	277.00	22376	389.00	22
67.00	397	171.00	1836	278.00	3313	390.00	1717
68.00	6543	172.00	3553	279.00	687	391.00	1334
69.00	388416	173.00	5481	280.00	164	392.00	1053
70.00	1947	174.00	8818	281.00	179	393.00	70
71.00	142	175.00	17616	282.00	501	394.00	111
72.00	242	176.00	4839	283.00	2475	395.00	163
73.00	2930	177.00	8074	284.00	1522	396.00	49
74.00	37992	178.00	2991	285.00	4061	397.00	223
75.00	59960	179.00	34320	286.00	599	399.00	24
76.00	20840	180.00	23104	287.00	108	400.00	79
77.00	438976	181.00	11066	288.00	341	401.00	707
78.00	29928	182.00	1895	289.00	1086	402.00	5680
79.00	25848	183.00	916	290.00	775	403.00	7666
80.00	20136	184.00	2185	291.00	517	404.00	2610
81.00	29504	185.00	15919	292.00	1371	405.00	456
82.00	7140	186.00	132864	293.00	5018	406.00	57

Report Date: 06-Jan-2014 13:44:03 Chrom Revision: 2.1 15-Oct-2013 07:52:24
Data File: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8946.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 06-Jan-2014 11:13:30
Spectrum: Tune Spec: Scans 174-176(4.40-4.41) Bgrd 170(4.38)
Base Peak: 442.00
Minimum % Base Peak: 0
Number of Points: 409

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	7349	187.00	38368	294.00	1051	407.00	12
84.00	749	188.00	3601	295.00	994	408.00	113
85.00	6119	189.00	7561	296.00	70144	410.00	265
86.00	8335	190.00	1405	297.00	10105	411.00	143
87.00	3883	191.00	3947	298.00	761	412.00	6
88.00	1255	192.00	10971	299.00	314	415.00	370
89.00	816	193.00	12391	301.00	859	416.00	167
90.00	224	194.00	2336	302.00	1499	419.00	70
91.00	6839	195.00	1556	303.00	8639	420.00	133
92.00	7271	196.00	26112	304.00	2210	421.00	6747
93.00	48840	197.00	645	305.00	286	422.00	6673
94.00	3248	198.00	934080	306.00	95	423.00	54928
95.00	242	199.00	59968	307.00	80	424.00	10575
96.00	2176	200.00	4934	308.00	1257	425.00	919
97.00	855	201.00	3770	309.00	662	426.00	82
98.00	37176	203.00	6827	310.00	856	427.00	118
99.00	27072	204.00	33512	311.00	363	428.00	1
100.00	2448	205.00	57456	312.00	287	429.00	49
101.00	15302	206.00	241920	313.00	691	430.00	52
102.00	1041	207.00	32808	314.00	3383	431.00	92
103.00	5536	208.00	7190	315.00	8199	432.00	66
104.00	9641	209.00	2036	316.00	4917	434.00	37
105.00	10053	210.00	3854	317.00	779	435.00	35
106.00	3547	211.00	9831	318.00	2	436.00	11
107.00	131456	212.00	472	319.00	151	437.00	63
108.00	18704	213.00	703	320.00	325	438.00	178
109.00	3656	214.00	141	321.00	2576	439.00	480
110.00	233984	215.00	2994	322.00	1192	441.00	149248
111.00	35192	216.00	5238	323.00	25448	442.00	1044352
112.00	4112	217.00	66768	324.00	4456	443.00	199232
113.00	1544	218.00	7840	325.00	475	444.00	17680
114.00	188	219.00	916	326.00	677	445.00	981
115.00	354	221.00	51544	327.00	4869	447.00	6
116.00	7505	222.00	4913	328.00	1971	449.00	21

Report Date: 06-Jan-2014 13:44:03 Chrom Revision: 2.1 15-Oct-2013 07:52:24
Data File: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8946.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 06-Jan-2014 11:13:30
Spectrum: Tune Spec: Scans 174-176(4.40-4.41) Bgrd 170(4.38)
Base Peak: 442.00
Minimum % Base Peak: 0
Number of Points: 409

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	108928	223.00	14283	329.00	417	450.00	13
118.00	7169	224.00	142144	330.00	102	451.00	6
119.00	924	225.00	35928	331.00	100	453.00	7
120.00	1675	226.00	4100	332.00	1788	454.00	23
121.00	435	227.00	59224	333.00	2518	455.00	10
122.00	8433	228.00	8495	334.00	16034	456.00	1
123.00	12345	229.00	12110	335.00	4013	458.00	20
124.00	5562	230.00	1634	336.00	506	460.00	13
125.00	5240	231.00	5020	338.00	70	462.00	4
127.00	458752	232.00	829	339.00	414	463.00	14
128.00	32528	233.00	842	340.00	164	464.00	13
129.00	176448	234.00	3603	341.00	2810	465.00	11
130.00	15125	235.00	4227	342.00	860	467.00	14
131.00	2550	236.00	2935	343.00	40	468.00	5
132.00	1471	237.00	3513	344.00	101	469.00	3
133.00	536	238.00	726	346.00	5623	470.00	21
134.00	4758	239.00	2257	347.00	1352	471.00	19
135.00	14496	240.00	1820	348.00	98	474.00	48
136.00	6108	241.00	3207	349.00	16	475.00	80
137.00	7475	242.00	7979	350.00	326	476.00	30
138.00	1339	243.00	7425	351.00	390	478.00	1
139.00	812	244.00	107768	352.00	7334	480.00	11
140.00	1665	245.00	13957	353.00	5091	481.00	33
141.00	21584	246.00	21360	354.00	7943	483.00	1
142.00	7277	247.00	4011	355.00	1068	484.00	6
143.00	4419	248.00	1021	356.00	183	486.00	4
144.00	1242	249.00	3999	357.00	208	488.00	18
145.00	1633	250.00	820	358.00	159	489.00	29
146.00	3834	251.00	887	359.00	307	490.00	37
147.00	11475	252.00	1057	361.00	274	491.00	45
148.00	25816	253.00	2054	362.00	121	492.00	16
149.00	4733	255.00	566400	363.00	4	495.00	39
150.00	1709	256.00	83336	365.00	36032	497.00	81
151.00	2636	257.00	6371	366.00	5230		

Report Date: 06-Jan-2014 13:44:03 Chrom Revision: 2.1 15-Oct-2013 07:52:24
Data File: \\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8946.D\SMSX4_SIMX.rslt\spectra.d
Injection Date: 06-Jan-2014 11:13:30
Spectrum: Tune Spec: Scans 174-176(4.40-4.41) Bgrd 170(4.38)
Base Peak: 442.00
Minimum % Base Peak: 0
Number of Points: 409

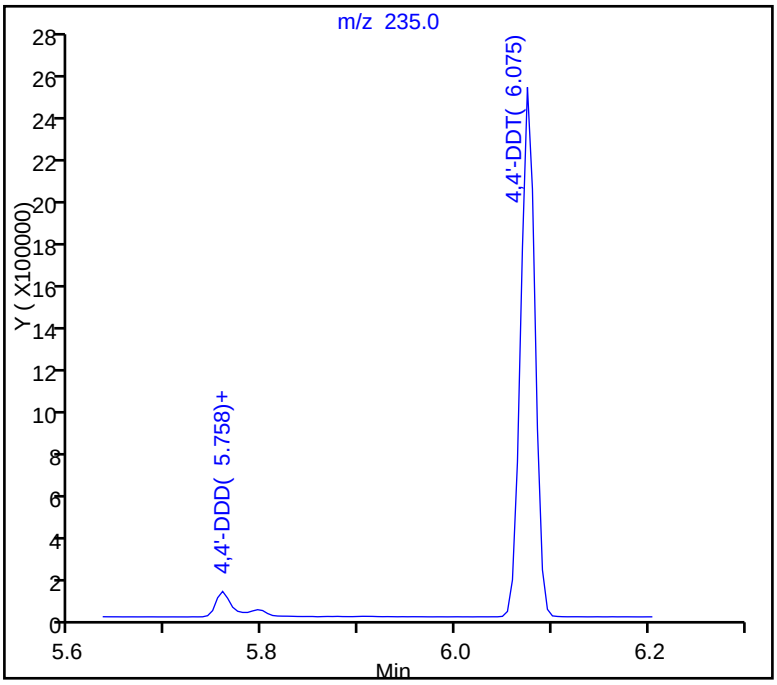
m/z	Y	m/z	Y	m/z	Y	m/z	Y
152.00	1427	258.00	33784	367.00	272		
153.00	7185	259.00	4962	368.00	25		

Breakdown Report

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8946.D				
Injection Date:	06-Jan-2014 11:13:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

13 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

13 4,4'-DDT, Area = 2593296
11 4,4'-DDE, Area = 4091
12 4,4'-DDD, Area = 139314

%Breakdown: 5.24%, Max Limit: 20.00%
Passed

Report Date: 06-Jan-2014 13:44:03 Chrom Revision: 2.1 15-Oct-2013 07:52:24

Peak Tailing Report

TestAmerica Denver

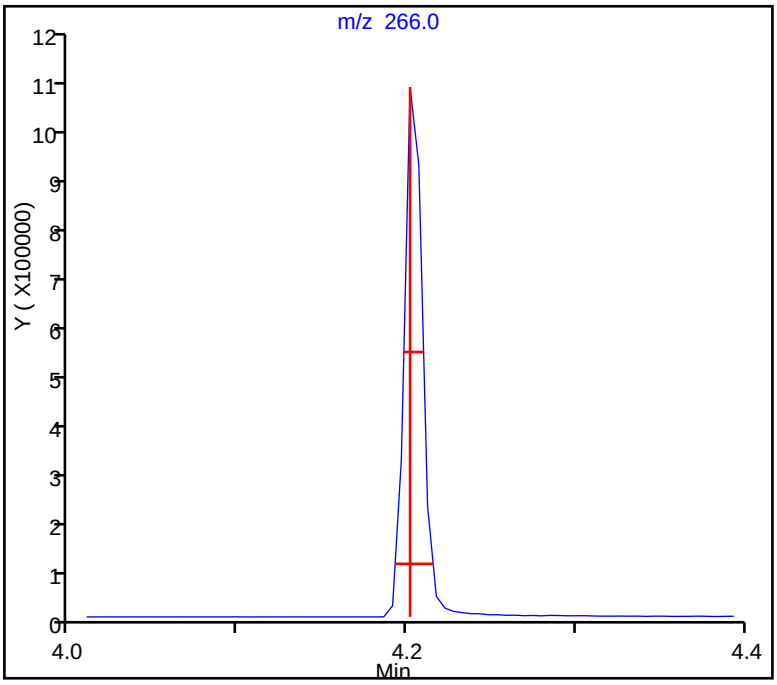
Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8946.D				
Injection Date:	06-Jan-2014 11:13:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

8 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.014 (min.)
Front Width = 0.009 (min.)

Tailing Factor = 1.5, Max. Tailing < 3.00
Passed



Peak Tailing Report

TestAmerica Denver

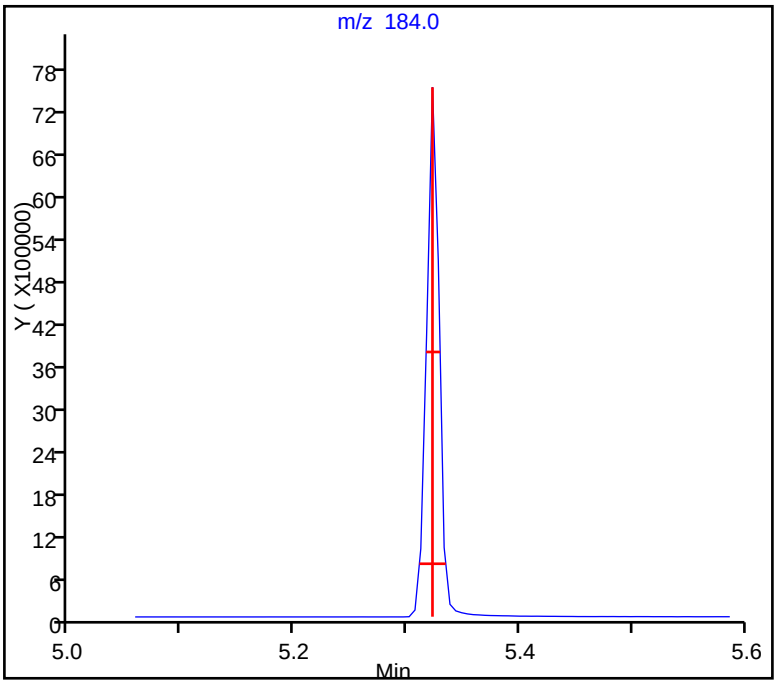
Data File:	\\Denchrom\ChromData\SMS_X4\20140106-18806.b\X4_8946.D				
Injection Date:	06-Jan-2014 11:13:30	Instrument ID:	SMS_X4		
Lims ID:	DFTPP	Lab Sample ID:			
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		

10 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.012 (min.)
Front Width = 0.012 (min.)

Tailing Factor = 1.0, Max. Tailing < 5.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-206688/1-A

Matrix: Water | Lab File ID: X4_8896.D

Analysis Method: 8270C SIM | Date Collected:

Extract. Method: 3510C | Date Extracted: 12/26/2013 17:46

Sample wt/vol: 1000(mL) | Date Analyzed: 12/31/2013 18:51

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207101 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	ND		100	3.4
50-32-8	Benzo[a]pyrene	ND		100	5.1
56-55-3	Benzo[a]anthracene	ND		100	3.2
207-08-9	Benzo[k]fluoranthene	ND		100	5.1
191-24-2	Benzo[g,h,i]perylene	ND		100	3.6
85-01-8	Phenanthrene	ND		100	9.8
120-12-7	Anthracene	ND		100	14
53-70-3	Dibenz(a,h)anthracene	ND		100	4.8
218-01-9	Chrysene	ND		100	3.2
83-32-9	Acenaphthene	ND		100	11
208-96-8	Acenaphthylene	ND		100	10
206-44-0	Fluoranthene	ND		100	4.5
86-73-7	Fluorene	ND		100	19
129-00-0	Pyrene	ND		100	8.1
193-39-5	Indeno[1,2,3-cd]pyrene	ND		100	15
91-57-6	2-Methylnaphthalene	ND		100	5.2
91-20-3	Naphthalene	ND		100	5.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	63		42-120
4165-60-0	Nitrobenzene-d5	74		43-120
1718-51-0	Terphenyl-d14	117		47-120

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8896.D
Lims ID: MB 280-206688/1-A Lab Sample ID: MB 280-206688/1-A
Client ID:
Sample Type: MB
Inject. Date: 31-Dec-2013 18:51:30 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: mb280-206688_1-a
Misc. Info.: 8_1-a =8_1-A
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 09:01:02

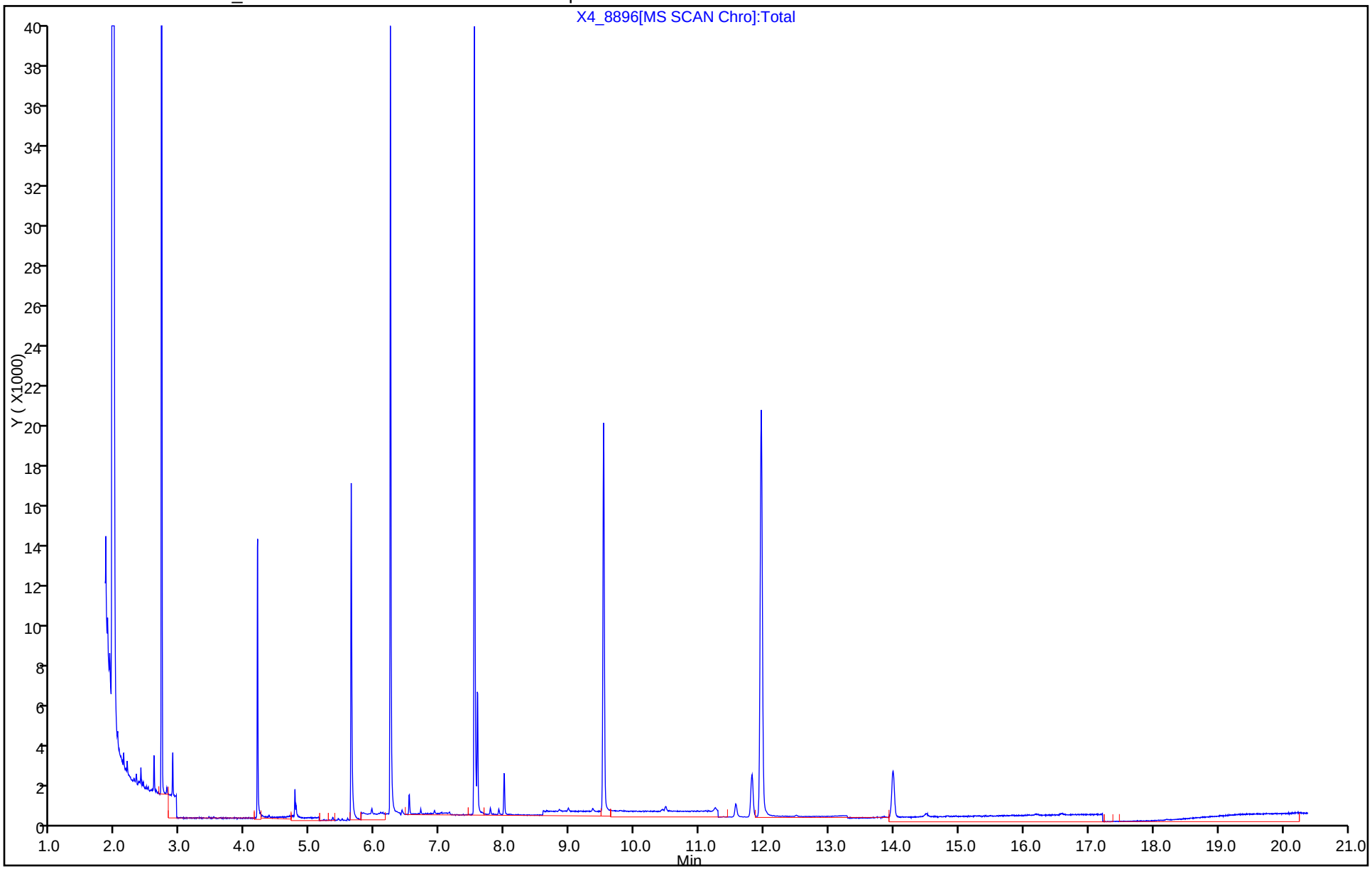
Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	93	19059	600.0	
* 1 Phenanthrene-d10	188	7.532	7.532	0.0	100	37390	600.0	
* 3 Chrysene-d12	240	11.956	11.956	0.0	96	43275	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.186	-0.003	99	7905	370.6	
$ 5 2-Fluorobiphenyl	172	5.629	5.630	-0.001	100	14164	315.0	
$ 6 Terphenyl-d14	244	9.521	9.527	-0.006	99	26574	587.0	
42 1,4-Dioxane	88		2.100					
7 N-Nitrosodimethylamine	42		2.219					
14 Naphthalene	128		4.783					
15 2-Methylnaphthalene	142		5.344					
16 1-Methylnaphthalene	142		5.429					
17 Dimethyl phthalate	163		5.942					
19 Acenaphthylene	152		6.119					
20 Acenaphthene	153		6.261					
18 Dibenzofuran	168		6.408					
21 Diethyl phthalate	149		6.521					
22 Fluorene	166		6.696					
23 N-Nitrosodiphenylamine	169		6.771					
24 Phenanthrene	178		7.553					
25 Anthracene	178		7.602					
26 Di-n-butyl phthalate	149		7.992					
27 Fluoranthene	202		8.979					
28 Pyrene	202		9.353					
29 Butyl benzyl phthalate	149		10.427					
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.813	0.0	100	4304	79.7	
31 Benzo[a]anthracene	228		11.924					
32 Chrysene	228		12.027					
33 Di-n-octyl phthalate	149		13.864					
34 Benzo[b]fluoranthene	252		15.253					
35 Benzo[k]fluoranthene	252		15.342					
36 Benzo[a]pyrene	252		16.385					

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276		19.111					
37 Dibenz(a,h)anthracene	278		19.148					
39 Benzo[g,h,i]perylene	276		19.584					
43 Benzidine	184		0.0					
45 Morpholine	1		0.0					
41 Pentachlorophenol	266		0.0					
8 Pentachlorophenol_T	266		4.202					
10 Benzidine_T	184		5.317					
12 4,4'-DDD	235		5.753					
11 4,4'-DDE	246		5.795					
13 4,4'-DDT	235		6.070					
S 44 TPAH	1		0.0					

Report Date: 02-Jan-2014 09:28:12 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8896.D				
Injection Date:	31-Dec-2013 18:51:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	MB 280-206688/1-A	Lab Sample ID:	MB 280-206688/1-A	Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-50614-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-206899/1-A
Matrix: Solid
Lab File ID: X4_8901.D
Analysis Method: 8270C SIM
Date Collected:
Extract. Method: 3546
Date Extracted: 12/29/2013 10:49
Sample wt/vol: 32.21(g)
Date Analyzed: 12/31/2013 21:12
Con. Extract Vol.: 1000(uL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 207101
Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	ND		4700	1100
50-32-8	Benzo[a]pyrene	ND		4700	690
56-55-3	Benzo[a]anthracene	ND		4700	840
207-08-9	Benzo[k]fluoranthene	ND		4700	930
191-24-2	Benzo[g,h,i]perylene	ND		4700	1000
85-01-8	Phenanthrene	ND		4700	1000
120-12-7	Anthracene	ND		4700	670
53-70-3	Dibenz(a,h)anthracene	ND		4700	1200
218-01-9	Chrysene	ND		4700	930
83-32-9	Acenaphthene	ND		4700	150
208-96-8	Acenaphthylene	ND		4700	160
206-44-0	Fluoranthene	ND		4700	930
86-73-7	Fluorene	ND		4700	440
129-00-0	Pyrene	ND		4700	1000
193-39-5	Indeno[1,2,3-cd]pyrene	ND		4700	1000
91-57-6	2-Methylnaphthalene	ND		4700	290
91-20-3	Naphthalene	ND		4700	300

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	92		39-120
4165-60-0	Nitrobenzene-d5	86		42-120
1718-51-0	Terphenyl-d14	101		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8901.D
Lims ID: MB 280-206899/1-A Lab Sample ID: MB 280-206899/1-A
Client ID:
Sample Type: MB
Inject. Date: 31-Dec-2013 21:12:30 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: mb280-206899_1-a
Misc. Info.: mb280-206899_1-a =MB280-206899_1-A
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 09:02:24

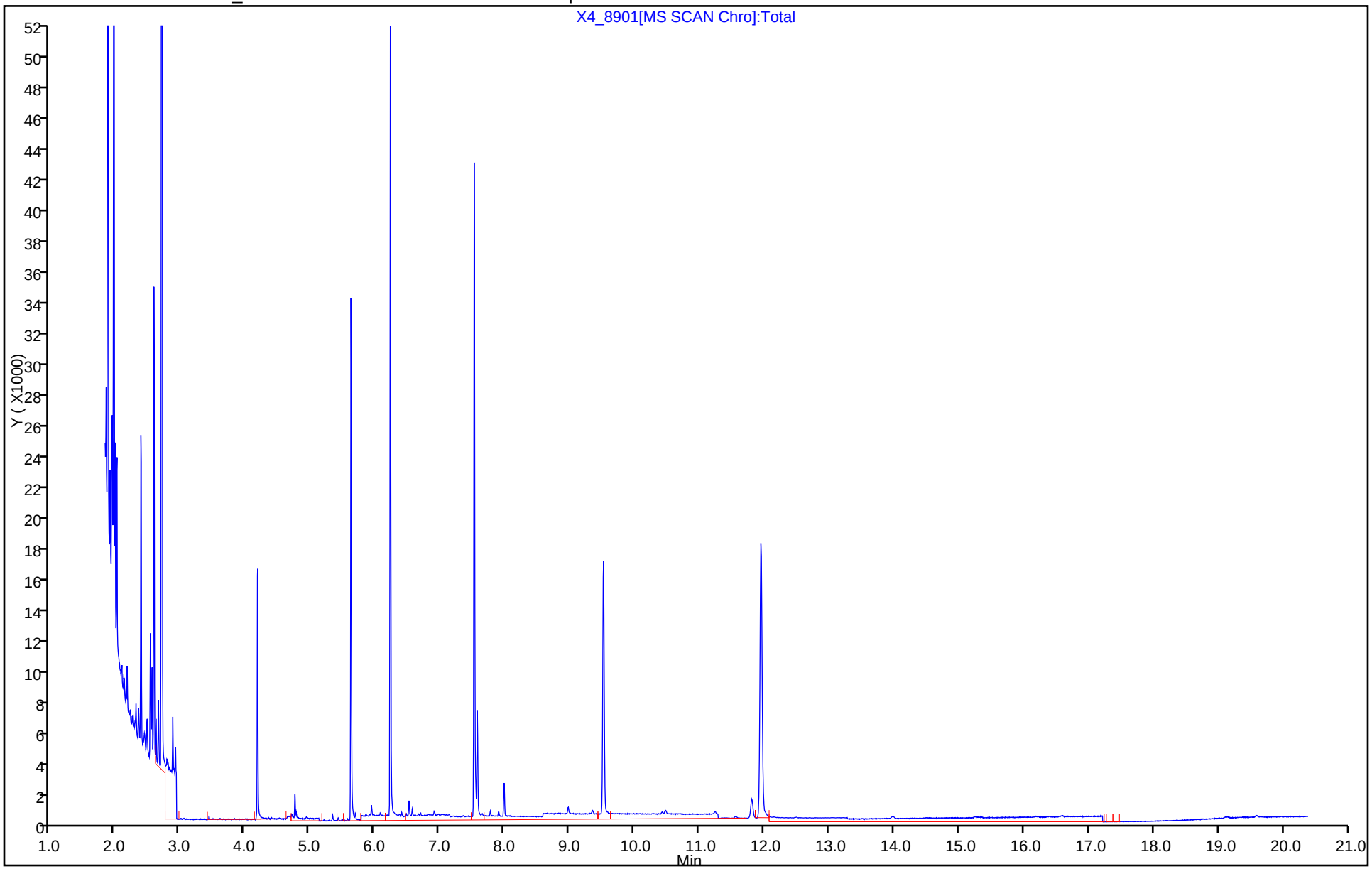
Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	98	20197	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	36977	600.0	
* 3 Chrysene-d12	240	11.948	11.956	-0.008	96	37684	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.186	-0.003	99	9688	428.6	
$ 5 2-Fluorobiphenyl	172	5.626	5.630	-0.004	100	21825	458.0	
$ 6 Terphenyl-d14	244	9.521	9.527	-0.006	99	22677	506.5	
42 1,4-Dioxane	88		2.100					
7 N-Nitrosodimethylamine	42		2.219					
14 Naphthalene	128		4.783					
15 2-Methylnaphthalene	142		5.344					
16 1-Methylnaphthalene	142		5.429					
17 Dimethyl phthalate	163		5.942					
19 Acenaphthylene	152		6.119					
20 Acenaphthene	153		6.261					
18 Dibenzofuran	168		6.408					
21 Diethyl phthalate	149		6.521					
22 Fluorene	166		6.696					
23 N-Nitrosodiphenylamine	169		6.771					
24 Phenanthrene	178		7.553					
25 Anthracene	178		7.602					
26 Di-n-butyl phthalate	149		7.992					
27 Fluoranthene	202		8.979					
28 Pyrene	202		9.353					
29 Butyl benzyl phthalate	149		10.427					
30 Bis(2-ethylhexyl) phthalate	149	11.805	11.813	-0.008	100	2432	45.5	
31 Benzo[a]anthracene	228		11.924					
32 Chrysene	228		12.027					
33 Di-n-octyl phthalate	149		13.864					
34 Benzo[b]fluoranthene	252		15.253					
35 Benzo[k]fluoranthene	252		15.342					
36 Benzo[a]pyrene	252		16.385					

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276		19.111					
37 Dibenz(a,h)anthracene	278		19.148					
39 Benzo[g,h,i]perylene	276		19.584					
43 Benzidine	184		0.0					
45 Morpholine	1		0.0					
41 Pentachlorophenol	266		0.0					
8 Pentachlorophenol_T	266		4.202					
10 Benzidine_T	184		5.317					
12 4,4'-DDD	235		5.753					
11 4,4'-DDE	246		5.795					
13 4,4'-DDT	235		6.070					
S 44 TPAH	1		0.0					

Report Date: 02-Jan-2014 09:28:14 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8901.D				
Injection Date:	31-Dec-2013 21:12:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	MB 280-206899/1-A	Lab Sample ID:	MB 280-206899/1-A	Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-50614-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-207028/1-A
Matrix: Solid
Lab File ID: X4_8917.D
Analysis Method: 8270C SIM
Date Collected:
Extract. Method: 3546
Date Extracted: 12/30/2013 19:55
Sample wt/vol: 32.0(g)
Date Analyzed: 01/02/2014 14:25
Con. Extract Vol.: 1000(uL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 207236
Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	ND		4700	1100
50-32-8	Benzo[a]pyrene	ND		4700	690
56-55-3	Benzo[a]anthracene	ND		4700	840
207-08-9	Benzo[k]fluoranthene	ND		4700	940
191-24-2	Benzo[g,h,i]perylene	ND		4700	1000
85-01-8	Phenanthrene	ND		4700	1000
120-12-7	Anthracene	ND		4700	680
53-70-3	Dibenz(a,h)anthracene	ND		4700	1200
218-01-9	Chrysene	ND		4700	940
83-32-9	Acenaphthene	ND		4700	150
208-96-8	Acenaphthylene	ND		4700	160
206-44-0	Fluoranthene	ND		4700	940
86-73-7	Fluorene	ND		4700	440
129-00-0	Pyrene	ND		4700	1000
193-39-5	Indeno[1,2,3-cd]pyrene	ND		4700	1000
91-57-6	2-Methylnaphthalene	ND		4700	290
91-20-3	Naphthalene	ND		4700	310

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	95		39-120
4165-60-0	Nitrobenzene-d5	95		42-120
1718-51-0	Terphenyl-d14	115		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8917.D
Lims ID: MB 280-207028/1-A Lab Sample ID: MB 280-207028/1-A
Client ID:
Sample Type: MB
Inject. Date: 02-Jan-2014 14:25:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: mb280-207028_1-a
Misc. Info.: mb280-207028_1-a =MB280-207028_1-A
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 03-Jan-2014 09:30:42

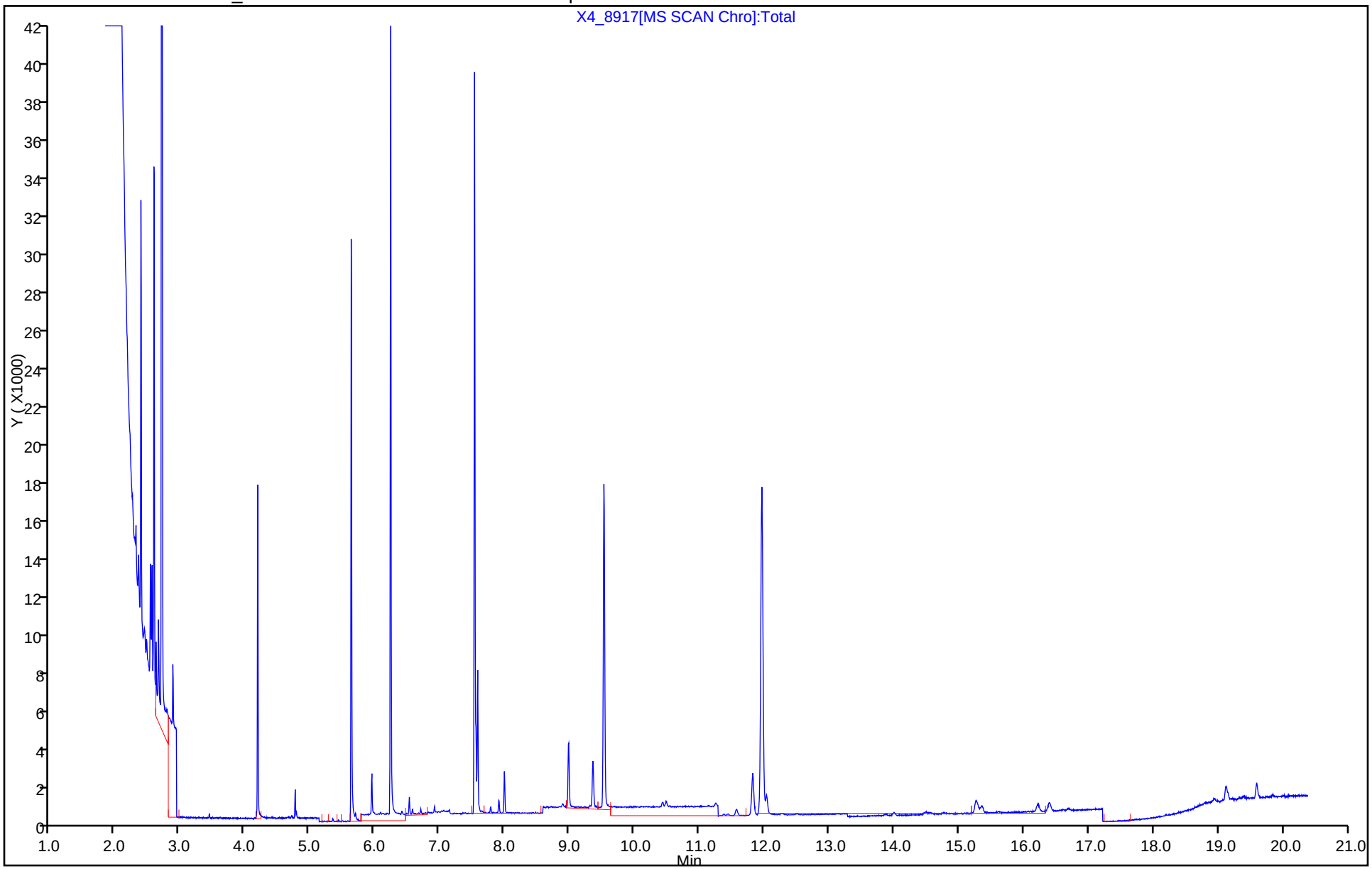
Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.240	6.240	0.0	95	17662	600.0	
* 1 Phenanthrene-d10	188	7.532	7.532	0.0	100	32305	600.0	
* 3 Chrysene-d12	240	11.964	11.964	0.0	96	35827	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	100	9348	472.9	
$ 5 2-Fluorobiphenyl	172	5.630	5.633	-0.003	100	19699	472.7	
$ 6 Terphenyl-d14	244	9.527	9.532	-0.005	99	22575	577.2	
42 1,4-Dioxane	88		2.100					
7 N-Nitrosodimethylamine	42		2.219					
14 Naphthalene	128		4.786					
15 2-Methylnaphthalene	142		5.344					
16 1-Methylnaphthalene	142		5.433					
17 Dimethyl phthalate	163		5.949					
19 Acenaphthylene	152		6.119					
20 Acenaphthene	153		6.269					
18 Dibenzofuran	168		6.408					
21 Diethyl phthalate	149		6.527					
22 Fluorene	166		6.702					
23 N-Nitrosodiphenylamine	169		6.771					
24 Phenanthrene	178		7.553					
25 Anthracene	178		7.602					
26 Di-n-butyl phthalate	149		7.992					
27 Fluoranthene	202		8.979					
28 Pyrene	202		9.359					
29 Butyl benzyl phthalate	149		10.438					
30 Bis(2-ethylhexyl) phthalate	149	11.821	11.821	0.0	99	4034	86.4	
31 Benzo[a]anthracene	228		11.932					
32 Chrysene	228		12.035					
33 Di-n-octyl phthalate	149		13.879					
34 Benzo[b]fluoranthene	252		15.264					
35 Benzo[k]fluoranthene	252		15.357					
36 Benzo[a]pyrene	252		16.397					

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.122	19.118	0.004	75	1258	19.8	
37 Dibenz(a,h)anthracene	278	19.152	19.152	0.0	35	391	6.08	
39 Benzo[g,h,i]perylene	276	19.596	19.592	0.004	72	1321	19.3	
43 Benzidine	184		0.0					
45 Morpholine	1		0.0					
41 Pentachlorophenol	266		0.0					
8 Pentachlorophenol_T	266		4.202					
10 Benzidine_T	184		5.323					
12 4,4'-DDD	235		5.753					
11 4,4'-DDE	246		5.795					
13 4,4'-DDT	235		6.075					
S 44 TPAH	1		0.0					

Report Date: 06-Jan-2014 10:05:58 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8917.D				
Injection Date:	02-Jan-2014 14:25:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	MB 280-207028/1-A	Lab Sample ID:	MB 280-207028/1-A	Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-50614-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-206688/2-A
Matrix: Water
Lab File ID: X4_8897.D
Analysis Method: 8270C SIM
Date Collected:
Extract. Method: 3510C
Date Extracted: 12/26/2013 17:46
Sample wt/vol: 1000(mL)
Date Analyzed: 12/31/2013 19:19
Con. Extract Vol.: 1000(uL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 207101
Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	877		100	3.4
50-32-8	Benzo[a]pyrene	811		100	5.1
56-55-3	Benzo[a]anthracene	786		100	3.2
207-08-9	Benzo[k]fluoranthene	887		100	5.1
191-24-2	Benzo[g,h,i]perylene	891		100	3.6
85-01-8	Phenanthrene	651		100	9.8
120-12-7	Anthracene	667		100	14
53-70-3	Dibenz(a,h)anthracene	872		100	4.8
218-01-9	Chrysene	900		100	3.2
83-32-9	Acenaphthene	527		100	11
208-96-8	Acenaphthylene	511		100	10
206-44-0	Fluoranthene	836		100	4.5
86-73-7	Fluorene	551		100	19
129-00-0	Pyrene	867		100	8.1
193-39-5	Indeno[1,2,3-cd]pyrene	848		100	15
91-57-6	2-Methylnaphthalene	446		100	5.2
91-20-3	Naphthalene	476		100	5.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	57		42-120
4165-60-0	Nitrobenzene-d5	52		43-120
1718-51-0	Terphenyl-d14	122	X	47-120

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8897.D
Lims ID: LCS 280-206688/2-A Lab Sample ID: LCS 280-206688/2-A
Client ID:
Sample Type: LCS
Inject. Date: 31-Dec-2013 19:19:30 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcs280-206688_2-a
Misc. Info.: lcs280-206688_2-a =LCS280-206688_2-A
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 09:01:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	96	18679	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	34885	600.0	
* 3 Chrysene-d12	240	11.948	11.956	-0.008	96	43500	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.186	0.0	99	5427	259.6	
$ 5 2-Fluorobiphenyl	172	5.630	5.630	0.0	100	12616	286.2	
$ 6 Terphenyl-d14	244	9.521	9.527	-0.006	99	25663	607.6	
14 Naphthalene	128	4.780	4.783	-0.003	100	27204	476.0	
15 2-Methylnaphthalene	142	5.344	5.344	0.0	100	18008	445.5	
16 1-Methylnaphthalene	142	5.429	5.429	0.0	97	18752	505.6	
19 Acenaphthylene	152	6.119	6.119	0.0	100	31838	511.2	
20 Acenaphthene	153	6.261	6.261	0.0	98	20478	527.1	
22 Fluorene	166	6.702	6.696	0.006	100	25609	551.5	
24 Phenanthrene	178	7.548	7.553	-0.005	100	46540	651.0	
25 Anthracene	178	7.602	7.602	0.0	100	46931	666.8	
27 Fluoranthene	202	8.973	8.979	-0.006	100	64827	836.1	
28 Pyrene	202	9.348	9.353	-0.005	100	69375	867.1	
31 Benzo[a]anthracene	228	11.916	11.924	-0.008	100	69465	785.6	
32 Chrysene	228	12.019	12.027	-0.008	100	75229	899.8	
34 Benzo[b]fluoranthene	252	15.246	15.253	-0.007	100	70999	876.7	
35 Benzo[k]fluoranthene	252	15.339	15.342	-0.003	100	73891	887.0	
36 Benzo[a]pyrene	252	16.378	16.385	-0.007	100	63672	811.3	
38 Indeno[1,2,3-cd]pyrene	276	19.107	19.111	-0.004	98	65531	848.2	M
37 Dibenz(a,h)anthracene	278	19.141	19.148	-0.007	95	68081	872.0	
39 Benzo[g,h,i]perylene	276	19.585	19.584	0.001	98	73865	890.6	

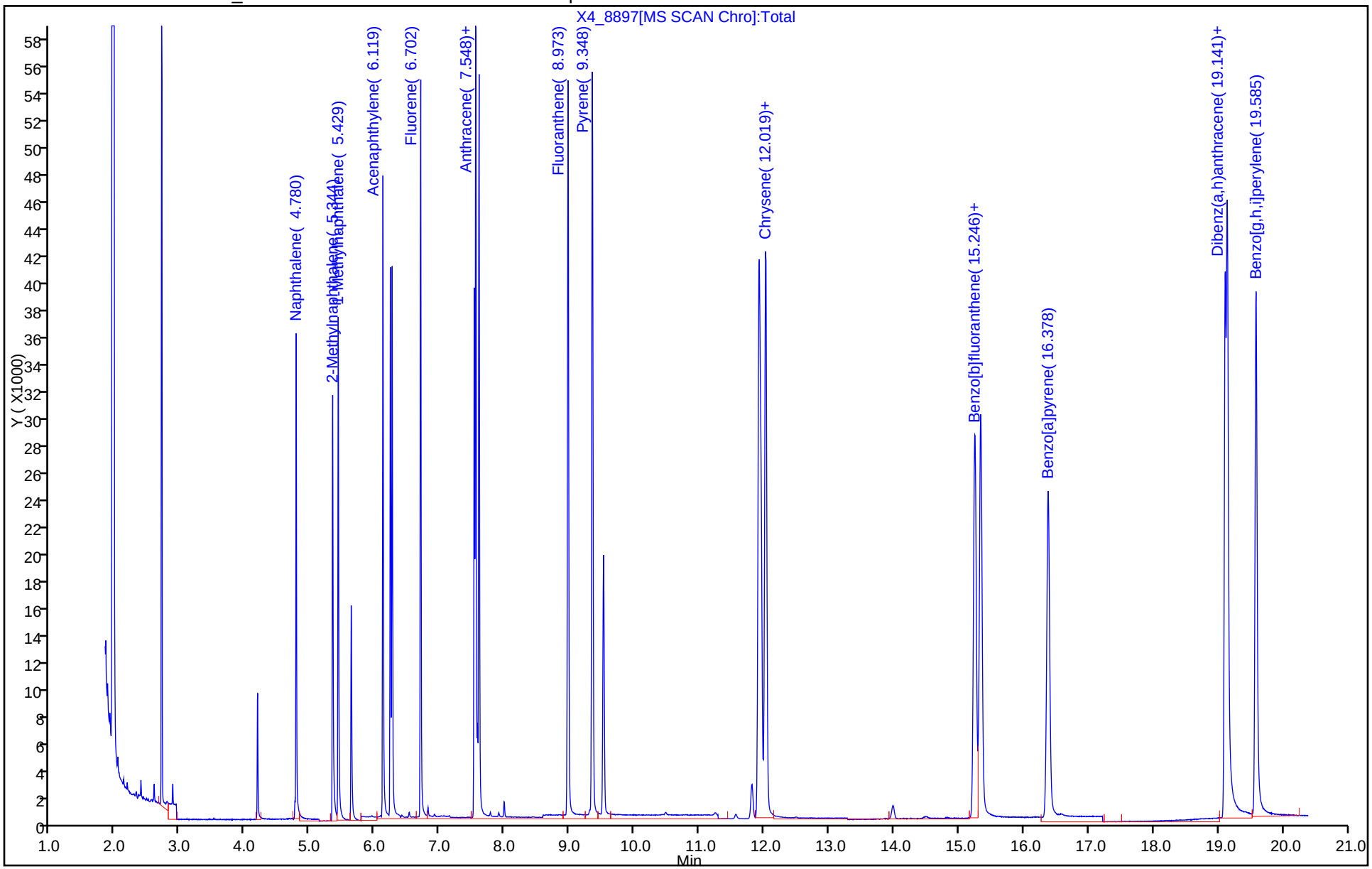
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 02-Jan-2014 09:28:12 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8897.D				
Injection Date:	31-Dec-2013 19:19:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	LCS 280-206688/2-A	Lab Sample ID:	LCS 280-206688/2-A	Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

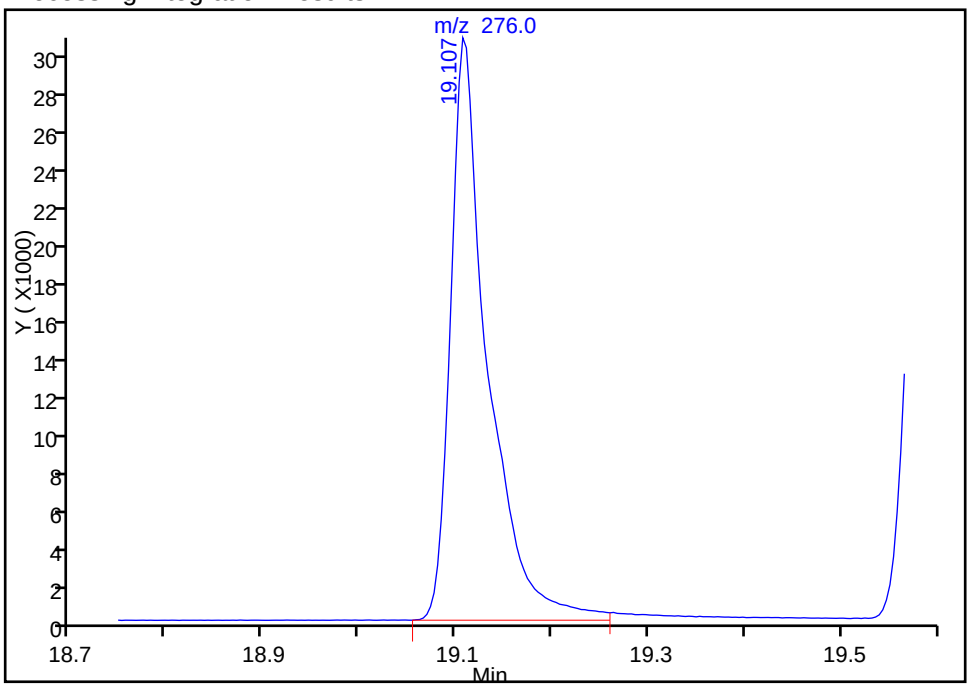
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8897.D				
Injection Date:	31-Dec-2013 19:19:30	Instrument ID:	SMS_X4		
Lims ID:	LCS 280-206688/2-A	Lab Sample ID:	LCS 280-206688/2-A		
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

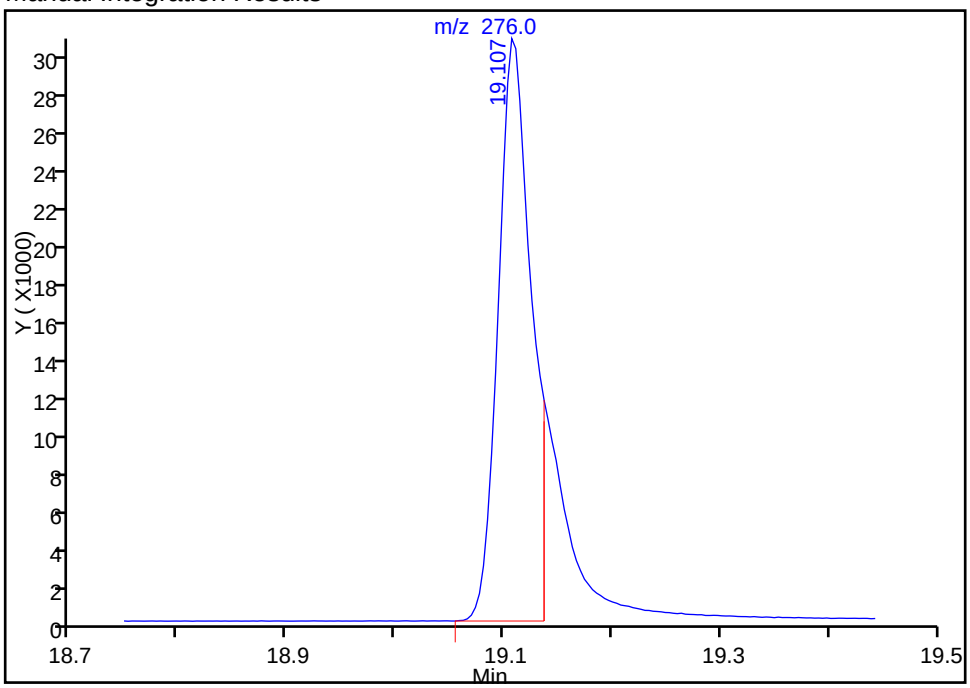
Processing Integration Results

RT: 19.11
Response: 83020
Amount: 1074.5320



Manual Integration Results

RT: 19.11
Response: 65531
Amount: 848.1710



Reviewer: vasquezk, 02-Jan-2014 09:01:38
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-206899/2-A

Matrix: Solid | Lab File ID: X4_8902.D

Analysis Method: 8270C SIM | Date Collected:

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 32.84(g) | Date Analyzed: 12/31/2013 21:40

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207101 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	25700		4600	1100
50-32-8	Benzo[a]pyrene	23300		4600	680
56-55-3	Benzo[a]anthracene	23200		4600	820
207-08-9	Benzo[k]fluoranthene	26000		4600	910
191-24-2	Benzo[g,h,i]perylene	27300		4600	1000
85-01-8	Phenanthrene	25200		4600	1000
120-12-7	Anthracene	24200		4600	660
53-70-3	Dibenz(a,h)anthracene	26700		4600	1200
218-01-9	Chrysene	27100		4600	910
83-32-9	Acenaphthene	25200		4600	150
208-96-8	Acenaphthylene	23800		4600	160
206-44-0	Fluoranthene	25300		4600	910
86-73-7	Fluorene	24700		4600	430
129-00-0	Pyrene	25400		4600	1000
193-39-5	Indeno[1,2,3-cd]pyrene	25900		4600	1000
91-57-6	2-Methylnaphthalene	24400		4600	280
91-20-3	Naphthalene	26500		4600	300

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	93		39-120
4165-60-0	Nitrobenzene-d5	87		42-120
1718-51-0	Terphenyl-d14	109		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8902.D
Lims ID: LCS 280-206899/2-A Lab Sample ID: LCS 280-206899/2-A
Client ID:
Sample Type: LCS
Inject. Date: 31-Dec-2013 21:40:30 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcs280-206899_2-a
Misc. Info.: lcs280-206899_2-a =LCS280-206899_2-A
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 09:02:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	99	20780	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	38098	600.0	
* 3 Chrysene-d12	240	11.948	11.956	-0.008	98	39898	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.186	-0.003	99	10118	435.1	
$ 5 2-Fluorobiphenyl	172	5.626	5.630	-0.004	100	22848	466.0	
$ 6 Terphenyl-d14	244	9.521	9.527	-0.006	99	25094	544.0	
14 Naphthalene	128	4.780	4.783	-0.003	100	55260	869.1	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	99	35979	800.2	
16 1-Methylnaphthalene	142	5.429	5.429	0.0	100	36094	874.7	
19 Acenaphthylene	152	6.119	6.119	0.0	100	54184	782.0	
20 Acenaphthene	153	6.261	6.261	0.0	100	35725	826.6	
22 Fluorene	166	6.696	6.696	0.0	98	41822	809.6	
24 Phenanthrene	178	7.548	7.553	-0.005	100	64713	828.8	
25 Anthracene	178	7.597	7.602	-0.005	100	61030	794.1	
27 Fluoranthene	202	8.973	8.979	-0.006	100	70221	829.2	
28 Pyrene	202	9.348	9.353	-0.005	100	73012	835.6	
31 Benzo[a]anthracene	228	11.916	11.924	-0.008	100	61888	763.1	
32 Chrysene	228	12.019	12.027	-0.008	100	68309	890.8	
34 Benzo[b]fluoranthene	252	15.246	15.253	-0.007	100	62704	844.2	
35 Benzo[k]fluoranthene	252	15.335	15.342	-0.007	100	65363	855.4	
36 Benzo[a]pyrene	252	16.378	16.385	-0.007	100	55155	766.2	
38 Indeno[1,2,3-cd]pyrene	276	19.107	19.111	-0.004	98	60176	849.2	M
37 Dibenz(a,h)anthracene	278	19.144	19.148	-0.004	96	62778	876.7	
39 Benzo[g,h,i]perylene	276	19.585	19.584	0.001	98	68128	895.6	

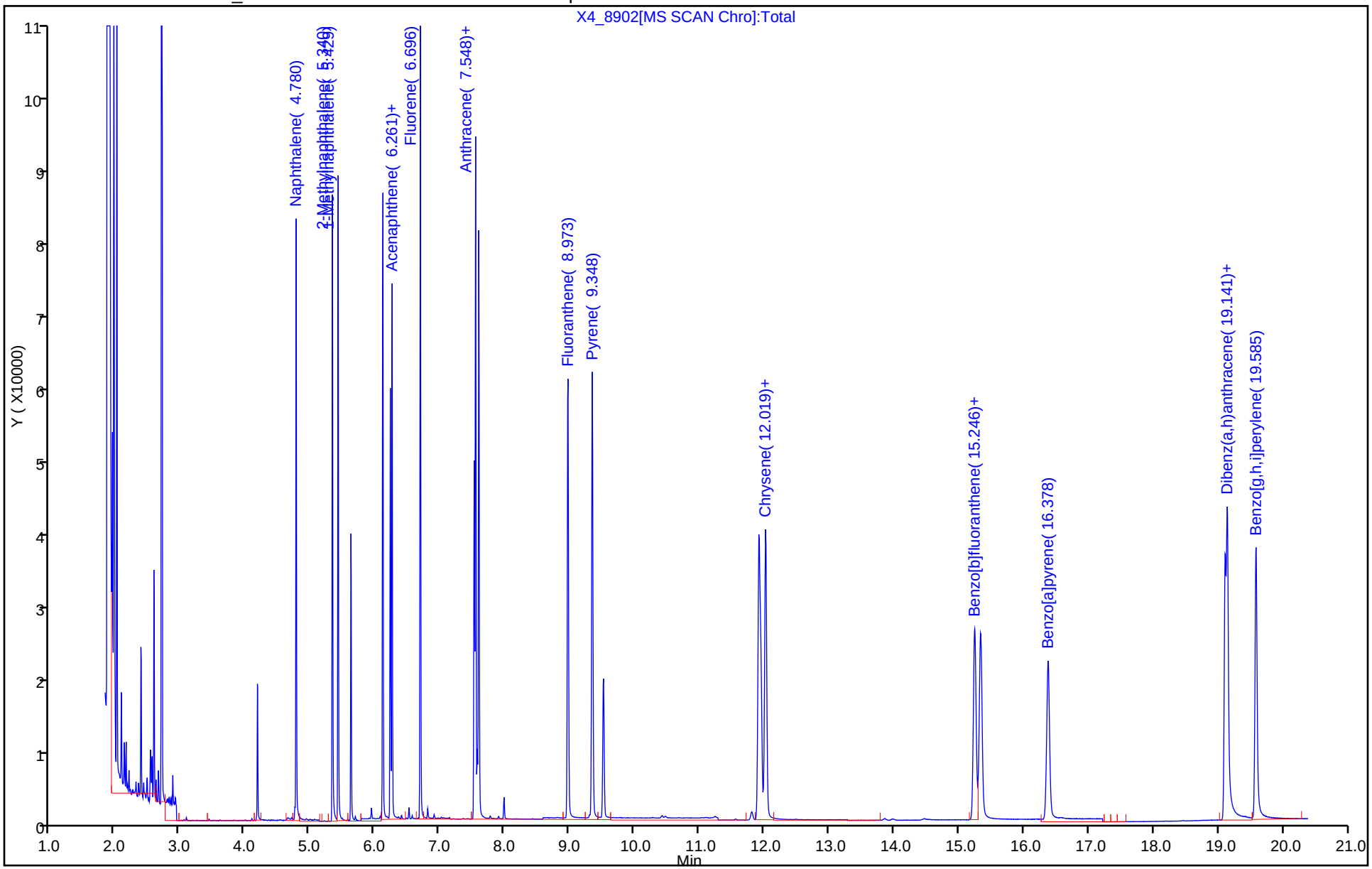
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 02-Jan-2014 09:28:15 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8902.D				
Injection Date:	31-Dec-2013 21:40:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	LCS 280-206899/2-A	Lab Sample ID:	LCS 280-206899/2-A	Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

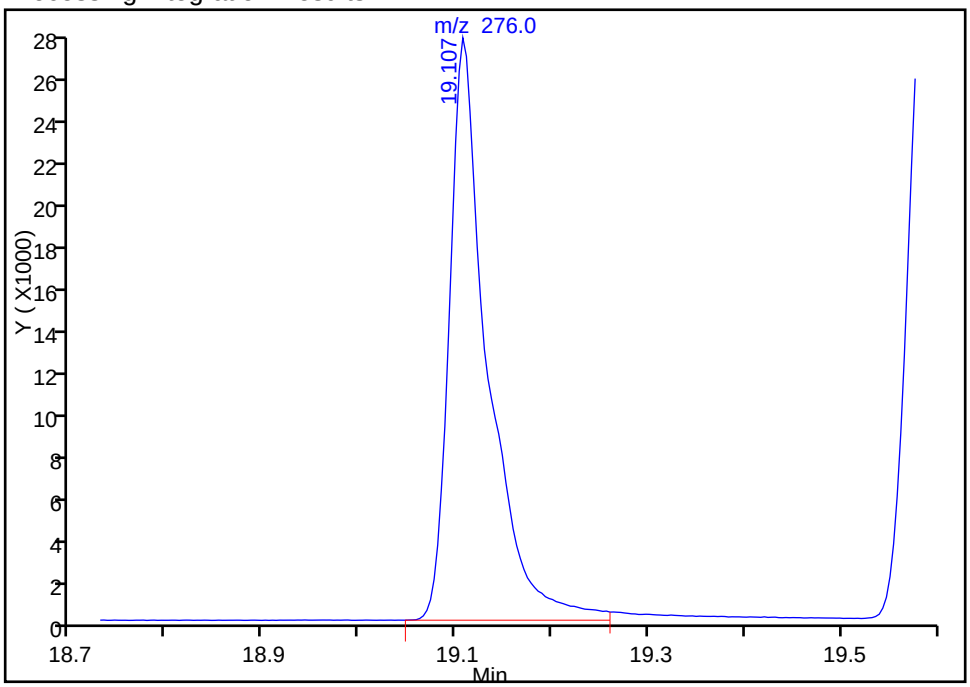
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8902.D				
Injection Date:	31-Dec-2013 21:40:30	Instrument ID:	SMS_X4		
Lims ID:	LCS 280-206899/2-A	Lab Sample ID:	LCS 280-206899/2-A		
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

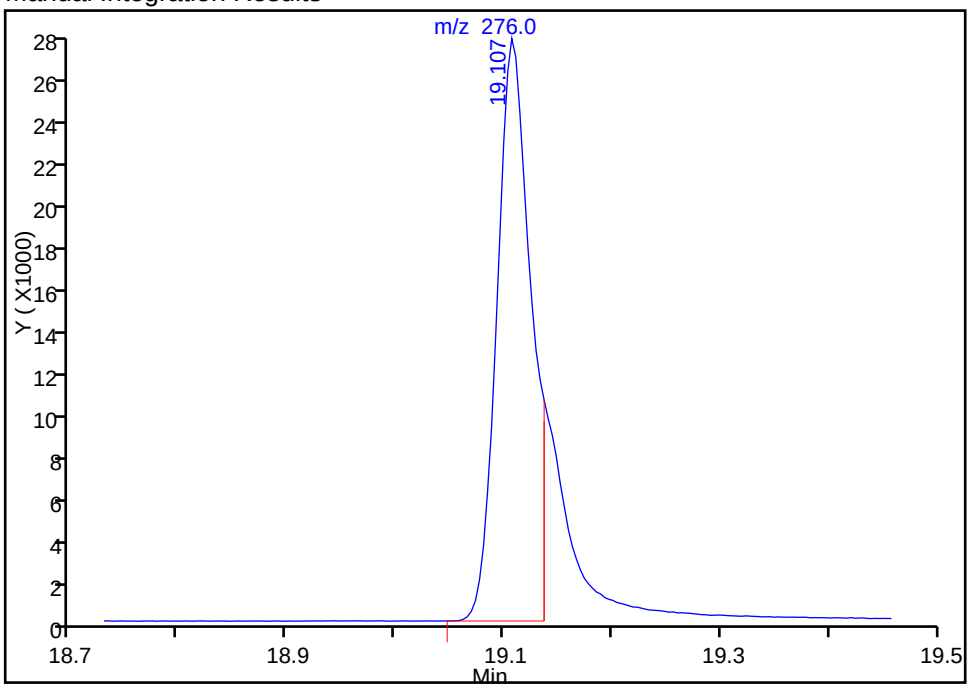
Processing Integration Results

RT: 19.11
Response: 76214
Amount: 1075.4978



Manual Integration Results

RT: 19.11
Response: 60176
Amount: 849.1767



Reviewer: vasquezk, 02-Jan-2014 09:02:48
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1
SDG No.:
Client Sample ID: | Lab Sample ID: LCS 280-207028/2-A
Matrix: Solid | Lab File ID: X4_8918.D
Analysis Method: 8270C SIM | Date Collected:
Extract. Method: 3546 | Date Extracted: 12/30/2013 19:55
Sample wt/vol: 30.2(g) | Date Analyzed: 01/02/2014 15:13
Con. Extract Vol.: 1000(uL) | Dilution Factor: 1
Injection Volume: 1(uL) | Level: (low/med) Low
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	27800		5000	1200
50-32-8	Benzo[a]pyrene	27300		5000	740
56-55-3	Benzo[a]anthracene	25800		5000	890
207-08-9	Benzo[k]fluoranthene	28100		5000	990
191-24-2	Benzo[g,h,i]perylene	28300		5000	1100
85-01-8	Phenanthrene	26400		5000	1100
120-12-7	Anthracene	26500		5000	720
53-70-3	Dibenz(a,h)anthracene	28300		5000	1300
218-01-9	Chrysene	27400		5000	990
83-32-9	Acenaphthene	26200		5000	160
208-96-8	Acenaphthylene	26500		5000	170
206-44-0	Fluoranthene	27700		5000	990
86-73-7	Fluorene	26100		5000	470
129-00-0	Pyrene	27800		5000	1100
193-39-5	Indeno[1,2,3-cd]pyrene	27900		5000	1100
91-57-6	2-Methylnaphthalene	26000		5000	310
91-20-3	Naphthalene	28100		5000	320

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	90		39-120
4165-60-0	Nitrobenzene-d5	91		42-120
1718-51-0	Terphenyl-d14	110		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8918.D
Lims ID: LCS 280-207028/2-A Lab Sample ID: LCS 280-207028/2-A
Client ID:
Sample Type: LCS
Inject. Date: 02-Jan-2014 15:13:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-0018755-004
Misc. Info.: lcs280-207028_2-a =LCS280-207028_2-A
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 03-Jan-2014 09:34:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.240	6.240	0.0	97	18819	600.0	
* 1 Phenanthrene-d10	188	7.532	7.532	0.0	100	35505	600.0	
* 3 Chrysene-d12	240	11.964	11.964	0.0	98	39296	600.0	
$ 4 Nitrobenzene-d5	82	4.189	4.189	0.0	100	9591	455.4	
$ 5 2-Fluorobiphenyl	172	5.633	5.633	0.0	100	20012	450.7	
$ 6 Terphenyl-d14	244	9.532	9.532	0.0	99	23603	549.1	
14 Naphthalene	128	4.786	4.786	0.0	100	48889	849.0	
15 2-Methylnaphthalene	142	5.347	5.344	0.003	99	31918	783.8	
16 1-Methylnaphthalene	142	5.433	5.433	0.0	97	31940	854.7	
19 Acenaphthylene	152	6.119	6.119	0.0	99	50171	799.5	
20 Acenaphthene	153	6.268	6.269	-0.001	100	30946	790.6	
22 Fluorene	166	6.702	6.702	0.0	98	36904	788.8	
24 Phenanthrene	178	7.553	7.553	0.0	100	57954	796.5	
25 Anthracene	178	7.602	7.602	0.0	100	57397	801.3	
27 Fluoranthene	202	8.979	8.979	0.0	100	65914	835.2	
28 Pyrene	202	9.359	9.359	0.0	100	68295	838.7	
31 Benzo[a]anthracene	228	11.932	11.932	0.0	100	62146	778.1	
32 Chrysene	228	12.043	12.035	0.008	100	62387	826.0	
34 Benzo[b]fluoranthene	252	15.272	15.264	0.008	100	61462	840.1	
35 Benzo[k]fluoranthene	252	15.357	15.357	0.0	100	63906	849.2	
36 Benzo[a]pyrene	252	16.400	16.397	0.003	100	58359	823.1	
38 Indeno[1,2,3-cd]pyrene	276	19.118	19.118	0.0	98	58824	842.8	M
37 Dibenz(a,h)anthracene	278	19.152	19.152	0.0	97	60337	855.5	
39 Benzo[g,h,i]perylene	276	19.596	19.592	0.004	98	64065	855.1	

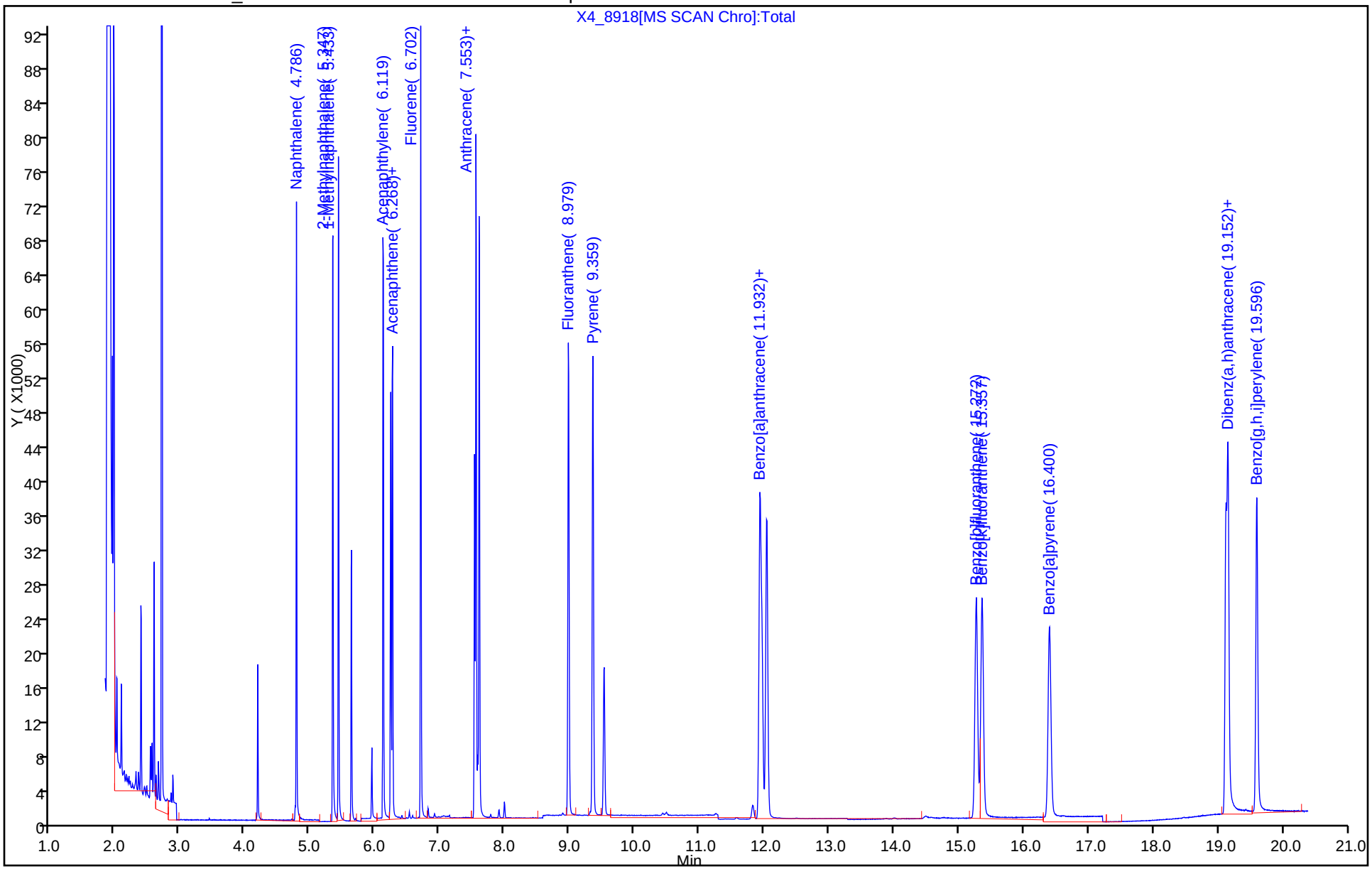
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:05:59 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8918.D				
Injection Date:	02-Jan-2014 15:13:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	LCS 280-207028/2-A	Lab Sample ID:	LCS 280-207028/2-A	Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

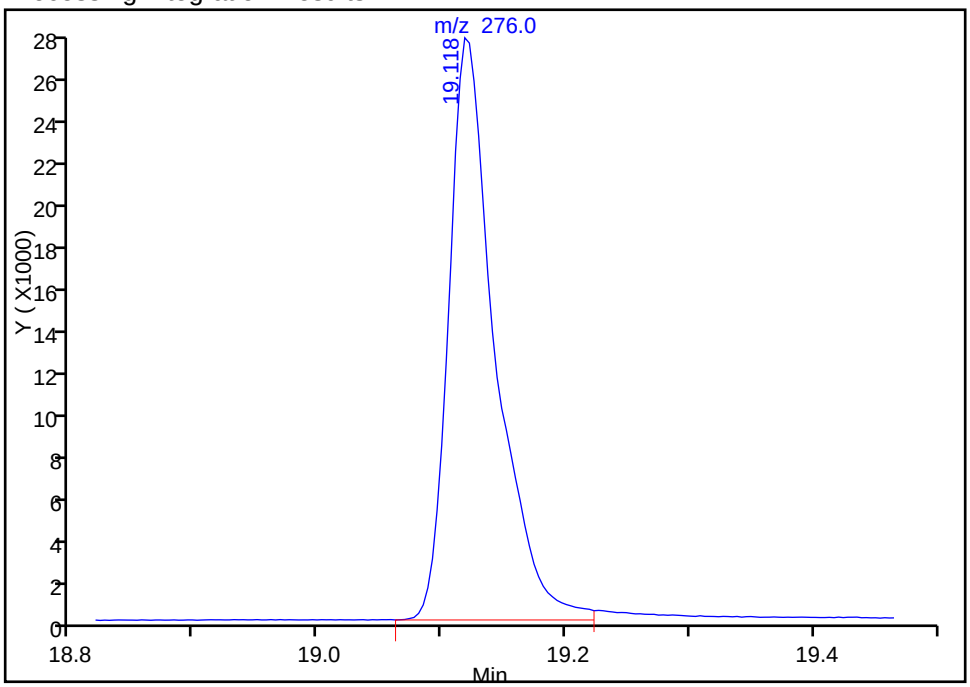
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8918.D				
Injection Date:	02-Jan-2014 15:13:30	Instrument ID:	SMS_X4		
Lims ID:	LCS 280-207028/2-A	Lab Sample ID:	LCS 280-207028/2-A		
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

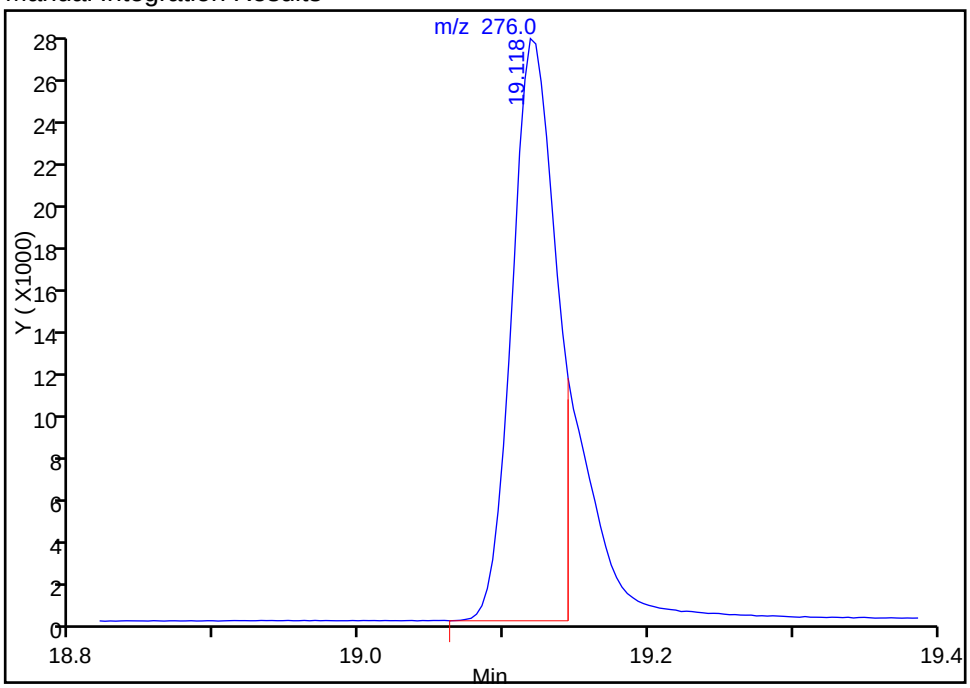
Processing Integration Results

RT: 19.12
Response: 72745
Amount: 1042.2711



Manual Integration Results

RT: 19.12
Response: 58824
Amount: 842.8147



Reviewer: vasquezk, 03-Jan-2014 09:34:21
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-50614-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCSD 280-206688/3-A
Matrix: Water
Lab File ID: X4_8898.D
Analysis Method: 8270C SIM
Date Collected:
Extract. Method: 3510C
Date Extracted: 12/26/2013 17:46
Sample wt/vol: 1000(mL)
Date Analyzed: 12/31/2013 19:47
Con. Extract Vol.: 1000(uL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 207101
Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	864		100	3.4
50-32-8	Benzo[a]pyrene	786		100	5.1
56-55-3	Benzo[a]anthracene	793		100	3.2
207-08-9	Benzo[k]fluoranthene	876		100	5.1
191-24-2	Benzo[g,h,i]perylene	887		100	3.6
85-01-8	Phenanthrene	790		100	9.8
120-12-7	Anthracene	775		100	14
53-70-3	Dibenz(a,h)anthracene	849		100	4.8
218-01-9	Chrysene	909		100	3.2
83-32-9	Acenaphthene	696		100	11
208-96-8	Acenaphthylene	674		100	10
206-44-0	Fluoranthene	903		100	4.5
86-73-7	Fluorene	730		100	19
129-00-0	Pyrene	935		100	8.1
193-39-5	Indeno[1,2,3-cd]pyrene	853		100	15
91-57-6	2-Methylnaphthalene	529		100	5.2
91-20-3	Naphthalene	579		100	5.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	73		42-120
4165-60-0	Nitrobenzene-d5	76		43-120
1718-51-0	Terphenyl-d14	124	X	47-120

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8898.D
Lims ID: LCSD 280-206688/3-A Lab Sample ID: LCSD 280-206688/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 31-Dec-2013 19:47:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcsd280-206688_3-a
Misc. Info.: lcsd280-206688_3-a =LCSD280-206688_3-A
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 09:01:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	96	18039	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	35644	600.0	
* 3 Chrysene-d12	240	11.948	11.956	-0.008	96	43869	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.186	0.0	100	7622	377.6	
$ 5 2-Fluorobiphenyl	172	5.630	5.630	0.0	100	15526	364.8	
$ 6 Terphenyl-d14	244	9.521	9.527	-0.006	99	26658	617.7	
14 Naphthalene	128	4.780	4.783	-0.003	100	31933	578.5	
15 2-Methylnaphthalene	142	5.344	5.344	0.0	100	20658	529.2	
16 1-Methylnaphthalene	142	5.429	5.429	0.0	98	22274	621.8	
19 Acenaphthylene	152	6.119	6.119	0.0	100	40532	673.8	
20 Acenaphthene	153	6.261	6.261	0.0	99	26100	695.6	
22 Fluorene	166	6.702	6.696	0.006	99	32744	730.1	
24 Phenanthrene	178	7.548	7.553	-0.005	100	57680	789.6	
25 Anthracene	178	7.602	7.602	0.0	100	55702	774.6	
27 Fluoranthene	202	8.973	8.979	-0.006	100	71542	903.0	
28 Pyrene	202	9.348	9.353	-0.005	100	76442	935.1	
31 Benzo[a]anthracene	228	11.916	11.924	-0.008	100	70750	793.4	
32 Chrysene	228	12.019	12.027	-0.008	100	76617	908.7	
34 Benzo[b]fluoranthene	252	15.246	15.253	-0.007	100	70577	864.1	
35 Benzo[k]fluoranthene	252	15.339	15.342	-0.003	100	73563	875.6	
36 Benzo[a]pyrene	252	16.378	16.385	-0.007	100	62244	786.4	
38 Indeno[1,2,3-cd]pyrene	276	19.111	19.111	0.0	98	66474	853.1	M
37 Dibenz(a,h)anthracene	278	19.144	19.148	-0.004	96	66878	849.4	
39 Benzo[g,h,i]perylene	276	19.584	19.584	0.0	98	74175	886.9	

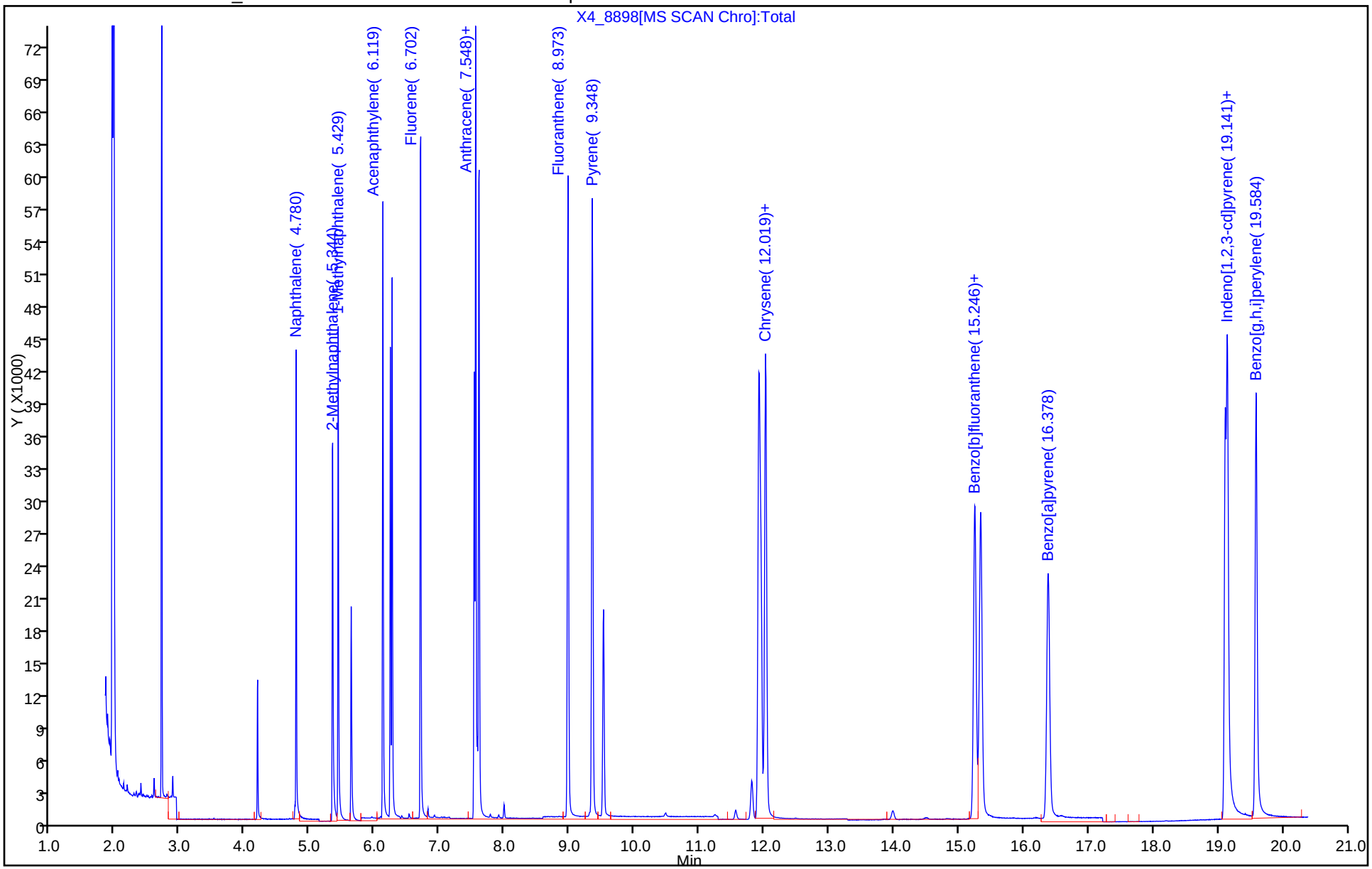
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 02-Jan-2014 09:28:13 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8898.D				
Injection Date:	31-Dec-2013 19:47:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	LCSD 280-206688/3-A	Lab Sample ID:	LCSD 280-206688/3-A	Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

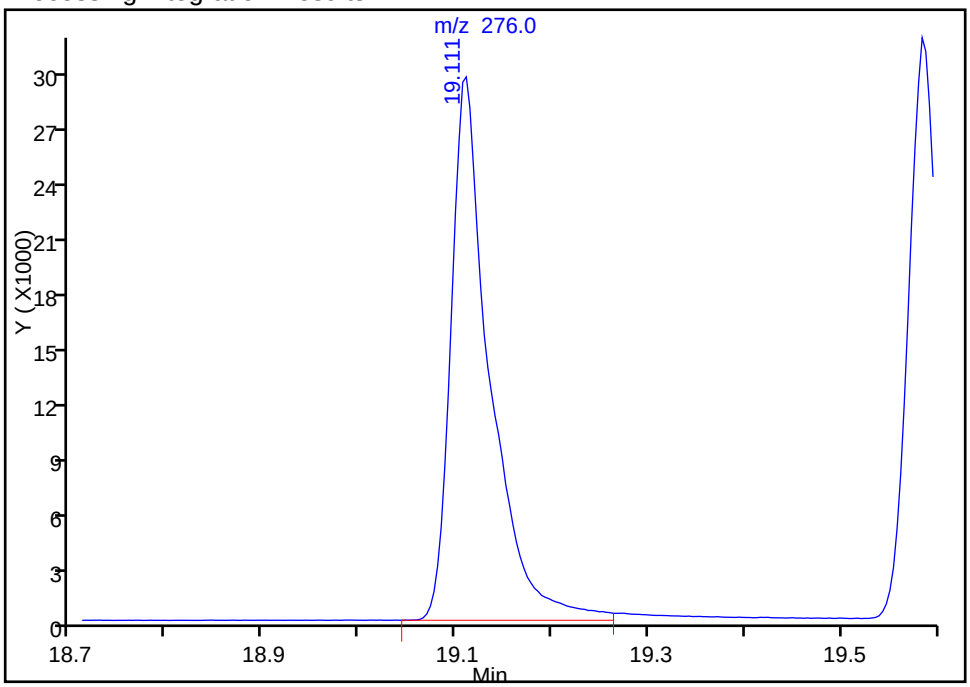
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8898.D				
Injection Date:	31-Dec-2013 19:47:30	Instrument ID:	SMS_X4		
Lims ID:	LCSD 280-206688/3-A	Lab Sample ID:	LCSD 280-206688/3-A		
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

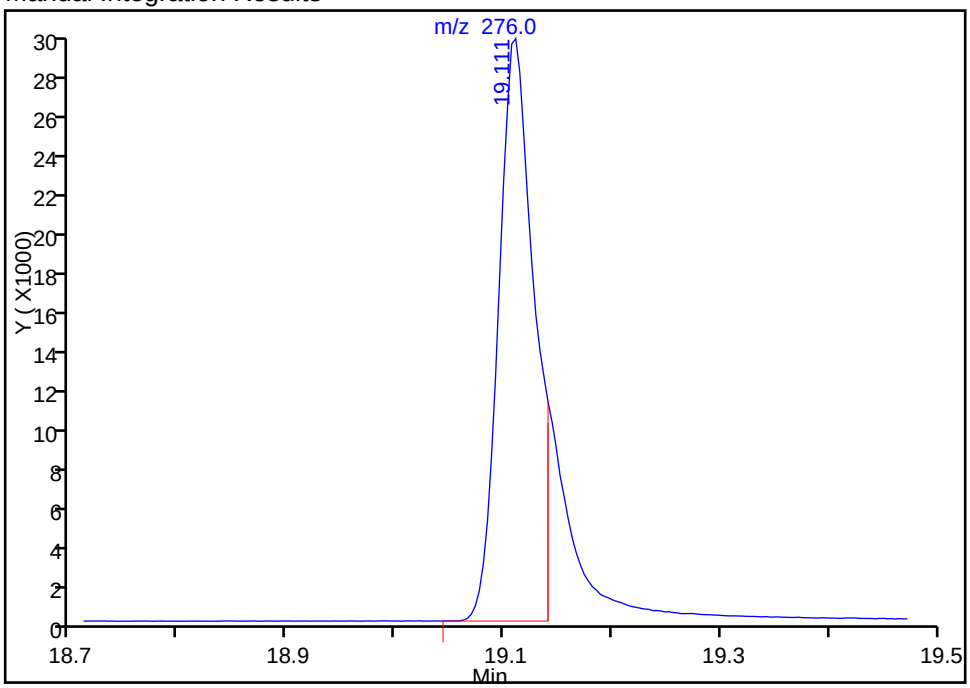
Processing Integration Results

RT: 19.11
Response: 82259
Amount: 1055.7269



Manual Integration Results

RT: 19.11
Response: 66474
Amount: 853.1393



Reviewer: vasquezk, 02-Jan-2014 09:01:57
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SF-CT MS | Lab Sample ID: 280-50614-1 MS

Matrix: Solid | Lab File ID: X4_8920.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 08:55

Extract. Method: 3546 | Date Extracted: 12/30/2013 19:55

Sample wt/vol: 32.0(g) | Date Analyzed: 01/02/2014 16:09

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 59.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	216000		12000	2800
50-32-8	Benzo[a]pyrene	155000		12000	1700
56-55-3	Benzo[a]anthracene	126000		12000	2100
207-08-9	Benzo[k]fluoranthene	118000		12000	2300
191-24-2	Benzo[g,h,i]perylene	134000		12000	2600
85-01-8	Phenanthrene	174000		12000	2600
120-12-7	Anthracene	80900		12000	1700
53-70-3	Dibenz(a,h)anthracene	73300		12000	3000
218-01-9	Chrysene	170000		12000	2300
83-32-9	Acenaphthene	85900		12000	370
208-96-8	Acenaphthylene	99500		12000	400
206-44-0	Fluoranthene	263000		12000	2300
86-73-7	Fluorene	86900		12000	1100
129-00-0	Pyrene	258000		12000	2600
193-39-5	Indeno[1,2,3-cd]pyrene	151000		12000	2600
91-57-6	2-Methylnaphthalene	94300		12000	720
91-20-3	Naphthalene	134000		12000	760

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	74		39-120
4165-60-0	Nitrobenzene-d5	104		42-120
1718-51-0	Terphenyl-d14	91		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8920.D
Lims ID: 280-50614-B-1-B MS Lab Sample ID: 280-50614-1
Client ID: FSA-SF-CT
Sample Type: MS
Inject. Date: 02-Jan-2014 16:09:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-0018755-006
Misc. Info.: 280-50614-b-1-bms =280-50614-B-1-BMS
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:11:12 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

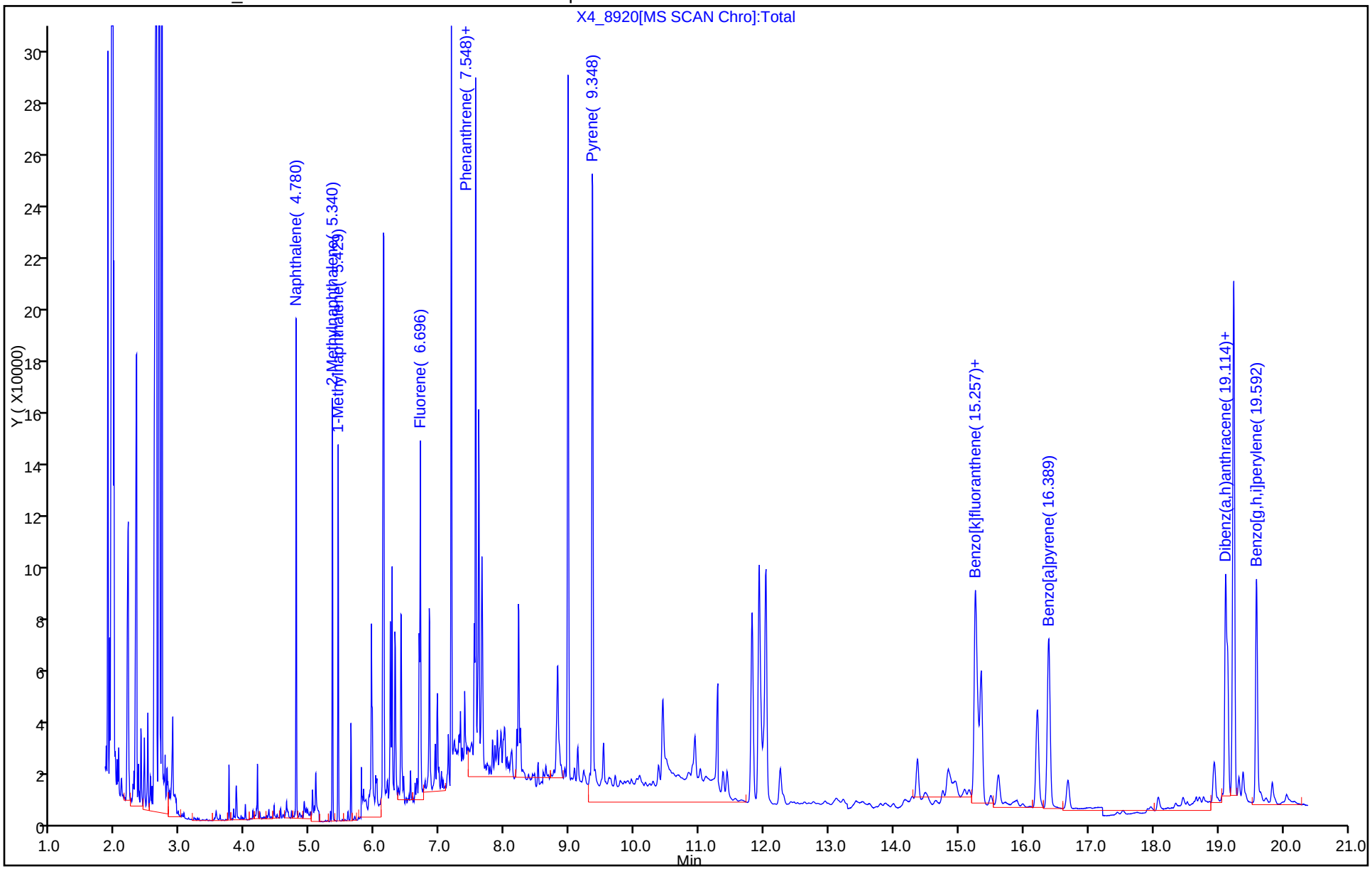
First Level Reviewer: vasquezk Date: 03-Jan-2014 14:06:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	93	23814	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	98	38844	600.0	
* 3 Chrysene-d12	240	11.948	11.964	-0.016	86	45466	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.189	-0.006	100	13908	521.9	
$ 5 2-Fluorobiphenyl	172	5.626	5.633	-0.007	100	20692	368.3	
$ 6 Terphenyl-d14	244	9.521	9.532	-0.011	94	21490	457.0	
14 Naphthalene	128	4.780	4.786	-0.006	100	125399	1720.9	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	99	62554	1214.0	
16 1-Methylnaphthalene	142	5.429	5.433	-0.004	99	54091	1143.9	
19 Acenaphthylene	152	6.119	6.119	0.0	95	101799	1282.0	
20 Acenaphthene	153	6.261	6.269	-0.008	99	54829	1106.9	
22 Fluorene	166	6.696	6.702	-0.006	98	66293	1119.8	
24 Phenanthrene	178	7.548	7.553	-0.005	99	178692	2244.7	
25 Anthracene	178	7.597	7.602	-0.005	94	81655	1042.0	
27 Fluoranthene	202	8.973	8.979	-0.006	100	292851	3391.9	
28 Pyrene	202	9.348	9.359	-0.011	100	295504	3317.1	
31 Benzo[a]anthracene	228	11.924	11.932	-0.008	99	150453	1628.0	
32 Chrysene	228	12.027	12.035	-0.008	100	191356	2189.8	
34 Benzo[b]fluoranthene	252	15.257	15.264	-0.007	100	235174	2778.3	
35 Benzo[k]fluoranthene	252	15.346	15.357	-0.011	100	132592	1522.8	
36 Benzo[a]pyrene	252	16.389	16.397	-0.008	100	163230	1989.8	
38 Indeno[1,2,3-cd]pyrene	276	19.114	19.118	-0.004	99	156816	1941.9	
37 Dibenz(a,h)anthracene	278	19.148	19.152	-0.004	97	77013	943.7	
39 Benzo[g,h,i]perylene	276	19.592	19.592	0.0	99	149291	1722.3	

Report Date: 06-Jan-2014 10:11:18 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8920.D				
Injection Date:	02-Jan-2014 16:09:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-B-1-B MS	Lab Sample ID:	280-50614-1	Worklist Smp#:	6
Client ID:	FSA-SF-CT				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU01 MS | Lab Sample ID: 280-50614-12 MS

Matrix: Solid | Lab File ID: X4_8932.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:45

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 32.14(g) | Date Analyzed: 01/02/2014 21:44

Con. Extract Vol.: 1000(uL) | Dilution Factor: 5

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	1620000		23000	5600
50-32-8	Benzo[a]pyrene	757000		23000	3500
56-55-3	Benzo[a]anthracene	549000		23000	4200
207-08-9	Benzo[k]fluoranthene	558000		23000	4700
191-24-2	Benzo[g,h,i]perylene	669000		23000	5100
85-01-8	Phenanthrene	544000		23000	5100
120-12-7	Anthracene	298000		23000	3400
53-70-3	Dibenz(a,h)anthracene	202000		23000	6100
218-01-9	Chrysene	683000		23000	4700
83-32-9	Acenaphthene	43200		23000	750
208-96-8	Acenaphthylene	294000		23000	790
206-44-0	Fluoranthene	1080000		23000	4700
86-73-7	Fluorene	64100		23000	2200
129-00-0	Pyrene	1090000		23000	5100
193-39-5	Indeno[1,2,3-cd]pyrene	746000		23000	5100
91-57-6	2-Methylnaphthalene	160000		23000	1400
91-20-3	Naphthalene	126000		23000	1500

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	71	D	39-120
4165-60-0	Nitrobenzene-d5	82	D	42-120
1718-51-0	Terphenyl-d14	129	D X	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8932.D
Lims ID: 280-50614-B-12-C MS Lab Sample ID: 280-50614-12
Client ID: FSA-SD-DU01
Sample Type: MS
Inject. Date: 02-Jan-2014 21:44:30 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-0018755-018
Misc. Info.: 280-50614-b-12-cms,5, =280-50614-B-12-CMS,5,
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 09:55:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	83	23612	600.0	
* 1 Phenanthrene-d10	188	7.532	7.532	0.0	100	44031	600.0	
* 3 Chrysene-d12	240	11.964	11.964	0.0	78	50956	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	99	2178	82.4	
$ 5 2-Fluorobiphenyl	172	5.629	5.633	-0.004	100	3975	71.3	
$ 6 Terphenyl-d14	244	9.527	9.532	-0.005	69	6867	128.8	
14 Naphthalene	128	4.783	4.786	-0.003	100	58346	807.6	
15 2-Methylnaphthalene	142	5.344	5.344	0.0	99	52616	1029.8	
16 1-Methylnaphthalene	142	5.429	5.433	-0.004	96	42714	911.0	
19 Acenaphthylene	152	6.119	6.119	0.0	99	148627	1887.7	
20 Acenaphthene	153	6.261	6.269	-0.008	93	13640	277.7	
22 Fluorene	166	6.696	6.702	-0.006	91	24174	411.8	
24 Phenanthrene	178	7.553	7.553	0.0	100	315497	3496.3	
25 Anthracene	178	7.602	7.602	0.0	99	170347	1917.7	
27 Fluoranthene	202	8.979	8.979	0.0	100	682454	6973.2	E
28 Pyrene	202	9.353	9.359	-0.006	100	704580	6977.4	E
31 Benzo[a]anthracene	228	11.932	11.932	0.0	98	365326	3527.2	
32 Chrysene	228	12.035	12.035	0.0	100	429769	4388.3	M
34 Benzo[b]fluoranthene	252	15.272	15.264	0.008	100	987790	10412	E
35 Benzo[k]fluoranthene	252	15.357	15.357	0.0	100	350024	3586.8	
36 Benzo[a]pyrene	252	16.404	16.397	0.007	100	447163	4863.8	
38 Indeno[1,2,3-cd]pyrene	276	19.126	19.118	0.008	99	434130	4796.8	
37 Dibenz(a,h)anthracene	278	19.152	19.152	0.0	79	118946	1300.6	
39 Benzo[g,h,i]perylene	276	19.607	19.592	0.015	99	417852	4301.1	

QC Flag Legend

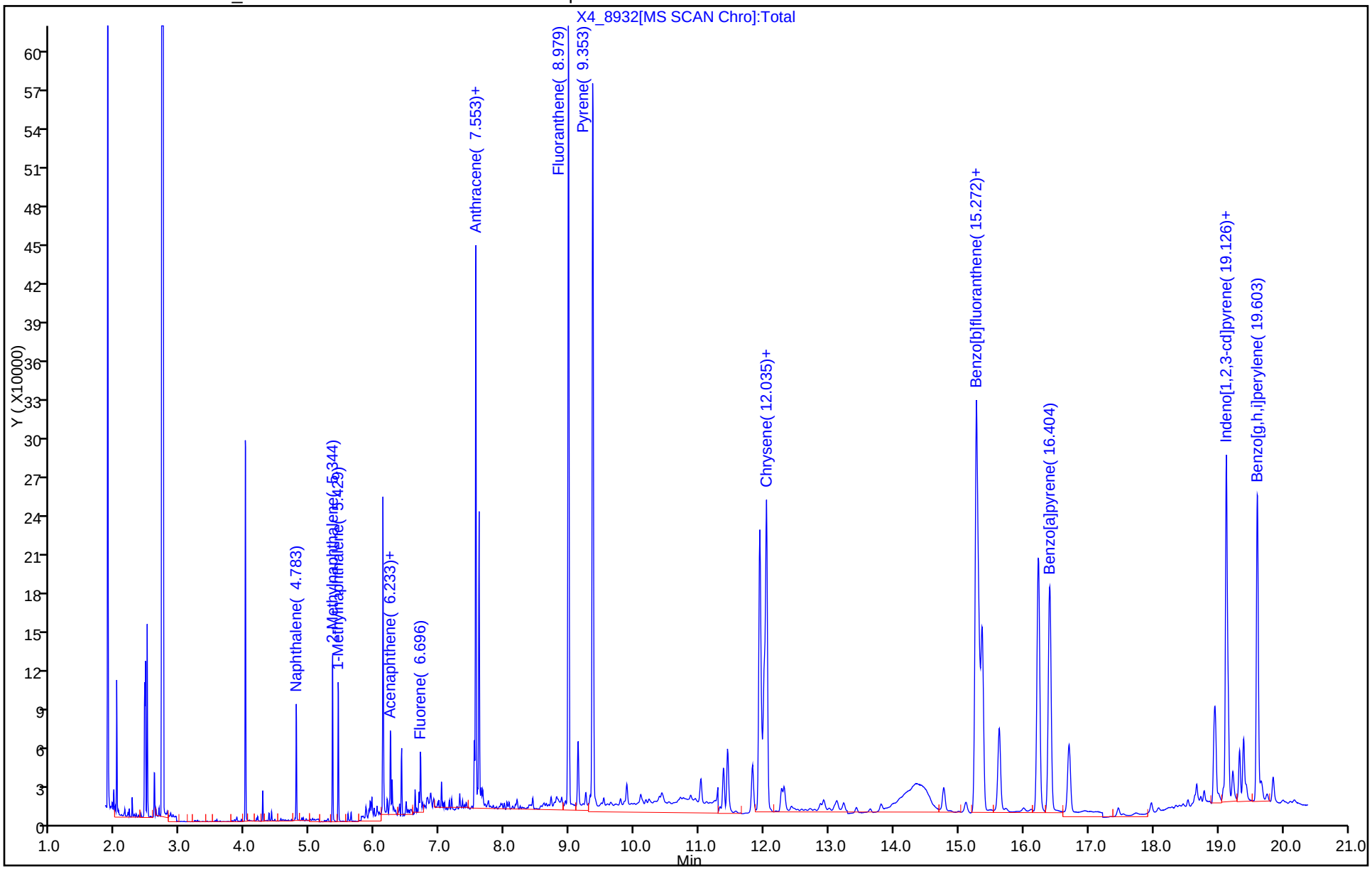
Processing Flags
E - Exceeded Maximum Amount

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:06:12 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8932.D				
Injection Date:	02-Jan-2014 21:44:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-B-12-C MS	Lab Sample ID:	280-50614-12	Worklist Smp#:	18
Client ID:	FSA-SD-DU01				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	18
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

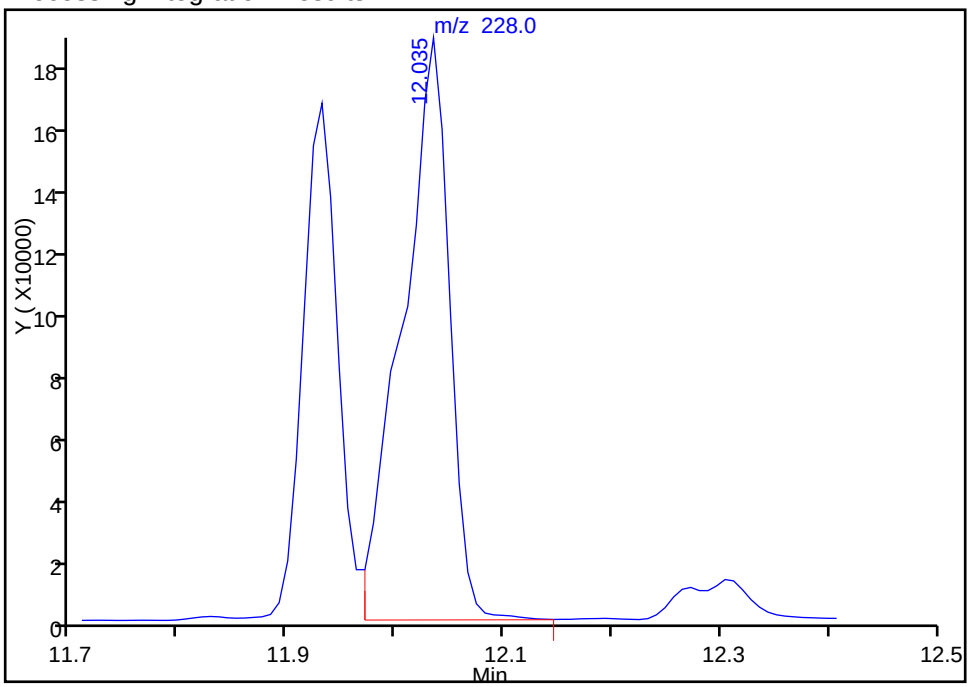
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8932.D				
Injection Date:	02-Jan-2014 21:44:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-12-C MS	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

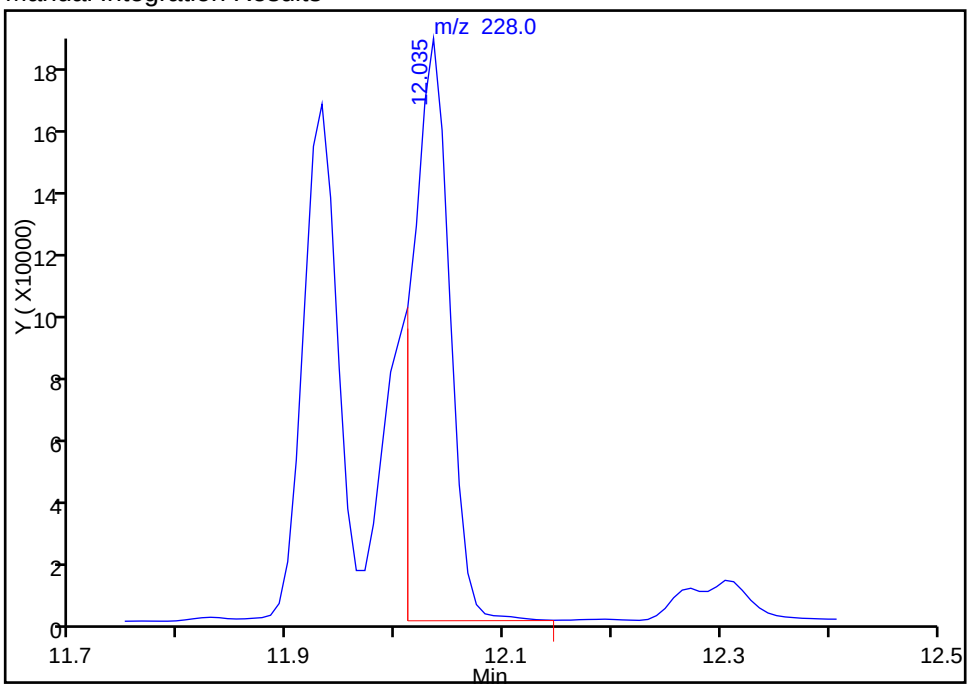
Processing Integration Results

RT: 12.03
Response: 558972
Amount: 5707.5841



Manual Integration Results

RT: 12.03
Response: 429769
Amount: 4388.3106



Reviewer: vasquezk, 06-Jan-2014 09:55:34
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SF-CT MSD | Lab Sample ID: 280-50614-1 MSD

Matrix: Solid | Lab File ID: X4_8921.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 08:55

Extract. Method: 3546 | Date Extracted: 12/30/2013 19:55

Sample wt/vol: 31.3(g) | Date Analyzed: 01/02/2014 16:37

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 59.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	232000		12000	2900
50-32-8	Benzo[a]pyrene	163000		12000	1800
56-55-3	Benzo[a]anthracene	136000		12000	2100
207-08-9	Benzo[k]fluoranthene	124000		12000	2400
191-24-2	Benzo[g,h,i]perylene	138000		12000	2600
85-01-8	Phenanthrene	199000		12000	2600
120-12-7	Anthracene	92400		12000	1700
53-70-3	Dibenz(a,h)anthracene	74100		12000	3100
218-01-9	Chrysene	182000		12000	2400
83-32-9	Acenaphthene	98700		12000	380
208-96-8	Acenaphthylene	110000		12000	400
206-44-0	Fluoranthene	294000		12000	2400
86-73-7	Fluorene	168000		12000	1100
129-00-0	Pyrene	290000		12000	2600
193-39-5	Indeno[1,2,3-cd]pyrene	154000		12000	2600
91-57-6	2-Methylnaphthalene	93000		12000	740
91-20-3	Naphthalene	137000		12000	780

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	70		39-120
4165-60-0	Nitrobenzene-d5	105		42-120
1718-51-0	Terphenyl-d14	93		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8921.D
Lims ID: 280-50614-B-1-C MSD Lab Sample ID: 280-50614-1
Client ID: FSA-SF-CT
Sample Type: MSD
Inject. Date: 02-Jan-2014 16:37:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-0018755-007
Misc. Info.: 280-50614-b-1-cmsd =280-50614-B-1-CMSD
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

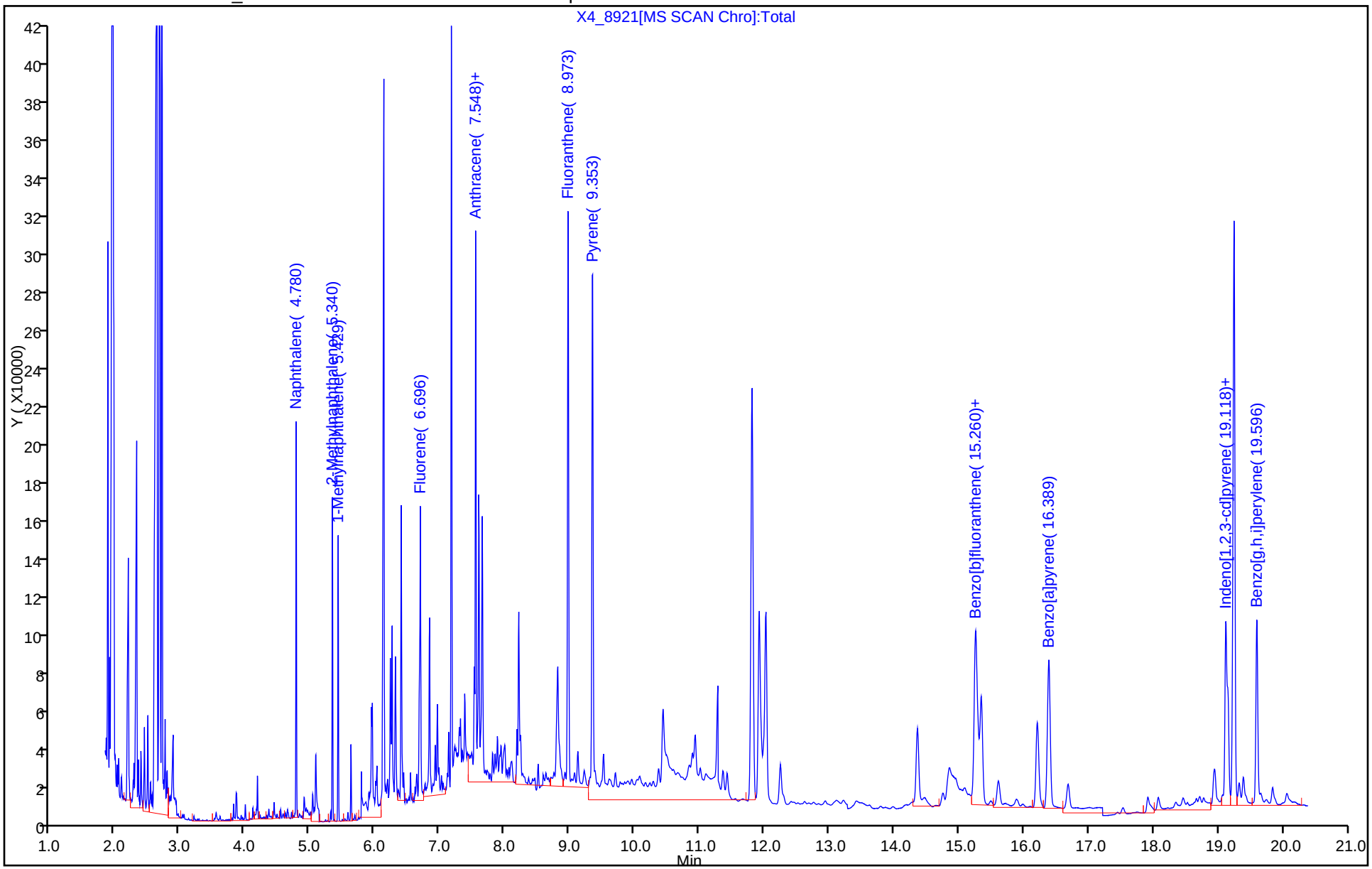
First Level Reviewer: vasquezk Date: 03-Jan-2014 14:07:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	94	24995	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	98	38629	600.0	
* 3 Chrysene-d12	240	11.956	11.964	-0.008	92	47419	600.0	
$ 4 Nitrobenzene-d5	82	4.183	4.189	-0.006	100	14729	526.6	
$ 5 2-Fluorobiphenyl	172	5.626	5.633	-0.007	100	20758	352.0	
$ 6 Terphenyl-d14	244	9.521	9.532	-0.011	92	21807	466.3	
14 Naphthalene	128	4.780	4.786	-0.006	100	131547	1720.0	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	99	63385	1172.0	
16 1-Methylnaphthalene	142	5.429	5.433	-0.004	99	54866	1105.4	
19 Acenaphthylene	152	6.119	6.119	0.0	95	115710	1388.3	
20 Acenaphthene	153	6.261	6.269	-0.008	99	64644	1243.4	
22 Fluorene	166	6.696	6.702	-0.006	95	131747	2120.2	
24 Phenanthrene	178	7.548	7.553	-0.005	99	198191	2503.5	
25 Anthracene	178	7.597	7.602	-0.005	94	90687	1163.7	
27 Fluoranthene	202	8.973	8.979	-0.006	100	317618	3699.2	
28 Pyrene	202	9.353	9.359	-0.006	100	323725	3654.1	
31 Benzo[a]anthracene	228	11.924	11.932	-0.008	99	164771	1709.5	
32 Chrysene	228	12.027	12.035	-0.008	100	208475	2287.5	
34 Benzo[b]fluoranthene	252	15.260	15.264	-0.004	100	257924	2921.6	
35 Benzo[k]fluoranthene	252	15.346	15.357	-0.011	100	142091	1564.6	
36 Benzo[a]pyrene	252	16.389	16.397	-0.008	100	175961	2056.7	
38 Indeno[1,2,3-cd]pyrene	276	19.118	19.118	0.0	99	163908	1946.1	
37 Dibenz(a,h)anthracene	278	19.152	19.152	0.0	95	79422	933.2	
39 Benzo[g,h,i]perylene	276	19.596	19.592	0.004	99	157491	1742.0	

Report Date: 06-Jan-2014 10:06:02 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8921.D				
Injection Date:	02-Jan-2014 16:37:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-B-1-C MSD	Lab Sample ID:	280-50614-1	Worklist Smp#:	7
Client ID:	FSA-SF-CT				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU01 MSD | Lab Sample ID: 280-50614-12 MSD

Matrix: Solid | Lab File ID: X4_8933.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:45

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 31.74(g) | Date Analyzed: 01/02/2014 22:12

Con. Extract Vol.: 1000(uL) | Dilution Factor: 5

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	1380000		24000	5700
50-32-8	Benzo[a]pyrene	597000		24000	3500
56-55-3	Benzo[a]anthracene	388000		24000	4300
207-08-9	Benzo[k]fluoranthene	451000		24000	4700
191-24-2	Benzo[g,h,i]perylene	556000		24000	5200
85-01-8	Phenanthrene	275000		24000	5200
120-12-7	Anthracene	244000		24000	3400
53-70-3	Dibenz(a,h)anthracene	169000		24000	6100
218-01-9	Chrysene	515000		24000	4700
83-32-9	Acenaphthene	39300		24000	760
208-96-8	Acenaphthylene	232000		24000	800
206-44-0	Fluoranthene	611000		24000	4700
86-73-7	Fluorene	44500		24000	2200
129-00-0	Pyrene	723000		24000	5200
193-39-5	Indeno[1,2,3-cd]pyrene	606000		24000	5200
91-57-6	2-Methylnaphthalene	154000		24000	1500
91-20-3	Naphthalene	116000		24000	1500

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	68	D	39-120
4165-60-0	Nitrobenzene-d5	81	D	42-120
1718-51-0	Terphenyl-d14	112	D	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8933.D
Lims ID: 280-50614-B-12-D MSD Lab Sample ID: 280-50614-12
Client ID: FSA-SD-DU01
Sample Type: MSD
Inject. Date: 02-Jan-2014 22:12:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-0018755-019
Misc. Info.: 280-50614-b-12-dmsd,5, =280-50614-B-12-DMSD,5,
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 09:55:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	85	22225	600.0	
* 1 Phenanthrene-d10	188	7.532	7.532	0.0	100	43440	600.0	
* 3 Chrysene-d12	240	11.964	11.964	0.0	85	51448	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	99	2003	80.5	
$ 5 2-Fluorobiphenyl	172	5.630	5.633	-0.003	100	3560	67.9	
$ 6 Terphenyl-d14	244	9.527	9.532	-0.005	71	5871	111.6	
14 Naphthalene	128	4.783	4.786	-0.003	100	50282	739.4	
15 2-Methylnaphthalene	142	5.344	5.344	0.0	99	46929	975.8	
16 1-Methylnaphthalene	142	5.429	5.433	-0.004	97	38760	878.3	
19 Acenaphthylene	152	6.119	6.119	0.0	99	109005	1470.9	
20 Acenaphthene	153	6.262	6.269	-0.007	94	11527	249.4	
22 Fluorene	166	6.696	6.702	-0.006	92	15594	282.2	
24 Phenanthrene	178	7.554	7.553	0.001	100	155515	1746.9	
25 Anthracene	178	7.602	7.602	0.0	99	135546	1546.7	
27 Fluoranthene	202	8.979	8.979	0.0	100	374620	3879.9	
28 Pyrene	202	9.353	9.359	-0.006	100	456985	4587.0	
31 Benzo[a]anthracene	228	11.932	11.932	0.0	99	257816	2465.4	
32 Chrysene	228	12.035	12.035	0.0	100	323142	3268.0	M
34 Benzo[b]fluoranthene	252	15.276	15.264	0.012	100	836434	8732.6	E
35 Benzo[k]fluoranthene	252	15.357	15.357	0.0	100	281891	2861.0	
36 Benzo[a]pyrene	252	16.400	16.397	0.003	100	352029	3792.4	
38 Indeno[1,2,3-cd]pyrene	276	19.126	19.118	0.008	99	351573	3847.4	
37 Dibenz(a,h)anthracene	278	19.152	19.152	0.0	79	98782	1069.8	
39 Benzo[g,h,i]perylene	276	19.607	19.592	0.015	99	346292	3530.4	

QC Flag Legend

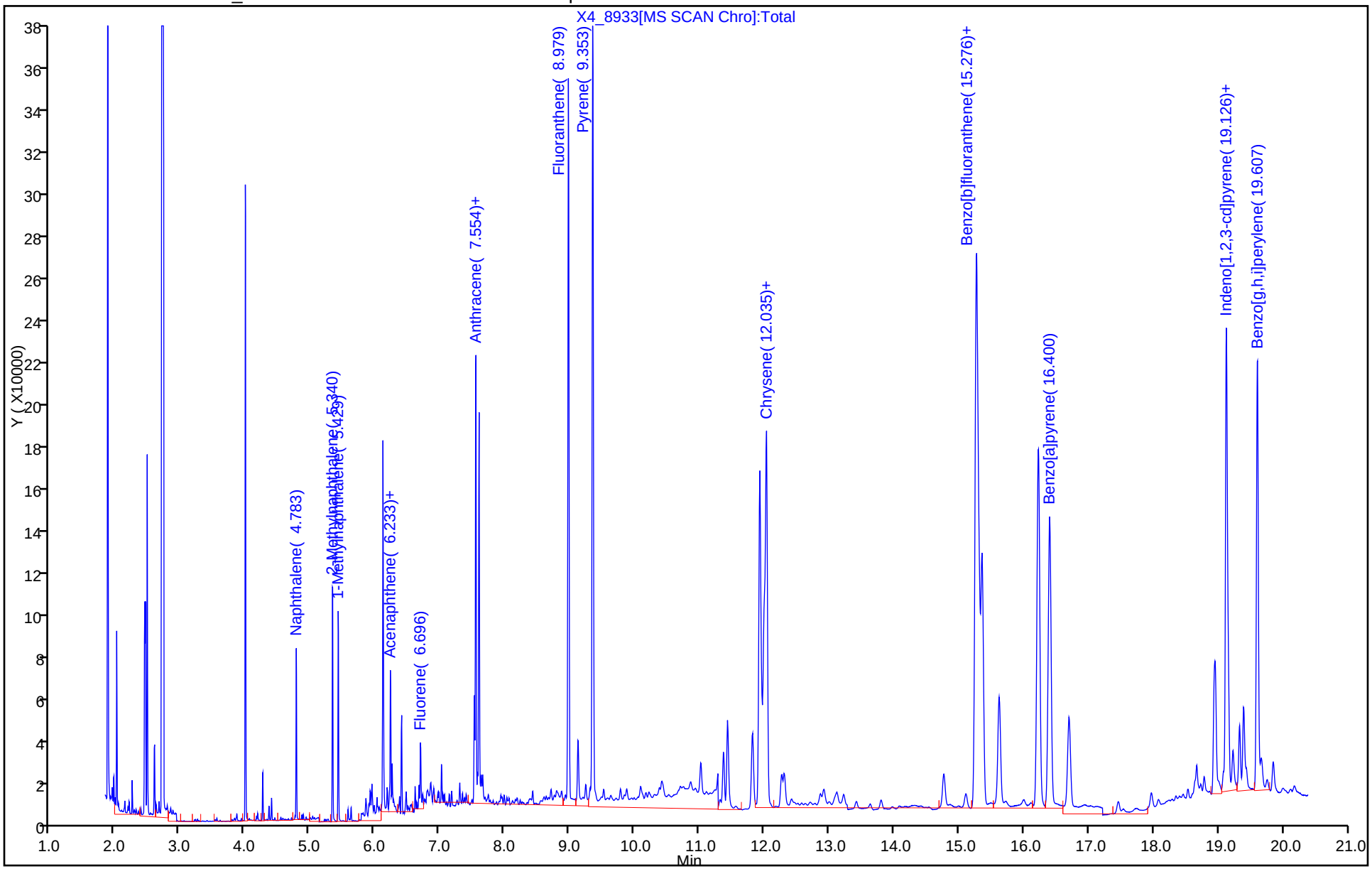
Processing Flags
E - Exceeded Maximum Amount

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:06:13 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8933.D				
Injection Date:	02-Jan-2014 22:12:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-B-12-D MSD	Lab Sample ID:	280-50614-12	Worklist Smp#:	19
Client ID:	FSA-SD-DU01				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	19
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

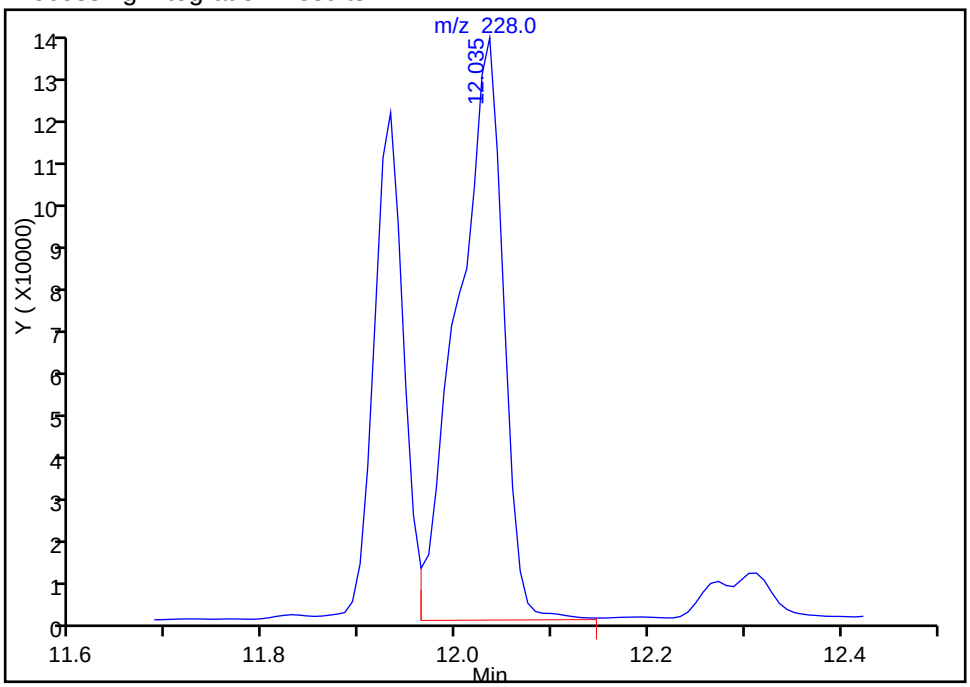
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8933.D				
Injection Date:	02-Jan-2014 22:12:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-12-D MSD	Lab Sample ID:	280-50614-12		
Client ID:	FSA-SD-DU01				
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

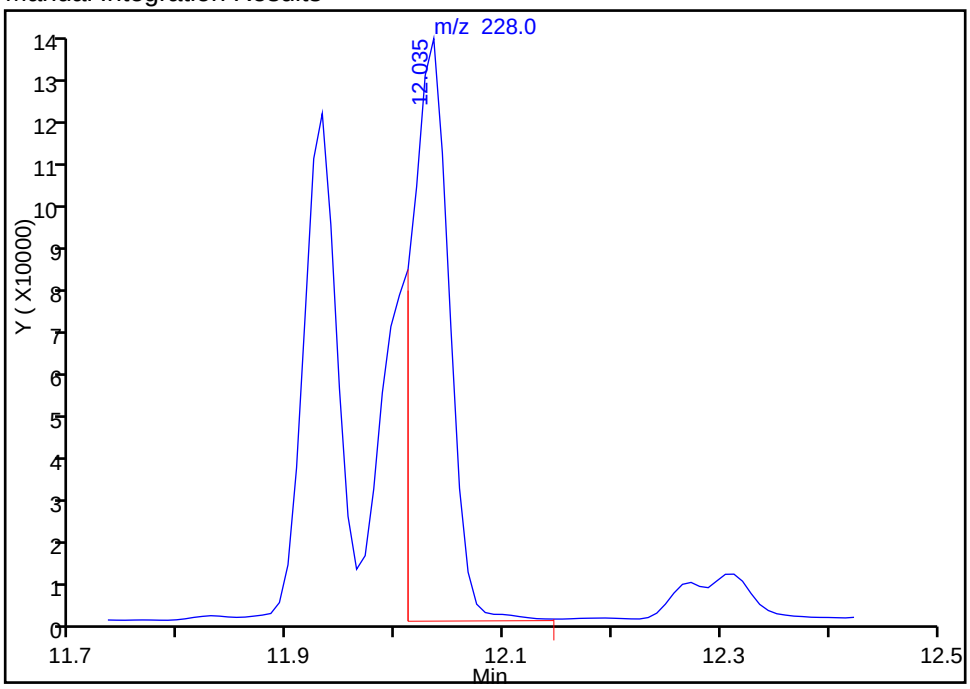
Processing Integration Results

RT: 12.04
Response: 445134
Amount: 4501.7344



Manual Integration Results

RT: 12.04
Response: 323142
Amount: 3268.0035



Reviewer: vasquezk, 06-Jan-2014 09:55:51
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU04-A DU | Lab Sample ID: 280-50614-5 DU

Matrix: Solid | Lab File ID: X4_8905.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 12:35

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 31.13(g) | Date Analyzed: 12/31/2013 23:04

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207101 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	98400		4800	1200
50-32-8	Benzo[a]pyrene	77400		4800	710
56-55-3	Benzo[a]anthracene	56400		4800	870
207-08-9	Benzo[k]fluoranthene	34700		4800	960
191-24-2	Benzo[g,h,i]perylene	55800		4800	1100
85-01-8	Phenanthrene	12400		4800	1100
120-12-7	Anthracene	8020		4800	690
53-70-3	Dibenz(a,h)anthracene	12700		4800	1300
218-01-9	Chrysene	73900		4800	960
83-32-9	Acenaphthene	1500	J	4800	150
208-96-8	Acenaphthylene	8550		4800	160
206-44-0	Fluoranthene	64600		4800	960
86-73-7	Fluorene	3000	J	4800	450
129-00-0	Pyrene	74100		4800	1100
193-39-5	Indeno[1,2,3-cd]pyrene	57200		4800	1100
91-57-6	2-Methylnaphthalene	5870		4800	300
91-20-3	Naphthalene	8850		4800	310

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	79		39-120
4165-60-0	Nitrobenzene-d5	83		42-120
1718-51-0	Terphenyl-d14	104		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8905.D
Lims ID: 280-50614-B-5-C DU Lab Sample ID: 280-50614-5
Client ID: FSA-SD-DU04-A
Sample Type: DU
Inject. Date: 31-Dec-2013 23:04:30 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-50614-b-5-cdu
Misc. Info.: 280-50614-b-5-cdu =280-50614-B-5-CDU
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 09:09:50

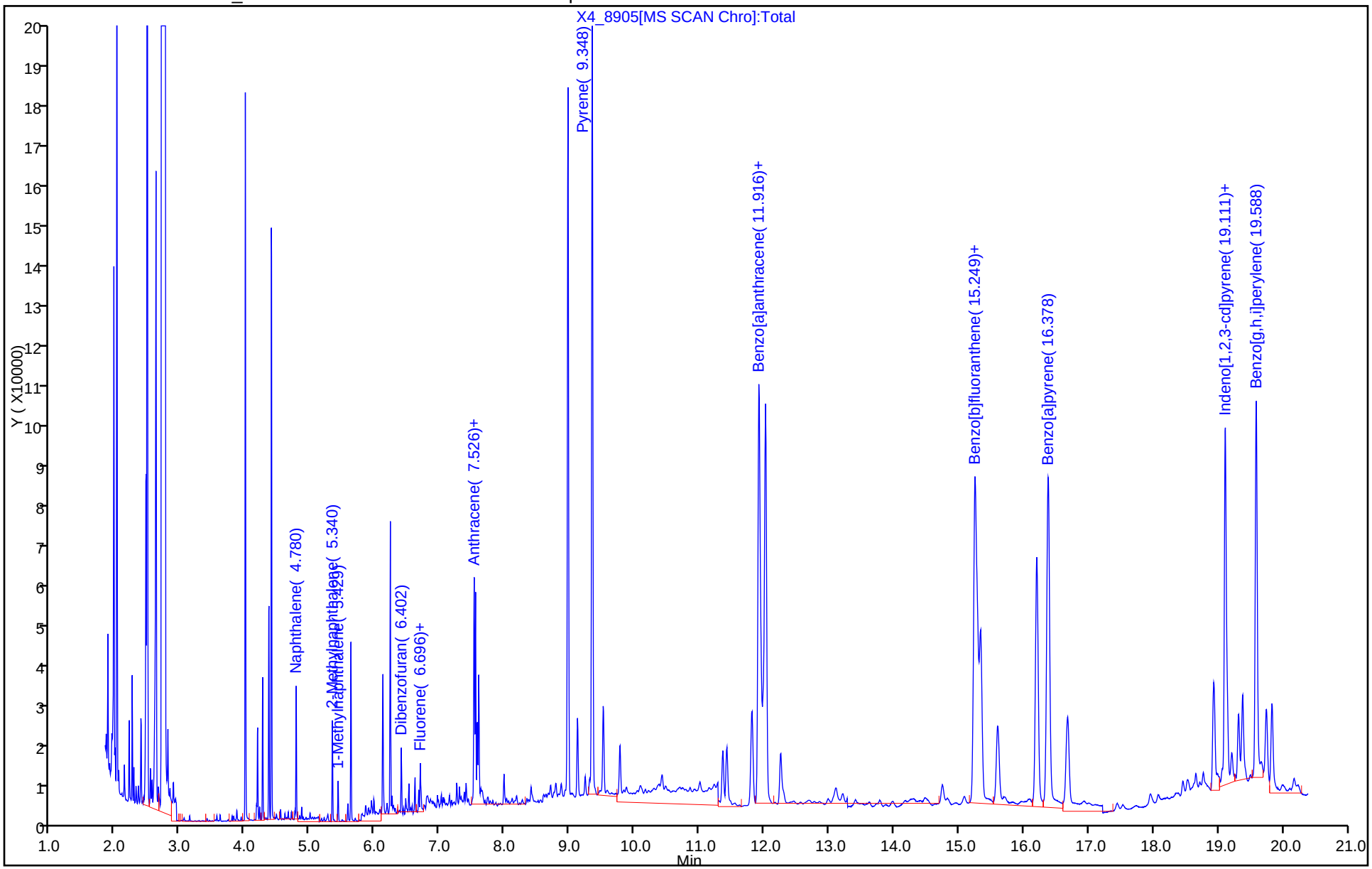
Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	100	24860	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	42984	600.0	
* 3 Chrysene-d12	240	11.948	11.956	-0.008	89	46508	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.186	0.0	100	11517	414.0	
$ 5 2-Fluorobiphenyl	172	5.626	5.630	-0.004	100	23272	396.7	
$ 6 Terphenyl-d14	244	9.516	9.527	-0.011	99	26946	517.8	
42 1,4-Dioxane	88		2.100					
7 N-Nitrosodimethylamine	42		2.219					
14 Naphthalene	128	4.780	4.783	-0.003	100	20952	275.4	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	100	9829	182.7	
16 1-Methylnaphthalene	142	5.429	5.429	0.0	100	4047	82.0	
17 Dimethyl phthalate	163	5.942	5.942	0.0	98	1764	28.1	
19 Acenaphthylene	152	6.119	6.119	0.0	100	22065	266.2	
20 Acenaphthene	153	6.261	6.261	0.0	94	2415	46.7	
18 Dibenzofuran	168	6.402	6.408	-0.006	96	8387	110.5	
21 Diethyl phthalate	149	6.521	6.521	0.0	98	4236	67.7	
22 Fluorene	166	6.696	6.696	0.0	96	5778	93.5	
23 N-Nitrosodiphenylamine	169	6.765	6.771	-0.006	86	829	21.5	
24 Phenanthrene	178	7.548	7.553	-0.005	100	34063	386.7	
25 Anthracene	178	7.597	7.602	-0.005	97	21645	249.6	
26 Di-n-butyl phthalate	149	7.987	7.992	-0.005	99	6652	61.9	
27 Fluoranthene	202	8.973	8.979	-0.006	100	192169	2011.4	
28 Pyrene	202	9.348	9.353	-0.005	100	227453	2307.3	
29 Butyl benzyl phthalate	149	10.428	10.427	0.001	69	3281	73.1	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.813	0.0	100	43359	698.3	
31 Benzo[a]anthracene	228	11.916	11.924	-0.008	99	166027	1756.3	
32 Chrysene	228	12.019	12.027	-0.008	100	205504	2299.1	
33 Di-n-octyl phthalate	149		13.864					
34 Benzo[b]fluoranthene	252	15.249	15.253	-0.004	100	265305	3064.1	
35 Benzo[k]fluoranthene	252	15.339	15.342	-0.003	100	96246	1080.6	
36 Benzo[a]pyrene	252	16.378	16.385	-0.007	100	202276	2410.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.111	19.111	0.0	99	147028	1779.9	
37 Dibenz(a,h)anthracene	278	19.137	19.148	-0.011	63	33008	395.4	
39 Benzo[g,h,i]perylene	276	19.588	19.584	0.004	98	154156	1738.5	
43 Benzidine	184		0.0					
45 Morpholine	1		0.0					
41 Pentachlorophenol	266		0.0					
8 Pentachlorophenol_T	266		4.202					
9 DFTPP								
10 Benzidine_T	184		5.317					
12 4,4'-DDD	235		5.753					
11 4,4'-DDE	246		5.795					
13 4,4'-DDT	235		6.070					
S 44 TPAH	1		0.0					

Report Date: 02-Jan-2014 09:28:17 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8905.D				
Injection Date:	31-Dec-2013 23:04:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-B-5-C DU	Lab Sample ID:	280-50614-5	Worklist Smp#:	21
Client ID:	FSA-SD-DU04-A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU03-A DU | Lab Sample ID: 280-50614-9 DU

Matrix: Solid | Lab File ID: X4_8925.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:00

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 30.69(g) | Date Analyzed: 01/02/2014 18:29

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
85-01-8	Phenanthrene	95900		4900	1100
120-12-7	Anthracene	101000		4900	700
53-70-3	Dibenz(a,h)anthracene	76700		4900	1300
83-32-9	Acenaphthene	7900		4900	160
208-96-8	Acenaphthylene	96900		4900	170
86-73-7	Fluorene	12000		4900	460
91-57-6	2-Methylnaphthalene	62000		4900	300
91-20-3	Naphthalene	49900		4900	320

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	79		39-120
4165-60-0	Nitrobenzene-d5	83		42-120
1718-51-0	Terphenyl-d14	104		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8925.D
Lims ID: 280-50614-B-9-C DU Lab Sample ID: 280-50614-9
Client ID: FSA-SD-DU03-A
Sample Type: DU
Inject. Date: 02-Jan-2014 18:29:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-0018755-011
Misc. Info.: 280-50614-b-9-cdu =280-50614-B-9-CDU
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 08:57:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	88	22472	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	99	44019	600.0	
* 3 Chrysene-d12	240	11.964	11.964	0.0	56	50934	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	99	10384	412.9	
$ 5 2-Fluorobiphenyl	172	5.626	5.633	-0.007	100	20847	393.2	
$ 6 Terphenyl-d14	244	9.521	9.532	-0.011	96	27818	522.0	
42 1,4-Dioxane	88		2.100					
7 N-Nitrosodimethylamine	42		2.219					
14 Naphthalene	128	4.783	4.786	-0.003	100	105367	1532.4	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	98	92510	1902.5	
16 1-Methylnaphthalene	142	5.429	5.433	-0.004	98	74426	1667.9	
17 Dimethyl phthalate	163	5.942	5.949	-0.007	97	6318	111.5	
19 Acenaphthylene	152	6.119	6.119	0.0	100	222891	2974.5	
20 Acenaphthene	153	6.261	6.269	-0.008	91	11338	242.6	
18 Dibenzofuran	168	6.402	6.408	-0.006	94	52363	763.2	
21 Diethyl phthalate	149	6.521	6.527	-0.006	96	3814	67.4	
22 Fluorene	166	6.696	6.702	-0.006	92	20593	368.6	
23 N-Nitrosodiphenylamine	169	6.765	6.771	-0.006	88	9880	250.6	
24 Phenanthrene	178	7.548	7.553	-0.005	100	265516	2943.2	
25 Anthracene	178	7.597	7.602	-0.005	100	275605	3103.5	
26 Di-n-butyl phthalate	149	7.987	7.992	-0.005	97	16636	151.1	
27 Fluoranthene	202	8.979	8.979	0.0	100	824815	8430.1	E
28 Pyrene	202	9.353	9.359	-0.006	100	1055828	10459	E
29 Butyl benzyl phthalate	149	10.428	10.438	-0.010	60	6398	139.3	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.821	-0.008	88	34990	550.3	
31 Benzo[a]anthracene	228	11.924	11.932	-0.008	98	603577	5830.1	E
32 Chrysene	228	12.027	12.035	-0.008	100	728608	7442.9	EM
33 Di-n-octyl phthalate	149		13.879					
34 Benzo[b]fluoranthene	252	15.272	15.264	0.008	100	1989513	20981	E
35 Benzo[k]fluoranthene	252	15.354	15.357	-0.003	100	644337	6605.5	E
36 Benzo[a]pyrene	252	16.400	16.397	0.003	100	868953	9455.7	E

Report Date: 06-Jan-2014 10:06:07 Chrom Revision: 2.1 15-Oct-2013 07:52:24
Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8925.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.130	19.118	0.012	98	824269	9111.4	E
37 Dibenz(a,h)anthracene	278	19.156	19.152	0.004	80	215283	2354.9	
39 Benzo[g,h,i]perylene	276	19.611	19.592	0.019	98	787974	8114.4	E
43 Benzidine	184		0.0					
45 Morpholine	1		0.0					
41 Pentachlorophenol	266		0.0					
8 Pentachlorophenol_T	266		4.202					
9 DFTPP								
10 Benzidine_T	184		5.323					
12 4,4'-DDD	235		5.753					
11 4,4'-DDE	246		5.795					
13 4,4'-DDT	235		6.075					
S 44 TPAH	1		0.0					

QC Flag Legend

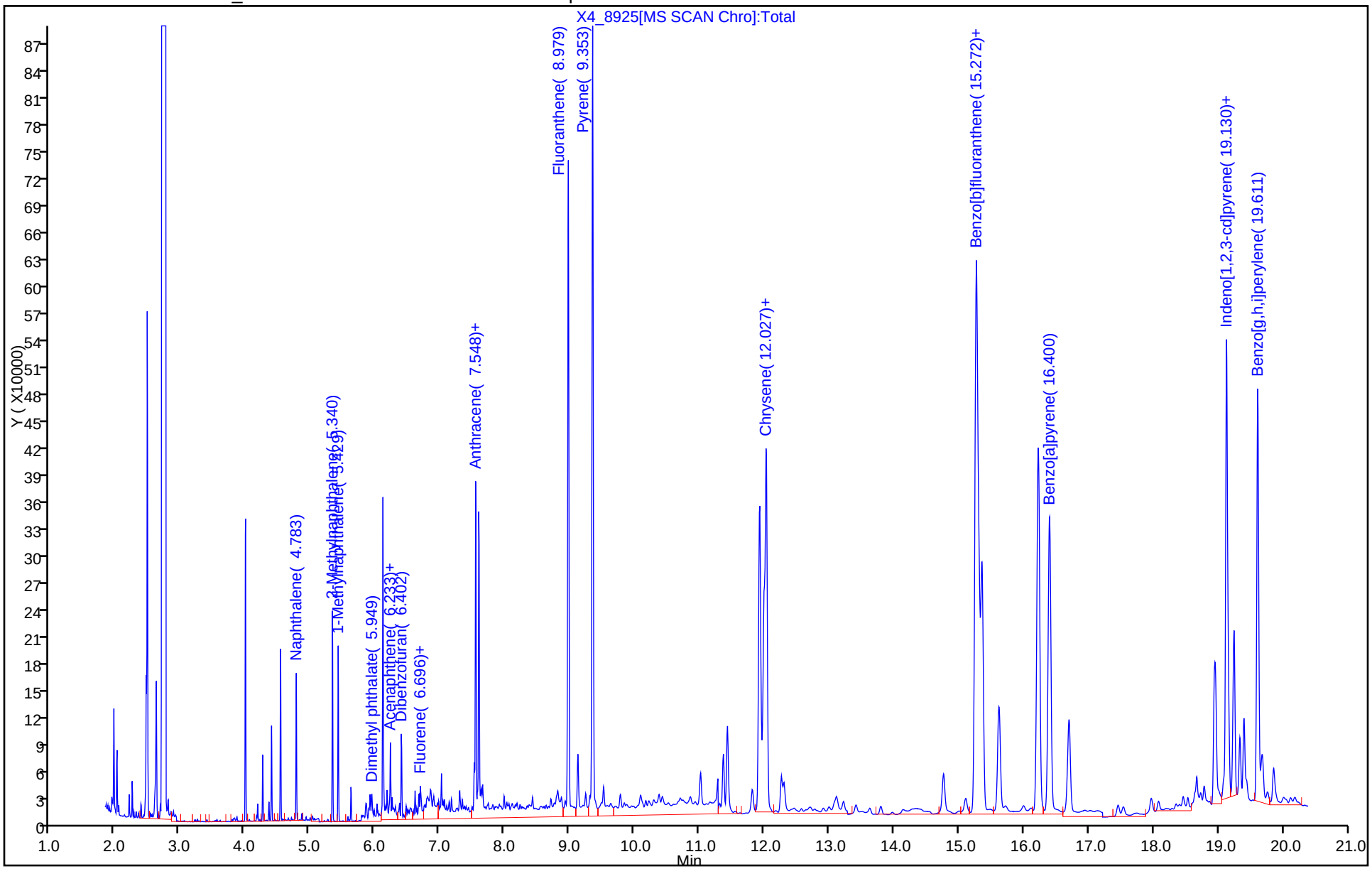
Processing Flags
E - Exceeded Maximum Amount

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:06:07 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8925.D				
Injection Date:	02-Jan-2014 18:29:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-B-9-C DU	Lab Sample ID:	280-50614-9	Worklist Smp#:	11
Client ID:	FSA-SD-DU03-A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU03-A DU DL | Lab Sample ID: 280-50614-9 DU DL

Matrix: Solid | Lab File ID: X4_8926.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:00

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 30.69(g) | Date Analyzed: 01/02/2014 18:57

Con. Extract Vol.: 1000(uL) | Dilution Factor: 5

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	607000		24000	5900
50-32-8	Benzo[a]pyrene	257000		24000	3600
56-55-3	Benzo[a]anthracene	172000		24000	4400
207-08-9	Benzo[k]fluoranthene	180000		24000	4900
191-24-2	Benzo[g,h,i]perylene	227000		24000	5400
218-01-9	Chrysene	238000		24000	4900
206-44-0	Fluoranthene	267000		24000	4900
129-00-0	Pyrene	331000		24000	5400
193-39-5	Indeno[1,2,3-cd]pyrene	249000		24000	5400

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	69	D	39-120
4165-60-0	Nitrobenzene-d5	65	D	42-120
1718-51-0	Terphenyl-d14	102	D	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8926.D
Lims ID: 280-50614-B-9-C DU Lab Sample ID: 280-50614-9
Client ID: FSA-SD-DU03-A
Sample Type: DU
Inject. Date: 02-Jan-2014 18:57:30 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-0018755-012
Misc. Info.: 280-50614-b-9-cdu,5, =280-50614-B-9-CDU,5,
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 08:58:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	91	20327	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	99	41122	600.0	
* 3 Chrysene-d12	240	11.956	11.964	-0.008	93	49622	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	100	1470	64.6	
$ 5 2-Fluorobiphenyl	172	5.630	5.633	-0.003	100	3292	68.6	
$ 6 Terphenyl-d14	244	9.522	9.532	-0.010	79	5072	101.9	
42 1,4-Dioxane	88		2.100					
7 N-Nitrosodimethylamine	42		2.219					
14 Naphthalene	128	4.783	4.786	-0.003	100	15536	249.8	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	97	14244	323.8	
16 1-Methylnaphthalene	142	5.429	5.433	-0.004	98	11330	280.7	
17 Dimethyl phthalate	163	5.949	5.949	0.0	94	1788	34.9	
19 Acenaphthylene	152	6.120	6.119	0.001	100	38450	567.3	
20 Acenaphthene	153	6.262	6.269	-0.007	85	2641	62.5	
18 Dibenzofuran	168	6.408	6.408	0.0	97	8388	135.1	
21 Diethyl phthalate	149		6.527					
22 Fluorene	166	6.696	6.702	-0.006	87	3856	76.3	
23 N-Nitrosodiphenylamine	169		6.771					
24 Phenanthrene	178	7.548	7.553	-0.005	100	47116	559.1	
25 Anthracene	178	7.602	7.602	0.0	98	42025	506.6	
26 Di-n-butyl phthalate	149		7.992					
27 Fluoranthene	202	8.979	8.979	0.0	100	149704	1637.9	
28 Pyrene	202	9.353	9.359	-0.006	100	191876	2034.5	
29 Butyl benzyl phthalate	149	10.428	10.438	-0.010	54	1417	33.0	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.821	-0.008	94	8798	148.1	
31 Benzo[a]anthracene	228	11.924	11.932	-0.008	99	106453	1055.4	
32 Chrysene	228	12.027	12.035	-0.008	100	139290	1460.5	M
33 Di-n-octyl phthalate	149		13.879					
34 Benzo[b]fluoranthene	252	15.264	15.264	0.0	100	343939	3722.9	
35 Benzo[k]fluoranthene	252	15.354	15.357	-0.003	100	105067	1105.6	
36 Benzo[a]pyrene	252	16.393	16.397	-0.004	100	141446	1579.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.118	19.118	0.0	99	134827	1529.8	
37 Dibenz(a,h)anthracene	278	19.145	19.152	-0.007	69	35780	401.7	
39 Benzo[g,h,i]perylene	276	19.596	19.592	0.004	99	131615	1391.2	
43 Benzidine	184		0.0					
45 Morpholine	1		0.0					
41 Pentachlorophenol	266		0.0					
8 Pentachlorophenol_T	266		4.202					
9 DFTPP								
10 Benzidine_T	184		5.323					
12 4,4'-DDD	235		5.753					
11 4,4'-DDE	246		5.795					
13 4,4'-DDT	235		6.075					
S 44 TPAH	1		0.0					

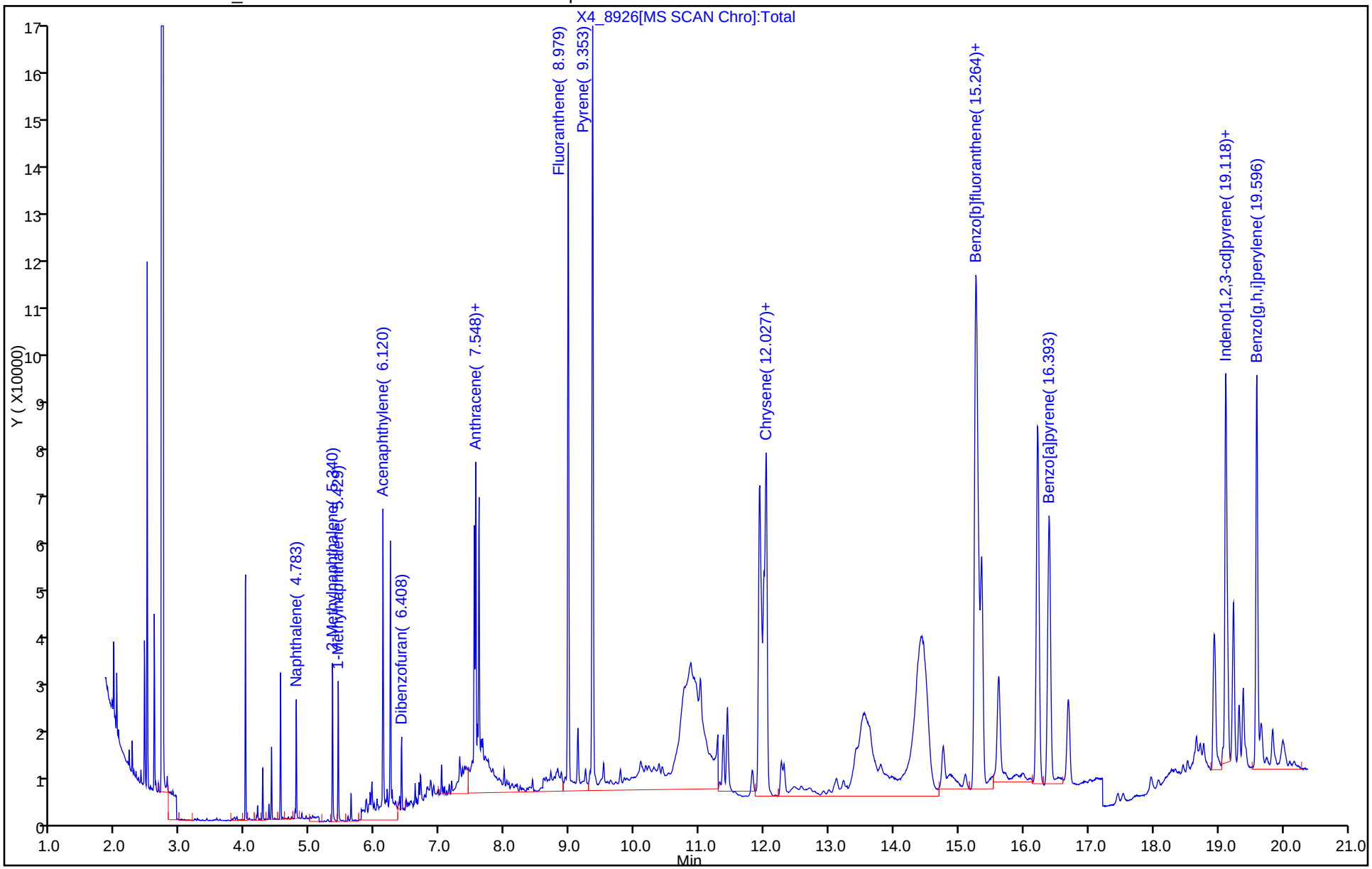
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:06:07 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8926.D				
Injection Date:	02-Jan-2014 18:57:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-B-9-C DU	Lab Sample ID:	280-50614-9	Worklist Smp#:	12
Client ID:	FSA-SD-DU03-A				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	12
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

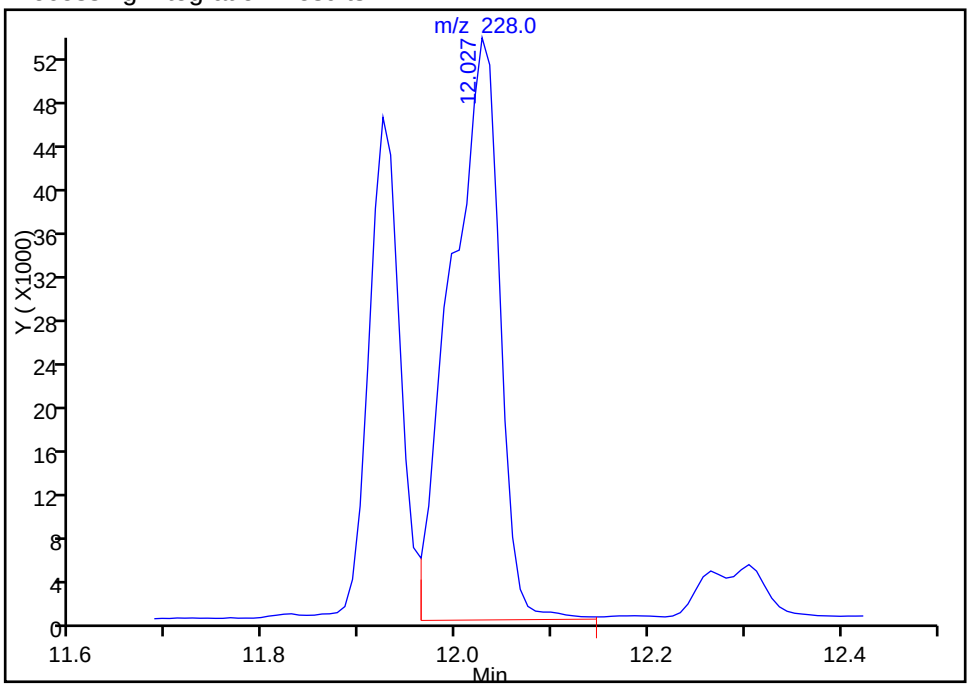
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8926.D				
Injection Date:	02-Jan-2014 18:57:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-9-C DU	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

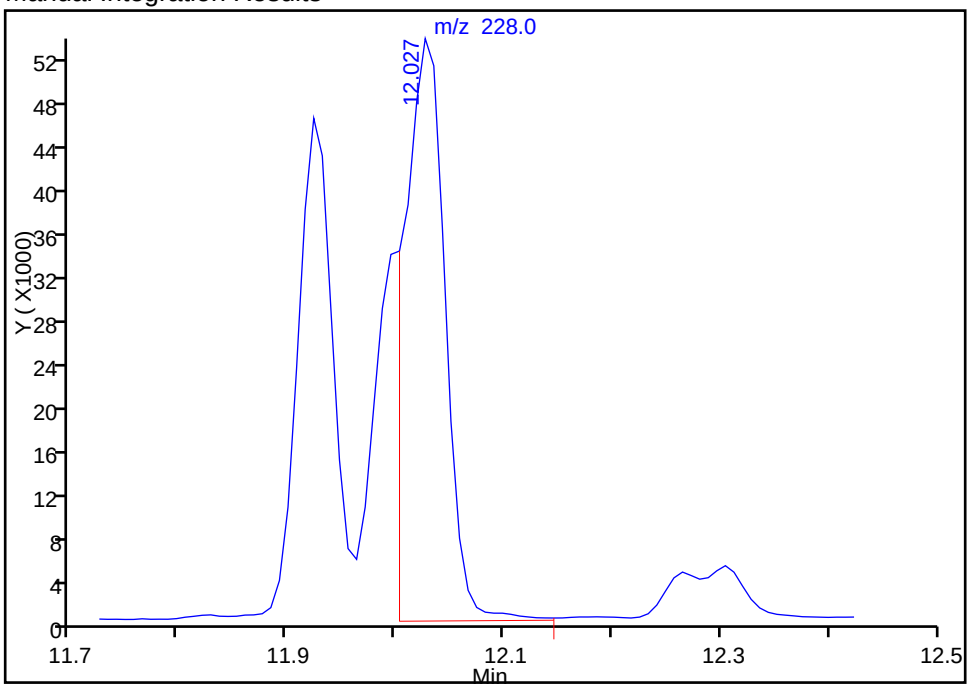
Processing Integration Results

RT: 12.03
Response: 185816
Amount: 1948.3476



Manual Integration Results

RT: 12.03
Response: 139290
Amount: 1460.5058



Reviewer: vasquezk, 06-Jan-2014 08:58:32
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU04-A TRL | Lab Sample ID: 280-50614-5 TRL

Matrix: Solid | Lab File ID: X4_8906.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 12:35

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 31.87(g) | Date Analyzed: 12/31/2013 23:32

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207101 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	35600		4700	1100
50-32-8	Benzo[a]pyrene	20800		4700	700
56-55-3	Benzo[a]anthracene	13300		4700	850
207-08-9	Benzo[k]fluoranthene	10900		4700	940
191-24-2	Benzo[g,h,i]perylene	19900		4700	1000
85-01-8	Phenanthrene	9160		4700	1000
120-12-7	Anthracene	4370	J	4700	680
53-70-3	Dibenz(a,h)anthracene	5090		4700	1200
218-01-9	Chrysene	17900		4700	940
83-32-9	Acenaphthene	769	J	4700	150
208-96-8	Acenaphthylene	4350	J	4700	160
206-44-0	Fluoranthene	22900		4700	940
86-73-7	Fluorene	2150	J	4700	440
129-00-0	Pyrene	27100		4700	1000
193-39-5	Indeno[1,2,3-cd]pyrene	20000		4700	1000
91-57-6	2-Methylnaphthalene	4470	J	4700	290
91-20-3	Naphthalene	5140		4700	310

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	78		39-120
4165-60-0	Nitrobenzene-d5	84		42-120
1718-51-0	Terphenyl-d14	96		35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8906.D
Lims ID: 280-50614-B-5-D TRL Lab Sample ID: 280-50614-5
Client ID: FSA-SD-DU04-A
Sample Type: TRL
Inject. Date: 31-Dec-2013 23:32:30 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-50614-b-5-dtrl
Misc. Info.: 280-50614-b-5-dtrl =280-50614-B-5-DTRL
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20131231-18717.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jan-2014 09:28:06 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK022

First Level Reviewer: vasquezk Date: 02-Jan-2014 09:10:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.233	0.0	98	25126	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	100	43225	600.0	
* 3 Chrysene-d12	240	11.948	11.956	-0.008	99	48161	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.186	0.0	100	11791	419.3	
$ 5 2-Fluorobiphenyl	172	5.626	5.630	-0.004	100	23106	389.7	
$ 6 Terphenyl-d14	244	9.521	9.527	-0.006	99	25084	479.3	
42 1,4-Dioxane	88		2.100					
7 N-Nitrosodimethylamine	42		2.219					
14 Naphthalene	128	4.783	4.783	0.0	100	12592	163.8	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	98	7752	142.6	
16 1-Methylnaphthalene	142	5.429	5.429	0.0	97	4872	97.7	
17 Dimethyl phthalate	163	5.942	5.942	0.0	98	1669	26.3	
19 Acenaphthylene	152	6.119	6.119	0.0	99	11622	138.7	
20 Acenaphthene	153	6.261	6.261	0.0	92	1281	24.5	
18 Dibenzofuran	168	6.402	6.408	-0.006	93	6117	79.7	
21 Diethyl phthalate	149	6.521	6.521	0.0	98	3581	56.6	
22 Fluorene	166	6.696	6.696	0.0	94	4286	68.6	
23 N-Nitrosodiphenylamine	169		6.771					
24 Phenanthrene	178	7.548	7.553	-0.005	99	25862	291.9	
25 Anthracene	178	7.597	7.602	-0.005	96	12135	139.2	
26 Di-n-butyl phthalate	149	7.987	7.992	-0.005	100	47636	440.7	
27 Fluoranthene	202	8.973	8.979	-0.006	100	70160	730.3	
28 Pyrene	202	9.348	9.353	-0.005	100	85507	862.6	
29 Butyl benzyl phthalate	149	10.428	10.427	0.001	65	2182	48.4	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.813	0.0	100	60177	963.8	
31 Benzo[a]anthracene	228	11.916	11.924	-0.008	98	41513	424.1	
32 Chrysene	228	12.019	12.027	-0.008	100	52887	571.4	M
33 Di-n-octyl phthalate	149		13.864					
34 Benzo[b]fluoranthene	252	15.253	15.253	0.0	99	101820	1135.6	
35 Benzo[k]fluoranthene	252	15.335	15.342	-0.007	97	32098	348.0	
36 Benzo[a]pyrene	252	16.382	16.385	-0.003	99	57602	662.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.111	19.111	0.0	97	54580	638.1	
37 Dibenz(a,h)anthracene	278	19.137	19.148	-0.011	49	14012	162.1	
39 Benzo[g,h,i]perylene	276	19.588	19.584	0.004	95	58279	634.7	
43 Benzidine	184		0.0					
45 Morpholine	1		0.0					
41 Pentachlorophenol	266		0.0					
8 Pentachlorophenol_T	266		4.202					
9 DFTPP								
10 Benzidine_T	184		5.317					
12 4,4'-DDD	235		5.753					
11 4,4'-DDE	246		5.795					
13 4,4'-DDT	235		6.070					
S 44 TPAH	1		0.0					

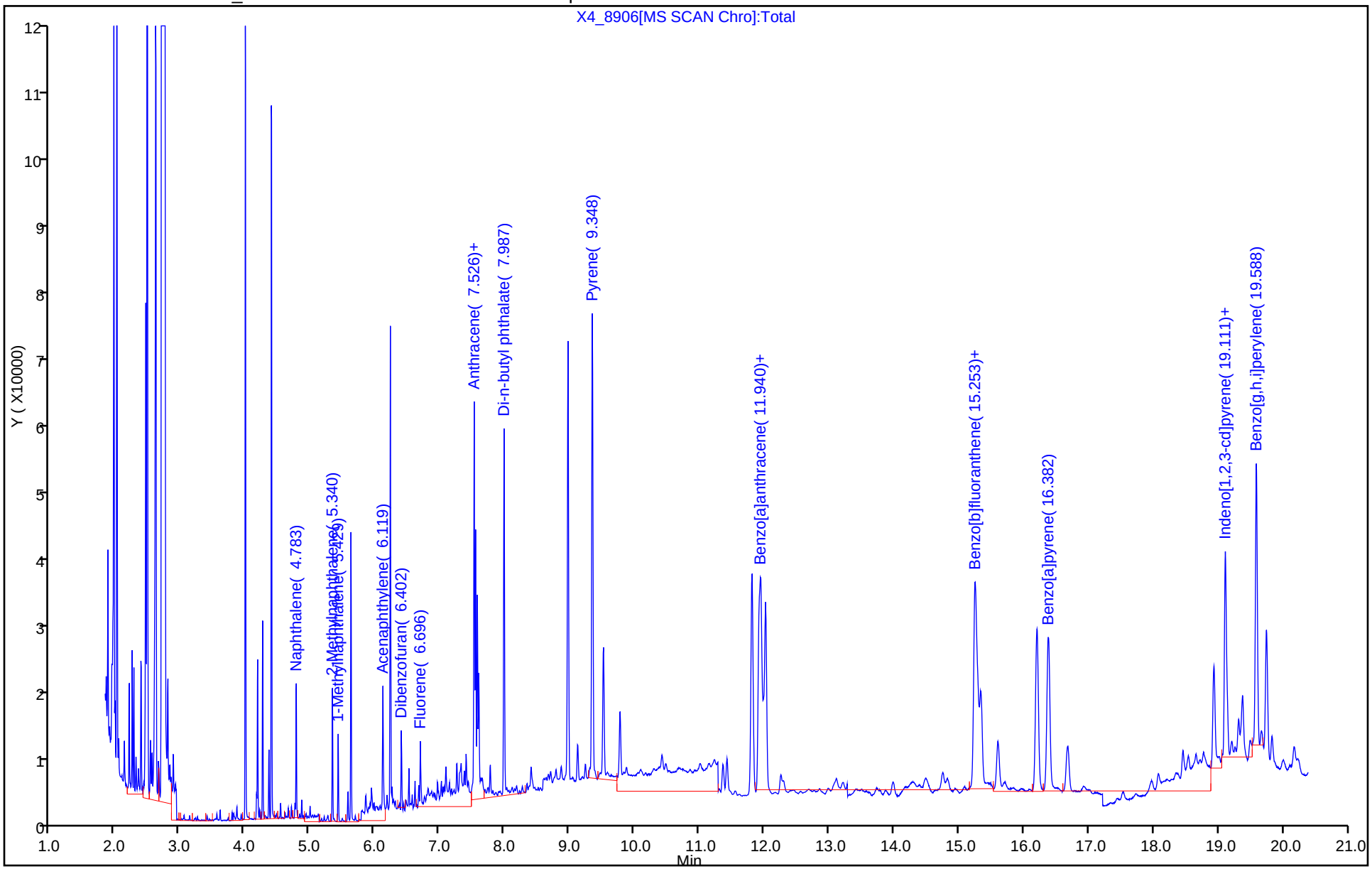
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 02-Jan-2014 09:28:18 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8906.D				
Injection Date:	31-Dec-2013 23:32:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-B-5-D TRL	Lab Sample ID:	280-50614-5	Worklist Smp#:	22
Client ID:	FSA-SD-DU04-A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

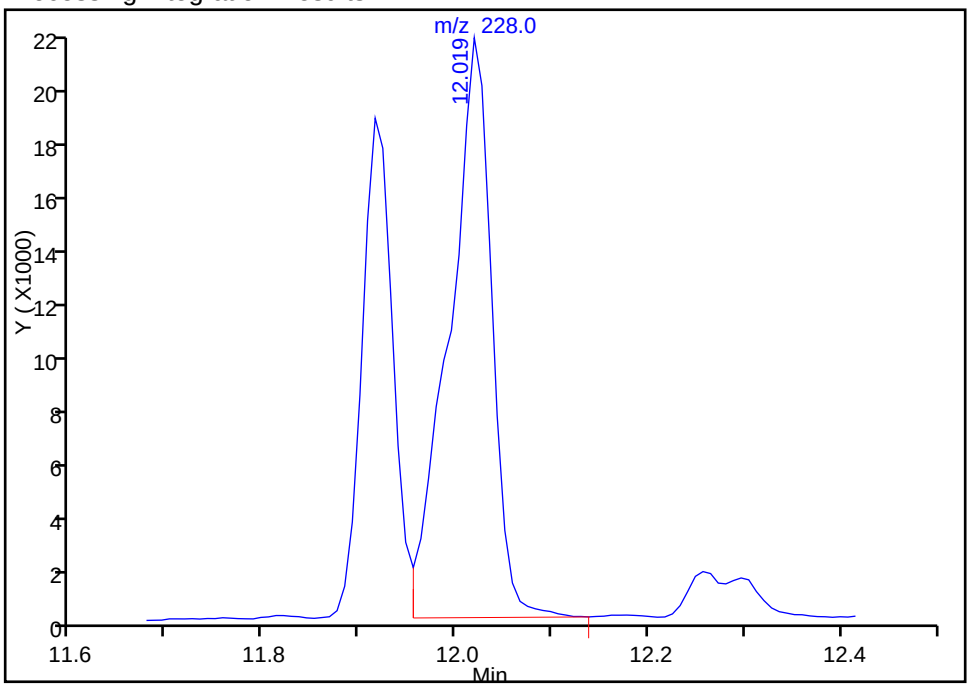
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20131231-18717.b\X4_8906.D				
Injection Date:	31-Dec-2013 23:32:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-5-D TRL	Lab Sample ID:	280-50614-5		
Client ID:	FSA-SD-DU04-A				
Operator ID:	VASQUEZK	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

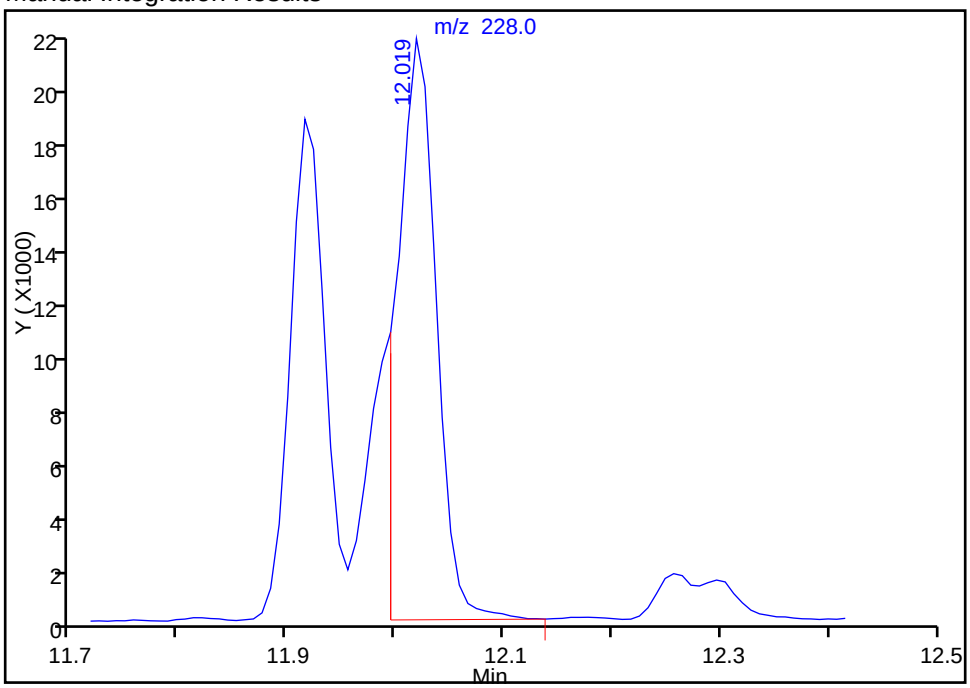
Processing Integration Results

RT: 12.02
Response: 65856
Amount: 711.4714



Manual Integration Results

RT: 12.02
Response: 52887
Amount: 571.3616



Reviewer: vasquezk, 02-Jan-2014 09:10:26
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU03-A TRL | Lab Sample ID: 280-50614-9 TRL

Matrix: Solid | Lab File ID: X4_8927.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:00

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 30.16(g) | Date Analyzed: 01/02/2014 19:24

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
85-01-8	Phenanthrene	86000		5000	1100
120-12-7	Anthracene	102000		5000	720
53-70-3	Dibenz(a,h)anthracene	73900		5000	1300
83-32-9	Acenaphthene	6880		5000	160
208-96-8	Acenaphthylene	85400		5000	170
86-73-7	Fluorene	11000		5000	470
91-57-6	2-Methylnaphthalene	47300		5000	310
91-20-3	Naphthalene	40500		5000	320

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	74		39-120
4165-60-0	Nitrobenzene-d5	74		42-120
1718-51-0	Terphenyl-d14	131	X	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8927.D
Lims ID: 280-50614-B-9-D TRL Lab Sample ID: 280-50614-9
Client ID: FSA-SD-DU03-A
Sample Type: TRL
Inject. Date: 02-Jan-2014 19:24:30 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-0018755-013
Misc. Info.: 280-50614-b-9-dtrl =280-50614-B-9-DTRL
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 09:00:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	86	23185	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	98	41472	600.0	
* 3 Chrysene-d12	240	11.956	11.964	-0.008	37	48749	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	99	9571	368.9	
$ 5 2-Fluorobiphenyl	172	5.626	5.633	-0.007	100	20187	369.0	
$ 6 Terphenyl-d14	244	9.521	9.532	-0.011	96	32982	656.9	
42 1,4-Dioxane	88		2.100					
7 N-Nitrosodimethylamine	42		2.219					
14 Naphthalene	128	4.783	4.786	-0.003	100	86734	1222.6	
15 2-Methylnaphthalene	142	5.344	5.344	0.0	99	71596	1427.1	
16 1-Methylnaphthalene	142	5.429	5.433	-0.004	97	56899	1235.9	
17 Dimethyl phthalate	163	5.942	5.949	-0.007	88	7736	132.3	
19 Acenaphthylene	152	6.119	6.119	0.0	100	199091	2575.2	
20 Acenaphthene	153	6.261	6.269	-0.008	90	10005	207.5	
18 Dibenzofuran	168	6.408	6.408	0.0	95	40626	573.9	
21 Diethyl phthalate	149	6.521	6.527	-0.006	94	6478	111.0	
22 Fluorene	166	6.696	6.702	-0.006	92	19174	332.7	
23 N-Nitrosodiphenylamine	169	6.765	6.771	-0.006	88	9528	256.5	
24 Phenanthrene	178	7.553	7.553	0.0	100	220398	2593.1	
25 Anthracene	178	7.602	7.602	0.0	100	258414	3088.6	
26 Di-n-butyl phthalate	149	7.987	7.992	-0.005	97	18186	175.4	
27 Fluoranthene	202	8.979	8.979	0.0	100	755445	8195.3	E
28 Pyrene	202	9.353	9.359	-0.006	100	974212	10243	E
29 Butyl benzyl phthalate	149	10.433	10.438	-0.005	56	3905	90.2	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.821	-0.008	90	34441	574.9	
31 Benzo[a]anthracene	228	11.932	11.932	0.0	98	550177	5552.4	E
32 Chrysene	228	12.035	12.035	0.0	100	742272	7922.4	EM
33 Di-n-octyl phthalate	149		13.879					
34 Benzo[b]fluoranthene	252	15.275	15.264	0.011	100	1812848	19974	E
35 Benzo[k]fluoranthene	252	15.357	15.357	0.0	100	482594	5169.1	E
36 Benzo[a]pyrene	252	16.404	16.397	0.007	100	758455	8623.2	E

Report Date: 06-Jan-2014 10:06:08 Chrom Revision: 2.1 15-Oct-2013 07:52:24
Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8927.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.126	19.118	0.008	99	756506	8737.2	E
37 Dibenz(a,h)anthracene	278	19.152	19.152	0.0	70	194914	2227.7	
39 Benzo[g,h,i]perylene	276	19.607	19.592	0.015	99	729066	7844.3	E
43 Benzidine	184		0.0					
45 Morpholine	1		0.0					
41 Pentachlorophenol	266		0.0					
8 Pentachlorophenol_T	266		4.202					
9 DFTPP								
10 Benzidine_T	184		5.323					
12 4,4'-DDD	235		5.753					
11 4,4'-DDE	246		5.795					
13 4,4'-DDT	235		6.075					
S 44 TPAH	1		0.0					

QC Flag Legend

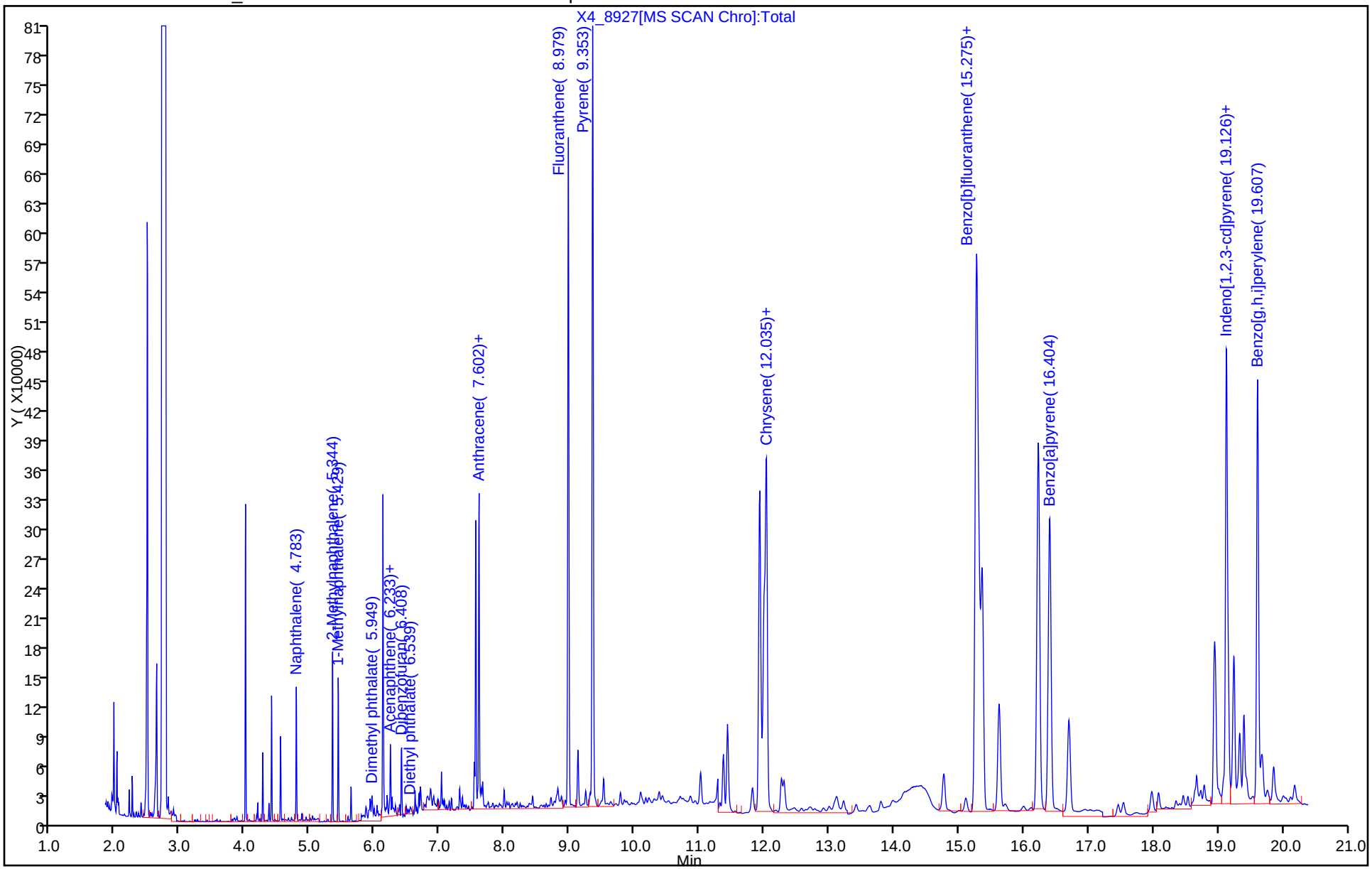
Processing Flags
E - Exceeded Maximum Amount

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:06:08 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8927.D				
Injection Date:	02-Jan-2014 19:24:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-B-9-D TRL	Lab Sample ID:	280-50614-9	Worklist Smp#:	13
Client ID:	FSA-SD-DU03-A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-50614-1

SDG No.:

Client Sample ID: FSA-SD-DU03-A TRL DL | Lab Sample ID: 280-50614-9 TRL DL

Matrix: Solid | Lab File ID: X4_8928.D

Analysis Method: 8270C SIM | Date Collected: 12/19/2013 15:00

Extract. Method: 3546 | Date Extracted: 12/29/2013 10:49

Sample wt/vol: 30.16(g) | Date Analyzed: 01/02/2014 19:52

Con. Extract Vol.: 1000(uL) | Dilution Factor: 5

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 207236 | Units: ng/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	661000		25000	6000
50-32-8	Benzo[a]pyrene	283000		25000	3700
56-55-3	Benzo[a]anthracene	187000		25000	4500
207-08-9	Benzo[k]fluoranthene	210000		25000	5000
191-24-2	Benzo[g,h,i]perylene	255000		25000	5500
218-01-9	Chrysene	259000		25000	5000
206-44-0	Fluoranthene	293000		25000	5000
129-00-0	Pyrene	358000		25000	5500
193-39-5	Indeno[1,2,3-cd]pyrene	282000		25000	5500

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl	78	D	39-120
4165-60-0	Nitrobenzene-d5	73	D	42-120
1718-51-0	Terphenyl-d14	141	D X	35-124

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8928.D
Lims ID: 280-50614-B-9-D TRL Lab Sample ID: 280-50614-9
Client ID: FSA-SD-DU03-A
Sample Type: TRL
Inject. Date: 02-Jan-2014 19:52:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-0018755-014
Misc. Info.: 280-50614-b-9-dtrl,5, =280-50614-B-9-DTRL,5,
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\Denchrom\ChromData\SMS_X4\20140102-18755.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 06-Jan-2014 10:05:57 Calib Date: 30-Nov-2013 12:16:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SMS_X4\20131130-17946.b\X4_8616.D

Column 1 : Detector MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 06-Jan-2014 09:00:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	6.233	6.240	-0.007	93	22336	600.0	
* 1 Phenanthrene-d10	188	7.526	7.532	-0.006	99	43160	600.0	
* 3 Chrysene-d12	240	11.956	11.964	-0.008	91	49230	600.0	
$ 4 Nitrobenzene-d5	82	4.186	4.189	-0.003	100	1827	73.1	
$ 5 2-Fluorobiphenyl	172	5.630	5.633	-0.003	100	4127	78.3	
$ 6 Terphenyl-d14	244	9.522	9.532	-0.010	89	7370	141.0	
42 1,4-Dioxane	88		2.100					
7 N-Nitrosodimethylamine	42		2.219					
14 Naphthalene	128	4.783	4.786	-0.003	100	17002	248.8	
15 2-Methylnaphthalene	142	5.340	5.344	-0.004	97	14356	297.0	
16 1-Methylnaphthalene	142	5.429	5.433	-0.004	97	11372	256.4	
17 Dimethyl phthalate	163	5.949	5.949	0.0	93	1657	29.4	
19 Acenaphthylene	152	6.119	6.119	0.0	100	43305	581.4	
20 Acenaphthene	153	6.262	6.269	-0.007	87	2852	61.4	
18 Dibenzofuran	168	6.408	6.408	0.0	96	8738	128.1	
21 Diethyl phthalate	149		6.527					
22 Fluorene	166	6.696	6.702	-0.006	87	3789	68.2	
23 N-Nitrosodiphenylamine	169		6.771					
24 Phenanthrene	178	7.548	7.553	-0.005	100	49947	564.7	
25 Anthracene	178	7.602	7.602	0.0	99	52463	602.5	
26 Di-n-butyl phthalate	149	7.987	7.992	-0.005	97	4828	44.7	
27 Fluoranthene	202	8.973	8.979	-0.006	100	169546	1767.4	
28 Pyrene	202	9.353	9.359	-0.006	100	213532	2157.3	
29 Butyl benzyl phthalate	149	10.428	10.438	-0.010	52	1080	24.0	
30 Bis(2-ethylhexyl) phthalate	149	11.813	11.821	-0.008	95	9489	152.2	
31 Benzo[a]anthracene	228	11.924	11.932	-0.008	99	113064	1129.9	
32 Chrysene	228	12.027	12.035	-0.008	100	147878	1562.9	M
33 Di-n-octyl phthalate	149		13.879					
34 Benzo[b]fluoranthene	252	15.264	15.264	0.0	100	365572	3988.6	
35 Benzo[k]fluoranthene	252	15.350	15.357	-0.007	100	119463	1267.1	
36 Benzo[a]pyrene	252	16.397	16.397	0.0	100	151564	1706.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	On-Col Amt ng/ml	Flags
38 Indeno[1,2,3-cd]pyrene	276	19.118	19.118	0.0	99	148649	1700.0	
37 Dibenz(a,h)anthracene	278	19.148	19.152	-0.004	75	38472	435.4	
39 Benzo[g,h,i]perylene	276	19.600	19.592	0.008	99	144439	1538.9	
43 Benzidine	184		0.0					
45 Morpholine	1		0.0					
41 Pentachlorophenol	266		0.0					
8 Pentachlorophenol_T	266		4.202					
9 DFTPP								
10 Benzidine_T	184		5.323					
12 4,4'-DDD	235		5.753					
11 4,4'-DDE	246		5.795					
13 4,4'-DDT	235		6.075					
S 44 TPAH	1		0.0					

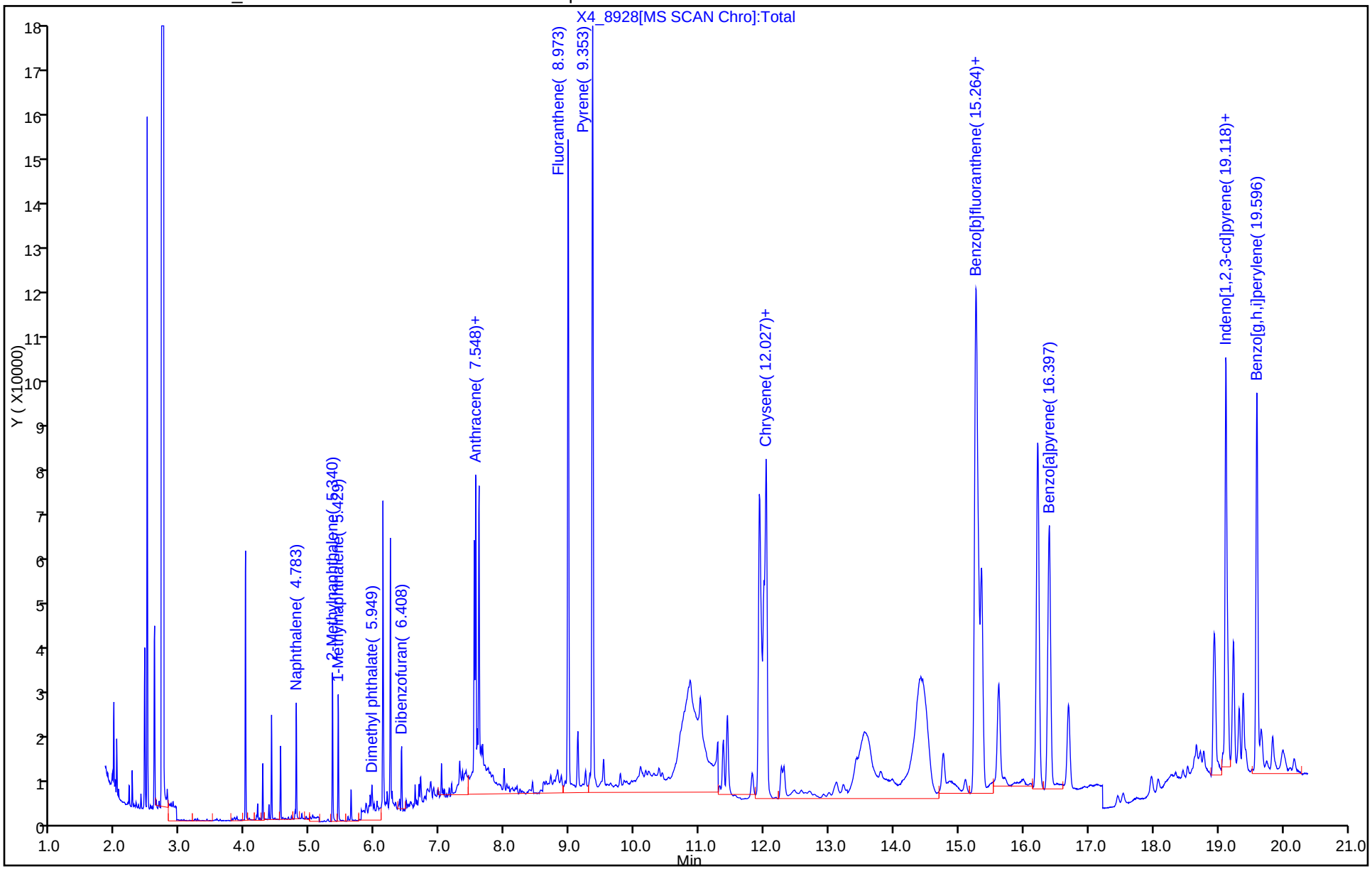
QC Flag Legend

Review Flags
M - Manually Integrated

Report Date: 06-Jan-2014 10:06:08 Chrom Revision: 2.1 15-Oct-2013 07:52:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8928.D				
Injection Date:	02-Jan-2014 19:52:30	Instrument ID:	SMS_X4	Operator ID:	VASQUEZK
Lims ID:	280-50614-B-9-D TRL	Lab Sample ID:	280-50614-9	Worklist Smp#:	14
Client ID:	FSA-SD-DU03-A				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	14
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

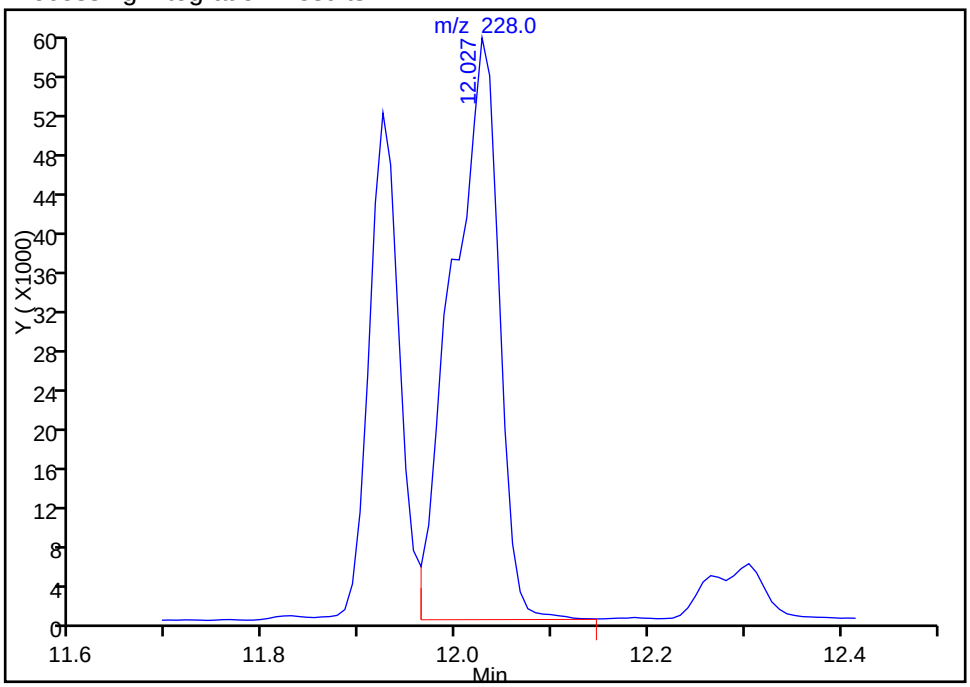
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SMS_X4\20140102-18755.b\X4_8928.D				
Injection Date:	02-Jan-2014 19:52:30	Instrument ID:	SMS_X4		
Lims ID:	280-50614-B-9-D TRL	Lab Sample ID:	280-50614-9		
Client ID:	FSA-SD-DU03-A				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSX4_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Chrysene, CAS: 218-01-9

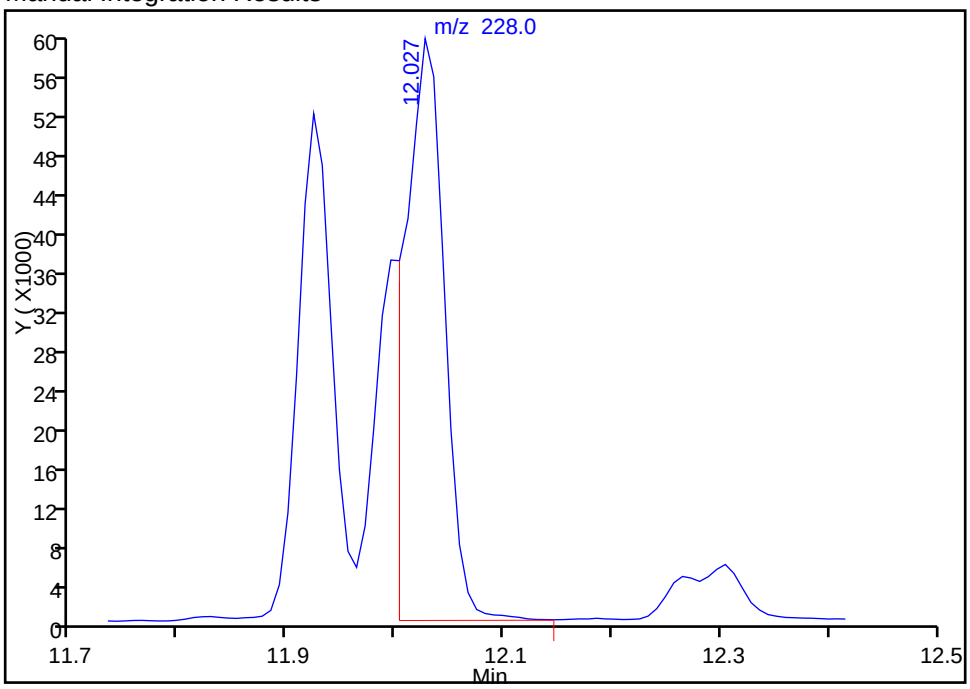
Processing Integration Results

RT: 12.03
Response: 195899
Amount: 2070.4273



Manual Integration Results

RT: 12.03
Response: 147878
Amount: 1562.9005



Reviewer: vasquezk, 06-Jan-2014 09:00:44
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Start Date: 11/30/2013 08:47

Analysis Batch Number: 203266 End Date: 11/30/2013 20:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-203266/2		11/30/2013 08:47	1	X4_8608.D	Vf-5MS (30.25) 0.25(mm)
STD0020 280-203266/3 IC		11/30/2013 09:01	1	X4_8609.D	Vf-5MS (30.25) 0.25(mm)
STD0100 280-203266/4 IC		11/30/2013 09:30	1	X4_8610.D	Vf-5MS (30.25) 0.25(mm)
STD0300 280-203266/5 IC		11/30/2013 09:57	1	X4_8611.D	Vf-5MS (30.25) 0.25(mm)
ICIS 280-203266/6		11/30/2013 10:25	1	X4_8612.D	Vf-5MS (30.25) 0.25(mm)
STD1200 280-203266/7 IC		11/30/2013 10:53	1	X4_8613.D	Vf-5MS (30.25) 0.25(mm)
STD2500 280-203266/8 IC		11/30/2013 11:21	1	X4_8614.D	Vf-5MS (30.25) 0.25(mm)
STD5000 280-203266/9 IC		11/30/2013 11:48	1	X4_8615.D	Vf-5MS (30.25) 0.25(mm)
STD10000 280-203266/10 IC		11/30/2013 12:16	1	X4_8616.D	Vf-5MS (30.25) 0.25(mm)
ICV 280-203266/11		11/30/2013 12:44	1	X4_8617.D	Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 13:12	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 13:40	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 14:08	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 14:35	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 15:03	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 15:31	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 15:59	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 16:27	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 16:55	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 17:23	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 17:51	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 18:19	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 18:46	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 19:14	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 19:42	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 20:10	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		11/30/2013 20:37	1		Vf-5MS (30.25) 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Start Date: 12/31/2013 13:43

Analysis Batch Number: 207101 End Date: 01/01/2014 01:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-207101/1		12/31/2013 13:43	1	X4_8885.D	Vf-5MS (30.25) 0.25(mm)
CCV 280-207101/2		12/31/2013 13:57	1	X4_8886.D	Vf-5MS (30.25) 0.25(mm)
ZZZZZ		12/31/2013 14:38	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		12/31/2013 15:06	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		12/31/2013 15:34	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		12/31/2013 16:02	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		12/31/2013 16:30	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		12/31/2013 16:58	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		12/31/2013 17:27	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		12/31/2013 17:55	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		12/31/2013 18:23	1		Vf-5MS (30.25) 0.25(mm)
MB 280-206688/1-A		12/31/2013 18:51	1	X4_8896.D	Vf-5MS (30.25) 0.25(mm)
LCS 280-206688/2-A		12/31/2013 19:19	1	X4_8897.D	Vf-5MS (30.25) 0.25(mm)
LCSD 280-206688/3-A		12/31/2013 19:47	1	X4_8898.D	Vf-5MS (30.25) 0.25(mm)
280-50614-14	FSA-FB-01	12/31/2013 20:16	1	X4_8899.D	Vf-5MS (30.25) 0.25(mm)
280-50614-15	FSA-EB-01	12/31/2013 20:44	1	X4_8900.D	Vf-5MS (30.25) 0.25(mm)
MB 280-206899/1-A		12/31/2013 21:12	1	X4_8901.D	Vf-5MS (30.25) 0.25(mm)
LCS 280-206899/2-A		12/31/2013 21:40	1	X4_8902.D	Vf-5MS (30.25) 0.25(mm)
280-50614-4	FSA-SD-DU05	12/31/2013 22:08	1	X4_8903.D	Vf-5MS (30.25) 0.25(mm)
280-50614-5	FSA-SD-DU04-A	12/31/2013 22:36	1	X4_8904.D	Vf-5MS (30.25) 0.25(mm)
280-50614-5 DU	FSA-SD-DU04-A DU	12/31/2013 23:04	1	X4_8905.D	Vf-5MS (30.25) 0.25(mm)
280-50614-5 TRL	FSA-SD-DU04-A TRL	12/31/2013 23:32	1	X4_8906.D	Vf-5MS (30.25) 0.25(mm)
280-50614-6	FSA-SD-DU04-B	12/31/2013 23:59	1	X4_8907.D	Vf-5MS (30.25) 0.25(mm)
280-50614-7	FSA-SD-DU04-C	01/01/2014 00:27	1	X4_8908.D	Vf-5MS (30.25) 0.25(mm)
280-50614-8	FSA-SD-CO	01/01/2014 00:55	1	X4_8909.D	Vf-5MS (30.25) 0.25(mm)
280-50614-9	FSA-SD-DU03-A	01/01/2014 01:23	1	X4_8910.D	Vf-5MS (30.25) 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Start Date: 01/02/2014 13:20

Analysis Batch Number: 207236 End Date: 01/03/2014 01:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-207236/1		01/02/2014 13:20	1	X4_8915.D	Vf-5MS (30.25) 0.25(mm)
CCV 280-207236/2		01/02/2014 13:45	1	X4_8916.D	Vf-5MS (30.25) 0.25(mm)
MB 280-207028/1-A		01/02/2014 14:25	1	X4_8917.D	Vf-5MS (30.25) 0.25(mm)
LCS 280-207028/2-A		01/02/2014 15:13	1	X4_8918.D	Vf-5MS (30.25) 0.25(mm)
280-50614-1	FSA-SF-CT	01/02/2014 15:41	1	X4_8919.D	Vf-5MS (30.25) 0.25(mm)
280-50614-1 MS	FSA-SF-CT MS	01/02/2014 16:09	1	X4_8920.D	Vf-5MS (30.25) 0.25(mm)
280-50614-1 MSD	FSA-SF-CT MSD	01/02/2014 16:37	1	X4_8921.D	Vf-5MS (30.25) 0.25(mm)
280-50614-2	FSA-SF-SCW	01/02/2014 17:05	4	X4_8922.D	Vf-5MS (30.25) 0.25(mm)
280-50614-3	FSA-SF-SCW-DUP	01/02/2014 17:33	4	X4_8923.D	Vf-5MS (30.25) 0.25(mm)
280-50614-9 DL	FSA-SD-DU03-A DL	01/02/2014 18:01	5	X4_8924.D	Vf-5MS (30.25) 0.25(mm)
280-50614-9 DU	FSA-SD-DU03-A DU	01/02/2014 18:29	1	X4_8925.D	Vf-5MS (30.25) 0.25(mm)
280-50614-9 DU DL	FSA-SD-DU03-A DU DL	01/02/2014 18:57	5	X4_8926.D	Vf-5MS (30.25) 0.25(mm)
280-50614-9 TRL	FSA-SD-DU03-A TRL	01/02/2014 19:24	1	X4_8927.D	Vf-5MS (30.25) 0.25(mm)
280-50614-9 TRL DL	FSA-SD-DU03-A TRL DL	01/02/2014 19:52	5	X4_8928.D	Vf-5MS (30.25) 0.25(mm)
280-50614-10	FSA-SD-DU03-B	01/02/2014 20:20	1	X4_8929.D	Vf-5MS (30.25) 0.25(mm)
280-50614-11	FSA-SD-DU03-C	01/02/2014 20:48	1	X4_8930.D	Vf-5MS (30.25) 0.25(mm)
280-50614-12	FSA-SD-DU01	01/02/2014 21:16	5	X4_8931.D	Vf-5MS (30.25) 0.25(mm)
280-50614-12 MS	FSA-SD-DU01 MS	01/02/2014 21:44	5	X4_8932.D	Vf-5MS (30.25) 0.25(mm)
280-50614-12 MSD	FSA-SD-DU01 MSD	01/02/2014 22:12	5	X4_8933.D	Vf-5MS (30.25) 0.25(mm)
280-50614-13	FSA-SD-DU02	01/02/2014 22:40	5	X4_8934.D	Vf-5MS (30.25) 0.25(mm)
ZZZZZ		01/02/2014 23:08	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		01/02/2014 23:36	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		01/03/2014 00:04	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		01/03/2014 00:32	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		01/03/2014 01:00	1		Vf-5MS (30.25) 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: SMS_X4 Start Date: 01/06/2014 11:13

Analysis Batch Number: 207515 End Date: 01/06/2014 18:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-207515/1		01/06/2014 11:13	1	X4_8946.D	Vf-5MS (30.25) 0.25(mm)
CCV 280-207515/2		01/06/2014 11:54	1	X4_8947.D	Vf-5MS (30.25) 0.25(mm)
280-50614-2 DL	FSA-SF-SCW DL	01/06/2014 12:25	50	X4_8948.D	Vf-5MS (30.25) 0.25(mm)
280-50614-3 DL	FSA-SF-SCW-DUP DL	01/06/2014 12:52	50	X4_8949.D	Vf-5MS (30.25) 0.25(mm)
280-50614-10 DL	FSA-SD-DU03-B DL	01/06/2014 13:20	5	X4_8950.D	Vf-5MS (30.25) 0.25(mm)
280-50614-11 DL	FSA-SD-DU03-C DL	01/06/2014 13:48	10	X4_8951.D	Vf-5MS (30.25) 0.25(mm)
280-50614-12 DL	FSA-SD-DU01 DL	01/06/2014 14:16	10	X4_8952.D	Vf-5MS (30.25) 0.25(mm)
280-50614-13 DL	FSA-SD-DU02 DL	01/06/2014 14:43	10	X4_8953.D	Vf-5MS (30.25) 0.25(mm)
ZZZZZ		01/06/2014 15:11	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		01/06/2014 15:39	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		01/06/2014 16:07	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		01/06/2014 16:34	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		01/06/2014 17:02	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		01/06/2014 17:30	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		01/06/2014 17:58	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		01/06/2014 18:26	1		Vf-5MS (30.25) 0.25(mm)

GC/MS SVOAContinuing Calibration Review Checklist *TestAmerica*

Denver

Instrument ID and Date: X4 010214

Check Method Used: Analysis ☐ 625 ☐ 8270 ☑ Other SV 8270C SIM

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
Continuing Calibration					
1. DFTPP meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Do SPCC RRFs and CCC %Ds meet method criteria?	✓			✓	
4. Does %D meet criteria for non-CCC compounds?	✓			✓	
5. Isomeric pairs checked for correct peak assignment?	✓			✓	
6. Standards traceability properly documented?	✓			✓	
7. Manual integrations documented and checked?	✓			✓	
8. Do the Internal Standards meet criteria for %D against ICAL?	✓			✓	

1st Level Reviewer: KJV Date: 010314

2nd Level Reviewer: MJ Date: 1/6/14

Revision 0
9/28/10
G:\QA\Edit\Forms\Data Review\GCMS SVOA CCV

KGV

Injection Log

Directory: C:\MSDCHEM\1\DATA\010214.B

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	98	X4_8914.d	0.	RINSE		2 Jan 2014 12:56
2	1	X4_8915.d	0.	DFTPP		2 Jan 2014 13:20
3	2	X4_8916.d	0.	CCV		2 Jan 2014 13:45
4	3	X4_8917.d	0.	mb280-207028_1-a	mb280-207028_1-a	2 Jan 2014 14:25
5	4	X4_8918.d	0.	280-0018755-004	lcs280-207028_2-a	2 Jan 2014 15:13
6	5	X4_8919.d	0.	280-0018755-005	280-50614-b-1-a	2 Jan 2014 15:41
7	6	X4_8920.d	0.	280-0018755-006	280-50614-b-1-bms	2 Jan 2014 16:09
8	7	X4_8921.d	0.	280-0018755-007	280-50614-b-1-cmsd	2 Jan 2014 16:37
9	8	X4_8922.d	0.	280-0018755-008	280-50614-a-2-a,4, RR@50x	2 Jan 2014 17:05
10	9	X4_8923.d	0.	280-0018755-009	280-50614-a-3-a,4, RR@50x	2 Jan 2014 17:33
11	10	X4_8924.d	0.	280-0018755-010	280-50614-a-9-b,5,	2 Jan 2014 18:01
12	11	X4_8925.d	0.	280-0018755-011	280-50614-b-9-cdu	2 Jan 2014 18:29
13	12	X4_8926.d	0.	280-0018755-012	280-50614-b-9-cdu,5,	2 Jan 2014 18:57
14	13	X4_8927.d	0.	280-0018755-013	280-50614-b-9-dtrl	2 Jan 2014 19:24
15	14	X4_8928.d	0.	280-0018755-014	280-50614-b-9-dtr..,5,	2 Jan 2014 19:52
16	15	X4_8929.d	0.	280-0018755-015	280-50614-a-10-b - RR@5x	2 Jan 2014 20:20
17	16	X4_8930.d	0.	280-0018755-016	280-50614-a-11-b RR@10x	2 Jan 2014 20:48
18	17	X4_8931.d	0.	280-0018755-017	280-50614-a-12-b,5, RR@10x	2 Jan 2014 21:16
19	18	X4_8932.d	0.	280-0018755-018	280-50614-b-12-cm..,5,	2 Jan 2014 21:44
20	19	X4_8933.d	0.	280-0018755-019	280-50614-b-12-dm..,5,	2 Jan 2014 22:12
21	20	X4_8934.d	0.	280-0018755-020	280-50614-a-13-b,5, RR@10x	2 Jan 2014 22:40
22	21	X4_8935.d	0.	280-0018755-021	mb280-206840_1-a	2 Jan 2014 23:08
23	22	X4_8936.d	0.	280-0018755-022	lcs280-206840_2-a	2 Jan 2014 23:36
24	23	X4_8937.d	0.	280-0018755-023	lcsd280-206840_3-a	3 Jan 2014 00:04
25	24	X4_8938.d	0.	280-0018755-024	280-50661-b-1-a	3 Jan 2014 00:32
26	25	X4_8939.d	0.	280-0018755-025	280-50661-b-2-a	3 Jan 2014 01:00
27	26	X4_8940.d	0.	280-0018755-026	280-50661-b-3-a RR past	3 Jan 2014 01:28
28	27	X4_8941.d	0.	280-0018755-027	280-50661-b-4-a Tune Time	3 Jan 2014 01:56
29	96	X4_8942.d	0.	RINSE		3 Jan 2014 02:24
30	97	X4_8943.d	0.	RINSE		3 Jan 2014 02:51
31	98	X4_8944.d	0.	RINSE		3 Jan 2014 03:19

Diluent Solvent Lot # 42358.

Circle: SOP: DV-MS-0011 (8270C/625) or ~~DV-MS-0002 (PAH SIM)~~ or DV-MS-0005 (PAH for CSLP)

Daily Maintenance Performed: A liner

KGV 010614

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GC/MS SVOAContinuing Calibration Review Checklist *TestAmerica*

Denver

Instrument ID and Date: X4 123113

Check Method Used: Analysis ☐ 625 ☐ 8270 ☒ Other SV 8270CSIM

Review Items	---- Yes	Level 1 No	---- N/A	Level 2	Comments
Continuing Calibration					
1. DFTPP meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Do SPCC RRFs and CCC %Ds meet method criteria?	✓			✓	
4. Does %D meet criteria for non-CCC compounds?	✓			✓	
5. Isomeric pairs checked for correct peak assignment?	✓			✓	
6. Standards traceability properly documented?	✓			✓	
7. Manual integrations documented and checked?	✓			✓	
8. Do the Internal Standards meet criteria for %D against ICAL?	✓			✓	

1st Level Reviewer: KJV Date: 010214

2nd Level Reviewer: MH Date: 1/2/14

Revision 0
9/28/10
G:\QA\Edit\Forms\Data Review\GCMS SVOA CCV

KJN 010214

Injection Log

Directory: C:\MSDCHEM\1\DATA\123113.B

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	98	X4_8884.d	0.	RINSE		31 Dec 2013 13:19
2	1	X4_8885.d	0.	DFTPP		31 Dec 2013 13:43
3	2	X4_8886.d	0.	CCV		31 Dec 2013 13:57
4	3	X4_8887.d	0.	mb280-206517_1-a	mb280-206517_1-a	31 Dec 2013 14:38
5	4	X4_8888.d	0.	lcs280-206517_2-a	lcs280-206517_2-a	31 Dec 2013 15:06
6	5	X4_8889.d	0.	lcsd280-206517_3-a	lcsd280-206517_3-a	31 Dec 2013 15:34
7	6	X4_8890.d	0.	280-50498-c-1-a	280-50498-c-1-a	31 Dec 2013 16:02
8	7	X4_8891.d	0.	280-50473-c-1-a	280-50473-c-1-a	31 Dec 2013 16:30
9	8	X4_8892.d	0.	280-50552-b-1-a	280-50552-b-1-a	31 Dec 2013 16:58
10	9	X4_8893.d	0.	280-50552-b-2-a	280-50552-b-2-a	31 Dec 2013 17:27
11	10	X4_8894.d	0.	280-50552-a-3-a	280-50552-a-3-a	31 Dec 2013 17:55
12	11	X4_8895.d	0.	280-50552-d-4-a	280-50552-d-4-a	31 Dec 2013 18:23
13	12	X4_8896.d	0.	mb280-206688_1-a	8_1-a	31 Dec 2013 18:51
14	13	X4_8897.d	0.	lcs280-206688_2-a	lcs280-206688_2-a	31 Dec 2013 19:19
15	14	X4_8898.d	0.	lcsd280-206688_3-a	lcsd280-206688_3-a	31 Dec 2013 19:47
16	15	X4_8899.d	0.	280-50614-b-14-a	280-50614-b-14-a	31 Dec 2013 20:16
17	16	X4_8900.d	0.	280-50614-a-15-a	280-50614-a-15-a	31 Dec 2013 20:44
18	17	X4_8901.d	0.	mb280-206899_1-a	mb280-206899_1-a	31 Dec 2013 21:12
19	18	X4_8902.d	0.	lcs280-206899_2-a	lcs280-206899_2-a	31 Dec 2013 21:40
20	19	X4_8903.d	0.	280-50614-a-4-b	280-50614-a-4-b	31 Dec 2013 22:08
21	20	X4_8904.d	0.	280-50614-a-5-b	280-50614-a-5-b	31 Dec 2013 22:36
22	21	X4_8905.d	0.	280-50614-b-5-cdu	280-50614-b-5-cdu	31 Dec 2013 23:04
23	22	X4_8906.d	0.	280-50614-b-5-dtrl	280-50614-b-5-dtrl	31 Dec 2013 23:32
24	23	X4_8907.d	0.	280-50614-a-6-b	280-50614-a-6-b	31 Dec 2013 23:59
25	24	X4_8908.d	0.	280-50614-a-7-b	280-50614-a-7-b	1 Jan 2014 00:27
26	25	X4_8909.d	0.	280-50614-a-8-b	280-50614-a-8-b	1 Jan 2014 00:55
27	26	X4_8910.d	0.	280-50614-a-9-b	280-50614-a-9-b	1 Jan 2014 01:23
28	96	X4_8911.d	0.	RINSE		1 Jan 2014 01:51
29	97	X4_8912.d	0.	RINSE		1 Jan 2014 02:19
30	98	X4_8913.d	0.	RINSE		1 Jan 2014 02:47

Diluent Solvent Lot # 42358

Circle: SOP: DV-MS-0011 (8270C/625) or DV-MS-0002 (PAH SIM) or DV-MS-0005 (PAH for CSLP)

Daily Maintenance Performed: A liner

KJN 010214

GC/MS TALS Initial Calibration Review Checklist

TestAmerica Denver

Instrument ID and Date: X4 113013

Calibration Event 16353 Batch 203266
Calibration Event 16354 Batch 203267

Check Analysis Method Used: ☐ 625 ☐ 8270C ☐ 8270D ☒ 8270-SIM ☐ 8270_LL ☐ Other SV _____

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
TALS Initial Calibration					
1. DFTPP meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Does the Form VI match the data in the CHROM source method?	✓			✓	
4. Sufficient number of calibration points used?	✓			✓	
5. Reasons for removal of points documented?	✓			✓	Some points <RL removed
6. %RSD or correlation coefficient within method limits?	✓			✓	
7. If RRF used for ICAL, were all compounds within 15%?	✓			✓	List all exceptions below (cpd & RSD)
8. Response factors/CCC meet criteria?	✓			✓	
9. Isomeric pairs checked for correct peak assignment? Aniline and bis(2-chloroethyl) ether 1,3-Dichlorobenzene, 1,4-dichlorobenzene and 1,2-dichlorobenzene 2-Methylphenol, 3/4-Methylphenol 2,4-Dimethylphenol and 3,5-dimethylphenol 2,4,6-Trichlorophenol and 2,4,5-Trichlorophenol Phenanthrene and anthracene Fluoranthene and pyrene Benzo(a)anthracene and chrysene Benzo(e)pyrene and benzo(a)pyrene Benzo(b) and (k)fluoranthene	✓			✓	
10. Data checked for detector saturation?	✓			✓	
11. Standards traceability properly documented (including COA)?	✓			✓	
12. 2nd Source ICV recovery 80-120% (± 20% drift) for DoD projects, 65-135% (± 35% or ± 55% of expected for poor performers) for 8270C non-DoD, 70-130% 8270D non-DoD? Exceptions noted in comment section.	✓			✓	Phthalates not needed

1st Level Reviewer: KJV Date: 12/2/13

2nd Level Reviewer: JON Date: 12/2/13

Revision 4, 3/27/2013
G:\QA\Edit\FORMS\Data Review\MS SV\GCMS SVOA TALS ICAL Review_Rev 4.doc

BJN 120113

Injection Log

Directory: C:\MSDCHEM\1\DATA\113013.B

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	100	X4_8604.d	0.	ION WINDOW CHECK		30 Nov 2013 07:18
2	1	X4_8605.d	0.	DFTPP		30 Nov 2013 07:41
3	1	X4_8606.d	0.	DFTPP } Tune Adjust		30 Nov 2013 08:00
4	1	X4_8607.d	0.	DFTPP		30 Nov 2013 08:23
5	1	X4_8608.d	0.	DFTPP		30 Nov 2013 08:47
6	2	X4_8609.d	0.	STD0020		30 Nov 2013 09:01
7	3	X4_8610.d	0.	STD0100		30 Nov 2013 09:30
8	4	X4_8611.d	0.	STD0300		30 Nov 2013 09:57
9	5	X4_8612.d	0.	ICIS STD0600		30 Nov 2013 10:25
10	6	X4_8613.d	0.	STD1200		30 Nov 2013 10:53
11	7	X4_8614.d	0.	STD2500		30 Nov 2013 11:21
12	8	X4_8615.d	0.	STD5000		30 Nov 2013 11:48
13	9	X4_8616.d	0.	STD10000		30 Nov 2013 12:16
14	10	X4_8617.d	0.	ICV		30 Nov 2013 12:44
15	11	X4_8618.d	0.	mb280-202782_1-a	mb280-202782_1-a	30 Nov 2013 13:12
16	12	X4_8619.d	0.	lcs280-202782_2-a	lcs280-202782_2-a	30 Nov 2013 13:40
17	13	X4_8620.d	0.	lcsd280-202782_3-a	lcsd280-202782_3-a	30 Nov 2013 14:08
18	14	X4_8621.d	0.	280-49624-e-2-a	280-49624-e-2-a-20x	30 Nov 2013 14:35
19	15	X4_8622.d	0.	280-49624-c-3-a	280-49624-c-3-a-20x	30 Nov 2013 15:03
20	16	X4_8623.d	0.	280-49624-d-4-a	280-49624-d-4-a-40x	30 Nov 2013 15:31
21	17	X4_8624.d	0.	280-49624-a-5-a	280-49624-a-5-a-40x	30 Nov 2013 15:59
22	18	X4_8625.d	0.	280-49624-b-6-a	280-49624-b-6-a-20x	30 Nov 2013 16:27
23	19	X4_8626.d	0.	280-49624-b-7-a	280-49624-b-7-a	30 Nov 2013 16:55
24	20	X4_8627.d	0.	280-49624-c-8-a	280-49624-c-8-a-100x	30 Nov 2013 17:23
25	21	X4_8628.d	0.	280-49624-a-9-a	280-49624-a-9-a	30 Nov 2013 17:51
26	22	X4_8629.d	0.	mb280-202332_1-a	mb280-202332_1-a	30 Nov 2013 18:19
27	23	X4_8630.d	0.	lcs280-202332_2-a	lcs280-202332_2-a	30 Nov 2013 18:46
28	24	X4_8631.d	0.	280-49336-a-1-b	280-49336-a-1-b-RR@10x	30 Nov 2013 19:14
29	25	X4_8632.d	0.	280-49336-f-3-d	280-49336-f-3-d	30 Nov 2013 19:42
30	26	X4_8633.d	0.	280-49336-f-3-ems	280-49336-f-3-ems	30 Nov 2013 20:10
31	27	X4_8634.d	0.	280-49336-f-3-fmsd	280-49336-f-3-fmsd	30 Nov 2013 20:37
32	96	X4_8635.d	0.	RINSE		30 Nov 2013 21:05
33	97	X4_8636.d	0.	RINSE		30 Nov 2013 21:33
34	98	X4_8637.d	0.	RINSE		30 Nov 2013 22:00

Diluent Solvent Lot # 42358

Circle: SOP: DV-MS-0011 (8270C/625) or ~~DV-MS-0002 (PAH STM)~~ or DV-MS-0005 (PAH for CSLP)

Daily Maintenance Performed: front end, change column, see Maintenance log BJN 120113

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GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Batch Number: 206688 Batch Start Date: 12/26/13 17:46 Batch Analyst: McKittrick, Ian B

Batch Method: 3510C Batch End Date: 12/27/13 21:55

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	GrossWeight	TareWeight	InitialAmount	FinalAmount	8270 SIM Surr 00049
MB 280-206688/1		3510C, 8270C SIM		7 SU			1000 mL	1000 uL	1 mL
LCS 280-206688/2		3510C, 8270C SIM		7 SU			1000 mL	1000 uL	1 mL
LCSD 280-206688/3		3510C, 8270C SIM		7 SU			1000 mL	1000 uL	1 mL
280-50614-B-14	FSA-FB-01	3510C, 8270C SIM	T	5 SU	1293.6 g	422.2 g	871.4 mL	1000 uL	1 mL
280-50614-A-15	FSA-EB-01	3510C, 8270C SIM	T	5 SU	1358.0 g	413.1 g	944.9 mL	1000 uL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8270SIMPAHLCS 00009					
MB 280-206688/1		3510C, 8270C SIM							
LCS 280-206688/2		3510C, 8270C SIM		1 mL					
LCSD 280-206688/3		3510C, 8270C SIM		1 mL					
280-50614-B-14	FSA-FB-01	3510C, 8270C SIM	T						
280-50614-A-15	FSA-EB-01	3510C, 8270C SIM	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Batch Number: 206688 Batch Start Date: 12/26/13 17:46 Batch Analyst: McKittrick, Ian B

Batch Method: 3510C Batch End Date: 12/27/13 21:55

Batch Notes	
Balance ID	24750399
Batch Comment	DV-OP-0006/0007
Person's name who did the concentration	Curley, N
HPLC H2O Lot#	S. Elga
Na2SO4 Lot Number	0000049014_00013
NaCL Lot #	0000059796
Oven, Bath or Block Temperature 1	84
Pipette ID	L
Prep Solvent Lot #	MeCl2_Cycl_00141
Prep Solvent Name	MeCl2
Prep Solvent Volume Used	180 mL
Person's name who did the prep	McKittrick , I
Person's name who witnessed reagent drop	Reviewer: Cokley, Cheyana
Analyst who added reagent	McKittrick, I
Person who performed Spike	See Above
Person who witnessed spiking	See Above
Sufficient volume for MS/MSD?	NO
Uncorrected Temperature	83 Degrees C
Water Bath ID	A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Batch Number: 206728 Batch Start Date: 12/27/13 07:35 Batch Analyst: Scoles, Brittany M

Batch Method: Increm, Prep Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-50614-A-4	FSA-SD-DU05	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					
280-50614-A-5	FSA-SD-DU04-A	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					
280-50614-B-5 DU	FSA-SD-DU04-A	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					
280-50614-B-5 TRL	FSA-SD-DU04-A	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					
280-50614-A-6	FSA-SD-DU04-B	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					
280-50614-A-7	FSA-SD-DU04-C	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					
280-50614-A-9	FSA-SD-DU03-A	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					
280-50614-B-9 DU	FSA-SD-DU03-A	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					
280-50614-B-9 TRL	FSA-SD-DU03-A	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					
280-50614-A-10	FSA-SD-DU03-B	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					
280-50614-A-11	FSA-SD-DU03-C	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					
280-50614-A-12	FSA-SD-DU01	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					
280-50614-B-12 MS	FSA-SD-DU01	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					
280-50614-B-12 MSD	FSA-SD-DU01	Increm, Prep, 3546, 8270C SIM	T	Laid out containers A and B.					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Batch Number: 206728 Batch Start Date: 12/27/13 07:35 Batch Analyst: Scoles, Brittany M

Batch Method: Increm, Prep Batch End Date:

Batch Notes	
Analyst	Brittany Scoles
Date and Time laid out to Dry	12/27/13 @ 07:45
Date and Time When Sieved	12.29.13@0815
Initials for Sieving	CDC
Initials for Label Check	CDC
Laid out on Parchment or Foil	Foil
Mesh Size of Seive	10
SOP Number	DV-OP-0013

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Batch Number: 206899 Batch Start Date: 12/29/13 10:49 Batch Analyst: Cokley, Cheyana D

Batch Method: 3546 Batch End Date: 12/30/13 13:16

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8270 SIM Surr 00049	8270SIMPAHLCS 00009		
MB 280-206899/1		3546, 8270C SIM		32.21 g	1000 uL	1 mL			
LCS 280-206899/2		3546, 8270C SIM		32.84 g	1000 uL	1 mL	1 mL		
280-50614-A-4-A	FSA-SD-DU05	3546, 8270C SIM	T	30.60 g	1000 uL	1 mL			
280-50614-A-5-A	FSA-SD-DU04-A	3546, 8270C SIM	T	30.94 g	1000 uL	1 mL			
280-50614-B-5-A DU	FSA-SD-DU04-A	3546, 8270C SIM	T	31.13 g	1000 uL	1 mL			
280-50614-B-5-B TRL	FSA-SD-DU04-A	3546, 8270C SIM	T	31.87 g	1000 uL	1 mL			
280-50614-A-6-A	FSA-SD-DU04-B	3546, 8270C SIM	T	31.67 g	1000 uL	1 mL			
280-50614-A-7-A	FSA-SD-DU04-C	3546, 8270C SIM	T	30.38 g	1000 uL	1 mL			
280-50614-A-8-A	FSA-SD-CO	3546, 8270C SIM	T	31.00 g	1000 uL	1 mL			
280-50614-A-9-A	FSA-SD-DU03-A	3546, 8270C SIM	T	30.79 g	1000 uL	1 mL			
280-50614-B-9-A DU	FSA-SD-DU03-A	3546, 8270C SIM	T	30.69 g	1000 uL	1 mL			
280-50614-B-9-B TRL	FSA-SD-DU03-A	3546, 8270C SIM	T	30.16 g	1000 uL	1 mL			
280-50614-A-10-A	FSA-SD-DU03-B	3546, 8270C SIM	T	30.58 g	1000 uL	1 mL			
280-50614-A-11-A	FSA-SD-DU03-C	3546, 8270C SIM	T	32.84 g	1000 uL	1 mL			
280-50614-A-12-A	FSA-SD-DU01	3546, 8270C SIM	T	32.86 g	1000 uL	1 mL			
280-50614-B-12-A MS	FSA-SD-DU01	3546, 8270C SIM	T	32.14 g	1000 uL	1 mL	1 mL		
280-50614-B-12-B MSD	FSA-SD-DU01	3546, 8270C SIM	T	31.74 g	1000 uL	1 mL	1 mL		
280-50614-A-13-A	FSA-SD-DU02	3546, 8270C SIM	T	31.18 g	1000 uL	1 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Batch Number: 206899 Batch Start Date: 12/29/13 10:49 Batch Analyst: Cokley, Cheyana D

Batch Method: 3546 Batch End Date: 12/30/13 13:16

Batch Notes	
Balance ID	24750526
Batch Comment	Aliquoted by:CDC / Filtered by: BWJ
Person's name who did the concentration	Brittany Scoles & Erin Redman
Final Concentrator Volume	1 mL
MeCL2 Lot #	MeCl2_Cycl_00141
MeCl2/Acetone Lot #	1:1AceMeCl2_00035
Microwave Start Time	12.29.13@ 1123
Microwave Stop Time	12.29.13@ 1153
Na2SO4 Lot Number	0000049014_00013
Ottawa Sand Lot #	2BI0314
Pipette ID	K
Person's name who did the prep	CDC
SOP Number	DV-OP-0015/0007
Person who witnessed spiking	Reviewer: BWJ
Water Bath ID	A
Water Bath Temperature	88 (obs: 87)

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Batch Number: 207028 Batch Start Date: 12/30/13 19:55 Batch Analyst: Munch, Robert J

Batch Method: 3546 Batch End Date: 12/31/13 13:28

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8270 SIM Surr 00049	8270SIMPAHLCS 00009	AnalysisComment	
MB 280-207028/1		3546, 8270C SIM		32.0 g	1000 uL	1 mL			
LCS 280-207028/2		3546, 8270C SIM		30.2 g	1000 uL	1 mL	1 mL		
280-50614-B-1	FSA-SF-CT	3546, 8270C SIM	T	31.1 g	1000 uL	1 mL		Split into 2 tubes	
280-50614-B-1 MS	FSA-SF-CT	3546, 8270C SIM	T	32.0 g	1000 uL	1 mL	1 mL	Split into 2 tubes	
280-50614-B-1 MSD	FSA-SF-CT	3546, 8270C SIM	T	31.3 g	1000 uL	1 mL	1 mL	Split into 2 tubes	
280-50614-A-2	FSA-SF-SCW	3546, 8270C SIM	T	30.7 g	1000 uL	1 mL			
280-50614-A-3	FSA-SF-SCW-DUP	3546, 8270C SIM	T	32.2 g	1000 uL	1 mL			

Batch Notes	
Balance ID	24750402
Batch Comment	Aliquoted by: RJM; Filtered by: RJM
Person's name who did the concentration	Erin Redman
Final Concentrator Volume	1 mL
MeCL2 Lot #	MeCl2_Cycl_00141
MeCl2/Acetone Lot #	1:1AceMeCl2_00035
Microwave Start Time	12.30.13 @2004
Microwave Stop Time	12.30.13 @2058
Na2SO4 Lot Number	0000049014_00013
Ottawa Sand Lot #	2BI0314
Pipette ID	C
Person's name who did the prep	Munch, R
SOP Number	DV-OP-0015/0007
Person who witnessed spiking	Reviewer: IM
Water Bath ID	A
Water Bath Temperature	88 (obs: 87)

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Batch Number: 207028 Batch Start Date: 12/30/13 19:55 Batch Analyst: Munch, Robert J

Batch Method: 3546 Batch End Date: 12/31/13 13:28

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-50614-1

SDG No.:

Project: Francis Street Assessment

Client Sample ID	Lab Sample ID
FSA-SF-CT	280-50614-1
FSA-SF-SCW	280-50614-2
FSA-SF-SCW-DUP	280-50614-3
FSA-SD-DU05	280-50614-4
FSA-SD-DU04-A	280-50614-5
FSA-SD-DU04-B	280-50614-6
FSA-SD-DU04-C	280-50614-7
FSA-SD-CO	280-50614-8
FSA-SD-DU03-A	280-50614-9
FSA-SD-DU03-B	280-50614-10
FSA-SD-DU03-C	280-50614-11
FSA-SD-DU01	280-50614-12
FSA-SD-DU02	280-50614-13

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-50614-1

SDG Number:

Matrix: Solid Instrument ID: NoEquip

Method: Moisture RL Date: 11/01/2009 00:00

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-50614-1

SDG Number:

Matrix: Solid Instrument ID: NoEquip

Method: Moisture RL Date: 11/01/2009 00:00

Leach Method: Increm, Prep

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver

Job No.: 280-50614-1

SDG No.:

Instrument ID: NoEquip

Method: Moisture

Start Date: 12/27/2013 12:32

End Date: 12/27/2013 12:32

Lab Sample ID	D/F	Type	Time	Analytes																			
				Moist																			
ZZZZZZ			12:32																				
ZZZZZZ			12:32																				
280-50614-1	1	T	12:32	X																			
280-50614-2	1	T	12:32	X																			
280-50614-3	1	T	12:32	X																			
ZZZZZZ			12:32																				
ZZZZZZ			12:32																				
ZZZZZZ			12:32																				
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ZZZZZZ			12:32																				
ZZZZZZ			12:32																				

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Instrument ID: NoEquip Method: Moisture

Start Date: 12/30/2013 10:57 End Date: 12/30/2013 11:01

Lab Sample ID	D/F	Type	Time	Analytes																			
				Moist																			
280-50614-4	1	T	10:57	X																			
280-50614-5	1	T	10:57	X																			
280-50614-B-5-A DU	1	T	10:57	X																			
280-50614-6	1	T	10:57	X																			
280-50614-7	1	T	10:57	X																			
280-50614-8	1	T	10:57	X																			
280-50614-9	1	T	10:57	X																			
280-50614-10	1	T	10:57	X																			
280-50614-11	1	T	10:57	X																			
280-50614-12	1	T	10:57	X																			
280-50614-13	1	T	10:57	X																			
ZZZZZZ			10:57																				
ZZZZZZ			10:57																				
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ZZZZZZ			11:01																				
ZZZZZZ			11:01																				

Prep Types

T = Total/NA

TestAmerica Denver

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Wet Chemistry Data Review Checklist For Gravimetric Methods

Test Name/Method #: 9cm Analysis Date: 12/30/13

SOP #: WC-0066 Analyst: Beth Neeley Instrument: Balance

Lot / Sample Numbers	Matrix	Prep Batch	Batch	Method	Special Inst
48859	Soil		206801	9cm	
50614					
50615					
50619					
BN 12/30/13					

	Yes	No	N/A	2nd Level
A. Balance, Oven, and DI Water QC Checks				
1. Was the balance calibration verified before and after processing samples and noted in the "Balance Calibration Log" for the date(s) the samples were processed?	✓			✓
2. Was the oven temperature within method requirements and recorded in the "Oven Temperature" logbook for the date(s) the samples were processed?	✓			✓
3. Was the daily conductivity check of the deionized water recorded in the "Conductivity Logbook"?			✓	✓
B. Method Requirements				
1. If sample is visibly oily, was this noted on the benchsheet?			✓	✓
2. Was final residue weight within minimum/maximum requirements?	✓			✓
3. Were the initial and final drying dates and times recorded on the benchsheet and were all samples dried for at least one hour?	✓			✓
C. Sample Results				
1. TDS/Conductivity ratio or historical data checked?			✓	✓
2. For % Moisture, was the Final Dried Weight < the Initial Pan Weight or is the result greater than 100%?		✓		✓
3. Were sample analyses done within holding time?			✓	✓
4. Were special client requirements met?	✓			✓
5. Were data that were manually transcribed from instrument printouts into TALS verified 100% including significant figures and units?			✓	✓
6. Do the prep and analysis dates in TALS reflect the actual dates? Lots/Dates report checked?	✓			✓
7. STD/True Value information is updated and included?	✓			✓
8. Are raw data copies prepared, scanned, and uploaded?	✓			✓
D. Preparation/Matrix QC				
1. Method blank < RL or all reported samples > 10 X RL?			✓	✓
2. Method blank < ½ RL or NCM provided?			✓	✓
3. LCS/LCSD run for batch and within QC limits?			✓	✓
4. DUP run for batch and RPD < 20% for samples >5 X RL?			✓	✓

Analyst: Beth Neeley Date: 12/30/13

Comments:

2nd Level Reviewer: [signature] Date: 12/30/13

Comments:

TestAmerica Denver

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Wet Chemistry Data Review Checklist For Gravimetric Methods

Test Name/Method #: % m Analysis Date: 12/30/13 + 12/31/13

SOP #: WC-0066 Analyst: Beth Neeley Instrument: Balance

Lot / Sample Numbers	Matrix	Prep Batch	Batch	Method	Special Inst
50614	Soil		206954	% m	
50670					
320-5375					
BN 12/31/13					

	Yes	No	N/A	2nd Level
A. Balance, Oven, and DI Water QC Checks				
1. Was the balance calibration verified before and after processing samples and noted in the "Balance Calibration Log" for the date(s) the samples were processed?	✓			✓
2. Was the oven temperature within method requirements and recorded in the "Oven Temperature" logbook for the date(s) the samples were processed?	✓			✓
3. Was the daily conductivity check of the deionized water recorded in the "Conductivity Logbook"?			✓	✓
B. Method Requirements				
1. If sample is visibly oily, was this noted on the benchsheet?			✓	✓
2. Was final residue weight within minimum/maximum requirements?	✓			✓
3. Were the initial and final drying dates and times recorded on the benchsheet and were all samples dried for at least one hour?	✓			✓
C. Sample Results				
1. TDS/Conductivity ratio or historical data checked?			✓	✓
2. For % Moisture, was the Final Dried Weight < the Initial Pan Weight or is the result greater than 100%?		✓		✓
3. Were sample analyses done within holding time?			✓	✓
4. Were special client requirements met?	✓			✓
5. Were data that were manually transcribed from instrument printouts into TALS verified 100% including significant figures and units?			✓	✓
6. Do the prep and analysis dates in TALS reflect the actual dates? Lots/Dates report checked?	✓			✓
7. STD/True Value information is updated and included?	✓			✓
8. Are raw data copies prepared, scanned, and uploaded?	✓			✓
D. Preparation/Matrix QC				
1. Method blank < RL or all reported samples > 10 X RL?			✓	✓
2. Method blank < ½ RL or NCM provided?			✓	✓
3. LCS/LCSD run for batch and within QC limits?			✓	✓
4. DUP run for batch and RPD < 20% for samples >5 X RL?	✓			✓

Analyst: Beth Neeley Date: 12/31/13

Comments:

2nd Level Reviewer*: [signature] Date: 12/31/13

Comments:

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Batch Number: 206728 Batch Start Date: 12/27/13 07:35 Batch Analyst: Scoles, Brittany M

Batch Method: Increm, Prep Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-50614-A-4	FSA-SD-DU05	Increm, Prep, Moisture	T	Laid out containers A and B.					
280-50614-A-5	FSA-SD-DU04-A	Increm, Prep, Moisture	T	Laid out containers A and B.					
280-50614-B-5 DU		Increm, Prep, Moisture	T	Laid out containers A and B.					
280-50614-A-6	FSA-SD-DU04-B	Increm, Prep, Moisture	T	Laid out containers A and B.					
280-50614-A-7	FSA-SD-DU04-C	Increm, Prep, Moisture	T	Laid out containers A and B.					
280-50614-A-9	FSA-SD-DU03-A	Increm, Prep, Moisture	T	Laid out containers A and B.					
280-50614-A-10	FSA-SD-DU03-B	Increm, Prep, Moisture	T	Laid out containers A and B.					
280-50614-A-11	FSA-SD-DU03-C	Increm, Prep, Moisture	T	Laid out containers A and B.					
280-50614-A-12	FSA-SD-DU01	Increm, Prep, Moisture	T	Laid out containers A and B.					

Batch Notes	
Analyst	Brittany Scoles
Date and Time laid out to Dry	12/27/13 @ 07:45
Date and Time When Sieved	12.29.13@0815
Initials for Sieving	CDC
Initials for Label Check	CDC
Laid out on Parchment or Foil	Foil
Mesh Size of Seive	10
SOP Number	DV-OP-0013

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Batch Number: 206728 Batch Start Date: 12/27/13 07:35 Batch Analyst: Scoles, Brittany M

Batch Method: Increm, Prep Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Batch Number: 206801 Batch Start Date: 12/27/13 12:32 Batch Analyst: Neeley, Beth A

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
280-50614-B-1	FSA-SF-CT	Moisture	T	3	1.31 g	15.92 g	7.19 g		
280-50614-A-2	FSA-SF-SCW	Moisture	T	4	1.30 g	15.10 g	12.31 g		
280-50614-B-3	FSA-SF-SCW-DUP	Moisture	T	5	1.32 g	15.94 g	13.47 g		

Batch Notes	
Balance ID	H31422 No Unit
Date samples were placed in the oven	12/27/13
Oven Temp when samples are put in oven	105 Degrees C
Time samples were place in the oven	1256
Date samples were removed from oven	12/30/13
Oven Temp when samples removed from oven	105 Degrees C
Time Samples were removed from oven	700
Oven ID	F
ID number of the thermometer	4082
Uncorrected In Temperature	105 Celsius
Uncorrected Out Temperature	105 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-50614-1

SDG No.:

Batch Number: 206954 Batch Start Date: 12/30/13 10:57 Batch Analyst: Neeley, Beth A

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
280-50614-A-4-A	FSA-SD-DU05	Moisture	T	1	1.32 g	11.82 g	11.79 g		
280-50614-A-5-A	FSA-SD-DU04-A	Moisture	T	2	1.32 g	11.43 g	11.41 g		
280-50614-B-5-A DU		Moisture		3	1.31 g	11.62 g	11.61 g		
280-50614-A-6-A	FSA-SD-DU04-B	Moisture	T	4	1.31 g	11.85 g	11.83 g		
280-50614-A-7-A	FSA-SD-DU04-C	Moisture	T	5	1.32 g	11.65 g	11.65 g		
280-50614-A-8-A	FSA-SD-CO	Moisture	T	6	1.31 g	11.50 g	11.50 g		
280-50614-A-9-A	FSA-SD-DU03-A	Moisture	T	7	1.32 g	12.15 g	12.04 g		
280-50614-A-10-A	FSA-SD-DU03-B	Moisture	T	8	1.32 g	12.29 g	12.18 g		
280-50614-A-11-A	FSA-SD-DU03-C	Moisture	T	9	1.32 g	11.44 g	11.33 g		
280-50614-A-12-A	FSA-SD-DU01	Moisture	T	10	1.33 g	11.83 g	11.70 g		
280-50614-A-13-A	FSA-SD-DU02	Moisture	T	11	1.33 g	11.36 g	11.25 g		

Batch Notes	
Balance ID	H31422 No Unit
Date samples were placed in the oven	12/30/13
Oven Temp when samples are put in oven	105 Degrees C
Time samples were place in the oven	1120
Date samples were removed from oven	12/31/13
Oven Temp when samples removed from oven	105 Degrees C
Time Samples were removed from oven	703
Oven ID	F
ID number of the thermometer	4082
Uncorrected In Temperature	105 Celsius
Uncorrected Out Temperature	105 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

GCAL

TestAmerica JVS 12/19/13

GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSTODY RECORD

2.7, 4.2, 5.0, 1.4

Lab use only			
Client Name	Client #	Workorder #	Due Date

Report to:
Client: TetraTech
Address: Bld 200 Suite 300
1955 Evergreen Blvd
Contact: Jessica Vickers
Phone: 678-775-3104
Fax:

Bill to:
Client: same
Address:
Contact:
Phone:
Fax:

Analytical Requests & Method

Lab use only:
Custody Seal
used ☐ yes ☐ no
intact ☐ yes ☐ no
Temperature °C

280-50614 Chain of Custody

P.O. Number

Project Name/Number: Francis Street Assessment/103d.9017.0003.0168

Sampled By: John Snyder / TetraTech START

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	PAH by SIM	PAH by SIM ISM processing	Remarks:	Lab ID
S	12/19	0855	/		FSA-SF-CT	—	2	/		MS/MSD	
S		0912	/		FSA-SF-SCW	—	2	/			
S		0918	/		FSA-SF-SCW-DUP	—	2	/			
S		1045	/		FSA-SD-DU05	—	2		/		
S		1235	/		FSA-SD-DU04-A	—	2		/	Run lab RSD analysis	
S		1240	/		FSA-SD-DU04-B	—	2		/		
S		1245	/		FSA-SD-DU04-C	—	2		/		
S		1120	/		FSA-SD-SCO	—	1		/		
S		1500	/		FSA-SD-DU03-A	—	2		/	Run lab RSD analysis	
S		1505	/		FSA-SD-DU03-B	—	2		/		
S		1510	/		FSA-SD-DU03-C	—	2		/		
S		1545	/		FSA-SD-DU01	—	2		/	MS/MSD	
S	✓	1610	/		FSA-SD-DU02	—	1		/		

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☑ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
11:48		12/20/13	11:48
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
12:00		12/21/13	12:00
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note: page 1/2

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

Matrix: W = water, S = soil, SD = solid, L = liquid, SL = sludge, o = oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax written changes to (225) 767-5717

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

GCAL-06 11/98

GCAL

GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

TestAmerica JWS 12/09/13

CHAIN OF CUSTODY RECORD

Lab use only

Client Name	Client #	Workorder #	Due Date

Report to:
Client:
Address: see pg 1
Contact:
Phone:
Fax:

Bill to:
Client:
Address: see pg 1
Contact:
Phone:
Fax:

P.O. Number
Project Name/Number
Sampled By: See Pg 1

Analytical Requests & Method: PAH by SIM

Lab use only:
Custody Seal
used ☐ yes ☐ no
intact ☐ yes ☐ no
Temperature °C

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	PAH by SIM	Remarks:	Lab ID
W	12/09/13	1615	—		FSA-FB-01	—	2	✓	field blank	/
W	↓	1620	—		FSA-EB-01	—	2	✓	equip. blank	

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☑ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature] 11:48	[signature]	12/20/13	11:48
[signature] 12:00	[signature]	12/21/13	12:00

Note: page 2/2

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

Matrix[1]: W = water S = soil, SD = solid, L = liquid, SL = sludge, o = oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax written changes to (225) 767-5717

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

GCAL-06 11/98

Login Sample Receipt Checklist

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Login Number: 50614

List Source: TestAmerica Denver

List Number: 1

Creator: Dedio, Michael T

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ENCLOSURE 6

TETRA TECH DATA VALIDATION REPORT

(32 Sheets)

TETRA TECH

Site Name:	Francis Street Assessment
Technical Direction Document Number (No.):	TTEMI-05-003-0168
Contract No.:	EP-W-05-054 (START III Region 4)
Data Reviewer:	Harry Ellis
Quality Assurance (QA) Manager:	Jessica A. Vickers
Analyses:	Polynuclear aromatic hydrocarbons (PAHs)
Data Package Requested:	Level IV
Level of Validation Effort:	Stage 4
Report Date:	January 23, 2014

Laboratory Report No.	280-50614
Samples	FSA-SD-CO, FSA-SD-DU01, FSA-SD-DU02, FSA-DU02-C, FSA-SD-DU03-A, FSA-SD-DU03-B, FSA-SD-DU04-A, FSA-SD-DU04-B, FSA-SD-DU04-C, FSA-SD-DU05, FSA-SF-CT, and FSA-SF-SCW
Field Duplicate Pairs	FSA-SF-SCW/FSA-SF-SCW-DUP
Field Blanks	FSA-FB-01 and FSA-EB-01

The Tetra Tech Inc. Superfund Technical Assessment and Response Team (START) conducted data validation of the analytical results for twelve soil samples and three quality control (QC) samples (a soil field duplicate, an aqueous field blank and an aqueous equipment blank) that were collected at the Francis Street Assessment site in Waycross, Georgia, on December 19, 2013. The soil and QC samples were analyzed under laboratory report No. 280-50614 by the Denver facility of TestAmerica Laboratories, Inc. (TestAmerica) in Arvada, Colorado. The samples were analyzed for PAHs by the Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846) Method 8270C with selected-ion monitoring (SIM).

Analytical data were evaluated in general accordance with the U.S. Environmental Protection Agency (EPA) Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Superfund Organic Methods Data Review (June 2008) data validation guidance document. The analytical method used by TestAmerica during this project provides guidance on procedures and method acceptance criteria that, in some areas, differ from the NFGs. Where the methods and the NFGs differ, the data validators followed the acceptance criteria in the method. In addition, if laboratory-derived acceptance criteria were presented in the TestAmerica data package, these criteria were used to evaluate the data unless the criteria were considered inadequate. The following is a list of qualifiers used for the validation of this data package:

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit [RL]).

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The laboratory specifications required that the following items be included in the data package:

- Cover page
- Table of contents
- Case narrative, including brief descriptions of the analytical methods used and a summary of laboratory or analytical non-conformances, if any
- Field/laboratory sample designation cross-reference table
- Sample container certificates of cleanliness (as provided by the manufacturer)
- Data qualifier, abbreviation, and acronym definition page
- Sample results summary sheets
- QC sample summary forms, for all associated preparation and analytical batches, which present all of the results and QC summary data that are provided on CLP or CLP-like forms for organic analyses. These forms should include results for the following:
  - Initial and continuing calibrations
  - Gas chromatography (GC) calibration verifications
  - Laboratory control samples (LCS) and LCS duplicates (LCSD)
  - Blanks (method, initial, continuing, and preparation)
  - Matrix spikes/matrix spike duplicates (MS/MSD)
  - Instrument performance check (for example, tune) results
  - Internal standard area and retention time results
  - System monitoring compound & surrogate results
  - Results of instrument and method detection limit (MDL) studies
- Signed original chain-of-custody (COC) forms
- Laboratory sample receipt forms
- Sample preparation (extraction, digestion, etc.) logs
- Instrument and analysis run logs
- Percent moisture/percent solids determination logs
- Raw data (for example, chromatograms, quantitation reports, and mass spectra) for all samples, QC samples, and calibrations

Data were evaluated based on the following criteria:

- Data completeness
- Sample preservation, receipt, and holding times
- Gas chromatography and mass spectrometry (GC/MS) instrument performance checks
- Initial calibration
- Continuing calibration
- Calibration verification
- Field and laboratory blanks
- System monitoring compounds (surrogates)
- MS/MSD
- Laboratory duplicate sample analysis
- Field duplicates
- LCS and LCSD
- Sample dilution

- Re-extraction and reanalysis
- Internal standards
- Target analyte identification
- Analyte quantitation and reported detection limits
- System performance and instrument stability

The data validation approach that was used should meet the needs of the data uses and requirements for limits on uncertainty for decision-making using the data. This approach consisted of a review of all of the data, including the raw data. This data validation effort constituted a full validation of the data and involved a 100 percent check against applicable acceptance criteria of all QC parameter data, including the parameters listed above. In addition, all data that pertain to analyte identification (qualitative), such as chromatograms and mass spectra, were checked completely (100 percent) to evaluate the accuracy of analyte identification.

The data validation effort also involved an in-depth quantitative check of a fraction of the data; this check involved recalculation of QC results (such as percent recoveries [%R] and relative percent difference [RPD] values) and target analyte results from the raw data. Results were recalculated at a frequency of 10 percent for the data that had been transcribed and generated by hand. Results for data calculated by software were recalculated at varying frequencies and to the extent necessary to confirm the adequacy of the software. If errors or discrepancies were encountered when any data were recalculated and checked, the extent of the data check was expanded, as necessary, to identify the full extent of the problem.

Enclosure 1 presents copies of the sample results sheets from the laboratory data package, with hand-entered qualifications from the data validation effort. Enclosure 2 presents a copy of the COC forms for the data package. The following sections discuss the data package and provide an overall assessment of the data. This discussion concentrates on the nonconformances and other irregularities associated with the various parameters.

DATA COMPLETENESS

The data package for laboratory report No. 280-50614 was complete as submitted.

SAMPLE PRESERVATION, RECEIPT, AND HOLDING TIMES

The holding times were met for sample analyses. The temperatures of the samples were within the QC limit of 4 ± 2 degrees Celsius when they arrived at the laboratory.

GC/MS INSTRUMENT PERFORMANCE CHECKS

All GC/MS instrument performance checks for the analysis of PAHs met the acceptance criteria.

INITIAL CALIBRATION

The initial calibrations were analyzed at the proper frequencies and concentrations and met requirements.

CONTINUING CALIBRATION

The continuing calibrations were analyzed at the proper frequencies and concentrations and met requirements.

CALIBRATION VERIFICATION

The second source calibration verifications for the PAH analyses were analyzed at the proper frequencies and concentrations and met all requirements.

FIELD AND LABORATORY BLANKS

Method blanks, the field blank, and the equipment rinsate blank were free of target analytes.

SYSTEM MONITORING COMPOUNDS (SURROGATES)

Surrogate recoveries were within the laboratory-specified control limits, with the following exceptions. Surrogate recoveries could not be reliably determined in samples diluted 10- and 50-fold. No qualifications were applied for these data gaps. In three field samples (the 4-fold diluted analysis of sample FSA-SF-ACW-DUP and the undiluted analyses of samples FSA-SD-DU05 and FSA-FB-01), the terphenyl-d_{14} recoveries were above the laboratory's QC limits. The positive results were qualified as estimated with a possible high bias (flagged "J+").

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

MS/MSD analyses were performed on samples FSA-SD-DU01 and FSA-SF-CT. Recoveries and the RPD values were within the laboratory-specified QC limits with the following exceptions.

In the MS/MSD analyses performed on sample FSA-SD-DU01, recoveries could not be determined for most analytes because the sample concentration was greater than four times the spiking amount; no qualifications are warranted for these data gaps. For the three analytes with lower concentrations, recoveries of acenaphthene were within QC limit, while the fluorene and naphthalene recoveries were above the QC limits. Therefore, results for fluorene and naphthalene in sample FSA-SD-DU01 were qualified as estimated with a possible high bias (flagged "J+").

In the MS/MSD analyses performed on sample FSA-SF-CT, recoveries were above the laboratory's QC limits for acenaphthene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, fluoranthene, fluorene, phenanthrene, and pyrene. In addition, the fluorene RPD exceeded the laboratory's QC limit of 50 percent. Therefore, the listed PAH results for sample FSA-SF-CT were qualified as estimated with a possible high bias (flagged "J+").

LABORATORY DUPLICATE SAMPLE ANALYSIS

Laboratory duplicate and triplicate analyses were performed for samples FSA-SD-DU04-A and FSA-SD-DU03-A. Results were very disparate.

The laboratory duplicate analysis for sample FSA-SD-DU04-A yielded considerably higher concentrations of all PAH than the primary sample, producing RPD ranging from 20 percent (for phenanthrene) to 111 percent (for benzo(a)anthracene). All PAHs except fluorene and phenanthrene had RPDs that exceeded the laboratory's QC limit of 50 percent. The laboratory triplicate sample results were similar to the duplicate results, with relative standard deviations (RSD) exceeding the laboratory's QC limit of 15 percent for all PAHs except fluorene and phenanthrene. Therefore, all PAH results except fluorene and phenanthrene for sample FSA-SD-DU04-A were qualified as estimated (flagged "J").

In contrast, the laboratory duplicate analysis for sample FSA-SD-DU03-A yielded fully satisfactory results, with RPD ranging from 2 percent (for dibenz(a,h)anthracene) to 39 percent (phenanthrene), all below the QC limit of 50 percent. In the triplicate analysis, only acenaphthene (18 percent), 2-methylnaphthalene (16 percent), and phenanthrene (24 percent) exceeded the QC limit of 15 percent.

Therefore, acenaphthene, 2-methylnaphthalene, and phenanthrene results for sample FSA-SD-DU03-A were qualified as estimated (flagged "J").

FIELD DUPLICATES

Samples FSA-SF-SCW and FSA-SF-SCW-DUP were collected as a field duplicate pair. RPDs were within the QC guideline of 50 percent for soil with the exception of acenaphthene (83 percent) and fluorene (100 percent). The results for acenaphthene and fluorene in the pair were qualified as estimated (flagged "J"), unless previously overridden by other qualifications.

LABORATORY CONTROL SAMPLES AND LABORATORY CONTROL SAMPLE DUPLICATES

LCS and LCSD results were within the QC limits.

SAMPLE DILUTION

The following results for the listed samples required the indicated dilutions to place the results within the calibration range and/or to eliminate matrix interferences. This resulted in elevated RLs for the non-detect results.

Dilution	Sample Identification	Affected Analytes
4x	FSA-SF-SCW	Acenaphthene, anthracene, dibenz(a,h)anthracene, fluorene, 2-methylnaphthalene, and naphthalene
4x	FSA-SF-SCW-DUP	Acenaphthene, acenaphthylene, anthracene, dibenz(a,h)anthracene, fluorene, 2-methylnaphthalene, and naphthalene
5x	FSA-SD-DU03-A and FSA-SD-DU03-B	Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, and pyrene
5x	FSA-SD-DU01	All PAHs except benzo(b)fluoranthene
5x	FSA-SD-DU02	All PAHs except fluoranthene and pyrene
10x	FSA-SD-DU03-C	Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, and pyrene
10x	FSA-SD-DU01	Benzo(b)fluoranthene
10x	FSA-SD-DU02	Fluoranthene and pyrene
50x	FSA-SF-SCW	All PAH except acenaphthene, anthracene, dibenz(a,h)anthracene, fluorene, 2-methylnaphthalene, and naphthalene
50x	FSA-SF-SCW-DUP	All PAH except acenaphthene, acenaphthylene, anthracene, dibenz(a,h)anthracene, fluorene, 2-methylnaphthalene, and naphthalene

RE-EXTRACTION AND REANALYSIS

No re-extraction or reanalysis was required for the samples analyzed within this data package.

INTERNAL STANDARDS

In the PAH analyses, the internal standard area counts and retention times in the samples were within QC limits established using the associated continuing calibration standard data.

TARGET ANALYTE IDENTIFICATION

The relative retention times (RRT) of the reported compounds in the PAH analyses were within ±0.06 RRT units of the standard RRTs. For each detected analyte in the PAH analyses, all ions present in the standard mass spectrum at a relative intensity greater than 10 percent were present in the sample spectrum and agreed within ±20 percent between the standard and sample spectra. The laboratory used manual integration to achieve good quality results for the following compounds.

Sample Designation	Affected Compounds
FSA-SF-CT	Benzo(a)anthracene
FSA-SD-CO, FSA-SD-DU01, FSA-SD-DU02, FSA-SD-DU03-A, FSA-SD-DU03-B, FSA-SD-DU03-C, FSA-SD-DU04-A, FSA-SD-DU04-B, and FSA-SD-DU04-C	Chrysene
FSA-SD-DU05	Benzo(k)fluoranthene and chrysene

ANALYTE QUANTITATION AND REPORTED DETECTION LIMITS

Sample results were checked for proper dilution factors, volumes, masses, and adjustments for moisture content. Sample results and RLs were correctly calculated. Sample results below the calibration range, or less than the laboratory RLs but greater than the MDLs, were qualified as estimated (flagged "J").

In accordance with the analytical method, all soil samples were dried and sieved before extraction. Pieces retained on the sieve (apparently rock fragments) were excluded from the portions of the samples that were weighed and extracted.

SYSTEM PERFORMANCE AND INSTRUMENT STABILITY

No signs of degraded instrument performance were observed. Analytical systems were judged to have been within control and stable during the analyses.

OVERALL ASSESSMENT OF DATA

The overall quality of this data package was acceptable. Rejection of data was not required for this data package. The analytical results were qualified as indicated in the above sections for QC exceedances. The data can be used as qualified, but data users should be aware that heterogeneity of PAH distribution is probably present in samples not tested for it.

ENCLOSURE 1

LABORATORY ANALYTICAL RESULTS SHEETS WITH HAND-ENTERED DATA VALIDATION QUALIFIERS FOR TESTAMERICA LABORATORIES, INC. REPORT NO. 280-50614

(22 Sheets)

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: FSA-SD-CO

Lab Sample ID: 280-50614-8
Client Matrix: Solid

Date Sampled: 12/19/2013 1120
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8909.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	31 00 g
Analysis Date:	01/01/2014 0055			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

DryWt Corrected: N

Analyte	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene	10000		1200	4800
Benzo[a]pyrene	6000		720	4800
Benzo[a]anthracene	4500	J	870	4800
Benzo[k]fluoranthene	3000	J	970	4800
Benzo[g,h,i]perylene	5400		1100	4800
Phenanthrene	6000		1100	4800
Anthracene	1800	J	700	4800
Dibenz(a,h)anthracene	ND	U	1300	4800
Chrysene	6800		970	4800
Acenaphthene	9500		150	4800
Acenaphthylene	1200	J	160	4800
Fluoranthene	10000		970	4800
Fluorene	17000		450	4800
Pyrene	14000		1100	4800
Indeno[1,2,3-cd]pyrene	5100		1100	4800
2-Methylnaphthalene	2200	J	300	4800
Naphthalene	3300	J	320	4800

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	82		39 - 120
Nitrobenzene-d5	94		42 - 120
Terphenyl-d14	103		35 - 124

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Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: FSA-SD-DU01

Lab Sample ID: 280-50614-12
Client Matrix: Solid

Date Sampled 12/19/2013 1545
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8931.D
Dilution:	5.0	Leach Batch	280-206728	Initial Weight/Volume:	32.86 g
Analysis Date:	01/02/2014 2116			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

DryWt Corrected: N

Analyte	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[a]pyrene	580000		3400	23000
Benzo[a]anthracene	370000		4100	23000
Benzo[k]fluoranthene	430000		4600	23000
Benzo[g,h,i]perylene	540000		5000	23000
Phenanthrene	230000		5000	23000
Anthracene	230000		3300	23000
Dibenz(a,h)anthracene	150000		5900	23000
Chrysene	510000		4600	23000
Acenaphthene	12000 J		730	23000
Acenaphthylene	200000		780	23000
Fluoranthene	580000 J		4600	23000
Fluorene	21000 J+		2100	23000
Pyrene	670000 J		5000	23000
Indeno[1,2,3-cd]pyrene	600000		5000	23000
2-Methylnaphthalene	110000		1400	23000
Naphthalene	85000 J+		1500	23000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	62	D	39 - 120
Nitrobenzene-d5	75	D	42 - 120
Terphenyl-d14	111	D	35 - 124

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Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU01**

Lab Sample ID: 280-50614-12
Client Matrix: Solid

Date Sampled: 12/19/2013 1545
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207515	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8952 D
Dilution:	10	Leach Batch:	280-206728	Initial Weight/Volume:	32.86 g
Analysis Date:	01/06/2014 1416	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		1500000		11000	46000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	71	D	39 - 120
Nitrobenzene-d5	0	D X	42 - 120
Terphenyl-d14	0	D X	35 - 124

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Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU02**

Lab Sample ID. 280-50614-13
Client Matrix. Solid

Date Sampled: 12/19/2013 1610
Date Received. 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch	280-206899	Lab File ID:	X4_8934.D
Dilution:	5.0	Leach Batch:	280-206728	Initial Weight/Volume:	31.18 g
Analysis Date:	01/02/2014 2240			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		760000		5800	24000
Benzo[a]pyrene		390000		3600	24000
Benzo[a]anthracene		320000		4300	24000
Benzo[k]fluoranthene		240000		4800	24000
Benzo[g,h,i]perylene		310000		5300	24000
Phenanthrene		480000	J	5300	24000
Anthracene		140000		3500	24000
Dibenz(a,h)anthracene		87000		6300	24000
Chrysene		420000		4800	24000
Acenaphthene		21000	J	770	24000
Acenaphthylene		150000		820	24000
Fluorene		32000	J	2300	24000
Indeno[1,2,3-cd]pyrene		340000		5300	24000
2-Methylnaphthalene		130000		1500	24000
Naphthalene		120000	J	1600	24000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	75	D	39 - 120
Nitrobenzene-d5	90	D	42 - 120
Terphenyl-d14	122	D	35 - 124

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Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU02**

Lab Sample ID 280-50614-13
Client Matrix: Solid

Date Sampled: 12/19/2013 1610
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch	280-207515	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch.	280-206899	Lab File ID:	X4_8953.D
Dilution:	10	Leach Batch	280-206728	Initial Weight/Volume	31 18 g
Analysis Date:	01/06/2014 1443	Run Type:	DL	Final Weight/Volume.	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Fluoranthene		790000	Je	9600	48000
Pyrene		780000	Je	11000	48000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	70	D	39 - 120
Nitrobenzene-d5	0	D X	42 - 120
Terphenyl-d14	117	D	35 - 124

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Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU03-A**

Lab Sample ID: 280-50614-9
Client Matrix: Solid

Date Sampled: 12/19/2013 1500
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8910.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.79 g
Analysis Date:	01/01/2014 0123			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Phenanthrene		140000 J		1100	4900
Anthracene		100000		700	4900
Dibenz(a,h)anthracene		75000		1300	4900
Acenaphthene		8000 J		160	4900
Acenaphthylene		100000		170	4900
Fluorene		13000		460	4900
2-Methylnaphthalene		73000 J		300	4900
Naphthalene		53000		320	4900

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	75		39 - 120
Nitrobenzene-d5	108		42 - 120
Terphenyl-d14	111		35 - 124

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Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU03-A**

Lab Sample ID: 280-50614-9
Client Matrix: Solid

Date Sampled: 12/19/2013 1500
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8924.D
Dilution:	5.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.79 g
Analysis Date:	01/02/2014 1801	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		670000		5800	24000
Benzo[a]pyrene		290000		3600	24000
Benzo[a]anthracene		190000		4400	24000
Benzo[k]fluoranthene		210000		4900	24000
Benzo[g,h,i]perylene		260000		5400	24000
Chrysene		270000		4900	24000
Fluoranthene		340000		4900	24000
Pyrene		400000		5400	24000
Indeno[1,2,3-cd]pyrene		290000		5400	24000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	72	D	39 - 120
Nitrobenzene-d5	76	D	42 - 120
Terphenyl-d14	113	D	35 - 124

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Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU03-B**

Lab Sample ID 280-50614-10
Client Matrix: Solid

Date Sampled: 12/19/2013 1505
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8929.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume	30.58 g
Analysis Date:	01/02/2014 2020			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Phenanthrene		95000		1100	4900
Anthracene		110000		710	4900
Dibenz(a,h)anthracene		75000		1300	4900
Acenaphthene		8300		160	4900
Acenaphthylene		93000		170	4900
Fluorene		11000		460	4900
2-Methylnaphthalene		44000		300	4900
Naphthalene		39000		320	4900

Surrogate	%Rec	Qualifer	Acceptance Limits
2-Fluorobiphenyl	67		39 - 120
Nitrobenzene-d5	71		42 - 120
Terphenyl-d14	101		35 - 124

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22 Jan 14

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: FSA-SD-DU03-B

Lab Sample ID: 280-50614-10
Client Matrix: Solid

Date Sampled: 12/19/2013 1505
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207515	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8950.D
Dilution:	5.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.58 g
Analysis Date:	01/06/2014 1320	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		630000		5900	25000
Benzo[a]pyrene		280000		3600	25000
Benzo[a]anthracene		180000		4400	25000
Benzo[k]fluoranthene		200000		4900	25000
Benzo[g,h,i]perylene		240000		5400	25000
Chrysene		250000		4900	25000
Fluoranthene		310000		4900	25000
Pyrene		370000		5400	25000
Indeno[1,2,3-cd]pyrene		270000		5400	25000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	66	D	39 - 120
Nitrobenzene-d5	62	D	42 - 120
Terphenyl-d14	103	D	35 - 124

HNE
22 Jan 14

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU03-C**

Lab Sample ID: 280-50614-11
Client Matrix: Solid

Date Sampled: 12/19/2013 1510
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8930.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	32.84 g
Analysis Date:	01/02/2014 2048			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Phenanthrene		87000		1000	4600
Anthracene		110000		660	4600
Dibenz(a,h)anthracene		78000		1200	4600
Acenaphthene		8600		150	4600
Acenaphthylene		95000		160	4600
Fluorene		11000		430	4600
2-Methylnaphthalene		48000		280	4600
Naphthalene		44000		300	4600

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	76		39 - 120
Nitrobenzene-d5	89		42 - 120
Terphenyl-d14	99		35 - 124

HVE
22 Jan 14

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU03-C**

Lab Sample ID: 280-50614-11
Client Matrix: Solid

Date Sampled: 12/19/2013 1510
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207515	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8951.D
Dilution:	10	Leach Batch:	280-206728	Initial Weight/Volume:	32.84 g
Analysis Date:	01/06/2014 1348	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		690000		11000	46000
Benzo[a]pyrene		290000		6800	46000
Benzo[a]anthracene		180000		8200	46000
Benzo[k]fluoranthene		220000		9100	46000
Benzo[g,h,i]perylene		270000		10000	46000
Chrysene		260000		9100	46000
Fluoranthene		310000		9100	46000
Pyrene		370000		10000	46000
Indeno[1,2,3-cd]pyrene		290000		10000	46000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	78	D	39 - 120
Nitrobenzene-d5	0	D X	42 - 120
Terphenyl-d14	0	D X	35 - 124

HVG
22 Jan 14

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU04-A**

Lab Sample ID 280-50614-5
Client Matrix Solid

Date Sampled: 12/19/2013 1235
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method	3546	Prep Batch	280-206899	Lab File ID:	X4_8904.D
Dilution	1.0	Leach Batch	280-206728	Initial Weight/Volume:	30.94 g
Analysis Date	12/31/2013 2236			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		39000 J		1200	4800
Benzo[a]pyrene		23000		720	4800
Benzo[a]anthracene		16000		870	4800
Benzo[k]fluoranthene		13000		970	4800
Benzo[g,h,i]perylene		22000		1100	4800
Phenanthrene		10000		1100	4800
Anthracene		4300 J	J	700	4800
Dibenz(a,h)anthracene		5300		1300	4800
Chrysene		21000		970	4800
Acenaphthene		740	J	160	4800
Acenaphthylene		4400	J	160	4800
Fluoranthene		29000		970	4800
Fluorene		2200 J	J	460	4800
Pyrene		32000 J		1100	4800
Indeno[1,2,3-cd]pyrene		22000		1100	4800
2-Methylnaphthalene		3300	J	300	4800
Naphthalene		4100	J	320	4800

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	79		39 - 120
Nitrobenzene-d5	79		42 - 120
Terphenyl-d14	118		35 - 124

HVE
22 Jan 14

01/23/14

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: **FSA-SD-DU04-B**

Lab Sample ID: 280-50614-6
Client Matrix: Solid

Date Sampled: 12/19/2013 1240
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8907.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	31.67 g
Analysis Date:	12/31/2013 2359			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		39000		1100	4700
Benzo[a]pyrene		24000		700	4700
Benzo[a]anthracene		16000		850	4700
Benzo[k]fluoranthene		12000		950	4700
Benzo[g,h,i]perylene		22000		1000	4700
Phenanthrene		9200		1000	4700
Anthracene		5400		680	4700
Dibenz(a,h)anthracene		6000		1200	4700
Chrysene		21000		950	4700
Acenaphthene		1200 J	J	150	4700
Acenaphthylene		5300		160	4700
Fluoranthene		28000		950	4700
Fluorene		2600 J	J	450	4700
Pyrene		35000		1000	4700
Indeno[1,2,3-cd]pyrene		22000		1000	4700
2-Methylnaphthalene		4100 J	J	290	4700
Naphthalene		5300		310	4700

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	75		39 - 120
Nitrobenzene-d5	81		42 - 120
Terphenyl-d14	95		35 - 124

HVE
~~24~~ 22 Jan 14

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: FSA-SD-DU04-C

Lab Sample ID: 280-50614-7
Client Matrix: Solid

Date Sampled: 12/19/2013 1245
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8908.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.38 g
Analysis Date:	01/01/2014 0027			Final Weight/Volume	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		53000		1200	4900
Benzo[a]pyrene		35000		730	4900
Benzo[a]anthracene		24000		890	4900
Benzo[k]fluoranthene		17000		990	4900
Benzo[g,h,i]perylene		30000		1100	4900
Phenanthrene		12000		1100	4900
Anthracene		6100		710	4900
Dibenz(a,h)anthracene		7300		1300	4900
Chrysene		31000		990	4900
Acenaphthene		1400 J	J	160	4900
Acenaphthylene		6600		170	4900
Fluoranthene		38000		990	4900
Fluorene		3000 J	J	460	4900
Pyrene		41000		1100	4900
Indeno[1,2,3-cd]pyrene		30000		1100	4900
2-Methylnaphthalene		4200 J	J	310	4900
Naphthalene		5800		320	4900

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	80		39 - 120
Nitrobenzene-d5	87		42 - 120
Terphenyl-d14	94		35 - 124

HVE
22 Jan 14

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: FSA-SD-DU05

Lab Sample ID: 280-50614-4
Client Matrix: Solid

Date Sampled: 12/19/2013 1045
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-206899	Lab File ID:	X4_8903.D
Dilution:	1.0	Leach Batch:	280-206728	Initial Weight/Volume:	30.60 g
Analysis Date:	12/31/2013 2208			Final Weight/Volume:	1000 uL
Prep Date:	12/29/2013 1049			Injection Volume:	1 uL
Leach Date:	12/27/2013 0735				

Analyte	DryWt Corrected: N	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		20000	J+	1200	4900
Benzo[a]pyrene		15000		730	4900
Benzo[a]anthracene		13000		880	4900
Benzo[k]fluoranthene		8000		980	4900
Benzo[g,h,i]perylene		12000		1100	4900
Phenanthrene		6100		1100	4900
Anthracene		2600	J	710	4900
Dibenz(a,h)anthracene		3100	J	1300	4900
Chrysene		16000		980	4900
Acenaphthene		910	J	160	4900
Acenaphthylene		2700	J	170	4900
Fluoranthene		20000		980	4900
Fluorene		1700	J	460	4900
Pyrene		27000		1100	4900
Indeno[1,2,3-cd]pyrene		11000		1100	4900
2-Methylnaphthalene		3900	J	300	4900
Naphthalene		3600	J	320	4900

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	79		39 - 120
Nitrobenzene-d5	77		42 - 120
Terphenyl-d14	135	X	35 - 124

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22 Jan 14

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Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: FSA-SF-CT

Lab Sample ID: 280-50614-1
Client Matrix: Solid

% Moisture 59 8

Date Sampled 12/19/2013 0855
Date Received 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID	SMS_X4
Prep Method.	3546	Prep Batch:	280-207028	Lab File ID:	X4_8919.D
Dilution:	1.0			Initial Weight/Volume.	31 1 g
Analysis Date.	01/02/2014 1541			Final Weight/Volume:	1000 uL
Prep Date	12/30/2013 1955			Injection Volume.	1 uL

DryWt Corrected: Y

Analyte	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene	130000 J+		2900	12000
Benzo[a]pyrene	77000 J+		1800	12000
Benzo[a]anthracene	58000		2200	12000
Benzo[k]fluoranthene	43000		2400	12000
Benzo[g,h,i]perylene	63000		2600	12000
Phenanthrene	94000 J+		2600	12000
Anthracene	22000		1700	12000
Dibenz(a,h)anthracene	16000		3100	12000
Chrysene	75000 J+		2400	12000
Acenaphthene	11000 J+		380	12000
Acenaphthylene	35000		410	12000
Fluoranthene	160000 J+		2400	12000
Fluorene	14000 J+		1100	12000
Pyrene	160000 J+		2600	12000
Indeno[1,2,3-cd]pyrene	64000		2600	12000
2-Methylnaphthalene	39000		740	12000
Naphthalene	76000		780	12000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	69		39 - 120
Nitrobenzene-d5	85		42 - 120
Terphenyl-d14	72		35 - 124

HV 6
22 January 2014

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Client. Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: **FSA-SF-SCW**

Lab Sample ID: 280-50614-2
Client Matrix: Solid

% Moisture 20 2

Date Sampled 12/19/2013 0912
Date Received 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method	3546	Prep Batch:	280-207028	Lab File ID:	X4_8922 D
Dilution	4 0			Initial Weight/Volume:	30 7 g
Analysis Date	01/02/2014 1705			Final Weight/Volume:	1000 uL
Prep Date	12/30/2013 1955			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ng/Kg)	Qualifier	MDL	RL
Anthracene		760000		3500	24000
Dibenz(a,h)anthracene		440000		6400	24000
Acenaphthene		130000 J		780	24000
Fluorene		360000 J		2300	24000
2-Methylnaphthalene		560000		1500	24000
Naphthalene		540000		1600	24000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	66	D	39 - 120
Nitrobenzene-d5	75	D	42 - 120
Terphenyl-d14	120	D	35 - 124

HVE
22 Jan 14

Client: Tetra Tech EM Inc

Job Number: 280-50614-1

Client Sample ID: **FSA-SF-SCW**

Lab Sample ID 280-50614-2
Client Matrix Solid % Moisture 20.2

Date Sampled: 12/19/2013 0912
Date Received 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207515	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-207028	Lab File ID:	X4_8948 D
Dilution:	50			Initial Weight/Volume:	30.7 g
Analysis Date:	01/06/2014 1225	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date	12/30/2013 1955			Injection Volume	1 uL

Analyte	DryWt Corrected: Y	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		3100000		73000	310000
Benzo[a]pyrene		1800000		45000	310000
Benzo[a]anthracene		1600000		55000	310000
Benzo[k]fluoranthene		1100000		61000	310000
Benzo[g,h,i]perylene		1400000		67000	310000
Phenanthrene		3000000		67000	310000
Chrysene		2300000		61000	310000
Acenaphthylene		570000		10000	310000
Fluoranthene		4800000		61000	310000
Pyrene		4500000		67000	310000
Indeno[1,2,3-cd]pyrene		1600000		67000	310000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	0	D X	39 - 120
Nitrobenzene-d5	0	D X	42 - 120
Terphenyl-d14	0	D X	35 - 124

HVE
22 Jan 14

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: **FSA-SF-SCW-DUP**

Lab Sample ID: 280-50614-3

Client Matrix: Solid

% Moisture: 16.9

Date Sampled: 12/19/2013 0918

Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207236	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-207028	Lab File ID:	X4_8923.D
Dilution:	4.0			Initial Weight/Volume:	32.2 g
Analysis Date:	01/02/2014 1733			Final Weight/Volume:	1000 uL
Prep Date:	12/30/2013 1955			Injection Volume:	1 uL

DryWt Corrected: Y

Analyte	Result (ng/Kg)	Qualifier	MDL	RL
Anthracene	560000	J+	3200	22000
Dibenz(a,h)anthracene	410000		5800	22000
Acenaphthene	54000 J		720	22000
Acenaphthylene	690000		760	22000
Fluorene	120000 J		2100	22000
2-Methylnaphthalene	470000		1400	22000
Naphthalene	400000		1500	22000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	79	D	39 - 120
Nitrobenzene-d5	99	D	42 - 120
Terphenyl-d14	148	X D	35 - 124

HVE
22 Jan 14

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01/23/14

Client: Tetra Tech EM Inc

Job Number: 280-50614-1

Client Sample ID: **FSA-SF-SCW-DUP**

Lab Sample ID: 280-50614-3
Client Matrix: Solid

% Moisture: 16.9

Date Sampled: 12/19/2013 0918
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207515	Instrument ID:	SMS_X4
Prep Method:	3546	Prep Batch:	280-207028	Lab File ID:	X4_8949.D
Dilution:	50			Initial Weight/Volume:	32.2 g
Analysis Date:	01/06/2014 1252	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date:	12/30/2013 1955			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ng/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		3100000		67000	280000
Benzo[a]pyrene		2100000		41000	280000
Benzo[a]anthracene		2100000		50000	280000
Benzo[k]fluoranthene		1100000		56000	280000
Benzo[g,h,i]perylene		1500000		62000	280000
Phenanthrene		4200000		62000	280000
Chrysene		2800000		56000	280000
Fluoranthene		5300000		56000	280000
Pyrene		5800000		62000	280000
Indeno[1,2,3-cd]pyrene		1700000		62000	280000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	0	D X	39 - 120
Nitrobenzene-d5	0	D X	42 - 120
Terphenyl-d14	0	D X	35 - 124

HVE
22 Jan 14

Client. Tetra Tech EM Inc

Job Number: 280-50614-1

Client Sample ID: FSA-EB-01

Lab Sample ID: 280-50614-15EB
Client Matrix: Water

Date Sampled: 12/19/2013 1620
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3510C	Prep Batch:	280-206688	Lab File ID:	X4_8900.D
Dilution:	1.0			Initial Weight/Volume:	944.9 mL
Analysis Date	12/31/2013 2044			Final Weight/Volume:	1000 uL
Prep Date:	12/26/2013 1746			Injection Volume:	1 uL

Analyte	Result (ng/L)	Qualifier	MDL	RL
Benzo[b]fluoranthene	ND U		3.6	110
Benzo[a]pyrene	ND		5.4	110
Benzo[a]anthracene	ND		3.4	110
Benzo[k]fluoranthene	ND		5.3	110
Benzo[g,h,i]perylene	ND		3.8	110
Phenanthrene	ND		10	110
Anthracene	ND		15	110
Dibenz(a,h)anthracene	ND		5.1	110
Chrysene	ND		3.4	110
Acenaphthene	ND		11	110
Acenaphthylene	ND		11	110
Fluoranthene	ND		4.8	110
Fluorene	ND		20	110
Pyrene	ND		8.6	110
Indeno[1,2,3-cd]pyrene	ND		16	110
2-Methylnaphthalene	ND		5.5	110
Naphthalene	ND U		5.6	110

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	54		42 - 120
Nitrobenzene-d5	50		43 - 120
Terphenyl-d14	112		47 - 120

AWE
22 Jan 14

Client: Tetra Tech EM Inc.

Job Number: 280-50614-1

Client Sample ID: **FSA-FB-01**

Lab Sample ID: 280-50614-14FB
Client Matrix: Water

Date Sampled: 12/19/2013 1615
Date Received: 12/21/2013 1200

8270C SIM PAHs by GCMS (SIM)

Analysis Method:	8270C SIM	Analysis Batch:	280-207101	Instrument ID:	SMS_X4
Prep Method:	3510C	Prep Batch:	280-206688	Lab File ID:	X4_8899.D
Dilution:	1.0			Initial Weight/Volume:	871.4 mL
Analysis Date:	12/31/2013 2016			Final Weight/Volume:	1000 uL
Prep Date:	12/26/2013 1746			Injection Volume:	1 uL

Analyte	Result (ng/L)	Qualifier	MDL	RL
Benzo[b]fluoranthene	ND	U	3.9	110
Benzo[a]pyrene	ND		5.9	110
Benzo[a]anthracene	ND		3.7	110
Benzo[k]fluoranthene	ND		5.8	110
Benzo[g,h,i]perylene	ND		4.1	110
Phenanthrene	ND		11	110
Anthracene	ND		18	110
Dibenz(a,h)anthracene	ND		5.5	110
Chrysene	ND		3.7	110
Acenaphthene	ND		12	110
Acenaphthylene	ND		11	110
Fluoranthene	ND		5.2	110
Fluorene	ND		22	110
Pyrene	ND		9.3	110
Indeno[1,2,3-cd]pyrene	ND		17	110
2-Methylnaphthalene	ND		5.9	110
Naphthalene	ND	U	6.1	110

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	74		42 - 120
Nitrobenzene-d5	82		43 - 120
Terphenyl-d14	132	X	47 - 120

HVE
22 Jan 14

ENCLOSURE 2

CHAIN-OF-CUSTODY DOCUMENTATION FOR TESTAMERICA LABORATORIES, INC. REPORT NO. 280-50614

(Two Sheets)

GCAL TestAmerica JWS 12/19/13 CHAIN OF CUSTODY RECORD

2.7, 4.2, 5.0, 1.4

GULF COAST ANALYTICAL LABORATORIES, INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

Lab use only

Client Name	Client #	Workorder #	Due Date

Report to:
Client: TetraTech
Address: Bld 200 Suite 300
1955 Evergreen Blvd
Contact: Jessica Vickers
Phone: 678-775-3104
Fax:

Bill to:
Client: same
Address:
Contact:
Phone:
Fax:

P.O. Number
Project Name/Number: Francis Street Assessment/103d.9017.0003.0168

Sampled By: John Snyder/TetraTech START

Analytical Requests & Method

Lab use only:
Custody Seal
used ☐ yes ☐ no
intact ☐ yes ☐ no
Temperature °C

280-50614 Chain of Custody

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	PAH by SIM	PAH by SIM ISM processing	Remarks:	Lab ID
S	12/19	0855	/		FSA-SF-CT	–	2	/		MS/MSD	
S		0912	/		FSA-SF-SCW	–	2	/			
S		0918	/		FSA-SF-SCW-DUP	–	2	/			
S		1045	/		FSA-SD-DU05	–	2		/		
S		1235	/		FSA-SD-DU04-A	–	2		/	Run lab RSD analysis	
S		1240	/		FSA-SD-DU04-B	–	2		/		
S		1245	/		FSA-SD-DU04-C	–	2		/		
S		1120	/		FSA-SD-SCO	–	1		/		
S		1500	/		FSA-SD-DU03-A	–	2		/	Run lab RSD analysis	
S		1505	/		FSA-SD-DU03-B	–	2		/		
S		1510	/		FSA-SD-DU03-C	–	2		/		
S		1545	/		FSA-SD-DU01	–	2		/	MS/MSD	
S	↓	1610	/		FSA-SD-DU02	–	1		/		

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☑ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
11:48		12/20/13	11:48
Relinquished by: (Signature) 12:00	Received by: (Signature)	Date: 12/21/13	Time: 12:00
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note: page 1/2

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

Matrix: W = water, S = soil, SD = solid, L = liquid, SL = sludge, o = oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax written changes to (225) 767-5717

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

GCAL-06 11/98

GCAL

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TestAmerica JWS 12/19/13

CHAIN OF CUSTODY RECORD

Lab use only

Client Name	Client #	Workorder #	Due Date

Report to:
Client:
Address: see pg 1
Contact:
Phone:
Fax:

Bill to:
Client:
Address: see pg 1
Contact:
Phone:
Fax:

P.O. Number
Project Name/Number
Sampled By: See Pg 1

Analytical Requests & Method: PAH by SIM

Lab use only:
Custody Seal
used ☐ yes ☐ no
intact ☐ yes ☐ no
Temperature °C

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Containers	PAH by SIM	Remarks:	Lab ID
W	12/19/13	1615	—		FSA-FB-01	—	2	✓	field blank	
W	↓	1620	—		FSA-EB-01	—	2	✓	equip. blank	

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☑ Standard ☐ Other

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
11:48		12/20/13	11:28
Relinquished by: (Signature) 12:00	Received by: (Signature)	Date: 12/21/13	Time: 12:00
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Note: page 2/2

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